

**MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,
THE MASHPEE WAMPANOAG TRIBE,
THE SHINNECOCK INDIAN NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICAN INDIANS,
THE WAMPANOAG TRIBE OF GAY HEAD (AQUINNAH)
THE STATE HISTORIC PRESERVATION OFFICER OF NEW JERSEY,
THE NEW JERSEY HISTORIC TRUST,
ATLANTIC SHORES OFFSHORE WIND PROJECT 1, LLC,
ATLANTIC SHORES OFFSHORE WIND PROJECT 2, LLC, AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE ATLANTIC SHORES OFFSHORE WIND SOUTH PROJECT
(LEASE NUMBER OCS-A 0499)**

WHEREAS, the Bureau of Ocean Energy Management (BOEM) is considering whether to authorize construction and operation of the Atlantic Shores Offshore Wind South Project (Project) pursuant to subsection 8(p)(1)(C) of the Outer Continental Shelf (OCS) Lands Act (43 United States Code [U.S.C.] 1337(p)(1)(C)) and in accordance with Renewable Energy Regulations at 30 Code of Federal Regulations (CFR) Part 585; and

WHEREAS, BOEM determined that the Project constitutes an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA), as amended (54 U.S.C. 306108), and its implementing regulations (36 CFR Part 800), consistent with the Programmatic Agreement (New Jersey-New York PA) regarding the review of OCS renewable energy activities offshore New Jersey and New York (*Programmatic Agreement Among The U.S. Department of the Interior, Bureau of Ocean Energy Management, The State Historic Preservation Officers of New Jersey and New York, The Shinnecock Indian Nation, and The Advisory Council on Historic Preservation Regarding Review of Outer Continental Shelf Renewable Energy Activities Offshore New Jersey and New York Under Section 106 of the National Historic Preservation Act*); and

WHEREAS, BOEM is considering whether to approve with conditions the Project Construction and Operations Plan (COP) submitted by Atlantic Shores Offshore Wind Project 1, LLC (Atlantic Shores Project 1 Company) and Atlantic Shores Offshore Wind Project 2, LLC (Atlantic Shores Project 2 Company), collectively referred to herein as Lessee; and

WHEREAS, BOEM determined that the construction, installation, operations and maintenance (O&M), and conceptual decommissioning of two offshore wind energy facilities (Project 1 and Project 2), known collectively as the Atlantic Shores Offshore Wind South Project (Project), planned for Lease Area OCS-A 0499 and to include up to 200 offshore wind turbine generators (WTGs) and their foundations, up to 10 offshore substations (OSSs) and their foundations, one meteorological (met) tower and its foundation, scour protection for foundations, interarray or interlink cables linking the individual turbines to the OSSs, offshore export cables and an onshore export cable system, two landfall locations in Sea Girt, New Jersey and Atlantic City, New Jersey, two onshore substations and/or converter stations (i.e., at the Fire Road Site and one of three site options at Lanes Pond Road, Brook Road, or Randolph Road), connections to the existing electrical grid in New Jersey, and an O&M facility in Atlantic City, New Jersey, have the potential to adversely affect historic properties as defined under 36 CFR 800.16(l); and

WHEREAS, BOEM prepared an Environmental Impact Statement (EIS) for the Project pursuant to the National Environmental Policy Act (42 U.S.C. 4321 et seq.) (NEPA) and elected to use the NEPA substitution process with its Section 106 consultation pursuant to 36 CFR 800.8(c); and

WHEREAS, in accordance with 36 CFR 800.3, on October 15, 2021, BOEM invited the New Jersey State Historic Preservation Officer (SHPO) and Advisory Council on Historic Preservation (ACHP) to consult on the Project and notified New Jersey SHPO and ACHP of its decision to use NEPA substitution and follow the standards for developing environmental documents to comply with the Section 106 consultation for this Project pursuant to 36 CFR 800.8(c), and New Jersey SHPO accepted through participation in consultation after that date, and ACHP responded with acknowledgement on October 20, 2021; and

WHEREAS, the Project is within a commercial lease area that was subject to previous NHPA Section 106 review by BOEM regarding the issuance of the commercial lease pursuant to the *Programmatic Agreement Among the U.S. Department of the Interior, Bureau of Ocean Energy Management; the State Historic Preservation Officers of Delaware, Maryland, New Jersey, and Virginia; the Advisory Council on Historic Preservation; the Narragansett Indian Tribe; and the Shinnecock Indian Nation Regarding the “Smart from the Start” Atlantic Wind Energy Initiative: Leasing and Site Assessment Activities within the Wind Energy Areas offshore Delaware, Maryland, New Jersey, and Virginia*, and BOEM issued a Finding of No Historic Properties Affected on July 11, 2012; and

WHEREAS, the Project is within a commercial lease area that was subject to previous NHPA Section 106 review by BOEM pursuant to the New Jersey-New York PA regarding approval of a Site Assessment Plan (SAP), and BOEM determined that no historic properties were affected by site assessment activities proposed in the SAP pursuant to the New Jersey-New York PA, and BOEM approved the SAP on April 8, 2021; and

WHEREAS, consistent with 36 CFR 800.16(d) and BOEM’s *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* (May 27, 2020), BOEM defined the area of potential effects (APE) for the undertaking as the depth and breadth of the seabed potentially impacted by any bottom-disturbing activities, constituting the marine portion of the APE (marine APE); the depth and breadth of terrestrial areas potentially impacted by any ground-disturbing activities, constituting the terrestrial portion of the APE (terrestrial APE); the viewshed from which offshore or onshore renewable energy structures would be visible, constituting the visual portion of the APE (visual APE); all areas subject to physical and visual effects from the undertaking at the O&M facility (O&M facility APE); and any temporary or permanent construction or staging areas that may fall into any of the aforementioned offshore or onshore portions of the APE (see Attachment 1, *APE Maps*); and

WHEREAS, BOEM identified the following historic properties in the APE: 22 marine archaeological resources and 59 ancient submerged landform features (ASLFs) in the marine APE; one (1) terrestrial archaeological resource and one (1) historic aboveground resource in the terrestrial APE; and 112 aboveground historic properties in the visual APE (i.e., 102 in the visual APE for offshore Project components, three [3] in the visual APE for onshore Project components, and seven [7] in the visual portion of the O&M facility APE); and

WHEREAS, BOEM identified two (2) National Historic Landmarks (NHLs) in the visual APE for Offshore Project components (i.e., Atlantic City Convention Hall [Jim Whelan Boardwalk Hall] and Lucy, The Margate Elephant); and

WHEREAS, BOEM determined that the Project design and implementation of avoidance measures identified in this Memorandum of Agreement (MOA) will avoid adverse effects on certain historic

properties: 22 marine archaeological resources, such as shipwrecks or potential shipwrecks (i.e., Marine Archaeological Resources 01–21 and 232); 21 of the 59 ASLFs (i.e., ASLFs 41, 205, 207, 212–226, and 229–231); one terrestrial archaeological resource (i.e., 23-Mo-283) and one (1) historic aboveground resource (i.e., West Jersey and Atlantic Railroad Historic District) in the terrestrial APE; 73 aboveground historic properties in the visual APE for offshore Project components; three (3) aboveground historic properties in the visual APE for onshore Project components; and seven (7) aboveground historic properties in the visual portion of the O&M facility APE; and

WHEREAS, following the publication of the Final EIS for the Project and BOEM’s *Finding of Adverse Effect for the Atlantic Shores Offshore Wind South Project Construction and Operations Plan* (hereinafter, the Finding of Adverse Effect) on May 24, 2024, BOEM continued to consult with Tribal Nations and New Jersey SHPO on avoidance and minimization measures to resolve adverse effects on historic properties; determined, with the assistance of the Lessee, that the Project design would avoid the aforementioned 21 ASLFs (i.e., ASLFs 41, 205, 207, 212–226, and 229–231), all of which had been previously anticipated to be subject to adverse effects; and notified consulting parties of these new avoidance measures and reduction in the count of adversely affected ASLFs; and

WHEREAS, within the range of Project alternatives analyzed in the EIS, and with the implementation of avoidance measures developed through consultations following the publication of BOEM’s Finding of Adverse Effect, BOEM determined 38 of the 59 ASLFs identified in the marine APE (i.e., ASLFs 22–40, 42–46, 48, 50–52, 54, 57, 204, 206, 208–211, 227, and 228) are eligible for listing in the National Register of Historic Places (NRHP) under Criteria A and D and would be adversely affected by physical disturbance from Offshore Project construction within the defined spatial extent of these resources; and

WHEREAS, within the range of Project alternatives analyzed in the EIS, BOEM determined the following 29 historic aboveground resources in the visual APE in New Jersey would be visually adversely affected by the Project: Absecon Lighthouse in Atlantic City, Atlantic County; Atlantic City Boardwalk Historic District in Atlantic City, Atlantic County; Atlantic City Convention Hall (Jim Whelan Boardwalk Hall; NHL) in Atlantic City, Atlantic County; Barnegat Lighthouse in Barnegat Light, Ocean County; Brigantine Hotel in Brigantine City, Atlantic County; Central Pier in Atlantic City, Atlantic County; The Flanders Hotel in Ocean City, Cape May County; Forked River Coast Guard Station No. 112 in Berkeley Township, Ocean County; Great Egg Coast Guard Station in Longport Borough, Atlantic County; Haddon Hall (Resorts Casino Hotel) in Atlantic City, Atlantic County; Island Beach State Park Historic District in Berkeley Township, Ocean County; John Stafford Historic District in Ventnor City, Atlantic County; Little Egg Harbor U.S. Life Saving Station #23 in Little Egg Harbor, Ocean County; Lucy, The Margate Elephant (NHL) in Margate City, Atlantic County; Margate Fishing Pier in Margate City, Atlantic County; Missouri Avenue Beach (Chicken Bone Beach) in Atlantic City, Atlantic County; Music Pier in Ocean City, Cape May County; Ocean City Boardwalk in Ocean City, Cape May County; Ritz Carlton Hotel in Atlantic City, Atlantic County; Riviera Apartments in Atlantic City, Atlantic County; Saint Leonard’s Tract Historic District in Ventnor City, Atlantic County; Seaview Golf Club, Clarence Geist Pavilion in Galloway Township, Atlantic County; U.S. Coast Guard Station in Atlantic City, Atlantic County; Vassar Square Condominiums in Ventnor City, Atlantic County; Ventnor City Fishing Pier in Ventnor City, Atlantic County; 108 South Gladstone Avenue in Margate City, Atlantic County; 114 South Harvard Avenue in Ventnor City, Atlantic County; 114 South Osborne Avenue in Margate City, Atlantic County; and 120 Atlantic Avenue in Atlantic City, Atlantic County; and

WHEREAS, within the range of Project alternatives analyzed in the EIS, BOEM determined there would be a visual adverse effect on two (2) NHLs in the visual APE for Offshore Project components (i.e., Atlantic City Convention Hall [Jim Whelan Boardwalk Hall] and Lucy, The Margate Elephant); and

WHEREAS, BOEM, in consultation with Tribal Nations, New Jersey SHPO, ACHP, and consulting parties, has developed this MOA to document the resolution of the undertaking's adverse effects, as required by NHPA Section 106 at 36 CFR 800.6, on 38 historic properties in the marine APE (i.e., 38 ASLFs) and 29 historic properties in the visual APE (i.e., 29 historic aboveground resources, including two [2] NHLs); and

WHEREAS, BOEM has planned and is taking action to minimize harm, as required by NHPA Section 110(f) at 36 CFR 800.10, to the two (2) adversely affected NHLs in the visual APE (i.e., Atlantic City Convention Hall [Jim Whelan Boardwalk Hall] and Lucy, The Margate Elephant) as explained in the Finding of Adverse Effect, with minimization measures including the use of non-reflective white or light gray paint on Offshore Project components and Aircraft Detection Lighting Systems (ADLS) to minimize visibility of the Project from the NHLs; and

WHEREAS, New Jersey SHPO concurred with BOEM's Finding of Adverse Effect on Historic Properties on March 20, 2024; and

WHEREAS, throughout this document the terms "Tribe" or "Tribal Nation" have the same meaning as "Indian Tribe" as defined in 36 CFR 800.16(m); and

WHEREAS, BOEM recognizes its government-to-government obligation to consult with Tribal Nations that may attach religious and cultural significance to historic properties that may be affected by the proposed undertaking and will comply with the American Indian Religious Freedom Act (AIRFA), Native American Graves Protection and Repatriation Act (NAGPRA), Executive Orders 13007, 13175, and 14112, Department Manual 512, Chapters 4 and 5 (November 2022), and Memorandum of Understanding to Protect Sacred Sites (November 2021); and

WHEREAS, BOEM acknowledges the United Nations draft resolution, Our Ocean, Our Future: Call for Action (Seventy-first session, A/71/L.74, June 2017) and UNESCO, SDG 11 Synthesis Report, Target 11.4, Strengthen efforts to protect and safeguard the world's cultural and natural heritage, July 5, 2023; and

WHEREAS, BOEM invited the following Federally recognized Tribal Nations to consult on this Project: the Absentee-Shawnee Tribe of Indians of Oklahoma, Delaware Tribe of Indians, Eastern Shawnee Tribe of Oklahoma, Mashantucket (Western) Pequot Tribal Nation, Mashpee Wampanoag Tribe, Shawnee Tribe, Stockbridge-Munsee Community Band of Mohican Indians, The Delaware Nation, The Narragansett Indian Tribe, The Shinnecock Indian Nation, and Wampanoag Tribe of Gay Head (Aquinnah); and

WHEREAS, the Mashantucket (Western) Pequot Tribal Nation initially declined BOEM's invitation to consult on November 22, 2021; however, on April 19, 2023, the Tribal Nation indicated that the Project is within their revised area of interest and, therefore, requested to receive notifications for the Project, and participated in Section 106 consultation meetings and reviews; and

WHEREAS, the Stockbridge-Munsee Community Band of Mohican Indians initially declined BOEM's invitation to consult on November 12, 2021; however, on May 31, 2023, the Tribal Nation indicated that the Project is within their area of interest and, therefore, requested to consult on the Project, and participated in Section 106 consultation meetings and reviews; and

WHEREAS, the Absentee-Shawnee Tribe of Indians of Oklahoma and Shawnee Tribe declined BOEM's invitation to consult; and

WHEREAS, the Delaware Tribe of Indians, Mashpee Wampanoag Tribe, The Delaware Nation, The Shinnecock Indian Nation, and Wampanoag Tribe of Gay Head (Aquinnah) have participated in consultation on the Project; and

WHEREAS, the Eastern Shawnee Tribe of Oklahoma and The Narragansett Indian Tribe did not respond to BOEM's invitation to consult; however, BOEM has included these Tribal Nations in all consulting party communications; and

WHEREAS, the Mashpee Wampanoag Tribe continues to participate in Section 106 consultations with BOEM and in compliance with the NHPA and as a cooperating Tribal government under the Council on Environmental Quality (CEQ) guidance to preserve and protect its sacred sites and natural and cultural resources, and through consultation, the Mashpee Wampanoag Tribe categorically objects to the adverse effects as a result of the undertaking; and

WHEREAS, the Mashpee Wampanoag Tribe attaches traditional and cultural association to ASLFs and asserts sacred sites should be avoided comparable to the same extent that historic shipwrecks are being avoided; and

WHEREAS, the Mashpee Wampanoag Tribe asserts that it has inherent aboriginal rights, title, and jurisdictional interest over the submerged lands once inhabited by their ancestors and, as stated in email on April 1, 2024, objects to ACHP's guidance regarding SHPO's signatory authority for this MOA on submerged archaeological assets; and

WHEREAS, the Mashpee Wampanoag Tribe is a Federally recognized Tribe and asserts that it has inherent aboriginal rights, title, and jurisdictional interest over submerged lands extending to the Exclusive Economic Zone (EEZ) and do not recognize SHPO authority over Tribal authority of maritime environments and submerged landscapes; and

WHEREAS, the Mashpee Wampanoag Tribe extends its spiritual and cultural connections to these submerged lands and maritime environments as a traditional cultural place and sacred site based on traditional cultural knowledge and Indigenous expertise and, therefore, expects a consensus seeking model and co-management approach to these spiritually connected environments based on cultural provenance; and

WHEREAS, BOEM acknowledges Tribal Nations possess special expertise in assessing the NRHP eligibility of properties of religious and cultural significance to Tribal Nations, pursuant to 36 CFR 800.4(c)(1), and BOEM has consulted with Tribal Nations to identify historic properties of religious and cultural significance to the Tribal Nation(s) that may be eligible for listing in the NRHP and that may be affected by the undertaking; and

WHEREAS, the Delaware Tribe of Indians, The Delaware Nation, Mashantucket (Western) Pequot Tribal Nation, Mashpee Wampanoag Tribe, The Shinnecock Indian Nation, Stockbridge-Munsee Community Band of Mohican Indians, Wampanoag Tribe of Gay Head (Aquinnah) have certain responsibilities assigned to them in this MOA related to implementation of mitigation measures for their respective Tribal Nations, and BOEM invited these Tribal Nations to sign this MOA as invited signatories; and

WHEREAS, in accordance with 36 CFR 800.3, BOEM invited other Federal agencies, state and local governments, and consulting parties with a demonstrated interest in the undertaking to participate in this consultation; the list of those invited and accepting participation are listed in the *Lists of Invited Governments and Organizations and Participating Consulting Parties* (Attachment 2); and

WHEREAS, BOEM has consulted with the Lessee in its capacity as the applicant seeking Federal approval of the COP, and, because the Lessee has responsibilities under the MOA, BOEM has invited the Lessee to be an invited signatory to this MOA; and

WHEREAS, BOEM invited the United States Army Corps of Engineers (USACE) to consult, since USACE has the authority to issue any needed permits and permissions for this Project under Section 404 of the Clean Water Act (CWA; 33 U.S.C. 1344), Sections 10 and 14 of the Rivers and Harbors Act (RHA; 33 U.S.C. 403), and Section 103 of the Marine Protection, Research, and Sanctuaries Act (MPRSA); and

WHEREAS, construction of the Project requires a Department of the Army (DA) permit from USACE for activities that would result in the discharge of dredged or fill material in waters of the United States pursuant to Section 404 of the CWA (33 U.S.C. 1344), and work and structures in navigable waters of the United States and structures from the mean high water mark to the seaward limit of the OCS pursuant to Section 10 of the RHA (33 U.S.C. 403), and activities associated with ocean disposal of dredged materials under Section 103 of the MPRSA, and requires Section 408 permission under Section 14 of the RHA for any alterations that have the potential to alter, occupy, or use any Federally authorized civil works projects; and

WHEREAS, USACE designated BOEM as the Lead Federal Agency pursuant to 36 CFR 800.2(a)(2) to act on its behalf for purposes of compliance with Section 106 for this Project (in a letter dated February 1, 2024), and BOEM invited USACE to sign this MOA as a concurring party; and

WHEREAS, USACE is or will be the Lead Federal Agency responsible for reviewing and authorizing a connected action, which includes the repair and/or replacement of an existing bulkhead to be conducted by the Lessee under a USACE Individual Permit and implementation of a maintenance dredging program to be conducted in coordination with the City of Atlantic City under an approved USACE DA Permit (CENAP-OPR-2021-00573-95) and a New Jersey Department of Environmental Protection (NJDEP) Dredge Permit (No. 0102.20.0001.1 LUP 210001), which BOEM has reviewed as part of the Project; and

WHEREAS, USACE's permitted area for the connected action of the maintenance dredging program, per DA Permit CENAP-OPR-2021-00573-95 encompasses a portion of BOEM's O&M facility APE, and BOEM has reviewed, consulted with Tribal Nations, NJ SHPO, ACHP, and consulting parties as part of the Section 106 review for this Project, and agrees with USACE's Finding of No Effect on Historic Properties per this DA Permit for areas in which the USACE permitted area for the connected action and BOEM's O&M facility APE overlap; and

WHEREAS, the Bureau of Safety and Environmental Enforcement (BSEE) designated BOEM as the Lead Federal Agency pursuant to 36 CFR 800.2(a)(2) to act on its behalf for purposes of compliance with Section 106 for this Project on May 29, 2024, and BOEM invited BSEE to sign this MOA as a concurring party; and

WHEREAS, BOEM will participate in the Section 106 review for the repair and/or replacement of an existing bulkhead under USACE Individual Permit, which will occur at a later date, with USACE serving as Lead Federal Agency, and BOEM will consult with signatories and consulting parties if this Section 106 review requires alteration of the conclusions reached in BOEM's Finding of Adverse Effect; and

WHEREAS, BOEM notified and invited the Secretary of the Interior (hereinafter *SOI* or *Secretary*, represented by the National Park Service [NPS]) to consult regarding this Project pursuant to the Section 106 regulations, including consideration of the potential effects on NHLs as required under NHPA

Section 110(f) (54 U.S.C. 306107) and 36 CFR 800.10; NPS accepted BOEM's invitation to consult on November 22, 2021; BOEM invited NPS to sign this MOA as a concurring party; and NPS informed BOEM that it wishes to continue to be a consulting party, but that given the nature of the adverse effects on NHLs, NPS will not be a signatory to this MOA; and

WHEREAS, BOEM invited the New Jersey Historic Trust to consult because the organization agreed to be the third-party administrator for the mitigation fund associated with adversely affected historic properties located in New Jersey, established under Stipulation III.C.1.i, this MOA assigns certain responsibilities to the New Jersey Historic Trust in administering this mitigation fund, and BOEM invited the New Jersey Historic Trust to sign this MOA as an invited signatory; and

WHEREAS, in accordance with 36 CFR 800.6(a)(1), BOEM has notified the ACHP of its adverse effect determination with its distribution of the Finding of Adverse Effect, including adverse effects on the NHLs pursuant to 36 CFR 800.10(b), and ACHP is consulting on the resolution of adverse effects on the historic properties pursuant to 36 CFR 800.6(a)(1)(iii) and 36 CFR 800.10(b); and

WHEREAS, BOEM has consulted with consulting parties participating in the development of this MOA regarding the definition of the undertaking, delineation of the APEs, identification and evaluation of historic properties, assessment of potential effects on the historic properties, and measures to avoid, minimize, and mitigate adverse effects on historic properties; and

WHEREAS, BOEM conducted five Section 106 consultation meetings on August 30, 2022; June 8, 2023; December 4, 2023; February 27, 2024; and April 25, 2024 and invited consulting parties (see Attachment 2) to these meetings; and

WHEREAS, pursuant to 36 CFR 800.6, BOEM invited all other consulting parties not designated as required or invited signatories, as stated in the previous clauses of this MOA to sign as concurring parties; however, the refusal of any consulting party to sign this MOA or otherwise concur does not invalidate or affect the effective date of this MOA, and consulting parties who choose not to sign this MOA will continue to receive information if requested and have an opportunity to participate in consultation as specified in this MOA; and

WHEREAS, the signatories (i.e., hereinafter, required and invited signatories) agree, consistent with 36 CFR 800.6(b)(2), that adverse effects will be resolved in the manner set forth in this MOA; and

WHEREAS, BOEM sought and considered the views of the public regarding Section 106 for this Project through the NEPA process by holding virtual public scoping meetings when initiating the NEPA and NHPA Section 106 review on October 19, 21, and 25, 2021, and public meetings related to the Draft EIS in-person on June 21 and 22, 2023, and virtually on June 26 and 28, 2023; and

WHEREAS, BOEM made the first Draft MOA available to the public for review and comment from May 19, 2023 through July 3, 2023, and made an updated version of the Draft MOA available to the public on March 22, 2024, using BOEM's Project website, and BOEM received comments from the public; and

NOW, THEREFORE, BOEM, New Jersey SHPO, and ACHP agree that the undertaking will be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

BOEM, with the assistance of the Lessee, will ensure that the following measures are carried out as conditions of its approval of the undertaking:

I. MEASURES TO AVOID ADVERSE EFFECTS ON IDENTIFIED HISTORIC PROPERTIES

- A. BOEM will include the following measures for avoiding adverse effects on historic properties located in the Project APE as conditions of approval of the Project COP:

1. Marine APE

- i. The Lessee will comply with protective buffers recommended by the Qualified Marine Archaeologist (QMA) for all 22 marine archaeological resources (i.e., Marine Archaeological Resources 01–21 and 232). Protective buffers must measure a minimum of 50 meters from the outer edge of magnetic anomalies or acoustic contacts for each of the resources as described in the *Cultural Resources Avoidance, Minimization, and Mitigation Plan* (Attachment 3) and *Marine Archaeology Monitoring and Post-Review Discovery Plan* (Attachment 4).
- ii. The Lessee will avoid 21 ASLFs (ASLFs 41, 205, 207, 212–226, and 229–231). No additional avoidance buffer is required for these ASLFs given avoidance of the ASLFs is based on the defined spatial extent of each ASLF, which has been determined based on the maximum observed presence of the seismic reflector and unique buffer area designed to account for minimal positioning errors or lack of resolution.
- iii. To demonstrate avoidance of all marine archaeological resources and ASLFs identified in Stipulations I.A.1.i and I.A.1.ii, the Lessee will provide as-placed and as-laid maps with both the horizontal and vertical extent of all seafloor impacts. These seafloor impacts may include anchoring activities (location of all anchors, anchor chains, cables, and wire ropes on the seafloor, including sweep but excluding the vertical extent of anchor penetration of the seafloor), cable installation (including trenching depths and seafloor footprint of the installation vessel), and WTG installation (anchoring and spudding/jack-up vessel placement). The as-built or as-laid position plats must be submitted at a scale of 1-in. = 1,000-ft., with Differential Global Positioning System (DGPS) accuracy demonstrating that these seafloor disturbing activities complied with the avoidance criteria applied to the archaeological sites or historic properties established in this MOA. The Lessee must submit these documents and maps to BOEM for consulting parties to review no later than 90 days after completion of the seafloor disturbing/construction activities.
- iv. During construction of the Project, the Lessee will prepare and submit annual reports to BOEM that describe implementation of avoidance buffers, pursuant to Stipulation XV (*Reporting*).

2. Terrestrial APE

- i. The Lessee will conduct archaeological monitoring during onshore construction in areas identified as having high or moderate archaeological sensitivity (including “medium-high” or “medium” archaeological sensitivity as described in the *Cultural Resources, Avoidance, Minimization, and Mitigation Plan* [Attachment 3]), including undisturbed, paved areas within 1,000 feet of a previously identified archaeological site, consistent with the protocol described in the *Terrestrial Archaeology Monitoring and Post-Review Discovery Plan* (Attachment 5). If archaeological resources or human remains are identified during construction, operations, or decommissioning of the Project, the onsite construction supervisor must stop work immediately and follow the protocols outlined in the *Terrestrial Archaeology Monitoring and Post-Review Discovery Plan* (Attachment 5).

- ii. The Lessee will construct the portion of the onshore export cable within the proposed Limit of Disturbance (LOD) as depicted in New Jersey Department of Environmental Protection (NJDEP) permit application 0000-21-0022.2 LUP240001 (NJDEP Permitting Plan, Tiles 47–49) to ensure avoidance of the Greenwood Cemetery. Along Black Horse Pike (U.S. Route 40 7 322), the LOD is located within the paved lanes of the roadway, approximately 10–11 feet south of the northern curb/gutter and sidewalk that borders the edge of the Greenwood Cemetery parcel. Any change to the proposed LOD at this location that results in a placement closer than 10–11 feet from the northern curb of Black Horse Pike will require additional consultation pursuant to Stipulation VII (*Project Modifications*). If any such changes are made to the location or extent of the proposed LOD at this location, the Lessee will provide updated and detailed construction drawings to BOEM and New Jersey SHPO depicting the LOD adjacent to Greenwood Cemetery, as soon as those plans are available and no later than 60 days prior to the start of construction.
- iii. The Lessee will coordinate with consulting Tribal Nations to provide them with an opportunity to participate as monitors during ongoing ground disturbing activities in the areas identified for monitoring in Stipulation I.A.2.i. The Lessee must provide compensation and travel and per diem costs, consistent with each Tribal Nation’s standard costs for monitoring activities.

3. Visual APE

- i. To maintain avoidance of adverse effects on historic properties in the visual APE where BOEM determined no adverse effects or where no effects would occur, the Lessee will ensure that Project structures are within the Project design envelope, sizes, scale, locations, lighting prescriptions, and distances that were used by BOEM to inform the definition of the APE for the Project and for determining effects in the Finding of Adverse Effect. If the Project is modified, BOEM will follow Stipulation VII (*Project Modifications*).

II. MEASURES TO MINIMIZE ADVERSE EFFECTS ON IDENTIFIED HISTORIC PROPERTIES

A. Visual APE

- 1. BOEM has undertaken planning and actions to minimize adverse effects on aboveground historic properties in the visual APE, including minimizing harm to the adversely affected NHLs (i.e., Atlantic City Convention Hall [Jim Whelan Boardwalk Hall] and Lucy, The Margate Elephant). The stipulated measures here will minimize visual adverse effects on all adversely affected aboveground historic properties in the visual APE. Additionally, these measures will minimize the undertaking’s additive adverse effects to the cumulative visual adverse effects on these adversely affected historic properties from all reasonably foreseeable offshore wind energy developments. BOEM will include the following measures for minimizing adverse effects on historic properties in the visual APE as conditions of approval of the Project COP:
 - i. The Lessee must use uniform WTG design, height, and rotor diameter to reduce visual contrast and decrease visual clutter.
 - ii. The Lessee must apply a paint color to the WTGs no lighter than Pure White (RAL 9010) and no darker than Light Grey (RAL 7035) in accordance with Federal Aviation Administration (FAA) Advisory Circular 70/7460-1M (2020) and BOEM’s Guidelines

for Lighting and Marking of Structures Supporting Renewable Energy Development (April 28, 2021) to help reduce potential visibility of the turbines.

- iii. The Lessee must use ADLS or related means (e.g., dimming or shielding) to limit visual impact, pursuant to approval by the FAA and BOEM and commercial and technical feasibility at the time of Facility Design Report/Fabrication and Installation Report approval. The WTGs, Meteorological Towers, and Offshore Substations (OSS) must be lit and marked in accordance with FAA and United States Coast Guard (USCG) lighting standards and will be consistent with BOEM's Guidelines for Lighting and Marking of Structures Supporting Renewable Energy Development (April 28, 2021) to reduce light intrusion.

III. MEASURES TO MITIGATE ADVERSE EFFECTS ON IDENTIFIED HISTORIC PROPERTIES

- A. BOEM will include the mitigation measures and below-referenced Historic Property Treatment Plans (HPTPs) listed in Stipulation III as conditions of approval of the Project COP. BOEM will require the Lessee to fund these measures per *Mitigation Funding Amounts* (Attachment 6), which contains good-faith estimates based on the experience of qualified consultants for similar activities and comparable historic properties.

- B. Marine APE

1. The Lessee cannot avoid 38 ASLFs (i.e., ASLFs 22–40, 42–46, 48, 50–52, 54, 57, 204, 206, 208–211, 227, and 228). To resolve the adverse effects on these 38 ASLFs, BOEM will include the following as conditions of approval of the Lessee's COP and require fulfillment of any on-site preconstruction work at these 38 ASLFs for the following mitigation measures prior to construction of the Project. The Lessee must fund mitigation measures, as described in *Mitigation Funding Amounts* (Attachment 6) and the HPTP for ASLFs (Attachment 7):
 - i. Preconstruction Geoarchaeology. The Lessee will implement the following measures: Collaborative review of existing geophysical and geotechnical data with Tribal Nations; selection of coring locations in consultation with Tribal Nations; collection of up to two vibracores within each affected ASLF that has not been previously sampled, with a sampling focus on areas that will be disturbed by Project construction activities; written verification to BOEM that the samples collected are sufficient for the planned analyses and consistent with the agreed scope of work; collaborative laboratory analyses at a laboratory located in the Atlantic region, decided through consultation with Tribal Nations; screening of recovered sediments for debitage or micro-debitage associated with indigenous land uses; third-party laboratory analyses, including micro- and macro-faunal analyses, micro- and macro-botanical analyses, radiocarbon dating of organic subsamples, and chemical analyses for potential indirect evidence of indigenous occupations; temporary curation of archival core sections; draft reports for review by BOEM and consulting Tribal Nations; final reporting; and public or professional presentations summarizing the results of the investigations, developed with the consent of the consulting Tribal Nations. The collection of vibracores must be completed prior to commencing seabed disturbing activities within the ASLFs. The qualified professional marine archaeologist leading the research must meet the professional qualifications listed under Stipulation X (*Expertise and Qualifications*). If any unanticipated discovery is found during the implementation of this mitigation measure, then BOEM with the assistance of the Lessee will follow the Stipulation XIII (*Post-Review Discoveries*).

- a. The Lessee must complete collection of the vibrocore samples prior to commencing seabed disturbing activities within ASLFs.
 - b. The Lessee must invite consulting Tribal Nations to participate during core opening and processing and must provide compensation and travel and per diem costs, consistent with each Tribal Nation's standard costs for monitoring activities.
 - c. The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XV (*Reporting*).
- ii. Open-Source GIS, Story Maps, and Animations. The Lessee will implement the following measures: Consultation with the Tribal Nations to determine the appropriate open-source GIS platform; review of candidate datasets and attributes for inclusion in the GIS; data integration; development of custom reports or queries to assist in future research or tribal maintenance of the GIS; work sessions with Tribal Nations to develop Story Map content or equivalent digital media; training sessions with Tribal Nations to review GIS functionality; review of Draft Story Maps with Tribal Nations; delivery of GIS to Tribal Nations; and consultation with Tribal Nations to decide how the data will be interpreted and represented and the format to be used (i.e. Story Maps or reports).
- a. The Lessee must develop the GIS under this measure so that it is free to use and free to modify by the Tribal Nations. To the extent feasible, the Lessee must provide all data in formats that allow for interoperability with other GIS platforms that the Tribal Nations may use. All datasets incorporated in the GIS must comply with Federal Geographic Data Committee data and metadata standards.
 - b. The Lessee must submit the Description of the GIS with appropriate schema, data organization, and custom reports/queries, formatting, and intended audiences, and Final Technical Description of the GIS with schema, data organization, and custom reports/queries to the consulting Tribal Nations for review.
 - c. BOEM, in consultation with the Tribal Nations, will select a consultant to implement these mitigation measures, per the Expertise and Qualifications stipulation for investigations of ASLFs (Stipulation X.C).
 - d. The Lessee may complete the mitigation measure during or post-construction but the Lessee must complete it within four years of execution of this MOA, unless different timing is agreed upon by the consulting Tribal Nations and accepted by BOEM.
 - e. The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XV (*Reporting*).
- iii. ASLF Post-Construction Seafloor Impact Inspection.
- a. Assessment. The Lessee must assess seafloor impacts on a maximum of 38 ASLFs that are adversely affected and analyze the ASLFs for the presence of archaeological materials, including but not limited to chipped stone tools, flakes, modified wooden implements, and bone. The post-construction seafloor assessment may consist of a QMA conducting or overseeing a Remotely Operated Vehicle (ROV) of the seafloor in the areas where previously identified ASLFs exist and where construction activities will permanently disturb the ASLFs and displace material culture.

- b. Three-Dimensional (3D) Model. The Lessee must develop a 3D model to define the spatial relationship of Project components and installation methodology (e.g., cable installation via trenching or jetting) relative to the ASLFs. The 3D model must identify portions of ASLFs within the vertical APE that will be impacted and that possess a high potential for preserved evidence of human occupation.
- c. Documentation. The QMA must document the impacts immediately following the installation of any inter-array cables, WTGs, service platforms, and export cables that impact the previously identified ASLFs. Documentation of the impacted ASLFs must include the use of standard archaeological methodologies.
- d. Methods. This inspection must cover not only the immediate physical impacts on the seafloor but also any berms created during trenching activities, anchoring activities, and scour or berms made during pile driving and installation of WTGs. These methodologies may include, but are not limited to, establishing a permanent datum, mapping, photo, video, 3D photogrammetry, and collecting a limited number of artifacts. For position accuracy, the ROV should be tracked using an Ultra- Short Base Line (USBL) positioning system.
- e. Reporting. In the final report for each of these investigations, the QMA must note the seafloor conditions (visibility), environmental conditions (e.g., sandy, mud, shell hash bottom), sea state, and how much time has passed since the construction activities have concluded in the area of the ASLF. The Lessee must produce a series of as-laid or as-placed plats that will show the location of the infrastructure in relation to the ASLF and should include both horizontal and vertical penetration into the ASLF. The maps must also include the location of any sites and artifacts identified as a result of the visual inspection. If sites are identified on state-owned submerged bottomlands, a copy of the notification to the state, a copy of the site file, and the site trinomial must be provided as part of the final report. The QMA must include all logs and other data associated with the ROV visual inspection of the seafloor.
 - 1) Identification of potential cultural material during the ROV inspection would not constitute a post-review discovery under Stipulation XIII (*Post-Review Discoveries*) and would not trigger the reporting and consultation requirements established in the Marine Archaeology Monitoring and Post-Review Discovery Plan (Attachment 4) because the ASLFs subject to this mitigation measure are previously identified historic properties that have already been determined to be adversely affected by the undertaking. In the event that human remains or potential human remains are identified during the ROV inspections, the Lessee must adhere to the Marine Archaeology Monitoring and Post-Review Discovery Plan (Attachment 4), inclusive of the statutory, regulatory, and policy requirements incorporated, therein.
 - 2) The Lessee must provide Tribal Nations and BOEM with draft and final technical reports, including 3D models and resulting seafloor impact assessments.
 - 3) The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XV (*Reporting*).
- f. Timing. The Lessee must complete the post-construction seafloor inspection no later than 60 calendar days post-final cable burial. If unanticipated issues arise during

offshore construction that prevent the post-construction seafloor inspection from being completed within 60 calendar days post-final cable burial, the Lessee must notify BOEM and propose an alternate completion timeframe for BOEM approval.

- g. **Tribal Monitors.** The Lessee must coordinate with consulting Tribal Nations to provide them with an opportunity to participate as monitors either via live feed or on the vessel (depending upon vessel space, monitors' offshore safety training and certification, monitors' availability, and health and safety concerns) during the post-construction seafloor inspection of the previously identified ASLFs in the APE (as described above). The Lessee will commence coordination with Tribal Nations with sufficient time to allow Tribal Nations' members to obtain safety training and other certifications as necessary. The Lessee will provide Tribal Nations with notification of any opportunity to participate in monitoring no less than 30 days prior to start of activities for monitoring. The Lessee must provide compensation and travel and per diem costs, consistent with each Tribal Nation's standard costs for monitoring activities.
- iv. **Tribal Capacity for The Delaware Nation.** The Lessee must fulfill the following commitments in accordance with Attachment 6 (*Mitigation Funding Amounts*) and Attachment 7 (*Historic Property Treatment Plan for Ancient Submerged Landform Features*): funding Tribal Nation capacity activities as determined by The Delaware Nation associated with monitoring of the ASLFs, including but not limited to, technology upgrades and training associated with interpretation and analysis of non-proprietary or otherwise regulatory-protected GIS data; funding for The Delaware Nation's participation in ethnographic studies with other Tribes, if applicable; funding for The Delaware Nation THPO's collaboration in those same studies, if applicable; and providing relevant ASLF GIS data layers to The Delaware Nation for use in studies. The Delaware Nation will determine the priority of Tribal capacity needs and initiatives associated with monitoring of ASLFs.
 - a. The Lessee may complete this measure pre-, during, or post-construction, provided that the Lessee must complete the measure within five years after the MOA is executed.
 - b. BOEM, in consultation with the Tribal Nations, will select consultants to implement this mitigation measure, per the Expertise and Qualifications stipulation for investigations of ASLFs (Stipulation X.C).
 - c. The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XV (*Reporting*).
- v. **Tribal Capacity for the Delaware Tribe of Indians.** The Lessee must fulfill the following commitments in accordance with Attachment 6 (*Mitigation Funding Amounts*) and Attachment 7 (*Historic Property Treatment Plan for Ancient Submerged Landform Features*): funding the Tribal Nation's historic preservation capacity activities as determined by the Tribal Nation, including but not limited to, technology upgrades and training associated with interpretation and analysis of non-proprietary or otherwise regulatory-protected GIS data; engaging contractors to assist the Tribal Nation with GIS-related or archaeology-related activities; funding for the THPO's collaboration in studies with other Tribal Nations, if applicable; and providing relevant ASLF GIS data layers to the Tribal Nation for use in studies. The Tribal Nation will determine the priority of Tribal capacity historic preservation needs and initiatives.

- a. The Lessee may complete this measure pre-, during, or post-construction, provided that the Lessee must complete the measure within five years after the MOA is executed.
 - b. BOEM, in consultation with the Tribal Nations, will select consultants to implement this mitigation measure, per the Expertise and Qualifications stipulation for investigations of ASLFs (Stipulation X.C).
 - c. The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XV (*Reporting*).
- vi. Tribal Capacity for the Mashantucket (Western) Pequot Tribal Nation. The Lessee must fulfill the following commitments in accordance with Attachment 6 (*Mitigation Funding Amounts*) and Attachment 7 (*Historic Property Treatment Plan for Ancient Submerged Landform Features*): funding the Tribal Nation's historic preservation capacity activities as determined by the Tribal Nation, including but not limited to, technology upgrades and training associated with interpretation and analysis of non-proprietary or otherwise regulatory-protected GIS data; engaging contractors to assist the Tribal Nation with GIS-related or archaeology-related activities; funding for the THPO's collaboration in studies with other Tribal Nations, if applicable; and providing relevant ASLF GIS data layers to Tribal Nation for use in studies. The Tribal Nation will determine the priority of Tribal capacity historic preservation needs and initiatives.
- a. The Lessee may complete this measure pre-, during, or post-construction, provided that the Lessee must complete the measure within five years after the MOA is executed.
 - b. BOEM, in consultation with the Tribal Nations, will select consultants to implement this mitigation measure, per the Expertise and Qualifications stipulation for investigations of ASLFs (Stipulation X.C).
 - c. The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XV (*Reporting*).
- vii. Tribal Capacity for the Mashpee Wampanoag Tribe. The Lessee must fulfill the following commitments in accordance with Attachment 6 (*Mitigation Funding Amounts*) and Attachment 7 (*Historic Property Treatment Plan for Ancient Submerged Landform Features*): funding the Tribal Nation's historic preservation capacity activities as determined by the Tribal Nation, including but not limited to, technology upgrades and training associated with interpretation and analysis of non-proprietary or otherwise regulatory-protected GIS data; engaging contractors to assist the Tribal Nation with GIS-related or archaeology-related activities; funding for the THPO's collaboration in studies with other Tribal Nations, if applicable; and providing relevant ASLF GIS data layers to Tribal Nation for use in studies. The Tribal Nation will determine the priority of Tribal capacity historic preservation needs and initiatives.
- a. The Lessee may complete this measure pre-, during, or post-construction, provided that the Lessee must complete the measure within five years after the MOA is executed.
 - b. BOEM, in consultation with the Tribal Nations, will select consultants to implement this mitigation measure, per the Expertise and Qualifications stipulation for investigations of ASLFs (Stipulation X.C).

- c. The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XV (*Reporting*).
- viii. Tribal Capacity for the Shinnecock Indian Nation. The Lessee must fulfill the following commitments in accordance with Attachment 6 (*Mitigation Funding Amounts*) and Attachment 7 (*Historic Property Treatment Plan for Ancient Submerged Landform Features*): funding the Tribal Nation's historic preservation capacity activities as determined by the Tribal Nation, including but not limited to, technology upgrades and training associated with interpretation and analysis of non-proprietary or otherwise regulatory-protected GIS data; engaging contractors to assist the Tribal Nation with GIS-related or archaeology-related activities; funding for the THPO's collaboration in studies with other Tribal Nations, if applicable; and providing relevant ASLF GIS data layers to Tribal Nation for use in studies. The Tribal Nation will determine the priority of Tribal capacity historic preservation needs and initiatives.
- a. The Lessee may complete this measure pre-, during, or post-construction, provided that the Lessee must complete the measure within five years after the MOA is executed.
 - b. BOEM, in consultation with the Tribal Nations, will select consultants to implement this mitigation measure, per the Expertise and Qualifications stipulation for investigations of ASLFs (Stipulation X.C).
 - c. The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XV (*Reporting*).
- ix. Tribal Capacity for the Stockbridge-Munsee Community Band of Mohican Indians. The region for assessment consists of the Munsee homelands in New Jersey. Per BOEM's consultation with the Stockbridge-Munsee Community Band of Mohican Indians, the Lessee will fulfill the following commitments in accordance with Attachment 6 (*Mitigation Funding Amounts*) and Attachment 7 (*Historic Property Treatment Plan for Ancient Submerged Landform Features*): funding the Tribal Nation's historic preservation capacity activities as determined by the Tribal Nation, including but not limited to development of a subsistence and settlement study by engaging a qualified contractor and providing funding for a desktop assessment of archaeological assemblages for a subsistence and settlement pattern analysis in New Jersey; developing a methodology for predictive modeling for areas with sensitivity for the presence of archaeological sites, including historic properties and sites of religious and cultural significance to the Tribal Nation; assembling GIS data layers indicating site locations, digital copies of site maps, reports, and literature relevant to the study (this may require additional consultation between the Tribal Nation, contractor, and New Jersey SHPO); funding for the Stockbridge-Munsee THPO's direction of and collaboration on the study; providing relevant GIS data layers to the Tribal Nation for use in this study as well as providing a tutorial on the data; coordinating with the Tribal Nation on reviewing and responding to comments on draft deliverables; and providing final deliverables consisting of one confidential report per participating Tribal Nation that may contain sensitive resource information and one report that could be made available to the public (both reports may be distributed by the Stockbridge-Munsee Community Band of Mohican Indians at the Tribe's discretion). The Stockbridge-Munsee Community Band of Mohican Indians may also share these reports with any other Tribal Nations if requested at the Tribe's discretion.

- a. The Delaware Tribe of Indians and/or The Delaware Nation may elect to participate in the study with the Stockbridge-Munsee Community Band of Mohican Indians.
 - b. The Lessee may complete this measure pre-, during, or post-construction, provided that the Lessee must complete the measure within five years after the date the MOA is executed.
 - c. The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XV (*Reporting*).
 - d. BOEM, in consultation with the Stockbridge-Munsee Community Band of Mohican Indians, will review and approve the Request for Proposals prepared by the Lessee and will select consultants to implement this mitigation measure, per the Expertise and Qualifications stipulation (Stipulation X.C). Further, the Stockbridge-Munsee Community Tribal Historic Preservation Office staff will provide direction, monitor the progress of and offer feedback to the consultant(s) for which the Stockbridge-Munsee Community will be compensated from the total mitigation funding amount identified for this mitigation measure in Attachment 6 (*Mitigation Funding Amounts*) including for personnel, administrative costs and/or other expenses incurred associated with implementing this measure.
- x. Tribal Capacity for the Wampanoag Tribe of Gay Head (Aquinnah). The Lessee must fulfill the following commitments in accordance with Attachment 6 (*Mitigation Funding Amounts*) and Attachment 7 (*Historic Property Treatment Plan for Ancient Submerged Landform Features*): funding the Tribal Nation's historic preservation capacity activities as determined by the Tribal Nation, including but not limited to, technology upgrades and training associated with interpretation and analysis of non-proprietary or otherwise regulatory-protected GIS data; engaging contractors to assist the Tribal Nation with GIS-related or archaeology-related activities; funding for the THPO's collaboration in studies with other Tribal Nations, if applicable; and providing relevant ASLF GIS data layers to Tribal Nation for use in studies. The Tribal Nation will determine the priority of Tribal capacity historic preservation needs and initiatives.
- a. The Lessee may complete this measure pre-, during, or post-construction, provided that the Lessee must complete the measure within five years after the MOA is executed.
 - b. BOEM, in consultation with the Tribal Nations, will select consultants to implement this mitigation measure, per the Expertise and Qualifications stipulation for investigations of ASLFs (Stipulation X.C).
 - c. The Lessee must notify signatories and Tribal Nations of completion of this measure through annual reporting, per Stipulation XV (*Reporting*).

C. Visual APE

- 1. BOEM will include the measures in Stipulation III.C.1 as conditions of approval of the Project COP and as mitigation measures to resolve adverse effects, including direct, indirect, and cumulative effects, on the 29 adversely affected aboveground historic properties in the visual APE in New Jersey:
 - o In Atlantic County:
 - Atlantic City:

- Absecon Lighthouse;
- Atlantic City Boardwalk Historic District;
- Atlantic City Convention Hall (Jim Whelan Boardwalk Hall; NHL);
- Central Pier;
- Haddon Hall (Resorts Casino Hotel);
- Missouri Avenue Beach (Chicken Bone Beach);
- Ritz Carlton Hotel;
- Riviera Apartments;
- U.S. Coast Guard Station;
- 120 Atlantic Avenue;
- Brigantine City:
 - Brigantine Hotel;
- Galloway Township:
 - Seaview Golf Club, Clarence Geist Pavilion;
- Longport Borough:
 - Great Egg Coast Guard Station;
- Margate City:
 - Lucy, The Margate Elephant (NHL);
 - Margate Fishing Pier;
 - 108 South Gladstone Avenue;
 - 114 South Osborne Avenue;
- Ventnor City:
 - John Stafford Historic District;
 - Saint Leonard's Tract Historic District;
 - Vassar Square Condominiums;
 - Ventnor City Fishing Pier;
 - 114 South Harvard Avenue;
- In Cape May County:
 - Ocean City:
 - The Flanders Hotel;
 - Music Pier;
 - Ocean City Boardwalk;
- In Ocean County:
 - Barnegat Light:
 - Barnegat Lighthouse;
 - Berkeley Township:
 - Forked River Coast Guard Station No. 112;
 - Island Beach State Park Historic District;
 - Little Egg Harbor:
 - Little Egg Harbor U.S. Life Saving Station #23.
- i. Mitigation Fund for Historic Properties. The Lessee must contribute funding to a mitigation fund in the amounts set forth in Attachment 6 (*Mitigation Funding Amounts*) to resolve visual adverse effects on the following 19 of the 29 adversely affected historic properties in New Jersey:
- In Atlantic County
 - Atlantic City:

- Central Pier;
- Haddon Hall (Resorts Casino Hotel);
- Ritz Carlton Hotel;
- Riviera Apartments;
- U.S. Coast Guard Station;
- 120 Atlantic Avenue;
- Brigantine City:
 - Brigantine Hotel;
- Galloway Township:
 - Seaview Golf Club, Clarence Geist Pavilion;
- Margate City:
 - Margate Fishing Pier;
 - 108 South Gladstone Avenue;
 - 114 South Osborne Avenue;
- Ventnor City:
 - John Stafford Historic District;
 - Vassar Square Condominiums;
 - Ventnor City Fishing Pier;
 - 114 South Harvard Avenue;
- In Cape May County:
 - Ocean City:
 - The Flanders Hotel;
 - Music Pier;
 - Ocean City Boardwalk;
- In Ocean County:
 - Little Egg Harbor:
 - Little Egg Harbor U.S. Life Saving Station #23.

See Attachment 6 for funding amounts, based on input of qualified consultants with experience fulfilling activities similar to those that can be funded through a mitigation fund and for historic properties comparable to those adversely affected by the Project.

- a. Fund Establishment. BOEM will require the Lessee to establish and contribute funds to a mitigation fund to resolve visual adverse effects on the historic properties. Attachment 6 provides a basis for the total funding amount, based on input of qualified consultants with experience fulfilling activities similar to those that may be funded through the mitigation fund and for historic properties comparable to those adversely affected by the Project.
- b. Fund Administration and Monitoring. BOEM and the Lessee have identified the New Jersey Historic Trust (third-party administrator) as an appropriate non-profit historic preservation organization to administer the fund and the funded activities, and to ensure the effectiveness of these activities as mitigation for the undertaking's adverse effect on the historic properties. BOEM will consult with the third-party administrator and New Jersey SHPO prior to allowing the third-party administrator to issue any grants to ensure the third-party administrator will award grants for preservation-related activities. The third-party administrator's fees and administrative costs will be paid from the fund and must not exceed 6% of the fund amount. BOEM, with the assistance of the third-party administrator, must ensure through the annual

reporting process (see Stipulation XV) that all granted funds are used exclusively for the purposes described in Stipulation III.C for direct costs of preservation, interpretation, or commemoration of the historic properties adversely affected by the undertaking. The third-party administrator must prohibit the use of grant funds for indirect costs, such as accountant fees, employee salaries or benefits, or legal fees. BOEM and the Lessee have consulted with consulting parties on the selection of the New Jersey Historic Trust as the third-party administrator. BOEM found the New Jersey Historic Trust to be acceptable as the third-party administrator. BOEM will follow the same consultation process in the case of replacement of the third-party administrator, if needed.

- c. Funding Amounts. In order to mitigate the undertaking's visual adverse effects on historic properties, the Lessee must provide the lump sum amount of \$1,585,000 in support of historic preservation and public interpretive and commemorative activities; see Attachment 6. The amount contributed on behalf of each individual historic property is based on previously proposed measures for comparable historic properties (including, but not limited to, activities such as applicable brick and mortar preservation, public access, or interpretation activities). BOEM considers these measures to be appropriate to fully address the nature, scope, size, and magnitude of adverse effects, including cumulative effects caused by the Project to the NRHP-qualifying characteristics of each historic property that would be affected. In the specific context of this undertaking, including the privately owned properties involved, the signatories agree that it is appropriate to provide flexibility to implement these or other specific activities for preservation, interpretation, and commemoration to mitigate adverse effects on historic properties, and the signatories agree that the level of funding identified in Attachment 6 is appropriate.
- d. Depositing the Funding Amount. Within 90 days of the Lessee receiving a non-objection notice for the Project's last Fabrication and Installation Report (FIR), or 60 days after submittal of the last FIR with BSEE not having raised objections (30 CFR 285.700(b)), the Lessee must pay \$1,585,000 to an account specified by the third-party administrator. The third-party administrator will manage the mitigation fund for the purpose of providing grants until the fund balance is expended. Notwithstanding the additional obligations of the Lessee under this MOA, including reporting on the implementation of the mitigation fund, the Lessee's deposit of such funds into this mitigation fund will satisfy the Lessee's obligations as it relates to mitigation for visual adverse effects on the historic properties listed in Stipulation III.C.1.i, unless additional consultation is required in the event of unapplied funds, as described below.
- e. Allocation of Funds through Grants. The third-party administrator will allocate funds to grants to support mitigation activities for the preservation, interpretation, or commemoration of historic sites, buildings, or events. The third-party administrator will award grants for the long-term protection, preservation, and commemoration of adversely affected historic properties in the following order of preference: Grants must first be awarded to the historic properties listed in Stipulation III.C.1.i. If after two years from the date the third-party administrator begins accepting grant applications, there are any funds still unapplied, then grants may be awarded for activities for any visually adversely affected historic property identified in the Finding of Adverse Effect and Stipulation III.C.1.

- f. Unapplied Funds. If, after five years from the date the administrator begins accepting grant applications, any funds are unapplied, then BOEM will consult with the consulting parties on appropriate use of the remaining funds to resolve adverse effects, and the MOA may be amended if necessary. BOEM will ensure that the mitigation fund operating procedures are clear that the remaining funds will be used for historic properties that are listed under Stipulation III.C.1 and that have not yet received any funds from this mitigation fund. After those historic properties are addressed, then any remaining funds may be applied to activities for any adversely affected historic property identified in the Finding of Adverse Effect. The signatories agree that the existence of unapplied funds does not constitute a breach of this agreement.
- g. Mitigation Fund Operating Procedures and Reporting. BOEM will consult with the third-party administrator to develop operating procedures for the mitigation fund, and BOEM will review and approve the final operating procedures no later than two years after the MOA is executed. BOEM will provide the final operating procedures to the consulting parties upon their completion. The mitigation fund operating procedures will clarify when and how the third-party administrator will start accepting grants, including the time period for application, how the applications will be screened, and the criteria for grant funding eligibility. BOEM will ensure that the third-party administrator has procedures under which it will provide a copy of all grants made and an annual report on expenditure of funds and activities to BOEM, New Jersey SHPO, and the Lessee. The Lessee must summarize the third-party administrator's annual report to describe funded mitigation activities, progress, completion, and outcomes in the annual report per the Reporting Stipulation (Stipulation XV), with sufficient detail for BOEM to ensure that the mitigation is being implemented according to this section.
- h. Grant-supported Mitigation Standards. BOEM will ensure that the operating procedures include the following, where applicable:
 - 1) Where Historic American Buildings Survey (HABS) documentation and HABS-like documentation is implemented as a grant-supported mitigation through the mitigation fund, the grantee will first consult with the New Jersey SHPO and the NPS, as appropriate, to identify photographic documentation specifications.
 - 2) Where a Historic Structure Report is implemented as a grant-supported mitigation through the mitigation fund, the documentation will be prepared in accordance with New Jersey SHPO's 2015 *Historic Structure Reports and Preservation Plans: A Preparation Guide – Second Edition*, as may be amended, and the project team must include an individual meeting the SOI's qualifications standards for Historic Architecture.
 - 3) Where funding is granted for projects that include physical changes to historic properties, including for visitor experience, public access, climate resiliency, or comparable actions, all projects must meet the SOI's Standards for the Treatment of Historic Properties, and these projects should not constitute adverse effects themselves on the historic properties.
- ii. Funding and Implementation of Historic Property Treatment Plans. The Lessee must fund and implement the following measures described in HPTPs to resolve adverse effects on ten (10) of the 29 adversely affected aboveground historic properties in the visual APE, described in Stipulation III.C.1.i:

- In Atlantic County:
 - Atlantic City:
 - Atlantic City Convention Hall (Jim Whelan Boardwalk Hall; NHL);
 - Absecon Lighthouse;
 - Atlantic City Boardwalk Historic District;
 - Missouri Avenue Beach (Chicken Bone Beach);
 - Longport Borough:
 - Great Egg Coast Guard Station;
 - Margate City:
 - Lucy, The Margate Elephant (NHL);
 - Ventnor City:
 - Saint Leonard's Tract Historic District;
- In Ocean County:
 - Barnegat Light:
 - Barnegat Lighthouse;
 - Berkeley Township:
 - Forked River Coast Guard Station No. 112;
 - Island Beach State Park Historic District.
- a. The Lessee must fund the mitigation measures according to Attachment 6 (*Mitigation Funding Amounts*), which contains funding amounts for each mitigation measure in Stipulation III.C.1.ii. Funding amounts reflect good faith estimates, based on the experience of qualified consultants with similar activities and comparable historic properties.
- b. The Lessee must ensure the mitigation measures under Stipulation III.C.1.ii are completed within four years of MOA execution, unless a different timeline is agreed upon by interested consulting parties and accepted by BOEM and may be completed simultaneously, as applicable.
- c. All mitigation is subject to New Jersey SHPO review and approval. Mitigation measures must comply with the SOI Standards for the Treatment of Historic Properties.
- d. National Historic Landmarks (NHLs)
 - 1) Consistent with NHPA Section 110(f) and as described in the Finding of Adverse Effect, BOEM has undertaken planning and actions as may be necessary to minimize harm to NHLs. The mitigation for this NHL does not replace any other planning and actions BOEM has taken to comply with that statutory requirement.
 - 2) For each adversely affected NHL, within 90 days of the Lessee receiving a non-objection notice for the Project's last Fabrication and Installation Report (FIR), or 60 days after submittal of the last FIR with BSEE not having raised objections (30 CFR 285.700(b)), the Lessee must deposit the funding for the mitigation measure into a dedicated account specified by each historic property representative.
 - 3) Atlantic City Convention Hall (Jim Whelan Boardwalk Hall) (NHL) in Atlantic City, Atlantic County. The following mitigation measure would be implemented to resolve adverse effects on this historic property as described in the corresponding HPTP (Attachment 8):

- Provide funding toward the rehabilitation of the Kennedy Plaza West Pavilion at the Atlantic City Convention Hall (Jim Whelan Boardwalk Hall) NHL. Funding may also be used toward the refinement of plans and specifications for the proposed project. The rehabilitation of the building will allow the currently vacant section of the NHL to be returned to public use to be enjoyed by visitors to the Atlantic City Convention Hall (Jim Whelan Boardwalk Hall) NHL and the Atlantic City Boardwalk.
- 4) Lucy, The Margate Elephant (NHL) in Margate City, Atlantic County. The following mitigation measure would be implemented to resolve adverse effects on this historic property as described in the corresponding HPTP (Attachment 9):
- Provide funding toward the construction of a new visitor experience and welcome center at the Lucy, The Margate Elephant NHL. Funding may also be used toward the refinement of plans and specifications for the proposed project or to the landscaping and/or hardscaping. The number of people that visit Lucy, The Margate Elephant has surpassed the capacity of the current facilities and there are currently not enough restrooms nor is Lucy, The Margate Elephant accessible to all members of the public. This project is being designed to enhance the visitor experience and to accommodate larger groups as well as school children and opportunity to visit this historic resource.
- e. Historic Properties Owned by the State of New Jersey (NJDEP). The following mitigation measure would be implemented to resolve adverse effects on Absecon Lighthouse in Atlantic City, Atlantic County; Barnegat Lighthouse in Barnegat Light, Ocean County; Forked River Coast Guard Station No. 112 in Berkeley Township, Ocean County; and Island Beach State Park Historic District in Berkeley Township, Ocean County as described in the corresponding HPTP (Attachment 10).
- 1) Provide funding to NJDEP for the planning or implementation of preservation, restoration, rehabilitation, cyclical maintenance, resiliency planning, disaster recovery, or other associated activities to ensure the long-term preservation of these historic properties.
- f. Other Historic Properties in Atlantic County.
- 1) Atlantic City Boardwalk Historic District in Atlantic City. The following mitigation measure would be implemented to resolve adverse effects on this historic property as described in the corresponding HPTP (Attachment 11):
 - Provide funding toward the next phase of the Atlantic City Boardwalk Restoration Plan. Due to the length of the boardwalk, Atlantic City has been replacing portions of the structure, which is the longest in the world, in segments and has secured grants and other sources of funding for the work completed thus far. The intent of this mitigation measure is to provide Atlantic City with funding to be used toward the repair and/or removal and replacement of the next planned segment of the Atlantic City Boardwalk.
 - 2) Great Egg Coast Guard Station in Longport Borough. The following mitigation measure would be implemented to resolve adverse effects on this historic property as described in the corresponding HPTP (Attachment 12):

- Provide funding to the Borough of Longport for the planning or implementation of preservation, restoration, rehabilitation, cyclical maintenance, resiliency planning, disaster recovery, or other associated activities to ensure the long-term preservation of the Great Egg Coast Guard Station.
- 3) Missouri Avenue Beach (Chicken Bone Beach) in Atlantic City. The following mitigation measures would be implemented to resolve adverse effects on this historic property as described in the corresponding HPTP (Attachment 13):
- Provide funding to hire a Secretary of the Interior Qualified Professional to produce a study to determine if the Missouri Avenue Beach (Chicken Bone Beach) qualifies as a TCP per the NPS's *National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties* (Parker and King, 1992). The consultant will work with the Chicken Bone Beach Historical Foundation, Inc. and the interested consulting parties to develop a methodology and exact scope of work.
 - Provide funding to develop and install signage to increase public awareness of the history and significance of Missouri Avenue Beach (Chicken Bone Beach).
 - Provide funding to the Chicken Bone Beach Historical Foundation Inc. to promote the history and significance of Missouri Avenue Beach (Chicken Bone Beach) through the Youth Jazz Institute.
- 4) St. Leonard's Tract Historic District in Ventnor City. One or more of the following mitigation measures will be implemented to resolve adverse effects on this historic property as determined through consultations among BOEM, the Lessee, and the St. Leonard's Association following the execution of this MOA and described in the corresponding HPTP (Attachment 14):
- Creation of a Photographic Survey of the Association's Existing Historic Homes.
 - Research and Preparation of Public Educational Materials on the history of St. Leonard's Tract.
 - Signage Commemorating the History of the St. Leonard's Tract.
 - St. Leonard's Association Website and "St. Leonard's Tract-Where History Happens" Podcast Support.
 - BOEM, in consultation with the St. Leonard's Association, will review and approve the Request(s) for Proposals prepared by the Lessee to implement the selected mitigation measures and will select consultants to implement this mitigation measure, per the Expertise and Qualifications stipulation (Stipulation X.C).
- g. In order to demonstrate that mitigation measures in the HPTPs that involve physical changes to an adversely affected historic property will not result in additional adverse effects on that historic property, the Lessee must engage a historic architect or architectural historian that meets the SOI Professional Qualifications Standards to review all architectural/engineering plans and specifications from contractors. This historic architect or architectural historian will prepare a report for each mitigation

measure that describes how the proposed work meets the SOI Standards for the Treatment of Historic Properties, which will be submitted to BOEM prior to the start of construction for each mitigation measure. The Lessee will submit that documentation to BOEM and to New Jersey SHPO for review and approval per Stipulation VI (*Review Process for Documents Produced Under MOA Stipulations*). Documentation of conformance with the SOI Standards must be maintained by the Lessee. The Lessee must also keep a record of all final plans and specifications for each mitigation project, which will be available to BOEM or the New Jersey SHPO upon request.

- 1) The historic architect or architectural historian must submit the following to BOEM and New Jersey SHPO for review as part of the historic architect or architectural historian's report:
 - A site plan that has the north direction clearly marked;
 - A set of architectural/engineering plans and specifications for the mitigation measure;
 - Photographs of the historic property before mitigation implementation;
 - A description of the mitigation measure (the project);
 - A description of the mitigation measure's origin (including but not limited to "requested by the property owner through consultation on [date]");
 - Identification of the staff who meet the SOI Professional Qualifications Standards; and
 - A description of how the work meets the SOI Standards for the Treatment of Historic Properties.
- 2) The Lessee must submit the following to BOEM at the conclusion of the mitigation measure implementation:
 - Before and after images of the mitigation measure's implementation; and
 - A concluding report from the historic architect or architectural historian describing how the work met the SOI Standards for the Treatment of Historic Properties.

IV. PHASED IDENTIFICATION AND EVALUATION OF HISTORIC PROPERTIES

- A. BOEM will defer and phase the final identification and evaluation of historic properties within the terrestrial APE, pursuant to 36 CFR 800.4(b)(2) and 800.5(a)(4), and consistent with the *Terrestrial Archaeology Phased Identification Plan* (Attachment 15). BOEM, with the assistance of the Lessee, will conduct phased identification and evaluation of historic properties in the terrestrial APE and will then assess the effects and consult with Tribal Nations, the New Jersey SHPO, the ACHP, and consulting parties on identification, assessment of effect, and the resolution of adverse effects before the initiation of onshore construction of the Project at the locations subject to phased identification as specified in the *Terrestrial Archaeology Phased Identification Plan* (Attachment 15). BOEM will implement the following measures for phased identification in the terrestrial APE:

1. For identification of historic properties within portions of the terrestrial APE, the Lessee must conduct supplemental technical studies in accordance with New Jersey state guidelines and recommendations presented in BOEM's most recent *Guidelines*. The Lessee will coordinate with New Jersey SHPO prior to the initiation of any such identification efforts in the state.
 - i. BOEM will require the Lessee to document its identification efforts in a technical report that addresses the identification of historic properties and includes an evaluation of effects applying the criteria of adverse effect pursuant to 36 CFR 800.5(a).
 - ii. BOEM will require the Lessee to document its identification efforts for terrestrial archaeological resources in the State of New Jersey in a supplemental terrestrial archaeological resources survey report, consistent with New Jersey SHPO guidelines.
 - iii. BOEM will require the Lessee to prepare a supplemental Terrestrial Archaeological Resources Assessment that includes effects recommendations for terrestrial archaeological resources that are historic properties identified in the supplemental terrestrial archaeological resources survey report.
2. BOEM will consult with Tribal Nations, the New Jersey SHPO, the ACHP, and consulting parties on the results of historic property identification surveys for any portions of the APE that were not addressed in the pre-approval consultations.
3. If Project effects on identified terrestrial archaeological resources cannot be avoided, BOEM will require additional investigation to evaluate the NRHP eligibility of the potentially affected resources. BOEM will treat all identified potential historic properties as eligible for inclusion in the NRHP unless BOEM determines, and the SHPO agrees, that a property is ineligible, pursuant to 36 CFR 800.4.
4. If BOEM identifies no additional historic properties or determines that no historic properties are adversely affected as a result of this phased identification, BOEM, with the assistance of the Lessee, will notify and consult with Tribal Nations, the New Jersey SHPO, the ACHP, and consulting parties following the consultation process set forth here in this stipulation.
 - i. BOEM, with the assistance of the Lessee, will notify all Tribal Nations, the New Jersey SHPO, the ACHP, and consulting parties about the surveys and BOEM's determination by providing a written summary of the surveys including any maps, a summary of the surveys, and/or research conducted to identify historic properties and assess effects, and copies of the surveys.
 - ii. BOEM, with the assistance of the Lessee, must provide Tribal Nations, the New Jersey SHPO, the ACHP, and consulting parties with 60 calendar days to review and comment on the survey reports, the results of the surveys, BOEM's determination, and the documents.
 - iii. After the 60-calendar-day review period has concluded and no comments require additional consultation, BOEM, with the assistance of the Lessee, must notify Tribal Nations, the New Jersey SHPO, the ACHP, and consulting parties that New Jersey SHPO has concurred with BOEM's determination, and if BOEM received any comments, provide a summary of the comments and BOEM's responses. If the New Jersey SHPO provides comments on BOEM's determination, then BOEM will resolve any such comments through additional consultation.

- iv. If requested by the Tribal Nations, the New Jersey SHPO, the ACHP, or consulting parties, BOEM, with the assistance of the Lessee, will conduct a consultation meeting during this 60-calendar day review period.
 - v. This MOA will not need to be amended if no additional historic properties are identified and/or adversely affected.
5. If BOEM determines additional historic properties will be subject to adverse effects based on the information from these surveys, BOEM, with the assistance of the Lessee, will notify and consult with Tribal Nations, the New Jersey SHPO, the ACHP, and consulting parties regarding BOEM's finding and the proposed measures to resolve the adverse effect(s), including the development of a new HPTP(s) following the consultation process set forth in this stipulation. Funding from the Lessee to the extent necessary to implement mitigation measures to resolve the adverse effect(s) to historic properties identified through phased identification would be in addition to the maximum mitigation funding amount identified in Attachment 6 (*Mitigation Funding Amounts*).
- i. BOEM, with the assistance of the Lessee, will notify Tribal Nations, the New Jersey SHPO, the ACHP, and consulting parties about the surveys and BOEM's determination by providing a written summary of the results including any maps, a summary of the surveys and/or research conducted to identify historic properties and assess effects, copies of the surveys, BOEM's determination, and the proposed resolution measures for the adverse effect(s).
 - ii. The Tribal Nations, the New Jersey SHPO, the ACHP, and consulting parties will have 60 calendar days to review and comment on the documents including the adverse effect finding and the proposed resolution of adverse effect(s), including a draft HPTP(s).
 - iii. BOEM, with the assistance of the Lessee, will conduct a consultation meeting during this 60-calendar day review period, and additional consultation meetings, if necessary.
 - iv. BOEM, with the assistance of the Lessee, will respond to the comments and make necessary edits to the documents.
 - v. BOEM, with the assistance of the Lessee, will send the revised draft final documents to Tribal Nations, the New Jersey SHPO, the ACHP, and consulting parties for review and comment during a 30-calendar-day review and comment period. With this same submittal of draft final documents, the Lessee must provide a summary of all the comments received on the documents and BOEM's responses.
 - vi. BOEM, with the assistance of the Lessee, will respond to the comments on the draft final documents and make necessary edits to the documents.
 - vii. Once BOEM has received agreement from the New Jersey SHPO on the finding of new adverse effect(s) and BOEM has accepted the final measures to resolve adverse effects, BOEM, with the assistance of the Lessee, will notify the Tribal Nations, the New Jersey SHPO, the ACHP, and consulting parties that the phased identification and final measures to resolve adverse effects have been accepted. With this notification, BOEM, with the assistance of the Lessee, will provide to Tribal Nations, the New Jersey SHPO, the ACHP, and consulting parties the final document(s), including the final measures to resolve adverse effects and a summary of comments and BOEM's responses to comments, if they receive any on the draft final documents.

viii. The MOA will not need to be amended after the final measures to resolve adverse effects are accepted by BOEM.

6. If New Jersey SHPO disagrees with BOEM's determination regarding whether an affected property is eligible for inclusion in the NRHP, or if the ACHP or the Secretary of the Interior so request, the agency official will obtain a determination of eligibility from the Secretary pursuant to 36 CFR Part 63 (36 CFR 800.4(c)(2)).
7. If a Tribal Nation that attaches religious and cultural significance to a property off Tribal lands does not agree with BOEM's determination regarding whether an affected property is eligible for inclusion in the NRHP, the Tribal Nation may ask the ACHP to request the agency official to obtain a determination of eligibility pursuant to 36 CFR Part 63 (36 CFR 800.4(c)(2)).
8. If any of the consulting parties object to the findings or resolutions made pursuant to these measures, BOEM will resolve any such objections pursuant to the dispute resolution process set forth in Stipulation XVII (*Dispute Resolution*).

V. CONNECTED ACTION RELATED TO O&M FACILITY

- A. USACE will serve as Lead Federal Agency for the portion of the activities under the connected action of repair and/or replacement of an existing bulkhead at the Project O&M facility under a USACE Nationwide Permit 3 or Nationwide Permit 13. BOEM will participate in Section 106 review of the connected action. If this review requires alteration of the conclusions reached in the Finding of Adverse Effect for this Project and, thus, requires additional consultation with the signatories and consulting parties, BOEM will follow the steps outlined in the Project Modifications Stipulation (Stipulation VII) for notification and consultation.

VI. REVIEW PROCESS FOR DOCUMENTS PRODUCED UNDER MOA STIPULATIONS

- A. The following process will be used for any document, report, or plan produced in accordance with the Stipulations of this MOA or attachments to the MOA for which a specific review process has not been defined:
 1. Draft Document
 - i. The Lessee will provide the document to BOEM for technical review and approval.
 - a. BOEM will have 30 calendar days to complete its technical review.
 - b. If BOEM does not provide approval, it will submit its comments back to the Lessee, who will have 30 calendar days to address the comments.
 - ii. BOEM, with the assistance of the Lessee, will provide the draft document to the signatories and consulting parties, except the ACHP, for review, comment and/or approval.
 - a. Consulting parties will have 60 calendar days to review and comment or another time frame agreed upon by the signatories and consulting parties.
 - b. BOEM, with the assistance of the Lessee, will coordinate a meeting with consulting parties to facilitate comments on the document if requested by a consulting party.
 - c. BOEM will consolidate comments received and provide them to the Lessee within 15 calendar days of receiving comments from consulting parties.

- d. BOEM, with the assistance of the Lessee, will respond to the comments and make necessary edits to the documents.
 - iii. If BOEM requires substantial edits to the draft document, the Lessee must make those revisions and resubmit the document as a draft for revision under Stipulation VI.A.1.i.
2. Draft Final Document
- i. The Lessee must provide BOEM with the draft final document for technical review and approval.
 - a. BOEM will have 15 calendar days to complete its technical review.
 - b. If BOEM does not provide approval, it will submit its comments to the Lessee, who will have 15 calendar days to address the comments.
 - ii. BOEM, with the assistance of the Lessee, will provide the final draft document to the signatories and consulting parties, except the ACHP, for review, comment, and/or approval. With this same submittal of draft final documents, BOEM, with the assistance of the Lessee, will provide a summary of all comments received on the documents and BOEM's responses.
 - a. Consulting parties will have 30 calendar days to review and comment, or another time frame agreed upon by the signatories and consulting parties.
 - b. BOEM, with the assistance of the Lessee, will coordinate a meeting with consulting parties to facilitate comments on the document if requested by a consulting party.
 - c. BOEM will consolidate comments received and provide them to the Lessee within 15 calendar days of receiving comments from consulting parties.
 - d. BOEM, with the assistance of the Lessee, will respond to the comments and make necessary edits to the documents.
3. Final Document
- i. The Lessee must provide BOEM with the final document for approval.
 - a. BOEM will have 15 calendar days to complete its technical review.
 - b. If BOEM does not provide approval, it will submit its comments back to the Lessee, who will have 15 calendar days to address the comments.
 - c. BOEM, with the assistance of the Lessee, will provide the final document to consulting parties, except the ACHP, within 30 calendar days of approving the final document. With this same submittal of final documents, BOEM, with the assistance of the Lessee, must provide a summary of all the comments received on the documents and BOEM's responses.

VII. PROJECT MODIFICATIONS

- A. If the Lessee proposes any modifications to the Project that expand the Project beyond the Project Design Envelope included in the COP and/or occur outside of the defined APEs, or if the proposed modifications change BOEM's final NHPA Section 106 determinations and findings for

this Project, the Lessee must notify and provide BOEM with information concerning the proposed modifications. The Lessee must not proceed with the proposed modifications until the following process under Stipulation VII.A is concluded. BOEM will determine if these modifications require alteration of the conclusions reached in the Finding of Adverse Effect. BOEM, with assistance of the Lessee, will notify the signatories and consulting parties and will consult on whether these modifications require alteration of the conclusions reached in the Finding of Adverse Effect. The Lessee must provide the signatories consulting parties with information concerning the proposed changes, and these parties will have 30 calendar days from receipt of this information to comment on the proposed changes. BOEM will consider any comments from signatories and consulting parties prior to agreeing to any proposed changes. Using the procedure below, BOEM will, as necessary, consult with the signatories and consulting parties to identify and evaluate historic properties in any newly affected areas, assess the effects of the modification(s), and resolve any adverse effects. Any Project modification followed pursuant to Stipulation VII would not require an amendment to the MOA. BOEM will require the Lessee to document project modifications, including any consultations conducted under this Stipulation in the annual report, pursuant to Stipulation XV (*Reporting*).

1. If the Project is modified and BOEM identifies no additional historic properties or determines that no historic properties are adversely affected due to the modification, BOEM, with the assistance of the Lessee, will notify and consult with the signatories and consulting parties following the consultation process set forth in this Stipulation VII.A.1.
 - i. BOEM, with the assistance of the Lessee, will notify the signatories and consulting parties about this proposed change and BOEM's determination by providing a written summary of the Project modification including maps, a summary of any additional surveys and/or research conducted to identify historic properties and assess effects, and copies of the surveys.
 - ii. BOEM, with the assistance of the Lessee, will provide the signatories and consulting parties with 30 calendar days to review and comment on the proposed change, BOEM's determination, and the documents.
 - iii. After the 30-calendar-day review period has concluded and if no comments require additional consultation, BOEM, with the assistance of the Lessee, will notify the signatories and consulting parties that BOEM has approved the project modification and, if BOEM received any comments, provide a summary of the comments and BOEM's responses.
 - iv. BOEM, with the assistance of the Lessee, will conduct any consultation meetings if requested by the signatories or consulting parties.
 - v. This MOA will not need to be amended if no additional historic properties are identified and/or adversely affected.
2. If BOEM determines new adverse effects on historic properties will occur due to Project modification(s), BOEM, with the assistance of the Lessee will notify and consult with the signatories and consulting parties regarding BOEM's determination and the proposed measures to resolve the adverse effect(s), including the development of a new HPTP(s) following the consultation process set forth in this Stipulation VII.A.2.

- i. BOEM, with the assistance of the Lessee, will notify all signatories and consulting parties about the proposed modification, BOEM's determination, and the proposed resolution measures for the adverse effect(s).
 - ii. The signatories and consulting parties will have 30 calendar days to review and comment on the adverse effect finding and the proposed resolution of adverse effect(s), including a draft HPTP(s).
 - iii. BOEM, with the assistance of the Lessee, will conduct additional consultation meetings, if necessary, during consultation on the adverse effect finding and during drafting and finalization of the HPTP(s).
 - iv. BOEM, with the assistance of the Lessee, will respond to the comments and make necessary edits to the documents.
 - v. BOEM, with the assistance of the Lessee, will send the revised draft final documents to the signatories and consulting parties for review and comment during a 30-calendar-day review and comment period. With this same submittal of draft final documents, BOEM, with the assistance of the Lessee, will provide a summary of all the comments received on the documents and BOEM's responses.
 - vi. BOEM, with the assistance of the Lessee, will respond to the comments on the draft final documents and make necessary edits to the documents.
 - vii. BOEM, with the assistance of the Lessee will notify the signatories and consulting parties that BOEM has approved the project modification and will provide the final document(s) including the final HPTP(s) and a summary of comments and BOEM's responses to comments, if BOEM receives any on the draft final documents, after BOEM has received concurrence from New Jersey SHPO on the finding of new adverse effect(s), BOEM has accepted the final HPTP(s), and BOEM has approved the Project modification.
 - viii. The new HPTP will be attached to the MOA after it is accepted by BOEM. The MOA will not need to be amended after the HPTP(s) is accepted by BOEM.
- B. If any of the signatories or consulting parties object to determinations, findings, or resolutions made pursuant to these measures (Stipulations VII.A.1 and VII.A.2), BOEM will resolve any such objections pursuant to the dispute resolution process set forth in the Stipulation XVII (*Dispute Resolution*).

VIII. SUBMISSION OF DOCUMENTS

- A. Federally recognized Tribal Nations, New Jersey SHPO, ACHP, and consulting parties:
 - 1. All submittals will be submitted electronically unless a specific request is made for the submittal to be provided in paper format.

IX. CURATION

- A. Collections from Federal lands or the OCS:
 - 1. Any archaeological materials removed from Federal lands or the OCS as a result of the actions required by this MOA will be curated in accordance with 36 CFR Part 79, "Curation of Federally Owned and Administered Archaeological Collections," ACHP's "Recommended Approach for Consultation on Recovery of Significant Information from Archaeological

Sites” published in the Federal Register (64 Fed. Reg. 27,085-27,087 [May 18, 1999]), or other provisions agreed to by the consulting parties and following applicable State guidelines. Other provisions may include curating materials of Native American heritage with Tribal Nations. No excavation is allowed to be initiated before acceptance and approval of a curation plan. The curation plan must be developed through consultation with the consulting Tribal Nations, agencies, and property owners and finalized within one year after completion of the associated construction activities.

- i. In the event artifacts and material culture of Native American heritage within the coastal and marine environments are identified and recovered during pre-construction, construction, operation, maintenance, and decommissioning of the proposed Project under this MOA, including for mitigation or resulting from post-review discovery including but not limited to vibracore sampling, those materials, if they are not replaced on the seafloor, will be housed at a curatorial facility in consultation with the Tribal Nations. These collection and curation directions do not apply to the post-construction seafloor inspection mitigation.
2. If suspected human remains are encountered, the Lessee must comply with the ACHP’s *Policy Statement on Burial Sites, Human Remains, and Funerary Objects* (March 2023) and the post-review discovery plans for marine archaeology (Attachment 4) and terrestrial archaeology (Attachment 5).

B. Collections from state, local government, and private lands:

1. Archaeological materials from state or local government lands in the APE and the records and documentation associated with these materials will be curated within the state of their origin at a repository preferred by the SHPO, or an approved and certified repository, in accordance with the standards and guidelines required by New Jersey SHPO for materials collected in New Jersey. Curating materials of Native American heritage with Tribal Nations should be considered an acceptable option. State and local government lands as described here may include the seafloor in state waters. No excavation should be initiated before acceptance and approval of a curation plan. The curation plan will be developed through consultation with consulting Tribal Nations, agencies, and property owners and finalized within one year after completion of the associated construction activities.
 - i. In the event artifacts and material culture of Native American heritage within the coastal and marine environments are identified and recovered from state property during pre-construction, construction, operation, maintenance, and decommissioning of the proposed Project under this MOA, including for mitigation or resulting from post-review discovery including but not limited to vibracore sampling, those materials, if they are not replaced on the seafloor, may be housed at a curatorial facility in consultation with the Tribal Nations and SHPO and local government(s). These collection and curation directions do not apply to the post-construction seafloor inspection mitigation.
2. Collections from private lands that would remain private property: In cases where archaeological survey and testing are conducted on private land, any recovered collections remain the property of the landowner. In such instances, BOEM and the Lessee, in coordination with New Jersey SHPO and affected Tribal Nation(s), will encourage landowners to donate the collection(s) to an appropriate public or Tribal entity. To the extent a private landowner requests that the materials be removed from the site, the Lessee must seek to have the materials donated to the repository identified under Stipulation IX.B.1 through a written donation agreement developed in consultation with the consulting parties.

BOEM, assisted by the Lessee, will seek to have all materials the state curated together in the same curation facility within the state. In cases where the property owner wishes to transfer ownership of the collection(s) to a public or Tribal entity, BOEM and the Lessee will ensure that recovered artifacts and related documentation are curated in a suitable repository as agreed to by BOEM, New Jersey SHPO, and affected Tribal Nation(s), and following New Jersey state guidelines. To the extent feasible, the materials and records resulting from the actions required by this MOA for private lands will be curated in accordance with 36 CFR Part 79. No excavation is allowed to be initiated before acceptance and approval of a curation plan.

3. If suspected human remains are encountered, the Lessee must comply with the ACHP's *Policy Statement on Burial Sites, Human Remains, and Funerary Objects* (March 2023) and the post-review discovery plans for marine archaeology (Attachment 4) and terrestrial archaeology (Attachment 5).

X. EXPERTISE AND QUALIFICATIONS

- A. Secretary of the Interior's Standards for Archaeology and Historic Preservation. The Lessee must ensure that all work carried out pursuant to this MOA meets the SOI's Standards for Archaeology and Historic Preservation, 48 Fed. Reg. 44,716 (September 29, 1983), taking into account the suggested approaches to new construction in the SOI's Standards for Rehabilitation.
- B. SOI Professional Qualifications Standards. The Lessee must ensure that all work carried out pursuant to this MOA is performed by or under the direct supervision of historic preservation professionals who meet the SOI's Professional Qualifications Standards (48 Fed. Reg. 44,738-44,739). A "qualified professional" is a person who meets the relevant standards outlined in such SOI's Standards. The Lessee must provide documentation to BOEM demonstrating that consultants retained for services pursuant to the MOA meet these standards prior to the implementation of mitigation measures.
- C. Investigations of ASLFs. The Lessee must ensure that the additional investigations of ASLFs will be conducted and reports and other materials produced by one or more QMAs and geological specialists who meet the SOI's Professional Qualifications Standards and have experience both in conducting HRG surveys and processing and interpreting the resulting data for archaeological potential, as well as collecting, subsampling, and analyzing cores. BOEM, in consultation with the Tribal Nations, will select a consultant to implement mitigation measures in Stipulation III.B.1 acceptable to the majority of Tribal Nations.
- D. Tribal Consultation Experience. BOEM, with the assistance of the Lessee, will ensure that all work carried out pursuant to this MOA that requires consultation with Tribal Nations is performed by professionals who have demonstrated professional experience consulting with Federally recognized Tribal Nations.
- E. Professional Standards for the Treatment of Human Remains. The Lessee will ensure that all work carried out pursuant to this MOA is performed by professionals who adhere to the principles of the Society for American Archaeology's *Statement Concerning the Treatment of Human Remains* (April 14, 2021) and the ACHP's *Policy Statement on Burial Sites, Human Remains, and Funerary Objects* (March 2023).
- F. BOEM Acknowledgement of the Special Expertise of Tribal Nations. BOEM recognizes that all Tribal participants and knowledge need not conform to the SOI's standards, acknowledging that Tribal Nations possess special expertise in identifying, assessing the eligibility of, evaluating

project effects on, and developing mitigation for historic properties that may possess religious and cultural significance to Tribal Nations, pursuant to 36 CFR 800.4(c)(1). To further apply this expertise, BOEM with the assistance of the Lessee, will incorporate Indigenous knowledge and Indigenous Traditional Ecological Knowledge (ITEK) that is conveyed by traditional knowledge keepers of the applicable Tribal Nation into the documents and review processes when such knowledge is received from Tribal Nations in consultation and during implementation of the MOA, consistent with the Office of Science and Technology Policy and Council on Environmental Quality memorandums (Executive Branch policy) on ITEK and Federal decision making (November 15, 2021) and “Guidance for Federal Departments and Agencies on Indigenous Knowledge” (November 30, 2022), “301 DM 7 Departmental Responsibilities for Consideration and Inclusion of Indigenous Knowledge in Department Actions and Scientific Research” (December 5, 2023); and ACHP’s *Policy Statement on Indigenous Knowledge and Historic Preservation* (March 21, 2024). Tribal Nations will also be afforded the opportunity to review the application of their knowledge in documents produced under the MOA pursuant to Stipulation VI (*Review Process for Documents Produced Under MOA Stipulations*).

XI. DURATION

- A. This MOA will expire at (1) the decommissioning of the Project in the Lease Area, as defined in the Lessee’s lease with BOEM (Lease Number OCS-A 0499), or (2) 25 years from the date of COP approval, whichever occurs first. Prior to such time, BOEM may consult with the signatories to reconsider the terms of the MOA and amend it in accordance with Amendments Stipulation (Stipulation XVIII).

XII. ARCHAEOLOGICAL MONITORING

- A. Implementation of Archaeological Monitoring Plans. The Lessee must implement the archaeological monitoring plans found in the *Marine Archaeology Monitoring and Post-Review Discovery Plan* (Attachment 4) and *Terrestrial Archaeology Monitoring and Post-Review Discovery Plan* (Attachment 5) for the areas identified for archaeological monitoring.
- B. In the event of a post-review discovery during archaeological monitoring, the process identified under the Post-Review Discoveries Stipulation (Stipulation XIII) will apply.

XIII. POST-REVIEW DISCOVERIES

- A. Implementation of Post-Review Discovery Plans. If properties are discovered that may be historically significant or unanticipated effects on historic properties are found, BOEM, with the assistance of the Lessee, will implement the post-review discovery plans found in the *Marine Archaeology Monitoring and Post-Review Discovery Plan* (Attachment 4) and *Terrestrial Archaeology Monitoring and Post-Review Discovery Plan* (Attachment 5).
 - 1. The signatories acknowledge and agree that it is possible that additional historic properties may be discovered during implementation of the Project, despite the completion of a good-faith effort to identify historic properties throughout the APEs.
- B. All Post-Review Discoveries. In the event of a post-review discovery of a property or unanticipated effects on a historic property prior to or during construction, operations, maintenance, or decommissioning of the Project, the Lessee must implement the following actions which are consistent with the post-review discovery plans for marine archaeology (Attachment 4) and terrestrial archaeology (Attachment 5):
 - 1. Immediately halt all ground- or seafloor-disturbing activities within the area of discovery

while considering whether stabilization and further protections are warranted to keep the discovered resource from further degradation and impact;

2. Notify BOEM and BSEE in writing via report within 72 hours of the discovery including any recommendations on the need and urgency of stabilization and additional protections for the discovered resource;
3. Keep the location of the discovery confidential and take no action that may adversely affect the discovered resource until BOEM or its designee has made an evaluation and instructs the Lessee on how to proceed; and
4. Conduct any additional investigations as directed by BOEM or its designee to determine, in consultation with the appropriate SHPO and consulting Tribal Nations, whether the resource is eligible for listing in the NRHP (30 CFR 585.702(b)). BOEM will also be notified about the transmittal of information on the archaeological site to the SHPO. BOEM will direct the Lessee to complete additional investigations, as BOEM deems appropriate, if:
 - i. The site has been impacted by Project activities; or
 - ii. Impacts on the site from Project activities cannot be avoided.
5. BOEM, with the assistance of the Lessee and in consultation with Tribal Nations, will consider the implementation of post-review discovery protocols developed by Tribal Nations, as applicable, prior to conducting additional investigations.
6. If investigations indicate that the resource is eligible for listing in the NRHP, BOEM, with the assistance of the Lessee, will work with the other relevant signatories and consulting parties to this MOA who have a demonstrated interest in the affected historic property and on the further avoidance, minimization, or mitigation of adverse effects.
7. If investigations identify that human remains or funerary items are present and associated with Tribal Nations or Native American (as defined at 25 U.S.C. 3001(9)) occupations, then BOEM, assisted by the Lessee, will implement the treatment process consistent with the Native American Graves Protection and Repatriation Act (NAGPRA). BOEM will consult with Tribal Nations prior to the development or execution of a treatment plan, consistent with the provisions of NAGPRA at 25 U.S.C. 3001-3013 and related law at 18 U.S.C. 1170. The Lessee must assist BOEM in the development and execution of a treatment plan at BOEM's request that is responsive to Tribal Nation concerns that might be expressed in the consultation.
8. If there is any evidence that the discovery is from a Native American society or appears to be a preserved burial site, the Lessee must contact the Tribal Nations as identified in the notification lists included in the post-review discovery plans within 72 hours of the discovery with details of what is known about the discovery and consult with the Tribal Nations pursuant to the post-review discovery plan.
9. If BOEM incurs costs in addressing the discovery, under Section 110(g) of the NHPA, BOEM may charge the Lessee reasonable costs for carrying out historic preservation responsibilities, pursuant to its delegated authority under the OCS Lands Act (30 CFR 585.702(c)-(d)).

XIV. EMERGENCY SITUATIONS

- A. In the event of an emergency or disaster that is declared by the President or the Governor of New Jersey, which represents an imminent threat to public health or safety or creates a hazardous condition due to impacts from this Project's infrastructure damaged during the emergency and affecting historic properties in the APEs, the Lessee must notify BOEM and BSEE. BOEM will then, with the assistance of the Lessee, notify the Tribal Nations, the New Jersey SHPO, and the ACHP of the condition which has initiated the situation and the measures taken to respond to the emergency or hazardous condition. BOEM will make this notification as soon as reasonably possible, but no later than 48 hours from when it becomes aware of the emergency or disaster. Should the Tribal Nations, SHPO, or the ACHP desire to provide technical assistance to BOEM, they will submit comments within seven calendar days from notification if the nature of the emergency or hazardous condition allows for such coordination.

XV. REPORTING

- A. By January 31 of each calendar year, following the execution of this MOA until it expires or is terminated, the Lessee must prepare and, following BOEM's review and agreement to share this summary report, provide all signatories and consulting parties to this MOA with a summary report detailing work undertaken pursuant to the MOA. Such report will include:
 - 1. A description of how the stipulations relating to avoidance, minimization, and mitigation measures (Stipulations I, II, and III) were implemented;
 - 2. Any scheduling changes proposed;
 - 3. Any project modifications, including consultations conducted pursuant to Stipulation VII (*Project Modifications*);
 - 4. Any changes to the attachments to the MOA;
 - 5. Any amendments to the MOA, pursuant to Stipulation XVIII (*Amendments*);
 - 6. Any problems encountered regarding the implementation of this MOA; and
 - 7. Any disputes and objections received in BOEM's efforts to carry out the terms of this MOA.
- B. The Lessee can satisfy its reporting requirement under this stipulation by providing the relevant portions of the annual compliance certification required under 30 CFR 285.633.
- C. If requested by the signatories, BOEM will convene an annual meeting with the signatories and consulting parties to discuss the annual report, the implementation of this MOA, and other requested topics.

XVI. LEASE ASSIGNMENT AND SEGREGATION

- A. If as a result of an assignment of 100 percent of the record title interest to a portion of Lease OCS-A 0499 in accordance with 30 CFR §§ 585.408 – 585.411 the assigned and retained portions become segregated into separate and distinct leases or a new legal entity is assigned the 100 percent of the record title interest in the entirety of the lease, BOEM will ensure that approval of any activity on the assigned lease or portions of the lease includes conditions binding that assignee to the terms of this MOA as they apply to the original lease. The assignee will notify the signatories that it agrees to the terms of this MOA and intends to sign the MOA as an invited signatory.

- B. BOEM will consider any amendments to the MOA that become necessary as a result of the assignment or segregation of the original lease, in accordance with Stipulation XVIII (*Amendments*). However, an amendment under Stipulation XVIII will not be necessary if BOEM determines the assignee's participation does not change the undertaking in a manner that would require any modifications to the stipulations set forth in this MOA. In such a case, BOEM will document the assignment or segregation of the lease and the assignee's becoming a signatory to the MOA in a written notification to the signatories and consulting parties and include a copy of the assignee's executed signature page as an invited signatory.
- C. For the purposes of this MOA only, upon assignment of 100 percent of the record title interest in the entirety of Lease OCS-A 0499, the assignee will assume and implement all stipulations assigned to the Lessee in this MOA.
- D. For the purposes of this MOA only, upon assignment and segregation of Lease OCS-A 0499 into separate and distinct leases, the Lessee of the retained portion and the assignee of the assigned portion will each assume and implement all stipulations assigned to the Lessee in this MOA.

XVII. DISPUTE RESOLUTION

- A. If any signatory or consulting party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, they must notify BOEM in writing of their objection. BOEM will consult with such party and potentially with other interested parties to resolve the objection and may amend the MOA to resolve the objection, if necessary, pursuant to Stipulation XVIII (*Amendments*). If BOEM determines that such objection cannot be resolved, BOEM:
 - 1. Will forward all documentation relevant to the dispute, including BOEM's proposed resolution, to ACHP requesting that the ACHP provide BOEM with its advice on the resolution of the objection within 30 calendar days of receiving adequate documentation. Prior to reaching a final decision on the dispute, BOEM will prepare a written response that considers any timely advice or comments regarding the dispute from ACHP, signatories and consulting parties, and provide them with a copy of this written response. BOEM will make a final decision and proceed accordingly.
 - 2. May make a final decision on the dispute and proceed accordingly, if ACHP does not provide its advice regarding the dispute within the 30-calendar-day time period. Prior to reaching such a final decision, BOEM will prepare a written response that takes into account any timely comments regarding the dispute from the signatories or consulting parties to the MOA, and provide them and ACHP with a copy of such written response.
- B. BOEM's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.
- C. At any time during the implementation of the measures stipulated in this MOA, should a member of the public object in writing to the signatories regarding the manner in which the measures stipulated in this MOA are being implemented, that signatory must notify BOEM. BOEM will review the objection and notify the other signatories as appropriate, and respond to the objector.

XVIII. AMENDMENTS

- A. This MOA may be amended when such an amendment is agreed to in writing by all signatories and invited signatories. The amendment will be effective on the date a copy signed by all of the signatories and invited signatories is filed with ACHP.

- B. Revisions to any attachment may be proposed by any signatory or invited signatory by submitting a draft of the proposed revisions to all signatories and invited signatories with a notification to the consulting parties. The signatories and invited signatories will consult for no more than 30 calendar days (or another time period agreed upon by all signatories and invited signatories) to consider the proposed revisions to the attachment. If the signatories and invited signatories unanimously agree to revise the attachment, BOEM will provide a copy of the revised attachment to the signatories and consulting parties. Revisions to any attachment to this MOA will not require an amendment to the MOA.

XIX. TERMINATION

- A. If any signatory or invited signatory to this MOA determines that its terms will not or cannot be carried out, that party will immediately consult with the other signatories and consulting parties to attempt to develop an amendment per the Amendments Stipulation (Stipulation XVIII). If within 30 calendar days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory or invited signatory may terminate the MOA upon written notification to the other signatories.
- B. Once the MOA is terminated, and prior to work continuing on the undertaking, BOEM will either (a) execute an MOA pursuant to 36 CFR 800.6; or (b) request, take into account, and respond to ACHP comments under 36 CFR 800.7. BOEM will notify the signatories and invited signatories as to the course of action it will pursue.

XX. COORDINATION WITH OTHER FEDERAL AGENCIES

- A. If another Federal agency that is not initially a party to or subject to this MOA receives an application for funding/license/permit for the undertaking as described in this MOA, that agency may fulfill its Section 106 responsibilities by stating in writing that it concurs with the terms of this MOA and notifying the signatories and invited signatories that it intends to do so. Such a Federal agency may become a signatory or a concurring party (collectively referred to as signing party) to the MOA as a means of complying with its responsibilities under Section 106 and based on its level of involvement in the undertaking. To become a signing party to the MOA, the agency official must provide written notice to the signatories and invited signatories that the agency agrees to the terms of the MOA, specifying the extent of the agency's intent to participate in the MOA. The participation of the agency is subject to approval by the signatories and invited signatories who must respond to the written notice within 30 calendar days, or the approval will be considered implicit. Any necessary amendments to the MOA as a result will be considered in accordance with the Amendments Stipulation (Stipulation XVIII).
- B. If the signatories and invited signatories approve the Federal agency's request to be a signing party to this MOA, an amendment under the Amendments Stipulation (Stipulation XVIII) will not be necessary if the Federal agency's participation does not change the undertaking in a manner that would require any modifications to the stipulations set forth in this MOA. BOEM will document these conditions and involvement of the Federal agency in a written notification to the signatories and consulting parties and include a copy of the Federal agency's executed signature page, which will codify the addition of the Federal agency as a signing party in lieu of an amendment.

XXI. ANTI-DEFICIENCY ACT

- A. Pursuant to 31 U.S.C. 1341, BOEM's obligations under this MOA are subject to the availability of appropriated funds, and the stipulations of this MOA are subject to the provisions of the Anti-Deficiency Act. BOEM will make reasonable and good faith efforts to secure the necessary funds

to implement this MOA in its entirety. If compliance with the Anti-Deficiency Act alters or impairs BOEM's ability to implement the stipulations of this agreement, BOEM will consult in accordance with the amendment and termination procedures found in Stipulations XVIII and XIX of this agreement.

Execution of this MOA by BOEM, New Jersey SHPO, and the ACHP and implementation of its terms demonstrate that BOEM has taken into account the effects of this undertaking on historic properties and afforded ACHP an opportunity to comment.

[SIGNATURES COMMENCE ON FOLLOWING PAGE]

**MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE MASHANTUCKET (WESTERN) PEQUOT TRIBAL NATION,
THE MASHPEE WAMPANOAG TRIBE,
THE SHINNECOCK INDIAN NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICAN INDIANS,
THE WAMPANOAG TRIBE OF GAY HEAD (AQUINNAH)
THE STATE HISTORIC PRESERVATION OFFICER OF NEW JERSEY,
THE NEW JERSEY HISTORIC TRUST,
ATLANTIC SHORES OFFSHORE WIND PROJECT 1, LLC,
ATLANTIC SHORES OFFSHORE WIND PROJECT 2, LLC, AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE ATLANTIC SHORES OFFSHORE WIND SOUTH PROJECT
(LEASE NUMBER OCS-A 0499)**

Signatory:

Bureau of Ocean Energy Management (BOEM)

**ELIZABETH
KLEIN**

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ELIZABETH KLEIN
Date: 2024.06.13
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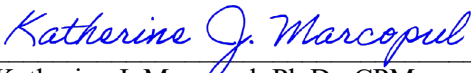
Elizabeth Klein
Director
Bureau of Ocean Energy Management

Date: June 13, 2024

**MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
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(LEASE NUMBER OCS-A 0499)**

Signatory:

New Jersey State Historic Preservation Officer (SHPO)



Katherine J. Marcopul, Ph.D., CPM
Administrator and
Deputy State Historic Preservation Officer
New Jersey Department of Environmental Protection

Date: 6/14/2024

**MEMORANDUM OF AGREEMENT
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REGARDING THE ATLANTIC SHORES OFFSHORE WIND SOUTH PROJECT
(LEASE NUMBER OCS-A 0499)**

Signatory:

Advisory Council on Historic Preservation (ACHP)



Reid J. Nelson
Executive Director
Advisory Council on Historic Preservation

Date: 6/27/2024

**MEMORANDUM OF AGREEMENT
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(LEASE NUMBER OCS-A 0499)**

Invited Signatory:

New Jersey Historic Trust



Glenn Ceponis
Executive Director
New Jersey Historic Trust

Date: 6/12/24

**MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
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REGARDING THE ATLANTIC SHORES OFFSHORE WIND SOUTH PROJECT
(LEASE NUMBER OCS-A 0499)**

Invited Signatory:

Atlantic Shores Offshore Wind Project 1, LLC

DocuSigned by:

E001265696FE4DB...
Jennifer Daniels
Vice President
Atlantic Shores Offshore Wind Project 1, LLC

Date: 6/21/2024

**MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
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(LEASE NUMBER OCS-A 0499)**

Invited Signatory:

Atlantic Shores Offshore Wind Project 2, LLC

DocuSigned by:

E001265696FE4DB...
Jennifer Daniels
Vice President
Atlantic Shores Offshore Wind Project 2, LLC

Date: 6/21/2024

MEMORANDUM OF AGREEMENT
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REGARDING THE ATLANTIC SHORES OFFSHORE WIND SOUTH PROJECT
(LEASE NUMBER OCS-A 0499)

Concurring Party:

Organization: Longport Borough NJ

Signature: Nicholas M Russo

Name: NICHOLAS M RUSSO

Title: MAYOR

Organization: Longport, NJ

Date: June 24, 2024

**MEMORANDUM OF AGREEMENT
AMONG THE BUREAU OF OCEAN ENERGY MANAGEMENT,
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(LEASE NUMBER OCS-A 0499)**

Concurring Party:

Organization: Chicken Bone Beach Historical Foundation Inc

Signature: 

Date: 5/31/2024

Name: Henrietta W. Shelton

Title: President

Organization: Chicken Bone Beach Historical Foundation Inc

MEMORANDUM OF AGREEMENT
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(LEASE NUMBER OCS-A 0499)

Concurring Party:

Organization: City of Atlantic City

Signature: [Signature]

Date: 5/31/2024

Name: Marty Small, Sr.

Title: Mayor

Organization: City of Atlantic City

**MEMORANDUM OF AGREEMENT
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(LEASE NUMBER OCS-A 0499)**

Concurring Party:

Organization: Save Lucy Committee, Inc.

Signature: 

Date: 6/5/2024

Name: Richard D. Helfant

Title: Executive Director/CEO

Organization: Save Lucy Committee, Inc.

**MEMORANDUM OF AGREEMENT
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(LEASE NUMBER OCS-A 0499)**

Concurring Party:

United States Bureau of Safety and Environmental Enforcement (BSEE)

CHERI HUNTER

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HUNTER
Date: 2024.06.25 15:35:28
-04'00'

Date: June 25, 2024

Name: Cheri Hunter

Title: BSEE Renewable Energy Operations Director

United States Bureau of Safety and Environmental Enforcement (BSEE)

**MEMORANDUM OF AGREEMENT
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(LEASE NUMBER OCS-A 0499)**

LIST OF ATTACHMENTS TO THE MOA

- ATTACHMENT 1 – APE MAPS
- ATTACHMENT 2 – LISTS OF INVITED GOVERNMENTS AND ORGANIZATIONS AND
PARTICIPATING CONSULTING PARTIES
- ATTACHMENT 3 – CULTURAL RESOURCES AVOIDANCE, MINIMIZATION, AND
MITIGATION PLAN
- ATTACHMENT 4 – MARINE ARCHAEOLOGY MONITORING AND POST-REVIEW DISCOVERY
PLAN
- ATTACHMENT 5 – TERRESTRIAL ARCHAEOLOGY MONITORING AND POST-REVIEW
DISCOVERY PLAN
- ATTACHMENT 6 – MITIGATION FUNDING AMOUNTS
- ATTACHMENT 7 – HISTORIC PROPERTY TREATMENT PLAN FOR ANCIENT SUBMERGED
LANDFORM FEATURES
- ATTACHMENT 8 – HISTORIC PROPERTY TREATMENT PLAN FOR ATLANTIC CITY
CONVENTION HALL (JIM WHELAN BOARDWALK HALL) (NHL) IN ATLANTIC CITY,
ATLANTIC COUNTY, NEW JERSEY
- ATTACHMENT 9 – HISTORIC PROPERTY TREATMENT PLAN FOR LUCY, THE MARGATE
ELEPHANT (NHL) IN MARGATE CITY, ATLANTIC COUNTY, NEW JERSEY
- ATTACHMENT 10 – HISTORIC PROPERTY TREATMENT PLAN FOR HISTORIC PROPERTIES
OWNED BY THE STATE OF NEW JERSEY (NJDEP): ABSECON LIGHTHOUSE IN ATLANTIC
CITY, ATLANTIC COUNTY; BARNEGAT LIGHTHOUSE IN BARNEGAT LIGHT, OCEAN
COUNTY; FORKED RIVER COAST GUARD STATION NO. 112 IN BERKELEY TOWNSHIP,
OCEAN COUNTY; AND ISLAND BEACH STATE PARK HISTORIC DISTRICT IN BERKELEY
TOWNSHIP, OCEAN COUNTY
- ATTACHMENT 11 – HISTORIC PROPERTY TREATMENT PLAN FOR ATLANTIC CITY
BOARDWALK HISTORIC DISTRICT IN ATLANTIC CITY, ATLANTIC COUNTY, NEW JERSEY

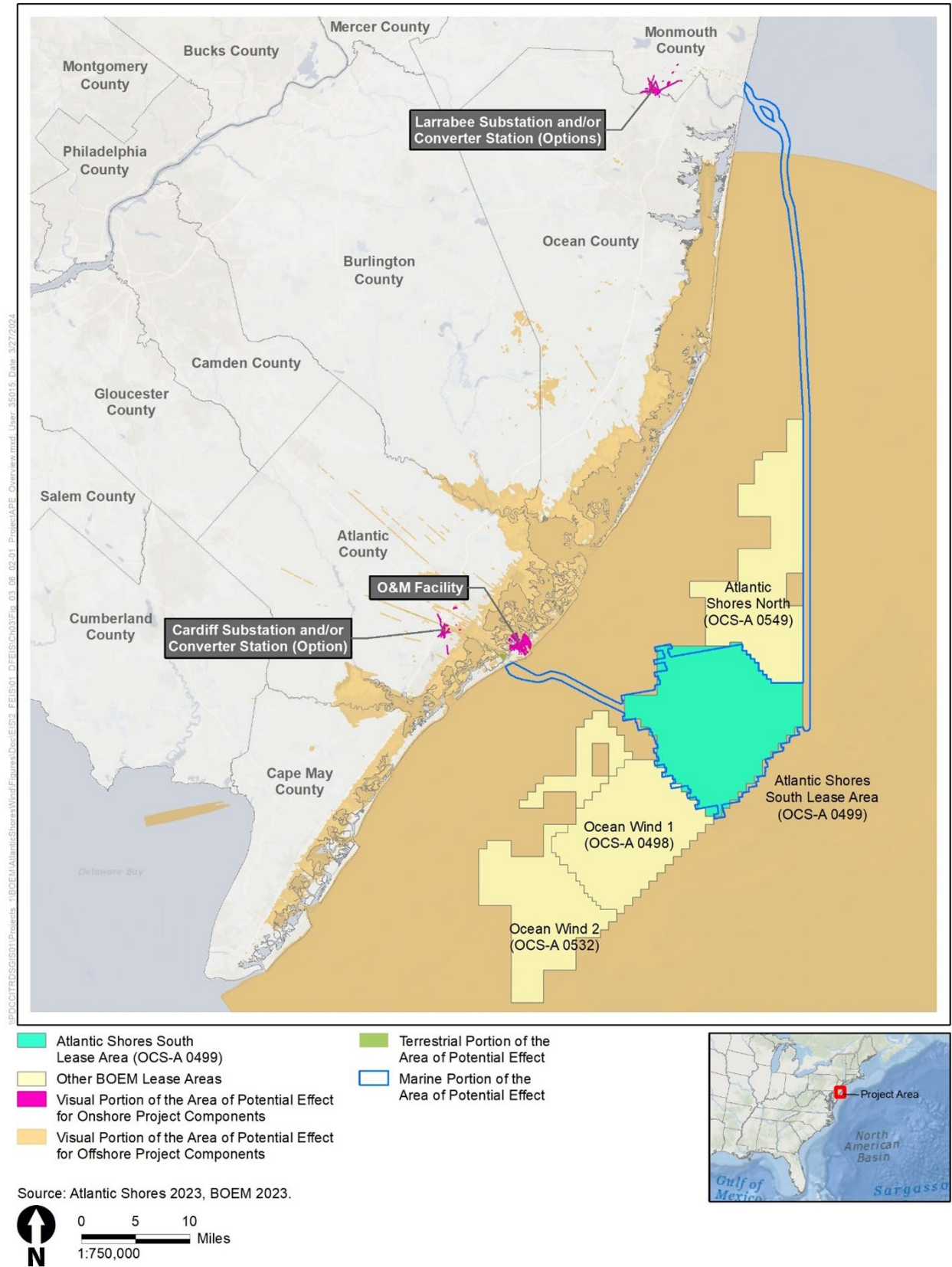
ATTACHMENT 12 – HISTORIC PROPERTY TREATMENT PLAN FOR GREAT EGG COAST
GUARD STATION IN LONGPORT BOROUGH, ATLANTIC COUNTY, NEW JERSEY

ATTACHMENT 13 – HISTORIC PROPERTY TREATMENT PLAN FOR MISSOURI AVENUE
BEACH (CHICKEN BONE BEACH) IN ATLANTIC CITY, ATLANTIC COUNTY, NEW JERSEY

ATTACHMENT 14 – HISTORIC PROPERTY TREATMENT PLAN FOR ST. LEONARD’S TRACT
HISTORIC DISTRICT IN VENTNOR CITY, ATLANTIC COUNTY, NEW JERSEY

ATTACHMENT 15 – TERRESTRIAL ARCHAEOLOGY PHASED IDENTIFICATION PLAN

ATTACHMENT 1 – APE MAPS



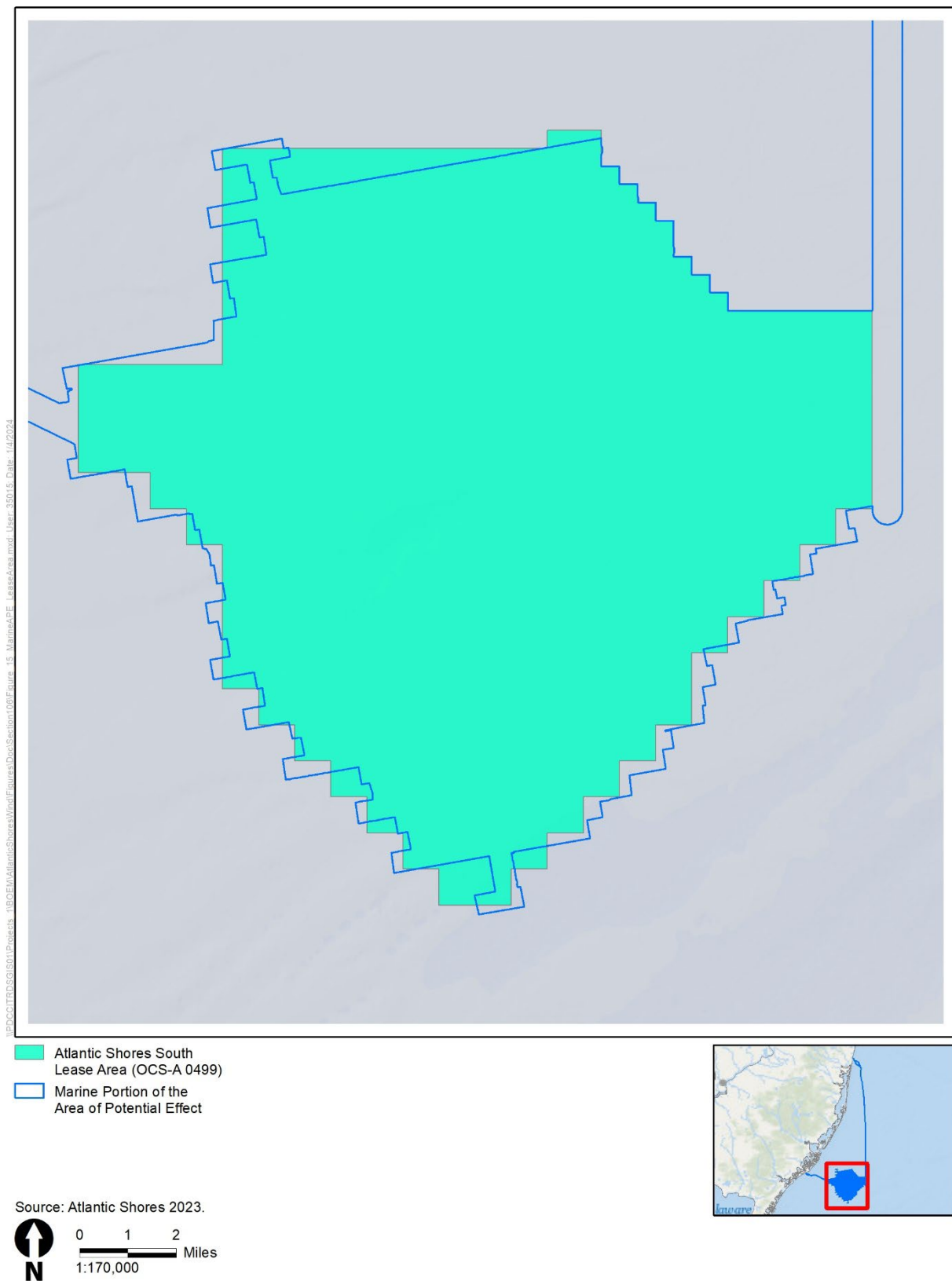


Figure 3. Detail of marine APE within the Lease Area

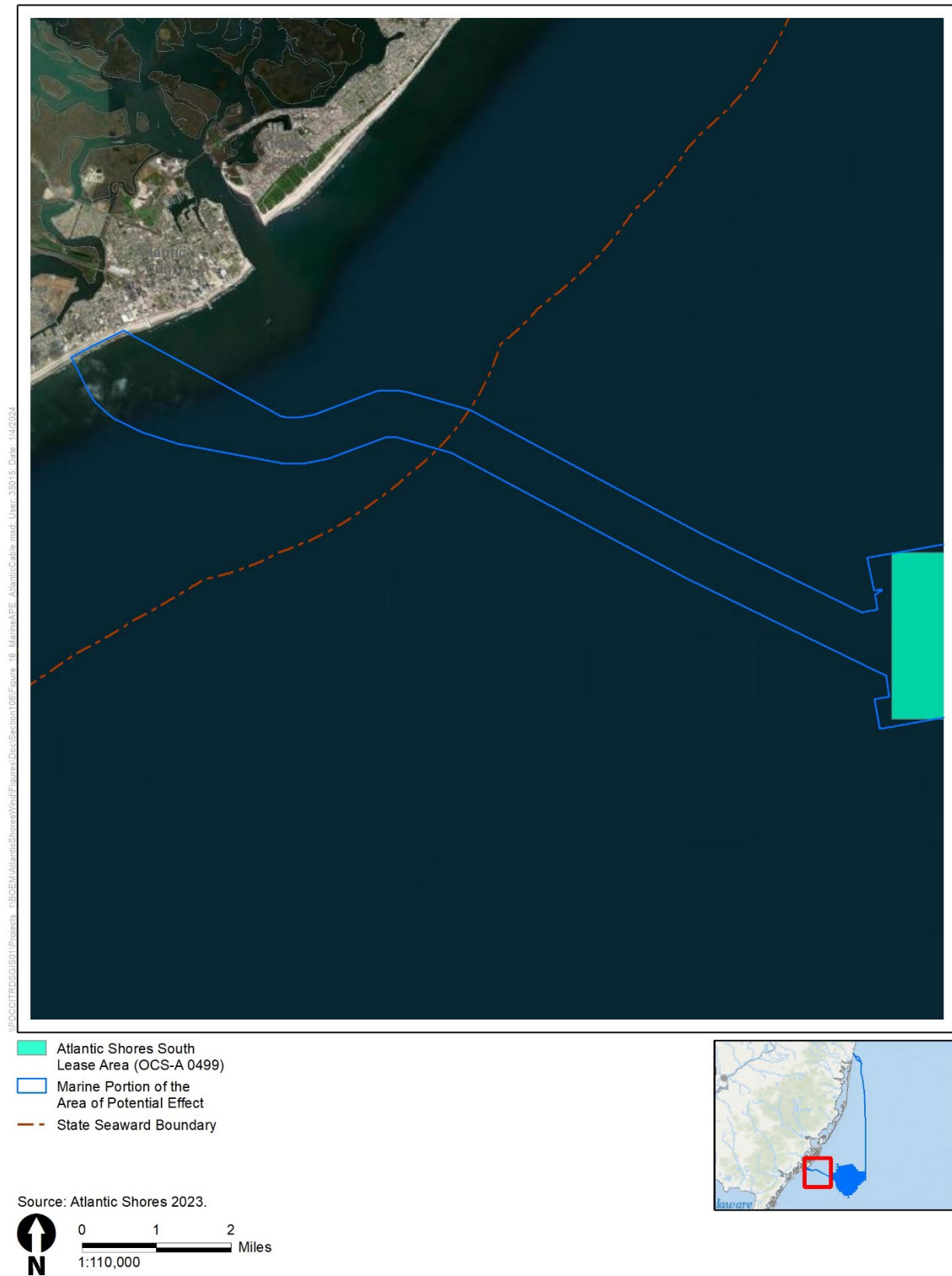


Figure 4. Detail of marine APE within the Atlantic Offshore ECC

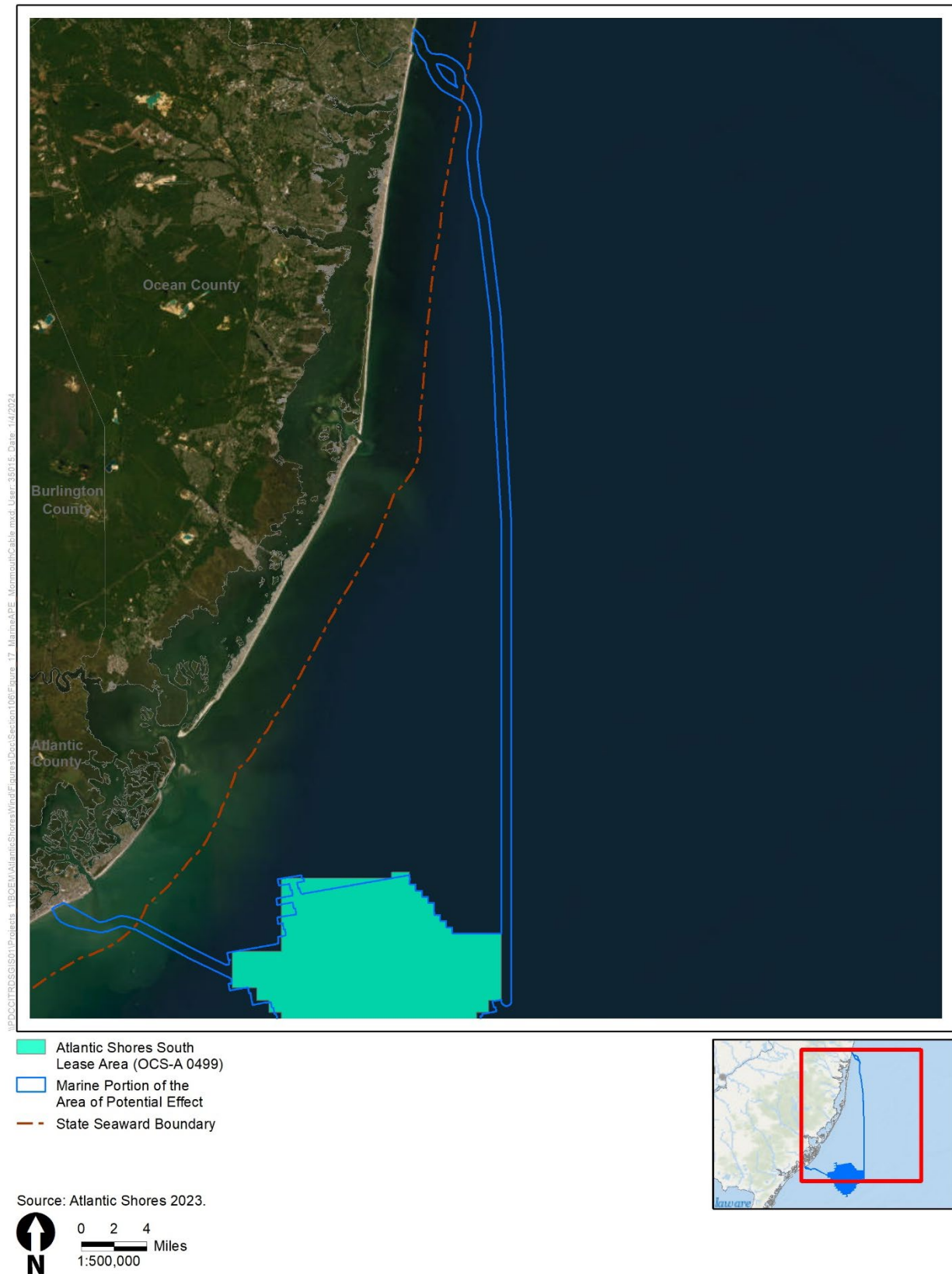


Figure 5. Detail of the marine APE within the Monmouth Offshore ECC

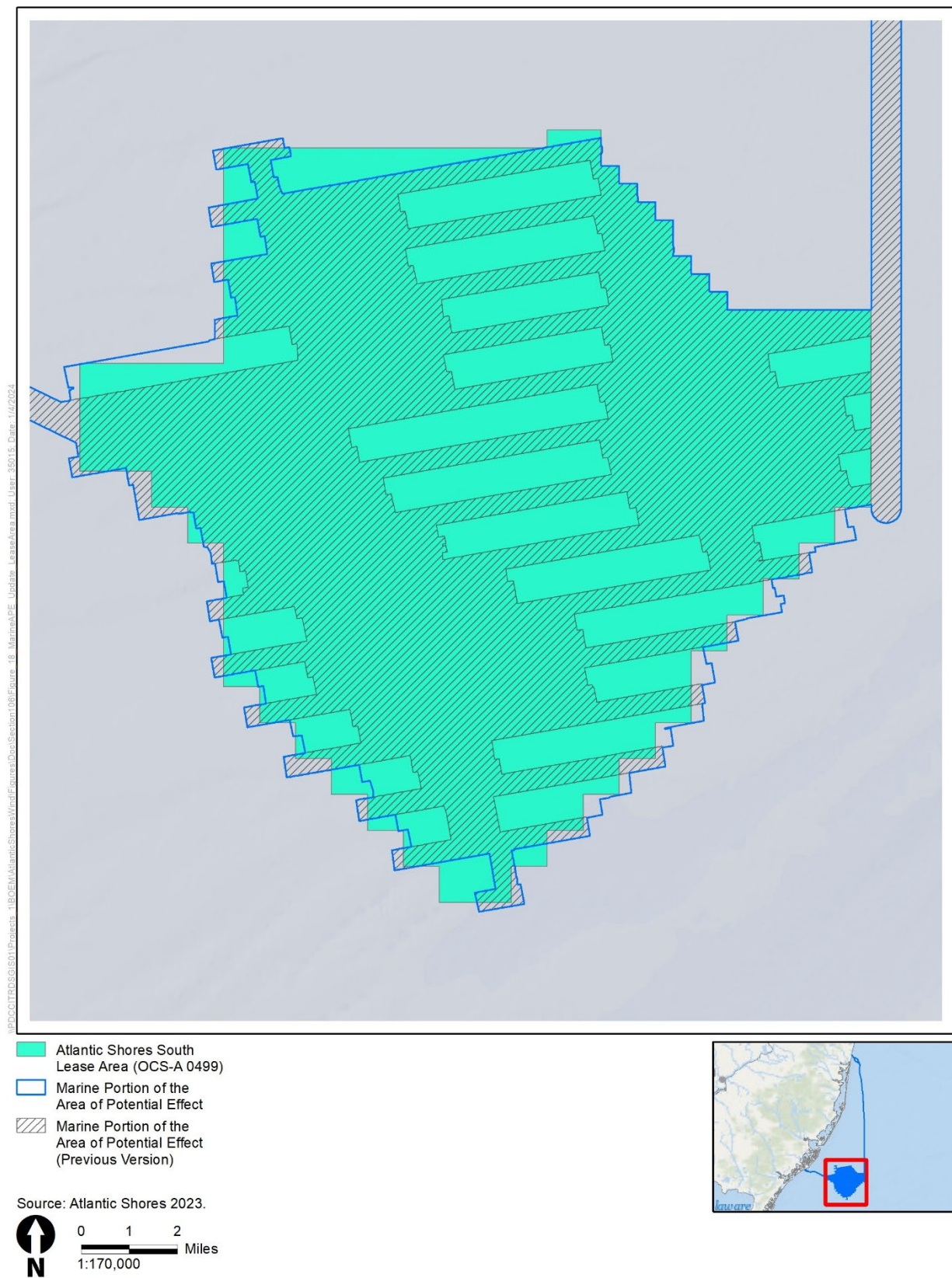


Figure 6. Comparison of previous and current marine APE delineations

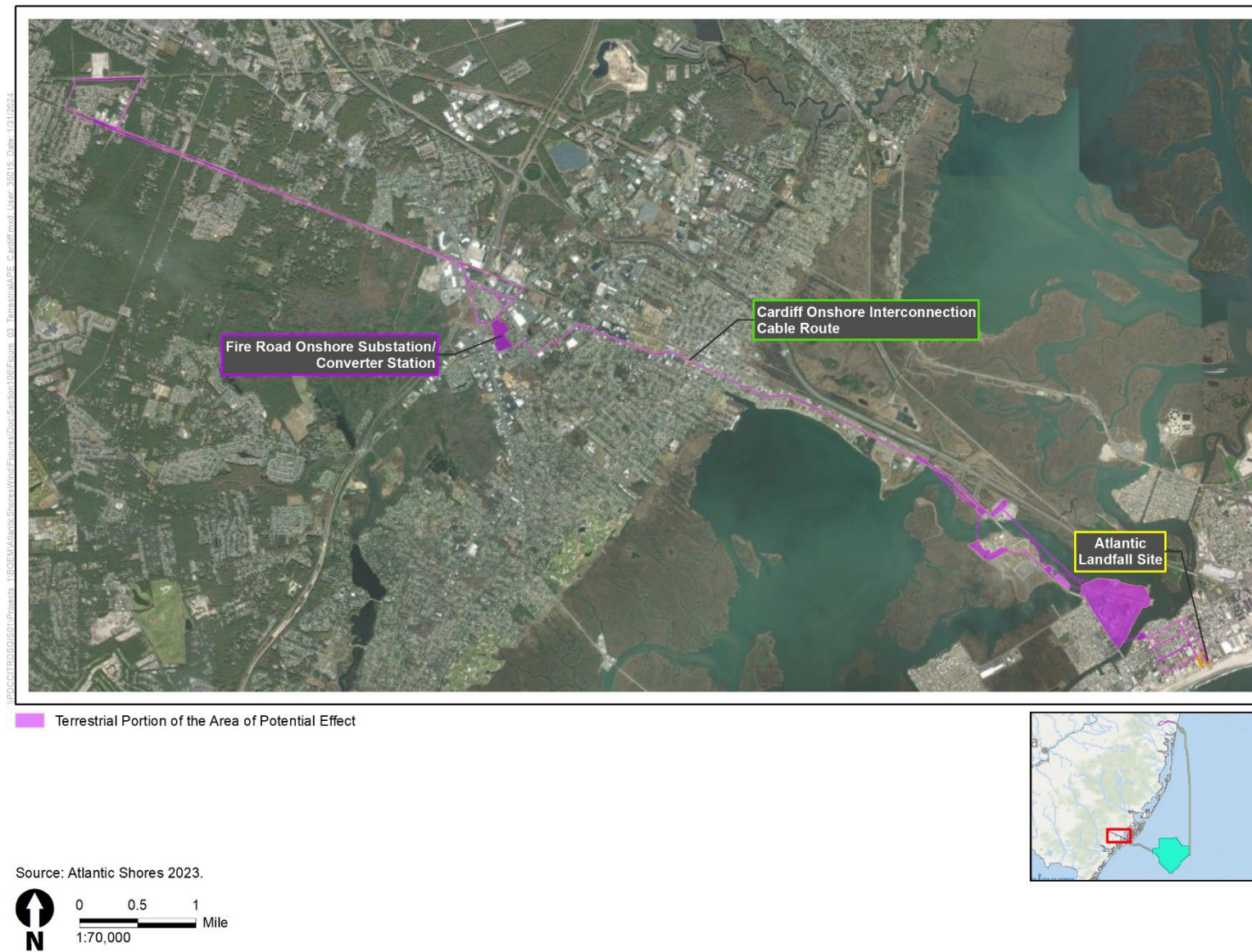
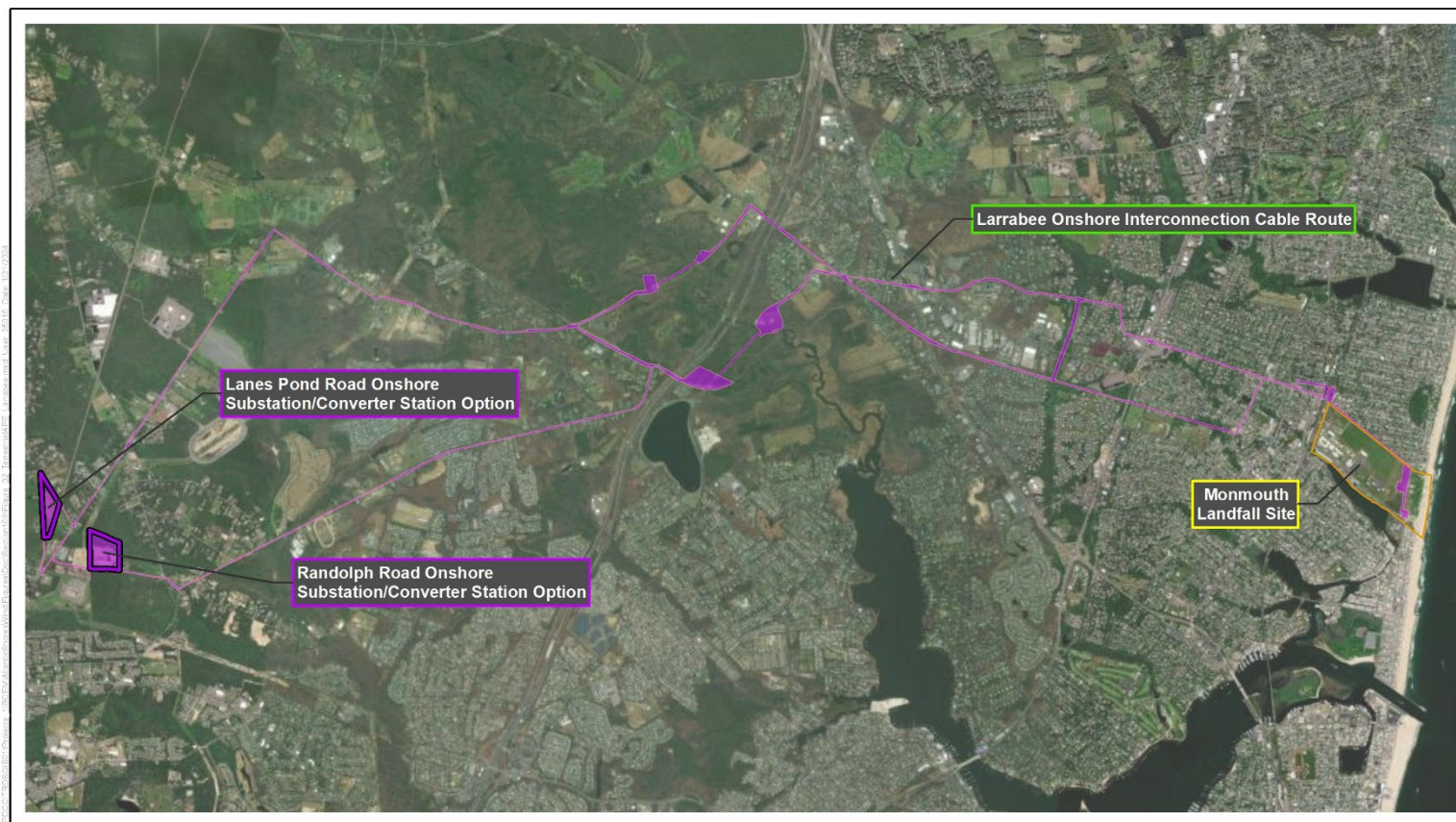
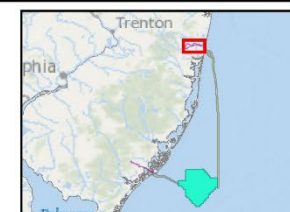


Figure 7. Detail of terrestrial APE for Cardiff facilities



Terrestrial Portion of the Area of Potential Effect



Source: Atlantic Shores 2023.

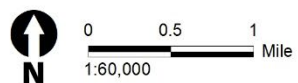
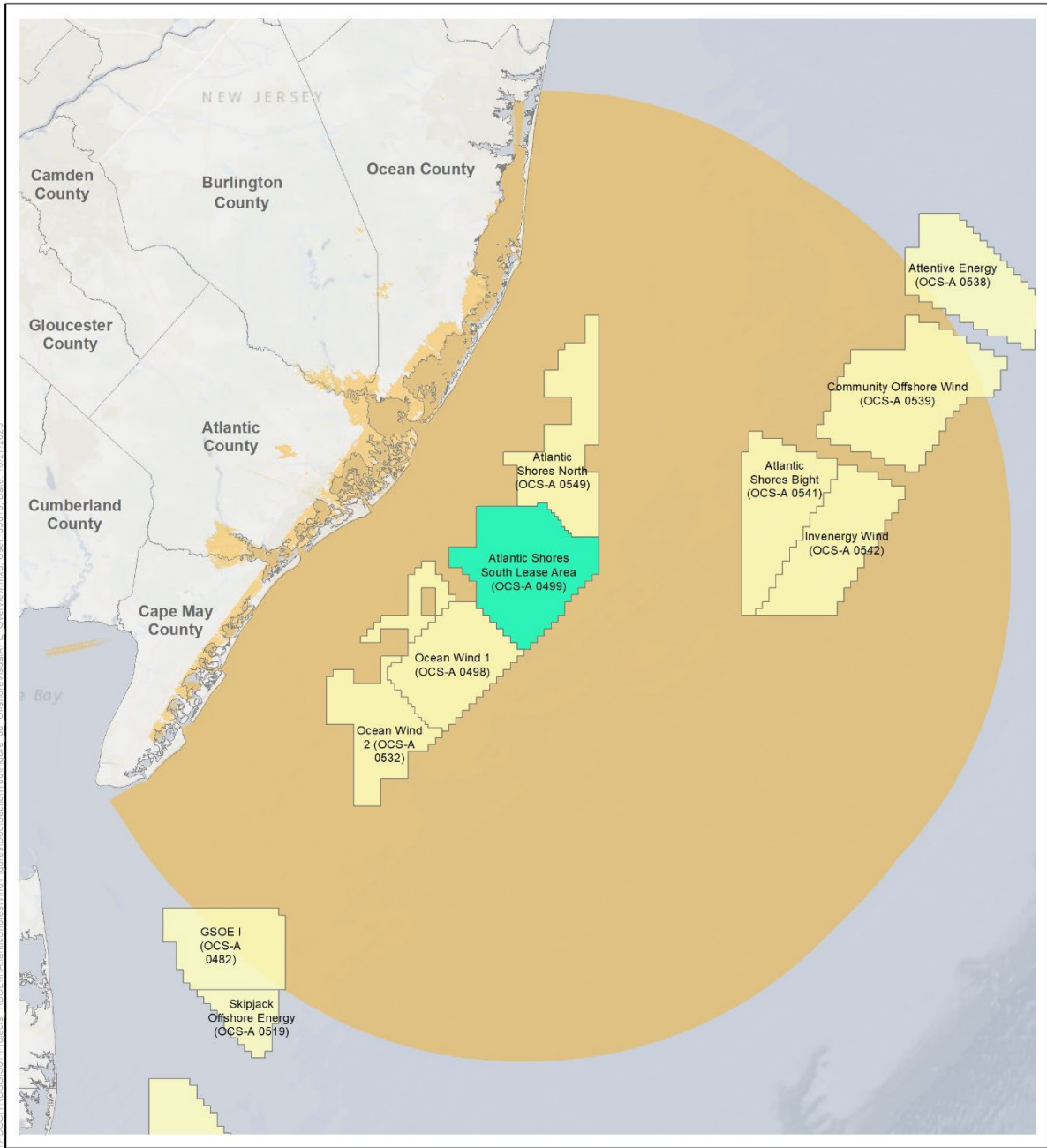


Figure 8. Detail of terrestrial APE for Larrabee Facilities



- Atlantic Shores South Lease Area (OCS-A 0499)
- Other BOEM Lease Areas
- Visual Portion of the Area of Potential Effect for Offshore Project Components

Source: Atlantic Shores 2023.

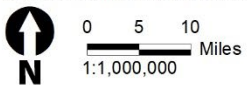


Figure 9. Overview of the visual APE for Offshore Project components

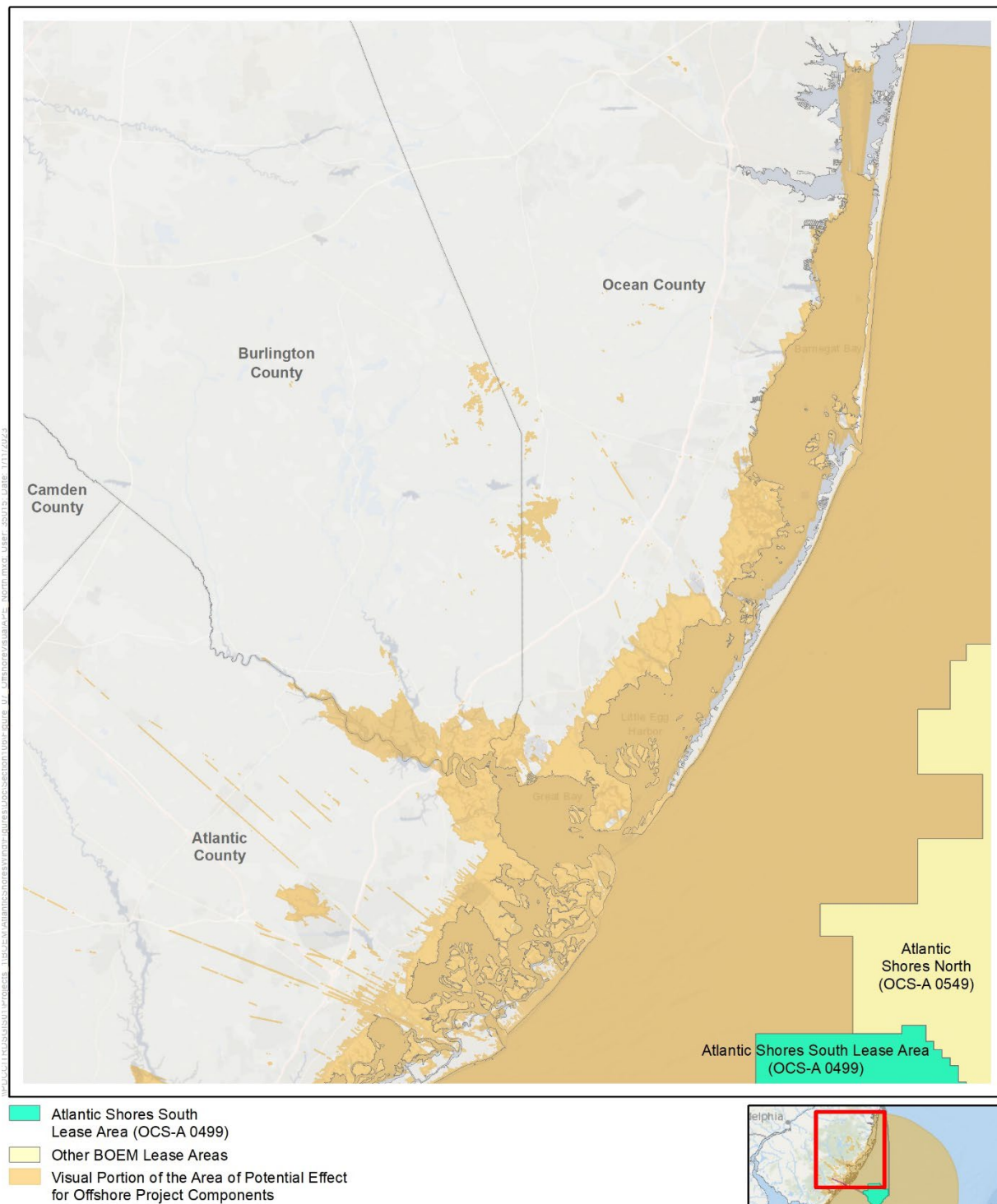


Figure 10. Detail of the visual APE for Offshore Project components, sheet 1 of 2

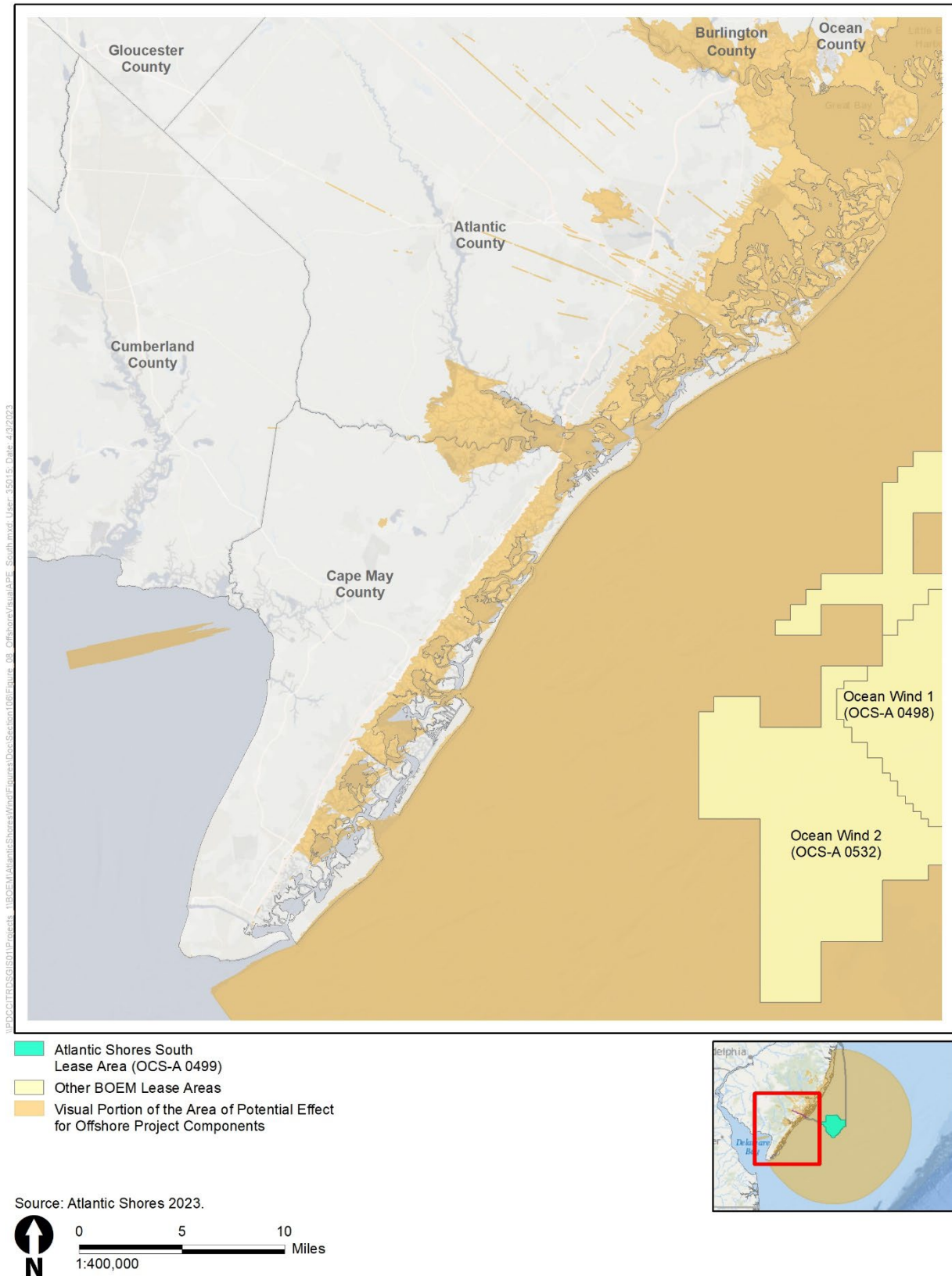


Figure 11. Detail of the visual APE for Offshore Project components, sheet 2 of 2

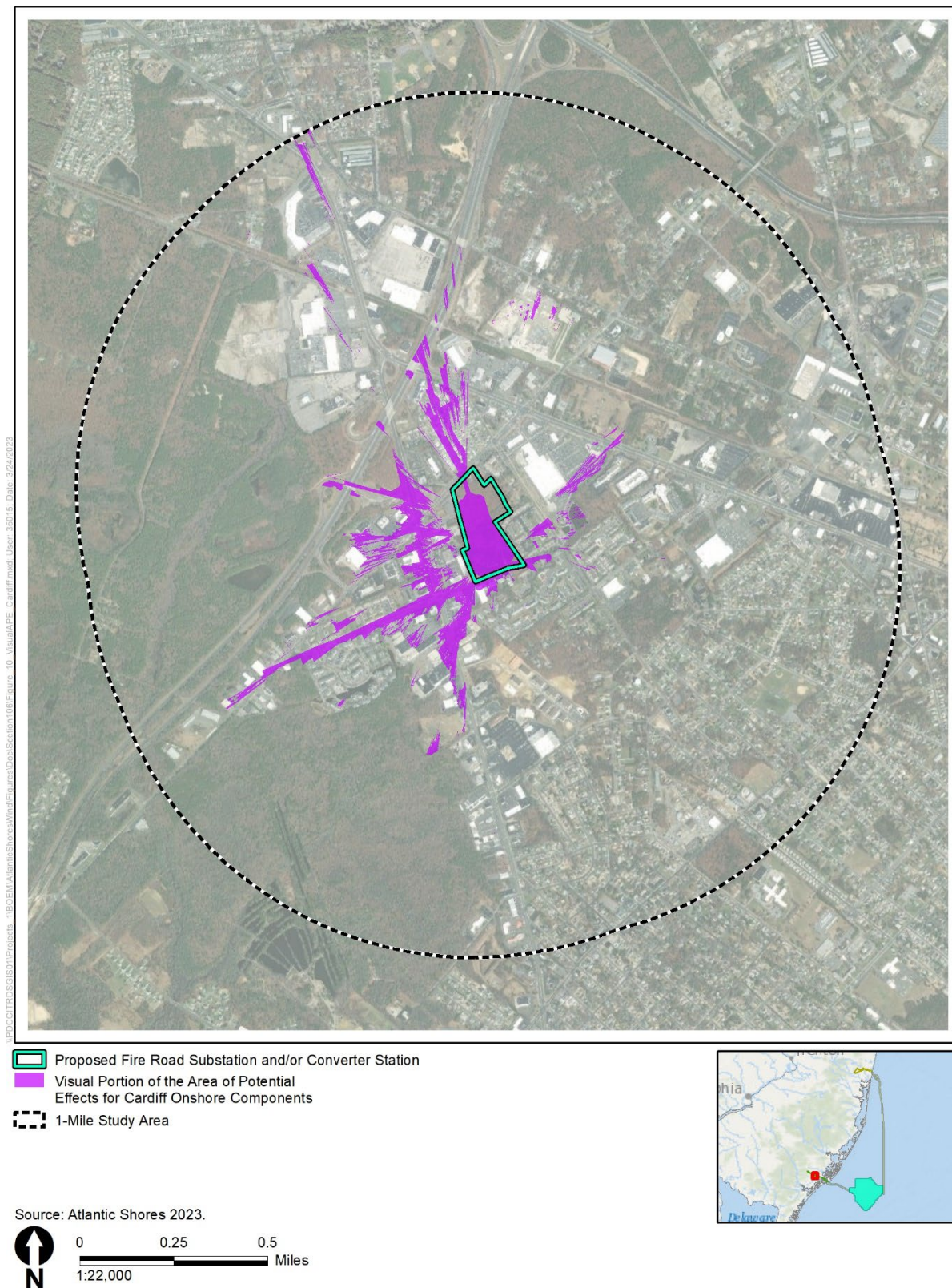


Figure 12. Detail of visual APE for Onshore Project components proposed for the Cardiff Facilities: Fire Road Site

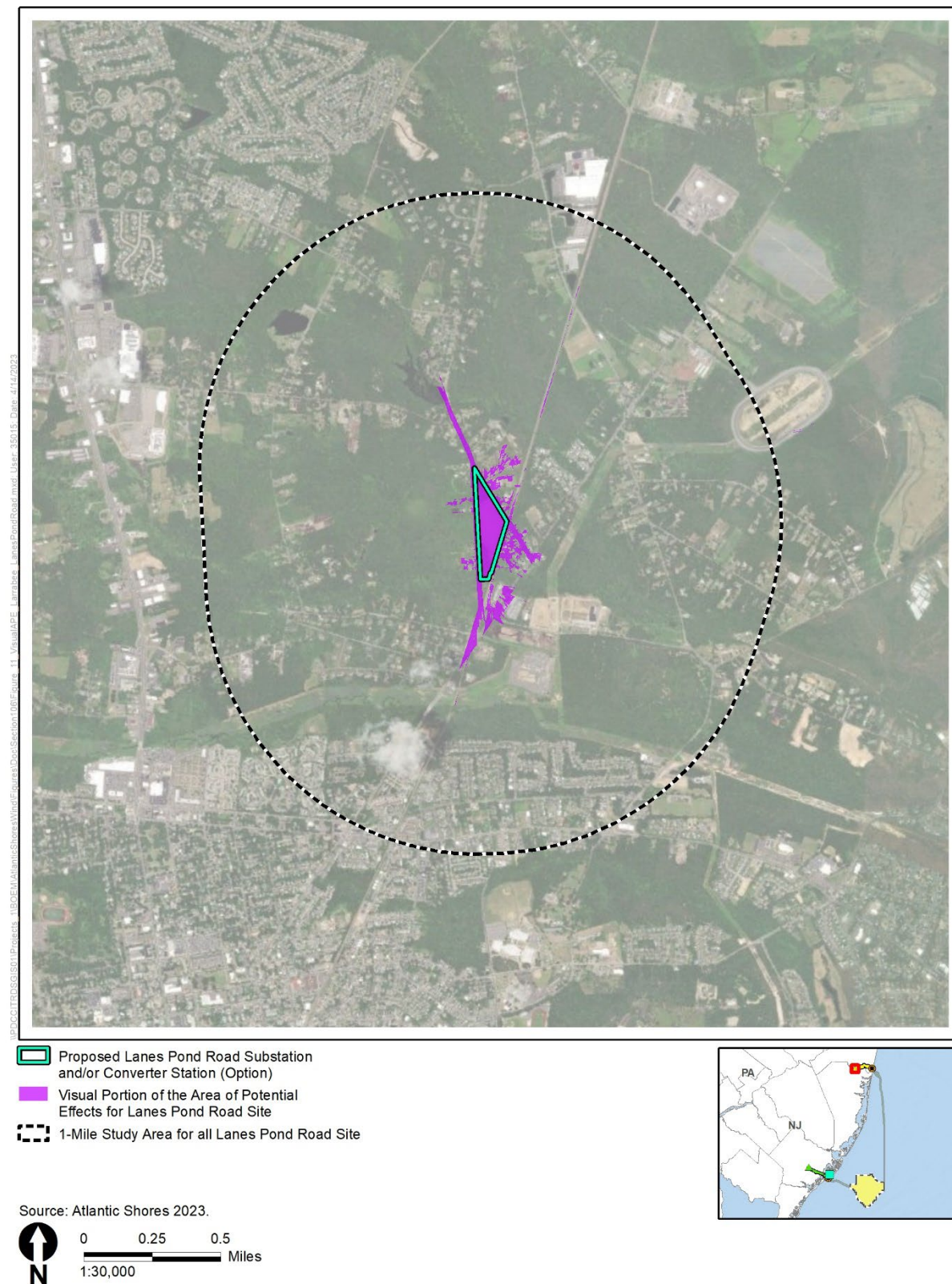


Figure 13. Detail of visual APE for Onshore Project components proposed for the Larrabee Facilities: Lanes Pond Road Site

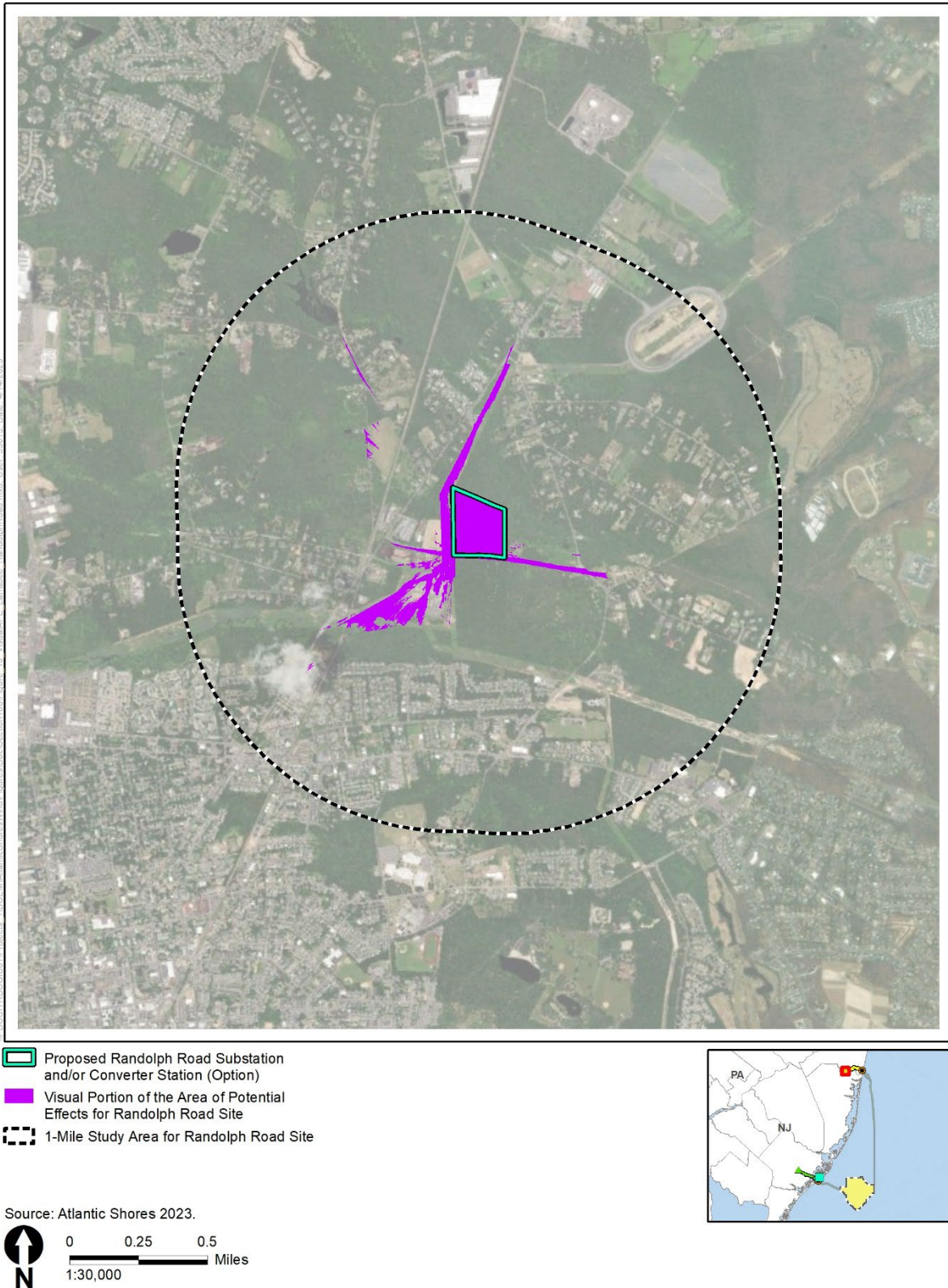
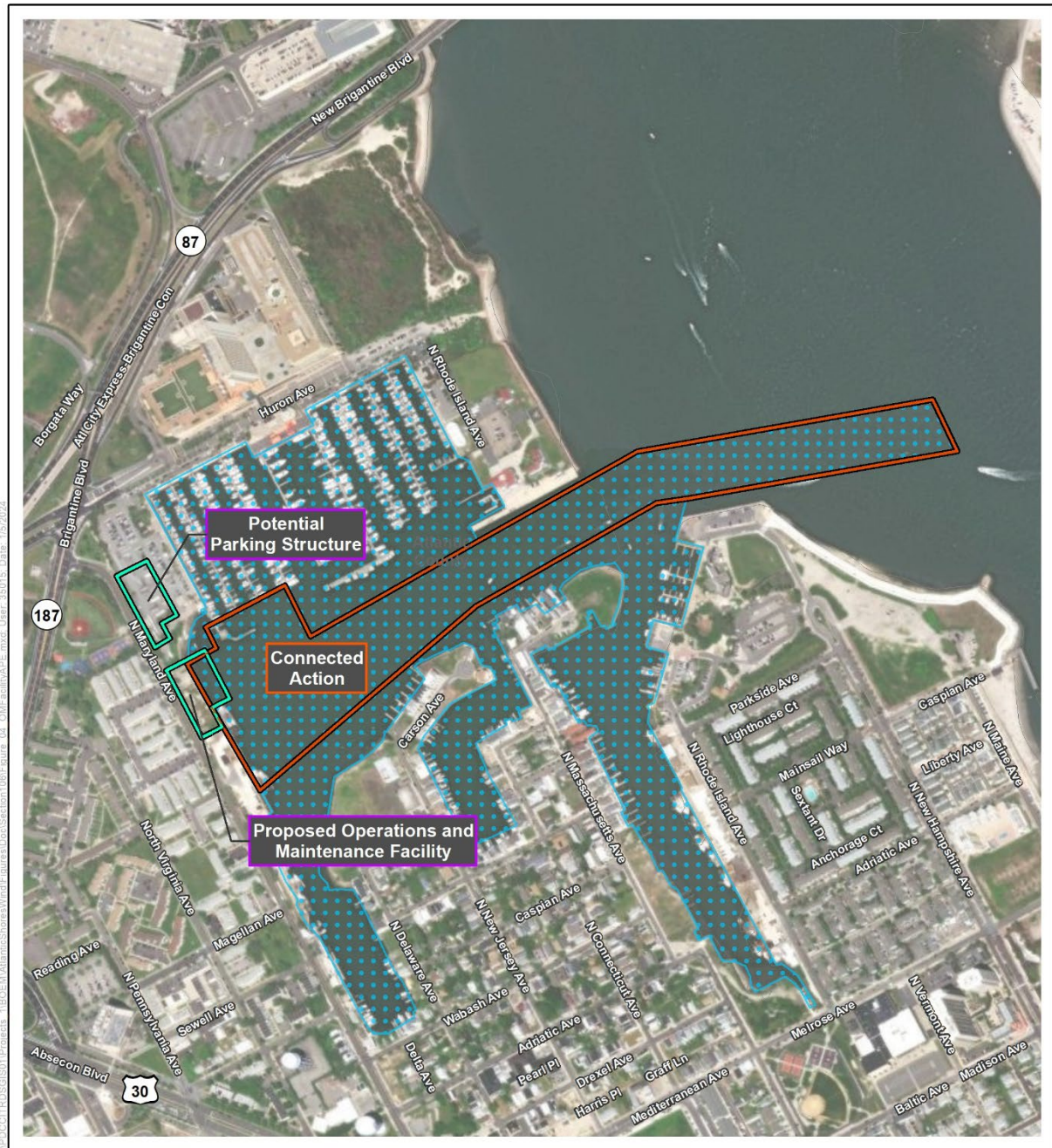


Figure 14. Detail of visual APE for Onshore Project components proposed for the Larrabee Facilities: Randolph Road Site



- O&M Facility APE
- Connected Action
- USACE DA Permit Area CENAP-OPR-2021-00573-95

Source: Atlantic Shores 2023, USACE 2021.

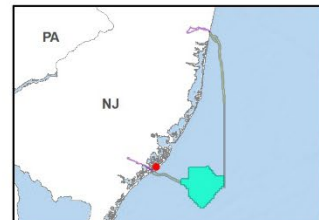
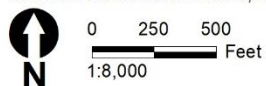


Figure 15. Detail of APE for the O&M facility

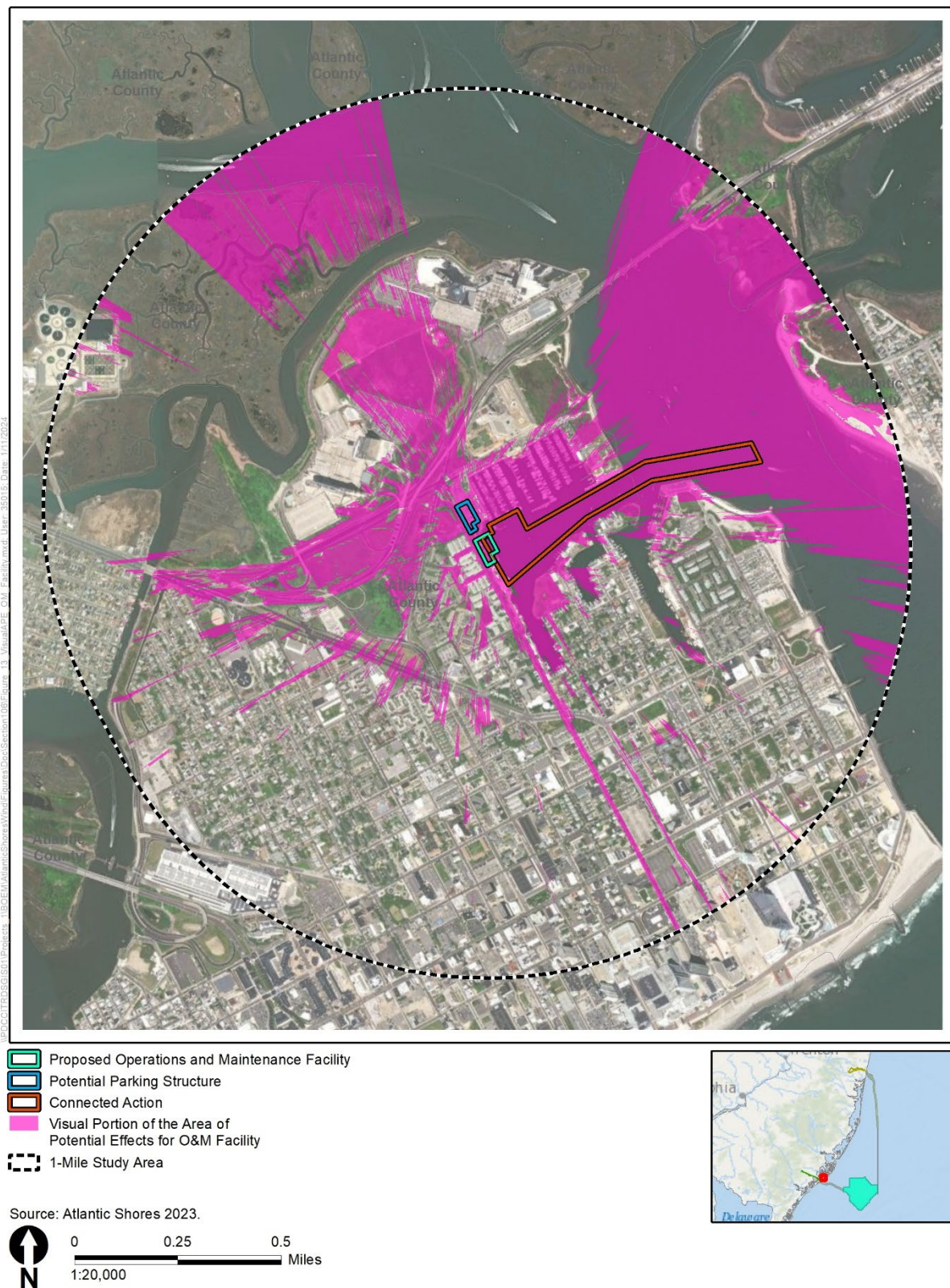


Figure 16. Detail of visual portion of the APE for Onshore Project components for the proposed O&M facility

**ATTACHMENT 2 – LISTS OF INVITED GOVERNMENTS AND ORGANIZATIONS AND
PARTICIPATING CONSULTING PARTIES**

Table 1. Governments and Organizations Invited to Participate in NHPA Section 106 Consultation

Government or Organization Type	Invited Government or Organization Name
Tribal Nations	Absentee-Shawnee Tribe of Indians of Oklahoma
	Delaware Tribe of Indians
	Eastern Shawnee Tribe of Oklahoma
	Mashantucket (Western) Pequot Tribal Nation
	Mashpee Wampanoag Tribe
	Shawnee Tribe
	Stockbridge-Munsee Community Band of Mohican Indians
	The Delaware Nation
	The Narragansett Indian Tribe
	The Shinnecock Indian Nation
	Wampanoag Tribe of Gay Head (Aquinnah)
Federal Agencies	U.S. Advisory Council on Historic Preservation
	U.S. Army Corps of Engineers
	U.S. Bureau of Safety and Environmental Enforcement
	U.S. Coast Guard
	U.S. Environmental Protection Agency
	U.S. Fish and Wildlife Service
	U.S. National Oceanic and Atmospheric Administration
	U.S. National Park Service
	U.S. Naval History and Heritage Command (Underwater Archaeology Branch)
SHPOs and State Agencies	New Jersey Department of Environmental Protection
	New Jersey Department of Environmental Protection, Historic Preservation Office
State/Non-Federally Recognized Tribes	Lenape Indian Tribe of Delaware
	Nanticoke Indian Tribe
	Nanticoke Lenni-Lenape Tribe
	Powhatan Renape Nation
	Ramapough Lenape Indian Nation
	Ramapough Mountain Indians
Local Governments	Atlantic County
	Atlantic County, Department of Regional Planning and Development
	Barneget Township
	Bass River Township
	Berkeley Township
	Borough of Avalon
	Borough of Barnegat Light
	Borough of Bay Head
	Borough of Beach Haven
	Borough of Cape May Point
	Borough of Harvey Cedars
	Borough of Longport
	Borough of Manasquan

Government or Organization Type	Invited Government or Organization Name
	Borough of Mantoloking
	Borough of Point Pleasant Beach
	Borough of Sea Girt
	Borough of Seaside Park
	Borough of Ship Bottom
	Borough of Stone Harbor
	Borough of Surf City
	Borough of Tuckerton
	Borough of West Cape May
	Borough of West Wildwood
	Borough of Wildwood Crest
	Borough of Woodbine
	Cape May County
	City of Absecon
	City of Atlantic City
	City of Brigantine
	City of Cape May
	City of Egg Harbor City
	City of Linwood
	City of Margate
	City of North Wildwood
	City of Ocean City
	City of Pleasantville
	City of Port Republic
	City of Sea Isle City
	City of Somers Point
	City of Ventnor City
	City of Wildwood
	Dennis Township
	Eagleswood Township
	Galloway Township
	Lacey Township
	Long Beach Township
	Manchester Township
	Middle Township
	Ocean County
	Stafford Township
	Toms River Township
	Town of Hammonton
	Township of Brick
	Township of Egg Harbor
	Township of Hamilton

Government or Organization Type	Invited Government or Organization Name
	Township of Lakewood
	Township of Little Egg Harbor
	Township of Lower
	Township of Ocean
	Township of Upper
	Wall Township
Nongovernmental Organizations or Groups	600 Boardwalk LLC
	Absecon Historical Society
	Anglers Club of Absecon Island
	Atlantic City Convention Center
	Atlantic County Historical Society
	Avalon History Center
	Barnegat Historical Society
	Barnegat Light Museum
	Barnegat Lighthouse State Park
	Belmar Historical Society
	Brigantine Beach Historical Museum
	Cape May Lighthouse
	Caribbean Motel
	Central Pier Associates LLC
	Chicken Bone Beach Historical Foundation, Inc.
	Converse Cottage
	Dr. Edward H. Williams House
	Eagleswood Historical Society
	Emlen Physick Estate
	Friends of Barnegat Lighthouse
	Friends of the Cape May Lighthouse
	Friends of the World War II Tower
	Greater Cape May Historic Society
	Greater Egg Harbor Township Historical Society
	Hereford Inlet Lighthouse
	Historic Cold Spring Village
	Historical Society of Lacey
	Lakewood Historical Society
	Legacy Vacation Resorts
	Linwood Historical Society
	Long Beach Island Historical Association
	Longport Historical Society
	Madison Hotel
	Margate Historical Society
	Max Gurwicz Enterprises
	Museum of Cape May County

Government or Organization Type	Invited Government or Organization Name
	New Jersey Casino Reinvestment Development Authority (CRDA)
	New Jersey Historic Trust
	New Jersey Lighthouse Society
	New Jersey Maritime Museum
	Ocean City Historical Museum
	Ocean City Music Pier
	Ocean County Historical Society
	Old Wall Historical Society
	Patriots for the Somers Mansion
	Preservation New Jersey
	Property Owner of 108 South Gladstone Avenue, Margate, New Jersey
	Property Owner of 114 South Harvard Avenue, Ventnor City, New Jersey
	Property Owner of 114 South Osborne Avenue, Margate, New Jersey
	Property Owner of 120 Atlantic Avenue, Atlantic City, New Jersey
	Property Owner of 124 Atlantic Avenue, Atlantic City, New Jersey
	Property Owner of 125 South Montgomery Avenue, Atlantic City, New Jersey
	Property Owner of 5231 Central Avenue, Ocean City, New Jersey
	Raphael-Gordon House
	Resorts International
	Ritz-Carlton Hotel/Condominium Association
	Rutgers University, Department of Marine and Coastal Sciences, School of Environmental and Biological Sciences
	Save Long Beach Island, Inc.
	Save Lucy Committee, Inc.
	Seaside Heights Historical Society
	Seaview Resort Acquisition Group LLC
	Squan Village Historical Society
	St. Leonard's Association
	The Flanders Hotel/Flanders Condominium Association
	The Inlet Public-Private Association Inc.
	The Museum of Cape May County
	The Noyes Museum of Art
	Tuckerton Historical Society
	Vassar Square Condominium Association
	Waretown Historical Society
	Wildwood Crest Historical Society
	Wildwood Historical Society
Lessee	Atlantic Shores Offshore Wind Project 1, LLC; and Atlantic Shores Offshore Wind Project 2, LLC

Table 2. Consulting Parties Participating in Section 106 Consultation

Government or Organization Type	Participating Government or Organization Name
Tribal Nations	Delaware Tribe of Indians
	Eastern Shawnee Tribe of Oklahoma
	Mashantucket (Western) Pequot Tribal Nation
	Mashpee Wampanoag Tribe
	Stockbridge-Munsee Community Band of Mohican Indians
	The Delaware Nation
	The Narragansett Indian Tribe
	The Shinnecock Indian Nation
	Wampanoag Tribe of Gay Head (Aquinnah)
Federal Agencies	U.S. Advisory Council on Historic Preservation
	U.S. Army Corps of Engineers
	U.S. Bureau of Safety and Environmental Enforcement
	U.S. Coast Guard
	U.S. National Park Service
	U.S. Naval History and Heritage Command (Underwater Archaeology Branch)
SHPOs and State Agencies	New Jersey Department of Environmental Protection, Historic Preservation Office
	New Jersey Department of Environmental Protection, State Parks, Forests & Historic Sites
State/Non-Federally Recognized Tribes	Lenape Indian Tribe of Delaware
Local Government	Atlantic County
	Atlantic County, Department of Regional Planning and Development
	Borough of Bay Head
	Borough of Beach Haven
	Borough of Harvey Cedars
	Borough of Longport
	Borough of Point Pleasant Beach
	Borough of Sea Girt
	Borough of Seaside Park
	Borough of Stone Harbor
	Borough of West Cape May
	Cape May County (represented by Cultural Heritage Partners and Warwick Group Consultants, LLC)
	City of Atlantic City (represented by Rutala Associates, LLC)
	City of Brigantine
	City of Cape May
	City of Linwood
	City of Margate
	City of North Wildwood (represented by Warwick Group Consultants, LLC)
	City of Ocean City
	City of Sea Isle City

Government or Organization Type	Participating Government or Organization Name
	City of Somers Point (represented by Rutala Associates, LLC)
	City of Ventnor City
	Galloway Township
	Long Beach Township (represented by Warwick Group Consultants, LLC)
	Stafford Township
	Township of Brick
	Township of Upper
Nongovernmental Organizations or Groups	Anglers Club of Absecon Island
	Chicken Bone Beach Historical Foundation, Inc.
	Greater Cape May Historic Society
	Hereford Inlet Lighthouse
	New Jersey Historic Trust
	Property Owner of 108 South Gladstone Avenue, Margate, New Jersey (represented by Perskie Mairone Brog Barrera & Baylinson, P.C.)
	Resorts Casino Hotel (DGMB Casino, LLC)
	Ritz Condominiums
	Save Long Beach Island, Inc.
	Save Lucy Committee, Inc. (represented by Rutala Associates, LLC)
	St. Leonard's Association
	The Flanders Hotel
	The Inlet Public-Private Association Inc.
	The Noyes Museum of Art
	Vassar Square Condominium Association
Lessee	Atlantic Shores Offshore Wind Project 1, LLC; and Atlantic Shores Offshore Wind Project 2, LLC

**ATTACHMENT 3 – CULTURAL RESOURCES AVOIDANCE, MINIMIZATION, AND
MITIGATION PLAN**



Appendix II-N3

Avoidance, Minimization, and Mitigation (AMM) Plan

May 2024

Cultural Resources Avoidance, Minimization, and Mitigation Plan for the Atlantic Shores South Offshore Wind Lease Area OCS-A 0499

Prepared for:



Atlantic Shores Offshore Wind LLC



Environmental Design & Research, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
www.edrdpc.com

**February 2023, Revised April, September, and December 2023 and February and
May 2024**

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GLOSSARY

AC	alternating current
ADLS	Aircraft Detection Lighting Systems
AMM	Avoidance, Minimization and Mitigation
AMSL	Above Mean Sea Level
AOWL	aviation obstruction warning light
APE	The Area of Potential Effects is the area in which the Atlantic Shores South Projects may have a visual effect on aboveground historic properties; the APE is determined by the responsible federal agency in consultation with relevant SHPOs
ASLF	ancient submerged landform feature
Atlantic Shores Offshore Project Area	The offshore area where Atlantic Shores' facilities are physically located
Atlantic Shores Offshore Wind, LLC	The owner and proponent of the Atlantic Shores Project 1 Company and Atlantic Shores Project 2 Company (collectively, Atlantic Shores)
Atlantic Shores South Offshore Wind Project	Atlantic Shores' proposal to develop the Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0499 for the generation of renewable energy from offshore wind (The Projects)
BOEM	Bureau of Ocean Energy Management
CFR	Code of Federal Regulations
COP	Construction and Operations Plan
C14	Carbon-14
DC	direct current
ECC	export cable corridor
EDR	Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C.
FAA	Federal Aviation Administration
FDR	Facility Design Report
FIR	Fabrication and Installation Report

FOE	BOEM's Finding of Adverse Effect
G&G	Geophysical and Geotechnical
GBS	gravity base structure
GIS	Geographic Information System
HDD	horizontal directional drilling
HPTP	Historic Property Treatment Plan
HVAC	high voltage alternating current
HVDC	high voltage direct current
HRVEA	Historic Resources Visual Effects Assessment
IT	information technology
km	kilometer(s)
km ²	square kilometer(s)
Lease Area	The entire Lease Area OCS-A 0499 that Atlantic Shores acquired from BOEM
LUCY	Look Up Cultural Resources for Yourself (NJDEP's cultural resources web mapping service)
m	Meter (1 meter = 3.38 feet)
MARA	Marine Archaeological Resources Assessment
mile	Statute mile (1 mile = 1.61 kilometers = 0.87 nautical miles)
MDS	Maximum Design Scenario
MOA	memorandum of agreement
MW	Megawatt = One million watts
MPRDP	Monitoring Plan and Post Review Discoveries Plan
nm	Nautical Mile (1 nm = 1.15 statute mile)
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act of 1966

NHL	National Historic Landmark
NJDEP	New Jersey Department of Environmental Protection
NJHPO	New Jersey Historic Preservation Office
NJWEA	New Jersey Wind Energy Area
NPS	National Park Service
NRHP	National Register of Historic Places
NRHP-Listed Aboveground Historic Property	Buildings, districts, objects, structures and/or sites that have been added to the National Register of Historic Places
NRHP-Eligible Aboveground Historic Property	Buildings, districts, objects, structures and/or sites that have been determined by NJHPO as eligible for listing in the New Jersey and National Register of Historic Places, as indicated by inclusion in the publicly available data on the LUCY website and the NJHPO's quarterly updated listing of NRHP-listed and -eligible aboveground historic properties
OCS	Outer Continental Shelf
O&M Facility	All onshore buildings and infrastructure used to support operations and maintenance activities
OSS	Offshore Substation
PAPE	The Preliminary Area of Potential Effects (PAPE) includes areas from which the proposed offshore Project components may be visible as determined by GIS-based viewshed analysis
PDE	Project Design Envelope, includes the range of development options identified within the Construction and Operations Plan
PIP	Phased Identification Plan
POI	point of interconnection
QMA	Qualified Marine Archaeologist
ROW	right-of-way
SHPO	State Historic Preservation Office
sq mi	Square Mile
STATCOM	static synchronous compensator

TARA	Terrestrial Archaeological Resources Assessment
THPO	Tribal Historic Preservation Office
USCG	United States Coast Guard
USGS	United States Geological Survey
VIA	Visual Impact Assessment
viewshed	Area of potential Projects' visibility defined by maximum structure height and mapped topography, vegetation, buildings, and structures within the study area
WTA	The Wind Turbine Area, the southern portion of Lease Area OCS-A 0499 that will be developed for Atlantic Shores as described in this Historic Resources Visual Effects Assessment
WTG	Wind Turbine Generator
3D	three-dimensional

EXECUTIVE SUMMARY

Per Section 106 of the National Historic Preservation Act (NHPA) and on behalf of Atlantic Shores Offshore Wind, LLC (Atlantic Shores), a 50/50 joint venture between EDF-RE Offshore Development, LLC, a wholly owned subsidiary of EDF Renewables, Inc. (EDF Renewables) and Shell New Energies US, LLC (Shell), Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, D.P.C. (EDR) prepared this Cultural Resources Avoidance, Minimization and Mitigation (AMM) Plan in support of the Atlantic Shores Construction and Operations Plan (COP) for two offshore wind energy generation projects within the southern portion of Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0499 for renewable energy generation from offshore wind. The Projects are comprised of up to 200 wind turbine generators (WTGs) and up to 10 offshore substation (OSS) positions (hereinafter, the Projects).¹

Section 106 of the NHPA requires federal agencies (i.e., BOEM) to consider the potential effect of their undertakings (i.e., the review and approval of the Projects) on historic properties, defined generally to include National Historic Landmarks (NHLs) and properties listed on or eligible for listing on the National Register of Historic Places (NRHP) and can include terrestrial archaeological resources, marine archaeological resources, and aboveground historic properties. This Avoidance, Minimization, and Mitigation Plan (AMM Plan) was developed based on BOEM's Section 106 consultations, the *Finding of Adverse Effect for the Atlantic Shores Offshore Wind South Project Construction and Operations Plan* (FOE; BOEM, 2024), and the below reports.

Based on desktop analysis and archaeological reconnaissance presented in the *Terrestrial Archaeological Resources Assessment – Onshore Interconnection Facilities* (TARA; COP Appendix II-P1; EDR, 2024a) and *Phase IA Terrestrial Archaeological Resources Assessment – Operations and Maintenance Facility* (O&M TARA; COP Appendix II-P2; EDR, 2024b), there is a very low likelihood of intact or potentially significant terrestrial archaeological resources to be located within the Projects' Area of Potential Effects (APE)². Identification level Phase IB archaeological survey is ongoing under a phased identification approach, which will inform future determinations of the Projects potential effects on terrestrial archaeological resources.

As described in the *Marine Archaeological Resources Assessment Atlantic Shores Offshore Wind Project Construction and Operations Plan and Addendum*, 22 submerged targets were identified (MARA; COP Appendix II-Q1; SEARCH, 2022 and 2023). Nine targets are located within the Wind Turbine Area (WTA); four targets are located in the Atlantic Export Cable Corridors (ECC); nine targets are located along the Monmouth ECC; and 59 ancient submerged landform features (ASLFs) were identified within the Marine APE. Based on intensive design efforts in response to consulting party comments and guidance provided by BOEM, Atlantic Shores has committed to avoiding physical disturbance to the following 21 ASLFs: ASLFs 41, 212, 213, 214, 215, 216, 219, 220, 221, 222, 223, 224, 225, 226, 205, 207, 217, 218, 229, 230, 231. Physical avoidance buffers of the targets are recommended, and mitigation measures for potential effects to marine resources have been developed in consultation with BOEM and the interested consulting parties.

¹ The two wind energy projects within the Lease Area are more fully described in Volume I (Project Information) of the COP for the Project (EDR, 2022a).

² The technical reports refer to the Preliminary Area of Potential Effect (PAPE) which is the same geographical areas as the APE.

As described in the *Historic Resources Visual Effects Assessment, Atlantic Shores South Offshore Wind – Wind Turbine Area* (HRVEA; COP Appendix II-O; EDR, 2024e) 102 aboveground historic properties were identified within the APE. Applying the Criteria of Adverse Effect per NHPA Section 106, 36 Code of Federal Regulations § 800.5, a total of 29 aboveground historic properties will be adversely affected by the Projects.

1.0 INTRODUCTION

1.1 Purpose of the Report

Per Section 106 of the National Historic Preservation Act (NHPA) and on behalf of Atlantic Shores Offshore Wind, LLC (Atlantic Shores), a 50/50 joint venture between EDF-RE Offshore Development, LLC, a wholly owned subsidiary of EDF Renewables, Inc. (EDF Renewables) and Shell New Energies US, LLC (Shell), Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, D.P.C. (EDR) prepared this Cultural Resources Avoidance, Minimization and Mitigation Plan (AMM Plan) in support of the Atlantic Shores Construction and Operations Plan (COP; EDR 2024a, 2024b) for two offshore wind energy generation projects within the southern portion of Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0499 for renewable energy generation from offshore wind. The Projects are comprised of up to 200 wind turbine generators (WTGs) and up to 10 offshore substation (OSS) positions (hereinafter, the Projects).

This AMM Plan is intended to assist BOEM, the New Jersey Historic Preservation Office (NJHPO), and other participating agencies and consulting parties/stakeholders with a review of the Projects under Sections 106 and 110(f) of the NHPA, and the National Environmental Policy Act (NEPA). The following framework is an outline of best practices based on Section 106 of the NHPA (Title 54 United States Code § 306108) and its implementing regulations (36 Code of Federal Regulations [CFR] Part 800) to avoid, minimize, and/or mitigate adverse effects upon historic properties.

Atlantic Shores has drafted this AMM Plan to describe the measures that have been developed in consultation with the intersected consulting parties to avoid, minimize, and mitigate the adverse effects to historic properties resulting from the Projects. The process described below is intended to afford consulting parties information on the Projects, the range of aboveground historic properties identified by Atlantic Shores that will be adversely affected, and the types of mitigation measures that Atlantic Shores has identified to avoid, minimize, and mitigate adverse effects.

1.2 Regulatory Context for Review of Effects on Historic Properties

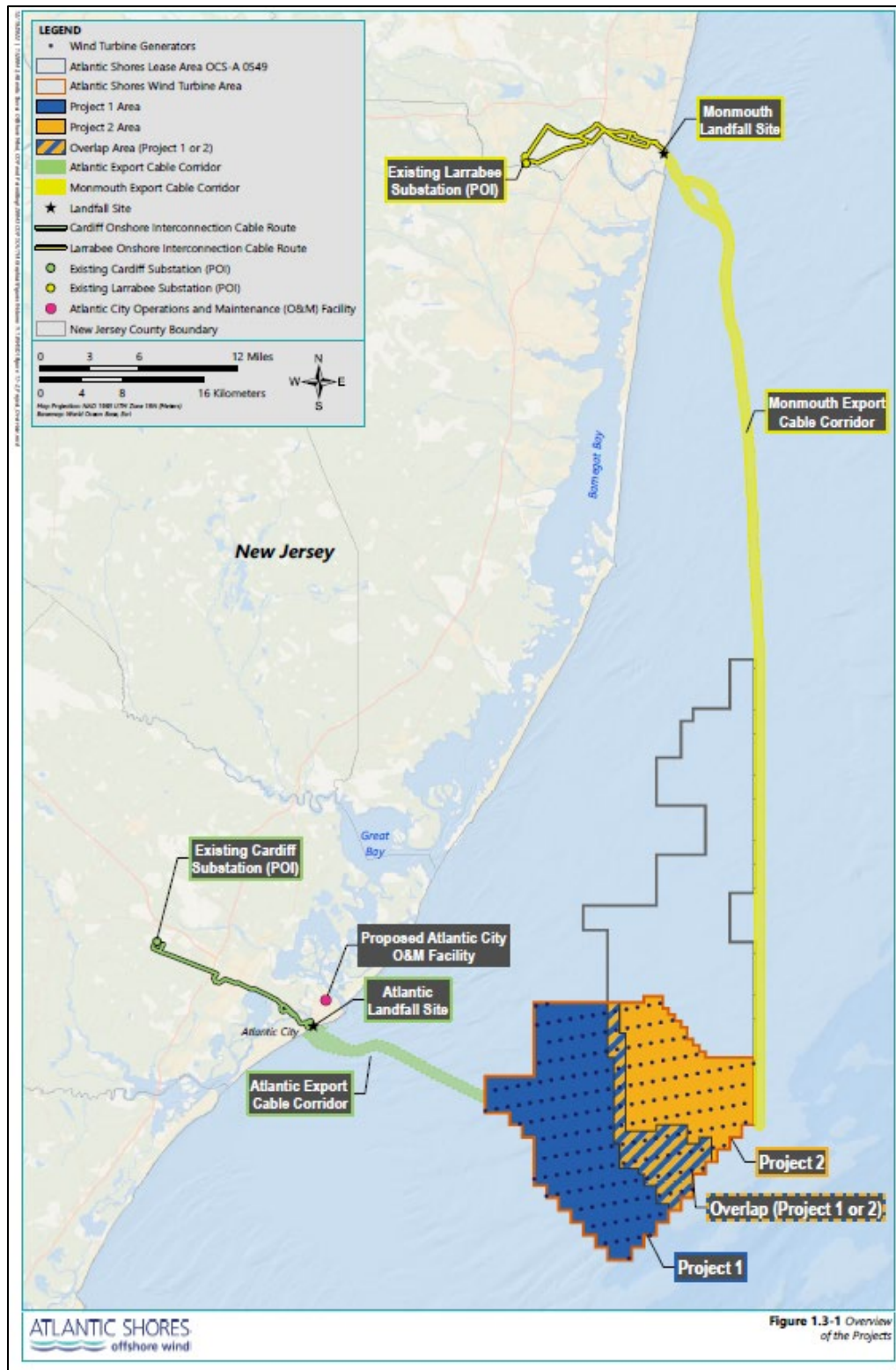
The Projects are considered a federal undertaking and therefore, subject to Section 106 of the NHPA (Title 54 United States Code § 306108). Section 106 requires federal agencies (i.e., BOEM) to consider the potential effect of their undertakings (i.e., the review and approval of the COP) on historic properties. Per 36 CFR Part 800.16, historic properties are defined as districts, buildings, structures, objects, or sites that are listed or eligible for listing in the NRHP or which have been designated as National Historic Landmarks (NHLs).

1.3 Overview of the Projects

Atlantic Shores' Lease Area is located on the OCS within the New Jersey Wind Energy Area (NJWEA), which was identified by BOEM as suitable for offshore renewable energy development through a multi-year, public environmental review process. The Projects will be located in an approximately 102,124-acre (413.3-square kilometer [km²]) Wind Turbine Area (WTA) located in the southern portion of the Lease Area (see Figure 1.3-1). Project 1 is located in the western 54,175 acres (219.2 km²) of the WTA, and Project 2 is located in the eastern 31,847 acres (128.9 km²) of the WTA with a 16,102-acre (65.2-km²) Overlap Area that could be

used by either Project 1 or Project 2. Figure 1.3-1 also depicts the boundaries of the Project 1 and Project 2 areas within the WTA.

Figure 1.3-1. Overview of the Projects.



1.3.1 Project Design Envelope

Atlantic Shores has applied a Project Design Envelope (PDE) approach to describe the facilities and activities associated with the Projects. A PDE is defined as “a reasonable range of project designs” associated with various components of a project (e.g., foundation and WTG options) (BOEM, 2018). In accordance with the PDE evaluation approach, the assessment of project effects must include the maximum design case for all project development scenarios. Consistent with BOEM’s *Draft Guidance Regarding the Use of a Project Design Envelope in a Construction and Operations Plan* (2018), this report and all related analyses consider a maximum design case layout. The layout represents the largest geographic footprint that could be occupied by visible structures and, therefore, the largest percentage of the visible horizon from shoreline locations that may be affected by the Projects. The maximum design case components are described below.

Table 1.3-1. Key Elements of the PDE.

Element	Project Design Element	Total	Project 1	Project 2
WTGs	Max. Number of WTGs	200 (inclusive of the 31 WTGs in the Overlap Area) ^a	105-136	64-95
	WTG Layout	Grid layout with ENE/WSW rows and approximately N/S columns, consistent with the predominant flow of traffic		
	Max. rotor diameter	918.6 ft (280.0 m)		
	Max. tip height^b	1,048.8 ft (319.7 m)		
OSSs	Max. Number of OSSs	10 small OSSs, or	5	5
		5 medium OSSs, or	2	3
		4 large OSSs	2	2
	OSS Layout	Positioned along the same ENE/WSW rows as WTGs		
	Min. Distance from Shore	Small OSS: 12 mi (19.3 km)		
		Medium and large OSS: 13.5 mi (21.7 km)		
WTG and OSS Foundations	Foundation types			
	Piled	Monopiles or piled jackets		
	Suction bucket	Mono-buckets, suction bucket jackets, or suction bucket tetrahedron bases ^c		
	Gravity	Gravity-base structures (GBS) or gravity-pad tetrahedron bases ^c		
	Max. pile diameter at seabed	Monopile: 49.2 ft (15.0 m)		
Inter-Array and Inter-Link Cables	Cable types and voltage	Inter-array: 66–150 kV high voltage alternating current (HVAC)		
		Inter-link: 66–275 kV HVAC		
	Max. Total Cable Length	Inter-array: 547 mi (880 km)	273.5 mi (440 km)	273.5 mi (440 km)
		Inter-link: 37 mi (60 km)	18.6 mi (30 km)	18.6 mi (30 km)
	Target burial depth range	5 to 6.6 ft (1.5 to 2 m)		

1.3.2 Description of Offshore Components

At its closest point, the WTA is approximately 8.7 miles (mi) (14 kilometers [km]) from the New Jersey shoreline. The WTA will include an array of wind turbine generators (WTGs) and multiple offshore substations (OSSs). A meteorological (met) tower and/or meteorological and oceanographic (metocean) buoys may also be installed in the WTA. The WTA layout is designed to maximize offshore renewable wind energy production while minimizing effects on existing marine uses. The structures will be aligned in a uniform grid with multiple lines of orientation allowing straight transit through the WTA.

For the development of the viewshed analysis (see Section 2.2.1 of the HRVEA [COP Appendix II-O; EDR, 2024e]), all 200 foundation locations located within the WTA were analyzed using the largest WTGs included within the PDE in order to capture the maximum area of potential visibility. By evaluating the largest WTG currently under consideration, the theoretical WTG visibility increases for distant viewpoints, thereby providing a conservative assessment of visibility of the Projects.

Each WTG will consist of four major components: the foundation, the tower, the nacelle, and the rotor (Figure 1.3-2). The height of the tower, or “hub height” (height from the water’s surface to the center of the rotor) will be approximately 574.2 feet (175 m) above mean sea level (AMSL). The nacelle sits atop the tower, and the rotor hub is mounted to the nacelle. Assuming a maximum rotor diameter of 918.6 feet (280 m), the total WTG height (i.e., height AMSL at the highest blade tip position) will be approximately 1046.6 feet (319 m).

Descriptions of each of the proposed WTG components included in the HRVEA are provided below:

Foundation: For the purpose of the HRVEA, it was assumed that each of the WTGs will be anchored to the sea floor using a monopile foundation secured with a single steel pile driven into the sea floor. However, the WTGs may utilize suction bucket or concrete gravity base structure (GBS) foundations. The monopile foundation is a tubular steel structure with a diameter of 39.4 feet (12 m) AMSL, upon which the tower transition will be mounted. A suction bucket foundation option consists of a hollow tube embedded in the ocean floor which holds the structure in place through vacuum pressure. The GBS consists of steel-reinforced concrete sunk to the ocean floor and held in place by gravity. The foundation will extend above the water surface, and the exposed portion of the foundation will be yellow in color. A boat landing will be affixed to the foundation with a stairway connecting the landing to a railed deck at the base of the tower.

Tower: The towers used for the Projects are tapered hollow steel structures manufactured in three sections. The assembled towers have a diameter of approximately 32.8 feet (10 m) at the base and 27.9 feet (8.5 m) at the top. Two amber U.S. Coast Guard (USCG) warning lights will be mounted on the deck at the base of each tower. In accordance with the BOEM and Federal Aviation Administration (FAA) obstruction marking standards, the WTG will be painted a light grey (RAL 7035) to pure white (RAL 9010). Additionally, the tower will be equipped with a minimum of three low intensity red flashing lights (L-810) at the approximate mid-section of the tower, which will operate during nighttime hours only.

Nacelle: The main mechanical components of the WTG are housed in the nacelle. These components include the drive train, generator, and transformer. For the purpose of this study, the nacelle is assumed to

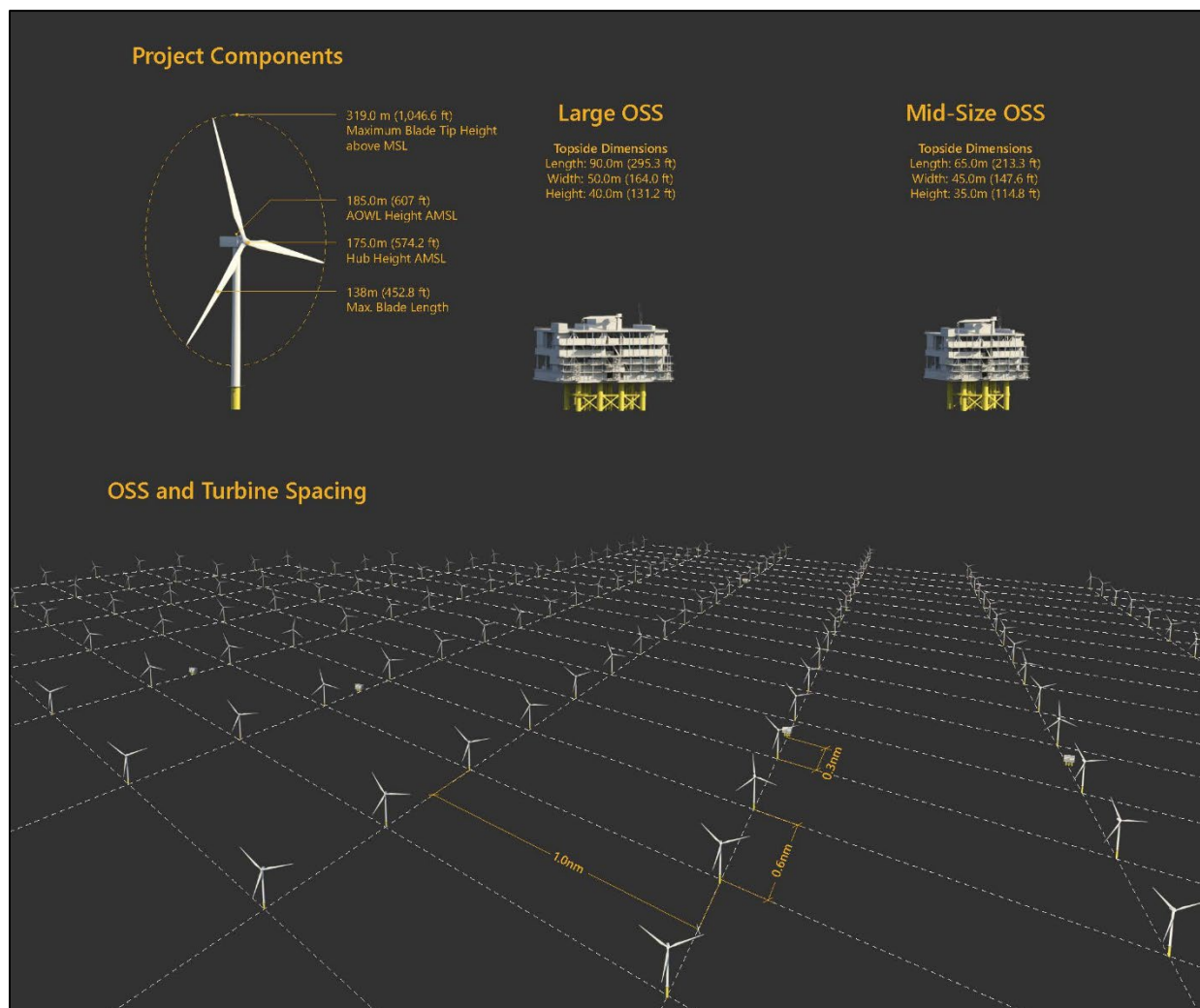
have maximum dimensions of approximately 82 feet (25 m) long, 52.5 feet (16 m) wide, and 39.4 feet (12 m) in height. Two aviation warning lights are proposed to be located on top of the nacelle, in accordance with BOEM and FAA guidelines. These will be medium intensity, flashing red lights (L-864) that are operated only at night, and will be synchronized with the L-810 lights described above. The WTG nacelle will be the same color as the tower and will not include any obvious lettering, logos, or other exterior markings (FAA, 2018). Where applicable, the lighting parameters presented in the VIA follow the current BOEM guidance for the lighting and marking of WTGs in order to illustrate the potential nighttime visual impacts associated with the Projects. However, lighting requirements may change based on final BOEM/FAA recommendations.

Rotor: A rotor assembly is mounted on the nacelle to operate upwind of the tower. The rotor consists of three composite blades, each approximately 452.8 feet (138 m) in length. The three-bladed rotor assembly will be light grey to white in color (consistent with the tower) and will have a maximum diameter of 918.6 feet (280 m). The rotor blades are rotated along their axis, or “pitched,” to enable them to operate efficiently at varying wind speeds. The rotor can spin at varying speeds, but typically rotates at a rate around 10 revolutions per minute.

The OSSs will be an enclosed structure measuring up to 295.3 feet long by 164 feet (90 m × 50 m) wide, with a maximum elevation of up to 131.2 feet (40 m) AMSL. For the purpose of the HRVEA, it was assumed that OSSs will be mounted on piled jacket foundations. However, the OSSs may utilize suction bucket or concrete GBS foundations. Diagram illustrating the appearance and dimensions of the WTG and OSS evaluated in this study are presented in Figure 1.3-2.

A single permanent meteorological (met) tower may be installed within the WTA during construction of Project 1. Up to 4 locations for the met tower, all located within Project 1, are under consideration. The foundation options for the met tower include all options under consideration for WTG foundations and the construction methodologies are assumed to be the same as those for WTG foundations. There is sufficient conservatism in the total estimates of seafloor disturbance from WTG foundation installation to account for the impacts from the met tower’s installation (see Section 4.6 of the COP). The maximum height of the met tower will not exceed 16.5 ft (5 m) above the hub height of the largest WTG installed. Therefore, it is conservative to assume the maximum height of the met tower will be 590.6 ft (180 m) above MSL. The met tower itself is expected to be composed of square lattice consisting of tubular steel. It will be equipped with a deck estimated to be approximately 50 ft by 50 ft (15 m by 15 m) mounted at approximately the same elevation as the interface between the WTGs and their foundations.

Figure 1.3-2. Computer Model of Offshore Platform and WTG Maximum Dimensions



Within the WTA, the WTGs and OSSs for Project 1 and Project 2 will be connected by two separate, electrically distinct systems of inter-array cables and/or inter-link cables. Energy from the OSSs will be delivered to shore by export cables that will travel within designed Export Cable Corridors (ECCs) from the WTA through federal and New Jersey state waters to one or two landfall sites on the New Jersey coastline. The Atlantic ECC extends from the western tip of the WTA to the Atlantic Landfall Site in Atlantic City, New Jersey. The Monmouth ECC extends from the eastern corner of the WTA, along the eastern edge of the Lease Area, to the Monmouth Landfall Site in Sea Girt, New Jersey. Both Projects 1 and 2 have the potential to use either ECC, and offshore export cables for each may also be co-located within an ECC.

At both the Monmouth and Atlantic Landfall Sites, horizontal directional drilling (HDD) will be employed to minimize impacts to the intertidal and nearshore habitats and ensure stable burial of the cables. From each landfall site, the onshore interconnection cables will travel underground primarily along existing roadways, utility rights-of-way (ROWs), and/or along bike paths to two new onshore substation and/or converter

station sites. From the onshore substations and/or converter stations, the onshore interconnection cables will continue to existing substations where the Projects will be connected into the electrical grid at the Cardiff Substation point of interconnection (POI) in Egg Harbor Township, New Jersey and/or the Larrabee Substation POI in Howell, New Jersey. While both Project 1 and Project 2 will be electrically distinct from one another, both Projects require the ability to interconnect at the two POIs to accommodate the maximum amount of electricity that could be generated by the Projects.

1.3.3 Description of Onshore Substation and Converter Facilities

Each Project will be electrically distinct and will require the use of an onshore substation (if HVAC export cables are used) or a converter station (if HVDC export cables are used). The onshore substation may use either an air-insulated switchgear design or a gas-insulated switchgear design pending the substations' final detailed design. The substation design and specific equipment will depend on whether the onshore interconnection cables are HVAC or HVDC. The onshore interconnection cables will be buried beneath or adjacent to existing rights-of-way.

If the HVAC option is constructed, each onshore substation will include up to four power transformers, static synchronous compensators (STATCOMs), shunt reactors, service station transformers, harmonic filter banks, and a substation control building. The tallest component of the substation will be the lightning mast which will be up to 80 feet (24.4 m) tall. The substation will receive electricity produced by the offshore components of the Atlantic Shores South Offshore Wind Projects via a buried onshore transmission cable to convert the incoming voltage to the voltage at the existing grid point of interconnect (POI).

If HVDC is selected, the equipment and facilities installed at the site could include a valve hall, service building, transformers, an AC yard and a DC area, a reactor yard, valve cooling towers, AC filters, and a storage building. At each onshore HVDC converter station, the current will be converted from DC to AC and the voltage will be stepped up or stepped down to match the electrical grid voltage.

Atlantic Shores has identified potential locations for these Facilities (Figure 1.3-1), including the following:

- Three potential locations for the proposed Larrabee Onshore Substation and/or Converter Station:³
 - Lanes Pond Road Site (formerly Parcel Area 7 and the Binyan Site) is an approximately 16.3-acre (6.6-ha) parcel consisting of agricultural fields and wooded areas south of the intersection of Miller Road and Lanes Pond Road in Howell Township.
 - The Brook Road Site (formerly Parcel Area 8 and the 100 Acre Site) is an approximately 99.4-acre (40.2-ha) combination of two parcels consisting primarily of forested uplands and some wetlands between Randolph Road and the Metedeconk River in Howell Township.

³ Atlantic Shores previously submitted a memorandum to BOEM in August 2022 with information on eight potential locations (Parcel Areas) for the proposed Larrabee Onshore Substation and/or Converter Station. Design decisions since the transmittal of that memorandum have resulted in the removal of six of the previously identified locations (Parcel Areas 1-6), and the addition of one location (Randolph Road Site). The designations of the two retained locations (Parcel Areas 7/Binyan Site and 8/100 Acre Site) have been updated to the Lanes Pond Road Site and the Brook Road Site options.

The Randolph Road (formerly Arnold Steel Site) option is an approximately 24.6-acre (9.97-ha) combination of three parcels consisting of a steel fabrication facility with associated laydown yard, offices, and parking, as well as forested wetlands surrounding Dicks Brook. The location north of Randolph Road to the northeast of the existing Larrabee POI in Howell Township.

- The Fire Road Site located at approximately 3038 Fire Road, is situated on approximately 19.71 acres (7.98 ha) of currently wooded and overgrown lots in Egg Harbor Township.

Figure 1.3-3. Regional Substation Locations.



1.3.3.1 Onshore Facility Siting

While both Project 1 and Project 2 will be electrically distinct from one another, the Projects require the ability to interconnect at two POIs to accommodate the maximum amount of electricity that could be generated by the Projects. Therefore, the Projects require two POIs and, consequently, two onshore interconnection cable routes and two landfall sites. To identify the locations of the Projects' onshore facilities, Atlantic Shores conducted an onshore routing assessment through an inter-related process that identified options for landfall sites and onshore interconnection cable routes to existing POIs. Identification of landfall sites and onshore interconnection cable routes in New Jersey is constrained by the density of development along the shorelines and built infrastructure inland. This siting must also account for the area required for horizontal directional drilling (HDD) staging areas as well as the physical dimensions required to install an underground transition vault that connects the export cables and the onshore interconnection cables.

1.3.3.2 Points of Interconnection

Five potential POIs within New Jersey (see Table 1.3-1) were identified based on their proximity to the coastline and their environmental and technical attributes (e.g., substation voltage, potential for expansion, upgrades required to accommodate the Projects' interconnection). These five POIs were used to evaluate potential onshore interconnection cable routes from the landfall sites to the POIs.

Table 1.3-2. Potential Points of Interconnection

Potential POIs	County
Larrabee	Monmouth
Cardiff	Atlantic
Lewis	Atlantic
Oyster Creek	Ocean
BL England	Cape May

1.3.3.3 Landfall Sites

Atlantic Shores conducted a siting evaluation of potential landfall sites that was largely based on parcel size, surrounding land use, and proximity to established linear development corridors (e.g., roadway and utility right-of-way [ROW]) that could serve as an onshore interconnection cable route. The specific siting criteria used to identify potential landfall sites included the following:

- **Technical considerations:**
 - The landfall sites require adequate open space onshore and in proximity to the coastline to accommodate the underground transition vaults and required HDD staging areas.
 - Landfall sites with offshore water depths that are deep enough to accommodate a cable laying vessel at the offshore HDD entrance/exit point are preferred.
- **Site characteristics:** The Projects require areas that are either undeveloped or consist of surface development (i.e., parking lots), without conflicting subsurface infrastructure.

- **Existing uses and sensitive areas:** Preferred landfall sites are not located proximate to residential communities and other sensitive receptors such as wildlife management areas, state parks, and other protected open spaces, which make up most of the open land along the New Jersey coast.

Based on these criteria, aerial photographs of the coastline were manually analyzed to determine candidate landfall sites. A total of 10 potential landfall sites were initially identified, as presented in Table 1.3-2 and shown on Figure 1.3-4.

Table 1.3-3. Landfall Sites

Landfall Site	Potential POI	Approximate Size	Latitude	Longitude
Wesley Lake	Larrabee	<1 acre (<0.004 [square kilometer] km ²)	40.218344	-74.004783
Monmouth	Larrabee, Oyster Creek	164 acres (0.66 km ²)	40.121597	-74.033785
Island Beach State Park	Larrabee, Oyster Creek	2,200 acres (8.9 km ²)	39.904109	-74.081359
Abbott Avenue	Larrabee, Oyster Creek	2 acres (0.008 km ²)	39.543841	-74.255182
Jeffrey Avenue	Larrabee, Oyster Creek	<1 acre (<0.004 km ²)	39.539932	-74.259552
Roosevelt Avenue	Larrabee, Oyster Creek	3 acres (0.01 km ²)	39.534552	-74.262262
North Atlantic City	Cardiff, Lewis	<1 acre (<0.004 km ²)	39.364038	-74.413007
Bader Airfield	Cardiff, Lewis	143 acres (0.58 km ²)	39.359757	-74.455573
Atlantic	Cardiff, Lewis	2 acres (0.008 km ²)	39.351952	-74.450009
Corson's Inlet	BL England	42 acres (0.17 km ²)	39.216859	-74.642799

1.3.3.4 Onshore Interconnection Routes

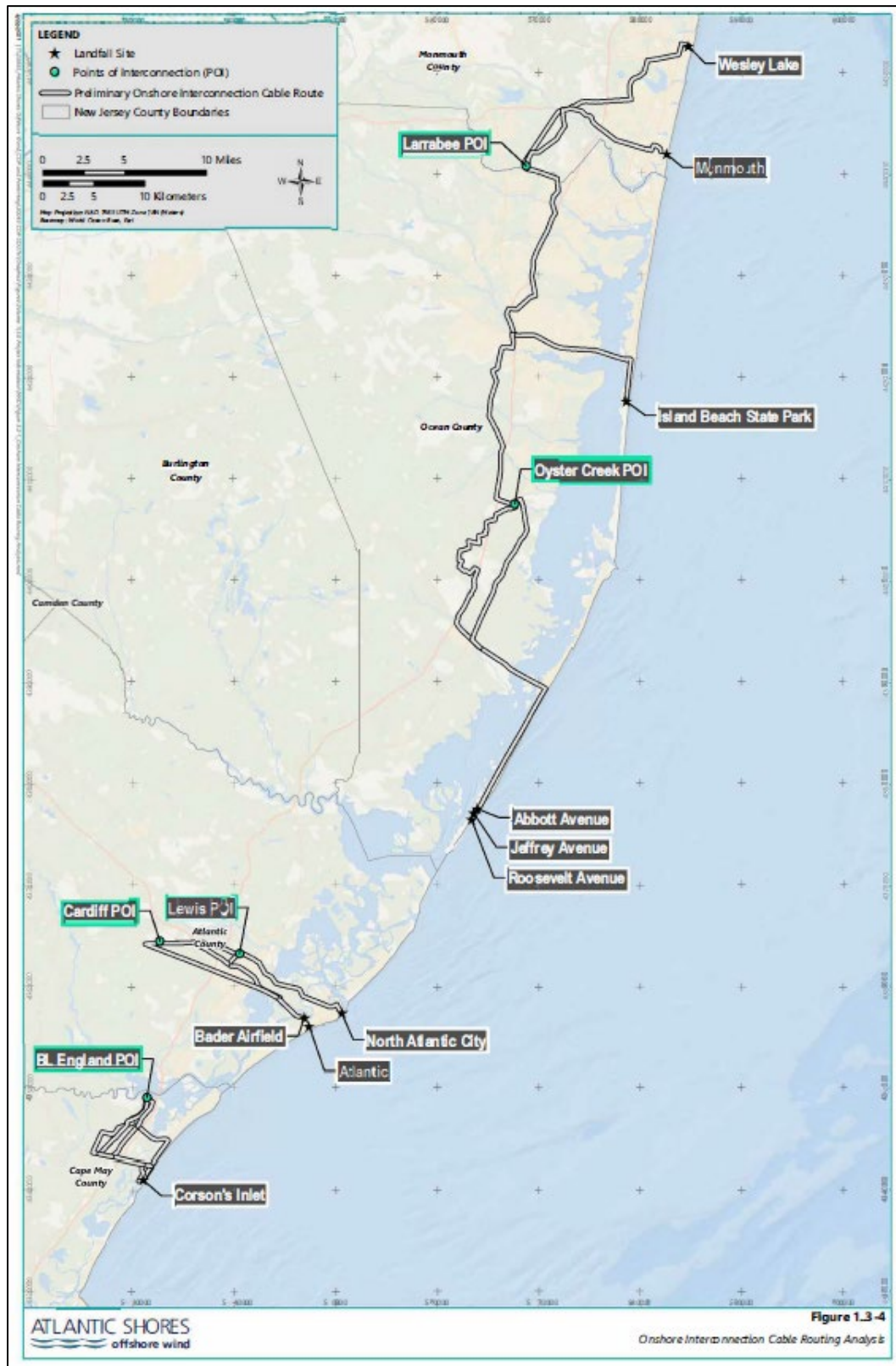
From each landfall site, Atlantic Shores conducted an iterative onshore interconnection cable routing assessment to each of the five POIs. The routing assessment was supported by aerial photography, publicly available Geographic Information Systems (GIS) environmental data, and baseline windshield surveys. Based on this routing analysis, 16 preliminary onshore interconnection cable routes were identified as shown in Figure 1.3-4.

A set of environmental and feasibility criteria were identified and weighted to establish and evaluate each onshore interconnection cable route. Route ranking was based on the following criteria:

- **Technical considerations:**
 - Shorter route lengths are preferred to reduce overall potential impacts and installation costs.
 - A lower number of hard route angles requiring a dead-end or corner transmission structure is preferred since hard route angles are more challenging and costly to construct.
- **Site characteristics:** Routes utilizing established ROWs for larger highways, state routes, existing transmission lines, or railroads are preferred because of the widespread development along the coast that prevents the establishment of a new ROW.
- **Existing uses and sensitive areas:**

- Routes that avoid or minimize the distance of the onshore interconnection cable route in or within proximity to residential neighborhoods are preferred to reduce temporary, construction-related noise impacts.
- Routes that minimize impacts to mapped threatened and endangered species habitat, tidelands, and wetlands are preferred.

Figure 1.3-4. Onshore Interconnection Cable Routing Analysis



1.3.4 Description of the O&M Facility

Once operational, the Projects will be supported by a new Operations and Maintenance Facility (O&M Facility) that Atlantic Shores is proposing to establish in Atlantic City, New Jersey. The O&M Facility will be used by Atlantic Shores as the primary location for O&M operations including material storage, day-to-day management of inspection and maintenance activities, vehicle parking, marine coordination, vessel docking, and dispatching of technicians. The O&M Facility will be designed to provide a safe and efficient operational flow of activities and equipment, and will consist of the following:

- office space, including a server/IT room to house the Project's IT infrastructure, and a control room for surveillance and coordination of offshore activities and Project operations;
- warehouse space, including full-height access for deliveries and equipment storage, a temperature and humidity-controlled electrical storage room, and a lifting facility; and
- harbor area and quayside, including but not limited to vessel mooring, unloading capabilities, a crane, berthing area, and emergency spill response equipment.

To establish the O&M Facility, Atlantic Shores intends to purchase and develop the 1.22-acre (0.49 ha) shoreside parcel at 801 North Maryland Avenue in Atlantic City, New Jersey (see Figure 1.3-5). The current owner of the site is listed as Amoco Oil Company in New Jersey Department of Environmental Protection (NJDEP) documents; it is presumed that the parcel was formerly used for oil storage, vessel docking, or other port activities. Construction of the O&M Facility is expected to involve the construction of a new building and a potential adjacent parking lot structure, repairs to any existing bulkheads/docks, installation of new dock facilities, and limited marine dredging. Alternatively, the O&M Facility may utilize the parking lot located on California Avenue at the Atlantic Landfall site or other existing surface lots in Atlantic City supported by shuttles to and from the O&M Facility.

Figure 1.3-5 Regional O&M Facility Location



2.0 TERRESTRIAL ARCHAEOLOGICAL RESOURCE AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

Atlantic Shores has proposed the Onshore Facilities be located primarily in previously disturbed areas including previously developed parcels, paved roadways, railroad ROWs and bike paths. These areas are likely to have disturbed soils due to the existing infrastructure and structures and there is a very low likelihood of intact or potentially significant archaeological resources to be in these areas. As described in the *Terrestrial Archaeological Resources Assessment – Onshore Interconnection Facilities* (TARA; COP Appendix II-P1; EDR, 2023a) and Phase IA Terrestrial Archaeological Resources Assessment – Operations and Maintenance Facility (O&M TARA; COP Appendix II-P2; EDR, 2023b) the Projects were sited to minimize potential adverse effects to terrestrial archaeological resources. The *“proposed Onshore Facilities associated with the Cardiff and Larrabee Physical Effects PAPEs have been significantly disturbed due to transportation infrastructure development (principally roadways, railroads, and bike paths) and adjoining business and residential neighborhoods”* (EDR, 2023a).

The desktop assessments and archaeological reconnaissance described in the TARA identified areas within the APE with the potential to contain intact archaeological resources. Pedestrian survey (with judgmental shovel testing if deemed appropriate based on observed field conditions) was recommended in any low sensitivity, “Potentially Undisturbed” areas adjacent to paved roadways (within which the onshore cables are actually sited) where depth to culturally sterile subsoil is less than approximately 2.0 feet as well as in any wetlands or areas of steep slope. Targeted archaeological shovel testing is recommended within those portions of the proposed Onshore Facilities that are sited within areas of the APE categorized as Medium and Medium-High sensitivity and “Potentially Undisturbed”. These areas have been designated the “Potential Phase IB Survey Areas”. Potentially undisturbed areas which are completely paved within 1,000 ft of previously identified archaeological sites are recommended for archaeological monitoring (see COP Appendix II-P1: Attachments C and D). Subsurface investigations of Onshore Interconnection Cable routes will focus on shovel test pit excavation along potentially intact road margins and within public ROWs to identify archaeological deposits or sites that could extend beneath paved surfaces. Field investigations to date include archaeological reconnaissance of the Onshore Facilities and in-progress Phase IB shovel test survey of the “Potential Phase IB Survey Areas” identified in the TARA analysis.

BOEM has determined, in accordance with Section 106 regulations (36 CFR § 800.4 (b)(2)), that a phased identification approach is appropriate for the survey, reporting, and consultation related to the outstanding Phase IB archaeological investigation. Atlantic Shores developed a Phased Identification Plan (PIP) for Terrestrial Archaeological Resources for the “Potential Phase IB Survey Areas” identified in the TARA to further evaluate the potential for archaeological sites within the Terrestrial APE, and to minimize the risk of unanticipated discoveries or disturbance to archaeological resources during construction (see MOA attachment *Phased Identification Plan: Terrestrial Archaeological Resources and Monitoring Plan and Post Review Discovery Plan: Terrestrial Archaeological Resources*). Given the Onshore Interconnection Cable routes would be buried in existing road ROWs or installed via HDD below the ground surface, no phased identification to identify and evaluate aboveground historic properties is anticipated. The PIP serves as a process document detailing the areas where phased identification survey will be conducted, the steps Atlantic Shores will take to complete the required cultural resources survey, and a schedule of associated

milestones. All milestones are anticipated to be completed before issuance of the Final Environmental Impact Statement and BOEM's Record of Decision.

To further mitigate the potential (however unlikely) for encountering archaeological resources during installation of the Onshore Facilities, as part of the PIP, Atlantic Shores has prepared a Monitoring Plan and Post Review Discoveries Plan (MPRDP) for terrestrial archaeological resources, which includes stop-work and notification procedures to be followed if a cultural resource is encountered during installation (see MOA attachment *Phased Identification Plan: Terrestrial Archaeological Resources and Monitoring Plan and Post Review Discovery Plan: Terrestrial Archaeological Resources*). Atlantic Shores anticipates that the MPRDP will be incorporated in a Memorandum of Agreement (MOA) executed among BOEM, SHPOs, consulting Tribal Nations, and potentially other consulting parties to resolve anticipated adverse effects to identified historic properties and to memorialize specific measures that Atlantic Shores will take to avoid and minimize potential effects to other historic properties in the event of a post-review discovery. The MPRDP outlines the steps for dealing with potential unanticipated discoveries of cultural resources, including human remains, during the construction of the proposed Onshore Facilities. In summary the MPRDP:

- Presents to regulatory and review agencies the plan Atlantic Shores and its contractors and consultants will follow to prepare for and potentially respond to unanticipated cultural resources (i.e., terrestrial archaeological) discoveries;
- Includes provisions and procedures allowing for a Cultural Monitor (Archaeologist) and Tribal Monitors to be present during construction and installation activities conducted in targeted areas of concern as identified in the TARA and through consultation with Tribal Nations; and
- Provides guidance and instruction to Atlantic Shores personnel and its contractors and consultants as to the proper procedures to be followed in the event of an unanticipated cultural resource (i.e., terrestrial archaeological) discovery.

3.0 MARINE ARCHAEOLOGICAL RESOURCE AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

As described in the *Marine Archaeological Resources Assessment Atlantic Shores Offshore Wind Project Construction and Operations Plan and Addendum* prepared by Atlantic Shore's Qualified Marine Archaeologist (QMA), SEARCH, 22 targets were identified (MARA and MARA Addendum; COP Appendix II-Q1; SEARCH, 2022 and 2023). Nine targets are located within the WTA; four targets are located in the Atlantic Export Cable Corridors (ECC); nine targets are located along the Monmouth ECC; and 59 ancient submerged landform features (ASLF) were identified within the Marine APE. Atlantic Shores has committed to avoiding physical disturbance to the following 21 ASLFs in the Marine APE: ASLFs 41, 212, 213, 214, 215, 216, 219, 220, 221, 222, 223, 224, 225, 226, 205, 207, 217, 218, 229, 230, 231. In order to avoid the ASLF, the report recommends:

1. Avoidance of each of the submerged cultural resources with a recommended a minimum 1-meter (3.2 feet) vertical buffer (ASLFs and shipwrecks/debris fields);
2. Avoidance of the 25-meter (82-foot) recommended horizontal buffer from ASLFs;
3. Avoidance of a QMA recommended and anomaly-specific 50-meter (164-foot) horizontal buffer from the outer edge of magnetic anomalies or acoustic contacts (shipwrecks and debris fields).

In addition, the MARA noted:

SEARCH has identified the paleolandscape features within the Project Areas and recommends refining engineering plans to minimization impacts and/or avoidance measures to identified ancient, submerged landform features and targets. ASOW will compile a list of targets that cannot be avoided. The data collected and a mitigation framework will be presented to stakeholders. Then, a mitigation plan will involve stakeholders and subject matter experts to develop a treatment plan to address targets where impacts cannot be avoided (SEARCH, 2021).

In addition to the avoidance and minimization measures described above, the MPRDP for Submerged Cultural Resources (see the MOA attachment *Monitoring Plan and Post Review Discovery Plan: Submerged Cultural Resources*) will discuss how Atlantic Shores has and will continue to implement the following environmental protection measures to avoid, minimize, and/or mitigate potential impacts to marine archaeological resources:

- Native American Tribal representatives and other consulting party members were invited to participate in the following:
 - Pre-Survey Meetings;
 - Preliminary Geologic Modeling;
 - Preliminary Geotechnical Sampling;
 - Preliminary Carbon-14 (C14) dating;
 - Selected Cultural Vibracore Sampling;
 - C14 and Geophysical Ground Modeling;
 - QMA Lab processing of Selected Cores;

- Video Documentation of Core Processing.
- Shipwrecks and associated historic sites potentially eligible for listing on the NRHP will be avoided within a minimum 50-meter buffer and Atlantic Shores will follow the Notification of the Discovery of Shipwrecks on the Seafloor (30 CFR 250.194(c), 30 CFR 250.1009(c)(4), and 30 CFR 251.7(b)(5)(B)(iii)). As per QMA recommendations (MARAs; COP Appendix II-Q1; SEARCH, 2022), the avoidance buffer will be resource specific. The avoidance buffer for magnetic anomalies will be calculated as a radius from a circular polygon delineated from the perimeter of the anomaly. In instances where the anomaly was identified by acoustic contact, the target avoidance buffer originates from the contact rather than the anomaly perimeter but still encompasses the entirety of the anomaly. This avoidance method is designed to account for sensor positional errors which may have occurred during survey, contouring accuracy between survey transects, and to account for potential buried non-ferrous debris and expected types of seafloor impacts.
- Completed Geophysical and Geotechnical (G&G) campaigns have been proactive in targeting and collecting culturally pertinent samples and information to be used in a robust ground model, which will inform Atlantic Shores' design decisions moving forward.
- Atlantic Shores plans to share the robust ground model as a mitigation to impacts to geologic landforms in Lease Area OCS-A 0499. Efforts can be made to make data products and media products available for all interested parties to aid in development of technical or historical retention.
- Where feasible, Atlantic Shores will present visual demonstrations of both the ASLFs and planned infrastructure. As an example, the ground model could be deconstructed into time-elements, in 3D space, and in a manner that tells a sequential geologic history using G&G data, all presented in an easily understood format. This map/landscape reconstruction could:
 - Be developed in collaboration with consulting Tribal Nations;
 - Where appropriate, incorporate traditional ecological knowledge shared by Tribal Nations;
 - Include illustrations/animations of traditions regarding evolution of seas and lands of the Atlantic OCS;
 - Include reconstruction of ancient landscapes based on Projects' survey data.
- Based on the Section 106 consultation, BOEM has determined the following measures will be implemented to mitigate unavoidable adverse effects to the ASLFs. These measures are further detailed in the MOA attachment *Historic Property Treatment Plan (HPTP) for Ancient Submerged Landform Features* and include the following:
 - Preconstruction Geoarchaeology
 - Collaborative review of existing geophysical and geotechnical data and any relevant supplemental analyses with Tribal Nations;
 - Consultations among BOEM, Atlantic Shores, Tribal Nations and other interested consulting parties to select appropriate locations within affected ASLFs for coring;

- Selection of coring locations in consultation with Tribal Nations;
- Collection of vibracores;
- Written verification to BOEM that the samples collected are sufficient for the planned analyses and consistent with the agreed scope of work;
- Collaborative laboratory analyses at a laboratory;
- Screening of recovered sediments for debitage or micro-debitage associated with indigenous land uses;
- Third-party laboratory analyses, including micro- and macro-faunal analyses, micro- and macro-botanical analyses, radiocarbon dating of organic subsamples, and/or chemical analyses for potential indirect evidence of indigenous occupations;
- Temporary curation of archival core sections;
- Draft reports for review by interested consulting parties; and
- Final reporting.
- Open-Source GIS, Story Maps, and Animations
 - Collaboration to strengthen the model as a useable educational tool.
 - Publicizing information by sharing the model and other educational tools with impacted communities.
 - Understanding that the expanse of science and mitigation can extend beyond a 3D ground model into a modern world that is made better through the development of offshore wind. This step can be part of a contribution from the stakeholder comment period identifying needs that can be fulfilled through our project.
- Postconstruction ASLF Investigation
 - QMA review and analysis of postconstruction geophysical data to identify areas of high preservation potential.
 - Preparation of a draft technical report outlining the methods and findings of the analysis for BOEM review.
 - Distribution of the technical report to Participating Parties.
 - A consultation meeting among the Participating Parties to review the findings and recommendation in the technical report, and to select targeted areas (if any) appropriate for subsequent surveys, inspections, or documentation.
 - Execution of appropriate surveys, inspections, and/or documentation utilizing one or more of the proposed methods outlined in Section 4.1.4 of the HPTP.

- The type of trenching system will inform the survey methodology. The search area will be based on the distance sediments are dispersed during cable installation.
- Analysis and reporting of the results of any supplemental surveys/inspections conducted as a result of the postconstruction analyses and consultations.
- Public and/or professional presentations summarizing the results of the investigations, developed with the consent of the consulting Tribal Nations.
- Tribal Capacity Support for the Delaware Nation, the Delaware Tribe of Indians, the Mashpee Wampanoag Tribe, the Shinnecock Indian Nation, the Mashantucket (Western) Pequot Tribal Nation, and the Wampanoag Tribe of Gay Head (Aquinnah)
 - Atlantic Shores will provide funding to the Tribal Nations that may be used for, but is not limited to the following:
 - Engagement in consultations related to the Projects.
 - Monitoring of the ASLFs.
 - The Tribal Nations will determine priority Tribal capacity needs and initiatives associated with monitoring of ASLFs.
 - Technology upgrades and training associated with interpretation and analysis of non-proprietary or otherwise regulatory-protected GIS data.
 - The Delaware Nation and Delaware Tribe of Indians' participation in ethnographic studies with other Tribes, if applicable.
 - The Delaware Nation and Delaware Tribe of Indians THPOs' collaboration in those same studies, if applicable.
 - The development of a Subsistence and Settlement Study of New Jersey for the Stockbridge-Munsee Community Band of Mohican Indians

4.0 ABOVEGROUND HISTORIC PROPERTIES

As stated in the HRVEA, Onshore Interconnection Facilities Historic Resources Effect Assessment (HREA), and the O&M Facilities HREA (COP Appendices II-O, II-N1; EDR, 2024f; and II-N2, EDR, 2024g respectively), online data sources, GIS data, public records, NJHPO data, and field surveys were used to review parcels that included previously identified (e.g., NRHP-listed or NJHPO-identified) historic properties within the APEs and/or where public records indicated the potential for buildings greater than 40 years in age. EDR's Secretary of Interior-qualified architectural historians performed desktop and field reviews to develop the list of the potential aboveground historic properties within the APEs. Following completion of the field surveys these properties were further evaluated for potential NRHP eligibility based on desktop research. Based on the above methodology:

- A total of 102 aboveground historic properties were identified in the HRVEA.
- Three aboveground historic properties were identified in the Onshore Interconnection Facilities HREA.
- Seven aboveground historic properties were identified in the O&M Facilities HREA.

4.1 Applying the Criteria of Adverse Effect

Potential effects on aboveground historic properties resulting from an offshore wind project include physical effects – such as alteration, disturbance, or destruction of a historic property caused by construction activities – as well as other changes such as visual, auditory, or atmospheric effects that diminish the historically significant characteristics of an historic property. No physical impacts to aboveground historic properties will occur as a result of the Projects' activities onshore, on the OCS, or within state waters, nor will any buildings or other potential onshore aboveground historic properties be physically altered by construction of the Projects. Instead, the Projects' potential effects on onshore aboveground historic properties would be a change to a given property's historic setting resulting from the introduction of WTGs and other offshore components, as well as any onshore components. Consistent with recent case law, BOEM, as the lead federal agency, considers visual effects caused by the construction/operation of the onshore and offshore facilities to be direct effects.

Section 106 of the NHPA requires federal agencies to consider the effects of their actions on historic properties that are listed or meet the eligibility criteria for listing in the NRHP. Per NHPA Section 106, 36 CFR § 800.5 (a)(1), the assessment of adverse effects on an historic property requires the following steps:

(a) Apply criteria of adverse effect. In consultation with the SHPO/THPO and any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to identified historic properties, the agency official shall apply the criteria of adverse effect to historic properties within the area of potential effects. The agency official shall consider any views concerning such effects which have been provided by consulting parties and the public (CFR, 2022).

The Federal Regulations entitled “Protection of Historic Resources” (36 CFR 800) include in Section 800.5(2) a discussion of potential adverse effects on historic properties. The criteria for determining whether a project (“undertaking”) may have an adverse effect on historic properties are as follows:

(vii) Criteria of adverse effect. An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative (CFR, 2022).

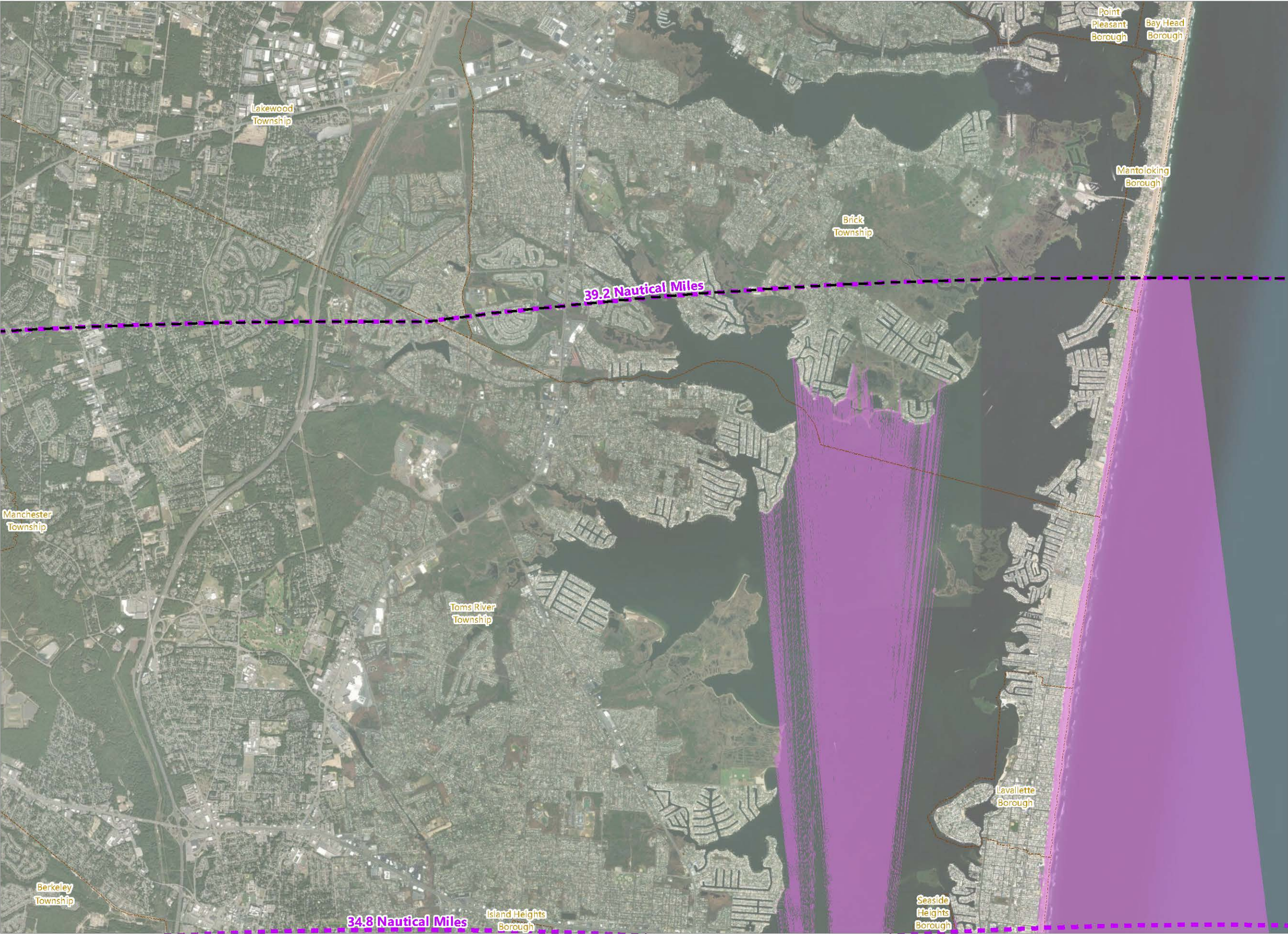
As stated in the HRVEA (COP Appendix II-O; EDR, 2024e), the majority of aboveground historic properties that fall within the Projects' viewshed will have partially obstructed views of the Projects due to screening provided by intervening topography, vegetation, and/or buildings and structures. The proposed WTGs are located between 9.78 miles (15.73 km) to 45.24 miles (72.8 km) away from the aboveground historic properties located within the APE.

The visual simulations prepared for the Projects in the Visual Impact Assessment (COP Appendix II-M1; EDR, 2023) show that in some cases views of the ocean will be disrupted by the size and scale of the WTGs. The introduction of vertical elements along the horizon line has the potential to create a pattern of visual disturbance within the natural seascape. Distance may be a mitigating factor in some cases. However, under clear conditions even at distances of 20 miles (32.2 km) away, WTGs spread across the horizon will likely become focal points of viewers from the shore, and the effect of “stacking” can cause multiple individual WTGs to appear as a larger, more substantial form. However, atmospheric conditions will affect the frequency and duration of WTG visibility from historic properties within the APE which will minimize the visual effect of the Projects under some conditions.

The Projects have been designed to minimize impacts to aboveground historic properties to the extent feasible; however, applying the Criteria of Adverse Effect per NHPA Section 106, 36 CFR § 800.5 (as previously summarized):

- A total of 29 of the 102 aboveground historic properties identified in the HRVEA and located within the WTA APE will be adversely affected (see Table 4.1-1 and Appendix II-O; EDR, 2024e).
- None of the three aboveground historic properties identified in the Onshore Interconnection Facilities HREA will be adversely affected by the Projects (see COP Appendix II-N1; EDR, 2024f).
- None of the seven aboveground historic properties identified in the Operation and Maintenance Facilities HREA will be adversely affected by the Projects (see COP Appendix II-N2 EDR, 2024g).

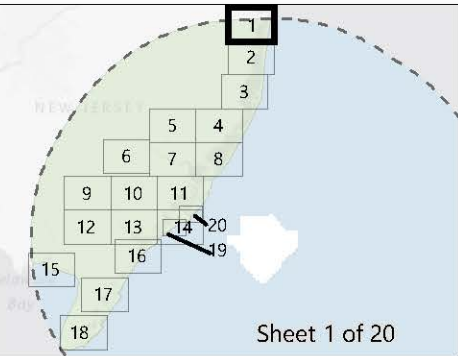
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Turbine Distance Interval
- 45.1-Mile Viewshed Radius
- Municipal Boundary

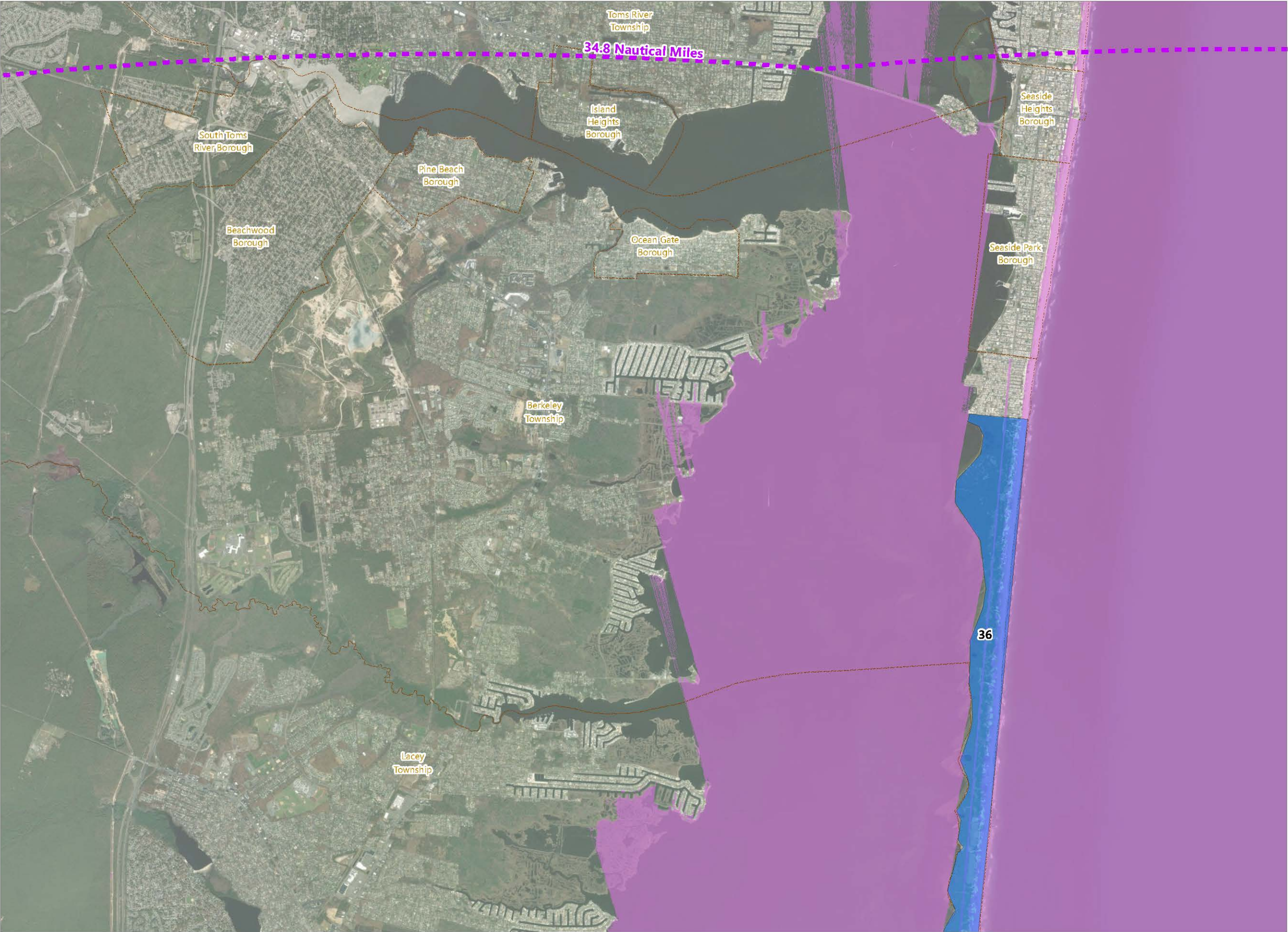


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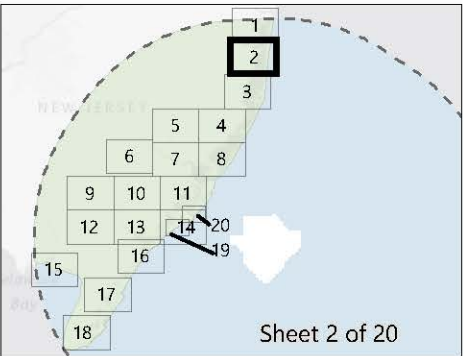
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Aboveground Historic Property
- NRHP-Eligible Property
- Turbine Distance Interval
- 45.1-Mile Viewshed Radius
- Municipal Boundary



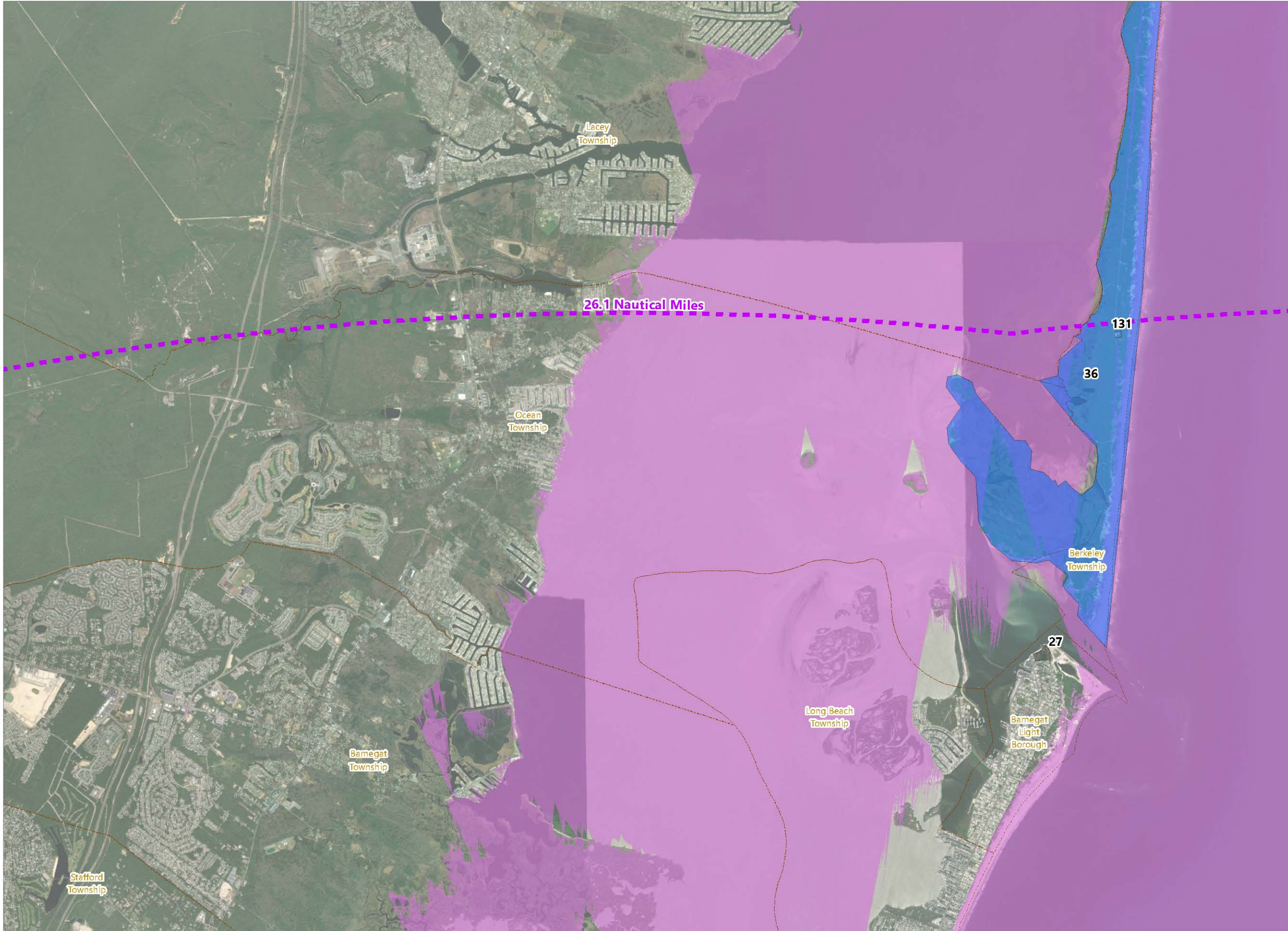
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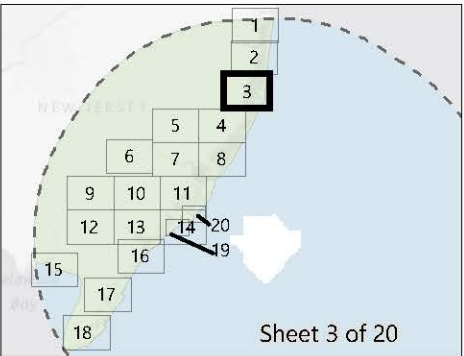
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Aboveground Historic Property
 - NRHP-Listed Property
 - NRHP-Eligible Property
- Turbine Distance Interval
- 45.1-Mile Viewshed Radius
- Municipal Boundary



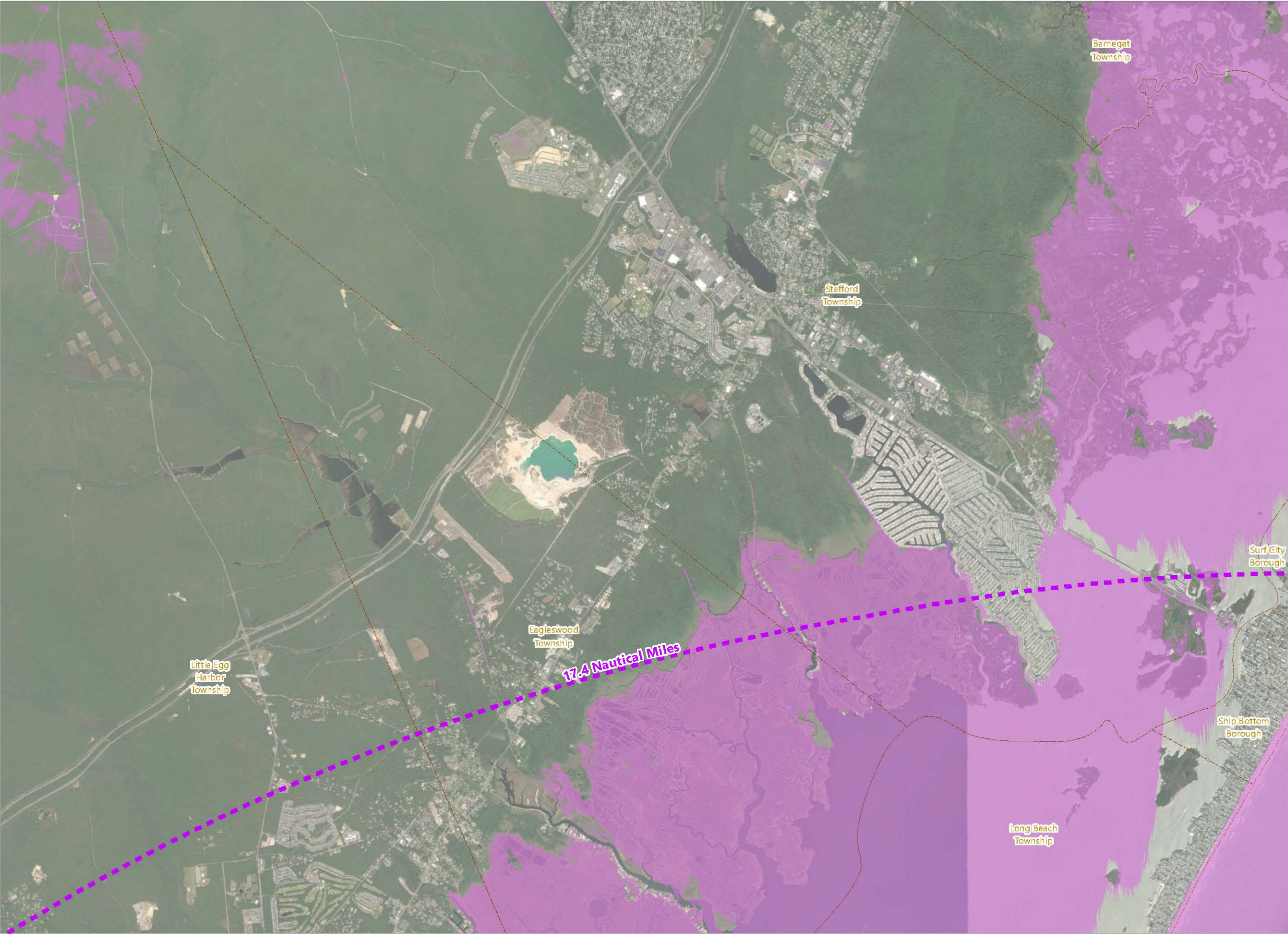
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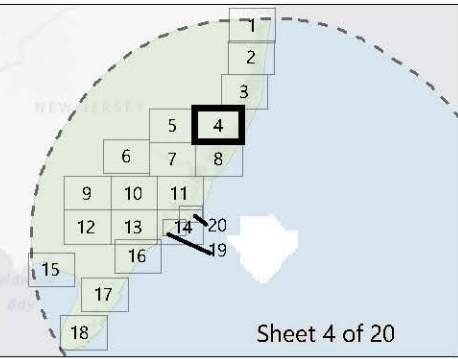
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Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Turbine Distance Interval
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- Municipal Boundary



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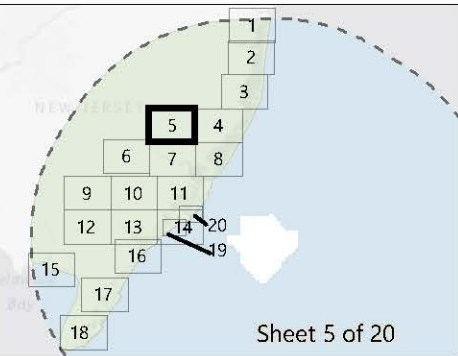
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



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Offshore Wind Project

Outer Continental Shelf

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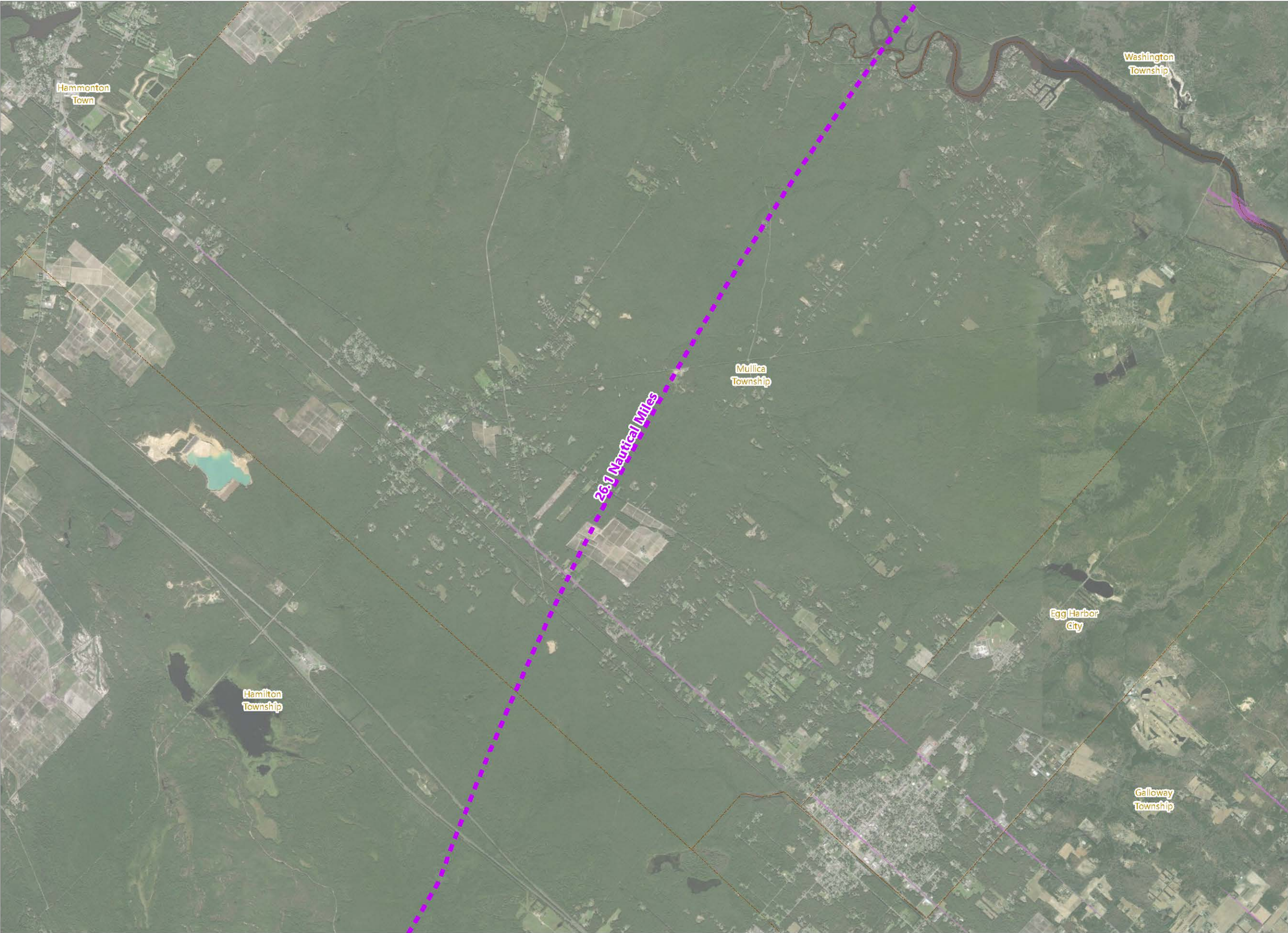


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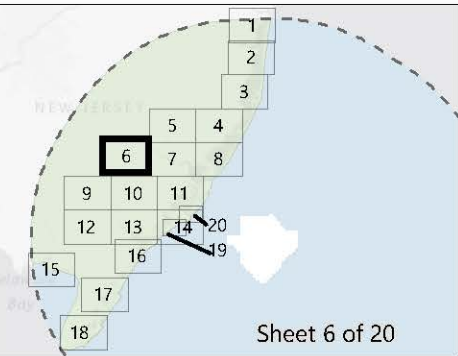
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Turbine Distance Interval
- 45.1-Mile Viewshed Radius
- Municipal Boundary

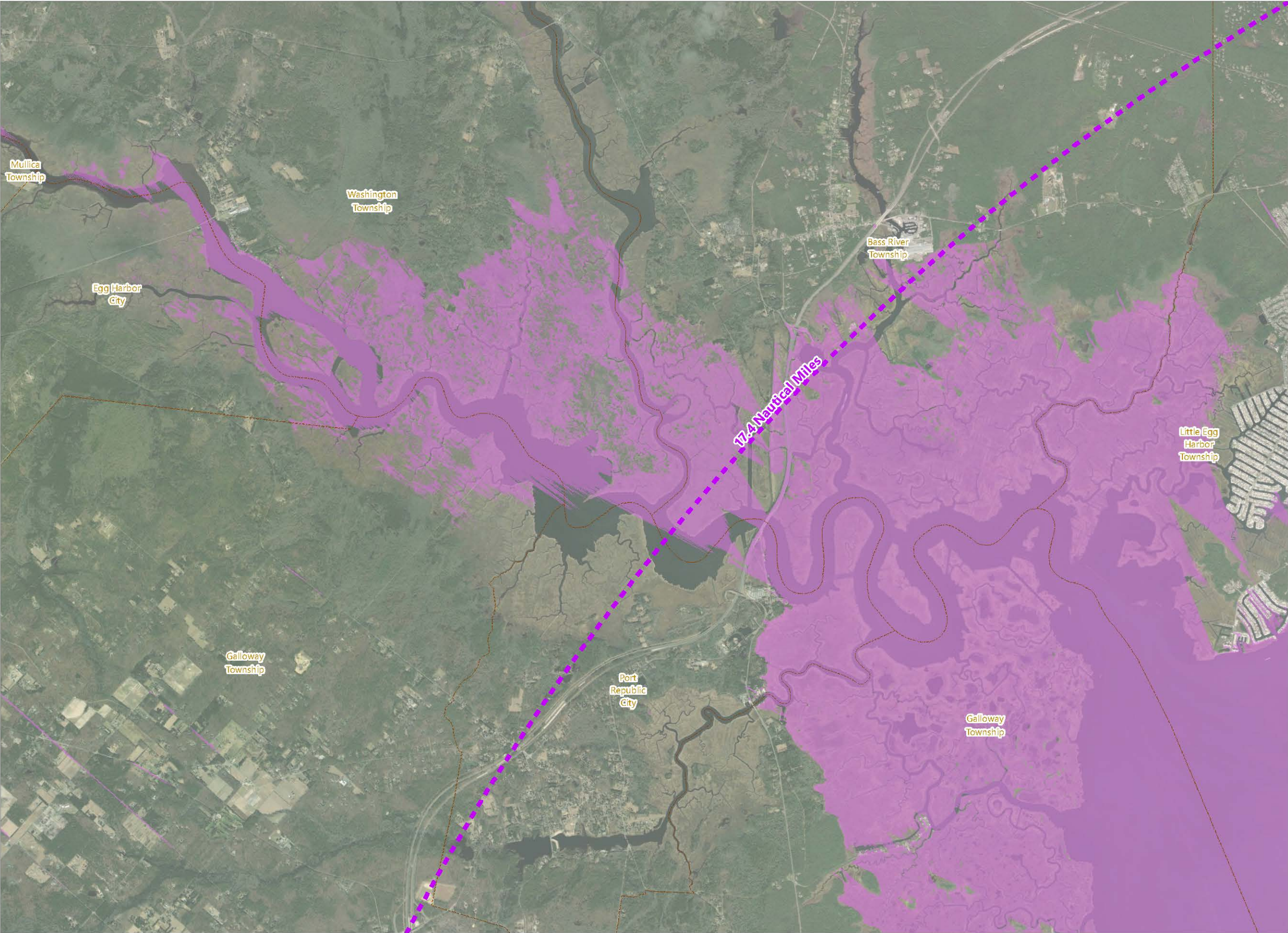


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offshore wind

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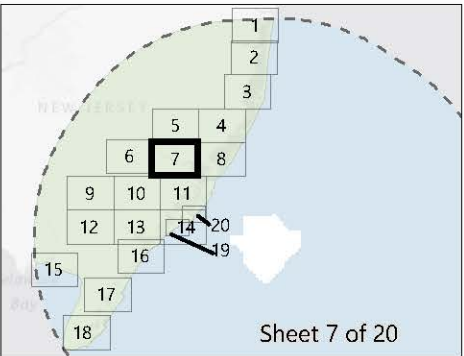
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
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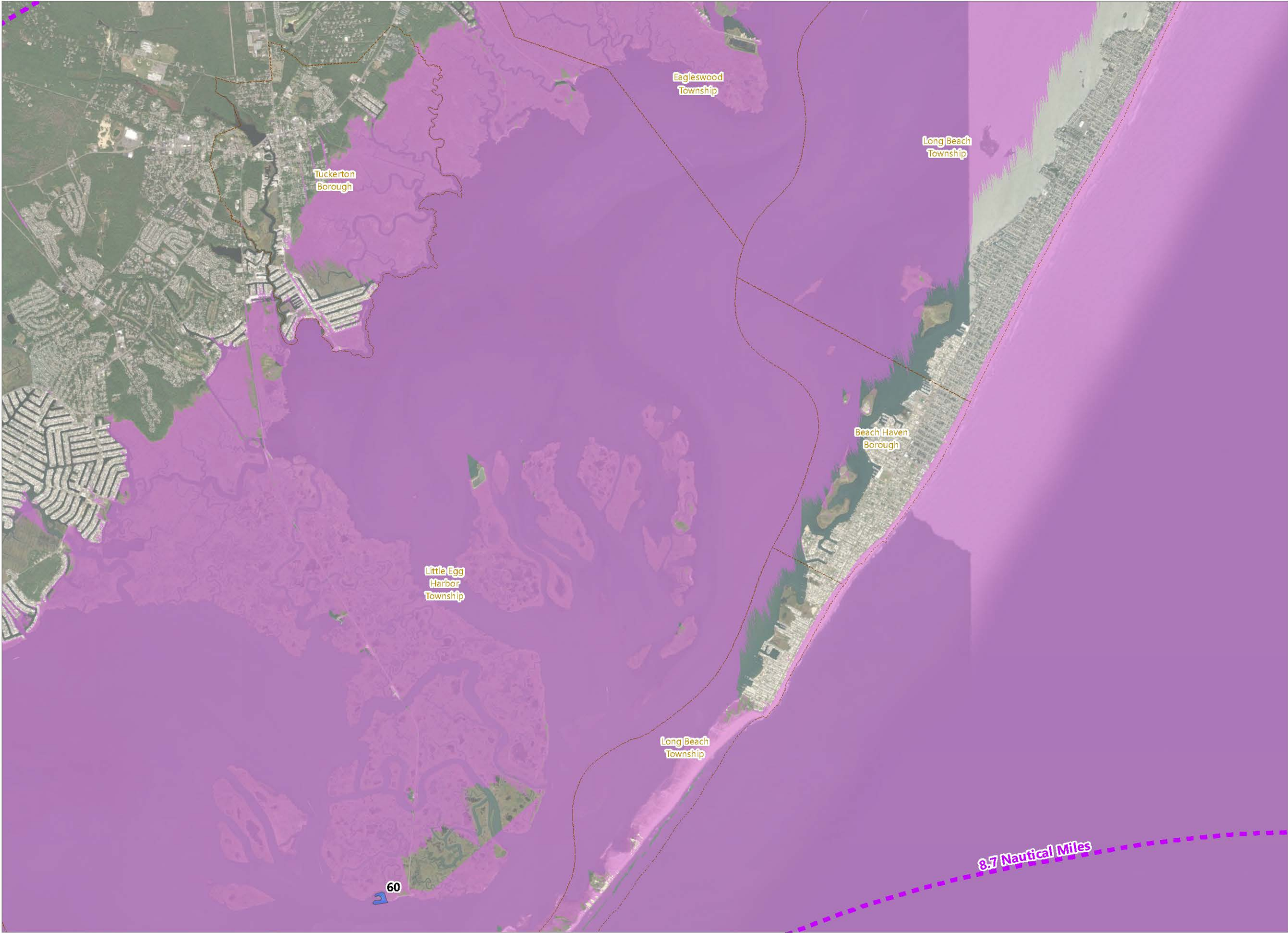


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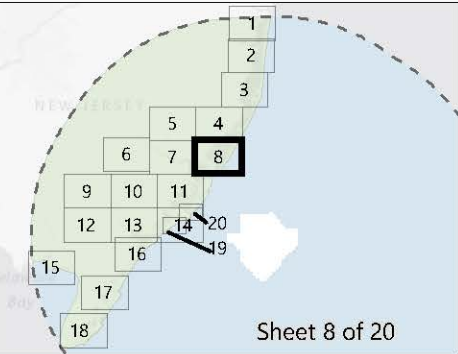
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Aboveground Historic Property
- NRHP-Eligible Property
- Turbine Distance Interval
- 45.1-Mile Viewshed Radius
- Municipal Boundary

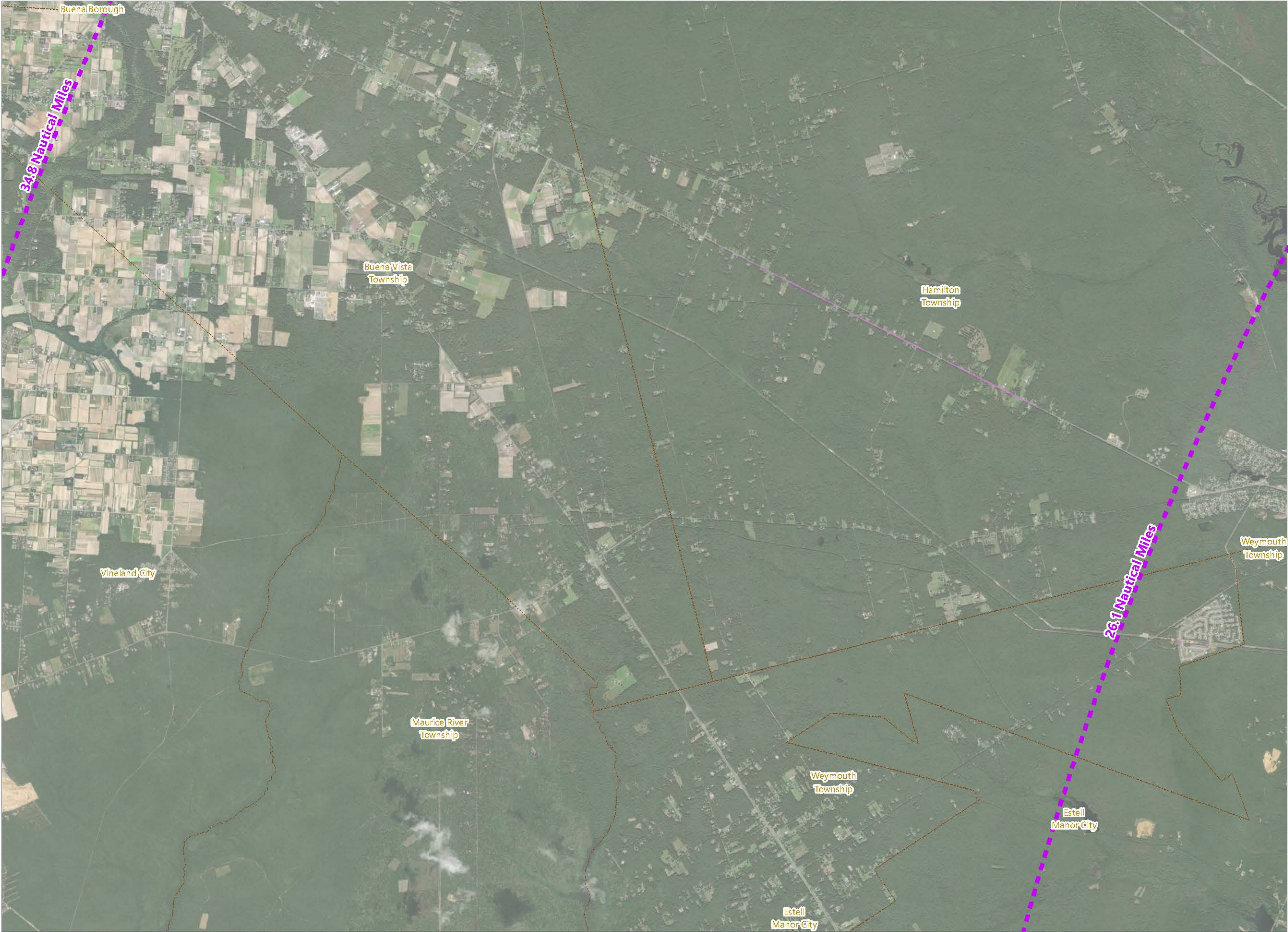


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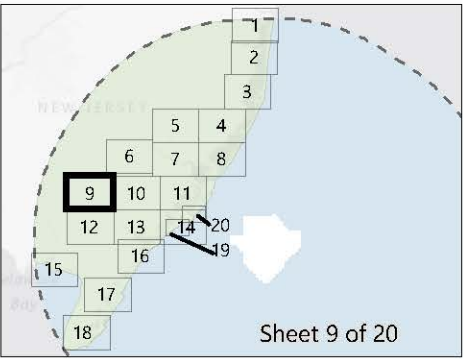
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Atlantic Shore South Offshore Wind Project

Outer Continental Shelf

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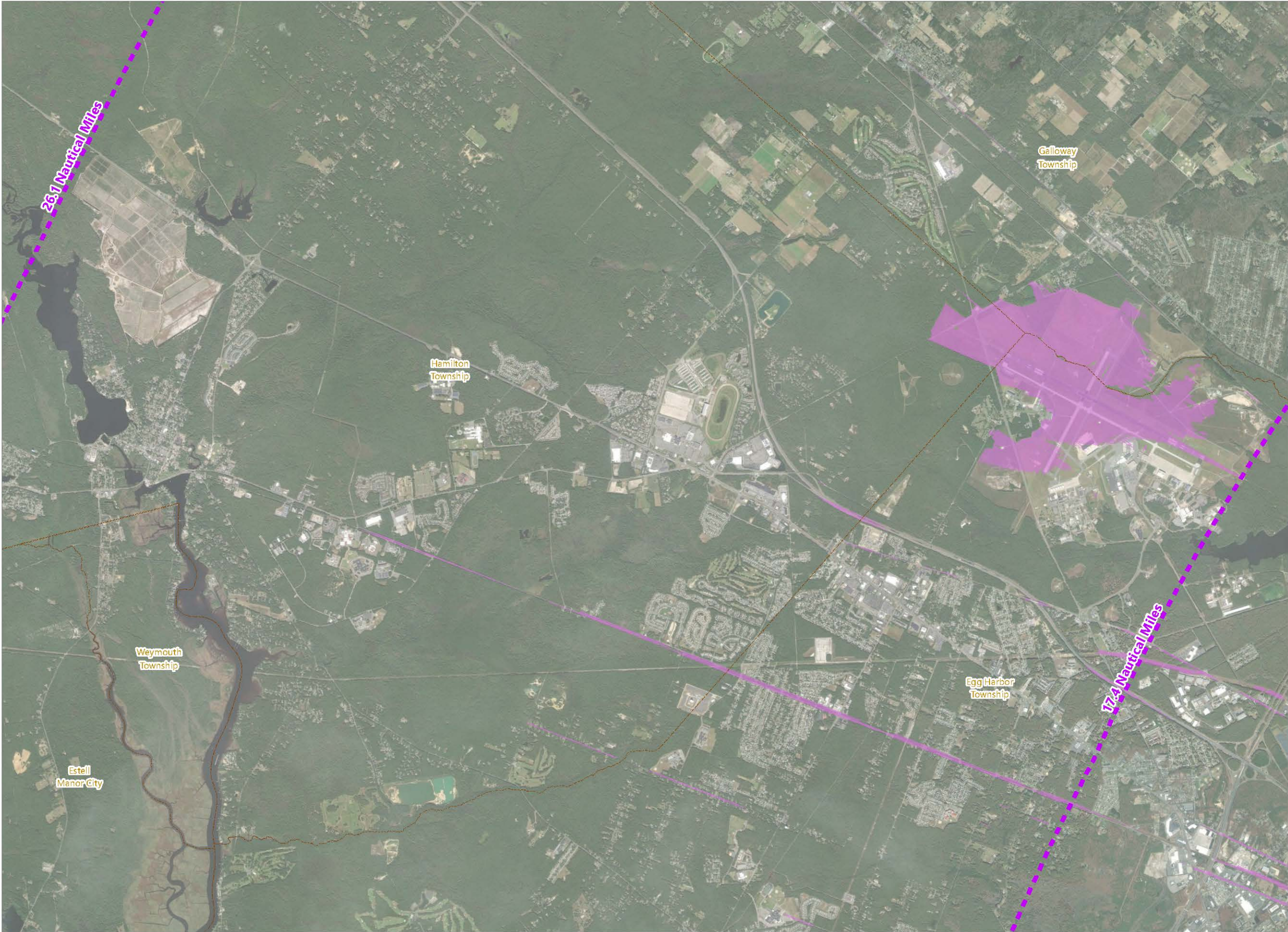


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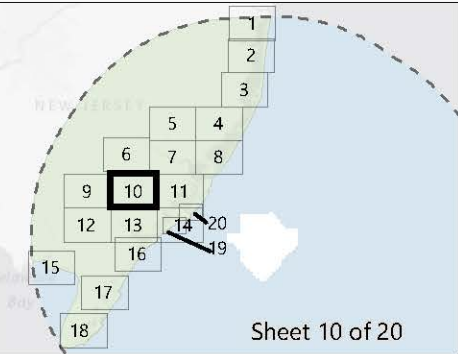
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

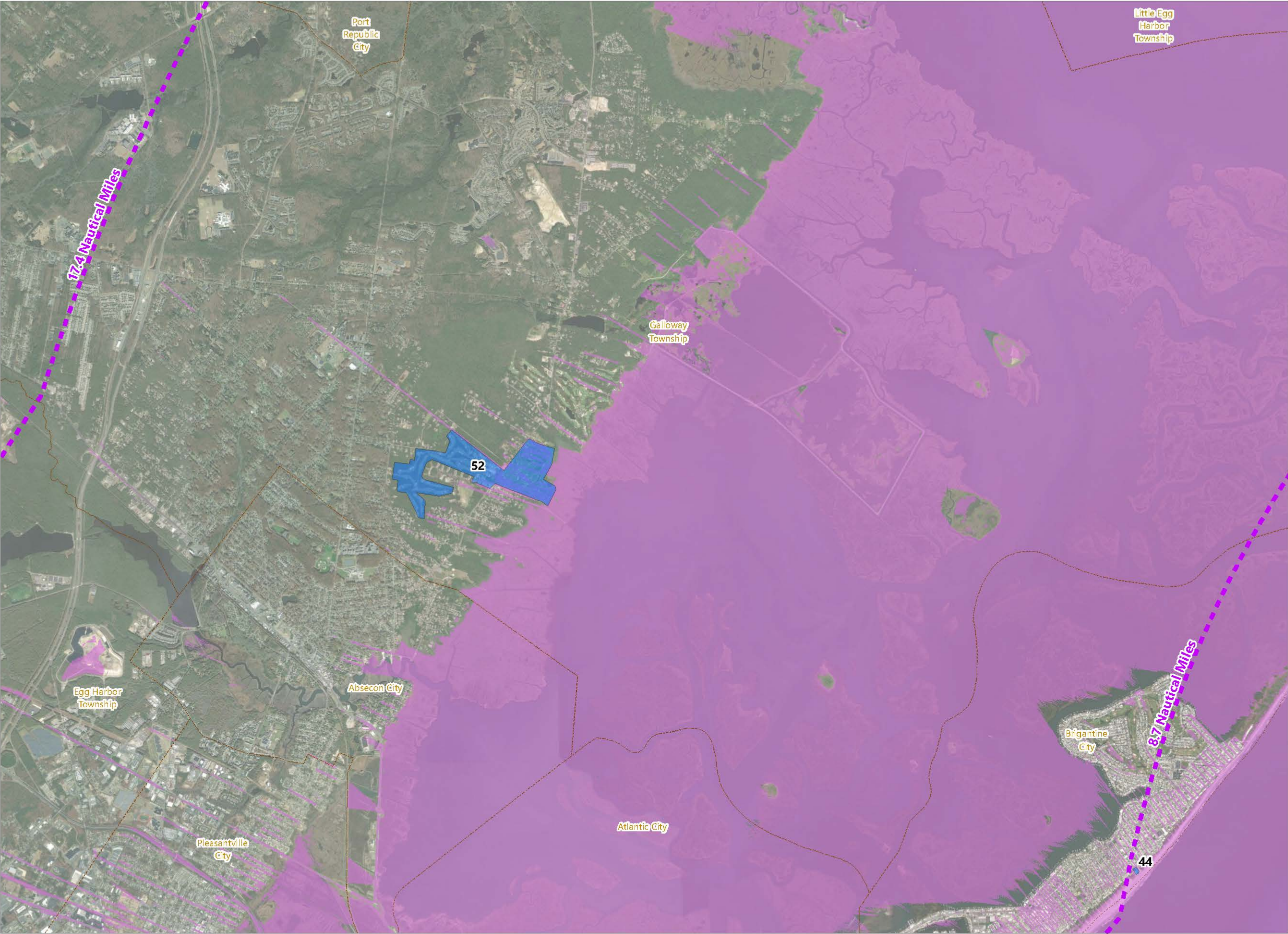
- Preliminary Area of Potential Effects (PAPE)
- Turbine Distance Interval
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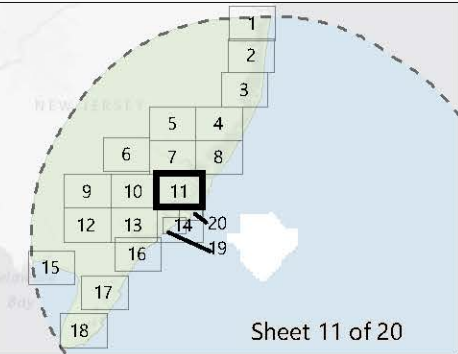
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Aboveground Historic Property
- NRHP-Eligible Property
- Turbine Distance Interval
- 45.1-Mile Viewshed Radius
- Municipal Boundary



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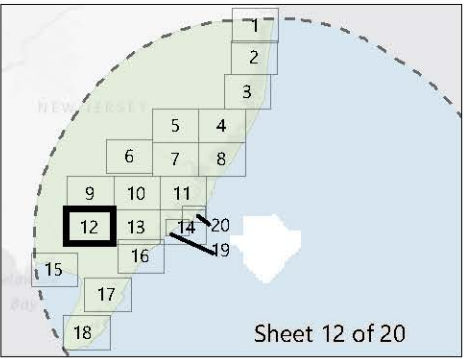
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Turbine Distance Interval
- 45.1-Mile Viewshed Radius
- Municipal Boundary

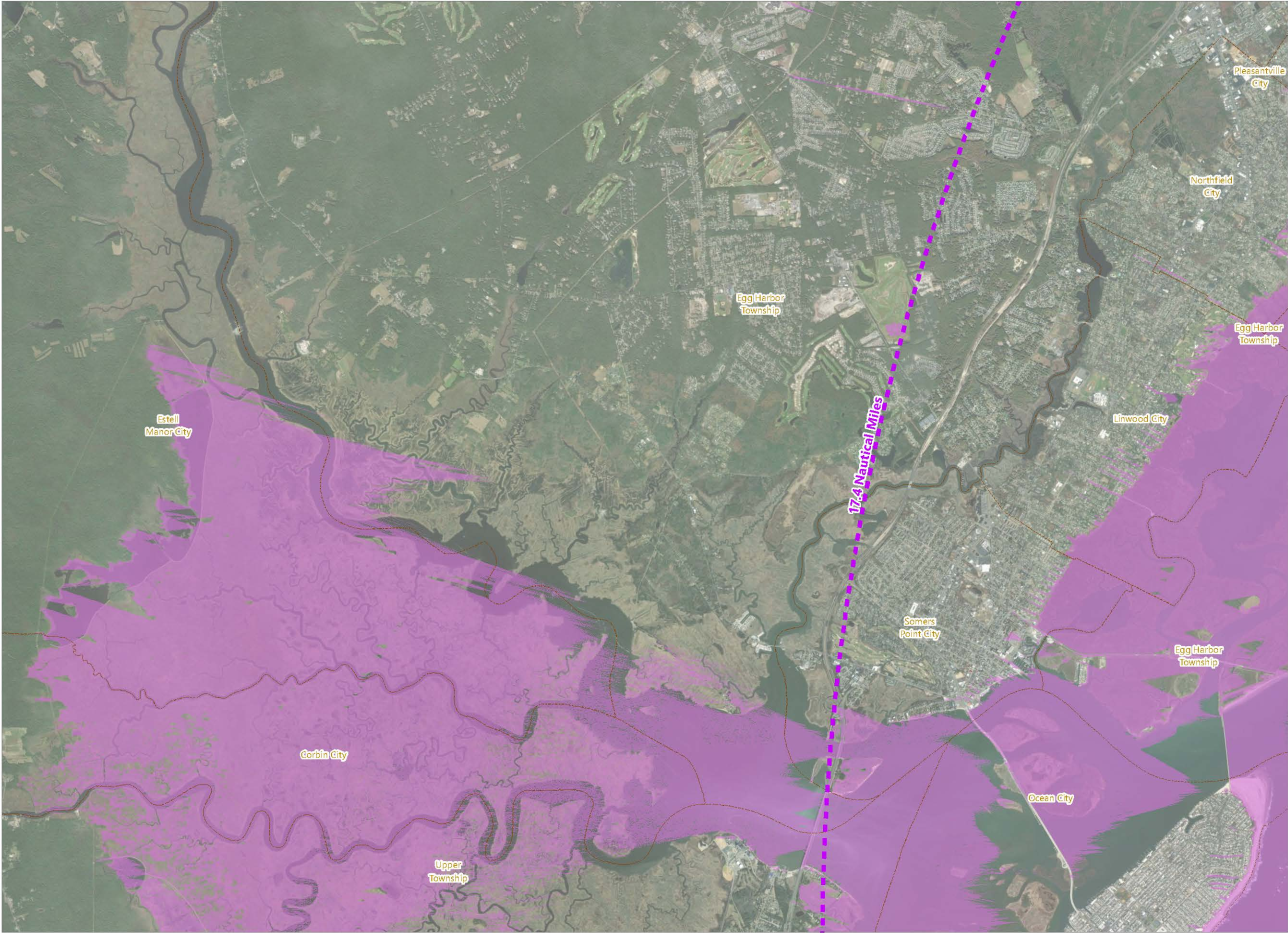


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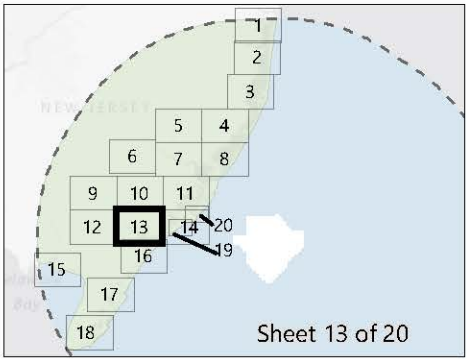
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Turbine Distance Interval
- 45.1-Mile Viewshed Radius
- Municipal Boundary



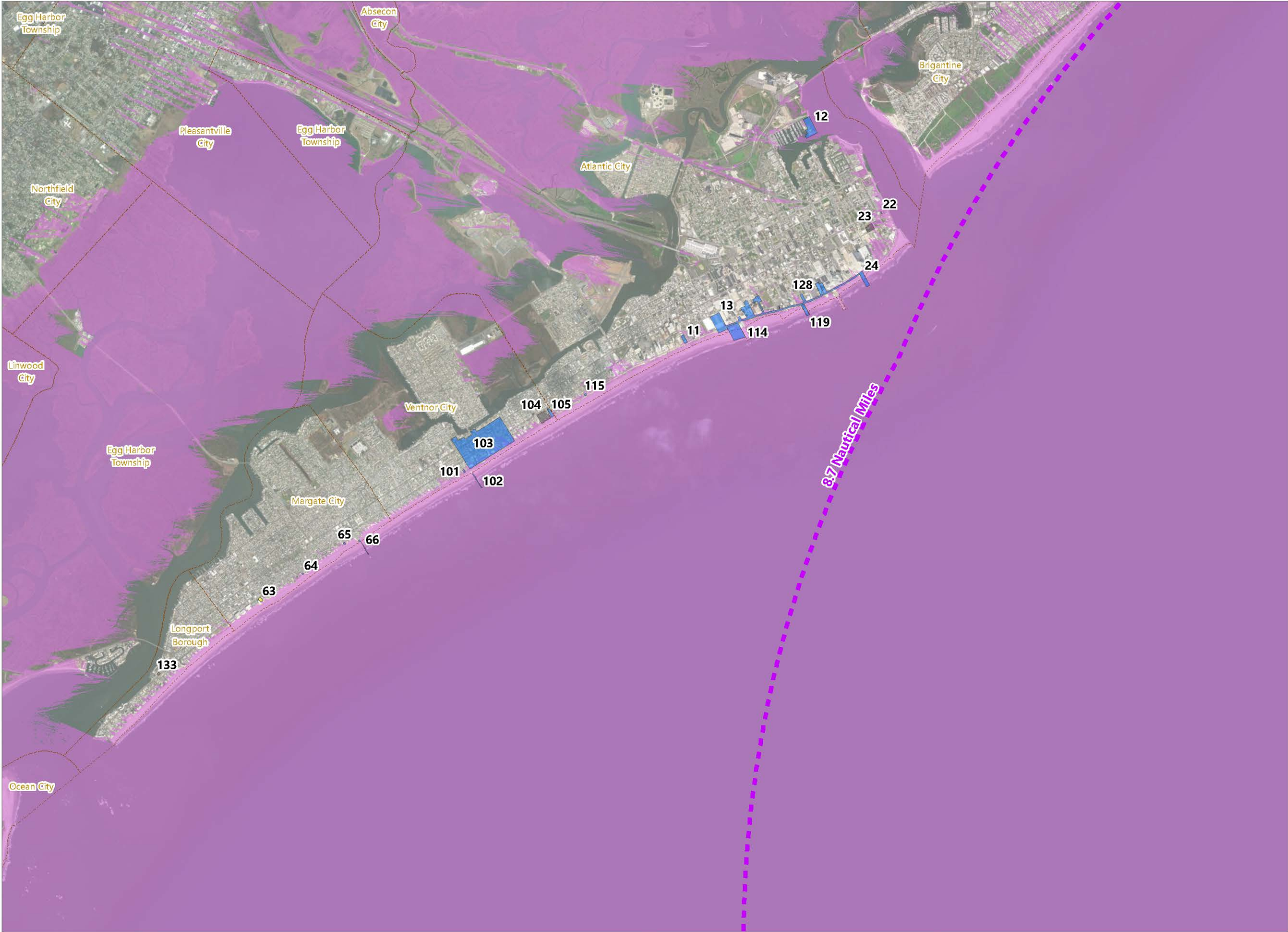
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offshore wind

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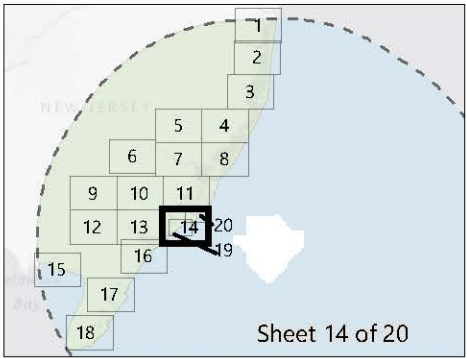
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Aboveground Historic Property
 - National Historic Landmark
 - NRHP-Listed Property
 - NRHP-Eligible Property
- Turbine Distance Interval
- 45.1-Mile Viewshed Radius
- Municipal Boundary



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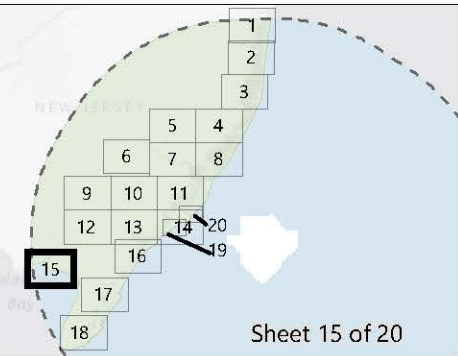
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Turbine Distance Interval
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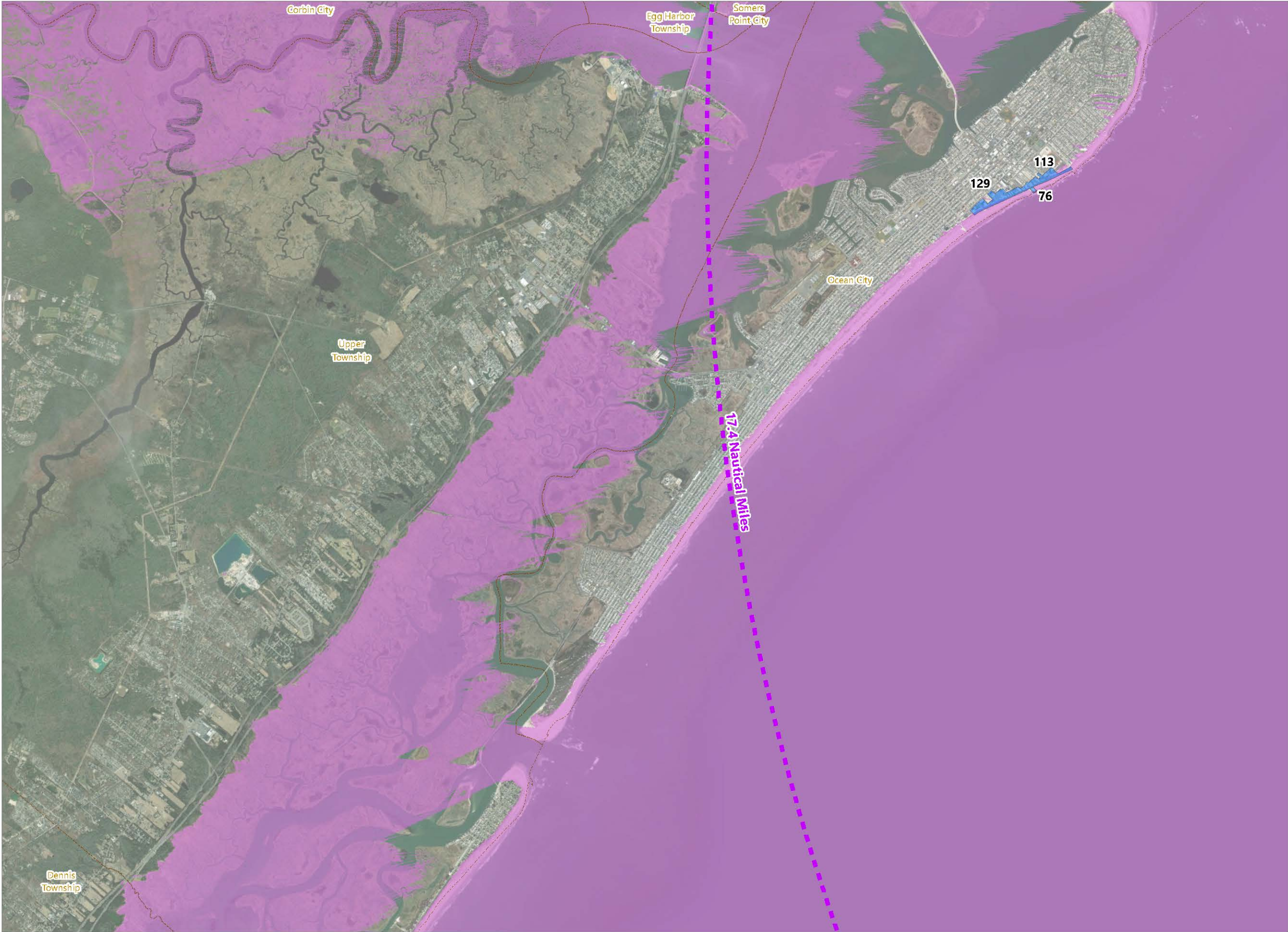
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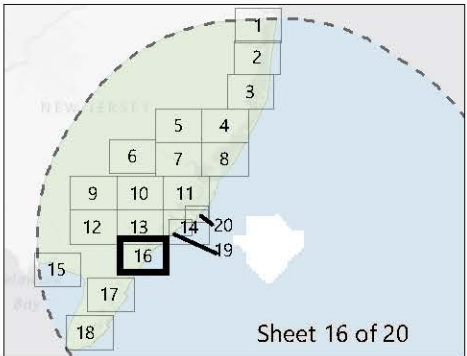
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Aboveground Historic Property
- NRHP-Listed Property
- NRHP-Eligible Property
- Turbine Distance Interval
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- Municipal Boundary



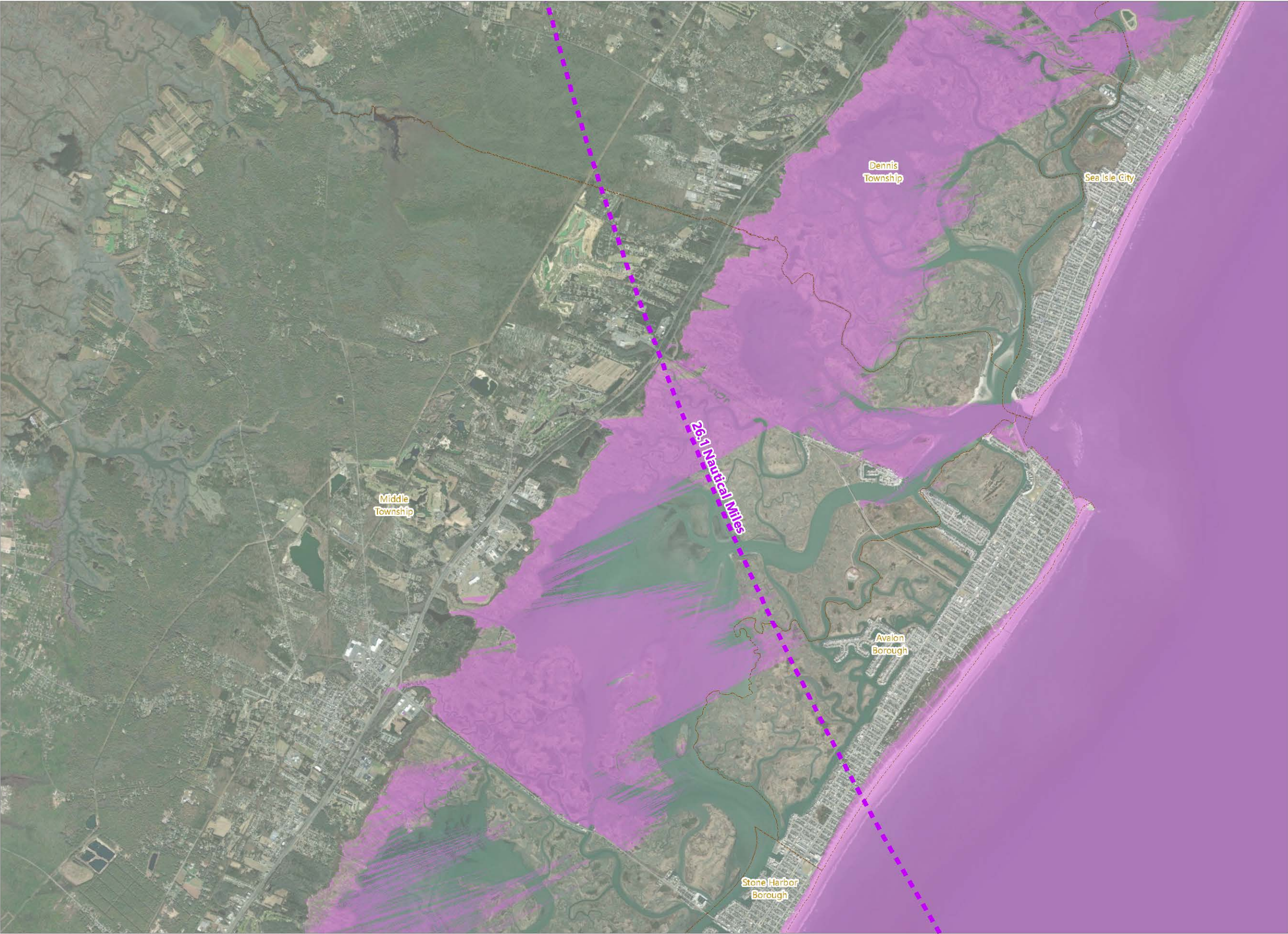
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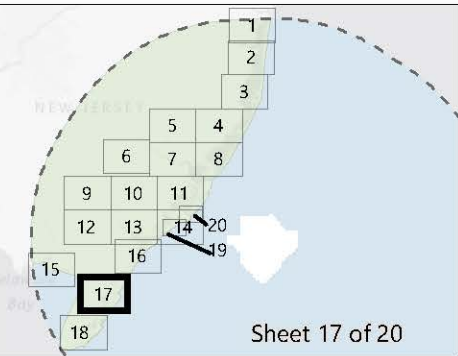
Figure 4.1-1: Potential Adversely-Effectuated Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Turbine Distance Interval
- 45.1-Mile Viewshed Radius
- Municipal Boundary

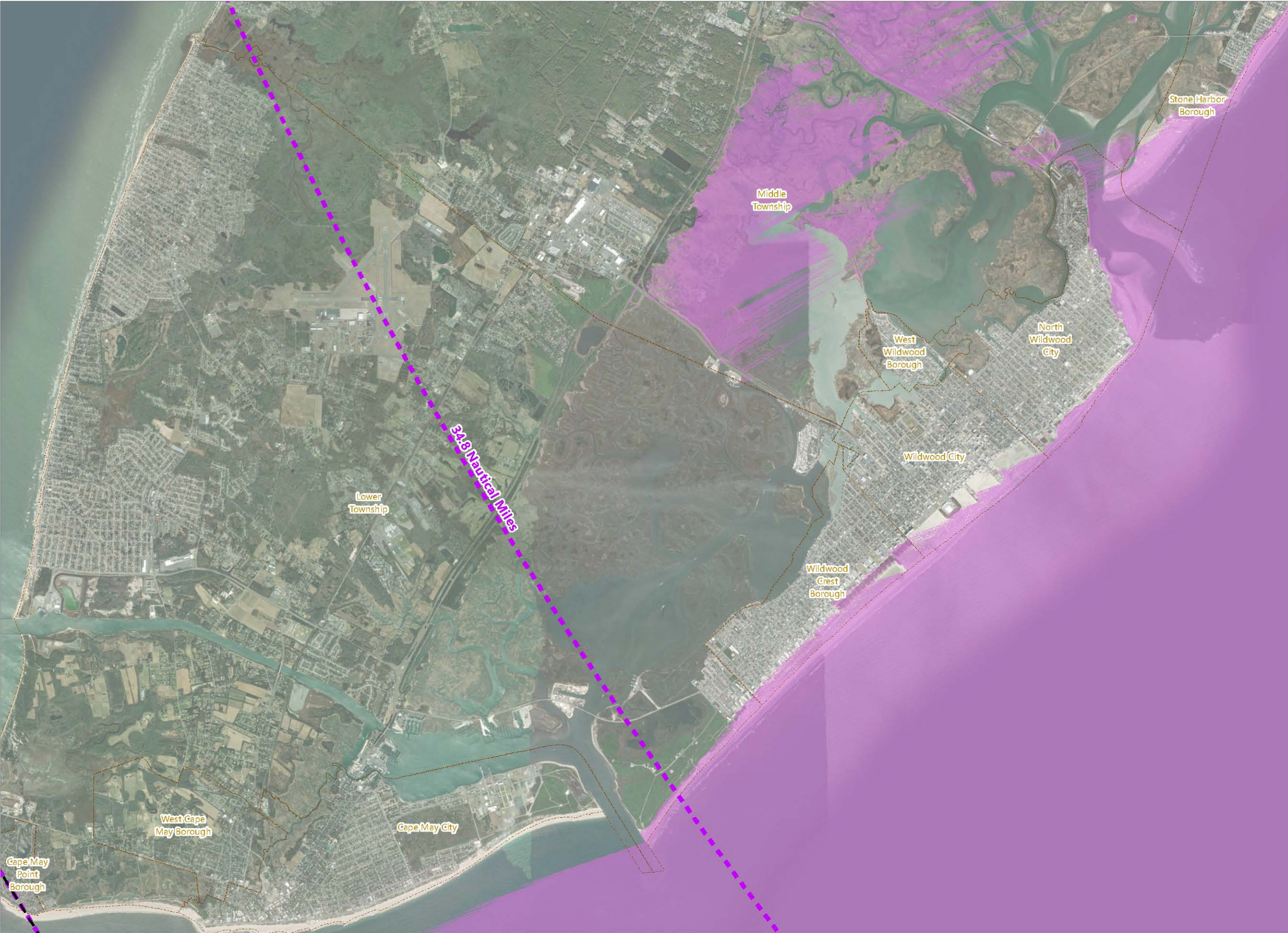


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offshore wind

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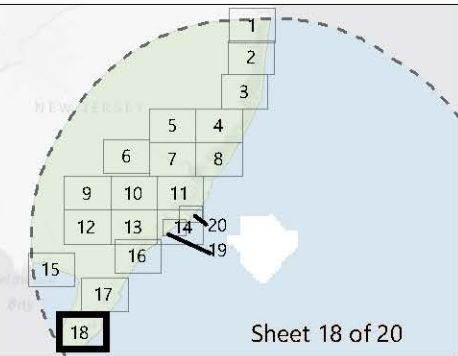
Figure 4.1-1: Potential Adversely-Effectuated Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Turbine Distance Interval
- 45.1-Mile Viewshed Radius
- Municipal Boundary



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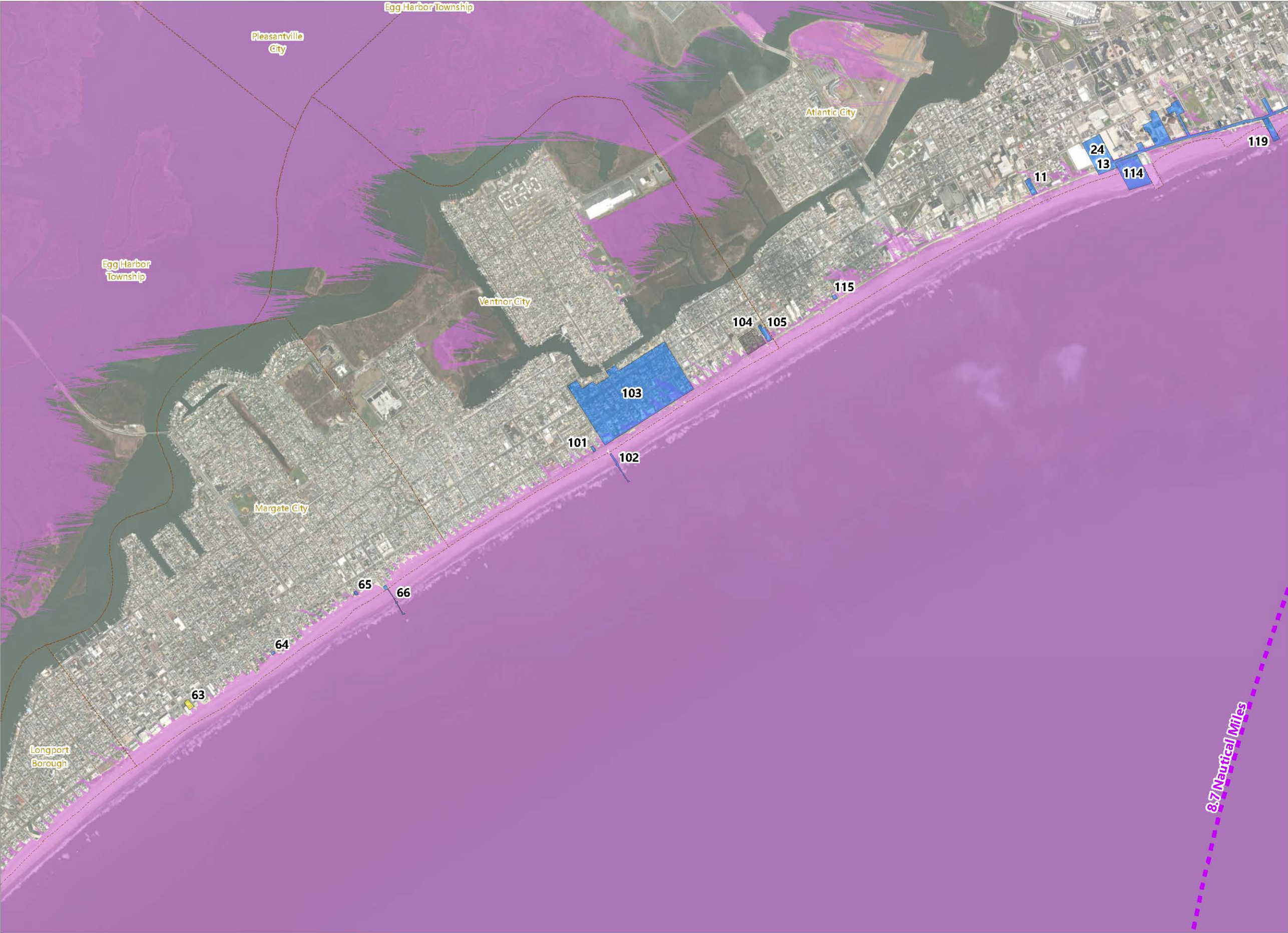


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offshore wind

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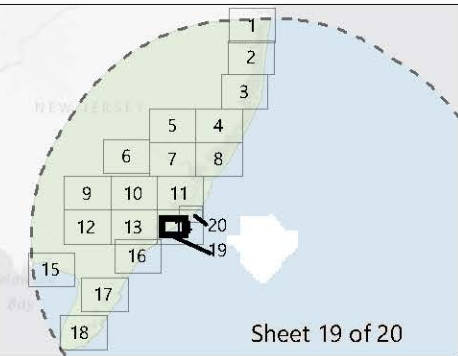
Figure 4.1-1: Potential Adversely-Effected Aboveground Historic Properties



Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Aboveground Historic Property
 - National Historic Landmark
 - NRHP-Listed Property
 - NRHP-Eligible Property
- Turbine Distance Interval
- 45.1-Mile Viewshed Radius
- Municipal Boundary

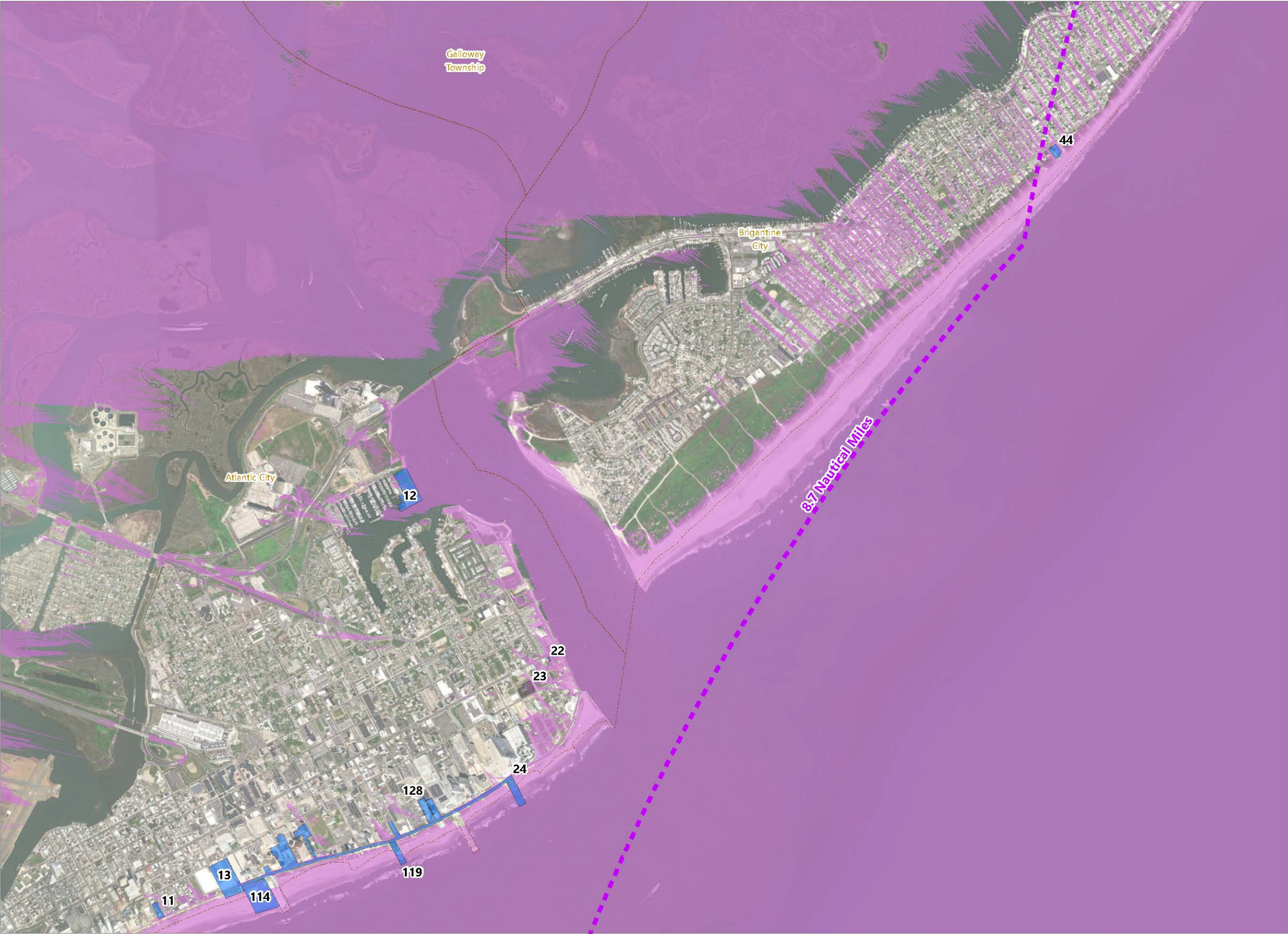


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offshore wind

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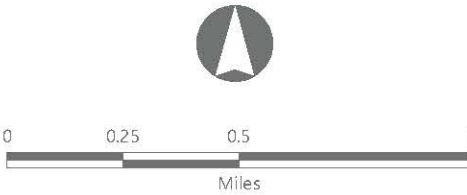
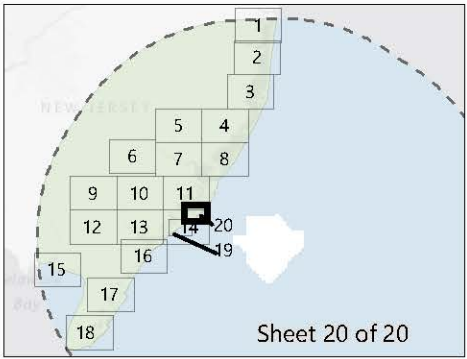
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Atlantic Shore South
Offshore Wind Project

Outer Continental Shelf

- Preliminary Area of Potential Effects (PAPE)
- Aboveground Historic Property
 - National Historic Landmark
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Table 4.1-1. Adversely Affected Aboveground Historic Properties

Property ID	Property Name	Address	Municipality	Recommended Designation
11	Ritz Carlton Hotel	2715 Boardwalk	Atlantic City	NRHP-Eligible (NJHPO-Determined)
12	USCG Station Atlantic City	900 Beach Thorofare	Atlantic City	NRHP-Eligible (NJHPO-Determined)
13	Atlantic City Convention Hall	Boardwalk between Pacific, Mississippi, and Florida Avenues	Atlantic City	National Historic Landmark
22	120 Atlantic Avenue	120 Atlantic Avenue	Atlantic City	NRHP-Eligible (EDR-Recommended)
23	Absecon Lighthouse	31 S. Rhode Island Avenue	Atlantic City	NRHP-Listed
24	Atlantic City Boardwalk Historic District	Boardwalk roughly bounded by S. Georgia Avenue to the southwest and Garden Pier to the northeast	Atlantic City	NRHP-Eligible (NJHPO-Determined)
128	Resorts Casino Hotel	1121 Boardwalk	Atlantic City	NRHP-Eligible (NJHPO-Determined)
114	Missouri Avenue Beach (Chicken Bone Beach)	N/A	Atlantic City	NRHP-Eligible (EDR-Recommended)
115	Riviera Apartments	116 S. Raleigh Avenue	Atlantic City	NRHP-Eligible (NJHPO-Determined)
119	Central Pier	1400 Boardwalk	Atlantic City	NRHP-Eligible (NJHPO-Determined)
131	Forked River Coast Guard Station No. 112	Central Avenue	North Wildwood City	NRHP-Eligible (NJHPO-Determined)
36	Island Beach State Park Historic District	Central Avenue	North Wildwood City	NRHP-Eligible (NJHPO-Determined)

Property ID	Property Name	Address	Municipality	Recommended Designation
44	Brigantine Hotel	1400 Ocean Avenue	Brigantine City	NRHP-Eligible (EDR-Recommended)
52	Seaview Golf Club (historic), Clarence Geist Pavilion	401 South New York Road	Galloway Township	NRHP-Eligible (EDR-Recommended)
60	Little Egg Harbor US Life Saving Station #23	800 Great Bay Boulevard	Little Egg Harbor Township	NRHP-Eligible (NJHPO-Determined)
133	Great Egg Coast Guard Station	2301 Atlantic Avenue	Longport	NRHP-Eligible (NJHPO-Determined)
63	Lucy, the Margate Elephant	Decatur and Atlantic Avenues	Margate City	National Historic Landmark
64	114 South Osborne Avenue	114 South Osborne Avenue	Margate City	NRHP-Eligible (BOEM-Determined)
65	108 South Gladstone Avenue	108 South Gladstone Avenue	Margate City	NRHP-Eligible (NJHPO-Determined)
66	Margate Fishing Pier	121 S. Exeter Avenue	Margate City	NRHP-Eligible (EDR-Recommended)
129	The Flanders Hotel	719 East 11 th Street	Ocean City	NRHP-Listed
76	Music Pier	825 Boardwalk	Ocean City	NRHP-Eligible (NJHPO-Determined)
113	Ocean City Boardwalk	N/A	Ocean City	NRHP-Eligible (NJHPO-Determined)
101	114 South Harvard Avenue	114 South Harvard Avenue	Ventnor City	NRHP-Eligible (NJHPO-Determined)

Property ID	Property Name	Address	Municipality	Recommended Designation
102	Ventnor City Fishing Pier	Cambridge Avenue at the Ventnor City Boardwalk	Ventnor City	NRHP-Eligible (EDR-Recommended)
103	Saint Leonard's Tract Historic District	Ventnor and Atlantic Avenues roughly bounded by the shoreline, S. Surrey Avenue, N. Cambridge Avenue and the Intercoastal Waterway	Ventnor City	NRHP-Eligible (NJHPO-Determined)
104	John Stafford Historic District	100 blocks of Vassar Square, Baton Rouge, Marion and Austin Avenues	Ventnor City	NRHP-Listed
105	Vassar Square Condominiums	4800 Boardwalk	Ventnor City	NRHP-Eligible (BOEM-Determined)
102	Ventnor Fishing Pier	Cambridge Avenue at the Ventnor City Boardwalk	Ventnor City	NRHP-Eligible (EDR-Recommended)

Therefore, aboveground historic properties will only be adversely affected by the introduction of the offshore components within extant ocean viewsheds. The onshore components will not adversely affect any aboveground historic properties. The Projects would introduce new man-made features to the seascape horizon, which includes few existing, fixed modern visual elements. The introduction of the WTGs would constitute a change to the historic setting of some aboveground historic properties within the APE. This is particularly true for those aboveground historic properties for which open views of the ocean are integral, such as lighthouses and recreation areas. Even for historic properties that were once strongly associated with open ocean views, existing conditions may no longer be representative of the settings related to those properties' periods of significance. Many sections of the WTA APE have been subject to multiple phases of development, demolition, and redevelopment. These cycles have substantially altered the historic settings of many historic properties located along the shorelines where unobstructed views of the Projects will be concentrated. In such circumstances, the changes to viewsheds related to the Projects may represent a minor, incremental alteration to some settings that have already been compromised.

4.2 Avoidance and Minimization Measures

Atlantic Shores is prioritizing avoiding and minimizing the adverse effects that will result from the Projects. In order to avoid and/or minimize potential adverse effects on aboveground historic properties, Atlantic Shores will implement the following measures which are based on protocols and procedures successfully implemented for similar offshore projects:

- Atlantic Shores will engage with relevant stakeholders to determine additional avoidance, minimization, or mitigation measures regarding potential effects on aboveground historic properties as required by 30 CFR 585.626(b)(15).
- WTGs will have uniform design, height, and rotor diameter.
- The Projects are located in a designated offshore wind development area that has been identified by BOEM as suitable for development.
- The OSSs will be set back sufficient to minimize their visibility from the shore.
- The WTGs will be painted no lighter than Pure White (RAL 9010) and no darker than Light Grey (RAL 7035) as required by BOEM and the FAA. WTGs of this color white generally blend well with the sky at the horizon and eliminate the need for daytime warning lights or red paint marking of the blade tips.
- The WTGs and OSSs will be lit and marked in accordance with BOEM and USCG requirements for aviation and navigation obstruction lighting, respectively.
- Atlantic Shores will use an Aircraft Detection Lighting System (ADLS) or related means (e.g., dimming or shielding) to limit visual impact, pursuant to approval by the FAA and BOEM, commercial and technical feasibility at the time of Facility Design Report (FDR)/Fabrication and Installation Report (FIR) approval, and dialogue with stakeholders. If successfully implemented, ADLS would limit the activation of the Aeronautical Obstruction Lights (AOWLs) to approximately 11 hours per year (Capitol Airspace Group, 2021), thus substantially limiting the nighttime visibility and visual impact of the Projects.

4.3 Mitigation Measures for Adverse Visual Effects

Despite implementation of the above-referenced design measures, unavoidable adverse effects to aboveground historic properties will remain. The *Historic Resources Visual Effects Assessment* identified 29 aboveground historic properties where there is a potential for adverse effects resulting from the Projects construction and operation, primarily located along the shorelines of the New Jersey barrier islands. Options to avoid potential adverse visual effects on aboveground historic properties are limited, given the nature of the Projects (i.e., very tall, vertical structures) and their siting criteria (i.e., established OCS lease area). Many of the common measures used for other infrastructure projects are inappropriate for offshore wind developments. For example, in some settings visual impacts to aboveground historic properties may be resolved through vegetative screening or landscaping that blocks or screens views of new infrastructure. Such efforts are not appropriate or feasible for many coastal historic properties where views of the ocean and shores are integral to the historic setting, location, uses, and public appreciation of the resources. The project-scale mitigation measures for adverse visual effects summarized below will minimize, but not eliminate, changes to the integrity of historic settings for the affected properties. Therefore, for most wind energy projects, mitigation of impacts to historic properties typically consists of supporting initiatives that benefit historic sites or buildings and/or the public's appreciation of historic resources to offset potential adverse effects to historic properties resulting from the introduction of WTGs into their visual setting.

Atlantic Shores has carefully considered potential Projects-related measures to avoid, minimize, and mitigate adverse effects to aboveground historic properties, archaeological sites, and marine archaeological properties. Atlantic Shores, in consultation with interested consulting parties, has developed measures to mitigate unavoidable adverse visual effects to the affected aboveground historic properties. The measures have been developed to appropriately align the specific type and magnitude of adverse effect caused by the Projects with the character-defining aspects of the affected properties. The mitigation measures are appropriate to the scale of the Projects and tailored to the specific historic properties where adverse visual effects are anticipated. The measures are intended to preserve and enhance the historic maritime settings of properties, where appropriate, and enhance public appreciation and enjoyment of the affected aboveground historic properties. These mitigation measures are further detailed in the HPTPs which contain the detailed mitigation actions that will be implemented to resolve adverse effects from the Projects, as well as the responsibilities of the parties involved and schedule. The HPTPs, can be found as attachments to the MOA and were developed in consultation with the interested consulting parties to mitigate adverse effects to the following historic properties:

- Atlantic City Boardwalk Historic District, Atlantic City, Atlantic County, New Jersey
- Atlantic City Convention Hall, Atlantic City, Atlantic County, New Jersey
- Great Egg Coast Guard Station, Longport, Atlantic County, New Jersey
- Missouri Avenue Beach (Chicken Bone Beach), Atlantic City, Atlantic County, New Jersey
- Absecon Lighthouse, Atlantic City, Atlantic County, New Jersey
- Barnegat Lighthouse, Barnegat Light Borough, Ocean County, Ocean County, New Jersey
- Forked River Coast Guard Station No. 112, Berkeley Township, Ocean County, New Jersey
- Island Beach State Park Historic District, Berkeley Township, Ocean County, New Jersey
- Lucy, the Margate Elephant, Margate City, Atlantic County, New Jersey
- Saint Leonard's Tract Historic District, Ventnor City, Atlantic County, New Jersey
- Ancient Submerged Landform Features, Outer Continental Shelf

A Mitigation Fund will be established that provides financial support for preservation activities that would appropriately resolve adverse effects for the remaining historic properties adversely affected by the Projects listed below. The mitigation fund will be a grant program where interested consulting parties or property owners can apply for specific activities that will support the preservation, interpretation, and/or commemoration of the adversely affected historic properties. The details of the mitigation fund are outlined in the MOA.

- 120 Atlantic Avenue, Atlantic City, Atlantic County, New Jersey
- Central Pier, Atlantic City, Atlantic County, New Jersey
- Resorts Casino Hotel, Atlantic City, Atlantic County, New Jersey
- Ritz Carlton Hotel, Atlantic City, Atlantic County, New Jersey
- Riviera Apartments, Atlantic City, Atlantic County, New Jersey
- USCG Station Atlantic City, Atlantic City, Atlantic County, New Jersey
- Brigantine Hotel, Brigantine City, Atlantic County, New Jersey
- Seaview Golf Club (historic), Clarence Geist Pavilion, Galloway Township, Atlantic County, New Jersey

- Little Egg Harbor US Life Saving Station #23, Little Egg Harbor Township, Ocean County, New Jersey
- 108 South Gladstone Avenue, Margate City, Atlantic County, New Jersey
- 114 South Osborne Avenue, Margate City, Atlantic County, New Jersey
- Margate Fishing Pier, Margate City, Atlantic County, New Jersey
- Music Pier, Ocean City, Cape May County, New Jersey
- Ocean City Boardwalk, Cape May County, New Jersey
- The Flanders Hotel, Cape May County, New Jersey
- 114 South Harvard Avenue, Ventnor City, Atlantic County, New Jersey
- John Stafford Historic District, Ventnor City, Atlantic County, New Jersey
- Vassar Square Condominiums, Ventnor City, Atlantic County, New Jersey
- Ventnor City Fishing Pier, Ventnor City, Atlantic County, New Jersey

Atlantic Shores intends to have all mitigation measures developed and finalized and funding placed in escrow accounts prior to construction. The implementation of the mitigation measure/s will begin following finalization of the MOA executed among BOEM, SHPOs, consulting Tribal Nations, and potentially other consulting parties.

5.0 MITIGATION ENGAGEMENT AND REFINEMENT PLAN

Atlantic Shores has hosted a series of informational meetings with interested consulting parties to refine the mitigation framework summarized above. The intent of the meetings was to solicit feedback on the feasibility and appropriateness of the mitigation measures and to document comments, specific interests, or concerns expressed by the interested parties regarding resolution of the anticipated effects to historic properties. The meetings were voluntary, limited to appropriate stakeholders for given historic properties, and not intended to replace or supplant BOEM's public meetings or associated Section 106 consultations.

Informational meetings will not, and cannot, replace agency consultations required by the NHPA; for example, the necessity of agency consultations is clear with respect to resolution of expected adverse effects to significant properties associated with Tribal Nations. Atlantic Shores respects tribal sovereignty and the unique relationship among federally recognized Tribal Nations and the federal government. Where feasible and appropriate, tribal representatives will be invited to further discuss their interests and concerns regarding the Projects and potential effects to resources of concern to the Tribal Nations and how such effects may be feasibly resolved. Likewise, other interested parties may wish to confine their engagement with Atlantic Shores to the formal permitting process.

6.0 SUMMARY

The intent of this AMM Plan is to outline the measures developed to avoid, minimize and/or mitigate the Projects' adverse effects to historic properties. The AMM Plan also describes the process by which Atlantic Shores plans to enhance and refine these measures in cooperation with other interested parties.

Based on desktop analysis and archaeological reconnaissance presented in the *Terrestrial Archaeological Resources Assessment – Onshore Interconnection Facilities* (TARA; COP Appendix II-P1; EDR, 2024c) and *Phase IA Terrestrial Archaeological Resources Assessment – Operations and Maintenance Facility* (O&M TARA; COP Appendix II-P2; EDR, 2024d), there is a very low likelihood of intact or potentially significant terrestrial archaeological resources to be located within the Projects' APE. Identification level Phase IB archaeological survey is ongoing under a phased identification approach, which will inform future determinations of the Projects' potential effects on terrestrial archaeological resources.

As described in the *Marine Archaeological Resources Assessment Atlantic Shores Offshore Wind Project Construction and Operations Plan and Addendum*, 22 submerged targets were identified (MARA and MARA Addendum; COP Appendix II-Q1; SEARCH, 2022 and 2023). Nine targets are located within the WTA; four targets are located in the Atlantic Export Cable Corridors (ECC); nine targets are located along the Monmouth ECC; and 59 ASLFs were identified within the Marine APE. Physical avoidance buffers of the targets are recommended, and mitigation measures for potential effects to marine resources are proposed.

Applying the Criteria of Adverse Effect per NHPA Section 106, 36 CFR § 800.5, a total of 29 aboveground historic properties will be adversely affected by the Projects.

The steps outlined in this report are based on the current design of the Projects. Alterations to Projects' infrastructure, installation methodology, or workspace requirements have the potential to preclude specific mitigation options proposed herein or require new procedures to adequately approach the mitigation of historic properties.

7.0 REFERENCES

Capitol Airspace Group. 2021. Atlantic Shores Offshore Wind Project Aircraft Detection Lighting System (ADLS) Efficacy Analysis. Prepared for EDR. February 2021. Alexandria, VA.

Code of Federal Regulations. 2022. 36 CFR 800 – Protection of Historic Properties [incorporating amendments effective December 15, 2021]. Available at <https://www.ecfr.gov/current/title-36/chapter-VIII/part-800>.

Bureau of Ocean Energy Management (BOEM). 2024. *Finding of Adverse Effect for the Atlantic Shores Offshore Wind Souht Project CONstruction and Operations Plan*. United States Department of the Interior. Washington, D.C.

Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR). 2021. *Construction and Operations Plan for Atlantic Shores Offshore Wind, Volume I, Appendix I-A, Preliminary Area of Potential Effects (PAPE) Memorandum, (Draft for BOEM review)*. Prepared for Atlantic Shores Offshore Wind, LLC. September 2021. Syracuse, NY.

EDR. 2023. *Visual Impact Assessment for the Atlantic Shores Offshore Wind Project*. Prepared for Atlantic Shores Offshore Wind LLC. Syracuse, N.Y.

EDR. 2024a. *Atlantic Shores Offshore Wind, Construction and Operations Plan, Lease Area OCS-A 499, Volume I: Project Information*. Prepared for Atlantic Shores Offshore Wind LLC. Syracuse, N.Y. Dated September 2021, revised December 2021, August 2022, and October 2022.

EDR. 2024b. *Atlantic Shores Offshore Wind, Construction and Operations Plan, Lease Area OCS-A 499, Volume II: Project Information*. Prepared for Atlantic Shores Offshore Wind LLC. Syracuse, N.Y. Dated September 2021, revised December 2021, August 2022, and October 2022.

EDR. 2024c. *Phase IA Terrestrial Archaeological Resources Assessment – Onshore Interconnection Facilities*. Prepared for Atlantic Shores Offshore Wind, LLC. May 2024. Syracuse, NY.

EDR. 2024d. *Phase IA Terrestrial Archaeological Resources Assessment, Atlantic Shores Offshore Wind Project – Operations and Maintenance Facility, Atlantic City, Atlantic County, New Jersey*. Prepared for Atlantic Shores Offshore Wind, LLC. May 2024. Syracuse, NY.

EDR. 2024e. *Technical Report Historic Resources Visual Effects Assessment, Atlantic Shores Offshore Wind – Wind Turbine Area*. Prepared for Atlantic Shores Offshore Wind, LLC. April 2024. Syracuse, NY.

EDR. 2024f. *Technical Report Historic Resources Effects Assessment, Atlantic Shores Offshore Wind Onshore Interconnection Facilities*. Prepared for Atlantic Shores Offshore Wind, LLC. April 2024. Syracuse, NY.

EDR. 2024g. *Technical Report Historic Resources Effects Assessment, Atlantic Shores Offshore Wind Operation and Maintenance Facilities*. Prepared for Atlantic Shores Offshore Wind, LLC. April 2024. Syracuse, NY.

SEARCH. 2022. *Marine Archaeological Resource Assessment Atlantic Shores Offshore Wind Project Construction and Operations Plan*. Prepared for Atlantic Shores Offshore Wind, LLC. February 2022. Pensacola, FL

SEARCH. 2023. *Marine Archaeological Resource Assessment Addendum Atlantic Shores Offshore Wind Project Construction and Operations Plan*. Prepared for Atlantic Shores Offshore Wind, LLC. September 2023. Pensacola, FL

**ATTACHMENT 4 – MARINE ARCHAEOLOGY MONITORING AND POST-REVIEW
DISCOVERY PLAN**

Monitoring Plan and Post Review Discoveries Plan: Submerged Cultural Resources

Atlantic Shores South Offshore Wind Project – Offshore Project Area

Outer Continental Shelf, Federal and New Jersey State Waters

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LIST OF ATTACHMENTS

Attachment A. Human Remains Protocols and Guidance

1.0 INTRODUCTION

Atlantic Shores Offshore Wind, LLC (Atlantic Shores), a 50/50 joint venture between EDF-RE Offshore Development, LLC, a wholly owned subsidiary of EDF Renewables, Inc. (EDF Renewables) and Shell New Energies US LLC (Shell) has proposed to construct two offshore wind energy generation projects (the Projects) within the Bureau of Ocean Energy Management (BOEM) Renewable Energy Lease Area OCS-A 0499 (the Lease Area). The Offshore Project Area consists of an approximately 102,124-acre (413.3-square kilometer [km²]) Wind Turbine Area (WTA) located in federal waters on the Atlantic Outer Continental Shelf (OCS). Project 1 is located in the western 54,175 acres (219.2 km²) of the WTA, and Project 2 is located in the eastern 31,847 acres (128.9 km²) of the WTA with a 16,102-acre (65.2-km²) Overlap Area that could be used by either Project 1 or Project 2. There will also be two Export Cable Corridors (ECCs), referred to as the Atlantic ECC and Monmouth ECC, which traverse federal and New Jersey state waters with landfall locations in Atlantic City, New Jersey, and Sea Girt, New Jersey, respectively.

Pursuant to 30 CFR Part 585, *Renewable Energy and Alternate Uses of Existing Facilities on the Outer Continental Shelf*, BOEM must review and approve the Projects Construction and Operations Plan (COP). As a result, approval of the COP constitutes a federal undertaking as defined in 36 CFR Part 800, and it is therefore subject to review and consultation under Section 106 of the National Historic Preservation Act (NHPA) (Title 54 U.S.C). In addition, the proposed construction in the Offshore Project Area is being reviewed by the New Jersey Department of Environmental Protection (NJDEP), New Jersey State Historic Preservation Office (NJHPO), and other relevant New Jersey State and/or Federal agencies and consulting partners under Section 7:4 of the New Jersey Administrative Code (NJAC), the State of New Jersey Executive Order #215, and the National Environmental Policy Act (NEPA), as applicable. The information and recommendations included in this Monitoring Plan and Post Review Discoveries Plan (MPRDP; the Plan) for submerged cultural resources are intended to assist these agencies in their review of the Project's potential effects.

The purpose of Atlantic Shores multi-year marine survey campaign and associated assessments were to support the identification and characterization of potential submerged cultural resources within the Offshore Project Area. Atlantic Shores conducted HRG and geotechnical surveys of the Preliminary Area of Potential Effects (PAPE) for marine physical effects (defined as the combination of the WTA and ECCs) between 2020 and 2022 to identify known submerged historic properties as well as to characterize the potential for the PAPE to include previously unidentified submerged cultural resources. These surveys were conducted in accordance with approved Marine High-Resolution Geophysical (HRG) Survey Plans (ASOW 2020, 2021), which were developed in consultation with BOEM, the New Jersey State Historic Preservation Office (NJHPO), and appropriate stakeholders such as the Narragansett Indian Tribe, the Shinnecock Indian Nation, and the Lenape Tribe of Delaware. Building on the HRG and geotechnical surveys and intensive background studies focused on the environmental, geologic, and cultural contexts of the PAPE, Atlantic Shores has completed a Marine Archaeological Resources Assessment (MARA) and MARA Addendum (hereafter, the MARA) to identify submerged cultural resources that could be affected by the Projects (SEARCH, 2021 and 2023; COP: Appendix II-Q). The MARA was conducted by Qualified Marine Archaeologists (QMAs) and in accordance with BOEM's *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585*. The MARA provides data in support of BOEM's NEPA and Section 106 review of potential effects to submerged historic properties.

The MARA includes recommendations and avoidance buffers for each of the identified submerged cultural resources and paleolandscapes. Taking those recommendations into consideration, Atlantic Shores is refining engineering plans to avoid and or/minimize potential impacts to identified targets including potential shipwrecks and ancient submerged landform features (ASLFs). To further mitigate the potential for encountering submerged cultural resources during construction and installation, Atlantic Shores has prepared this MPRDP, which includes discussion of how Atlantic Shores has and will continue to implement the following Applicant-proposed environmental protection measures to avoid, minimize, and/or mitigate potential impacts to submerged cultural resources:

- Consultation with Native American Tribal representatives and other consulting party members;
- Shipwrecks and associated historic sites potentially eligible for listing on the NRHP will be avoided and Atlantic Shores will follow the Notification of the Discovery of Shipwrecks on the Seafloor (30 CFR 250.194(c), 30 CFR 250.1009(c)(4), and 30 CFR 251.7(b)(5)(B)(iii));
- Completed Geophysical and Geotechnical (G&G) campaigns have been proactive in targeting and collecting culturally pertinent samples and information to be used in a robust ground model, which will inform Atlantic Shores' design decisions moving forward;
- Share the robust ground model as a mitigation to impacts to geologic landforms in Lease Area OCS-A 0499; and
- Where feasible, Atlantic Shores will present visual demonstrations of both the ASLFs and planned infrastructure.

Atlantic Shores anticipates that this MPRDP will be incorporated in a Memorandum of Agreement executed among BOEM, SHPOs, and potentially other consulting parties to help resolve potential adverse physical effects to identified submerged cultural resources and to memorialize specific measures that Atlantic Shores will take to avoid and minimize potential effects to other potential submerged cultural resources in the event of a post-review discovery. The Plan outlines the steps for dealing with potential unanticipated discoveries of submerged cultural resources, including human remains, during the proposed construction and installation activities in the Offshore Project Area.

1.1 Purpose

The purpose of the Plan is to:

1. Present to regulatory and review agencies the plan Atlantic Shores and its contractors and consultants will follow to prepare for and potentially respond to unanticipated submerged cultural resources discoveries;

2. Provide guidance and instruction to Atlantic Shores personnel and its contractors and consultants as to the proper procedures to be followed in the event of a potential unanticipated submerged cultural resource discovery.

The following terms are used throughout the Plan:

- **The Offshore Project Area:** The Offshore Project Area consists of an approximately 102,124-acre (413.3-square kilometer [km²]) Wind Turbine Area (WTA) located in federal waters on the Atlantic Outer Continental Shelf (OCS).
- **Marine Physical Effects Preliminary Area of Potential Effect (PAPE)¹:** All areas of potential seabed disturbance associated with the construction and installation of the proposed offshore infrastructure. The PAPE is defined as the combination of the approximately 102,139-acre (413.3 km²) WTA and both proposed ECCs (including the 5,362-acre [21.7 km²] Atlantic ECC and the 26,509-acre [95.1 km²] Monmouth ECC). Construction activities are expected to affect a small percentage of the seabed encompassed by the Marine Physical Effects PAPE
- **Unanticipated Discovery/Unanticipated Cultural Resource Discovery:** Any indications of the presence of archaeological materials including artifacts, features, animal bone, and/or human remains. Common artifacts encountered may include wooden shipwrecks, metal shipwrecks, downed aircraft, post-Contact artifacts, pre-Contact artifacts, bone and faunal remains.
- **Potential Human Remains:** Any indications of potential human remains, such as bones or bone fragments, which cannot definitely be determined to be non-human.
- **Compliance Manager:** Atlantic Shores' designated on-site/onboard staff person responsible for monitoring compliance with permitting conditions and commitments during construction and installation (see Section 10.0).

¹ The final Area of Potential Effects (APE) will be formally determined by BOEM in consultation with NJHPO as part of the Section 106 consultation process.

- **Qualified Marine Archaeologist (QMA)/Archaeologist:** Atlantic Shores' submerged cultural resources consultant/s (see Section 10.0). Review of any potential unanticipated discoveries will be conducted under the supervision of the QMA, a cultural resource professional who meets the U.S. Secretary of the Interior's Professional Qualifications for Archeology (36 CFR 61) and has experience in conducting HRG surveys and processing and interpreting data for archaeological potential. Review of any potential unanticipated human skeletal remains will be conducted under the supervision of the QMA and/or an experienced subcontractor osteologist/forensic anthropologist who is available to respond in an on-call capacity.

2.0 TRAINING AND ORIENTATION

Atlantic Shores will, in coordination with the QMA/s, provide a summary presentation to the General Construction Manager and construction contractor personnel (hereafter, Construction Personnel) of the relevant results/findings of the MARA, including mapping of each identified submerged cultural resource target and ASLF in the PAPE with recommended avoidance buffers. Atlantic Shores' training for Construction Personnel will also include the following:

- Review and education of federal and state laws protecting cultural resources and BOEMs responsibilities to identify and protect cultural resources and resource integrity;
- An overview of the general cultural history of the Offshore Project Area so that personnel have a greater understanding of what common types of submerged cultural resources can be found on the Atlantic OCS (e.g., wooden shipwrecks, metal shipwrecks, downed aircraft, post-Contact artifacts, pre-Contact artifacts, bone and faunal remains, etc.);
- How to identify potential submerged cultural resources during bottom disturbing activities, including representative photographs/mapping of potential cultural features or finds; and
- Procedures to follow and parties to notify if potential submerged cultural resources/materials are encountered during project activities.

The QMA will develop draft MPRDP awareness training in coordination with Atlantic Shores. The training program will be provided to BOEM and the NJHPO for review and comment before the training program is finalized.

Note that as different construction crews and/or subcontractors join the Project, this training may need to be conducted multiple times to insure everyone is familiar with materials presented in this Plan. Atlantic Shores will extend an invitation to consulting Native American Tribes to participate in these training sessions.

Atlantic Shores will assure that Construction Personnel are made aware of the procedures they must follow in the event of an unanticipated discovery. All construction personnel, including operators of equipment involved seabed disturbance, will be advised of the need to immediately stop work if they observe any indications of the presence of an unanticipated cultural resource discovery as defined above. Construction personnel will be instructed to immediately contact the Compliance Manager upon the observation of a potential unanticipated discovery as defined in the introduction.

Atlantic Shores will stress the necessity of compliance with this Plan and special emphasis and attention will be given to potential circumstances involving human remains. Atlantic Shores will stress the importance of treating any human remains, or potential human remains, encountered during construction and installation activities with the utmost dignity and respect (see Section 9.2 below concerning human remains).

3.0 DOCUMENTATION

In addition to the training, copies of the complete MPRDP as well as an informational graphic summarizing its contents and the materials discussed in the training will be placed in a conspicuous and easily accessible and centralized location (such as a field office or mobilization

point) so that Construction Personnel have readily available access to the MPRDP protocols at all times.

The QMA will develop the informational graphic which will include at minimum:

- Images of common types of submerged cultural resources and materials;
- A flow chart depicting the MPRDP reporting process;
- A notice to all employees of their stop work authority if potential submerged cultural resources are encountered; and
- Contact information for the Compliance Manager responsible for overseeing implementation of the MPRDP, as well as the QMA.

4.0 CULTURAL AND TRIBAL MONITORING

Per Lease stipulation 4.3.5, Atlantic Shores has informed the QMA that they are permitted to be present during HRG surveys and bottom-disturbing activities performed in support of COP submittal to ensure avoidance of potential archaeological resources, and has given the QMA the opportunity to inspect the quality of collected data. This MPRDP assumes that this stipulation will also be applied to any future HRG and/or geotechnical surveys, bottom-disturbing activities, and any underwater Remotely Operated Vehicle (ROV) inspections.

In the event that the QMA indicates that he or she wishes to be present, Atlantic Shores must facilitate the QMA's presence, and provide the QMA the opportunity to inspect data quality (as has occurred with the previously conducted HRG and geotechnical surveys).

Atlantic Shores has/will invite consulting Native American Tribes to designate a Tribal Monitor/s to participate in the following activities (at the Tribes' discretion):

- Pre-Survey Meetings;
- Preliminary Geologic Modeling;
- Preliminary Geotechnical Sampling;

- Preliminary Carbon-14 (C14) dating;
- Selected Cultural Vibracore Sampling;
- C14 and Geophysical Ground Modeling;
- Qualified Marine Archaeologist (QMA) Lab processing of Selected Cores; and
- Video Documentation of Core Processing

For future activities, it will be the responsibility of the QMA to coordinate logistics with ensuring proper access, safety, and time-lines for participation of any Tribal Monitors.

5.0 LOCATIONS WHERE MONITORING IS REQUIRED

As described in the *Marine Archaeological Resources Assessment Atlantic Shores Offshore Wind Project Construction and Operations Plan* prepared by Atlantic Shore's QMA, SEARCH, 21 targets were identified (MARA; COP Appendix II-Q1; SEARCH, 2022). Eight targets are located within the WTA; four targets are located in the Atlantic ECC; nine targets are located along the Monmouth ECC; and 37 ASLFs were identified within the Marine Physical Effects PAPE.

Atlantic Shores anticipates avoidance of the 21 targets and their associated avoidance buffers. Atlantic Shores is currently refining engineering plans to avoid and/or minimize potential impacts to identified ASLFs.

At this time, no locations in which monitoring will be required have been identified. If it is determined that avoidance of any of the identified targets and/or ASLFs is not feasible, and if any potential adverse effects are determined, monitoring of construction and installation activities occurring within the mapped boundaries of those features may be investigated. The scope of any proposed monitoring effort would be developed following Section 106 consultation with BOEM, NJHPO, and consulting Native American Tribes regarding the Projects.

6.0 TEMPORARY AVOIDANCE MEASURES

Avoidance measures will primarily include buffers surrounding both previously identified and potential post review discovery submerged cultural resources. These buffers will be established at a minimum of 50 meters surrounding the outermost discernable extent of the resource. Project construction plans and mapping will indicate avoidance of the area but will not include reference to any archaeological sites or materials.

7.0 PROCESS FOR DETERMINING IF MONITORING A CONSTRUCTION ACTIVITY IS NECESSARY

Cultural monitoring of proposed construction and installation activities may be recommended for targeted portions of the proposed Marine Physical Effects PAPE pending review of the results of the MARA by BOEM, NJHPO, and relevant Consulting Parties. Native American Tribes may also request cultural monitoring in areas they determine to be culturally sensitive during Section 106 consultations. If Construction Personnel have questions about whether monitoring is necessary for a specific construction or installation activity, they will contact the Projects' QMA, who will consult with BOEM cultural staff to receive a decision.

8.0 REPORTING

If monitoring any portion of the Marine Physical Effects PAPE is recommended, the QMA will submit written updates to BOEM, NJHPO, consulting Native American Tribes, and other relevant Consulting Parties via email (with mapping/photographs, if applicable), end of day on every Friday, providing a summary of the week's activities, and a look-ahead of upcoming activities. Monitoring may not take place every week, however, the QMA will be afforded the opportunity to be onboard and/or review all collected data whenever Construction Personnel are conducting construction and installation activities in the recommended portions of the proposed Marine Physical Effects PAPE. A compiled archaeological report will be provided to BOEM, NJHPO, consulting Native

American Tribes, and other relevant Consulting Parties within 6 months of the completion of construction and installation activities for the proposed offshore infrastructure. It will include:

- A summary of the construction and installation activities and any monitoring effort;
- Any site form updates (if needed) and/or newly recorded sites that were inadvertently discovered during construction;
- Any Site Specific Treatment Plans devised (if applicable, see Section 9.0 below); and
- Reference to any in-progress Phase II/III survey reports, if applicable.

9.0 POST REVIEW DISCOVERIES

Though extensive preconstruction marine archaeological surveys have been conducted, the possibility remains for previously unidentified submerged cultural resources to be present within the PAPE. At previously identified sites/targets, there is a potential for the discovery of previously unidentified archaeological components, features, or human remains that may require investigation and assessment, while identified historic properties may sustain effects that were not originally anticipated. Given this, the following procedure for the treatment of unanticipated post review discoveries that may occur during construction and installation activities has been developed. The implementation of the MPRDP will be the responsibility of Atlantic Shores and the QMA.

9.1 Post Review Discovery Procedures and Notifications

The Lease includes the following clauses outlining the required steps to be taken in the event of a post review unanticipated discovery:

- **No Impact Without Approval:** As per Lease Stipulation 4.3.6, Atlantic Shores must not knowingly impact a potential archaeological resource without BOEM's prior approval.
- **Post Review Discovery Clauses:** As per Lease Stipulation 4.3.7, if Atlantic Shores discovers a potential archaeological resource, such as the presence of a shipwreck (*e.g.*, a sonar image or visual confirmation of an iron, steel, or wooden hull, wooden timbers, anchors,

concentrations of historic objects, piles of ballast rock), prehistoric artifacts, or ASLFs within the PAPE, Atlantic Shores must:

- Immediately halt seafloor/bottom-disturbing activities within the area of discovery;
- Notify BOEM and the Bureau of Safety and Environmental Enforcement (BSEE) within 24 hours of discovery;
- Notify BOEM and BSEE in writing via report within 72 hours of its discovery;
- Keep the location of the discovery confidential and take no action that may adversely affect the archaeological resource until BOEM conducts an evaluation and instructs the applicant on how to proceed; and
- Conduct any additional investigations as directed by the Lessor to determine if the resource is eligible for listing in the National Register of Historic Places.

In the event that a submerged unanticipated archaeological discovery occurs, in addition to the requirements outlined in the Lease, procedures and notifications will include the following:

- **Inadvertent/Unanticipated discovery:** If Atlantic Shores (or its contractors/consultants) believe that an unanticipated discovery has been made, all bottom-disturbing activities within at least 50 meters of the discovery (or further at the discretion of the QMA) will be stopped until such time as it is determined that construction and installation in this area may continue, if ever. Atlantic Shores will be responsible for taking appropriate steps to protect and secure the evidence of the discovery. Construction Personnel will delineate the area of the discovery and its avoidance buffer on Project mapping/construction plans. The area will be regarded as off-limits but will not be identified as an archaeological site in order to protect the resource via discretion and confidentiality. Drilling and/or trenching equipment may be permitted by the QMA's approval to traverse the area surrounding the delineated area if necessary; however, such movement will be minimized to the extent practical, and no vehicles or equipment will be permitted within the delineated area.
- **Initial Assessment of the Unanticipated Discovery:** If potential previously unidentified submerged cultural materials/features are identified during monitoring, Construction Personnel will notify the QMA and provide them with sufficient

information/documentation on the potential find to allow the QMA to evaluate the discovery and determine if the find is a cultural resource. If necessary, the QMA may request to visit the find site or the vessel that recovered the cultural material to inspect the find. The QMA will provide immediate notification to BOEM, BSEE, NJHPO, consulting Native American Tribes, and other relevant Consulting Parties. If the cultural materials/features can be entirely avoided by the construction and installation activities, a stop-work order is not required, and the previously unidentified cultural materials/features can be summarized as part of the Project reporting (see Section 8.0).

- **Notification Process for Potential Submerged Cultural Resources:** Within 24 hours of the identification of a potentially-significant discovery, as determined by the QMA, Atlantic Shores will notify BOEM, BSEE, NJHPO, and other applicable Consulting Parties. BOEM, BSEE, and NJHPO contacts are listed in Section 10.0, the Notifications Contact List. No construction activities will be permitted in the vicinity of the find until such time as the significance of the resource has been evaluated by BOEM and NJHPO and the need for and scope of impact mitigation has been determined by BOEM, BSEE, NJHPO, and other applicable Consulting Parties. Any discovery made on a weekend will be protected until the parties identified above are notified of the discovery. No construction or installation activities shall be permitted in the vicinity of the find until such time as the significance of the resource has been evaluated by BOEM and NJHPO (per the process outlined below) and the need for and scope of impact mitigation has been determined in consultation with BOEM, BSEE, NJHPO, and Atlantic Shores. If human remains are involved, the procedure described in Section 9.2 concerning human remains will be followed.
- **Notification to BOEM and NJHPO following Site Visit:** Atlantic Shores' Archaeologist will examine/review the finds and provide additional information to BOEM and NJHPO. The additional information will either:
 - Explain why the Archaeologist believes the resource is not significant with respect to the S/NRHP; or
 - Explain why the Archaeologist believes the resource to be potentially significant with respect to the S/NRHP and propose a Site-Specific Treatment Plan for

evaluating the significance of the resource and evaluating Onshore Facilities-related impacts to it. Atlantic Shores anticipates that the proposed Site-Specific Treatment Plan would provide a basis for initiating consultation with BOEM, NJHPO, and applicable Consulting Parties (see Section 10.0). Atlantic Shores and BOEM, in consultation with the NJHPO and Consulting Parties, as necessary, will discuss options and develop a plan for the treatment of unanticipated significant discoveries.

Archaeological investigation of a submerged unanticipated discovery may be necessary in order to evaluate the find, determine its eligibility for listing in the NRHP, and/or assess any construction or installation impacts that may have occurred. The following is a recommended procedure for complying with the MPRDP and providing BOEM and the NJHPO with the necessary information to make informed decisions to approve continuation of bottom disturbing activities. After each step, consultation among the appropriate parties will occur.

- **Site Specific Treatment Plan:** Atlantic Shores will submit the Site-Specific Treatment Plan to BOEM, BSEE, NJHPO, and other Consulting Parties identified through BOEM's Section 106 consultations within one week of notification to BOEM following the identification of a potentially S/NRHP significant submerged cultural resource. If the proposed mitigation measures within the Site Specific Treatment Plan can reasonably be conducted concurrently with ongoing construction and installation, the submission to BOEM and NJHPO will be accompanied by a request to resume construction and installation in the area of the discovery outside of its QMA recommended avoidance buffer.
- **Written Authorization to Proceed:** Proposed mitigation measures will not proceed until Atlantic Shores receives written authorization, following consultation with BOEM, BSEE, NJHPO, and applicable Consulting Parties. Atlantic Shores will notify BOEM, BSEE, and NJHPO at the completion of all mitigation measures. If construction has been halted during mitigation, Atlantic Shores will also request authorization from BOEM and NJHPO to resume construction and installation at the conclusion of mitigation.

- **Summary Report:** Atlantic Shores will submit a summary report describing the results of the Site Specific Treatment Plan's mitigation measures to BOEM within a reasonable timeframe from the completion of mitigation fieldwork. The time required to complete the Summary Report may vary depending on the specific circumstances and the nature of any significant submerged cultural resources subject to mitigation. Atlantic Shores anticipates that reporting of most mitigation activities would be completed within six months of the conclusion of field investigations. All such reporting would be completed within one year of the conclusion of field investigations unless otherwise agreed in writing among Atlantic Shores, BOEM, and NJHPO. Atlantic Shores shall ensure that all archaeological or human remains-related encounters and their handling are reported in the status reports summarizing construction activities.
- **Phase III Report:** If archaeological data recovery is conducted, a full Phase III report will be submitted to BOEM, BSEE, NJHPO, consulting Native American Tribes, and other Consulting Parties identified through BOEM's Section 106 consultations based on a schedule to be established as part of review of the Site-Specific Treatment Plan.

9.2 Human Remains Protocol

Though unlikely, should potential human remains, evidence of human burials, and/or funerary objects be encountered during marine geotechnical investigation or during marine construction and installation, all work in the vicinity of the find shall be halted until further notice for the remains to be protected from further disturbance. Project personnel should **not** take photographs of the potential remains (absolutely no social media posts). Atlantic Shores will immediately contact BOEM, NJHPO, the county coroner/medical examiner, local law enforcement, and all Consulting Parties identified herein. The potential remains/funerary objects will be treated with respect, left in situ by all on site personnel, and protected from further disturbance. All such remains will be secured and protected pending completion of the notification and consultation procedures described below. If human remains or funerary objects are determined to be Native American, a treatment plan will be developed in consultation with the BOEM and the appropriate Tribal

Nations, consistent with established protocols and guidance. This will include the Advisory Council on Historic Preservation's (ACHP) "Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects" (ACHP, 2023; Attachment A) and may be modified based on information gathered through engagement with consulting Tribal Nations.

The ACHP human remains policy requires temporary suspension of activity in the vicinity of the discovery, protection of discovered remains, notification of NJHPO and Native American representatives, and consultation regarding treatment of remains. The coroner and local law enforcement will make the official ruling on the nature of the remains, being either forensic or archaeological. A decision concerning avoidance or diver recovery of the burial and final disposition of the remains shall be made by BOEM in consultation with the Consulting Parties and consistent with all applicable state/federal statutes and regulations.

If obviously non-human (i.e., animal) skeletal remains are discovered, the procedures outlined in Section 9.1 of this Protocol will be followed. The following protocol for dealing with skeletal remains will be followed during any circumstances in which any possible human skeletal remains are identified during construction activities ("skeletal remains" is defined as any articulated or disarticulated bones or teeth).

- **Respect Human Remains:** It is crucial that all human remains (or possible human remains) be treated with the utmost respect and dignity.
- **Unanticipated Discovery Involving Possible Human Skeletal Remains:** Any member of the Construction Personnel who believes an unanticipated discovery involving possible human skeletal remains has occurred is required to stop work in the immediate vicinity of the discovery and notify the Compliance Manager.
- **Plan of Action:** Human remains and associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.

- **Area of Discovery:** If Atlantic Shores believes that possible human skeletal remains have been discovered, they will immediately stop all work within 50 meters of the discovery location until it is confirmed that construction may resume. The area will be regarded as off-limits but will not be identified publicly as an archaeological site or the location of skeletal remains in order to protect the resource via discretion and confidentiality. Drilling or trenching equipment may be allowed to pass through the area surrounding the discovery, if necessary; however, such movement will be minimized, and no equipment will be permitted within the delineated area around the discovery. No additional work or examination will occur until law enforcement have been consulted and made an official ruling on the nature of the remains (i.e., if they are forensic or archaeological in nature).
- **Notification Upon Discovery:** Upon the discovery of potential human remains, Atlantic Shores will immediately notify BOEM, BSEE, NJHPO, the appropriate Native American Nations, Atlantic Shores' Archaeologist, the coroner, and local law enforcement listed in the Notifications Contact List (see Section 10.0), via telephone and email. The Archaeologist (or subconsultant forensic archaeologist) will examine the remains as soon as possible, make a preliminary assessment of their nature (i.e., if they are human or non-human), and immediately notify the parties listed above of the results of the preliminary assessment.
- **Examination of Skeletal Remains:** As soon as possible following the discovery, law enforcement personnel and the Archaeologist will examine the skeletal remains at the site and determine if they are human.
- **Determination of Animal Remains:** If the remains are determined to be animal (i.e., non-human), the Archaeologist will assess whether they occur in an archaeological context. Additionally, if the remains are determined to be animal, Atlantic Shores will immediately notify the parties listed the Notifications Contact List (see Section 10.0) that no human remains were identified.
- **Determination of Animal Remains in an Archaeological Context:** If the remains are non-human and are determined to occur in an archaeological context, the procedures outlined in Section 9.1 of this Protocol will be followed.

- **Determination of Animal Remains without Archaeological Context:** If the remains are non-human and the Archaeologist determines no archaeological resource is present, they will immediately advise the Compliance Manager. Atlantic Shores will consult with BOEM and NJHPO to request that construction may resume at the discovery site. The Archaeologist will prepare and submit a letter including photographs or images of the (non-) discovery site to Atlantic Shores within a reasonable timeframe.
- **Determination of Human Remains:** If local law enforcement and/or the Archaeologist determines the remains are human, the county coroner, BOEM, BSEE, NJHPO, and appropriate Native American Nations will be notified immediately (see Section 10.0). No additional work or examination will occur until the county coroner and local law enforcement have arrived on the scene and made an official ruling on the nature of the remains (i.e., if they are forensic or archaeological in nature). If the coroner or law enforcement rules the remains to be archaeological in nature, Atlantic Shores will prepare a Site-Specific Treatment Plan (see Section 9.1).
- **Determination of Native American Human Remains:** If the human remains are determined to be archaeological and if the Archaeologist identifies them as Native American in origin, the remains will be left in place and protected from further removal or disturbance until the feasibility of their avoidance by further disturbance can be assessed in consultation with BOEM, appropriate Native American Nations, and NJHPO. Note that Atlantic Shores understands that avoidance is preferred by the NJHPO and the Native American Nations (see ACHP, 2023).
- **Determination of non-Native American Human Remains:** If human remains are determined to be archaeological but non-Native American, they will be left in place and protected until a Site-Specific Treatment Plan for avoidance or removal is developed through consultation with BOEM, NJHPO, and the corresponding County Medical Examiner's Office (see Section 9.1, below).
- **Site-Specific Treatment Plan – Special Consideration:** The Site-Specific Treatment Plan will give special consideration to the presence of human remains. Proposals will also include provisions for evaluating the area for the presence of additional graves.

10.0 NOTIFICATIONS CONTACT LIST

Atlantic Shores and Subcontractors	
Atlantic Shores Kyle Hilberg Project Developer (281) 544-9084 Kyle.Hilberg@atlanticshoreswind.com	Atlantic Shores Developer Compliance Manager TO BE DETERMINED
Cultural Resources Consultant/Archaeologist Daniel Forrest Environmental Design and Research (860) 367-5754 dforrest@edrdpc.com	
State Agencies	
New Jersey Historic Preservation Office (NJHPO) Jesse West-Rosenthal Historic Preservation Specialist 2 (609) 984-6019 Jesse.West-Rosenthal@dep.nj.gov	
Federal Agencies	
Bureau of Ocean and Energy Management (BOEM) Sarah Stokely Section 106 Lead 45600 Woodland Road VAM-OREP Sterling, Virginia 20166 (571) 460-9954 sarah.stokely@boem.gov	Bureau of Safety and Environmental Enforcement (BSEE) Shawn Arnold, FPO, Senior Marine Archaeologist and Barry Bleichner, Marine Archaeologist Office of Environmental Compliance 1201 Elmwood Park Blvd. New Orleans, LA 70123 (504) 736-2416 (Arnold) (504) 736-2947 (Bleichner) William.arnold@bsee.gov barry.bleichner@bsee.gov
Federally Recognized Tribes	
Shinnecock Indian Nation Rainbow Chavis Director, Shinnecock Cultural Resources Department and Jason Cofield, Director of Tribal Operations The Shinnecock Indian Nation P.O. Box 5006, 100 Church Street Southampton, NY 11969 culturalresources@shinnecock.org Cofield@shinnecock.org	Mashpee Wampanoag Tribe David Weeden Tribal Historic Preservation Officer 483 Great Neck Road, South Mashpee, MA 02649 (774) 327-0068 david.weeden@mwtribe-nsn.gov

Wampanoag Tribe of Gay Head (Aquinnah) Bettina Washington Tribal Historic Preservation Officer 20 Black Brook Road Aquinnah, MA 02535-1546 (508) 560-9014 thpo@wampanoagtribe-nsn.gov	Delaware Tribe of Indians Susan Bachor Deputy Tribal Historic Preservation Officer Delaware Tribe Historic Preservation 126 University Circle Stroud Hall, Room 437 East Stroudsburg, Pennsylvania 18301 (570) 422-2023 sbachor@delawaretribe.org
Narragansett Indian Tribe John Brown III Tribal Historic Preservation Officer P.O. Box 268 Charlestown, RI 02813 (401) 491-9459 tashtesook@aol.com	The Delaware Nation Carissa Speck Historic Preservation Director The Delaware Nation 310064 US Highway 281, Building 100 PO Box 825, Anadarko, OK 73005 (405) 247-2488, Ext. 1403 cspeck@delawarenation-nsn.gov
Stockbridge-Munsee Community Band of Mohican Indians Jeff Bendremer, PhD, MA, RPA Tribal Historic Preservation Officer Stockbridge-Munsee Community Band of Mohican Indians 86 Spring Street Williamstown, MA 01267 thpo@mohican-nsn.gov	Mashantucket (Western) Pequot Tribal Nation, Michael Kickingbear Johnson Acting Tribal Historic Preservation Officer Tribal Historic Preservation Office Indiantown Rd. PO Box 3060 Mashantucket, CT 06339-3060 (860) 396-7575 mejohanson@mptn-nsn.gov
Seneca Nation of Indians Rickey Armstrong, Sr. President 90 Ohi:yo' Way Salamanca, NY 14779 (918) 542-2441 and Dr. Joe Stahlman THPO Director/Seneca-Iroquois National Museum Onöhsagwë: De' Cultural Center 82 W. Hetzel St. Salamanca, New York 14779 (918) 542-2441 x103 joe.stahlman@sni.org	Eastern Shawnee Tribe of Oklahoma Paul Barton THPO/Cultural Preservation Director Eastern Shawnee Tribe of Oklahoma 70500 East 128 Road Wyandotte, OK 74370 PBarton@estoo.net (918) 238-5151 x1833

Seneca-Cayuga Nation (of Oklahoma) William Tarrant THPO PO Box 453220 Grove, OK 74344 wtarrant@sctribe.com (918) 787-5452 ext. 6061	
State Law Enforcement	
Southern Region Medical Examiner Office (Atlantic County) Woodbine Developmental Center 1175 DeHirsch Avenue Woodbine, NJ 08270-2401 (609) 861-3355 (Phone) (609) 909-7200 (24-hour line)	Law Enforcement Agency (Atlantic County) Atlantic County Sherriff Eric Scheffler 4997 Unami Boulevard Mays Landing, NJ 08330 (609) 909-7200 (Main Office) (609) 909-7292 (Fax)
Office of the Medical Examiner (Monmouth County) Office of the Medical Examiner 1490 Livingston Avenue North Brunswick, NJ 08902 (732) 745-3190 (Phone) (732) 745-3491 (Fax)	Law Enforcement Agency (Monmouth County) Monmouth County Sherriff Shaun Golden 2500 Kozloski Road Freehold, NJ 07728 (732) 431-6400 (Main Office)

REFERENCES

Advisory Council on Historic Preservation (ACHP). 2023. Policy Statement Regarding the Treatment of Burial Sites, Human Remains, and Funerary Objects. ACHP, Washington, DC.

Atlantic Shores Offshore Wind (Atlantic Shores). 2020. Geotechnical Survey Plan. Lease Area (OCS-A 0499). Submitted to Bureau of Ocean Energy Management.

Atlantic Shores. 2021. Marine High-Resolution Geophysical Survey Plan. Lease Area (OCS-A 0499). Submitted to Bureau of Ocean Energy Management.

Bureau of Ocean Energy Management (BOEM). 2020. *Guidelines for Providing Archaeological and Historical Property Information Pursuant to 30 CFR Part 585*. United States Department of the Interior, Office of Renewable Energy Programs.

Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR). 2020. *Phase IB Archaeological Survey, South Fork Export Cable: Beach Lane – Route A, Town of East Hampton, Suffolk County, New York*. Prepared for South Fork Wind, LLC. December 2020. Available at https://www.boem.gov/sites/default/files/documents/renewable-energy/App%20S2_SFW_Phase%20IB%20Onshore%20Archaeological%20Report.pdf

EDR. 2021. *Phase IA Terrestrial Archaeological Resources Assessment, Atlantic Shores Offshore Wind Project – Operations and Maintenance Facility, Atlantic City, Atlantic County, New Jersey*. Prepared for Atlantic Shores Offshore Wind, LLC. December 2021. Syracuse, NY.

EDR. 2022a. Sunrise Wind Farm Project, Phase IB Terrestrial Archaeological Resources Assessment – Sunrise Wind Onshore Facilities. Prepared for Sunrise Wind LLC. May 2022. Rochester, NY.

EDR. 2022b. *Terrestrial Archaeological Resources Assessment, Atlantic Shores Offshore Wind Project – Onshore Interconnection Facilities, Monmouth and Atlantic County, New Jersey*. Prepared for Atlantic Shores Offshore Wind, LLC. August 2022, revised February 2023. Syracuse, NY.

EDR. 2022c. *Historic Resources Visual Effects Assessment, Atlantic Shores Offshore Wind – Wind Turbine Area*. Prepared for Atlantic Shores Offshore Wind, LLC. August 2022. Syracuse, NY.

SEARCH. 2022. *Marine Archaeological Resource Assessment Atlantic Shores Offshore Wind Project Construction and Operations Plan*. Prepared for Atlantic Shores Offshore Wind, LLC. February 2022. Pensacola, FL.

SEARCH. 2023. *Marine Archaeological Resource Assessment Addendum Atlantic Shores Offshore Wind Project Construction and Operations Plan*. Prepared for Atlantic Shores Offshore Wind, LLC. September 2023. Pensacola, FL.

Attachment A
Human Remains Protocols and Guidance



ADVISORY COUNCIL ON HISTORIC PRESERVATION POLICY STATEMENT ON BURIAL SITES, HUMAN REMAINS, AND FUNERARY OBJECTS

March 1, 2023

Preamble. The Advisory Council on Historic Preservation (ACHP) developed this policy statement to establish a set of principles and rules that the ACHP will encourage federal agencies to adopt as they carry out their day-to-day responsibilities under Section 106 of the National Historic Preservation Act (NHPA). This statement also establishes a set of standards and guidelines that federal and state agencies, local entities, Indian Tribes, industry applicants, and other relevant entities should, at a minimum, seek to implement in order to provide burial sites, human remains, and funerary objects the consideration and protection they deserve.

This policy statement is not bound by geography, ethnicity, political or socioeconomic status, or a system of belief and recognizes that the respectful consideration for burial sites, human remains, and funerary objects is a human rights concern shared by all. However, the burial sites, human remains, and funerary objects of certain groups of people, including but not limited to Indian Tribes, Native Hawaiians, enslaved Africans and their descendants, and other Indigenous Peoples, have a higher probability of being unmarked and undocumented and thus more likely to be affected by development projects. As such, this policy statement emphasizes the need for consultation and coordination with those communities, including seeking consensus in decision making and providing deference to their practices, protocols, and preferences, where feasible.

Section 106 requires agencies to consult and seek agreement with consulting parties on measures to avoid, minimize, or mitigate adverse effects to historic properties. Accordingly, and consistent with Section 106, this policy does not recommend a specific outcome from the consultation process. Rather, it focuses on issues and perspectives that federal agencies should consider while carrying out their consultation and decision-making responsibilities. The ACHP will incorporate these principles in its work and encourages federal agencies and other entities to apply the principles in this policy any time there is potential to encounter burial sites, human remains, or funerary objects.

In many cases, burial sites, human remains, and funerary objects are subject to other applicable federal, Tribal, state, or local laws or protocols that may prescribe a specific outcome, such as the Native American Graves Protection and Repatriation Act (NAGPRA). In those scenarios, the federal agency should identify and follow all applicable laws or protocols and implement any prescribed outcomes. NHPA and NAGPRA are separate and distinct laws, with separate and distinct implementing regulations and categories of parties that must be consulted.¹ Compliance with one of these laws does not equate to or fulfill the compliance requirements of the other. Implementation of this policy and its principles does not, in any way, change, modify, or detract from NAGPRA or other applicable laws.

Authority: The authority for this policy stems from the ACHP's statutory responsibility to advise on matters relating to historic preservation (which includes the role of Indian Tribes, Tribal Historic

¹ The ACHP's publication [Consultation with Indian Tribes in the Section 106 Process: The Handbook](#) (2021) and the National Association of Tribal Historic Preservation Officers' publication [Tribal Consultation: Best Practices in Historic Preservation](#) (2005) provide additional guidance.

Preservation Officers [THPOs], and Native Hawaiian organizations [NHOs] in that process), to advise the President and Congress regarding historic preservation matters, and to recommend methods to federal agencies to improve the effectiveness, coordination, and consistency of their historic preservation policies. While the ACHP recognizes that not all burial sites, human remains, and funerary objects may constitute or be associated with historic properties eligible for or listed in the National Register of Historic Places, the consideration and treatment of such places fall within the concerns of the historic preservation community.²

This policy statement recognizes the unique legal and political relationship between the federal government and federally recognized Indian Tribes as set forth in the Constitution of the United States, treaties, statutes, and court decisions, and acknowledges that the federal Indian trust responsibility is a legal obligation under which the United States “has charged itself with moral obligations of the highest responsibility and trust” toward Indian Tribes.³ Part of the ACHP’s trust responsibility is to ensure that the regulations implementing Section 106 incorporate the procedural requirement that federal agencies consult with Indian Tribes and NHOs that attach religious and cultural significance to historic properties that may be affected by undertakings the federal agency proposes to carry out, license, permit, or assist.⁴ In general, the trust responsibility establishes fiduciary obligations on the part of federal agencies to Tribes, including a duty to protect Tribal lands and cultural and natural resources for the benefit of Tribes and individual Tribal members.

The ACHP views its trust responsibility as encompassing all aspects of historic resources including intangible values.⁵ As part of that trust responsibility, the ACHP offers this policy statement to inform how the Section 106 consultation process should consider burial sites, human remains, and funerary objects.

Principles. The care for and consideration of burial sites, human remains, and funerary objects is of significant social and moral consequence in the United States and U.S. territories. When burial sites, human remains, or funerary objects are or have the potential to be encountered during the planning or implementation of a proposed federal undertaking, the following principles should be adhered to:

Principle 1: Burial sites, human remains, and funerary objects should be treated with dignity and respect in all circumstances regardless of National Register eligibility or the circumstances of the action. This includes, but is not limited to, all times prior to and during consultation, during field surveys, when handling must occur, in documenting and/or reporting, if treatment actions occur, and in all other forms of interaction.

Principle 2: Disturbing or disinterring burial sites, human remains, or funerary objects, when not requested by descendants, associated Indian Tribes or NHOs, or required by applicable law or regulation, should not be pursued unless there are no other alternatives available and only after consultation with descendants or associated communities and fully considered avoidance of impact and preservation in place.

Principle 3: Only through consultation, which includes the early and meaningful exchange of information and a concerted effort to reach consensus, can informed decisions be made about the identification, documentation, National Register eligibility, and treatment of burial sites, human remains, and funerary objects.

² 54 U.S.C. §§ 304102 and 304108

³ *Seminole Nation v. United States*, 316 U.S. 286 (1942)

⁴ “[The Advisory Council on Historic Preservation’s Statement on Its Trust Responsibility](#)” (Advisory Council on Historic Preservation, 2004)

⁵ “[Policy Statement Regarding the Council’s Relationship with Indian Tribes](#)” (Advisory Council on Historic Preservation, 2000)

Principle 4: To the maximum extent possible, decision making should give deference to the treatment requests of descendants or associated communities. Where known, and in accordance with applicable law, cultural practices of the descendants or associated communities should be followed if burial sites, human remains, or funerary objects may be encountered, are inadvertently identified, impacted, or must be disinterred.

Principle 5: The Indigenous Knowledge held by an Indian Tribe, NHO, or other Indigenous Peoples is a valid and self-supporting source of information. To the fullest extent possible, deference should be provided to the Indigenous Knowledge and expertise of Indian Tribes, NHOs, and Indigenous Peoples in the identification, documentation, evaluation, assessment, and treatment of their burial sites, human remains, and funerary objects.

Principle 6: Burial sites, human remains, and funerary objects are important in and of their own right. They may also constitute or be part of a sacred site and may include or incorporate several possible elements of historic significance including religious and cultural significance. The integrity of burial sites, human remains, and funerary objects is best informed by those who ascribe significance to them.

Principle 7: Burial sites, human remains, and funerary objects are frequently associated with cultural practices, sacred sites, Indigenous Knowledge, and other forms of culturally sensitive actions and/or information unique to a people. Maximum effort should be taken to limit the disclosure of confidential or sensitive information through all available mechanisms including, but not limited to, the proper handling and labeling of records, limiting documentation to necessary information, and through the application of existing law.

Principle 8: The federal Indian boarding school system directly targeted American Indian, Alaska Native, and Native Hawaiian children in the pursuit of a policy of cultural assimilation that coincided with territorial dispossession. In partnership with the historic preservation community, federal agencies should seek to implement the recommendations identified in the Department of the Interior's *Federal Indian Boarding School Investigative Report* by supporting community-driven identification, documentation, interpretation, protection, preservation, reclamation, and co-management of burial sites, human remains, and funerary objects across that system, including marked and unmarked burial areas, and supporting repatriation where appropriate.

Principle 9: The legacies of colonization, including cultural assimilation, forced relocation, and slavery, have led to an uneven awareness of where and why practitioners are likely to encounter burial sites, human remains, and funerary objects across the United States and its territories. The historic preservation community has a key role in expanding public education to support greater awareness of and consideration for the histories and lifeways of Indian Tribes, Native Hawaiians, enslaved Africans and their descendants, and Indigenous Peoples including recognizing and respecting the historical trauma that these groups and individuals may experience.

Principle 10: Access to and/or repatriation of burial sites, human remains, and funerary objects should be enabled through fair, transparent, and effective mechanisms developed in conjunction with descendant communities to the fullest extent of the law.

Principle 11: Human remains and funerary objects may be relocated or removed from a location by or at the request of descendant communities for a variety of reasons. The continued presence of human remains or funerary objects may not be essential to the ongoing significance and integrity of a site or its relevance to a broad theme in history. The historic significance and integrity of such sites are best determined in consultation with lineal descendants and/or associated communities.

Principle 12: Climate change can impact the burial sites, sacred sites, cemeteries, and associated cultural practices significant to Indian Tribes, NHOs, and other groups of people. Climate plans should be developed in consultation and should include mechanisms to support the advanced identification and protection or treatment of these locations.

Principle 13: Respectful consideration of burial sites, human remains or funerary objects may require additional assistance from consulting parties to properly identify, document, evaluate for National Register eligibility, and/or conduct treatment actions. If a federal agency requests or relies on an Indian Tribe, NHO, or other party to carry out activities that are the federal agency's responsibility under the NHPA, the Indian Tribe, NHO, or other consulting party should be reimbursed or compensated.⁶

Implementation of the Policy. Implementation of this policy statement is the responsibility of the ACHP's leadership and staff; however, the ACHP recognizes that appropriate expertise and experience to ensure effective implementation may also reside in other parties. Accordingly, the ACHP commits to advancing consideration of burial sites, human remains, and funerary objects in the Section 106 process with its preservation partners through the following:

- A. Train ACHP staff regarding the implementation of this policy statement.
- B. Development of informational resources that address the NHPA, Section 106, and the following:
 - i. The Federal Indian Boarding School Initiative
 - ii. The intersection of NAGPRA
 - iii. Acquiring and managing sensitive information
 - iv. Climate change and burial sites, human remains, and funerary objects
 - v. Best practices in the treatment of marked and unmarked burial sites, human remains, and funerary objects.
- C. ACHP staff will seek opportunities to implement the policy principles into Section 106 agreement documents and program alternatives to advance consideration of burial sites, human remains, and funerary objects.
- D. The ACHP will advise federal agencies, Indian Tribes, Tribal and State Historic Preservation Officers, and NHOs in their development of historic preservation protocols for appropriate consideration of burial sites, human remains, and funerary objects.
- E. Encourage federal agencies and other relevant parties to give full and meaningful consideration to burial sites, human remains, and funerary objects consistent with this policy statement.

Policy Review Period. The ACHP commits to reviewing this policy statement approximately every five years from the date of its adoption to ensure its continued applicability. The ACHP executive director will seek input regarding the need to update this policy statement through appropriate ACHP committees, including Federal Agency Programs and Native American Affairs. Amendments shall be pursued when the executive director or ACHP members determine that such action is required and/or would significantly improve the policy statement. This policy statement shall be in effect until rescinded by ACHP members.

Definitions. The definitions provided below are meant to inform the application of this policy statement. However, terms such as burial site, intact, disturbance, and human remains, among others, often require the input of associated parties to more fully understand how to interpret or apply each term. The

⁶ Consistent with ACHP's [Guidance on Assistance to Consulting Parties in the Section 106 Review Process](#), when the federal agency (or in some cases the applicant) seeks the views and advice of any consulting party in fulfilling its legal obligation to consult with them, the agency or applicant is not required to pay that party for providing its views.

definitions provided below are intended to be inclusive and to advance the preservation and protection of burial sites, human remains, and funerary items, as appropriate.

- **Burial Site:** Any location, whether originally below, on, or above the surface of the earth, where human remains are or have been located.
- **Confidential:** Information that is protected by law, regulation, or federal policy. Preserving authorized restrictions on information access and disclosure, including means for protecting personal privacy and proprietary information
- **Consultation:** The process of seeking, discussing, and considering the views of other participants and, where feasible, seeking agreement with them. A foundational activity in the Section 106 review process.
- **Consulting parties:** Persons or groups the federal agency consults with during the Section 106 process. They may include the State Historic Preservation Officer; Tribal Historic Preservation Officer; Indian Tribes and Native Hawaiian organizations; representatives of local governments; applicants for federal assistance, permits, licenses, and other approvals; and/or any additional consulting parties.⁷ Additional consulting parties may include individuals and organizations with a demonstrated interest in the undertaking due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking's effects on historic properties.⁸
- **Culturally sensitive:** Tangible and intangible property and knowledge which pertains to the distinct values, beliefs, and ways of living for a culture. It often includes property and knowledge that is not intended to be shared outside the community of origin or outside of specific groups within a community.⁹
- **Disturbance:** Disturbance of burial sites that are listed in or eligible for listing in the National Register of Historic Places likely would constitute an adverse effect under Section 106. An adverse effect occurs when "an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, setting, materials, workmanship, feeling, or association".¹⁰ Determination of what constitutes a "disturbance" should be defined in consultation with proper deference provided to the views and opinions of descendant individuals and/or communities.
- **Funerary objects:** Objects that, as part of the death rite or ceremony of a culture, are reasonably believed to be associated with human remains.
- **Historic property:** Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. It includes artifacts, records, and remains that are related to and located within such properties, and it includes properties of traditional religious and cultural importance to an Indian Tribe or Native Hawaiian organization and that meet the National Register of Historic Places criteria.¹¹
- **Human remains:** The physical remains of a human body including cremains, fragmented human remains, hair, and fluid, among other components. When human remains are believed to be comingled with other material (such as soil or faunal), the entire admixture should be treated as human remains.
- **Indian Tribe:** An Indian Tribe, band, nation, or other organized group or community, including a Native village, Regional Corporation or Village Corporation, as those terms are defined in Section 3 of the Alaska Native Claims Settlement Act¹², which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.¹³
- **Indigenous Knowledge (IK):** Information provided by an Indian Tribe, Tribal member, Native Hawaiian, or other Indigenous person uniquely reflective of their knowledge, experience, understanding, or observation relating to cultural resources, practices, or actions. Indigenous Knowledge often constitutes sensitive information.

⁷ Based on 36 CFR § 800.2(c)

⁸ 36 CFR § 800.2(c)(6)

⁹ "[Native American Archival Materials](#)," (First Archivist Circle, 2007)

¹⁰ 36 CFR § 800.5(a)(1)

¹¹ 36 CFR § 800.16(1)

¹² 43 U.S.C. § 1602

¹³ 36 CFR § 800.16(m)

- **Native Hawaiian:** Any individual who is a descendant of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the state of Hawaii.¹⁴
- **Native Hawaiian organization (NHO):** Any organization which serves and represents the interests of Native Hawaiians; has as a primary and stated purpose the provision of services to Native Hawaiians; and has demonstrated expertise in aspects of historic preservation that are significant to Native Hawaiians.¹⁵
- **Preservation in place:** Taking active steps to avoid disturbing a burial site, human remains, or funerary objects including, to the maximum extent practical, any access, viewsheds, setting, and/or ongoing cultural activity that may be associated with the location.
- **Section 106:** That part of the NHPA which establishes a federal responsibility to take into account the effects of undertakings on historic properties and to provide the ACHP a reasonable opportunity to comment with regard to such action.
- **Sensitive:** Information that may be protected by law, regulation, or federal policy; information that may be identified as sensitive by the sponsoring entity/original source.
- **State Historic Preservation Officer (SHPO):** The official appointed to administer a state's historic preservation program.¹⁶
- **Tribal Historic Preservation Officer (THPO):** The official appointed or designated to administer the Tribe's historic preservation program.¹⁷
- **Treatment:** Measures developed and implemented to avoid, minimize, or mitigate adverse effects to historic properties.

¹⁴ 36 CFR § 800.16(s)(2)

¹⁵ 36 CFR § 800.16(s)(1)

¹⁶ 54 U.S.C. § 302301

¹⁷ 54 U.S.C. § 302702



Policy Statement Regarding Burial Sites, Human Remains, and Funerary Objects: Explanations and Discussion

“The Advisory Council on Historic Preservation is committed to reorienting historic preservation for the good of all. We encourage federal agencies, state and local governments, and the private sector to do their part in implementing the principles advanced in this new policy—and to ensure that the burial areas and sacred objects of our ancestors are treated with the dignity and respect they deserve.” – Hon. Sara C. Bronin, Chair

Introduction. The Advisory Council on Historic Preservation (ACHP) voted unanimously to adopt its new “Policy Statement on Burial Sites, Human Remains, and Funerary Objects” (Burial Policy) on March 1, 2023. The Burial Policy establishes a set of standards and guidelines that federal and state agencies, contractors, and other relevant entities should, at a minimum, seek to implement in order to provide burial sites, human remains, and funerary objects the consideration and protection they deserve.

The Burial Policy was adopted in response to unfortunate and traumatic incidents of disturbance to these sites, remains, and objects, some of which occurred as federal agencies carried out the review of a proposed undertaking pursuant to Section 106 of the National Historic Preservation Act (NHPA). The Burial Policy formally recognizes that the places most often disturbed are those associated with Indian Tribes, Native Hawaiians, Indigenous People, racial and ethnic minorities, and low-income communities. It also acknowledges the impact of climate change on sites, cemeteries, and associated cultural practices, which further threatens their identification and protection.

The ACHP will implement the Burial Policy throughout its work, including its oversight of the Section 106 process, and recommend it to federal agencies and any applicants or developers seeking federal licenses or permits. However, the Burial Policy’s reach is not limited to the federal government; the ACHP encourages state and local governments, nongovernmental institutions, cultural resource management firms, and private developers to adhere to the 13 principles set forth in the Burial Policy.

How federal agencies can implement the Burial Policy. The Burial Policy is broadly applicable in all federal historic preservation responsibilities. Federal agencies are encouraged to implement the Burial Policy while completing their Section 106 responsibilities during the identification, evaluation, and treatment of historic properties, and the development and implementation of agreement documents and other program alternatives. However, the principles identified in the Burial Policy speak to a broad range of circumstances and considerations and are not limited to the Section 106 arena. The ACHP encourages federal agencies to tailor implementation of the Burial Policy to their unique mission and authorities in an effort to advance protection of these sites, remains, and objects.

Federal agencies should look to relevant principles and consider:

- Applying the principles as part of their ongoing federal historic property stewardship and cultural resources management actions, including under Sections 106 and 110 of the NHPA; Executive Order 13007: Indian Sacred Sites; Executive Order 14096: Revitalizing Our Nation’s Commitment to Environmental Justice for All; Executive Order 13175: Consultation and Coordination with Tribal

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Governments; as part of their climate change planning and response actions; and as a part of other relevant actions.

- In consultation, develop agency protocol or policy that further details how the agency intends to apply the principles in carrying out their historic preservation responsibilities.
- For Section 106 Programmatic Agreements (PAs) and Memoranda of Agreement (MOAs), work with consulting parties to incorporate and tailor as necessary the ACHP MOA template language regarding the Burial Policy's principles in unanticipated discovery stipulations for burial sites, human remains, or funerary objects.¹
- Incorporate the ACHP MOA template language or other references to the Burial Policy's principles in other relevant Section 106 MOA or PA stipulations (e.g., identification and documentation, avoidance or minimization, consultation or coordination, etc.) or in other Section 106 program alternatives.

How state and local government agencies can implement the Burial Policy. While the Burial Policy was developed with a focus on federal agency activities and federal preservation requirements, its principles can be applied when state or local governments have similar stewardship or planning review responsibilities in their jurisdictions. State and local governments may also have opportunities to implement relevant principles from the policy when consulting with federal agencies in the Section 106 review process. The ACHP encourages state and local governments to look to the Burial Policy for best practices in working to preserve and protect burial sites, human remains, and funerary objects.

How nongovernmental institutions and private developers can implement the Burial Policy.

Nongovernmental institutions and private developers can play a pivotal role in the protection of burial sites, human remains, and funerary objects. These organizations frequently work across federal, state, and local jurisdictions and the private sector. Through the application of internal guidance documents, codes of ethics, and other operating procedures that align with or adopt the principles contained in the Burial Policy, nongovernmental institutions and private developers, including cultural resources management firms, can support more effective and consistent consideration of these sites, remains, and objects.

Discussion. The following explanations are informed by comments and recommendations made by ACHP members and other consulting parties during the development of the Burial Policy. This document is intended to provide ACHP staff, federal agencies, and other interested parties with additional context, guidance, and advice on the interpretation and implementation of each principle.²

Principle 1: Burial sites, human remains, and funerary objects should be treated with dignity and respect in all circumstances regardless of National Register eligibility or the circumstances of the action. This includes, but is not limited to, all times prior to and during consultation, during field surveys, when handling must occur, in documenting and/or reporting, if treatment actions occur, and in all other forms of interaction.

The presence of human remains or funerary objects can give a location special importance as a burial area, cemetery, historic property,³ or as a sacred site.⁴ Federal agencies and state and local governments

¹ In implementing the policy, the ACHP recommends that federal agencies include the following template language in unanticipated discovery stipulations in Section 106 Memoranda of Agreement (MOAs) and Programmatic Agreements (PAs): **When applicable, the [Agency] will follow the principles within the ACHP's Policy Statement on Burial Sites, Human Remains, and Funerary Objects, dated March 1, 2023.** This template statement can be added to a stipulation tailored to the specific circumstances of an individual undertaking. While such a statement is not required, agencies are strongly encouraged to follow the principles in the policy statement and incorporate the reference when consulting to develop new MOAs and PAs; see [Guidance on Agreements Documents](#) (ACHP, n.d.) for additional information.

² See ACHP's [Policy Statement on Burial Sites, Human Remains, and Funerary Objects](#) for more information on the Policy.

³ Burial sites, human remains, and/or funerary objects should be treated with care and respect regardless of their ability to meet National Register eligibility criteria individually or as part of a larger site, district, TCP, or cultural landscape.

⁴ See [Executive Order 13007: Indian Sacred Sites](#) of May 24, 1996, and the 2021 [Memorandum of Understanding Regarding Interagency Coordination and Collaboration for the Protection of Indigenous Sacred Sites](#). Hereafter "Sacred Sites MOU."

should ensure that the actions of their staff, contractors, volunteers, and any other party under their direct supervision or control demonstrate respect for the beliefs and cultural practices of those who may be associated with the sites, remains, or objects they encounter. Respectful treatment includes all manner of interaction, including, but not limited to, physical handling, written and oral communication, and visual depictions. Prioritizing the use of respectful forms of documentation and communication may minimize harm experienced by associated communities⁵ if burial sites, human remains, or funerary objects are identified or impacted.

Through consultation with associated communities, including Indian Tribes and Native Hawaiian organizations (NHOs), federal agencies should discuss and, to the fullest extent of the law, seek agreement on what constitutes respectful treatment. Working toward consensus on these considerations is consistent with the intent of the Section 106 process and is best achieved through early and ongoing consultation and collaboration.

Principle 2: Disturbing or disinterring burial sites, human remains, or funerary objects, when not requested by descendants, associated Indian Tribes or NHOs, or required by applicable law or regulation, should not be pursued unless there are no other alternatives available and only after consultation with descendants or associated communities and fully considered avoidance of impact and preservation in place.

As a matter of practice and in accordance with applicable law, federal agencies and state and local governments should avoid impacting burial sites, human remains, and funerary objects including areas where there is the known potential for encountering them as they plan and carry out their actions or undertakings. Documentation or study should not be viewed as a justification for the disturbance or removal of such remains or objects without first consulting and seeking agreement with those associated with the site, remains, and/or objects.

When considering the potential to encounter or affect a burial site, human remains, or funerary objects, federal agencies and state and local governments should recognize that the size and makeup of burial sites can vary widely as they are reflective of the many unique cultures and belief systems in the United States and U.S. territories. These sites may do the following:⁶

- be associated with established and ongoing cultural practices.⁷
- require access for associated individuals or communities for ongoing care and maintenance.⁸
- be part of an ongoing culture's lifeways (see discussion under Principle 11 for more information).
- include funerary objects placed before, during, or after the time of death.
- be comprised of individuals or multiple people, including mass graves, or group burials.
- have resulted from events including warfare, slavery, disease, and other circumstances that inadvertently or intentionally limited the cultural continuation of death rites and burial practices.
- take various forms, including cremains, encased human remains, and fluids.
- be physically/culturally inseparable from the surrounding soils, plants, or other landscape features.
- include remains originally below, on, or above the surface of the earth, including water sources.

⁵ The term "associated individuals and communities" as used in this document is inclusive of all people in the United States including Indigenous people of the U.S. territories, Indian Tribes, NHOs, and other racial and ethnic groups.

⁶ This list reflects comments and contributions from consulting parties and ACHP leadership and is not exhaustive.

⁷ "Indigenous peoples have the right to practice and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites, artefacts, designs, ceremonies, technologies and visual and performing arts and literature," Article 11, [United Nations Declaration on the Rights of Indigenous Peoples](#). Hereafter "Declaration."

⁸ "Indigenous peoples have the right to manifest, practice, develop and teach their spiritual and religious traditions, customs and ceremonies, the right to maintain, protect, and have access in privacy to their religious and cultural sites; the right to the use and control of their ceremonial objects; and the right to the repatriation of their human remains," Article 12 of the Declaration.

To determine if a proposed undertaking might disturb and/or the extent of any potential impact to a burial site, human remains, or funerary objects that may result from an agency's actions, the federal agency should consult with and provide deference to the knowledge and expertise of associated communities (see Principles 2 and 3 for more information).

As the Burial Policy advocates, federal agencies should always plan to avoid known or probable locations of burial sites, human remains, and funerary objects altogether. However, when a federal agency's actions are necessary to comply with applicable law or regulation, or determines through consultation that the avoidance of impact is not possible, the agency should minimize disturbance⁹ to the maximum extent practical.¹⁰ Accordingly, removal of human remains or funerary objects should only occur when required by law, if repatriation has been requested by associated communities, or when all other alternatives to preserve the site in place have been considered and rejected because they are not possible or appropriate.

Principle 3: Only through consultation, which includes the early and meaningful exchange of information and a concerted effort to reach consensus, can informed decisions be made about the identification, documentation, National Register eligibility, and treatment of burial sites, human remains, and funerary objects.

Consultation is the hallmark of the Section 106 process and is foundational to inform the broader decision-making efforts taken by federal agencies and state and local governments. Federal agencies are also directed by Presidential Memoranda¹¹ and Executive Orders,¹² which set out basic steps, standards, and criteria for Tribal consultation related to agency actions. Additionally, the United Nations Declaration on the Rights of Indigenous Peoples (Declaration) has identified that the right of an individual or associated community to “participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own decision-making instructions,” is a basic human right.¹³ These mechanisms all identify minimum standards that can be used by federal agencies and state and local governments to inform their consultation and collaboration efforts to achieve a more mutually beneficial outcome.

Specific to the Section 106 process, federal agencies must make a “reasonable and good faith” effort to identify consulting parties and begin consultation early in project planning, after the federal agency determines it has an undertaking with the potential to affect historic properties and prior to making decisions that would restrict the consideration of alternatives to avoid adverse effects to historic properties. This process is an important tool for Indian Tribes, NHOs, State and Tribal Historic Preservation Officers, and other consulting parties to lend their voice in protecting and maintaining

⁹ Determination of what constitutes a “disturbance” should be defined in consultation and with proper deference provided to the views and opinions of associated communities. Consistent with 36 CFR §800.5(a)(2)(vi), natural deterioration of the remains may be the acceptable or preferred outcome if requested by associated communities during consultation.

¹⁰ If appropriate, preserve the human remains in place. Preservation in place may mean that, to the extent allowed by law, the natural deterioration may be the preferred outcome - See, e.g., 36 CFR § 800.5(a)(2)(vi).

¹¹ “Tribal consultation is a two-way, Nation-to-Nation exchange of information and dialogue between official representatives of the United States and of Tribal Nations regarding Federal policies that have Tribal implications. Consultation recognizes Tribal sovereignty and the Nation-to-Nation relationship between the United States and Tribal Nations and acknowledges that the United States maintains certain treaty and trust responsibilities to Tribal Nations. Consultation requires that information obtained from Tribes be given meaningful consideration, and agencies should strive for consensus with Tribes or a mutually desired outcome. Consultation should generally include both Federal and Tribal officials with decision-making authority regarding the proposed policy that has Tribal implications. Consultation will ensure that applicable information is readily available to all parties, that Federal and Tribal officials have adequate time to communicate, and that after the Federal decision, consulting Tribal Nations are advised as to how their input influenced that decision-making. All of these principles should be applied to the extent practicable and permitted by law” [Memorandum on Uniform Standards for Tribal Consultation](#), (Executive Office of the President, 2022).

¹² [Executive Order 13175: Consultation and Coordination with Tribal Governments](#); Executive Order 13007: Indian Sacred Sites.

¹³ Article 18 of the Declaration.

historic properties, including burial sites, human remains, and funerary objects important to their communities. For consultation to be successful, federal agencies should also recognize and account for other voices that constitute our diverse nation including African Americans,¹⁴ nonfederally recognized Tribes,¹⁵ Indigenous Peoples,¹⁶ other marginalized or low-income communities,¹⁷ and the public.

The statutory language of the NHPA and the Section 106 implementing regulations prescribe specific actions federal agencies must take in regard to federally recognized Indian Tribes and NHOs including the following:

- Seek out and invite any Indian Tribes or NHOs that might attach religious and cultural significance to historic properties in the area of potential effects (APE) to consult on a proposed undertaking.¹⁸
- Consult with any Indian Tribe or NHO that attaches religious and cultural significance to such historic properties.¹⁹
- Gather information from **any** Indian Tribe or NHO to assist in identifying properties which **may be** of religious and cultural significance to them and **may be** eligible for the National Register.²⁰
- Recognize that properties of traditional religious and cultural importance to an Indian Tribe or NHO may be determined eligible for inclusion on the National Register.²¹
- Recognize the government-to-government relationship between the federal government and Indian Tribes and consult with the representatives designated or identified by the Tribal government.²²
- Recognize that consultation on a government-to-government level with Indian Tribes cannot be delegated to nonfederal entities, such as applicants and contractors.²³
- Solicit the views of Indian Tribes and NHOs in a manner sensitive to their governmental structures.²⁴

Where appropriate, federal agencies should develop consultation protocols with Indian Tribes or NHOs to tailor how consultation between those parties may be carried out. Such agreements are often not project-specific but instead may be more general and focused on the relationship between the agency and the Indian Tribe or NHO. This type of agreement can cover all aspects of the consultation process with the Tribe or NHO and could grant an Indian Tribe or NHO additional rights to participate or concur in agency decisions in the Section 106 process beyond those specified in the regulations.²⁵ Additionally, many

¹⁴ “Including descendants in research and interpretation is contingent upon building a positive relationship with the community,” (National Trust for Historic Preservation African American Cultural Heritage Action Fund, 2018, 8). Hereafter “Engaging Descendant Communities” (NTHP-AACHAF, 2018).

¹⁵ “In carrying out Section 106, a federal agency may invite state-recognized tribes or tribes with neither federal nor state recognition to participate in the review process as “additional consulting parties” based on a “demonstrated interest” in an undertaking’s effects on historic properties,” [Guide to Working with Non-Federally Recognized Tribes in the Section 106 Process](#) (ACHP, 2018); also see 36 CFR §§ 800.2(c)(5) and 800.3(f)(3).

¹⁶ “The Indigenous populations in Puerto Rico, Guam, American Samoa, the Virgin Islands, the Northern Mariana Islands, Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau may have important information to contribute, Ibid; see 36 CFR §§ 800.3(e)-(f).

¹⁷ “If there is a golden rule to the preservation of cemeteries and burial grounds, it is to be aware that our diverse country is home to a wide variety of burial customs,” Lynette Strangstad, *Preservation of Historic Burial Grounds* (National Trust for Historic Preservation, 2003).

¹⁸ 36 CFR § 800.2(a)(4) and 36 CFR § 800.3(c).

¹⁹ 54 U.S.C. § 302706(b) and 36 CFR § 800.2(c)(2)(ii)(D).

²⁰ 36 CFR § 800.4(a)(4) (emphasis added), 54 U.S.C. § 302706(b); this includes burial sites, human remains, and funerary objects.

²¹ 54 U.S.C. § 302706(a).

²² 36 CFR § 800.2(c)(2)(ii)(C).

²³ “...federal agencies cannot unilaterally delegate their Tribal consultation responsibilities to an applicant nor presume that such discussions substitute for federal agency Tribal consultation responsibilities,” [Limitations on the Delegation of Authority by Federal Agencies to Initiate Tribal Consultation under Section 106 of the National Historic Preservation Act](#) (ACHP, 2011).

²⁴ 36 CFR § 800.4(a)(4); “Recognizing past injustice, while upholding Tribal treaty and reserved rights, and respecting Tribal and Indigenous communities, cultures, and values will assist Agencies in developing collaborative processes that are more equitable and inclusive of Indigenous Peoples and their knowledge systems,” [Guidance for Federal Departments or Agencies on Indigenous Knowledge](#) (Executive Office of the President Office of Science and Technology Policy [OSTP] and Council on Environmental Quality [CEQ], 2022). Hereafter “Indigenous Knowledge (OSTP and CEQ, 2022).”

²⁵ See [Types of Agreement Documents in Section 106](#) (ACHP, 2018) and 36 CFR § 800.2(c)(2)(ii)(E).

Indian Tribes have existing protocols that federal agencies can utilize to inform ongoing or future actions related to burial sites, human remains, and funerary objects.²⁶

Principle 4: To the maximum extent possible, decision making should give deference to the treatment requests of descendants or associated communities. Where known, and in accordance with applicable law, cultural practices of the descendants or associated communities should be followed if burial sites, human remains, or funerary objects may be encountered, are inadvertently identified, impacted, or must be disinterred.

Any plan for the disinterment, housing, treatment, transport, recordation, or repatriation of burial sites, human remains, or funerary objects should be discussed and developed by the federal agency or the state or local government through consultation prior to the action occurring and in a manner that prioritizes the requests and expertise of associated communities. The associated community should be asked if they have any established protocols or any existing cultural practices that should be followed or adhered to, to the extent allowable by law.²⁷ While many situations involving the possible treatment of or impacts to burial sites, human remains, or funerary objects require the development of plans on a case-by-case basis, there are several actions that can be taken to potentially accommodate the treatment requests of associated communities, including the following:

- Contracting with associated communities. Frequently, cultural information is not known or shared outside of a community. Contracting with the associated community may allow decision making to be better informed by the people to whom these sites are most significant.²⁸
- Providing cultural sensitivity training for all staff who might interact with burial sites, human remains, or funerary objects. Consider working with associated communities to develop or administer the training. Extending training opportunities to applicants and contractors is also recommended.²⁹
- Informing staff and applicants. Agencies should ensure that staff and applicants are versed in agency policy and the preferences of any associated communities.
- Developing culturally appropriate protocols. Developing mutually acceptable actions, including housing, handling, transportation, documentation standards, and how sensitive information would be identified and managed, among others, can help ensure proper deference is provided, particularly when associated communities are not present in the field.
- Consulting early and consistently. During the scoping stage for proposed projects, while alternatives and project areas are being determined, associated communities can provide expertise and knowledge that can inform agency actions to help avoid impacting important locations. Early coordination also provides an opportunity to learn about the preferences and practices of associated communities.
- Acknowledging historical context and past injustice. Understanding that each group of people has had different experiences is critical for agencies to collaborate and engage effectively. Agencies should acknowledge the history of the department or agency they represent, and the federal government broadly. Further, they should recognize that at times, western science has been used as a tool to oppress Indian Tribes, Native Hawaiians, enslaved Africans and their descendants, and other Indigenous Peoples.³⁰

²⁶ See [Eastern Band of Cherokee Indians Tribal Code, Chapter 70, Skeletal Remains and Burial Site Preservation](#).

²⁷ In a Section 106 review, the federal agency is responsible for making findings and determinations and making the final decision regarding a proposed undertaking, potentially including treatment actions related to burial sites, human remains, and funerary objects. In doing so, the federal agency must make a reasonable and good faith effort to seek agreement through consultation with associated communities before making its decision on the undertaking.

²⁸ Many Indian Tribes and other associated communities have databases that contain information relevant to them that could inform federal decision making in a manner that results in a more accurate assessment of these locations.

²⁹ See [Early Coordination with Indian Tribes During Pre-Application Processes: A Handbook](#) (ACHP, 2018).

³⁰ Indigenous Knowledge (OSTP and CEQ, 2022); see also “All interpretation begins in research, and when discussing the history of enslavement, museum and historic site professionals do themselves and visitors a disservice by not involving descendants in research. Without their voices, research lacks depth, humanity and credibility, and institutions continue to perpetuate the exploitative practices of the past” “Engaging Descendant Communities” (NTHP-AACHAF, 2018, 8).

Principle 5: The Indigenous Knowledge held by an Indian Tribe, NHO, or other Indigenous Peoples is a valid and self-supporting source of information. To the fullest extent possible, deference should be provided to the Indigenous Knowledge and expertise of Indian Tribes, NHOs, and Indigenous Peoples in the identification, documentation, evaluation, assessment, and treatment of their burial sites, human remains, and funerary objects.

The ACHP applies the term “Indigenous Knowledge,” for purposes of Section 106 reviews, to the information or knowledge held by Indian Tribes and NHOs used for identifying, documenting, evaluating, assessing, and resolving adverse effects to historic properties of religious and cultural significance to them.³¹ Indigenous Knowledge is often specific to an Indian Tribe, NHO, or Indigenous People and may exist in a variety of forms.³² Federal agencies and state and local governments often lack the expertise to appropriately consider and apply this knowledge. As a result, consultation and collaboration with Indian Tribes, NHOs, and Indigenous Peoples is critical to ensuring that Indigenous Knowledge is considered and applied in a manner that respects Tribal sovereignty and achieves mutually beneficial outcomes for Tribal and Indigenous communities.³³

Federal agencies should understand at the outset that Indigenous Knowledge is frequently used by Indian Tribes and NHOs to identify historic properties of religious and cultural significance to them in the Section 106 review process. Indigenous Knowledge is recognized as a valid form of evidence for inclusion in federal policy, research, and decision making and does not require other forms of knowledge for validation or support.³⁴ In other words, a federal agency should not request a Tribe provide written documentation corroborating the Tribe’s statements.

The inclusion of Indigenous Knowledge is a critical component in the Section 106 process.³⁵ Including Indian Tribes or NHOs early on in project planning and continuing to consult with them at every step in the process as required in the regulations, will help provide federal agencies with the information necessary to carry out the Section 106 process. It should also be noted that the Section 106 regulations recognize that the passage of time, changing perceptions of significance, or incomplete prior evaluations of cultural resources may require the reevaluation of project areas for the presence of historic properties.³⁶ This is a particularly important when considering places of significance to Tribes and NHOs because past identification and evaluation efforts may not have included consultation or the Indigenous Knowledge held by Indian Tribes and NHOs.³⁷

Agencies should not initiate consultation with an assumption that an Indian Tribe or NHO will share its knowledge with the agency. The NHPA does not require any Indian Tribe or NHO to provide federal agencies with Indigenous Knowledge simply because it may be valuable information in the context of Section 106 decisions. In requesting Indigenous Knowledge, federal agencies should be respectful of an

³¹ Although the term “Indigenous Knowledge” is not defined in the NHPA or the Section 106 implementing regulations, its role in the Section 106 process is necessitated by the requirement, at 36 CFR Section 800.4(c)(1), that agency officials acknowledge that Indian Tribes and NHOs possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them. Indigenous Knowledge is an integral part of that special expertise. TK and 106 (ACHP, 2021).

³² See [Traditional Knowledge and the Section 106 Process: Information for Federal Agencies and Other Participants](#) (ACHP, 2021) [hereafter “TK and 106 (ACHP, 2021)”] and Indigenous Knowledge (OSTP and CEQ, 2022) for a discussion on what constitutes Indigenous Knowledge in the Section 106 process and federal decision making more broadly.

³³ Indigenous Knowledge (OSTP and CEQ, 2022).

³⁴ “Indigenous Knowledge is a valid form of evidence for inclusion in Federal policy, research and decision making. Indigenous Knowledge and other forms of knowledge do not depend on each other for validation, and each system can support the insights of the other,” Indigenous Knowledge (OSTP and CEQ, 2022).

³⁵ “Where Federal statutes require Agencies to consider information and make informed decisions, Agencies should consult and collaborate with Tribal Nations and Indigenous Peoples to include Indigenous Knowledge in decision making,” Indigenous Knowledge (OSTP and CEQ, 2022).

³⁶ 36 CFR § 800.4(c)(1).

³⁷ TK and 106 (ACHP, 2021).

Indian Tribe's or NHO's authority to disclose or withhold such information.³⁸ Any effort to solicit and incorporate Indigenous Knowledge should be an inclusive process that empowers the Indian Tribe or NHO to determine if, and how, their knowledge may be included in the agency's process. Agencies should discuss plans for direct engagement with Indian Tribes and NHOs and ensure sustained engagement throughout the development or implementation of an activity. Agencies should only engage with knowledge holders designated by Tribal leadership.³⁹

Principle 6: Burial sites, human remains, and funerary objects are important in and of their own right. They may also constitute or be part of a sacred site and may include or incorporate several possible elements of historic significance including religious and cultural significance. The integrity of burial sites, human remains, and funerary objects is best informed by those who ascribe significance to them.

Individual and collective burial places can reflect and represent the cultural values and practices of the past that help instruct us about who we are as a people.⁴⁰ For associated communities, the burial sites of their ancestors also represent important locations that may have an ongoing role in their beliefs and lifeways and may only be known by those who are part of that culture or belief system. Federal agencies should seek to inform any identification and documentation efforts, determination of National Register eligibility, assessment of effects, and treatment actions in consultation with associated communities.⁴¹ Consulting with associated communities is essential to properly inform any evaluation of the significance and integrity of these locations.

The Section 106 regulations require federal agencies to acknowledge the special expertise of Indian Tribes and NHOs in evaluating and, by extension, identifying historic properties of religious and cultural significance to them, which may include burial sites, human remains, and funerary objects.⁴² Federal agencies should also be aware that historic properties of religious and cultural significance to an Indian Tribe may be located on ancestral, aboriginal, or ceded lands.⁴³ In many cases, because of migration or forced removal, Indian Tribes may now be located far away from historic properties that still hold significance for them. Accordingly, the regulations require that federal agencies make a reasonable and good faith effort to identify Indian Tribes that may attach religious and cultural significance to historic properties that may be affected by the undertaking,⁴⁴ even if Indian Tribes are now located a great

³⁸ "Article 19 is particularly relevant to the use and integration of traditional knowledge in Section 106 decision making. It states that governments 'shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative and administrative measures that may affect them,'" TK and 106 (ACHP, 2021).

³⁹ Indigenous Knowledge, (OSTP and CEQ, 2022); Article 31 of the Declaration states that "indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions...They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions." Working with Indigenous Peoples, governments "shall take effective measures to recognize and protect the exercise of these rights."

⁴⁰ "[Guidelines for Evaluating and Registering Cemeteries and Burial Places](#)" National Register Bulletin, Volume National Register Bulletin, Volume 41 (National Park Service [NPS], U.S. Department of the Interior [DOI], 1992).

⁴¹ "Furthermore, although those who were formerly enslaved are now ancestors long gone, their descendants still have much to contribute to the research process in the present day. The rubric promotes a changed practice in cultural institutions, enabling public historians to work alongside descendants to research the past and tell compelling stories about enslaved people, incorporating essential family oral histories, long dismissed as unreliable sources by many academic historians... data must be supplemented by the oral histories and other materials, such as genealogical records and family heirlooms that the descendant communities possess, to render whole a valuable and shared integral component of American history," "Engaging Descendant Communities" (NTHP-AACHAF, 2018, 4); see Guide to Working with Non-Federally Recognized Tribes in the Section 106 Process (ACHP, 2018); 36 CFR §§ 800.2(c)(5) and 3(f)(3); see Principle 5 of this document for more information.

⁴² See 36 CFR § 800.4(c)(1) and TK and 106 (ACHP, 2021).

⁴³ 36 C.F.R. § 800.2(c)(2)(ii)(D).

⁴⁴ 36 CFR § 800.3(f)(2).

distance away from such properties and undertakings.⁴⁵

For Indian Tribes, NHOs, and other Indigenous Peoples, burial locations are frequently considered to be sacred sites due to their ongoing role in their lifeway, language, and family structure.⁴⁶ Consistent with Executive Order 13007: Indian Sacred Sites, federal agencies should, through consultation, implement procedures that seek to accommodate access to and ceremonial use of Indian sacred sites, avoid adversely affecting the physical integrity of such sites, and maintain confidentiality of sensitive information relating to the site when managing federal lands. It is important to note that a sacred site may not meet the National Register criteria as a historic property and that, conversely, a historic property may not constitute a sacred site. However, where an undertaking may affect a historic property that is also considered by an Indian Tribe to be a sacred site, including burial sites, the federal agency should consider access to and ceremonial use of the property consistent with Executive Order 13007 when applicable in the course of the Section 106 review process.⁴⁷ Agencies must also be aware that sacred sites often occur within a larger landform or are connected through physical features or ceremonies to other sites or a larger sacred landscape. These broader areas and connections should be accounted for when seeking to understand the context and significance of sacred sites.⁴⁸

Principle 7: Burial sites, human remains, and funerary objects are frequently associated with cultural practices, sacred sites, Indigenous Knowledge, and other forms of culturally sensitive actions and/or information unique to a people. Maximum effort should be taken to limit the disclosure of confidential or sensitive information through all available mechanisms including, but not limited to, the proper handling and labeling of records, limiting documentation to necessary information, and through the application of existing law.

As a federal agency carries out its historic preservation responsibilities, it may find that some kinds of information about historic properties is sensitive and if released, risk harm to the properties, and therefore should be protected from public disclosure. As provided in Section 304 of the NHPA, there could be several reasons an agency must not release information about the location, character, or ownership of historic properties. For example, withholding information may help prevent looting or disturbance of a site, or it may help protect the continued use of a site or area by traditional religious practitioners.⁴⁹ Other federal laws or regulations may also authorize or require the withholding of information about cultural resources. Federal agencies should utilize available mechanisms to limit disclosure of confidential or culturally sensitive information in the course of their duties.

Appropriately managing sensitive information is of the utmost importance. The release of information that could cause harm or threaten the ongoing cultural practices or beliefs associated with those places or objects should be avoided to the fullest extent of the law. Federal agencies should seek to develop transparent and effective protocols and processes that enable associated communities to share sensitive information with full awareness of the legal protections that could protect against its disclosure.

The agency official should address concerns raised about confidentiality during the Section 106 review process pursuant to 36 CFR § 800.11(c). In recognizing the importance of protecting sensitive information, the Section 106 implementing regulations state that:

- Consultation should commence early in the planning process in order to identify and discuss relevant issues and resolve concerns about the confidentiality of information on historic properties.⁵⁰

⁴⁵ 36 CFR § 800.2(c)(2)(ii); see also [Consultation with Indian Tribes in the Section 106 Process: The Handbook](#), (ACHP, 2021).

⁴⁶ Sacred Sites MOU (2021).

⁴⁷ See Executive Order 13007: Indian Sacred Sites of May 24, 1996, and [The Relationship Between Executive Order 13007 Regarding Indian Sacred Sites and Section 106](#), (ACHP, 2018).

⁴⁸ Sacred Sites MOU (2021).

⁴⁹ [Frequently Asked Questions on Protecting Sensitive Information About Historic Properties Under Section 304 of the NHPA](#) (ACHP, 2016). Hereafter "Section 304 and the NHPA (ACHP, 2016)."

⁵⁰ 36 CFR § 800.2(c)(2)(ii)(A).

- Federal agencies should recognize that an Indian Tribe or NHO may be reluctant to divulge specific information regarding the location, nature, and activities associated with sites.⁵¹
- Consultation with Indian Tribes and NHOs should be conducted in a manner sensitive to the concerns and needs of the Indian Tribe or NHO.⁵²

Additionally, federal agencies should recognize the wide range of information that Tribes, NHOs, and Indigenous Peoples may deem sensitive. At the same time, Indigenous Knowledge is relevant and essential to many federal decision-making processes, so it is of critical importance for federal employees to have a solid understanding of how to navigate public disclosure laws to identify how sensitive Indigenous Knowledge may be protected. In collecting or working with any Indigenous Knowledge, the federal agency should be cognizant of several factors, including the following:

- How and what Indigenous Knowledge might be needed to inform or influence the decision-making process at hand?
- What sensitivity concerns may exist for that Indigenous Knowledge?
- What legal protections exist to protect against the disclosure of Indigenous Knowledge?⁵³
- Do both the source of the Indigenous Knowledge as well as the receiving entity have a common understanding and expectation of how that Indigenous Knowledge will be treated and incorporated?

Principle 8: The federal Indian boarding school system directly targeted American Indian, Alaska Native, and Native Hawaiian children in the pursuit of a policy of cultural assimilation that coincided with territorial dispossession. In partnership with the historic preservation community, federal agencies should seek to implement the recommendations identified in the Department of the Interior's *Federal Indian Boarding School Investigative Report* by supporting community-driven identification, documentation, interpretation, protection, preservation, reclamation, and co-management of burial sites, human remains, and funerary objects across that system, including marked and unmarked burial areas, and supporting repatriation where appropriate.

The intentional targeting and removal of American Indian, Alaska Native, and Native Hawaiian children to achieve the goal of forced assimilation of Indian people was both traumatic and violent.⁵⁴ Based on initial research, the Department of the Interior (DOI) found that hundreds of Indian children died throughout the federal Indian boarding school system. Many of those children were buried in unmarked or poorly maintained burial sites far from their Indian Tribes, Alaska Native Villages, the Native Hawaiian Community⁵⁵, and families, often hundreds, or even thousands, of miles away.⁵⁶

Descendants' preferences for the possible disinterment or repatriation of the remains of children discovered in marked or unmarked burial sites across the federal Indian boarding school system vary widely and should be prioritized.⁵⁷ Depending on the religious and cultural practices of an Indian Tribe,

⁵¹ 36 CFR § 800.4(a)(4).

⁵² 36 CFR § 800.2(c)(2)(ii)(C).

⁵³ See [Memorandum of Understanding Regarding Interagency Coordination and Collaboration for the Protection of Indian Sacred Sites: Policy Review Report](#) (2013), Section 304 and the NHPA (ACHP, 2016), and Section 9 of the [Archaeological Resources Protection Act](#) for examples.

⁵⁴ "Indian boarding schools, and the policies that created, funded, and fueled their existence, were designed to assimilate American Indian, Alaska Native, and Native Hawaiian children into non-Native culture by stripping them of their cultural identities, often through physical, sexual, psychological, industrial, and spiritual abuse and neglect." [S.1723 - Truth and Healing Commission on Indian Boarding School Policies Act](#), 6).

⁵⁵ The term "Native Hawaiian Community" is specific to the DOI and DOI's Federal Indian Boarding School Initiative Report.

⁵⁶ Newland, Bryan, [Federal Indian Boarding School Initiative Investigative Report](#) (Assistant Secretary –Indian Affairs, U.S. Department of the Interior, 2022). Hereafter "DOI Boarding School Report (Newland, 2022)"; "...many of the American Indian and Alaska Native children who died while attending Indian boarding schools or neighboring hospitals were buried in unmarked graves or off campus cemeteries." [S.1723 - Truth and Healing Commission on Indian Boarding School Policies Act](#), 7).

⁵⁷ "Tribal preferences for the possible disinterment or repatriation of remains of children discovered in marked or unmarked burial sites across the Federal Indian boarding school system vary widely. Depending on the religious and cultural practices of an Indian Tribe, Alaska Native Village, or the Native Hawaiian Community, it may prefer to disinter or repatriate any remains of

Alaska Native Village, or the Native Hawaiian Community, they may prefer to disinter or repatriate any remains of a child discovered across the federal Indian boarding school system for return to the child's home territory or to leave the child's remains undisturbed in its current burial site. Moreover, some burial sites contain human remains or parts of remains of multiple individuals or human remains that were relocated from other burial sites, thereby preventing Tribal and individual identification.

Federal agencies should seek to support the Federal Indian Boarding School Initiative investigation through community-driven identification, documentation, interpretation, protection, preservation, reclamation, and co-management of burial sites, human remains, and funerary objects. Federal agencies should also seek to protect burial sites and enable potential repatriation or disinterment of remains of children, consistent with federal, state, and Tribal law, including the Native American Graves Protection and Repatriation Act (NAGPRA), and in coordination with proper authorities.⁵⁸

Principle 9: The legacies of colonization, including cultural assimilation, forced relocation, and slavery, have led to an uneven awareness of where and why practitioners are likely to encounter burial sites, human remains, and funerary objects across the United States and its territories. The historic preservation community has a key role in expanding public education to support greater awareness of and consideration for the histories and lifeways of Indian Tribes, Native Hawaiians, enslaved Africans and their descendants, and Indigenous Peoples including recognizing and respecting the historical trauma that these groups and individuals may experience.

The location and significance of burial sites, human remains, and funerary objects varies and is often unique to a people. In some circumstances, burial sites and funerary objects are known only to their descendants or associated communities. However, this knowledge is not always comprehensive; may not be consistently recorded, particularly in a manner that is readily transferrable for the purposes of federal decision making; may only reside with select individuals; and is frequently considered to be sensitive.⁵⁹

Legacies of occupation and colonization abruptly altered many of the cultural practices of Indigenous People and African Americans through forced assimilation and relocation, enslavement, warfare with the United States Government, and the introduction of disease, among other dynamics.⁶⁰ As a result, the location of burial areas and the method of burial were often controlled by external parties, were confined to remote areas, and/or were rarely documented.⁶¹ Thus, such locations infrequently appear on historical maps or in other records. In many cases, including as a result of segregation and the Federal Indian

a child discovered across the Federal Indian boarding school system for return to the child's home territory or to leave the child's remains undisturbed in its current burial site," Ibid.

⁵⁸ Ibid.

⁵⁹ TK and ACHP (ACHP, 2021).

⁶⁰ "The United States directly targeted American Indian, Alaska Native, and Native Hawaiian children in the pursuit of a policy of cultural assimilation that coincided with Indian territorial dispossession," DOI Boarding School Report (Newland, 2022); "...all Indian Tribes have undergone some manner of displacement, whether they have seen their homelands whittled down to small reservations or have lost their lands and status through the federal policies of removal and termination...the effects of removal persist and continue to affect Tribal participation in the Section 106 process," [The Indian Removal Era and Section 106 Tribal Consultation: Information Paper](#) (ACHP, 2019, 1); "assimilation processes, such as the Indian Boarding School Policies, were adopted by the United States Government to strip American Indian, Alaska Native, and Native Hawaiian children of their Indigenous identities, beliefs, and languages to assimilate them into non-Native culture through federally funded and controlled Christian-run schools, which had the intent and, in many cases, the effect, of termination, with dire and intentional consequences on the cultures and languages of Indigenous peoples." S.1723 - Truth and Healing Commission on Indian Boarding School Policies Act, 2).

⁶¹ "Mexican American history is often overlooked and is not well recorded," [UT-Austin Researchers Work to Protect Historic Mexican American Cemetery](#) (The Daily Texan, 2021); "African-American cemetery sites were often confined to remote areas or marginal property and they frequently were not provided the same sort of state or local maintenance support or assistance as predominantly white cemeteries. As a result, many jurisdictions are unaware of the existence of these historic sites." [African American Burial Grounds Preservation Program](#), Senate Report (United States Senate Committee on Energy and Natural Resources, December 12, 2022).

Boarding School Initiative, among other situations, these practices continued into the 20th century.⁶² For example, Federal Indian policy resulted in the separation (both physically and intellectually) of Indigenous Peoples from the places they are connected to, severing relationships with lands, waters, and social systems, which are all critical elements of Indigenous Knowledge. These policies systematically served to assimilate and displace Native people and eradicate Native cultures.⁶³

These communities continue to experience the impacts of intergenerational trauma resulting from the legacies of these federal policies,⁶⁴ including impacts on their social, cultural, spiritual, mental, and physical wellbeing.⁶⁵ Disturbing the burial areas or remains of ancestors or family members can have traumatic and compounding effects to the social and emotional welfare of associated individuals and communities and should be avoided to the maximum extent allowable by law.⁶⁶ The ACHP encourages federal agency and state and local governments to avoid disturbing or disinterring burial sites and human remains.

Federal, Tribal, state, and local officials and other subject matter experts providing public education and technical assistance in historic preservation have an important role to play both in raising awareness about these histories and their impact on where burial areas, human remains, and funerary objects may be encountered, and in creating resources to help others do the same. The ACHP encourages federal agencies and state and local governments, in collaboration with associated communities, to create additional understanding of and opportunities for associated communities to identify and protect their burial sites, human remains, and funerary objects. These efforts may include site protection and enhancement, providing access to associated individuals or communities, conducting additional research, or a number of

⁶² “Beginning with slavery and continuing through the Jim Crow era, African Americans were often restricted in where they could bury their loved ones. Local laws segregated burial grounds by race,” Ibid; see [S.3667 - African-American Burial Grounds Preservation Act \(introduced\)](#); see the [DOI Boarding School Report](#) (Newland, 2022); “Mexicans weren’t necessarily allowed to be buried in white cemeteries...In some cases I’ve seen where there’s a white cemetery, and then right next to it is the Mexican section or the Black section...[or] just a completely different cemetery,” [This Is Sacred Ground’: Austinites And Researchers Seek To Restore Mexican-American Cemeteries In Montopolis](#) (KUT 90.5, 2021).

⁶³ Indigenous Knowledge (OSTP and CEQ, 2022).

⁶⁴ Ibid; “the general lack of public awareness, accountability, education, information, and acknowledgment of the ongoing and direct impacts of the Indian Boarding School Policies and related inter-generational trauma persists, signaling the overdue need for an investigative Federal commission to further document and expose assimilation and termination efforts to eradicate the cultures and languages of Indigenous peoples implemented under Indian Boarding School Policies (pages 12-13)”. [S.1723 - Truth and Healing Commission on Indian Boarding School Policies Act](#).

⁶⁵ Sacred Sites MOU (2021); “the longstanding intended consequences and ramifications of the treatment of American Indian, Alaska Native, and Native Hawaiian children, families, and communities because of Federal policies and the funding of Indian boarding schools continue to impact Native communities through intergenerational trauma, cycles of violence and abuse, disappearance, health disparities, substance abuse, premature deaths, additional undocumented physical, sexual, psychological, industrial, and spiritual abuse and neglect, and trauma”. [S.1723 - Truth and Healing Commission on Indian Boarding School Policies Act](#), 10).

⁶⁶ “Desecration and disturbance of burial sites is not a victimless crime. The consequences of these actions not only include property damage, but can also result in emotional trauma to relatives and friends of the deceased, as well as to descendant communities” ([Historic African American Cemeteries, Maryland Commission on African American History & Culture](#), (Maryland Historical Trust, 2022, 24); “Traditional Hawaiian belief maintains that it is the kuleana (responsibility) of the living to care for and to protect ‘ohana (family) burial sites and to pass on this knowledge and responsibility to the next generation. These practices assure that living Native Hawaiians will always provide perpetual care and protection to their ancestors, thereby maintaining the integrity of the family. Central to the physical and spiritual well-being of Native Hawaiians is the inheritance of mana from their ancestral past. In turn, the k...puna (ancestors) care for and protect the living, affirming the interdependent relationship between them and living descendants, where each cares for and protects the other,” Native Burials: Human Rights and Sacred Bones (Edward Halealoha, 2000); “[The cemetery] is sacred ground to us [Mexican Americans], from our ancestors...The site is difficult to access, making it hard for people to visit and maintain...has long had problems with people dumping trash...It’s sad to see because it looks as if it’s been neglected and dismissed, especially with the development that’s right next to it...Those are families and families’ history and legacies and relatives that are buried there. Those are stories that need to be told,” [This Is Sacred Ground’: Austinites And Researchers Seek To Restore Mexican-American Cemeteries In Montopolis](#) (KUT 90.5, 2021).

other targeted efforts. Identifying appropriate actions should be done in collaboration with associated communities.

Principle 10: Access to and/or repatriation of burial sites, human remains, and funerary objects should be enabled through fair, transparent, and effective mechanisms developed in conjunction with descendant communities to the fullest extent of the law.

Having access to a location, including the ability to conduct cultural practices or perpetuate Indigenous Knowledge, can contribute to the significance of a Traditional Cultural Place (TCP),⁶⁷ a sacred site, or historic property and may be necessary to retain the integrity of these locations. The care for and access to these locations may also be part of an ongoing cultural practice or may serve to revitalize traditions or customs, among other purposes, that are important to an associated community.⁶⁸ Federal agencies should seek to enable access to and protection of burial sites, human remains, and/or funerary objects through the development of protocols, co-stewardship or co-management agreements, and other mechanisms as part of their ongoing management functions.⁶⁹ Efforts to increase access and protection of these sites should be pursued in consultation with the associated communities and in a manner that does not inadvertently disclose sensitive information.

Associated communities may also seek to have human remains or funerary objects relocated or returned for several reasons. Repatriation is of particular concern to Indian Tribes, NHOs, and other Indigenous Peoples whose ancestors are frequently located in locations no longer under their control or ownership.⁷⁰ Consistent with NAGPRA, DOI's Boarding School Initiative, and the United Nations Declaration on the Rights of Indigenous Peoples (Declaration), the ACHP fully supports federal agency efforts to prioritize repatriation of human remains and funerary objects.⁷¹ The Declaration expressly recognizes Indigenous Peoples' rights to practice, access, and revitalize culture including the right to the repatriation of their human remains.⁷² The Declaration also states that Indigenous Peoples have the right to revitalize their cultural traditions and customs including the right to maintain, protect, and develop past, present, and future manifestations of their cultures, such as burial sites and ceremonies, among other aspects.⁷³

While the Declaration is not legally binding, federal agencies can look to it for policy guidance in carrying out their Section 106 responsibilities. Because the Declaration was developed with input from Indigenous Peoples around the world, it stands as a guide to what is important to Indigenous Peoples,

⁶⁷ A TCP is a building, structure, object, site, or district that may be eligible for inclusion in the National Register for its significance to a living community because of its association with cultural beliefs, customs, or practices that are rooted in the community's history and that are important in maintaining the community's cultural identity, National Register Bulletin, Volume 38 Draft Update (NPS, 2022). TCPs differ from a "sacred site" and a "historic property of religious and cultural significance" in several ways. Most notably, a TCP is a type of significance that any individual or group can ascribe to a location whereas the ability to designate a location as a "sacred site" under E.O. 13007 or to ascribe "religious and cultural significance" per 36 CFR Part 800 are exclusive to Indian Tribes and NHOs. See the Sacred Sites MOU (2021); E.O. 13007, and Sacred Sites and Section 106 for more information.

⁶⁸ The Declaration, like other human rights instruments, recognizes rights to religion and culture. Article 25 states more specifically: "Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands."

⁶⁹ See [Early Coordination with Indian Tribes During Pre-Application Processes](#) (ACHP, 2018) and [Secretarial Order 3403: Joint Secretarial Order on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters](#).

⁷⁰ "Articles 11, 12, 13, 14, 15, and 31 recognize that Indigenous Peoples have a right to their distinctive cultures generally, as well as to their languages, religions, traditional knowledge, and repatriation of human remains and ceremonial objects. To the extent that U.S. policy historically sought to eradicate Indigenous Peoples' cultures, and currently offers few remedial or ongoing protections in the realm of cultural rights, the Declaration can provide important standards," [Project to Implement the United Nations Declaration on the Rights of Indigenous Peoples Tribal Implementation Toolkit](#) (Native American Rights Fund, Colorado Law, and UCLA Law School, 2021); see discussion in Principles 8 and 9 of this document for additional information.

⁷¹ See Declaration articles 8, 11, 12, 15, 18, 25, and 31; see [Section 106 and the U.N. Declaration on the Rights of Indigenous Peoples: General Information and Guidance](#) (ACHP, 2018).

⁷² See Article 12 of the Declaration.

⁷³ See Article 11 of the Declaration.

above and beyond basic human rights. In its 2008 policy statement on its relationship with NHOs,⁷⁴ the ACHP clarified that the Section 106 implementing regulations “set the minimum standards for federal agency interactions with its preservation partners.” This clarification applies to all preservation partners. The ACHP suggests that federal agencies and state and local governments consider the Declaration a reference to help inform the outreach, consultation, and consideration of the associated communities’ input, which in turn may work to increase the appropriate protection of, access to, and/or repatriation of burial sites, human remains, or funerary objects.⁷⁵

Principle 11: Human remains and funerary objects may be relocated or removed from a location by or at the request of descendant communities for a variety of reasons. The continued presence of human remains or funerary objects may not be essential to the ongoing significance and integrity of a site or its relevance to a broad theme in history. The historic significance and integrity of such sites are best determined in consultation with lineal descendants and/or associated communities.

Associated communities, including Indian Tribes and NHOs, are increasingly requesting that federal agencies and state and local governments relocate or return human remains or funerary objects for a variety of reasons, including from Federal Indian Boarding Schools, as a part of an ongoing cultural practice, or to reclaim control over their ancestors and funerary objects.

For many people the locations where their ancestors reside are frequently considered to be sacred sites, Traditional Cultural Places, or historic properties. Depending on the role that the deceased individual(s) and/or funerary object(s) have in their culture, the burial site may continue to be significant and may retain integrity even after human remains or funerary objects have been removed.⁷⁶ When evaluating burial sites during the course of a Section 106 review, the federal agency should consult with, recognize, and provide deference to the knowledge and expertise of the associated community in its decision making.

Principle 12: Climate change can impact the burial sites, sacred sites, cemeteries, and associated cultural practices significant to Indian Tribes, NHOs, and other groups of people. Climate plans should be developed in consultation and should include mechanisms to support the advanced identification and protection or treatment of these locations.

Climate change poses a unique risk to all burial sites, human remains, and funerary objects including those that are sacred sites, may be located in a cemetery, are connected to ongoing cultural practices, or are part of a larger landscape. These impacts may result from sea level rise, extended drought, increased severity of invasive species, severe storm events, or extreme wildfire, among other examples, all of which have the potential to affect or destroy these sites, remains, and objects.⁷⁷

When a federal agency develops climate change planning documents it should seek to consult with stakeholders to proactively identify locations of concern and review available mechanisms to preserve or protect burial sites, human remains, and funerary objects, recognizing that natural deterioration may be a

⁷⁴ [ACHP Policy Statement on the ACHP’s Interaction with Native Hawaiian Organizations](#) (ACHP, 2008).

⁷⁵ [ACHP Plan to Support the United Nations Declaration on the Rights of Indigenous Peoples](#) (ACHP, 2013); “The Declaration, which is grounded in widespread consensus and fundamental human rights values, should be a benchmark for all relevant decision-making by the federal executive, Congress, and the judiciary, as well as by the states of the United States,” S. James Anaya (Special Rapporteur on the Rights of Indigenous Peoples), [The Situation of Indigenous Peoples in the United States of America](#), U.N. Doc. A/HRC/21/47/Add.1 (Aug. 30, 2012).

⁷⁶ [“Guidelines for Evaluating and Registering Cemeteries and Burial Places”](#) National Register Bulletin, Volume 41 (NPS, DOI, 1992); “Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard,” Article 25 of the Declaration.

⁷⁷ See [“Cultural Resources Climate Change Strategy”](#) (NPS, DOI, n.d.), and [“Climate Impacts to Indian Tribe and Native Hawaiian Sacred Sites and Historic Properties: Plan for ACHP Actions”](#) (ACHP, 2022).

contributing quality of a property of religious and cultural significance to an Indian Tribe or NHO.⁷⁸ Having knowledge pertaining to the location or importance of significant places, preferred treatment options, and/or transparent consultation and coordination protocols can help ensure the preservation of these places during emergencies or as part of ongoing federal historic property management responsibilities. Federal agencies should also review climate-related planning and adaptation grant opportunities to ensure that cultural resources and historic properties (including burial sites, human remains, and funerary objects) are included as eligible categories.⁷⁹

Many Tribal, state, and local governments are also in the position to proactively identify and protect these sites, remains, or objects. Consistent with their relevant mission and authorities, these governments should seek to incorporate consideration of burial sites, human remains, and funerary objects into their climate change planning and response actions to the maximum extent practicable.

Principle 13: Respectful consideration of burial sites, human remains, and funerary objects may require additional assistance from consulting parties to properly identify, document, evaluate for National Register eligibility, and/or conduct treatment actions. If a federal agency requests or relies on an Indian Tribe, NHO, or other party to carry out activities that are the federal agency's responsibility under the NHPA, the Indian Tribe, NHO, or other consulting party should be reimbursed or compensated.

Understanding where burial sites, human remains, and funerary objects are located oftentimes requires the knowledge or expertise of associated communities to properly identify and evaluate these locations. The very basis of what constitutes a burial site or funerary object, their defining characteristics, boundaries, and proper protocols associated with interacting and recording them, is expertise frequently known only to associated communities. As such, consistent with Principle 3, federal agencies should conduct early and robust consultation that works to integrate the knowledge and understanding of those who attribute significance to the sites, remains, or objects into the agencies' decision making.

Consistent with ACHP guidance,⁸⁰ when the federal agency, or in some cases, the applicant, seeks the views and advice of any consulting party in fulfilling its legal obligation to consult with them, for instance in a Section 106 review, the agency or applicant is not required to pay that party for providing its views. However, both within and beyond the Section 106 context, where appropriate and consistent with applicable agency fiscal and acquisition authorities, federal agencies should consider compensating associated individuals or groups in a manner that allows them to fully participate and inform any identification, documentation, evaluation, or mitigation actions related to burial sites, human remains, or funerary objects. If a party is asked by a federal agency to do more than respond to the agency's findings and determinations, then it should be compensated for its efforts.

June 30, 2023

⁷⁸ 36 CFR 800.5(a)(2)(vi).

⁷⁹ Tribal and NHO Climate Plan (ACHP, 2022, 3).

⁸⁰ See [Guidance on Assistance to Consulting Parties in the Section 106 Review Process](#).

**ATTACHMENT 5 – TERRESTRIAL ARCHAEOLOGY MONITORING AND POST-REVIEW
DISCOVERY PLAN**

Monitoring Plan and Post Review Discoveries Plan: Terrestrial Archaeological Resources

Atlantic Shores South Offshore Wind Project – Onshore Facilities

Monmouth and Atlantic County, New Jersey

Contains Archaeological Site Information

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Attachment D. Representative Archaeological Artifacts and Features

1.0 INTRODUCTION

Atlantic Shores Offshore Wind, LLC (Atlantic Shores), a 50/50 joint venture between EDF-RE Offshore Development, LLC, a wholly owned subsidiary of EDF Renewables, Inc. (EDF Renewables) and Shell New Energies US LLC (Shell) has proposed to construct the Atlantic Shores Onshore Interconnection Facilities (Onshore Facilities) located in the Boroughs of Manasquan and Borough of Sea Girt, Township of Howell and Township of Wall, Monmouth County, New Jersey and the City of Atlantic City and City of Pleasantville, Egg Harbor Township, Atlantic County, New Jersey. The Onshore Facilities will support Atlantic Shores' proposal to develop two offshore wind energy generation projects (the Project) within Bureau of Ocean and Energy Management (BOEM) Lease Area OCS-A 0499 (the Lease Area). The proposed Onshore Facilities are being reviewed by the New Jersey Department of Environmental Protection (NJDEP), New Jersey State Historic Preservation Office (NJHPO), the Bureau of Ocean and Energy Management (BOEM), and other relevant New Jersey State and/or Federal agencies and consulting partners under Section 7:4 of the New Jersey Administrative Code (NJAC), the State of New Jersey Executive Order #215, the National Environmental Policy Act (NEPA), and/or Section 106 of the National Historic Preservation Act (NHPA), as applicable. The information and recommendations included in this Monitoring Plan and Post Review Discoveries Plan (MPRDP; the Plan) for terrestrial archaeological resources are intended to assist these agencies in their review of the Project's potential effect on terrestrial archaeological resources.

Atlantic Shores proposes to construct, operate, and maintain the Onshore Facilities (including landfalls, onshore interconnection cables, onshore substations and/or converter stations, and an Operations and Maintenance [O&M] facility) to connect the offshore portions of the Projects to existing Points of Interconnection (POIs). Export cables will deliver energy from the offshore generation facilities to proposed landfall sites located in either Monmouth County (the Monmouth Landfall Site) and/or Atlantic County (the Atlantic Landfall Site), New Jersey. From the landfall sites, onshore cables will follow onshore interconnection cable routes (onshore routes) proposed within existing roadway, utility rights-of-way (ROWs), and/or along bike paths to existing Points of

Interconnection (POIs) for connection to the electrical grid. Along the onshore routes, onshore substations and/or converter stations are also proposed.

During previous and ongoing consultation between offshore wind developers and Native American Tribes, Tribal representatives have indicated their strong preference for intensive archaeological investigations to be conducted prior to construction of onshore infrastructure, as opposed to relying on archaeological monitoring to identify, evaluate, and respond to the potential presence of archaeological sites within the Preliminary Area of Potential Effect (PAPE). In addition, BOEM has indicated to Atlantic Shores that it will require a Phase IA/IB survey as part of the Section 106 process. Therefore, Atlantic Shores retained EDR to complete Terrestrial Archaeological Resource Assessments (TARAs) of the onshore portions of the PAPE for physical effects (i.e., construction activities and/or ground disturbance) for the proposed Onshore Facilities (EDR, 2021 and 2022b). The purpose of the desktop assessment included in the TARAs is to inventory and characterize previously identified archaeological resources within the PAPE that may be affected by construction of the proposed Onshore Facilities, which will subsequently inform EDR's recommendations of which portions of the proposed PAPE should be subject to systematic Phase IB archaeological survey and/or archaeological monitoring. Additionally, Atlantic Shores will retain EDR to conduct systematic Phase IB archaeological survey and/or archaeological monitoring of the areas recommended in the TARA. Results of any subsequent Phase IB archaeological survey would be included in a subsequent revision or amendment to the TARA report which will be submitted to BOEM and the Consulting Parties prior to the Projects' Record of Decision (ROD).

The TARAs for the Onshore Facilities (EDR, 2021 and 2022b) included background research, archaeological reconnaissance, and desktop assessment. Background research was conducted to review the geology and environmental setting, previously reported archaeological sites and archaeological surveys, regional histories, and historical maps of the PAPE and adjacent areas. These sources were reviewed to prepare historic contexts and to assess the archaeological sensitivity of the PAPE. In addition, archaeologists conducted reconnaissance-level surveys of the proposed Onshore Facilities to evaluate existing conditions and prior ground disturbance as part

of assessing the potential for archaeological resources to be present within the PAPE. Informed by a synthesis of background research and archaeological reconnaissance, the PAPE was categorized into “Disturbed” and “Potentially Undisturbed” areas. This categorization informed EDR’s assessment of the archaeological sensitivity of the proposed Onshore Interconnection Facilities Sites as well as EDR’s identification of areas where additional archaeological field investigations are recommended (i.e., Phase IB shovel testing) in a manner consistent with NJHPO’s *Guidelines for Phase I Archaeological Investigations: Identification of Archaeological Resources* (hereafter, NJHPO’s *Guidelines*; NJHPO, 2019). The TARA will be updated following the results of recommended Phase IB survey (described below).

Atlantic Shores has elected to site the proposed buried onshore cables within existing, previously disturbed road, bike path, and railroad ROWs, where disturbance during construction and installation of the existing infrastructure likely exceeded the depth of potential archaeological deposits. This siting strategy avoids or significantly reduces potential impacts to adjacent undisturbed soils and avoids or minimizes the risk of potentially encountering undisturbed archaeological deposits throughout most of the onshore routes.

The “Potential Phase IB Survey Areas” identified in the TARA (see EDR, 2022b: Figures 14, 21, 31, 38) illustrate those portions of the proposed Onshore Facilities for which Phase IB archaeological testing (i.e., shovel testing) may be appropriate depending on the proposed ground disturbance when final siting/design of the Onshore Facilities within the PAPE is determined. The purpose of any potential Phase IB testing would be to further evaluate the potential for archaeological sites to be located within the PAPE, and to minimize the risk of unanticipated discoveries or disturbance to archaeological resources during construction. In those portions of the proposed onshore routes with potentially intact, deeply buried soil deposits (such as eolian or alluvial deposits) that overlap with paved roadways or bike paths not suitable for shovel testing, then shovel test pits (STPs) would be excavated within the public ROW on the road shoulder or bike path margins adjacent to the paved areas, as a proxy for what may be beneath the paved areas. This testing strategy is based on methodologies utilized when evaluating the onshore facilities for similar offshore wind projects reviewed by BOEM (EDR, 2020 and 2022a).

As of August 2023, Phase IB archeological testing has been completed for the majority of the Cardiff Onshore Facilities PAPE (approximately 19.98 acres out of the recommended 20.07 acres of combined Phase IB STP Survey) and a portion of the Larrabee Facilities PAPE (approximately 4.77 acres out of the recommended 49.14 acres of combined Phase IB STP survey). The results of the Phase IB testing conducted to date are presented in the TARA (EDR, 2022b, Sections 2.3.9, 3.3.9, and 3.4.7) and is currently pending review with BOEM, NJHPO, and consulting Native American Tribes as part of the Section 106 consultation process. Phase IB survey results for the remaining areas will be presented in an addendum to the TARA at a future date. Note that construction activities will not occur in unsurveyed areas until all Phase IB archaeological testing is completed and the results are presented to all consulting parties.

Based on the results of the background research and archaeological reconnaissance, the proposed Project is not anticipated to result in any adverse physical effects to any potentially State/National Register of Historic Places (S/NRHP)-eligible terrestrial archaeological resources. Additionally, no terrestrial archaeological resources were identified in the results of the completed Phase IB survey. As such, no mitigation or avoidance measures are currently proposed in the surveyed areas. This assessment may be updated pending the results of Phase IB survey for the remaining areas.

To further mitigate the potential (however unlikely) for encountering archaeological resources during installation of the Onshore Facilities, Atlantic Shores has prepared this MPRDP, which includes stop-work and notification procedures to be followed if a cultural resource is encountered during installation. Atlantic Shores anticipates that this MPRDP will be incorporated in a Memorandum of Agreement executed among BOEM, SHPOs, and potentially other consulting parties to resolve anticipated adverse visual effects to identified above ground historic properties (see the Projects' Historic Resources Visual Effects Assessment [HRVEA], EDR, 2022c) and to memorialize specific measures that Atlantic Shores will take to avoid and minimize potential effects to other historic properties in the event of a post-review discovery. The Plan outlines the steps for dealing with potential unanticipated discoveries of cultural resources, including human remains, during the construction of the proposed Onshore Facilities.

1.1 Purpose

The purpose of the Plan is to:

1. Present to regulatory and review agencies the plan Atlantic Shores and its contractors and consultants will follow to prepare for and potentially respond to unanticipated cultural resources (i.e., terrestrial archaeological) discoveries;
2. Include provisions and procedures allowing for a Cultural Monitor (Archaeologist) and Tribal Monitors to be present during construction and installation activities conducted in targeted areas of concern as identified in the TARA and through consultation with Native American Tribes; and
3. Provide guidance and instruction to Atlantic Shores personnel and its contractors and consultants as to the proper procedures to be followed in the event of an unanticipated cultural resource (i.e., terrestrial archaeological) discovery.

The following terms are used throughout the Plan:

- **The Onshore Facilities:** The Onshore Facilities collectively refers to all components of the onshore portions of the Project, including landfalls, onshore interconnection cable routes, onshore substations and/or converter stations, and an O&M facility.
- **Unanticipated Discovery/Unanticipated Cultural Resource Discovery:** Any indications of the presence of archaeological materials including artifacts, stone features, animal bone, and/or human remains. Common artifacts encountered may include bottles/glass, pottery/ceramics, stone foundations, hand-dug wells, brick, nails, miscellaneous metal fragments, charcoal or ash-stained soils, arrowheads/spearheads, stone (chert or "flint") chips or flakes, rough gray, black, or brown pottery, and other stone tools/artifacts of obvious human origin.
- **Potential Human Remains:** Any indications of potential human remains, such as bones or bone fragments, which cannot definitely be determined to be non-human.

- **Preliminary Area of Potential Effect (PAPE)**¹: All areas of potential soil disturbance associated with the construction and operation of the proposed Onshore Facilities.
- **Compliance Manager**: Atlantic Shores' designated on-site staff person responsible for monitoring compliance with permitting conditions and commitments during construction (see Section 10.0).
- **Archaeologist**: Atlantic Shores' cultural resources consultant/s (see Section 10.0). Review of any potential unanticipated discoveries will be conducted under the supervision of a cultural resource professional who meets the U.S. Secretary of the Interior's Professional Qualifications for Archeology (36 CFR 61). Review of any potential unanticipated human skeletal remains will be conducted under the supervision of EDR's experienced subcontractor osteologist/forensic anthropologist who is available to respond in an on-call capacity.

2.0 PROJECT PERSONNEL ROLES

Atlantic Shores will coordinate with a number of project personnel in order to follow the procedures outlined in this plan in the event that a cultural resource is encountered during installation of Onshore Facilities. Project Personnel include the following:

- **Archaeological Monitor(s)**: Archaeological Monitors will be responsible for assessing any cultural resources encountered during installation and will communicate the need for an anticipated duration of any temporary work stoppages clearly and effectively to the Construction Contractor if cultural materials are exposed and will clearly communicate if and when work may resume in a given area. The monitors will also work with Qualified Tribal Monitors should they elect to be present during archaeological monitoring. The archaeological Monitor is also responsible for submitting written weekly update (detailed in Section 9.0) summarizing all activities. All Archaeological Monitors will be supervised by

¹ The final Area of Potential Effects (APE) will be formally determined by BOEM in consultation with NJHPO as part of the Section 106 consultation process.

a professional archaeologist meeting Secretary of the Interior's Professional Qualifications Standards for Archaeologists (hereafter, SOI Standards; 48 Federal Register 44738-44739)

- **Cultural Resources Manager:** The Cultural Resources Manager is the supervisor or manager of the Archaeological Monitor(s). The Cultural Resource Manager may not be in the field but in the same capacity as monitors but will manage archaeological monitoring aspects. The Cultural Resources Manager is responsible for coordinating with BOEM, BSEE, NJHPO, and other Consulting Parties about monitoring activities and post review discovery procedures and will notify the relevant contact(s) (Section 11.0) in the event that human remains or Cultural Resources are exposed, or if exposed cultural resources are determined to be S/NRHP eligible. The Cultural resources Manager will meet, at a minimum, the SOI Standards
- **Construction Contractor:** The Construction Contractor is the manager or supervisor of Construction Personnel. There may be more than one Construction Contractor, dependent on the construction activity. The Construction Contractor will be oriented and trained by Atlantic Shores and a coordinating Archaeologist about the materials presented in this Plan. This training is detailed in Section 3.0. As stated in the Post Review Discovery Procedures (Section 10.1), The Construction Contractor will alert the monitors and/or Developer Compliance Manager to any possible cultural resources or human remains they may find and stop working in the area of the find until the Archaeologist and/or Tribal Monitor has assessed the find. The Construction Contractor will also provide heavy equipment and an operator to aid the Archaeological or Tribal Monitor in tasks such as the removal of overburden during archaeological monitoring or excavation and will aid the Developer Compliance Manager in securing any open excavation that may need to be left open overnight.
- **Developer Compliance Manager:** The Developer Compliance Manager is Atlantic Shores's defined point-of-contact for construction activities. Who will ensure that the Construction Contractor and Construction Personnel are made aware of the procedures they must follow in the event of an unanticipated discovery. The Develop Compliance Manager will

provide a construction plan and schedule to the Cultural Resource Manager and all consulting Native American Tribes participating in monitoring activities prior to the start of work in a recommended monitoring area. The construction plan will conform to the requirements of this MPRDP and contains details on the operations, materials, equipment, and excavations to allow the Archaeological and Tribal Monitor(s) to implement this MPDP. As stated in the Post Review Discovery Procedures (Section 10.1), the Developer Compliance Manager will notify the Cultural Resources Manager if any cultural resources are exposed while a monitor is not present onsite and request an expedited field evaluation.

- **Tribal Monitor(s):** Tribal Monitors will be someone with education and training in archaeology designated by any consulting Native American Tribe(s), that wish to participate in monitoring activities. Like Archaeological Monitors, Tribal Monitors will be responsible for assessing any cultural resources encountered during installation and will communicate the need for an anticipated duration of any temporary work stoppages clearly and effectively to the Construction Contractor if cultural materials are exposed and will clearly communicate if and when work may resume in a given area. All Tribal Monitors will be experienced in archaeological monitoring and will either meet SOI standards or be supervised by an archaeologist who meets SOI Standards. Tribal monitors may participate in the training and orientation activities, further detailed in Section 3.0, at their discretion. Tribal involvement in monitoring and post review discovery procedures are further detailed in Section 5.0.
- **Tribal Representative(s):** Tribal Representative(s) are Native Americans with affiliation to affected and/or consulting Native American Tribes who are onsite to observe construction activities. Tribal involvement in monitoring and post review discovery procedures are further detailed in Section 5.0.

3.0 TRAINING AND ORIENTATION

Atlantic Shores will, in coordination with the Archaeological Monitor and any participating Tribal Monitors and/or Tribal Representatives, provide a summary presentation to the Construction Contractor(s) and other Construction Personnel of the relevant results/findings of any potential Phase IB archaeological survey. Atlantic Shores' training for Construction Personnel will also include the following:

- Review and education of federal and state laws protecting cultural resources and BOEMs responsibilities to identify and protect cultural resources and resource integrity;
- An overview of the general cultural history of the Onshore Facilities area so that personnel have a greater understanding of what cultural resources may be encountered and so that they can be more readily identified in the field;
- An orientation presentation regarding the types of finds that could be discovered (e.g., artifacts, buried shell deposits), including representative photographs of potential cultural features or finds (see Representative Archaeological Artifacts and Features, Attachment D); and
- An overview of common debris and refuse of modern origins that may be encountered during construction.

Note that as different construction crews and/or subcontractors join the Project, this training may need to be conducted multiple times to insure everyone is familiar with materials presented in this Plan. Atlantic Shores will extend an invitation to consulting Native American Tribes to participate in these training sessions. All Native American Tribes will be notified by the Developer Contractor Manager or Cultural Resources Manager a minimum of 30 days in advance of the construction crew training so that they have the option to participate in attending and/or presenting in the training.

Atlantic Shores will ensure that the Construction Contractor and Construction Personnel are made aware of the procedures they must follow in the event of an unanticipated discovery. All Construction Personnel, including operators of equipment involved in grading, stripping, or

trenching activities, will be advised of the need to immediately stop work if they observe any indications of the presence of an unanticipated cultural resource discovery as defined above. Construction Personnel will be instructed to immediately contact the Developer Compliance Manager upon the observation of a potential unanticipated discovery as defined in the introduction.

Atlantic Shores will stress the necessity of compliance with this Plan and special emphasis and attention will be given to potential circumstances involving human remains. Atlantic Shores will stress the importance of treating any human remains, or potential human remains, encountered during construction of the Onshore Facilities with the utmost dignity and respect (see Section 9.2 below concerning human remains).

4.0 DOCUMENTATION

Copies of this MPRDP, as well as the representative photographs provided in Attachment D, will be provided to the Construction Contractor at an easily accessible and centralized location (such as a field office or mobilization point) so that they always have readily available access to the MPRDP protocols.

5.0 ARCHAEOLOGICAL/TRIBAL MONITORS AND TRIBAL REPRESENTATIVES

Atlantic Shores will retain one to two onsite Archaeological Monitor(s) to conduct the archaeological monitoring activities. Atlantic Shores will also invite consulting Native American Tribes to designate a Tribal Monitor(s) to participate in the monitoring effort and be onsite (at the Tribes' discretion). Consulting Native American Tribes may choose to participate at any point during the construction process. All Native American Tribes interested in participating in monitoring efforts will be notified a minimum of 30 days in advance of the start of construction (including any placement of temporary avoidance measures under VII) so that they can gauge participation for having Tribal Monitors and/or Tribal Representatives onsite. It will be the responsibility of the Developer Compliance Manager to coordinate logistics while ensuring proper access, safety, and timelines for participation of any Tribal Monitors.

If specific safety training is requirement for Archaeological/Tribal Monitors and/or Tribal Representatives prior to them entering the construction site, the Developer's Compliance Manager must ensure that individuals are notified and that understand what personal protective equipment is required prior to entering the construction site. The Archaeological Monitor will be in regular communication with the Construction Contractor, to insure Archaeological/ Tribal Monitors and/or Tribal Representatives are onsite to observe construction and installation activities when those activities are conducted in the recommended portions of the proposed Onshore Interconnection Facilities.

6.0 LOCATIONS WHERE MONITORING IS REQUIRED

Based on the results of the archaeological reconnaissance and desktop assessment, EDR recommends monitoring in portions of the Larabee and Cardiff Physical Effects PAPE adjacent to cemeteries, and in paved portions with Medium-High Sensitivity located within 1,000 feet (ft.) of previously recorded archaeological sites. No surveyed Phase IB areas are recommended for monitoring. Note that scope of monitoring is subject to change and additional areas maybe recommended following remaining Phase IB Survey efforts and additional Section 106 consultation with BOEM, NJHPO, consulting Native American Tribes, and other consulting parties. The recommended monitoring areas are described below in greater detail and are illustrated in Attachments A and B of this plan:

Larabee PAPE

- Paved ROW of the Edgar Felix Memorial Bikeway, located west of the intersection with the Wall Township Bike Path (Attachment A, Sheet 1)

Cardiff PAPE

- Paved Road ROW of Black Horse Pike (US Route 40) between Frankfort Court and US Route 9 (Attachment B, Sheet 1);
- Paved Road ROW of Black Horse Pike (US Route 40) located adjacent to Greenwood Cemetery (Attachment B, Sheet 2);

- Paved Road ROW of West Jersey Avenue between Black Horse Pike (US Route 40) and Haywood Avenue (Attachment B, Sheet 3);
- Paved Road ROW of West Jersey Avenue between Spruce Avenue and Fernwood Avenue, partially within 500 ft. of fresh surface water (Attachment B, Sheet 4)

O&M Facility PAPE

- Geotechnical boring at the O&M facility (exact locations to be determined) and during potential installation of pilings, should the geotechnical investigation uncover potentially intact soil deposits below well-documented fill.

7.0 TEMPORARY AVOIDANCE MEASURES

This section is reserved for the discussion of any site-specific avoidance measures that will be enacted for any potential archaeological sites which may be identified within the PAPE following the conclusion of upcoming Phase IB archaeological survey. It is expected that any potential sites that require avoidance and the measures enacted to avoid those sites will be agreed upon as part of the Section 106 consultation process.

Avoidance measures may include the installation of orange safety fencing, t-posting and flagging, signage, and/or monitoring. Any fencing and/or signage will be installed by the Cultural Monitor and/or other archaeological staff. The Archaeological Monitor will be given at least two weeks' notice prior to any construction or installation activities in the area to coordinate installation of the avoidance measures. Avoidance measures will be maintained for the duration of any construction or installation activities in the area and this maintenance will be the responsibility of the Developer Compliance Manager. Signage will indicate avoidance of the area but will not include reference to any archaeological sites or materials.

8.0 PROCESS FOR DETERMINING IF MONITORING A CONSTRUCTION ACTIVITY IS NECESSARY

It is expected that cultural monitoring of construction and installation activities will be recommended for targeted portions of the proposed Onshore Interconnection Facilities pending

review of the results of the Phase IB survey by BOEM, NJHPO, and relevant Consulting Parties. Native American Tribes may also request cultural monitoring in areas they determine to be culturally sensitive during Section 106 consultations. If the Construction Contractor and Construction Personnel have questions about whether monitoring is necessary for a specific activity, they will contact the Projects' designated Cultural Resources Manager), who will consult with BOEM cultural staff to receive a decision.

9.0 REPORTING

The Archaeological Monitor will submit written weekly updates via email (with photographs, if applicable), at the end of day on every Friday, providing a summary of the week's activities, and a look-ahead of upcoming activities. Monitoring may not take place every week, however, the Archaeological Monitor will be onsite whenever Construction Contractor(s) are conducting construction and installation activities in the recommended portions of the proposed Onshore Interconnection Facilities. A compiled Monitoring Report will be provided within 6 months of the completion of construction and installation activities for the proposed Onshore Interconnection Facilities. It will include:

- A summary of the monitoring effort;
- Any site form updates (if needed) and/or newly recorded sites that were inadvertently discovered during construction;
- Any Site Specific Treatment Plans devised (if applicable, see Section 9.0 below); and
- Reference to any in-progress Phase II/III survey reports, if applicable.

10.0 POST REVIEW DISCOVERIES

10.1 Post Review Discovery Procedures and Notifications

In the event that an unanticipated archaeological discovery occurs, procedures and notifications will include the following:

- **Post Review Discovery:** If previously unidentified cultural materials/features are identified during monitoring, the Construction Contractor will notify the Archaeological/Tribal Monitor and request an expedited field evaluation. The Cultural Resource Manager will provide immediate notification to BOEM, the Bureau of Safety and Environmental Enforcement (BSEE), NJHPO, consulting Native American Tribes, and other relevant Consulting Parties. If the cultural materials/features can be entirely avoided by the construction and installation activities, a stop-work order is not required, and the previously unidentified cultural materials/features can be summarized as part of the weekly monitoring update and reported on in the Monitoring Report (and any associated Site Form), when construction and installation activities for the Projects are completed (see Section 9.0).
- **Inadvertent/Unanticipated discovery:** If unanticipated archeological discovery of a potentially significant resource occurs during onshore construction, and continuing construction in the immediate vicinity (100 ft.) would be incompatible with the objective of preserving the quality and integrity of the resource, Atlantic Shores (or the Construction Contractor(s)) shall stabilize the area, if necessary to protect the resource, and immediately cease all ground-disturbing activities in the immediate vicinity (100 ft.) of the find and protect the find from further damage. Atlantic Shores (or the Construction Contractor(s)) will notify the Cultural Resources Manager and the Archaeological/Tribal Monitor(s) of the discovery and request an expedited field evaluation. The restricted areas would extend 100 ft. from the maximum discernable limit of the archaeological resource, or further at the discretion of the Archaeological Monitor. The only earth-moving activities that may occur within the restricted areas prior to notifications are those necessary for immediate stabilization of the exposed archaeological feature or deposit. Atlantic Shores (or the Construction Contractor(s)) shall flag, fence off, or securely cover with steel plates the archaeological discovery location and take reasonable measures to ensure site security. If any member of the construction workforce believes that potential archaeological materials/artifacts or stone features have been encountered and the Archaeologist is not on-site, he/ or she/they will be required to stop work in the immediate vicinity of the find.

and notify the Developer Compliance Manager. If the Archaeological and/or Tribal Monitor is onsite and a potential discovery is made, construction staff will stop work in the immediate vicinity of the find and notify the Monitor of the potential findings. If human remains are involved, the procedure described in Section 10.2 concerning human remains will be followed.

- **Do Not Disturb Potential Archaeological Materials:** The potential archaeological features and/or artifacts will be left in place and not disturbed. No materials will be collected or removed until appropriate consultation has taken place and a plan of action has been developed. If artifacts are discovered after they have been removed from the ground, the Archaeological Monitor will carefully secure such artifacts to prevent further damage. If the Archaeological Monitor is not on-site at the time of discovery, the Developer Compliance Manager will secure any artifacts that have been inadvertently removed from the ground. No artifacts or potential cultural materials shall be removed from the site of the discovery prior to the arrival of the designated Archaeological/Tribal Monitor.
- **Stop Work Order – Protect and Secure Potential Archaeological Materials:** If Atlantic Shores (or its contractors/consultants) believe that an unanticipated discovery has been made, all ground-disturbing activities within 100 ft. of the discovery will be stopped until such time as it is determined that construction in this area may continue. Atlantic Shores will be responsible for taking appropriate steps to protect and secure the evidence of the discovery. Construction Personnel will delineate the immediate area of the discovery with flagging tape and/or construction fencing. Open trenches or other excavations will be covered with available materials (such as steel plates, plywood, and/or plastic sheeting) as necessary, to secure the discovery and ensure public safety. The area will be regarded as off-limits but will not be identified as an archaeological site in order to protect the resource via discretion and confidentiality. Vehicles and equipment may be permitted by the Archaeological/Tribal Monitor's approval to traverse the area surrounding the delineated area if necessary; however, such movement will be minimized to the extent practical, and no vehicles or equipment will be permitted within the delineated area.

- **Notification Process for Potential Archaeological Materials:** Within 24 hours of the identification of a potentially significant discovery, as determined by the Archaeological Monitor and/or Cultural Resources Manager, Atlantic Shores will notify BOEM, BSEE, NJHPO, and other applicable Consulting Parties. Contact information for BOEM, BSEE, NJHPO and other Consulting Parties are listed the Notifications Contacts List in Section 11.0. No construction activities will be permitted in the vicinity of the find until such time as the significance of the resource has been evaluated by BOEM and NJHPO and the need for and scope of impact mitigation has been determined by BOEM, BSEE, NJHPO, and other applicable Consulting Parties. Any discovery made on a weekend will be protected until the parties identified above are notified of the discovery. No construction activities shall be permitted in the vicinity of the find until such time as the significance of the resource has been evaluated by NJHPO (per the process outlined below) and the need for and scope of impact mitigation has been determined in consultation with BOEM, NJHPO, and Atlantic Shores.
- **Determination of Native American Resource:** If the archaeological resource is Native American in nature, Atlantic Shores will request that BOEM notify representatives of the appropriate Native American Nation(s) listed in the Notifications Contact List (see Section 11.0).
- **Notification to BOEM and NJHPO following Site Visit:** Atlantic Shores' Archaeologist will examine/review the finds and provide additional information to BOEM and NJHPO. The additional information will either:
 - Explain why the Archaeologist believes the resource is not significant with respect to the S/NRHP; or
 - Explain why the Archaeologist believes the resource to be potentially significant with respect to the S/NRHP and propose a Site-Specific Treatment Plan for evaluating the significance of the resource and evaluating Onshore Facilities-related impacts to it. Atlantic Shores anticipates that the proposed Site-Specific Treatment Plan would provide a basis for initiating consultation with BOEM, NJHPO, and applicable Consulting Parties (see Section 11.0). Atlantic Shores and

BOEM, in consultation with the NJHPO and Consulting Parties, as necessary, will discuss options and develop a plan for the treatment of unanticipated significant discoveries.

- **Site Specific Treatment Plan:** Atlantic Shores will submit the Site-Specific Treatment Plan to BOEM, BSEE, NJHPO, and other Consulting Parties identified through BOEM's Section 106 consultations within one week of notification to BOEM following the identification of a potentially S/NRHP significant resource. If the proposed mitigation measures within the Site Specific Treatment Plan can reasonably be conducted concurrently with ongoing Onshore Facilities construction, the submission to BOEM and NJHPO will be accompanied by a request to resume construction in the area of the discovery.
- **Written Authorization to Proceed:** Proposed mitigation measures will not proceed until Atlantic Shores receives written authorization, following consultation with BOEM, BSEE, NJHPO, and applicable Consulting Parties. Atlantic Shores will notify BOEM, BSEE and NJHPO at the completion of all mitigation measures. If construction has been halted during mitigation, Atlantic Shores will also request authorization from BOEM and NJHPO to resume construction at the conclusion of mitigation.
- **Summary Report:** Atlantic Shores will submit a summary report describing the results of the Site Specific Treatment Plan's mitigation measures to BOEM within a reasonable timeframe from the completion of mitigation fieldwork. The time required to complete the Summary Report may vary depending on the specific circumstances and the nature of any significant archaeological properties subject to mitigation. Atlantic Shores anticipates that reporting of most mitigation activities would be completed within six months of the conclusion of field investigations. All such reporting would be completed within one year of the conclusion of field investigations unless otherwise agreed in writing among Atlantic Shores, BOEM, and NJHPO. Atlantic Shores shall ensure that all archaeological or human remains-related encounters and their handling are reported in the status reports summarizing construction activities.
- **Phase III Report:** If archaeological data recovery is conducted, a full Phase III report will be submitted to BOEM, BSEE, NJHPO, consulting Native American Tribes, and other

Consulting Parties identified through BOEM's Section 106 consultations based on a schedule to be established as part of review of the Site-Specific Treatment Plan.

10.2 Human Remains Protocol

Should potential human remains, evidence of human burials, and/or funerary objects be encountered during the conduct of archeological fieldwork or during construction, all work in the vicinity of the find shall be halted until further notice for the remains to be protected from further disturbance. Atlantic Shores will immediately contact BOEM, NJHPO, the county coroner/medical examiner, local law enforcement, and all Consulting Parties identified herein. The potential remains/funerary objects will be treated with respect, left in situ by all on site personnel, and protected from further disturbance. All such remains will be secured and protected pending completion of the notification and consultation procedures described below. If human remains or funerary objects are determined to be Native American, a treatment plan will be developed in consultation with the BOEM and the appropriate Tribal Nations, consistent with established protocols and guidance. This will include the Advisory Council on Historic Preservation's (ACHP) "Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects" (ACHP, 2023; Attachment C) and may be modified based on information gathered through engagement with consulting Tribal Nations.

The ACHP human remains policy requires temporary suspension of activity in the vicinity of the discovery, protection of discovered remains, notification of NJHPO and Native American representatives, and consultation regarding treatment of remains. The coroner and local law enforcement will make the official ruling on the nature of the remains, being either forensic or archaeological. A decision concerning avoidance or hand excavation of the burial and final disposition of the remains shall be made by BOEM in consultation with the Consulting Parties and consistent with all applicable state statutes and regulations.

If obviously non-human (i.e., animal) skeletal remains are discovered, the procedures outlined in Section 10.1 of this Protocol will be followed. The following protocol for dealing with skeletal remains will be followed during any circumstances in which any possible human skeletal remains

are identified during construction activities ("skeletal remains" is defined as any articulated or disarticulated bones or teeth).

- **Respect Human Remains:** It is crucial that all human remains (or possible human remains) be treated with the utmost respect and dignity.
- **Unanticipated Discovery Involving Possible Human Skeletal Remains:** Any member of the construction team who believes an unanticipated discovery involving possible human skeletal remains has occurred is required to stop work in the immediate vicinity of the discovery and notify the Developer Compliance Manager.
- **Plan of Action:** Human remains and associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.
- **Area of Discovery:** If Atlantic Shores believes that possible human skeletal remains have been discovered, they will immediately stop all work within 100 ft. of the discovery location until it is confirmed that construction may resume. The area of the discovery will immediately be protected and secured by (at a minimum) the installation of flagging tape and/or construction fencing delineating the discovery location. The area will be regarded as off-limits but will not be identified publicly as an archaeological site or the location of skeletal remains in order to protect the resource via discretion and confidentiality. Vehicles and equipment may be allowed to pass through the area surrounding the discovery, if necessary; however, such movement will be minimized, and no vehicles or equipment will be permitted within the delineated area around the discovery. No additional work or examination will occur until the county coroner and local law enforcement have arrived on the scene and made an official ruling on the nature of the remains (i.e., if they are forensic or archaeological in nature).
- **Notification Upon Discovery:** Upon the discovery of potential human remains, Atlantic Shores will immediately notify BOEM, BSEE, NJHPO, the appropriate Native American Nations, Atlantic Shores' Archaeologist, the coroner, and local law enforcement listed in the Notifications Contact List (see Section 11.0), via telephone and email. The

Archaeologist will examine the remains as soon as possible, make a preliminary assessment of their nature (i.e., if they are human or non-human), and immediately notify the parties listed above of the results of the preliminary assessment.

- **Examination of Skeletal Remains:** As soon as possible following the discovery, law enforcement personnel and the Archaeologist will examine the skeletal remains at the site and determine if they are human.
- **Determination of Animal Remains:** If the remains are determined to be animal (i.e., non-human), the Archaeologist will assess whether they occur in an archaeological context. Additionally, if the remains are determined to be animal, Atlantic Shores will immediately notify the parties listed the Notifications Contact List (see Section 11.0) that no human remains were identified.
- **Determination of Animal Remains in an Archaeological Context:** If the remains are non-human and are determined to occur in an archaeological context, the procedures outlined in Section 10.1 of this Protocol will be followed.
- **Determination of Animal Remains without Archaeological Context:** If the remains are non-human and the Archaeologist determines no archaeological resource is present, they will immediately advise the Developer Compliance Manager. Atlantic Shores will consult with BOEM and NJHPO to request that construction may resume at the discovery site. The Archaeologist will prepare and submit a letter including photographs of the (non-) discovery site to Atlantic Shores within a reasonable timeframe.
- **Determination of Human Remains:** If local law enforcement and/or the Archaeologist determines the remains are human, the county coroner, BOEM, BSEE, NJHPO, and appropriate Native American Nations will be notified immediately (see Section 11.0). No additional work or examination will occur until the county coroner and local law enforcement have arrived on the scene and made an official ruling on the nature of the remains (i.e., if they are forensic or archaeological in nature). If the coroner or law enforcement rules the remains to be archaeological in nature, Atlantic Shores will prepare a Site-Specific Treatment Plan (see Section 10.1).

- **Determination of Native American Human Remains:** If the human remains are determined to be archaeological and if the Archaeologist identifies them as Native American in origin, the remains will be left in place and protected from further removal or disturbance until the feasibility of their avoidance by further disturbance can be assessed in consultation with BOEM, appropriate Native American Nations, and NJHPO. Note that Atlantic Shores understands that avoidance is preferred by the NJHPO and the Native American Nations (see ACHP, 2023).
- **Determination of non-Native American Human Remains:** If human remains are determined to be archaeological but non-Native American, they will be left in place and protected until a Site-Specific Treatment Plan for avoidance or removal is developed through consultation with BOEM, NJHPO, and the corresponding County Medical Examiner's Office (see Section 11).
- **Site-Specific Treatment Plan – Special Consideration:** The Site-Specific Treatment Plan will give special consideration to the presence of human remains. Proposals will also include provisions for evaluating the area for the presence of additional graves.

11.0 NOTIFICATIONS CONTACT LIST

Atlantic Shores and Subcontractors	
Atlantic Shores Kyle Hilberg Project Developer (281) 544-9084 Kyle.Hilberg@atlanticshoreswind.com	Atlantic Shores Developer Compliance Manager TO BE DETERMINED
Cultural Resources Consultant/Archaeologist Daniel Forrest Environmental Design and Research (860) 367-5754 dforrest@edrdpc.com	
State Agencies	
New Jersey Historic Preservation Office (NJHPO) Jesse West-Rosenthal Historic Preservation Specialist 2 (609) 984-6019 Jesse.West-Rosenthal@dep.nj.gov	
Federal Agencies	
Bureau of Ocean and Energy Management (BOEM) Sarah Stokely Section 106 Lead 45600 Woodland Road VAM-OREP Sterling, Virginia 20166 (571) 460-9954 sarah.stokely@boem.gov	Bureau of Safety and Environmental Enforcement (BSEE) Shawn Arnold, FPO, Senior Marine Archaeologist and Barry Bleichner, Marine Archaeologist Office of Environmental Compliance 1201 Elmwood Park Blvd. New Orleans, LA 70123 (504) 736-2416 (Arnold) (504) 736-2947 (Bleichner) William.arnold@bsee.gov barry.bleichner@bsee.gov
Federally Recognized Tribes	
Shinnecock Indian Nation Rainbow Chavis Director, Shinnecock Cultural Resources Department and Jason Cofield, Director of Tribal Operations The Shinnecock Indian Nation P.O. Box 5006, 100 Church Street Southampton, NY 11969 culturalresources@shinnecock.org Cofield@shinnecock.org	Mashpee Wampanoag Tribe David Weeden Tribal Historic Preservation Officer 483 Great Neck Road, South Mashpee, MA 02649 (774) 327-0068 david.weeden@mwtribe-nsn.gov

<p>Wampanoag Tribe of Gay Head (Aquinnah) Bettina Washington Tribal Historic Preservation Officer 20 Black Brook Road Aquinnah, MA 02535-1546 (508) 560-9014 thpo@wampanoagtribe-nsn.gov</p>	<p>Delaware Tribe of Indians Susan Bachor Deputy Tribal Historic Preservation Officer Delaware Tribe Historic Preservation 126 University Circle Stroud Hall, Room 437 East Stroudsburg, Pennsylvania 18301 (570) 422-2023 sbachor@delawaretribe.org</p>
<p>Narragansett Indian Tribe John Brown III Tribal Historic Preservation Officer P.O. Box 268 Charlestown, RI 02813 (401) 491-9459 tashtesook@aol.com</p>	<p>The Delaware Nation Carissa Speck Historic Preservation Director The Delaware Nation 310064 US Highway 281, Building 100 PO Box 825, Anadarko, OK 73005 (405) 247-2488, Ext. 1403 cspeck@delawarenation-nsn.gov</p>
<p>Stockbridge-Munsee Community Band of Mohican Indians Jeff Bendremer, PhD, MA, RPA Tribal Historic Preservation Officer Stockbridge-Munsee Community Band of Mohican Indians 86 Spring Street Williamstown, MA 01267 thpo@mohican-nsn.gov</p>	<p>Mashantucket (Western) Pequot Tribal Nation, Michael Kickingbear Johnson Acting Tribal Historic Preservation Officer Tribal Historic Preservation Office Indiantown Rd. PO Box 3060 Mashantucket, CT 06339-3060 (860) 396-7575 mejohanson@mptn-nsn.gov</p>
<p>Seneca Nation of Indians Rickey Armstrong, Sr. President 90 Ohi:yo' Way Salamanca, NY 14779 (918) 542-2441</p> <p>and</p> <p>Dr. Joe Stahlman THPO Director/Seneca-Iroquois National Museum Onöhsagwë: De' Cultural Center 82 W. Hetzel St. Salamanca, New York 14779 (918) 542-2441 x103 joe.stahlman@sni.org</p>	<p>Eastern Shawnee Tribe of Oklahoma Paul Barton THPO/Cultural Preservation Director Eastern Shawnee Tribe of Oklahoma 70500 East 128 Road Wyandotte, OK 74370 PBarton@estoo.net (918) 238-5151 x1833</p>

Seneca-Cayuga Nation (of Oklahoma) William Tarrant THPO PO Box 453220 Grove, OK 74344 wtarrant@sctribe.com (918) 787-5452 ext. 6061	
State Law Enforcement	
Southern Region Medical Examiner Office (Atlantic County) Woodbine Developmental Center 1175 DeHirsch Avenue Woodbine, NJ 08270-2401 (609) 861-3355 (Phone) (609) 909-7200 (24-hour line)	Law Enforcement Agency (Atlantic County) Atlantic County Sherriff Eric Scheffler 4997 Unami Boulevard Mays Landing, NJ 08330 (609) 909-7200 (Main Office) (609) 909-7292 (Fax)
Office of the Medical Examiner (Monmouth County) Office of the Medical Examiner 1490 Livingston Avenue North Brunswick, NJ 08902 (732) 745-3190 (Phone) (732) 745-3491 (Fax)	Law Enforcement Agency (Monmouth County) Monmouth County Sherriff Shaun Golden 2500 Kozloski Road Freehold, NJ 07728 (732) 431-6400 (Main Office)

REFERENCES

Advisory Council on Historic Preservation (ACHP). 2023. *Policy Statement Regarding the Treatment of Burial Sites, Human Remains, and Funerary Objects*. ACHP, Washington, DC.

Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR). 2020. *Phase IB Archaeological Survey, South Fork Export Cable: Beach Lane – Route A, Town of East Hampton, Suffolk County, New York*. Prepared for South Fork Wind, LLC. December 2020. Available at: https://www.boem.gov/sites/default/files/documents/renewable-energy/App%20S2_SFW_Phase%20IB%20Onshore%20Archaeological%20Report.pdf (Accessed October 2020).

EDR. 2021. *Phase IA Terrestrial Archaeological Resources Assessment, Atlantic Shores Offshore Wind Project – Operations and Maintenance Facility, Atlantic City, Atlantic County, New Jersey*. Prepared for Atlantic Shores Offshore Wind, LLC. December 2021, revised April, and December 2023.

EDR. 2022a. *Sunrise Wind Farm Project, Phase IB Terrestrial Archaeological Resources Assessment – Sunrise Wind Onshore Facilities*. Prepared for Sunrise Wind LLC. May 2022.

EDR. 2022b. *Terrestrial Archaeological Resources Assessment, Atlantic Shores Offshore Wind Project – Onshore Interconnection Facilities, Monmouth and Atlantic County, New Jersey*. Prepared for Atlantic Shores Offshore Wind, LLC. August 2022, revised February October, November, and December 2023.

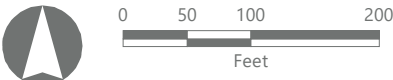
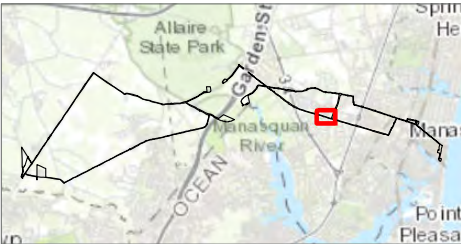
EDR. 2022c. *Historic Resources Visual Effects Assessment, Atlantic Shores Offshore Wind – Wind Turbine Area*. Prepared for Atlantic Shores Offshore Wind, LLC. August 2022.

Attachment A
Larrabee PAPE - Recommended Areas for Monitoring



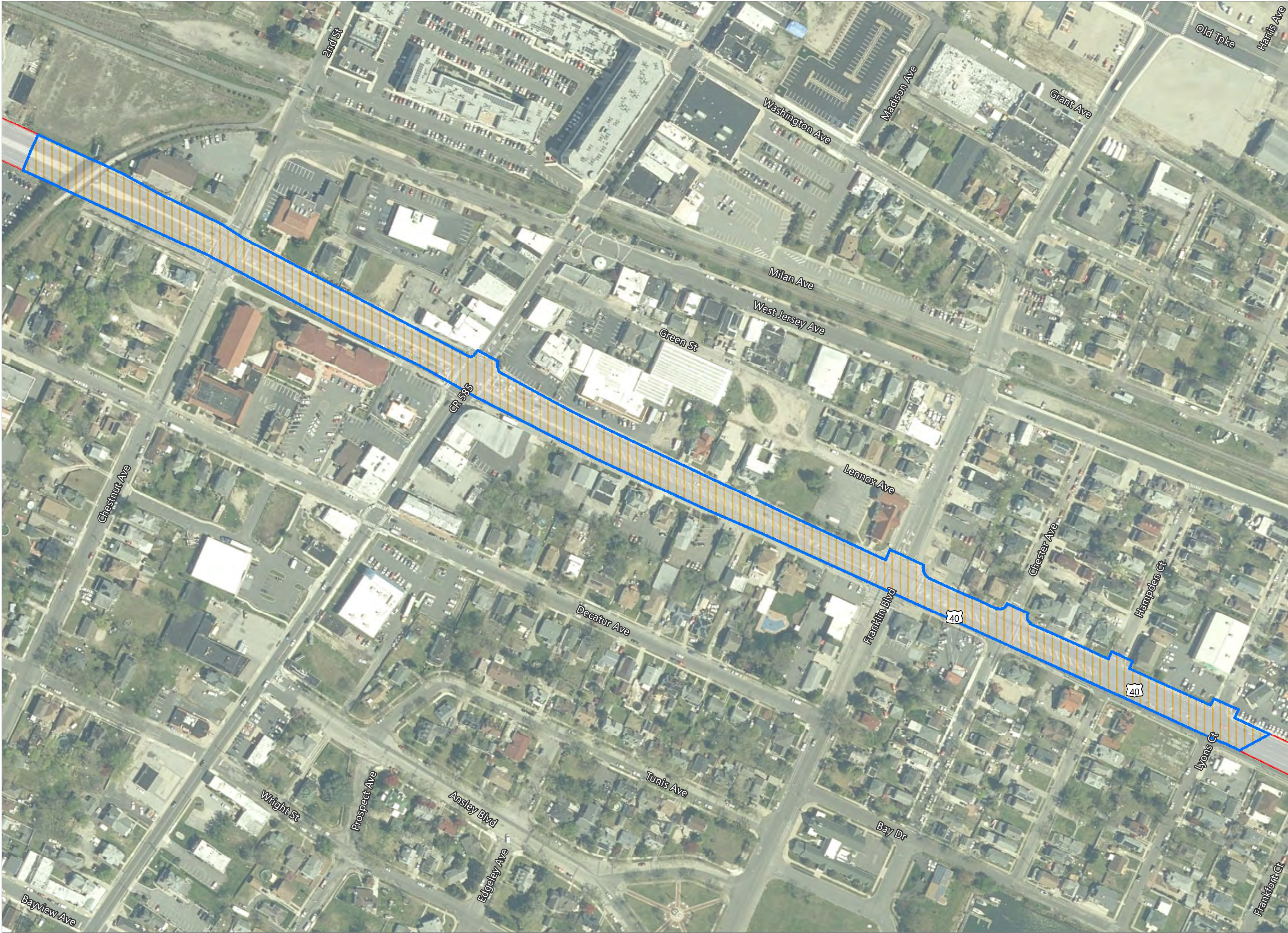
**Atlantic Shores South
Offshore Wind Project –
Onshore Interconnection
Facilities**
Monmouth and Atlantic County, NJ
**Archaeological Monitoring Plan and
Post Review Discoveries Plan:
Terrestrial Archaeological Resources**

- Area Recommended for Monitoring
- Larrabee PAPE Boundary
- Archaeological Sensitivity
 - Excluded from Field Survey Consideration
 - Medium Sensitivity
 - Medium-High Sensitivity
 - Roadway/Paved Medium-High Sensitivity
 - Roadway/Paved



Prepared October 30, 2023
Basemap: NJ Office of Information Technology and Office of GIS
"NJ 2020 Natural Color Imagery"

Attachment B
Cardiff PAPE - Recommended Areas for Monitoring

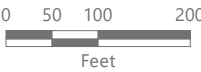
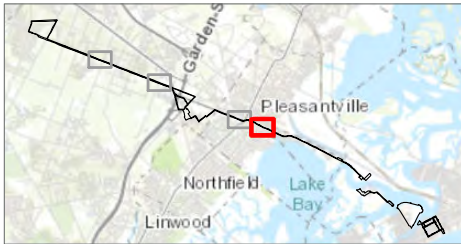


**Atlantic Shores South
Offshore Wind Project –
Onshore Interconnection
Facilities**

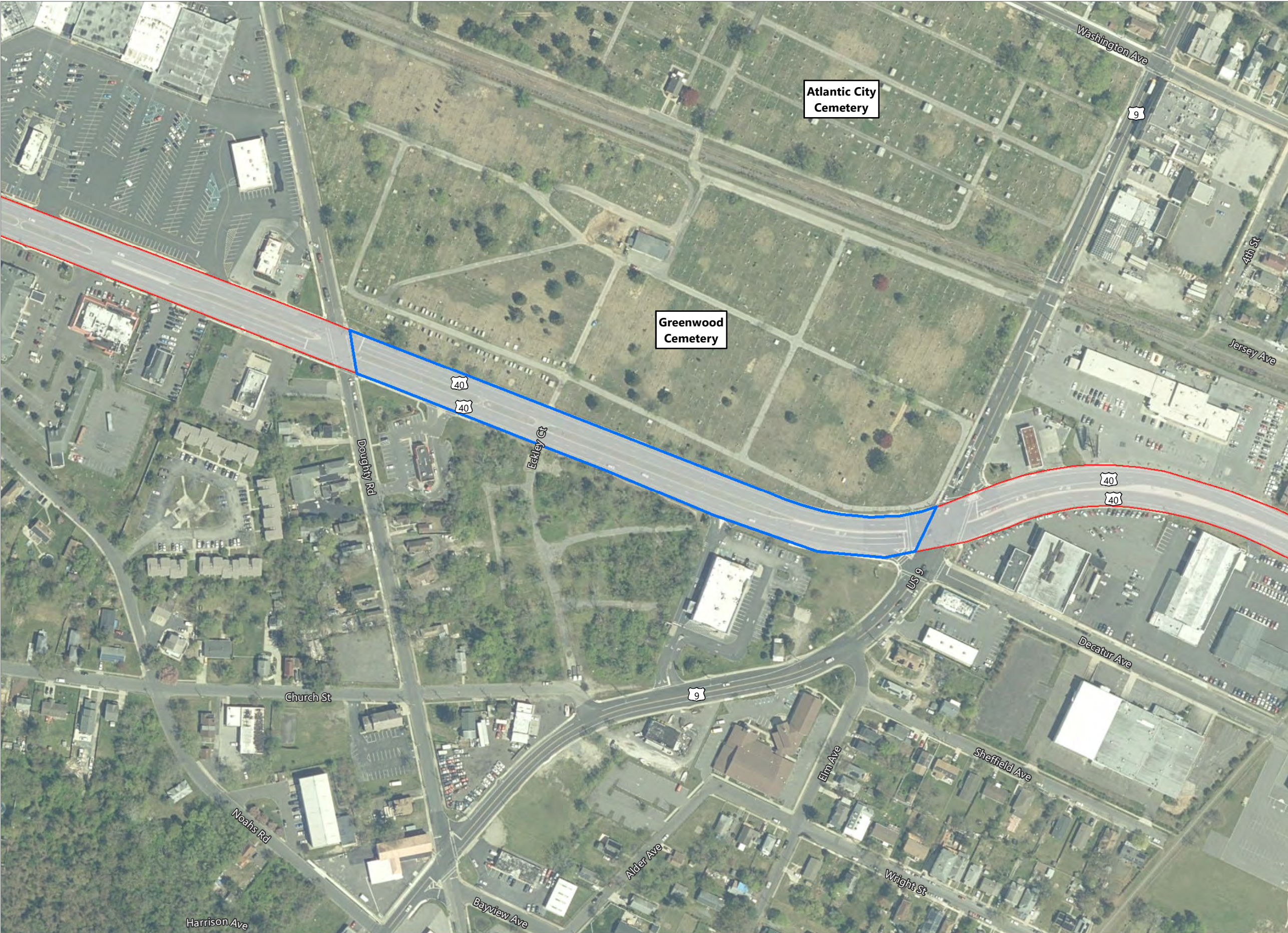
Monmouth and Atlantic County, NJ

**Archaeological Monitoring Plan and
Post Review Discoveries Plan:
Terrestrial Archaeological Resources**

- Area Recommended for Monitoring
- Cardiff PAPE Boundary
- Archaeological Sensitivity
 - Roadway/Paved Medium-High Sensitivity
 - Roadway/Paved



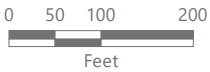
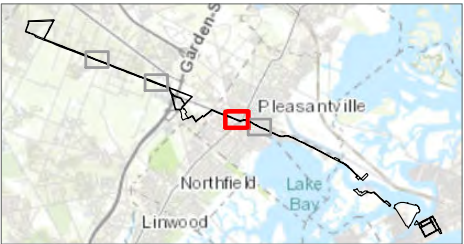
Prepared October 30, 2023
Basemap: NJ Office of Information Technology and Office of GIS
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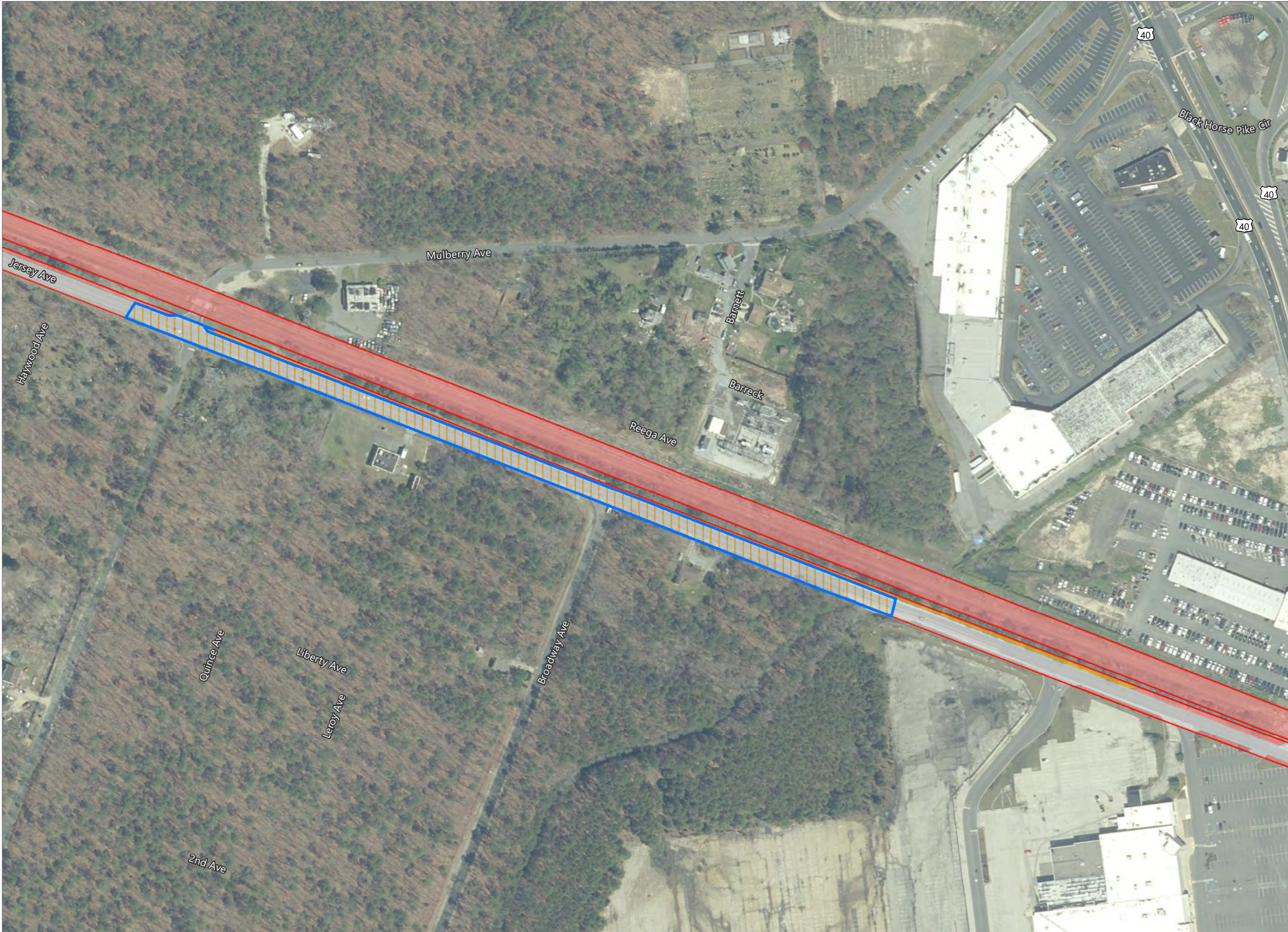
**Atlantic Shores South
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Monmouth and Atlantic County, NJ
**Archaeological Monitoring Plan and
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Terrestrial Archaeological Resources**

- Area Recommended for Monitoring
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- Archaeological Sensitivity
 - Roadway/Paved



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"NJ 2020 Natural Color Imagery"



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Monmouth and Atlantic County, NJ

**Archaeological Monitoring Plan and
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Terrestrial Archaeological Resources**

Area Recommended for Monitoring

Cardiff PAPE Boundary

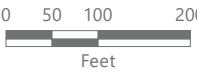
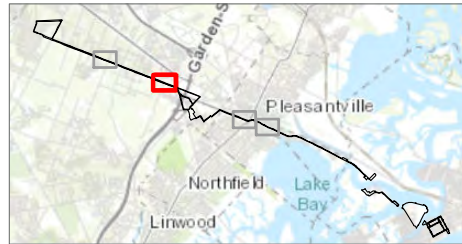
Archaeological Sensitivity

Area Excluded from Field Survey Consideration

Medium-High Sensitivity

Roadway/Paved Medium-High Sensitivity

Roadway/Paved




Prepared October 30, 2023
Basemap: NJ Office of Information Technology and Office of GIS
"NJ 2020 Natural Color Imagery"



**Atlantic Shores South
Offshore Wind Project –
Onshore Interconnection
Facilities**

Monmouth and Atlantic County, NJ

**Archaeological Monitoring Plan and
Post Review Discoveries Plan:
Terrestrial Archaeological Resources**


 Area Recommended for Monitoring


 Cardiff PAPE Boundary

Archaeological Sensitivity

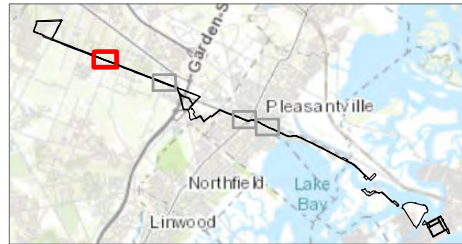
 Area Excluded from Field Survey Consideration

 Low Sensitivity

 Medium-High Sensitivity

 Roadway/Paved Medium-High Sensitivity

 Roadway/Paved



0 50 100 200
Feet

Prepared October 30, 2023
Basemap: NJ Office of Information Technology and Office of GIS
"NJ 2020 Natural Color Imagery"

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Attachment C
Human Remains Protocols and Guidance



ADVISORY COUNCIL ON HISTORIC PRESERVATION POLICY STATEMENT ON BURIAL SITES, HUMAN REMAINS, AND FUNERARY OBJECTS

March 1, 2023

Preamble. The Advisory Council on Historic Preservation (ACHP) developed this policy statement to establish a set of principles and rules that the ACHP will encourage federal agencies to adopt as they carry out their day-to-day responsibilities under Section 106 of the National Historic Preservation Act (NHPA). This statement also establishes a set of standards and guidelines that federal and state agencies, local entities, Indian Tribes, industry applicants, and other relevant entities should, at a minimum, seek to implement in order to provide burial sites, human remains, and funerary objects the consideration and protection they deserve.

This policy statement is not bound by geography, ethnicity, political or socioeconomic status, or a system of belief and recognizes that the respectful consideration for burial sites, human remains, and funerary objects is a human rights concern shared by all. However, the burial sites, human remains, and funerary objects of certain groups of people, including but not limited to Indian Tribes, Native Hawaiians, enslaved Africans and their descendants, and other Indigenous Peoples, have a higher probability of being unmarked and undocumented and thus more likely to be affected by development projects. As such, this policy statement emphasizes the need for consultation and coordination with those communities, including seeking consensus in decision making and providing deference to their practices, protocols, and preferences, where feasible.

Section 106 requires agencies to consult and seek agreement with consulting parties on measures to avoid, minimize, or mitigate adverse effects to historic properties. Accordingly, and consistent with Section 106, this policy does not recommend a specific outcome from the consultation process. Rather, it focuses on issues and perspectives that federal agencies should consider while carrying out their consultation and decision-making responsibilities. The ACHP will incorporate these principles in its work and encourages federal agencies and other entities to apply the principles in this policy any time there is potential to encounter burial sites, human remains, or funerary objects.

In many cases, burial sites, human remains, and funerary objects are subject to other applicable federal, Tribal, state, or local laws or protocols that may prescribe a specific outcome, such as the Native American Graves Protection and Repatriation Act (NAGPRA). In those scenarios, the federal agency should identify and follow all applicable laws or protocols and implement any prescribed outcomes. NHPA and NAGPRA are separate and distinct laws, with separate and distinct implementing regulations and categories of parties that must be consulted.¹ Compliance with one of these laws does not equate to or fulfill the compliance requirements of the other. Implementation of this policy and its principles does not, in any way, change, modify, or detract from NAGPRA or other applicable laws.

Authority: The authority for this policy stems from the ACHP's statutory responsibility to advise on matters relating to historic preservation (which includes the role of Indian Tribes, Tribal Historic

¹ The ACHP's publication [Consultation with Indian Tribes in the Section 106 Process: The Handbook](#) (2021) and the National Association of Tribal Historic Preservation Officers' publication [Tribal Consultation: Best Practices in Historic Preservation](#) (2005) provide additional guidance.

Preservation Officers [THPOs], and Native Hawaiian organizations [NHOs] in that process), to advise the President and Congress regarding historic preservation matters, and to recommend methods to federal agencies to improve the effectiveness, coordination, and consistency of their historic preservation policies. While the ACHP recognizes that not all burial sites, human remains, and funerary objects may constitute or be associated with historic properties eligible for or listed in the National Register of Historic Places, the consideration and treatment of such places fall within the concerns of the historic preservation community.²

This policy statement recognizes the unique legal and political relationship between the federal government and federally recognized Indian Tribes as set forth in the Constitution of the United States, treaties, statutes, and court decisions, and acknowledges that the federal Indian trust responsibility is a legal obligation under which the United States “has charged itself with moral obligations of the highest responsibility and trust” toward Indian Tribes.³ Part of the ACHP’s trust responsibility is to ensure that the regulations implementing Section 106 incorporate the procedural requirement that federal agencies consult with Indian Tribes and NHOs that attach religious and cultural significance to historic properties that may be affected by undertakings the federal agency proposes to carry out, license, permit, or assist.⁴ In general, the trust responsibility establishes fiduciary obligations on the part of federal agencies to Tribes, including a duty to protect Tribal lands and cultural and natural resources for the benefit of Tribes and individual Tribal members.

The ACHP views its trust responsibility as encompassing all aspects of historic resources including intangible values.⁵ As part of that trust responsibility, the ACHP offers this policy statement to inform how the Section 106 consultation process should consider burial sites, human remains, and funerary objects.

Principles. The care for and consideration of burial sites, human remains, and funerary objects is of significant social and moral consequence in the United States and U.S. territories. When burial sites, human remains, or funerary objects are or have the potential to be encountered during the planning or implementation of a proposed federal undertaking, the following principles should be adhered to:

Principle 1: Burial sites, human remains, and funerary objects should be treated with dignity and respect in all circumstances regardless of National Register eligibility or the circumstances of the action (i.e., exemptions, disaster, and emergencies). This includes, but is not limited to, all times prior to and during consultation, during field surveys, when handling must occur, in documenting and/or reporting, if treatment actions occur, and in all other forms of interaction.

Principle 2: Disturbing or disinterring burial sites, human remains, or funerary objects, when not requested by descendants, associated Indian Tribes or NHOs, or required by applicable law or regulation, should not be pursued unless there are no other alternatives available and only after consultation with descendants or other legally associated individuals or groups and fully considered avoidance of impact and preservation in place.

Principle 3: Only through consultation, which includes the early and meaningful exchange of information and a concerted effort to reach consensus, can informed decisions be made about the identification, documentation, National Register eligibility, and treatment of burial sites, human remains, and funerary objects.

² 54 U.S.C. §§ 304102 and 304108

³ *Seminole Nation v. United States*, 316 U.S. 286 (1942)

⁴ “[The Advisory Council on Historic Preservation’s Statement on Its Trust Responsibility](#)” (Advisory Council on Historic Preservation, 2004)

⁵ “[Policy Statement Regarding the Council’s Relationship with Indian Tribes](#)” (Advisory Council on Historic Preservation, 2000)

Principle 4: To the maximum extent possible, decision making should give deference to the treatment requests of descendants or other legally associated individuals or groups. Where known, and in accordance with applicable law, cultural practices of the descendants or associated groups should be followed if burial sites, human remains, or funerary objects may be encountered, are inadvertently identified, impacted, or must be disinterred.

Principle 5: The Indigenous Knowledge held by an Indian Tribe, NHO, or other Indigenous Peoples is a valid and self-supporting source of information. To the fullest extent possible, deference should be provided to the Indigenous Knowledge and expertise of Indian Tribes, NHOs, and Indigenous Peoples in the identification, documentation, evaluation, assessment, and treatment of their burial sites, human remains, and funerary objects.

Principle 6: Burial sites, human remains, and funerary objects are important in and of their own right. They may also constitute or be part of a sacred site and may include or incorporate several possible elements of historic significance including religious and cultural significance. The integrity of burial sites, human remains, and funerary objects is best informed by those who ascribe significance to them.

Principle 7: Burial sites, human remains, and funerary objects are frequently associated with cultural practices, sacred sites, Indigenous Knowledge, and other forms of culturally sensitive actions and/or information unique to a people. Maximum effort should be taken to limit the disclosure of confidential or sensitive information through all available mechanisms including, but not limited to, the proper handling and labeling of records, limiting documentation to necessary information, and through the application of existing law.

Principle 8: The federal Indian boarding school system directly targeted American Indian, Alaska Native, and Native Hawaiian children in the pursuit of a policy of cultural assimilation that coincided with territorial dispossession. In partnership with the historic preservation community, federal agencies should seek to implement the recommendations identified in the Department of the Interior's Federal Indian Boarding School Investigative Report by supporting community-driven identification, documentation, interpretation, protection, preservation, reclamation, and co-management of burial sites, human remains, and funerary objects across that system, including marked and unmarked burial areas, and supporting repatriation where appropriate.

Principle 9: The legacies of colonization, including cultural assimilation, forced relocation, and slavery, have led to an uneven awareness of where and why practitioners are likely to encounter burial sites, human remains, and funerary objects across the United States and its territories. The historic preservation community has a key role in expanding public education to support greater awareness of and consideration for the histories and lifeways of Indian Tribes, Native Hawaiians, African Americans, and Indigenous Peoples including recognizing and respecting the historical trauma that these groups and individuals may experience.

Principle 10: Access to and/or repatriation of burial sites, human remains, and funerary objects should be enabled through fair, transparent, and effective mechanisms developed in conjunction with descendant communities to the fullest extent of the law.

Principle 11: Human remains and funerary objects may be relocated or removed from a location by or at the request of descendent communities for a variety of reasons. The continued presence of human remains or funerary objects may not be essential to the ongoing significance and integrity of a site or its relevance to a broad theme in history. The historic significance and integrity of such sites are best determined in consultation with lineal descendants and/or associated communities.

Principle 12: Climate change can impact the burial sites, sacred sites, cemeteries, and associated cultural practices significant to Indian Tribes, NHOs, and other groups of people. Climate plans should be developed in consultation and should include mechanisms to support the advanced identification and protection or treatment of these locations.

Principle 13: Respectful consideration of burial sites, human remains or funerary objects may require additional assistance from consulting parties to properly identify, document, evaluate for National Register eligibility, and/or conduct treatment actions. If a federal agency requests or relies on an Indian Tribe, NHO, or other party to carry out activities that are the federal agency's responsibility under the NHPA, the Indian Tribe, NHO, or other consulting party should be reimbursed or compensated.⁶

Implementation of the Policy. Implementation of this policy statement is the responsibility of the ACHP's leadership and staff; however, the ACHP recognizes that appropriate expertise and experience to ensure effective implementation may also reside in other parties. Accordingly, the ACHP commits to advancing consideration of burial sites, human remains, and funerary objects in the Section 106 process with its preservation partners through the following:

- A. Train ACHP staff regarding the implementation of this policy statement.
- B. Development of informational resources that address the NHPA, Section 106, and the following:
 - i. The Federal Indian Boarding School Initiative
 - ii. The intersection of NAGPRA
 - iii. Acquiring and managing sensitive information
 - iv. Climate change and burial sites, human remains, and funerary objects
 - v. Best practices in the treatment of marked and unmarked burial sites, human remains, and funerary objects.
- C. ACHP staff will seek opportunities to implement the policy principles into Section 106 agreement documents and program alternatives to advance consideration of burial sites, human remains, and funerary objects.
- D. The ACHP will advise federal agencies, Indian Tribes, Tribal and State Historic Preservation Officers, and NHOs in their development of historic preservation protocols for appropriate consideration of burial sites, human remains, and funerary objects.
- E. Encourage federal agencies and other relevant parties to give full and meaningful consideration to burial sites, human remains, and funerary objects consistent with this policy statement.

Policy Review Period. The ACHP commits to reviewing this policy statement approximately every five years from the date of its adoption to ensure its continued applicability. The ACHP executive director will seek input regarding the need to update this policy statement through appropriate ACHP committees, including Federal Agency Programs and Native American Affairs. Amendments shall be pursued when the executive director or ACHP members determine that such action is required and/or would significantly improve the policy statement. This policy statement shall be in effect until rescinded by ACHP members.

Definitions. The definitions provided below are meant to inform the application of this policy statement. However, terms such as burial site, intact, disturbance, and human remains, among others, often require the input of associated parties to more fully understand how to interpret or apply each term. The

⁶ Consistent with ACHP's [Guidance on Assistance to Consulting Parties in the Section 106 Review Process](#), when the federal agency (or in some cases the applicant) seeks the views and advice of any consulting party in fulfilling its legal obligation to consult with them, the agency or applicant is not required to pay that party for providing its views.

definitions provided below are intended to be inclusive and to advance the preservation and protection of burial sites, human remains, and funerary items, as appropriate.

- **Burial Site:** Any location, whether originally below, on, or above the surface of the earth, where human remains are or have been located.
- **Confidential:** Information that is protected by law, regulation, or federal policy. Preserving authorized restrictions on information access and disclosure, including means for protecting personal privacy and proprietary information
- **Consultation:** The process of seeking, discussing, and considering the views of other participants and, where feasible, seeking agreement with them. A foundational activity in the Section 106 review process.
- **Consulting parties:** Persons or groups the federal agency consults with during the Section 106 process. They may include the State Historic Preservation Officer; Tribal Historic Preservation Officer; Indian Tribes and Native Hawaiian organizations; representatives of local governments; applicants for federal assistance, permits, licenses, and other approvals; and/or any additional consulting parties.⁷ Additional consulting parties may include individuals and organizations with a demonstrated interest in the undertaking due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking's effects on historic properties.⁸
- **Culturally sensitive:** Tangible and intangible property and knowledge which pertains to the distinct values, beliefs, and ways of living for a culture. It often includes property and knowledge that is not intended to be shared outside the community of origin or outside of specific groups within a community.⁹
- **Disturbance:** Disturbance of burial sites that are listed in or eligible for listing in the National Register of Historic Places likely would constitute an adverse effect under Section 106. An adverse effect occurs when "an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, setting, materials, workmanship, feeling, or association".¹⁰ Determination of what constitutes a "disturbance" should be defined in consultation with proper deference provided to the views and opinions of descendant individuals and/or communities.
- **Funerary objects:** Objects that, as part of the death rite or ceremony of a culture, are reasonably believed to be associated with human remains.
- **Historic property:** Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. It includes artifacts, records, and remains that are related to and located within such properties, and it includes properties of traditional religious and cultural importance to an Indian Tribe or Native Hawaiian organization and that meet the National Register of Historic Places criteria.¹¹
- **Human remains:** The physical remains of a human body including cremains, fragmented human remains, hair, and fluid, among other components. When human remains are believed to be comingled with other material (such as soil or faunal), the entire admixture should be treated as human remains.
- **Indian Tribe:** An Indian Tribe, band, nation, or other organized group or community, including a Native village, Regional Corporation or Village Corporation, as those terms are defined in Section 3 of the Alaska Native Claims Settlement Act¹², which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.¹³
- **Indigenous Knowledge (IK):** Information provided by an Indian Tribe, Tribal member, Native Hawaiian, or other Indigenous person uniquely reflective of their knowledge, experience, understanding, or observation relating to cultural resources, practices, or actions. Indigenous Knowledge often constitutes sensitive information.

⁷ Based on 36 CFR § 800.2(c)

⁸ 36 CFR § 800.2(c)(6)

⁹ "[Native American Archival Materials](#)," (First Archivist Circle, 2007)

¹⁰ 36 CFR § 800.5(a)(1)

¹¹ 36 CFR § 800.16(1)

¹² 43 U.S.C. § 1602

¹³ 36 CFR § 800.16(m)

- **Native Hawaiian:** Any individual who is a descendant of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the state of Hawaii.¹⁴
- **Native Hawaiian organization (NHO):** Any organization which serves and represents the interests of Native Hawaiians; has as a primary and stated purpose the provision of services to Native Hawaiians; and has demonstrated expertise in aspects of historic preservation that are significant to Native Hawaiians.¹⁵
- **Preservation in place:** Taking active steps to avoid disturbing a burial site, human remains, or funerary objects including, to the maximum extent practical, any access, viewsheds, setting, and/or ongoing cultural activity that may be associated with the location.
- **Section 106:** That part of the NHPA which establishes a federal responsibility to take into account the effects of undertakings on historic properties and to provide the ACHP a reasonable opportunity to comment with regard to such action.
- **Sensitive:** Information that may be protected by law, regulation, or federal policy; information that may be identified as sensitive by the sponsoring entity/original source.
- **State Historic Preservation Officer (SHPO):** The official appointed to administer a state's historic preservation program.¹⁶
- **Tribal Historic Preservation Officer (THPO):** The official appointed or designated to administer the Tribe's historic preservation program.¹⁷
- **Treatment:** Measures developed and implemented to avoid, minimize, or mitigate adverse effects to historic properties.

¹⁴ 36 CFR § 800.16(s)(2)

¹⁵ 36 CFR § 800.16(s)(1)

¹⁶ 54 U.S.C. § 302301

¹⁷ 54 U.S.C. § 302702



Policy Statement Regarding Burial Sites, Human Remains, and Funerary Objects: Explanations and Discussion

“The Advisory Council on Historic Preservation is committed to reorienting historic preservation for the good of all. We encourage federal agencies, state and local governments, and the private sector to do their part in implementing the principles advanced in this new policy—and to ensure that the burial areas and sacred objects of our ancestors are treated with the dignity and respect they deserve.” – Hon. Sara C. Bronin, Chair

Introduction. The Advisory Council on Historic Preservation (ACHP) voted unanimously to adopt its new “Policy Statement on Burial Sites, Human Remains, and Funerary Objects” (Burial Policy) on March 1, 2023. The Burial Policy establishes a set of standards and guidelines that federal and state agencies, contractors, and other relevant entities should, at a minimum, seek to implement in order to provide burial sites, human remains, and funerary objects the consideration and protection they deserve.

The Burial Policy was adopted in response to unfortunate and traumatic incidents of disturbance to these sites, remains, and objects, some of which occurred as federal agencies carried out the review of a proposed undertaking pursuant to Section 106 of the National Historic Preservation Act (NHPA). The Burial Policy formally recognizes that the places most often disturbed are those associated with Indian Tribes, Native Hawaiians, Indigenous People, racial and ethnic minorities, and low-income communities. It also acknowledges the impact of climate change on sites, cemeteries, and associated cultural practices, which further threatens their identification and protection.

The ACHP will implement the Burial Policy throughout its work, including its oversight of the Section 106 process, and recommend it to federal agencies and any applicants or developers seeking federal licenses or permits. However, the Burial Policy’s reach is not limited to the federal government; the ACHP encourages state and local governments, nongovernmental institutions, cultural resource management firms, and private developers to adhere to the 13 principles set forth in the Burial Policy.

How federal agencies can implement the Burial Policy. The Burial Policy is broadly applicable in all federal historic preservation responsibilities. Federal agencies are encouraged to implement the Burial Policy while completing their Section 106 responsibilities during the identification, evaluation, and treatment of historic properties, and the development and implementation of agreement documents and other program alternatives. However, the principles identified in the Burial Policy speak to a broad range of circumstances and considerations and are not limited to the Section 106 arena. The ACHP encourages federal agencies to tailor implementation of the Burial Policy to their unique mission and authorities in an effort to advance protection of these sites, remains, and objects.

Federal agencies should look to relevant principles and consider:

- Applying the principles as part of their ongoing federal historic property stewardship and cultural resources management actions, including under Sections 106 and 110 of the NHPA; Executive Order 13007: Indian Sacred Sites; Executive Order 14096: Revitalizing Our Nation’s Commitment to Environmental Justice for All; Executive Order 13175: Consultation and Coordination with Tribal

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Governments; as part of their climate change planning and response actions; and as a part of other relevant actions.

- In consultation, develop agency protocol or policy that further details how the agency intends to apply the principles in carrying out their historic preservation responsibilities.
- For Section 106 Programmatic Agreements (PAs) and Memoranda of Agreement (MOAs), work with consulting parties to incorporate and tailor as necessary the ACHP MOA template language regarding the Burial Policy's principles in unanticipated discovery stipulations for burial sites, human remains, or funerary objects.¹
- Incorporate the ACHP MOA template language or other references to the Burial Policy's principles in other relevant Section 106 MOA or PA stipulations (e.g., identification and documentation, avoidance or minimization, consultation or coordination, etc.) or in other Section 106 program alternatives.

How state and local government agencies can implement the Burial Policy. While the Burial Policy was developed with a focus on federal agency activities and federal preservation requirements, its principles can be applied when state or local governments have similar stewardship or planning review responsibilities in their jurisdictions. State and local governments may also have opportunities to implement relevant principles from the policy when consulting with federal agencies in the Section 106 review process. The ACHP encourages state and local governments to look to the Burial Policy for best practices in working to preserve and protect burial sites, human remains, and funerary objects.

How nongovernmental institutions and private developers can implement the Burial Policy.

Nongovernmental institutions and private developers can play a pivotal role in the protection of burial sites, human remains, and funerary objects. These organizations frequently work across federal, state, and local jurisdictions and the private sector. Through the application of internal guidance documents, codes of ethics, and other operating procedures that align with or adopt the principles contained in the Burial Policy, nongovernmental institutions and private developers, including cultural resources management firms, can support more effective and consistent consideration of these sites, remains, and objects.

Discussion. The following explanations are informed by comments and recommendations made by ACHP members and other consulting parties during the development of the Burial Policy. This document is intended to provide ACHP staff, federal agencies, and other interested parties with additional context, guidance, and advice on the interpretation and implementation of each principle.²

Principle 1: Burial sites, human remains, and funerary objects should be treated with dignity and respect in all circumstances regardless of National Register eligibility or the circumstances of the action. This includes, but is not limited to, all times prior to and during consultation, during field surveys, when handling must occur, in documenting and/or reporting, if treatment actions occur, and in all other forms of interaction.

The presence of human remains or funerary objects can give a location special importance as a burial area, cemetery, historic property,³ or as a sacred site.⁴ Federal agencies and state and local governments

¹ In implementing the policy, the ACHP recommends that federal agencies include the following template language in unanticipated discovery stipulations in Section 106 Memoranda of Agreement (MOAs) and Programmatic Agreements (PAs): **When applicable, the [Agency] will follow the principles within the ACHP's Policy Statement on Burial Sites, Human Remains, and Funerary Objects, dated March 1, 2023.** This template statement can be added to a stipulation tailored to the specific circumstances of an individual undertaking. While such a statement is not required, agencies are strongly encouraged to follow the principles in the policy statement and incorporate the reference when consulting to develop new MOAs and PAs; see [Guidance on Agreements Documents](#) (ACHP, n.d.) for additional information.

² See ACHP's [Policy Statement on Burial Sites, Human Remains, and Funerary Objects](#) for more information on the Policy.

³ Burial sites, human remains, and/or funerary objects should be treated with care and respect regardless of their ability to meet National Register eligibility criteria individually or as part of a larger site, district, TCP, or cultural landscape.

⁴ See [Executive Order 13007: Indian Sacred Sites](#) of May 24, 1996, and the 2021 [Memorandum of Understanding Regarding Interagency Coordination and Collaboration for the Protection of Indigenous Sacred Sites](#). Hereafter "Sacred Sites MOU."

should ensure that the actions of their staff, contractors, volunteers, and any other party under their direct supervision or control demonstrate respect for the beliefs and cultural practices of those who may be associated with the sites, remains, or objects they encounter. Respectful treatment includes all manner of interaction, including, but not limited to, physical handling, written and oral communication, and visual depictions. Prioritizing the use of respectful forms of documentation and communication may minimize harm experienced by associated communities⁵ if burial sites, human remains, or funerary objects are identified or impacted.

Through consultation with associated communities, including Indian Tribes and Native Hawaiian organizations (NHOs), federal agencies should discuss and, to the fullest extent of the law, seek agreement on what constitutes respectful treatment. Working toward consensus on these considerations is consistent with the intent of the Section 106 process and is best achieved through early and ongoing consultation and collaboration.

Principle 2: Disturbing or disinterring burial sites, human remains, or funerary objects, when not requested by descendants, associated Indian Tribes or NHOs, or required by applicable law or regulation, should not be pursued unless there are no other alternatives available and only after consultation with descendants or associated communities and fully considered avoidance of impact and preservation in place.

As a matter of practice and in accordance with applicable law, federal agencies and state and local governments should avoid impacting burial sites, human remains, and funerary objects including areas where there is the known potential for encountering them as they plan and carry out their actions or undertakings. Documentation or study should not be viewed as a justification for the disturbance or removal of such remains or objects without first consulting and seeking agreement with those associated with the site, remains, and/or objects.

When considering the potential to encounter or affect a burial site, human remains, or funerary objects, federal agencies and state and local governments should recognize that the size and makeup of burial sites can vary widely as they are reflective of the many unique cultures and belief systems in the United States and U.S. territories. These sites may do the following:⁶

- be associated with established and ongoing cultural practices.⁷
- require access for associated individuals or communities for ongoing care and maintenance.⁸
- be part of an ongoing culture's lifeways (see discussion under Principle 11 for more information).
- include funerary objects placed before, during, or after the time of death.
- be comprised of individuals or multiple people, including mass graves, or group burials.
- have resulted from events including warfare, slavery, disease, and other circumstances that inadvertently or intentionally limited the cultural continuation of death rites and burial practices.
- take various forms, including cremains, encased human remains, and fluids.
- be physically/culturally inseparable from the surrounding soils, plants, or other landscape features.
- include remains originally below, on, or above the surface of the earth, including water sources.

⁵ The term "associated individuals and communities" as used in this document is inclusive of all people in the United States including Indigenous people of the U.S. territories, Indian Tribes, NHOs, and other racial and ethnic groups.

⁶ This list reflects comments and contributions from consulting parties and ACHP leadership and is not exhaustive.

⁷ "Indigenous peoples have the right to practice and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites, artefacts, designs, ceremonies, technologies and visual and performing arts and literature," Article 11, [United Nations Declaration on the Rights of Indigenous Peoples](#). Hereafter "Declaration."

⁸ "Indigenous peoples have the right to manifest, practice, develop and teach their spiritual and religious traditions, customs and ceremonies, the right to maintain, protect, and have access in privacy to their religious and cultural sites; the right to the use and control of their ceremonial objects; and the right to the repatriation of their human remains," Article 12 of the Declaration.

To determine if a proposed undertaking might disturb and/or the extent of any potential impact to a burial site, human remains, or funerary objects that may result from an agency's actions, the federal agency should consult with and provide deference to the knowledge and expertise of associated communities (see Principles 2 and 3 for more information).

As the Burial Policy advocates, federal agencies should always plan to avoid known or probable locations of burial sites, human remains, and funerary objects altogether. However, when a federal agency's actions are necessary to comply with applicable law or regulation, or determines through consultation that the avoidance of impact is not possible, the agency should minimize disturbance⁹ to the maximum extent practical.¹⁰ Accordingly, removal of human remains or funerary objects should only occur when required by law, if repatriation has been requested by associated communities, or when all other alternatives to preserve the site in place have been considered and rejected because they are not possible or appropriate.

Principle 3: Only through consultation, which includes the early and meaningful exchange of information and a concerted effort to reach consensus, can informed decisions be made about the identification, documentation, National Register eligibility, and treatment of burial sites, human remains, and funerary objects.

Consultation is the hallmark of the Section 106 process and is foundational to inform the broader decision-making efforts taken by federal agencies and state and local governments. Federal agencies are also directed by Presidential Memoranda¹¹ and Executive Orders,¹² which set out basic steps, standards, and criteria for Tribal consultation related to agency actions. Additionally, the United Nations Declaration on the Rights of Indigenous Peoples (Declaration) has identified that the right of an individual or associated community to “participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own decision-making instructions,” is a basic human right.¹³ These mechanisms all identify minimum standards that can be used by federal agencies and state and local governments to inform their consultation and collaboration efforts to achieve a more mutually beneficial outcome.

Specific to the Section 106 process, federal agencies must make a “reasonable and good faith” effort to identify consulting parties and begin consultation early in project planning, after the federal agency determines it has an undertaking with the potential to affect historic properties and prior to making decisions that would restrict the consideration of alternatives to avoid adverse effects to historic properties. This process is an important tool for Indian Tribes, NHOs, State and Tribal Historic Preservation Officers, and other consulting parties to lend their voice in protecting and maintaining

⁹ Determination of what constitutes a “disturbance” should be defined in consultation and with proper deference provided to the views and opinions of associated communities. Consistent with 36 CFR §800.5(a)(2)(vi), natural deterioration of the remains may be the acceptable or preferred outcome if requested by associated communities during consultation.

¹⁰ If appropriate, preserve the human remains in place. Preservation in place may mean that, to the extent allowed by law, the natural deterioration may be the preferred outcome - See, e.g., 36 CFR § 800.5(a)(2)(vi).

¹¹ “Tribal consultation is a two-way, Nation-to-Nation exchange of information and dialogue between official representatives of the United States and of Tribal Nations regarding Federal policies that have Tribal implications. Consultation recognizes Tribal sovereignty and the Nation-to-Nation relationship between the United States and Tribal Nations and acknowledges that the United States maintains certain treaty and trust responsibilities to Tribal Nations. Consultation requires that information obtained from Tribes be given meaningful consideration, and agencies should strive for consensus with Tribes or a mutually desired outcome. Consultation should generally include both Federal and Tribal officials with decision-making authority regarding the proposed policy that has Tribal implications. Consultation will ensure that applicable information is readily available to all parties, that Federal and Tribal officials have adequate time to communicate, and that after the Federal decision, consulting Tribal Nations are advised as to how their input influenced that decision-making. All of these principles should be applied to the extent practicable and permitted by law” [Memorandum on Uniform Standards for Tribal Consultation](#), (Executive Office of the President, 2022).

¹² [Executive Order 13175: Consultation and Coordination with Tribal Governments](#); Executive Order 13007: Indian Sacred Sites.

¹³ Article 18 of the Declaration.

historic properties, including burial sites, human remains, and funerary objects important to their communities. For consultation to be successful, federal agencies should also recognize and account for other voices that constitute our diverse nation including African Americans,¹⁴ nonfederally recognized Tribes,¹⁵ Indigenous Peoples,¹⁶ other marginalized or low-income communities,¹⁷ and the public.

The statutory language of the NHPA and the Section 106 implementing regulations prescribe specific actions federal agencies must take in regard to federally recognized Indian Tribes and NHOs including the following:

- Seek out and invite any Indian Tribes or NHOs that might attach religious and cultural significance to historic properties in the area of potential effects (APE) to consult on a proposed undertaking.¹⁸
- Consult with any Indian Tribe or NHO that attaches religious and cultural significance to such historic properties.¹⁹
- Gather information from **any** Indian Tribe or NHO to assist in identifying properties which **may be** of religious and cultural significance to them and **may be** eligible for the National Register.²⁰
- Recognize that properties of traditional religious and cultural importance to an Indian Tribe or NHO may be determined eligible for inclusion on the National Register.²¹
- Recognize the government-to-government relationship between the federal government and Indian Tribes and consult with the representatives designated or identified by the Tribal government.²²
- Recognize that consultation on a government-to-government level with Indian Tribes cannot be delegated to nonfederal entities, such as applicants and contractors.²³
- Solicit the views of Indian Tribes and NHOs in a manner sensitive to their governmental structures.²⁴

Where appropriate, federal agencies should develop consultation protocols with Indian Tribes or NHOs to tailor how consultation between those parties may be carried out. Such agreements are often not project-specific but instead may be more general and focused on the relationship between the agency and the Indian Tribe or NHO. This type of agreement can cover all aspects of the consultation process with the Tribe or NHO and could grant an Indian Tribe or NHO additional rights to participate or concur in agency decisions in the Section 106 process beyond those specified in the regulations.²⁵ Additionally, many

¹⁴ “Including descendants in research and interpretation is contingent upon building a positive relationship with the community,” (National Trust for Historic Preservation African American Cultural Heritage Action Fund, 2018, 8). Hereafter “Engaging Descendant Communities” (NTHP-AACHAF, 2018).

¹⁵ “In carrying out Section 106, a federal agency may invite state-recognized tribes or tribes with neither federal nor state recognition to participate in the review process as “additional consulting parties” based on a “demonstrated interest” in an undertaking’s effects on historic properties,” [Guide to Working with Non-Federally Recognized Tribes in the Section 106 Process](#) (ACHP, 2018); also see 36 CFR §§ 800.2(c)(5) and 800.3(f)(3).

¹⁶ “The Indigenous populations in Puerto Rico, Guam, American Samoa, the Virgin Islands, the Northern Mariana Islands, Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau may have important information to contribute, Ibid; see 36 CFR §§ 800.3(e)-(f).

¹⁷ “If there is a golden rule to the preservation of cemeteries and burial grounds, it is to be aware that our diverse country is home to a wide variety of burial customs,” Lynette Strangstad, *Preservation of Historic Burial Grounds* (National Trust for Historic Preservation, 2003).

¹⁸ 36 CFR § 800.2(a)(4) and 36 CFR § 800.3(c).

¹⁹ 54 U.S.C. § 302706(b) and 36 CFR § 800.2(c)(2)(ii)(D).

²⁰ 36 CFR § 800.4(a)(4) (emphasis added), 54 U.S.C. § 302706(b); this includes burial sites, human remains, and funerary objects.

²¹ 54 U.S.C. § 302706(a).

²² 36 CFR § 800.2(c)(2)(ii)(C).

²³ “...federal agencies cannot unilaterally delegate their Tribal consultation responsibilities to an applicant nor presume that such discussions substitute for federal agency Tribal consultation responsibilities,” [Limitations on the Delegation of Authority by Federal Agencies to Initiate Tribal Consultation under Section 106 of the National Historic Preservation Act](#) (ACHP, 2011).

²⁴ 36 CFR § 800.4(a)(4); “Recognizing past injustice, while upholding Tribal treaty and reserved rights, and respecting Tribal and Indigenous communities, cultures, and values will assist Agencies in developing collaborative processes that are more equitable and inclusive of Indigenous Peoples and their knowledge systems,” [Guidance for Federal Departments or Agencies on Indigenous Knowledge](#) (Executive Office of the President Office of Science and Technology Policy [OSTP] and Council on Environmental Quality [CEQ], 2022). Hereafter “Indigenous Knowledge (OSTP and CEQ, 2022).”

²⁵ See [Types of Agreement Documents in Section 106](#) (ACHP, 2018) and 36 CFR § 800.2(c)(2)(ii)(E).

Indian Tribes have existing protocols that federal agencies can utilize to inform ongoing or future actions related to burial sites, human remains, and funerary objects.²⁶

Principle 4: To the maximum extent possible, decision making should give deference to the treatment requests of descendants or associated communities. Where known, and in accordance with applicable law, cultural practices of the descendants or associated communities should be followed if burial sites, human remains, or funerary objects may be encountered, are inadvertently identified, impacted, or must be disinterred.

Any plan for the disinterment, housing, treatment, transport, recordation, or repatriation of burial sites, human remains, or funerary objects should be discussed and developed by the federal agency or the state or local government through consultation prior to the action occurring and in a manner that prioritizes the requests and expertise of associated communities. The associated community should be asked if they have any established protocols or any existing cultural practices that should be followed or adhered to, to the extent allowable by law.²⁷ While many situations involving the possible treatment of or impacts to burial sites, human remains, or funerary objects require the development of plans on a case-by-case basis, there are several actions that can be taken to potentially accommodate the treatment requests of associated communities, including the following:

- Contracting with associated communities. Frequently, cultural information is not known or shared outside of a community. Contracting with the associated community may allow decision making to be better informed by the people to whom these sites are most significant.²⁸
- Providing cultural sensitivity training for all staff who might interact with burial sites, human remains, or funerary objects. Consider working with associated communities to develop or administer the training. Extending training opportunities to applicants and contractors is also recommended.²⁹
- Informing staff and applicants. Agencies should ensure that staff and applicants are versed in agency policy and the preferences of any associated communities.
- Developing culturally appropriate protocols. Developing mutually acceptable actions, including housing, handling, transportation, documentation standards, and how sensitive information would be identified and managed, among others, can help ensure proper deference is provided, particularly when associated communities are not present in the field.
- Consulting early and consistently. During the scoping stage for proposed projects, while alternatives and project areas are being determined, associated communities can provide expertise and knowledge that can inform agency actions to help avoid impacting important locations. Early coordination also provides an opportunity to learn about the preferences and practices of associated communities.
- Acknowledging historical context and past injustice. Understanding that each group of people has had different experiences is critical for agencies to collaborate and engage effectively. Agencies should acknowledge the history of the department or agency they represent, and the federal government broadly. Further, they should recognize that at times, western science has been used as a tool to oppress Indian Tribes, Native Hawaiians, enslaved Africans and their descendants, and other Indigenous Peoples.³⁰

²⁶ See [Eastern Band of Cherokee Indians Tribal Code, Chapter 70, Skeletal Remains and Burial Site Preservation](#).

²⁷ In a Section 106 review, the federal agency is responsible for making findings and determinations and making the final decision regarding a proposed undertaking, potentially including treatment actions related to burial sites, human remains, and funerary objects. In doing so, the federal agency must make a reasonable and good faith effort to seek agreement through consultation with associated communities before making its decision on the undertaking.

²⁸ Many Indian Tribes and other associated communities have databases that contain information relevant to them that could inform federal decision making in a manner that results in a more accurate assessment of these locations.

²⁹ See [Early Coordination with Indian Tribes During Pre-Application Processes: A Handbook](#) (ACHP, 2018).

³⁰ Indigenous Knowledge (OSTP and CEQ, 2022); see also “All interpretation begins in research, and when discussing the history of enslavement, museum and historic site professionals do themselves and visitors a disservice by not involving descendants in research. Without their voices, research lacks depth, humanity and credibility, and institutions continue to perpetuate the exploitative practices of the past” “Engaging Descendant Communities” (NTHP-AACHAF, 2018, 8).

Principle 5: The Indigenous Knowledge held by an Indian Tribe, NHO, or other Indigenous Peoples is a valid and self-supporting source of information. To the fullest extent possible, deference should be provided to the Indigenous Knowledge and expertise of Indian Tribes, NHOs, and Indigenous Peoples in the identification, documentation, evaluation, assessment, and treatment of their burial sites, human remains, and funerary objects.

The ACHP applies the term “Indigenous Knowledge,” for purposes of Section 106 reviews, to the information or knowledge held by Indian Tribes and NHOs used for identifying, documenting, evaluating, assessing, and resolving adverse effects to historic properties of religious and cultural significance to them.³¹ Indigenous Knowledge is often specific to an Indian Tribe, NHO, or Indigenous People and may exist in a variety of forms.³² Federal agencies and state and local governments often lack the expertise to appropriately consider and apply this knowledge. As a result, consultation and collaboration with Indian Tribes, NHOs, and Indigenous Peoples is critical to ensuring that Indigenous Knowledge is considered and applied in a manner that respects Tribal sovereignty and achieves mutually beneficial outcomes for Tribal and Indigenous communities.³³

Federal agencies should understand at the outset that Indigenous Knowledge is frequently used by Indian Tribes and NHOs to identify historic properties of religious and cultural significance to them in the Section 106 review process. Indigenous Knowledge is recognized as a valid form of evidence for inclusion in federal policy, research, and decision making and does not require other forms of knowledge for validation or support.³⁴ In other words, a federal agency should not request a Tribe provide written documentation corroborating the Tribe’s statements.

The inclusion of Indigenous Knowledge is a critical component in the Section 106 process.³⁵ Including Indian Tribes or NHOs early on in project planning and continuing to consult with them at every step in the process as required in the regulations, will help provide federal agencies with the information necessary to carry out the Section 106 process. It should also be noted that the Section 106 regulations recognize that the passage of time, changing perceptions of significance, or incomplete prior evaluations of cultural resources may require the reevaluation of project areas for the presence of historic properties.³⁶ This is a particularly important when considering places of significance to Tribes and NHOs because past identification and evaluation efforts may not have included consultation or the Indigenous Knowledge held by Indian Tribes and NHOs.³⁷

Agencies should not initiate consultation with an assumption that an Indian Tribe or NHO will share its knowledge with the agency. The NHPA does not require any Indian Tribe or NHO to provide federal agencies with Indigenous Knowledge simply because it may be valuable information in the context of Section 106 decisions. In requesting Indigenous Knowledge, federal agencies should be respectful of an

³¹ Although the term “Indigenous Knowledge” is not defined in the NHPA or the Section 106 implementing regulations, its role in the Section 106 process is necessitated by the requirement, at 36 CFR Section 800.4(c)(1), that agency officials acknowledge that Indian Tribes and NHOs possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them. Indigenous Knowledge is an integral part of that special expertise. TK and 106 (ACHP, 2021).

³² See [Traditional Knowledge and the Section 106 Process: Information for Federal Agencies and Other Participants](#) (ACHP, 2021) [hereafter “TK and 106 (ACHP, 2021)”] and Indigenous Knowledge (OSTP and CEQ, 2022) for a discussion on what constitutes Indigenous Knowledge in the Section 106 process and federal decision making more broadly.

³³ Indigenous Knowledge (OSTP and CEQ, 2022).

³⁴ “Indigenous Knowledge is a valid form of evidence for inclusion in Federal policy, research and decision making. Indigenous Knowledge and other forms of knowledge do not depend on each other for validation, and each system can support the insights of the other,” Indigenous Knowledge (OSTP and CEQ, 2022).

³⁵ “Where Federal statutes require Agencies to consider information and make informed decisions, Agencies should consult and collaborate with Tribal Nations and Indigenous Peoples to include Indigenous Knowledge in decision making,” Indigenous Knowledge (OSTP and CEQ, 2022).

³⁶ 36 CFR § 800.4(c)(1).

³⁷ TK and 106 (ACHP, 2021).

Indian Tribe's or NHO's authority to disclose or withhold such information.³⁸ Any effort to solicit and incorporate Indigenous Knowledge should be an inclusive process that empowers the Indian Tribe or NHO to determine if, and how, their knowledge may be included in the agency's process. Agencies should discuss plans for direct engagement with Indian Tribes and NHOs and ensure sustained engagement throughout the development or implementation of an activity. Agencies should only engage with knowledge holders designated by Tribal leadership.³⁹

Principle 6: Burial sites, human remains, and funerary objects are important in and of their own right. They may also constitute or be part of a sacred site and may include or incorporate several possible elements of historic significance including religious and cultural significance. The integrity of burial sites, human remains, and funerary objects is best informed by those who ascribe significance to them.

Individual and collective burial places can reflect and represent the cultural values and practices of the past that help instruct us about who we are as a people.⁴⁰ For associated communities, the burial sites of their ancestors also represent important locations that may have an ongoing role in their beliefs and lifeways and may only be known by those who are part of that culture or belief system. Federal agencies should seek to inform any identification and documentation efforts, determination of National Register eligibility, assessment of effects, and treatment actions in consultation with associated communities.⁴¹ Consulting with associated communities is essential to properly inform any evaluation of the significance and integrity of these locations.

The Section 106 regulations require federal agencies to acknowledge the special expertise of Indian Tribes and NHOs in evaluating and, by extension, identifying historic properties of religious and cultural significance to them, which may include burial sites, human remains, and funerary objects.⁴² Federal agencies should also be aware that historic properties of religious and cultural significance to an Indian Tribe may be located on ancestral, aboriginal, or ceded lands.⁴³ In many cases, because of migration or forced removal, Indian Tribes may now be located far away from historic properties that still hold significance for them. Accordingly, the regulations require that federal agencies make a reasonable and good faith effort to identify Indian Tribes that may attach religious and cultural significance to historic properties that may be affected by the undertaking,⁴⁴ even if Indian Tribes are now located a great

³⁸ "Article 19 is particularly relevant to the use and integration of traditional knowledge in Section 106 decision making. It states that governments 'shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative and administrative measures that may affect them,'" TK and 106 (ACHP, 2021).

³⁹ Indigenous Knowledge, (OSTP and CEQ, 2022); Article 31 of the Declaration states that "indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions...They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions." Working with Indigenous Peoples, governments "shall take effective measures to recognize and protect the exercise of these rights."

⁴⁰ "[Guidelines for Evaluating and Registering Cemeteries and Burial Places](#)" National Register Bulletin, Volume National Register Bulletin, Volume 41 (National Park Service [NPS], U.S. Department of the Interior [DOI], 1992).

⁴¹ "Furthermore, although those who were formerly enslaved are now ancestors long gone, their descendants still have much to contribute to the research process in the present day. The rubric promotes a changed practice in cultural institutions, enabling public historians to work alongside descendants to research the past and tell compelling stories about enslaved people, incorporating essential family oral histories, long dismissed as unreliable sources by many academic historians... data must be supplemented by the oral histories and other materials, such as genealogical records and family heirlooms that the descendant communities possess, to render whole a valuable and shared integral component of American history," "Engaging Descendant Communities" (NTHP-AACHAF, 2018, 4); see Guide to Working with Non-Federally Recognized Tribes in the Section 106 Process (ACHP, 2018); 36 CFR §§ 800.2(c)(5) and 3(f)(3); see Principle 5 of this document for more information.

⁴² See 36 CFR § 800.4(c)(1) and TK and 106 (ACHP, 2021).

⁴³ 36 C.F.R. § 800.2(c)(2)(ii)(D).

⁴⁴ 36 CFR § 800.3(f)(2).

distance away from such properties and undertakings.⁴⁵

For Indian Tribes, NHOs, and other Indigenous Peoples, burial locations are frequently considered to be sacred sites due to their ongoing role in their lifeway, language, and family structure.⁴⁶ Consistent with Executive Order 13007: Indian Sacred Sites, federal agencies should, through consultation, implement procedures that seek to accommodate access to and ceremonial use of Indian sacred sites, avoid adversely affecting the physical integrity of such sites, and maintain confidentiality of sensitive information relating to the site when managing federal lands. It is important to note that a sacred site may not meet the National Register criteria as a historic property and that, conversely, a historic property may not constitute a sacred site. However, where an undertaking may affect a historic property that is also considered by an Indian Tribe to be a sacred site, including burial sites, the federal agency should consider access to and ceremonial use of the property consistent with Executive Order 13007 when applicable in the course of the Section 106 review process.⁴⁷ Agencies must also be aware that sacred sites often occur within a larger landform or are connected through physical features or ceremonies to other sites or a larger sacred landscape. These broader areas and connections should be accounted for when seeking to understand the context and significance of sacred sites.⁴⁸

Principle 7: Burial sites, human remains, and funerary objects are frequently associated with cultural practices, sacred sites, Indigenous Knowledge, and other forms of culturally sensitive actions and/or information unique to a people. Maximum effort should be taken to limit the disclosure of confidential or sensitive information through all available mechanisms including, but not limited to, the proper handling and labeling of records, limiting documentation to necessary information, and through the application of existing law.

As a federal agency carries out its historic preservation responsibilities, it may find that some kinds of information about historic properties is sensitive and if released, risk harm to the properties, and therefore should be protected from public disclosure. As provided in Section 304 of the NHPA, there could be several reasons an agency must not release information about the location, character, or ownership of historic properties. For example, withholding information may help prevent looting or disturbance of a site, or it may help protect the continued use of a site or area by traditional religious practitioners.⁴⁹ Other federal laws or regulations may also authorize or require the withholding of information about cultural resources. Federal agencies should utilize available mechanisms to limit disclosure of confidential or culturally sensitive information in the course of their duties.

Appropriately managing sensitive information is of the utmost importance. The release of information that could cause harm or threaten the ongoing cultural practices or beliefs associated with those places or objects should be avoided to the fullest extent of the law. Federal agencies should seek to develop transparent and effective protocols and processes that enable associated communities to share sensitive information with full awareness of the legal protections that could protect against its disclosure.

The agency official should address concerns raised about confidentiality during the Section 106 review process pursuant to 36 CFR § 800.11(c). In recognizing the importance of protecting sensitive information, the Section 106 implementing regulations state that:

- Consultation should commence early in the planning process in order to identify and discuss relevant issues and resolve concerns about the confidentiality of information on historic properties.⁵⁰

⁴⁵ 36 CFR § 800.2(c)(2)(ii); see also [Consultation with Indian Tribes in the Section 106 Process: The Handbook](#), (ACHP, 2021).

⁴⁶ Sacred Sites MOU (2021).

⁴⁷ See Executive Order 13007: Indian Sacred Sites of May 24, 1996, and [The Relationship Between Executive Order 13007 Regarding Indian Sacred Sites and Section 106](#), (ACHP, 2018).

⁴⁸ Sacred Sites MOU (2021).

⁴⁹ [Frequently Asked Questions on Protecting Sensitive Information About Historic Properties Under Section 304 of the NHPA](#) (ACHP, 2016). Hereafter "Section 304 and the NHPA (ACHP, 2016)."

⁵⁰ 36 CFR § 800.2(c)(2)(ii)(A).

- Federal agencies should recognize that an Indian Tribe or NHO may be reluctant to divulge specific information regarding the location, nature, and activities associated with sites.⁵¹
- Consultation with Indian Tribes and NHOs should be conducted in a manner sensitive to the concerns and needs of the Indian Tribe or NHO.⁵²

Additionally, federal agencies should recognize the wide range of information that Tribes, NHOs, and Indigenous Peoples may deem sensitive. At the same time, Indigenous Knowledge is relevant and essential to many federal decision-making processes, so it is of critical importance for federal employees to have a solid understanding of how to navigate public disclosure laws to identify how sensitive Indigenous Knowledge may be protected. In collecting or working with any Indigenous Knowledge, the federal agency should be cognizant of several factors, including the following:

- How and what Indigenous Knowledge might be needed to inform or influence the decision-making process at hand?
- What sensitivity concerns may exist for that Indigenous Knowledge?
- What legal protections exist to protect against the disclosure of Indigenous Knowledge?⁵³
- Do both the source of the Indigenous Knowledge as well as the receiving entity have a common understanding and expectation of how that Indigenous Knowledge will be treated and incorporated?

Principle 8: The federal Indian boarding school system directly targeted American Indian, Alaska Native, and Native Hawaiian children in the pursuit of a policy of cultural assimilation that coincided with territorial dispossession. In partnership with the historic preservation community, federal agencies should seek to implement the recommendations identified in the Department of the Interior's *Federal Indian Boarding School Investigative Report* by supporting community-driven identification, documentation, interpretation, protection, preservation, reclamation, and co-management of burial sites, human remains, and funerary objects across that system, including marked and unmarked burial areas, and supporting repatriation where appropriate.

The intentional targeting and removal of American Indian, Alaska Native, and Native Hawaiian children to achieve the goal of forced assimilation of Indian people was both traumatic and violent.⁵⁴ Based on initial research, the Department of the Interior (DOI) found that hundreds of Indian children died throughout the federal Indian boarding school system. Many of those children were buried in unmarked or poorly maintained burial sites far from their Indian Tribes, Alaska Native Villages, the Native Hawaiian Community⁵⁵, and families, often hundreds, or even thousands, of miles away.⁵⁶

Descendants' preferences for the possible disinterment or repatriation of the remains of children discovered in marked or unmarked burial sites across the federal Indian boarding school system vary widely and should be prioritized.⁵⁷ Depending on the religious and cultural practices of an Indian Tribe,

⁵¹ 36 CFR § 800.4(a)(4).

⁵² 36 CFR § 800.2(c)(2)(ii)(C).

⁵³ See [Memorandum of Understanding Regarding Interagency Coordination and Collaboration for the Protection of Indian Sacred Sites: Policy Review Report](#) (2013), Section 304 and the NHPA (ACHP, 2016), and Section 9 of the [Archaeological Resources Protection Act](#) for examples.

⁵⁴ "Indian boarding schools, and the policies that created, funded, and fueled their existence, were designed to assimilate American Indian, Alaska Native, and Native Hawaiian children into non-Native culture by stripping them of their cultural identities, often through physical, sexual, psychological, industrial, and spiritual abuse and neglect." [S.1723 - Truth and Healing Commission on Indian Boarding School Policies Act](#), 6).

⁵⁵ The term "Native Hawaiian Community" is specific to the DOI and DOI's Federal Indian Boarding School Initiative Report.

⁵⁶ Newland, Bryan, [Federal Indian Boarding School Initiative Investigative Report](#) (Assistant Secretary –Indian Affairs, U.S. Department of the Interior, 2022). Hereafter "DOI Boarding School Report (Newland, 2022)"; "...many of the American Indian and Alaska Native children who died while attending Indian boarding schools or neighboring hospitals were buried in unmarked graves or off campus cemeteries." [S.1723 - Truth and Healing Commission on Indian Boarding School Policies Act](#), 7).

⁵⁷ "Tribal preferences for the possible disinterment or repatriation of remains of children discovered in marked or unmarked burial sites across the Federal Indian boarding school system vary widely. Depending on the religious and cultural practices of an Indian Tribe, Alaska Native Village, or the Native Hawaiian Community, it may prefer to disinter or repatriate any remains of

Alaska Native Village, or the Native Hawaiian Community, they may prefer to disinter or repatriate any remains of a child discovered across the federal Indian boarding school system for return to the child's home territory or to leave the child's remains undisturbed in its current burial site. Moreover, some burial sites contain human remains or parts of remains of multiple individuals or human remains that were relocated from other burial sites, thereby preventing Tribal and individual identification.

Federal agencies should seek to support the Federal Indian Boarding School Initiative investigation through community-driven identification, documentation, interpretation, protection, preservation, reclamation, and co-management of burial sites, human remains, and funerary objects. Federal agencies should also seek to protect burial sites and enable potential repatriation or disinterment of remains of children, consistent with federal, state, and Tribal law, including the Native American Graves Protection and Repatriation Act (NAGPRA), and in coordination with proper authorities.⁵⁸

Principle 9: The legacies of colonization, including cultural assimilation, forced relocation, and slavery, have led to an uneven awareness of where and why practitioners are likely to encounter burial sites, human remains, and funerary objects across the United States and its territories. The historic preservation community has a key role in expanding public education to support greater awareness of and consideration for the histories and lifeways of Indian Tribes, Native Hawaiians, enslaved Africans and their descendants, and Indigenous Peoples including recognizing and respecting the historical trauma that these groups and individuals may experience.

The location and significance of burial sites, human remains, and funerary objects varies and is often unique to a people. In some circumstances, burial sites and funerary objects are known only to their descendants or associated communities. However, this knowledge is not always comprehensive; may not be consistently recorded, particularly in a manner that is readily transferrable for the purposes of federal decision making; may only reside with select individuals; and is frequently considered to be sensitive.⁵⁹

Legacies of occupation and colonization abruptly altered many of the cultural practices of Indigenous People and African Americans through forced assimilation and relocation, enslavement, warfare with the United States Government, and the introduction of disease, among other dynamics.⁶⁰ As a result, the location of burial areas and the method of burial were often controlled by external parties, were confined to remote areas, and/or were rarely documented.⁶¹ Thus, such locations infrequently appear on historical maps or in other records. In many cases, including as a result of segregation and the Federal Indian

a child discovered across the Federal Indian boarding school system for return to the child's home territory or to leave the child's remains undisturbed in its current burial site," Ibid.

⁵⁸ Ibid.

⁵⁹ TK and ACHP (ACHP, 2021).

⁶⁰ "The United States directly targeted American Indian, Alaska Native, and Native Hawaiian children in the pursuit of a policy of cultural assimilation that coincided with Indian territorial dispossession," DOI Boarding School Report (Newland, 2022); "...all Indian Tribes have undergone some manner of displacement, whether they have seen their homelands whittled down to small reservations or have lost their lands and status through the federal policies of removal and termination...the effects of removal persist and continue to affect Tribal participation in the Section 106 process," [The Indian Removal Era and Section 106 Tribal Consultation: Information Paper](#) (ACHP, 2019, 1); "assimilation processes, such as the Indian Boarding School Policies, were adopted by the United States Government to strip American Indian, Alaska Native, and Native Hawaiian children of their Indigenous identities, beliefs, and languages to assimilate them into non-Native culture through federally funded and controlled Christian-run schools, which had the intent and, in many cases, the effect, of termination, with dire and intentional consequences on the cultures and languages of Indigenous peoples." S.1723 - Truth and Healing Commission on Indian Boarding School Policies Act, 2).

⁶¹ "Mexican American history is often overlooked and is not well recorded," [UT-Austin Researchers Work to Protect Historic Mexican American Cemetery](#) (The Daily Texan, 2021); "African-American cemetery sites were often confined to remote areas or marginal property and they frequently were not provided the same sort of state or local maintenance support or assistance as predominantly white cemeteries. As a result, many jurisdictions are unaware of the existence of these historic sites." [African American Burial Grounds Preservation Program](#), Senate Report (United States Senate Committee on Energy and Natural Resources, December 12, 2022).

Boarding School Initiative, among other situations, these practices continued into the 20th century.⁶² For example, Federal Indian policy resulted in the separation (both physically and intellectually) of Indigenous Peoples from the places they are connected to, severing relationships with lands, waters, and social systems, which are all critical elements of Indigenous Knowledge. These policies systematically served to assimilate and displace Native people and eradicate Native cultures.⁶³

These communities continue to experience the impacts of intergenerational trauma resulting from the legacies of these federal policies,⁶⁴ including impacts on their social, cultural, spiritual, mental, and physical wellbeing.⁶⁵ Disturbing the burial areas or remains of ancestors or family members can have traumatic and compounding effects to the social and emotional welfare of associated individuals and communities and should be avoided to the maximum extent allowable by law.⁶⁶ The ACHP encourages federal agency and state and local governments to avoid disturbing or disinterring burial sites and human remains.

Federal, Tribal, state, and local officials and other subject matter experts providing public education and technical assistance in historic preservation have an important role to play both in raising awareness about these histories and their impact on where burial areas, human remains, and funerary objects may be encountered, and in creating resources to help others do the same. The ACHP encourages federal agencies and state and local governments, in collaboration with associated communities, to create additional understanding of and opportunities for associated communities to identify and protect their burial sites, human remains, and funerary objects. These efforts may include site protection and enhancement, providing access to associated individuals or communities, conducting additional research, or a number of

⁶² “Beginning with slavery and continuing through the Jim Crow era, African Americans were often restricted in where they could bury their loved ones. Local laws segregated burial grounds by race,” Ibid; see [S.3667 - African-American Burial Grounds Preservation Act \(introduced\)](#); see the [DOI Boarding School Report](#) (Newland, 2022); “Mexicans weren’t necessarily allowed to be buried in white cemeteries...In some cases I’ve seen where there’s a white cemetery, and then right next to it is the Mexican section or the Black section...[or] just a completely different cemetery,” [This Is Sacred Ground’: Austinites And Researchers Seek To Restore Mexican-American Cemeteries In Montopolis](#) (KUT 90.5, 2021).

⁶³ Indigenous Knowledge (OSTP and CEQ, 2022).

⁶⁴ Ibid; “the general lack of public awareness, accountability, education, information, and acknowledgment of the ongoing and direct impacts of the Indian Boarding School Policies and related inter-generational trauma persists, signaling the overdue need for an investigative Federal commission to further document and expose assimilation and termination efforts to eradicate the cultures and languages of Indigenous peoples implemented under Indian Boarding School Policies (pages 12-13)”. [S.1723 - Truth and Healing Commission on Indian Boarding School Policies Act](#).

⁶⁵ Sacred Sites MOU (2021); “the longstanding intended consequences and ramifications of the treatment of American Indian, Alaska Native, and Native Hawaiian children, families, and communities because of Federal policies and the funding of Indian boarding schools continue to impact Native communities through intergenerational trauma, cycles of violence and abuse, disappearance, health disparities, substance abuse, premature deaths, additional undocumented physical, sexual, psychological, industrial, and spiritual abuse and neglect, and trauma”. [S.1723 - Truth and Healing Commission on Indian Boarding School Policies Act](#), 10).

⁶⁶ “Desecration and disturbance of burial sites is not a victimless crime. The consequences of these actions not only include property damage, but can also result in emotional trauma to relatives and friends of the deceased, as well as to descendant communities” ([Historic African American Cemeteries, Maryland Commission on African American History & Culture](#), (Maryland Historical Trust, 2022, 24); “Traditional Hawaiian belief maintains that it is the kuleana (responsibility) of the living to care for and to protect ‘ohana (family) burial sites and to pass on this knowledge and responsibility to the next generation. These practices assure that living Native Hawaiians will always provide perpetual care and protection to their ancestors, thereby maintaining the integrity of the family. Central to the physical and spiritual well-being of Native Hawaiians is the inheritance of mana from their ancestral past. In turn, the k...puna (ancestors) care for and protect the living, affirming the interdependent relationship between them and living descendants, where each cares for and protects the other,” Native Burials: Human Rights and Sacred Bones (Edward Halealoha, 2000); “[The cemetery] is sacred ground to us [Mexican Americans], from our ancestors...The site is difficult to access, making it hard for people to visit and maintain...has long had problems with people dumping trash...It’s sad to see because it looks as if it’s been neglected and dismissed, especially with the development that’s right next to it...Those are families and families’ history and legacies and relatives that are buried there. Those are stories that need to be told,” [This Is Sacred Ground’: Austinites And Researchers Seek To Restore Mexican-American Cemeteries In Montopolis](#) (KUT 90.5, 2021).

other targeted efforts. Identifying appropriate actions should be done in collaboration with associated communities.

Principle 10: Access to and/or repatriation of burial sites, human remains, and funerary objects should be enabled through fair, transparent, and effective mechanisms developed in conjunction with descendant communities to the fullest extent of the law.

Having access to a location, including the ability to conduct cultural practices or perpetuate Indigenous Knowledge, can contribute to the significance of a Traditional Cultural Place (TCP),⁶⁷ a sacred site, or historic property and may be necessary to retain the integrity of these locations. The care for and access to these locations may also be part of an ongoing cultural practice or may serve to revitalize traditions or customs, among other purposes, that are important to an associated community.⁶⁸ Federal agencies should seek to enable access to and protection of burial sites, human remains, and/or funerary objects through the development of protocols, co-stewardship or co-management agreements, and other mechanisms as part of their ongoing management functions.⁶⁹ Efforts to increase access and protection of these sites should be pursued in consultation with the associated communities and in a manner that does not inadvertently disclose sensitive information.

Associated communities may also seek to have human remains or funerary objects relocated or returned for several reasons. Repatriation is of particular concern to Indian Tribes, NHOs, and other Indigenous Peoples whose ancestors are frequently located in locations no longer under their control or ownership.⁷⁰ Consistent with NAGPRA, DOI's Boarding School Initiative, and the United Nations Declaration on the Rights of Indigenous Peoples (Declaration), the ACHP fully supports federal agency efforts to prioritize repatriation of human remains and funerary objects.⁷¹ The Declaration expressly recognizes Indigenous Peoples' rights to practice, access, and revitalize culture including the right to the repatriation of their human remains.⁷² The Declaration also states that Indigenous Peoples have the right to revitalize their cultural traditions and customs including the right to maintain, protect, and develop past, present, and future manifestations of their cultures, such as burial sites and ceremonies, among other aspects.⁷³

While the Declaration is not legally binding, federal agencies can look to it for policy guidance in carrying out their Section 106 responsibilities. Because the Declaration was developed with input from Indigenous Peoples around the world, it stands as a guide to what is important to Indigenous Peoples,

⁶⁷ A TCP is a building, structure, object, site, or district that may be eligible for inclusion in the National Register for its significance to a living community because of its association with cultural beliefs, customs, or practices that are rooted in the community's history and that are important in maintaining the community's cultural identity, National Register Bulletin, Volume 38 Draft Update (NPS, 2022). TCPs differ from a "sacred site" and a "historic property of religious and cultural significance" in several ways. Most notably, a TCP is a type of significance that any individual or group can ascribe to a location whereas the ability to designate a location as a "sacred site" under E.O. 13007 or to ascribe "religious and cultural significance" per 36 CFR Part 800 are exclusive to Indian Tribes and NHOs. See the Sacred Sites MOU (2021); E.O. 13007, and Sacred Sites and Section 106 for more information.

⁶⁸ The Declaration, like other human rights instruments, recognizes rights to religion and culture. Article 25 states more specifically: "Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands."

⁶⁹ See [Early Coordination with Indian Tribes During Pre-Application Processes](#) (ACHP, 2018) and [Secretarial Order 3403: Joint Secretarial Order on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters](#).

⁷⁰ "Articles 11, 12, 13, 14, 15, and 31 recognize that Indigenous Peoples have a right to their distinctive cultures generally, as well as to their languages, religions, traditional knowledge, and repatriation of human remains and ceremonial objects. To the extent that U.S. policy historically sought to eradicate Indigenous Peoples' cultures, and currently offers few remedial or ongoing protections in the realm of cultural rights, the Declaration can provide important standards," [Project to Implement the United Nations Declaration on the Rights of Indigenous Peoples Tribal Implementation Toolkit](#) (Native American Rights Fund, Colorado Law, and UCLA Law School, 2021); see discussion in Principles 8 and 9 of this document for additional information.

⁷¹ See Declaration articles 8, 11, 12, 15, 18, 25, and 31; see [Section 106 and the U.N. Declaration on the Rights of Indigenous Peoples: General Information and Guidance](#) (ACHP, 2018).

⁷² See Article 12 of the Declaration.

⁷³ See Article 11 of the Declaration.

above and beyond basic human rights. In its 2008 policy statement on its relationship with NHOs,⁷⁴ the ACHP clarified that the Section 106 implementing regulations “set the minimum standards for federal agency interactions with its preservation partners.” This clarification applies to all preservation partners. The ACHP suggests that federal agencies and state and local governments consider the Declaration a reference to help inform the outreach, consultation, and consideration of the associated communities’ input, which in turn may work to increase the appropriate protection of, access to, and/or repatriation of burial sites, human remains, or funerary objects.⁷⁵

Principle 11: Human remains and funerary objects may be relocated or removed from a location by or at the request of descendant communities for a variety of reasons. The continued presence of human remains or funerary objects may not be essential to the ongoing significance and integrity of a site or its relevance to a broad theme in history. The historic significance and integrity of such sites are best determined in consultation with lineal descendants and/or associated communities.

Associated communities, including Indian Tribes and NHOs, are increasingly requesting that federal agencies and state and local governments relocate or return human remains or funerary objects for a variety of reasons, including from Federal Indian Boarding Schools, as a part of an ongoing cultural practice, or to reclaim control over their ancestors and funerary objects.

For many people the locations where their ancestors reside are frequently considered to be sacred sites, Traditional Cultural Places, or historic properties. Depending on the role that the deceased individual(s) and/or funerary object(s) have in their culture, the burial site may continue to be significant and may retain integrity even after human remains or funerary objects have been removed.⁷⁶ When evaluating burial sites during the course of a Section 106 review, the federal agency should consult with, recognize, and provide deference to the knowledge and expertise of the associated community in its decision making.

Principle 12: Climate change can impact the burial sites, sacred sites, cemeteries, and associated cultural practices significant to Indian Tribes, NHOs, and other groups of people. Climate plans should be developed in consultation and should include mechanisms to support the advanced identification and protection or treatment of these locations.

Climate change poses a unique risk to all burial sites, human remains, and funerary objects including those that are sacred sites, may be located in a cemetery, are connected to ongoing cultural practices, or are part of a larger landscape. These impacts may result from sea level rise, extended drought, increased severity of invasive species, severe storm events, or extreme wildfire, among other examples, all of which have the potential to affect or destroy these sites, remains, and objects.⁷⁷

When a federal agency develops climate change planning documents it should seek to consult with stakeholders to proactively identify locations of concern and review available mechanisms to preserve or protect burial sites, human remains, and funerary objects, recognizing that natural deterioration may be a

⁷⁴ [ACHP Policy Statement on the ACHP’s Interaction with Native Hawaiian Organizations](#) (ACHP, 2008).

⁷⁵ [ACHP Plan to Support the United Nations Declaration on the Rights of Indigenous Peoples](#) (ACHP, 2013); “The Declaration, which is grounded in widespread consensus and fundamental human rights values, should be a benchmark for all relevant decision-making by the federal executive, Congress, and the judiciary, as well as by the states of the United States,” S. James Anaya (Special Rapporteur on the Rights of Indigenous Peoples), [The Situation of Indigenous Peoples in the United States of America](#), U.N. Doc. A/HRC/21/47/Add.1 (Aug. 30, 2012).

⁷⁶ [“Guidelines for Evaluating and Registering Cemeteries and Burial Places”](#) National Register Bulletin, Volume 41 (NPS, DOI, 1992); “Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard,” Article 25 of the Declaration.

⁷⁷ See [“Cultural Resources Climate Change Strategy”](#) (NPS, DOI, n.d.), and [“Climate Impacts to Indian Tribe and Native Hawaiian Sacred Sites and Historic Properties: Plan for ACHP Actions”](#) (ACHP, 2022).

contributing quality of a property of religious and cultural significance to an Indian Tribe or NHO.⁷⁸ Having knowledge pertaining to the location or importance of significant places, preferred treatment options, and/or transparent consultation and coordination protocols can help ensure the preservation of these places during emergencies or as part of ongoing federal historic property management responsibilities. Federal agencies should also review climate-related planning and adaptation grant opportunities to ensure that cultural resources and historic properties (including burial sites, human remains, and funerary objects) are included as eligible categories.⁷⁹

Many Tribal, state, and local governments are also in the position to proactively identify and protect these sites, remains, or objects. Consistent with their relevant mission and authorities, these governments should seek to incorporate consideration of burial sites, human remains, and funerary objects into their climate change planning and response actions to the maximum extent practicable.

Principle 13: Respectful consideration of burial sites, human remains, and funerary objects may require additional assistance from consulting parties to properly identify, document, evaluate for National Register eligibility, and/or conduct treatment actions. If a federal agency requests or relies on an Indian Tribe, NHO, or other party to carry out activities that are the federal agency's responsibility under the NHPA, the Indian Tribe, NHO, or other consulting party should be reimbursed or compensated.

Understanding where burial sites, human remains, and funerary objects are located oftentimes requires the knowledge or expertise of associated communities to properly identify and evaluate these locations. The very basis of what constitutes a burial site or funerary object, their defining characteristics, boundaries, and proper protocols associated with interacting and recording them, is expertise frequently known only to associated communities. As such, consistent with Principle 3, federal agencies should conduct early and robust consultation that works to integrate the knowledge and understanding of those who attribute significance to the sites, remains, or objects into the agencies' decision making.

Consistent with ACHP guidance,⁸⁰ when the federal agency, or in some cases, the applicant, seeks the views and advice of any consulting party in fulfilling its legal obligation to consult with them, for instance in a Section 106 review, the agency or applicant is not required to pay that party for providing its views. However, both within and beyond the Section 106 context, where appropriate and consistent with applicable agency fiscal and acquisition authorities, federal agencies should consider compensating associated individuals or groups in a manner that allows them to fully participate and inform any identification, documentation, evaluation, or mitigation actions related to burial sites, human remains, or funerary objects. If a party is asked by a federal agency to do more than respond to the agency's findings and determinations, then it should be compensated for its efforts.

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⁷⁸ 36 CFR 800.5(a)(2)(vi).

⁷⁹ Tribal and NHO Climate Plan (ACHP, 2022, 3).

⁸⁰ See [Guidance on Assistance to Consulting Parties in the Section 106 Review Process](#).

Attachment D
Representative Archaeological Artifacts and Features

Photo 1

Native American projectile
point example



Photo 2

Native American projectile
point example



Photo 3

Native American worked
stone tool example



Photo 4

Native American worked
stone tool example



Photo 5

Native American worked
stone tool example



Photo 6

Native American worked
stone tool example





Photo 7

Native American pottery fragments



Photo 8

Native American pottery fragments



Photo 9

A midden is a widespread layer of archaeological material. This is a Native American shell midden



Photo 10

A midden of mostly bottle glass

Photo 11

A cellar feature, defined by the distinct soil color change



Photo 12

Remains of a house foundation





Photo 13
Ceramics



Photo 14
Ceramics, in context



Photo 15

Historical nails and metal



Photo 16

Glass bottles



Photo 17

Large mammal bone, in context



Photo 18

Bone and shell artifacts

ATTACHMENT 6 – MITIGATION FUNDING AMOUNTS

The mitigation measures in Stipulation III have been developed by individuals who meet the qualifications specified in the SOI's Qualifications Standards for Archaeology, History, Architectural History, and/or Architecture (36 CFR 61) and are based on input from consulting parties. The mitigation measures consider the nature, scope, and magnitude of adverse effects caused by the Project and the qualifying characteristics of each historic property that would be affected. The funding amounts that follow are those that have been committed to by the Lessee, which is responsible for providing this funding, as developed in consultation with consulting parties. As detailed below, the Lessee would provide a maximum total of \$7,060,440 to support mitigation of all adverse effects caused by the Project as described in the MOA in Stipulation III, of which \$2,820,440 would fund measures described under Stipulation III.B; \$1,585,000 would be placed in an account to provide a mitigation fund as described under Stipulation III.C.1.i; and \$2,655,000 would fund measures described under Stipulation III.C.1.ii. These budgets are good-faith estimates, based on the experience of these qualified consultants with similar activities and comparable historic properties. The levels of funding are appropriate to accomplish the identified preservation goals and result in meaningful benefits to and resolving adverse effects on the affected historic properties. Therefore, the funding amounts indicated here for activities stipulated in the MOA represent the maximum amounts the Lessee is required to spend to fund the mitigation measures listed below.

The mitigation funding amounts for each adversely affected historic property for which mitigation has been stipulated in Stipulation III are summarized in the lists below. The corresponding mitigation measures are summarized in more detail in Stipulation III and referenced HPTPs, where applicable.

Mitigation Measures for Adversely Affected Historic Properties in the Marine APE

- Per Stipulation III.B, \$2,820,440 for mitigation to resolve adverse effects on 38 ASLFs, including:
 - \$1,480,080 for:
 - Preconstruction geoarchaeology
 - Open-Source GIS, Story Maps, and Animations
 - ASLF Post-construction seafloor assessment
 - \$191,480 for Tribal Capacity Support for The Delaware Nation
 - \$191,480 for Tribal Capacity Support for the Delaware Tribe of Indians
 - \$191,480 for Tribal Capacity Support for the Mashantucket (Western) Pequot Tribal Nation
 - \$191,480 for Tribal Capacity Support for the Mashpee Wampanoag Tribe
 - \$191,480 for Tribal Capacity Support for the Shinnecock Indian Nation
 - \$191,480 for Tribal Capacity Support for the Stockbridge-Munsee Community Band of Mohican Indians
 - \$191,480 for Tribal Capacity Support for the Wampanoag Tribe of Gay Head (Aquinnah)

Mitigation Measures for Adversely Affected Historic Properties in the Visual APE

- Per Stipulation III.C.1.i, contribution of \$1,585,000 to the mitigation fund for 19 of the 29 adversely affected historic properties in the visual APE:
 - In Atlantic County:
 - Atlantic City:
 - \$100,000 for Central Pier;
 - \$65,000 for Haddon Hall (Resorts Casino Hotel);

- \$65,000 for Ritz Carlton Hotel;
 - \$70,000 for Riviera Apartments;
 - \$55,000 for U.S. Coast Guard Station;
 - \$25,000 for 120 Atlantic Avenue;
- Brigantine City:
 - \$65,000 for Brigantine Hotel;
- Galloway Township:
 - \$75,000 for Seaview Golf Club, Clarence Geist Pavilion;
- Margate City:
 - \$100,000 for Margate Fishing Pier;
 - \$25,000 for 108 South Gladstone Avenue;
 - \$25,000 for 114 South Osborne Avenue;
- Ventnor City:
 - \$100,000 for John Stafford Historic District;
 - \$70,000 for Vassar Square Condominiums;
 - \$100,000 for Ventnor City Fishing Pier;
 - \$25,000 for 114 South Harvard Avenue;
- In Cape May County:
 - Ocean City:
 - \$65,000 for The Flanders Hotel;
 - \$100,000 for Music Pier;
 - \$400,000 for Ocean City Boardwalk;
- In Ocean County:
 - Little Egg Harbor:
 - \$55,000 for Little Egg Harbor U.S. Life Saving Station #23;
- Per Stipulation III.C.1.ii, \$2,655,000 for the implementation of a HPTP for ten (10) of the 29 adversely affected historic properties in the visual APE:
 - Atlantic City Convention Hall (Jim Whelan Boardwalk Hall; NHL)
 - Mitigation:
 - Provide funding toward the rehabilitation of the Kennedy Plaza West Pavilion at the Atlantic City Convention Hall (Jim Whelan Boardwalk Hall) NHL. Funding may also be used toward the refinement of plans and specifications for the proposed project. The rehabilitation of the building will allow the currently vacant section of the NHL to be returned to public use to be enjoyed by visitors to the Atlantic City Convention Hall (Jim Whelan Boardwalk Hall) NHL and the Atlantic City Boardwalk.
 - Funding Amount: \$1,000,000
 - Lucy, The Margate Elephant (NHL) in Margate City, Atlantic County
 - Mitigation:
 - Provide funding toward the construction of a new visitor experience and welcome center at the Lucy, The Margate Elephant NHL. Funding may also be used toward the refinement of plans and specifications for the proposed project or to the landscaping and/or hardscaping. The number of people that visit Lucy, The Margate Elephant has surpassed the capacity of the current facilities and there are currently not enough restrooms nor is Lucy, The Margate Elephant accessible to all members of the public. This project is being designed to enhance the visitor experience and to

accommodate larger groups as well as school children and opportunity to visit this historic resource.

- Funding Amount: \$500,000
- Historic Properties Owned by the State of New Jersey (NJDEP)
 - Mitigation:
 - Provide funding to NJDEP for the planning or implementation of preservation, restoration, rehabilitation, cyclical maintenance, resiliency planning, disaster recovery, or other associated activities to ensure the long-term preservation of these historic properties.
 - Funding Amount: Total of \$425,000, which includes:
 - \$100,000 for Absecon Lighthouse
 - \$100,000 for Barnegat Lighthouse
 - \$75,000 for Forked River Coast Guard Station No. 112
 - \$150,000 for Island Beach State Park Historic District
- Other Historic Properties in Atlantic County
 - Atlantic City Boardwalk Historic District in Atlantic City
 - Mitigation:
 - Provide funding toward the next phase of the Atlantic City Boardwalk Restoration Plan. Due to the length of the boardwalk, Atlantic City has been replacing portions of the structure, which is the longest in the world, in segments and has secured grants and other sources of funding for the work completed thus far. The intent of this mitigation measure is to provide Atlantic City with funding to be used toward the repair and/or removal and replacement of the next planned segment of the Atlantic City Boardwalk.
 - Funding Amount: \$500,000
 - Great Egg Coast Guard Station in Longport Borough
 - Mitigation:
 - Provide funding to the Borough of Longport for the planning or implementation of preservation, restoration, rehabilitation, cyclical maintenance, resiliency planning, disaster recovery, or other associated activities to ensure the long-term preservation of the Great Egg Coast Guard Station.
 - Funding Amount: \$55,000
 - Missouri Avenue Beach (Chicken Bone Beach) in Atlantic City
 - Mitigation:
 - Provide funding to hire a Secretary of the Interior Qualified Professional to produce a study to determine if the Missouri Avenue Beach (Chicken Bone Beach) qualifies as a TCP per the NPS's *National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties* (Parker and King, 1992). The consultant will work with the Chicken Bone Beach Historical Foundation, Inc. and the interested consulting parties to develop a methodology and exact scope of work;
 - Provide funding to develop and install signage to increase public awareness of the history and significance of Missouri Avenue Beach (Chicken Bone Beach); and
 - Provide funding to the Chicken Bone Beach Historical Foundation Inc. to promote the history and significance of Missouri Avenue Beach (Chicken Bone Beach) through the Youth Jazz Institute.

- Funding Amount: \$75,000
- St. Leonard's Tract Historic District in Ventnor City
 - Mitigation:
 - Creation of a Photographic Survey of the Association's Existing Historic Homes;
 - Research and Preparation of Public Educational Materials on the history of St. Leonard's Tract;
 - Signage Commemorating the History of the St. Leonard's Tract; and/or
 - Website and Podcast Support.
 - Funding Amount: \$100,000

**ATTACHMENT 7 – HISTORIC PROPERTY TREATMENT PLAN FOR ANCIENT
SUBMERGED LANDFORM FEATURES**

Historic Property Treatment Plan

for the

Atlantic Shores Offshore Wind

Lease Area OCS-A 0499

Ancient Submerged Landform Features

Outer Continental Shelf, New Jersey State and Federal Waters

Submitted to:



Bureau of Ocean Energy Management
U.S. Department of the Interior

Prepared for:



Atlantic Shores Offshore Wind LLC



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May 2024

ABSTRACT

Federal Undertaking: Atlantic Shores Offshore Wind Project

Location: Outer Continental Shelf, Offshore New Jersey and New York

Federal and
State Agencies: Bureau of Ocean Energy Management
National Park Service
U.S. Army Corps of Engineers
New Jersey Historic Preservation Office
Advisory Council on Historic Preservation

Regulatory Process: National Environmental Policy Act
Section 106 of the National Historic Preservation Act
Section 110(f) of the National Historic Preservation Act

Purpose: This Historic Property Treatment Plan provides background data, historic property information, and detailed steps that will be implemented to carry out mitigation actions to resolve adverse effects from the Atlantic Shores South Projects.

Potential Adverse Effect
Finding for: Ancient Submerged Landform Features (ASLFs)
Outer Continental Shelf, New Jersey State and Federal Waters

Submitted By: Atlantic Shores Offshore Wind, LLC

Date: May 2024

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LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
ASLF	Ancient Submerged Landform Features
BOEM	Bureau of Ocean Energy Management
BSB	Below seabed
CFR	Code of Federal Regulations
COP	Construction and Operations Plan
DEIS	Draft Environmental Impact Statement
ECC	Export Cable Corridors
EDR	Environmental Design and Research, D.P.C.
FGDC	Federal Geographic Data Committee
FoAE	Findings of Adverse Effect
HPTP	Historic Property Treatment Plan
HRG	High-Resolution Geophysical
MARA	Marine Archaeological Resources Assessment
MOA	Memorandum of Agreement
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act of 1966
NRHP	National Register of Historic Places
NJHPO	New Jersey Historic Preservation Office
NJWEA	New Jersey Wind Energy Area
OCS	Outer Continental Shelf
OSS	Onshore Substation
PAPE	Preliminary Area of Potential Effects
QMA	Qualified Marine Archaeologist
RFP	Request for Proposals
ROD	Record of Decision
TCG	Transgressive Channel Group
TCP	Traditional Cultural Property
TEK	Traditional Ecological Knowledge
USCG	United States Coast Guard
WTA	Wind Turbine Area
WTG	Wind Turbine Generator

1.0 INTRODUCTION

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) (54 USC 306108) and its implementing regulations, and in compliance with Section 110(f) of the NHPA (54 USC 306107), the Bureau of Ocean Energy Management (BOEM) has determined the Atlantic Shores South Offshore Wind Project (the Projects) will have an adverse effect on historic properties. A historic property is defined per 36 CFR § 800.16 as any property that is listed in, or has been determined eligible for listing in, the National Register of Historic Places (NRHP), or is a National Historic Landmark (NHL). This Historic Property Treatment Plan (HPTP) for the Ancient Submerged Landform Features (ASLF) provides background data, physical descriptions, and detailed mitigation actions that will be implemented to resolve adverse effects from the Projects. Atlantic Shores Offshore Wind, LLC (Atlantic Shores) has provided this HPTP in accordance with BOEM's Findings of Adverse Effects (FoAE) for the Projects under the National Historic Preservation Act of 1966 (NHPA).

BOEM used the National Environmental Policy Act (NEPA) substitution process to fulfill its Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)), and BOEM has notified the Advisory Council on Historic Preservation (ACHP), the New Jersey Historic Preservation Office (NJHPO), and interested consulting parties of BOEM's decision to use this process. Atlantic Shores has provided this HPTP to BOEM for inclusion in the Final Environmental Impact Statement (FEIS).

This HPTP describes the mitigation measures to resolve adverse effects on historic properties, the implementation steps, and timeline for actions. The mitigation measures are based on the evaluations and outreach performed by Atlantic Shores as well as outreach to the interested consulting parties performed by BOEM. This HPTP document has undergone revision and refinement in consultation with the NJHPO, the ACHP, and other consulting parties throughout the NEPA substitution process. This HPTP is included in the Memorandum of Agreement (MOA) issued in accordance with 36 CFR §§ 800.8, 800.10.

This HPTP is organized into the following sections:

- **Section 1.0, Introduction**, outlines the content of this HPTP.
- **Section 2.0, Background Information**, briefly summarizes the Projects and describes the cultural resources regulatory contexts (federal, Tribal, state, and local, including preservation restrictions) applicable to the HPTP, identifies the historic properties discussed in this HPTP that will be adversely affected by the Undertaking, and summarizes the pertinent provisions and attachments of the MARA (SEARCH, 2022)
- **Section 3.0, Historic Properties – Context, Significance and Effects**, provides a physical description of the historic properties included in this HPTP, describes their historic context, the applicable NRHP criteria for each historic property with a focus on its significance and integrity; describes the potential effects of the Projects on each property. **Section 4.0, Mitigation Measures**, proposes measures to conduct the mitigation actions identified in the COP or alternative measures developed through consultation. The mitigation action includes a detailed description, intended

outcome, methods, standards, requirements for documentation, and reporting instructions. The mitigation action details may be revised pursuant to ongoing discussions with consulting parties.

- **Section 5.0, Implementation**, establishes the organizational responsibilities for implementing the mitigation actions, as identified in Section 4.0 of this HPTP. For each/the action, organizational responsibilities are outlined, a timeline is provided, and regulatory reviews are listed.
- **Section 6.0, References**, is a list of works cited in this HPTP.

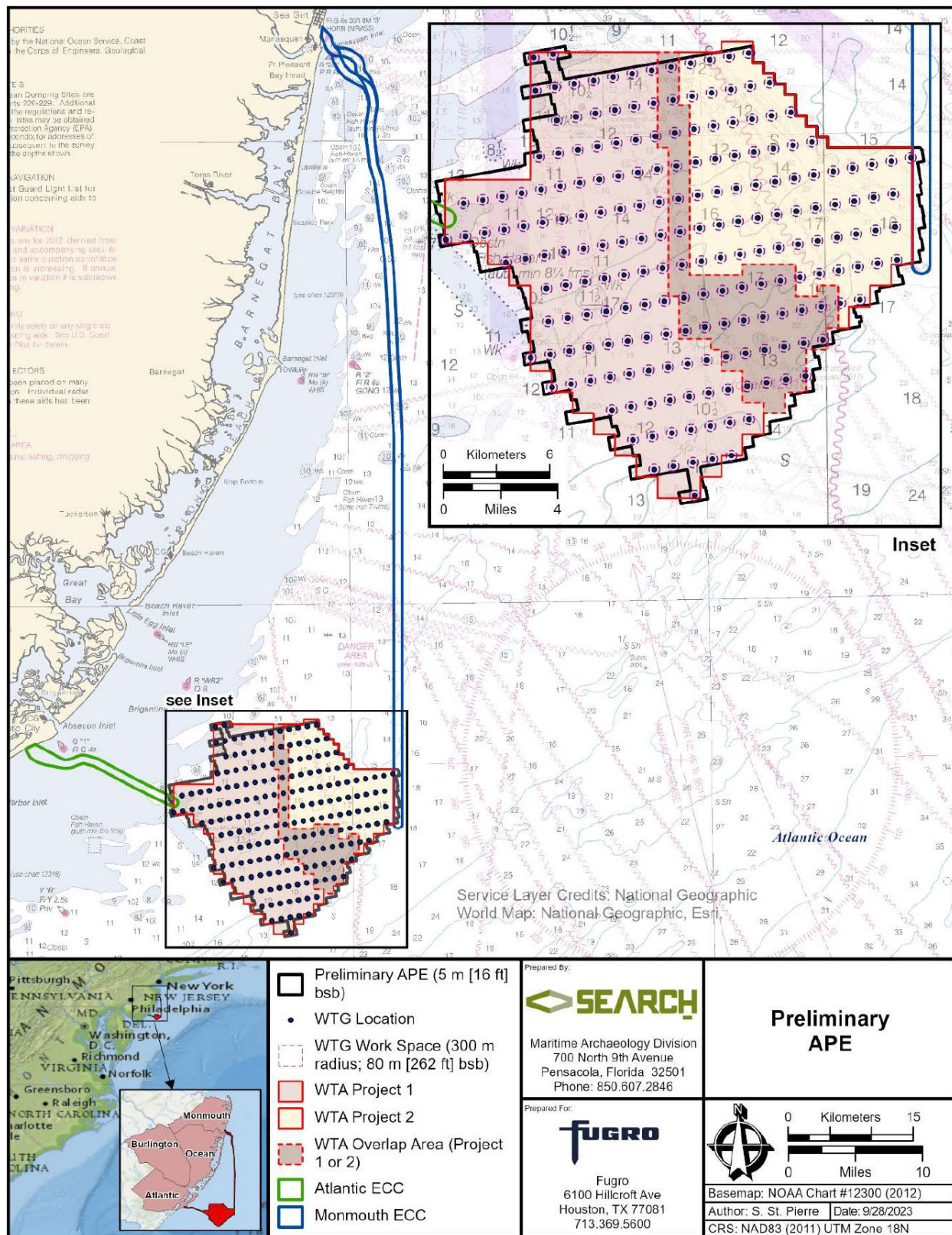
2.0 BACKGROUND INFORMATION

2.1 Overview of the Project

Atlantic Shores' Lease Area is located on the Outer Continental Shelf (OCS) within the New Jersey Wind Energy Area (NJWEA), which was identified by BOEM as suitable for offshore renewable energy development through a multi-year, public environmental review process. The Projects will be located in an approximately 102,124-acre (413.3-square kilometer [km²]) Wind Turbine Area (WTA) located in the southern portion of the Lease Area (see Figure 2.1-1). Project 1 is located in the western 54,175 acres (219.2 km²) of the WTA, and Project 2 is located in the eastern 31,847 acres (128.9 km²) of the WTA with a 16,102-acre (65.2-km²) Overlap Area that could be used by either Project 1 or Project 2. Figure 2.1-1 also depicts the boundaries of the Project 1 and Project 2 areas within the WTA.

The Projects will collectively consist of up to 200 WTGs and associated foundations, inter-array cables connecting the WTGs, and offshore substations. The offshore substations utilized for the Projects will include up to 10 Onshore Substations (OSSs). Energy from the WTGs will be delivered to shore via 230 kV to 525 kV high voltage alternating current or high voltage direct current export cables. Up to four export cables will be installed within each of two possible Export Cable Corridors, for a total of up to eight export cables. The export cables will traverse federal and New Jersey state waters to deliver energy from the OSSs to landfall sites located in Monmouth County (the Monmouth Landfall Site) and/or Atlantic County (the Atlantic Landfall Site), New Jersey. The offshore-to-onshore transition at the landfall sites will occur via horizontal directional drilling to avoid nearshore and shoreline impacts. From the Monmouth and Atlantic Landfall Sites, new 230 kV to 525 kV high voltage alternating current or high voltage direct current onshore interconnection cables will travel underground along existing roadways, utility rights-of-way, and/or along bike paths to up to two new onshore substation sites (one for each onshore point of interconnection), where transmission will be stepped up or stepped down in preparation for interconnection with the electrical grid. Onshore interconnection cables will continue from each of the new onshore substations to proposed points of interconnection into the electrical grid at the existing Larrabee Substation in Howell, New Jersey (for the Monmouth Landfall Site) or the existing Cardiff Substation in Egg Harbor Township, New Jersey (for the Atlantic Landfall Site). Once operational, the Projects will be supported by a new operations and maintenance (O&M) facility that will be located in Atlantic City, New Jersey. The O&M facility will be the primary location for O&M operations including material storage, day-to-day management of inspection and maintenance activities, vehicle parking, marine coordination, vessel docking, and dispatching of technicians. Atlantic Shores intends to purchase and develop a shoreside parcel in Atlantic City, New Jersey that was formerly used for vessel docking or other port activities.

Figure 2.1-1. Overview of the Projects.



2.2 Regulatory Framework

2.2.1 *Section 106 and Section 110(f) of the NHPA*

Section 106 of the NHPA of 1966 requires federal agencies to consider the effects of their undertakings on historic properties, which are defined per 36 CFR § 800.16 to include any property that is listed in or has been determined eligible for listing in the NRHP or is an NHL. Section 110(f) of the NHPA further requires that federal agencies undertake such planning and actions as may be necessary to minimize harm to any NHL that may be directly and adversely affected by an undertaking. Historic properties can include marine archaeological resources, terrestrial archaeological sites, above-ground historic properties (e.g., buildings, sites, monuments, and landscapes), and Traditional Cultural Properties.

The regulations at 36 CFR § 800.8 provide for use of the NEPA process to fulfill a federal agency's NHPA Section 106 review obligations in lieu of the procedures set forth in 36 CFR § 800.3 through 800.6. Under these provisions, either issuance of a Record of Decision (ROD) and implementation of relevant conditions or the execution of a MOA will resolve adverse effects to historic properties caused by the Projects, including to NHLs for which BOEM must provide a higher standard of care, as required by Section 110(f) of the NHPA. This HPTP was developed to support ongoing consultations and will be finalized for inclusion in the MOA issued in accordance with 40 CFR §1500-1508, and 36 CFR § 800.8 and 800.10.

All activities implemented under this HPTP will be conducted in accordance with any conditions imposed by BOEM in its ROD and with applicable local, state and federal regulations and permitting requirements. Responsibilities for specific compliance actions are described in further detail in Section 5.2 – Organizational Responsibilities.

2.3 Summary of HPTP Development

This HPTP was developed by Atlantic Shores for inclusion in the FEIS in support of BOEM's consultation pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR § 800.8. In addition to BOEM's formal Section 106 consultation meetings, Atlantic Shores invited the interested consulting parties to a series of meetings to review conceptual mitigation measures for the adversely affected historic properties on October 16, 18, 19, 30 and November 1, 2023. Atlantic Shores hosted further discussions with interested Tribal Nations on February 7 and 22, 2024 and has incorporated additional feedback from BOEM relating to the agency's government-to-government consultations with affected Tribal Nations into this revised HPTP.

3.0 HISTORIC PROPERTIES - SIGNIFICANCE, EFFECTS, AND MITIGATION MEASURES

3.1 Historic Properties Included in the HPTP

The physical descriptions of each ASLF included in this HPTP (see Sections 3.2.1 through 3.2.3, below) are reproduced from the *Marine Archaeological Resources Assessment* (MARA), dated February 2022 (SEARCH, 2022; COP Appendix II-Q1) and the *Marine Archaeological Resources Assessment Addendum* (MARA Addendum), dated November 2023 (SEARCH, 2023). The physical descriptions herein are followed by a collective narrative summarizing the historic context (Section 3.3), and a collective assessment of applicable NRHP criteria and Potential Adverse Physical Effects (Section 3.4).

3.2 Descriptions and Physical Conditions of Historic Properties

This HPTP describes the conditions and proposed mitigation measures for NRHP-eligible ASLFs identified within Lease Area OCS-A 0499 (Section 3.2.1), the Monmouth ECC (3.2.2), and the Atlantic ECC (Section 3.2.3). The potentially affected ASLFs range in size and general character throughout the PAPE, though Atlantic Shores analyses suggest some common conditions. As is common in submerged sections of the coastal plain along the Atlantic Ocean, marine transgression following the last glaciations in the Northern Hemisphere resulted in widespread truncation and redeposition of ancient terrestrial landscapes. Such destructive processes did not affect all areas equally and intact terrestrial sediments and elements of ancient landforms are likely present in portions of PAPE. Atlantic Shores has conducted several phases of investigations intended to characterize broad areas where distinct elements of ancient landscapes are preserved and discernable from geophysical and geotechnical datasets, as well as focused assessments of potential WTG locations that could intersect intact terrestrial sediments or soils within each ASLF. All ASLFs are anticipated to be subject to adverse effects caused by bottom-disturbing activities. Atlantic Shores has engaged in and will continue efforts to avoid and mitigate all adverse effects when feasible, during design. Based on intensive design efforts in response to consulting party comments and guidance provided by BOEM, Atlantic Shores has committed to avoiding physical disturbance to the following 21 ASLFs: ASLFs 41, 212, 213, 214, 215, 216, 219, 220, 221, 222, 223, 224, 225, 226, 205, 207, 217, 218, 229, 230, 231. As described in Section 5, consultations among the Tribal Nations, BOEM, Atlantic Shores and other consulting parties will be conducted prior to any seabed disturbing activities affecting the remaining ASLFs described below.

3.2.1 Lease Area OCS-A 0499

The potentially NRHP-eligible ASLFs identified within Lease Area OCS-A 0499 are summarized in Table 3.2-1 and described in the subsection below.

Table 3.2-1. ASLFs identified in Lease Area OCS-A 0499

Name	Seabed Impact Area	Location	Feature Description
Target 40	OCS-A 0499	Federal Waters, Monmouth ECC	Multiple channel cuts separated by intact margins and eroded surfaces. Feature is a component of the eastern major fluvial complex within the PAPE. Assessed as having high preservation potential.
Target 45	OCS-A 0499	Federal Waters	Intact margin deposits along the right side of the channel. Most likely the northern portion of Target 48.

Name	Seabed Impact Area	Location	Feature Description
Target 46	OCS-A 0499	Federal Waters	Main channel with smaller channel cuts separated by intact margins.
Target 48	OCS-A 0499	Federal Waters	Multiple channel cuts separated by intact margins. Erosion of former terrestrial topography in some areas is likely based on unconformity beneath marine sand deposits. Feature is a component of the western major fluvial complex within the PAPE.; The western major fluvial system within the PAPE
Target 50	OCS-A 0499	Federal Waters	Multiple channel cuts separated by an intact margin.
Target 51	OCS-A 0499	Federal Waters	Multiple channel cuts with variable basal reflectors.; Most likely a major tributary of the western channel complex.
Target 52	OCS-A 0499	Federal Waters	Multiple channel cuts separated by intact margin deposits.
Target 54	OCS-A 0499	Federal Waters	Multiple channel generations downcutting into one another, with preserved margins.
Target 57	OCS-A 0499	Federal Waters	A channel characterized by a deeper and shallow downcutting event.; Intact margins with an additional channel or lagoonal feature on the left bank.
Target 204	OCS-A 0499	Federal Waters	Channel downcut with an intact margin on one side
Target 205	OCS-A 0499	Federal Waters	Channel downcut with an intact margin on one side; Will be avoided by construction.
Target 206	OCS-A 0499	Federal Waters	Large channel downcut with an intact margin on one side
Target 207	OCS-A 0499	Federal Waters	Channel downcut with an intact margin on one side; Will be avoided by construction.
Target 208	OCS-A 0499	Federal Waters	Large channel downcut with intact margins converging with another channel into one thalweg
Target 209	OCS-A 0499	Federal Waters	Two channel downcuts separated by intact margin deposits, with extensive intact margins on one side
Target 210	OCS-A 0499	Federal Waters	Two channel downcuts separated by an eroded surface, bounded by margins
Target 211	OCS-A 0499	Federal Waters	Two channel downcuts separated by intact margin deposits, with intact margins on both sides
Target 212	OCS-A 0499	Federal Waters	Large channel downcut; Will be avoided by construction.
Target 213	OCS-A 0499	Federal Waters	Two channel downcuts; Will be avoided by construction.
Target 214	OCS-A 0499	Federal Waters	Three channel downcuts separated by eroded surfaces; Will be avoided by construction.
Target 215	OCS-A 0499	Federal Waters	Two channel downcuts separated by an eroded surface; Will be avoided by construction.
Target 216	OCS-A 0499	Federal Waters	Channel downcut with an intact margin on one side; Will be avoided by construction.
Target 217	OCS-A 0499	Federal Waters	Channel downcut; Will be avoided by construction.
Target 218	OCS-A 0499	Federal Waters	Two channel downcuts separated by margin deposits, with intact margins on both sides; Will be avoided by construction.
Target 219	OCS-A 0499	Federal Waters	Large channel downcut with intact margin deposits on one side, and intact secondary channel margins present on one side; Will be avoided by construction.
Target 220	OCS-A 0499	Federal Waters	Channel downcut; Will be avoided by construction.
Target 221	OCS-A 0499	Federal Waters	Two large channel downcuts separated by intact margin deposits, with intact margins on both sides, and an intact secondary channel margin deposit within the second thalweg; Will be avoided by construction.
Target 222	OCS-A 0499	Federal Waters	Channel downcut with intact margins on both sides; Will be avoided by construction.

Name	Seabed Impact Area	Location	Feature Description
Target 223	OCS-A 0499	Federal Waters	Braided channel system with three major channel downcuts separated by extensive intact margin deposits, bounded by intact margins on both sides; <i>Will be avoided by construction.</i>
Target 224	OCS-A 0499	Federal Waters	Two channel downcuts separated by intact margin deposits, with intact margins on one side; <i>Will be avoided by construction.</i>
Target 225	OCS-A 0499	Federal Waters	Channel downcut with intact margins on both sides; <i>Will be avoided by construction.</i>
Target 226	OCS-A 0499	Federal Waters	Two channel downcuts separated by an eroded surface; <i>Will be avoided by construction.</i>
Target 227	OCS-A 0499	Federal Waters	Braided channel system with seven channel downcuts separated by intact and/or eroded margins, with intact margins on one side and an intact secondary channel margin deposit in the largest channel thalweg
Target 228	OCS-A 0499	Federal Waters	Channel downcut with intact margins on both sides
Target 229	OCS-A 0499	Federal Waters	Channel downcut with intact margins on one side; <i>Will be avoided by construction.</i>
Target 230	OCS-A 0499	Federal Waters	Channel downcut; <i>Will be avoided by construction.</i>
Target 231	OCS-A 0499	Federal Waters	Channel downcut; <i>Will be avoided by construction.</i>

3.2.1.1 Target 40

Target 40 represents a discontinuous portion of the late Pleistocene paleochannels present within the Monmouth ECC and Lease Area OCS-A 0499 as part of the Transgressive Channel Group (TCG). This target represents a complex of partially preserved and buried channels and margin deposits moving from the Wind Turbine Area (WTA) and cutting across the ECC. Target 40 is the largest ASLF identified within the PAPE, covering approximately 3875.60 ha (9,576.82 ac) and extending to a maximum depth below seabed (bsb) of 23.8 m (78.1 ft). The acoustic imagery of Target 40 depicts multiple channel cuts separated by potentially intact margin deposits and eroded surfaces. Target 40 is the eastern major fluvial complex within the PAPE. It is 7,547.9 m (24,763.4 ft) at its widest point. In general, the extent of near channel and channel margin reflectors is representative of partially preserved ancient, submerged landforms. Truncation of formerly terrestrial landform elements by the seafloor is apparent in many sections of the ASLF; however, a preserved section of elevated channel margin is present near the proposed location of WTG 75. Approximately 29% (1,136.91 ha [2,809.37 ac]) of the near channel and margin deposits are present within the 5.0 m (16 ft) vertical PAPE, and 26 % (993.54 ha [2,455.09 ac]) are within the 3.0 m (9.8 ft) vertical PAPE.

3.2.1.2 Target 45

Target 45 represents a discontinuous portion of the late Pleistocene paleochannels present within Lease Area OCS-A 0499 as part of the TCG. This target represents a preserved and buried channel cutting within the WTA. Covering approximately 103.4 ha (255.5 ac), the acoustic imagery of Target 45 depicts intact margin deposits along the right side of the channel. Target 45 was likely a northern portion of Target 48. The acoustic reflector extends to a maximum depth of 10.2 m (33.5 ft) bsb and is 1,225.7 m (4,021.3 ft) at its widest point. In general, the extent of near channel and channel margin reflectors is representative of preserved ancient, submerged landforms. Approximately 37.1% (38.39 ha [94.88 ac]) of the near channel

and margin deposits are present within the 5.0 m (16 ft) vertical PAPE, and 3.3 % (3.43 ha [8.48 ac]) are within the 3.0 m (9.8 ft) vertical PAPE. Approximately 3.73 ha (9.21 ac) are within the WTG buffers.

3.2.1.3 Target 46

Target 46 represents a discontinuous portion of the late Pleistocene paleochannels present within Lease Area OCS-A 0499 as part of the TCG. This target represents a well incised preserved and buried channel cutting within the WTA. Covering approximately 133.2 ha (329.0 ac), the acoustic imagery of Target 46 depicts the main channel and its banks. The acoustic reflector extends to a maximum depth of 13.6 m (44.6 ft) bsb and is 1,717.3 m (5,634.2 ft) at its widest point. In general, the extent of near channel and channel margin reflectors representative of preserved ancient, submerged landforms. Approximately 39.0% (136.84 ha [338.13 ac]) of the near channel and margin deposits are present within the 5.0 m (16 ft) vertical PAPE, and 31.1% (109.29 ha [270.07 ac]) are within the 3.0 m (9.8 ft) vertical PAPE. Approximately 28.09 ha (69.42 ac) are within the WTG buffers.

3.2.1.4 Target 48

Target 48 represents a discontinuous portion of the late Pleistocene paleochannels present within Lease Area OCS-A 0499 as part of the TCG. This target represents a series of preserved and buried channels cutting within the WTA. Covering approximately 879.42 ha (2,173.10 ac), the acoustic imagery of Target 48 depicts multiple channel cuts separated by intact margin deposits. Target 48 represents a portion of the major western fluvial system. The acoustic reflector extends to a maximum depth of 11.9 m (39.0 ft) bsb and is 4,815.2 m (15,797.9 ft) at its widest point. In general, the extent of near channel and channel margin reflectors is representative of preserved ancient, submerged landforms. Erosion and truncation of near-surface elements of the feature is apparent in some sections based on supplementary analyses of potential WTG locations within the ASLF. Approximately 40.1% (1,000.86 ha [2,473.17 ac]) of the near channel and margin deposits are present within the 5.0 m (16 ft) vertical PAPE, and 33.7 % (841.35 ha [2,079.02 ac]) are within the 3.0 m (9.8 ft) vertical PAPE. Approximately 156.90 ha (387.70 ac) are within the WTG buffers.

3.2.1.5 Target 50

Target 50 represents a discontinuous portion of the late Pleistocene paleochannels present within Lease Area OCS-A 0499 as part of the TCG. This target represents a series of preserved and buried channels cutting within the WTA which may have originally been one major channel. Covering approximately 353.4 ha (873.3 ac), the acoustic imagery of Target 50 depicts the multiple channel cuts separated by an intact margin deposit. The acoustic reflector extends to a maximum depth of 10.2 m (33.5 ft) bsb and is 3,048.5 m (10,001.6 ft) at its widest point. In general, the extent of near channel and channel margin reflectors is representative of preserved ancient, submerged landforms. Erosion and truncation of near-surface elements of the feature is apparent in some sections based on supplementary analyses of potential WTG locations within the ASLF. Approximately 27.7% (97.96 ha [242.06 ac]) of the near channel and margin deposits are present within the 5.0 m (16 ft) vertical PAPE, and 25.3% (89.32 ha [220.73 ac]) are within the 3.0 m (9.8 ft) vertical PAPE. Approximately 17.64 ha (43.60 ac) are within the WTG buffers.

3.2.1.6 Target 51

Target 51 represents a discontinuous portion of the late Pleistocene paleochannels present within Lease Area OCS-A 0499 as part of the TCG. This target represents a series of preserved and buried channels cutting within the WTA. Covering approximately 611.7 ha (1,511.5 ac), the acoustic imagery of Target 51 depicts multiple channel cuts with variable basal reflectors. This fluvial pathway likely represents a major tributary of the western channel complex. The acoustic reflector extends to a maximum depth of 17.0 m (55.8 ft) bsb and is 5,602.9 m (18,382.1 ft) at its widest point. In general, the extent of near channel and channel margin reflectors is representative of preserved ancient, submerged landforms. Erosion and truncation of near-surface elements of the feature is apparent in some sections based on supplementary analyses of potential WTG locations within the ASLF. These features cover approximately 255.2 ha (630.6 ac). Approximately 24.1% (189.33 ha [467.84 ac]) of the near channel and margin deposits are present within the 5.0 m (16 ft) vertical PAPE, and 10.3 % (80.71 ha [199.44 ac]) are within the 3.0 m (9.8 ft) vertical PAPE. Approximately 25.53 ha (63.09 ac) are within the WTG buffers.

3.2.1.7 Target 52

Target 52 represents a discontinuous portion of the late Pleistocene paleochannels present within Lease Area OCS-A 0499 as part of the TCG. This target represents a series of preserved and buried channels cutting within the WTA. Covering approximately 333.69 ha (824.57 ac), the acoustic imagery of Target 52 depicts multiple channel cuts separated by intact margin deposits. The acoustic reflector extends to a maximum depth of 17.9 m (58.7 ft) bsb and is 5,685.0 m (18,651.5 ft) at its widest point. In general, the extent of near channel and channel margin reflectors are representative of preserved ancient, submerged landforms. These features cover approximately 153.9 ha (380.2 ac). Approximately 10.7% (65.57 ha [162.04 ac]) of the near channel and margin deposits are present within the 5.0 m (16 ft) vertical PAPE, and 7.1 % (43.50 ha [107.50 ac]) are within the 3.0 m (9.8 ft) vertical PAPE. Approximately 41.78 ha (103.23 ac) are within the WTG buffers.

3.2.1.8 Target 54

Target 54 represents a discontinuous portion of the late Pleistocene paleochannels present within Lease Area OCS-A 0499 as part of the TCG. This target represents a series of preserved and buried channels within the WTA and likely the southeastern most extent of one of the major fluvial systems in the PAPE. Covering approximately 143.2 ha (354.0 ac), the acoustic imagery of Target 54 depicts multiple channel generations downcutting into one another with preserved margins. The acoustic reflector extends to a maximum depth of 8.5 m (27.9 ft) bsb and is 2,479.9 m (8,136.1 ft) at its widest point. In general, the extent of near channel and channel margin reflectors is representative of preserved ancient, submerged landforms. These features cover approximately 269.6 ha (666.2 ac). Approximately 26.2% (154.47 ha [381.71 ac]) of the near channel and margin deposits are present within the 5.0 m (16 ft) vertical PAPE, and 10.7% (63.44 ha [156.76 ac]) are within the 3.0 m (9.8 ft) vertical PAPE. Approximately 39.34 ha (97.22 ac) are within the WTG buffers.

3.2.1.9 Target 57

Target 57 represents a discontinuous portion of the late Pleistocene paleochannels present within Lease Area OCS-A 0499 as part of the TCG. This target represents a buried channel with preserved margins within the WTA. Covering approximately 145.6 ha (359.8 ac), the acoustic imagery of Target 57 depicts a channel

characterized by a deeper and shallow downcutting event. The associated banks and margins appear intact on either side with an additional channel or lagoonal feature on the left bank. The acoustic reflector extends to a maximum depth of 10.2 m (33.5 ft) bsb and is 2,220.9 m (7,286.4 ft) at its widest point. In general, the extent of near channel and channel margin reflectors is representative of preserved ancient, submerged landforms. These features cover approximately 49.4 ha (122.2 ac). Approximately 34.0% (49.43 ha [122.15 ac]) of the near channel and margin deposits are present within the 5.0 m (16 ft) vertical PAPE, and 23.6% (34.37 ha [84.94 ac]) are within the 3.0 (9.8 ft) vertical PAPE. Approximately 11.48 ha (28.36 ac) are within the WTG buffers.

3.2.1.10 Target 204

Target 204 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 18.84 ha (46.55 ac), the acoustic imagery of Target 204 depicts a channel downcut with an intact margin to the left. The reflector extends to a maximum depth of 10.4 m (34.1 ft) bsb and downcuts into the H005 and H020 stratigraphic units. The target is 240 m (787.2 ft) at its widest point. These features cover approximately 5.7 ha (14.0 ac). Approximately 30.0% (5.66 ha [13.98 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 30.0% (5.66 ha [13.98 ac]) are within the 5 m (16 ft) vertical PAPE.

3.2.1.11 Target 205

Target 205 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 19.24 ha (47.54 ac), the acoustic imagery of Target 205 depicts a channel downcut with an intact margin to the right. The reflector extends to a maximum depth of 6.9 m (22.7 ft) bsb and downcuts into the H005 and H020 stratigraphic units. The target is 267 m (875.8 ft) at its widest point. These features cover approximately 5.3 ha (13.1 ac). Approximately 27.5% (5.30 ha [13.10 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 27.5% (5.30 ha [13.10 ac]) are within the 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 205 during construction.

3.2.1.12 Target 206

Target 206 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 10.22 ha (25.25 ac), the acoustic imagery of Target 206 depicts a large channel downcut with an intact margin to the right. The reflector extends to a maximum depth of 9.5 m (31.3 ft) bsb and downcuts into the H005 and H020 stratigraphic units. It is 403 m (1,321.8 ft) at its widest point. shows the extent of the near channel and channel margin reflectors representative of preserved ASLFs. These features cover approximately 2.4 ha (5.8 ac). Approximately 23.1% (2.36 ha [5.83 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 23.1% (2.36 ha [5.83 ac]) are within the 5 m (16 ft) vertical PAPE.

3.2.1.13 Target 207

Target 207 represents a discontinuous portion of the late- Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 8.40 ha (20.77 ac), the acoustic imagery of Target 207 depicts a channel downcut with an intact margin to the east. The reflector extends to a maximum depth of 15.6 m (51.2 ft) bsb and downcuts into the H005 and H020 stratigraphic units. It is 264 m (865.9 ft) at its widest point. These features cover approximately 0.4 ha (1.0 ac). Approximately 2.0% (0.17 ha [0.41 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 4.8% (0.41 ha [1.00 ac]) are within the 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 207 during construction.

3.2.1.14 Target 208

Target 208 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 52.88 ha (130.67 ac), the acoustic imagery of Target 208 depicts a large channel downcut with intact margins to the at both ends. To the south, this and a second channel converge into one channel thalweg. The reflector extends to a maximum depth of 7.8 m (25.6 ft) bsb and downcuts into the CH20 stratigraphic unit. It is 925 m (3,034.0 ft) at its widest point. These features cover approximately 18.5 ha (45.6 ac). Approximately 0.0% of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 24.1% (12.77 ha [31.54 ac]) are within the 5 m (16 ft) vertical PAPE.

3.2.1.15 Target 209

Target 209 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 60.38 ha (149.21 ac), the acoustic imagery of Target 209 depicts two channel downcuts separated by intact margin deposits, with extensive intact margins to the left. The reflector extends to a maximum depth of 7.8 m (25.6 ft) bsb and downcuts into the H005 and H020 stratigraphic units. It is 1,672 m (5,484.2 ft) at its widest point. These features cover approximately 20.5 ha (50.7 ac). Approximately 17.4% (10.53 ha [26.01 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 34.0% (20.53 ha [50.72 ac]) are within the 5 m (16 ft) vertical PAPE.

3.2.1.16 Target 210

Target 210 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 34.56 ha (85.40 ac), the acoustic imagery of Target 210 depicts two channel downcuts separated by an eroded surface, bounded by margins on both sides. A third north-south running channel is also present to the south. The reflector extends to a maximum depth of 8.7 m (28.4 ft) bsb and downcuts into the H005 stratigraphic unit. It is 655 m (2,148.4 ft) at its widest point. These features cover approximately 8.6 ha (21.2 ac). Approximately 7.8% (2.71 ha [6.70 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 24.9% (8.59 ha [21.23 ac]) are within the 5 m (16 ft) vertical PAPE.

3.2.1.17 Target 211

Target 211 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 73.93 ha (182.67 ac), the acoustic imagery of Target 211 depicts two channel downcuts separated by intact margin deposits, with intact margins to at both ends. The eastern margin represents an intact secondary terrace. The reflector extends to a maximum depth of 19.1 m (62.5 ft) bsb and downcuts into the H005, H020, H050, H080, H085, and CH20 stratigraphic units. It is 1614 m (5293.9 ft) at its widest point. These features cover approximately 22.9 ha (56.7 ac). Approximately 16.4% (12.09 ha [29.87 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 31.0% (22.93 ha [56.66 ac]) are within the 5 m (16 ft) vertical PAPE.

3.2.1.18 Target 212

Target 212 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 90.35 ha (223.25 ac), the acoustic imagery of Target 212 depicts a large channel downcut. The reflector extends to a maximum depth of 8.7 m (28.4 ft) bsb and downcuts into the H005, H020, and CH20 stratigraphic units. It is 1,326 m (4,349.3 ft) at its widest point. These features cover approximately 32.7 ha (80.8 ac). Approximately 0.0% of the near channel and margin deposits are within the 3 m (10 ft) and 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 212 during construction.

3.2.1.19 Target 213

Target 213 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 24.28 ha (59.98 ac), the acoustic imagery of Target 213 depicts multiple channel downcuts. The reflector extends to a maximum depth of 14.7 m (48.3 ft) bsb and downcuts into the H005 and H020 stratigraphic units. It is 620 m (2,033.6 ft) at its widest point. These features cover approximately 2.7 ha (6.7 ac). The near channel and margin deposits are all beneath the limits of the 3 m (10 ft) and 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 213 during construction.

3.2.1.20 Target 214

Target 214 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 4.85 ha (11.99 ac), the acoustic imagery of Target 214 depicts three channel downcuts separated eroded surfaces. The reflector extends to a maximum depth of 12.1 m (39.8 ft) bsb and downcuts into the H005 and H020 stratigraphic units. It is 589 m (1,931.9 ft) at its widest point. The near channel and margin deposits are all beneath the limits of the 3 m (10 ft) and 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 214 during construction.

3.2.1.21 Target 215

Target 215 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 57.44 ha (141.94 ac), the acoustic imagery of Target 215 depicts two channel downcuts separated by an eroded surface. The reflector extends to a maximum depth of 15.6 m (51.2 ft) bsb and downcuts into the H005, H020, and CH20 stratigraphic units. It is 948 m (23109.4 ft) at its widest point. The near channel and margin deposits are all beneath the limits of the 3 m (10 ft) and 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 215 during construction.

3.2.1.22 Target 216

Target 216 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 3.86 ha (9.55 ac), the acoustic imagery of Target 216 depicts a channel downcut with an intact margin to the right. The reflector extends to a maximum depth of 7.8 m (25.6 ft) bsb and downcuts into the H005 stratigraphic unit. It is 293 m (961.0 ft) at its widest point. These features cover approximately 1.0 ha (2.5 ac). None of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 21.6% (0.84 ha [2.07 ac]) are within the 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 216 during construction.

3.2.1.23 Target 217

Target 217 represents a discontinuous portion of the late- Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 4.34 ha (10.73 ac), the acoustic imagery of Target 217 depicts a channel downcut. The reflector extends to a maximum depth of 8.7 m (28.4 ft) bsb and downcuts into the H005 and H020 stratigraphic units. It is 184 m (603.5 ft) at its widest point. The near channel and margin deposits are all beneath the limits of the 3 m (10 ft) and 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 217 during construction.

3.2.1.24 Target 218

Target 218 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 14.31 ha (35.36 ac), the acoustic imagery of Target 218 depicts two channel downcuts separated by margin deposits, with intact margins to the at both ends. The reflector extends to a maximum depth of 5.2 m (17.1 ft) bsb and downcuts into the H005 stratigraphic unit. It is 408 m (1,338.2 ft) at its widest point. These features cover approximately 2.2 ha (5.3 ac). Approximately 15.1% (2.16 ha [5.35 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 15.1% (2.16 ha [5.35 ac]) are within the 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 218 during construction.

3.2.1.25 Target 219

Target 219 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 63.80 ha (157.65 ac), the acoustic imagery of Target 219 depicts a large channel downcut with intact margin deposits to the right, and intact secondary channel

margins deposits present to the left. The reflector extends to a maximum depth of 6.9 m (22.7 ft) bsb and downcuts into the H005 and H010 stratigraphic units. It is 1,191 m (3,906.5 ft) at its widest point. These features cover approximately 14.3 ha (35.2 ac). Approximately 22.3% (14.25 ha [35.21 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 22.3% (14.25 ha [35.21 ac]) are within the 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 219 during construction.

3.2.1.26 Target 220

Target 220 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 2.89 ha (7.13 ac), the acoustic imagery of Target 220 depicts a channel downcut. The reflector extends to a maximum depth of 3.5 m (11.4 ft) bsb and downcuts into the H005 stratigraphic unit. It is 113 m (370.6 ft) at its widest point. The near channel and margin deposits are all beneath the limits of the 3 m (10 ft) and 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 220 during construction.

3.2.1.27 Target 221

Target 221 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 144.93 ha (358.12 ac), the acoustic imagery of Target 221 depicts two large channel downcuts separated by intact margin deposits, with intact margins at both ends, and an intact secondary channel margin deposit present within the right thalweg. The reflector extends to a maximum depth of 8.7 m (28.4 ft) bsb and downcuts into the H005 and H010 stratigraphic units. It is 1,720 m (5,641.6 ft) at its widest point. These features cover approximately 48.1 ha (118.9 ac). Approximately 31.1% (45.06 ha [111.34 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 33.2% (48.13 ha [118.93 ac]) are within the 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 221 during construction.

3.2.1.28 Target 222

Target 222 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 5.42 ha (13.40 ac), the acoustic imagery of Target 222 depicts a channel downcut with intact margins at both ends. The reflector extends to a maximum depth of 4.3 m (14.2 ft) bsb and downcuts into the H005 and H010 stratigraphic units. It is 342 m (1,121.8 ft) at its widest point. These features cover approximately 2.4 ha (5.9 ac). Approximately 44.1% (2.39 ha [5.91 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 44.1% (2.39 ha [5.91 ac]) are within the 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 222 during construction.

3.2.1.29 Target 223

Target 223 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 108.48 ha (268.06 ac), the acoustic imagery of Target 223 depicts a complex braided channel system with three major channel downcuts separated by extensive

intact margin deposits, bounded by intact margins at both ends. The reflector extends to a maximum depth of 7.8 m (25.6 ft) bsb and downcuts into the H005 and H010 stratigraphic units. It is 1,250 m (4,100.0 ft) at its widest point. These features cover approximately 36.6 ha (90.4 ac). Approximately 33.7% (36.58 ha [90.39 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 33.7% (36.58 ha [90.39 ac]) are within the 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 223 during construction.

3.2.1.30 Target 224

Target 224 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 8.48 ha (20.95 ac), the acoustic imagery of Target 224 depicts two channel downcuts separated by intact margin deposits, with intact margins to the left. The reflector extends to a maximum depth of 8.7 m (28.4 ft) bsb and downcuts into the H010 stratigraphic unit. It is 265 m (869.2 ft) at its widest point. These features cover approximately 0.9 ha (2.3 ac). None the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 11.0% (0.94 ha [2.31 ac]) are within the 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 224 during construction.

3.2.1.31 Target 225

Target 225 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 7.32 ha (18.09 ac), the acoustic imagery of Target 225 depicts a channel downcut with intact margins at both ends. The reflector extends to a maximum depth of 5.2 m (17.1 ft) bsb and downcuts into the H010 stratigraphic unit. It is 256 m (839.7 ft) at its widest point. These features cover approximately 4.7 ha (11.6 ac). Approximately 4.0% (0.29 ha [0.72 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 64.1% (4.69 ha [11.59 ac]) are within the 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 225 during construction.

3.2.1.32 Target 226

Target 226 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 15.94 ha (39.40 ac), the acoustic imagery of Target 226 depicts two channel downcuts separated by an eroded surface, without intact margins. The reflector extends to a maximum depth of 9.5 m (31.3 ft) bsb and downcuts into the H005 and H010 stratigraphic units. It is 735 m (2,410.8 ft) at its widest point. These features cover approximately 1.6 ha (4.0 ac). The near channel and margin deposits are all beneath the limits of the 3 m (10 ft) and 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 226 during construction.

3.2.1.33 Target 227

Target 227 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 91.22 ha (225.41 ac), the acoustic imagery of Target 227 depicts a complex braided channel system with multiple channel downcuts separated by intact and/or

eroded margins, with intact margins to the left. An intact secondary channel margin deposit is present in the largest channel thalweg to the east. The system is limited to a single channel thalweg to the north. The reflector extends to a maximum depth of 13.9 m (45.5 ft) bsb and downcuts into the H005, H010, and H020 stratigraphic units. It is 1778 m (5,831.8 ft) at its widest point. These features cover approximately 21.4 ha (52.8 ac). Approximately 0.3% (0.27 ha [0.66 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 16.5% (15.08 ha [37.25 ac]) are within the 5 m (16 ft) vertical PAPE.

3.2.1.34 Target 228

Target 228 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 17.89 ha (44.22 ac), the acoustic imagery of Target 228 depicts a channel downcut with intact margins at both ends. The reflector extends to a maximum depth of 6.9 m (22.7 ft) bsb and downcuts into the H020 stratigraphic unit. It is 304 m (997.1 ft) at its widest point. These features cover approximately 4.0 ha (9.9 ac). Approximately 12.6% (2.25 ha [5.56 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 22.4% (4.01 ha [9.90 ac]) are within the 5 m (16 ft) vertical PAPE.

3.2.1.35 Target 229

Target 229 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 2.51 ha (6.21 ac), the acoustic imagery of Target 229 depicts a channel downcut with intact margins to the right. The reflector extends to a maximum depth of 3.5 m (11.4 ft) bsb and downcuts into the H005 stratigraphic unit. It is 173 m (567.4 ft) at its widest point. These features cover approximately 1.1 ha (2.7 ac). Approximately 44.1% (1.11 ha [2.74 ac]) of the near channel and margin deposits are within the 3 m (10 ft) vertical PAPE, and 44.1% (1.11 ha [2.74 ac]) are within the 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 229 during construction.

3.2.1.36 Target 230

Target 230 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 2.17 ha (5.37 ac), the acoustic imagery of Target 230 depicts a channel downcut with no intact margins. The reflector extends to a maximum depth of 3.5 m (11.4 ft) bsb and downcuts into the H005 stratigraphic unit. It is 177 m (580.6 ft) at its widest point. All of near channel and margin deposits are beneath the limits of the 3 m (10 ft) and 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 230 during construction.

3.2.1.37 Target 231

Target 231 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Lease Area as part of the TCG. Covering approximately 0.89 ha (2.19 ac), the acoustic imagery of Target 231 depicts a channel downcut with no intact margin deposits. The reflector extends to a maximum depth of 4.3 m (14.2 ft) bsb and downcuts into the H005 stratigraphic unit. It is 117 m (383.8 ft) at its widest point.

All of near channel and margin deposits are beneath the limits of the 3 m (10 ft) and 5 m (16 ft) vertical PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 231 during construction.

3.2.2 Monmouth ECC

The ASLFs identified within the Monmouth ECC are summarized in Table 3.2-2 and described in the subsections below.

Table 3.2-2. ASLFs identified in the Monmouth ECC

Name	Seabed Impact Area	State	Location	Feature Description
Target 22	Monmouth ECC	New Jersey	State Waters	Multiple channel cuts separated by intact margin deposits
Target 23	Monmouth ECC	New Jersey	State Waters	Multiple channel cuts separated by intact margin deposits
Target 24	Monmouth ECC	New Jersey	State Waters	Meandering portions of buried channels and intact margins
Target 25	Monmouth ECC	New Jersey	State Waters	Three channel cuts separated by intact margins
Target 26	Monmouth ECC	New Jersey	State and Federal Waters	Series of preserved and buried channels with intact margins
Target 27	Monmouth ECC	N/A	Federal Waters	Multiple channel cuts separated by intact margin deposits
Target 28	Monmouth ECC	N/A	Federal Waters	Series of preserved channels and intact margins
Target 29	Monmouth ECC	N/A	Federal Waters	Multiple channel cuts separated by intact margin deposits
Target 30	Monmouth ECC	N/A	Federal Waters	Multiple channel cuts separated by intact margin deposits
Target 31	Monmouth ECC	N/A	Federal Waters	Three channel cuts separated by intact margins and eroded surfaces
Target 32	Monmouth ECC	N/A	Federal Waters	One channel downcut with intact margins
Target 33	Monmouth ECC	N/A	Federal Waters	Series of channel cuts separated by intact margins and eroded surfaces
Target 34	Monmouth ECC	N/A	Federal Waters	Series of channel cuts separated by intact margins and eroded surfaces
Target 35	Monmouth ECC	N/A	Federal Waters	Localized system of two channel cuts with intact margins and eroded surfaces
Target 36	Monmouth ECC	N/A	Federal Waters	Series of channel cuts separated by intact margins and eroded surfaces
Target 37	Monmouth ECC	N/A	Federal Waters	Series of channel cuts separated by intact margins and eroded surfaces
Target 38	Monmouth ECC	N/A	Federal Waters	Three channel cuts separated by intact margins
Target 39	Monmouth ECC	N/A	Federal Waters	Three channel cuts separated by intact margins and eroded surfaces

3.2.2.1 Target 22

Target 22 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) Transgressive Channel Group (TCG). It covers approximately 79.8 ha (197.3 ac), and the acoustic imagery of Target 22 depicts multiple channel cuts separated by intact margin deposits. The acoustic reflector extends to a maximum depth of 4.9 m (16.1 ft) below seabed (bsb). It is 958.1 m (3,143.4 ft) at its widest point. In general,

the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 33.1 ha (81.8 ac) of the ECC horizontal PAPE. Each of the near-channel and margin deposits is within the 5 m (16 ft) and 3 m (5 ft) vertical ECC PAPE.

3.2.2.2 Target 23

Target 23 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. It covers approximately 79.7 ha (196.9 ac), and the acoustic imagery of Target 23 depicts multiple channel cuts separated by intact margin deposits. The acoustic reflector extends to a maximum depth of 4.9 m (16.1 ft) bsb. It is 586.7 m (1,924.9 ft) at its widest point. The extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 35.0 ha (86.6 ac) of the ECC horizontal PAPE. Each of the near-channel and margin deposits is within the 5 m (16 ft) vertical ECC PAPE. Approximately 99% (34.6 ha [85.5 ac]) are within the 3 m (10 ft) vertical ECC PAPE.

3.2.2.3 Target 24

Target 24 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. The target represents a meandering section of buried channels cutting across the ECC. It covers approximately 180.0 ha (444.7 ac), and the acoustic imagery of Target 24 depicts two channel cuts separated by intact margin deposits. The acoustic reflector extends to a maximum depth of 4.0 m (13.1 ft) bsb. It is 1,121.9 m (3,680.8 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 56.0 ha (138.3 ac) of the ECC horizontal PAPE. Each of the near-channel and margin deposits is within the 5 m vertical ECC PAPE. Approximately 93% (52.2 ha [128.9 ac]) are within the 3 m (10 ft) vertical ECC PAPE.

3.2.2.4 Target 25

Target 25 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. Covering approximately 46.8 ha (115.6 ac), Target 25 consists of three channel cuts separated by intact margin deposits. The acoustic reflector extends to a maximum depth of 4.0 m (13.1 ft) bsb. It is 615.4 m (2,019.0 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 9.8 ha (24.3 ac) of the ECC horizontal PAPE. Each of the near channel and margin deposits is within the 5 m (16 ft) and 3 m (10 ft) vertical ECC PAPE.

3.2.2.5 Target 26

Target 26 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents a series of preserved and buried channels cutting across the ECC. Covering approximately 324.4 ha (801.5 ac), Target 26 consists of multiple channel cuts separated by intact margin deposits. The acoustic reflector extends to a maximum depth of 4.9 m (16.0 ft) bsb. It is 1,186.6 m (3,893.0 ft) at its widest point.

The extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 68.7 ha (169.8 ac) of the ECC horizontal PAPE. Each of the near-channel and margin deposits is within the 5 m (16 ft) vertical ECC PAPE. Approximately 95% (65.1 ha [160.8 ac]) are within the 3 m (10 ft) vertical ECC PAPE.

3.2.2.6 Target 27

Target 27 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents a series of preserved and buried channels cutting across the ECC. Covering approximately 181.4 ha (448.2 ac), Target 27 consists of multiple channel cuts separated by intact margin deposits. The acoustic reflector extends to a maximum depth of 3.2 m (10.7 ft) bsb. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 49.9 ha (123.4 ac) of the ECC horizontal PAPE. Each of the near channel and margin deposits is within the 5 m (16 ft) vertical ECC PAPE. Approximately 99% (49.4 ha [122.0 ac]) are within the 3 m (10 ft) vertical ECC PAPE.

3.2.2.7 Target 28

Target 28 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents a series of preserved channels cutting across the ECC. Covering approximately 163.4 ha (403.8 ac), Target 28 depicts a single channel cut with intact margin deposits. The acoustic reflector extends to a maximum depth of 2.5 m (8.2 ft) bsb. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 43.8 ha (108.3 ac) of the horizontal ECC PAPE. Each of the near-channel and margin deposits is within the 5 m (16 ft) and 3 m (10 ft) vertical ECC PAPE.

3.2.2.8 Target 29

Target 29 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents a series of preserved and buried channels cutting across the ECC. Covering approximately 54.7 ha (135.12 ac), Target 29 consists of multiple channel cuts separated by intact margin deposits. The acoustic reflector extends to a maximum depth of 4.0 m (13.1 ft) bsb. It is 1,251.0 m (4,104.3 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 10.1 ha (24.9 ac) of the horizontal ECC PAPE. Each of the near channel and margin deposits is within the 5 m (16 ft) and 3 m (10 ft) vertical ECC PAPE.

3.2.2.9 Target 30

Target 30 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents a series of preserved and buried channels and margin deposits cutting across the ECC. Covering approximately 150.5 ha (372.0 ac), Target 30 consists of multiple channel cuts separated by intact margin

deposits. The acoustic reflector extends to a maximum depth of 4.0 m (13.1 ft) bsb. It is 1,169.0 m (3,835.3 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 41.6 ha (102.8 ac) of the horizontal ECC PAPE. Each of the near-channel and margin deposits is within the 5 m (16 ft) and 3 m (10 ft) vertical ECC PAPE.

3.2.2.10 Target 31

Target 31 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents preserved and buried channels and margin deposits cutting across the ECC. Covering approximately 37.7 ha (93.2 ac), Target 31 consists of three channel cuts separated by intact margin deposits and eroded surfaces. The acoustic reflector extends to a maximum depth of 3.2 m (10.7 ft) bsb. It is 520.6 m (1,708.0 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 12.6 ha (31.3 ac) of the horizontal ECC PAPE. Each of the near channel and margin deposits is within the 5 m (16 ft) and 3 m (10 ft) vertical ECC PAPE.

3.2.2.11 Target 32

Target 32 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents a single preserved and buried channel and margin deposits cutting across the ECC. Covering approximately 19.4 ha (48.0 ac), Target 32 consists of one channel cut and the neighboring margin deposits. The acoustic reflector extends to a maximum depth of 3.2 m (10.7 ft) bsb. It is 221.5 m (726.7 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 9.3 ha (23.1 ac) of the horizontal ECC PAPE. Each of the near channel and margin deposits is within the 5 m (16 ft) and 3 m (10 ft) vertical ECC PAPE.

3.2.2.12 Target 33

Target 33 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents a series of preserved and buried channels and margin deposits cutting across the ECC. Covering approximately 83.2 ha (205.6 ac), Target 33 consists of four channel cuts separated by intact margin deposits and eroded surfaces. The acoustic reflector extends to a maximum depth of 2.5 m (8.2 ft) bsb. It is 765.1 m (2,510.2 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 21.9 ha (54.2 ac) of the horizontal ECC PAPE. Each of the near-channel and margin deposits is within the 5 m (16 ft) vertical ECC PAPE. Approximately 86% (18.8 ha [46.6 ac]) are within the 3 m (10 ft) vertical ECC PAPE.

3.2.2.13 Target 34

Target 34 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents numerous preserved and buried channels and margin deposits cutting across the ECC. Covering approximately 73.2 ha (181.0 ac), Target 34 consists of a series of channel cuts separated by intact margin deposits and eroded surfaces. The acoustic reflector extends to a maximum depth of 4.0 m (13.2 ft) bsb. It is 1,144.8 m (3,755.9 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 23.8 ha (58.9 ac) of the horizontal ECC PAPE. Each of the near-channel and margin deposits is within the 5 m (16 ft) and 3 m (10 ft) vertical ECC PAPE.

3.2.2.14 Target 35

Target 35 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents a localized system of preserved and buried channels and margin deposits cutting across the ECC. Covering approximately 34.9 ha (86.2 ac), Target 35 consists of two channel cuts separated by intact margin deposits and eroded surfaces. The acoustic reflector extends to a maximum depth of 4.8 m (15.7 ft) bsb. It is 745.4 m (2,445.5 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 10.7 ha (26.5 ac) of the horizontal ECC PAPE. Each of the near-channel and margin deposits is within the 5 m (16 ft) and 3 m (10 ft) vertical ECC PAPE.

3.2.2.15 Target 36

Target 36 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents a system of preserved and buried channels and margin deposits cutting across the ECC. Covering approximately 101.3 ha (250.2 ac), the acoustic imagery of Target 36 depicts a series of channel cuts separated by intact margin deposits and eroded surfaces. The acoustic reflector extends to a maximum depth of 4.0 m (13.1 ft) bsb. It is 1,182.1 m (3,878.3 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 32.9 ha (81.4 ac) of the horizontal ECC PAPE. All of the near channel and margin deposits are within the 5 m (16 ft) and 3 m (10 ft) vertical ECC PAPE.

3.2.2.16 Target 37

Target 37 represents a discontinuous portion of the late-Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents a localized system of preserved and buried channels and margin deposits cutting across the ECC. The feature covers 31.4 ha (77.6 ac), and the acoustic imagery of Target 37 depicts a series of channel cuts separated by intact margin deposits and eroded surfaces. The reflector extends to a maximum depth of 1.6 m (5.2 ft) bsb. It is 518.0 m (1,699.5 ft) at its widest point. In general, the extent of the near channel and

channel margin reflectors is representative of preserved ASLFs. These features cover 11.4 ha (28.3 ac) of the horizontal ECC PAPE. All of the near channel and margin deposits are within the 5 m (16 ft) and 3 m (10 ft) vertical ECC PAPE.

3.2.2.17 Target 38

Target 38 represents a discontinuous portion of the late Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents a complex of preserved and buried channels and margin deposits cutting across the ECC. Covering approximately 69.9 ha (172.8 ac), the acoustic imagery of Target 38 depicts three channel cuts separated by intact margin deposits. The acoustic reflector extends to a maximum depth of 5.6 m (18.5 ft) bsb. It is 808.1 m (2,651.2 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 33.8 ha (83.6 ac) of the horizontal ECC PAPE. All of the near channel and margin deposits are within the 5.0 m (16 ft) and 3.0 m (9.8 ft) vertical ECC PAPE.

3.2.2.18 Target 39

Target 39 represents a discontinuous portion of the late Pleistocene paleochannels present within the Monmouth ECC as part of the Late Pleistocene and Early Holocene (28,000-7,400 cal. BP) TCG. This target represents a complex of preserved and buried channels and margin deposits cutting across the ECC. Covering approximately 91.9 ha (227.1 ac), the acoustic imagery of Target 39 depicts three channel cuts separated by intact margin deposits and eroded surfaces. The acoustic reflector extends to a maximum depth of 5.6 m (18.4 ft) bsb. It is 1,509.8 m (4,953.4 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 28.0 ha (69.1 ac) of the horizontal ECC PAPE. All of the near channel and margin deposits are within the 5.0 m (16 ft) and 3.0 m (9.8 ft) vertical ECC PAPE.

3.2.3 *Atlantic ECC*

The ASLFs identified within the Atlantic ECC are summarized in Table 3.2-3 and described in the subsections below.

Table 3.2-3.2-3. ASLFs identified in the Atlantic ECC

Name	Seabed Impact Area	State	Location	Feature Description
Target 41	Atlantic ECC	New Jersey	State Waters	Two channel cuts separated by intact margins and eroded surfaces; Will be avoided by construction.
Target 42	Atlantic ECC	New Jersey	State Waters	Two channel cuts separated by intact margins and eroded surfaces
Target 43	Atlantic ECC	N/A	Federal Waters	Series of channel cuts separated by intact margins and eroded surfaces
Target 44	Atlantic ECC	N/A	Federal Waters	Series of channel cuts separated by intact margins and eroded surfaces

3.2.3.1 Target 41

Target 41 represents a discontinuous portion of the late Pleistocene paleochannels present within the Atlantic ECC as part of the TCG. This target represents a localized system of preserved and buried channels and margin deposits cutting across the edge of the ECC. Covering approximately 10.4 ha (25.8 ac), the acoustic imagery of Target 41 depicts two channel cuts separated by intact margin deposits and eroded surfaces. The acoustic reflector extends to a maximum depth of 1.6 m (5.3 ft) bsb. It is 302.3 m (991.8 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 1.9 ha (4.7 ac) of the horizontal PAPE. All of the near channel and margin deposits are within the 5.0 m (16 ft) and 3.0 m (9.8 ft) vertical ECC PAPE. Atlantic Shores has committed to avoiding physical disturbance to Target 41 during construction.

3.2.3.2 Target 42

Target 42 represents a discontinuous portion of the late Pleistocene paleochannels present within the Atlantic ECC as part of the TCG. This target represents a pair of preserved and buried channels and margin deposits cutting into the southern edge of the ECC. Covering approximately 31.3 ha (77.2 ac), the acoustic imagery of Target 42 depicts two channel cuts separated by intact margin deposits and eroded surfaces. The acoustic reflector extends to a maximum depth of 2.5 m (8.2 ft) bsb. It is 528.6 m (1,734.2 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 8.2 ha (20.3 ac) of the horizontal PAPE. All of the near channel and margin deposits are within the 5.0 m (16 ft) vertical ECC PAPE. Approximately 56% (4.6 ha [11.5 ac]) are within the 3.0 m (9.8 ft) vertical ECC PAPE.

3.2.3.3 Target 43

Target 43 represents a discontinuous portion of the late Pleistocene paleochannels present within the Atlantic ECC as part of the TCG. This target represents a complex of preserved and buried channels and margin deposits cutting into the southern edge of the ECC. Covering approximately 131.8 ha (325.7 ac), the acoustic imagery of Target 43 depicts a series of channel cuts separated by intact margin deposits and eroded surfaces. The acoustic reflector extends to a maximum depth of 4.9 m (16.0 ft) bsb. It is 1,919.5 m (6,297.6 ft) at its widest point. In general, the extent of the near channel and channel margin reflectors is representative of preserved ASLFs. These features cover approximately 59.5 ha (147.1 ac) of the horizontal ECC PAPE. All of the near channel and margin deposits are within the 5.0 m (16 ft) vertical ECC PAPE. Approximately 96% (57.4 ha [141.8 ac]) are within the 3.0 m (9.8 ft) vertical ECC PAPE.

3.2.3.4 Target 44

Target 44 a discontinuous portion of the late Pleistocene paleochannels present within the Atlantic ECC as part of the TCG. This target represents a complex of partially preserved and buried channels and margin deposits cutting across the ECC. Covering approximately 184.7 ha (456.4 ac), the acoustic imagery of Target 44 depicts a series of channel cuts separated by intact margin deposits and eroded surfaces. The acoustic reflector extends to a maximum depth of 3.2 m (10.7 ft) bsb. It is 2,553.9 m (8,378.9 ft) at its widest point.

In general, the extent of near channel and channel margin reflectors is representative of partially preserved ASLFs. A potentially intact, elevated channel margin was identified along the northern margins of the corridor. These features cover approximately 59.5 ha (147.0 ac) of the horizontal ECC PAPE. All of the near channel and margin deposits are within the 5.0 m (16 ft) and 3.0 m (9.8 ft) vertical ECC PAPE.

3.3 Environmental and Cultural Context

ASLFs identified within the PAPE are very likely associated with the terminal Pleistocene and Holocene epochs, prior to the arrival of European explorers and settlers in the region. Progressive inundation of coastal shelf by rising seas following the last ice age would have transformed the ancient terrestrial landscapes of the PAPE. Global and regional sea-level reconstructions indicate that marine transgression was relatively rapid between approximately 21,000 years ago and 10,000 years ago. As the rate of sea level rise slowed during the middle and late Holocene periods, complex lagoon and barrier island environments would have been established in areas where sedimentation and sea levels reached equilibrium. A broad range of culturally and economically significant plant and animal species may have been present in a complex and evolving mosaic of habitats before the seas rose over the lands of the PAPE. Environmental studies and global settlement patterns suggest Indigenous peoples likely lived on such ancient coastal and near coastal lands (SEARCH, 2022). Intact remnants of ancient terrestrial landscapes may be associated with material evidence of ancient indigenous ancestors, as well as events and people important to the histories and cultures of many descendant nations. Marine surveys conducted by Atlantic Shores were designed to identify and evaluate such features throughout the areas of proposed offshore development.

Based on high-resolution geophysical (HRG) data, sedimentological and organic sample data taken from vibracores for the MARA analyses (RCGA, 2021; SEARCH, 2022) and detailed reconstructions of the paleolandscapes within the PAPE, the sediments within the offshore facilities are associated with late to terminal Pleistocene and early Holocene era (c. 28,000-7,400 cal. BP) terrestrial, fluvial, and estuarine landscapes. These landscapes likely consisted of a mix of inland open grasslands, a spruce and hardwood forest without any apparent modern analogs, and coastal grassy wetlands such as tidal marshes. The potential indigenous use of the preserved landforms would likely have been restricted to a period roughly correlating with the archaeologically defined Paleoindian Period (ca. >14,500-10,000 BP).

Interpretations suggest that the ASLFs are associated with stable landforms on the margin of a large deep channel-like features that could have supported indigenous occupation or other activities prior to marine transgression. No direct evidence of human use at these locations have been recovered, but the setting of each is consistent with terrestrial locations used by indigenous peoples in the northeastern U.S. after 13,000 cal. BP. Radiocarbon dating of samples collected from the Holocene-Late Pleistocene transgressive channel sequence date from approximately 12,000-7,400 BP and is consistent with time periods of interest to the Tribal Nations. Although direct evidence of indigenous settlements on the post-glacial OCS landscapes is currently lacking, paleoenvironmental reconstructions suggest that ASLF Targets 22-58 are the type of location where evidence of occupations might be expected. Reported Paleoindian site locations occur in a wide range of environmental settings, including estuary and channel margins comparable to those inferred at the ASLFs.

It is important to note that little is known about potential coastal adaptations during this time period. The submerged continental shelf contains the vast majority of coastal habitats that would have been available to people living in the region more than 12,000 years ago. Practical and technological challenges have limited the range of surveys that might yield direct evidence of now-submerged coastal sites. Where terminal Pleistocene or very early Holocene coastal sites have been identified elsewhere in North America, those sites have yielded different types of stone tools than typically associated with Paleoindian sites in the Northeast. As such, it is plausible that archaeological expressions of Pleistocene coastal occupations in the Northeast may look quite different than their counterparts in the interior sections (now on the mainland).

Furthermore, ASLFs are associated with a preserved element of the ancient terrestrial landscape that the consulting Tribal Nations have identified as having traditional cultural significance. As shared by New England and Middle-Atlantic Tribal representatives on previous consultations with BOEM, several of the consulting Tribal Nations' traditions hold that their people have always been here. They did not migrate from ancient Asia or Europe or anywhere else. Their origins are rooted here, in the Northeast, and at the interface between the seas and lands. Important events in Tribal histories occurred on the OCS and preserved elements of the ancient landscapes with which their ancestors and culture heroes interacted are important.

3.4 NRHP Criteria and Assessment of Potential Adverse Physical Effects

Atlantic Shores identified 59 ASLFs in the Lease Area, Monmouth ECC and Atlantic ECC through interpretation of HRG and seismic data. Previous research and consultation between BOEM and New England federally recognized Tribal Nations have reviewed ASLFs that are generally similar to the ASLFs identified by Atlantic Shores. These consultations have determined that some previously identified ASLFs on the Atlantic OCS are Traditional Cultural Properties (TCPs) that are eligible for the NRHP (BOEM 2021, 2022). These findings therefore suggest that ASLFs identified within the Atlantic Shores South PAPE could also be eligible for listing in the NRHP.

Beyond their potential to contain significant archaeological information of pre-contact activities and ancient Native American populations on the now-submerged OCS, ASLFs may represent culturally significant TCPs to federally recognized Tribal Nations. The National Park Service defines a TCP as "one that is eligible for inclusion in the national Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community" (Parker and King 1998:1).

The proposed undertaking, including the construction and installation of infrastructure, supporting activities such as anchoring and spudding, and installation of protective measure, such as scour protections, may have a physical effect on ASLFs if they cannot be avoided. Such effects may disturb the integrity of materials, spatial relationships, and features within any potential archaeological deposits. Additionally, while the existing submerged contexts of the identified ASLFs is notably different from the landscape setting present during periods of potential Native American occupation or use, the proposed infrastructure could diminish the integrity of feeling and association of NRHP-eligible TCPs.

As part of avoidance and minimization planning for the identified ASLFs, Atlantic Shores and the Qualified Marine Archaeologists are evaluating measures to avoid or minimize seabed disturbance within the identified boundaries of the ASLFs associated with potentially intact terrestrial sediments or soils. Based on these ongoing efforts, Atlantic Shores will avoid 21 of the identified ASLFs within the marine APE. This HPTP has been developed to present mitigation measures to address the potential impacts associated with the current design. Physical disturbance of the ASLFs could diminish their capacity to yield important new information about ancient indigenous coastal adaptations and may also diminish the integrity of the landform's association with ancient submerged indigenous cultural landscapes significant to the traditional beliefs and practices of the consulting Tribal Nations.

3.5 ASLFs and preservation potential

Atlantic Shores will continue to seek opportunities to refine and review the ASLFs in consultation with QMAs and interested consulting parties to focus specific mitigation activities in areas with the greatest potential to preserve intact, significant ecological and cultural materials. This HPTP includes proposed consultations that would occur during implementation of mitigation measures to ensure full consideration of traditional Indigenous ecological knowledge and the perspectives of affected Tribal Nations when selecting specific features for supplemental marine archaeological investigations.

4.0 MITIGATION MEASURES

BOEM and Atlantic Shores have identified steps to implement these measures in consultation with interested consulting parties, led by individuals who meet the qualifications specified in the Secretary of the Interior's Qualifications Standards for Archaeology, History and/or Architectural History (36 CFR 61).

4.1 Preconstruction Geoarchaeology

4.1.1 *Purpose and Intended Outcome*

This mitigation measure will consist of the collaborative review of the extensive geotechnical and geoarchaeological data utilized in the MARA analyses among BOEM, the consulting Tribal Nations and Atlantic Shores to select candidate locations for pre-construction geoarchaeological sampling. Such review and consultation will be supported by initial versions of GIS interpretations and work products developed by Atlantic Shores and described in Section 4.3 of this HPTP. Atlantic Shores will also present the methods and results of any post-MARA analyses that help discriminate ASLF locations with the greatest potential to retain intact sediments and evidence of cultural sites or ancient indigenous use of the now-submerged landscapes. The supplemental consultations would be initiated following execution of the Memorandum of Agreement and at least 60 days prior to commencement of any post-MOA, pre-construction geoarchaeological investigations. Atlantic Shores, in consultation with BOEM, will invite the consulting Tribal Nations to review any supplemental analyses completed by the Lessee subsequent to the MARA analyses.

The consulting Tribal Nations will be provided a minimum of 15 calendar days to review and comment upon the draft sampling locations prior to BOEM finalizing the locations and Atlantic Shores proceeding with the marine survey fieldwork. All coring would be conducted prior to construction affecting the specific ASLFs. The collected cores will be analyzed in collaboration with the Tribal Nations to provide a more detailed understanding of ancient terrestrial landscapes and how such settings may have been used by Pleistocene-age indigenous peoples. Atlantic Shores acknowledges Tribes/Tribal Nations possess indigenous traditional ecological knowledge and intends to collaborate with Tribal Nations during preconstruction geoarchaeological investigations. Data acquired from this effort is expected to refine the age estimates for each stable landform, the timing and character of ecological transitions evidenced in the MARA report and provide an additional opportunity to recover evidence of ancient indigenous use of each ASLF.

Based on the post-MOA consultations, Atlantic Shores will collect up to two vibracores within each affected ASLF that has not been previously sampled. Pre-construction coring will focus on areas subject to seabed disturbance associated with Project construction activities. Following collection of the vibracores at the locations selected through the post-MOA consultation, Atlantic Shores will submit a written summary of the vibracoring campaign and request that BOEM provide written verification that samples collected are sufficient for the planned analyses and consistent with the agreed scope of work.

4.1.2 *Scope of Work*

The scope of work will consist of:

- Collaborative review of existing geophysical and geotechnical data and any relevant supplemental analyses with Tribal Nations;
- Supplemental consultations among BOEM, Atlantic Shores, Tribal Nations and other interested consulting parties to select candidate vibracoring locations;
- Atlantic Shores will provide a draft list and justification for vibracore locations associated with the affected ASLFs, focusing on portions of ASLFs subject to disturbance during Project construction activities.
- Tribal Nations and BOEM will have at least 15 days to review and comment upon the proposed coring locations prior to Atlantic Shores finalizing the locations and proceeding with coring activities.
- Collection of vibracores;
- Written verification to BOEM that the samples collected are sufficient for the planned analyses and consistent with the agreed scope of work;
- Collaborative laboratory analyses at a laboratory with opportunities for direct participation by representatives of the consulting Tribal Nations;
- Screening of recovered sediments for debitage or micro-debitage associated with indigenous land uses;
- Third-party laboratory analyses, including micro- and macro-faunal analyses, micro- and macro-botanical analyses, radiocarbon dating of organic subsamples, and/or chemical analyses for potential indirect evidence of indigenous occupations;
- Temporary curation of archival core sections;
- Draft reports for review by interested consulting parties; and
- Final reporting.

4.1.3 *Methodology*

The research, analyses, and interpretations are intended to be a collaborative effort with the consulting Tribal Nations and other interested consulting parties. Atlantic Shores will invite the Tribal Nations to a series of working sessions to:

- Review existing data and relevant supplemental analyses to select appropriate ASLFs for geoarchaeological investigation in consultation with BOEM and other interested consulting parties;
- Develop specific research questions addressing the Tribal Nations' interests in the ASLFs;
- Select candidate coring locations;
- Split, document, and sample recovered vibracores in the laboratory;
- Review analytic results and preliminary interpretations; and
- Review draft reporting.

4.1.4 *Standards*

The Preconstruction Geoarchaeology effort will be conducted in accordance with BOEM's *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* (May 2020). The

QMA leading the research will meet the SOI professional qualification standards for archeology (62 FR 33708) and BOEM's standards for QMAs.

4.1.5 Documentation

The following documentation is to be provided for review by interested consulting parties and will be included in annual reporting to BOEM:

- Draft coring locations and justifications
- Draft Technical Report; and
- Final Technical Report.

4.1.6 Curation

Vibracores and associated subsamples will be temporarily curated by the qualified consultant conducting the analysis. Once completed, the remaining samples will be offered to the Tribal Nations for potential further analysis or retention.

4.1.7 Funds and Accounting

Funding amounts were determined to be sufficient by BOEM in consultation with the interested consulting parties and are identified in an attachment to the MOA.

4.2 Postconstruction ASLF Investigation

4.2.1 Purpose and Intended Outcome

This mitigation measure will consist of the use of postconstruction cable burial survey data, supplemental analyses by QMAs, and identification through consultations with Tribal Nations of targeted areas warranting additional inspections and/or documentation. Atlantic Shores proposes a mitigation measure to assess impacts to ASLFs via seafloor inspection following construction activities. This effort will focus on areas of cable installation in the Lease Area and Export Cable Corridors as this activity is more likely to disturb and redistribute shallow portions of a previously identified ASLFs. Atlantic Shores will construct a 3D model defining the spatial relationship of project components and installation methodology (e.g., cable installation via trenching or jetting) relative to the ASLFs. The 3D model will identify portions of the ASLFs within the vertical APE that will be impacted and possess a high preservation potential for evidence of human occupation. Atlantic Shores will coordinate with BOEM and Tribes/Tribal Nations on the results of this effort to select locations for post-construction visual inspection. Up to four ASLFs will be selected for visual inspection of post-construction impacts to areas of high preservation potential based on an assessment of the 3D ground-model.

Atlantic Shores' QMA will design and direct the visual inspection of the seafloor at the selected locations identified through the above process to assess for the presence/absence of displaced cultural materials from the ASLF. BOEM, Atlantic Shores, and the QMA will work together to determine the methodology used to conduct the visual inspection. Various factors, including but not limited to environmental conditions,

health and safety risks, the spatial extent of impacts, and the unique characteristics of each selected ASLF will be considered before mobilization to conduct the visual inspection. Inspections will cover not only the immediate physical impacts to the seafloor but also berms created during trenching activities, anchoring activities, and scour or berms made during pile driving and installation of WTGs. Atlantic Shores acknowledges Tribes/Tribal Nations possess indigenous traditional ecological knowledge and intends to collaborate with Tribal Nations during post-construction seafloor inspections. Tribes/Tribal Nations will be afforded the opportunity to participate as monitors during the seafloor inspections either via live video feed or on the vessel, depending upon vessel space, monitors' offshore safety training and certification, and health and safety concerns.

In the final report for each of these investigations, the QMA will note the seafloor conditions (visibility), environmental conditions (e.g., sandy, mud, shell hash bottom), sea state, and how much time passed since the construction activities concluded in the area of the ASLF. A series of as-laid or as-placed plats will show the location of the infrastructure in relation to the ASLF and should include both horizontal and vertical penetration into the ASLF. The maps should also include the location of any sites and artifacts identified as a result of the visual inspection. If sites are identified on state-owned submerged bottomlands, a copy of the notification to the state, a copy of the site file, and the site trinomial should be provided as part of the final report. The Final Report will also include all survey logs, survey times, and other data associated with the sonar or visual inspection of the seafloor.

4.2.2 *Scope of Work*

The scope of work will consist of:

- Selection of ASLFs for 3D modeling via consultations;
- Development of 3D model throughout ASLFs designated for review;
- Consultation with BOEM to determine the method of seafloor impact assessment;
- Seafloor impact assessment;
- Draft technical report;
- Draft open-source GIS deliverables including 3D model;
- Atlantic Shores to complete open-source GIS or digital deliverables including 3D model;
- Atlantic Shores to complete final technical report

4.2.3 *Standards*

The project will comply with the following standards:

- Any subsequent surveys, inspections, or documentation efforts will be conducted in accordance with BOEM's *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* (May 2020). The qualified professional archaeologists leading the research will meet the SOI professional qualification standards for archeology (62 FR 33708) and BOEM's standards for Qualified Marine Archaeologists.

4.2.4 Methodology

Atlantic Shores will perform a post-construction survey along the cables following installation as described in Section 4.5.9 of COP Volume I. Methodologies for post construction surveys may include non-invasive remote-sensing sonar or recorded camera surveys of the seabed where construction activities have taken place, as determined through the consultative steps identified above. If areas of high preservation potential are identified within potentially affected ASLFs, the selection of targeted areas for supplemental surveys, inspections, and/or documentation will be a collaborative effort with the interested consulting parties. The selection of methods used for any additional supplemental surveys, inspections, and/or documentation is expected to be the subject of future consultation and tailored to the targeted areas identified at the time.

4.2.5 Documentation

A technical report will be prepared to present the analyses and results of the post construction survey and any subsequent investigations, as necessary. The QMA will note the seafloor conditions (visibility), environmental conditions (e.g., sandy, mud, shell hash bottom), sea state, and how much time has passed since the construction/installation activities have concluded in the area of the ASLFs. Figures will be included showing the location of the cables in relation to the ASLFs and should include both horizontal and vertical penetration into the ASLF. The figures will include the location of sites and artifacts (if any) identified as a result of any survey, inspection, and/or documentation effort. Any records such as survey times, survey logs, and/or other data will be provided as appendices. If sites are identified in state-owned waters, a copy of the notification to the state, a copy of the site file, and the site trinomial will be provided as part of the technical report.

An invitation will be extended to consulting Tribal Nations to incorporate Traditional Ecological Knowledge (TEK) to the interpretations of the technical report, including the participation of traditional knowledge-holders in report drafting. Sharing of TEK and the incorporation of traditional knowledge in the report interpretations will be at the discretion of each of the consulting Tribal Nations. Atlantic Shores will consider the Tribal Nations' comments and suggestions when preparing the technical report and will seek to resolve any disagreements among the parties through supplemental consultations prior to finalizing the reports. Public and/or professional presentations summarizing the results of the investigations may developed with the consent of the consulting Tribal Nations.

Final digital copies of the completed reports will be provided to the interested consulting parties. Hard copies of the final reports will be submitted to the interested consulting parties or other parties upon request.

The documentation will be included in the annual reporting to BOEM.

4.2.6 Funds and Accounting

Funding amounts were determined to be sufficient by BOEM in consultation with the interested consulting parties and are identified in an attachment to the MOA.

4.3 Open-Source GIS, Story Maps, and Animations

4.3.1 *Purpose and Intended Outcome*

This mitigation measure will consist of the compilation and transfer of relevant geophysical, geotechnical, and geoarchaeological datasets pertaining to the ASLF to a non-proprietary GIS system for use by Tribal Nations. The datasets will include sub-bottom (seismic) data used to characterize the seabed and ASLF features, the location of all geotechnical/geoarchaeological samples collected, and the vertical and horizontal extents of the affected features or sub-features within each ASLF. The GIS will be, to the extent feasible and practicable, compatible with GIS datasets compiled for other OCS projects to assist in the Tribal Nations' on-going research and stewardship efforts. BOEM and Atlantic Shores will consult with the Tribal Nations to determine the appropriate data presentation platform for related mitigation measures. Such consultations will review candidate datasets and attributes for inclusion in the presentation; data integration; development of custom reports or queries to assist in future research or tribal maintenance of the presentation. As appropriate, Atlantic Shores will host work sessions with Tribal Nations to:

- Develop potential Story Map content;
- Training sessions with Tribal Nations to review data presentation;
- Review of Draft Story Maps with Tribal Nations; and
- Delivery of data and materials to Tribal Nations;

Tribal Nations may decide how the data will be interpreted and inform the Lessee which format to use (i.e. Story Maps, GIS, or reports). If Tribal Nations prefer Story Map presentations, such Story Maps or equivalent digital media presentations will be prepared to integrate and present the complex technical data compiled during the MARA and mitigation investigations in a manner best suited for inter- and intra-Tribal audiences. Story Map content would be developed in close consultation and collaboration with the consulting Tribal Nations.

Incorporation of Atlantic Shores datasets into a broader GIS framework will allow the Tribal Nations to better understand and protect preserved elements of the ancient submerged landscapes of traditional cultural significance. The value of the GIS will increase as additional datasets are acquired and incorporated. Access to the GIS will support each Tribal Nations' capacity to pursue their own research or intra-Tribal educational programs related to the OCS and traditional cultural uses of the now-submerged landscapes of their ancestors. The combined MARA and Preconstruction Geotechnical Sampling investigations will provide an important perspective on the preservation of submerged TCPs within formerly glaciated sections of the OCS and within the footprint of former inland grassland biomes. Integrated GIS that can accommodate datasets collected from other OCS development projects and surveys would allow for comparisons to areas south of the maximum glacial limits on the OCS to provide a more comprehensive view of the ancient landscapes within the region. Atlantic Shores will provide reasonable compensation to Tribal representatives working with Atlantic Shores on implementation of this measure. Story Maps created within the GIS will provide a flexible approach to incorporating media from a variety of sources, including geospatial data, interviews with traditional knowledge-holders, photographs, audio recordings, and archival cartography for a compelling interpretive experience. Based on requests received from some consulting on Tribal Nations on similar offshore wind projects, Story Maps may also include links to animated renderings prepared by

Atlantic Shores of ancient landscapes to better illustrate the evolution of the OCS through time. Story Maps can be tailored for specific Tribal audiences and uses and would be developed in consultation with the consulting Tribal Nations.

The presentation developed under this measure will be free to use and free to modify by the Tribal Nations. To the extent feasible, all data will be provided in formats that allow for interoperability with other platforms that the Tribal Nations may use. All datasets incorporated in GIS format will comply with Federal Geographic Data Committee data and metadata standards.

In order to ensure maximum benefit to the Tribal Nations, Atlantic Shores will fund appropriate and feasible technology upgrades associated with the analysis of GIS data.

4.3.2 *Scope of Work*

The scope of work will consist of:

- Consultation with the Tribal Nations to determine the appropriate open-source GIS platform or other digital presentation platform.
- Review of candidate datasets and attributes for inclusion in the GIS.
- Review of potential animated content suitable for the Tribal Nations' intended uses and audiences.
- Training sessions, as appropriate, to prepare Tribal Nations for use and maintenance of the presentation(s).
- Data integration.
- Work Sessions with Tribal Nations to develop Story Map content, incorporating TEK.
- Technology upgrades.
- Training session with Tribal Nations to review GIS/Story Map functionality.
- Review of Draft GIS/Story Maps with Tribal Nations.
- Delivery of GIS to Tribal Nations.
- Delivery of Final Story Maps.

4.3.3 *Methodology*

Atlantic Shores will develop the GIS platform and/or Story Map platform in consultation with the interested consulting parties. At least one work session will be scheduled to refine specific functionality of interest to the Tribal Nations. That session will be conducted after the preliminary data analyses for the Preconstruction Geotechnical Sampling effort has been completed. This will allow for a more focused walk-through of the data and options for organizing and integrating different datasets. Atlantic Shores will request from the Tribal Nations details on any existing open-source GIS platform currently in use by each Tribe to minimize any issues with data integration or interoperability. Once the work session has been conducted, Atlantic Shores will proceed with development of the GIS, considering the Tribal Nations' comments and suggestions. The draft GIS will be shared with the Tribal Nations in a training session that presents the functions of the GIS and familiarizes the Tribal representatives with the interfaces, data organization, and any custom features developed to enhance useability. Atlantic Shores will consider any feedback from the

Tribal Nations on the draft GIS before proceeding with finalizing the system design and implementation. Atlantic Shores will provide the GIS to the Tribal Nations by physical storage media or as a secure digital file transfer, as appropriate to each Tribal Nations IT infrastructure and preference.

Story Map content will be developed with the consulting Tribal Nations through one or more scheduled work sessions. Potential options for content intended for youth audiences, Tribal governments, and/or general Tribal membership will be discussed to refine the conceptual framework and develop draft Story Maps for review by the Tribal Nations. Atlantic Shores will consider all comments and feedback provided by the Tribal Nations when preparing the final Story Maps.

4.3.4 Standards

The project will comply with following standards:

- The GIS developed under this measure will be free to use and free to modify by the Tribal Nations. To the extent feasible, all data will be provided in formats that allow for interoperability with other GIS platforms that the Tribal Nations may use. All datasets incorporated in the GIS will comply with Federal Geographic Data Committee (FGDC) data and metadata standards.

4.3.5 Documentation

Atlantic Shores will provide draft descriptions and documentation of the GIS for review by the interested consulting parties and will provide a description of the draft Story Maps to the consulting Tribal Nations following the initial working sessions. The documentation will be included in the annual reporting to BOEM.

Documentation includes:

- Draft Description of the GIS with appropriate schema, data organization, and custom reports/queries.
- Draft Story Map descriptions with details on content, formatting, and intended audiences.
- Final Technical Description of the GIS with schema, data organization, and custom reports/queries.

4.3.6 Funds and Accounting

Funding amounts were determined to be sufficient by BOEM in consultation with the interested consulting parties and are identified in an attachment to the MOA.

4.4 Tribal Capacity Support for the Delaware Nation and Delaware Tribe of Indians

4.4.1 Purpose and Intended Outcome

This mitigation measure will provide funding for enhancing the capacity of the Delaware Nation and Delaware Tribe of Indians and the Nations' Tribal Historic Preservation Offices to effectively engage in consultations and mitigation activities associated with the undertaking. Funding will be used by the Tribal Nations for activities as determined by the Tribal Nations associated with monitoring of the ASLFs, including

but not limited to, technology upgrades and training associated with interpretation and analysis of non-proprietary or otherwise regulatory-protected GIS data; funding for the Tribal Nations' participation in ethnographic studies with other Tribes, if applicable; funding for the Delaware Nation and Delaware Tribe of Indians THPOs' collaboration in those same studies, if applicable; and providing relevant ASLF GIS data layers to the Delaware Nation and Delaware Tribe of Indians for use in studies, as well as providing a tutorial on this data. The Tribal Nations will determine priority Tribal capacity needs and initiatives associated with monitoring of ASLFs.

4.4.2 Scope of Work

The scope of work will consist of:

- Consultation among BOEM, the Delaware Nation, Delaware Tribe of Indians, and Atlantic Shores on annual reporting guidelines.
- Circulation of draft reporting guidelines prepared by Atlantic Shores.
- BOEM issuance of final reporting guidelines in consideration of comments provided by the Delaware Nation, Delaware Tribe of Indians, and Atlantic Shores.
- Transfer of funding from Atlantic Shores to the Delaware Nation and Delaware Tribe of Indians, respectively.
- Annual reporting by the included Tribal Nations on all expenditures starting one calendar year from the funds transfer and concluding once all funds have been expended by the Tribal Nations.

4.4.3 Methodology

BOEM will consult with the Delaware Nation, Delaware Tribe of Indians, and Atlantic Shores on annual reporting requirements to document expenditures made via the capacity enhancement funds. All funds will be expended within five years of MOA execution unless otherwise agreed by BOEM, the Delaware Nation, Delaware Tribe of Indians, and Atlantic Shores.

4.4.4 Standards

Any consultants selected to implement or assist implementation of this measure will meet the MOA Expertise and Qualification stipulation for investigations of ASLFs (Stipulation X.C).

4.4.5 Documentation

Documentation will be provided to the Delaware Nation and Delaware Tribe of Indians for review and comment and includes:

- Draft funding guidelines; and
- Final funding guidelines.

The Delaware Nation and Delaware Tribe of Indians will be responsible for annual reporting on their own expenditures to BOEM and Atlantic Shores, as described above and detailed in the final funding guidelines.

4.4.6 Funds and Accounting

Funding amounts were determined to be sufficient by BOEM in consultation with the consulting parties and are identified in an attachment to the MOA.

4.5 Tribal Capacity Support for the Stockbridge-Munsee Community Band of Mohican Indians

4.5.1 Purpose and Intended Outcome

This measure will entail funding the Tribal Nation's historic preservation capacity activities as determined by the Tribal Nation and may include, but not be limited to, development of a subsistence and settlement study. A qualified contractor will be engaged by Atlantic Shores to work with the Tribal Nation on the funded activities, which may include analysis of existing documentation of archaeological sites to prepare a predictive model of areas with an elevated potential to contain undocumented or unreported archaeological sites, including sites of religious and cultural significance to the Stockbridge-Munsee Community Band of Mohican Indians or other Tribal Nations who participate in the preparation of this study. The results of this study, if developed by the Stockbridge-Munsee Community Band of Mohican Indians, will assist the Tribal Nation and other parties in the early identification and protection of significant cultural sites located in the State of New Jersey. The Lessee will fulfill the following commitments in accordance with Attachment 6 (Mitigation Funding Amounts) and Attachment 7 (Historic Property Treatment Plan for Ancient Submerged Landform Features).

4.5.2 Scope of Work

The scope of work will consist of:

- Selection of a qualified contractor by Atlantic Shores in consultation with BOEM and the Stockbridge-Munsee Community Band of Mohican Indians
- Contractor's development of methodology for predictive modeling or related preservation activities
- Contractor's compilation of GIS data, site forms, site maps, reports, and relevant literature
- Collaboration among Tribal Nation(s) and Contractor on execution of the analyses and reporting
- Preparation by the Contractor of a draft confidential technical report for each participating Tribal Nation, including GIS data layers for use by such Tribal Nations and a tutorial on use of the data layers for the participating Tribal Nations
- Review and comment on the draft GIS data and associated confidential technical report(s) by the Tribal Nations.
- Preparation of a publicly-accessible report that excludes culturally sensitive information or information that may risk damage to sensitive cultural sites, per NHPA Section 304.
- Final confidential reporting and GIS data compilation by the Contractor.
- Both the confidential and publicly-accessible reports may be shared by the participating Tribal Nations at their discretion.
- The Delaware Tribe of Indians and/or the Delaware Nation may participate in the preparation of this study at each Tribal Nation's discretion.

- If the Delaware Tribe of Indians or Delaware Nation elect to participate, the total funding provided by Atlantic Shores to support such activities will not exceed the amounts established for each Tribal Nation in the MOA.
- Each participating Tribal Nation will be responsible for providing annual reporting and status updates to Atlantic Shores until the study or studies are completed.

4.5.3 *Methodology*

Atlantic Shores will prepare a Request for Proposals (RFP) to solicit qualified professionals to support implementation of this measure. BOEM, in consultation with the Stockbridge-Munsee Community, will review and comment on the RFP prepared by Atlantic Shores and select the contractor/consultant(s) to implement this mitigation measure, per the Expertise and Qualifications stipulation of the MOA (Stipulation X.C). Atlantic Shores will be responsible for compensating the selected contractor/consultant(s) and each participating Tribal Nation for their collaborative work up to the maximum funding level established in the MOA Attachment 6. Further, the Stockbridge-Munsee Community Tribal Historic Preservation Office staff will provide direction, monitor the progress of and offer feedback to the contractor/consultant(s) for which the Stockbridge-Munsee Community will be compensated from the total mitigation funding amount identified for this mitigation measure in the MOA Attachment 6 (Mitigation Funding Amounts) including for personnel, administrative costs and/or other expenses incurred associated with implementing this measure. This measure may be implemented pre-, during, or post-construction and must be completed according to the timelines in the MOA.

4.5.4 *Standards*

Any consultants selected to implement or assist implementation of this measure will meet the MOA Expertise and Qualification stipulation for investigations of ASLFs (Stipulation X.C).

4.5.5 *Documentation*

Documentation will include:

- Draft confidential and public reports and associated GIS data layers for each participating Tribal Nation
- Final confidential and public reports and associated GIS data layers for each participating Tribal Nation

Each participating Tribal Nation will be responsible for annual reporting to BOEM and Atlantic Shores, as described above.

4.5.6 *Funds and Accounting*

Funding amounts were determined to be sufficient by BOEM in consultation with the consulting parties and are identified in an attachment to the MOA.

4.6 Tribal Capacity Support for the Mashpee Wampanoag Tribe, Shinnecock Indian Nation, Mashantucket (Western) Pequot Tribal Nation, and Wampanoag Tribe of Gay Head (Aquinnah)

4.6.1 Purpose and Intended Outcome

This mitigation measure will provide funding for enhancing the capacity of the above-listed Tribal Nations and the Nations' Tribal Historic Preservation Offices to effectively engage in consultations and mitigation activities associated with the undertaking. Funding will be used for activities as determined by the included Tribal Nations associated with monitoring of the ASLFs, including but not limited to, technology upgrades and training associated with interpretation and analysis of non-proprietary or otherwise regulatory-protected GIS data; funding for participation in related ethnographic studies with other Tribes, if applicable; funding for the THPOs' collaboration in those same studies, if applicable; and providing relevant ASLF GIS data layers to the include Tribal Nations for use in studies, as well as providing a tutorial on this data. Each Tribal Nation will determine priority Tribal capacity needs and initiatives associated with monitoring of ASLFs.

4.6.2 Scope of Work

The scope of work will consist of:

- Consultation among BOEM, the Tribal Nations, and Atlantic Shores on annual reporting guidelines.
- Circulation of draft reporting guidelines prepared by Atlantic Shores.
- BOEM issuance of final reporting guidelines in consideration of comments provided by the Tribal Nations and Atlantic Shores.
- Transfer of funding from Atlantic Shores to each included Tribal Nation.
- Annual reporting by each Tribal Nation on their own expenditures starting one calendar year from the funds transfer and concluding once all funds have been expended by the Tribal Nation.

4.6.3 Methodology

BOEM will consult with the Tribal Nations and Atlantic Shores on annual reporting requirements to document expenditures made via the capacity enhancement funds. All funds will be expended within five years of MOA execution unless otherwise agreed by BOEM, the Tribal Nations, and Atlantic Shores.

4.6.4 Standards

Any consultants selected to implement or assist implementation of this measure will meet the MOA Expertise and Qualification stipulation for investigations of ASLFs (Stipulation X.C).

4.6.5 Documentation

Documentation will be provided to the Tribal Nations for review and comment and includes:

- Draft funding guidelines; and
- Final funding guidelines.

Each Tribal Nation will be responsible for annual reporting to BOEM and Atlantic Shores, as described above and detailed in the final funding guidelines.

4.6.6 *Funds and Accounting*

Funding amounts were determined to be sufficient by BOEM in consultation with the consulting parties and are identified in an attachment to the MOA.

5.0 IMPLEMENTATION

5.1 Timeline

The timeline for implementation of the mitigation measures is identified in the MOA.

5.2 Organizational Responsibilities

5.2.1 *Bureau of Ocean Energy Management (BOEM)*

BOEM remains responsible for making all federal decisions and determining compliance with Section 106. BOEM has reviewed this HPTP to ensure, at minimum, it includes the content required.

- BOEM, in consultation with the interested consulting parties, will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA;
- BOEM will be responsible for sharing the annual summary report with the interested consulting parties; and
- BOEM is responsible for consultation related to dispute resolution.

5.2.2 *Atlantic Shores Offshore Wind, LLC*

Atlantic Shores will be responsible for the following:

- Considering the comments provided by the interested consulting parties in the development of this HPTP;
- Except when responsible for direct contracting for implementation, as described above, depositing funding for the implementation of this HPTP in a dedicated account specified by the Tribal Nations prior to the commencement of the mitigation measures;
- Releasing RFPs and selecting qualified professionals as specified above;
- Managing funding and implementing the mitigation measures as specified in Section 4.0;
- Providing documentation to the interested consulting parties for review and comment as specified in Section 4.0;
- Annual Reporting to BOEM on progress in implementation of this HPTP;
- Ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations; and
- Provide notification to BOEM and the interested consulting parties when the HPTP implementation is complete.

5.2.3 *Interested Consulting Parties*

The interested consulting parties will be responsible for the following:

- Providing review and comment on the proposed mitigation measures described in Section 4.0.

5.2.4 Other Parties, as Appropriate

Atlantic Shores does not anticipate additional consulting parties, should any be determined, this will be updated.

5.3 Schedule

All mitigation measures must be completed within the timeframes outlined in the MOA. The schedule for funding, commencing, implementing, and completing the mitigation measures described in Section 4.0 will be completed according to the timelines outlined in the MOA, unless a different timeline is agreed upon by interested consulting parties and accepted by BOEM.

6.0 REFERENCES

Code of Federal Regulations (CFR). 2021a. 36 CFR § 800 – Protection of Historic Properties [incorporating amendments effective December 15, 2021]. Available at <https://www.ecfr.gov/current/title-36/chapter-VIII/part-800>. Accessed March 31, 2022.

CFR. 2021b. 36 CFR § 61.4(e)(1) – Procedures for State, Tribal, and Local Government Historic Preservation Programs [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4\(e\)\(1\)](https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4(e)(1)). Accessed March 31, 2022.

CFR. 2021c. 36 CFR § 65.2(c)(2) – National Historic Landmarks Program – Effects of Designation [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2\(c\)\(2\)](https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2(c)(2)). Accessed March 31, 2022.

CFR. 2022. 40 CFR § 1500 – National Environmental Policy Act Implementing Regulations. Available at <https://www.ecfr.gov/current/title-40/chapter-V/subchapter-A>. Accessed March 31, 2022.

Federal Register. 1997. 62 FR 33708 – The Secretary of the Interior’s Historic Preservation Professional Qualifications Standards. Office of the Federal Register, National Archives and Records Administration. Washington, D.C. Available at <https://www.govinfo.gov/app/details/FR-1997-06-20/97-16168>. Accessed March 31, 2022.

Parker, Patricia L., and Thomas F. King. 1998. Guidelines for Evaluating and Documenting Traditional Cultural Properties. National Register Bulletin 38. Available at <https://www.nps.gov/subjects/nationalregister/upload/NRB38-Compleweb.pdf>. Accessed March 31, 2023

RCG&A (R. Christopher Goodwin & Associates, Inc.). 2021. Technical Memorandum. Atlantic Shores Offshore Wind Project Geoarchaeological Analyses. Submitted June 15, 2021 to Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C.

SEARCH Inc. (SEARCH). 2022. Marine Archaeological Resources Assessment Atlantic Shores Offshore Wind Project Construction and Operations Plan. Prepared for Atlantic Shores Offshore Wind, LLC. Submitted February 2022.

SEARCH Inc. (SEARCH). 2023. Marine Archaeological Resources Assessment Addendum, Atlantic Shores Offshore Wind Project, Lease Area OCS-A 0499. Prepared for Atlantic Shores Offshore Wind, LLC. Submitted November 2023.

United States Code. 2016. Title 54 - National Historic Preservation Act [as amended through December 16, 2016]. Available at <https://www.achp.gov/sites/default/files/2018-06/nhpa.pdf>. Accessed March 31, 2022.

**ATTACHMENT 8 – HISTORIC PROPERTY TREATMENT PLAN FOR ATLANTIC CITY
CONVENTION HALL (JIM WHELAN BOARDWALK HALL) (NHL) IN ATLANTIC CITY,
ATLANTIC COUNTY, NEW JERSEY**

Historic Property Treatment Plan

for the

Atlantic Shores Offshore Wind

Lease Area OCS-A 0499

**Atlantic City Convention Hall (Jim Whelan Boardwalk Hall),
NHL**

Atlantic City, Atlantic County, New Jersey

Submitted to:



Bureau of Ocean Energy Management
U.S. Department of the Interior

Prepared for:



Atlantic Shores Offshore Wind LLC



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May 2024

ABSTRACT

Federal Undertaking: Atlantic Shores Offshore Wind Projects

Location: Outer Continental Shelf, offshore New Jersey

Federal and
State Agencies: Bureau of Ocean Energy Management
National Park Service
U.S. Army Corps of Engineers
New Jersey Historic Preservation Office
Advisory Council on Historic Preservation

Regulatory Process: National Environmental Policy Act
Section 106 of the National Historic Preservation Act
Section 110(f) of the National Historic Preservation Act

Purpose: This Historic Property Treatment Plan provides background data, historic property information, and detailed steps that will be implemented to carry out mitigation actions to resolve adverse effects from the Atlantic Shores South Projects.

Adverse Visual Effect
Finding for: Atlantic City Convention Hall (Jim Whelan Boardwalk Hall), NHL, Atlantic City, Atlantic County, New Jersey

Submitted By: Atlantic Shores Offshore Wind, LLC

Date: May 2024

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LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
ADLS	Aircraft Detection Lighting System
APE	Area of Potential Effects
BOEM	Bureau of Ocean Energy Management
CFR	Code of Federal Regulations
COP	Construction and Operations Plan
DEIS	Draft Environmental Impact Statement
EDR	Environmental Design and Research, D.P.C.
FEIS	Final Environmental Impact Statement
FoAE	Findings of Adverse Effect
FR	Federal Register
ICF	Interconnection Facility
HPTP	Historic Property Treatment Plan
MOA	Memorandum of Agreement
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act of 1966
NPS	National Park Service
NRHP	National Register of Historic Places
NJHPO	New Jersey Historic Preservation Office
NJWEA	New Jersey Wind Energy Area
OCS	Outer Continental Shelf
OSS	Onshore Substations
PAPE	Preliminary Area of Potential Effects
RFP	Request for Proposals
ROD	Record of Decision
USCG	United States Coast Guard
WTG	Wind Turbine Generator

1.0 INTRODUCTION

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) (54 USC 306108) and its implementing regulations, and in compliance with Section 110(f) of the NHPA (54 USC 306107), the Bureau of Ocean Energy Management (BOEM) has determined the Atlantic Shores South Offshore Wind Projects (the Projects) will have an adverse effect on historic properties. A historic property is defined per 36 CFR § 800.16 as any property that is listed in, or has been determined eligible for listing in, the National Register of Historic Places (NRHP), or is a National Historic Landmark (NHL). This Historic Property Treatment Plan (HPTP) for the Atlantic City Convention Hall (Jim Whelan Boardwalk Hall), NHL, Atlantic City, Atlantic County, New Jersey, which is a NHL; (hereinafter, the Historic Property) provides background data, historic property information, and detailed mitigation actions that will be implemented to resolve adverse effects from the Projects. Atlantic Shores Offshore Wind, LLC (Atlantic Shores) has provided this HPTP in accordance with BOEM's Findings of Adverse Effects (FoAE) for the Projects under the National Historic Preservation Act of 1966 (NHPA).

BOEM used the National Environmental Policy Act (NEPA) substitution process to fulfill its Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)), and BOEM has notified the Advisory Council on Historic Preservation (ACHP), the New Jersey Historic Preservation Office (NJHPO), and the interested consulting parties of BOEM's decision to use this process. Atlantic Shores has provided this HPTP to BOEM for inclusion in the Final Environmental Impact Statement (FEIS).

This HPTP describes the mitigation measures to resolve adverse effects on historic properties, the implementation steps, and timeline for actions. The mitigation measures are based on the evaluations and outreach performed by Atlantic Shores as well as outreach to the interested consulting parties performed by BOEM. This HPTP document has undergone revision and refinement in consultation with the NJHPO, the ACHP, and other consulting parties throughout the NEPA substitution process. This HPTP is included in the Memorandum of Agreement (MOA) issued in accordance with 36 CFR §§ 800.8, 800.10.

This HPTP is organized into the following sections:

- **Section 1.0, Introduction**, outlines the content of this HPTP.
- **Section 2.0, Background Information**, briefly summarizes the Projects and describes the cultural resources regulatory contexts (federal, tribal, state, and local, including preservation restrictions) applicable to the HPTP.
- **Section 3.0, Historic Properties – Context, Significance, and Effects**, provides a physical description of the historic properties included in this HPTP, describes their historic context, the applicable NRHP criteria for each property with a focus on the contribution of each property's maritime visual setting to its significance and integrity, describes the potential visual effect of the Projects on each property.
- **Section 4.0, Mitigation Measures**, identifies the specific steps to carry out the mitigation actions. The mitigation action includes a detailed description, intended outcome, methods, standards, and requirements for documentation.

- **Section 5.0, Implementation**, establishes the organizational responsibilities for implementing the mitigation actions, as identified in Section 3.0 of this HPTP.
- **Section 6.0, References**, is a list of works cited in this HPTP.

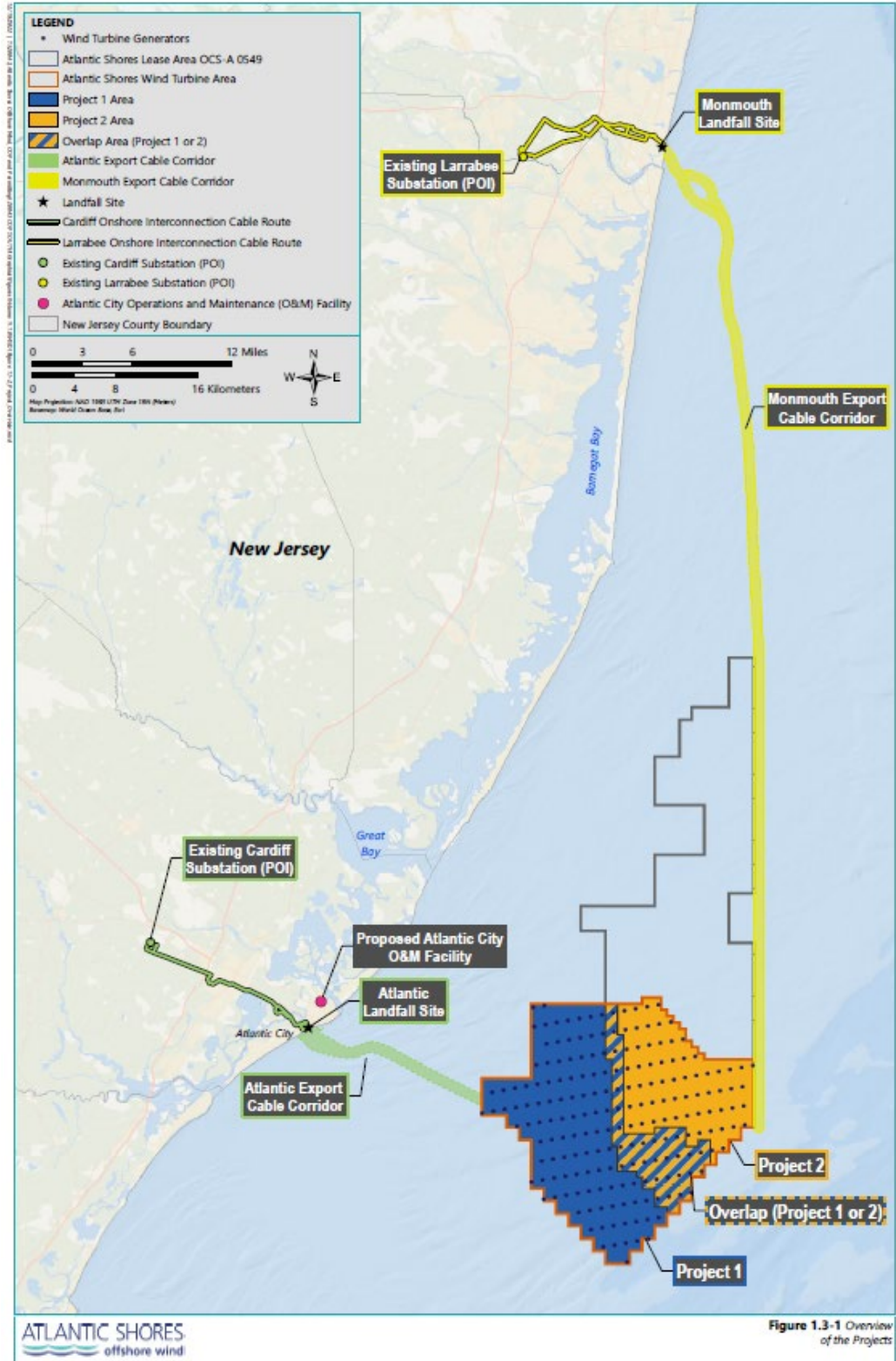
2.0 BACKGROUND INFORMATION

2.1 Overview of the Projects

Atlantic Shores' Lease Area is located on the Outer Continental Shelf (OCS) within the New Jersey Wind Energy Area (NJWEA), which was identified by BOEM as suitable for offshore renewable energy development through a multi-year, public environmental review process. The Projects will be located in an approximately 102,124-acre (413.3-square kilometer [km²]) Wind Turbine Area (WTA) located in the southern portion of the Lease Area (see Figure 2.1-1). Project 1 is located in the western 54,175 acres (219.2 km²) of the WTA, and Project 2 is located in the eastern 31,847 acres (128.9 km²) of the WTA with a 16,102-acre (65.2-km²) Overlap Area that could be used by either Project 1 or Project 2. Figure 2.1-1 also depicts the boundaries of the Project 1 and Project 2 areas within the WTA.

The Projects will collectively consist of up to 200 WTGs and associated foundations, inter-array cables connecting the WTGs, and offshore substations. The offshore substations utilized for the Projects will include up to 10 Onshore Substations (OSSs). Energy from the WTGs will be delivered to shore via 230 kV to 525 kV high voltage alternating current or high voltage direct current export cables. Up to four export cables will be installed within each of two possible Export Cable Corridors, for a total of up to eight export cables. The export cables will traverse federal and New Jersey state waters to deliver energy from the OSSs to landfall sites located in Monmouth County (the Monmouth Landfall Site) and/or Atlantic County (the Atlantic Landfall Site), New Jersey. The offshore-to-onshore transition at the landfall sites will occur via horizontal directional drilling to avoid nearshore and shoreline impacts. From the Monmouth and Atlantic Landfall Sites, new 230 kV to 525 kV high voltage alternating current or high voltage direct current onshore interconnection cables will travel underground along existing roadways, utility rights-of-way, and/or along bike paths to up to two new onshore substation sites (one for each onshore point of interconnection), where transmission will be stepped up or stepped down in preparation for interconnection with the electrical grid. Onshore interconnection cables will continue from each of the new onshore substations to proposed points of interconnection into the electrical grid at the existing Larrabee Substation in Howell, New Jersey (for the Monmouth Landfall Site) or the existing Cardiff Substation in Egg Harbor Township, New Jersey (for the Atlantic Landfall Site). Once operational, the Projects will be supported by a new operations and maintenance (O&M) facility that will be located in Atlantic City, New Jersey. The O&M facility will be the primary location for O&M operations including material storage, day-to-day management of inspection and maintenance activities, vehicle parking, marine coordination, vessel docking, and dispatching of technicians. Atlantic Shores intends to purchase and develop a shoreside parcel in Atlantic City, New Jersey that was formerly used for vessel docking or other port activities.

Figure 2.1-1. Overview of the Projects.



2.2 Regulatory Framework

Historic Property Treatment Plan

Atlantic City Convention Hall (Jim Whelan Boardwalk Hall), NHL, Atlantic City, Atlantic County, New Jersey

2.2.1 Section 106 and Section 110(f) of the NHPA

Section 106 of the NHPA of 1966 requires federal agencies to consider the effects of their undertakings on historic properties, which are defined per 36 CFR § 800.16 to include any property that is listed in or has been determined eligible for listing in the NRHP or is an NHL. Section 110(f) of the NHPA further requires that federal agencies undertake such planning and actions as may be necessary to minimize harm to any NHL that may be directly and adversely affected by an undertaking. Historic properties can include marine archaeological resources, terrestrial archaeological sites, above-ground historic properties (e.g., buildings, sites, monuments, and landscapes), and Traditional Cultural Properties.

The regulations at 36 CFR § 800.8 provide for use of the NEPA process to fulfill a federal agency's NHPA Section 106 review obligations in lieu of the procedures set forth in 36 CFR § 800.3 through 800.6. Under these provisions, either issuance of a Record of Decision (ROD) and implementation of relevant conditions or the execution of a MOA will resolve adverse effects to historic properties caused by the Projects, including to NHLs for which BOEM must provide a higher standard of care, as required by Section 110(f) of the NHPA. This HPTP was developed to support ongoing consultations and will be finalized for inclusion in the MOA issued in accordance with 40 CFR §1500-1508, and 36 CFR § 800.8 and 800.10.

All activities implemented under this HPTP will be conducted in accordance with any conditions imposed by BOEM in its ROD and with applicable local, state and federal regulations and permitting requirements. Responsibilities for specific compliance actions are described in further detail in Section 5.2 – Organizational Responsibilities.

2.2.2 Municipal Regulations

Before implementation, any on-site mitigation measures will be coordinated with local municipalities and commissions to obtain approvals, as appropriate. These may include, but are not limited to building permits, zoning, land use, planning, historic commissions, and design review boards.

2.2.3 Preservation Easements and Restrictions

Preservation easements and restrictions protect significant historic, archaeological, or cultural resources. Any mitigation work would comply with the conditions of all extant historic preservation easements.

2.3 Summary of HPTP Development

This HPTP was developed by Atlantic Shores for inclusion in the FEIS in support of BOEM's consultation pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR § 800.8. In addition to BOEM's formal Section 106 consultation meetings, Atlantic Shores invited the interested consulting parties to a series of meetings to review conceptual mitigation measures for the adversely affected historic properties on October 16, 18, 19, 30 and November 1, 2023. Atlantic Shores anticipates the HPTP may be revised based on comments received directly from the interested consulting parties or via the ongoing BOEM led Section 106 consultations.

3.0 HISTORIC PROPERTIES - SIGNIFICANCE, EFFECTS, AND MITIGATION MEASURES

3.1 Historic Properties Included in the HPTP

This HPTP describes the mitigation measures for the below listed historic properties, as identified in Table 3.1-1.

Table 3.1-1. Historic Properties included in the HPTP

Property ID	Property Name	Address	NRHP Status	Ownership
13	Atlantic City Convention Hall (Jim Whelan Boardwalk Hall), NHL,	Boardwalk between Pacific, Mississippi, and Florida Avenues	National Historic Landmark	Public

Discussions are provided below for each historic property included in the HPTP, which include:

- a physical description of the property,
- a narrative summarizing their historic context,
- the applicable NRHP criteria for the Historic Property with a focus on the contribution of each property's maritime visual setting to its significance and integrity,
- the visual effects of the Projects on each property, and
- measures to mitigate adverse effects on each property.

Maps and photographs are included in Attachment A - Aboveground Historic Property Information and Visual Effects Assessment.

The mitigation measures described herein were developed by individuals who meet the Secretary of the Interior's *Professional Qualifications Standards* (36 CFR § 61) and are appropriate to fully address the nature, scope, size, and magnitude of adverse effects including cumulative effects caused by the Projects. These mitigation measures may also include actions to respond to some reasonably foreseeable hazards unrelated to the Project that pose risks to the long-term preservation of the affected historic properties, such as climate change.

3.2 Historic Context of Atlantic City

Atlantic City is in the extreme eastern extent of Atlantic County on Absecon Island on the coast of the Atlantic Ocean. The city is bordered to the northeast by the city of Brigantine and to the southwest by Ventnor City. The first recorded Euro-American settler was Jeremiah Leed who built a house in the vicinity of Atlantic City in 1783. In 1850, Dr. Jonathan Pitney proposed the development of a seaside resort on the island. In 1852, he and other investors secured a railroad charter, and the Camden and Atlantic Railroad was constructed with its terminus in Atlantic City in 1854. The city was formally incorporated the same year and the resort quickly became a popular tourist destination for visitors from Philadelphia and its suburbs. Atlantic City saw the height of its popularity in the late nineteenth and into the early twentieth century. A financial and commercial district was constructed along Atlantic Avenue and included high-style banks as well as commercial and institutional buildings. The 1950s brought a decline in visitation due to the advent

of air travel and the newly formed highway system in the United States. To revive the city, gambling was legalized in 1976 and Atlantic City enjoyed a boom in tourism (Allaback and Milliken, 1995; ACFPL, 2022).

3.3 Atlantic City Convention Hall (Jim Whelan Boardwalk Hall), NHL

3.3.1 Description and Existing Conditions

The Atlantic City Convention Hall NHL, constructed in 1926-1929 by Lockwood-Greene and Co., exhibits Beaux Arts and Romanesque style elements and features a cut limestone façade and curved arcade fronting the beach. The arcade features a covered double row of columns anchored by public bath houses on each end. The façade of the building features massive columns supporting Romanesque arches, and the recessed entrances feature large arched windows. Decorative motifs include elements popular on the Atlantic City Boardwalk in the 1920s and include cut stone ocean flora and fauna. The massive auditorium behind the public entrance façade is clad in brick with an arched roof (Charleton, 1985).

3.3.2 Historic Significance and Setting

The Atlantic City Convention Hall has been designated an NHL with significance in architecture, engineering, and recreation. It is significant for its monumental architecture, and represents significant engineering feats, containing at the time of its construction, the largest room with an unobstructed view ever built. The building is also significant for its role in the recreation of Atlantic City and the nation, becoming one of America's most popular venues for shows and events (Charleton, 1985).

The Atlantic City Convention Hall NHL is located on the Atlantic City Boardwalk with the building's primary orientation toward the Atlantic Ocean. The building's arcade is constructed to provide views of the beach and is anchored by public bath houses adjacent to the beach. The building's location on the Atlantic coast lends to its historic significance as a beachside attraction within Atlantic City.

3.3.3 Project Effect on the Historic Property

The Projects are anticipated to result in potential adverse visual effects on the Atlantic City Convention Hall. The NHL will have unobstructed views of the Projects due to the NHL's location on the boardwalk. The Convention Hall and boardwalk both have a historic relationship to views of the ocean and the high level of sensitivity to visual effects, as publicly accessible recreation venues specifically designed for access to the beach and enjoyment of the ocean horizon. Although the primary association with historic recreation pertains to events held inside the convention hall, and the critical association of the property to the Atlantic City Boardwalk would be unaffected by the Projects, the property's design elements, siting, and orientation underscore the significance the beach and ocean views to the convention hall's historic setting. The proximity of the Projects to this property suggests the WTGs will be a significant focus of visitor attention when the property is experienced from the boardwalk or other exterior vantages.

4.0 MITIGATION MEASURES

BOEM and Atlantic Shores have identified steps to implement these measures in consultation with interested consulting parties, led by individuals who meet the qualifications specified in the Secretary of the Interior's Qualifications Standards for History and Architectural History (36 CFR 61).

4.1 Purpose and Intended Outcome

The purpose of this HPTP is to contribute funding in the amount agreed in the MOA toward the rehabilitation of the Kennedy Plaza West Pavilion at the NHL. Funding may also be used toward the refinement of plans and specifications for the proposed project. The rehabilitation of the building will allow the currently vacant section of the NHL to be returned to public use to be enjoyed by visitors to the Atlantic City Convention Hall (Jim Whelan Boardwalk Hall), NHL and the Atlantic City Boardwalk.

4.2 Scope of Work

The exact scope of work will be determined in consultation with the interested consulting parties.

4.3 Standards

The project will comply with following standards:

- The Secretary of the Interior's *Standards for Treatment of Historic Properties* (36 CFR 68);
- The Secretary of the Interior's *Professional Qualifications Standards* (36 CFR Part 61), as applicable;
- The NJHPO's guidance on new construction https://www.nj.gov/dep/hpo/4sustain/newconst_1.pdf;
- The National Park Service's guidance on new construction within historic properties <https://www.nps.gov/subjects/taxincentives/new-construction-in-historic-properties.htm>; and
- All applicable local ordinances, laws, and regulations.

4.4 Methodology

The City of Atlantic City will release a request for proposals (RFP) for services and select qualified professionals to perform the scope of work. The preferred consultants and contractors will have experience working with and on historic buildings, preferably National Historic Landmarks. All draft and final documentation will be developed in consultation with the interested consulting parties and will be provided to the interested consulting parties for review and comment.

4.5 Documentation

The following documentation is to be provided for review by interested consulting parties:

- RFPs;
- Proposals by qualified consultants in response to the RFP.
- Existing conditions documentation including photographs;
- Preliminary draft plans and specifications;

- Final plans and specifications; and
- As-built documentation including photographs.

4.6 Funds and Accounting

Funding amounts were determined to be sufficient by BOEM in consultation with the interested consulting parties and are identified in an attachment to the MOA.

5.0 IMPLEMENTATION

5.1 Timeline

The timeline for implementation of the mitigation measures is identified in the MOA.

5.2 Organizational Responsibilities

5.2.1 *Bureau of Ocean Energy Management (BOEM)*

BOEM remains responsible for making all federal decisions and determining compliance with Section 106. BOEM will review this HPTP to ensure, at minimum, it includes the content required.

- BOEM, in consultation with the interested consulting parties, will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA;
- BOEM will be responsible for sharing the annual summary report with the interested consulting parties; and
- BOEM is responsible for consultation related to dispute resolution.

5.2.2 *Atlantic Shores Offshore Wind, LLC*

Atlantic Shores will be responsible for the following:

- Considering the comments provided by the interested consulting parties in the development of this HPTP;
- Depositing funding in the amount agreed in the MOA to be used toward the implementation of this HPTP in a dedicated account specified by the interested consulting parties prior to the commencement of the mitigation measures;
- Managing funding and implementing the mitigation measures as specified in Section 4.0;
- Providing documentation to the interested consulting parties for review and comment as specified in Section 4.0;
- Annual Reporting to BOEM on progress in implementation of this HPTP;
- Ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations; and
- Provide notification to BOEM and the interested consulting parties when the HPTP implementation is complete.

5.2.3 *Interested Consulting Parties*

The interested consulting parties will be responsible for the following:

- Providing review and comment on the proposed mitigation measures described in Section 4.0.

5.2.4 *Other Parties, as Appropriate*

Additional consulting parties are not anticipated, should any be determined, this will be updated.

5.3 Schedule

All mitigation measures must be completed within the timeframes outlined in the MOA. The schedule for funding, commencing, implementing, and completing the mitigation measures described in Section 4.0 will be completed according to the timelines outlined in the MOA, unless a different timeline is agreed upon by interested consulting parties and accepted by BOEM.

6.0 REFERENCES

Allaback, S., and C. Milliken. 1995. Resorts & Recreation: an Historic Theme Study of the New Jersey Coastal Heritage Trail Route. Sandy Hook Foundation, Inc. and National Park Service, U.S. Department of the Interior. Available at https://www.nps.gov/parkhistory/online_books/nj1/index.htm (Accessed October 2022).

Atlantic City Free Public Library ACFPL). 2023. *History of Casino Gambling in Atlantic City*. Available at: <http://www.acfpl.org/ac-history-menu/atlantic-city-heritage-collections/15-heston-archives/68-history-of-casino-gambling-in-atlantic-city> (Accessed June 2023).

Charleton, J. 1985. *Atlantic City Convention Hall*. National Register of Historic Places Inventory Nomination Form. United States Department of the Interior. Washington, D.C.

Code of Federal Regulations (CFR). 2021a. 36 CFR § 800 – Protection of Historic Properties [incorporating amendments effective December 15, 2021]. Available at <https://www.ecfr.gov/current/title-36/chapter-VIII/part-800>. Accessed March 31, 2022.

CFR. 2021b. 36 CFR § 61.4(e)(1) – Procedures for State, Tribal, and Local Government Historic Preservation Programs [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4\(e\)\(1\)](https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4(e)(1)). Accessed March 31, 2022.

CFR. 2021c. 36 CFR § 65.2(c)(2) – National Historic Landmarks Program – Effects of Designation [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2\(c\)\(2\)](https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2(c)(2)). Accessed March 31, 2022.

CFR. 2022. 40 CFR § 1500 – National Environmental Policy Act Implementing Regulations. Available at <https://www.ecfr.gov/current/title-40/chapter-V/subchapter-A>. Accessed March 31, 2022.

Federal Register. 1997. 62 FR 33708 – The Secretary of the Interior’s Historic Preservation Professional Qualifications Standards. Office of the Federal Register, National Archives and Records Administration. Washington, D.C. Available at <https://www.govinfo.gov/app/details/FR-1997-06-20/97-16168>. Accessed March 31, 2022.

NETRonline (NETR). 2023. Historic Aerials. Available at: <https://historicaerials.com/> (Accessed February 2023).

United States Code. 2016. Title 54 - National Historic Preservation Act [as amended through December 16, 2016]. Available at <https://www.achp.gov/sites/default/files/2018-06/nhpa.pdf>. Accessed March 31, 2022.

ATTACHMENT A.
ABOVEGROUND HISTORIC PROPERTY INFORMATION AND VISUAL EFFECTS ASSESSMENT

Atlantic City Convention Hall

Boardwalk between Pacific, Mississippi, and Florida Avenues
Atlantic City, Atlantic County, NJ



Photograph representative of NHL



Photograph representative of NHL



Photograph representative of NHL



Photograph representative of NHL



Photograph representative of NHL



Photograph from property looking toward Projects

Historic Designation National Historic Landmark
Distance to Nearest Turbine 11.4 miles
Number of Blade Tips Visible 200
Property Acreage within Study Area 8.64
Property Acreage within PAPE 0.35
Percentage of Property with Potential Visibility 4.03
Visible Light Units
Nacelle Aviation 200
Mid Tower Aviation 200
Coast Guard 41

Significance
The Atlantic City Convention Hall, constructed in 1926-1929 by Lockwood-Greene and Co., exhibits Beaux Arts and Romanesque style elements and features a cut limestone façade and curved arcade fronting the beach. The arcade features a covered double row of columns anchored by public bath houses on each end. The facade of the building features massive columns supporting Romanesque arches, and the recessed entrances feature large arched windows. Decorative motifs include elements popular on the Atlantic City Boardwalk in the 1920s and include cut stone ocean flora and fauna. The massive auditorium behind the public entrance facade is clad in brick with an arched roof. The Atlantic City Convention Hall has been designated a National Historic Landmark with significance in architecture, engineering, and recreation. It is significant for its monumental architecture, and represents significant engineering feats, containing at the time of its construction, the largest room with an unobstructed view ever built. The building is also significant for its role in the recreation of Atlantic City and the nation, becoming one of America's most popular venues for shows and events.

Maritime Setting
The Atlantic City Convention Hall is located on the Atlantic City Boardwalk with the building's primary orientation toward the Atlantic Ocean. The building's arcade is constructed as to provide views of the beach and is anchored by public bath houses adjacent to the beach. The building's location on the Atlantic Coast lends to its historic significance as a beachside attraction within Atlantic City.

Effect Recommendation
Adverse Effect

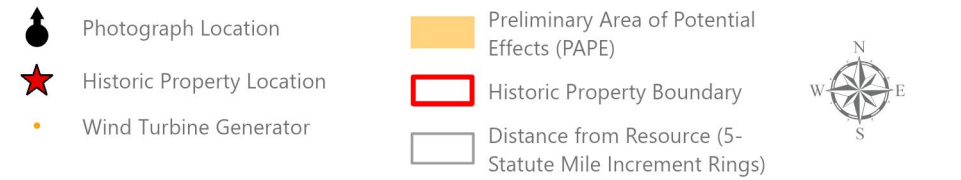
Unobstructed views of the Projects due to the NHL's location on the boardwalk. Although the primary association with historic recreation pertains to events held inside the convention hall, and the critical association of the property to the Atlantic City Boardwalk would be unaffected by the Projects, the property's design elements, siting, and orientation underscore the significance the beach and ocean views to the convention hall's historic setting. The proximity of the Projects to this property suggests the WTGs will be a significant focus of visitor attention when the property is experienced from the boardwalk or other exterior vantages.



Esri ArcGIS Online "World Imagery" map service



Esri ArcGIS Online "World Topographic Map" map service



Atlantic Shores South Offshore Wind Project

Historic Resources Visual Effects Assessment

**ATTACHMENT 9 – HISTORIC PROPERTY TREATMENT PLAN FOR LUCY, THE
MARGATE ELEPHANT (NHL) IN MARGATE CITY, ATLANTIC COUNTY, NEW JERSEY**

Historic Property Treatment Plan

for the

Atlantic Shores Offshore Wind

Lease Area OCS-A 0499

Lucy, the Margate Elephant

Margate City, Atlantic County, New Jersey

Submitted to:



Bureau of Ocean Energy Management
U.S. Department of the Interior

Prepared for:



Atlantic Shores Offshore Wind LLC



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May 2024

ABSTRACT

Federal Undertaking: Atlantic Shores Offshore Wind Projects

Location: Outer Continental Shelf, offshore New Jersey

Federal and
State Agencies: Bureau of Ocean Energy Management
National Park Service
U.S. Army Corps of Engineers
New Jersey Historic Preservation Office
Advisory Council on Historic Preservation

Regulatory Process: National Environmental Policy Act
Section 106 of the National Historic Preservation Act
Section 110(f) of the National Historic Preservation Act

Purpose: This Historic Property Treatment Plan provides background data, historic property information, and detailed steps that will be implemented to carry out mitigation actions to resolve adverse effects from the Atlantic Shores South Projects.

Adverse Visual Effect
Finding for: Lucy, the Margate Elephant, Margate City, Atlantic County, New Jersey

Submitted By: Atlantic Shores Offshore Wind, LLC

Date: May 2024

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Table 3.1-1. Historic Properties included in the HPTP6

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1.0 INTRODUCTION

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) (54 USC 306108) and its implementing regulations, and in compliance with Section 110(f) of the NHPA (54 USC 306107), the Bureau of Ocean Energy Management (BOEM) has determined the Atlantic Shores South Offshore Wind Projects (the Projects) will have an adverse effect on historic properties. A historic property is defined per 36 CFR § 800.16 as any property that is listed in, or has been determined eligible for listing in, the National Register of Historic Places (NRHP), or is a National Historic Landmark (NHL). This Historic Property Treatment Plan (HPTP) for the Lucy, the Margate Elephant, Margate City, Atlantic County, New Jersey, which is a NHL; (hereinafter, the Historic Property) provides background data, historic property information, and detailed mitigation actions that will be implemented to resolve adverse effects from the Projects. Atlantic Shores Offshore Wind, LLC (Atlantic Shores) has provided this HPTP in accordance with BOEM's Findings of Adverse Effects (FoAE) for the Projects under the National Historic Preservation Act of 1966 (NHPA).

BOEM used the National Environmental Policy Act (NEPA) substitution process to fulfill its Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)), and BOEM has notified the Advisory Council on Historic Preservation (ACHP), the New Jersey Historic Preservation Office (NJHPO), and the interested consulting parties of BOEM's decision to use this process. Atlantic Shores has provided this HPTP to BOEM for inclusion in the Final Environmental Impact Statement (FEIS).

This HPTP describes the mitigation measures to resolve adverse effects on historic properties, the implementation steps, and timeline for actions. The mitigation measures are based on the evaluations and outreach performed by Atlantic Shores as well as outreach to the interested consulting parties performed by BOEM. This HPTP document has undergone revision and refinement in consultation with the NJHPO, the ACHP, and other consulting parties throughout the NEPA substitution process. This HPTP is included in the Memorandum of Agreement (MOA) issued in accordance with 36 CFR §§ 800.8, 800.10.

This HPTP is organized into the following sections:

- **Section 1.0, Introduction**, outlines the content of this HPTP.
- **Section 2.0, Background Information**, briefly summarizes the Projects and describes the cultural resources regulatory contexts (federal, tribal, state, and local, including preservation restrictions) applicable to the HPTP.
- **Section 3.0, Historic Properties – Context, Significance, and Effects**, provides a physical description of the historic properties included in this HPTP, describes their historic context, the applicable NRHP criteria for each property with a focus on the contribution of each property's maritime visual setting to its significance and integrity, describes the potential visual effect of the Projects on each property.
- **Section 4.0, Mitigation Measures**, identifies the specific steps to carry out the mitigation actions. The mitigation action includes a detailed description, intended outcome, methods, standards, and requirements for documentation.

- **Section 5.0, Implementation**, establishes the organizational responsibilities for implementing the mitigation actions, as identified in Section 3.0 of this HPTP.
- **Section 6.0, References**, is a list of works cited in this HPTP.

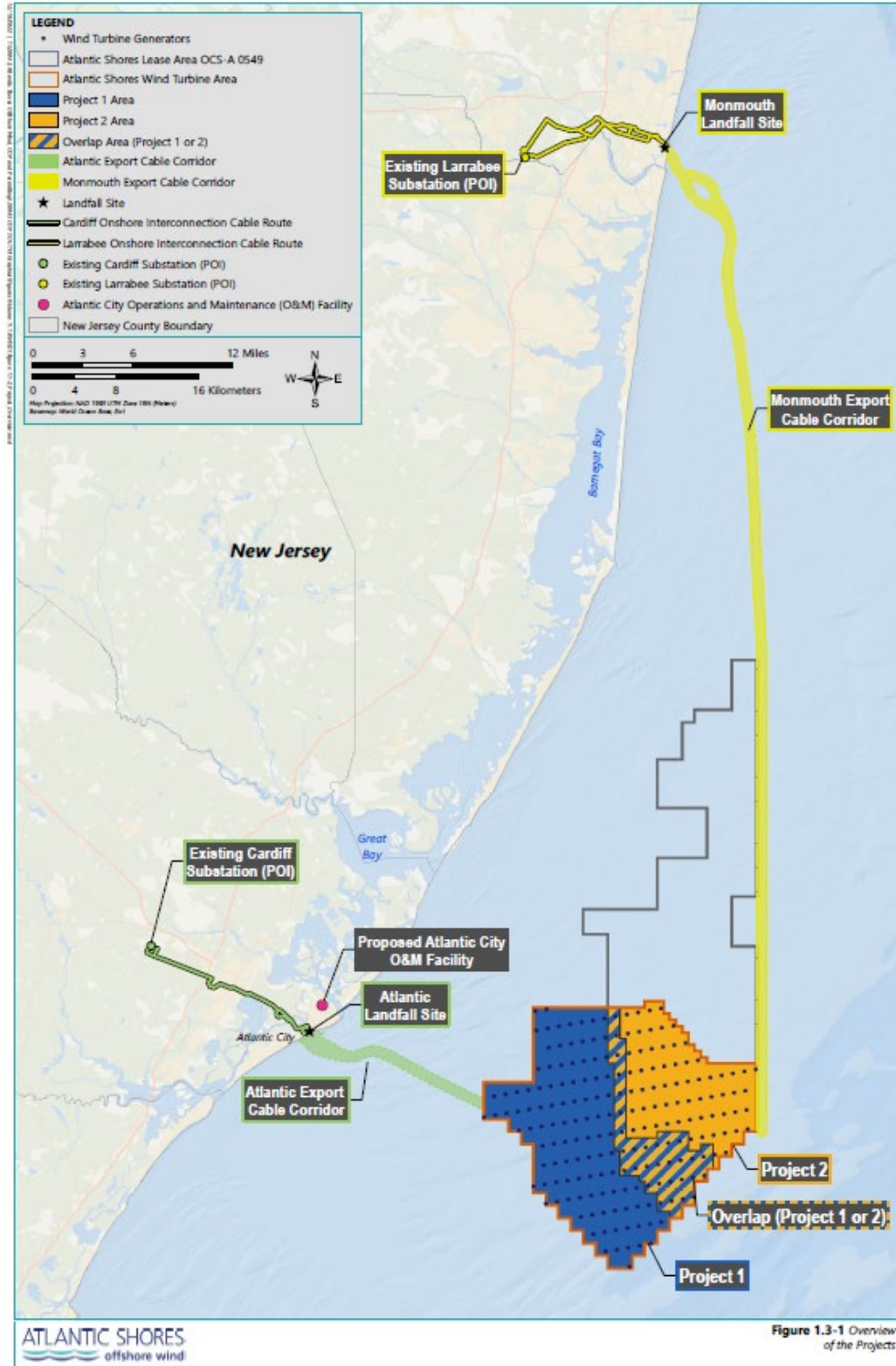
2.0 BACKGROUND INFORMATION

2.1 Overview of the Projects

Atlantic Shores' Lease Area is located on the Outer Continental Shelf (OCS) within the New Jersey Wind Energy Area (NJWEA), which was identified by BOEM as suitable for offshore renewable energy development through a multi-year, public environmental review process. The Projects will be located in an approximately 102,124-acre (413.3-square kilometer [km²]) Wind Turbine Area (WTA) located in the southern portion of the Lease Area (see Figure 2.1-1). Project 1 is located in the western 54,175 acres (219.2 km²) of the WTA, and Project 2 is located in the eastern 31,847 acres (128.9 km²) of the WTA with a 16,102-acre (65.2-km²) Overlap Area that could be used by either Project 1 or Project 2. Figure 2.1-1 also depicts the boundaries of the Project 1 and Project 2 areas within the WTA.

The Projects will collectively consist of up to 200 WTGs and associated foundations, inter-array cables connecting the WTGs, and offshore substations. The offshore substations utilized for the Projects will include up to 10 Onshore Substations (OSSs). Energy from the WTGs will be delivered to shore via 230 kV to 525 kV high voltage alternating current or high voltage direct current export cables. Up to four export cables will be installed within each of two possible Export Cable Corridors, for a total of up to eight export cables. The export cables will traverse federal and New Jersey state waters to deliver energy from the OSSs to landfall sites located in Monmouth County (the Monmouth Landfall Site) and/or Atlantic County (the Atlantic Landfall Site), New Jersey. The offshore-to-onshore transition at the landfall sites will occur via horizontal directional drilling to avoid nearshore and shoreline impacts. From the Monmouth and Atlantic Landfall Sites, new 230 kV to 525 kV high voltage alternating current or high voltage direct current onshore interconnection cables will travel underground along existing roadways, utility rights-of-way, and/or along bike paths to up to two new onshore substation sites (one for each onshore point of interconnection), where transmission will be stepped up or stepped down in preparation for interconnection with the electrical grid. Onshore interconnection cables will continue from each of the new onshore substations to proposed points of interconnection into the electrical grid at the existing Larrabee Substation in Howell, New Jersey (for the Monmouth Landfall Site) or the existing Cardiff Substation in Egg Harbor Township, New Jersey (for the Atlantic Landfall Site). Once operational, the Projects will be supported by a new operations and maintenance (O&M) facility that will be located in Atlantic City, New Jersey. The O&M facility will be the primary location for O&M operations including material storage, day-to-day management of inspection and maintenance activities, vehicle parking, marine coordination, vessel docking, and dispatching of technicians. Atlantic Shores intends to purchase and develop a shoreside parcel in Atlantic City, New Jersey that was formerly used for vessel docking or other port activities.

Figure 2.1-1. Overview of the Projects.



2.2 Regulatory Framework

Historic Property Treatment Plan

Lucy, the Margate Elephant, NHL, Margate City, Atlantic County, New Jersey

2.2.1 Section 106 and Section 110(f) of the NHPA

Section 106 of the NHPA of 1966 requires federal agencies to consider the effects of their undertakings on historic properties, which are defined per 36 CFR § 800.16 to include any property that is listed in or has been determined eligible for listing in the NRHP or is an NHL. Section 110(f) of the NHPA further requires that federal agencies undertake such planning and actions as may be necessary to minimize harm to any NHL that may be directly and adversely affected by an undertaking. Historic properties can include marine archaeological resources, terrestrial archaeological sites, above-ground historic properties (e.g., buildings, sites, monuments, and landscapes), and Traditional Cultural Properties.

The regulations at 36 CFR § 800.8 provide for use of the NEPA process to fulfill a federal agency's NHPA Section 106 review obligations in lieu of the procedures set forth in 36 CFR § 800.3 through 800.6. Under these provisions, either issuance of a Record of Decision (ROD) and implementation of relevant conditions or the execution of a MOA will resolve adverse effects to historic properties caused by the Projects, including to NHLs for which BOEM must provide a higher standard of care, as required by Section 110(f) of the NHPA. This HPTP was developed to support ongoing consultations and will be finalized for inclusion in the MOA issued in accordance with 40 CFR §1500-1508, and 36 CFR § 800.8 and 800.10.

All activities implemented under this HPTP will be conducted in accordance with any conditions imposed by BOEM in its ROD and with applicable local, state and federal regulations and permitting requirements. Responsibilities for specific compliance actions are described in further detail in Section 5.2 – Organizational Responsibilities.

2.2.2 Municipal Regulations

Before implementation, any on-site mitigation measures will be coordinated with local municipalities and commissions to obtain approvals, as appropriate. These may include, but are not limited to building permits, zoning, land use, planning, historic commissions, and design review boards.

2.2.3 Preservation Easements and Restrictions

Preservation easements and restrictions protect significant historic, archaeological, or cultural resources. Any mitigation work would comply with the conditions of all extant historic preservation easements.

2.3 Summary of HPTP Development

This HPTP was developed by Atlantic Shores for inclusion in the FEIS in support of BOEM's consultation pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR § 800.8. In addition to BOEM's formal Section 106 consultation meetings, Atlantic Shores invited the interested consulting parties to a series of meetings to review conceptual mitigation measures for the adversely affected historic properties on October 16, 18, 19, 30 and November 1, 2023. Atlantic Shores anticipates the HPTP may be revised based on comments received directly from the interested consulting parties or via the ongoing BOEM led Section 106 consultations.

3.0 HISTORIC PROPERTIES - SIGNIFICANCE, EFFECTS, AND MITIGATION MEASURES

3.1 Historic Properties Included in the HPTP

This HPTP describes the mitigation measures for the below listed historic properties, as identified in Table 3.1-1.

Table 3.1-1. Historic Properties included in the HPTP

Property ID	Property Name	Address	NRHP Status	Ownership
63	Lucy, the Margate Elephant	Decatur and Atlantic Avenues	National Historic Landmark	Public

Discussions are provided below for each historic property included in the HPTP, which include:

- a physical description of the property,
- a narrative summarizing their historic context,
- the applicable NRHP criteria for the Historic Property with a focus on the contribution of each property's maritime visual setting to its significance and integrity,
- the visual effects of the Projects on each property, and
- measures to mitigate adverse effects on each property.

Maps and photographs are included in Attachment A - Aboveground Historic Property Information and Visual Effects Assessment.

The mitigation measures described herein were developed by individuals who meet the Secretary of the Interior's *Professional Qualifications Standards* (36 CFR § 61) and are appropriate to fully address the nature, scope, size, and magnitude of adverse effects including cumulative effects caused by the Projects. These mitigation measures may also include actions to respond to some reasonably foreseeable hazards unrelated to the Project that pose risks to the long-term preservation of the affected historic properties, such as climate change.

3.2 Historic Context of Margate City

Margate City is a primarily residential community located on Absecon Island and bordered to the northeast by Ventnor City and to the southwest by the borough of Longport. It is connected to mainland New Jersey via Margate Boulevard, which is carried by a series of causeways and bridges. Although a railroad line reached Absecon Island by the late nineteenth century, Margate City (known as South Atlantic City prior to 1910) was not densely developed until the 1920s when large tracts of upscale seaside cottages were constructed on the blocks closest to the oceanfront. Historic aerial imagery shows that the majority of Margate City's residential areas were built in the 1920s and 1930s (NETR, 2023). Developments such as Marven Gardens (now a historic district listed in the NRHP; the name is a portmanteau of Margate and Ventnor) generally featured homes rendered in popular styles of the era including Craftsman, French Eclectic, and various Colonial Revivals (Ralph, 1989). Most of the streets in the city follow a grid pattern, with small lots utilized to maximize the number of housing units built. Atlantic Avenue and Ventnor Avenue form the primary travel corridors through Margate City, and it is along these avenues that the community's

commercial development is centered. Although several low-rise condominium complexes and a handful of high-rise condominiums were built in the late twentieth and early twenty-first centuries, Margate City retains its early-twentieth-century residential character.

3.3 Lucy, the Margate Elephant

3.3.1 Description and Existing Conditions

Lucy, the Margate Elephant NHL was built in 1881 as a real estate marketing gimmick by James Lafferty, who patented zoomorphic architecture. His “Elephant Bazaar” (dubbed “Lucy” by subsequent owners) had a wood frame and tin-clad wood sheathing; the frame has since been reinforced with steel and the sheathing is currently being restored. At 65 feet tall and 60 feet long, it is one of the largest statue-like structures in America and the oldest roadside tourist attraction. In 1970, after threats of demolition, Lucy was moved to a nearby city-owned lot and restored. It was designated an NHL in 1976 (Pitts, 1976b).

3.3.2 Historic Significance and Setting

Lucy, the Margate Elephant is located at the corner of South Decatur and Atlantic Avenues in Margate City, one block west of the beach overlooking the Atlantic Ocean. The NHL was moved from its original location to its current site in 1970. Lucy, the Margate Elephant is located on the edge of the Margate City beach overlooking the Atlantic Ocean. As an example of novelty architecture, this resource is suited to the beachside resort environment with partially obstructed views of the Atlantic Ocean from ground level.

3.3.3 Project Effect on the Historic Property

The Projects are anticipated to result in potential adverse visual effects on Lucy, the Margate Elephant. The NHL is located in an area with a dense built environment characterized by modern (non-historic) architecture; therefore, its integrity of setting has been diminished. As stated above, Lucy was moved in 1970 and the new location allows for views of the Atlantic Ocean and the Intercoastal Waterway from within the howdah and through the portal windows, as well as views of the NHL from these bodies of water. Due to the proximity of the Projects to this NHL, views from within Lucy will allow for direct lines of site to the Projects and will be a significant focus of visitor attention when viewing the ocean from the howdah or the portal windows.

4.0 MITIGATION MEASURES

BOEM and Atlantic Shores have identified steps to implement these measures in consultation with interested consulting parties, led by individuals who meet the qualifications specified in the Secretary of the Interior's Qualifications Standards for History and Architectural History (36 CFR 61).

4.1 Purpose and Intended Outcome

The purpose of this HPTP is to contribute funding in the amount agreed in the MOA toward the construction of a new visitor experience and welcome center at the National Historic Landmark. Funding may also be used toward the refinement of plans and specifications for the proposed project or to the landscaping and/or hardscaping. The number of people that visit Lucy has surpassed the capacity of the current facilities and there are currently not enough restrooms nor is Lucy accessible to all members of the public. This project is being designed to enhance the visitor experience and to accommodate larger groups as well as school children and opportunity to visit this historic resource.

4.2 Scope of Work

The exact scope of work will be determined in consultation with the interested consulting parties.

4.3 Standards

The project will comply with following standards:

- The Secretary of the Interior's *Standards for Treatment of Historic Properties* (36 CFR 68);
- The Secretary of the Interior's *Professional Qualifications Standards* (36 CFR Part 61), as applicable;
- The NJHPO's guidance on new construction https://www.nj.gov/dep/hpo/4sustain/newconst_1.pdf;
- The National Park Service's guidance on new construction within historic properties <https://www.nps.gov/subjects/taxincentives/new-construction-in-historic-properties.htm>; and
- All applicable local ordinances, laws, and regulations.

4.4 Methodology

The Save Lucy Committee will release a request for proposals (RFP) for services and select qualified professionals to perform the scope of work. The preferred consultants and contractors will have experience working with and on historic buildings, preferably National Historic Landmarks. All draft and final documentation will be developed in consultation with the interested consulting parties and will be provided to the interested consulting parties for review and comment.

4.5 Documentation

The following documentation is to be provided for review by interested consulting parties:

- RFPs;
- Proposals by qualified consultants in response to the RFP.

- Existing conditions documentation including photographs;
- Preliminary draft plans and specifications;
- Final plans and specifications; and
- As-built documentation including photographs.

4.6 Funds and Accounting

Funding amounts were determined to be sufficient by BOEM in consultation with the interested consulting parties and are identified in an attachment to the MOA.

5.0 IMPLEMENTATION

5.1 Timeline

The timeline for implementation of the mitigation measures is identified in the MOA.

5.2 Organizational Responsibilities

5.2.1 *Bureau of Ocean Energy Management (BOEM)*

BOEM remains responsible for making all federal decisions and determining compliance with Section 106. BOEM will review this HPTP to ensure, at minimum, it includes the content required.

- BOEM, in consultation with the interested consulting parties, will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA;
- BOEM will be responsible for sharing the annual summary report with the interested consulting parties; and
- BOEM is responsible for consultation related to dispute resolution.

5.2.2 *Atlantic Shores Offshore Wind, LLC*

Atlantic Shores will be responsible for the following:

- Considering the comments provided by the interested consulting parties in the development of this HPTP;
- Depositing funding in the amount agreed in the MOA to be used toward the implementation of this HPTP in a dedicated account specified by the interested consulting parties prior to the commencement of the mitigation measures;
- Managing funding and implementing the mitigation measures as specified in Section 4.0;
- Providing documentation to the interested consulting parties for review and comment as specified in Section 4.0;
- Annual Reporting to BOEM on progress in implementation of this HPTP;
- Ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations; and
- Provide notification to BOEM and the interested consulting parties when the HPTP implementation is complete.

5.2.3 *Interested Consulting Parties*

The interested consulting parties will be responsible for the following:

- Providing review and comment on the proposed mitigation measures described in Section 4.0.

5.2.4 *Other Parties, as Appropriate*

Additional consulting parties are not anticipated, should any be determined, this will be updated.

5.3 Schedule

All mitigation measures must be completed within the timeframes outlined in the MOA. The schedule for funding, commencing, implementing, and completing the mitigation measures described in Section 4.0 will be completed according to the timelines outlined in the MOA, unless a different timeline is agreed upon by interested consulting parties and accepted by BOEM.

6.0 REFERENCES

Code of Federal Regulations (CFR). 2021a. 36 CFR § 800 – Protection of Historic Properties [incorporating amendments effective December 15, 2021]. Available at <https://www.ecfr.gov/current/title-36/chapter-VIII/part-800>. Accessed March 31, 2022.

CFR. 2021b. 36 CFR § 61.4(e)(1) – Procedures for State, Tribal, and Local Government Historic Preservation Programs [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4\(e\)\(1\)](https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4(e)(1)). Accessed March 31, 2022.

CFR. 2021c. 36 CFR § 65.2(c)(2) – National Historic Landmarks Program – Effects of Designation [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2\(c\)\(2\)](https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2(c)(2)). Accessed March 31, 2022.

CFR. 2022. 40 CFR § 1500 – National Environmental Policy Act Implementing Regulations. Available at <https://www.ecfr.gov/current/title-40/chapter-V/subchapter-A>. Accessed March 31, 2022.

Federal Register. 1997. 62 FR 33708 – The Secretary of the Interior’s Historic Preservation Professional Qualifications Standards. Office of the Federal Register, National Archives and Records Administration. Washington, D.C. Available at <https://www.govinfo.gov/app/details/FR-1997-06-20/97-16168>. Accessed March 31, 2022.

NETRonline (NETR). 2023. Historic Aerials. Available at: <https://historicaerials.com/> (Accessed February 2023).

Pitts, C. 1976b. *“Lucy” the Margate Elephant*. National Register of Historic Places Inventory-Nomination Form. Available at: <https://npgallery.nps.gov/NRHP/> (Accessed August 2022).

Ralph, M. 1989. *Marven Gardens Historic District*. National Register of Historic Places Registration Form. United States Department of the Interior, National Park Service.

United States Code. 2016. Title 54 - National Historic Preservation Act [as amended through December 16, 2016]. Available at <https://www.achp.gov/sites/default/files/2018-06/nhpa.pdf>. Accessed March 31, 2022.

ATTACHMENT A.
ABOVEGROUND HISTORIC PROPERTY INFORMATION AND VISUAL EFFECTS ASSESSMENT

Lucy, the Margate Elephant

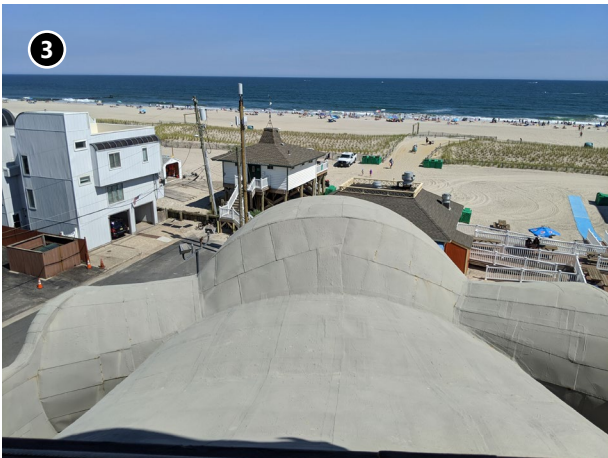
Decatur and Atlantic Avenues
Margate City, Atlantic County, NJ



Photograph representative of NHL



Photograph representative of NHL



Photograph representative of NHL



Photograph representative of NHL



Photograph representative of NHL



Photograph representative of NHL

Historic Designation National Historic Landmark
Distance to Nearest Turbine 14.4 miles
Number of Blade Tips Visible 139
Property Acreage within Study Area 0.56
Property Acreage within PAPE 0.08
Percentage of Property with Potential Visibility 14.66
Visible Light Units
Nacelle Aviation 136
Mid Tower Aviation 116
Coast Guard 4

Significance

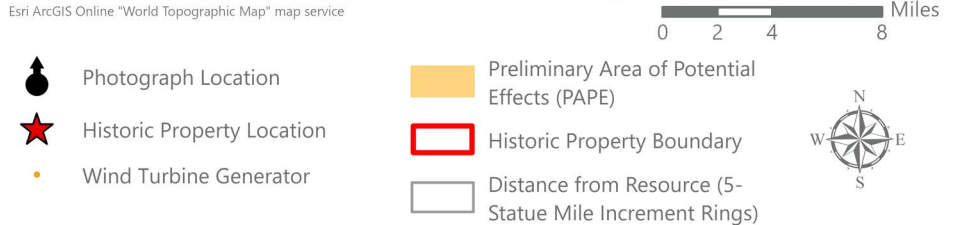
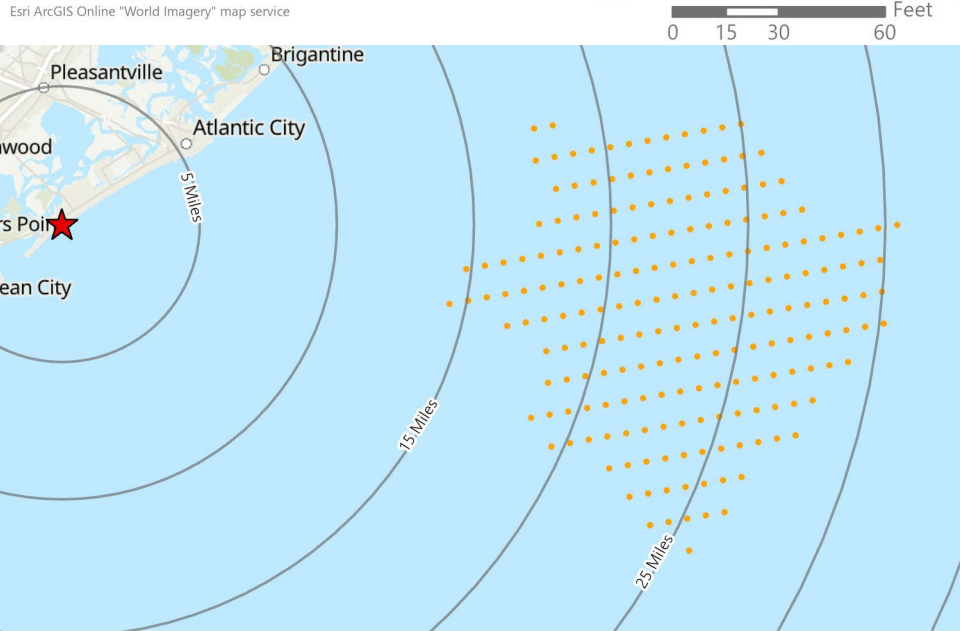
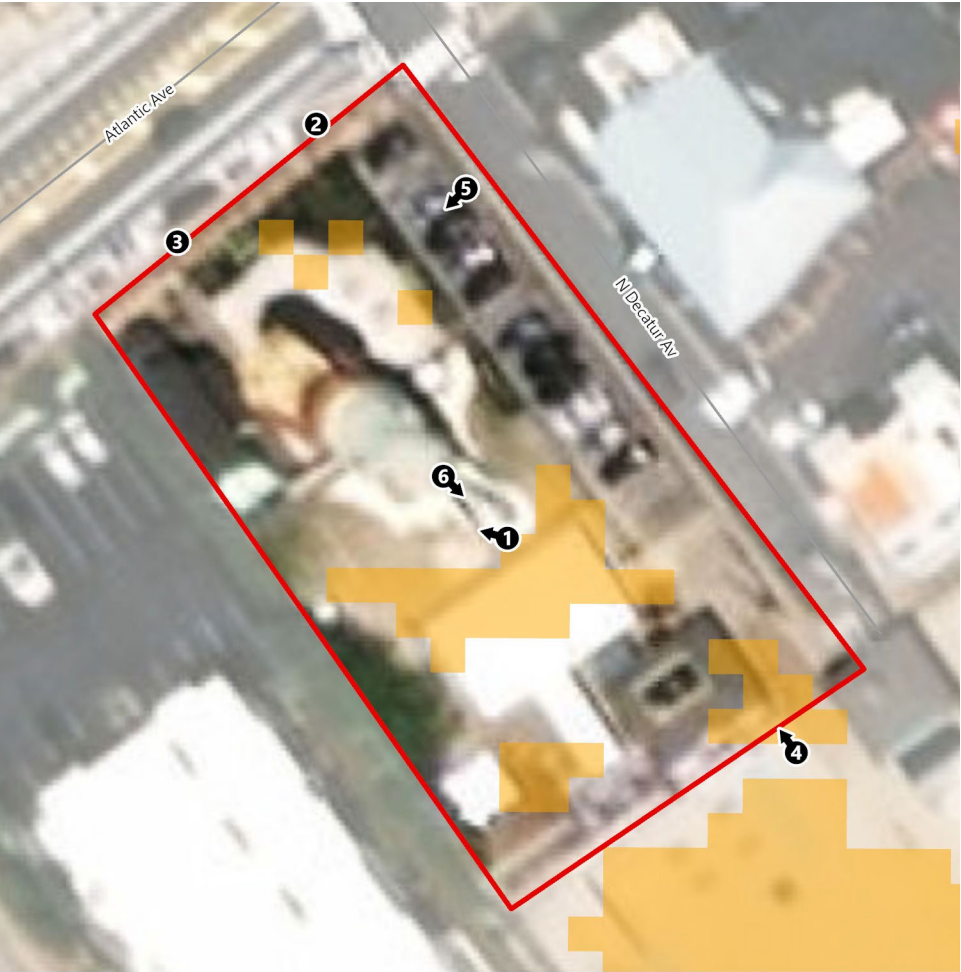
Lucy, the Margate Elephant was built in 1881 by as a real estate marketing gimmick by James Lafferty, who patented zoomorphic architecture. His “Elephant Bazaar” (dubbed “Lucy” by subsequent owners), had a wood frame and tin-clad wood sheathing; the frame has since been reinforced with steel and the sheathing is currently being restored. At 65 ft tall and 60 ft long, it is one of the largest statue-like structures in America and the oldest roadside tourist attraction. In 1970, after threats of demolition, Lucy was moved to a nearby city-owned lot, and restored. It was designated a National Historic Landmark in 1976. Despite being moved from its original location and restored, Lucy retains sufficient integrity in terms of design, workmanship, feeling, and association to eligible for the NRHP under Criterion C.

Maritime Setting

Lucy, the Margate Elephant is located on the edge of the Margate City beach overlooking the Atlantic Ocean. As an example of novelty architecture, this resource is suited to the beachside resort environment with partially obstructed views of the Atlantic Ocean from ground level.

Effect Recommendation
Adverse Effect

The National Historic Landmark (NHL) was constructed as a real estate advertising gimmick in 1881. The NHL was moved from its original location to its current site in 1970. Today, Lucy is surrounded by modern structures and infrastructure; therefore, its integrity of setting has been diminished. However, Lucy’s placement at the new location adjacent to the beach appears to intentionally allow for views from and of the Atlantic Ocean. The ocean, surrounding buildings, and the Intercoastal Waterway are prominently visible from Lucy’s portal windows and the howdah and will create a direct line of sight to the Projects.



Atlantic Shores Offshore Wind Project

Historic Resources Visual Effects Assessment

**ATTACHMENT 10 – HISTORIC PROPERTY TREATMENT PLAN FOR HISTORIC
PROPERTIES OWNED BY THE STATE OF NEW JERSEY (NJDEP): ABSECON
LIGHTHOUSE IN ATLANTIC CITY, ATLANTIC COUNTY; BARNEGAT LIGHTHOUSE IN
BARNEGAT LIGHT, OCEAN COUNTY; FORKED RIVER COAST GUARD STATION NO. 112
IN BERKELEY TOWNSHIP, OCEAN COUNTY; AND ISLAND BEACH STATE PARK
HISTORIC DISTRICT IN BERKELEY TOWNSHIP, OCEAN COUNTY**

Historic Property Treatment Plan

for

Atlantic Shores South Offshore Wind Lease Area OCS-A 0499

**Barnegat Lighthouse, Barnegat Light Borough
Forked River Coast Guard Station No. 112, Berkeley Township
Island Beach State Park Historic District, Berkeley Township
in Ocean County, New Jersey
&
Absecon Lighthouse, Atlantic City, Atlantic County, New Jersey**

Submitted to:



Bureau of Ocean Energy Management
U.S. Department of the Interior

Prepared for:



Atlantic Shores Offshore Wind LLC



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May 2024

ABSTRACT

Federal Undertaking:	Atlantic Shores Offshore Wind Projects
Location:	Outer Continental Shelf, offshore New Jersey
Federal and State Agencies:	Bureau of Ocean Energy Management National Park Service U.S. Army Corps of Engineers New Jersey Historic Preservation Office Advisory Council on Historic Preservation
Regulatory Process:	National Environmental Policy Act Section 106 of the National Historic Preservation Act Section 110(f) of the National Historic Preservation Act
Purpose:	This Historic Property Treatment Plan provides background data, historic property information, and detailed steps that will be implemented to carry out mitigation actions to resolve adverse effects from the Atlantic Shores South Projects.
Adverse Visual Effect Finding for:	Barnegat Lighthouse, Barnegat Light Borough, Ocean County, New Jersey Absecon Lighthouse, Atlantic City, Atlantic County, New Jersey Forked River Coast Guard Station No. 112, Berkeley Township, Ocean County, New Jersey Island Beach State Park Historic District, Berkeley Township, Ocean County, New Jersey
Submitted By:	Atlantic Shores Offshore Wind, LLC
Date:	May 2024

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LIST OF ATTACHMENTS

Attachment A - Aboveground Historic Property Information and Visual Effects Assessment

LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
ADLS	Aircraft Detection Lighting System
APE	Area of Potential Effects
BOEM	Bureau of Ocean Energy Management
CFR	Code of Federal Regulations
COP	Construction and Operations Plan
DEIS	Draft Environmental Impact Statement
EDR	Environmental Design and Research, D.P.C.
FEIS	Final Environmental Impact Statement
FoAE	Findings of Adverse Effect
FR	Federal Register
ICF	Interconnection Facility
HPTP	Historic Property Treatment Plan
MOA	Memorandum of Agreement
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act of 1966
NPS	National Park Service
NRHP	National Register of Historic Places
NJHPO	New Jersey Historic Preservation Office
NJWEA	New Jersey Wind Energy Area
OCS	Outer Continental Shelf
OSS	Onshore Substation
PAPE	Preliminary Area of Potential Effects
RFP	Request for Proposals
ROD	Record of Decision
USCG	United States Coast Guard
WTG	Wind Turbine Generator

1.0 INTRODUCTION

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) (54 USC 306108) and its implementing regulations, and in compliance with Section 110(f) of the NHPA (54 USC 306107), the Bureau of Ocean Energy Management (BOEM) has determined the Atlantic Shores South Offshore Wind Projects (the Projects) will have an adverse effect on historic properties. A historic property is defined per 36 CFR § 800.16 as any property that is listed in, or has been determined eligible for listing in, the National Register of Historic Places (NRHP), or is a National Historic Landmark (NHL). This Historic Property Treatment Plan (HPTP) for Barnegat Lighthouse, Barnegat Light Borough, Ocean County, New Jersey and Absecon Lighthouse, Atlantic City, Atlantic County, New Jersey, which are listed in the National Register of Historic Places (NRHP) and the Island Beach State Park Historic District and the Forked River Coast Guard Station No. 112, which have been determined NRHP-eligible; (hereinafter, the Historic Properties) provides background data, historic property information, and detailed mitigation actions that will be implemented to resolve adverse effects from the Projects. Atlantic Shores Offshore Wind, LLC (Atlantic Shores) has provided this HPTP in accordance with BOEM's Findings of Adverse Effects (FoAE) for the Projects under the National Historic Preservation Act of 1966 (NHPA).

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- **Section 1.0, Introduction**, outlines the content of this HPTP.
- **Section 2.0, Background Information**, briefly summarizes the Projects and describes the cultural resources regulatory contexts (federal, tribal, state, and local, including preservation restrictions) applicable to the HPTP.

Section 3.0, Historic Properties – Context, Significance, and Effects, provides a physical description of the historic properties included in this HPTP, describes their historic context, the applicable NRHP criteria for each historic property with a focus on the contribution of each property's maritime visual setting to its significance and integrity, describes the potential visual effect of the Projects on each property.

- **Section 4.0, Mitigation Measures**, identifies the specific steps to carry out the mitigation actions. The mitigation action includes a detailed description, intended outcome, methods, standards, and requirements for documentation.
- **Section 5.0, Implementation**, establishes the organizational responsibilities for implementing the mitigation actions, as identified in Section 3.0 of this HPTP.
- **Section 6.0, References**, is a list of works cited in this HPTP.

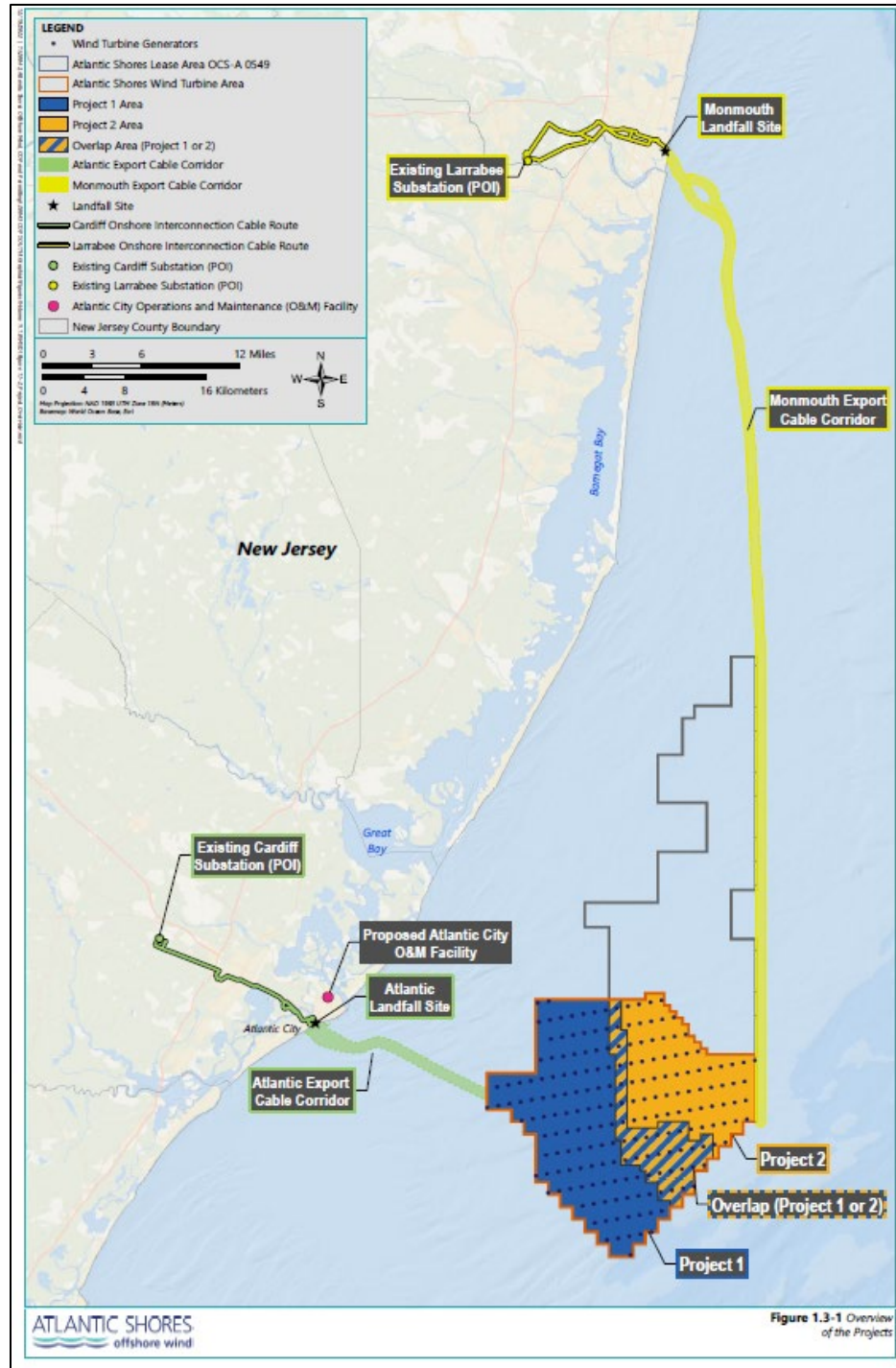
2.0 BACKGROUND INFORMATION

2.1 Overview of the Projects

Atlantic Shores' Lease Area is located on the Outer Continental Shelf (OCS) within the New Jersey Wind Energy Area (NJWEA), which was identified by BOEM as suitable for offshore renewable energy development through a multi-year, public environmental review process. The Projects will be located in an approximately 102,124-acre (413.3-square kilometer [km²]) Wind Turbine Area (WTA) located in the southern portion of the Lease Area (see Figure 2.1-1). Project 1 is located in the western 54,175 acres (219.2 km²) of the WTA, and Project 2 is located in the eastern 31,847 acres (128.9 km²) of the WTA with a 16,102-acre (65.2-km²) Overlap Area that could be used by either Project 1 or Project 2. Figure 2.1-1 also depicts the boundaries of the Project 1 and Project 2 areas within the WTA.

The Projects will collectively consist of up to 200 WTGs and associated foundations, inter-array cables connecting the WTGs, and offshore substations. The offshore substations utilized for the Projects will include up to 10 Onshore Substations (OSSs). Energy from the WTGs will be delivered to shore via 230 kV to 525 kV high voltage alternating current or high voltage direct current export cables. Up to four export cables will be installed within each of two possible Export Cable Corridors, for a total of up to eight export cables. The export cables will traverse federal and New Jersey state waters to deliver energy from the OSSs to landfall sites located in Monmouth County (the Monmouth Landfall Site) and/or Atlantic County (the Atlantic Landfall Site), New Jersey. The offshore-to-onshore transition at the landfall sites will occur via horizontal directional drilling to avoid nearshore and shoreline impacts. From the Monmouth and Atlantic Landfall Sites, new 230 kV to 525 kV high voltage alternating current or high voltage direct current onshore interconnection cables will travel underground along existing roadways, utility rights-of-way, and/or along bike paths to up to two new onshore substation sites (one for each onshore point of interconnection), where transmission will be stepped up or stepped down in preparation for interconnection with the electrical grid. Onshore interconnection cables will continue from each of the new onshore substations to proposed points of interconnection into the electrical grid at the existing Larrabee Substation in Howell, New Jersey (for the Monmouth Landfall Site) or the existing Cardiff Substation in Egg Harbor Township, New Jersey (for the Atlantic Landfall Site). Once operational, the Projects will be supported by a new operations and maintenance (O&M) facility that will be located in Atlantic City, New Jersey. The O&M facility will be the primary location for O&M operations including material storage, day-to-day management of inspection and maintenance activities, vehicle parking, marine coordination, vessel docking, and dispatching of technicians. Atlantic Shores intends to purchase and develop a shoreside parcel in Atlantic City, New Jersey that was formerly used for vessel docking or other port activities.

Figure 2.1-1. Overview of the Projects.



2.2 Regulatory Framework

2.2.1 *Section 106 and Section 110(f) of the NHPA*

Section 106 of the NHPA of 1966 requires federal agencies to consider the effects of their undertakings on historic properties, which are defined per 36 CFR § 800.16 to include any property that is listed in, or has been determined eligible for listing in the NRHP or is an NHL. Section 110(f) of the NHPA further requires that federal agencies undertake such planning and actions as may be necessary to minimize harm to any NHL that may be directly and adversely affected by an undertaking. Historic properties can include marine archaeological resources, terrestrial archaeological sites, above-ground historic properties (e.g., buildings, sites, monuments, and landscapes), and Traditional Cultural Properties.

The regulations at 36 CFR § 800.8 provide for use of the NEPA process to fulfill a federal agency's NHPA Section 106 review obligations in lieu of the procedures set forth in 36 CFR § 800.3 through 800.6. Under these provisions, either issuance of a Record of Decision (ROD) and implementation of relevant conditions or the execution of a MOA will resolve adverse effects to historic properties caused by the Projects, including to NHLs for which BOEM must provide a higher standard of care, as required by Section 110(f) of the NHPA. This HPTP was developed to support ongoing consultations and will be finalized for inclusion in the MOA issued in accordance with 40 CFR §1500-1508, and 36 CFR § 800.8 and 800.10.

All activities implemented under this HPTP will be conducted in accordance with any conditions imposed by BOEM in its ROD and with applicable local, state and federal regulations and permitting requirements. Responsibilities for specific compliance actions are described in further detail in Section 5.2 – Organizational Responsibilities.

2.2.2 *Municipal Regulations*

Before implementation, any on-site mitigation measures will be coordinated with local municipalities and commissions to obtain approvals, as appropriate. These may include, but are not limited to building permits, zoning, land use, planning, historic commissions, and design review boards.

2.2.3 *Preservation Easements and Restrictions*

Preservation easements and restrictions protect significant historic, archaeological, or cultural resources. Any mitigation work would comply with the conditions of all extant historic preservation easements.

2.3 Summary of HPTP Development

This HPTP was developed by Atlantic Shores for inclusion in the FEIS in support of BOEM's consultation pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR § 800.8. In addition to BOEM's formal Section 106 consultation meetings, Atlantic Shores invited the interested consulting parties to a series of meetings to review conceptual mitigation measures for the adversely affected historic properties on October 16, 18, 19, 30 and November 1, 2023. Atlantic Shores anticipates the HPTP may be revised based on comments received directly from the interested consulting parties or via the ongoing BOEM led Section 106 consultations.

3.0 HISTORIC PROPERTIES - SIGNIFICANCE, EFFECTS, AND MITIGATION MEASURES

3.1 Historic Properties Included in the HPTP

This HPTP describes the mitigation measures for the below listed historic properties, as identified in Table 3.1-1.

Table 3.1-1. Historic Properties included in the HPTP

Property ID	Address	Municipality	NRHP Status	Ownership
27	Northern end of Long Beach Island	Barnegat Light Borough	NRHP-Listed	State of New Jersey
23	Absecon Lighthouse	Atlantic City	NRHP-Listed	State of New Jersey
131	Forked River Coast Guard Station No. 112	Berkeley Township	NRHP-Eligible (NJHPO-Determined)	State of New Jersey
36	Island Beach State Park Historic District	Berkeley Township	NRHP-Eligible (NJHPO-Determined)	State of New Jersey

Discussions are provided below for each historic property included in the HPTP, which include:

- a physical description of the property,
- a narrative summarizing their historic context,
- the applicable NRHP criteria for Historic Properties with a focus on the contribution of each property's maritime visual setting to its significance and integrity,
- the visual effects of the Projects on each property, and
- measures to mitigate adverse effects on each property.

Maps and photographs are included in Attachment A - Aboveground Historic Property Information and Visual Effects Assessments.

The mitigation measures described herein were developed by individuals who meet the Secretary of the Interior's *Professional Qualifications Standards* (36 CFR § 61) and are appropriate to fully address the nature, scope, size, and magnitude of adverse effects including cumulative effects caused by the Projects. These mitigation measures may also include actions to respond to some reasonably foreseeable hazards unrelated to the Project that pose risks to the long-term preservation of the affected historic properties, such as climate change.

3.2 Historic Context of Barnegat Light Borough

Barnegat Light Borough is located in the extreme eastern extent of Ocean County at the northern tip of Long Beach Island. This area of Long Beach Island was first visited by European explorers in 1609 when Henry Hudson reached the vicinity of the borough. The Dutch eventually came to call this area Barendegat, or "Island of the Breakers" for the dangerous sea conditions encountered. The area was used as hunting and fishing ground for Euro-American settlers in the early nineteenth century. By the middle of the

nineteenth century, vacationers from New York reached Barnegat Light Borough by traveling to mouth of Toms River and sailing south down Barnegat Bay to reach the northern end of Long Beach Island. A railroad trestle was constructed in 1886 connecting the island to the mainland. In 1904, the area was incorporated as Barnegat City and was formally separated from Long Beach Township. It was renamed Barnegat Light in 1948 in commemoration of the lighthouse, which had become a landmark on the island. In the 1920s, Norwegian settlers founded the fishing village appropriately named Viking Village on the inlet located on the western side of the borough. The lighthouse and surrounding land was acquired by the state of New Jersey in 1957 and converted into a state park. This area of Long Beach Island continues to be a popular destination for boaters, fishers, and beachgoers (Barnegat Light Tourism Coalition, 2021).

3.2.1 Barnegat Lighthouse

3.2.1.1 Description and Existing Conditions

The Barnegat Lighthouse was built between 1855 and 1857 by Lt. George Meade, an Army engineer and future Civil War General. The lighthouse is 163 feet tall and was built to replace a much shorter structure that was destroyed by coastal erosion. The lighthouse operated with its original 12-foot-tall Fresnel lens from 1959 to 1927, after which other lighting apparatus were used until the light was decommissioned in 1944 (Wilson, 1970a).

3.2.1.2 Historic Significance and Setting

The Barnegat Lighthouse was constructed between 1855 and 1857 to guide ships navigating Barnegat Inlet. The Barnegat Lighthouse was given to the State of New Jersey and shortly after it was decommissioned, and the municipality changed its name to Barnegat Light. Though currently undergoing repairs, the Barnegat Lighthouse retains sufficient integrity to retain its listing on the NRHP of Historic Places. The Barnegat Lighthouse has a maritime setting as it was built on the northwestern tip of Long Beach Island to guide ships navigating Barnegat Inlet. Partial views of the ocean may be seen from the ground and broad ocean views may be seen from the top of the house where four cameras live stream the vistas for visitors to the Interpretive Center.

3.2.1.3 Project Effect on the Historic Property

Due to its location on the bay side of Long Beach Island, as well as the intervening land and structures, at a distance of over 27 miles, the Projects are anticipated to only be visible from approximately 0.246 percent of the Barnegat Lighthouse property from viewer height level; however, the Projects will be visible from the lantern level and may be a significant focus of visitor attention when viewing the Atlantic Ocean.

3.3 Historic Context of Atlantic City

Atlantic City is in the extreme eastern extent of Atlantic County on Absecon Island on the coast of the Atlantic Ocean. The city is bordered to the northeast by the city of Brigantine and to the southwest by Ventnor City. The first recorded Euro-American settler was Jeremiah Leed who built a house in the vicinity of Atlantic City in 1783. In 1850, Dr. Jonathan Pitney proposed the development of a seaside resort on the island. In 1852, he and other investors secured a railroad charter, and the Camden and Atlantic Railroad was constructed with its terminus in Atlantic City in 1854. The city was formally incorporated the same year and

the resort quickly became a popular tourist destination for visitors from Philadelphia and its suburbs. Atlantic City saw the height of its popularity in the late nineteenth and into the early twentieth century. A financial and commercial district was constructed along Atlantic Avenue and included high-style banks as well as commercial and institutional buildings. The 1950s brought a decline in visitation due to the advent of air travel and the newly formed highway system in the United States. To revive the city, gambling was legalized in 1976 and Atlantic City enjoyed a boom in tourism (Allaback and Milliken, 1995; ACFPL, 2022).

3.3.1 Absecon Lighthouse

3.3.1.1 Description and Existing Conditions

The Absecon Lighthouse was constructed in 1856 under the direction of Lt. George Meade, who later commanded Union forces at the Battle of Gettysburg. Constructed of iron and brick, it rises 171 feet tall, is 27 feet in diameter at the base and 13 feet, seven-and-a-half inches at the lens chamber. The roof is pyramidal and caps rectangular glass panes with iron frames (Wilson, 1970b).

3.3.1.2 Historic Significance and Setting

The Absecon Lighthouse was constructed to help guide ships into Absecon Bay and the Intercoastal Waterway and around the New Jersey coastline. The original Frensel Lens is still located in the lantern (Absecon Light, 2023). When the light was installed in 1857, it was visible for 20 miles. The lighthouse was decommissioned in 1933 and the keepers house has been demolished (Wilson, 1970b). From the early twentieth century through the 1970s, the areas surrounding the lighthouse was a dense residential neighborhood; however, over the last 40 years, the buildings have been demolished and the area consists of large vacant parcels, scattered residential and high-rise buildings (NETRonline, 2023).

3.3.1.3 Project Effect on the Historic Property

The Absecon Lighthouse is currently located approximately 0.2 miles west of the Absecon Inlet, and approximately 0.3 miles north of the Atlantic Ocean. Although the Projects are anticipated to be visible from elevated views within Absecon Lighthouse, the visibility of the Projects will be partially screened by the intervening high-rise buildings. The integrity of setting for the lighthouse has been diminished due to unsympathetic demolitions and new development in the lighthouse's immediate surroundings. Limited views of the Projects would not diminish the significance of the property's architectural design or its association with historical navigation safety; however, due to the Projects location less than 11 miles from the lighthouse, views of the Projects from the lantern level will be a focus of attention and may detract from the integrity of the maritime setting and the feeling associated with the property.

3.4 Historic Context of Berkeley Township

Berkeley Township is located in the northern limit of Atlantic County and is bounded on the north by Cedar Creek, on the east by Barnegat Bay, on the south by Toms River, and on the west by Manchester Township. The first Euro-American settlers in this area of Atlantic County were English and arrived in the late seventeenth century. The early economies capitalized on the abundant pine barren forests and proximity to Barnegat Bay and Toms River. Agriculture, lumbering, milling, and boatbuilding were the principal trades.

Throughout the eighteenth century, the township was predominantly rural with scattered settlements. The township was formally incorporated in 1875 from Dover Township and Bayville, incorporated in 1881, was the primary locale. The Toms River and Waretown Railroad arrived in the area in 1872 and with it brought sportsmen, vacationers, and new residents. The railroad also spurred the export of local produce and fish and shellfish which helped to sustain a diversified agricultural economy. By the early twentieth century, pound fishing (the trapping of large quantities of fish in large nets) and cranberry harvesting became lucrative economies in the township. Although a number of resort communities were proposed and platted in the township, Berkeley Township remained rural and undeveloped throughout the twentieth century. The late twentieth and early twenty-first century brought a proliferation of housing to the township which is largely confined to the bayfront areas (Heritage Studies, Inc., 1981).

3.4.1 Forked River Coast Guard Station No. 112

3.4.1.1 Description and Existing Conditions

The Forked River Coast Guard Station No. 112 is located within Island Beach State Park and is a two-and-one-half-story frame building constructed ca.1932 with a cross-gable roof, and clapboard siding, and rests upon a high basement. The building functioned as a lifesaving station from 1854-1915 and then a coast guard station 1915-1945. Current residence and boat house completed c.1937.

3.4.1.2 Historic Significance and Setting

The Forked River Coast Guard Station No. 112 is located on the eastern side of Central Avenue overlooking the Atlantic Ocean. The building is currently being used as a nature center for Island Beach State Park. The property was determined individually NRHP-eligible by the NJHPO in 1996 and has also been identified as a contributing resource to the NRHP-eligible Island Beach State Park Historic District.

3.4.1.3 Project Effect on the Historic Property

Ocean views are integral to the history and original function of the Forked River Coast Guard Station No. 112. The Projects are anticipated to be visible from within the upper stories of the Forked River Coast Guard Station No. 112 and will be a focus of viewer attention from within the building when viewing the ocean.

3.4.2 Island Beach State Park Historic District

3.4.2.1 Description and Existing Conditions

The Island Beach State Park Historic District is located on the southern end of Island Beach. The district includes the Judge's Shack, Henry Phipps House, Francis P. & Augusta H.S. Freeman House , Bay House , Island Beach Borough Hall (Formerly Aeolium Nature Center), Caretaker's Cottage (Currently State Park Police Station), Ocean Swimming Beach (OSB) Pavilion 1, Ocean Swimming Beach (OSB) Pavilion 2, Park Office Gatehouse, 6 Remaining Beach Shacks, as well as the U.S. Lifesaving Station Number 14 and the Forked River Coast Guard Station #112. The barrier island was purchased by Henry Phipps to develop a resort community for the upper class; however, the resort was not developed, and the majority of the island's natural landscape was preserved.

3.4.2.2 Historic Significance and Setting

The Island Beach State Park Historic District encompasses the barrier island and State Park from its northern boundary south of 24th Avenue to Barnegat Inlet. The Island Beach State Park Historic District is eligible for listing on the National Register of Historic Places under Criterion A in the area of Conservation. The district's period of significance begins in 1911, with the construction of the first beach shack, and continues through 1973.

3.4.2.3 Project Effect on the Historic Property

Due to its location on the barrier island and the fact it is a mostly undeveloped, conserved, natural landscape, there are no visual intrusions between the Island Beach State Park Historic District and the Projects. The unobstructed views of the Projects will detract from the integrity of setting, feeling, and association of the Island Beach State Park Historic District.

4.0 MITIGATION MEASURES

BOEM and Atlantic Shores have identified steps to implement these measures in consultation with interested consulting parties, led by individuals who meet the qualifications specified in the Secretary of the Interior's Qualifications Standards for History and Architectural History (36 CFR 61).

4.1 Purpose and Intended Outcome

The purpose of this HPTP is to provide funding to the New Jersey Department of environmental Protection (NJDEP) for the planning or implementation of preservation, restoration, rehabilitation, cyclical maintenance, resiliency planning, disaster recovery, or other associated activities to ensure the long-term preservation of the Barnegat Lighthouse, the Absecon Lighthouse, the Forked River Coast Guard Station No. 112, and the Island Beach State Park Historic District.

4.2 Scope of Work

The scope of work will be determined in consultation with the interested consulting parties.

4.3 Standards

All projects funded through this HPTP must meet the Secretary of the Interior's Standards for Treatment of Historic Properties and all local laws and regulations.

4.4 Methodology

The methodology will be determined in consultation with the interested consulting parties.

4.5 Documentation

Existing conditions, including documentation and photography will be completed prior to any work commencing and as-built documentation and photography will be completed at the end of the project. All draft and final documentation will be developed in consultation with the interested consulting parties and will be provided to the interested consulting parties for review and comment. The documentation will be included in the annual reporting to BOEM.

4.6 Funds and Accounting

Funding amounts were determined to be sufficient by BOEM in consultation with the interested consulting parties and are identified in an attachment to the MOA.

5.0 IMPLEMENTATION

5.1 Timeline

The timeline for implementation of the mitigation measures is identified in the MOA.

5.2 Organizational Responsibilities

5.2.1 *Bureau of Ocean Energy Management (BOEM)*

BOEM remains responsible for making all federal decisions and determining compliance with Section 106. BOEM has reviewed this HPTP to ensure, at minimum, it includes the content required.

- BOEM, in consultation with the interested consulting parties, will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA;
- BOEM will be responsible for sharing the annual summary report with the interested consulting parties; and
- BOEM is responsible for consultation related to dispute resolution.

5.2.2 *Atlantic Shores Offshore Wind, LLC*

Atlantic Shores will be responsible for the following:

- Considering the comments provided by the interested consulting parties in the development of this HPTP;
- Depositing funding for the implementation of this HPTP in a dedicated account specified by the interested consulting parties prior to the commencement of the mitigation measures;
- Releasing RFPs and selecting qualified professionals as specified above;
- Managing funding and implementing the mitigation measures as specified in Section 4.0;
- Providing documentation to the interested consulting parties for review and comment as specified in Section 4.0;
- Annual Reporting to BOEM on progress in implementation of this HPTP;
- Ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations; and
- Provide notification to BOEM and the interested consulting parties when the HPTP implementation is complete.

5.2.3 *Interested Consulting Parties*

The interested consulting parties will be responsible for the following:

- Providing review and comment on the proposed mitigation measures described in Section 4.0.

5.2.4 Other Parties, as Appropriate

Additional consulting parties are not anticipated, should any be determined, this will be updated.

5.3 Schedule

All mitigation measures must be completed within the timeframes outlined in the MOA. The schedule for funding, commencing, implementing, and completing the mitigation measures described in Section 4.0 will be completed according to the timelines outlined in the MOA, unless a different timeline is agreed upon by interested consulting parties and accepted by BOEM.

6.0 REFERENCES

Absecon Lighthouse. 2023. Available at: <https://abseconlighthouse.org/>. Accessed September 2023.

Barnegat Light Tourism Coalition. 2018. *Barnegat Light History – Now and Then*. Available at: <https://discoverbarnegatlight.com/barnegat-light-history-now-and-then> (Accessed August 2022).

Code of Federal Regulations (CFR). 2021a. 36 CFR § 800 – Protection of Historic Properties [incorporating amendments effective December 15, 2021]. Available at <https://www.ecfr.gov/current/title-36/chapter-VIII/part-800>. Accessed March 31, 2022.

CFR. 2021b. 36 CFR § 61.4(e)(1) – Procedures for State, Tribal, and Local Government Historic Preservation Programs [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4\(e\)\(1\)](https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4(e)(1)). Accessed March 31, 2022.

CFR. 2021c. 36 CFR § 65.2(c)(2) – National Historic Landmarks Program – Effects of Designation [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2\(c\)\(2\)](https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2(c)(2)). Accessed March 31, 2022.

CFR. 2022. 40 CFR § 1500 – National Environmental Policy Act Implementing Regulations. Available at <https://www.ecfr.gov/current/title-40/chapter-V/subchapter-A>. Accessed March 31, 2022.

Federal Register. 1997. 62 FR 33708 – The Secretary of the Interior’s Historic Preservation Professional Qualifications Standards. Office of the Federal Register, National Archives and Records Administration. Washington, D.C. Available at <https://www.govinfo.gov/app/details/FR-1997-06-20/97-16168>. Accessed March 31, 2022.

Heritage Studies, Inc. 1981. New Jersey Historic Sites Inventory, Ocean County Vol. 28. Available at https://www.nj.gov/dep/hpo/hrrcn_sandy_OCE_GB_147_148_PDF/OCE_GB_148_v28.pdf (Accessed February 2023).

NETRonline (NETR). 2023. *Historic Aerials* [website]. Available at: <https://historicaerials.com/> (Accessed February 2023).

United States Code. 2016. Title 54 - National Historic Preservation Act [as amended through December 16, 2016]. Available at <https://www.achp.gov/sites/default/files/2018-06/nhpa.pdf>. Accessed March 31, 2022.

Wilson, C.I., Jr. 1970a. *Barnegat Lighthouse*. National Register of Historic Places Inventory-Nomination Form. Available at: <https://npgallery.nps.gov/NRHP/> (Accessed August 2022).

Wilson, Charles Jr. 1970b. *Absecon Lighthouse*. National Register of Historic Places Nomination Form. Available at: <https://npgallery.nps.gov/nrhp>. Accessed September 2023.

ATTACHMENT A.
ABOVEGROUND HISTORIC PROPERTY INFORMATION AND VISUAL EFFECTS ASSESSMENT

Barnegat Lighthouse

Northern end of Long Beach Island
Barnegat Light Borough, Ocean County, NJ



Photograph of property



Photograph of property context



Photograph from property looking toward ocean

Historic Designation NRHP-Listed
Distance to Nearest Turbine 27.31
Number of Blade Tips Visible 0
Property Acreage within Study Area 0.18
Property Acreage within PAPE 0
Percentage of Property with Potential Visibility 0
Visible Light Units
Nacelle Aviation 0
Mid Tower Aviation 0
Coast Guard 0

Significance

The Barnegat Lighthouse was built between 1855 and 1857 by Lt. George Meade, an Army engineer and future Civil War General. The lighthouse is 163 feet tall and was built to replace a much shorter structure that was destroyed by coastal erosion. The lighthouse operated with its original 12 foot tall Fresnel lens from 1959 to 1927, after which other lighting apparatus were used until the light was decommissioned in 1944. The property was given to the State of New Jersey and shortly thereafter the surrounding municipality changed its name to Barnegat Light. Though currently undergoing repairs, the Barnegat Lighthouse retains sufficient integrity to retain its listing on the NRHP of Historic Places.

Maritime Setting

The Barnegat Lighthouse has a definitively maritime setting as it was built on the northwestern tip of Long Beach Island to guide ships navigating Barnegat Inlet. Partial views of the ocean may be seen from the ground and broad ocean views may be seen from the top of the house where four cameras live stream the vistas for visitors to the Interpretive Center.

Effect Recommendation
Adverse Effect

The Barnegat Lighthouse was constructed between 1855 and 1857 to guide ships navigating Barnegat Inlet. Due to its location on the bay side of Long Beach Island, as well as the intervening land and structures, at a distance of over 27 miles, the Projects are anticipated to only be visible from approximately 0.246 percent of the property from viewer height level; however, the Projects will be visible from the lantern level and may be a significant focus of visitor attention when viewing the Atlantic Ocean.



Esri ArcGIS Online "World Imagery" map service

0 12.5 25 50 Feet



Esri ArcGIS Online "World Topographic Map" map service

0 4.5 9 18 Miles

- Photograph Location
- Historic Property Location
- Wind Turbine Generator
- Preliminary Area of Potential Effects (PAPE)
- Historic Property Boundary
- Distance from Resource (5-Statute Mile Increment Rings)



Atlantic Shores South Offshore Wind Project

Historic Resources Visual Effects Assessment

Absecon Lighthouse

31 S. Rhode Island Avenue
Atlantic City, Atlantic County, NJ

1



Photograph of property

2



Photograph of property context

3



Photograph from property looking toward Projects

Atlantic Shores South Offshore Wind Project

Historic Resources Visual Effects Assessment

Historic Designation NRHP-Listed
Distance to Nearest Turbine 10.65
Number of Blade Tips Visible 27
Property Acreage within Study Area 2.04
Property Acreage within PAPE 0.98
Percentage of Property with Potential Visibility 48.18
Visible Light Units
Nacelle Aviation 17
Mid Tower Aviation 11
Coast Guard 2

Significance

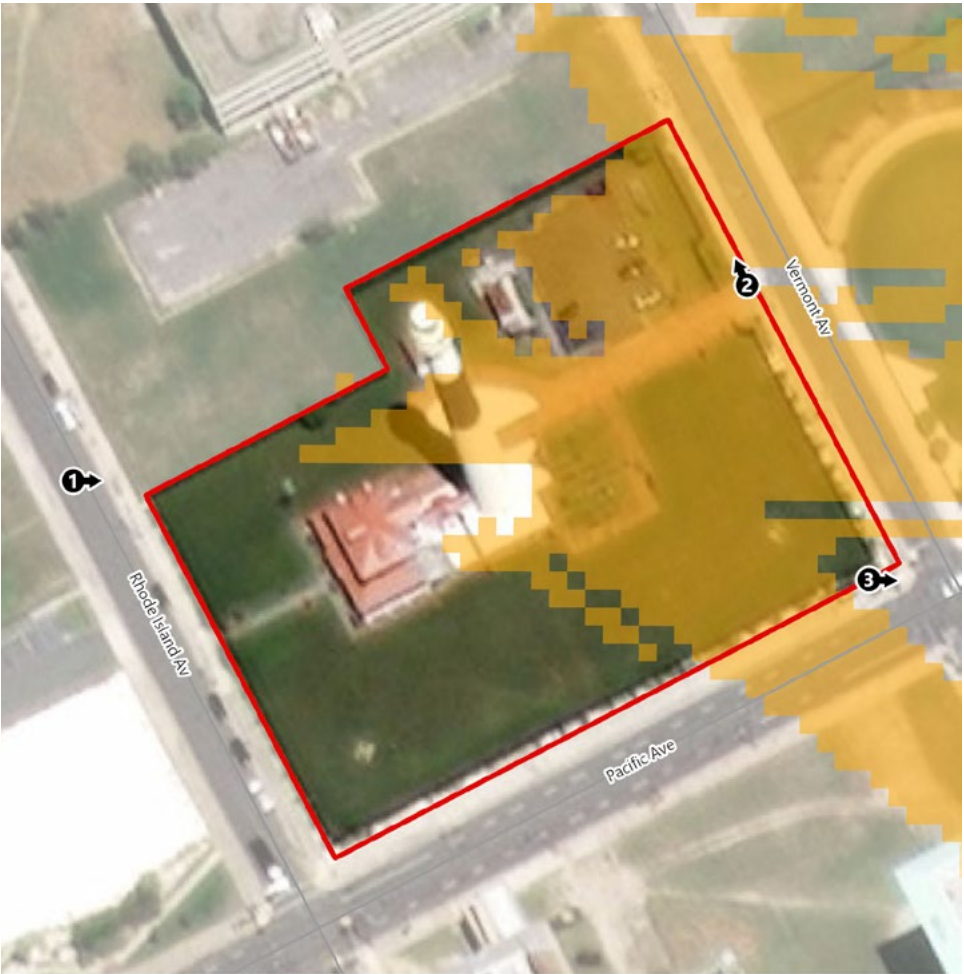
The Absecon Lighthouse was constructed in 1856 under the direction of Lt. George Meade, who later commanded Union forces at the Battle of Gettysburg. Constructed of iron and brick, it rises 171 feet tall, is 27 feet in diameter at the base and 13 feet, seven-and-a-half inches at the lens chamber. The roof is pyramidal and caps rectangular glass panes with iron frames. The lighthouse was decommissioned in 1933, and was moved to its current location from its original site closer to the inlet. The current keeper's house serves as a museum and is not original to the lighthouse, being constructed after the lighthouse was moved to its current location. The lighthouse is listed in the NRHP and is significant for its architecture and association with navigational history.

Maritime Setting

The Absecon Lighthouse is currently located approximately 0.2 miles west of the Absecon Inlet, and approximately 0.3 miles north of the Atlantic Ocean. The lighthouse was sited at its original location to guide vessels to and around the Absecon Inlet.

Effect Recommendation
Adverse Effect

Although the Projects are anticipated to be visible from elevated views within Absecon Lighthouse, the visibility of the Projects will be partially screened by the intervening high-rise buildings. The integrity of setting for the lighthouse has been diminished due to unsympathetic demolitions and new development in the lighthouse's immediate surroundings. Limited views of the Projects would not diminish the significance of the property's architectural design or its association with historical navigation safety; however, due to the Projects' location less than 11 miles from the lighthouse, views of the Projects from the lantern level will be a focus of attention and may detract from the integrity of the maritime setting and the feeling associated with the property.



Forked River Coast Guard Station No. 112

Central Avenue
Berkley Township, Ocean County, NJ



Photograph of property



Photograph of property context



Photograph from property looking toward Projects

Historic Designation NRHP-Eligible (NJHPO-Determined)
Distance to Nearest Turbine 30.1
Number of Blade Tips Visible 0
Property Acreage within Study Area ###
Property Acreage within PAPE 1.81
Percentage of Property with Potential Visibility 0
Visible Light Units
Nacelle Aviation 0
Mid Tower Aviation 0
Coast Guard 0

Significance

The Forked River Coast Guard Station No. 112 is a two-and-one-half-story frame building constructed ca.1932. The building has a cross-gable roof, and clapboard siding, and rests upon a high basement. According to LUCY, the building functioned as a lifesaving station from 1854-1915 and then a coast guard station 1915-1945. Current residence and boat house completed c.1937. The building is currently used as a nature center for Island Beach State Park and was determined individually NRHP-eligible by the NJHPO in 1996. The station has also been identified as a contributing resource to the NRHP-eligible Island Beach State Park Historic District.

Maritime Setting

The Forked River Coast Guard Station No. 112 is located on the Atlantic Ocean on the barrier island with a maritime setting and function and views of the ocean.

Effect Recommendation
Adverse Effect

Ocean views are integral to the history and original function of the Forked River Coast Guard Station No. 112. The Projects are anticipated to be visible from within the upper stories of the Forked River Coast Guard Station No. 112 and will be a focus of viewer attention from within the building when viewing the ocean.



Esri ArcGIS Online "World Imagery" map service



Esri ArcGIS Online "World Topographic Map" map service



Atlantic Shores South Offshore Wind Project

Historic Resources Visual Effects Assessment

Island Beach State Park Historic District

2401 Central Avenue
Berkeley Township, Ocean County, NJ



Photograph representative of district



Photograph representative of district



Photograph representative of district



Photograph representative of district



Photograph representative of district

Historic Designation NRHP-Eligible (NJHPO-Determined)
Distance to Nearest Turbine 27.3 miles
Number of Blade Tips Visible 200
Property Acreage within Study Area 2671.43
Property Acreage within PAPE 1099.1
Percentage of Property with Potential Visibility 41.14
Visible Light Units
Nacelle Aviation 194
Mid Tower Aviation 41
Coast Guard 0

Significance

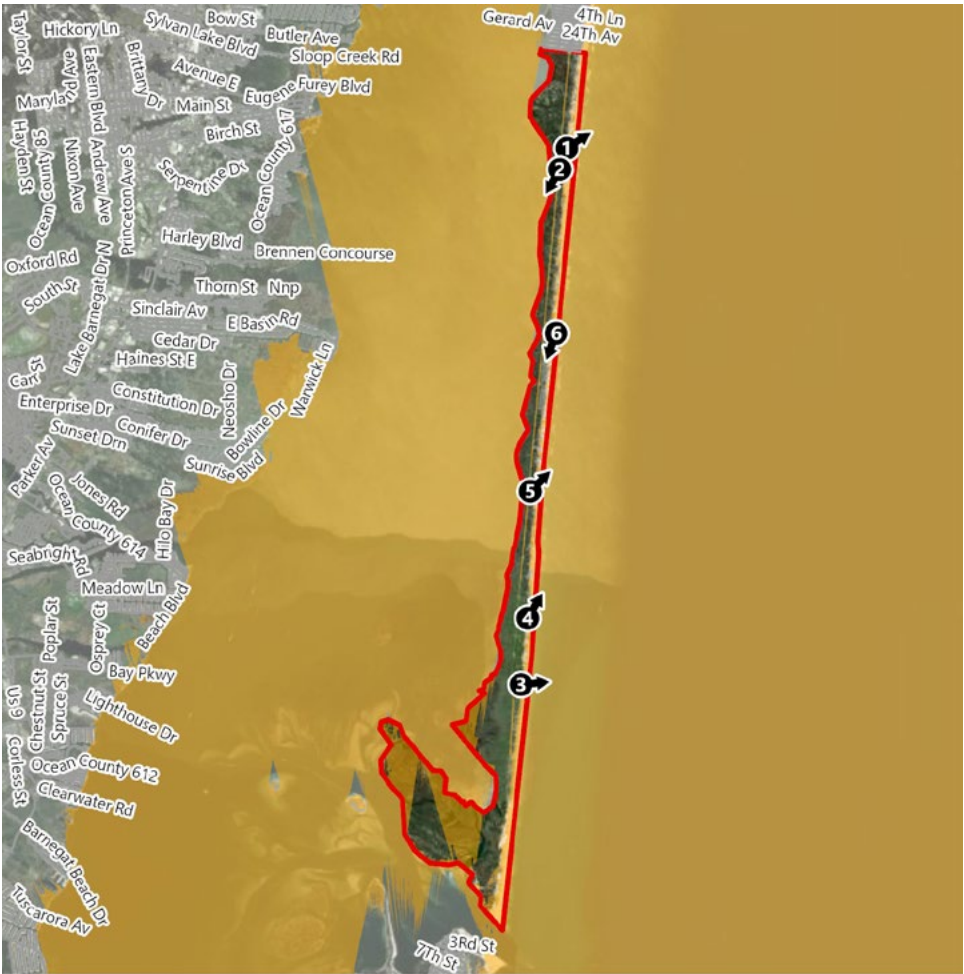
The Island Beach State Park Historic District encompasses the barrier island and State Park from its northern boundary south of 24th Avenue to Barnegat Inlet. The district includes the U.S. Lifesaving Station Number 14, which is listed on the NRHP; Erath/Lease #24, the Aeolium Visitor Center, Gatehouse and Governor’s Mansion which were previously identified by NJHPO but not evaluated for listing in the NRHP; the Judge’s Shack and Forked River Coast Guard Station No. 112 which have been determined eligible for the NRHP by NJHPO, as well as additional contributing structures. The barrier island was purchased by Henry Phipps to develop a resort community for the upper class; however the resort was not developed and the majority of the island’s natural landscape was preserved. The resource retains sufficient integrity to convey its significance under NRHP Criteria A and C.

Maritime Setting

The Island Beach State Park Historic District has a clear maritime setting as a primarily undeveloped barrier island between the Atlantic Ocean and Barnegat Bay.

Effect Recommendation
Adverse Effect

Due to its location on the barrier island and the fact it is a mostly undeveloped, conserved, natural landscape, there are no visual intrusions between the Island Beach State Park Historic District and the Projects. The unobstructed views of the Projects will detract from the integrity of setting, feeling, and association of the Island Beach State Park Historic District.



Esri ArcGIS Online "World Imagery" map service



Esri ArcGIS Online "World Topographic Map" map service



Atlantic Shores South Offshore Wind Project

Historic Resources Visual Effects Assessment

**ATTACHMENT 11 – HISTORIC PROPERTY TREATMENT PLAN FOR ATLANTIC CITY
BOARDWALK HISTORIC DISTRICT IN ATLANTIC CITY, ATLANTIC COUNTY, NEW
JERSEY**

Historic Property Treatment Plan for the Atlantic Shores Offshore Wind Lease Area OCS-A 0499

The Atlantic City Boardwalk Historic District Atlantic City, Atlantic County, New Jersey

Submitted to:



Bureau of Ocean Energy Management
U.S. Department of the Interior

Prepared for:



Atlantic Shores Offshore Wind LLC



Environmental Design & Research, D.P.C.
217 Montgomery Street, Suite 1100
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May 2024

ABSTRACT

Federal Undertaking:	Atlantic Shores Offshore Wind Projects
Location:	Outer Continental Shelf, offshore New Jersey
Federal and State Agencies:	Bureau of Ocean Energy Management National Park Service U.S. Army Corps of Engineers New Jersey Historic Preservation Office Advisory Council on Historic Preservation
Regulatory Process:	National Environmental Policy Act Section 106 of the National Historic Preservation Act Section 110(f) of the National Historic Preservation Act
Purpose:	This Historic Property Treatment Plan provides background data, historic property information, and detailed steps that will be implemented to carry out mitigation actions to resolve adverse effects from the Atlantic Shores South Projects
Adverse Visual Effect Finding for:	The Atlantic City Boardwalk Historic District, Atlantic City, Atlantic County, New Jersey
Submitted By:	Atlantic Shores Offshore Wind, LLC
Date:	May 2024

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- Attachment A - Aboveground Historic Property Information and Visual Effects Assessments
- Attachment B – Atlantic City Boardwalk Reconstruction Project Plans and Specifications

LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
ADLS	Aircraft Detection Lighting System
APE	Area of Potential Effects
BOEM	Bureau of Ocean Energy Management
CFR	Code of Federal Regulations
COP	Construction and Operations Plan
DEIS	Draft Environmental Impact Statement
EDR	Environmental Design and Research, D.P.C.
FEIS	Final Environmental Impact Statement
FoAE	Finding of Adverse Effect
FR	Federal Register
ICF	Interconnection Facility
HPTP	Historic Property Treatment Plan
MOA	Memorandum of Agreement
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act of 1966
NPS	National Park Service
NRHP	National Register of Historic Places
NJHPO	New Jersey Historic Preservation Office
NJWEA	New Jersey Wind Energy Area
OCS	Outer Continental Shelf
OSS	Onshore Substation
PAPE	Preliminary Area of Potential Effects
RFP	Request for Proposals
ROD	Record of Decision
USCG	United States Coast Guard
WTG	Wind Turbine Generator

1.0 INTRODUCTION

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) (54 USC 306108) and its implementing regulations, and in compliance with Section 110(f) of the NHPA (54 USC 306107), the Bureau of Ocean Energy Management (BOEM) has determined the Atlantic Shores South Offshore Wind Projects (the Projects) will have an adverse effect on historic properties. A historic property is defined per 36 CFR § 800.16 as any property that is listed in, or has been determined eligible for listing in, the National Register of Historic Places (NRHP), or is a National Historic Landmark (NHL). This Historic Property Treatment Plan (HPTP) for the Atlantic City Boardwalk Historic District, in Atlantic City, Atlantic County, New Jersey, which have been determined to be eligible for listing on the National Register of Historic Places (NRHP); (hereinafter, the Historic Property) provides background data, historic property information, and detailed mitigation actions that will be implemented to resolve adverse effects from the Projects. Atlantic Shores Offshore Wind, LLC (Atlantic Shores) has provided this HPTP in accordance with BOEM's Findings of Adverse Effects (FoAE) for the Projects under the National Historic Preservation Act of 1966 (NHPA).

BOEM used the National Environmental Policy Act (NEPA) substitution process to fulfill its Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)), and BOEM has notified the Advisory Council on Historic Preservation (ACHP), the New Jersey Historic Preservation Office (NJHPO), and interested consulting parties of BOEM's decision to use this process.

This HPTP describes the mitigation measures to resolve adverse effects on historic properties, the implementation steps, and timeline for actions. The mitigation measures are based on the evaluations and outreach performed by Atlantic Shores as well as outreach to the interested consulting parties performed by BOEM. This HPTP document has undergone revision and refinement in consultation with the NJHPO, the ACHP, and other consulting parties throughout the NEPA substitution process. This HPTP is included in the Memorandum of Agreement (MOA) issued in accordance with 36 CFR §§ 800.8, 800.10.

This HPTP is organized into the following sections:

- **Section 1.0, Introduction**, outlines the content of this HPTP.
- **Section 2.0, Background Information**, briefly summarizes the Projects and describes the cultural resources regulatory contexts (federal, tribal, state, and local, including preservation restrictions) applicable to the HPTP.
- **Section 3.0, Historic Property – Context, Significance, and Effects**, provides a physical description of the historic property included in this HPTP, describes their historic context, the applicable NRHP criteria for each property with a focus on the contribution of each property's maritime visual setting to its significance and integrity, describes the potential visual effect of the Projects on each property.
-

- Section 4.0, Mitigation Measures, this section identifies the specific steps to carry out the mitigation actions. The mitigation action includes a detailed description, intended outcome, methods, standards, and requirements for documentation.
- **Section 5.0, Implementation**, establishes the organizational responsibilities for implementing the mitigation actions, as identified in Section 3.0 of this HPTP.
- **Section 6.0, References**, is a list of works cited in this HPTP.

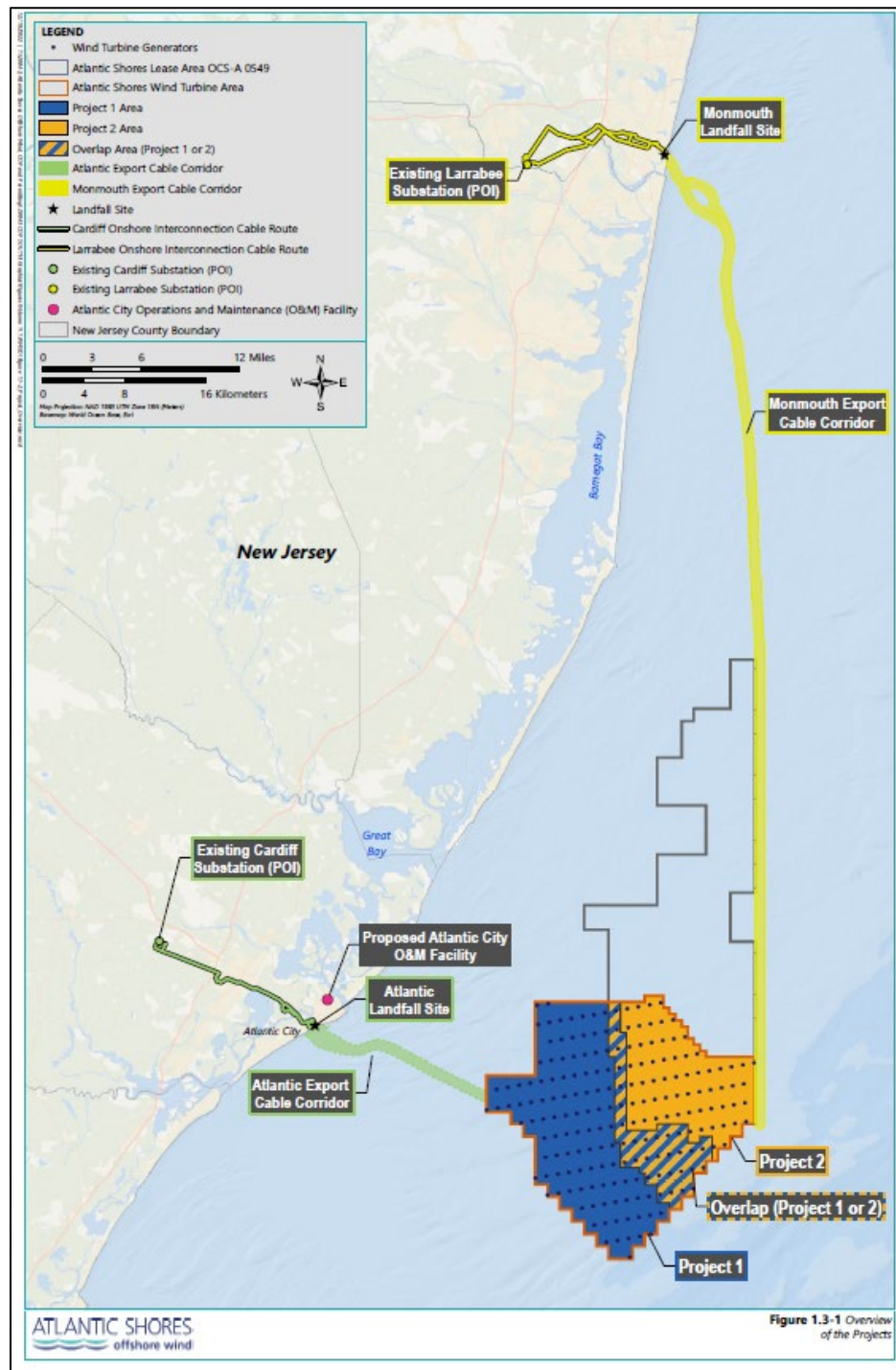
2.0 BACKGROUND INFORMATION

2.1 Overview of the Projects

Atlantic Shores' Lease Area is located on the Outer Continental Shelf (OCS) within the New Jersey Wind Energy Area (NJWEA), which was identified by BOEM as suitable for offshore renewable energy development through a multi-year, public environmental review process. The Projects will be located in an approximately 102,124-acre (413.3-square kilometer [km²]) Wind Turbine Area (WTA) located in the southern portion of the Lease Area (see Figure 2.1-1). Project 1 is located in the western 54,175 acres (219.2 km²) of the WTA, and Project 2 is located in the eastern 31,847 acres (128.9 km²) of the WTA with a 16,102-acre (65.2-km²) Overlap Area that could be used by either Project 1 or Project 2. Figure 2.1-1 also depicts the boundaries of the Project 1 and Project 2 areas within the WTA.

The Projects will collectively consist of up to 200 Wind Turbine Generators (WTGs) and associated foundations, inter-array cables connecting the WTGs, and offshore substations (OSS). The offshore substations utilized for the Projects will include up to 10 OSSs. Energy from the WTGs will be delivered to shore via 230 kV to 525 kV high voltage alternating current or high voltage direct current export cables. Up to four export cables will be installed within each of two possible Export Cable Corridors, for a total of up to eight export cables. The export cables will traverse federal and New Jersey state waters to deliver energy from the OSSs to landfall sites located in Monmouth County (the Monmouth Landfall Site) and/or Atlantic County (the Atlantic Landfall Site), New Jersey. The offshore-to-onshore transition at the landfall sites will occur via horizontal directional drilling to avoid nearshore and shoreline impacts. From the Monmouth and Atlantic Landfall Sites, new 230 kV to 525 kV high voltage alternating current or high voltage direct current onshore interconnection cables will travel underground along existing roadways, utility rights-of-way, and/or along bike paths to up to two new onshore substation sites (one for each onshore point of interconnection), where transmission will be stepped up or stepped down in preparation for interconnection with the electrical grid. Onshore interconnection cables will continue from each of the new onshore substations to proposed points of interconnection into the electrical grid at the existing Larrabee Substation in Howell, New Jersey (for the Monmouth Landfall Site) or the existing Cardiff Substation in Egg Harbor Township, New Jersey (for the Atlantic Landfall Site). Once operational, the Projects will be supported by a new operations and maintenance (O&M) facility that will be located in Atlantic City, New Jersey. The O&M facility will be the primary location for O&M operations including material storage, day-to-day management of inspection and maintenance activities, vehicle parking, marine coordination, vessel docking, and dispatching of technicians. Atlantic Shores intends to purchase and develop a shoreside parcel in Atlantic City, New Jersey that was formerly used for vessel docking or other port activities.

Figure 2.1-1. Overview of the Projects.



2.2 Regulatory Framework

2.2.1 *Section 106 and Section 110(f) of the NHPA*

Section 106 of the NHPA of 1966 requires federal agencies to consider the effects of their undertakings on historic properties, which are defined per 36 CFR § 800.16 to include any property that is listed in, or has been determined eligible for listing in, the NRHP, or is an NHL. Section 110(f) of the NHPA further requires that federal agencies undertake such planning and actions as may be necessary to minimize harm to any NHL that may be directly and adversely affected by an undertaking. Historic properties can include marine archaeological resources, terrestrial archaeological sites, above-ground historic properties (e.g., buildings, sites, monuments, and landscapes), and Traditional Cultural Properties.

The regulations at 36 CFR § 800.8 provide for use of the NEPA process to fulfill a federal agency's NHPA Section 106 review obligations in lieu of the procedures set forth in 36 CFR § 800.3 through 800.6. Under these provisions, either issuance of a Record of Decision (ROD) and implementation of relevant conditions or the execution of a MOA will resolve adverse effects to historic properties caused by the Projects, including to NHLs for which BOEM must provide a higher standard of care, as required by Section 110(f) of the NHPA. This HPTP was developed to support ongoing consultations and will be finalized for inclusion in the MOA issued in accordance with 40 CFR §1500-1508, and 36 CFR § 800.8 and 800.10.

All activities implemented under this HPTP will be conducted in accordance with any conditions imposed by BOEM in its ROD and with applicable local, state and federal regulations and permitting requirements. Responsibilities for specific compliance actions are described in further detail in Section 5.2 – Organizational Responsibilities.

2.2.2 *Municipal Regulations*

Before implementation, any on-site mitigation measures will be coordinated with local municipalities and commissions to obtain approvals, as appropriate. These may include, but are not limited to building permits, zoning, land use, planning, historic commissions, and design review boards.

2.2.3 *Preservation Easements and Restrictions*

Preservation easements and restrictions protect significant historic, archaeological, or cultural resources. Any mitigation work would comply with the conditions of all extant historic preservation easements.

2.3 Summary of HPTP Development

This HPTP was developed by Atlantic Shores for inclusion in the FEIS in support of BOEM's consultation pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR § 800.8. In addition to BOEM's formal Section 106 consultation meetings, Atlantic Shores invited the interested consulting parties to a series of meetings to review conceptual mitigation measures for the adversely affected historic properties on October 16, 18, 19, 30 and November 1, 2023. Atlantic Shores anticipates the HPTP may be revised based on comments received directly from the interested consulting parties or via the ongoing BOEM led Section 106 consultations.

3.0 HISTORIC PROPERTY - SIGNIFICANCE, EFFECTS, AND MITIGATION MEASURES

3.1 Historic Properties Included in the HPTP

This HPTP describes the mitigation measures for the below listed historic property, as identified in Table 3.1-1.

Table 3.1-1. Historic Properties included in the HPTP

Property ID	Property Name	Address	NRHP Status	Ownership
24	Atlantic City Boardwalk Historic District	Boardwalk roughly bounded by S. Georgia Avenue to the southwest and Garden Pier to the northeast	NRHP-Eligible (NJHPO-Determined)	Private

Discussions are provided below for each historic property included in the HPTP, which include:

- a physical description of the property,
- a narrative summarizing their historic context,
- the applicable NRHP criteria for Historic Properties with a focus on the contribution of each property's maritime visual setting to its significance and integrity,
- the visual effect of the Projects on each property, and
- measures to resolve adverse effects to each property.

Maps and photographs are included in Attachment A - Aboveground Historic Property Information and Visual Effects Assessments.

The mitigation measures described herein were developed by individuals who meet the Secretary of the Interior's *Professional Qualifications Standards* (36 CFR § 61) and are appropriate to fully address the nature, scope, size, and magnitude of adverse effects including cumulative effects caused by the Projects. These mitigation measures may also include actions to respond to some reasonably foreseeable hazards unrelated to the Project that pose risks to the long-term preservation of the affected historic property, such as climate change.

3.2 Historic Context of Atlantic City

Atlantic City is in the extreme eastern extent of Atlantic County on Absecon Island on the coast of the Atlantic Ocean. The city is bordered to the northeast by the city of Brigantine and to the southwest by Ventnor City. The first recorded Euro-American settler was Jeremiah Leed who built a house in the vicinity of Atlantic City in 1783. In 1850, Dr. Jonathan Pitney proposed the development of a seaside resort on the island. In 1852, he and other investors secured a railroad charter, and the Camden and Atlantic Railroad was constructed with its terminus in Atlantic City in 1854. The city was formally incorporated the same year and the resort quickly became a popular tourist destination for visitors from Philadelphia and its suburbs. Atlantic City saw the height of its popularity in the late nineteenth and into the early twentieth century. A

financial and commercial district was constructed along Atlantic Avenue and included high-style banks as well as commercial and institutional buildings. The 1950s brought a decline in visitation due to the advent of air travel and the newly formed highway system in the United States. To revive the city, gambling was legalized in 1976 and Atlantic City enjoyed a boom in tourism (Allaback and Milliken, 1995; ACFPL, 2022).

3.3 Atlantic City Boardwalk Historic District

3.3.1 Description and Existing Conditions

The Atlantic City Boardwalk Historic District encompasses approximately 1.4 miles of boardwalk in Atlantic City, stretching from the Atlantic City Convention Hall in the south to the Garden Pier in the north, and contains many of the iconic Atlantic City resorts along the boardwalk. The boardwalk itself has a wood deck, modern steel railing, numerous benches, and modern and historic replica lighting fixtures.

3.3.2 Historic Significance and Setting

Originally constructed in 1870, the Atlantic City Boardwalk is one of the most famous attractions on the New Jersey shore and boasts the typical attractions seen on boardwalks including amusement park rides, entertainment piers, food and drinks, and the iconic rolling chairs, in addition to renowned hotels and resorts. Despite its fluid construction history, the Atlantic City Boardwalk Historic District retains sufficient integrity to convey its significance under Criterion A for its association with Entertainment/Recreation and Community Planning and Development in Atlantic City. The Atlantic City Boardwalk Historic District has a clear maritime setting and is located adjacent to the Atlantic Ocean and overlooks the beaches at Atlantic City.

3.3.3 Project Effect on the Historic Property

The Atlantic City Boardwalk Historic District encompasses an approximately 1.4-mile wooden boardwalk and adjacent buildings, sites, and structures directly adjacent to the beach and the Atlantic Ocean. The boardwalk allows for unobstructed views of the ocean and the Projects, and it is anticipated that the Projects will be visible from 21.35 percent of this historic district. Therefore, the Projects will have an adverse effect on the setting of the Atlantic City Boardwalk Historic District.

4.0 MITIGATION MEASURES

BOEM and Atlantic Shores have identified steps to implement these measures in consultation with interested consulting parties, led by individuals who meet the qualifications specified in the Secretary of the Interior's Qualifications Standards for History and Architectural History (36 CFR 61).

4.1 Purpose and Intended Outcome

The purpose of this HPTP is to contribute funding in the amount agreed in the MOA toward the next phase of the Atlantic City Boardwalk Restoration Plan. Due to the length of the boardwalk, Atlantic City has been replacing portions of the structure, which is the longest in the world, in segments and has secured grants and other sources of funding for the work completed thus far. The intent of this mitigation measure is to provide Atlantic City with funding to be used toward the repair and/or removal and replacement of the next planned segment of the Atlantic City Boardwalk.

4.2 Scope of Work

The exact scope of work will be determined in consultation with the interested consulting parties; however, the mitigation measure will be completed similarly to the boardwalk rehabilitation that took place on the segment between Bellevue and Missouri Avenue and Texas Avenue to Columbia Place per the drawings and specifications provided by the interested consulting parties and included as Attachment B.

4.3 Standards

The project will comply with following standards:

- The Secretary of the Interior's *Standards for Treatment of Historic Properties* (36 CFR 68);
- The Secretary of the Interior's *Professional Qualifications Standards* (36 CFR Part 61), as applicable; and
- All applicable local ordinances, laws, and regulations.

4.4 Methodology

The City of Atlantic City will release an RFP for consultant and contracting services for the scope of work and select a consultant to perform the Scope of Work listed in Section 4.2. The preferred consultants and contractors will have experience working on historic properties. Existing conditions documentation will be shared with the interested consulting parties. All draft and final documentation will be developed in consultation with the interested consulting parties and will be provided to the interested consulting parties for review and comment. As-built documentation will be shared with the interested consulting parties.

4.5 Documentation

The following documentation is to be provided for review by interested consulting parties:

- RFPs;
- Proposals by qualified consultants in response to the RFP.

- Existing conditions documentation including photographs;
- Preliminary draft plans and specifications;
- Final plans and specifications; and
- As-built documentation including photographs.

4.6 Funds and Accounting

Funding amounts were determined to be sufficient by BOEM in consultation with the interested consulting parties and are identified in an attachment to the MOA.

5.0 IMPLEMENTATION

5.1 Timeline

The timeline for implementation of the mitigation measures is identified in the MOA.

5.2 Organizational Responsibilities

5.2.1 *Bureau of Ocean Energy Management (BOEM)*

BOEM remains responsible for making all federal decisions and determining compliance with Section 106. BOEM will have reviewed this HPTP to ensure, at minimum, it includes the content required.

- BOEM, in consultation with the interested consulting parties, will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA;
- BOEM will be responsible for sharing the annual summary report with the interested consulting parties; and
- BOEM is responsible for consultation related to dispute resolution.

5.2.2 *Atlantic Shores Offshore Wind, LLC*

Atlantic Shores will be responsible for the following:

- Considering the comments provided by the interested consulting parties in the development of this HPTP;
- Depositing funding in the amount agreed in the MOA to be used toward the implementation of this HPTP in a dedicated account specified by the interested consulting parties prior to the commencement of the mitigation measures;
- Releasing RFPs and selecting qualified professionals as specified above;
- Managing funding and implementing the mitigation measures as specified in Section 4.0;
- Providing documentation to the interested consulting parties for review and comment as specified in Section 4.0;
- Annual Reporting to BOEM on progress in implementation of this HPTP;
- Ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations; and
- Provide notification to BOEM and the interested consulting parties when the HPTP implementation is complete.

5.2.3 *Interested Consulting Parties*

The participating parties will be responsible for the following:

- Providing review and comment on the proposed mitigation measures described in Section 4.0.

5.2.4 Other Parties, as Appropriate

Additional interested consulting parties are not anticipated, should any be determined, this will be updated.

5.3 Schedule

All mitigation measures must be completed within the timeframes outlined in the MOA. The schedule for funding, commencing, implementing, and completing the mitigation measures described in Section 4.0 will be completed according to the timelines outlined in the MOA, unless a different timeline is agreed upon by interested consulting parties and accepted by BOEM.

6.0 REFERENCES

Absecon Lighthouse. 2023. Available at: <https://abseconlighthouse.org/>. Accessed September 2023.

Allaback, S., and C. Milliken. 1995. Resorts & Recreation: an Historic Theme Study of the New Jersey Coastal Heritage Trail Route. Sandy Hook Foundation, Inc. and National Park Service, U.S. Department of the Interior. Available at https://www.nps.gov/parkhistory/online_books/nj1/index.htm (Accessed October 2022).

The Atlantic City Experience. 2023. "The Beach and Boardwalk." Available at <https://www.atlanticcityexperience.org/the-beach-and-the-boardwalk.html>. Accessed February 2023.

Atlantic City Experience. 2023. *Chalfonte-Haddon Hall*. Available at: <https://www.atlanticcityexperience.org/?view=article&id=143:chalfonte-haddon-hall&catid=10012> (June 2023).

Atlantic City Free Public Library. 2023. *History of Casino Gambling in Atlantic City*. Available at: <http://www.acfpl.org/ac-history-menu/atlantic-city-heritage-collections/15-heston-archives/68-history-of-casino-gambling-in-atlantic-city> (Accessed June 2023).

Atlantic City Free Public Library. 2022. *Atlantic City History*. Available at: <http://acfpl.org/ac-history-menu/atlantic-city-faq-s/15-heston-archives/147-atlantic-city-history-22.html> (Accessed February 2023).

Code of Federal Regulations (CFR). 2021a. 36 CFR § 800 – Protection of Historic Properties [incorporating amendments effective December 15, 2021]. Available at <https://www.ecfr.gov/current/title-36/chapter-VIII/part-800>. Accessed March 31, 2022.

CFR. 2021b. 36 CFR § 61.4(e)(1) – Procedures for State, Tribal, and Local Government Historic Preservation Programs [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4\(e\)\(1\)](https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4(e)(1)). Accessed March 31, 2022.

CFR. 2021c. 36 CFR § 65.2(c)(2) – National Historic Landmarks Program – Effects of Designation [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2\(c\)\(2\)](https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2(c)(2)). Accessed March 31, 2022.

CFR. 2022. 40 CFR § 1500 – National Environmental Policy Act Implementing Regulations. Available at <https://www.ecfr.gov/current/title-40/chapter-V/subchapter-A>. Accessed March 31, 2022.

Federal Register. 1997. 62 FR 33708 – The Secretary of the Interior's Historic Preservation Professional Qualifications Standards. Office of the Federal Register, National Archives and Records Administration. Washington, D.C. Available at <https://www.govinfo.gov/app/details/FR-1997-06-20/97-16168>. Accessed March 31, 2022.

NETRonline (NETR). 2023. *Historic Aerials* [website]. Available at: <https://historicaerials.com/> (Accessed February 2023).

New Jersey Office of Historic Preservation. 1980. Atlantic City Boardwalk Historic District (Multiple Resource) [Draft] and Historic American Building Survey: Boardwalk Area – Atlantic City, N.J. On File with the NJHPO.

Historic Property Treatment Plan
The Atlantic City Boardwalk Historic District, in Atlantic City, Atlantic County, New Jersey

Resorts Casino Hotel. 2023. *Atlantic City's First Casino – A Resorts AC History*. Available at: <https://resortscas.com/history/> (Accessed June 2023).

Sanborn Map Company. 1896. *Atlantic City, New Jersey*. Page 29. Sanborn Map Company Publishing, New York, New York.

Sanborn Map Company. 1949. Sanborn Fire Insurance Map from Atlantic City, Atlantic County, New Jersey. Library of Congress Geography and Map Division, Washington DC.

Sokolic, W. H., and R. E. Ruffolo Jr. 2006. *Images of America: Atlantic City Revisited*. Arcadia Publishing, Charleston, SC.

United States Code. 2016. Title 54 - National Historic Preservation Act [as amended through December 16, 2016]. Available at <https://www.achp.gov/sites/default/files/2018-06/nhpa.pdf>. Accessed March 31, 2022.

University of Pennsylvania. 2003. Harry Sternfeld, 1888-1976: A Finding Aid for Architectural Drawings, ca. 1907-1921, in The Architectural Archives, University of Pennsylvania. Available at <https://www.design.upenn.edu/sites/default/files/036Sternfeld.pdf>. Accessed February 2023.

Wilson, Charles Jr. 1970. *Absecon Lighthouse*. National Register of Historic Places Nomination Form. Available at: <https://npgallery.nps.gov/nrhp>. Accessed September 2023.

ATTACHMENT A.
ABOVEGROUND HISTORIC PROPERTY INFORMATION AND VISUAL EFFECTS
ASSESSMENTS

Atlantic City Boardwalk Historic District

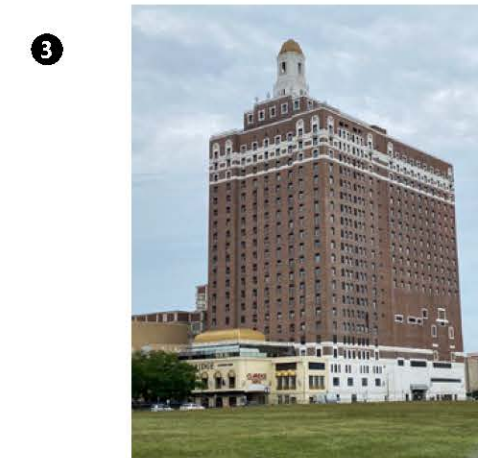
Boardwalk roughly bounded by S. Georgia Avenue to the southwest and Garden Pier to the northeast
Atlantic City, Atlantic County, NJ



Photograph representative of district



Photograph representative of district



Photograph representative of district



Photograph representative of district



Photograph representative of district



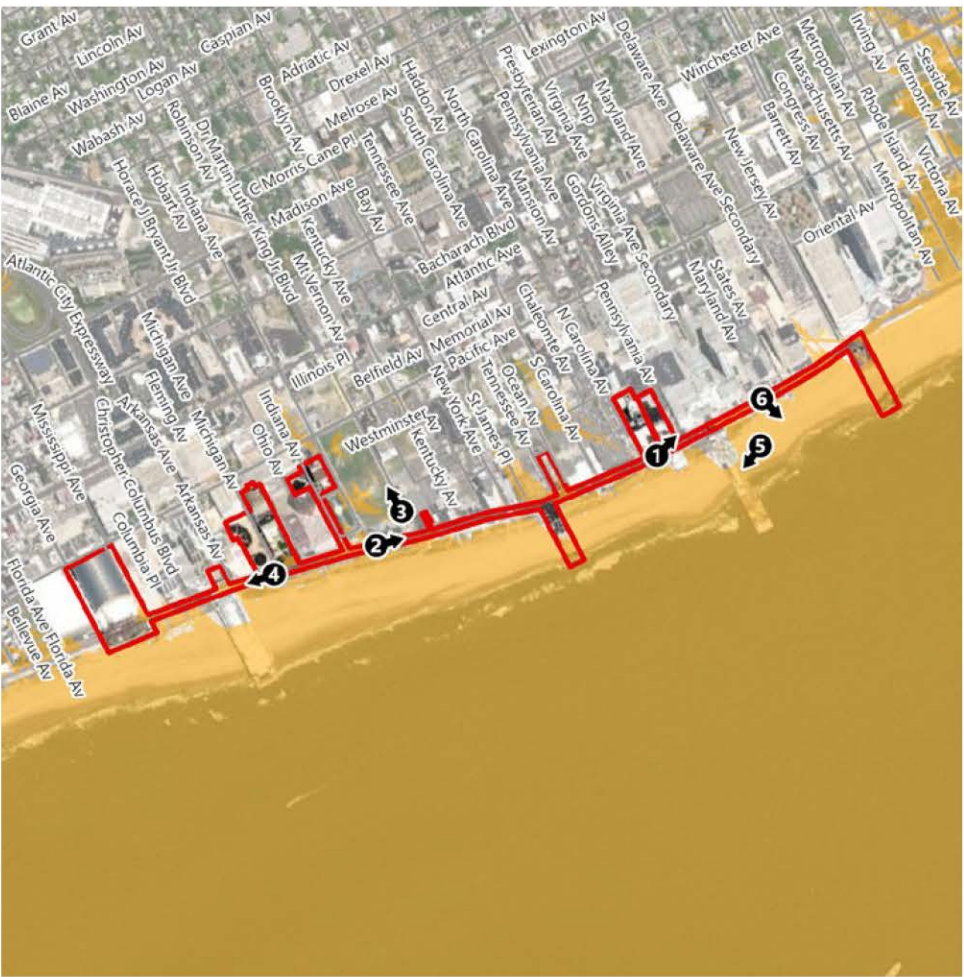
Photograph from property looking toward Projects

Historic Designation NRHP-Eligible (NJHPO-Determined)
Distance to Nearest Turbine 10.47 miles
Number of Blade Tips Visible 200
Property Acreage within Study Area 35.91
Property Acreage within PAPE 7.66
Percentage of Property with Potential Visibility 21.35
Visible Light Units
Nacelle Aviation 200
Mid Tower Aviation 200
Coast Guard 49

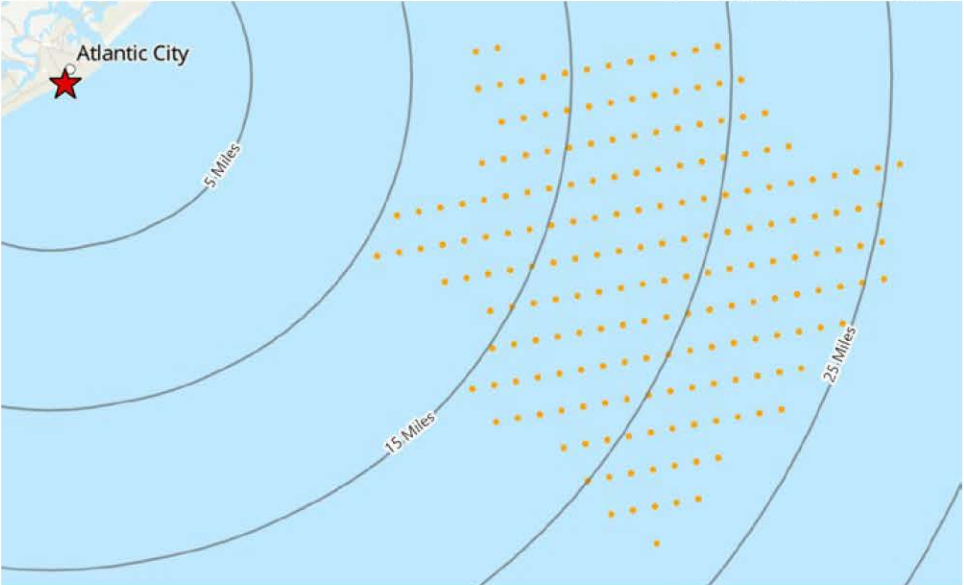
Significance
The Atlantic City Boardwalk Historic District encompasses approximately 1.4 miles of boardwalk in Atlantic City, stretching from the Atlantic City Convention Hall in the south to the Garden Pier in the north, and contains many of the iconic Atlantic City resorts along the boardwalk. Originally constructed in 1870 the Atlantic City Boardwalk is one of the most famous attractions on the New Jersey shore and boasts the typical attractions seen on boardwalks including amusement park rides, entertainment piers, food and drinks, and the iconic tram cars, in addition to renown hotels and resorts. The Atlantic City Boardwalk Historic District retains sufficient integrity to convey its significance under Criterion A for its association with Entertainment/Recreation and Community Planning and Development in Atlantic City. Despite its fluid construction history, its significance as an enduring vacation destination provides the Atlantic City Historic District Boardwalk with sufficient integrity to convey its eligibility to the NRHP under Criterion A (Entertainment/Recreation).

Maritime Setting
The Atlantic City Boardwalk Historic District has a clear maritime setting and is located adjacent to the Atlantic Ocean and overlooks the beaches at Atlantic City.

Effect Recommendation
Adverse Effect
Unobstructed views of the Projects due to the historic district's location on the boardwalk. Although the immediate shoreline and waters in proximity to the beaches along the district are critical elements of the historic setting, distant ocean views contribute to the district's integrity of feeling and association. The Projects will be a significant focus of attention based on proximity and the expansive ocean views available from within the district.



Esri ArcGIS Online "World Imagery" map service



Esri ArcGIS Online "World Topographic Map" map service

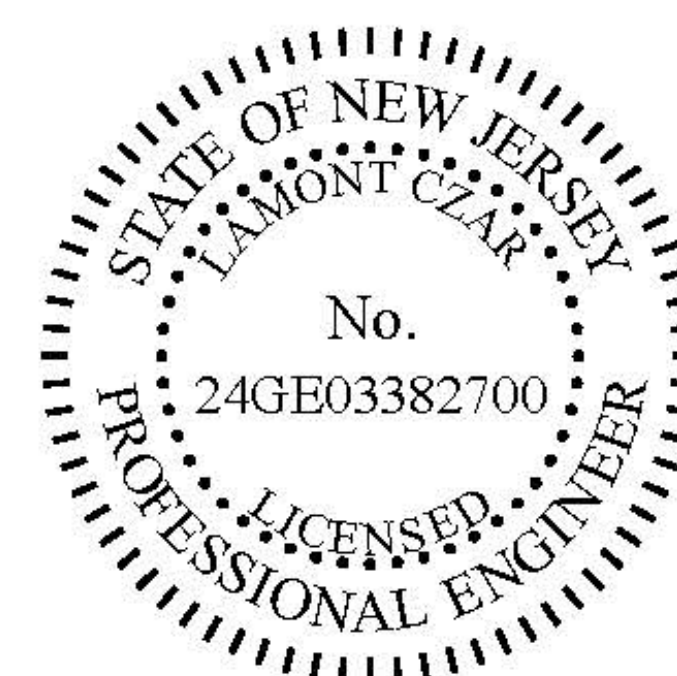


Atlantic Shores Offshore Wind Project

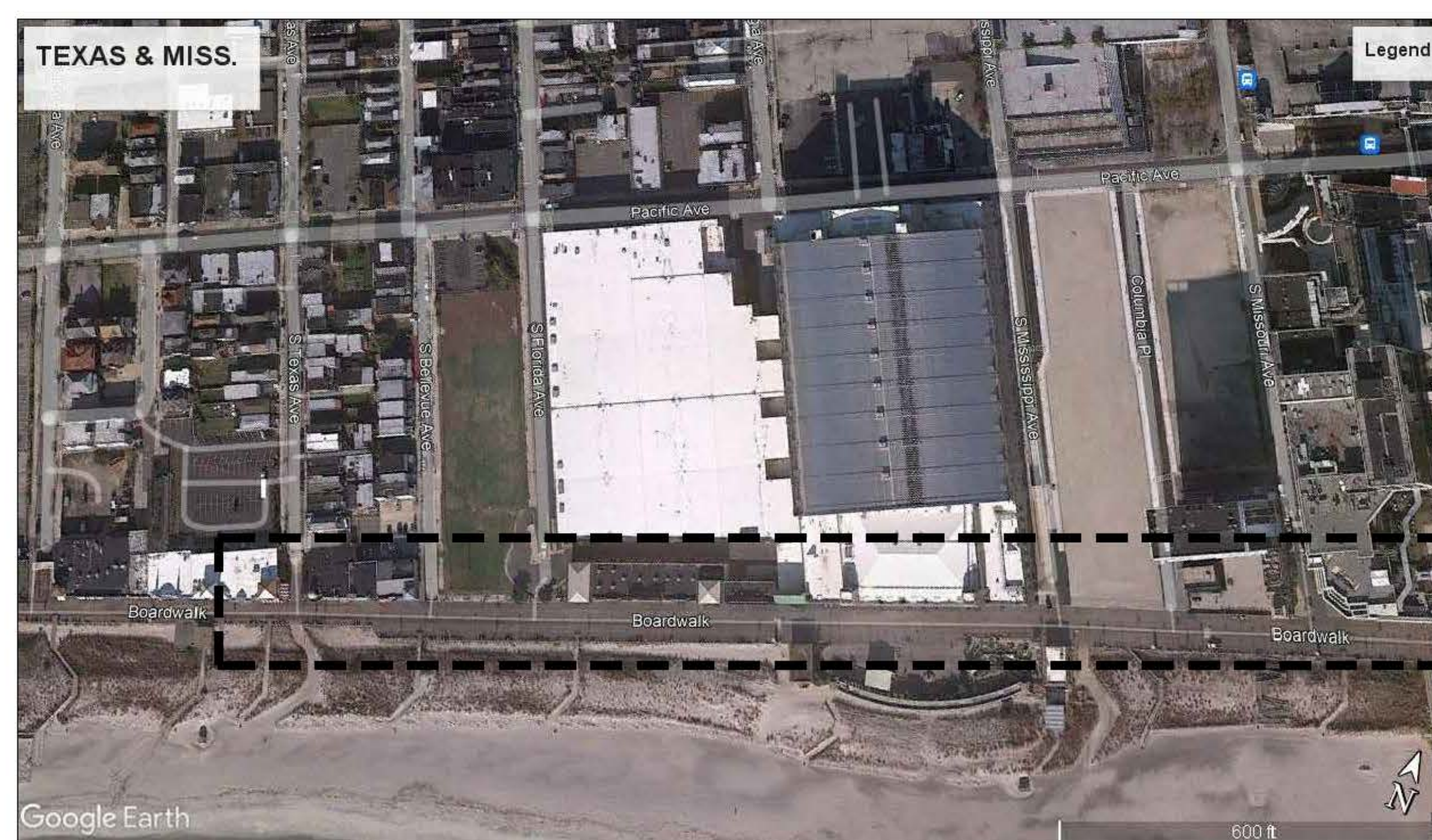
Historic Resources Visual Effects Assessment

ATTACHMENT B.
ATLANTIC CITY BOARDWALK RECONSTRUCTION PROJECT
PLANS AND SPECIFICATIONS

ATLANTIC CITY BOARDWALK RECONSTRUCTION PROJECT
BELLEVUE TO MISSOURI AVENUE
ATLANTIC CITY , NEW JERSEY
BID No. 23-13

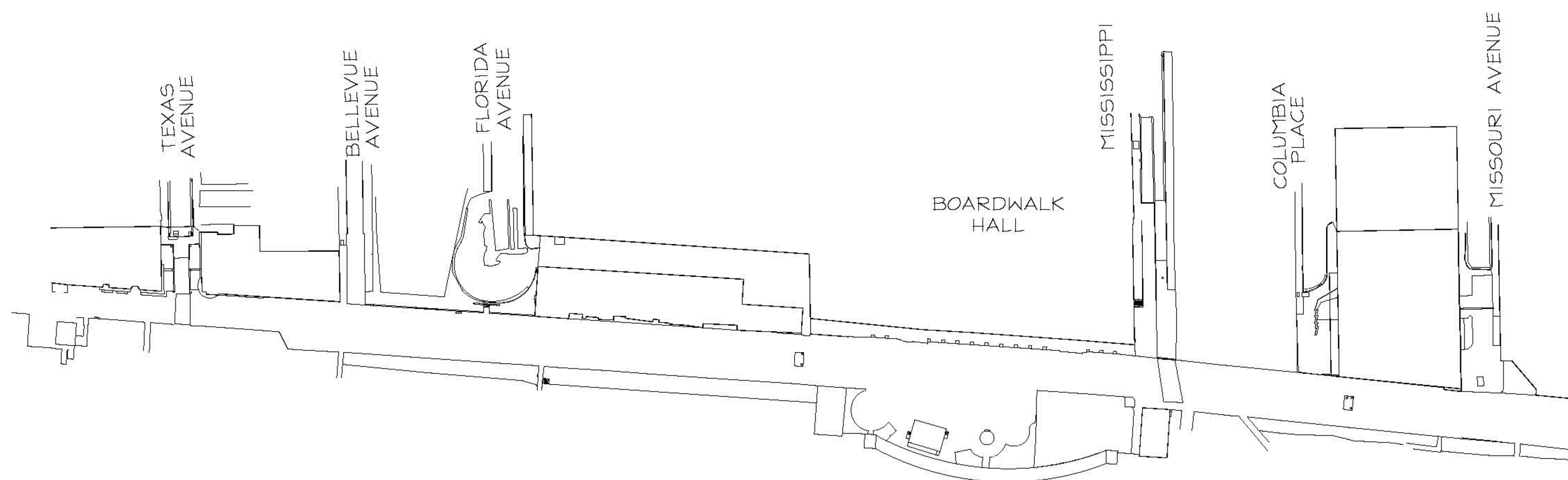


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AREA OF WORK


LOCATION PLAN







KEY PLAN

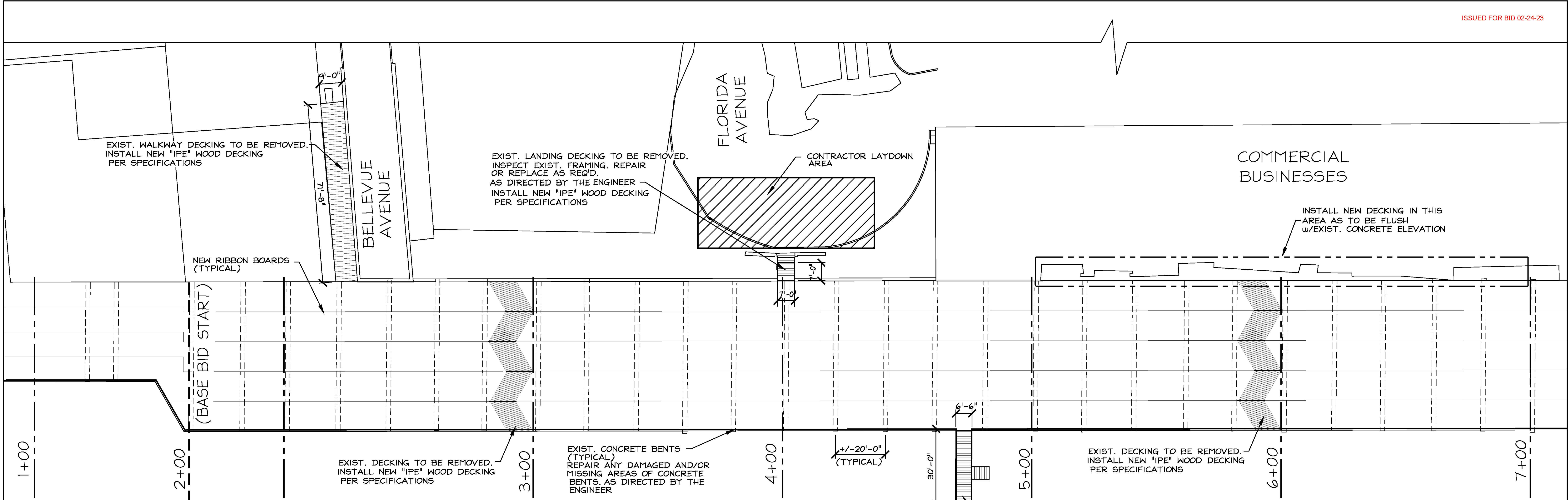
INDEX OF SHEETS	
SHEET NUMBER	DESCRIPTION
C	COVER SHEET
S-1	STATION PLANS 1+00 TO 13+00
S-2	STATION PLANS +13.00 TO +16.00
S-3	SECTIONS & DETAILS
S-4	SECTIONS & DETAILS
S-5	CONCRETE BENT REPAIR DETAILS
S-6	TYPICAL BOARDWALK PICTURES
S-7	TYPICAL BOARDWALK PICTURES
S-8	TYPICAL BOARDWALK PICTURES
S-9	MISSISSIPPI AVE. CONCRETE BOARDWALK PLANS
S-10	MISSISSIPPI AVE. SECTIONS & DEATILS
S-11	GENERAL NOTES
1	TEXAS AVENUE SURVEY
2	BELLVUE AVENUE SURVEY
3	FLORIDA AVENUE SURVEY
4	MISSISSIPPI AVENUE SURVEY
5	COLUMBIA PLACE SURVEY
6	MISSOURI AVENUE SURVEY

ATLANTIC CITY BOARDWALK RECONSTRUCTION PROJECT
BELLEVUE TO MISSOURI AVENUE
ATLANTIC CITY, NEW JERSEY


Lamont A. Czer, P.E. NJ Lic. 246E0338700

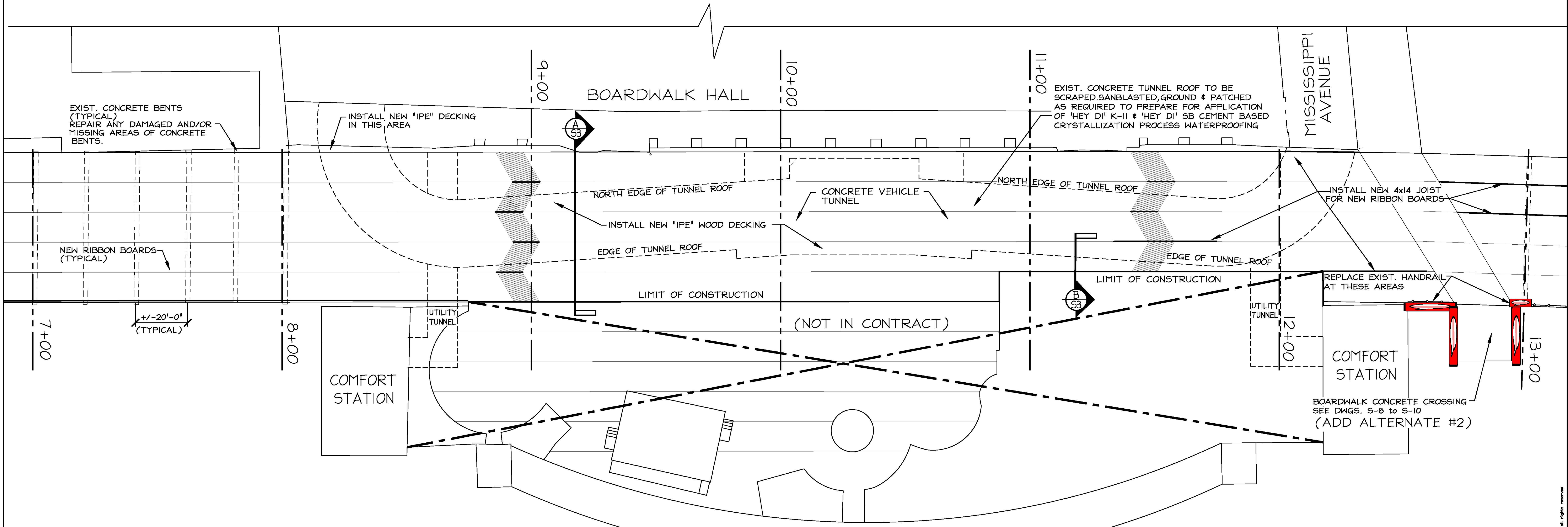
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BOARDWALK PLAN STATIONS 1+00-7+00

SCALE-1/16"=1'-0"



BOARDWALK PLAN STATIONS 7+00-13+00

SCALE-1/16"=20'-0"

SEE SPECIFICATIONS FOR PHASING PLAN

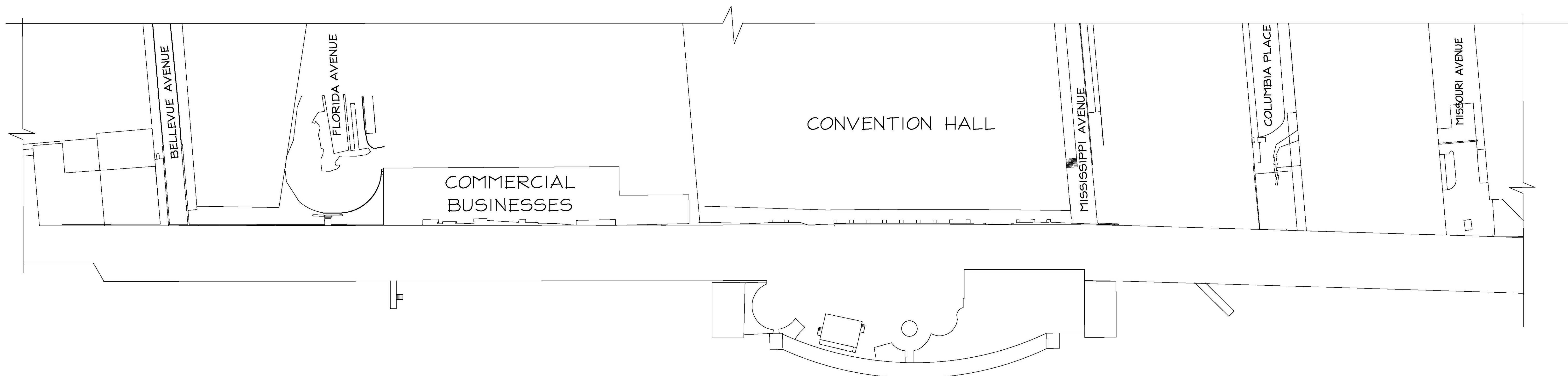
ATLANTIC CITY BOARDWALK RECONSTRUCTION PROJECT
BELLEVUE TO MISSOURI AVENUE
ATLANTIC CITY, NEW JERSEY

[Signature]
Lamont A. Carr, P.E. NO Lic. 2460382700

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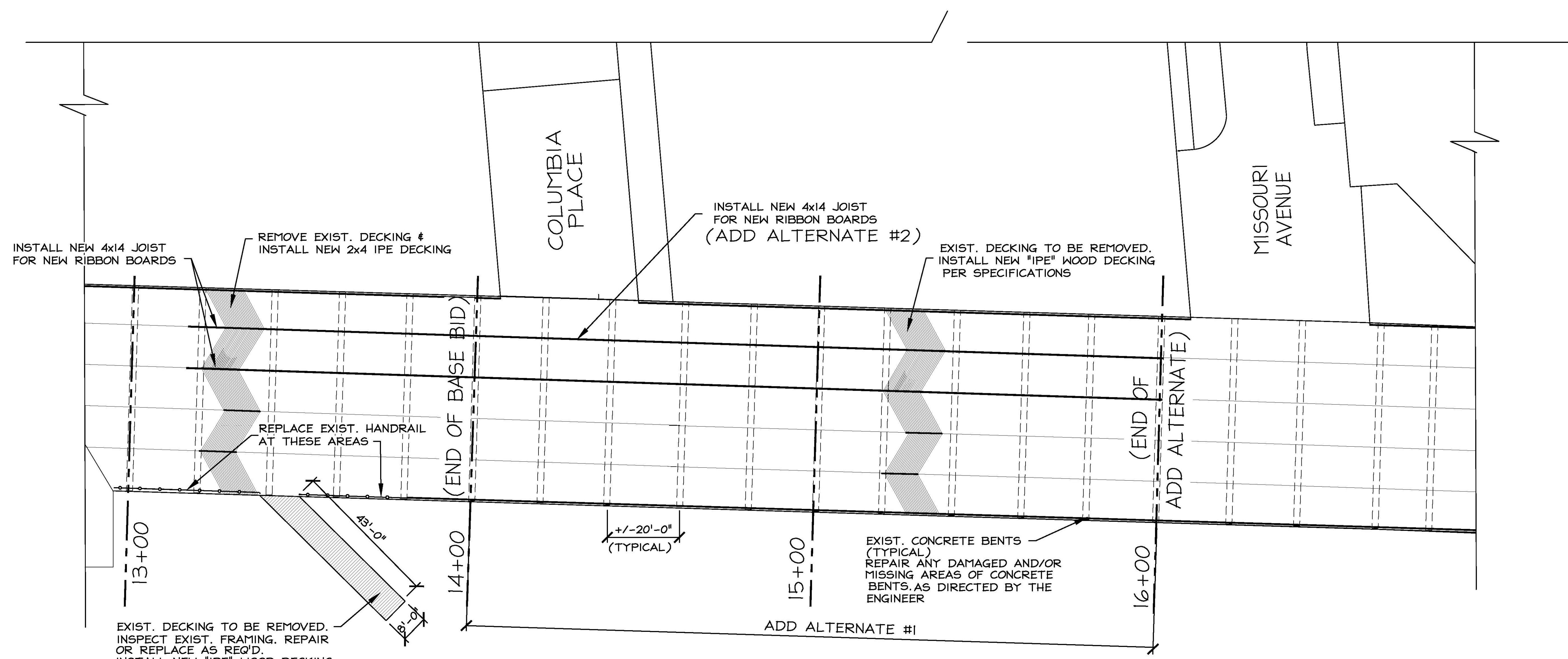
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LOGISTICS PLAN


LOGISTICS PLAN TO BE
REVIEWED WITH ATLANTIC CITY



BOARDWALK PLAN STATIONS 13+00-16+00
SCALE-1/16"=20'-0"

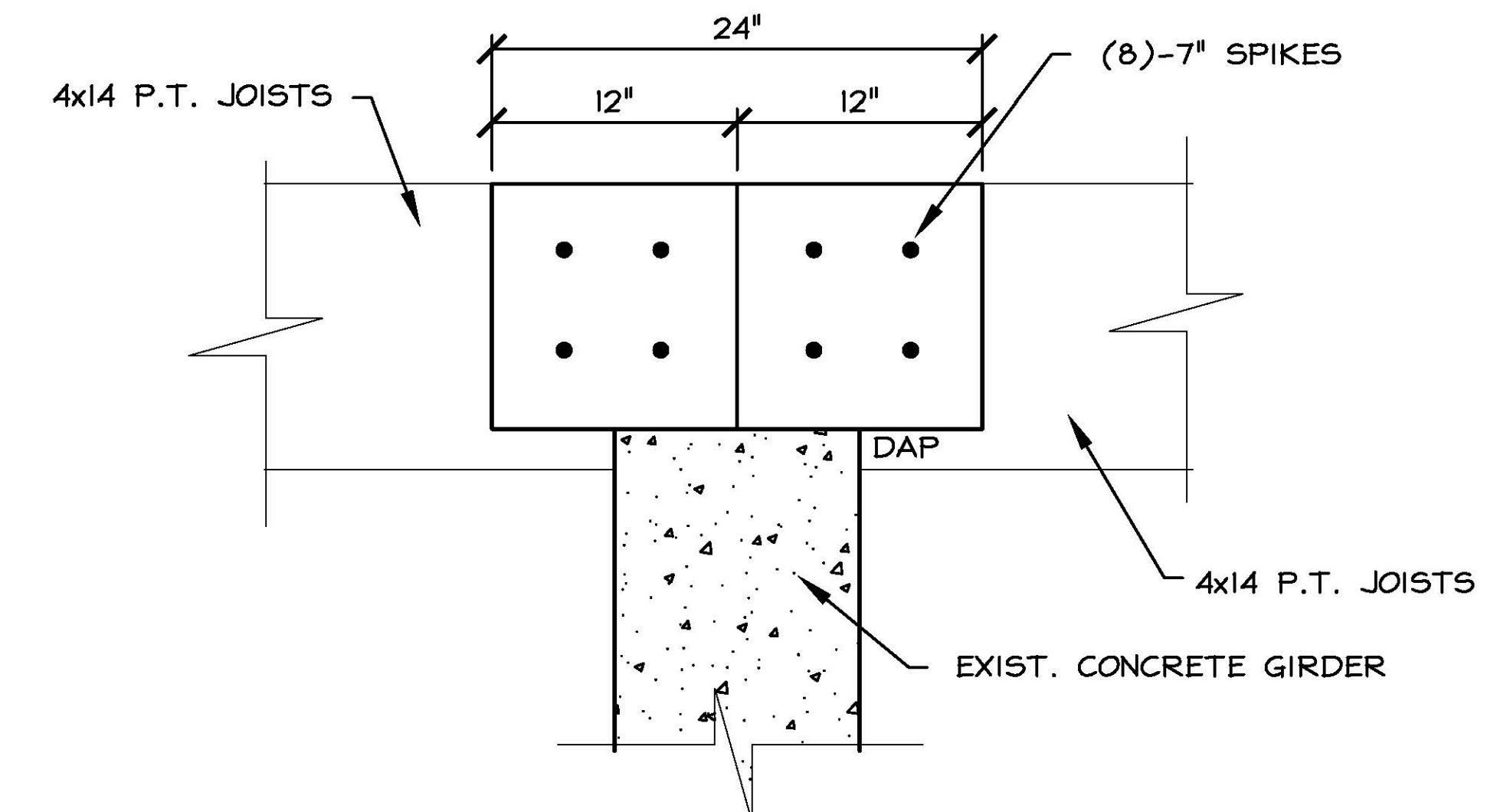
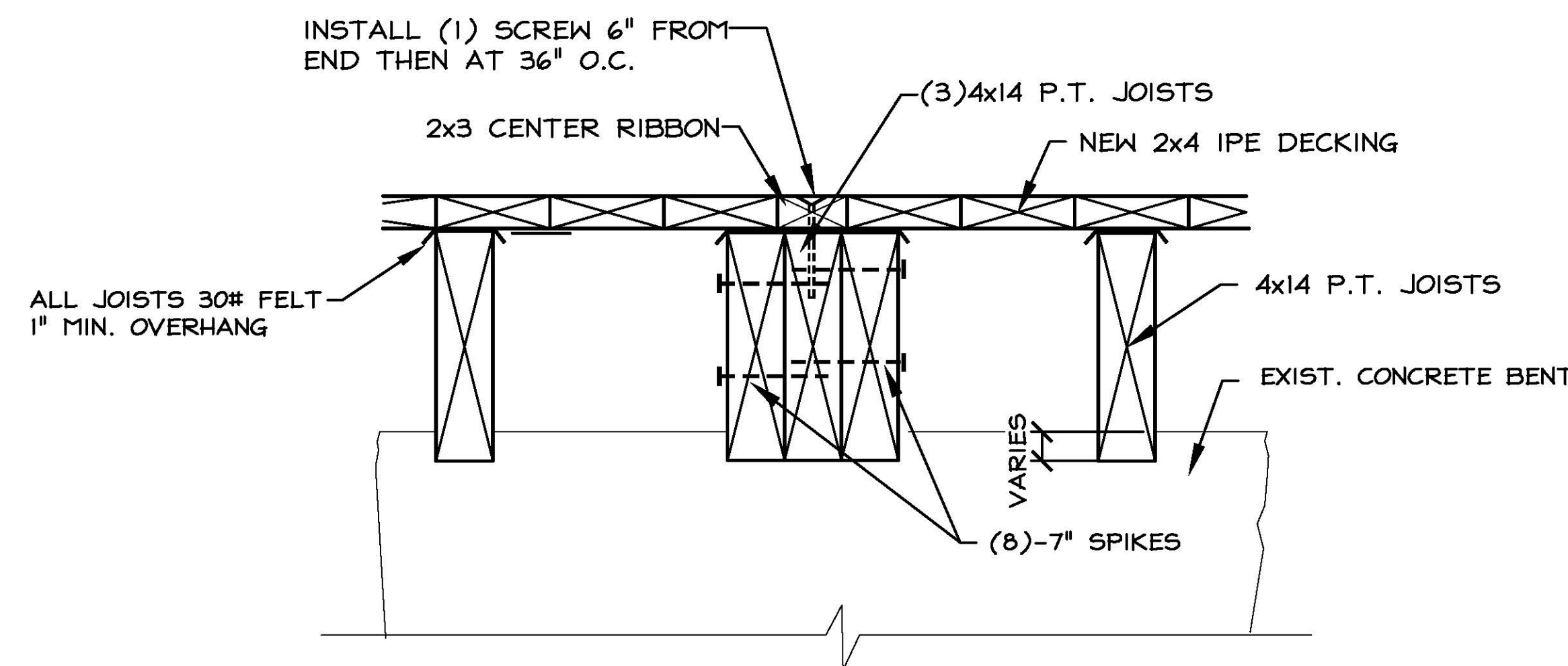
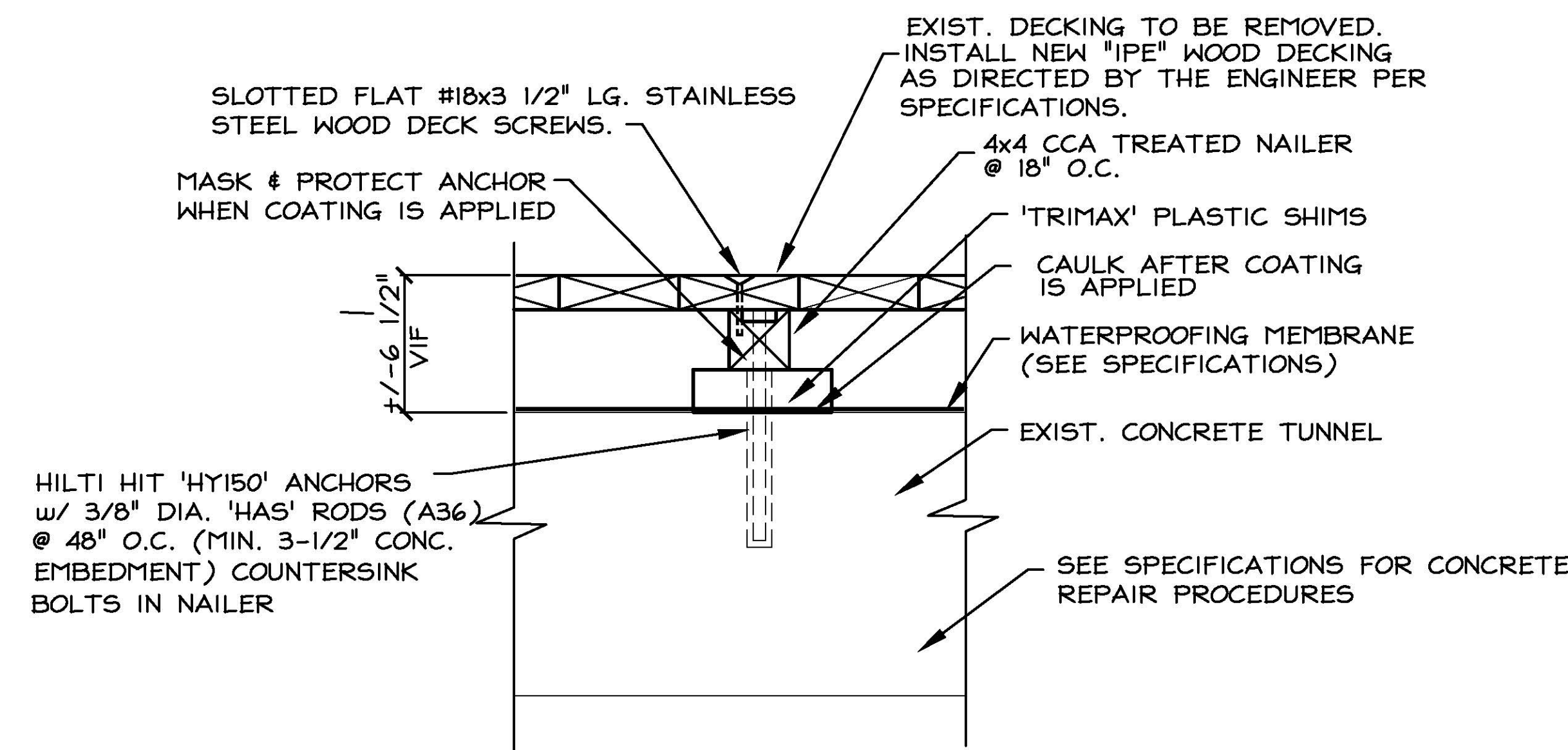
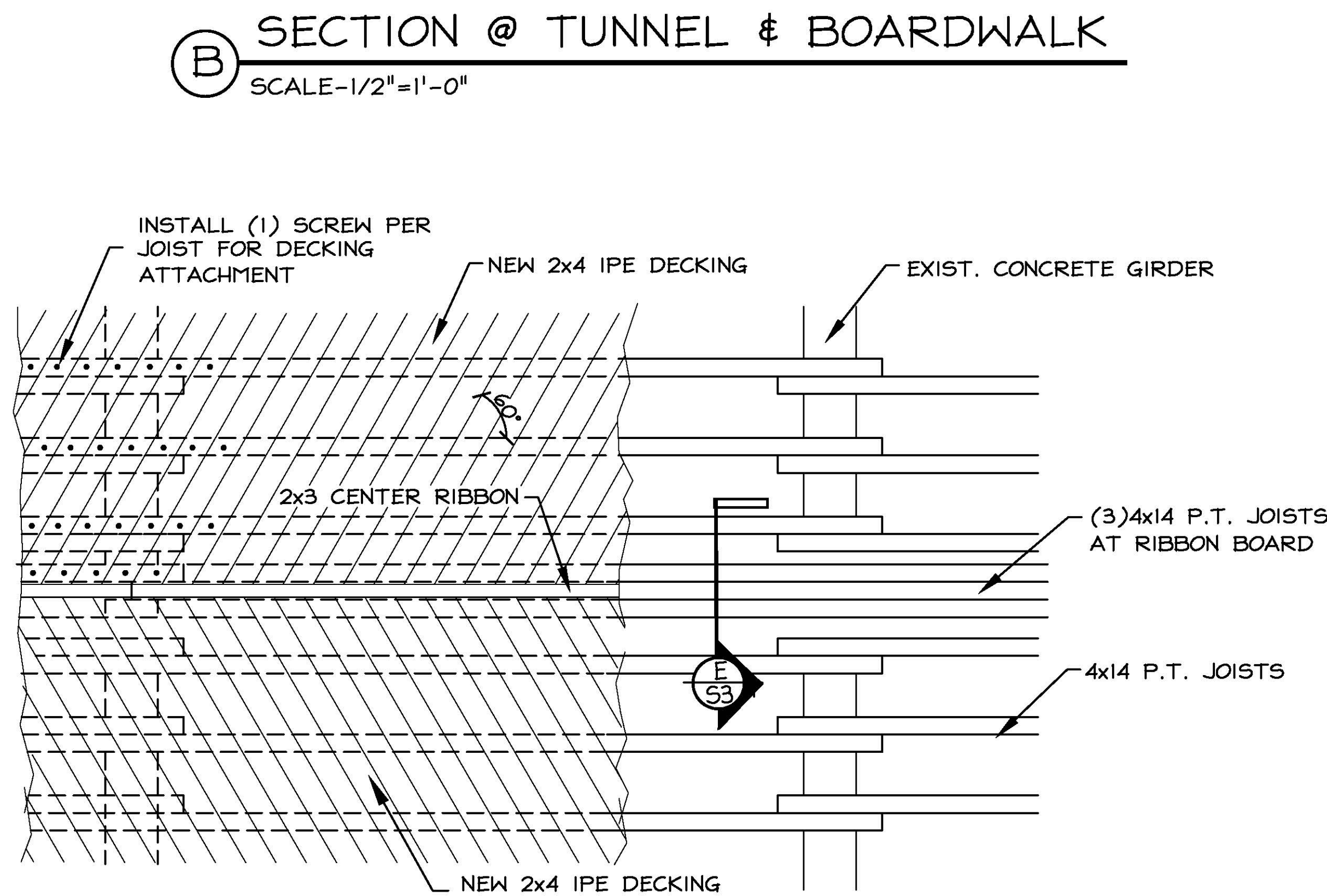
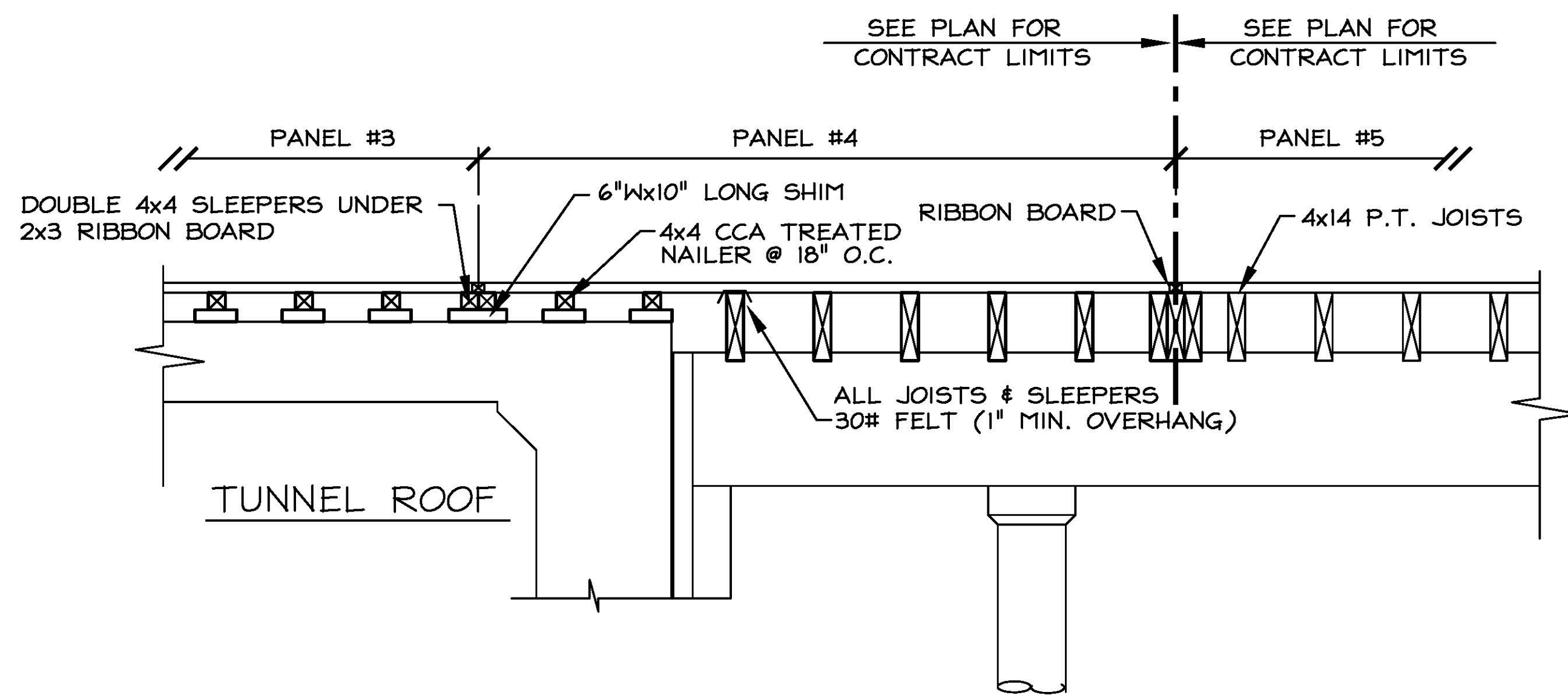
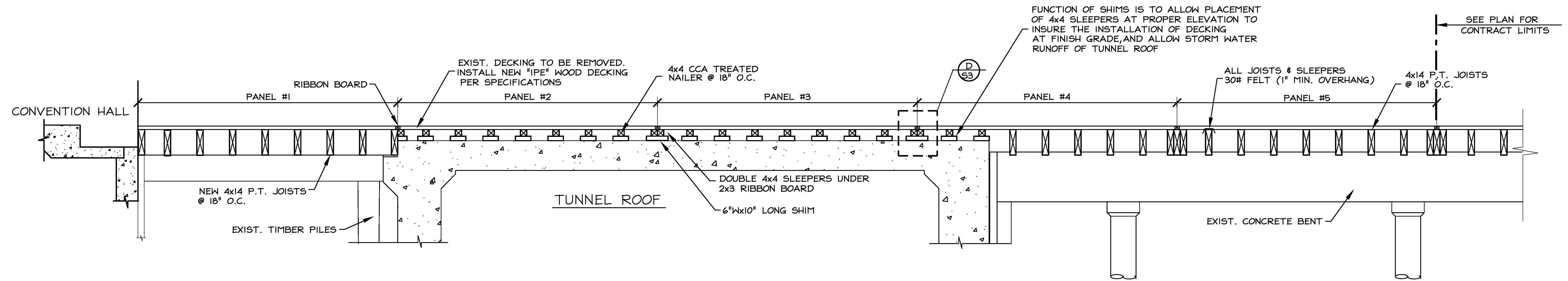
SEE SPECIFICATIONS FOR PHASING PLAN

ATLANTIC CITY BOARDWALK RECONSTRUCTIO PROJECT
BELLEVUE TO MISSOURI AVENUE
ATLANTIC CITY, NEW JERSEY


Leonard A. Czarr, P.E. NO Lic. 24603302700

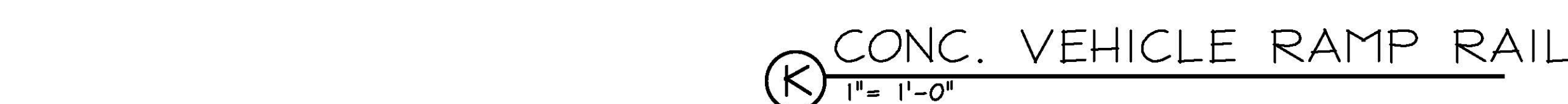
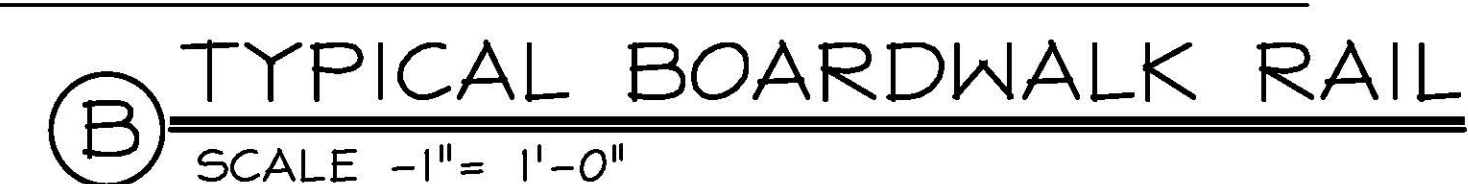
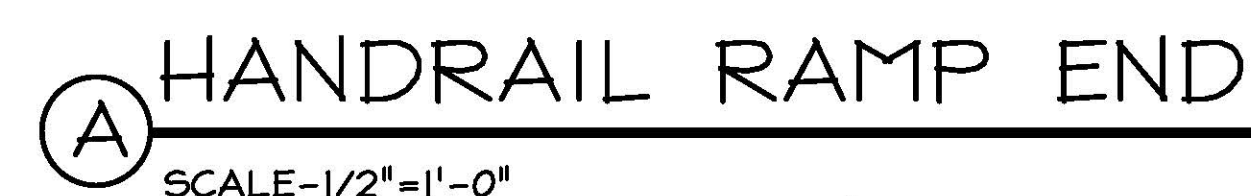
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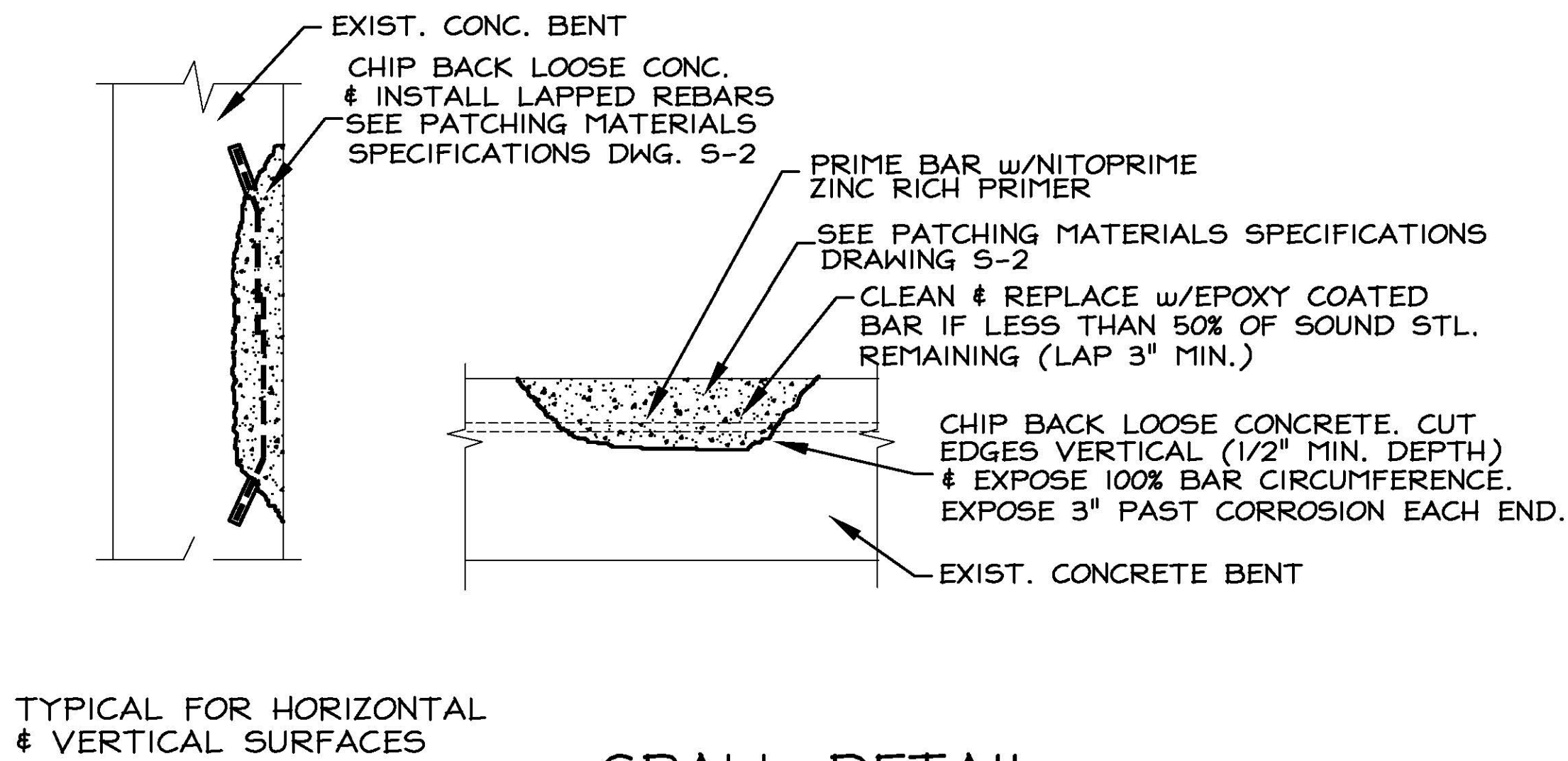
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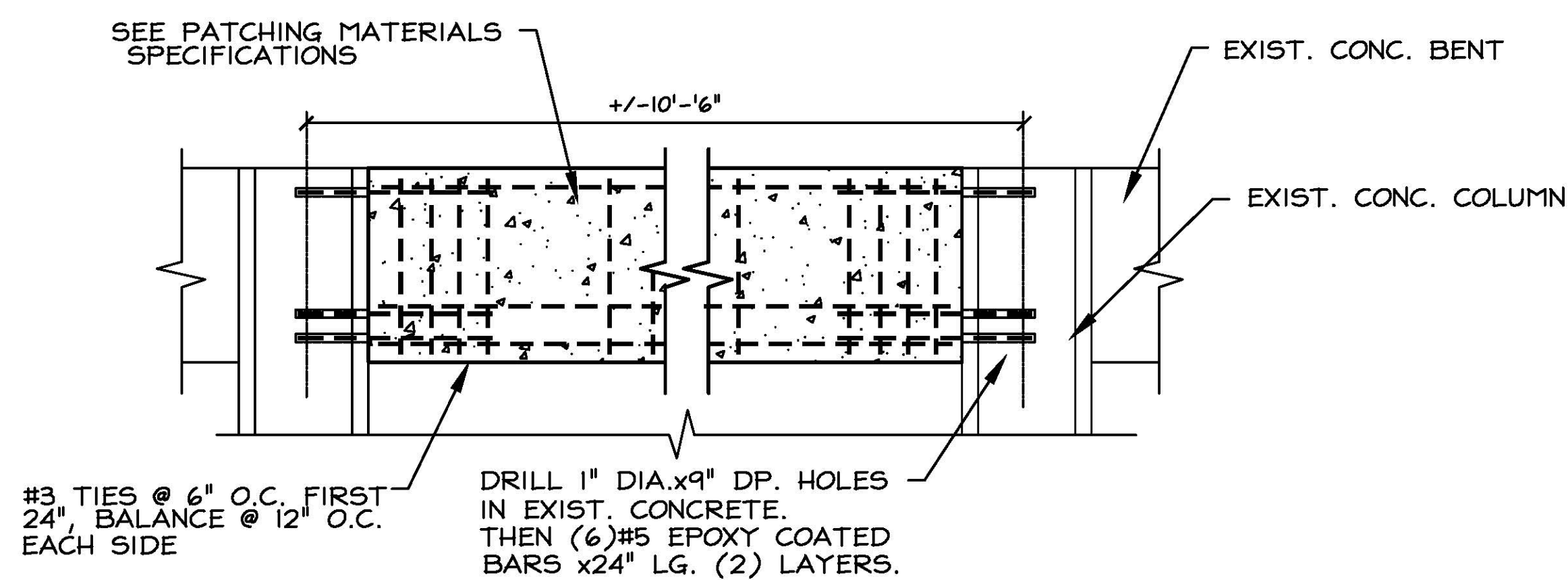
- TUNNEL REPAIR SEQUENCE**
1. REMOVE THE EXISTING WOOD DECKING OVERBURDEN ALONG WITH ANY SUPPORT DUNNAGE DOWN TO THE CONCRETE DECK SURFACE.
 2. REMOVE ANY EXISTING LOOSE COATING MATERIAL THAT IS INSTALLED OVER THE CONCRETE WITH MECHANICAL METHODS.
 3. POWER-WASH THE CONCRETE DECK SURFACE (3000 PSI) DOWN TO A CLEAN SUBSTRATE SURFACE.
 4. PRIME THE CONCRETE DECK AND ANY ASPHALT COATING WITH PUMA 107 PRIMER - METHACRYLATE. TWO-COMPONENT PRIMER FOR CONCRETE AND METAL SUBSTRATES FOR APPLICATION OF PUMA COATINGS.
 5. INSTALL PUMA BASE COAT AND REINFORCEMENT- POLYURETHANE-MODIFIED METHYL METHACRYLATE REINFORCED ROOF COATING SYSTEM BASE COAT.
 6. INSTALL PUMA TOPCOAT- POLYURETHANE-MODIFIED METHYL METHACRYLATE ROOF COATING SYSTEM TOPCOAT.
 7. THE PUMA COATING SYSTEM SHALL INCLUDE THE ENTIRE TOP HORIZONTAL SURFACE AND CARRY OVER THE VERTICAL EDGE PERIMETER DETAILS 12" MINIMUM. WHERE THE EDGE DETAIL HAS A STEP-DOWN TRANSITION, THE ENTIRE DETAIL WILL BE INCLUDED IN THE PUMA COATING TERMINATING OVER THE OUTER MOST EDGE 12" DOWN AS WELL.
 8. BEFORE THE WOOD DUNNAGE OVERBURDEN IS INSTALLED, INSTALL TPA (156 MIL YELLOW) WALKWAY ROLL, REINFORCED PVC/TPA MEMBRANE ROLL WITH SERRATED SLIP-RESISTANT SURFACE SLIP SHEETS BETWEEN THE NEW PUMA COATING SYSTEM AND THE DUNNAGE OVERBURDEN. THE TPA WALKWAY SHALL EXTEND 6' PAST THE PERIMETER OF THE DUNNAGE.

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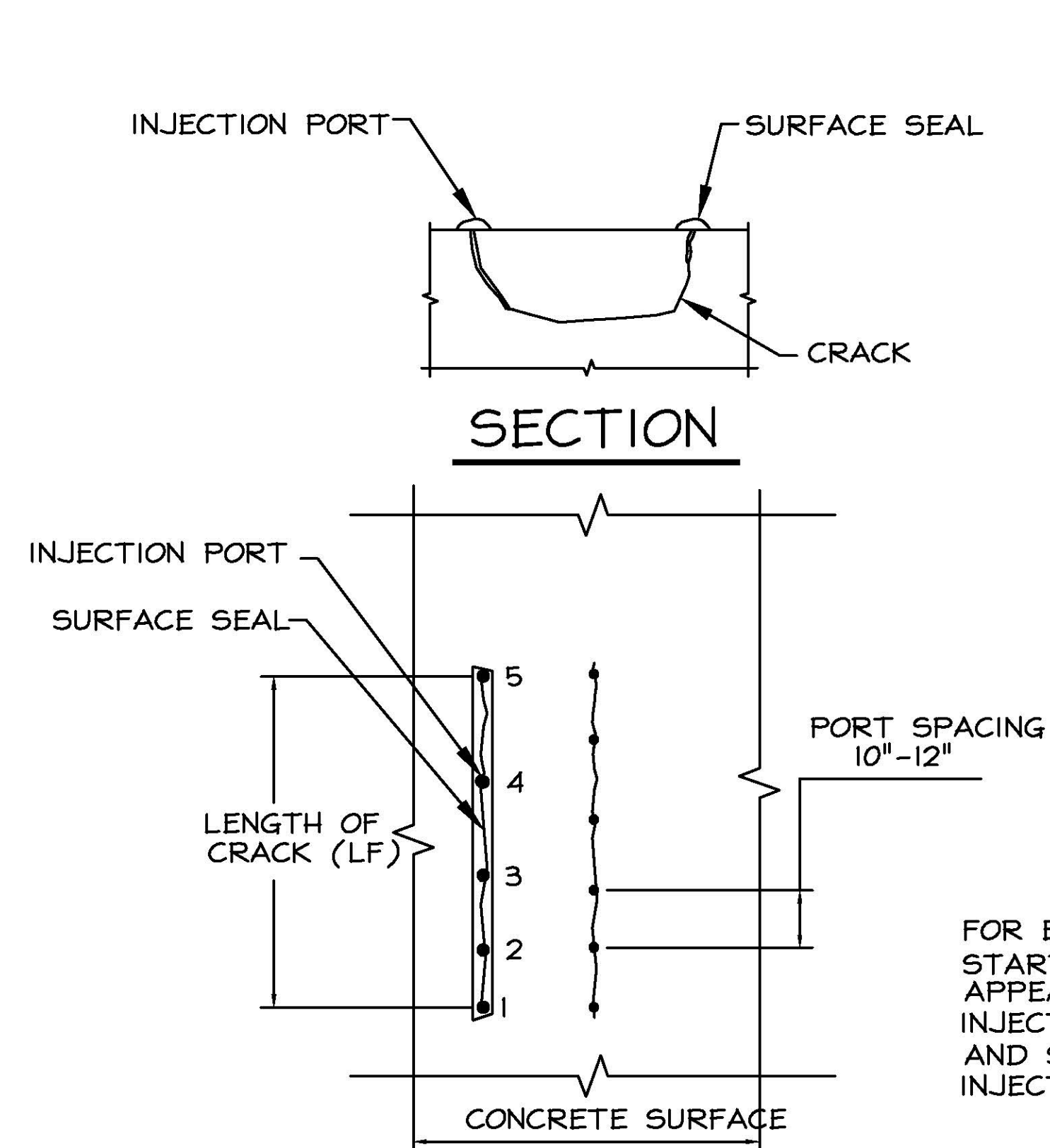




1 SPALL DETAIL

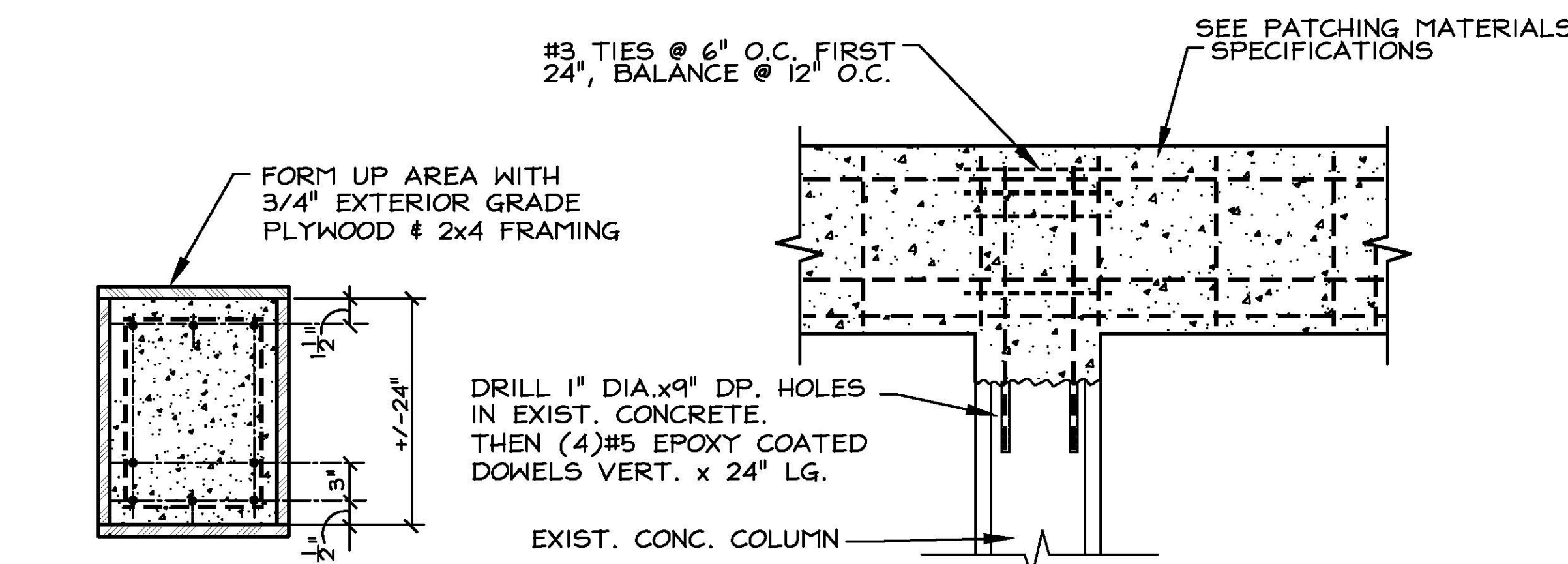


3 BEAM REPLACEMENT DETAIL



6 INJECTION DETAIL

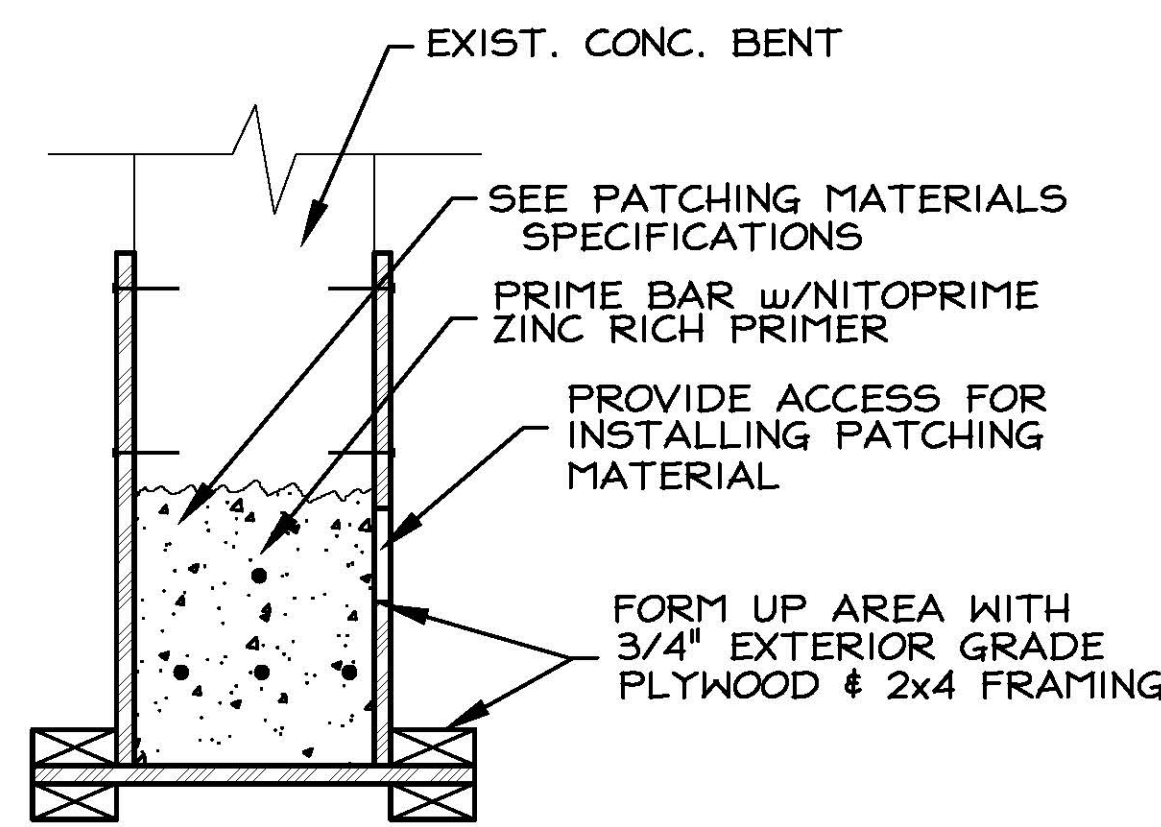
1. CRACK REPAIR SHALL BE DONE WHERE DIRECTED BY ENGINEER.
2. REPAIR CRACKS IN BEAMS, GIRDERS AND PILES USING EPOXY RESIN INJECTION AS PER CONTRACT SPECIFICATIONS. SEAL CONCRETE SURFACE AT CRACK. INJECT CRACK IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS CONFORMING TO ASTM C-881, TYPE 4, GRADE I, CLASS B & CLASS C.
3. CRACKS LARGER THAN 3/16" WIDE SHALL BE REPAIRED AS A SPALL PER REPAIR - WHERE DIRECTED BY THE ENGINEER.



4 COLUMN REPAIR DETAIL

PATCHING MATERIALS SPECIFICATIONS

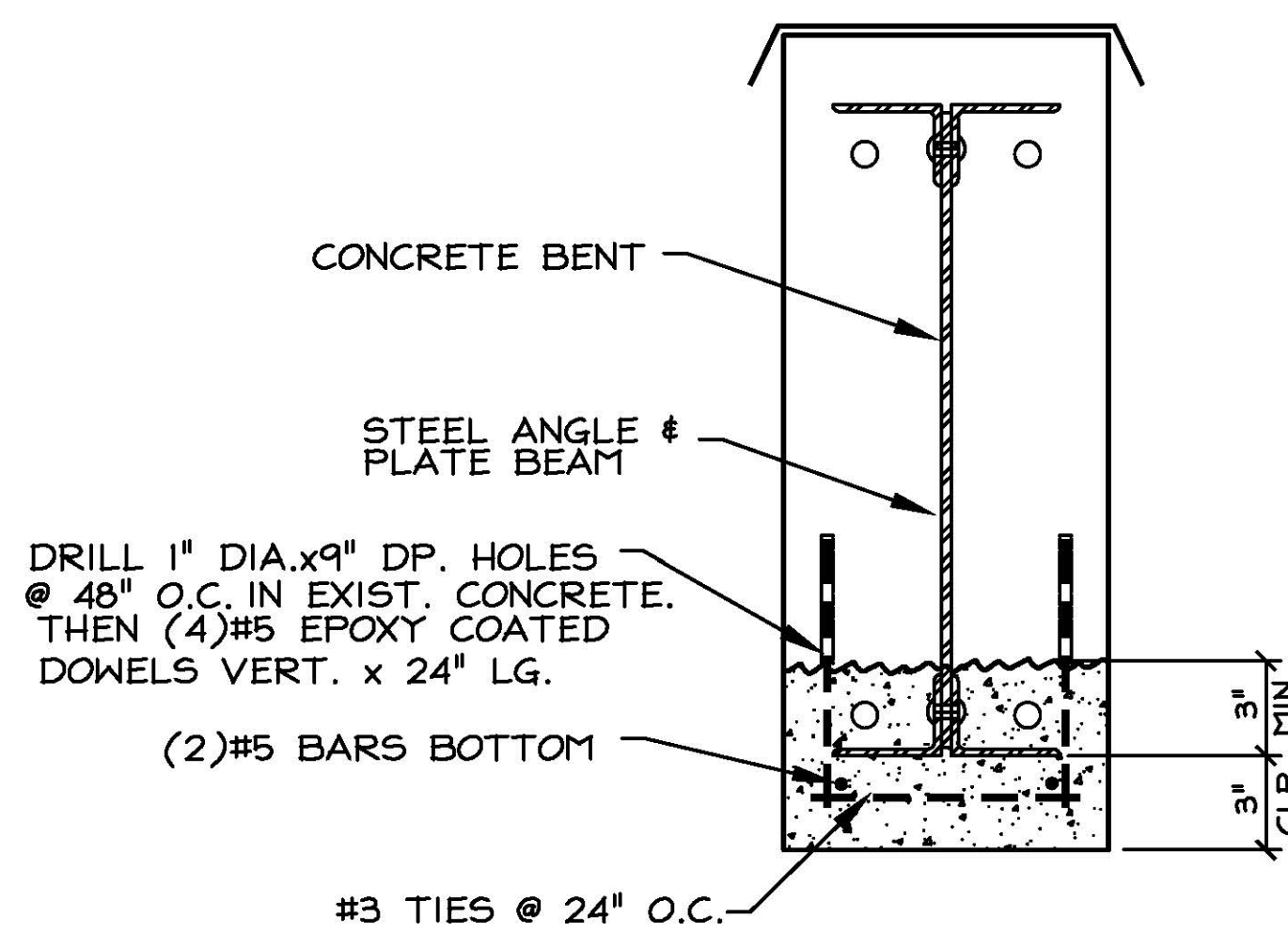
1. 'SIKA ARMATEC 110' - BONDING AGENT & REINFORCEMENT PROTECTION
2. 'SIKA TOP 123 PLUS' - TWO-COMPONENT, POLYMER-MODIFIED, CEMENTITIOUS, NON-SAG MORTAR PLUS FERROGARD 901 PENETRATING CORROSION INHIBITOR
3. 'SIKACRETE 211 SCC PLUS' - ONE-COMPONENT, POLYMER-MODIFIED, CEMENTITIOUS, SELF CONSOLIDATING CONCRETE MIX WITH AN INTEGRAL MIGRATING CORROSION INHIBITOR



FORM DETAIL

CLEAN & REPLACE w/EPOXY COATED BAR IF LESS THAN 50% OF SOUND STL. REMAINING (LAP 3" MIN.)

2 BOTTOM REPAIR DETAIL



5 BEAM END REPAIR DETAIL

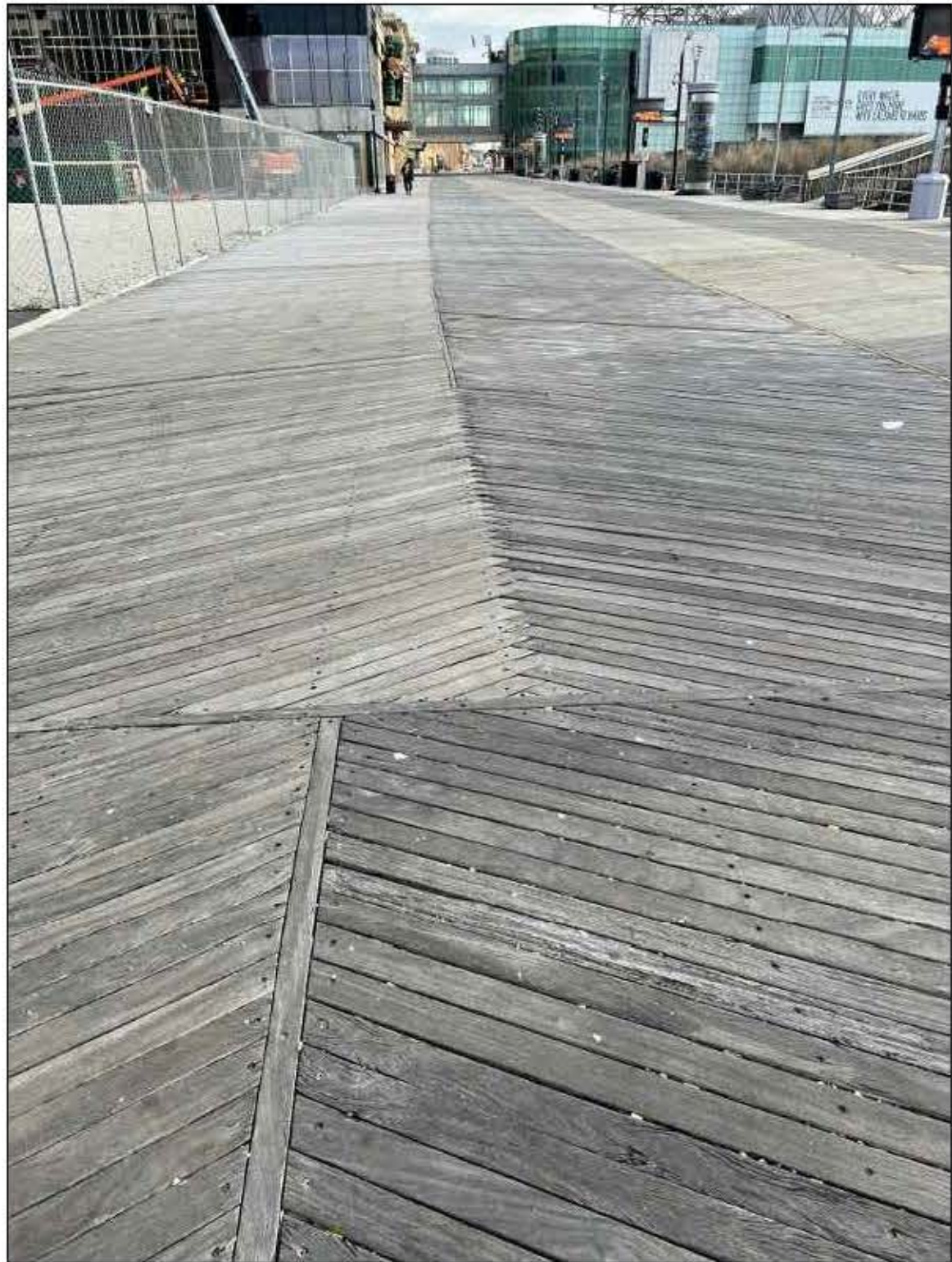
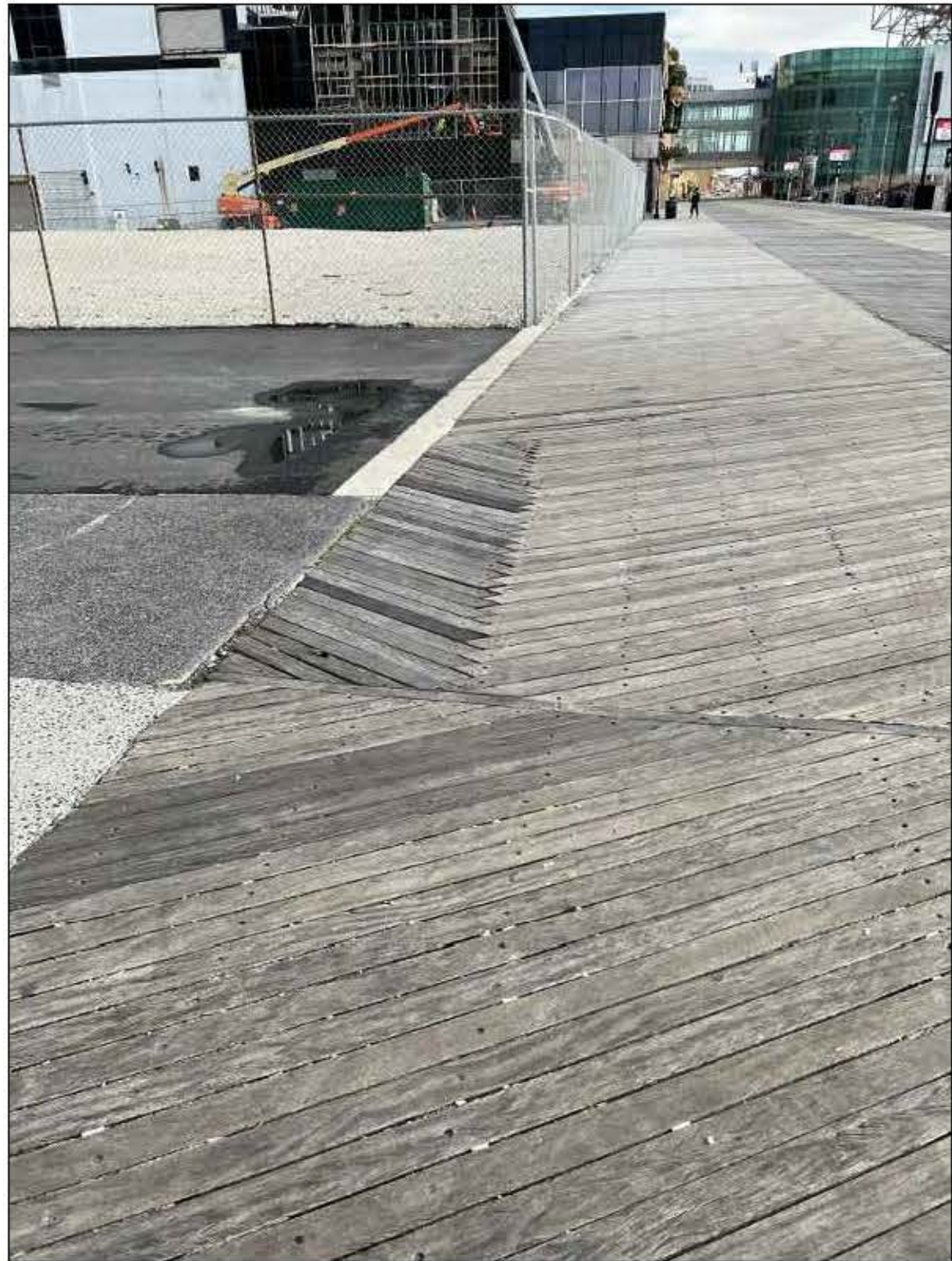
BASE BID REPAIR QUANTITIES

- REPAIR TYPE #1
SMALL SURFACE REPAIR-DETAIL #1 = 300 S.F.
REPAIR TYPE #2
BOTTOM BEAM REPAIR-DETAIL #2 = 200 S.F.
REPAIR TYPE #3
FULL BEAM REPAIR-DETAIL #3 = 150 L.F.
REPAIR TYPE #4
COLUMN REPAIR - DETAIL #4 = 15 COLUMNS
REPAIR TYPE #5
BEAM END REPAIR - DETAIL #5 = 10 EACH
REPAIR TYPE #6
CRACK INJECTION - DETAIL #6 = 300 L.F.

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EXISTING "HERRINGBONE" PATTERN DECKING TO BE REMOVED AND INSTALL NEW "RIBBON" BOARD & JOIST



INSTALL NEW DECKING UNDER ALL LIGHTS, UTILITY BOXES, VISUAL DISPLAYS & REPLACE ALL TRASH/RECYCLING CANS, BENCHS, ETC.

TYPICAL BOARDWALK CONDITIONS

ATLANTIC CITY BOARDWALK RECONSTRUCTIO PROJECT
BELLEVUE TO MISSOURI AVENUE
ATLANTIC CITY, NEW JERSEY


Larnold A. Czerny, P.E. NO Lic: 2460382700

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(609) 653-9445

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REMOVE/RELOCATE TO
ACCOMMODATE NEW CONCRETE
STRUCTURE (TYPICAL)



EXISTING UTILITIES
(TYPICAL)

REMOVE/RELOCATE TO
ACCOMMODATE NEW CONCRETE
STRUCTURE (TYPICAL)



EXISTING UTILITIES
(TYPICAL)

REMOVE/RELOCATE TO
ACCOMMODATE NEW CONCRETE
STRUCTURE (TYPICAL)



EXISTING UTILITIES
(TYPICAL)

AC ELECT. MANHOLE
(SEE SECTION "H" 6-3)



EXISTING ACE MANHOLE

NEW RAIL TO TIE
INTO EXISTING



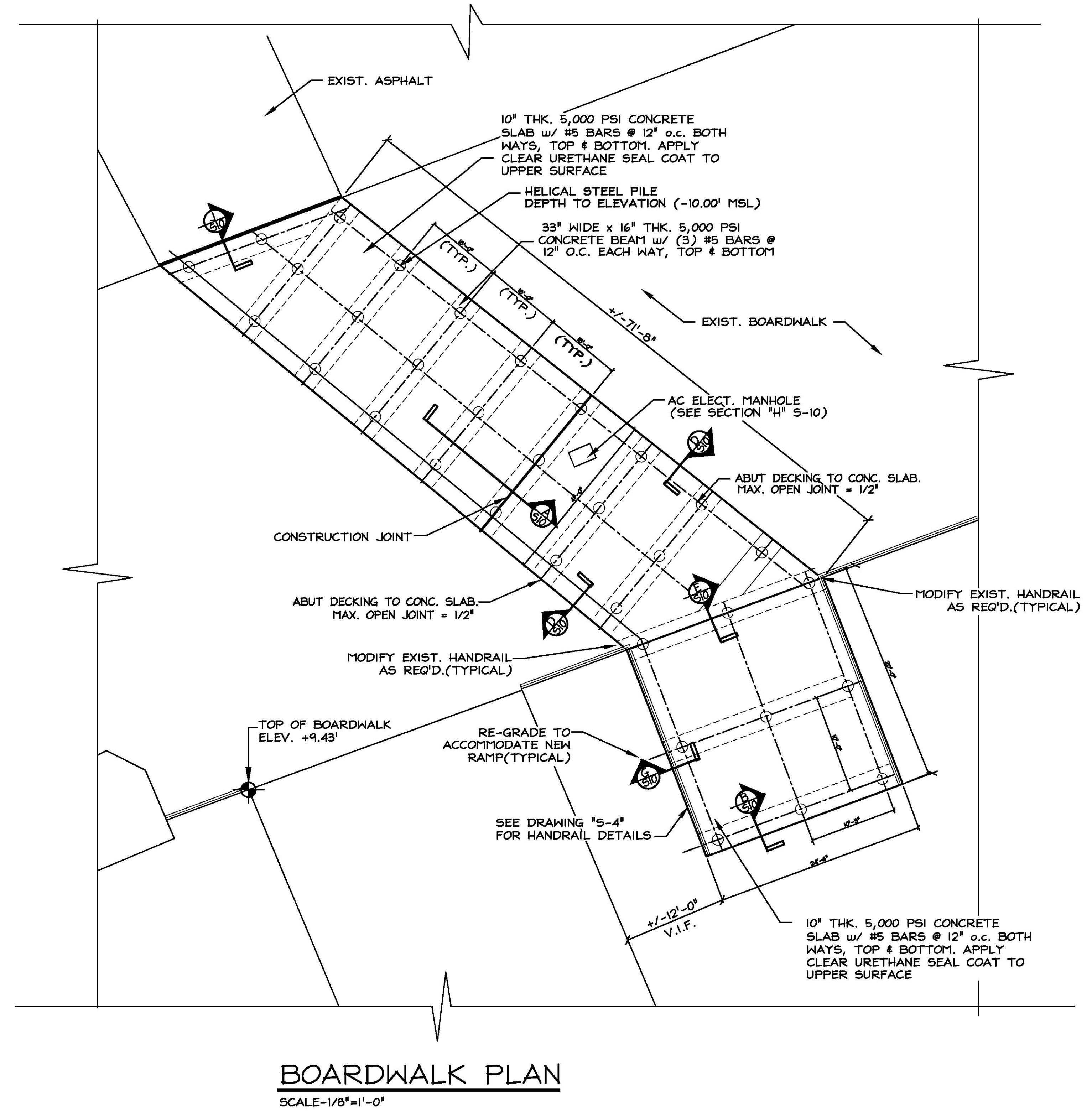
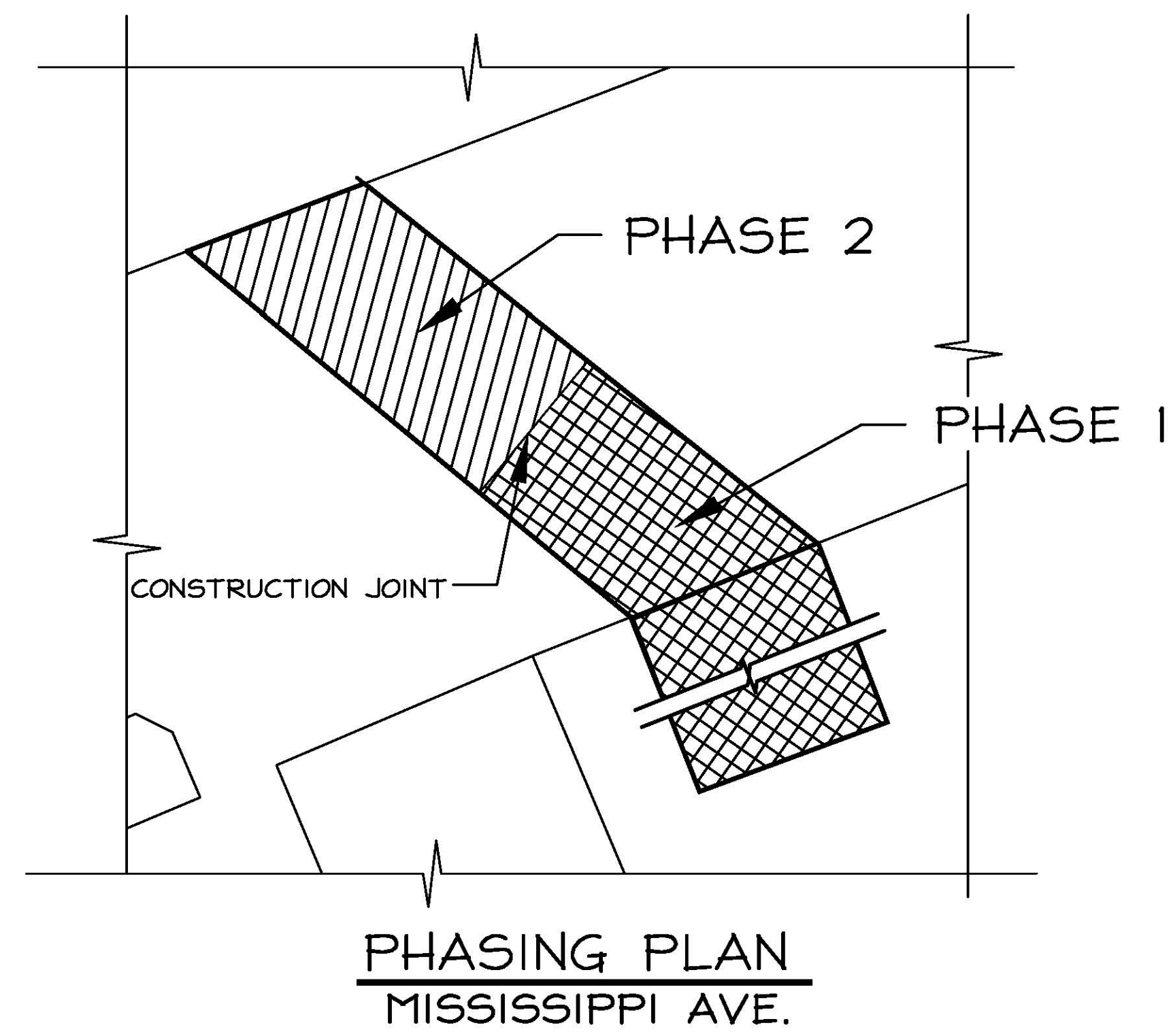
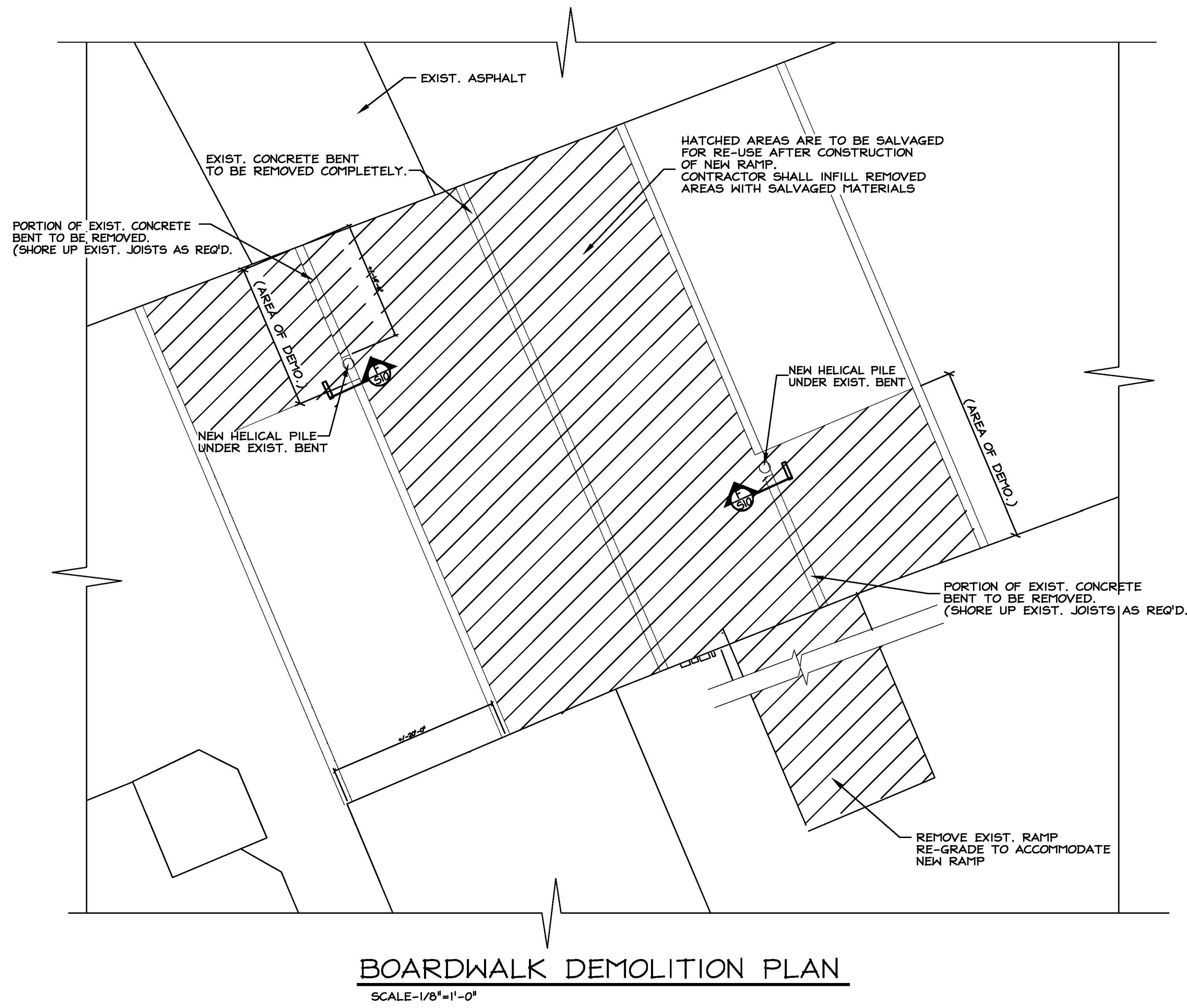
EXISTING HANDRAIL
(TYPICAL)

ATLANTIC CITY BOARDWALK RECONSTRUCTIO PROJECT
BELLEVUE TO MISSOURI AVENUE
ATLANTIC CITY, NEW JERSEY


Lamont A. Czar, P.E. NO Lic. 24603382700

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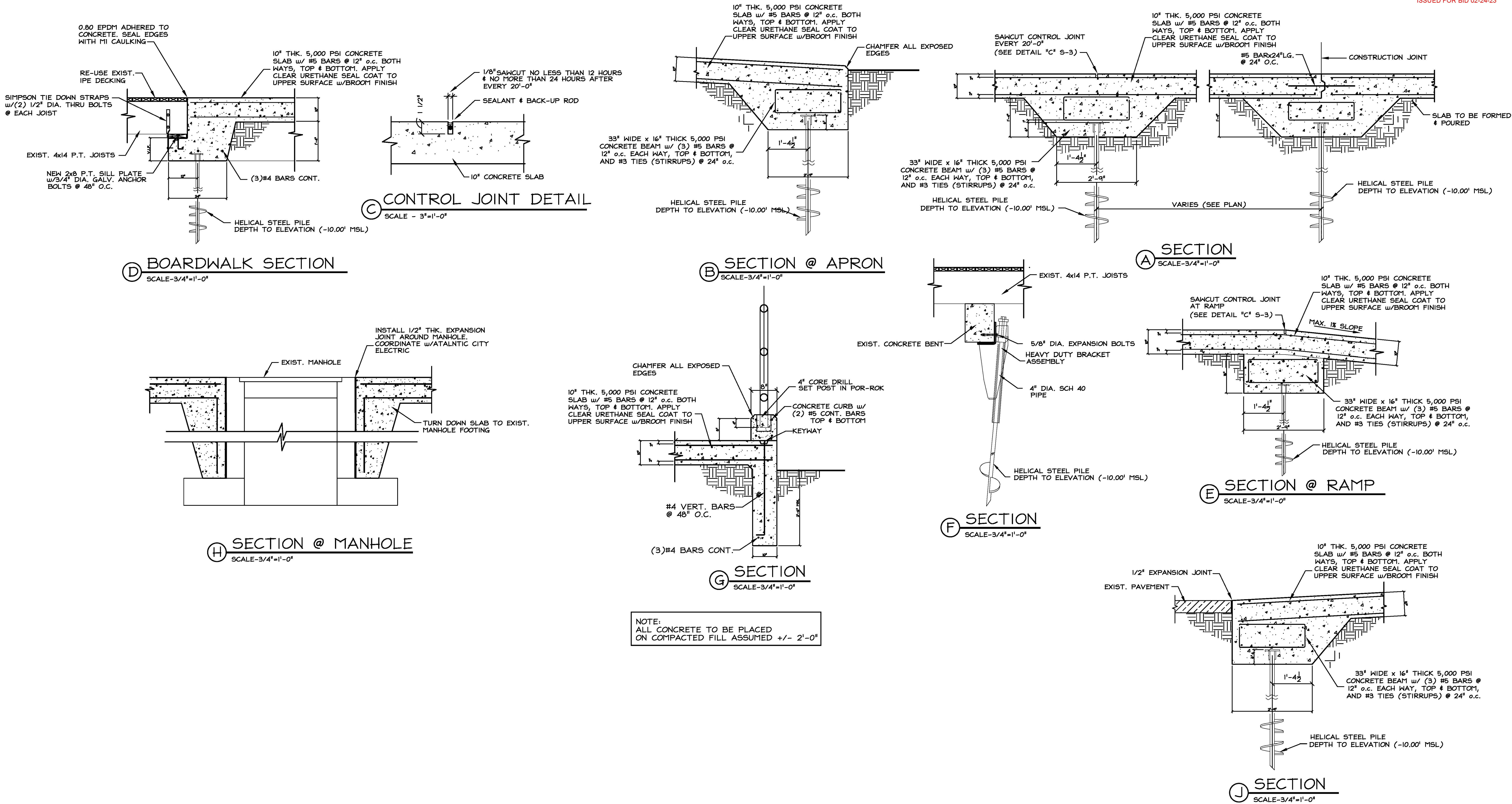
- GENERAL NOTES:**
1. CONTRACTOR ACKNOWLEDGES THAT FINAL LOCATION(S) WILL BE SUBJECT TO FIELD CONDITIONS AFTER REMOVAL OF EXISTING STRUCTURE.
 2. CONTRACTOR SHALL INCLUDE FIFTEEN (10) HELICAL PILES WITHIN THEIR PERSPECTIVE BID TO ACCOMMODATE EXISTING CONDITIONS.
 3. PRIOR TO INSTALLATION, CONTRACTOR SHALL HAND EXCAVATE TO LOCATE EXISTING UTILITIES.

ATLATIC CITY BOARDWALK RECONSTRUCTIO PROJECT
BELLEVUE TO MISSOURI AVENUE
ATLANTIC CITY, NEW JERSEY

Leonard A. Carr, P.E. NO Lic. 24603382700

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ATLANTIC CITY BOARDWALK RECONSTRUCTIO PROJECT
BELLEVUE TO MISSOURI AVENUE
ATLANTIC CITY, NEW JERSEY

[Signature]
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GENERAL NOTES

1. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND DIMENSIONS AND SHALL REVIEW THE DRAWINGS AND SPECIFICATIONS PRIOR TO BIDDING. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND THE SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING NOTES:
2. CZAR ENGINEERING, LLC (HEREAFTER REFERRED TO AS THE "ENGINEER") SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S PERFORMANCE, NONPERFORMANCE, NEGLIGENT PERFORMANCE, OR BREACH OF THE CONTRACT AWARDED. CONTRACTOR SHALL INDEMNIFY, INSURE AND HOLD HARMLESS THE ENGINEER AND EACH OF HIS DIRECTORS, OFFICERS, EMPLOYEES, ATTORNEYS, AGENTS, SUBCONSULTANTS, HEIRS AND ASSIGNS, AGAINST, AND HOLD EACH OF THEM HARMLESS FROM, ANY LOSS, LIABILITIES, DAMAGES, CLAIMS, CAUSES OF ACTION, COSTS AND EXPENSES, INCLUDING REASONABLE ATTORNEY'S FEES AND DISBURSEMENTS, SUFFERED OR INCURRED BY ANY OF THEM ARISING OUT OF, RESULTING FROM, ATTRIBUTABLE TO, OR IN ANY MANNER CONNECTED THEREWITH.
3. CONTRACTOR MUST NOTIFY THE OWNER AND ENGINEER OF ANY OMISSIONS, CONTRADICTIONS OR CONFLICTS SEVEN DAYS BEFORE THE BID DATE. ENGINEER WILL PROVIDE THE NECESSARY CORRECTIONS OR ADDITIONS TO PLANS. IF HE DOES NOT NOTIFY THE OWNER AND ENGINEER OF ANY SUCH CONDITION, IT WILL BE ASSUMED HE HAS INCLUDED THE NECESSARY ITEMS IN HIS BID.
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL AND STATE REGULATIONS, BUILDING CODES, ORDINANCES AND GOOD CONSTRUCTION PRACTICES. IF THE CONTRACTOR FEELS A CONFLICT EXISTS BETWEEN WHAT IS CONSIDERED GOOD CONSTRUCTION PRACTICE AND THESE PLANS, HE SHALL STATE IN WRITING ALL OBJECTIONS PRIOR TO SUBMITTING QUOTATIONS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STABILITY AND INTEGRITY OF EXISTING STRUCTURES AND THE PROTECTION OF ADJACENT PROPERTY AND PUBLIC UNTIL COMPLETION OF THE WORK.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY DURING THE COURSE OF THE WORK, TO BRING TO THE ATTENTION OF THE OWNER AND ENGINEER ANY DELETERIOUS CONDITIONS DISCOVERED WHERE NOT PREVIOUSLY IDENTIFIED.
7. CONTRACTOR SHALL SUBMIT ALL ALTERATIVE MATERIALS, METHODS OR CONSTRUCTION DETAILS TO THE OWNER AND ENGINEER FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION, PURCHASES, FABRICATION, ETC.
8. CONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR THE ACCURACY OF ALL MEASUREMENTS, ESTIMATES OF MATERIAL QUANTITIES AND SIZES, AND SITE CONDITIONS THAT WILL AFFECT WORK.
9. REFERENCE TO THE CIVIL DRAWINGS AND SPECIFICATIONS FOR INFORMATION NOT SHOWN HEREIN.
10. ENGINEER'S SERVICES/STRUCTURE LIMITED TO WORK AS DESCRIBED HEREIN ONLY. NO OTHER STRUCTURES WERE REVIEWED AND WE DEFER TO THE BUILDING CONTRACT DOCUMENTS FOR ALL OTHER DESIGN INFORMATION. IF THE CLIENT, OWNER, CONTRACTOR, OR ANY OTHER INTERESTED PARTY ARE AWARE OF DEFICIENCIES IN THE BALANCE OF THE STRUCTURE, IT IS INCUMBENT UPON THEM TO NOTIFY THE ENGINEER, IN WRITING, AND ADDITIONAL SERVICES WOULD FOLLOW UNDER A SEPARATE CONTRACT. OTHERWISE, ENGINEER CANNOT AND WILL NOT ACCEPT LIABILITY FOR DEFICIENCIES IN THE BALANCE OF THE STRUCTURE.

GENERAL REQUIREMENTS & CONDITIONS

1. WHERE A SECTION OR DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY TO ALL LIKE CONDITIONS EVEN THOUGH NOT SPECIFICALLY MARKED ON THE PLANS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THE STRUCTURE DURING CONSTRUCTION AGAINST EARTH PRESSURE, WIND, AND OTHER FORCES UNTIL PERMANENT SUPPORTS ARE IN PLACE.
3. WHERE NO SPECIFIC INFORMATION IS GIVEN, CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE STRUCTURAL OR ARCHITECTURAL PLANS OR THE PRESCRIPTIVE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE.
4. THE WORK OF THE FOLLOWING ITEMS SHALL CONFORM IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE NEW JERSEY DEPARTMENT OF TRANSPORTATION NJDOT STANDARD SPECIFICATIONS OF ROADS AND BRIDGE CONSTRUCTION 2007, AND ALL AMENDMENTS TO SAME, WITH THE EXCEPTION THAT THE ENGLISH UNITS OF MEASURE WILL BE SUBSTITUTED IN LIEU OF THE METRIC SYSTEM OF MEASURE, WHICH SAID STANDARD SPECIFICATIONS OF ROADS AND BRIDGE CONSTRUCTION AND SAID AMENDMENTS ARE HEREBY MADE A PART OF THESE SPECIFICATIONS AND ARE ON FILE IN THE ATLANTIC CITY ENGINEER'S OFFICE, AND AS MORE PERTINENTLY SPECIFIED HEREIN UNDER FOR THIS PARTICULAR PROJECT.
5. REFERENCE TO SECTIONS IN THE TITLE OF EACH ITEM OF WORK REFERS TO SECTIONS OF SAID NJDOT SPECIFICATIONS

DIVISION OF WORK

1. THE CONSTRUCTION OF THE BOARDWALK DECK AND SUPPORTS IS DIVIDED INTO THE FOLLOWING ITEMS FOR THE PURPOSES OF ASSIGNING VALUE TO THE WORK FOR THE PURPOSES OF PAYMENT. EACH ITEM ALSO DEFINES THE UNIT OF MEASURE AND OTHER MEASUREMENT CRITERIA. THE COSTS ASSOCIATED WITH ANY PARTICULAR TASK OR MATERIAL THAT IS NECESSARY FOR THE COMPLETION OF THE TOTAL PROJECT AND NOT DESCRIBED OR DELINEATED AS A SEPARATE ITEM OR ASSIGNED TO A SPECIFIC ITEM IS TO BE CONSIDERED PART OF ALL THE ITEMS.

END OF PROJECT BOARDWALK FENCE

1. IN ADDITION TO OTHER PROJECT SITE CONTROL MEASURES, THE CONTRACTOR SHALL PROVIDE ALL LUMBER AND HARDWARE NECESSARY TO ERECT AND ASSEMBLE THE WOOD FRAME RAILING AROUND THE LIMITS OF THE DEMOLISHED SECTIONS OF BOARDWALK. THE HARDWARE SHALL INCLUDE, IN GENERAL, ALL BOLTS, NUTS, WASHERS, NAILS, AND SPIKES SUCH ARE REQUIRED TO COMPLETE THE STRUCTURES. ALL HARDWARE SHALL BE GALVANIZED STEEL. UNLESS OTHERWISE SPECIFIED, ALL HARDWARE SHALL BE AS FOLLOWS:
- A. BOLTS - ASTM STANDARD A 307, GRADE A.
- B. SPIKES AND NAILS - COMMON WIRE TYPE PER AISI 10101 OR 1020 STEEL.
- C. ALL OF THE ABOVE HARDWARE SHALL BE HOT-DIP GALVANIZED PER ASTM A-123 OR A-153 AS APPLICABLE.

2. UNLESS OTHERWISE INDICATED, THE LENGTH OF NAILS AND SPIKES SHALL NOT BE LESS THAN TWICE THE NOMINAL THICKNESS OF THE MATERIAL BEING NAILED.

ACCESS TO WORK

1. THE BOARDWALK, WHEN COMPLETED, IS AN ELEVATED STRUCTURE WITH A LIMITED LOAD CAPACITY AND LIMITED ACCESS. DURING CONSTRUCTION, THE ACCESS TO THE STRUCTURE WILL BE LIMITED. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ACCESS NEEDED FOR CONSTRUCTION ACTIVITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR NOT TO EXCEED THE LOAD BEARING CAPACITY OF HIS WORK OR ANY STRUCTURES. ANY WORK DAMAGED DURING CONSTRUCTION MUST BE REPLACED.
2. THE CONTRACTOR MAY CONSTRUCT TEMPORARY ACCESS WITHIN THE CONSTRAINTS OF THE ROAD OPENING AND ROAD CLOSING ORDINANCES. BOARDWALK ACCESS FROM EXISTING VEHICLE RAMPS DOES, BY ATLANTIC CITY ORDINANCE, REQUIRE A BOARDWALK ACCESS PERMIT AND WILL BE AT THE CONTRACTORS RISK AND DECK REPAIRS AT THE CONTRACTORS EXPENSE. CREATING VEHICLE ACCESS TO THE BOARDWALK AT OTHER LOCATIONS MAY REQUIRE STIFFENING THE BOARDWALK STRUCTURE BY ADDITIONAL JOISTS OR OTHER METHODS APPROVED AT THE CONTRACTOR'S EXPENSE. APPROVALS FOR ADDITIONAL ACCESS POINTS WITHIN THE PROJECT LIMITS SHALL BE APPROVED BY THE ENGINEER. AREAS OUTSIDE OF THE PROJECT LIMITS ARE ADMINISTERED BY THE ATLANTIC CITY ENGINEER'S OFFICE UNDER THE ORDINANCES FOR BOARDWALK ACCESS, ROAD OPENINGS AND ROADWAY CLOSINGS.

HELICAL PILING/FOUNDATION

1. SCREW ANCHOR: HELICAL PILE FOUNDATION SYSTEMS CONSIST OF STEEL SCREW ANCHORS WITH ONE OR MORE TRUE HELIX SHAPED STEEL PLATES ATTACHED TO A CENTRAL STEEL SHAFT. EXTEND ANCHORS BY ADDING SHAFT EXTENSIONS.
2. SUBMIT PRODUCT DATA, INCLUDING MANUFACTURER'S PRODUCT DATA SHEET, FOR SPECIFIED PRODUCTS.
3. SUBMIT PROJECT RECORD DOCUMENTS FOR INSTALLED MATERIALS INCLUDING TYPE (NUMBER AND SIZE OF HELICES) AND SIZE; ACTUAL LOCATIONS OF SCREW ANCHORS, ANCHOR DIAMETER AND ANCHOR LENGTH, INSTALLATION ANGLE BELOW HORIZONTAL; EXTENSION LENGTH ALONG SHAFT AND DATUM; ANCHOR TESTING (IF REQUIRED); TORQUE INSTALLATION RECORDS ON ALL SCREW ANCHORS AND TORQUE MONITORING CALIBRATION DATA.
4. INSTALLER SHALL BE EXPERIENCED IN PERFORMING WORK OF THIS SECTION WHO HAS SPECIALIZED IN INSTALLATION OF WORK SIMILAR TO THAT REQUIRED FOR THIS PROJECT
5. SCREW ANCHOR PLATE: MINIMUM 5500 FT-LBS ANCHORS: LOW CARBON STEEL MEETING THE GENERAL REQUIREMENTS OF AISI, OR ASTM A572, ASTM A935, ASTM A656 OR ASTM A936.
6. SCREW ANCHOR SHAFT: MINIMUM 5500 FT-LBS ANCHORS: MEDIUM CARBON ROUND CORNERED SQUARE STEEL BAR MEETING DIMENSIONAL AND WORKMANSHIP REQUIREMENTS OF ASTM A29.
7. BOLTS: 5500 AND 7000 FT-LBS ANCHOR BOLTS: ASTM A320, GRADE L7.
8. PREPARATION: USE PLACEMENT METHOD WHICH WILL NOT CAUSE DAMAGE TO NEARBY STRUCTURES.
9. HELICAL PIER INSTALLATION: PROVIDE INSTALLATION TORQUE UNITS, ROTARY TYPE, FORWARD AND REVERSE CAPABILITY, ELECTRIC OR HYDRAULIC POWERED, CAPABLE OF POSITIONING THE SCREW ANCHOR AT THE DESIGNED ANGLE. MINIMUM DRIVE EQUIPMENT RATING TO EQUAL OR EXCEED THE MAXIMUM TORQUE RATING OF THE SPECIFIED SCREW ANCHOR. PROVIDE TORQUE MONITORING DEVICE AS PART OF THE INSTALLING UNIT OR AS A SEPARATE IN LINE DEVICE.
10. POSITION SCREW ANCHOR AS INDICATED. ESTABLISH PROPER ANGULAR ALIGNMENT AT THE START OF INSTALLATION.
11. CONNECT THE INSTALLATION UNIT TO THE ANCHOR WITH MANUFACTURER'S INSTALLATION AND SECURE, PROTECT SAFE AND SECURE CONNECTION TO SCREW ANCHORS AND EXTENSIONS. APPLY SUFFICIENT DOWNWARD PRESSURE TO ADVANCE ANCHOR. INSTALL IN A SMOOTH AND CONTINUOUS MANNER, RATE OF ANCHOR ROTATION 5-20 RPM.
12. MONITOR TORQUE APPLIED BY THE INSTALLING UNIT DURING THE ENTIRE INSTALLATION, AND RECORD VALUES ACHIEVED ON EACH SCREW ANCHOR. REMOVE UNENCOUNTERED OBSTRUCTIONS, OR RELOCATE SCREW ANCHOR AND ADJACENT ANCHORS AS REQUIRED.
13. PROVIDE EXTENSION MATERIAL TO OBTAIN INDICATED DEPTH, COUPLE WITH BOLTS PROVIDED AS PART OF EXTENSION; TORQUE TO 40 FT-LBS. INSTALL TO REFUSAL. PROVIDE GROUND COVER, 5' MINIMUM, ABOVE THE TOP HELIX. OBTAIN WRITTEN PERMISSION FROM ENGINEER BEFORE PROCEEDING IF INDICATED DEPTH OR MINIMUM TORQUE CANNOT BE OBTAINED.
14. DEPTH AND TORQUE TOLERANCES: SCREW ANCHORS THAT REACH MAXIMUM TORQUE RATING BEFORE REACHING MINIMUM INDICATED DEPTH SHALL BE SUBJECT TO THE FOLLOWING:

- A. TERMINATE AT DEPTH AT (-10.00' MSL)
- B. REPLACE SCREW ANCHOR WITH SMALLER AND/OR FEWER HELICES, INSTALLED 3' MINIMUM BEYOND TERMINATION OF ORIGINAL SCREW ANCHOR.

15. SITE TESTS: MONITOR TORQUE APPLIED BY THE INSTALLING UNITS DURING THE ENTIRE INSTALLATION.
16. ALL HELICAL PILES, EXTENSIONS, AND CAPS SHALL BE HOT-DIPPED GALVANIZED PER ASTM A153 (LATEST REVISION).
17. MANUFACTURER SHALL HAVE IN EFFECT INDUSTRY-RECOGNIZED WRITTEN QUALITY CONTROL FOR ALL MATERIALS AND MANUFACTURING PROCESSES.

CONCRETE

1. UNDER THIS ITEM THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND ALL ELSE NECESSARY TO FABRICATE AND CONSTRUCT CONCRETE DECK OR PILING. PROVIDE SUPPORT FOR THE CONTINUOUS SUPPORT FOR THE BOARDWALK DECK.
2. AGGREGATES, CONCRETE: ALL AGGREGATES, FINE AND COARSE, SHALL CONFORM TO THE SPECIFICATIONS OUTLINED BY ASTM C-33. THE AGGREGATES SHALL BE FREE OF ALL DELETERIOUS SUBSTANCES, WHICH CAUSE REACTIVITY WITH OXIDIZED HYDROGEN SULFIDE. BOTH TYPES OF AGGREGATES SHALL BE OF INTERMEDIATE OR HARD GRADE. HOMOGENEOUS CONCRETE MIX. ALL GRADED MATERIALS SHALL BE ACCURATELY WEIGHED AT A CERTIFIED CENTRAL BATCHING FACILITY PRIOR TO MIXING.
3. CEMENT THAT IS TO BE INCORPORATED INTO THE CONCRETE DECK SHALL BE PORTLAND CEMENT, WHICH CONFORMS TO ASTM C-150, TYPE II. THE CEMENT CONTENT AND CONCRETE MIX DESIGN SHALL PRODUCE A MINIMUM STRENGTH OF 5,000 PSI AND SHALL CONFORM TO SECTIONS 501.02 AND 501.03 OF THE STANDARD SPECIFICATIONS. CONCRETE SEALANT TO THE TOP SURFACE OF THE CONCRETE DECK SHALL BE CLEAR ACRYLIC URETHANE SEALANT THAT HAS A SOLIDS CONTENT OF NOT LESS THAN 20 PERCENT AT A COVERAGE RATE OF NOT MORE THAN 1600 SQUARE FEET PER GALLON. THE ACRYLIC URETHANE COATING SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS WITH REGARDS TO SURFACE PREPARATION METHOD.
4. REINFORCING STEEL: ALL REINFORCING STEEL, INCLUDING WELDED WIRE FABRIC, SHALL BE OF THE SIZE AND IN THE LOCATION AS SHOWN ON THE SHOP DRAWINGS. ALL REINFORCING SHALL BE SUFFICIENTLY TIED TO WITHSTAND ANY DISPLACEMENT DURING THE POURING OPERATION. ALL BARS SHALL BE INTERMEDIATE OR HARD GRADE BILLET STEEL CONFORMING TO ASTM A615 GRADE 60. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
5. ALL REINFORCING STEEL LAP SPLICES SHALL CONFORM TO MINIMUM VALUES IN ACCORDANCE WITH SECTION 504.03 OF THE STANDARD SPECIFICATIONS.
6. ALL REINFORCING STEEL BARS AND WIRE FABRIC ARE TO BE EPOXY COATED. THE WIRE SHALL NOT BE LESS THAN 16 GAUGE BLACK ANNEALED WIRE. REINFORCING BAR SUPPORTS SHALL CONFORM TO THE BAR SUPPORT SPECIFICATIONS AND STANDARD NOMENCLATURE AS CONTAINED IN THE MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION AS PUBLISHED BY THE CONCRETE REINFORCING STEEL INSTITUTE. WHEREVER THE LEGS OF ANY SUPPORT DEVICE REST DIRECTLY UPON FORMS WHICH, AFTER STRIPPING, WILL EXPOSE THE CONCRETE SURFACES TO PERMANENT VIEW, THE DEVICES SHALL EITHER BE GALVANIZED OR PROVIDED WITH PLASTIC BUTTON TIPS AT THE ENDS TO PREVENT RUST STAINING OF THE CONCRETE.
7. ALL METHODS OF CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS SPECIFIED IN THE CURRENT NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
8. ALL MATERIALS SHALL BE SUBJECT TO INSPECTION PRIOR TO INCORPORATION INTO THE WORK.
9. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY FORMS AND FALSE WORK TO CONSTRUCT THE CONCRETE TO THE DESIGN DIMENSIONS. THE CONTRACTOR IS RESPONSIBLE FOR PLANNING AND EXECUTING THE ORDER OF CONSTRUCTION AND IS RESPONSIBLE FOR THE COST OF DEVIATION FROM THE ENGINEER'S CONSTRUCTION PLAN.

COMPACTED FILL

1. SATISFACTORY SOILS: ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, MH, SP, AND SM, OR A COMBINATION OF THESE GROUP SYMBOLS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES (76.2MM) IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER.
2. PLACE AND COMPACT FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS.
3. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL LAYER BEFORE COMPACTION TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT.
4. COMPACTION: PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
5. COMPACT SOIL TO 95 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 1557.
6. TESTING AGENCY: OWNER WILL ENGAGE A QUALIFIED INDEPENDENT GEOTECHNICAL ENGINEERING TESTING AGENCY TO PERFORM FIELD QUALITY-CONTROL TESTING.
7. ALLOW TESTING AGENCY TO INSPECT AND TEST SUBGRADES AND EACH FILL OR BACKFILL LAYER. PROVIDE EARTHQUAKE TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS.

WOOD FRAMING

4x14 SOUTHERN YELLOW PINE JOISTS, CCA TREATED

1. UNDER THIS ITEM THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND ALL ELSE NECESSARY TO SUPPLY AND INSTALL 4x14 SOUTHERN YELLOW PINE JOISTS, CCA TREATED AS SHOWN ON THE PLANS SUBJECT TO CHANGES NECESSITATED BY DEVIATION FROM THE PLANNED LOCATIONS OF THE TIMBER BENTS.
2. THIS ITEM INCLUDES ALL TOP FLANGE HANGERS, BOLTS, NUTS, WASHERS, ANCHORS, NAILS & SPIKES TO CONNECT THE JOISTS TO EACH OTHER AS WELL AS THE 30-POUND ROOFING FELT. THIS ITEM DOES NOT INCLUDE THE JOISTS ANCHORS, WHICH SECURE THE JOISTS TO THE CONCRETE BENTS.
3. A LAYOUT PLAN IS PROVIDED AND ANY DEVIATION FOR THESE PLANS ARE TO BE DOCUMENTED BY THE CONTRACTOR AND PROVIDED TO ENGINEER.
4. MATERIALS:

- A. EACH SHIPMENT OF SOUTHERN YELLOW PINE SHALL BE ACCOMPANIED BY A "GRADING CERTIFICATE OF INSPECTION", ISSUED BY THE SOUTHERN PINE INSPECTION BUREAU, OR APPROVED EQUAL.
- B. A COPY OF THE "GRADING CERTIFICATE OF INSPECTION", FOR EACH OF THE ABOVE, SHALL BE SENT DIRECTLY TO THE ENGINEER IMMEDIATELY UPON INSPECTION ON ANY PART OF THE MATERIAL. THE CONTRACTOR, HOWEVER, WILL BE REQUIRED TO ALSO SEND A COPY OF THE "GRADING CERTIFICATE OF INSPECTION" AS A REQUIRED SUBMITTAL SD-07.
- C. IN THE CASE OF PRESERVATIVE TREATMENT, FOR EACH SHIPMENT OF LUMBER, THE CONTRACTOR SHALL FURNISH A "TREATMENT CERTIFICATE" FROM A TESTING LABORATORY APPROVED BY THE ENGINEER, OR BY THE CODE INSPECTION INC.; FOREST SERVICES, INC.; FROELING AND ROBINSON INSPECTION CO.; TIMBER PRODUCTS, INC.; OR APPROVED EQUAL (ALL OF WHICH HAVE THE APPROVAL AND AUTHORIZATION OF THE AMERICAN WOOD PRESERVERS' BUREAU TO MAKE SAID TESTING AND CERTIFICATION), SAID CERTIFICATES TO CERTIFY AS TO THE PROPER TREATMENT REQUIRED BY THESE PLANS, INCLUDING THE TWENTY (20%) PERCENT MAXIMUM MOISTURE CONTENT REQUIREMENT, OR THE CONTRACTOR SHALL FURNISH A CERTIFICATE ISSUED BY A TREATMENT COMPANY DULY AUTHORIZED BY THE AMERICAN WOOD PRESERVERS' BUREAU, INDICATING THAT THE TREATMENT FOR THE RESPECTIVE SHIPMENT(S) WAS IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND THE AMERICAN WOOD PRESERVERS' BUREAU STANDARDS, SAID CERTIFICATE INDICATING THE RETENTION OF EACH SHIPMENT.
- D. EACH PIECE OF LUMBER TREATED WITH PENTACHLOROPHENOL OR WATER-BORNE PRESERVATIVES SHALL ALSO BEAR THE INSPECTION BRAND FROM THE SAID APPROVED TESTING LABORATORY OR THE AUTHORIZED BY THE AMERICAN WOOD PRESERVERS BUREAU (AWPB).
- E. THE LUMBER WILL BE RECEIVED SUBJECT TO THE RE-INSPECTION AS PROVIDED BY THE REFERRED TO GRADING RULING.
- F. SOUTHERN YELLOW PINE, ROUGH AND TREATED WITH CCA (0.6 PCF), TYPE C, SHALL BE OF THE GRADE, "DENSE SELECT STRUCTURAL", AS PER PARAGRAPH 311.1 OF THE SOUTHERN PINE INSPECTION BUREAU GRADING RULES (1994 EDITION).
- G. BOLTS SHALL BE ASTM STANDARD A 307, GRADE A. SPIKES AND NAILS SHALL BE COMMON WIRE TYPE AS PER AISI 10101 OR 1020 STEEL. HARDWARE SHALL BE HOT-DIP GALVANIZED AS PER ASTM A-123 OR A-153 AS APPLICABLE. ALL WASHERS SHALL BE ONE-QUARTER THICK ROUND PLATE WASHERS.
- H. ALL PLATES AND WASHERS SHALL BE GALVANIZED STEEL, UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE PLANS. ALL BOLTS SHALL BE FURNISHED WITH TWO ROUND PLATE WASHERS.
- I. UNLESS OTHERWISE INDICATED, LENGTH OF NAILS AND SPIKES SHALL NOT BE LESS THAN TWICE THE NOMINAL THICKNESS OF THE MATERIAL BEING NAILED.
- J. ROOFING FELT SHALL BE DESIGNATED 30 POUND AND MEET THE STANDARDS OF ASTM D4864.

CONSTRUCTION & INSTALLATION OF BOARDWALK JOISTS:

- A. THE CONTRACTOR IS CAUTIONED THAT SMALL CHANGES ACCEPTABLE AT ONE END OF A PANEL MAY RESULT IN UNACCEPTABLE CONDITIONS AT THE FAR END OF THE PANEL.
- B. DOUBLE AND TRIPLE JOISTS SHALL BE SECURED TO THE SUPPORTING BENTS WITH JOIST ANCHORS. THE SPECIFIED JOISTS SPACING MAY REQUIRE THE INSTALLATION OF JOIST ANCHORS PRIOR TO THE FINAL PLACEMENT OF THE ADJACENT JOISTS.
- C. THE RIM JOISTS AT THE EXTREME EDGE ON BOTH SIDES OF THE BOARDWALK HAVE BOLTED SPLICE PLATES. THE INSTALLATION AND TIGHTENING OF BOLTS WILL REQUIRE INSTALLATION OF SPLICE PLATES PRIOR TO THE FINAL PLACEMENT OF THE ADJACENT JOIST.
- D. JOISTS SHALL BE SELECTED AND LAID-OUT SO THAT WHEN THE DECK BOARDS ARE PLACED ON THE JOISTS UNIFORM CONTACT IS MADE BETWEEN ALL OF THE JOISTS AND THE DECK BOARD WITHOUT DEFLECTING THE DECK BOARDS OR JOISTS.
- E. THE JOISTS SHALL BE POSITIONED ON THE BENTS TO SIT SQUARELY AND VERTICALLY AND SHALL BE SPIKED TOGETHER AT LAP SPLICES TO HOLD PROPER ORIENTATION THROUGH THE ASSEMBLY OF THE BOARDWALK STRUCTURE.
- F. ROOFING FELT SHALL COVER THE FULL WIDTH OF A JOIST, DOUBLE JOIST OR TRIPLE JOIST AS A SINGLE WIDTH WITH NOT LESS THAN 1 INCH OVERLAP ON EACH SIDE. SEAMS ARE PERMITTED OVER STAGE SPLICES AND RIM JOIST SPLICE PLATES. ROOFING FELT DAMAGED BY CUTTING DECK BOARDS IN PLACE SHALL BE REPLACED OR MENDED TO THE SATISFACTION OF THE ENGINEER WITH A COMPATIBLE WATERPROOF SEALANT.
- G. WHILE THE JOIST PATTERN SHOWN CAN BE ACCOMPLISHED WITH CONSISTENT LENGTH JOISTS, THE CONTRACTOR MAY WISH TO HAVE A QUANTITY OF LONGER JOISTS IN THE EVENT THAT THE BENT SPACING DEVIATES FROM THESE STANDARDS. THE DEVIATION FROM THE CONTRACTOR IN ONE ITEM MAY RESULT IN NECESSARY ADJUSTMENTS IN OTHERS, THE COST OF WHICH IS TO BE BORNE BY THE CONTRACTOR. DEVIATIONS FROM THESE STANDARDS ARE ACCEPTABLE ONLY IF THE WORK CONFORMS TO ALL THE REQUIREMENTS LISTED UNDER CONSTRUCTION & INSTALLATION OF BOARDWALK DECKING AND THE FOLLOWING REQUIREMENTS FOR BOARDWALK JOISTS;

6. ALL JOISTS OTHER THAN RIM JOISTS SHALL HAVE NOT LESS THAN 24 SQUARE INCHES OF BEARING SURFACE AT EACH END.
7. RIM JOIST SHALL HAVE NOT LESS THAN 12 INCHES OF BEARING ON EACH END WITH THE EXCEPTION OF INSIDE CORNERS AT ANGLE POINTS IN THE BOARDWALK.
8. THE TOP SIDE OF SINGLE JOIST ENDS AT LAP SPLICES SHALL BE CHAMFERED TO REDUCE UPLIFT OF THE DECKING DURING BEAM DEFLECTION.
9. IT MAY BE NECESSARY TO NOTCH THE BOTTOM FACE OF JOISTS WHERE THE NEW WORK MATCHES INTO THE ELEVATION OF EXISTING WORK. ALL END SUPPORTED JOISTS THAT HAVE NOTCHED BOTTOM FACES SHALL HAVE SHEAR BOLTS INSTALLED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
10. USE OF SHIMS IS PERMITTED ONLY IF THE SHIM IS PERMANENTLY FASTENED TO THE JOIST AND THE SHIM COVERS THE FULL WIDTH OF THE JOIST WITH A MINIMUM OF 24 SQUARE INCHES OF BEARING.
11. ALL RIBBON BOARDS BETWEEN PANELS SHALL BE FULLY SUPPORTED BY A JOIST.
12. INSTALLED BOARDWALK DECK BOARDS SHALL HAVE A DOUBLE JOIST AS THE THIRD SUPPORT WHEN COUNTING THE JOIST SUPPORTING THE END OF THE BOARD AS ONE.
13. JOIST INSTALLATION SHALL BE COMPATIBLE WITH COMPLIANCE TO THE REQUIREMENTS FOR INSTALLATION OF BOARDWALK DECK.

JOISTS ANCHORS

1. UNDER THIS ITEM THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND ALL ELSE NECESSARY TO SUPPLY AND INSTALL JOISTS ANCHORS AT THE LOCATIONS SHOWN ON THESE PLANS. THIS INCLUDES THE JOIST ANCHOR AND ALL FASTENERS, LABOR AND EQUIPMENT NECESSARY TO INSTALL JOIST ANCHORS.
2. THE INSTALLATION OF JOIST ANCHORS REQUIRES ACCESS TO THE SIDES OF JOISTS WHICH MAY DICTATE THE INSTALLATION OF JOIST ANCHORS PRIOR TO THE SETTING OF THE ADJACENT JOIST.
3. ALL DOUBLE JOISTS SHALL BE SECURED WITH JOIST ANCHORS UNLESS JOISTS ON EACH SIDE OF THE BENT CANNOT BE TIED TOGETHER.

BOARDWALK DECKING

1. BOARDWALK DECK FASTENERS

- A. THE STAINLESS STEEL BOARDWALK DECK FASTENERS SHALL CONFORM TO ALL REQUIREMENTS SHOWN IN THE STANDARD BOARDWALK FASTENER & SHORT BOARDWALK FASTENER DETAILS ON THESE PLANS.
- B. ALL BOARDWALK DECK FASTENERS AND THE STAINLESS WIRE TO MAKE SAME SUPPLIED UNDER THESE SPECIFICATIONS ARE TO BE MANUFACTURED IN THE UNITED STATES OF AMERICA.
- C. BOARDWALK DECK FASTENERS SHALL BE FABRICATED FROM SERIES 302 STAINLESS STEEL AND ARE MANUFACTURED IN THE USA. THE CONTRACTOR SHALL PROVIDE CERTIFICATION STATING THE ORIGIN AND COMPOSITION OF WIRE USED TO FABRICATE BOARDWALK FASTENERS AND THE LOCATION OF FABRICATION.
- D. THE CONTRACTOR IS RESPONSIBLE TO SUPPLY ITS OWN #4 RECESS BITS THAT ARE NECESSARY TO INSTALL BOARDWALK FASTENERS.
2. DECKING SHALL BE INSTALLED A UNIFORM HERRINGBONE PATTERN WITH PARALLEL BOARDS SPACED WITH 0.238 INCHES BETWEEN ADJACENT FACES. THE SPACING BETWEEN ADJACENT BOARDS MAY BE ADJUSTED IN THE PANEL APPROACHING AN ALIGNMENT CHANGE IN THE BOARDWALK. THE SPACING BETWEEN ADJACENT PARALLEL DECK BOARDS SHALL BE NOT LESS THAN 1/16 OF AN INCH AND NOT MORE THAN 5/16 OF AN INCH.
3. THE ANGLE SHOWN IS SUGGESTED AS THE MINIMUM ANGLE FOR INSTALLATION AND RESULTS IN UTILIZING BOTH 14-FOOT LONG AND 16-FOOT LONG DECK BOARDS. THE CONTRACTOR IS CAUTIONED THAT SMALL CHANGES ACCEPTABLE AT ONE END OF A PANEL MAY RESULT IN UNACCEPTABLE CONDITIONS AT THE FAR END OF THE PANEL. THE PATTERN OF INSTALLATION IMPLEMENTED BY THE CONTRACTOR SHALL CONFORM TO THE FOLLOW REQUIREMENTS:
- A. SEE DETAIL "C" 5-3 FOR SCREW FASTENING PATTERN.
- B. EACH END OF A DECK BOARD THAT CAN BE SUBJECT TO PEDESTRIAN OR VEHICLE LOADS SHALL BE ANCHORED WITH A STANDARD BOARDWALK FASTENER TO A JOIST WITH NOT LESS THAN 14 SQUARE INCHES OF BEARING.
- C. THE MAXIMUM DISTANCE BETWEEN THE END OF A DECK BOARD AND A FASTENER IS 8 INCHES. THIS EXCLUDES THAT PORTION OF THE DECK THAT IS THE OVERHANG EDGE, WHICH IS NOT SUBJECT TO PEDESTRIAN OR VEHICLE LOADS.
- D. DECK BOARDS AT DOUBLE JOISTS SHALL BE ATTACHED TO ONLY ONE OF THE DOUBLE JOIST PAIR WITH THE OMITTED FASTENER IN ADJACENT DECK BOARDS BEING IN AN ALTERNATING PATTERN ALONG THE DOUBLE JOIST.
- E. ALL RIBBON BOARDS BETWEEN PANELS SHALL BE FULLY SUPPORTED BY A JOIST AND SHALL HAVE TWO FASTENERS WITHIN 24-INCHES OF EACH END AND AT INTERVALS OF 36-INCHES ELSEWHERE.
- F. BUTT SPLICES ARE PERMITTED ONLY WHERE END-TO-END DECK BOARDS CAN BE FASTENED TO THE SAME JOIST AND ACHIEVE THE REQUIRED MINIMUM END BEARING. THIS OCCURS FOR THE RIBBON BOARDS AND WHERE JOISTS ARE INSTALLED IN THE LAYOVER (14-INCH WIDE BY 4-INCH DEEP) ORIENTATION.
- G. THE DECK BOARD PATTERN, EXCLUDING RAMPS, IS TO BE BASED ON FUTURE MAINTENANCE USING 14 FOOT LONG AND 16-FOOT LONG DECK BOARDS. (THE CONTRACTOR MAY FIND IT BENEFICIAL TO ORDER QUANTITIES OF SHORTER BOARDS TO REDUCE WASTE.)
- H. INSTALLED BOARDWALK DECK BOARDS SHALL HAVE A DOUBLE JOIST AS THE THIRD SUPPORT WHEN COUNTING THE JOIST SUPPORTING THE END OF THE BOARD AS ONE. THE EXCEPTIONS ARE CRIPPLED BOARDS AT THE END OF A PANEL AND THOSE INSTANCES THAT OCCUR IN THE PROVIDED INSTALLATION PLAN. THIS RULE DOES NOT APPLY WHEN THE JOISTS ARE CONTINUOUSLY SUPPORTED AND NOT SUBJECT TO MEASURABLE DEFLECTION UNDER LOADS.
- I. NO BOARD IS TO BE RIPPED TO LESS THAN 2-1/4" IN WIDTH.

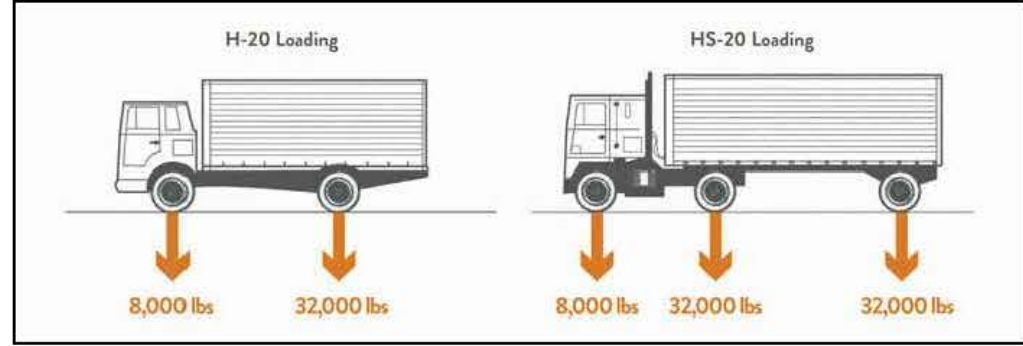
4. ACCEPTANCE OF COMPLETED WORK: NO WORK SHALL BE ACCEPTED BY THE ENGINEER PRIOR TO FINAL INSPECTION. THE CONTRACTOR SHALL PROTECT WORK IN PROGRESS AND COMPLETED WORK UNTIL FINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE FOR AND IS TO REPAIR ANY DAMAGE THAT MAY OCCUR PRIOR TO FINAL INSPECTION.
5. ANY INSTALLED PORTION OF THE DECKING THAT HAS FACE-TO-FACE GAPS EXCEEDING 5/16 INCH IS TO BE DISASSEMBLED AND REINSTALLED.
6. ANY WARPED, CUPPED OR OTHERWISE FAILING TO HAVE AN UPWARD FACING SURFACE THAT DOES NOT MEET GRADING STANDARDS SHALL BE REPLACED. DECK BOARDS SHALL NOT HAVE HOLES WITHOUT FASTENERS.
7. THE COMPLETED BOARDWALK DECK SHALL BE WITHOUT VERTICAL DISCONTINUITIES GREATER THAN 1/8 INCH.

DESIGN LOAD SCHEDULE

LIVE LOADS: = 10 OPSP
VEHICLE LOADS: = AASHTO H15-44LIVE LOADS

MAXIMUM LOADING ACROSS THE UTILITY MANHOLE SHALL NOT EXCEED H20 STANDARDS, WITH WHEEL LOADING AS NOTED.

INCREASED VEHICLE WEIGHT WILL REQUIRE SUPPLEMENTAL LOAD DISTRIBUTION.



MATERIAL SUPPLIED BY OWNER

2"x4" IPE DECKING
4"x14" P.T. JOISTS

MATERIAL WILL BE AVAILABLE AT THE CITY'S STORAGE YARD. ALL COSTS ASSOCIATED WITH TRANSPORTATION TO THE PROJECT SITE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR

HELICAL PILES BY MAGNUM PIERING INC.											
LEAD NO.	HELIX STEEL GRADE	SHAFT MATERIAL	A'	B'	C'	W'	T'	TORQUE RATING (FT-LBS)	ALLOWABLE COMPRESSION (KIPS) ^{*7A,B}	PILE CAP NO.	ALLOWABLE TENSION (KIPS) ^{*A}
C150-0397	50	S95	8"	10"	12"	1.5"	0.375"	5500	27.5	C1500793G	23.0
C150-0398	50	S95	10"	12"	14"	1.5"	0.375"	5500	27.5	C1500793G	23.0
C150-0399	50	S95	12"	14"	16"	1.5"	0.375"	5500	27.5	C1500793G	23.0
C150-0400	80	S9150	6"	8"	10"	1.5"	0.375"	7000	35.0	C1500793G	23.0
C150-0401	80	S9175	8"	10"	12"	1.75"	0.375"	11000	55.0	C1500794G	37.0
C150-0402	80	S9175	10"	12"	14"	1.75"	0.375"	11000	55.0	C1500794G	37.0
C150-0403	80	S9200	8"	10"	12"	2"	0.5"	16000	75.0 ^B	C1500795G	65.0
C150-0404	80	S9200	10"	12"	14"	2"	0.5"	16000	75.0 ^B	C1500795G	65.0

NOTES:

1. A = DIAMETER OF FIRST HELIX
2. B = DIAMETER OF SECOND HELIX
3. C = DIAMETER OF THIRD HELIX
4. W = WIDTH OF SOLID SQUARE SHAFT
5. T = THICKNESS OF HELICES
6. ALLOWABLE VALUES LISTED INCLUDE A SAFETY FACTOR OF 2.0
7. ALLOWABLE COMPRESSION VALUE BASED ON A CAPACITY-TO-TORQUE RATIO = 10.0(FT-1)
8. COMPRESSION VALUES ARE BASED ON THE FULL TORQUE RATING.
9. TENSION VALUES ARE LIMITED BY THE CAPACITY OF THE PILE CAP.
10. LIMITED BY MECHANICAL STRENGTH OF COUPLING BOLT.

* INSTALLATION TORQUE REQUIRED TO ACHIEVE 12.5 TON ALLOWABLE PILE CAPACITY = 5000 FT-LBS.

ATLANTIC CITY BOARDWALK RECONSTRUCTION PROJECT
BELLEVUE TO MISSOURI AVENUE
ATLANTIC CITY, NEW JERSEY

[Signature]
Lanell A. Carr, P.E. NO. 12-2469382700

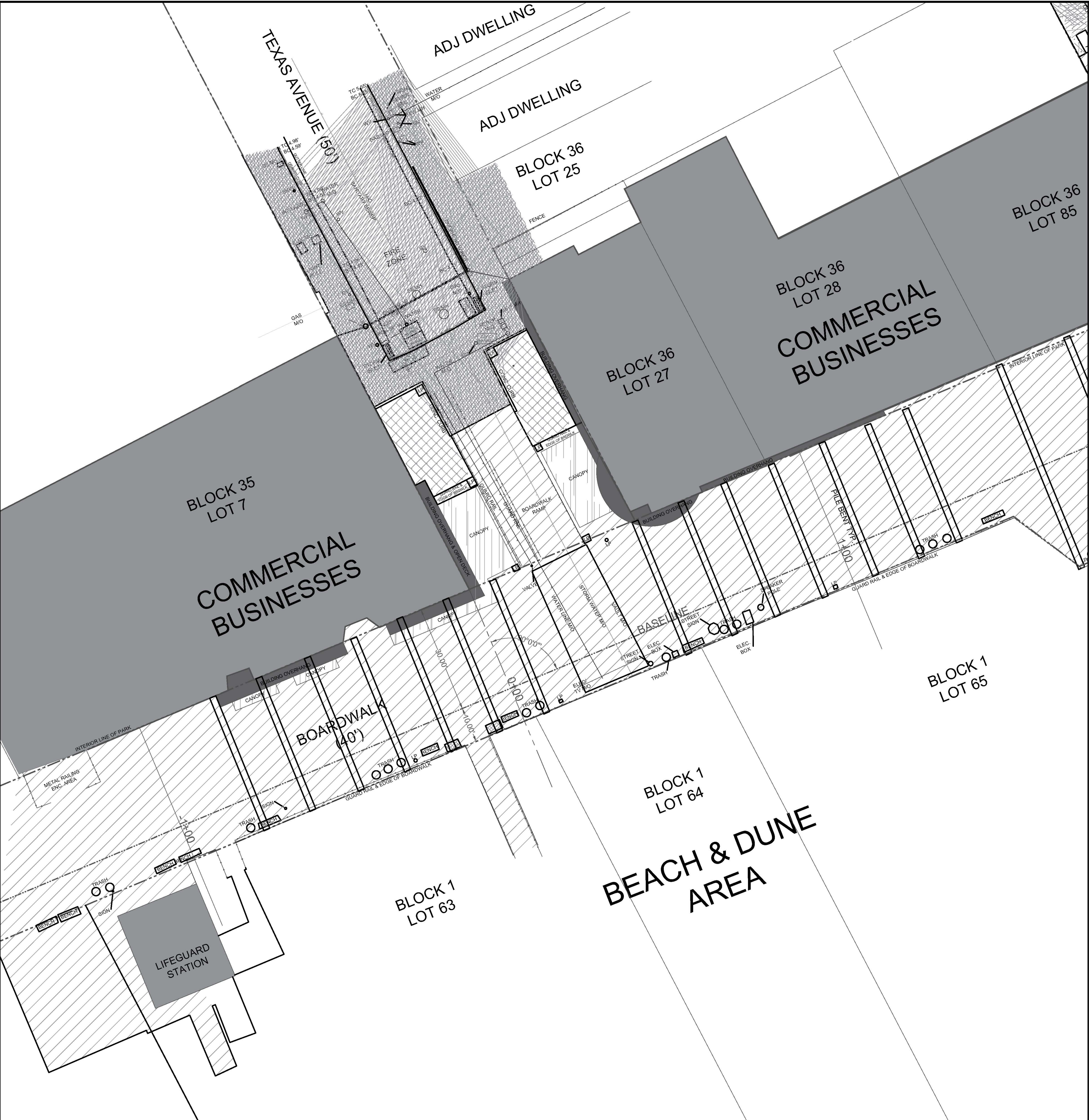
CZAR Engineering L.L.C.
5014 FERNWOOD AVENUE
Haddon Township, N.J. 08234-1647
Egg
(609) 653-9445

REV	DESCRIPTION	DATE
PROJ. No.		
DATE	02/24/23	
SCALE	AS NOTED	
DRAWN	ACE	
CHECKED	BC	

DWG. No.
S-11

1. ELEVATIONS REFERENCE NAVD 88 DATUM
2. ALL UTILITY MARK-OUT LOCATIONS SHOWN WERE LOCATED DURING FIELD SURVEY
3. UTILITY MARK-OUTS DENOTE UNDERGROUND UTILITY LINES
4. PILE BENTS SHOWN LOCATED DURING SURVEY, THOSE NOT SHOWN WERE NOT ACCESSIBLE AT TIME OF SURVEY.

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SEW MH- STORM WATER MANHOLE
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ACE MH- ATLANTIC CITY ELECTRIC MANHOLE
SFWL- SUITABLE FIT WET LOCATIONS MANHOLE



ARTHUR PONZIO CO. RESPONSIBILITIES DO NOT INCLUDE ANY FIELD INSPECTION, CONSTRUCTION MANAGEMENT, CONSTRUCTION OR CONTRACTOR'S COMPLIANCE WITH CONSTRUCTION DOCUMENTS.

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A2co ARTHUR PONZIO CO.
ENGINEERS ♦ SURVEYORS
PLANNERS

00 NORTH DOVER AVENUE, ATLANTIC CITY, N. J. 084
PHONE: 609-344-8184 FAX: 609-344-1584
NEW JERSEY STATE AUTH. NO.: 24GA28001300

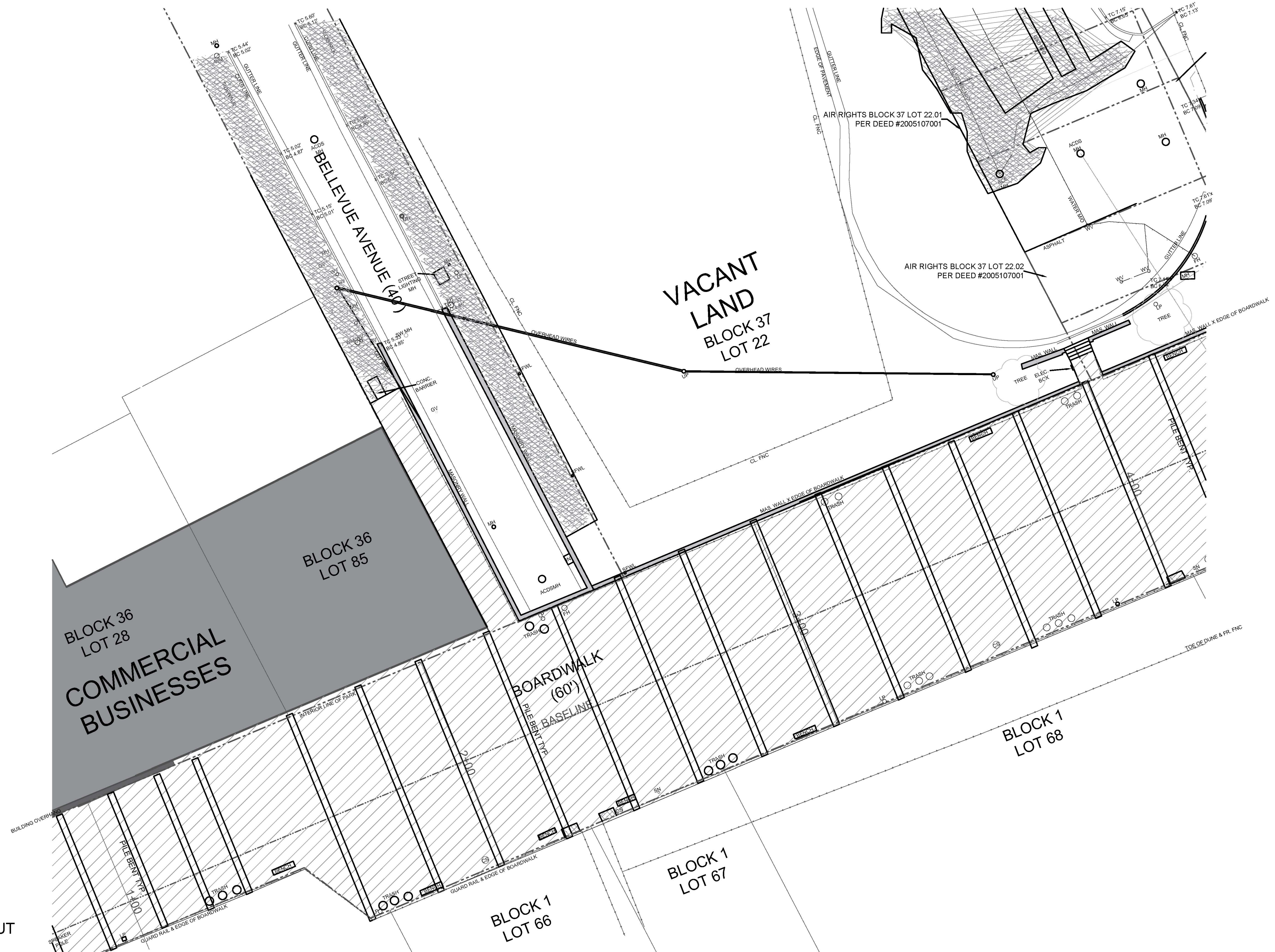
ARTHUR W. PONZIO, JR.
PROFESSIONAL PLANNER N.J. NO. 33LI0026760
PROFESSIONAL LAND SURVEYOR N.J. NO. 4GS0283140

TEXAS AVENUE BOARDWALK SURVEY BLOCK LOT ATLANTIC CITY ATLANTIC COUNTY NEW JERSEY	
SCALE: 1" = 15' DATE: 10/03/2022	BY: WER PROJ. NO. 40272

1. ELEVATIONS REFERENCE NAVD 88 DATUM
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LEGEND:

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ALL WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND SAFETY REQUIREMENTS AND SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST PROVISIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), THE HIGH VOLTAGE PROXIMITY ACT, STATE OF NEW JERSEY, ADOPTED 7/21/48 AS P.L. 1948, c 248, THE NEW JERSEY UNIFORM CONSTRUCTION CODE, ICC, ASTM SPECIFICATIONS, ALL LOCAL ORDINANCES AND PERMIT CONDITIONS.

ARTHUR PONZIO CO. RESPONSIBILITIES DO NOT INCLUDE ANY FIELD INSPECTION, CONSTRUCTION MANAGEMENT, CONSTRUCTION OR CONTRACTOR'S COMPLIANCE WITH CONSTRUCTION DOCUMENTS.

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ENGINEERS ♦ SURVEYORS
PLANNERS

00 NORTH DOVER AVENUE, ATLANTIC CITY, N. J. 084
PHONE: 609-344-8194 FAX: 609-344-1594
NEW JERSEY STATE AUTH. NO.: 246A28001300

ARTHUR W. PONZIO, JR.
PROFESSIONAL PLANNER N.J. NO. 33LI00267600
PROFESSIONAL LAND SURVEYOR N.J. NO. GS0283140

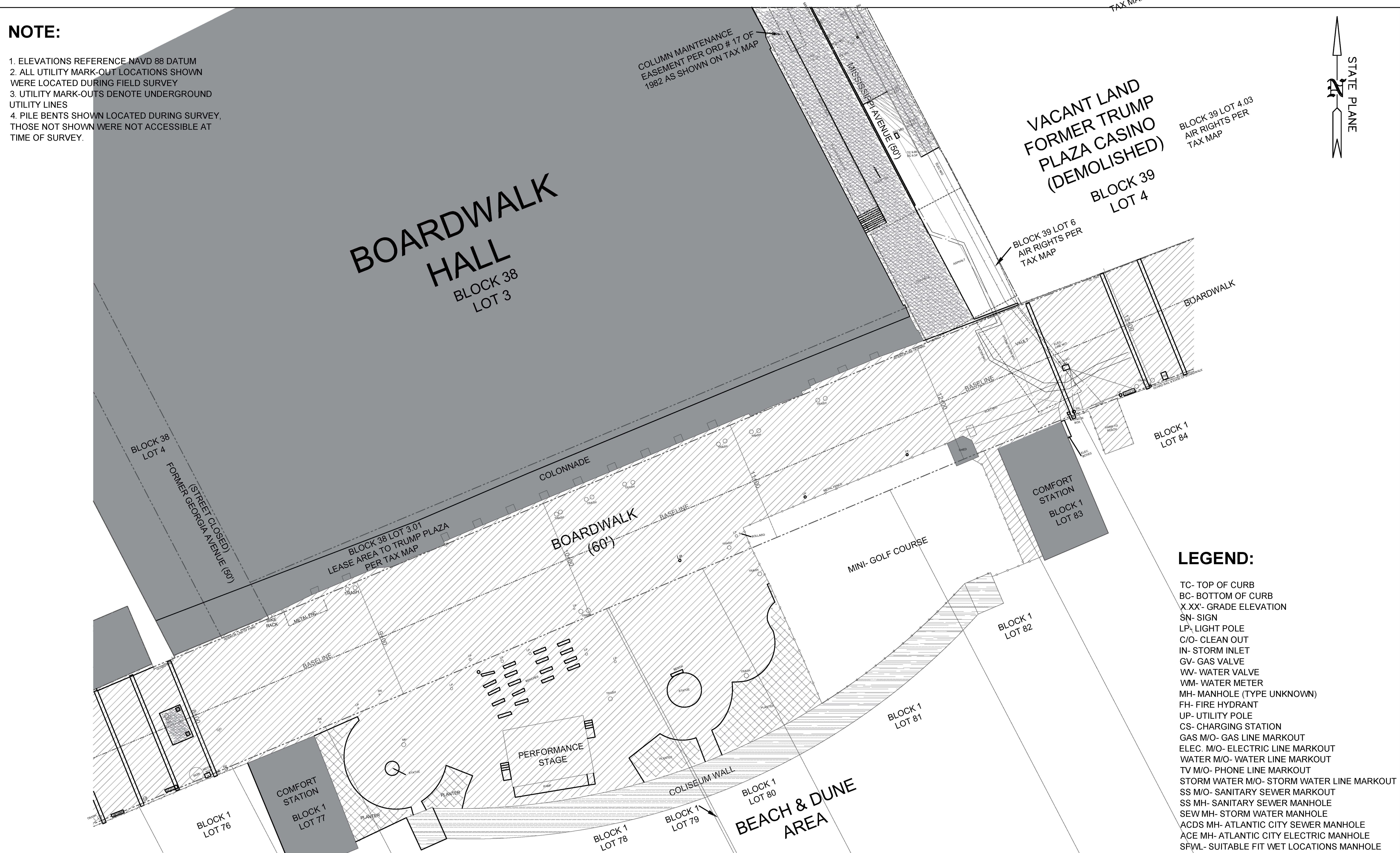
BELLEVUE AVENUE BOARDWALK SURVEY BLOCK LOT ATLANTIC CITY ATLANTIC COUNTY NEW JERSEY	
SCALE: 1" = 15' DATE: 10/03/2022	BY: WER PROJ. NO. 40272

[illegible]

ARTHUR W. PONZIO, JR.
PROFESSIONAL PLANNER N.J. NO. 33L00267600
PROFESSIONAL LAND SURVEYOR N.J. NDA4G0283140

SHEET NO.
3
SHEET 3 of 8

1. ELEVATIONS REFERENCE NAVD 88 DATUM
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ALL WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND SAFETY REQUIREMENTS AND SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL SAFETY CODE, THE NATIONAL ELECTRICAL CODE, THE 1964 VOLTAGE PROHIBITY ACT, STATE OF NEW JERSEY, ADAPTED 7/21/84 AS P.L. 104A, & 246, THE NEW JERSEY UNIFORM CONSTRUCTION CODE, IBC, ASTM SPECIFICATIONS, ALL LOCAL, STATE AND FEDERAL ORDINANCES AND ALL APPLICABLE CODES.

ARTHER POMBO CO. RESPONSIBILITIES DO NOT INCLUDE ANY FIELD INSPECTION, CONSTRUCTION MANAGEMENT, CONSTRUCTION OR CONTRACTOR'S COMPLIANCE WITH CONSTRUCTION

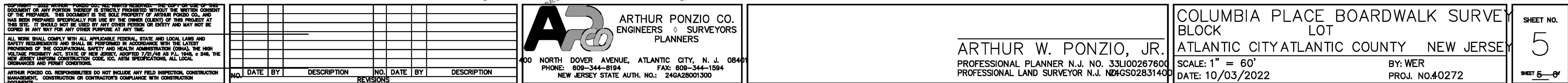
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A2co **ARTHUR PONZIO CO.**
ENGINEERS ♦ SURVEYORS
PLANNERS

00 NORTH DOVER AVENUE, ATLANTIC CITY, N. J. 084
PHONE: 609-344-8184 FAX: 609-344-1584
NEW JERSEY STATE AUTH. NO.: 24GA28001300

ARTHUR W. PONZIO, JR.
PROFESSIONAL PLANNER N.J. NO. 33LI0026760
PROFESSIONAL LAND SURVEYOR N.J. NO. GS0283140

MISSISSIPPI AVENUE BOARDWALK SURVEY BLOCK LOT ATLANTIC CITY ATLANTIC COUNTY NEW JERSEY		SHEET NO. <div style="font-size: 2em; font-weight: bold;">4</div>
SCALE: 1" = 20' DATE: 10/03/2022	BY: WER PROJ. No. 4.0272	SHEET <u>4</u> OF <u>8</u>



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SHEET 6-8

SEALED BID:

**BOARDWALK RECONSTRUCTION PROJECT
TEXAS AVENUE TO COLUMBIA PLACE**

Notice is hereby given that sealed bids shall be received when called for by the Purchasing Agent (the "**Purchasing Agent**") of the Department of Revenue and Finance, Purchasing Division (the "**Purchasing Division**") of the City of Atlantic City (the "**City**") at its meeting on:

TUESDAY, AUGUST 1, 2023 at 2:00 PM

Prevailing time, at which place and time sealed bids shall be opened & recorded.

Bid packages may be obtained via email tmooney@acnj.gov, kastin@acnj.gov and nkramer@acnj.gov or may be picked up in the Purchasing Division, Room 310 - City Hall, 1301 Bacharach Blvd., Atlantic City, NJ, 609-347-5393 (Monday-Friday 9:00 am-4:30 pm)

Bidders shall mail their bids to the attention of the City Clerk, Room 704 - City Hall, 1301 Bacharach Blvd., Atlantic City, New Jersey, 08401, or may deliver their bid in person, prior to the date and time stated above.

On the day of the scheduled Purchasing Board meeting a telephone capable of conference calling features shall be in place for the City Clerk and Purchasing Agent to utilize to officiate the meeting.

Interested parties may choose to dial into the meeting Phone Number: (844) 517-1442 **Access Code:** 132 992 5113, watch via live stream on the City Website www.acnj.gov or you may attend meeting in person.

The City shall not be responsible for bids that arrive late or to the wrong location regardless if such bids are hand delivered or sent by postage or overnight delivery, notwithstanding the postmark date on such bids. Late bids shall not be considered.

Bidders shall be required to comply with the requirements of N.J.A.C. 10:5-31 et seq. and N.J.A.C. 17:27, City of Atlantic City Ordinance 24 of 1993, and the Mayor's Executive Order No. 2 of 1994 and the requirements of N.J.S.A. 34:11-56.25 et. Seq (New Jersey Prevailing Wage Act), and Americans with Disabilities Act of 1990 (42 U.S.C. 12101, et. seq.).

The Contractor shall have and maintain an active SAMs registration and shall not appear on an excluded parties list or be subject to debt offset. The Contractor is encouraged to use, to the greatest extent practicable, iron and aluminum as well as steel, cement, and other manufactured products produced in the United States in every contract, subcontract, purchase order or sub-award that is chargeable under this Award.

A certified or cashier's check or bid bond and Certificate of Surety (as defined herein) shall accompany all bids, in accordance with the Specifications and Instructions to bidders. Bidder and any subcontractors shall be required to comply with the requirements of N.J.S.A. 34:11-56.48 et seq. Public Works Contractor Registration Act and shall be registered in accordance with the act.

Bidders shall be required to comply with N.J.S.A. 52:32-44 and submit proof of NJ Business Registration and submit proof of any business registration for any named subcontractors in accordance with the act.

A Pre-Bid Meeting has been scheduled for: Wednesday, June 28, 2023 at 10:00AM prevailing time at Texas Ave Boardwalk. All potential Bidders are strongly recommended to attend this meeting.

BID #23-13

Mary P. Mooney
Purchasing Agent
R.P.P.O. – Q.P.A



EDA

U.S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION

In partnership with



Project Manual For The

Boardwalk Reconstruction Project Texas Ave. to Columbia Place Atlantic City, New Jersey

EDA PROJECT # 01-79-15223
CITY OF ATLANTIC CITY BID 23-13



Prepared By:
CZAR Engineering, LLC

IN CASE OF ANY CONFLICT WITHIN THE CONSTRUCTION DOCUMENTS, THE ENGINEER OF RECORD CZAR ENGINEERING, LLC., SHALL DETERMINE WHICH OF THE REQUIREMENTS SHALL GOVERN BASED UPON THE MOST STRINGENT OF THE REQUIREMENTS, AND THE CONTRACTOR SHALL PERFORM THE WORK AT NO ADDITIONAL COST OR TIME TO THE CITY. ANY AMBIGUITY OR DISCREPANCY BETWEEN DRAWINGS AND SPECIFICATIONS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER OF RECORD, CZAR ENGINEERING, LLC., WHOSE DECISION SHALL BE CONCLUSIVE.

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PREVAILING WAGE RATES By Reference

SECTION 0

PROJECT SUMMARY

BOARDWALK RECONSTRUCTION PROJECT

SECTION 0 PROJECT SUMMARY

PART 1 - GENERAL

1.1 PROJECT

- A. Title: Boardwalk Reconstruction Project
 - a. Atlantic City Bid #23-13.
- B. Project Location: Bellevue Avenue to Columbia Place, Atlantic City, NJ
 - a. See project documents for specific locations.
- C. Owner: City of Atlantic City
- D. Engineer: CZAR Engineering, LLC
- E. This Project shall be performed under a single prime contract.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Work covered by the Contract Documents.
 - 2. Work under other contracts.
 - 3. Use of premises.
 - 4. Phasing of project.
 - 5. Project schedule.
 - 6. Specification formats and conventions.

1.2.1. GENERAL SCOPE OF WORK

The Work generally consists of two (2) major work activities:

- A. Re-Decking
 - a. Removal and disposal of the existing decking
 - b. Selective replacement of the existing pressure treated joists.
 - c. Selective concrete repairs
- B. Boardwalk Tunnel Repairs
 - a. Removal and disposal of the existing decking

BOARDWALK RECONSTRUCTION PROJECT

SECTION 0 PROJECT SUMMARY

- b. Coating upper roof section of the CIP tunnel
- c. Reconstruction of the framing system and installation of new decking
- C. Alternates
 - a. The project has two (2) Add Alternates
 - i. Add Alternate #1
 - 1. Re-decking from Columbia Place to Missouri Avenue
 - a. See project documents for specific area.
 - ii. Add Alternate #2
 - 1. Delete re-decking and install new cast in place high vehicle weight crossing from Mississippi Ave boardwalk ramp to the water side of the boardwalk.

CI. BASE BID QUANTITIES:

- a. Contractor shall include the following quantities and associated costs, within their bid. Adjustments, plus and or minus, shall be based on the unit price(s) listed within the Bid Form:
 - i. Replace Existing Joist 75ea.
 - ii. Repair Type #1 300 sf
 - iii. Repair Type #2 200 sf
 - iv. Repair Type #3 150 lf.
 - v. Repair Type #4 15 ea
 - vi. Repair Type #5 10 ea
 - vii. Repair Type #6 300 lf
 - viii. Repair Type #7 20 ea
 - ix. F & I Helical Piles 5ea (in addition to quantity specified on plans)

1.2.2. WORK UNDER OTHER CONTRACTS

- A. IPE decking and pressure treated joists shall be supplied by the City of Atlantic City. All other materials shall be supplied by the contractor.

BOARDWALK RECONSTRUCTION PROJECT

SECTION 0 PROJECT SUMMARY

1.2.3. USE OF PREMISES

- A. General: Contractor shall have limited use of premises for construction operations.
- B. Nonsmoking Project: Smoking is not permitted within the project site area.

1.2.4. OWNER'S OCCUPANCY REQUIREMENTS

- A. Owner Occupancy: Allow for Owner occupancy of project site, building and the use of same by the public during construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate both Owner and public usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits, unless otherwise indicated.
- B. Driveways and Entrances: Keep driveways, walkways, ADA access and other entrances serving premises the immediate project area clear and available to Owner, employees, public, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Maintain access to existing walkways, corridors, other adjacent occupied or used facilities and fire service(s)

Do not close or obstruct driveways, walkways, corridors, or other occupied or used facilities outside of the immediate construction area without written permission from Owner and authorities having jurisdiction.

Supply, install and maintain temporary pedestrian, ADA & vehicular directional signage during construction. This includes temporary identification of ADA parking stalls should the permanent ones be impacted by construction. All temporary signage to be updated as needed throughout the project. See specifications for temporary access requirements.

1.2.5. PHASING OF PROJECT

- A. Contractor shall be responsible to maintain unencumbered operation of the complex's facilities, adjacent streets, walkways and parking areas, throughout the entirety of the project.
- B. The work shall be conducted to provide the least possible interference to the activities of the Owner's personnel and the public.

BOARDWALK RECONSTRUCTION PROJECT

SECTION 0 PROJECT SUMMARY

- C. Schedule deliveries to minimize use of driveways, entrances, and to minimize space and time requirements for storage of materials and equipment on-site.

1.2.6. PROJECT SCHEDULE

Project shall be completed within 365 calendar days.

A. Special Events

The Project Area may have events previously scheduled that shall take place at the during the period of construction. The Contractor shall have need to accommodate these events and work around them. These events, if any, shall be discussed at the scheduled project meeting(s) and included in the meeting minutes for the contractor to reference throughout the project, with updates as required.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 1

CITY of ATLANTIC CITY PROCUREMENT and CONTRACTING REQUIREMENTS

Notice is hereby given that sealed bids shall be received when called for by the Purchasing Agent (the "Purchasing Agent") of the Department of Revenue and Finance, Purchasing Division (the "Purchasing Division") of the City of Atlantic City (the "City") at its meeting on:

TUESDAY, _____, 2023 at 2:00 PM

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A certified or cashier's check or bid bond and Certificate of Surety (as defined herein) shall accompany all bids, in accordance with the Specifications and Instructions to bidders. Bidder and any subcontractors shall be required to comply with the requirements of N.J.S.A. 34:11-56.48 et seq. Public Works Contractor Registration Act and shall be registered in accordance with the act.

Bidders shall be required to comply with N.J.S.A. 52:32-44 and submit proof of NJ Business Registration and submit proof of any business registration for any named subcontractors in accordance with the act.

A Pre-Bid Meeting has been scheduled for: at _____ PM prevailing time.
All potential Bidders are strongly recommended to attend this meeting to be held at _____.

A: GENERAL INSTRUCTIONS

1.1 ADDENDA, INTERPRETATIONS & BID SPECIFICATION CHALLENGES

No interpretations of the meaning of the specifications, plans or contract documents shall be made to any bidder orally. All questions and requests for interpretation concerning this bid shall be addressed in writing, via facsimile and email, to the following:

**City of Atlantic City
1301 Bacharach Boulevard, Room 310
Atlantic City, New Jersey 08401
Attn: Purchasing Agent
Fax: 609-347-5250
tmooney@acnj.gov, kastin@acnj.gov and nkramer@acnj.gov**

RFI DEADLINE: All RFI shall be received by 2023

Any and all such interpretations and/or supplemental instructions shall be in the form of written addenda to the specifications, which if issued, shall be issued in accordance with applicable State Laws.

Any challenge to the bid specifications shall be submitted, in writing, to the City Solicitor's Office (with a copy sent to Purchasing Department) **three (3) business days** prior to the bid opening date, via certified mail or hand delivered. If the challenge is not submitted three business days prior to the bid opening date, the challenge shall not be considered and is considered waived by the bidder. **Challenges noted in the exceptions page within the bid package shall not be accepted.**

The City of Atlantic City reserves the right to purchase items from State Contract and Atlantic County Pricing Agreement Contracts vendors, if serves the interest of the City of Atlantic City.

All addenda so issued shall become part of the contract documents, and shall be attached to the bid form when submitted (RE: N.J.S.A. 40A:11-23.1(a))

1.2 SUBMISSION OF BIDS

Bid shall be submitted in a package clearly marked "BID ENVELOPE." Bidder's name and address together with bid name and due date shall appear on the outside of the envelope containing bid.

The Bid Tabulation Sheets shall be posted onto the City's webpage as soon as possible following the review and preparation of the sheets. (Approximate 24 hr. turn around)

1.3 PRICE TO INCLUDE

The bid submitted shall cover the entire cost of the contemplated services as described in the specifications. The price bid shall cover the entire cost of services and completion, including all materials, workmanship, and appurtenances necessary for its completion by description in the specifications, or to be reasonably inferred therefrom.

1.4 AWARD OR REJECTION OF BIDS

The award of the contract shall be made, subject to necessary monies to do the work being provided by the City in accordance with the requirements contained in N.J.A.C. 5:30, Local Finance Board either by Resolution, Ordinance, or in other lawful manner. The contract to be executed by the successful bidder shall become effective only after the receipt of a written purchase order from the Purchasing Department.

In accordance with N.J.S.A. 34:11-56.25 et seq., New Jersey State Prevailing Wage Act, no contract shall be awarded to any contractor, subcontractor, or to any firm, corporation, or partnership in which such contractor/subcontractor has an interest, who is debarred from public works.

As of February 20, 2020, any contractor that is debarred at the federal level from contracting with a federal government agency shall be debarred from contracting for any public work in the state. This law applies to the construction of buildings, roads, and bridges at the expense of the public. See Public Law 2019, c. 406, codified at N.J.S.A. 52:32-44.1. Prior to awarding any contract for public work, a contractor shall provide written certification to the contracting agency that neither the contractor nor their affiliates are debarred at the federal level from contracting with a federal government agency. The contracting agency shall not make, negotiate, or award a contract for public work to any contractor that does not provide such written certification as required by this subsection. The contracting agency shall verify the certification by consulting the federal System for Award Management, or its successor, prior to awarding a contract for public work.

Bids received from bidders who have previously failed to complete contracts within the time scheduled therefore, or who have performed prior work for the City in an unacceptable manner, may be rejected pursuant to applicable law.

The City reserves the right to reject all bids, to reject any bid or bids not complying with the specifications, and to waive minor informalities in any bid or bids if such waiver be deemed by the City to be in the best interests of the City in accordance with the requirements contained in N.J.S.A. 40A:11-1 et seq.

B: CONDITIONS APPLICABLE TO CONTRACT

The project is being funded by the United States Department of Housing and Urban Development (HUD) through a federal grant program known as the Community Development Block Grant-Disaster Recovery (CDBG-DR) program. The funding is administered by the New Jersey Department of Environmental Protection as the Flood Hazard Risk Reduction and Resiliency Grant Program (FHRRRG). Throughout these specifications if there are any rules and regulations that are applicable to Federal, State and Local requirements, the more stringent of the rules and regulations shall apply.

Attention is called to the Bidder to thoroughly examine the CDBG-DR Checklist and the NJDEP Project Requirements sections located at the back of this package "Flood Hazard Risk Reduction & Resiliency Grant Program CDBG-DR Bid Package Handbook." Included within the NJDEP Project Requirements is information on Section 3 of the Housing and Urban Development (HUD) Act of 1968. Failure to submit a Section 3 Utilization plan may be cause for rejection of bid. Failure to provide DUNS number and certificate of Non-Debarment and Suspension may be cause for rejection of bid.

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The successful bidder shall comply with all provisions and conditions included in the Bid Specifications. Attention of bidders is particularly called to the requirements as to conditions of employment to be observed and federal and state prevailing wage rates to be paid under the contract; Federal Labor Standards form HUD-4010; Section 3 of the Housing and Urban Development Act of 1968; Section 109 of Title I of the Housing and Urban Development Act of 1974 (prohibiting discrimination); and Equal Employment Opportunity Executive Order 11246. Additional monitoring for compliance with Federal Labor Standards shall be conducted and may include, but is not limited to, requests for pay stubs, cancelled checks and monthly fringe benefit contribution report."

SECTION 3 CONTRACT CLAUSE FOR COVERED CONTRACTS

- A. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- B. The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 75 which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with 24 CFR Part 75 regulations.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The contractor agrees to include this Section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 75 and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 75. The contractor will

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E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR Part 75 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR Part 75

F. Noncompliance with HUD's regulations in 24 CFR Part 75 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

G. With respect to work performed in connection with Section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5307) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of Section 3 and Section 7(b) agree to comply with Section 3 to the maximum extent feasible, but not in derogation of compliance with Section 7(b).

SWMVBE OUTREACH REQUIREMENTS AND PROCEDURES

Please note below the Federal requirement for SWMVBE outreach during the bidding process. Please printout and upload into Sandy Integrated Recovery Operations and Management System (SIROMS) all outreach efforts made (i.e. emails, web page snap shots, etc.):

Federal Regulation: 2 CFR 200.321 - Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms.

- (a) The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.
- (b) Affirmative steps must include:
 - (1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
 - (2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
 - (3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
 - (4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
 - (5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
 - (6) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (1) through (5) of this section.

HUD document for reference on how to implement this working with

Small & Disadvantaged Business Utilization

https://www.hud.gov/program_offices/sdbHUD

Section 3 Business database:

<https://portalapps.hud.gov/Sec3BusReg/BRegistry/SearchBusiness>

New Jersey requirements:

Please visit the NJ Selective Assistance Vendor Information (NJSAVI) Database located on this page to find potential vendors to solicit:

https://www20.state.nj.us/TYTR_SAVI/vendorSearch.jsp

LABOR POSTERS

Verify that wage determinations and Davis-Bacon posters in both English and Spanish are posted on a visible place on site. This must be checked every time NJ DEP does a site inspection.

- a) Labor Standards Posters
 - i) <http://www.dol.gov/compliance/topics/posters.htm>
 - (1) Notice to All Employees Working on Federal or Federally Financed Construction Projects (Davis-Bacon Act)
 - (2) "Equal Employment Opportunity is the Law" Poster (EEO)
 - (3) "Employee Rights on Government Contracts" Poster (SCA, CWHSSA, Walsh-Healey)
 - (4) "Notification of Employee Rights Under Federal Labor Laws" Poster
- b) New Jersey Labor and Workforce Development posters
- c) <https://www.nj.gov/labor/wageandhour/tools-resources/forms-publications/employer-poster-packet/>
 - i)
 - (1) Wage & hour Law Abstract
 - (2) Child Labor Laws
 - (3) Reporting and Record keeping Requirements Under State Wage, Benefit and Tax Laws
 - (4) Payment of Wages
 - (5) Schedule of Minors' Hours
 - (6) Family Leave Insurance
 - (7) PR-1, Poster- Unemployment & Disability Insurance
 - (8) CEPA (Whistle Blower)
 - (9) New Jersey Safe Act
 - (10) Gender Equity Notice - English and Spanish
- d) NJ Sandy Fraud Prevention Hotline Poster



SANDY REBUILDING AND RECONSTRUCTION
FRAUD PREVENTION HOTLINE

TO PREVENT FRAUD PLEASE REPORT ANY SUSPICION OF:

- FRAUDULENT ACTIVITY
- THEFT
- WASTE
- BRIBES OR KICKBACKS
- UNETHICAL OR ILLEGAL CONDUCT

Call Toll Free
1-855-OSC-TIPS
(1-855-672-8477)

Or Contact Us At
comptrollertips@osc.state.nj.us

ALL COMMUNICATIONS WILL BE KEPT CONFIDENTIAL

State of New Jersey/Office of the State Comptroller
www.nj.gov/comptroller/sandytransparency/

TO PREVENT FRAUD PLEASE REPORT ANY SUSPICION OF:

- **FRAUDULENT ACTIVITY**
- **THEFT**
- **WASTE**
- **BRIBES OR KICKBACKS**
- **UNETHICAL OR ILLEGAL CONDUCT**

STATEMENT OF ASSURANCES FOR CONTRACTOR/CONSULTANT

**ADDITIONAL FEDERALLY FUNDED AGREEMENT PROVISIONS
APPLICABLE TO COMMUNITY DEVELOPMENT BLOCK GRANT-
DISASTER RECOVERY FUNDED PROJECTS**

The purpose of this Statement of Assurances is to list requirements applicable to programs funded in whole or in part by Community Development Block Grant-Disaster Recovery (“CDBG-DR”) funds received from the U.S. Department of Housing and Urban Development (“HUD”). Not all of the requirements listed herein shall apply to all activities or work under the Contract.

As used herein, “Contractor” and “Consultant” refer to any contractors or consultants awarded a Contract to provide goods or perform services in connection with the Project and paid with CDBG-DR funds.

Contractor/Consultant agrees to comply with all *applicable* federal CDBG-DR laws, guidelines and standards in a manner satisfactory to the State and HUD, including all administration and compliance requirements set forth by this Statement of Assurances. To the extent that Contractor/Consultant utilizes any subconsultants/subcontractors, Contractor/Consultant shall require and ensure that each subconsultant/subcontractor comply with all *applicable* federal CDBG-DR laws, guidelines and standards; any subcontracts entered into by Consultant shall set forth these requirements. Contractor/Consultant also agrees to comply with all *applicable* cross-cutting statutes and regulations, subject to waivers cited in the Federal Register, Docket No. FR-5696-N-01 (March 5, 2013) (Allocations, Common Application, Waivers, and Alternative Requirements for Grantees Receiving CDBG - DR funds in Response to Superstorm Sandy), as supplemented by additional applicable Notices published by HUD in the Federal Register.

Contractor/Consultant agrees to comply with the requirements of Title 24 of the CFR, Part 570 (HUD regulations concerning Community Development Block Grants).

The failure to list herein a legal requirement applicable to services performed by Contractor/Consultant does not relieve the Contractor/Consultant from complying with that requirement.

A. GENERAL PROVISIONS

1. Under provisions of the Hatch Act that limit the political activity of employees and HUD regulations governing political activity (24 CFR 570.207), CDBG funds shall not be used to finance the use of facilities or equipment for political purposes or to engage in other partisan political activities, such as candidate forums, voter transportation, or voter registration. However, a facility originally assisted with CDBG funds may be used on an incidental basis to hold political meetings, candidate forums, or voter registration campaigns, provided that all parties and organizations have access to the facility on an equal basis, and are assessed equal rent or use charges, if any.

2. Under provisions of the Byrd Anti-Lobbying Amendment, 31 U.S.C. 1352, Contractors/Consultants that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

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3. No federally appointed funds shall be used for lobbying purposes regardless of level of government, in accordance with 2 CFR 200.450.
4. HUD rules prohibit the use of CDBG funds for inherently religious activities, as set forth in 24 CFR 570.200(j), except for circumstances specified in the Department of Housing and Urban Development Allocations, Common Application, Waivers, and Alternative Requirements for Grantees Receiving CDBG Disaster Recovery Funds in Response, 78 FR 14329 (March 5, 2013).
5. HUD rules impose drug-free workplace requirements in Subpart B of 2 CFR part 2429, which adopts the government-wide implementation (2 CFR Part 182) of sections 5152-5158 of the Drug-Free Workplace Act of 1988.
6. Citizens will be provided with an appropriate address, phone number, and times during which they may submit complaints regarding activities carried out utilizing these CDBG-DR funds. The State will provide a written response to every citizen complaint within fifteen (15) working days of the complaint.

B. PERSONALLY IDENTIFIABLE INFORMATION: To the extent the Contractor/Consultant receives personally identifiable information, it will comply with the Privacy Act of 1974 and HUD rules and regulations related to the protection of personally identifiable information. The term “personally identifiable information” refers to information which can be used to distinguish or trace an individual’s identity, such as their name, social security number, biometric records, etc., either alone or when combined with other personal or identifying information which is linked or linkable to a specific individual, such as date and place of birth, mother’s maiden name, etc. See 2 CFR 200.79 & OMB M-07-16. Contractor/Consultant shall require all persons that have access to personally identifiable information (including subcontractors/subconsultants and their employees) to sign a Non-Disclosure Agreement.

C. FINANCIAL MANAGEMENT AND PROCUREMENT

1. *To the extent applicable*, Contractor/Consultant shall adhere to the principles and standards governing federal grant distribution as set forth in the OMB Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (2 CFR Part 200).
2. Contractor/Consultant shall comply with all *applicable* laws pertaining to financial management, including 2 CFR Part 180 and 2 CFR Part 2424, which prohibit the making of any award or permitting any award (sub grant or contract) at any tier to any party that is debarred or suspended or is otherwise excluded from or ineligible for participation in federal assistance programs. To the extent that it uses subcontractors or subconsultants, Contractor must verify that none of them are on the List of Parties Excluded from Federal Procurement or Non-procurement Programs promulgated in accordance with Executive Orders 12549 and 12689, “Debarment and Suspension,” as set forth at 2 CFR Part 2424. No Contractors or Subcontractors that are on the List may receive any CDBG funds.
3. Conflict of interest rules, as set forth in 24 CFR 570.489, 24 CFR 570.611, and 2 CFR 200.112, apply. Contractor/Consultant shall disclose in writing any potential conflict of interest to DPMC and DEP.
4. *To the extent applicable*, Contractor/Consultant shall comply with 24 CFR Part 570 regarding the management and disposition of cash, real and personal property acquired with CDBG-DR funds.

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5. *To the extent applicable*, Contractor/Consultant shall comply with 24 CFR 570.489(j) regarding change of use of real property. These standards apply to real property within its control (including activities undertaken by subcontractors/subconsultants). These standards apply from the date CDBG-DR funds are first spent until five years after the close-out of the Program.

D. RECORDS AND RECORDS RETENTION

1. In accordance with 2 CFR 200.333, 24 CFR 570.502 and 570.506, Contractor/Consultant shall retain financial records, supporting documents, statistical records, and all other records pertinent to this Agreement. The retention period shall be the longer of three (3) years after the expiration or termination of this Agreement, or three years after the submission of the annual performance and evaluation report in which the project is reported on for the final time, except that records for activities subject to the reversion of assets provisions at § 570.503(b)(7) or change of use provisions at § 570.505 must be maintained for as long as those provisions continue to apply to the activity. Notwithstanding the above, if any litigation, claim, or audit pertaining to the Agreement is started before the expiration of the applicable retention period, records must be retained until completion of the action and resolution of all issues which arise from it, or until the end of the required retention period, whichever is later.

2. Contractor/Consultant shall provide the State and HUD, including their representatives or agents, access to and the right to examine all records, books, papers, or documents related to the Contract and the use of CDBG funds.

E. FEDERAL LABOR STANDARDS: *To the extent applicable*, Contractor/Consultant shall comply with Federal Labor Standards, including:

1. Section 110 of the Housing and Community Development Act of 1974, 42 U.S.C. §5310, 24 CFR §570.603 and HUD Handbook 1344.1 Federal Labor Standards Requirements in Housing and Urban Development Programs, as revised, which require that all laborers and mechanics (as defined at 29 CFR §5.2) employed by Contractor/Consultant (including its subcontractors/subconsultants) in connection with construction contracts over \$2,000, are paid wages at rates not less than those prevailing on similar construction in the locality as per the Davis-Bacon Act (40 U.S.C. §3141 *et seq.*), as amended; except that these requirements do not apply to the rehabilitation of residential property if such property contains less than 8 units;

2. The Contract Work Hours and Safety Standards Act (40 U.S.C. 3701 *et seq.*), requiring that mechanics and laborers (including watchmen and guards) employed on federally assisted contracts of \$100,000 or greater be paid wages of not less than one and one-half times their basic wage rates for all hours worked in excess of forty hours in a work-week, and projects must comply with safety standards;

3. The Federal Fair Labor Standards Act (29 U.S.C. 201 *et seq.*), requiring that covered nonexempt employees be paid at least the minimum prescribed wage, and also that they be paid one and one-half times their basic wage rate for all hours worked in excess of the prescribed work-week;

4. The Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR part 3), which apply to contracts and subcontracts for construction, prosecution, completion, or repair of public buildings, public works or buildings, or works financed in whole or in part by Federal loans or grants, and requires payment of wages once a week and allows only permissible payroll deductions;

5. Department of Labor regulations in parallel with HUD requirements above:

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- a. 29 CFR part 1: Procedures for Predetermination of Wage Rates
 - b. 29 CFR part 5: Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction (Also, Labor Standards Provisions Applicable to Non-construction Contracts Subject to the Contract Work Hours and Safety Standards Act)
 - c. 29 CFR part 6: Rules of Practice for Administrative Proceedings Enforcing Labor Standards In Federal and Federally Assisted Construction Contracts and Federal Service Contracts
 - d. 29 CFR part 7: Practice Before the Administrative Review Board With Regard to Federal and Federally Assisted Construction Contracts.
6. All applicable Federal Labor Standards provisions set forth in form HUD-4010. Consultant/Contractor will ensure that form HUD-4010 is included in all bid packages and subcontracts entered into with contractors, consultants, or other third parties to supply goods or perform services in connection with the Contract activities and paid with CDBG-DR funds.

F. SECTION 3 REQUIREMENTS

1. *To the extent applicable*, Contractor/Consultant shall comply with Section 3 of the Housing and Urban Development Act of 1968, as amended (“Section 3”). Section 3 is intended to ensure, to the greatest extent feasible, that training, employment, contracting, and other economic opportunities generated by Section 3 covered financial assistance shall be directed to low-income residents of the neighborhood where the financial assistance is spent, and to businesses that are either owned by low-income residents of the neighborhood where the financial assistance is spent, or substantially employ these persons. Section 3 applies to any activity that involves housing construction, rehabilitation, and demolition, or other public construction projects when the total amount of HUD assistance to the project exceeds \$200,000. A guide to Section 3 applicability and compliance requirements is located at HUD’s website, <https://www.hud.gov/section3>. The requirements apply to an entire Section 3 Project, regardless of whether the project is fully or partially assisted under HUD programs that provide housing and community development financial assistance.
2. Contractor/Consultant agrees to comply with federal regulations in 24 CFR part 75, which implement Section 3, including the employment, training, and contracting requirements of 24 CFR 75.19. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 75 regulations.
3. The Contractor/Consultant agrees to notify potential subcontractors that are associated with Section 3 covered projects and activities about the requirements of Section 3, to include this Section 3 clause in every contract and subcontract subject to compliance with regulations in 24 CFR part 75, and to ensure that any subcontractors also include this Section 3 clause in their subcontracts for work performed on the project.
4. The Contractor/Consultant will not subcontract with any subcontractor where the contractor/consultant has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 75.

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5. The Contractor/Consultant agrees to maintain hiring and contracting practices to the greatest extent feasible so that 25 percent of the total labor hours expended on the project are by Section 3 Workers, of which 5 percent are by Targeted Section 3 Workers as defined in 24 CFR part 75. As part of these practices, Contractor/Consultant agrees to provide priority consideration to eligible residents and businesses in accordance with 24 CFR Part 75, as applicable. If the Contractor/Consultant is not able to meet this benchmark goal, it must provide a narrative of efforts taken and supporting documentation explaining why it was unable to meet that goal, despite greatest extent feasible efforts taken.
6. If applicable, Contractor/Consultant agrees to notify each labor organization or representative of workers with which the Contractor/Consultant has a collective bargaining or similar labor agreement or other understanding, if any, about its obligation to comply with the requirements of Section 3 and ensure that new collective bargaining or similar labor agreements provide employment, registered apprenticeship, training, subcontracting, or other economic opportunities to Section 3 Workers and businesses, and to post notices in conspicuous places at the work site advising the labor union, organization, or workers' representative of the contractor's commitments under Section 3.
7. Contractor/Consultant agrees to comply with all monitoring, reporting, recordkeeping, and other procedures specified by HUD. The Contractor/Consultant is responsible for providing Section 3 performance metrics and supporting documentation for all of its contractors and subcontractors, as applicable.

G. FAIR HOUSING AND NON-DISCRIMINATION

1. *To the extent applicable*, Contractor/Consultant shall comply with the following fair housing and non-discrimination laws. Any act of unlawful discrimination committed by Contractor/Consultant or failure to comply with applicable laws shall be grounds for termination of the Contract.
 - a. Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. §200d *et seq.*, and the regulations issued pursuant thereto (24 CFR Part 1), which provide that no person in the United States shall on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which it receives federal financial assistance and shall immediately take any measures necessary to effectuate this assurance. If any real property or structure thereon is provided or improved with the aid of federal financial assistance extended to it this assurance shall obligate it, or in the case of any transfer of such property, and transferee, for the period during which the property or structure is used for another purpose involving the provision of similar services or benefits.
 - b. Fair Housing Act (Title VIII of the Civil Rights Act of 1968, as amended, 42 U.S.C. 3601–3619), which requires administering all programs and activities relating to housing and community development in a manner to affirmatively further fair housing. Title VIII further prohibits discrimination against any person in the sale or rental of housing, or the provision of brokerage services, including in any way making unavailable or denying a dwelling to any person, because of race, color, religion, sex, national origin, handicap or familial status.

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- c. Title II of the Civil Rights Act of 1968 (25 U.S.C. 1301-1303), which prohibits discrimination because of race, color, religion, or natural origin in certain places of public accommodation.
- d. Architectural Barriers Act (ABA) of 1968, 42 U.S.C. 4151 *et seq.* The ABA requires access to buildings designed, built, altered, or leased by or on behalf of the federal government or with loans or grants, in whole or in part, from the federal government. As used in the ABA, the term “building” does not include privately owned residential structures not leased by the government for subsidized housing programs.
- e. Title IX of the Education Amendments Act of 1972, 20 U.S.C. 1681 *et seq.*, which prohibits discrimination on the basis of sex in any federally funded education program or activity.
- f. Section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. §794, which provides that no otherwise qualified individual shall solely by reason of his or her handicap be excluded from participation, denied program benefits, or subjected to discrimination under any program or activity receiving federal funding assistance.
- g. Section 508 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. §794d, which requires Federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities, and applies to all federal agencies when they develop, procure, maintain or use electronic and information technology.
- h. Section 109 of Title I of the Housing and Community Development Act of 1974, and the regulations issued pursuant thereto (24 CFR 570.602), which provides that no person in the United States shall, on the grounds of race, color, national origin, or sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity funded in whole or in part with funds provided under that Part. Section 109 further prohibits discrimination to an otherwise qualified individual with a handicap, as provided under Section 504 of the Rehabilitation Act of 1973, as amended, and prohibits discrimination based on age as provided under the Age Discrimination Act of 1975. The policies and procedures necessary to ensure enforcement of section 109 are codified in 24 CFR 6.
- i. Section 104(b)(2) of the Housing and Community Development Act of 1974, 42 U.S.C. 5304(b), which requires communities receiving community development block grants to certify that the grantee is in compliance with various specified requirements.
- j. Age Discrimination Act of 1975, 42 U.S.C. 6101 *et seq.*, which prohibits discrimination on the basis of age in programs and activities receiving federal financial assistance.
- k. Title II of the Americans with Disabilities Act of 1990, 42 U.S.C. 12131 *et seq.*, as amended by the ADA Amendments Act of 2008, which prohibits discrimination against people with disabilities by public entities, which includes any state or local government and any of its departments, agencies or other instrumentalities.
- l. Housing for Older Persons Act of 1995 (“HOPA”) (42 U.S.C. 3607), which governs housing developments that qualify as housing for persons age 55 or older.
- m. Accessibility requirements contained in Title III of the Americans with Disabilities Act of 1990 (42 U.S.C. 12181 *et seq.*).
- n. Executive Order 11063: Equal Opportunity in Housing, November 20, 1962, as amended by Executive Order 12259, and the regulations issued pursuant thereto, which pertain to equal opportunity in housing and non-discrimination in the sale or rental of housing built with federal assistance.
- o. Executive Order 11246 (Johnson), September 24, 1965, as amended by Executive Order 11375 (Johnson), October 13, 1967, as amended by Executive Order 13672 (Obama), July 21, 2014, which prohibit discrimination in employment on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin. Further, contractors and subcontractors on federal and federally assisted construction contracts shall take affirmative action to ensure that equal opportunity is provided in all aspects of their employment, including, but not limited to: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training and apprenticeship.
- p. Executive Order 12086: Consolidation of contract compliance functions for equal employment opportunity, October 5, 1978.
- q. Executive Order 12892: Leadership and Coordination of Fair Housing in Federal Programs: Affirmatively Furthering Fair Housing, January 17, 1994.
- r. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994.

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- s. Executive Order 13166: Improving Access to Services for Persons with Limited English Proficiency (LEP), August 11, 2000, and Federal Register Notice FR-4878-N-02 (available online at <http://www.gpo.gov/fdsys/pkg/FR-2007-01-22/pdf/07-217.pdf>), which require recipients of federal financial assistance to ensure meaningful access to programs and activities by LEP persons. (The State's Language Access Plan (LAP) is available online at http://www.renewjerseystronger.org/wp-content/uploads/2014/08/NJ-DCA-LAP_Version-1.0_2015.01.14-for-RenewJerseyStronger.pdf).
- t. Executive Order 13217: Community-Based Alternatives for Individuals with Disabilities, June 19, 2001.
- u. Executive Order 13330: Human Service Transportation Coordination, February 24, 2004.
- v. Implementing regulations for the above:
 - i. 24 CFR part 1: Nondiscrimination in Federally Assisted Programs of HUD.
 - ii. 24 CFR part 3: Nondiscrimination on the Basis of Sex in Education Programs or Activities receiving Federal Financial Assistance.
 - iii. 24 CFR 5.105: Other Federal Requirements.
 - iv. 24 CFR part 6: Nondiscrimination in Programs, Activities Receiving Assistance under Title I of the Housing and Development Act of 1974.
 - v. 24 CFR part 8: Nondiscrimination Based on Handicap in Federally Assisted Programs and Activities of the Department of Housing and Urban Development.
 - vi. 24 CFR 50.4(l) and 58.5 (j): Environmental Justice.
 - vii. 24 CFR 91.225(a)(1): Affirmatively Furthering Fair Housing.
 - viii. 24 CFR 91.325(a)(1): Affirmatively Furthering Fair Housing.
 - ix. 24 CFR 91.325(b)(5): Compliance with Anti-discrimination laws.
 - x. 24 CFR 91.520: Performance Reports.
 - xi. 24 CFR part 100 – part 125: Fair Housing.
 - xii. 24 CFR part 107: Non-discrimination and Equal Opportunity in Housing under Executive Order 11063 (State Community Development Block Grant Grantees).
 - xiii. 24 CFR part 121: Collection of Data.
 - xiv. 24 CFR part 135: Economic Opportunities for Low- and Very Low-Income Persons.
 - xv. 24 CFR part 146: Non-discrimination on the Basis of Age in HUD Programs or Activities Receiving Federal Financial Assistance.
 - xvi. 24 CFR 570.206(c): Fair Housing Activities.
 - xvii. 24 CFR 570.487(b): Affirmatively Furthering Fair Housing.
 - xviii. 24 CFR 570.487(e): Architectural Barriers Act and Americans with Disabilities Act (State Community Development Block Grant Grantees).
 - xix. 24 CFR 570.490(a)-(b): Recordkeeping requirements.
 - xx. 24 CFR 570.491: Performance Reviews and Audits.
 - xxi. 24 CFR 570.495(b): HCDA Section 109 nondiscrimination.
 - xxii. 24 CFR 570.506(g): Fair Housing and equal opportunity records.
 - xxiii. 24 CFR 570.601: Affirmatively Further Fair Housing.
 - xxiv. 24 CFR 570.608 and Part 35: Lead-Based Paint.
 - xxv. 24 CFR 570.614: Architectural Barriers Act and Americans with Disabilities Act.
 - xxvi. 24 CFR 570.904: Equal Opportunity and Fair Housing Review
 - xxvii. 24 CFR 570.912: Nondiscrimination compliance

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H. CONTRACTING WITH SMALL AND MINORITY-OWNED AND VETERAN-OWNED FIRMS, WOMEN'S BUSINESS ENTERPRISES AND LABOR AREA SURPLUS FIRMS

1. Contractor/Consultant shall take all necessary affirmative steps to ensure contracting opportunities are provided to small and minority-owned and veteran-owned businesses, women's business enterprises, and labor area surplus firms. As used in this contract, the terms "minority-owned business," "veteran-owned business," and "women's business enterprises" means a business that is at least fifty-one percent (51%) owned and controlled by minority group members, veterans or women.

For purposes of this definition, "minority group members" are African-Americans, Spanish-speaking, Spanish surnamed or Spanish-heritage Americans, Asian-Americans, and Native Americans. Contractor may rely on written representations by businesses regarding their status as minority, women and veteran businesses in lieu of an independent investigation.

2. Affirmative steps shall include:

- a. Placing qualified small and minority-, veteran- and women-owned businesses on solicitation lists;
- b. Ensuring that small and minority-, veteran- and women-owned businesses are solicited whenever they are potential sources, for goods and/or services required in furtherance of the Contract;
- c. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority-, veteran- and women-owned businesses;
- d. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority-, veteran- and women-owned businesses; and
- e. Using the service and assistance, as appropriate, of organizations such as the Small Business Administration, and the Minority Business Development Agency of the U.S. Department of Commerce; and
- f. Requiring the subcontractor, if subcontracts are to be let, to take the affirmative steps listed in subparagraphs (a) through (e) of this section.

I. ENVIRONMENTAL REGULATORY COMPLIANCE

To the extent applicable, Contractor/Consultant must comply with HUD regulations found at 24 CFR Parts 50 and 58, implementing the National Environmental Policy Act ("NEPA"), 42 U.S.C. §4321 *et seq.*, and other Federal environmental requirements, including but not limited to:

1. Floodplain management and wetland protection:

- a. Executive Order 11990, Protection of Wetlands (May 24, 1977) (42 FR 26961), 3 CFR, 1977 Comp., p. 121, as interpreted by HUD regulations at 24 CFR 55, particularly sections 2 and 5 of the order;
- b. Executive Order 11988, Floodplain Management, May 24, 1977 (42 FR 26951), 3 CFR, 1977 Comp., p. 117, as interpreted in HUD regulations at 24 CFR part 55, particularly section 2(a) of the order;

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2. The Coastal Zone Management Act of 1972 (16 U.S.C. § 1451 et seq.), as amended, particularly sections 307(c) and (d) (16 U.S.C. §§1456(c) and(d));
3. In relation to water quality:
 - a. Executive Order 12088, as amended by Executive Order 12580, relating to the prevention, control and abatement of water pollution;
 - b. The Safe Drinking Water Act of 1974 (42 U.S.C. §§ 201, 300(f) et seq. and U.S.C. §349), as amended, particularly Section 1424(e) (42 U.S.C. §§ 300h-303(e)), which is intended to protect underground sources of water. No commitment for federal financial assistance can be entered into for any project which the U.S. Environmental Protection Agency (“EPA”) determines may contaminate an aquifer which is the sole or principal drinking water source for an area (40 CFR 149); and
 - c. The Federal Water Pollution Control Act of 1972, as amended, including the Clean Water Act of 1977, Public Law 92-212 (33 U.S.C. §1251, et seq.) which provides for the restoration and maintenance of the chemical, physical and biological integrity of the nation’s water.
4. Endangered Species Act of 1973 (16 U.S.C. §1531 et seq.), as amended, particularly section 7 (16 U.S.C. §1536);
5. The Fish and Wildlife Coordination Act of 1958, as amended;
6. Wild and Scenic Rivers Act of 1968 (16 U.S.C. § 1271 et seq.), particularly sections 7(b) and (c) (16 U.S.C. §1278(b) and (c));
7. Executive Order 11738 (Nixon), Sept. 10, 1973, providing for administration of the Clean Air Act and the Federal Water Pollution Control Act With Respect to Federal Contracts, Grants, or Loans, and EPA regulations (40 CFR 15);
8. The Clean Air Act of 1970 (42 U.S.C. § 7401 et seq.) as amended, particularly sections 176(c) and (d) (42 U.S.C. § 7506(c) and (d)), and 40 CFR 6, 51, 93, which prohibits engaging in, supporting in any way, providing financial assistance for, licensing or permitting, or approving any activity which does not conform to State or Federal implementation plans for national primary and secondary ambient air quality standards.
9. The Farmland Protection Policy Act of 1981, 7 U.S.C.A. §4201 et seq., particularly sections 1540(b) and 1541 (7 U.S.C. §4201(b) and §4202), and Farmland Protection Policy, 7 CFR 658, which require recipients of federal assistance to minimize the extent to which their projects contribute to the unnecessary and irreversible commitment of farmland to nonagricultural uses;
10. Noise abatement and control requirements at 24 CFR 51B;
11. Explosive and flammable operations requirements at 24 CFR 51C;
12. Requirements at 24 CFR 58.5(i) relating to toxic chemicals and radioactive materials;
13. Environmental Justice, Executive Order 12898—Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994 (59 FR 7629), 3 CFR, 1994 Comp. p. 859.

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J. EQUAL EMPLOYMENT OPPORTUNITY

1. All federally assisted construction contracts must include the equal opportunity clause provided under 41 CFR §60-1.4(b). Federally assisted construction contracts include any agreement or modification thereof between any applicant and a person for construction work which is paid for in whole or in part with funds obtained from the federal government. Construction work is defined as “the construction, rehabilitation, alteration, conversion, extension, demolition or repair of buildings, highways, or other changes or improvements to real property, including facilities providing utility services. The term also includes the supervision, inspection, and other onsite functions incidental to the actual construction.” 41 CFR §60-1.3.

2. Pursuant to 41 CFR §60-1.4(b), the following language shall be included in all federally assisted construction contracts and subcontracts:

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representatives of the contractor's commitments under section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

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(5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The contractor will include the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

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OFFICE OF THE STATE COMPTROLLER REQUIREMENT

Pursuant to N.J.A.C. 17:44-2.2 Contractor shall maintain all documentation related to products, transactions or services under this contract for a period of five (5) years from the date of final payment. Such records shall be made available to the New Jersey Office of the State Comptroller upon request.

PERFORMANCE, PAYMENT, AND MAINTENANCE BONDS

The bidder whose bid is accepted shall furnish to the City, a performance bond and labor and material payment bond, or a combination performance and labor and material payment bond, and at the completion of the work, a two (2) year maintenance bond, each in the amount of 100% of the final contract price, with such sureties as shall be approved by the City and as detailed and described below.

All surety companies shall be authorized to transact such business in New Jersey, pursuant to N.J.S.A. 17:17-10 or 17:32-1 et seq. The surety shall designate a New Jersey agent on whom service of process can be made.

The Contractor shall be responsible for updating the surety's expiration from the list or an agent change, to the Engineer or City. All surety companies shall have the minimum capital and surplus or net cash assets required, pursuant to N.J.S.A. 17:17-6 or 17:17-7, whichever is applicable, on the date of advertisement for the project. All surety companies shall complete a Surety Disclosure Statement and Certification for all payment and performance bonds, pursuant to N.J.S.A. 2A:44-143d.

In addition, for these public works project bids, including any and all alternates, that equals at least \$850,000.00 but not more than \$3.5 million, the surety company shall hold a current certificate of authority issued by the U.S. Secretary of the Treasury that is valid in New Jersey as listed annually in the U. S. Treasury Circular 570. However, if the surety company has been operational for a period in excess of five years, the surety company shall also be considered to have satisfied this requirement if it is rated in one of the three highest categories by an independent nationally recognized United States rating company that determines the financial stability of insurance companies. Such rating companies shall meet standards promulgated by the N. J. Commissioner of Insurance N.J.A.C. 11:1-41.1 et seq.

In addition, for those public works project bids, including any and all alternates, is in excess of \$3.5 million, the surety company shall hold a current certificate of authority issued by the United States Secretary of the Treasury that is valid in the State of New Jersey listed annually in U.S. Treasury Circular 570. And, if the surety company has been operational for a period in excess of five years, it shall be rated in one of the three highest categories by an independent, nationally recognized United States rating company that determines the financial stability of insurance companies. Such ratings shall meet standards promulgated in N.J.A.C. 11:1-41.1 et seq. A surety company, which seeks to provide a payment and performance bond in excess of \$3.5 million, is exempt from the requirement of Treasury Circular 570 if it meets standards developed by the Commissioner of Insurance through regulations which, at least equal, and may exceed, the general criteria required for Treasury listing. These standards are found at N.J.A.C. 11:1-41.4.

EXAMINATION AND RESPONSIBILITY

Bidders are directed to examine for themselves the specifications and the location of the proposed work. They shall exercise their own judgment as to the scope and nature of the work; the difficulties to be encountered and the quantities that may actually be encountered in the work. Each bidder is fully responsible for having reviewed and understood these specifications previous to submitting their bid, that their bid covers and complies with all requirements of the specifications, and shall not at any time thereafter assert any claim related to any misunderstanding of the nature or amount of work to be done.

CONDITION OF WORK

Each bidder shall inform themselves fully of the conditions relative to the services under which the work is now being or shall be performed. Failure to do so shall not relieve a successful bidder of their obligation to furnish all materials and labor necessary to carry out the provisions of the contract documents and to complete the contemplated work/services as set forth in his bid. The Contractor in the carrying out of their work shall employ such methods or means that shall not cause any interruptions or interference with the work of any other contractor (if applicable).

OBLIGATIONS OF BIDDERS

At the time of the opening of bids each bidder shall be presumed to have inspected the site and to have read and to be thoroughly familiar with the specifications (including all addenda). The failure or omission of any bidder to receive or examine any form, instrument, or documents, shall in no way relieve any bidder from any obligations contained therein.

SPECIAL NOTICE

All sections of this bid package shall be held equally binding with and shall be considered a part of the specifications and contract. If a conflict arises between sections of the bid, the more stringent requirement shall be upheld and required of the Contractor.

REPRESENTATION OF CONTRACTOR

The Contractor represents and warrants:

- (a) That they are financially solvent and that experienced in and competent to perform the type of work to furnish the labor, plant, materials and supplies or equipment to be so performed or furnished and;
- (b) That they are familiar with all Federal, State, County, Municipal and Department Laws, Ordinances and Regulations, which shall in any way affect the work or those employed therein, including, but not limited to, any special Acts relating to the work or to the project of which it is a part, and
- (c) That such temporary and permanent work required by the contract documents and is to be done by them shall be satisfactorily constructed and used for the purpose for which it is intended, and that such construction shall not injure any persons or damage any property, and
- (d) That they have carefully examined the drawings, specifications, and the site of the work, and that from their own investigations have satisfied themselves as to the nature and location of the work, the character, quality and quantity of surface and subsurface materials likely to be encountered, the character of equipment and other facilities needed for the performance of the work, the general and local conditions and all other items which may in any way affect the work or its performance.

SUBLETTING OR ASSIGNING OF CONTRACT

The Contractor shall not assign, sell, or transfer or otherwise dispose of the contract or any portion thereof or of the work provided therein or their right, title, or interest therein, to any persons, firm, or corporation, without prior written consent of the City.

NECESSARY TO COMPLETE

If any work or materials are required which are obviously necessary to carry out the full intent and meaning of the said specifications although the same may not be either directly or indirectly in the specifications, the Contractor is hereby bound to furnish the same without charge or claim.

DRAWINGS AND SPECIFICATIONS

The Contractor shall keep at the site of the work one copy of the drawings and specifications signed and identified by the Engineer and shall at all times give the Engineer and other representatives of the City access thereto. Anything shown on the drawings and not mentioned in the specifications or mentioned in the specifications and not shown on the drawings, shall have the same effect as if shown or mentioned respectively in both. In case of any conflict within the construction documents, the Engineer shall determine which of the requirements shall govern based upon the most stringent of the requirements, and the Contractor shall perform the work at no additional cost or time to the City. Any ambiguity or discrepancy between drawings and specifications shall be submitted by the Contractor to the Engineer whose decision shall be conclusive.

The general arrangement and location of equipment, the various pipe, duct, and conduit runs, etc. are shown on the drawings. All dimensions or the scales of the drawings shall be considered as approximate and shall be checked by each bidder to their own satisfaction prior to bid. The exact location of all parts of the work shall be governed by existing conditions, and the Contractor shall coordinate and locate all work at the time of installation. Any changes in location, etc. from that shown on the drawings, necessary by existing conditions, shall be made by the Contractor at no increase of the contract sum.

RIGHT-OF-WAY

All right-of-ways through private property required shall be secured by the City. Contractor shall not start construction in right-of-ways until directed by the Engineer. No claim shall be made by the Contractor for damage due to delay in securing right-of-ways.

TIME LIMITS

The Contractor agrees to start the work herein contracted for within ten (10) days from the date of approved purchase order. The time to complete the work contracted for, from the date of the purchase order, shall be limited to the following:

365 Calendar Days

No extension of time shall be allowed for delay from any cause whatsoever, including normal weather conditions unless the Contractor shall have notified the Purchasing Department in writing of such delay and their intention to claim an extension of time within two (2) days after the beginning of such delay. Such notice shall give complete information concerning the nature, extent, and cause of the delay. If, in the opinion of the City, an extension of time is warranted the City or City's representative, shall issue a written extension, setting a new time limit for the completion of the work.

LIQUIDATED DAMAGES

In case the Contractor fails to complete the work contracted for, satisfactory to and acceptable to the City within the stipulated time limit, or violates any terms or conditions of said contract or the terms and conditions of 40A:11-1 et seq., then the Contractor shall pay to the City for each and every calendar day determined to be in default, the following sums, which are agreed upon, fixed and determined by the parties hereto to be liquidated damages.

To Completion of Project..... One Thousand Five Hundred (\$1,500.00) dollars per calendar day.

In case the Contractor shall be delayed due to the failure on the part of the City to furnish anything on its part to be furnished or for any other cause beyond the control of the Contractor, they shall be entitled to such an extension of time for the delivery of equipment, materials, work and supplies as in the judgment of the City or City's representative to be fair and just.

CITY'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

The City shall at any time during the contract period terminate the contract by giving THIRTY (30) DAYS notice in writing to the other party of its intention to do so.

Additionally, the City has the right to stop work or terminate the contract, if:

- (a) The Contractor has violated the provisions of (N.J.S.A. 40A:11-1 et seq.), or any other Federal, State or Local law, or
- (b) The Contractor shall be adjudged bankrupt or make an assignment for the benefit of creditors, or
- (c) A receiver or liquidator shall be appointed for the Contractor or for any of their property and shall not be dismissed within 20 days after such appointment or the proceedings in connection therewith shall not be stayed on appeal within the said 20 days, or

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- (d) The Contractor shall refuse or fail, after notice or warning from the Engineer, to supply enough properly skilled workmen or proper materials, or
- (e) The Contractor shall refuse or fail to prosecute to work or any part thereof with such diligence as shall ensure its completion within the period herein specified (or any duly authorized extension thereof) or shall fail to complete the work within said period, or
- (f) The Contractor shall fail to make prompt payment to persons supplying labor or materials for the work, or
- (g) The Contractor shall fail or refuse to regard laws, ordinances or regulations or otherwise to be guilty of a violation of any provisions of the contract or the Scope of Work therein, then and in such event, the City, without prejudice or any rights or remedy it may have, may give seven (7) days notice to the Contractor to terminate the employment of the Contractor and their right to proceed, either as to the entire work or at the option of the City as to any portion thereof as to which delay shall have occurred, and may take possession of the work and complete the work by the Contractor or otherwise, as the City may deem expedient.

In such case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the compensation to be paid the Contractor hereunder shall exceed the expense of so completing the work, including compensation for additional managerial, administrative and inspection services and any damages for delay, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor and their sureties shall be liable to the City for such expenses.

If the right of the Contractor to proceed with the work is terminated, the City shall take possession of and utilize in completing the work such materials, appliances, supplies, drawings, and equipment, as may be on the site of the work and necessary therefore. If the City does not terminate the right of the Contractor to proceed, the Contractor shall continue the work.

STATE LAW AND REGULATIONS AND INSURANCE

The Contractor shall assume all risks connected with their work. The Contractor shall comply with all State Laws and Regulations concerning Workmen's Compensation and shall maintain such insurance as shall protect them against all claims for damages for personal injury, including death which may arise during prosecution of the contract, either by themselves or by any Subcontractor or anyone directly or indirectly employed by either of them.

CONTRACTOR'S INSURANCE

Before commencing work, and as a condition precedent for payment, the Contractor shall purchase and maintain insurance, in conformance with the provisions contained in this Agreement. This insurance will provide a defense and indemnify the City of Atlantic City (City) against any such claim, damage, loss, or expense that is attributable to bodily injury, sickness, disease, or death or to injury to or destruction of tangible property (other than the work itself) including the loss of use, which arises out of the Contractor's operations under this agreement. This insurance shall apply regardless of whether the operations, actions, derelictions, or failures to act from which the claim arises, are attributable to the Contractor, any of its Contractors, officers, agents, subcontractors, employees, anyone directly or

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indirectly employed by any of them including anyone for whose acts of the aforementioned may be liable by operation of statute, government regulation, or applicable case law and the City, unless, caused by the sole negligence of the City.

Proof of this insurance shall be provided to the City before the work commences as set forth below. In no event shall the failure to provide this proof, prior to the commencement of work, be deemed a waiver by the City of the Contractor's insurance obligations set forth herein. In the event that the insurance company (ies) issuing the policy (ies) required by this section deny coverage to the City, the Contractor will defend and indemnify the City at the Contractor's expense. The Contractor must obtain the required insurance with the carrier rated A-VII or better by A. M. Best. The Contractor shall maintain at least the limits of liability as set forth below:

Commercial General Liability Insurance

\$ 1,000,000.00 Each Occurrence (Bodily Injury and Property Damage)

\$ 2,000,000.00 General Aggregate

\$ 2,000,000.00 Products/Completed Operations Aggregate

\$ 1,000,000.00 Personal and Advertising Injury

Contractual liability that will respond to Indemnification, shall be included in the policy. The General Aggregate Limit shall apply separately to the work as defined herein. As an alternative, the Contractor may provide Commercial general Liability Insurance with no aggregate.

Protection and Indemnity Insurance (only required if boats, barges, or other sea vessels are used)

\$ 2,000,000 Each Occurrence Limit (Limit may be reduced to \$1,000,000 if this policy included in the Umbrella Liability Insurance). Pollution Liability in an additional amount of \$1,000,000 must be included in the policy for the Each Occurrence Limit.

Professional Liability Insurance

\$ 1,000,000 Each Claim

\$ 3,000,000 Aggregate

Contractor must confirm that the full limits are available and they have not been reduced by other claims.

Comprehensive Automobile Liability Insurance

\$ 1,000,000.00 Combined Single Limit Bodily Injury and Property Damage. Coverage must include all owned, non-owned and hired vehicles used by the Contractor.

Workers' Compensation and Employers' Liability Insurance

\$ 500,000.00 Each Accident

\$ 500,000.00 Each Employee for Injury by Disease

\$ 500,000.00 Aggregate for Injury by Disease

If the Contractor is a Sole Proprietor, Partnership or LLC, Insurance Policy and Certificate must indicate that the proprietor/partners/members are "included." This requirement does not apply if inclusion is not allowed by law.

Other Conditions

The City, along with their respective elected or appointed officials, officers, agents, and employees, shall be named as Additional Insureds for Operations and Products/Completed Operations on the Contractor's Commercial General Liability Policy and Additional Insureds on the Contractor's Professional Liability which must be primary and noncontributory with respect to the Additional Insureds.

It is expressly understood by the parties to this Agreement that it is the intent of the parties that any insurance obtained by the City is deemed excess, noncontributory and not co-primary in relation to the coverage (s) procured by the Contractor, any of its Contractor's, officers, agents, subcontractors, employees or anyone directly or indirectly employed by any of them or by anyone for whose acts any of the aforementioned may be liable by operations of statute, government regulation or applicable case law.

A Waiver of Subrogation clause shall be added to the General Liability, Automobile Liability and Professional Liability policies in favor of the City and this clause shall apply to the City's elected or appointed officials, officers, agents, and employees. It should also apply to the Contractor's Worker's Compensation policy if allowed by state law.

Prior to commencement of work, Contractor shall submit a Certificate of Insurance in favor of the City and as an Additional Insured Endorsement (in a form acceptable to the City) as required hereunder. In any and all claims against the Additional Insureds by any employee of the Contractor, anyone directly or indirectly employed by the Contractor or anyone for whose acts the Contractor may be liable, the indemnification obligation shall not be limited by any limitation on the amount or type of damage, compensation or benefits payable by or for the Contractor under Workers' Compensation acts, disability benefit acts or other employee benefit acts.

The Contractor shall maintain in effect all insurance coverages required under this Agreement at the Contractor's sole expense and with insurance companies acceptable to the City. In the event the Contractor fails to obtain or maintain any insurance coverage required under this Agreement, the City may, at its sole discretion, purchase such coverage as desired for the City's benefit and charge the expense to the Contractor, or, in the alternative, terminate this Agreement. In the event the coverage is cancelled or non-renewed, the insurance carrier(s) will provide 30 days advance notice of the cancellation or non-renewal.

SUIT OR CLAIMS

The Contractor agrees to indemnify and save harmless the City and the Engineer and all their agents and employees from actions and suits of every kind and description brought against them, or on account of the use of patented rights, and from any damages or injuries received or sustained by any party, or parties, arising out of any act or omission of the Contractor, their workmen or agents in performance of the work under this agreement, including the furnishing of equipment, materials and supplies at the site of the proposed work.

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DAMAGES TO PERSONS AND PROPERTY

Contractor shall fully and completely indemnify and same harmless the City from damages or injury to persons or property resulting from the performance of the work, or through negligence to the contract, or through the use of any improper or defective machinery implements or appliances or through any act of omission of the Contractor, or their agents, or their employees.

ROLE OF THE ENGINEER

The Engineer shall verify, by observation and/or required tests, the amount, quality, acceptability and fitness of the materials, equipment and supplies furnished; and shall interpret any ambiguities in the drawings and specifications, contract documents, and any extra work order. Upon request, the Engineer shall confirm in writing any oral direction, requirement, or determination.

All work of refilling sunken ditches, repaving over trenches and keeping the streets and sidewalks in passable condition shall be satisfactorily performed by the Contractor during the construction of the work as well as during the maintenance period. If any work is not done within 48 hours after written notice given by the Engineer, the work shall be done by the City and charged to the Contractor.

SURVEYS

Unless otherwise expressly provided for in the specifications, the Contractor shall furnish all surveys necessary for the execution of the work. The City shall furnish a base line and datum benchmarks as required. The Contractor shall measure and lay out their work and be responsible for the accuracy thereof from benchmarks and base lines established by the Engineer which shall constitute the surveys hereinbefore referred to. The Contractor shall submit cut sheets for curb, sidewalk and roadway construction projects unless specifically waived in writing by the Engineer.

PRESERVATION OF STAKES

The Contractor shall carefully preserve benchmarks, reference points and stakes, and in case of willful or careless destruction, they shall be charged with the resulting expense and shall be responsible, for any mistakes that may be caused by their unnecessary loss or disturbance.

USES OF PREMISES AND REMOVAL OF DEBRIS

The Contractor expressly undertakes the following at their own expense:

- (a) To take every precaution against injuries to persons or damage to property.

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- (b) To store apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as shall not unduly interfere with the progress of their work or the administration of City's affairs.
- (c) To place upon the work any part thereof only such loads as are consistent with the safety of that portion of the work.
- (d) To frequently clean up all refuse, scrap material and debris caused by their operations and at all times the site of the work shall present a neat, orderly condition.
- (e) Before final payment to remove all surplus material, false work, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from their operations and to put the site in a neat orderly condition.
- (f) To affect all cutting, fitting, or patching of their work required to make the same conform to the drawings and specifications, and except with the consent of the Engineer, not to cut or otherwise alter the work.

INJURY TO EXISTING STRUCTURES

The Contractor shall be responsible for all injury to existing structures met within the prosecution of the work, including the delivery to the site of the proposed improvements of materials and supplies. In case of accident to existing structures met within the prosecution of the work, the Contractor shall be required to immediately notify the proper authorities and as soon as possible thereafter also notify the Engineer.

CORRECTION OF WORK

The Contractor expressly warrants that their work shall be free from any defects in materials or workmanship and agrees to correct any such defects which may appear in such materials or workmanship within two years or the term of the maintenance bond, whichever is longer, following the final acceptance of the work by the City, such final acceptance to be evidenced by an appropriate resolution of the governing body or by the issuance of final payment by the City.

Neither the acceptance of the completed work nor payment therefore shall operate to release the Contractor or their surety or sureties from any obligation or obligations under this contract or the bonds required under these Contract Documents.

PUBLIC UTILITIES

The contract drawings indicate the approximate location of known overhead and subsurface utilities in the vicinity of the work. The bidder is advised to investigate and ascertain for themselves all the facts concerning the actual location of these utilities.

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The Contractor shall cooperate with the utility Companies in the adjustment of their facilities and shall notify the utility Companies not less than ten (10) days in advance of the time they propose to perform any work that will endanger or affect their facilities.

The Contractor shall permit the utilities Companies, or their agents, access to the site of the work at all times in order to relocate, construct or protect their lines and they shall cooperate with them in performing this work. Separate payments shall not be made for the following:

1. Coordination and cooperation of the Contractor with the utility companies, nor for the protection or replacement of utilities as specified hereinbefore.
2. Damages for delay caused by conflicts with utilities outside the jurisdiction of the City (ex: gas mains, telephone or electric lines, county storm sewer, water mains, etc.).

The bidder shall include all such costs in the prices bid for the various scheduled items in the Bid form. A list of utilities with facilities in the area of the work includes:

Atlantic City Electric
2542 North Fire Road
Egg Harbor Township, NJ 08234

Atlantic City Municipal Utilities Authority
401 North Virginia Avenue
Atlantic City, NJ 08401

Atlantic City Sewerage Company
1200 Atlantic Avenue
Atlantic City, NJ 08401

Atlantic County Utilities Authority
P.O. Box 996
Pleasantville, NJ 08232-0996

Comcast
901 W Leeds Avenue
Absecon, NJ 08201

South Jersey Gas Company
111 North Franklin Avenue
Pleasantville, NJ 08232

Verizon
11 South Shore Road (Rt #9)
Marmora, NJ 08223

PROTECTION OF WORK AND PROPERTY

The Contractor shall continuously maintain adequate protection of their work and shall protect City's property from injury or loss arising in connection with their work. They shall also protect all adjacent property as provided by law and shall be responsible for all injury to property and existing structures sustained during the prosecution of their work, including delivery to the site of the equipment, materials, and supplies. They shall repair and replace any such damage, injury, or loss equal or better than the condition of the item prior to the Contractor's action.

All passageways, guard fences, light and other facilities required for protection by local authorities or local conditions shall be provided and maintained.

CONTRACTOR'S PERSONNEL

PERSONAL ATTENTION

The Contractor shall give their personal supervision to the prosecution of the work or have a competent representative on the work who shall have written authority to carry out the requirements of the Contract Documents. The Contractor shall also supply all manpower, materials and equipment as they shall be required in the furnishing and delivery to the site of the proposed work, the equipment, materials and supplies bid upon.

CONTRACTOR'S SUPERINTENDENT

The Contractor shall attend to the work personally or through a competent, English-speaking superintendent, who shall be continually present on the project site whenever work is in progress. Such a superintendent shall be satisfactory to the City and Engineer and shall not be removed or replaced without due notice being given the City and Engineer. The Superintendent shall have full authority to act for the Contractor without the need to consult any higher level of authority.

LABOR LAWS

The Contractor and any Subcontractors shall comply with all the requirements of the Labor Laws of the State of New Jersey applicable to contracts on behalf of this City for construction, alteration or repair of any building or public work, including particularly, but without limitation of the foregoing, the provisions of N.J.S.A. 10:2-1 to 10:2-4, inclusive and N.J.S.A. 34:11-56.25 et seq, New Jersey Prevailing Wage Act.

The Contractor hereby agrees to comply in all respect with the New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56.25 et seq. as amended. A copy of the prevailing wage rates pertaining to the work and issued by the New Jersey Department of Labor can be found at the following web address:
http://www.nj.gov/labor/wagehour/wagerate/prevailing_wage_determinations.html

SPECIFICATIONS & INSTRUCTIONS

Pursuant to N.J.S.A. 34:11-56.25 et seq. – New Jersey Prevailing Wage Act, no public works contract shall be awarded to any contractor and subcontractor or to any firm, corporation, or partnership in which they have an interest on the attached disbarred bidders list located at the end of this specification, until expiration date given. Workmen shall be paid not less than such prevailing wage rate.

Before final payment is made by or on behalf of the City of any sum or sums due to the work, the Contractor or Subcontractor shall file with the treasurer of the City, written statements in form satisfactory to the Commissioner of Labor certifying to the amounts then due and owing from such contractor or subcontractor filing such statement to any and all workmen for wages due on account of the work, setting forth therein the names of the persons whose wages are unpaid and the amount due to each respectively which statement shall be certified by the oath of the Contractor or Subcontractor as the case may be in accordance with the said New Jersey Prevailing Wage Act.

The prevailing wage rate shall be determined by the Commissioner of Labor or his duly authorized representative. Contractors or Subcontractors performing public work of a public body subject to the provisions of this act shall post the prevailing wage rates for each craft and classification involved as determined by the Commissioners of Labor including the effective date of any changes thereof, in prominent and easily accessible places at the site of the work or at such place or places as are used by them to pay workmen their wages.

Prior to final payment, the Contractor shall be required to execute and deliver an Affidavit of Compliance in a form provided by the Engineer, as required by the Act.

CONTRACTOR'S EMPLOYEES

All workmen shall be competent and fully qualified in the type of work to be performed. Any employee of the Contractor, who is found by the Engineer to be incompetent, or who is performing their work in an unsightly manner or contrary to the specifications or the Engineer's instructions, or who is disorderly, shall be removed from the project and shall not again be employed on the project without the Engineer's consent.

EIGHT HOUR DAY: PREVAILING WAGE RATE

All mechanics, workers, laborers, employed or engaged in the work hereunder shall work no more than eight (8) hours in any one day. In case of necessity for the protection of property or human life, mechanics, workmen and laborers may be employed for longer periods than eight hours per calendar day, if paid extra compensation on the basis of eight hours constituting a days work, in accordance with the Prevailing Wage Act, N.J.S.A. 34:11-56-25 et seq., and all State and Federal laws.

PAYMENT OF EMPLOYEES

The Contractor and each of their Subcontractors shall pay each of their employees engaged in work on the project under this contract in full (less deductions made mandatory by law) in legal tender and not less often than once each month.

SPECIFICATIONS & INSTRUCTIONS

SAFETY AND HEALTH REGULATIONS

The Contractor shall comply with the Department of Labor, Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (P.L.91-596) and under Section 107 of the Contract Work Hours and Safety Standards for Construction (P.L.91-54).

ACCIDENT PREVENTION

Precautions shall be exercised at all times for the protection of persons (incl. employees) and property. The safety provisions of applicable laws, buildings and construction codes shall be observed. Machinery, equipment, and all hazards shall be guarded or eliminated in accordance with the safety provisions of the Manual of Accident Prevention in Construction published by the Association General Contractors in America and Part VI "Temporary Traffic Control" of the U.S. Dept. of Transportation. Federal Highway Administration "Manual on Uniform Traffic Control Devices," latest edition, whichever is more stringent to the extent that such provisions are not in contravention of applicable law. Contractor alone shall be responsible for the safety, efficiency, and adequacy of his plant, appliances, and methods and for any damage which may result from their failure for their improper construction, maintenance, or operation. The cost of "Accident Prevention" shall be included in the lump sum or unit price bid whichever is applicable.

MATERIALS

CONTRACTOR'S TITLE TO MATERIALS

No materials or supplies for the work shall be purchased by the Contractor or by Subcontractor that are subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the seller. The Contractor warrants that they have good title to all materials and supplies used by them in the work.

ROYALTIES AND PAYMENTS

The Contractor shall pay all royalties and license fees. They shall defend all suits or claims for infringement of any patent rights and shall save the City harmless from loss or account thereof.

USE OF DOMESTIC MATERIAL

In the performance of the work, the Contractor and all Subcontractors shall use only manufactured materials and farm products of the United States of America, wherever available. All Contractors and Subcontractors shall comply with the provisions of N.J.S.A. 40A:11-18, which relate to the use of domestic materials.

ORDERING MATERIALS

Before ordering materials, the Contractor shall obtain the Engineer's approval of their conformity to the specifications. In the case of concrete aggregate, and similar materials, samples shall accompany the request for approval. The Contractor shall forward to the Engineer copies of all shipping lists, invoices or delivery slips accompanying such deliveries.

SAMPLES

The Contractor shall submit to the Engineer any samples of materials before or during the progress of the work that may be required by the Contract Documents and all materials and workmanship shall be equal in every respect to the samples submitted and approved.

SHOP OR SETTING DRAWINGS

(a) The Contractor shall submit promptly eight copies, of which two shall be returned to the contractor, of each shop or setting drawings prepared in accordance with the schedule predetermined under the provisions of the preceding paragraph hereof with the Contractor's approval stamp and date thereon. After examination of such drawings by the Engineer, and the return thereof, the Contractor shall make such corrections to the drawings as have been indicated and shall furnish the Engineer with eight corrected copies.

If requested by the Engineer, the Contractor shall furnish additional copies, regardless of corrections made in or approval given to such drawings by the Engineer. The Contractor shall nevertheless be responsible for the accuracy of such drawings and for their conformity to the drawings and specifications unless he notified the Engineer in writing of any deviations, at the time he furnished such drawings. Shop drawing requirements as detailed within the technical specifications and scope of work shall govern should they be in conflict with the General Conditions.

(b) The Contractor shall likewise submit, in writing, the type, kind and name of the manufacturer of all materials to be used in the work for the written approval of the Engineer prior to the installation of same.

(c) Any equipment or materials installed without this written approval of the Engineer shall be required to be removed by the Contractor at their own expense and replaced with equipment and materials as approved.

ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

The Contractor shall be furnished additional instructions and detail drawings to carry out the work included in the contract as required. The additional drawings and instructions thus supplied to the Contractor, shall coordinate with the contract documents and shall be so prepared that they can be reasonably interpreted as a part thereof. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions.

SPECIFICATIONS & INSTRUCTIONS

The Contractor and the Engineer shall prepare, jointly (a) a schedule fixing the date at which special drawings shall be required and by whom they shall be made, such drawings, if any, to be furnished by the Engineer in accordance with said schedule, and (b) a schedule fixing the respective dates for the submission of shop or setting drawings; the beginning of manufacture, testing and installation of materials, supplies and equipment and the completion of the various parts of the work, each such schedule to be subject to change from time to time in accordance with the progress of the work.

OR APPROVED EQUAL CLAUSES

Wherever in these contract documents a particular brand, make of materials, device or equipment is shown or specified, such brand, make of material, device or equipment should be regarded merely as a standard.

When a bidder submits an equivalent, it shall be the responsibility of the bidder to document the equivalence claim. Failure to submit such documentation shall be grounds for rejection of the claim of equivalence.

If two or more brands, makes of material, devices or equipment are shown or specified, each should be regarded as the equal of the other. Any other brand, make of material, devices, or equipment, which in the opinion of the Engineer is the recognized equal of that specified, considering quality, workmanship, and economy of operation, and is suitable for the purpose intended, shall be accepted.

All material and workmanship shall, in every respect be in accordance with what, in the opinion of the Engineer is in conformity with approved modern practice.

Whenever the drawings, specifications or other contract documents or the direction of the City or its authorized agent admit of doubt as to what is permissible, and/or fail to note the quality of any work, that interpretation shall be made by the Engineer which is in accordance with approved modern practice to meet the particular requirement of the contract.

SUBSTITUTIONS

After the execution of the contract, substitution of equipment or materials of makes other than those named in the contract shall be considered for one reason only. That the equipment proposed for substitution is superior or equal in construction and/or efficiency to that named in the contract.

Complete data, to include: shop drawings, specifications, performance curves, test results, list of similar installation with years of service, operating and maintenance instruction, a statement that the Contractor agrees to pay all costs that shall result directly or indirectly from acceptance of the substitute, and all other necessary information; shall be submitted in triplicate to enable the Engineer to evaluate the proposed substitution equipment or material.

The determination as to whether or not such changes shall be permitted rests solely with the Engineer. The Contractor shall take and assume full responsibility and bear any extra expense or cost incurred by changes advocated.

SPECIFICATIONS & INSTRUCTIONS

Those costs include, but are not limited to, review time by the Engineer or the Engineer's Consultants, costs of redesign, and claims of other contractors affected by the resulting change. It shall be assumed that the cost to the Contractor of the equipment or materials proposed to be substituted is less than the equipment or materials named in the contract, and if the substitution is approved, the contract price shall be reduced by an amount equal to the savings.

MATERIAL SAFETY DATA

In accordance with the requirements of N.J.S.A. 34:5A-1 et seq., "Workers and Community Right to Know Act", the State Department of Health has adopted a Workplace Hazardous Substance List (N.J.A.C. 8:59-9) which includes substances that pose a threat to the health and safety of employees. Therefore, under the provisions of N.J.A.C. 8:59-7, the contractor shall furnish the City a "Material Safety Data Sheet" for each product which is supplied to the City which contains a substance listed on the Hazardous Substance List (N.J.A.C. 8:59-9). The City reserves the right to request a copy of the applicable Material Safety Data Sheet be forwarded with the delivery of each product. Furthermore, under the provisions of N.J.A.C. 8:59-5, each product shall have a label affixed or stenciled onto any container that contains any substance listed on the Hazardous Substance List (N.J.A.C. 8:59-9).

INSPECTION AND TESTING

INSPECTION

The Contractor shall afford every facility for inspection of the equipment, materials, and supplies at all times by the Engineer prior to the delivery of same to the site of the work. All equipment, supplies and materials shall be tested in the presence of the Engineer, if so desired. Any equipment, materials, supplies, or workmanship deemed of inferior quality, or not in accordance with the finally approved specifications, brought to or incorporated in the work shall be rejected by the Engineer. The equipment, materials and supplies and workmanship shall be re-inspected at any time, prior to delivery to the site of the proposed improvements. The Contractor shall bear all the expense of testing materials.

When construction is not continuous through the normal work week, (Monday through Friday), Contractor shall notify the Engineer at least 24 hours in advance of any stopping or starting of the work. Notification shall be by writing, telephone, facsimile, telegraph, or personal visit to the Engineer's listed office.

Contractor shall notify Engineer at least forty-eight (48) hours in advance to any work on Saturdays. There shall be no work permitted on Sundays or holidays. If the project receives inspection by the Engineer, the normal working hours for the Engineers inspector are from 8:30 a.m. to 4:00 p.m., Monday through Friday. Any overtime inspection costs for the Engineers inspector which are avoidable shall be reimbursed by the Contractor. As the City is only paying for the contract time in the Contract Documents, the Contractor shall be responsible for all costs of inspection and contract management beyond the contract time limits, unless a written extension of time has been granted by the City. These costs are in addition to any liquidated damages that may be charged to the Contractor.

SPECIFICATIONS & INSTRUCTIONS

DAILY REPORTS

On a daily basis, the Contractor shall have their Authorized Representative complete, sign and present the Engineer with a Certificate of Site Safety Conditions, attached hereto as Form GC-6.02S. At the Engineers discretion, the Contractor shall be directed to furnish a daily report, on a form, which shall include the date, the weather, a general description of the work performed, line item quantities involved, number and skill type of workers, equipment utilized, location of work, and any pertinent remarks affecting the work.

INSPECTORS

The work shall be conducted under the general observation of the Engineer through such Inspectors as the Engineer employs. Inspectors are stationed on the site of the work to represent the Engineer and to report to him concerning the observation of progress of the work and the workmanship and materials being furnished. Such Inspectors shall inform the Engineer and the Contractor when they observe that work being performed and/or the materials being furnished that do not conform to the requirements of the Contract Documents.

Such observation, if and when provided, shall not relieve the Contractor of any responsibility to furnish materials and perform work in complete accordance with the requirements of the Contract Documents, nor does such observation create any duty or obligation to any employee or invitee of Contractor, any Subcontractor, or to any third party.

The Inspector is not authorized to revoke, alter, enlarge, relax, or release any requirements of the Contract Documents or to issue instructions contrary to the Contract Documents.

ACCESS TO THE WORK

The Contractor shall furnish the Engineer with every reasonable facility for observing the work as performed.

The Engineer shall have the right to inspect all work done and all materials furnished either in the field or at the point of manufacture. The Contractor shall furnish or cause to be furnished safe access at all times to the places where preparation, fabrication, or manufacture of materials and/or construction of the work is in progress.

When the Engineer or his representative are in or about the premises mentioned above in the course of their duties, they shall be deemed conclusively to be an invitee of the Contractor. If the Contractor is not the City of the premises mentioned above, the City thereof shall be deemed an agent of the Contractor with respect to the obligation assumed hereby. The Contractor or their agent, as described above, shall be liable for the payment of claims for injuries, damages, etc, for death of the City or his representative due to the negligence on the part of the Contractor or his agent.

SPECIFICATIONS & INSTRUCTIONS

COVERING UNINSPECTED WORK

If any work be buried, covered, or otherwise concealed prior to observation by Engineer or contrary to the orders and direction of the Engineer and such work is not subject to testing and approval by any acceptable alternate method it shall, if required by the Engineer, be uncovered for examination. Such uncovering and all necessary restoration regardless of the final acceptability of the work uncovered, shall be at the expense of the Contractor.

TESTING MATERIALS

Except as may be provided elsewhere, tests or analysis of materials which are usually tested after delivery to the site, such as concrete aggregate, mixed-in-place concrete, and similar materials; shall be performed by the Engineer or testing laboratories which shall be approved by the Engineer and selected and paid for by the Contractor.

The preliminary testing of concrete mixtures and tests or analysis of other materials, samples of which shall be submitted prior to delivery, shall also be performed by the laboratory, and paid for by the Contractor at the Engineer's request. If the Engineer orders sampling and analysis or tests of materials which are usually accepted on certification of the manufacturer, but which appear defective or not conforming to the requirements of the Specifications, the Contractor shall bear the reasonable costs of sampling, transportation, tests, and analysis.

PAYMENTS

CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES

Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Engineer an estimated construction progress schedule in form satisfactory to the Engineer, showing proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that shall become due to the Contractor in accordance with the progress schedule. The Contractor shall update the schedule each time a change is approved, but at a minimum every 30 days. An updated schedule shall be submitted with the Contractor's payment application. Should a payment application be submitted without an updated schedule, payment processing may be delayed.

The Contractor shall also furnish the Engineer (a) a detailed estimate giving a complete breakdown of the contract price on Lump Sum Contracts and (b) periodic itemized estimates of work done for the purpose of making partial payments thereon. The costs employed in making up any of these schedules shall be used in determining the basis of partial payments.

Unless otherwise specified, on the first day of each month or within thirty (30) days thereafter, the Engineer shall estimate approximately the value of the work performed, and equipment, materials and supplies delivered on the ground inspected and accepted during the preceding month, according to these specifications, less any retainage, and shall be certified by the Engineer for payment to the Contractor.

SPECIFICATIONS & INSTRUCTIONS

The value of the work, as estimated, shall be determined by the lump sum and/or unit price bid. Requests for payment for materials on hand shall be accompanied with receipted invoice from supplier. Prior to such payment being made, the Contractor shall execute an agreement, provided by the Engineer and Solicitor on behalf of the City, which details the conditions of payment.

If, in the opinion of the Engineer, it is undesirable to replace any defective or damaged materials or to reconstruct or correct any portion of the work injured or not performed in accordance with the contract documents, the compensation to be paid to the Contractor hereunder shall be reduced by such amount as in the judgment of the Engineer shall be equitable.

No request for payment shall be approved until a Certification of Site Safety Conditions showing no unsafe conditions for each day worked in the payment request period has been furnished by the Contractor.

When the work performed under this contract has been completed by the Contractor and accepted by the City, the Engineer shall make a final estimate of the work and certify the same to the City which shall for causes herein specified, pay to the Contractor the balance due, excepting therefrom such sum as may be lawfully retained under any provisions of this contract. All prior estimates and payments including those relating to extra work shall be subjected to corrections by this payment.

The City shall pay the amount due to the prime contractor for each periodic payment, final payment, or retainage monies not more than 30 calendar days after the billing date, except as provided herein, which for periodic billing shall be established at the pre-construction meeting and memorialized in the minutes of the pre-construction meeting.

The billing shall be deemed approved and certified 20 days after the City receives it, as indicated by the date stamped received on the billing by the City, except as provided herein, unless the City or City's Representative provides, before the end of the 20 day period, a written statement of the amount withheld and the reason for withholding payment. The City is a public or governmental agency that requires the governing body to vote on authorizations for each periodic payment, final payment or retainage monies, the amount due may be approved and certified at the next scheduled public meeting of the City's governing body, and paid during the City's subsequent payment cycle.

RETAINAGE

The Contractor is advised that for contracts \$100,000.00 and under for improvement to real property, the sum of 10% of the amount due shall be held on each partial payment pending completion of the project. The Contractor is advised that the Local Public Contracts Law, N.J.S.A. 40A:11-1 et seq. are applicable if the total amount of the contract awarded for this project exceeds \$100,000.00. The provisions of N.J.S.A. 40A:11-1 et seq. provide that the Contractor may:

1. Agree to the withholding of payments in the manner prescribed in the contract, or may deposit with the contracting unit registered book bonds, entry municipal bonds, State bonds or other appropriate bonds of the State of New Jersey, or negotiable bearer bonds or notes of any political subdivision of the State, the value of which is equal to the amount necessary to satisfy the amount that otherwise would be withheld pursuant to the terms of the contract.

SPECIFICATIONS & INSTRUCTIONS

The nature and amount of the bonds or notes to be deposited shall be subject to approval by the contracting unit. For the purposes of this section, "value" shall mean par value or current market value, whichever is lower.

2. Such agreement shall be indicated by signing of estimate or payment certificates unless written communication to the contrary is made to the City and Engineer, or

If the Contractor agrees to the withholding of payments, the amount withheld shall be deposited, with a banking institution or savings and loan association insured by an agency of the Federal Government, in an account bearing interest at the rate currently paid by such institutions or associations on time or savings deposits. The amount withheld, or the bonds or notes deposited, and any interest accruing on such bonds or notes, shall be returned to the contractor upon fulfillment of the terms of the contract relating to such withholding. Any interest accruing on such cash withholdings shall be credited to the City.

Furthermore, N.J.S.A. 40A:11-1 et seq. provides that for contracts over \$100,000.00 for improvement to real property:

1. From the total amounts due as ascertained through a current Engineer's estimate shall be deducted an amount equivalent to two percent (2%) of the amount due on each partial payment shall be withheld by the City pending completion of the contract.
2. Upon acceptance of the work performed pursuant to the contract for which the contractor has agreed to the withholding of payments pursuant to this section, all amounts being withheld by the City shall be released and paid in full to the contractor as required by law after final acceptance by the City, without further withholding of any amounts for any purpose whatsoever, provided that the contract has been completed as indicated.

ACCEPTANCE OF FINAL PAYMENT AS RELEASE

The acceptance by the Contractor of final payment shall be and shall operate as a release by the City of all claims and all liability to the Contractor other than claims in stated amounts as may be specifically excepted by the Contractor for all things done or furnished in connection with the work and for every act and neglect of the City, or City's designee and others relating to or arising out of this work. Any payment, however, final, or otherwise, shall not release the Contractor or its sureties from any obligations under the contract documents or the performance, payment, and maintenance bonds.

COSTS OF ENGINEERING AND INSPECTION

There shall be deducted from the contract and retained by the City an amount to defray the cost of wages and overhead paid by the City to the Resident Engineer, Inspector or Inspectors employed on the work for any avoidable time in excess of eight (8) hours per day or on Saturdays, Sundays, or legal holidays.

This amount shall be determined at the rate of the hourly rate contract with the City per man hour for each Inspector or Resident Engineer for, in excess of 8 hours per day and at the rate of the hourly rate contract with the City per man hour for Saturday, Sunday and Holidays for each Inspector or Resident Engineer.

SPECIFICATIONS & INSTRUCTIONS

In addition, there will be deducted from the contract and retained by the City an amount equal to the cost paid by the City to the Engineer, for all inspection and contract administration performed in excess of the completion time stipulated for the contract, or as amended by approved change orders.

LIENS

Final payment of retained percentage shall not become due until the Contractor, shall furnish the City a complete release of liens arising out of his contract, or receipts in full, in lieu thereof covering claims of any kind or character for work or labor done, or labor or materials furnished by the Subcontractor, materialmen, persons or corporations whatsoever. The form attached entitled "Full Release and Waiver of Liens" shall be submitted with the final voucher prior to final payment.

PREVAILING WAGE PAYMENT CERTIFICATE

The form attached hereto, entitled "Prevailing Wage Payment Certification" shall be executed by the Contractor and submitted with the final voucher prior to final payment.

CERTIFIED PAYROLL REPORTS

The Contractor shall submit original certified payroll reports within 10 days of the payment of wages to the City with a copy to the City's designee, in compliance with N.J.A.C. 12:60 5.1.

VALUE ENGINEERING CONSTRUCTION CHANGE ORDERS

IMPLEMENTATION OF VALUE ENGINEERING

In accordance with N.J.S.A. 40A:11-16.6 a contractor may submit a Value Engineering Construction Proposal (VECP) after the award of a contract for a project for structures or other improvements to real property, other than work affecting a public building, that exceed \$5,000,000. This includes most public works projects, such as utility and environmental systems, road construction and repair, etc., but not building construction, improvements, or renovation. A VECP is a cost reduction proposal based on analysis by a contractor of the functions, systems, equipment, facilities, services, supplies, means and methods of construction, and any other item needed for the completion of the contract consistent with the required performance, quality, reliability, and safety.

STATUTORY PROVISIONS N.J.S.A. 40A:11-16.6 c

- a. Value engineering construction change orders shall not be used to impair any of the essential functions, or characteristics of the project, or any portion of the work involved.
- b. The contractor shall submit a value engineering construction proposal that completely describes the changes to the original specifications or proposal, impact on other project components, advantages and disadvantages of the proposed change, cost estimates and calculations on which they are based, any impact on the contract time schedule, and any other relevant information that the contracting unit may require in order to review the value engineering construction proposal.

The contractor's cost for developing the value engineering construction proposal shall not be eligible for reimbursement by the contracting unit.
- c. The contractor shall be liable for all reasonable costs incurred by the contracting unit for the technical evaluation and engineering review of a value engineering construction proposal presented by the contractor.
- d. The contracting unit's engineer shall prepare a written report for the governing body that shall evaluate the value engineering construction proposal, make a recommendation on whether or not it should be accepted, rejected, or modified, and state to the contracting unit and contractor the amount of any projected cost savings.
- e. The proposal shall not be approved unless the engineer reports to the governing body that the proposal appears consistent with the required performance, quality, reliability, and safety of the project and does not impair any of the essential functions, or characteristics of the project, or any portion of the work involved.
- f. The contracting unit shall have the sole discretion to approve or disapprove a value engineering construction proposal.
- g. The contractor and the contracting unit shall equally share in the cost savings generated on the contract as a result of an approved value engineering construction change order. Once the project is completed, the contracting unit's engineer shall verify the cost savings to reflect the actual cost of the work, and such verified cost saving shall be the basis for the savings shared equally with the contractor.
- h. The contractor shall have no claim against the contracting unit as a result of the contracting unit's disapproval of a value engineering construction proposal.

IMPLEMENTATION OF VALUE ENGINEERING PROCEDURES IN CONSTRUCTION CONTRACTS

An initial submission shall be required to use the Value Engineering process. The initial proposal shall outline the general technical concepts associated with the proposal and the estimated savings that shall result.

The initial proposal shall be reviewed by the City and, if found to be conceptually acceptable, approval to submit a final proposal shall be granted by the City. A finding of conceptual acceptability of the initial proposal in no way obligates the City to approve the final proposal. The Contractor shall have no claim against the City as a result of the rejection of any such final proposal.

Final proposals shall be considered only after City approval of the initial proposal.. Final proposals shall not be considered if submitted after 50 percent completion of the Work has occurred, based on monthly estimates amounting to more than 50 percent of the total Contract price (subject to any approved adjustments), unless the remaining Contract Time is one year or more.

Proposals shall not be considered that change the following:

- a. The type, thickness, or joint designs of a concrete, or HMA surface, intermediate, or base course.
- b. The types and thicknesses of the unbound materials underlying a concrete, or HMA surface, intermediate, or base course.
- c. The basic design of bridges, defined as the type of superstructure and substructure, span length type and thickness of deck, type of beam and arrangement, geometrics, width, and under-clearance.
- d. The basic design of retaining walls.
- e. The basic design of overhead sign supports and breakaway sign supports.
- f. The type of noise barriers.
- g. Special architectural aesthetic treatments of structures.

All proposals for changes to bridges and structures shall conform to the current AASHTO Standard Specifications for Highway Bridges as modified by the NJDOT Design Manual for Bridges and Structures.

As a minimum, the following materials and information shall be submitted with each final proposal plus any additional information requested by the City:

- a. A statement that the final proposal is submitted as a Value Engineering proposal.
- b. A description of the difference between the existing Contract requirements and the proposed change, and the comparative advantages and disadvantages of each, including considerations of safety, service life, economy of operations, stage construction, ease of maintenance, and desired appearance.
- c. Complete plans, specifications, and calculations showing the proposed revisions relative to the original Contract features and requirements.

SPECIFICATIONS & INSTRUCTIONS

If the proposal is approved, the Contractor shall submit drawings, in ink, on polyester film such as Mylar or Herculene, 4 mils thick, matted on both sides except as follows:

- (1) Structural drawings shall be submitted in pencil.
- (2) Electrical drawings shall be matted on one side and may be submitted in pencil.
- (3) Cross-section sheets shall be 3 mils thick and may be matted on one side.

All plans and engineering calculations shall bear the signature of a Professional Engineer licensed to practice in the State.

- d. A complete cost analysis indicating the final estimated costs and quantities to be replaced by the proposal, the new costs and quantities generated by the final proposal, and the cost effects of the proposed changes on operational, maintenance, and other considerations.
- e. A specific date by which a Change Order adopting the final proposal shall be executed so as to obtain the maximum cost reduction during the remainder of the Contract. This date shall be selected to allow the City ample time, usually a minimum of 45 days, for review and processing a Change Order. Should the City find that insufficient time is available for review and processing, it may reject the final proposal solely on such basis.
- f. A statement as to the effect the final proposal has on the Contract Time.
- g. A description of any previous use or testing of the final proposal on another City project or elsewhere and the conditions and results therewith. If the final proposal was previously submitted on another City project, indicate the date, the project, and the action taken by the City.
- h. The proposal shall not be experimental in nature but shall have been proven to the City's satisfaction under similar or acceptable conditions on another City project or at another location acceptable to the City.

Proposals shall be considered only after Award of Contract and only when all of the following conditions are met:

- a. The Contractor is cautioned not to base any bid prices on the anticipated approval of a proposal and to recognize that such proposal may be rejected. In the event of rejection, the Contractor is required to complete the Contract according to the original Plans and Specifications and the prices initially bid and accepted by the Governing Body.
- b. All proposals, approved or not approved by the City for use in the Contract, apply only to the ongoing Contract or Contracts referenced in the proposal. The proposals shall become the property of the City and shall contain no restrictions imposed by the Contractor on their use or disclosure. The City shall have the right to use, duplicate, and disclose in whole or in part any data necessary for the utilization of the proposal. The City retains the right to use any accepted proposal or part thereof on any other or subsequent project without any obligation to the Contractor. This provision is not intended to deny rights provided by law with respect to patented materials or processes.

SPECIFICATIONS & INSTRUCTIONS

- c. If the City already has under consideration certain revisions to the Contract that are subsequently incorporated in a proposal, the City shall reject the Contractor's proposal and shall proceed with such revisions without any value engineering obligation to the Contractor.
- d. The Contractor shall make no claim against the City or City's agents for any costs or delays due to the City's rejection of a proposal, including but not limited to development costs, anticipated profits, or increased materials or labor costs resulting from delays in the review of such proposal.
- e. The Engineer shall determine whether a proposal qualifies for consideration and evaluation. The City may reject any proposal which is not consistent with the basic design criteria for the Project.
- f. The Engineer may reject all or any portion of Work performed pursuant to an approved proposal if the Engineer determines that unsatisfactory results are being obtained. The Engineer may direct the removal of such rejected Work and require the Contractor to proceed according to the original Contract requirements without reimbursement for any Work performed under the proposal, or for its removal. Where modifications to the proposal are approved to adjust to field or other conditions, reimbursement is limited to the total amount payable for the Work at the Contract prices as if it were constructed according to the original Contract requirements. Such rejection or limitation of reimbursement does not constitute the basis of any claim against the City for delay or for any other costs.
- g. Proposals shall be considered only if equivalent options are not already provided in the Contract Documents.
- h. The proposal shall be made based on items of work scheduled to be done by the Contractor. Anticipated cost savings based on revisions of utility relocations or other similar items to be done by others shall not be considered. Proposals that may increase the cost of Work done by others may be considered.
- i. If additional information is needed to evaluate proposals, this information shall be provided in a timely manner. Such additional information could include, where design changes are proposed, results of field investigations and surveys, design computations, and field change sheets.

The contracting unit's engineer shall prepare a written report for the governing body that shall evaluate the value engineering construction proposal, make a recommendation on whether or not it should be accepted, rejected, or modified, and state to the contracting unit and contractor the amount of any projected cost savings.

- a. The proposal shall not be approved unless the Engineer reports to the City's governing body that the proposal appears consistent with the required performance, quality, reliability, and safety of the project and does not impair any of the essential functions, or characteristics of the project, or any portion of the work involved.
- b. If the City fails to respond to the final proposal by the date specified, the Contractor shall consider the final proposal rejected and shall make no claim against the City as a result thereof.
- c. The City shall have the sole discretion to approve or disapprove a value engineering construction proposal.

SPECIFICATIONS & INSTRUCTIONS

If the proposal is accepted, the changes shall be authorized by Change Order. Payment shall be made as follows:

- a. The changes will be incorporated into the Contract by adjustments in the quantities of Pay Items, agreed upon Extra Work Items or by Force Account, as appropriate, according to the Specifications.
- b. Once the project is completed, the contracting unit's engineer shall verify the cost savings to reflect the actual cost of the work, and such verified cost saving shall be the basis for the savings shared equally with the contractor. The costs of such verification shall be borne equally by both parties.
- c. The City's costs for review and processing of the proposal will be deducted from the savings. The cost of the Engineer to verify the savings shall be apportioned equally between the parties.
- d. A Contractor's costs for development, design, and implementation of the proposal are not eligible for reimbursement.
- e. The Contractor shall submit proposals for an approved Subcontractor, provided that reimbursement is made by the City to the Contractor and that the terms of the remuneration to the Subcontractor are satisfactorily negotiated and accepted before the proposal is submitted to the City. Subcontractors shall not submit a proposal except through the Contract.

SPECIFICATIONS & INSTRUCTIONS

PREVAILING WAGE PAYMENT CERTIFICATION

This form shall be executed by Contractor and submitted with final voucher prior to final payment.

PROJECT

TO

CITY OF ATLANTIC CITY

RE: Contract for Certification of Contractor of Payment of Prevailing Wages to Workmen Pursuant to New Jersey Prevailing Wage Act N.J.S.A. 34:11-56.25 et seq. and all other claims.

The undersigned Contractor hereby certifies that any and all workmen employed by the undersigned Contractor and all Subcontractors have been paid in full and prevailing wages for their respective crafts or trades as determined and computed by the Commissioner of Labor and Industry, of the State of New Jersey, and that all suppliers and material men have been paid in full all amounts claimed by them, and there remains no outstanding claim, lien, or dispute; nor any contingent claim by any of the foregoing:

DATED:

CONTRACTOR

SPECIFICATIONS & INSTRUCTIONS

STATE OF NEW JERSEY

COUNTY OF ATLANTIC

_____, being duly sworn according to law, upon his oath disposes and says that
he is the

_____ (Owner-pres. or authorized agent) of

_____ (name of corporation) that he has read the
aforesaid statement of certification and knows the content thereof, and that the same is true of his own
knowledge and this affidavit is being executed by him pursuant to the New Jersey Prevailing Wage Act
N.J.S.A. 34:11-56.25 et seq.

Signature

Sworn and subscribed to

before me, this _____ day of _____ 20__.

Notary Public of New Jersey

CERTIFICATION OF SITE SAFETY CONDITIONS

Form GC-6.02S

CITY:

PROJECT
NAME:

COUNTY

JOB #

I hereby certify that site safety conditions and the means and methods of construction have been and are in accord with the provisions of the Contract Documents and all requirements contained and referenced therein since the last executed Certificate of Site Safety Conditions, except as noted:

- | | |
|---|---|
| <input type="checkbox"/> Unsafe Trench Condition | <input type="checkbox"/> Unsafe Entry to Live Manhole |
| <input type="checkbox"/> Unsafe Traffic Control | <input type="checkbox"/> Unsafe Equipment |
| <input type="checkbox"/> Inadequate Fall Protection | <input type="checkbox"/> Proximity to Electric |
| <input type="checkbox"/> Other _____ | |
| <input type="checkbox"/> None _____ | |

Comments/Resolution _____

Contractor: _____

by: _____
Authorized Representative

I executed this form at _____ on _____

Time

Date

SPECIFICATIONS & INSTRUCTIONS

Full Release and Waiver of Liens

WHEREAS, the undersigned is a subcontractor, supplier or other person furnishing work, services, materials, or equipment upon real estate owned by the City of Atlantic City in the State of New Jersey in furtherance of that certain (PROJECT NAME) sponsored by the City of Atlantic City.

Receipt is acknowledged of \$_____, which represents full payment, for work, services, materials and/or equipment furnished and installed by us at the above referenced project, the undersigned does hereby waive, release and relinquish the City and the Building/Land from any and all claims and/or construction liens pursuant to N.J.S.A. 2A:44A-1 *et seq.* relating to this Project, to the extent of \$_____.

We agree to hold the City and the Building/Land harmless against any claim made or lien filed by any of our material suppliers and subcontractors who performed work or supplied materials for the Project to-date.

In addition, the undersigned warrants: (a) that any claims for payment for work, services, materials and/or equipment furnished in the construction or repair of the aforesaid real estate and improvements have not been assigned; (b) that all laborers, subcontractors and suppliers of the undersigned who have furnished work, services, materials and/or equipment in the construction or repair of the aforesaid real estate and improvements have been fully paid and that none of such laborers, subcontractors or suppliers have or will have any claim, demand or lien against the aforesaid real estate and improvements; and (c) that no financing statement, chattel mortgage, security interest, conditional bill of sale or retention of title agreement has been given or executed or will be given or executed for or in connection with any materials, appliances, machinery, fixtures or furnishings placed upon or installed, or to be placed upon or installed, in the aforesaid real estate and improvements by the undersigned.

IN WITNESS WHEREOF, the undersigned has executed and sealed this Full Release and Waiver of Liens this_____ day of _____, 20__.

Paid to date: \$ _____

NAME OF SUBCONTRACTOR/SUPPLIER: _____

By: _____

Title: _____

Sworn and subscribed to

before me, this_____ day of _____ 20__,

Notary Public of New Jersey

C: BID REQUIREMENTS/FORMS

**SECTION C CONTAINS REQUIREMENTS AND FORMS
THAT SHALL BE COMPLETED AND SUBMITTED WITH
YOU BID PACKAGE.**

**IN ADDITION TO SECTION C REQUIREMENTS &
FORMS, BIDDER SHALL COMPLETE
FLOOD HAZARD RISK REDUCTION & RESILIENCY
GRANT PROGRAM CDBG-DR
CHECKLIST & FORMS
AND SUBMIT WITH BID PACKAGE.**

CERTIFIED CHECK, CASHIER'S CHECK, OR BID BOND

No certified check, cashier's check or bid bond shall be required if the total amount of the bid is under \$50,000.00 per Mayor James Whelan's Executive Order No. 2 of 1994. A certified check, cashier's check or bid bond is required for bids over \$50,000.00, drawn upon a National or State Bank or Trust Company, to the order of the City of Atlantic City, New Jersey for the sum of ten percent (10%) of the total amount bid, but not in excess of \$20,000.00.

All certified or cashier's checks or bid bonds deposited by bidders to whom a contract is not awarded shall be returned to them by the City Clerk at the time of award of a contract hereunder, and the certified or cashier's check or bid bond deposited by the successful bidder shall be returned upon the proper execution and delivery of the award of contract and required bond, if called for.

In the event the successful bidder fails to execute and deliver such contract within TEN (10) DAYS from the date of the receipt of notice of final award of contract, the certified or cashier's check or bid bond so submitted with bid shall be considered as liquidated damages accruing to the City of Atlantic City and not as a penalty and the City of Atlantic City shall retain same in full settlement for any and all damages sustained by it as a result of such default.

**ANY AND ALL BONDS OF ANY TYPE THAT ARE REQUIRED IN THESE SPECIFICATIONS SHALL
BE FROM A COMPANY AUTHORIZED TO DO BUSINESS IN THE STATE OF NEW JERSEY.**

CONSENT OF SURETY

Each proposal of \$50,000.00 or more shall be accompanied by a certificate from a surety company stating that it shall provide the contractor with a bond in such sum as is required in the specifications. **The Consent of Surety shall be submitted with the bid package, but as stated above, no surety or performance bonds shall be required if bid is under \$50,000.00.**

The successful bidder shall be required to furnish a bond of a surety company authorized to do business in the State of New Jersey, in a sum equal to one hundred percent (100%) of the total contract price. Said bond shall be satisfactory as to form to the City Solicitor and as to surety to the Comptroller of the City of Atlantic City and is to be conditioned for the faithful performance of the contract to be entered into and, also, for the payment of lawful claims of subcontractors, material men, laborers, persons, firms or corporations of labor performed or material, provisions, provender, or other supplies or teams, fuels, oils, implements of machinery furnished, used or consumed in the carrying forward, performing or completing of said contract.

Attach Consent of Surety from a Surety Company, meeting the requirements, described herein, stating that if the bidder is awarded the contract that the surety company shall supply the bonds for the contract.

1. Shall be an irrevocable, unconditional commitment by the surety to issue on behalf of the bidder the bond or bonds set forth in the contract documents upon award of the project in the full amounts specified.
2. Shall include all bonds required by the contract documents i.e. performance, labor and material payment, maintenance, environmental, etc.
3. Certificate (Consent) of Surety is not waiveable and shall be considered a material defect resulting in rejection of bid if omitted from bid package.
4. Shall not contain any provision that would serve to limit the surety's liability to the "spread to second" bidder in the event the bidder fails to enter into a contract upon award.

SUBCONTRACTOR DECLARATION

Each bidder shall set forth in the bid the names, addresses and license number (when required) of each subcontractor for the furnishing of plumbing, and gas fitting and all kindred work, and of the steam power plants, steam and hot water heating and ventilating and refrigeration apparatus and all kindred work, steam power plants and kindred work, and electrical work, including any electrical power plants, tele-data, fire alarm, or security system, and structural steel and ornamental iron work, if any, for the construction, alteration or repair of any public buildings.

A general contractor that intends to utilize a specific subcontractor to perform work in one or more of the specialty trade categories shall provide the required information with regard to that subcontractor in the appropriate space for each specialty trade category applicable to the contract

Whenever a bid sets forth more than one subcontractor for any of the categories listed below, the bidder shall submit to the contracting unit a certificate signed by the bidder listing each subcontractor named in the bid for that category. The certificate shall set forth the scope of work, goods, and services for which the subcontractor has submitted a price quote and which the bidder has agreed to award to each subcontractor should the bidder be awarded the contract. The certificate shall be submitted to the contracting unit simultaneously with the list of the subcontractors.

The certificate may take the form of a single certificate listing all subcontractors or, alternatively, a separate certificate may be submitted for each subcontractor. If a bidder does not submit a certificate or certificates to the contracting unit, the contracting unit shall award the contract to the next lowest responsible bidder.

All bidders seeking to perform plumbing work on a publicly bid contract are required to comply with N.J.S.A. 45:14C-2 and N.J.A.C. 13:32-1.3. These provisions require that plumbing work on such contract may only be performed by an entity in which a licensed master plumber owns not less than 10% of the issued and outstanding shares of stock in the corporation, or not less than 10% of the capital of the partnership, or not less than 10% of the ownership of any other firm or legal entity. Accordingly, if a bidder intends to perform plumbing work on a publicly bid contract with its own employees or by the bidder himself, a master plumber shall possess an ownership interest that complies with N.J.S.A. 45:14C-2 and N.J.A.C. 13:32-1.3 in the entity submitting the bid. Alternately, if a bidder intends to perform such work through a subcontractor, a master plumber shall possess an ownership interest that complies with N.J.S.A. 45:14C-2 and N.J.A.C. 13:32-1.3 in the subcontractor.

There shall be submitted proof that each subcontractor is qualified in accordance with the rules and regulations of the State of New Jersey when such rules and regulations exist.

A general contractor that intends to perform work in one or more of the specialty trade categories through the use of its own employees or the general contractor himself rather than through the utilization of a subcontractor shall write the word “**IN-HOUSE**” next to each applicable category and then insert the name, and license number where required, of each such employee of the general contractor or the general contractor himself in the appropriate spaces for each specialty trade category applicable to the contract.

If the contract does not involve any of the specialty trade categories below, please insert the word “**NONE**” in each appropriate space provided.

SPECIFICATIONS & INSTRUCTIONS

Plumbing Work: _____

Name _____

Phone # _____

Address _____

License Number: _____

Gas Fitting and All Kindred Work: _____

Name _____

Phone # _____

Address _____

License Number: _____

Certification Number (for Medical Gas Piping Installation): _____

Steam Power Plants, Steam and Hot Water Heating and Ventilating and Refrigeration Apparatus and all Kindred Work:

Name _____

Phone # _____

Address _____

License Number: _____

Electrical Work, including any Electrical Power Plants _____

Name _____

Phone # _____

Address _____

License Number: _____

SPECIFICATIONS & INSTRUCTIONS

Tele-data Systems: _____

Name _____

Phone # _____

Address _____

License Number: _____

Telecommunications Exemption (Provide copy of letter and ID card)

Number: _____

Fire Alarm
Systems: _____

Name _____

Phone # _____

Address _____

License Number: _____

Fire Protection Equipment Business or Fire Protection Contractor Business Permit Number: _____

Security Systems: _____

Name _____

Phone # _____

Address _____

License Number: _____

Structural Steel and Ornamental Iron Work:

Name _____

Phone # _____

Address _____

License Number: _____

PUBLIC WORKS CONTRACTOR REGISTRATION FORM

N.J.S.A. 34:11-56.48 et seq requires that contractors and subcontractors, be registered with the New Jersey Department of Labor, Division of Wage and Hour Compliance. The definition in the law is as follows:

“Contractor means a person, partnership, association, joint stock company, trust, corporation, or other legal business entity or successor thereof who enters into a contract which is subject to the provisions of the “New Jersey Prevailing Wage Act, “N.J.S.A. 34:11-56.25 et seq and includes any subcontractor or lower tier subcontractor of a contractor as defined herein.”

1. All named contractors in a bid proposal (including out-of-state contractors) shall be registered with the Department of Labor’s Division of Wage and Hour Compliance at the time proposals are received by the public entity.
2. All named sub-contractors shall be registered with the Department of Labor pursuant to the PWCRA at the time the proposal is received, or the proposal shall be determined to be non-responsive.
3. Any non-listed sub-contractor shall be registered with the Department of Labor prior to physically starting work.
4. The law requires contractors to submit certificates after a bid proposal is received and prior to awarding the contract. (N.J.S.A. 34:11-56.55)
5. After bid proposals are received, and prior to contract award, the contractor shall submit to the public entity copies of certifications of all listed sub-contractors.
6. Prior to the work being performed by non-listed subcontractors, the contractor shall submit to the public entity copies of certifications of all non-listed subcontractors.

Please indicate for the bidder and all subcontractors listed on the “Subcontractor Declaration” herein, as to their registration with the NJ Department of Labor, Division of Wage and Hour Compliance in accordance with N.J.S.A. 34:11-56.25 et seq

<u>Name</u>	<u>Registration Number</u>
Bidder_____	_____
(Subcontractor)_____	_____
(Subcontractor)_____	_____

Subscribed and sworn

before me this_____ day

of _____ 20_____.

	Signature
--	-----------

Notary Public of _____	
------------------------	--

My Commission Expires _____, 20_____.

Name and Title
(Type or Print)

NEW JERSEY" BUSINESS REGISTRATION CERTIFICATE" FORM

N.J.S.A. 52:32-44 requires that Business Organizations, be registered with the New Jersey Department of Treasury, Division Revenue. The definition in the law is as follows: "'Contractor" means a business organization that seeks to enter, or has entered into, a contract with a contracting agency;

"Contract" means any agreement, including but not limited to a purchase order or a formal agreement for the provision of goods, performance of services, or construction of a construction project, which is a legally binding relationship enforceable by law, between a contractor and a contracting agency that agrees to compensate the contractor, as defined by and subject to the terms and conditions of the agreement; and where the goods that are received, services that are delivered, and construction that is constructed is within the geographic borders of the State of New Jersey; and where:

- (1) the value of a single contract with the contractor is in excess of 15 percent of the amount of the contracting agency's bid threshold; or
- (2) when the aggregate amount of contracts with the contractor, during the fiscal year of the contracting agency, exceeds 15 percent of the amount of the contracting agency's bid threshold.

Please indicate for the bidder and all subcontractors listed on the "Subcontractor Declaration" herein, as to their registration with the NJ Department of Treasury, Division of Revenue in accordance with N.J.S.A. 52:32-44.

The contractor shall provide the contracting agency with the business registration of the contractor and that of any named subcontractor prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

<u>Name</u>	<u>Registration Number</u>
Bidder_____	_____
(Subcontractor)_____	_____
(Subcontractor)_____	_____
Subscribed and sworn	
before me this_____day	
of_____20_____.	
_____	_____
Notary Public of _____	Signature _____
	Name and Title _____
My Commission Expires_____, 20_____.	(Type or Print)

BACKGROUND QUESTIONNAIRE

Bidders shall provide the following background questionnaire information:

Date of Organization of Company _____

Name and address of officers: _____

President _____

Vice President _____

Secretary _____

Treasurer _____

EXPERIENCE

1. How many years has your organization been in business as a general contractor under your present business name? _____
2. How many years' experience in this type of construction work has your organization had? _____
3. What are the latest similar projects your organization has completed (as the prime) within the last three (3) years? (Attach additional pages if necessary)

	<u>Contract Amount</u>	<u>Date Work Completed</u>	<u>Company</u>
A.	\$ _____	_____	_____
B.	\$ _____	_____	_____
C.	\$ _____	_____	_____
D.	\$ _____	_____	_____
E.	\$ _____	_____	_____

SPECIFICATIONS & INSTRUCTIONS

Background Questionnaire Page 2

Names, Addresses and Telephone Numbers of Reference for items listed on previous page:

	<u>Name and Address</u>	<u>Telephone No.</u>
A.	_____	_____
B.	_____	_____
C.	_____	_____

4. Have you ever failed to complete any work awarded to you (within the last ten years)? _____
 If so, where, and why? _____

5. Have you or has any officer of your organization ever been an officer or partner of some other contracting organization that failed to complete any work (within the last ten years)? _____
 If so, state the name of individual, position, and the name of the other organization

Did this other contracting organization ever fail to complete any work awarded it
 (within the last ten years)? _____
 If so, where, and why? _____

6. List of uncompleted contracts at present held by you:

<u>Name of Contract</u>	<u>Contracting Agency</u>	<u>Amount</u>
_____	_____	\$ _____
_____	_____	\$ _____
_____	_____	\$ _____

SPECIFICATIONS & INSTRUCTIONS

Background Questionnaire Page 3

7. State approximately the largest amount of work you have done in any one year (within the last five years) of a similar nature to the work being bid on.

8. List the equipment available for the performance of work under the proposed contract (attach additional sheets if necessary)

STATEMENT OF OWNERSHIP DISCLOSURE

N.J.S.A. 52:25-24.2 (P.L. 1977, c.33, as amended by P.L. 2016, c.43)

This statement shall be completed, certified to, and included with all bid and proposal submissions. Failure to submit the required information is cause for automatic rejection of the bid or proposal.

Name of Organization: _____

Organization Address: _____

Part I Check the box that represents the type of business organization:

- ☐ Sole Proprietorship (skip Parts II and III, execute certification in Part IV)
- ☐ Non-Profit Corporation (skip Parts II and III, execute certification in Part IV)
- ☐ For-Profit Corporation (any type) ☐ Limited Liability Company (LLC)
- ☐ Partnership ☐ Limited Partnership ☐ Limited Liability Partnership (LLP)
- ☐ Other (be specific): _____

Part II

- ☐ The list below contains the names and addresses of all stockholders in the corporation who own 10 percent or more of its stock, of any class, or of all individual partners in the partnership who own a 10 percent or greater interest therein, or of all members in the limited liability company who own a 10 percent or greater interest therein, as the case may be. **(COMPLETE THE LIST BELOW IN THIS SECTION)**

OR

- ☐ No one stockholder in the corporation owns 10 percent or more of its stock, of any class, or no individual partner in the partnership owns a 10 percent or greater interest therein, or no member in the limited liability company owns a 10 percent or greater interest therein, as the case may be. **(SKIP TO PART IV)**

(Please attach additional sheets if more space is needed):

Name of Individual or Business Entity	Home Address (for Individuals) or Business Address

**Part III DISCLOSURE OF 10% OR GREATER OWNERSHIP IN THE STOCKHOLDERS,
PARTNERS OR LLC MEMBERS LISTED IN PART II**

If a Proposer has a direct or indirect parent entity which is publicly traded, and any person holds a 10 percent or greater beneficial interest in the publicly traded parent entity as of the last annual federal Security and Exchange Commission (SEC) or foreign equivalent filing, ownership disclosure can be met by providing links to the website(s) containing the last annual filing(s) with the federal Securities and Exchange Commission (or foreign equivalent) that contain the name and address of each person holding a 10% or greater beneficial interest in the publicly traded parent entity, along with the relevant page numbers of the filing(s) that contain the information on each such person. **Attach additional sheets if more space is needed.**

Website (URL) containing the last annual SEC (or foreign equivalent) filing	Page #'s

Please list the names and addresses of each stockholder, partner or member owning a 10 percent or greater interest in any corresponding corporation, partnership and/or limited liability company (LLC) listed in Part II **other than for any publicly traded parent entities referenced above.** The disclosure shall be continued until names and addresses of every noncorporate stockholder, and individual partner, and member exceeding the 10 percent ownership criteria established pursuant to N.J.S.A. 52:25-24.2 has been listed. **Attach additional sheets if more space is needed.**

Stockholder/Partner/Member and Corresponding Entity Listed in Part II	Home Address (for Individuals) or Business Address

Part IV Certification

I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge: that I am authorized to execute this certification on behalf of the bidder/proposer; that the *City of Atlantic City* is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the completion of any contracts with *the City* to notify the *City* in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the, permitting the *City* to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):		Title:	
Signature:		Date:	

STATE OF NEW JERSEY DEBARRED LIST AFFIDAVIT

STATE NEW JERSEY

SS

COUNTY OF _____

I, _____ of the City/Town/Township/Borough, etc. _____ in the
County of _____ and the State of _____ full age, being duly sworn
according to law on my oath depose and say that:

I am _____ an officer of the firm of

_____ the bidder making the bid for the above named work, and that I
executed said bid with full authority to do so; that said bidder at the time of making of this bid is not
included on the State of New Jersey, State Treasurer's List of Debarred, Suspended and Disqualified
Bidders; and that all statements contained in said bid and in this affidavit are true and correct, and made
with the full knowledge that the _____, as the City relies upon the truth of the statements contained in
said bid and in the statements contained in this affidavit in awarding the contract for said work.

The undersigned further warrants that should the name of the firm making this bid appear on the State
Treasurer's List of Debarred, Suspended and Disqualified Bidders at anytime prior to, and during the life
of this Contract, including Guarantee Period, that the Local Unit shall be immediately so notified by the
signatory of this Eligibility Affidavit.

The undersigned understands that the firm making the bid as Contractor is subject to debarment, suspension
and/or disqualification in contracting with the State of New Jersey, if the Contractor, pursuant to NJAC
12:60-7.1 et seq, commits any of the acts listed therein, and as determined according to applicable law and
regulation.

(Insert Name, Telephone No., Fax No., and Address of Contractor)

(Insert Name and Title of Affiant)

Subscribed and sworn

before me this _____ day

of _____ 20____.

Notary Public of _____

My Commission Expires _____, 20____.

SPECIFICATIONS & INSTRUCTIONS

**CERTIFICATION OF NON-DEBARMENT
FOR FEDERAL GOVERNMENT CONTRACTS**

N.J.S.A. 52:32-44.1 (P.L. 2019, c.406)

This certification shall be completed, certified to, and submitted to the contracting unit prior to contract award, except for emergency contracts where submission is required prior to payment.

PART I: VENDOR INFORMATION

Individual or Organization Name	
Address of Individual or Organization	
DUNS Code (if applicable)	
CAGE Code (if applicable)	
Check the box that represents the type of business organization:	

- ☐ Sole Proprietorship (skip Parts III and IV) ☐ Non-Profit Corporation (skip Parts III and IV)
☐ For-Profit Corporation (any type) ☐ Limited Liability Company (LLC) ☐ Partnership
☐ Limited Partnership ☐ Limited Liability Partnership (LLP)
☐ Other (be specific): _____

PART II – CERTIFICATION OF NON-DEBARMENT: Individual or Organization

I hereby certify that the **individual or organization listed above in Part I** is not debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the **City of Atlantic City** is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by **the City** to notify the **City** in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the City, permitting the City to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):		Title:	
Signature:		Date:	

PART III – CERTIFICATION OF NON-DEBARMENT: Individual or Entity Owning Greater than 50 Percent of Organization**Section A (Check the Box that applies)**

<input type="checkbox"/>	Below is the name and address of the stockholder in the corporation who owns more than 50 percent of its voting stock, or of the partner in the partnership who owns more than 50 percent interest therein, or of the member of the limited liability company owning more than 50 percent interest therein, as the case may be.
Name of Individual or Organization	
Home Address (for Individual) or Business Address	
OR	
<input type="checkbox"/>	No one stockholder in the corporation owns more than 50 percent of its voting stock, or no partner in the partnership owns more than 50 percent interest therein, or no member in the limited liability company owns more than 50 percent interest therein, as the case may be.

Section B (Skip if no Business entity is listed in Section A above)

<input type="checkbox"/>	Below is the name and address of the stockholder in the corporation who owns more than 50 percent of the voting stock of the organization's parent entity, or of the partner in the partnership who owns more than 50 percent interest in the organization's parent entity, or of the member of the limited liability company owning more than 50 percent interest in organization's parent entity, as the case may be.
Stockholder/Partner/Member Owning Greater Than 50 Percent of Parent Entity	
Home Address (for Individual) or Business Address	
OR	
<input type="checkbox"/>	No one stockholder in the parent entity corporation owns more than 50 percent of its voting stock, no partner in the parent entity partnership owns more than 50 percent interest therein, or no member in the parent entity limited liability company owns more than 50 percent interest therein, as the case may be.

SPECIFICATIONS & INSTRUCTIONS

Section C – Part III Certification

I hereby certify that no individual or organization that is debarred by the federal government from contracting with a federal agency owns greater than 50 percent of the **Organization listed above in Part I** or, if applicable, owns greater than 50 percent of a parent entity of _____. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the **City of Atlantic City** is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award **with the City** to notify the **City** in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the City, permitting the City to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):		Title:	
Signature:		Date:	

Part IV – CERTIFICATION OF NON-DEBARMENT: Contractor – Controlled Entities

Section A



Below is the name and address of the corporation(s) in which the **Organization listed in Part I** owns more than 50 percent of voting stock, or of the partnership(s) in which the **Organization listed in Part I** owns more than 50 percent interest therein, or of the limited liability company or companies in which the **Organization listed above in Part I** owns more than 50 percent interest therein, as the case may be.

Name of Business Entity

Business Address

****Add additional sheets if necessary****

OR



The **Organization listed above in Part I** does not own greater than 50 percent of the voting stock in any corporation and does not own greater than 50 percent interest in any partnership or any limited liability company.

Section B (skip if no business entities are listed in Section A of Part IV)

SPECIFICATIONS & INSTRUCTIONS

<input type="checkbox"/>	Below are the names and addresses of any entities in which an entity listed in Part III A owns greater than 50 percent of the voting stock (corporation) or owns greater than 50 percent interest (partnership or limited liability company).
--------------------------	---

Name of Business Entity Controlled by Entity Listed in Section A of Part IV	Business Address

****Add additional Sheets if necessary****

OR

<input type="checkbox"/>	No entity listed in Part III A owns greater than 50 percent of the voting stock in any corporation or owns greater than 50 percent interest in any partnership or limited liability company.
--------------------------	--

Section C – Part IV Certification

I hereby certify that the **Organization listed above in Part I** does not own greater than 50 percent of any entity that that is debarred by the federal government from contracting with a federal agency and, if applicable, does not own greater than 50 percent of any entity that in turns owns greater than 50 percent of any entity debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the **City of Atlantic City** is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by **the City** to notify the **City of Atlantic City** in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the **City**, permitting the **City** to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):		Title:	
Signature:		Date:	

SPECIFICATIONS & INSTRUCTIONS

NON-COLLUSION AFFIDAVIT

STATE OF _____:

SS.

COUNTY OF _____:

I, _____ of the (City, Town, Township, Borough, etc.)
of _____ in the County of _____ and the State
of _____, of full age, being duly sworn according to law
on my oath depose and say that:

I am _____
of the firm of _____

the bidder making the Proposal for the above named project, and that I executed the said Proposal with full authority to do so; that said bidder had not, directly or indirectly, entered into any agreement(s), participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the above named project; and that all statements contained in said Proposal and in this affidavit are true and correct, and made with full knowledge that the _____ relies upon the truth of the statements contained in said Proposal and in this affidavit in awarding the contract for the said Project.

I warrant that no requirement or commitment was made in reference to any political contribution to any party, persons, or elected official and that no undisclosed benefits of any kind were promised to anyone connected with City government or any political party in reference hereto.

I warrant that no member, partner, official, officer, stockholder or anyone having interest in this firm has any interest of any amount or nature as to another firm, partnership, corporation, group, etc., making a bid on said project.

I further warrant that no person(s) or selling agency has been employed or retained to solicit, or secure such contract upon an agreement or understanding for a commission, percentage, brokerage or contingent, fee except bona fide employees or bona fide established commercial or selling agencies maintained by

(Name of Bidder)

SPECIFICATIONS & INSTRUCTIONS

Continued...

I further warrant and represent that I have never been convicted of or acknowledge nor admitted to any payment of kickbacks or unlawful gifts to any government official or employee for which conduct the City of Atlantic City deems me disqualified from doing business with the City of Atlantic City under such circumstances.

I also understand that the above disqualification does not apply to any vendor who cooperates with the prosecution and gives supporting testimony of behalf of the prosecution in the course of a judicial inquiry.

(N.J.S.A. 52:34-15)

(Also type or print name of
affiant under signature)

Subscribed and sworn to
before me this__ day of
_____, 20__.

Notary Public of

My commission expires:

(Date)

CERTIFICATE OF BIDDER SHOWING ABILITY TO PERFORM CONTRACT
AFFIDAVIT

I, _____ of the (City, Town, Township, Borough,
etc.)
of _____ in the County of _____ and the
State of _____ of full age, being duly sworn
according to law on my oath depose and say that:

1. I am a(n) owner, partner, shareholder, or officer of the company set forth below and am duly authorized to execute this affidavit on its behalf.

(Check appropriate Statement(s))

_____ I own, lease, or control the necessary equipment required by the plans, specifications, and advertisements under which bids are asked for.

_____ I do not own, lease, or control all the necessary equipment required by the plans, specifications,

and advertisements under which bids are asked for.

If the bidder is not the actual owner or lessee of all the necessary equipment provide the source from which the equipment will be obtained (Attach additional sheets if necessary)

(Attach certification from the owner or person in control of the equipment definitely granting to the bidder the control of the equipment required during such time as may be necessary for the completion of that portion of the contract for which it is necessary)

SEAL _____

Title: _____

Name of Company

Subscribed and sworn to
before me this ___ day of
_____, 20__.

Notary Public of _____

My commission expires _____
(Date)

SPECIFICATIONS & INSTRUCTIONS



DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN FORM

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY - DIVISION OF PURCHASE AND PROPERTY
33 WEST STATE STREET, P.O. BOX 230 TRENTON, NEW JERSEY 08625-0230

BID SOLICITATION # AND TITLE: _____

VENDOR NAME: _____

Pursuant to N.J.S.A. 52:32-57, et seq. (P.L. 2012, c.25 and P.L. 2021, c.4) any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must certify that neither the person nor entity, nor any of its parents, subsidiaries, or affiliates, is identified on the New Jersey Department of the Treasury's Chapter 25 List as a person or entity engaged in investment activities in Iran. The Chapter 25 list is found on the Division's website at <https://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf>. Vendors/Bidders must review this list prior to completing the below certification. If the Director of the Division of Purchase and Property finds a person or entity to be in violation of the law, s/he shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

CHECK THE APPROPRIATE

BOX

☐ I certify, pursuant to N.J.S.A. 52:32-57, et seq. (P.L. 2012, c.25 and P.L. 2021, c.4), that neither the Vendor/Bidder listed above nor any of its parents, subsidiaries, or affiliates is listed on the New Jersey Department of the Treasury's Chapter 25 List of entities determined to be engaged in prohibited activities in Iran.

OR

☐ I am unable to certify as above because the Vendor/Bidder and/or one or more of its parents, subsidiaries, or affiliates is listed on the New Jersey Department of the Treasury's Chapter 25 List. I will provide a detailed, accurate and precise description of the activities of the Vendor/Bidder, or one of its parents, subsidiaries or affiliates, has engaged in regarding investment activities in Iran by completing the information requested below.

Entity Engaged in Investment Activities	_____
Relationship to Vendor/ Bidder	_____
Description of Activities	_____

Duration of Engagement _____
Anticipated Cessation Date _____

CERTIFICATION

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Vendor, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the State of New Jersey is relying on the information contained herein, and that the Vendor is under a continuing obligation from the date of this certification through the completion of any contract(s) with the State to notify the State in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I may be subject to criminal prosecution under the law, and it will constitute a material breach of my contract(s) with the State, permitting the State to declare any contract(s) resulting from this certification void and unenforceable.

Signature

Date

Print Name and Title

SPECIFICATIONS & INSTRUCTIONS

Certification of Non-Involvement in Prohibited Activities in Russia or Belarus
Contract / Bid Solicitation Title of the Contract / Bid Solicitation No.

Pursuant to N.J.S.A. 52:32-60.1, et seq. (P.L. 2022, c.3) any person or entity (hereinafter the "Vendor") that seeks to enter into or renew a contract with a State agency for the provision of goods or services, or the purchase of bonds or other obligations, shall be required to complete the certification below indicating whether or not the Vendor is engaged in prohibited activities in Russia and/or Belarus¹. If the Department of the Treasury finds that a Vendor has made a certification in violation of the law, it shall take any action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

Certification

I, the undersigned, certify that I have read the definition of "Vendor" below, and have reviewed the Department of the Treasury's list of Vendors engaged in prohibited activities in Russia and/or Belarus, and having done so certify:

(Check the Appropriate Box)

A. That the Vendor is not identified on the Department of the Treasury's list of Vendors engaged in prohibited activities in Russia and/or Belarus and is not engaged in prohibited activities in Russia and/or Belarus.

OR

B. That I am unable to certify as to "A" above, because the Vendor is identified on the Department of the Treasury's list of Vendors engaged in prohibited activities in Russia and/or Belarus.

OR

C. That I am unable to certify as to "A" above, because the Vendor, though not identified on the Department of the Treasury's list of Vendors engaged in prohibited activities in Russia and/or Belarus, is engaged in prohibited activities in Russia or Belarus. A detailed, accurate and precise description of the Vendor's activity in Russia and/or Belarus is set forth below.

Description of Prohibited Activity (*Attach Additional Sheets If Necessary.*)

Additional Certification of Federal Exemption and/or License

(Complete only if appropriate)

D. I, the undersigned, certify that Vendor is currently engaged in activity in Russia and/or Belarus, but is doing so consistent with federal law and/or regulation and/or license. A detailed description of how the Vendor's activity in Russia and/or Belarus is consistent with federal law, or is within the requirements of the federal exemption and/or license is set forth below. (*Attach Additional Sheets If Necessary.*)

(Signature of Vendor's Authorized Representative)

(Date)

(Print Name & Title of Vendor's Authorized Representative)

(Vendor's FEIN)

SPECIFICATIONS & INSTRUCTIONS

Certification of Non-Involvement in Prohibited Activities in Russia or Belarus (Continued)

(Vendor's Name)

(Vendor's Telephone Number)

(Vendor's Address (Street Address))

(Vendor's Fax Number)

(Vendor's Address (City/State/Zip Code))

(Vendor's Email Address)

Definitions:

¹ Vendor means: (1) A natural person, corporation, company, limited partnership, limited liability partnership, limited liability company, business association, sole proprietorship, joint venture, partnership, society, trust, or any other nongovernmental entity, organization, or group; (2) Any governmental entity or instrumentality of a government, including a multilateral development institution, as defined in Section 1701(c)(3) of the International Financial Institutions Act, 22 U.S.C. 262r(c)(3); or (3) Any parent, successor, subunit, direct or indirect subsidiary, or any entity under common ownership or control with, any entity described in paragraph (1) or (2). ¹¹ Engaged in prohibited activities in Russia or Belarus means: (1) companies in which the Government of Russia or Belarus has any direct equity share; (2) having any business operations commencing after the effective date of this act that involve contracts with or the provision of goods or services to the Government of Russia or Belarus; (3) being headquartered in Russia or having its principal place of business in Russia or Belarus, or (4) supporting, assisting or facilitating the Government of Russia or Belarus in their campaigns to invade the sovereign country of Ukraine, either through in-kind support or for profit.

AFFIRMATIVE ACTION/CONTRACT COMPLIANCE REQUIREMENTS

**BIDDERS ARE REQUIRED TO COMPLY WITH THE REQUIREMENTS OF
N.J.S.A. 10:5-31 et seq. AND N.J.A.C. 17:27 AND ORDINANCE NO. 24 OF 1993**

ALL BIDDERS are required to submit the Schedule of Good Faith Effort for Utilization of Minority and Women Business Enterprise Program for Contractors and/or supplies.

ALL BIDDERS are encouraged to hire Atlantic City residents and use Atlantic City Contractor, Sub-Contractors and Merchants if awarded this contract.

ALL BIDDERS shall write the following office's for technical assistance before submission of this bid package if assistance is needed. All requests for assistance & responses thereto shall be in writing.

ALL BIDDERS that have received a NJ Certificate of Employee Information Report shall enclose a copy of same with this qualifications package. All others shall contact the Public Agency Compliance Officer (P.A.C.O.)

CONTACT INFORMATION:

Human Resources Office
Mona Tally, Affirmative Action Officer
Public Agency Compliance Officer
Telephone (609) 347-5425
mtally@acnj.gov

If awarded this contract your company/firm shall be required to comply with the requirement of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27 Law against Discrimination in Public Contracts.

SCHEDULE OF MINORITY BUSINESS ENTERPRISE (MBE)
FEMALE BUSINESS ENTERPRISE (FBE)
CONTRACTORS/SUPPLIERS

ALL BIDDERS shall write to the Public Agency Compliance Officer for technical assistance before submission of this bid if assistance is needed. All requests for assistance & responses thereto shall be in writing to Human Resources Office, Attn: Mona Tally, City Hall, Room 416, 1301 Bacharach Blvd, Atlantic City, NJ 08401.

BIDDER SHALL COMPLETE THIS FORM AND SUBMIT WITH BID PACKAGE.

FMBE STATUS: FBE _____ MBE _____ DBE _____ OTHER _____
 CERTIFICATION NO _____ City _____ State _____ Other _____
 (If FMBE Status exclude Part I and Part II)

PART I: SCHEDULE OF MINORITY CONTRACTORS AND/OR SUPPLIERS

Contractor to insert Name of Minority Business Addresses and Telephone Numbers	Specify type of work Break-down segments of work	Total Contract Dollar Amount to MFBEs w/minimum of 10%
_____	_____	_____
_____	_____	_____
_____	_____	_____

Any substitution of a MFBE identified on this schedule shall be for good cause and on written notice to the Public Agency Compliance Officer. Any substitution for MFBE Sub Contractors and/or suppliers shall be by a certified MFBE Sub Contractor and/or Suppliers with the written prior approval of the Public Agency Compliance Officer.

PART II: GOOD FAITH EFFORT EXTENDED

(Complete in event the above 10% minimum MFBE
Contractors/Suppliers participation is not met)

INSTRUCTION: Fully explain all efforts taken to meet the minimum minority contractors and/or suppliers participation which shall include: letters, phone calls, communications sent to minority firms, sources and/or contracts, etc. Documentation of all efforts shall be required.

MINIMUM GOOD FAITH CONDITIONS

SPECIFICATIONS & INSTRUCTIONS

**AWARDING OF PROCUREMENT, PROFESSIONAL
OR SERVICE CONTRACTING**

ONLY

Once the successful bidder is identified (through the receipt of a copy of the resolution approved by the City Council of Atlantic City) then the contractor who has been awarded the contract shall provide the Public Agency with one of the following:

- (A) If the contractor has a Federal Affirmative Action Plan Approval which consists of a valid letter from the Office of Federal Contract Compliance Programs.

A photo copy of the letter of approval shall be submitted to the Human Resources Office.
(or)

- (B) If the contractor has a Certificate of Employee Information Report.

A photo copy of the certificate shall be submitted to the Human Resources Office.

(or)

- (C) If the company has none of the above, the Public Agency is required to provide the contractor with an AA302 Affirmative Action Employee Information Report.

Bidder shall submit a copy of any of the above to the Human Resources Office, Attn: Mona Tally, City Hall, 1301 Bacharach Blvd. Room 416, Atlantic City, New Jersey 08401.

SPECIFICATIONS & INSTRUCTIONS

BIDDER REFERRED TO LAW

The bidder is specifically referred to N.J.S.A. 10:5-31 et. seq. and N.J.A.C. 17:27 as amended and the Regulations adopted pursuant thereto, relating to affirmative action in relation to discrimination.

EXHIBIT B

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE

N.J.S.A. 10:5-31 et seq. (P.L.1975, c.127)

N.J.A.C. 17:27-1.1 et seq.

CONSTRUCTION CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality, or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality, or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer, pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Dept. of LWD, Construction EEO Monitoring Program, may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B, and C, as long as the Dept. of LWD, Construction EEO Monitoring Program is satisfied that the contractor or subcontractor is employing workers

SPECIFICATIONS & INSTRUCTIONS

provided by a union which provides evidence, in accordance with standards prescribed by the Dept. of LWD, Construction EEO Monitoring Program, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2. The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

(A) If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et. seq., as supplemented and amended from time to time and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to afford equal employment opportunities minority and women workers directly, consistent with this chapter. If the contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances,

indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.

(B) If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:

(1) To notify the public agency compliance officer, the Dept. of LWD, Construction EEO Monitoring Program, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;

(2) To notify any minority and women workers who have been listed with it as awaiting available vacancies;

(3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;

SPECIFICATIONS & INSTRUCTIONS

- (4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;
- (5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and non-discrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;
- (6) To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:
 - (i) The contractor or subcontractor shall interview the referred minority or women worker.
 - (ii) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work of the construction trade, the contractor or subcontractor shall in good faith determine the qualifications of such individuals. The contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However, a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Dept. of LWD, Construction EEO Monitoring Program. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below.
 - (iii) The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in (i) above, whenever vacancies occur. At the request of the Dept. of LWD, Construction EEO Monitoring Program, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.
 - (iv) If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Dept. of LWD, Construction EEO Monitoring Program.
- (7) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Dept. of LWD, Construction EEO Monitoring Program and submitted promptly to the Dept. of LWD, Construction EEO Monitoring Program upon request.

(C) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Dept. of LWD, Construction EEO Monitoring Program an initial project workforce report (Form AA-201) electronically provided to the public agency by the Dept. of LWD, Construction EEO Monitoring Program, through its web-site, for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of this contract to the Dept. of LWD, Construction EEO Monitoring Program, and to the public agency compliance officer.

The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women.

(D) The contractor and its subcontractors shall furnish such reports or other documents to the Dept. of LWD, Construction EEO Monitoring Program as may be requested by the Dept. of LWD, Construction EEO Monitoring Program from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Dept. of LWD, Construction EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1.1 et seq.

CONTRACT PROCEDURES

At the time the City submits a contract for signing to the construction contractor, the construction contractor shall complete and submit an initial Project Workforce Report Form AA 201. Proper completion and submission of this report shall constitute evidence of the contractor's compliance with the regulations. Failure to submit this form may result in the contract being terminated. The contractor also agrees to submit a copy of the Monthly Project Workforce Report Form AA 202 once a month thereafter for the duration of the contract to the Division and to the public agency compliance officer.

AMERICANS WITH DISABILITIES ACT CONTRACTING LANGUAGE
EQUAL OPPORTUNITY FOR INDIVIDUALS WITH DISABILITIES

The contractor and the City do hereby agree that the provisions of Title II of the Americans With Disabilities Act of 1990 (the "Act") (42 U.S.C. S12.101 et seq.), which prohibits discrimination on the basis of disability by public entities, in all services, programs and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereunto, are made part of this contract. In providing any aid, benefit, or service on behalf of the City pursuant to this contract, the contractor agrees that the performance shall be in strict compliance with the Act. In the event the contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the contractor shall defend the City in any action or administrative proceeding commenced pursuant to this Act. The contractor shall indemnify, protect, and save harmless the City, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The contractor shall, at its own expense, appear, defend, and pay any and all charges for legal services and any and all costs or other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the City's grievance procedure, the contractor agrees to abide by any decision of the City which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the City, or if the City incurs any expense to cure a violation of the Act which has been brought pursuant to its grievance procedure, the contractor shall satisfy and discharge the same at its own expense.

The City shall, as soon as practical after a claim has been made against it, give written notice thereof to the contractor along with the full particulars of the claim. If any action or administrative proceeding is brought against the City or any of its agents, servants and employees, the City shall expeditiously forward or have forwarded to the contractor every demand, complaint, notice, summons, pleading, or other process received by the City or its representatives.

It is expressly agreed and understood that any approval by the City of the services provided by the contractor pursuant to this contract will not relieve the contractor of the obligation to comply with the Act and to defend, indemnify, protect, and save harmless the City pursuant to this paragraph.

It is further agreed and understood that the City assumes no obligation to indemnify or save harmless the contractor, its agents, servants, employees, and subcontractors for any claim which may arise out of their performance of this contract. Furthermore, the contractor expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the contractor's obligations assumed in this contract, nor shall they be construed to relieve the contractor from any liability, nor preclude the City from taking any other actions available to it under any other provisions of this contract or otherwise at law.

Request for Taxpayer Identification Number and Certification

Give Form to the
requester. Do not
send to the IRS.

► Go to www.irs.gov/FormW9 for instructions and the latest information.

Print or type.
See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC

☐ C Corporation

☐ S Corporation

☐ Partnership

☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ►

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ►

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

Requester's name and address (optional)

6 City, state, and ZIP code

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number										
				-				-		
or										
Employer identification number										
				-						

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign
Here

Signature of
U.S. person ►

Date ►

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and

4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, *Withholding of Tax on Nonresident Aliens and Foreign Entities*).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the instructions for Part II for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships*, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C corporation, or S corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n) . . .	THEN check the box for . . .
• Corporation	Corporation
• Individual • Sole proprietorship, or • Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes.	Individual/sole proprietor or single-member LLC
• LLC treated as a partnership for U.S. federal tax purposes, • LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or • LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes.	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
• Partnership	Partnership
• Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.SSA.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/Businesses and clicking on Employer Identification Number (EIN) under Starting a Business. Go to www.irs.gov/Forms to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to www.irs.gov/OrderForms to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor ⁴
For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

***Note:** The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes.

Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at spam@uce.gov or report them at www.ftc.gov/complaint. You can contact the FTC at www.ftc.gov/idtheft or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see www.IdentityTheft.gov and Pub. 5027.

Visit www.irs.gov/IdentityTheft to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

SPECIFICATIONS & INSTRUCTIONS

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

(Name of Project)

(Project or Bid number)

Pursuant to N.J.S.A. 40A:11-23.1a., the undersigned bidder hereby acknowledges receipt of the following notices, revisions, or addenda to the bid advertisement, specifications or bid documents. By indicating date of receipt, bidder acknowledges the submitted bid takes into account the provisions of the notice, revision or addendum. Note that the local unit's record of notice to bidders shall take precedence and that failure to include provisions of changes in a bid proposal may be subject for rejection of the bid.

Local Unit Reference Number Or Title of Addendum/Revision		Date Received	Bidder's Initials
Notice, Revision or Addenda No.	Title or Description		

Acknowledged by bidder:

Name of Bidder: _____

By Authorized Representative:

Printed Name and Title: _____

BID DOCUMENT SUBMISSION CHECKLIST

The following checklist is provided for each bidder to check off documents submitted with their bid.

Initial Each Item
Submitted With Bid
(Bidder's Initials)

X	Bidder's acknowledgement of receipt of any notice(s) or revision(s) or addenda to an advertisement, specifications or bid document(s) (REQUIRED)	
X	A statement of corporate ownership, pursuant to <u>N.J.S.A. 52:25-24.2</u> (Stockholders Statement) (REQUIRED)	
X	A listing of subcontractors as required by <u>N.J.S.A. 40A:11-16</u> (Subcontractor's Declaration) (REQUIRED)	
X	A bid guarantee as required by <u>N.J.S.A. 40A:11-21</u> (Bid Bond, Certified Check or Cashier's Check) (REQUIRED)	
X	A certificate from a surety company, pursuant to <u>N.J.S.A. 40A:11-22</u> (Consent of Surety) (REQUIRED)	

BID DOCUMENT SUBMISSION CHECKLIST

The following checklist is provided for each bidder to check off documents submitted with their bid.

X	Flood Hazard Risk Reduction & Resiliency Grant Program CDBG-DR Checklist/Forms Listed (REQUIRED)	
X	Public Works Contractor Registration Form (REQUESTED)	
X	New Jersey "Business Registration Certificate" Form (REQUESTED)	
X	Background Questionnaire (REQUIRED)	
X	State of New Jersey Debarred List Affidavit (REQUIRED)	
X	Certification Of Non-Debarment For Federal Government Contracts (REQUIRED)	
X	Submission of a Non-Collusion Affidavit (this form shall be notarized) (REQUIRED)	
X	Affirmative Action Requirements (REQUIRED)	
X	Bidder Certificate showing ability to perform contract, pursuant to <u>N.J.S.A. 40A:11-20</u> (REQUIRED)	
X	Disclosure of Investment Activities in Iran, pursuant to P.L. 2012, c. 25 and P.L. 2021, c.4 (REQUESTED)	
X	Certification of Non-Involvement in Prohibited Activities in Russia or Belarus (REQUESTED)	
X	Bid Form (REQUIRED)	

SECTION 2

GENERAL REQUIREMENTS

DOCUMENT 00200

INSTRUCTIONS TO BIDDERS

SEE ATLANTIC CITY'S INSTRUCTIONS TO BIDDER FOR BID REQUIREMENTS

END OF DOCUMENT

**BOARDWALK RECONSTRUCTION
BID 23-13**

DOCUMENT 00410

BID FORM

Owner: **City of Atlantic City
City Hall
1301 Bacharach Boulevard
Atlantic City, NJ 08401**

Project: **Atlantic City Boardwalk Reconstruction
Texas Ave. to Columbia Place
Atlantic City, New Jersey**

Date: _____

1.1 OFFER:

- A. Having examined the Place of The Work and all matters referred to in the Instructions to Bidders, Bid Documents and Contract Documents for the above-mentioned project, we the undersigned, hereby offer to enter into a Contract to perform the Work for the Contract Sum of:

_____ dollars \$ _____),
in lawful money of the United States of America.

A.1 Owner's Contingency Allowance	\$	75,000.00
A.2 Testing Allowance	\$	10,000.00

- B. **TOTAL BASE BID**
(Total of all work plus Items A.1 and A.2)

_____ dollars (\$ _____)

- C. All applicable taxes that are not exempt in accordance with the Owner's Sales and Use Tax Certificate of Exemption are included in the Bid Sum.

1.2 ADD ALTERNATES:

- A. **Add Alternate #1** **Replace decking and related work from station +14.00 to +16.00:**

_____ dollars (\$ _____)

- B. **Add Alternate #2** **Delete re-decking and Complete all work associated with construction new concrete vehicle crossing at Mississippi Avenue only:**

_____ dollars (\$ _____)

**BOARDWALK RECONSTRUCTION
BID 23-13**

1.2.1 SELECTION OF ALTERNATES

Alternates shall be selected based on the following criteria:

Add Alternate #1: Availability of funding from the EDA's grant to the City of Atlantic City.

Add Alternate #2: This alternate is to be funded directly by the City of Atlantic City and shall be awarded based on available funds from the City of Atlantic City. It is possible that Add Alternate #2 could be awarded without the award of add Alternate #1 based on separate funding sources.

1.3 DEDUCT ALTERNATES:

A. NONE

1.4 UNIT PRICES:

A. The following is the list of Unit Prices, which include labor, materials, taxes, insurance, overhead, profit and other costs in connection therewith, which shall prevail for the addition to or deduction from the Base Bid quantities.

- | | | |
|----|--|----------------|
| 1. | Helical Piles Per Specification | \$_____ per EA |
| | <i>Contractor shall include an additional five (5) helical pile within the BASE BID</i> | |
| 2. | Compacted Fill | \$_____ per CY |
| 3. | Railings – Per specification | \$_____ per LF |
| 4. | Repair Type 1 | \$_____ per SF |
| 5. | Repair Type 2 | \$_____ per SF |
| 6. | Repair Type 3 | \$_____ per LF |
| 7. | Repair Type 4 | \$_____ per EA |
| 8. | Repair Type 5 | \$_____ per EA |
| 9. | Repair Type 6 | \$_____ per LF |

**BOARDWALK RECONSTRUCTION
BID 23-13**

- | | | |
|-----|---|----------------|
| 10. | Concrete – Installed
Formed, reinforcing, concrete | \$_____ per CY |
| 11. | Install (1) 4" x 14" joist with hardware | \$_____ per EA |
| 12. | Install 2" Saddle Strap | \$_____ per EA |

1.5 ACCEPTANCE:

- A. This offer shall be open to acceptance and is irrevocable for sixty days from the bid closing date.
- B. If this bid is accepted by the Owner within the time period stated above, we will:
1. Execute the Agreement within seven days of receipt of the Contract Agreement.
 2. Furnish the required bonds prior to or with the executed Contract Agreement.
 3. Commence work within ten days after written Notice to Proceed and Approved Purchase Order.

1.6 CONTRACT TIME:

- A. If this bid is accepted, we shall:

Complete the Work in _____ calendar days from Notice to Proceed.

1.7 ADDENDA:

- A. The following Addenda have been received. The modifications to the Contract Documents noted therein have been considered and all costs thereto are included in the Bid Sum.

Addendum No _____ Dated _____

Addendum No _____ Dated _____

Addendum No _____ Dated _____

**BOARDWALK RECONSTRUCTION
BID 23-13**

1.8 APPENDICES:

- B. The following documents are appended hereto and form an integral part of this Bid Form:

Documents:

- PROJECT MANUAL
 - February 24, 2023
- DRAWINGS:
 - STRUCTURAL
 - C, S-1 to S7 DATED 12-12-22
 - SUREVEY/EXISTING CONDITION
 - PLANS #1 – #6 DATED 10-3-22
- PREVAILING WAGE RATES (BY REFERENCE)

BID FORM SIGNATURE(S)

The Corporate Seal of:

(Bidder - please print the full name of your Proprietorship, Partnership or Corporation) was hereunto affixed in the presence of:

(Authorized signing officer / Title)

(Seal)

(Authorized signing officer / Title)

If the bid is a joint venture or partnership, add additional forms of execution for each member of the joint venture in the appropriate form or forms as above.

END OF DOCUMENT

DOCUMENT 00500

AGREEMENT

1.1 AGREEMENT

- A. AIA Document A101 Owner-Contractor Agreement Form - Stipulated Sum 2007 Edition, forms the basis of Contract between the Owner and Contractor.

END OF DOCUMENT

DOCUMENT 00700

GENERAL CONDITIONS

1.1 GENERAL CONDITIONS

- A. In addition to the City of Atlantic City's "Specifications and Instructions", the contract shall include, by reference, AIA a201 General Conditions of the Contract for Construction, latest edition for additional terms and conditions.
- B. In the event there is a conflict with any document issued for this project, the more stringent requirement shall be enforced.

1.2 SUPPLEMENTARY CONDITIONS

- A. Refer to Document 00800 for amendments to these General Conditions.

END OF DOCUMENT

SUPPLEMENTARY CONDITIONS

1.1 SUPPLEMENTARY CONDITIONS

- A. These Supplementary Conditions modify the General Conditions of the Contract for Construction, AIA Document A201-latest edition, and other provisions of the Contract Documents as indicated below. All provisions which are not so modified remain in full force and effect.
- B. The terms used in these Supplementary Conditions which are defined in the General Conditions of the Contract for Construction, AIA Document A201, latest edition, have the meanings assigned to them in the General Conditions.
- C. When and if a conflict arises between Division 00 and Division 01, the more stringent requirement shall be upheld and required of the Contractor.

ARTICLE 1.1 - BASIC DEFINITIONS

Add the following subparagraphs:

- 1.1.8 Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.
- 1.1.9 Furnish: To supply and deliver, unload, inspect for damage.
- 1.1.10 Install: To unpack, assemble, erect, apply, place, finish, cure, protect, clean, and make ready for use.
- 1.1.11 Provide: To furnish and install.

ARTICLE 2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

Delete subparagraph 2.2.5 and substitute the following:

- 2.2.5 The Contractor shall be furnished free of charge six] copies of Drawings and Project Manuals. Additional sets shall be furnished at the cost of reproduction, postage, and handling.

ARTICLE 3.6 - TAXES

Add the following subparagraph:

- 3.6.2 The Owner shall obtain an exemption certificate for the Contractor for taxes [and duties] on certain Products or items, for purchasing Products or items for the Work.

ARTICLE 9.3 - APPLICATIONS FOR PAYMENT

Add the following Clause:

- 9.3.1.3 Until Substantial Completion, the Owner shall pay 90 percent of the amount due the Contractor on account of progress payments. At Substantial Completion, the Owner may make a payment to increase total payments to 98 percent of the amount due the Contractor.

Add the following clause:

- 9.3.1.4 The full Contract retainage may be reinstated if the manner of completion of the Work and its progress do not remain satisfactory to the Architect or if the Surety withholds its consent, or for any other good and sufficient reasons.

ARTICLE 10.2 - SAFETY OF PERSONS AND PROPERTY

Add the following clause:

- 10.2.4.1 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary, the Contractor shall give the Owner reasonable advance notice.

ADD: Contractor shall be responsible for compliance with all Federal, State and or local safety regulations. This shall include but not be limited to physical barriers, signage, acceptable to the City of Atlantic City, for the protection of the public during the course of the project.

Contractor shall be required to provide a project specific safety plan prior to the commencement of any work.

ARTICLE 11.1 - CONTRACTOR'S LIABILITY INSURANCE

See Division 00- City of Atlantic City Procurement and Contracting Requirements for all insurance requirements.

CZAR Engineering shall be named as additional insured and held harmless from any and all claims arising from this contract.

END OF DOCUMENT

SECTION 01100

SUMMARY

PART 1 GENERAL

1.1 SUMMARY

A. Section includes:

1. Contract description.
2. Work by Owner.
3. Contractor's use of site and premises
4. Owner occupancy.

B. CONTRACT DESCRIPTION:

Work of the Project includes, but not limited to:

Re-decking and related work from Texas/Bellevue Avenues to Columbia Place with add alternates to continue decking to Missouri Avenue and construct high weight vehicle crossing at Mississippi Avenue.

- C. Work also includes providing temporary access, including physical barricade(s), directional signage, etc.
- D. The work of a single contract comprises the Project.

1.2 WORK BY OWNER

- A. Items noted NIC (Not in Contract) shall be furnished and installed by Owner.
1. Owner shall supply all wood decking materials and joists. Contractor shall supply all other materials

1.3 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Limit use of site and premises to allow:
1. Owner occupancy of adjacent areas.
 2. Work by Others and Work by Owner.
 3. Use of adjacent site by the public

4. Owner shall identify lay down area. (see plans for location)
5. Use of the existing restroom facilities by the contractor's and or subcontractor's employee's is prohibited. Contractor, within their bid, shall provide sufficient restroom facilities for utilization by the contractor's entire work force.

1.4 OWNER OCCUPANCY

- A. Contractor shall integrate within their construction schedule, areas that require work under this contract but are not being turned over for full time utilization by the contractor. See limits of construction for the area(s) that the contractor shall be provided complete access during the contract period. All other work areas shall be noted within the contractor's construction schedule and coordinated with the owner's ongoing operations.
- B. The Owner shall occupy the site during the entire period of construction for the conduct of normal operations.
- C. Cooperate with Owner to minimize conflict, and to facilitate Owner's operations.
- D. Schedule the Work to accommodate Owner occupancy.
- E. Contractor's Construction Schedule: Submit a fully developed, bar-chart type construction schedule at the preconstruction conference. Provide a separate bar for each construction activity and a vertical line to identify the first working day of each week. The schedule shall be updated each month indicating work complete and any changes, additions, and omissions to the schedule.
- F. Coordinate the construction schedule with the list of subcontracts, submittal schedule, progress reports, payment requests and other schedules.
- G. Indicate completion in advance of the date established for substantial completion. Indicate substantial completion on the schedule to allow time for the Engineer's procedures necessary for certification of substantial completion.

END OF SECTION

SECTION 01300

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Coordination and project conditions.
 - 2. Field engineering.
 - 3. Preconstruction meeting.
 - 4. Site mobilization meeting.
 - 5. Progress meetings.
 - 6. Preinstallation meetings.
 - 7. Request for interpretation procedures.

1.2 COORDINATION AND PROJECT CONDITIONS

- A. Coordinate scheduling, submittals, and Work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- C. Coordinate space requirements, supports, and installation of mechanical and electrical Work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion.
- E. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.3 FIELD ENGINEERING

- A. Employ a Land Surveyor registered in the State of the Project and acceptable to Owner.
- B. Locate and protect survey control and reference points. Promptly notify Architect/Engineer of any discrepancies discovered.
- C. Control datum for survey is shown on Drawings.

- D. Verify set-backs and easements; confirm drawing dimensions and elevations.
- E. Provide field engineering services. Establish elevations, lines, levels, and locations of the Work utilizing recognized engineering survey practices.
- F. Submit a copy of site drawing and certificate signed by the Land Surveyor that the elevations and locations of the Work are in conformance with the Contract Documents.
- G. Maintain a complete and accurate log of control and survey work as it progresses.
- H. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- I. Promptly report to Architect/Engineer the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- J. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect/Engineer.

1.4 PRECONSTRUCTION MEETING

- A. Owner shall schedule a meeting after Notice of Award.
- B. Attendance Required: Owner, Architect/Engineer, and Contractor.
- C. Agenda:
 - 1. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of products, schedule of values, and progress schedule.
 - 5. Designation of personnel representing the parties in Contract.
 - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 7. Scheduling.
- D. Record minutes and distribute copies within two days after meeting to participants, and those affected by decisions made.

1.5 SITE MOBILIZATION MEETING

- A. Owner shall schedule a meeting at the Project site prior to Contractor occupancy.
 - 1. Site mobilization meeting may be combined with pre-construction meeting at Owner's discretion.
- B. Attendance Required: Owner, Architect/Engineer, Contractor, Contractor's Superintendent, and major Subcontractors.
- C. Agenda:
 - 1. Use of premises by Owner and Contractor.
 - 2. Owner's requirements and occupancy.

3. Construction facilities and controls provided by Owner.
 4. Temporary utilities provided by Owner.
 5. Survey and building layout.
 6. Security and housekeeping procedures.
 7. Schedules.
 8. Application for payment procedures.
 9. Procedures for testing.
 10. Procedures for maintaining record documents.
 11. Requirements for start-up of equipment.
 12. Inspection and acceptance of equipment put into service during construction period.
 13. Emergency telephone numbers.
- D. Record minutes and distribute copies within two days after meeting to participants, and those affected by decisions made.

1.6 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum two week intervals.
- B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required: Job superintendent, major subcontractors and suppliers, as appropriate to agenda topics for each meeting.
 1. Owner shall attend progress meetings at Owner's discretion.
 2. Architect/Engineer shall attend progress meetings at Architect/Engineer's discretion.
- D. Agenda:
 1. Review minutes of previous meetings.
 2. Review of Work progress.
 3. Field observations, problems, and decisions.
 4. Identification of problems which impede planned progress.
 5. Review questions about Contract Documents.
 6. Review of submittals schedule and status of submittals.
 7. Review of off-site fabrication and delivery schedules.
 8. Maintenance of progress schedule.
 9. Corrective measures to regain projected schedules.
 10. Planned progress during succeeding work period.

11. Coordination of projected progress.
 12. Maintenance of quality and work standards.
 13. Effect of proposed changes on progress schedule and coordination.
 14. Other business relating to Work.
- E. Record minutes and distribute copies within two days after meeting to participants, with copies to Architect/Engineer, Owner, and those affected by decisions made.

1.7 PREINSTALLATION MEETING

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, Work of the specific section.
- C. Notify Architect/Engineer five days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
 1. Review conditions of installation, preparation and installation procedures.
 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with copies to Architect/Engineer, Owner, and those affected by decisions made.

1.8 REQUEST FOR INTERPRETATION (RFI) PROCEDURES

- A. Present questions at regular project progress meeting.
- B. Architect/Engineer shall provide answers to questions at project progress meeting, when possible. Record answers in meeting minutes.
- C. When Architect/Engineer cannot answer question at project progress meeting, prepare RFI on form approved by Owner. Submit request to Architect/Engineer with copy to Owner.
- D. RFIs submitted before submitting question at progress meeting shall be returned without action for Contractor's introduction at next regular progress meeting.
- E. RFIs requesting information available on Construction Documents instead of interpretation of Construction Documents shall be returned without action.
- F. Identify Drawing or Specification requiring clarification and describe condition requiring clarification on RFI.
 1. Drawings: Include drawing number, detail or section number, column line coordinates and other information to clearly identify area of drawing in question.
 2. Specification: Include section number, page number, and article, paragraph, and subparagraph number as appropriate.
- G. Architect/Engineer shall review RFI and respond in writing. When required, Architect/Engineer may issue sketches and revised specifications to supplement response.

- H. Distribute Architect/Engineer's response to those affected by response.
- I. Promptly enter information from response in Project Record Documents.

END OF SECTION

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Submittal procedures.
 - 2. Submittal processing.
 - 3. Construction progress schedules.
 - 4. Proposed products list.
 - 5. Product data.
 - 6. Shop drawings.
 - 7. Samples.
 - 8. Design data.
 - 9. Test reports.
 - 10. Certificates.
 - 11. Manufacturer's instructions.
 - 12. Manufacturer's field reports.

1.2 SUBMITTAL PROCEDURES

- A. Transmit each submittal with Engineer accepted form.
- B. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- C. Identify Project, Contractor, subcontractor and supplier; pertinent drawing and detail number, and specification section number, as appropriate.
- D. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- E. Schedule submittals to expedite the Project. Coordinate submission of related items for delivery at the same time.
- F. Make submittals to parties as scheduled in this Section.
- G. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of the completed Work.
- H. Provide space for Contractor and Engineer review stamps.
- I. When revised for resubmission, identify all changes made since previous submission.

- J. Distribute copies of reviewed submittals to affected parties. Instruct parties to promptly report any inability to comply with requirements.
- K. Submittals not requested shall not be recognized or processed.

1.3 SUBMITTAL PROCESSING

- A. Allow sufficient review and transmittal time for each submittal so the Work is not delayed as a result of time required to process submittals, including time for re-submittals.
- B. Allow two weeks for initial review. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. The Engineer shall promptly notify the Contractor when a submittal being processed must be delayed for coordination.
- C. When an intermediate submittal is necessary, process the same as the initial submittal.
- D. Allow two weeks for processing each re-submittal.
- E. No extension of Contract Time shall be permitted because of failure to transmit submittals to Engineer sufficiently in advance of the Work to permit processing.

1.4 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial schedules within 15 days after date established in Notice to Proceed. After review, resubmit required revised data within ten days.
- B. Submit revised Progress Schedules with each Application for Payment.
- C. Distribute copies of reviewed schedules to Project site file, subcontractors, suppliers, and other affected parties.
- D. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.
- E. Submit a horizontal bar chart with separate line for each major portion of Work or operation section of Work, identifying first work day of each week.
 - 1. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities.
- F. Indicate estimated percentage of completion for each item of Work at each submission.
- G. Provide separate schedule of submittal dates for shop drawings, product data, and samples, and dates reviewed submittals shall be required from Engineer. Indicate decision dates for selection of finishes.
- H. Revisions To Schedules:
 - 1. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
 - 2. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.

3. Provide narrative report to define problem areas, anticipated delays, and impact on Schedule. Report corrective action taken, or proposed, and its effect including the effect of changes on schedules of separate contractors.

1.5 PROPOSED PRODUCTS LIST

- A. Within 15 days after date established in Notice to Proceed, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.6 PRODUCT DATA

- A. Product Data: Submit to Engineer for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- B. Submit product data in quantities as scheduled in this Section. Two copies shall be retained by Engineer.
- C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
 1. Submit color carts for Engineer's initial color selections.
- D. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- E. Material Safety Data Sheets (MSDS) are not permitted as submittal.
 1. When requested by Owner, submit MSDS directly to Owner.
- F. After review provide and distribute copies required for record documents described in Section 01700.

1.7 SHOP DRAWINGS

- A. Shop Drawings: Submit to Engineer for review for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.
- B. When required by individual specification sections, provide shop drawings signed and sealed by professional engineer responsible for designing components shown on shop drawings.
 1. Include signed and sealed calculations to support design.
 2. Submit drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
 3. Make revisions and provide additional information when required by authorities having jurisdiction.
- C. Indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

- D. Submit shop drawings in the form and quantities as scheduled in this Section. One copy shall be returned.
- E. After review provide and distribute copies required for record documents described in Section 01700.

1.8 SAMPLES

- A. Samples: Submit to Engineer for review for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.
- B. Samples For Selection as Specified in Product Sections:
 - 1. Submit to Engineer for aesthetic, color, or finish selection.
 - 2. Submit samples of finishes from the full range of manufacturers' standard colors, textures, and patterns for Engineer selection. Include custom colors and other Product characteristics where specified.
 - 3. After review, produce duplicates and distribute as required for record documents purposes described in Section 01700.
- C. Submit samples to illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work where aesthetic selections are required so related samples are submitted at same time.
- D. Include identification on each sample, with full Project information.
- E. Submit the number of samples scheduled in this section. One sample shall be retained by Engineer.
- F. Reviewed samples which may be used in the Work are indicated in individual specification sections.

1.9 DESIGN DATA

- A. Submit for the Engineer's knowledge as contract administrator or for the Owner in quantities as scheduled in this Section.
- B. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the Contract Documents.

1.10 TEST REPORTS

- A. Submit for the Engineer's knowledge as contract administrator or for the Owner in quantities as scheduled in this Section.
- B. Submit test reports for information for the limited purpose of assessing conformance with information given and the design concept expressed in the Contract Documents.

1.11 CERTIFICATES

- A. When specified in individual specification sections, submit certification by the manufacturer, installation/application subcontractor, or the Contractor to Engineer, in quantities as scheduled in this Section.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or product, but must be acceptable to Engineer.

1.12 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, to Engineer for delivery to Owner in quantities as scheduled in this Section.
- B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.13 MANUFACTURER'S FIELD REPORTS

- A. Submit reports for the Engineer's benefit as contract administrator or for the Owner in quantities as scheduled in this Section.
- B. Submit report in duplicate within five days of observation to Engineer for information.
- C. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the Contract Documents.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 SUBMITTAL SCHEDULE

- A. Provide the following quantities of submittals unless a larger quantity is specified in individual sections of the specification.

Submittal Type	Copies Required
	Engineer
Product Data	Electronic PDF.
Shop Drawings - Opaque Print	Electronic PDF.
Samples	3
Test Reports	Electronic PDF
Design Data	Electronic PDF
Test Reports	Electronic PDF
Certificates	Electronic PDF
Manufacturer's Instructions	Electronic PDF
Manufacturer's Field Reports	Electronic PDF
Erection Drawings	Electronic PDF

- B. When submittals are transmitted directly to Engineer's consultants, furnish consultant number of submittals specified for Engineer and furnish one copy to Engineer.
- C. Submittal Sheet Size: Except for templates, patterns and similar full-size drawings, provide submittals on sheets at least 8-1/2 x 11 inches, but no larger than 30 x 42 inches in size.

END OF SECTION

SECTION 01400

QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Quality control and control of installation.
 - 2. Tolerances
 - 3. References.
 - 4. Manufacturers' field services.
 - 5. Examination.
 - 6. Preparation.

1.2 QUALITY CONTROL AND CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. When manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.3 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. When manufacturers' tolerances conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

1.4 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where a specific date is established by code.
- C. When specified reference standards conflict with Contract Documents, request clarification from the Architect/Engineer before proceeding.
- D. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of the Architect/Engineer shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.5 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, instruct owner's personnel in operation and maintenance, and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- C. Submit report of field services within 5 days of observation. Refer to Section 01330 - Submittal Procedures, MANUFACTURERS' FIELD REPORTS article.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Verify tolerances of existing substrate for plumb, level, plane, and line are acceptable for attachment of new Work.
- D. Examine and verify specific conditions described in individual specification sections.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.

- F. Notify Architect/Engineer when unsatisfactory existing substrate conditions shall prevent application or installation of subsequent construction in accordance with Contract Documents.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

END OF SECTION

SECTION 01455

TESTING LABORATORY SERVICES

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Selection and payment.
 - 2. Laboratory responsibilities.
 - 3. Laboratory reports.
 - 4. Limits on testing laboratory authority.
 - 5. Contractor responsibilities.

1.2 SELECTION AND PAYMENT

- A. Contractor shall employ and pay for services of an independent testing laboratory to perform specified inspecting and testing, at Owner's discretion as scheduled in this section.
- B. Employ and pay for services of an independent testing agency or laboratory acceptable to the Owner to perform specified testing as scheduled in this section.
 - 1. Employment of testing laboratory does not relieve Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- C. Payment for all testing and related services shall be authorized by the Owner and charged to the Contractor's testing allowance without additional overhead and or markup.

1.3 QUALITY ASSURANCE

- A. Laboratory: Authorized to operate in State in which Project is located.
- B. Laboratory Staff: Maintain a full time registered engineer on staff to review services.
- C. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to either National Bureau of Standards or accepted values of natural physical constants.

1.4 CONTRACTOR SUBMITTALS

- A. Prior to start of Work, submit Contractor's testing laboratory name, address, and telephone number, and names of full time registered Engineer and responsible officer.
- B. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to either National Institute of Standards and Technology or accepted values of natural physical constants.

1.5 LABORATORY RESPONSIBILITIES

- A. The independent firm shall perform tests, inspections and other services specified in individual specification sections.
 - 1. Perform additional inspections and tests required by Owner or Architect/Engineer.
- B. Testing, inspections and source quality control may occur on or off the project site. Perform off-site testing as required by the Architect/Engineer or the Owner.
- C. Test samples of mixes submitted by Contractor.
- D. Provide qualified personnel at site. Cooperate with Owner and Contractor in performance of services.
- E. Perform specified inspection, sampling, and testing of Products in accordance with specified standards.
- F. Ascertain compliance of materials and mixes with requirements of Contract Documents.
- G. Promptly notify Owner, Architect/Engineer and Contractor of observed irregularities or non-conformance of Work or Products.
- H. Attend preconstruction conferences and progress meetings as requested.

1.6 LABORATORY REPORTS

- A. After each inspection and test, promptly submit copies of laboratory report to the following:
 - 1. Architect/Engineer, two copies.
 - 2. Owner, one copy.
 - 3. Contractor, two copies.
 - 4. Local authority having jurisdiction, one copy.
- B. Include:
 - 1. Date issued.
 - 2. Project title and number.
 - 3. Name of inspector.
 - 4. Date and time of sampling or inspection.
 - 5. Identification of product and Specifications Section.
 - 6. Location in the Project.
 - 7. Type of inspection or test.
 - 8. Date of test.
 - 9. Results of tests.
- C. Conformance with Contract Documents.
- D. When requested by Owner or Architect/Engineer, provide interpretation of test results.

1.7 LIMITS ON TESTING LABORATORY AUTHORITY

- A. Laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
- B. Laboratory may not approve or accept any portion of the Work.
- C. Laboratory may not assume any duties of Contractor.
- D. Laboratory has no authority to stop the Work.

1.8 CONTRACTOR RESPONSIBILITIES

- A. Deliver to laboratory at designated location, adequate samples of materials proposed to be used which require testing, along with proposed mix designs.
- B. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
- C. Provide incidental labor and facilities to provide access to Work to be tested, to obtain and handle samples at the site or at source of products to be tested, to facilitate tests and inspections, storage and curing of test samples.
- D. Notify laboratory 24 hours prior to expected time for operations requiring inspection and testing services. Coordinate schedule with laboratory to ensure testing and inspection personnel are available at the site when required by Work in progress.
- E. Arrange with laboratory and pay for additional samples and tests required by Contractor beyond specified requirements.
- F. When initial tests indicate Work is defective, provide and pay for additional inspections and tests required to confirm corrected Work conforms to Contract Documents.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 TESTING AND INSPECTION SCHEDULE

- A. Owner's Testing Laboratory shall perform the following tests and inspections as specified in other Sections.
 - 1. Soils: Compaction density, moisture content.
 - 2. Concrete: Mix design, compressive strength, slump, air entrainment, reinforcement placement.
 - 3. Masonry: Mortar strength, masonry unit strength, masonry prism strength, reinforcement placement.
 - 4. Structural Steel: Field connections, shop connections.
- B. Contractor shall provide and pay for other specified and code required tests and inspections.

END OF SECTION

SECTION 01500

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Temporary Utilities.
 - 2. Construction Facilities.
 - 3. Temporary Controls.
 - 4. Barricades and Facility Access
 - 5. Removal of utilities, facilities, and controls.

1.2 TEMPORARY ELECTRICITY

- A. Provide and pay for power service required from utility source as needed for construction operation.
 - 1. Exercise measures to conserve energy.
- B. Provide power outlets for construction operations, with branch wiring and distribution boxes located as required. Provide flexible power cords as required.
- C. Permanent convenience receptacles may not be utilized during construction.
- D. Provide adequate distribution equipment, wiring, and outlets to provide single phase branch circuits for power and lighting.

1.3 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES

- A. Provide and maintain lighting for construction operations to achieve a minimum 10 footcandles illuminance.
- B. Provide and maintain 5 footcandles illuminance to exterior staging and storage areas after dark for security purposes.
- C. Provide and maintain 2 footcandles illuminance to interior work areas after dark for security purposes.
- D. Provide local lighting as required.
- E. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required.
- F. Maintain lighting and provide routine repairs.
- G. Permanent building lighting may be utilized during construction.

1.4 TEMPORARY HEATING

- A. Provide and pay for heating devices. Heat as needed to maintain specified conditions for construction operations.
 - 1. Exercise measures to conserve energy.
- B. Enclose building prior to activating temporary heating in accordance with the Enclosures article in this section.
- C. Prior to operation of permanent equipment for temporary heating purposes, verify that installation is approved for operation, equipment is lubricated and filters are in place. Provide and pay for operation, maintenance, and regular replacement of filters and worn or consumed parts.
- D. Maintain minimum ambient temperature of 50 degrees F in areas where construction is in progress, unless indicated otherwise in product sections.

1.5 TEMPORARY VENTILATION

- A. Ventilate enclosed areas to achieve curing of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- B. Use permanent ventilation equipment. Extend and supplement equipment with temporary fan units as required to maintain clean air for construction operations.

1.6 TEMPORARY WATER SERVICE

- A. Provide, maintain and pay for suitable quality water service required for construction operations.
 - 1. Exercise measures to conserve water.
- B. Extend branch piping with outlets located so water is available by hoses with threaded connections. Provide temporary pipe insulation and heat trace as required to prevent freezing.

1.7 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures at time of mobilization.
- B. Use of existing and permanent facilities during construction is not permitted.

1.8 FIELD OFFICES AND SHEDS

- A. Office: Weather tight, with lighting, electrical outlets, heating, cooling and ventilating equipment, and equipped with sturdy furniture drawing rack, and drawing display table.
- B. Provide space for Project meetings, with table and chairs to accommodate 10 persons.
- C. Locate offices and sheds a minimum distance of 30 feet from existing and new structures.

- D. Storage Areas and Sheds: Size to storage requirements for products of individual Sections, allowing for access and orderly provision for maintenance and for inspection of products to requirements of Section 01600.
- E. Preparation: Fill and grade sites for temporary structures to provide drainage away from buildings.
- F. Installation:
 - 1. Install office spaces ready for occupancy 15 days after date fixed in Notice to Proceed.
 - 2. Employee Residential Occupancy: Not allowed on Owner's property.
- G. Maintenance And Cleaning:
 - 1. Weekly janitorial services for offices; periodic cleaning and maintenance for office and storage areas.
 - 2. Maintain approach walks free of mud, water, and snow.

1.11 VEHICULAR ACCESS

- A. ***All vehicles accessing the Boardwalk shall comply with permitting requirements as required by the City of Atlantic Engineer's office requirements.***
- B. Use existing public rights-of-way and on-site roadways to access construction site.
- C. Construct temporary access from on-site roadways to serve construction area, of a width and load bearing capacity to provide unimpeded traffic for construction purposes.
 - 1. Extend and relocate as Work progress requires, provide detours as necessary for unimpeded traffic flow.
 - 2. Location as indicated or as approved by Owner when not indicated.
 - 3. Provide means of removing mud from vehicle wheels before entering streets.
- D. Provide unimpeded access for emergency vehicles.
- E. Provide and maintain access to fire hydrants and control valves free of obstructions.

1.12 PARKING

- F. Parking shall not be allowed onsite.
- G. Contractor shall arrange for parking facilities as required.

1.13 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from closed or remote spaces, prior to enclosing the space.
- C. Keep streets and sidewalks clear of construction materials and waste in accordance with all applicable codes and ordinances.
- D. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- E. Collect and remove waste materials, debris, and rubbish from site minimum weekly and legally dispose off-site.
- F. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers.

1.14 PROJECT IDENTIFICATION

- G. Project Identification Sign:
 - See EDA signage requirements in 1500 Part 2.
 - 1. Graphic Design, Colors, Style of Lettering: Designated by Architect/Engineer.
- H. Design sign and structure to withstand sixty miles/hr wind velocity.
- I. Finishes, Painting: Adequate to withstand weathering, fading, and chipping for duration of construction.
- J. Sign Materials:
 - 1. Structure and Framing: New wood, structurally adequate.
 - 2. Sign Surfaces: Exterior grade plywood with medium density overlay, minimum 3/4 inch thick, standard large sizes to minimize joints.
 - 3. Rough Hardware: Galvanized steel, aluminum, or brass.
 - 4. Paint and Primers: Exterior quality, two coats; sign background; color as selected.
 - 5. Lettering: Exterior quality paint, or die cut vinyl self-adhesive appliques, colors as selected.
- K. Installation:

1. Install project identification sign within 15 days after date fixed by Notice to Proceed.
 2. Erect at location as directed by Owner.
 3. Erect supports and framing on secure foundation, rigidly braced and framed to resist wind loadings.
 4. Install sign surface plumb and level, with butt joints. Anchor securely.
 5. Paint exposed surfaces of sign, supports, and framing.
- L. No other signs are allowed without Owner permission except those required by law.
- M. Maintenance: Maintain signs and supports clean, repair deterioration and damage.

1.15 TRAFFIC REGULATION

- N. Maintain pedestrian traffic on sidewalks. Provide barriers as specified in this section.
- O. Obtain required permits for street and sidewalk closures when required to accommodate construction operations.
- P. Signs, Signals, And Devices: As required by local jurisdictions.
- Q. Haul Routes:
1. Consult with authority having jurisdiction, establish public thoroughfares to be used for haul routes and site access.

1.16 FIRE PREVENTION FACILITIES

- R. Contractor shall maintain access to all boardwalk located fire hydrants during the course of construction.**
- S. Prohibit smoking within buildings under construction. Designate area on site where smoking is permitted. Provide approved ashtrays in designated smoking areas.
- T. Establish fire watch for cutting and welding and other hazardous operations capable of starting fires. Maintain fire watch before, during, and after hazardous operations until threat of fire does not exist.
- U. Portable Fire Extinguishers: NFPA 10; 10 pound capacity, 4A-60B; C UL rating.
1. Provide one fire extinguisher at each stair on each floor of buildings under construction.
 2. Provide minimum one fire extinguisher in every construction trailer and storage shed.

1.17 TEMPORARY ACCESS, DIRECTIONAL SIGNAGE AND BARRIERS

V. Contractor shall provide temporary building access as follows:

1. General Business Facilities/Restrooms
 - a. Maintain a minimum of 50% access for existing to all locations.
2. Boardwalk Hall
 - a. Provide a minimum of 65% boardwalk access from the existing entrance/exit doors.
3. Boardwalk Walkway
 - a. Contractor shall maintain a minimum of 30' of the boardwalk width open at all times for pedestrian and related traffic.
4. ***All proposed access locations shall be coordinated with the Engineer and facility operator prior to construction and be constructed for a minimum 100 psf loading.***

VI. Physical barriers shall be a minimum of 36" high to allow for pedestrian flow, prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.

- a. Contractor shall provide to Engineer with barricade details prior to construction.

VII. Signage

- a. Contractor shall supply directional signage at all temporary barricades/access routes.
- b. Signage shall include arrows, narrative directions, emergency exit as required to facilitate pedestrian flow during the course of the project and be of sufficient size/color to advise of the access/exit changes.
- c. All signs shall be professionally developed. Handwritten signage shall not be permitted,
- d. All proposed signage shall be submitted to the Engineer prior to construction for review.

VIII. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

IX. ***CONTRACTOR SHALL PROVIDE PERSONNEL TO DIRECT PEDESTRIAN TRAFFIC AT ALL TIMES DURING THE COURSE OF THE PROJECT.***

1.18 ENCLOSURES AND FENCING AT LAYDOWN AREA

AA. Fencing: Commercial grade chain link fence.

1. Provide 6 foot high fence around construction site; equip with vehicular and pedestrian gates with locks.

2. Contractor shall be responsible for maintaining all temporary fencing, etc.

BB. Exterior Enclosures:

1. Provide temporary insulated weather tight closure of exterior openings to accommodate acceptable working conditions and protection for products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

1.19 SECURITY

CC. Security Program:

1. Protect Work from theft, vandalism, and unauthorized entry.
2. Initiate security program acceptable to Owner at project mobilization.
3. Maintain program throughout construction period until Owner acceptance precludes the need for Contractor security.

DD. Entry Control:

1. Restrict entrance of persons and vehicles into Project site.
2. Allow entrance only to authorized persons with proper identification.
3. Maintain log of workers and visitors, make available to Owner on request.

1.20 WATER CONTROL

- EE. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- FF. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

1.21 DUST CONTROL

- GG. Execute Work by methods to minimize raising dust from construction operations.
- HH. Provide positive means to prevent air-borne dust from dispersing into atmosphere.

1.22 EROSION AND SEDIMENT CONTROL

- II. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- JJ. Minimize amount of bare soil exposed at one time.

- KK. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
 - LL. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
 - MM. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- 1.23 PEST CONTROL
- NN. Provide methods, means, and facilities to prevent pests and insects from damaging the Work and entering the facility.

1.24 POLLUTION CONTROL

- OO. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.

1.25 RODENT CONTROL

- PP. Provide methods, means, and facilities to prevent rodents from accessing or invading premises.

1.26 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- QQ. Remove temporary facilities and controls, except those required for the field offices and sheds prior to Substantial Completion.
- RR. Remove remaining temporary facilities and controls prior to Final Application for Payment inspection.
- SS. Remove temporary buildings, foundations, and utility services. Restore areas.
- TT. Remove temporary site access and parking.
- UU. Remove temporary signs, framing, supports, and foundations.
- VV. Remove underground installations to a minimum depth of 2 feet. Grade site as indicated.
- WW. Clean and repair damage caused by installation or use of temporary work.
- XX. Restore existing facilities used during construction to original condition.
- YY. Restore permanent facilities used during construction to specified condition.

END OF SECTION

Specification 01500.1

EDA PROJECT SIGN SIGN REQUIREMENTS

EDA PROJECT SIGN

The Contractor shall supply, erect, and maintain in good condition a project sign according to the specifications set forth below:

EDA SITE SIGN SPECIFICATIONS

Size: 4' x 8' x ¾"

Materials: Exterior grade/MDO plywood (APA rating A-B)

Supports: 4" x 4" x 12' posts with 2" x 4" cross branching

Erection: Posts shall be set a minimum of three feet deep in concrete footings that are at least 12" in diameter.

Paint: Outdoor enamel

Colors: Jet Black, Blue (PMS300), and Gold (PMS7406). Specifically, on white background the following will be placed:

The U. S. Department of Commerce seal in blue, black, and gold;

“EDA” in blue;

“U. S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT

ADMINISTRATION” in black;

“In partnership with” in blue;

(Actual name of the) “EDA Grant Recipient” in black;

Lettering: Specific fonts are named below; positioning shall be as shown on the attached illustration.

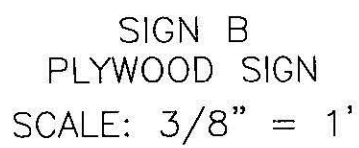
“U. S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT
ADMINISTRATION” use Bank Gothic Medium - **BANK GOTHIC MED**

“In partnership with” use Univers™ 55 Oblique - **Univers 55**

(Name of) “EDA Grant Recipient” use Univers™ Extra Black 85 **Univers 85**

Project signs shall not be erected on public highway rights-of-way. If any possibility exists for obstruction to traffic line of sight, the location and height of the sign shall be coordinated with the agency responsible for highway or street safety in the area.

The EDA Regional Director may permit modifications to these specifications if they conflict with state law or local ordinances.



ECONOMIC DEVELOPMENT ADMINISTRATION



EDA

DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION

In partnership with

EDA Grant Recipient Name>



1.75"

1.75"

EDA

10"

Black
Blue= PMS300
Gold= PMS7406

ENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION

In partnership with

48"

DA Grant Recipient Name>

96"

SECTION 01600

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Products.
 - 2. Product delivery requirements.
 - 3. Product storage and handling requirements.
 - 4. Product options.
 - 5. Product substitution procedures.

1.2 PRODUCTS

- A. Provide products of qualified manufacturers suitable for intended use. Provide products of each type by a single manufacturer unless specified otherwise.

1.3 PRODUCT DELIVERY REQUIREMENTS

- A. Package product for protection during shipment, handling, and storage. Protect sensitive equipment and finishes against impact, abrasion, and other damage.
- B. Transport and handle products in accordance with manufacturer's instructions.
- C. Arrange deliveries of products in accordance with Project schedule. Allow time for inspection prior to installation.
- D. Coordinate deliveries to avoid conflict with Work and conditions at site; limitations on storage space; availability of personnel and handling equipment; and Owner's use of premises.
- E. Deliver products in undamaged, dry condition, in original unopened containers or packaging with identifying labels intact and legible.
- F. Clearly mark partial deliveries of component parts of equipment to identify equipment and contents to permit easy accumulation of parts and to facilitate assembly.
- G. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- H. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

- A. Store and protect products in accordance with manufacturers' instructions.
- B. Store products with seals and labels intact and legible.
- C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.

- D. For exterior storage of fabricated products, place on sloped supports above ground.
- E. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.5 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Requests for substitution are permitted whether specifically stated or not. Submit a request for substitution for any manufacturer not named in accordance with the following article.

1.6 PRODUCT SUBSTITUTION PROCEDURES

- A. Instructions to Bidders specify time restrictions for submitting requests for Substitutions during the bidding period to requirements specified in this section.
- B. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that the Contractor:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. shall provide the same warranty for the Substitution as for the specified product.
 - 3. shall coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension which may subsequently become apparent.
- E. Substitutions shall not be considered:
 - 1. When they are indicated or implied on Shop Drawing or Product Data submittals, without separate written request.
 - 2. When acceptance shall require revision to the Contract Documents.
 - 3. Without a net reduction in Contract Sum or a reduction in Contract time.
 - 4. When request is from a source other than Contractor.

F. Substitution Submittal Procedure:

1. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
2. Complete Substitution Request form attached to this section for each substitution request.
3. Indicate net reduction in Contract Sum or reduction in Contract time, if proposed substitution is accepted.
4. Submit side-by-side comparison of features of specified Product and proposed substitution.
5. Burden of proof that proposed substitution is equivalent to specified Product is on proposer.
6. Submit Shop Drawings, Product Data, and certified test results attesting to the proposed product equivalence.
7. The Architect/Engineer shall notify Contractor in writing of decision to accept or reject request.
8. Architect/Engineer shall consider only one request for substitution for each product. If request is not accepted, provide specified product.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01700

EXECUTION REQUIREMENTS

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Closeout procedures.
 - 2. Final cleaning.
 - 3. Protecting installed construction.
 - 4. Project record documents.
 - 5. Spare parts and maintenance products.
 - 6. Product warranties and product bonds.

1.2 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect/Engineer's review.
- B. Provide submittals to Architect/Engineer that are required by governing or other authorities.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- D. Owner shall occupy the Project at Substantial Completion.

1.3 FINAL CLEANING

- A. Execute final cleaning prior to Substantial Completion inspection.
- B. Clean building and site areas affected by construction operations.
- C. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces.
- D. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- E. Clean permanent and replace disposable filters of operating equipment used during progress of work.
- F. Clean debris from roofs, gutters, downspouts, and drainage systems.
- G. Clean site; sweep paved areas, rake clean landscaped surfaces.
- H. Remove waste and surplus materials, rubbish, and construction facilities from the site.

1.4 PROTECTING INSTALLED CONSTRUCTION

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, and sills.
- D. Protect floors and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Prohibit traffic from landscaped areas.

1.5 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed Shop Drawings, Product Data, and Samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
 - 7. Requests for interpretation.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress, not less than weekly. Allow inspection by Architect/Engineer or Owner upon request to verify documents are current and accurately reflect the Work.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions and alternates utilized.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish first floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 4. Field changes of dimension and detail.

5. Details not on original Contract Drawings.

- G. Requests for Interpretation (RFI): Record Architect/Engineer's responses on Record Drawings and in Specifications as appropriate to suit response.
- H. Submit documents to Architect/Engineer with claim for final Application for Payment.

1.6 SPARE PARTS AND MAINTENANCE PRODUCTS

- A. Provide spare parts, maintenance, and extra products in quantities specified in individual specification sections.
- B. Deliver to Project site and place in location as directed; obtain receipt prior to final payment.

1.7 PRODUCT WARRANTIES AND PRODUCT BONDS

- A. Obtain warranties and bonds executed in triplicate by responsible subcontractors, suppliers, and manufacturers.
- B. Execute and assemble transferable warranty documents and bonds from subcontractors, suppliers, and manufacturers.
- C. Verify that documents are in proper form, contain full information, and are notarized.
- D. Co-execute submittals when required.
- E. Provide Table of Contents and assemble in three ring binder with durable plastic cover.
- F. Submit warranties and bonds at Substantial Completion. Indicate the date of Substantial Completion for the respective phase as the effective date of the warranties.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 3

TECHNICAL SPECIFICATIONS

Contractor shall refer to the complete project manual and drawings for additional project specifications.

ATLANTIC CITY BOARDWALK RECONSTRUCTION
ATLANTIC CITY, NEW JERSEY

Section 02060

DEMOLITION

2.1 GENERAL

A. Definitions: As follows:

1. Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain the Owner's property.
2. Remove and Salvage: Items indicated to be removed and salvaged remain the Owner's property. Remove, clean, and pack or crate items to protect against damage. Identify contents of containers and deliver to Owner's designated storage area.
3. Remove and Reinstall: Remove items indicated; clean, service, and otherwise prepare them for reuse; store and protect against damage. Reinstall items in locations indicated.
4. Existing to Remain: Protect construction indicated to remain against damage and soiling during demolition. When permitted by the Architect, items may be removed to a suitable, protected storage location during demolition and then cleaned and reinstalled in their original locations.

B. Except for items or materials indicated to be reused, salvaged, or otherwise indicated to remain the Owner's property, demolished materials shall become the Contractor's property and shall be removed from the site with further disposition at the Contractor's option.

C. Photographs or videotape, sufficiently detailed, of existing conditions of adjoining construction and site improvements that might be misconstrued as damage caused by demolition operations.

D. Record drawings at Project closeout according to Division 1 Section "Contract Closeout."

1. Identify and accurately locate capped utilities and other subsurface structural, electrical, or mechanical conditions.

E. Regulatory Requirements: Comply with governing EPA notification regulations before starting demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

F. Owner assumes no responsibility for actual condition of Boardwalk to be demolished.

ATLANTIC CITY BOARDWALK RECONSTRUCTION
ATLANTIC CITY, NEW JERSEY

- G. Storage or sale of removed items or materials on-site shall not be permitted.

2.2 PRODUCTS (Not Applicable)

2.3 EXECUTION

- A. Survey the condition of the Boardwalk to determine whether removing any element might result in a structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during demolition.
- B. Perform surveys as the Work progresses to detect hazards resulting from demolition activities.
- C. Utility Requirements: Locate, identify, shut off, disconnect, and seal or cap off indicated utility services serving structures to be demolished.
 - 1. Provide temporary services during interruptions to existing utilities to remain, as acceptable to Owner and to governing authorities.
- D. Drain, purge, or otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials before proceeding with demolition operations.
- E. Employ a certified, licensed exterminator to treat Boardwalk and to control rodents and vermin before and during demolition operations.
- F. Conduct demolition operations and remove debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.
- G. Conduct demolition operations to prevent injury to people and damage to adjacent buildings, facilities, and site improvements to remain. Ensure safe passage of people around demolition area.
- H. Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent movement, settlement, or collapse of Boardwalk to be demolished and adjacent buildings to remain.
- I. Explosives: Use of explosives shall not be permitted.
- J. Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.

ATLANTIC CITY BOARDWALK RECONSTRUCTION
ATLANTIC CITY, NEW JERSEY

- K. Remove and transport debris in a manner that shall prevent spillage on adjacent surfaces and areas.
- L. Boardwalk Demolition: Demolish Boardwalk completely and remove from the site. Use methods required to complete Work within limitations of governing regulations and as follows:
 - 1. IPE decking and joists shall be salvaged for re-use on this project where noted.
 - 2. Unused materials shall be disposed of at the end of the project.
- M. Completely remove below-grade construction, including piling, foundation walls and footings.
- N. Damages: Promptly repair damages to adjacent facilities caused by demolition operations.
- O. Disposal: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
 - 1. Do not burn demolished materials.
 - 2. Dispose of demolished materials at designated spoil areas on Owner's property.
 - 3. Transport demolished materials off Owner's property and legally dispose of them.

END OF SECTION 02060

BOARDWALK RECONSTRUCTION PROJECT
ATLANTIC CITY, NJ

Section 02460
HELICAL PILING

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes: Helical Piling, shoring and underpinning.
- B. Unit Prices: Products and installation included in this section are specified by unit prices. Refer to Division 1 Unit Prices Section for unit prices amounts and requirements.

1.02 DEFINITIONS

- A. Screw Anchor: Helical Pile Foundation Systems consist of steel screw anchors with one or more true-helix shaped steel plates attached to a central steel shaft. Extend anchors by adding shaft extensions.

1.03 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit product data, including manufacturer's SPEC-DATA^a product sheet, for specified products.
- C. Shop Drawings: Submit shop drawings showing profiles and product components, including anchorage and accessories.
- D. Quality Assurance Submittals: Submit the following:
 - 1. Test Reports: Certified test reports showing compliance with specified characteristics and physical properties.
 - 2. Manufacturer's Instructions: Manufacturer's installation instructions.
- E. Closeout Submittals: Submit the following:
 - 1. Warranty: Warranty documents specified herein.
 - 2. Record Documents: Project record documents for installed materials in accordance with Division 1 Closeout Submittals (Project Record Documents) Section.
 - a. Accurately record the following: Type (number and size of helices) and size; actual locations of screw anchors, anchor diameter and anchor length, installation angle below horizontal; extension length along shaft and

datum; anchor testing (if required); torque installation records on all screw anchors and torque monitoring calibration data.

1.04 QUALITY ASSURANCE

- A. Installer Qualifications: Installer experienced in performing work of this section who has specialized in installation of work similar to that required for this project.
 - 1. Installer: Installer Company specializing in performing the work of this section with documented certification.
- B. Preinstallation Meetings: Conduct preinstallation meeting to verify project requirements, substrate conditions, manufacturer's installation instructions and manufacturer's warranty requirements. Comply with Division 1 Project Management and Coordination (Project Meetings) Section.

1.05 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under Contract Document.
 - 1. Warranty Period: 10 years commencing on Date of Substantial Completion.

PART 2 PRODUCTS

2.01 HELICAL PILING

- A. Manufacturer: AB Chance Company or equivalent.

2.02 PRODUCT SUBSTITUTIONS

2.03 MANUFACTURED COMPONENTS

- A. Components
 - 1. Screw Anchor Plate: 5500 ft lb Anchors: Low-carbon steel meeting the general requirements of AISI, or ASTM A572, ASTM A935, ASTM A656 or ASTM A936.
 - 2. Screw Anchor Shaft: 5500 ft lb Anchors: Medium-carbon round-cornered square steel bar meeting dimensional and workmanship requirements of ASTM A29.

3. Bolts: 5500 and 7000 ft lb Anchors - Bolts: ASTM A320, Grade L7.

PART 3 EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

- A. Compliance: Comply with manufacturer's product data, including product technical bulletins.

3.02 PREPARATION

- A. Preparation: Use placement method which shall not cause damage to nearby structures.

3.03 INSTALLATION

- A. Helical Pier Installation: Installation by certified installer or dealer.
 1. Provide installation torque units, rotary type, forward and reverse capability, electric or hydraulic powered. Capable of positioning the screw anchor at the designed angle. Minimum drive equipment rating to equal or exceed the maximum torque rating of the specified screw anchor. Provide torque monitoring device as part of the installing unit or as a separate in-line device. Make available calibration torque monitoring data for Engineer, Inspector or Owner.
 2. Position screw anchor as indicated. Establish proper angular alignment at the start of installation.
 3. Connect the installation unit to the anchor with manufacturer's approved adapters. Provide safe and secure connection to screw anchors and extensions. Apply sufficient downward pressure to advance anchor. Install in a smooth and continuous manner, rate of anchor rotation 5 - 20 rpm.
 4. Monitor torque applied by the installing unit during the entire installation, and record values achieved on each screw anchor. Remove encountered obstructions, or relocate screw anchor and adjacent anchors as required.
 5. Provide extension material to obtain indicated depth, couple with bolts provided as part of extension; torque to 40 ft lbs. Install to minimum depth indicated. Provide ground cover, 5' minimum, above the top helix. Obtain written permission from Engineer before proceeding if indicated depth or minimum torque cannot be obtained.
- B. Depth and Torque Tolerances: Screw anchors that reach maximum torque rating before reaching minimum indicated depth shall be subject to the following:
 1. Terminate at 55 feet or as otherwise designated on the drawings and/or obtained

with written approval of Engineer.

2. Replace screw anchor with smaller and/or fewer helices, installed 3' minimum beyond termination of original screw anchor.

3.04 FIELD QUALITY REQUIREMENTS

- A. Site Tests: Monitor torque applied by the installing units during the entire installation.
- B. Inspection: Field inspection and testing when required shall be performed under provisions of Division 1 Testing Requirements.

3.05 PROTECTION

- A. Protection: Protect installed product from damage during construction.

END OF SECTION

Section 03300

**CAST-IN-PLACE CONCRETE
AND
PATCHING MATERIALS**

1.1 GENERAL

A. Submittals: Submit the following:

1. Product data for reinforcement, forming accessories, admixtures, patching compounds, waterstops, joint systems, curing compounds, dry-shake finish materials, and others as requested by Owner.
2. Shop drawings for fabricating, bending, and placing concrete reinforcement.
3. Laboratory test reports or evaluation reports for concrete materials and concrete mix designs.
4. Written report to Owner for each proposed concrete mix at least 15 days prior to start of concreting. Do not begin concrete production until mixes have been reviewed by Owner.

B. Quality Assurance: Comply with provisions of ACI 301, "Specifications for Structural Concrete for Buildings," ACI 318, "Building Code Requirements for Reinforced Concrete," and CRSI "Manual of Standard Practice," except where more stringent requirements are indicated. Latest edition.

1. Concrete Testing Service: Owner to engage a testing agency acceptable to Owner to perform materials evaluation testing and to design concrete mixes.

1.2 PRODUCTS

A. Reinforcing Materials: As follows:

1. Deformed Reinforcing Bars: Epoxy coated, ASTM A 615, Grade 60, unless otherwise indicated.
2. Welded Wire Fabric: Epoxy coated, ASTM A 185.

B. Concrete Materials: As follows:

1. Portland Cement: ASTM C 150, Type
2. Fly Ash: ASTM C 618, Type F.
3. Aggregates:
 - a. Normal-Weight Aggregates: ASTM C 33 and as specified. Provide aggregates from a single source for exposed concrete.
 - b. Lightweight Aggregates: ASTM C 330.

4. Water: Potable.
- C. Admixtures: Provide admixtures that contain not more than 0.1 percent chloride ions.
1. Air-Entraining Admixture: ASTM C 260.
 2. Water-Reducing, Retarding, and Accelerating Chemical Admixtures: ASTM C 494.
- D. Related Materials: As follows:
1. Absorptive Cover: Burlap cloth made from jute or kenaf, weighing approximately 9 oz. per sq. yd., complying with AASHTO M 182, Class 2.
 2. Moisture-Retaining Cover: Waterproof paper, polyethylene film, or polyethylene-coated burlap, complying with ASTM C 171.
 3. Membrane-Forming Curing Compound: ASTM C 309, Type I. Moisture loss not more than 0.55 kg/sq. meter when applied at 200 sq. ft./gal.
 4. Evaporation Control: Monomolecular film-forming compound applied to exposed concrete slab surfaces for temporary protection from rapid moisture loss.
- E. Mix Proportions and Design: Proportion mixes complying with mix design procedures specified in ACI 301.
1. Limit use of fly ash to not exceed 25 percent of cement content by weight.
 2. Design mixes to provide normal weight concrete with the following properties:
 - a. 5,000-psi, 28-day compressive strength; water-cement ratio, 0.44 maximum (non-air-entrained), 0.35 maximum (air-entrained).
 3. Limit maximum water-cement ratio of concrete exposed to freezing and thawing to 0.45.
 4. Slump Limits: Proportion and design mixes to result in concrete slump at point of placement as follows:
 - a. Ramps, Slabs, and Sloping Surfaces: Not more than 3 inches.
 - b. Reinforced Foundation Systems: Not less than 1 inch and not more than 3 inches.
 - c. Other Concrete: Not more than 4 inches.
 5. Adjust mix designs when material characteristics, job conditions, weather, test results, or other circumstances warrant. Do not use revised concrete

mixes until laboratory test data and strength results have been submitted to and reviewed by Owner.

- F. Use air-entraining admixture in exterior exposed concrete, providing not less than 4.5 percent nor more than 7 percent entrained air for concrete exposed to freezing and thawing, and from 2 percent to 4 percent for other concrete.
- G. Use water-reducing, accelerating, and retarding admixtures that have been tested and accepted in mix designs in strict compliance with manufacturer's directions.
- H. Job-Site Mixing: Use drum-type batch machine mixer, mixing not less than 1-1/2 minutes for 1 cu. yd. or smaller capacity. Increase mixing time at least 15 seconds for each additional cu. yd.
- I. Ready-Mix Concrete: ASTM C 94.

1.3 EXECUTION

- A. Reinforcement: Accurately position and support reinforcement, and secure against displacement. Locate and support reinforcement to maintain minimum cover with metal chairs, runners, bolsters, spacers, and hangers as required. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.
 - 1. Install welded wire fabric in lengths as long as practicable; lap at least one full mesh and lace splices with wire.
- B. Installation of Embedded Items: Set and build anchorage devices and other embedded items required for other work that is attached to or supported by cast-in-place concrete. Use setting diagrams, templates, and instructions provided by others for locating and setting.
 - 1. Locate and support waterstops to prevent displacement.
- C. Concrete Placement: Comply with ACI 304, "Guide for Measuring, Mixing, Transporting, and Placing Concrete," for placing concrete in a continuous operation within planned joints or sections. Do not begin concrete placement until other affected work is completed.
 - 1. Consolidate placed concrete using mechanical vibrating equipment with hand rodding and tamping so that concrete is worked around reinforcement and other embedded items and into forms.
 - 2. Protect concrete from physical damage or reduced strength due to weather extremes during mixing, placing, and curing.
 - a. In cold weather comply with ACI 306.

- b. In hot weather comply with ACI 305.

D. Finish of Formed Surface: As follows:

- 1. Smooth-Formed Finish: Provide a smooth finish for concrete surfaces exposed to view and surfaces to be covered with a coating or covering material applied directly to concrete. Repair and patch defective areas, with fins and other projections completely removed and smoothed.

DI. Curing: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. In hot, dry, and windy weather, apply an evaporation- control compound according to manufacturer's instructions after screeding and bull floating, but before power floating and troweling.

- 1. Begin initial curing as soon as free water has disappeared from exposed surfaces.
- 2. Continue curing unformed concrete surfaces by water ponding, continuous fog spraying, continuously wetted absorptive cover, or by moisture- retaining cover curing. Cure formed surfaces by moist curing until forms are removed. Keep concrete continuously moist for not less than 72 hours for high- early strength concrete and 7 days for all other concrete.
- 3. Apply membrane-forming curing compound to exposed interior slabs and to exterior slabs, walks, and curbs as soon as final finishing operations are complete. Apply uniformly according to manufacturer's directions. Recoat areas subjected to heavy rainfall within 3 hours after initial application. Maintain continuity of coating and repair damage during curing period.
 - a. Use membrane-curing compounds that shall not affect surfaces to be covered with finish materials applied directly to concrete.

DII. Field Quality Control: The Owner shall employ a testing agency to perform tests and to submit test reports. Sampling and testing for quality control during concrete placement may include the following, as directed by Owner.

- 1 Sampling Fresh Concrete: ASTM C 172, except modified for slump to comply with ASTM C 94.
 - b. Slump: ASTM C 143; one test at point of discharge for each day's pour of each type of concrete; additional tests when concrete consistency seems to have changed.
 - c. Air Content: ASTM C 173, volumetric method for lightweight or normal weight concrete; ASTM C 231, pressure method for normal weight concrete; one for each day's pour of each type of air- entrained concrete.

- d. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F (4 deg C) and below, when 80 deg F (27 deg C) and above, and one test for each set of compressive-strength specimens.
 - e. Compression Test Specimen: ASTM C 31; one set of four standard cylinders for each compressive-strength test, unless otherwise directed. Mold and store cylinders for laboratory-cured test specimens except when field-cured test specimens are required.
 - f. Compressive-Strength Tests: ASTM C 39; one set for each day's pour exceeding 5 cu. yd. plus additional sets for each 50 cu. yd. more than the first 25 cu. yd. of each concrete class placed in any one day; one specimen tested at 7 days, two specimens tested at 28 days, and one specimen retained in reserve for later testing if required.
2. When frequency of testing shall provide fewer than five strength tests for a given class of concrete, conduct testing from at least five randomly selected batches or from each batch if fewer than five are used.
 3. When total quantity of a given class of concrete is less than 50 cu. yd., Owner may waive strength testing if adequate evidence of satisfactory strength is provided.
 4. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, evaluate current operations and provide corrective procedures for protecting and curing the in-place concrete.
 5. Strength level of concrete shall be considered satisfactory if averages of sets of three consecutive strength test results equal or exceed specified compressive strength and no individual strength test result falls below specified compressive strength by more than 500 psi.
 6. Test results shall be reported in writing to Owner, Structural Engineer, ready-mix producer, and Contractor within 24 hours after tests. Reports of compressive strength tests shall contain the Project identification name and number, date of concrete placement, name of concrete testing service, concrete type and class, location of concrete batch in structure, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both 7-day tests and 28-day tests.
 7. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted but shall not be used as the sole basis for acceptance or rejection.
 8. Additional Tests: The testing agency shall make additional tests of in-place concrete when test results indicate specified concrete strengths and other characteristics have not been attained in the structure, as directed by Owner. Testing agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42, or by other methods as directed.

END OF SECTION 03300



DIVISION 3 - CONCRETE
Section 03300 - Cast-in-Place Concrete
Bonding Agents for Concrete

Part 1 - General

1.01 Summary

- A. This specification describes the use of a bonding bridge between new portland-cement mortar or concrete and hardened portland-cement mortar or concrete.

1.02 Quality Assurance

- A. Manufacturing qualifications: The manufacturer of the specified product shall be ISO 9001 certified and have in existence a recognized ongoing quality assurance program independently audited on a regular basis.
- B. Contractor qualifications: Contractor shall be qualified in the field of concrete repair and protection with a successful track record of 5 years or more. Contractor shall maintain qualified personnel who have received product training by a manufacturer's representative.
- C. Install materials in accordance with all safety and weather conditions required by manufacturer, or as modified by applicable rules and regulations of local, state and federal authorities having jurisdiction. Consult Material Safety Data Sheets for complete handling recommendations.

1.03 Delivery, Storage, and Handling

- A. All materials must be delivered in original, unopened containers with the manufacturer's name, labels, product identification, and batch numbers. Damaged material must be removed from the site immediately.
- B. Store all materials off the ground and protect from rain, freezing or excessive heat until ready for use.
- C. Condition the specified product as recommended by the manufacturer.

1.04 Job Conditions

- A. Environmental Conditions: Do not apply material if it is raining or snowing or if such conditions appear to be imminent. Minimum application temperature 40°F (5°C) and rising.
- B. Protection: Precautions should be taken to avoid damage to any surface near the work zone due to mixing and handling of the specified coating.

1.05 Submittals

- A. Submit two copies of manufacturer's literature, to include: Product Data Sheets, and appropriate Material Safety Data Sheets (MSDS).

1.06 Warranty

- A. Provide a written warranty from the manufacturer against defects of materials for a period of one (1) year, beginning with date of substantial completion of the project.

Part 2 - Products

2.01 Manufacturers

- A. **Sika Armathec 110 EpoCem**, as manufactured by Sika Corporation, is considered to conform to the requirements of this specification.

2.02 Materials

- A. Epoxy resin/portland cement adhesive shall be **Sika Armathec 110 EpoCem**
1. Component "A" shall be an epoxy resin/water emulsion containing suitable viscosity control agents. It shall not contain butyl glycidyl ether.
 2. Component "B" shall be primarily a water solution of a polyamine.
 3. Component "C" shall be a blend of selected portland cements and sands.
 4. The material shall not contain asbestos.

2.03 Performance Criteria

- A. Properties of the mixed epoxy resin/portland cement adhesive.
1. Pot Life: 90 minutes @ 73° F
 2. Contact Time: 95°F (35°C) 6 hours
80-95F (26-35C) 6 Hours
65-79F (18-26C) 12 Hours
50-64F (10-17C) 16 Hours
40-49F (4-9C) wet on wet
 3. Color: dark gray
- B. Properties of the cured epoxy resin/portland cement adhesive.
1. Compressive Strength (ASTM C-109)
 - a. 3 day: 4500 psi (31.0 MPa)
 - b. 7 day: 6500 psi (44.8 MPa)
 - c. 28 day: 8500 psi (58.6 MPa)
 2. Splitting Tensile Strength (ASTM C-496)
 - a. 28 days: 600 psi (4.1 MPa)
 3. Flexural Strength (ASTM C-348)
 - a. 1250 psi (8.6 MPa)
 4. Bond Strength ASTM C-882 at 14 days
 - a. Wet on Wet, 0-hr. open time: 2800 psi (19.3 MPa)
 - b. 24-hr. open time: 2600 psi (17.9 MPa)
 5. Bond of Steel Reinforcement to Concrete (Pullout Test)
 - a. Sika Armathec 110 coated 625-psi (4.3 MPa)
 - b. Epoxy coated 508 psi (3.5 MPa)
 - c. Plain Reinforcement 573 psi (3.95 MPa)
 6. The epoxy resin/portland cement adhesive shall not produce a vapor barrier.
 7. Material must be proven to prevent corrosion of reinforcing steel when tested under the procedures as set forth by the Federal Highway Administration Program Report No. FHWA/RD86/193. Proof shall be in the form of an independent testing laboratory corrosion report showing prevention of corrosion of the reinforcing steel.

Note: Tests above were performed with material and curing conditions at 73°F and 45-55% relative humidity.

Part 3 - Execution

3.01 Mixing and Application

- A. Mixing the epoxy resin: Shake contents of Components "A" and Component "B". Completely empty both components into a clean, dry mixing pail. Mix thoroughly for 30 seconds using a jiffy paddle with a low-speed (400-600 rpm) drill. Slowly add the entire contents of Component "C" while continuing to mix for 3 minutes until uniform with no lumps. Mix only that quantity that can be applied within its pot life.
- B. Placement procedure:
 - I. Apply to prepared surface with a stiff-bristle brush, broom or "hopper type" spray equipment.
 - a. For hand-applied mortars - Place fresh, plastic concrete/mortar while the bonding bridge adhesive is "wet" or within open times indicated in section 2.03.A.2.
 - b. For machine-applied mortars - Apply while the bonding bridge adhesive is "wet" or within the open times indicated in section 2.03.A.2.
- C. Adhere to all limitations and cautions for the epoxy resin/portland cement adhesive in the manufacturers current printed literature.

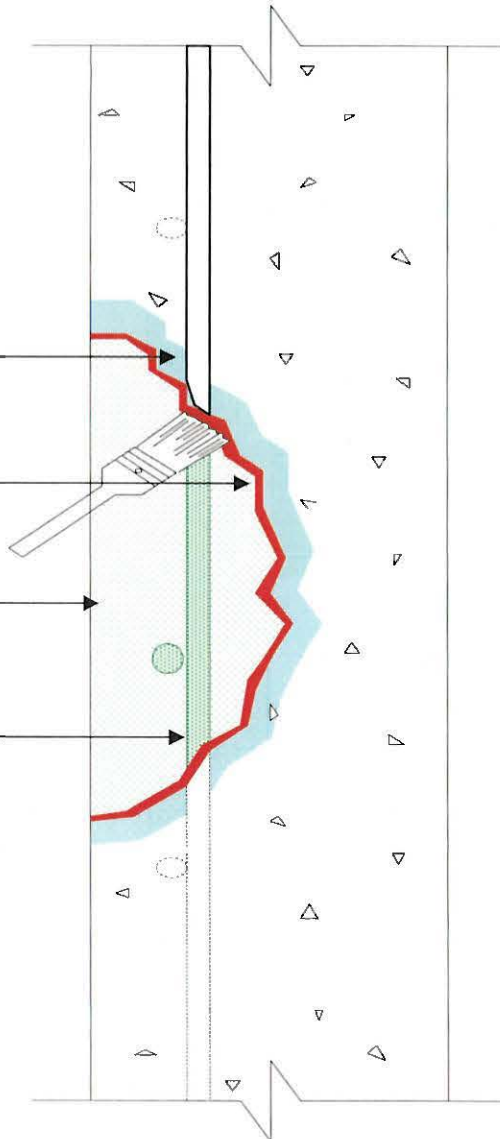
3.02 Cleaning

- A. The uncured epoxy resin/portland cement adhesive can be cleaned from tools with water. The cured epoxy resin/portland cement adhesive can only be removed mechanically.
- B. Leave finished work and work area in a neat, clean condition without evidence of spillovers onto adjacent areas.

SC-200

Sika® Armatec 110 EpoCem Bonding Bridge

1. Pre-wet surface to saturated surface dry (SSD).
2. Apply by stiff bristle brush or spray apply with "hopper type" or equal equipment.
3. Place repair material while Sika Armatec 110 EpoCem is still wet or within indicated open times.
4. Indicates Sika Armatec 110 EpoCem applied to reinforcing steel per Spec Component SC-201



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by Sika Corporation, 201 Polito Avenue, Lyndhurst, NJ 07071

Section 04 52 00 Masonry Restoration

Part 1 - General

1.01 Summary

This specification describes the patching of interior and/or exterior vertical or overhead surfaces with a polymer-modified, portland cement mortar.

1.02 Quality Assurance

- A. Manufacturing qualifications: The manufacturer of the specified product shall be ISO 9001 certified and have in existence a recognized ongoing quality assurance program independently audited on a regular basis.
- B. Contractor qualifications: Contractor shall be qualified in the field of concrete repair and protection with a successful track record of 5 years or more. Contractor shall maintain qualified personnel who have received product training by a manufacturer's representative.
- C. Install materials in accordance with all safety and weather conditions required by manufacturer or as modified by applicable rules and regulations of local, state and federal authorities having jurisdiction. Consult Material Safety Data Sheets for complete handling recommendations.

1.03 Delivery, Storage, and Handling

- A. All materials must be delivered in original, unopened containers with the manufacturer's name, labels, product identification, and batch numbers. Damaged material must be removed from the site immediately.
- B. Store all materials off the ground and protect from rain, freezing or excessive heat until ready for use.
- C. Condition the specified product as recommended by the manufacturer.

1.04 Job Conditions

- A. Environmental Conditions: Do not apply material if it is raining or snowing or if such conditions appear to be imminent. Minimum application temperature 45°F (5°C) and rising.
- B. Protection: Precautions should be taken to avoid damage to any surface near the work zone due to mixing and handling of the specified material.

1.05 Submittals

- A. Submit two copies of manufacturer's literature, to include: Product Data Sheets (PDS), and appropriate Safety Data Sheets (SDS).
- B. Submit copy of Certificate of Approved Contractor status by manufacturer.

1.06 Warranty

Provide a written warranty from the manufacturer against defects of materials for a period of one (1) year, beginning with date of substantial completion of the project.

Part 2 - Products

2.01 Manufacturer

SikaTop®-123 Plus, as manufactured by Sika® Corporation, is considered to conform to the requirements of this specification.

2.02 Materials

Polymer-modified Portland cement mortar:

- A. Component A shall be a liquid polymer emulsion of an acrylic copolymer base and additives.
 - a. pH: 4.5-6.5
 - b. Film Forming Temperature: 73°F max.
 - c. Tear Strength: 950 psi min.
 - d. Elongation at Break: 500% min.
 - e. Particle Size: less than 0.1 micron
- B. Component A shall contain an organic, penetrating corrosion inhibitor which has been independently proven to reduce corrosion in concrete via ASTM G3 (half-cell potential tests). The corrosion inhibitor shall not be calcium nitrite, and shall have a minimum of 5 years of independent field testing to document performance on actual construction projects.
- C. Component B shall be a blend of selected portland cements, specially graded aggregates, admixtures for controlling setting time, water reducers for workability, and an organic accelerator.
- D. The materials shall be non-combustible, both before and after cure.
- E. The materials shall be supplied in a factory-proportioned unit.
- F. The polymer-modified, portland cement mortar must be placeable from 1/8" to 1½" in depth per lift for vertical applications and 1/8" to 1" in depth for overhead applications.

2.03 Performance Criteria

Typical Properties of the mixed polymer-modified, portland cement mortar:

1. Yield	Approximately 0.39 ft ³ per 44 lb. bag
2. Color	Concrete gray
3. Density (ASTM C-138)	132 lbs/ft ³
4. Mixing Ratio	1 gal of SikaTop® Component A per 44 lb. bag
5. Application Thickness	Min 1/8" (3 mm); Max 1.5" (38 mm)
6. Application Temp	Min 50°F (10°C) ; Max 86°F (30°C)
7. Working Time	15 min.
8. Finishing Time	20 - 60 min
9. Compressive Strength (ASTM C-109)	1 day - 3,000 psi (20.7 MPa) 7 days - 4,000 psi (27.6 MPa) 28 days - 6,000 psi (41.4 MPa)
10. Flexural Strength @ 28 days (ASTM C-293)	1,500 psi (10.3 MPa)
11. Bond Strength @ 28 days (ASTM C-882 Modified)	2,000 psi (13.8 MPa)
12. Permeability (ASTM C-1202)	< 500 Coulombs

Note: Tests above were performed with the material and curing conditions @ 71°F – 75°F and 45 - 55% relative humidity.

Part 3 – Execution

3.01 Surface Preparation

- A. Areas to be repaired must be clean, sound, and free of contaminants. All loose and deteriorated concrete shall be removed by mechanical means. Mechanically prepare concrete substrate to obtain a surface profile of $\pm 1/16"$ (CSP 5 or greater as per ICRI Guidelines) with a new exposed aggregate surface. Area to be patched shall not be less than $1/8"$ in depth.
- B. Where reinforcing steel with active corrosion is encountered, sandblast the steel to a white metal finish to remove all contaminants and rust. Where corrosion has occurred due to the presence of chlorides, the steel shall be high pressure washed after mechanical cleaning. Prime steel with 2 coats of Sika® Armatex® 110 EpoCem as per the Product Data Sheet. (See Spec Component SC-201-0699)

3.02 Mixing and Application

- A. Mechanically mix in an appropriate sized mortar mixer or with a Sika® mud paddle and low speed (400-600 rpm) drill. Pour approximately 4/5 gal Component A into the mixing container. Add Component B while continuing to mix. Mix to a uniform consistency for a maximum of three minutes. Add remaining Component A to mix for desired consistency. Should smaller quantities be needed, be sure the components are measured in the correct ratio and that the Component B is uniformly blended before mixing the components together. Mix only that amount of material that can be placed in 10 - 15 minutes. Do not retemper material.
- B. Placement Procedure: At the time of application, the substrate shall be saturated surface dry with no standing water. Mortar must be scrubbed into substrate filling all pores and voids. While the scrub coat is still plastic, force material against edge of repair, working toward center. If repair area is too large to fill while scrub coat is still wet use Sika® Armatex® 110 EpoCem in lieu of scrub coat. (See spec component SC-200-0699) After filling, consolidate then screed. Allow mortar to set to desired stiffness then finish with trowel for smooth surface. Wood float or sponge float for a rough surface. Areas where the depth of the repair area to sound concrete is greater than $1-1/2"$, the repair shall be made in lifts of $1\frac{1}{2}"$ maximum thickness. The top surface of each lift shall be scored to produce a rough surface for the next lift. The preceding lift shall be allowed to reach final set before applying fresh material. The fresh mortar must be scrubbed into the preceding lift.
- C. As per ACI recommendations for portland cement concrete, curing is required. Moist cure with wet burlap and polyethylene, a fine mist of water or a water-based* compatible curing compound. Moist curing should commence immediately after finishing and continue for 48 hours. Protect newly applied material from rain, sun, and wind until compressive strength is 70% of the 28 day compressive strength. To prevent from freezing cover with insulating material. Setting time is dependent on temperature and humidity.

*Pretesting of curing compound is recommended.

- D. Adhere to all procedures, limitations and cautions for the polymer-modified portland cement mortar in the manufacturers current printed technical data sheet and literature.

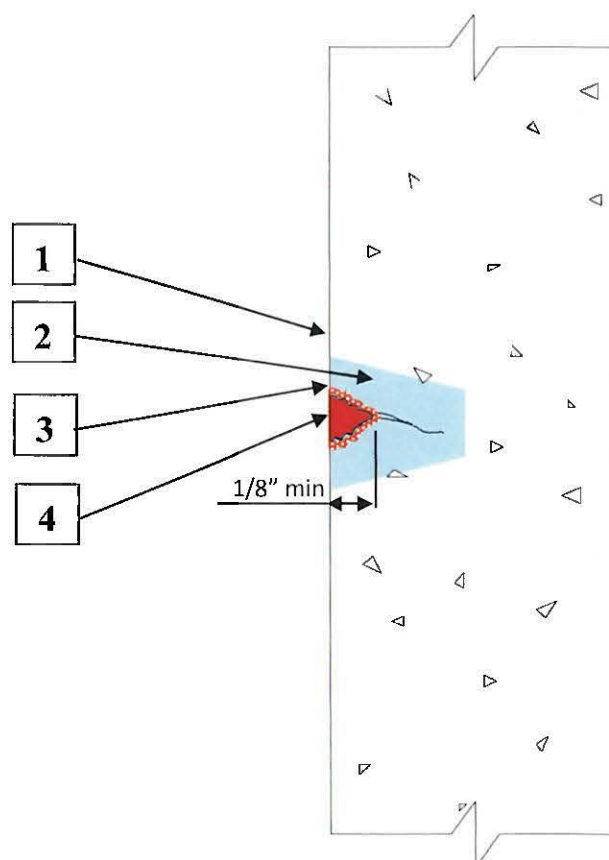
3.02 Cleaning

- A. The uncured polymer-modified portland cement mortar can be cleaned from tools with water. The cured polymer modified portland cement mortar can only be removed mechanically.
- B. Leave finished work and work area in a neat, clean condition without evidence of spillovers onto adjacent areas.

SC-027

SikaTop® 123 Plus Crack Filler (Vertical / Overhead)

1. Substrate shall be clean, sound and lamination-free prior to repairing.
2. Pre-soak the substrate to provide Saturated Surface Dry (SSD) condition prior to applying repair material. (Exception: not applicable if Sikadur®-32 Hi-Mod or Sikadur®-Patch-Fix is used as an epoxy agent)
3. Apply scrub coat of the repair material to the prepared substrate. (Exception: not applicable if Sikadur®-32 Hi-Mod or Sikadur®-Patch-Fix is used as an epoxy agent)
4. While scrub coat is wet place SikaTop®-123 Plus, filling the entire cavity. Strike off and finish as required. Wet cure or use Sikagard® Curing Compound and protect as per the PDS.



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Section 03 01 00 Maintenance of concrete

SIKA SPECIFICATION NOTE: *This guide specification includes test methods, materials and installation procedures for SikaCrete®-211 SCC Plus. This guide specification should be adapted to suit the needs and conditions of individual projects. It is prepared in CSI Master Format and should be included as a separate section under Division 3 - Concrete.*

Part 1 - General

1.01 Summary

This Specification shall be read as a whole by all parties concerned. Each Section may contain more or less the complete Work of any trade. The Contractor is solely responsible to make clear to the Subcontractors the extent of their Work and coordinate overlapping Work.

1.02 System description

This specification describes the patching or overlay of interior and exterior horizontal surfaces and formed vertical and overhead surfaces with Portland Cement Concrete.

1.03 Related sections

- A. Section 03550 - Concrete Toppings
- B. Section 03920 - Concrete Resurfacing
- C. Section 03930 - Concrete Rehabilitation

1.04 References

The following standards are applicable to this section:

- ASTM C-39 - Compressive Strength
- ASTM C-496 - Splitting Tensile Strength
- ASTM C-882 Modified - Slant Shear Bond Strength
- ASTM C-469 - Modulus of Elasticity
- ASTM C-157 Modified- Shrinkage
- ASTM C-293 - Flexural Strength

1.05 Quality Assurance

- A. Manufacturing qualifications: The manufacturer of the specified product shall be ISO 9001 certified and have in existence a recognized ongoing quality assurance program independently audited on a regular basis.
- B. Contractor qualifications: Contractor shall be qualified in the field of concrete repair and protection with a successful track record of 5 years or more. Contractor shall maintain qualified personnel who have received product training by a manufacturer's representative.
- C. Store and apply materials in accordance with all safety and weather conditions required by manufacturer or as modified by applicable rules and regulations of local, state and federal authorities having jurisdiction. Consult Material Safety Data Sheets for complete handling recommendations.

1.06 Delivery, Storage, and Handling

- A. All materials must be delivered in original, unopened containers with the manufacturer's name, labels, product identification, and batch numbers. Damaged material must be removed from the site immediately.
- B. Store all materials off the ground and protect from rain, freezing or excessive heat until ready for use.
- C. Condition the specified product as recommended by the manufacturer.

1.07 Job Conditions

- A. Environmental Conditions: Do not apply material if it is raining or snowing or if such conditions appear to be imminent. Minimum application temperature 45°F (7°C) and rising.
- B. Protection: Precautions should be taken to avoid damage to any surface near the work zone due to mixing and handling of the specified material.

1.08 Submittals

- A. Submit two copies of manufacturer's literature, to include: Product Data Sheets (PDS), and appropriate Safety Data Sheets (SDS).
- B. Submit copy of Certificate of Approved Contractor status by manufacturer.

1.09 Warranty

Provide a written warranty from the manufacturer against defects of materials for a period of one (1) year, beginning with date of substantial completion of the project.

Part 2 - Products

2.01 Manufacturer

SikaCrete®-211 SCC Plus, as manufactured by Sika® Corporation, is considered to conform to the requirements of this specification.

2.02 Materials

- A. The repair concrete shall be self consolidating and polymer modified. It shall be comprised of selected portland cements, specially graded aggregates, admixtures for controlling setting time and plasticizers for workability as well as silica fume and a migrating corrosion inhibitor.
- A. The materials shall be non-combustible, both before and after cure.
- B. The materials shall be supplied as a factory-blended unit.
- C. The portland cement concrete must be placeable from 1" to 8" in depth and appropriate for full-slab depth repair and replacement.
- D. The portland cement concrete aggregate shall conform to ASTM C-33. (similar to No.8 distribution per ASTM C-33, Table II) and be clean, well-graded, having low absorption and high density.

2.03 Performance Criteria

Typical Properties of the mixed polymer-modified, portland cement mortar:

1. Yield	0.5 ft ³ (0.01 m ³) per bag
2. Color	Concrete gray
3. Mixing Ratio	5.5-6 pints (2.6-2.8 L)
4. Application Thickness	Min 1" (25 mm); Max 8 " (203 mm)
5. Application Temp	> 45 °F (7 °C)
6. Initial spread (ASTM C-1611)	25-30" (6.4-7.6 cm)
7. Spread at 30 minutes (ASTM C-1611)	> 15" (3.9 cm)
8. Application time	60 min
9. Compressive Strength (ASTM C-39)	1 day - 2,000 psi (13.8 MPa) 7 days - 5,500 psi (37.9 MPa) 28 days - 6,500 psi (44.8 MPa)
10. Flexural Strength (ASTM C-293)	28 days - 1,000 psi (6.9 MPa)
11. Slant shear (ASTM C-882 Modified)	28 days - 2,500 psi (17.2 MPa)
12. Splitting Tensile Strength (ASTM C-496)	28 days - 1,000 psi (6.9 MPa)
13. Permeability (ASTM C-1202 & AASHTO T-277)	28 days < 650 Coloumbs
14. Freeze thaw resistance	300 cycles > 99 %

Note: Tests above were performed with the material and curing conditions @ 71°F – 75°F and 45 - 55% relative humidity.

Part 3 – Execution

3.01 Surface Preparation

- A. Areas to be repaired must be clean, sound, and free of contaminants. All loose and deteriorated concrete shall be removed by mechanical means. Mechanically prepare concrete substrate to obtain a surface profile of $\pm 1/8"$ (CSP 7-8 or greater as per ICRI Guidelines) with a new exposed aggregate surface. Area to be patched shall not be less than 1" in depth.
- B. Where reinforcing steel with active corrosion is encountered, sandblast the steel to a white metal finish to remove all contaminants and rust. Where corrosion has occurred due to the presence of chlorides, the steel shall be high pressure washed after mechanical cleaning. Prime steel with 2 coats of Sika® Armatex® 110 EpoCem as per the Product Data Sheet.

3.02 Mixing and Application

- A. Start mixing with 5.5 pints of water. An additional 0.5 pint can be added if needed. Do not overwater, as excess water shall cause segregation. Add entire contents of one bag of Sikacrete 211 SCC Plus while continuing to mix to a uniform consistency, maximum 3 minutes. Mechanically mix with a lowspeed (400-600 rpm) drill or in an appropriate-size mortar mixer or concrete mixer.
- B. Placement Procedure: At the time of application, the substrate should be SSD (Saturated Surface Dry) with no standing water. Concrete must be scrubbed into substrate filling all pores and voids. While the scrub coat is still plastic, force material against edge of repair, working toward center. If repair area is too large to fill while scrub coat is still wet use Sika Armatex 110 EpoCem in lieu of scrub coat. After filling, consolidate, then screed. Allow concrete to set to desired stiffness, then finish with trowel, manual or power, for smooth surface. Broom or burlap drag for rough surface.
- C. Alternatively the material may be poured or pumped into formed areas. To ensure proper filling and adhesion vibrate the material during placement or pump the repair material under pressure. Vibrate form while pouring or pumping. Pump with a variable pressure pump. Continue pumping until a 3 to 5 psi increase in normal line pressure is evident then STOP pumping. Form should not deflect. Vent to be capped when steady flow is evident, and forms stripped when appropriate.
- D. As per ACI recommendations for portland cement concrete, curing is required. Moist cure with wet burlap and polyethylene, a fine mist of water or a water-based* compatible curing compound. Moist curing should commence immediately after finishing and continue for 48 hours. Protect newly applied material from rain, sun, and wind until compressive strength is 70% of the 28 day compressive strength. To prevent from freezing cover with insulating material. Setting time is dependent on temperature and humidity.

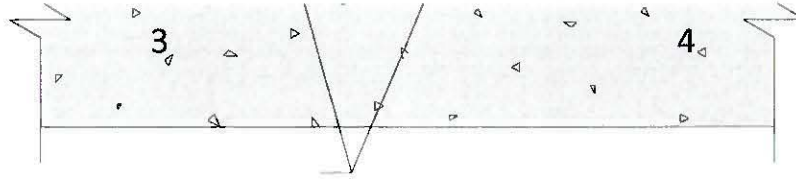
*Pretesting of curing compound is recommended.

- E. Adhere to all procedures, limitations and cautions for the polymer-modified portland cement mortar in the manufacturers current printed Product Data Sheet (PDS) and literature.

E.01 Cleaning

- A. The uncured polymer-modified portland cement mortar can be cleaned from tools with water. The cured polymer modified portland cement mortar can only be removed mechanically.
- B. Leave finished work and work area in a neat, clean condition without evidence of spillovers onto adjacent areas.

a) Pourable repair



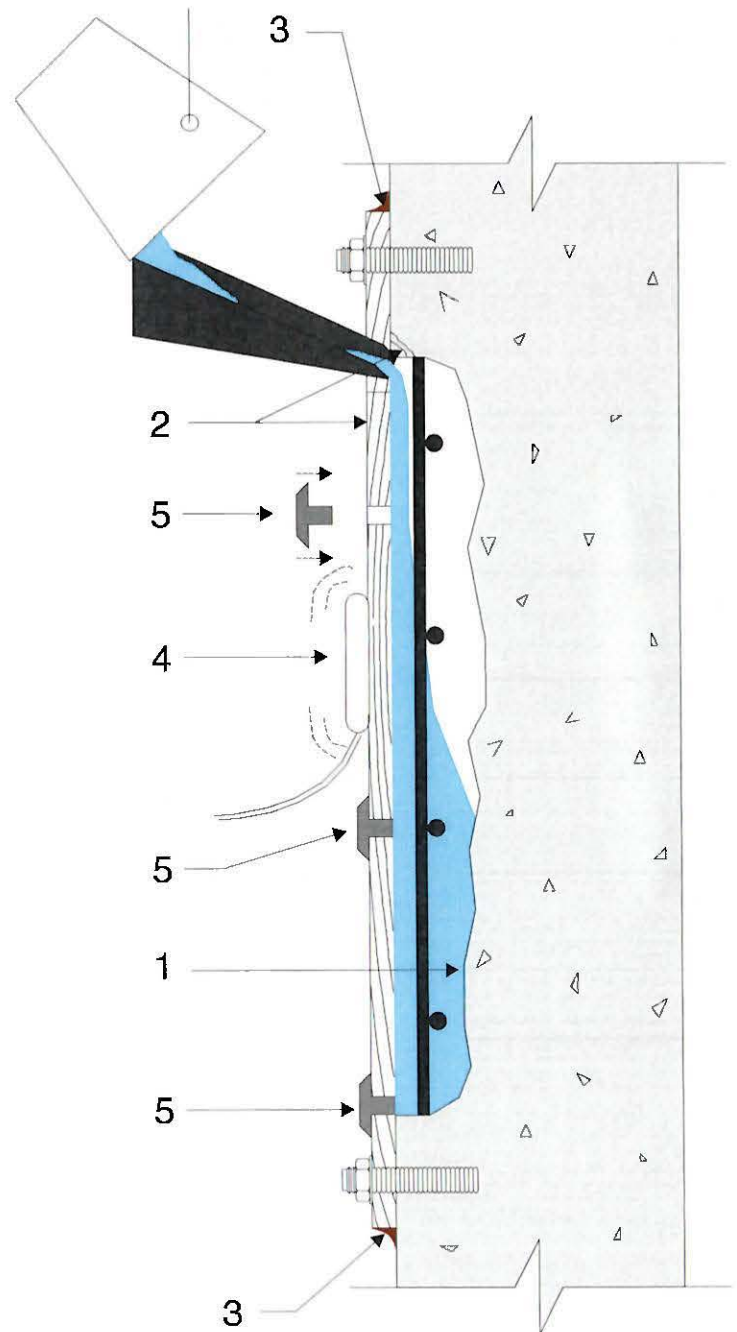
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1. Repair area should not be less than 1" in depth.
2. Substrate should be Saturated Surface Dry (SSD) with no standing water.
3. Apply scrub coat to substrate, filling all pores and voids.
4. While scrub coat is still wet pour SikaCrete®-211 SCC Plus.

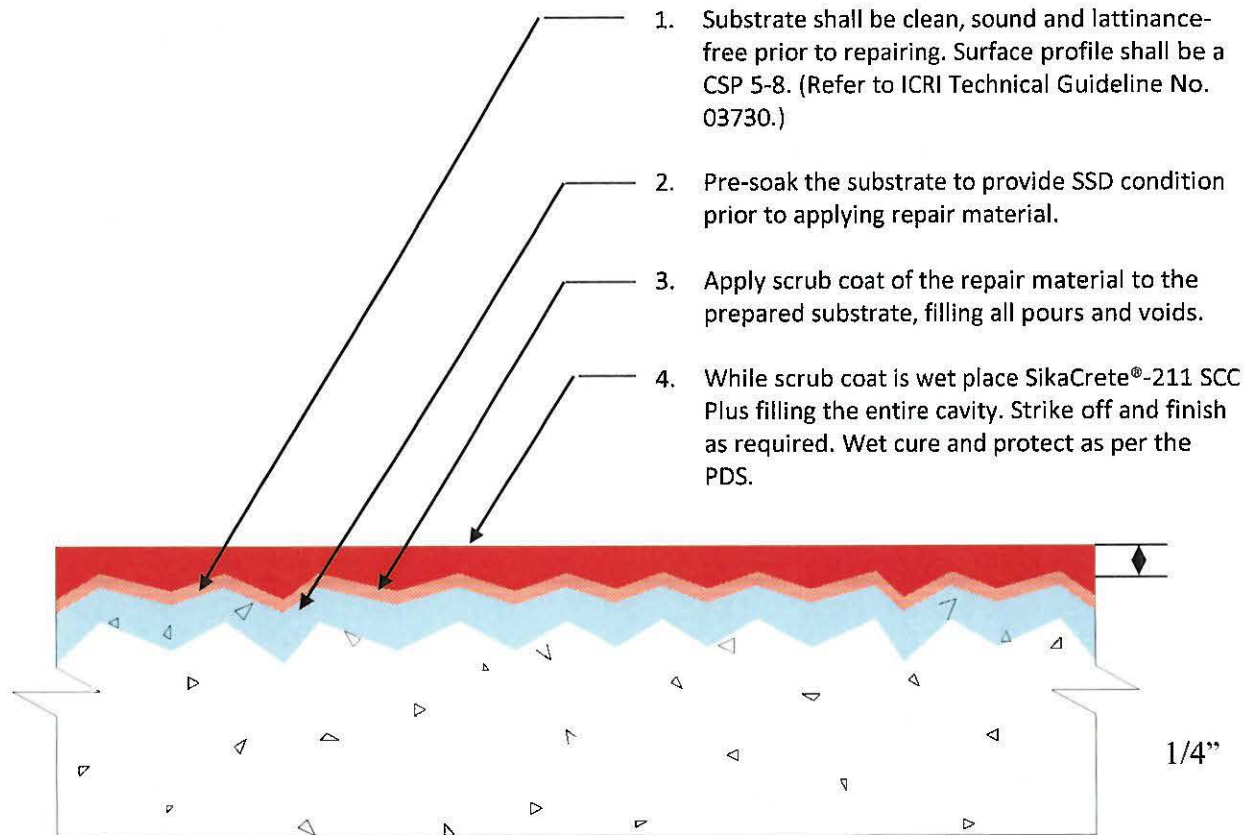
Note: If repair area is too large to fill while scrub coat is still wet, use Sika Armatec 110 EpoCem in lieu of the scrub coat.
(See Spec Component SC-200)

b) Form and Pour

1. Pre-wet surface to SSD.
2. Apply release agent to form or use plastic lined plywood.
3. Run bead of Sikaflex 1a around edge of form to prevent leakage, let cure, then anchor form. Fill with water to check for water tightness. Let drain to no free standing water.
4. Pump SikaCrete®-211 SCC Plus with a variable pressure pump. Continue pumping until a 3 to 5 psi increase in normal line pressure is evident then STOP pumping. Form should not deflect.
5. Vibrate form while pumping.
6. Vent to be capped when steady flow is evident.
7. Strip form when appropriate.
8. Dry pack anchor holes with additional SikaCrete®-211 SCC Plus material



c) Overlay



Note:

If repair area is too large to fill while scrub coat is still wet, use Sika® Armatec® 110 EpoCem in lieu of the scrub coat.
If reinforcing steel is located within the repair location refer to Spec Component SC-201
For applications greater than 1" in depth, add 3/8" coarse aggregate in accordance to the PDS.

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ATLANTIC CITY BOARDWALK RECONSTRUCTION
ATLANTIC CITY, NEW JERSEY

Section 06110

CARPENTRY

Part One - GENERAL

- 1.1 REFER to Drawings and to conditions and requirements given in various sections of Division 0 - Bidding and Contract Requirements which may affect the work of this Section.
- 1.2 SCOPE OF WORK
 - A. Furnish and install CCA treated lumber nailers, decking, and hardware.
- 1.3 SITE CONDITIONS
 - A. Field measurements and material qualities - Contractor shall have sole responsibility for accuracy of all measurements, estimates of material quantities and sizes, and site conditions that shall effect work.
- 1.4 QUALITY CONTROL
 - A. The Engineer shall inspect each lumber shipment, within two weeks after delivery. The Engineer shall notify the Contractor, in writing, of any defective material (by quantity and size), which the Contractor shall replace at his/her own expense within thirty (30) days. Grounds for rejection shall include, but not limited to:
 - 1. Split, checked or warped material.
 - 2. Moisture content exceeding fifteen percent.
 - 3. Offensive odor.
 - 4. Surface oils, marks, stains and/or impurities.
 - 5. Inconsistent and/or varying color.

Part Two - PRODUCTS

- 2.1 JOISTS:
 - A. Joists shall be supplied by Owner
- 2.2 DECKING:
 - Material shall be supplied by Owner.

ATLANTIC CITY BOARDWALK RECONSTRUCTION
ATLANTIC CITY, NEW JERSEY

- 2.3 Contractor shall be responsible from all trucking, labor, etc. to move materials to project site from the City of Atlantic City's storage yard(s) all materials supplied by the Owner.

B. MOCK UP:

Contractor shall be required to provide a complete bent to bent mockup noting installation of timber piles, beams, joists, hangers, etc. prior to proceeding with the framing phase of the project. In the event the lumber is unavailable at the time of the mock up review/approval, the contractor shall be required to install a decking material mockup for review/approval prior to proceeding with the decking material. This requirement shall be the same for offsite fabricated components or a field constructed system.

- 2.3 FASTENERS: Slotted flat head #18 x 3-1/2" (2x lumber) stainless steel wood screws or an approved equal.

- 2.4 BOLTS: Steel bolts shall be hot-dipped galvanized in accordance with ASTM A153 or cadmium plated

Part Three - EXECUTION

3.1 EXAMINATION

- A. Verify the conditions are satisfactory to begin work. Do not begin until all unsatisfactory conditions are corrected. Beginning work constitutes acceptance of conditions.
- B. Verify that work of other trades has been reviewed and approved by the Engineer and Owner.
- C. Check substructure for inadequate anchorage, foreign material, moisture, or unevenness that would prevent quality and execution of the carpentry work. Include the cost of correcting these conditions in the bid prices.

3.2 TIMBER JOISTS

- A. Timber joist shall be supplied by the owner
- B. Contractor shall be responsible from all trucking, labor, etc. to move materials to project site from the City of Atlantic City's storage yard(s).
- C. The new joists to be installed as detailed herein and on the plans.

ATLANTIC CITY BOARDWALK RECONSTRUCTION
ATLANTIC CITY, NEW JERSEY

- B. Contractor shall fabricate the blocking detailed on the plans from lumber supplied by the City, along with any and all dapping of the joists necessary to set joist level with the bearing surface.
- C. No cuts shall be permitted deeper than the depth of the necessary dap. Any and all cuts made in fabricating any dapped out area of the joists deeper than the depth of the required dap, shall cause the Engineer or his representative to reject same. Summarily, the cost of the rejected joist shall be deducted from the contract sum paid to the Contractor.

3.3 DECKING

- A. The Contractor shall employ stop control devices on all drilling and countersink bits to insure that the wood substructure are not penetrated by the bits during drilling and/or countersink operations. The devices and procedures to be employed by the Contractor must be approved by the Engineer or his representative before the drilling and countersink operations commence.
 - C. The decking shall be reinstalled in the herringbone pattern as shown and detailed on the plans. Decking must be neatly laid with 3/16" spacing between deck boards. Each piece of decking shall be fastened at each joist/nailer with one stainless steel screw as detailed on the plans. All screws are to be countersunk approximately 1/8". **It is brought to the attention of the Contractor that all screw holes are to be predrilled before setting the stainless steel screws. Under no circumstances shall this procedure be waived.**
 - D. The work of this section shall include any necessary adjustment to joists and decking so as to finish off the top grade of the new decking to conform with the physical conditions of all abutting adjacent structures, and likewise, to reconstruct the Boardwalk at a uniform continuous grade approximately the same as existing. If in order to accomplish this result, the tops of existing substructures are found to be low, the Contractor must install the necessary shims as specified in paragraph 3.4. Likewise, if the substructure is high, bottom of joists shall be dapped.
 - E. All decking lumber shall be accurately cut and framed, true and exact and to close fit in such manner that all contact surfaces shall have a firm and even bearing over the entire surface.
- 3.4 CLEAN UP daily and upon completion. Remove from the Project Site and adjacent Boardwalk and property, all debris and rubbish resulting from the work of this Section.

END OF SECTION 06110

CITY OF ATLANTIC CITY

**BOARDWALK RECONSTRUCTION PROJECT
TEXAS AVENUE TO COLUMBIA PLACE**

**PROJECT LABOR
AGREEMENT**

ARTICLE 1 - PREAMBLE

WHEREAS, CITY OF ATLANTIC CITY, ("City" or "Owner") on behalf of itself, and Project Management Firms acting as Construction Managers, and reflecting the objectives of City, as Owner, desires to provide for the efficient, safe, quality, and timely completion BOARDWALK RECONSTRUCTION PROJECT TEXAS AVENUE TO COLUMBIA PLACE (the "Project") in a manner designed to afford lower reasonable costs to The City, the Owner, and the Public it represents, and the advancement of public policy objectives; and

WHEREAS, this Project Labor Agreement will foster the achievement of these goals, inter alia, by:

- Ensuring a reliable source of skilled and experienced labor;
- Standardizing the terms and conditions governing the employment of labor on the Project;
- Permitting wide flexibility in work scheduling and shift hours and times, from those which otherwise might obtain;
- Receiving negotiated adjustments as to work rules and staffing requirements from those which otherwise might obtain;
- Providing comprehensive and standardized mechanisms for the settlement of work disputes, including those relating to jurisdiction, without delay or disruption to the project;
- Avoiding the costly delays of potential strikes, slowdowns, walkouts, picketing and other disruptions arising from work disputes, and promote labor harmony and peace for the duration of the project;
- Furthering public policy objectives as to improved employment opportunities for minorities, women and the economically disadvantaged in the construction industry;
- Expediting the construction process;
- Stabilizing wages, hours and working conditions for the craft workers on the project; and
- Ensuring a satisfactory, continuous and harmonious relationship between the parties hereto.

WHEREAS, the signatory Unions desire the stability, security and work opportunities afforded by a Project Labor Agreement; and

WHEREAS, the Parties desire to maximize Project safety conditions for both workers and the public.

NOW, THEREFORE, the Parties enter into this Project Labor Agreement pursuant to N.J.S.A. 52:38-1 et seq.

SECTION 1. PARTIES TO THE AGREEMENT

This is a Project Labor Agreement ("Agreement") for BOARDWALK RECONSTRUCTION PROJECT TEXAS AVENUE TO COLUMBIA PLACE. This Agreement is entered into by and between the City and its successors and assigns, and the Contractor(s) to be named (such Contractors joining by Letters of Assent in the form of Schedule B attached), and by the South Jersey Building and Construction Trades Council, ("BTC") on behalf of itself and its affiliated local union members, (each a "local Union", and collectively "Member Unions") and sometimes referred to herein where the context requires as a "Local Union", and together with the Member Unions, the "Unions") for certain construction work to be performed as outlined under Article 3.

ARTICLE 2 - GENERAL CONDITIONS

SECTION 1. DEFINITIONS

Throughout this Agreement, the South Jersey Building and Construction Trades Council shall be referred to as "BTC", the BTC's Members Unions is referred to singularly and collectively as "the Union(s)," and where specific reference is made to "Local Unions" that phrase is sometimes used; the term "Contractor(s)" shall include all signatory Contractors, and their subcontractors of whatever tier, engaged in on-site Project construction work within the scope of this Agreement as defined in Article 3; the City of Atlantic is referenced as the "City" or "Owner"; the South Jersey Building and Construction Trades Council is referenced as the ("BTC"), the Project Manager or Owner's Representative, is referenced as "PM", and the work covered by this Agreement (as defined in Article 3) is referred to as the "Project".

SECTION 2. CONDITIONS FOR AGREEMENT TO BECOME EFFECTIVE

The Agreement shall not become effective unless executed by all parties designated in Article 1, Section 1 above, and will remain in effect until the completion of the Project. In the event that the City opts not to use a Project Manager, in the City's sole discretion, then the City shall designate an Owner's representative who shall act, under the terms of this Agreement, as a Project Manager.

SECTION 3. ENTITIES BOUND & ADMINISTRATION OF AGREEMENT

This Agreement shall be binding on the BTC, all signatory Unions and the City and all signatory Contractors performing on-site Project work, including site preparation and staging areas, as defined in Article 3. The Contractors shall include in any subcontract that they let, for performance during the term of this Agreement, a requirement that their subcontractors, of whatever tier, become signatories and bound by this Agreement with respect to subcontracted work performed within the scope of Article 3, and as per Schedule A "Local Collective Bargaining Agreements" and per Schedule B "Contractors Letters of Assent".

SECTION 4. SUPREMACY CLAUSE

This Agreement, together with the local Collective Bargaining Agreements appended hereto as Schedule A and Contractor(s) Letters of Assent appended hereto as Schedule B, represents the complete understanding of all signatories and supersedes any national agreement, local agreement or other collective bargaining agreement of any type which would otherwise apply to this Project, in whole or in part, except for all work performed under the National Agreement of the International Union of Elevator Constructors, with the exception of Article VII, IX and X of this Agreement. Where a subject covered by the provisions, explicit or implicit, of this Agreement is also covered by a Schedule A, the provisions of this Agreement shall prevail except for all work performed under the NTD Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, all instrument calibration work and loop checking shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, and the National Agreement of the International Union of Elevator Constructors, with the exception of Article 7, 9 and 10 of this Agreement, all such work will be governed by the National Agreement. No practice, understanding or agreement between a Contractor and Local Union, which is not explicitly set forth in this Agreement, shall be binding on this Project. It is further understood that no contractor shall be required to sign any other agreement as a condition of performing work on this project. No practice, understanding or agreement between a Contractor and Local Union, which is not explicitly set forth in this Agreement shall apply on this Project.

SECTION 5. LIABILITY

The liability of any Contractor and the liability of any Union under this Agreement shall be several and not joint. The City, PM and any Contractor shall not be liable for any violations of this Agreement by any other Contractor, and the BTC and Local Unions shall not be liable for any violations of this Agreement by any other Union.

SECTION 6. AWARD OF CONTRACTS AND SUSPENSION OF WORK

The City shall require in its bid specifications for all work within the scope of Article 3 that all successful bidders, and their subcontractors of whatever tier, become bound by, and signatory to, this Agreement. It is understood that nothing in this Agreement shall be construed

as limiting the sole discretions of the City in determining which Contractors shall be awarded contracts for Project Work. It is further understood that the City has sole discretion at any time to terminate, delay or suspend the work, in whole or part, on this Project.

SECTION 7. BID SPECIFICATIONS

The City shall include in all bid specifications for the BOARDWALK RECONSTRUCTION PROJECT TEXAS AVENUE TO COLUMBIA PLACE, a notice advising all bidders that the work is subject to this Agreement and that all Contractors and subcontractors will be required to provide the Schedule B "Contractors Letters of Assent" as a condition of any contract award. It is understood that nothing in this Agreement shall be construed as limiting the sole discretion of the City in the award of contracts for work on the Project; nor shall it limit the rights of the City and/or Contractors in determining which subcontractor(s) shall be awarded subcontracts for Project work. A summarized scope of work is attached as Schedule C.

SECTION 8. THE CONSTRUCTION PROJECT MANAGER

The City will also be acting with respect to the Project as the Construction Project Manager ("Project Manager"). All references herein to the Project Manager shall be to the City and all notices required to be given to the Project Manager under this Agreement shall be given to the City. In addition to its rights and obligations as Owner, the City shall have all rights and obligations under this Agreement as Project Manager. Notwithstanding, the City may engage an outside consulting firm to support and assist the City with respect to Project Management, which firm shall have all rights and obligations given to the Project Manager under this Agreement. If an outside consulting firm is retained, the City will immediately notify the Unions.

SECTION 9. AVAILABILITY AND APPLICABILITY TO ALL SUCCESSFUL BIDDERS

- A. The City shall require in its bid specifications for all work within the scope of Article 3 that all successful bidders, and their subcontractors of whatever tier, become bound by, and signatory to, this Agreement. It is understood that nothing in this Agreement shall be construed as limiting the sole discretion of the City or the Project Manager in determining which Contractors shall be awarded contracts for Project work. It is further understood that the City has the sole discretion at any time to terminate, delay or suspend the work, in whole or in part, on this Project.
- B. The Unions agree that this Agreement will be made available to, and will fully apply to any successful bidder for the Project work who becomes signatory thereto, without regard to whether that successful bidder performs work at other sites on either a union or non-union basis and without regard to whether employees of such successful bidder are, or are not, members of any unions. This Agreement shall not apply to the work of any Contractor which is performed at any location other than the Project site, as defined in Article 3, Section 1.

ARTICLE 3 - SCOPE OF THE AGREEMENT

The Project work covered by this Agreement shall be as defined and limited by the following sections of this Article.

SECTION 1. THE WORK

This Agreement applies to the construction of all on-site work at the Project, as defined in the prime contract therefore to be awarded by City to the General Contractor for BOARDWALK RECONSTRUCTION PROJECT TEXAS AVENUE TO COLUMBIA PLACE. This Scope of Work may be amended from time to time by City to include work not performed under the original contract bid documents. The Scope of Work is confined to the on-site Project performed work contained in the scope of the General Contractor's final construction contract. In no event shall this Agreement be construed to apply to any other construction activity engaged in by City, directly or indirectly or by a vendor or tenant of City, at or in the vicinity of the Project site.

SECTION 2. EXCLUDED EMPLOYEES

The following persons are not subject to the provisions of this Agreement, even though performing work on the Project:

- A. Superintendents, supervisors (excluding superintendents and general supervisors and forepersons specifically covered by a craft's Schedule A), engineers, architects, inspectors and testers (excluding divers specifically covered by a craft's Schedule A), quality control/assurance personnel, timekeepers, mail carriers, clerks, office workers, messengers, guards, non-manual employees, and all professional, engineering, administrative and management persons;
- B. Employees of City or any State agency, authority or entity or employees of any municipality or other public employer;
- C. Employees of any project manager or consultant engaged by the City, excepting those who are performing manual, on-site construction labor who will be covered by this Agreement;
- D. Employees and entities engaged in off-site manufacture, modifications, repair, maintenance, assembly, painting, handling or fabrication of project components, materials, equipment or machinery, unless such offsite operations are covered by the New Jersey Prevailing wage Act by being dedicated exclusively to the performance of the public works contract or building project and are adjacent to the site of work, or involved in deliveries to and from the Project site, excepting local deliveries of all

major construction materials including, but not limited to, fill, ready mix, and asphalt which are covered by this Agreement;

- E. Employees of the Contractors, excepting those performing manual, on-site construction labor covered by this Agreement;
- F. Employees engaged in on-site equipment warranty;
- G. Employees engaged in geophysical testing (whether land or water) other than boring for core samples;
- H. Employees engaged in laboratory or specialty testing or inspections;
- I. Employees engaged in ancillary Project work performed by third parties such as electric utilities, gas utilities, telephone utilities companies, and railroads;

SECTION 3. NON-APPLICATION TO CERTAIN ENTITIES

This Agreement shall not apply to the parents, affiliates, subsidiaries, or other joint or sole ventures of the Owner, the Project Manager, or any Contractors which do not perform work at this Project Site. It is agreed, for the purposes of this Agreement only, that this Agreement does not have the effect of creating any joint employment, single employer or alter ego status between the City, the Project Manager and/or any Contractor. The Agreement shall further not apply to the City, its Project Management firm, Clerk of the Works, or any other state or City agency, authority, or other municipal or public entity, and nothing contained herein shall be construed to prohibit or restrict the City or its employees, or the employees of any other state authority, agency or entity from performing on or off-site work related to the Project. As the contracts which comprise the Project work are completed and accepted, the Agreement shall not have further force or effect on such items or areas except where inspections, additions, repairs, modifications, check-out and/or warranty work are assigned in writing (copy to Local Union involved) to the Contractor(s) for performance under the terms of this Agreement and per Schedule B - "Contractors Letters of Assent."

ARTICLE 4 - UNION RECOGNITION AND EMPLOYMENT

SECTION 1. PRE-HIRE RECOGNITION

The Contractors recognize the signatory Unions as the sole and exclusive bargaining representatives of all craft employees who are performing on-site Project work within the scope of this Agreement as defined in Article 3.

SECTION 2. UNION REFERRAL

- A. The Contractors agree to hire Project craft employees covered by this Agreement through the job referral systems and hiring halls (where the referrals meet the qualifications set forth in items 1, 2, and 4 subparagraph B) established in the Local

Unions' area collective bargaining agreements (attached as Schedule A to this Agreement). Notwithstanding this, the Contractors shall have sole rights to determine the competency of all referrals; the number of employees required (except with regard to pile-driving); the selection of employees to be laid-off (subject to the applicable procedures in Schedule A for permanent and/or temporary layoffs and except as provided in Article 5, Section 3); and the sole right to reject any applicant referred by a Local Union, subject to the show-up payments required in the applicable Schedule A. In the event that a Local Union is unable to fill any request for qualified employees within a 48-hour period after such requisition is made by the Contractor (Saturdays, Sundays and holidays excepted), the Contractor may employ qualified applicants from another competent source. In the event that the Local Union does not have a job referral system, the Contractor shall give the Local Union first preference to refer applicants, subject to the other provisions of this Article. The Contractor shall notify the Local Union of the Project, craft employees hired within its jurisdiction from any source other than referral by the Union.

B. Following the employment of the first employee in each craft under Schedule A or the procedure set forth above in paragraph A, a Contractor may request by name, and the Local will honor, referral of persons who have applied to the Local for Project work and who meet the following qualifications as determined by a Committee of 3 designated, respectively, by the applicable Local Union, the City and a mutually selected third party or, in the absence of agreement, the permanent arbitrator (or designee) designated in Article 7:

- 1) Possess any license required by New Jersey law for the Project work to be performed;
- 2) Have worked a total of at least 1,000 hours in the Construction craft during the prior 3 years;
- 3) Were on the Contractor's active payroll for at least 60 out of the 180 calendar days prior to the contract award; and
- 4) Have demonstrated ability to safely perform the basic function of the applicable trade.

No more than 12 per centum of the employees covered by this Agreement, per Contractor by craft, shall be hired through the special provisions above (any fraction shall be rounded to the next highest whole number). Certified MBE/WBE contractor may request from the Workforce Coordinator, through the City, an exception to, and waiver of, the above per centum limitation upon the number of its employees to be hired through the special provision of Section 2.b above. This exception is based upon hardship and demonstration by the Contractor that the Project work would be the Contractor's only job and that it would be obliged to lay off qualified minority and female employees in its current workforce moving from the last job. The exception and waiver are also conditioned upon the employees meeting the qualifications as set forth in Section 2.b, above.

SECTION 3. NON-DISCRIMINATION IN REFERRALS

The Unions represent that their hiring halls and referral systems will be operated in a non-discriminatory manner and in full compliance with all applicable federal, state and local laws and regulations, which require equal employment opportunities. Referrals shall not be affected in any way by the rules, regulations, bylaws, constitutional provisions or any other aspects or obligations of union membership, policies or requirements and shall be subject to such other conditions as are established in this Article. No employment applicant shall be discriminated against by any referral system or hiring hall because of the applicant's union membership, or lack thereof.

SECTION 4. MINORITY AND FEMALE REFERRALS

In the event a Union either fails, or is unable, to refer qualified minority or female applicants in percentages equaling Project affirmative action goals as set forth in the City's bid specifications, the Contractor may employ qualified minority or female applicants from any other available source as Apprentice Equivalents. Apprentice Equivalents will have completed a Department of Labor ("DOL") approved training program, applied to take a construction Apprenticeship test, and will be paid at not less than the applicable equivalent Apprentice rate. With the approval of the Local Administrative Committee (LAC), experience in construction related areas may be accepted as meeting the above requirements.

SECTION 5. CROSS AND QUALIFIED REFERRALS

The Unions shall not knowingly refer to a Contractor an employee then employed by another Contractor working under this Agreement. The Local Unions will exert their utmost efforts to recruit sufficient numbers of skilled and qualified craft employees to fulfill the requirements of the Contractor.

SECTION 6. UNION DUES/WORKING ASSESSMENTS

Nothing in this Agreement requires employees to join a union or pay dues or fees to a union as a condition of working on the covered project. This Agreement is not, however, intended to supersede independent requirements in applicable local union agreements as to contractors that are otherwise signatory to those agreements and as to employees of such employers performing covered work.

SECTION 7. CRAFT FOREPERSONS AND GENERAL FOREPERSONS

The selection of craft forepersons and/or general forepersons and the number of forepersons required shall be solely the responsibility of the Contractor except where otherwise provided by specific provisions of an applicable Schedule A collective bargaining agreement. All forepersons shall take orders exclusively from the designated Contractor representatives. Craft forepersons shall be designated as working forepersons at the request of the Contractor, except when an existing local Collective Bargaining Agreement prohibits a foreperson from working when the crafts-persons he is leading exceed a specified number.

ARTICLE 5 - UNION REPRESENTATIONS

SECTION 1. LOCAL UNION REPRESENTATIVE

Each Local Union representing on-site Project employees shall be entitled to designate in writing (with copies to the Contractors involved and the City and Project Management Firm) one representative, and the Business Manager, who shall be afforded access to the Project. Such representatives shall fully comply with the visitor, safety and security of the Project.

SECTION 2. STEWARDS

- A) Each Local Union shall have the right to designate a working journey person as a Steward and an alternate, and shall notify the Contractor and PM of the identity of the designated Steward (and alternate) prior to the assumption of such duties. Stewards shall not exercise supervisory functions and will receive the regular rate of pay for the craft classifications. There will be no non-working Stewards on the Project.
- B) In addition to their work as an employee, the Steward shall have the right to receive complaints or grievances and to discuss and assist in their adjustment with the Contractor's appropriate supervisor. Each Steward shall be concerned with the employees of the Steward's Contractor and, if applicable, subcontractors of that Contractor, but not with the employees of any other Contractor. The Contractor will not discriminate against the Steward in the proper performance of Union duties.
- C) The Stewards shall not have the right to determine when overtime shall be worked, or who shall work overtime, except pursuant to a Schedule A provision providing procedures for the equitable distribution of overtime.

SECTION 3. LAYOFF OF A STEWARD

Contractors agree to notify the appropriate Union 24 hours prior to the layoff of a Steward, except in cases of discipline or discharge for just cause. If a Steward is protected against layoff by a Schedule A, such provisions shall be recognized to the extent the Steward possesses the necessary qualifications to perform the work required. In any case in which a Steward is discharged or disciplined for just cause, the Local Union involved shall be notified immediately by the Contractor.

ARTICLE 6 – MANAGEMENT’S RIGHTS

SECTION 1. RESERVATION OF RIGHTS

Except as expressly limited by a specific provision of this Agreement, Contractors retain full and exclusive authority for the management of their Project operations including, but not limited to: the right to direct the work force, including determination as to the number to be hired and the qualifications therefore; the promotion, transfer, layoff of its employees; or the discipline or discharge for just cause of its employees; the assignment and schedule of work; the promulgation of reasonable Project work rules; and, the requirement, timing and number of employees to be utilized for overtime work. No rules, customs, or practices, which limit or restrict productivity or efficiency of the individual, as determined by the Contractors and/or joint working efforts with other employees shall be permitted or observed.

SECTION 2. MATERIALS, METHODS & EQUIPMENT

There shall be no limitations or restriction upon the Contractors choice of materials, techniques, methods, technology or design, or, regardless of source or location, upon the use and installation of equipment, machinery, package units, pre-cast, pre-fabricated, pre-finished, or pre-assembled materials, tool, or other labor-saving devices. Contractors may, without restriction, install or use materials, supplies or equipment regardless of their source. The on-site installation or application of such items shall be performed by the craft having jurisdiction over such work; provided, however, it is recognized that other personnel having special qualifications may participate, in a supervisory capacity, in the installation, check-out or testing of specialized or unusual equipment or facilities as designated by the Contractor. Notwithstanding the foregoing statement of contractor rights, prefabrication issues relating to work traditionally performed at the job site shall be governed pursuant to the terms of the applicable Schedule A. There shall be no restrictions as to work, which is performed off-site for the Projects, except for work done in a fabrication center, tool yard, or batch plant dedicated exclusively to the performance of work on the Project, and located adjacent to the "site of work".

ARTICLE 7 - WORK STOPPAGES AND LOCKOUTS

SECTION 1. NO STRIKES-NO LOCKOUT

There shall not be strikes, sympathy strikes, picketing, work stoppages, slowdowns, hand billing, demonstrations or other disruptive activity at the Project for any reason by any Union or employee against any Contractor or employer while performing work at the Project. There shall be no other Union, or concerted or employee activity which disrupts or interferes with the operation of the existing free flow of traffic in the project area. Failure of any Union or employee to cross any picket line established by any union, signatory or non-signatory to this Agreement, or the picket or demonstration line of any other organization, at or in proximity to the Project site is a violation of this Article. There shall be no lockout at the Project by any signatory Contractor. Contractors and Unions shall take all steps necessary to ensure compliance with this Section 1 and to ensure uninterrupted construction and the free flow of traffic in the project area for the duration of this Agreement.

SECTION 2. DISCHARGE FOR VIOLATION

A Contractor may discharge any employee violating Section 1, above, and any such employee will not be eligible thereafter for referral under this Agreement for a period of 100 days.

SECTION 3. NOTIFICATION

If a Contractor contends that any Union has violated this Article, it will notify the appropriate district or area council of the Local Union involved advising of such fact, with copies of the notification to the Local Unions and South Jersey Building and Construction Trades Council ("BTC"). The district or area council, and the BTC shall each instruct, order and otherwise use their best efforts to cause the employees, and/or Local Unions to immediately cease and desist from any violation of this Article. A district or area council, or the BTC complying with these obligations shall not be liable for the unauthorized acts of a Local Union or its members.

SECTION 4. EXPEDITED ARBITRATION

Any Contractor or Union alleging a violation of Section 1 of this Article may utilize the expedited procedure set forth below (in lieu of, or in addition to, any actions at law or equity) that may be brought.

- A. A party invoking this procedure shall notify JJ Pierson, Jr., Esq., The Arbitration Centre, 8 Fox Hunt Road, Box 604, New Vernon, NJ 07976, phone 973-359-8100, fax 973-359-8161 who shall serve as Arbitrator under this expedited arbitration procedure. Copies of such notification will be simultaneously sent to the alleged violator and, if a Local Union is alleged to be in violation, its International, the City, the PM, the BTC, and the Contractor involved.
- B. The Arbitrator shall thereupon, after notice as to the time and place to the Contractor, the Local Union involved, the BTC, and the PM, hold a hearing within 48 hours of receipt of the notice invoking the procedure if it is contended that the violation still exists. The hearing will not, however, be scheduled for less than 24 hours after the notice to the City or area council required by Section 3 above.
- C. All notices pursuant to this Article may be by telephone, telegraph, hand delivery, or fax, confirmed by overnight delivery, to the arbitrator, Contractor or Union involved. The hearing may be held on any day including Saturdays or Sundays. The hearing shall be completed in one session, which shall not exceed 8 hours duration (no more than 4 hours being allowed to either side to present their case, and conduct their cross examination) unless otherwise agreed. A failure of any Union or Contractor to attend the hearing shall not delay the hearing of evidence by those present or the issuance of an award by the Arbitrator.

- D. The sole issue at the hearing shall be whether a violation of Section 1, above, occurred. If a violation is found to have occurred, the Arbitrator shall issue a Cease and Desist Award restraining such violation and serve copies on the Contractor and Union involved. The Arbitrator shall have no authority to consider any matter in justification, explanation or mitigation of such violation or to award damages, which issue is reserved solely for court proceedings, if any. The Award shall be issued in writing within 3 hours after the close of the hearing, and may be issued without an Opinion. If any involved party desires an Opinion, one shall be issued within 15 calendar days, but its issuance shall not delay compliance with, or enforcement of, the Award.
- E. An Award issued under this procedure may be enforced by any court of competent jurisdiction upon the filing of the Agreement together with the Award. Notice of the filing of such enforcement proceedings shall be given to the Union or Contractor involved. In any court proceeding to obtain a temporary or preliminary order enforcing the arbitrator's Award as issued under this expedited procedure, the involved Union and Contractor waive their right to a hearing and agree that such proceedings may be ex parte, provided notice is given to opposing counsel. Such agreement does not waive any party's right to participate in a hearing for a final court order of enforcement or in any contempt proceeding.
- F. Any rights created by statute or law governing arbitration proceedings which are inconsistent with the procedure set forth in this Article, or which interfere with compliance thereto, are hereby waived by the Contractors and Unions to whom they accrue.
- G. The fees and expenses of the Arbitrator shall be equally divided between the involved Contractor and Union.

SECTION 5. ARBITRATION OF DISCHARGES FOR VIOLATION

Procedures contained in Article 9 shall not be applicable to any alleged violation of this Article, with the single exception that an employee discharged for violation of Section I, above, may have recourse to the procedures of Article 9 to determine only if the employee did, in fact, violate the provisions of Section 1 of this Article; but not for the purpose of modifying the discipline imposed where a violation is found to have occurred.

ARTICLE 8. - LOCAL ADMINISTRATIVE COMMITTEE (LAC)

SECTION 1. THE LOCAL ADMINISTRATIVE COMMITTEE

The Local Administrative Committee (LAC) will meet on a regular basis to:

- A. Implement and oversee this Agreement's procedures and initiatives;
- B. Monitor the effectiveness of this Agreement; and

- C. Identify opportunities to improve efficiency and work execution.

SECTION 2. COMPOSITION

The LAC will be co-chaired by the President of the BTC or his designee, and a designated official of the City. It will be comprised of representatives of the local union's signatory to this Agreement and representatives of the City's Project Management firm and other contractors on the Project.

ARTICLE 9. - GRIEVANCE AND ARBITRATION PROCEDURE

SECTION 1. PROCEDURE FOR RESOLUTION OR GRIEVANCES

Any question, dispute or claim arising out of, or involving the interpretation or application of this Agreement (other than jurisdictional disputes or alleged violation of Article 7, Section 1) shall be considered a grievance and shall be resolved pursuant to the exclusive procedure of the steps described below; provided, in all cases, that the question, dispute or claim arose during the term of this Agreement.

Step 1:

- A. When any employee covered by this Agreement feels aggrieved by a claimed violation of this Agreement, the employee shall, through the Local Union business representative or job steward give notice of the claimed violation to the work site representative of the involved Contractor. To be timely, such notice of the grievance must be given within 7 calendar days after the act, occurrence, or event giving rise to the grievance, or after the act, occurrence or event became known or should have become known to the Union. The business representative of the Local Union or the job steward and the work site representative of the involved Contractor shall meet and endeavor to adjust the matter within 7 calendar days after timely notice has been given. If they fail to resolve the matter within the prescribed period, the grieving party, may, within seven (7) calendar days thereafter, pursue Step 2 of the grievance procedure by serving the involved Contractor with written copies of the grievance setting forth a description of the claimed violation, the date on which the grievance occurred, the provisions of the Agreement alleged to have been violated. Grievances and disputes settled at Step 1 are non-precedential except as to the specific Local Union, employee and Contractor directly involved, unless the settlement is accepted in writing, by the Contractor, as creating a precedent; and
- B. Should any signatory to this Agreement have a dispute (excepting jurisdictional disputes or alleged violations of Article 7, Section 1) with any other signatory to this Agreement and, if after conferring, a settlement is not reached within 7 calendar days, the dispute shall be reduced to writing and proceed to Step 2 in the same manner as outlined in sub-paragraph (a) for the adjustment of grievances on behalf of employees.

Step 2:

The Business Manager or designee of the involved Local Union, together with representatives of the BTC and the involved Contractor, shall meet in Step 2 within 5 calendar days of the written grievance to arrive at a satisfactory settlement.

Step 3:

- A. If the grievance shall have been submitted but not resolved in Step 2, any of the participating Step 2 entities may, within fourteen (14) calendar days after the initial Step 2 meeting, submit the grievance in writing (with copies to other participants) to the next available arbitrator of the panel of Arbitrators consisting of Arbitrator JJ Pierson, Gary Kendellen, and Wellington Davis, who shall act as the Arbitrator under this procedure. The Labor Arbitration Rules of the American Arbitration Association shall govern the conduct of the arbitration hearing, at which all Step 2 participants shall be parties. The decision of the Arbitrator shall be final and binding on the involved Contractor, Local Union and employees. The fees and expenses of such arbitration shall be borne equally by the involved Contractor and Local Union.
- B. Failure of the grieving party to adhere to the time limits set forth in this Article shall render the grievance null and void. These time limits may be extended only by written consent of the PM, involved Contractor and involved Local Union at the particular step where the extension is agreed upon. The Arbitrator shall have authority to make decisions only on the issues presented to him and shall not have the authority to change, add to, delete or modify any provision of this Agreement.

SECTION 2. LIMITATION AS TO RETROACTIVITY

No arbitration decision or award may provide retroactivity of any kind exceeding thirty (30) calendar days prior to the date of service of the written grievance on the Project Manager, the City and the involved Contractor or Local Union.

SECTION 3. PARTICIPATION BY PROJECT MANAGER

The Project Manager shall be notified by the involved Contractor of all actions at Steps 2 and 3 and, at its election, may participate in full in all proceedings at these Steps, including Step 3 arbitration.

ARTICLE 10 - JURISDICTIONAL DISPUTES

SECTION 1. NO DISRUPTIONS

There will be no strikes, sympathy strikes, work stoppages, slowdowns, picketing or other disruptive activity of any kind arising out of any jurisdictional dispute. Pending the resolution of the dispute, the work shall continue uninterrupted and as assigned by the Contractor. No jurisdictional dispute shall excuse a violation of Article 7.

SECTION 2. ASSIGNMENT

- A. There shall be a mandatory pre-job markup/assignment meeting prior to the commencement of any work. Attending such meeting shall be designated representatives of the Union signatories to this Agreement, the PM, and the involved Contractors. Best efforts will be made to schedule the pre-job meeting in a timely manner after Notice to Proceed is issued but not later than 30 days prior to the start of the Project.
- B. All project construction work assignments shall be made by the Contractor according to the criteria set forth in Section 3, Subsection D 1-3.
- C. When a Contractor has made an assignment of work, he shall continue the assignment without alternation unless otherwise directed by an arbitrator or there is an agreement between the National or International Unions involved. Claims of a change of assignment shall be processed in accordance with Article 1 of the Procedural Rules of the Plan for the Settlement of Jurisdictional disputes in the Construction Industry ("the Plan").
- D. In the event that a Union involved in the change of original assignment dispute is an affiliate of a National or International Union that is not affiliated with the Building and Construction Trades Department and does not wish to process a case through the Plan, the parties shall mutually select one of the following Arbitrators: Arbitrator JJ Pierson, Arbitrator Gary Kendellen, or Arbitrator Wellington Davis, and submit the dispute directly to the Arbitrator. The selected Arbitrator shall determine whether the case requires a hearing or may be decided upon written submission. In rendering his determination on whether there has been a change of original assignment, the Arbitrator shall be governed by the following:

 - 1) The Contractor who has the responsibility for the performance and installation shall make a specific assignment of the work which is included in his contract to a particular union(s). For instance, if Contractor A subcontracts certain work to Contractor B, the Contractor B shall have the responsibility for making the specific assignments for the work included in his contract. If Contractor B, in turn shall subcontract certain work to Contractor C, then Contractor C shall have the responsibility for making the specific assignment for the work included in his contract. After work has been so assigned, each assignment will be maintained even though the assigning Contractor is replaced and such work is subcontracted to another Contractor. It is a violation of the Agreement for the Contractor to hold up disputed work or shut down a project because of a jurisdictional dispute.
 - 2) When a Contractor has made an assignment of work, he shall continue the assignment without alteration unless otherwise directed by an Arbitrator

or there is an agreement between the National or International Unions involved.

- a. Unloading and/or handling of materials to stockpile or storage by a trade for the convenience of the responsible Contractor when his employees are not on the job site, or in an emergency situation, shall not be considered to be an original assignment to the trade.
- b. Starting of work by a trade without a specific assignment by an authorized representative of the responsible Contractor shall not be considered an original assignment of that trade, provided that the responsible Contractor, or his authorized representative, promptly, and in any event, within eight (8) working hours following the start of the work, takes positive steps to stop further unauthorized performance of the work by that trade.

SECTION 3. PROCEDURE FOR SETTLEMENT OF DISPUTES

- A. Any Union having a jurisdictional dispute with respect to Project work assigned to another Union will submit through its International the dispute in writing to the Administrator of the Plan within 72 hours and send a copy of the letter to the other Union involved, the Contractor involved, the General Contractor, the BTC, and the district or area councils of the unions involved. Upon receipt of a dispute letter from any union, the Administrator will invoke the procedures set forth in the Plan to resolve the jurisdictional dispute. The jurisdictional dispute letter shall contain the information described in Article IV of the Procedural Rules of Plan.
- B. Within five (5) calendar days of receipt of the dispute letter, there shall be meeting of the General Contractor, the Contractor involved, the Local Unions involved and designees of the BTC and the district or area councils of the Local Unions involved for the purpose of resolving the jurisdictional dispute.
- C. In order to expedite the resolution of jurisdictional disputes, the parties have agreed in advance to mutually select one of the following designated Arbitrators: Arbitrator JJ Pierson, Arbitrator Andy Douglas or Arbitrator Richard K. Henft to hear all unsolved jurisdictional disputes arising under this Agreement. All other rules and procedures of the Plan shall be followed. If none of the three Arbitrators is not available to hear the dispute within the time limits of the Plan, the Plan's arbitrator selection process shall be utilized to select another arbitrator.
- D. In the event that a Union involved in the dispute is an affiliate of a National or International Union that is not affiliated with the National Building and Construction Trades Council and does not wish to process cases through the Plan as described in paragraphs A-C above, the parties to the dispute shall mutually select one of the following Arbitrators: Arbitrator JJ Pierson, Arbitrator Gary Kendellen, or Arbitrator Wellington Davis to hear the dispute and shall submit the dispute directly to the

selected arbitrator. The time limits for submission and processing disputes shall be the same as provided elsewhere in this Section. The selected Arbitrator shall schedule the hearing within seven (7) business days from the date of submission. If he cannot hear the case within the required timeframe, one of the other Arbitrators will be selected to hear the case unless all parties to the dispute agree to waive the seven (7) day time limit. In rendering his decision, the Arbitrator shall determine:

- 1) First whether a previous agreement of record or applicable agreement, including a disclaimer agreement, between the National and International Unions to the dispute governs;
- 2) Only if the Arbitrator finds that the dispute is not covered by an appropriate or applicable agreement of record or agreement between the crafts to the dispute, he shall then consider the established trade practice in the industry and prevailing practice in the locality where there is a previous decision of record governing the case, the Arbitrator shall give equal weight to such decision of record, unless the prevailing practice in the locality in the past ten (10) years favors one craft. In that case, the Arbitrator shall base his decision on the prevailing practice in the locality. Except, that if the Arbitrator finds that a craft has improperly obtained the prevailing practice in the locality through raiding, the undercutting of wages or by the use of vertical agreements, the Arbitrator shall rely on the decision of record and establish trade practice in the industry rather than the prevailing practice in the locality.
- 3) Only if none of the criteria is found to exist, the Arbitrator shall then consider that because of efficiency, cost or continuity and good management are essential to the wellbeing of the industry, the interest of the consumer or the past practices of the employer shall not be ignored. The Arbitrator shall set forth the basis of his decision and shall explain his findings regarding the applicability of the above criteria. If lower-ranked criteria are relied upon, the Arbitrator shall explain why a higher-ranked criteria were not deemed applicable. The Arbitrator's decision shall apply to the job in dispute.

Each party to the arbitration shall bear its own expense for the arbitration and agrees that the fees and expenses of the Arbitrator shall be borne by the losing party or parties as determined by the Arbitrator.

- E. The Arbitrator shall render a short-form decision within five (5) days of the hearing based upon the evidence submitted at the hearing, with a written decision to follow within thirty (30) days of the close of hearing.
- F. This Jurisdictional Dispute Resolution Procedure will only apply to work performed by Local Unions that represent workers employed on the Project.

- G. Any Local Union involved in a jurisdictional dispute on this Project shall continue working in accordance with Section 2 above and without disruption of any kind.

SECTION 4. AWARD

Any award rendered pursuant to this Article and the Plan shall be final and binding on the disputing Local Unions and the involved Contractor on this Project only and may be enforced in accordance with the provisions of Article VII of the Plan. Any award rendered pursuant to the alternate procedures of this Article shall be final and binding on the disputing Local Unions and the involved Contractor on this Project only, and may be enforced in any court of competent jurisdiction. Such award or resolution shall not establish a precedent on any other construction work not covered by this Agreement. In all disputes under this Article, the General Contractor and the involved Contractors shall be considered parties in interest.

SECTION 5. LIMITATIONS

The Arbitrator shall have no authority to assign work to a double crew, that is, to more employees than the minimum required by the Contractor to perform the work involved; nor to assign work to employees who are not qualified to perform the work involved; nor to assign work being performed by non-union employees to union employees. This does not prohibit the establishment, with the agreement of the involved Contractor, of composite crews where more than 1 employee is needed for the job. The aforesaid determinations shall decide only to whom the disputed work belongs.

SECTION 6. NO INTERFERENCE WITH WORK

- A. There shall be no interference or interruption of any kind with the work of the Project while any jurisdictional dispute is being resolved. The work shall proceed as assigned by the Contractor until finally resolved under the applicable procedure of this Article. The award shall be confirmed in writing to the involved parties. There shall be no strike, work stoppage or interruption in protest any such award. Any Claims of a violation of this section shall be submitted and processed in accordance with the impediment to job progress provisions of the Plan.
- B. In the event a Union alleged to have engaged in an impediment to job progress is an affiliate of a National or International Union that is not affiliate with the Building and Construction Trades Department and does not wish to have the impediment to job progress charge processed through the Plan, the parties to the dispute shall mutually select one of the three Arbitrators designated in this Article to hear the dispute. The selected Arbitrator shall schedule the hearing within two (2) business days from the date of submission. If he cannot hear the case within the required timeframe, one of the other Arbitrators shall be selected by the parties to hear the case unless all parties to the dispute agree to waive the two (2) day time limit. The sole issue at the hearing shall be whether or not a violation of this Section has in fact occurred, and the Arbitrator shall have no authority to consider any matter in justification, explanation or mitigation of such violation or to award damages. The Arbitrator's decision shall

be issued in writing within three (3) hours after the close of the hearing, and may be issued without an opinion. If any party desires an opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the decision. The Arbitrator may order cessation of the violation of this Section and other appropriate relief, and such decision shall be served on all parties by facsimile upon issuance. Each party to the arbitration shall bear its own expense for the arbitration and agrees that the fees and expenses of the Arbitrator shall be borne by the losing party or parties as determined by the Arbitrator.

ARTICLE 11 - WAGES AND BENEFITS

SECTION 1. CLASSIFICATION AND BASE HOURLY RATE

All employees covered by this Agreement shall be classified in accordance with the work performed and paid the base hourly wage rates for those classifications as specified in the attached Schedule A, as amended during this Agreement. Recognizing, however, that special conditions may exist or occur on the Project, the parties, by mutual agreement may establish rates and/or hours for one or more classifications, which may differ from Schedule A. Parties to such agreements shall be the Contractors involved, the involved Local Unions and the BTC.

SECTION 2. EMPLOYEE BENEFIT FUNDS

- A. The Contractors agree to pay contributions on behalf of all employees covered by this Agreement to the established employee benefit funds in the amounts designated in the appropriate Schedule A; provided, however, that the Contractor and the Union agree that only such bona fide employee benefits as are explicitly required under N.J.S.A. 34:11-56.30 of the New Jersey State Labor Law shall be included in this requirement and paid by the Contractor on this Project. Bona fide jointly trusted fringe benefit plans established or negotiated through collective bargaining during the life of this Agreement may be added if similarly protected under N.J.S.A. 34:11-56.30. Contractors shall not be required to contribute to non-N.J.S.A. 34:11-56.30 benefits, trusts or plans.
- B. The Contractor agrees to be bound by the written terms of the legally established Trust Agreements specifying the detailed basis on which payments are to be paid into, and benefits paid out of, such Trust Funds but only with regard to work done on this Project and only for those employees to whom this Agreement requires such benefit Payments.
- C. Prior to the Project Manager or any Contractor making any payment to a Contractor or sub-contractor, the Project Manager or Contractor shall verify that the Contractor or sub-contractor has made contributions in full to the respective employee benefit funds. The Project Manager or Contractor will obtain this verification in writing from the Contractor or sub-contractor prior to making any payment to a Contractor or sub-contractor.

- D. Should any Contactor or sub-contractor become delinquent in the payment of contributions to the fringe benefit funds, then the sub-contractor at the next higher tier, or upon notice of the delinquency claim from the Union or the Funds, agrees to withhold from the sub-contractor such disputed amount from the next advance, or installment payment for work performed until the dispute has been resolved.

ARTICLE 12 - HOURS OF WORK, PREMIUM PAYMENTS, SHIFTS AND HOLIDAYS

SECTION 1. WORK WEEK AND WORKDAY

- A. The standard work week shall consist of forty (40) hours of work at straight time rates per one of the following schedules:
1. Five Day Work Week: Monday-Friday, 5 days, 8 hours plus ½ hour unpaid lunch period each day.
 2. Four Day Work Week: Monday-Thursday, 4 Days, 10 hours plus ½ hour unpaid lunch period each day.
- B. The Day Shift shall commence between the hours of 6:00 am and 9:00am and shall end between the hours of 2:30 pm and 7:30 pm. Starting and quitting times shall occur at the employees' place of work as may be designated by the Contractor.
- C. Scheduling: The Contactor shall have the option of scheduling either a five-day work week, or a four-day work week (when mutually agreed upon on a craft-by-craft basis). The Contractor shall also have the option to set the work day hours consistent with Project requirements, the Project schedule, and minimization of interference with site operations traffic flow. When conditions beyond the control of the Contractor, such as severe weather, power failure, fire or natural disaster, prevent the performance of Project work on a regularly scheduled work day, the Contractor may, with mutual agreement of the Local Union on a craft-by-craft basis, schedule Friday (where on 4 day 10 hours) during the calendar week in which a workday was lost, at straight time pay; providing the employees involved work a total of 40 hours or less during that work week.
- D. Notice: Contractors shall provide not less than five (5) days prior notice to the Local Union involved as to the work week and work hours schedules to be worked or such lesser notice as may be mutually agreed upon.

SECTION 2. OVERTIME

Overtime pay for hours outside of the standard work week and work day, described in Article 12 Section 1 above, shall be paid in accordance with the applicable Schedule A. There will be no restriction upon the Contractor's scheduling of overtime or the non-discriminatory designation of employees who shall be worked, except as noted in Article 5, Section 2. There shall be no pyramiding of overtime pay under any circumstances. The Contractor shall have the right to schedule work so as to minimize overtime.

SECTION 3. SHIFTS

- A. Flexible Schedules: Scheduling of shift work shall remain flexible in order to meet Project schedules and existing Project conditions including the minimization of interference with City operations. It is not necessary to work a day shift in order to schedule a second shift. Shifts must be worked a minimum of five consecutive work days, must have prior approval of the City and must be scheduled with no less than five (5) work days notice to the Local Union.
- B. Second Shift: The second shift (starting between 2 pm and 8 pm) shall consist of 8 hours work (or 10 hours of work) for an equal number of hours pay at the straight time rate plus 15% in lieu of overtime and exclusive of a ½ hour unpaid lunch period.
- C. Flexible Starting Times: Shift starting times will be adjusted by the Contractor as necessary to fulfill Project requirements subject to the notice requirements of Paragraph A.
- D. Four Tens: When working a four-day work week, the standard work day shall consist of ten (10) hours work for ten (10) hours of pay at the straight time rate exclusive of an unpaid 1/2 hour meal period and regardless of the starting time. This provision is applicable to night shifts only, and such night shifts are subject to the shift differential in paragraph B above.
- E. It is agreed that when project circumstances require a deviation from the above shifts, the involved Unions and Contractors shall adjust the starting times of the above shifts or establish shifts which meet the project requirements. It is agreed that neither party will unreasonably withhold their agreement.

SECTION E. HOLIDAYS

- A. Schedule: There shall be eight (8) recognized holidays on the Project:

New Year's Day	Labor Day
Presidents Day	Veterans Day
Memorial Day	Thanksgiving Day
Fourth of July	Christmas Day

Work shall be scheduled on Good Friday pursuant to the craft's Schedule A.

All of the above holidays shall be observed on the dates designated by New Jersey State Law. In the absence of such designations, they shall be observed on the calendar date except those holidays which occur on Sunday shall be observed on the following Monday. Holidays falling on Saturday are to be observed on the preceding Friday.

- B. Payment: Regular holiday pay, if any, and/or premium pay for work performed on such

a recognized holiday shall be in accordance with the applicable Schedule A.

- C. Exclusivity: No holidays other than those listed in Section 4.A above, shall be recognized nor observed except in Presidential Election years when Election Day is a recognized holiday.

SECTION 5. REPORTING PAY

- A. Employees who report to work location pursuant to regular schedule and who are not provided with work or whose work is terminated early by a Contractor, for whatever reason, shall receive minimum reporting pay in accordance with the applicable Schedule A.
- B. When an employee, who has completed his/her scheduled shift and left the Project site, is "called back" to perform special work of a casual, incidental or irregular nature, the employee shall receive pay for actual hours worked with a minimum guarantee, as may be required by the applicable Schedule A.
- C. When an employee leaves the job or work location of his/her own volition or is discharged for cause or is not working as result of the Contractor's invocation of Section 7 below, they shall be paid only for the actual time worked.
- D. Except as specifically set forth in this Article there shall be no premiums, bonuses, hazardous duty, high time or other special payments of any kind.
- E. There shall be no pay for time not actually worked except as specifically set forth in this Agreement and except where an applicable Schedule A requires a full weeks pay for forepersons.

SECTION 6. PAYMENT OF WAGES

- A. Payday: Payment shall be made by check, drawn on a New Jersey bank with branches located within commuting distance of the job site. Paychecks shall be issued by the Contractor at the job site by 10 AM on Thursdays. In the event that the following Friday is a bank holiday, paychecks shall be issued on Wednesday of that week. Not more than three (3) days wages shall be held back in any pay period. Paycheck stubs shall contain the name and business address of the Contractor, together with an itemization of deductions from gross wages.
- B. Termination: Employees who are laid-off or discharged for cause shall be paid in full for that which is due them at the time of termination. The Contractors shall also provide the employee with a written statement setting forth the date of lay off or discharge.

SECTION 7. EMERGENCY WORK SUSPENSION

A Contractor may, if considered necessary for the protection of life and/or safety of employees or others, suspend all or a portion of Project Work. In such instances, employees will be paid for actual time worked; provided, however, that when a Contractor requests that employees remain at the job site available for work, employees will be paid for "stand-by" time at their hourly rate of pay. The same rules will apply in the case that the Construction Manager determines that a part or all of the Project work must be suspended if considered necessary for the protection of life and/or safety of employees or others.

SECTION 8. INJURY/DISABILITY

An employee who, after commencing work, suffers a work-related injury or disability while performing work duties, shall receive no less than 8 hours wages for that day. Further, the employee shall be rehired at such time as the employee is able to return to duties provided there is still work available on the Project for which the employee is qualified and able to perform.

SECTION 9. TIME KEEPING

A Contractor may utilize brassing or other systems to check employees in and out. Each employee must check in and out. The Contractor will provide adequate facilities for checking in and out in an expeditious manner.

SECTION 10. MEAL PERIOD

A Contractor shall schedule an unpaid period of not more than ½ hour duration at the work location between the 3rd and 5th hour of the scheduled shift. A Contractor may, for efficiency of operation, establish a schedule which coordinates the meal periods of two or more crafts. If an employee is required to work through the meal period, the employee shall be compensated in a manner established in the applicable Schedule A.

SECTION 11. BREAK PERIODS

There will be no rest periods, organized coffee breaks or other non-working time established during working hours. Individual coffee containers will be permitted at the employee's work location. Local area practice will prevail for coffee breaks that are not organized.

ARTICLE 13 - APPRENTICES

SECTION 1. RATIOS

Recognizing the need to maintain continuing supportive programs designed to develop adequate numbers of competent workers in the construction industry and to provide craft entry opportunities for minorities, women and economically disadvantaged non-minority males, Contractors will employ apprentices in their respective crafts to perform such work as is within their capabilities and which is customarily performed by the craft in which they are indentured. Contractors may utilized apprentices and such other appropriate classifications as are contained

in the applicable Schedule A in a ratio not to exceed 25% (twenty-five percent) of work force by craft (without regard to whether a lesser ratio is set forth in Schedule A), unless the applicable Schedule A provide for a higher percentage. Apprentices and such other classifications as are appropriate shall be employed in a manner consistent with the provisions of the appropriate Schedule A.

SECTION 2. DEPARTMENT OF LABOR

To assist the Contractors in attaining a maximum effort on this Project, the Unions agree to work in close cooperation with, and accept monitoring by, the New Jersey State and Federal Departments of Labor to ensure that minorities, women, or economically disadvantaged individuals are afforded opportunities to participate in apprenticeship programs which result in the placement of apprentices on this Project. To further ensure that this Contractor effort is attained, up to 50% (fifty percent) of the apprentices placed on this Project should be first year, minority, women or economically disadvantaged apprentices. The Local Unions will cooperate with the Contractor request for minority, women or economically disadvantaged referrals to meet this Contractor effort.

ARTICLE 14 - SAFETY PROTECTION OF PERSON AND PROPERTY

SECTION 1. SAFETY REQUIREMENTS

Each Contractor will ensure that applicable OSHA requirements and other safety requirements set forth in the contract documents are at all times maintained on the Project and the employees and Unions agree to cooperate fully with these efforts. Employees must perform their work at all times in a safe manner and protect themselves and the property of the Contractor and the Owner from injury or harm. Failure to do so will be grounds for discipline, including discharge

SECTION 2. CONTRACTOR RULES

Employees covered by this Agreement shall at all times be bound by the reasonable safety, security, and visitor rules as established by the Contractors and the PM for this Project. Such rules will be published and posted in conspicuous places throughout the Project.

SECTION 3. INSPECTIONS

The Contractors, City, Architect and Project Manager retain the right to inspect incoming shipments of equipment, apparatus, machinery and construction materials of every kind.

ARTICLE 15 - NO DISCRIMINATION

SECTION 1. COOPERATIVE EFFORTS

The Contractors and Unions agree that they will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin or age in any

manner prohibited by law or regulation. It is recognized that special procedures may be established by the Contractors and Local Unions and the New Jersey State Department of Labor for the training and employment of persons who have not previously qualified to be employed on construction projects of the type covered by this Agreement. The parties to this Agreement will assist in such programs and agree to use their best efforts to ensure that the goals for female and minority employment are met on this Project.

SECTION 2. LANGUAGE OF AGREEMENT

The use of the masculine or feminine gender in this Agreement shall be construed as including both genders.

ARTICLE 16 - GENERAL TERMS

SECTION 1. PROJECT RULES

The City, the Project Manager and the Contractors shall establish such reasonable Project rules as are appropriate for the good order of the Project, provided they do not violate the terms of this Agreement. These rules will be explained at the pre-job conference and posted at the Project site and may be amended thereafter as necessary. Failure of an employee to observe these rules and regulations shall be grounds for discipline, including discharge. The fact that no order was posted prohibiting a certain type of misconduct shall not be a defense to an employee disciplined or discharge for such misconduct when the action taken is for cause.

SECTION 2. TOOLS OF THE TRADES

The welding/cutting torch and chain fall are tools of the particular trade having jurisdiction over the work performed. Employees using these tools shall perform any of the work of the trade. There shall be no restrictions on the emergency use of any tools or equipment by any qualified employee or on the use of any tools or equipment for the performance of work within the employee's jurisdiction.

SECTION 3. SUPERVISION

Employees shall work under the supervision of the craft foreperson or general foreperson.

SECTION 4. TRAVEL ALLOWANCES

There shall be no payments for travel expenses, travel time, subsistence allowance or other such reimbursements or special pay except as expressly set forth in this Agreement and in Schedule A limited to travel expenses.

SECTION 5. FULL WORK DAY

Employees shall be at their staging area at the starting time established by the Contractor and shall be returned to their staging area by quitting time after performing their assigned

functions under the supervision of the Contractor. The signatories reaffirm their policy of a fair day's work for a fair day's wage.

SECTION 6. COOPERATION

The City, Contractors and the Unions will cooperate in seeking any New Jersey Department of Labor approvals that may be required for implementation of any terms of this Agreement.

ARTICLE 17 - SAVINGS AND SEPARABILITY

SECTION 1. THIS AGREEMENT

In the event that the application of any provision of this Agreement is enjoined, on either an interlocutory or permanent basis, or otherwise found in violation of law, the provision involved shall be rendered, temporarily or permanently, null and void but the remainder of the Agreement shall remain in full force and effect. In such event, the Agreement shall remain in effect for contracts already bid and/or awarded or in construction where the Contractor voluntarily accepts the Agreement. The parties to this Agreement will enter into negotiations for a substitute provision in conformity with the law and the intent of the parties for contracts to be let in the future.

SECTION 2. THE BID SPECIFICATIONS

In the event that the Contractors' bid specifications, or other action, requiring that a successful bidder become signatory to this Agreement is enjoined, on either an interlocutory or permanent basis, or otherwise found in violation of law such requirement shall be rendered, temporarily or permanently, null and void but the Agreement shall remain in full force and effect to the extent allowed by law. In such event, the Agreement shall remain in effect for contracts already bid and/or awarded or in construction where the Contractor voluntarily accepts the Agreement. The parties will enter in to negotiations as to modifications to the Agreement to reflect the court action taken and the intent of the parties for contracts to be let in the future.

SECTION 3. NON-LIABILITY

In the event of an occurrence referenced in Section 1 or Section 2 of this Article, neither the City, the Architect, the Project Manager, nor any Contractor, nor any signatory Union shall be liable, directly or indirectly, for any action taken, or not taken, to comply with any court order, injunction or determination. Project bid specifications will be issued in conformance with court orders in effect and no retroactive payments or other action will be required if the original court determination is ultimately reversed.

SECTION 4. NON-WAIVER

Nothing in this Article shall be construed as waiving the prohibitions of Article 7 as to

signatory Contractors and signatory Unions.

ARTICLE 18 - HELMETS TO HARDHATS

SECTION 1. UTILIZE THE CENTER FOR MILITARY RECRUITMENT

The Employers and the Unions recognize a desire to facilitate the entry into the building and construction trades of veterans who are interested in careers in the building and construction industry. The Employers and Unions agree to utilize the services of the Center for Military Recruitment, Assessment and Veterans Employment ("Center") and the Center's "Helmets to Hardhats" program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.

SECTION 2. CREATION OF AN INTEGRATED DATABASE OF INTERESTED VETERANS

The Unions and **Employers** agree to coordinate with the **Center** to create and maintain an integrated database of veterans interested in working on this Project and of apprenticeship and employment opportunities for this Project. To the extent permitted by law, the Unions will give credit to such veterans for bona fide, provable past experience.

ARTICLE 19 - FUTURE CHANGES IN SCHEDULE A AREA CONTRACTS

SECTION 1. CHANGES TO AREA CONTRACTS

- A. The collective bargaining agreements attached as Schedule A to this Agreement shall continue in full force and effect until the Contractor and/or Union parties to the Area Collective Bargaining Agreements which are set forth in Schedule A notify the Contractors in writing of the mutually agreed upon changes in provisions of such agreements which are applicable to the Project, and their effective dates.
- B. It is agreed that any provisions negotiated into any Schedule A collective bargaining agreements will not apply to work on this Project if such provisions are less favorable to this Project than those uniformly required of contractors for construction work normally covered by those agreements; nor shall any provisions be recognized or applied on this Project if it may be construed to apply exclusively, or predominantly, to work covered by this Project Agreement.
- C. Any disagreement between signatories to this Agreement over the incorporation into Schedule A collective bargaining agreement of provisions agreed upon in the renegotiations of Area Collective Bargaining Agreements shall be resolved in accordance with the procedure set forth in Article 9 of this Agreement.

SECTION 2. LABOR DISPUTES DURING AREA CONTRACT NEGOTIATIONS

The Unions agree that there will be no strikes, work stoppages, sympathy actions,

picketing, slowdowns or other disruptive activity or other violations of Article 7 affecting the Project by any Local Union involved in the renegotiations of Area Local Collective Bargaining Agreements nor shall there be any lock-out on the Project affect a Local Union during the course of such renegotiations.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed and effective as of the _____ day of _____ 2021.

SIGNATORIES:

CITY OF ATLANTIC

Authorized Signature

Print Name

SOUTH JERSEY BUILDING AND CONSTRUCTION TRADES COUNCIL

Authorized Signature

Michael Laughlin

Print Name

INDIVIDUAL UNIONS

Asbestos Workers Local 89
Boilermakers Local 28
Cement Mason Local 592
Elevator Constructors Local 5
IBEW Local 351
Laborers Local 172
Laborers Local 78
Painters District Council 711
Roofers & Waterproofers Local 30
Sheet Metal Workers Local 27
Tapers Local 1976
Tile, Marble & Terrazzo- BAC Local 7

BAC Local 5
Carpenters Local 255
Dockbuilders Local 441
Glaziers Local 252
Ironworkers Local 399
Laborers Local 77
Operating Engineers Local 825
Plumbers & Fitters Local 322
Sheet Metal Workers Local 19 (Signs)
Sprinkler Fitters Local 669
Teamsters Local 331

INDIVIDUAL UNIONS

Asbestos Workers Local 89

BAC Local 5

Boilermakers Local 28

Carpenters Local 255

Cement Mason Local 592

Dockbuilders Local 441

Elevator Constructors Local 5

Glaziers Local 252

IBEW Local 351

Ironworkers Local 399

Laborers Local 172

Laborers Local 77

Laborers Local 78

Operating Engineers Local 825

Painters District Council 711

Plumbers & Fitters Local 322

Roofers & Waterproofers Local 30

Sheet Metal Workers Local 19 (Signs)

Sheet Metal Workers Local 27

Sprinkler Fitters Local 669

Tapers Local 1976

Teamsters Local 331

Tile, Marble & Terrazzo- BAC Local 7

SCHEDULE A

LOCAL COLLECTIVE BARGAINING AGREEMENTS

(ATTACH HERE)

SCHEDULE B

LETTERS OF ASSENT

(ATTACH EXECUTED FORM HERE)

(When Executed Attached to Schedule B)

LETTER OF ASSENT

PROJECT LABOR AGREEMENT

The undersigned, as a Prime contractor or subcontractor on a Contract which is part of the construction project known as BOARDWALK RECONSTRUCTION PROJECT TEXAS AVENUE TO COLUMBIA PLACE, for and in consideration of the award of a Contract to perform work on said Project, and in further consideration of the mutual promises made in the Project Labor Agreement, a copy of which was received and is acknowledged, hereby:

(1) On behalf of itself and all its employees, accepts and agrees to be bound by terms and conditions of the Project Labor Agreement, together with any and all amendments and supplements now existing or which are later made thereto, and understands that any act of noncompliance with all such terms and conditions, including but not limited to, evidence of compliance with the pre-employment controlled substance testing, will subject the noncomplying Contractor or employee(s) to being prohibited from the Project Site until full compliance is obtained.

(2) Certified that it has no commitments or agreements, which would preclude its full compliance with the terms and conditions of said Project Labor Agreement.

(3) Agrees to secure from any Contractor(s) (as defined in said Project Labor Agreement) which is or becomes a Subcontractor(s) (of any tier), a duly executed Letter of Assent in form identical to this document prior to commencement of any work.

Date

Name of Contractor/Company

Signature of Authorized Representative

Print Name and Title

Contract Number

SCHEDULE C

General scope of work summary for the Boardwalk Reconstruction Project **Texas Avenue To Columbia Place**

Scope items consist of two (2) major work activities, but are not limited to the following:

A. Re-Decking

- a. Removal and disposal of the existing decking
- b. Selective replacement of the existing pressure treated joists.
- c. Selective concrete repairs

B. Boardwalk Tunnel Repairs

- a. Removal and disposal of the existing decking
- b. Coating upper roof section of the CIP tunnel
- c. Reconstruction of the framing system and installation of new decking

C. Alternates

- a. The project has two (2) Add Alternates
 - i. Add Alternate #1
 - 1. Re-decking from Columbia Place to Missouri Avenue
 - a. See project documents for specific area.
 - ii. Add Alternate #2
 - 1. Delete re-decking and install new cast in place high vehicle weight crossing from Mississippi Ave boardwalk ramp to the water side of the boardwalk.

**ATTACHMENT 12 – HISTORIC PROPERTY TREATMENT PLAN FOR GREAT EGG COAST
GUARD STATION IN LONGPORT BOROUGH, ATLANTIC COUNTY, NEW JERSEY**

Historic Property Treatment Plan

for

Atlantic Shores South Offshore Wind

Lease Area OCS-A 0499

Great Egg Coast Guard Station
Longport, Atlantic County, New Jersey

Submitted to:



Bureau of Ocean Energy Management
U.S. Department of the Interior

Prepared for:



Atlantic Shores Offshore Wind LLC



Environmental Design & Research, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
www.edrdpc.com

May 2024

ABSTRACT

Federal Undertaking: Atlantic Shores Offshore Wind Projects

Location: Outer Continental Shelf, offshore New Jersey

Federal and State Agencies: Bureau of Ocean Energy Management
National Park Service
U.S. Army Corps of Engineers
New Jersey Historic Preservation Office
Advisory Council on Historic Preservation

Regulatory Process: National Environmental Policy Act
Section 106 of the National Historic Preservation Act
Section 110(f) of the National Historic Preservation Act

Purpose: This Historic Property Treatment Plan provides background data, historic property information, and detailed steps that will be implemented to carry out mitigation actions to resolve adverse effects from the Atlantic Shores South Projects.

Adverse Visual Effect Finding for: Great Egg Coast Guard Station, Longport, Atlantic County, New Jersey

Submitted By: Atlantic Shores Offshore Wind, LLC

Date: May 2024

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LIST OF ATTACHMENTS

Attachment A - Aboveground Historic Property Information and Visual Effects Assessment

LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
ADLS	Aircraft Detection Lighting System
APE	Area of Potential Effects
BOEM	Bureau of Ocean Energy Management
CFR	Code of Federal Regulations
COP	Construction and Operations Plan
DEIS	Draft Environmental Impact Statement
EDR	Environmental Design and Research, D.P.C.
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FR	Federal Register
ICF	Interconnection Facility
HPTP	Historic Property Treatment Plan
MOA	Memorandum of Agreement
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act of 1966
NPS	National Park Service
NRHP	National Register of Historic Places
NJHPO	New Jersey Historic Preservation Office
NJWEA	New Jersey Wind Energy Area
OCS	Outer Continental Shelf
OSS	Onshore Substation
PAPE	Preliminary Area of Potential Effects
RFP	Request for Proposals
ROD	Record of Decision
USCG	United States Coast Guard
WTG	Wind Turbine Generator

1.0 INTRODUCTION

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) (54 USC 306108) and its implementing regulations, and in compliance with Section 110(f) of the NHPA (54 USC 306107), the Bureau of Ocean Energy Management (BOEM) has determined the Atlantic Shores South Offshore Wind Projects (the Projects) will have an adverse effect on historic properties. A historic property is defined per 36 CFR § 800.16 as any property that is listed in, or has been determined eligible for listing in, the National Register of Historic Places (NRHP), or is a National Historic Landmark (NHL). This Historic Property Treatment Plan (HPTP) for Great Egg Coast Guard Station in Longport, Atlantic County, New Jersey, which is listed in the National Register of Historic Places (NRHP) (hereinafter, the Historic Property) provides background data, historic property information, and detailed mitigation actions that will be implemented to resolve adverse effects from the Projects. Atlantic Shores Offshore Wind, LLC (Atlantic Shores) has provided this HPTP in accordance with BOEM's Findings of Adverse Effects (FoAE) for the Projects under the National Historic Preservation Act of 1966 (NHPA).

BOEM used the National Environmental Policy Act (NEPA) substitution process to fulfill its Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)), and BOEM has notified the Advisory Council on Historic Preservation (ACHP), the New Jersey Historic Preservation Office (NJHPO), and consulting parties of BOEM's decision to use this process. Atlantic Shores has provided this HPTP to BOEM for inclusion in the Final Environmental Impact Statement (FEIS).

This HPTP describes the mitigation measures to resolve adverse effects on historic properties, the implementation steps, and timeline for actions. The mitigation measures are based on the evaluations and outreach performed by Atlantic Shores as well as outreach to the interested consulting parties performed by BOEM. This HPTP document has undergone revision and refinement in consultation with the NJHPO, the ACHP, and other consulting parties throughout the NEPA substitution process. This HPTP is included in the Memorandum of Agreement (MOA) issued in accordance with 36 CFR §§ 800.8, 800.10.

This HPTP is organized into the following sections:

- **Section 1.0, Introduction**, outlines the content of this HPTP.
- **Section 2.0, Background Information**, briefly summarizes the Projects and describes the cultural resources regulatory contexts (federal, tribal, state, and local, including preservation restrictions) applicable to the HPTP.
- **Section 3.0, Historic Properties – Context, Significance, and Effects**, provides a physical description of the historic properties included in this HPTP, describes their historic context, the applicable NRHP criteria for each historic property with a focus on the contribution of each property's maritime visual setting to its significance and integrity, describes the potential visual effect of the Projects on each property.
- **Section 4.0, Mitigation Measures**, identifies the specific steps to carry out the mitigation actions. The mitigation action includes a detailed description, intended outcome, methods, standards, and requirements for documentation.

- **Section 5.0, Implementation**, establishes the organizational responsibilities for implementing the mitigation actions, as identified in Section 3.0 of this HPTP.
- **Section 6.0, References**, is a list of works cited in this HPTP.

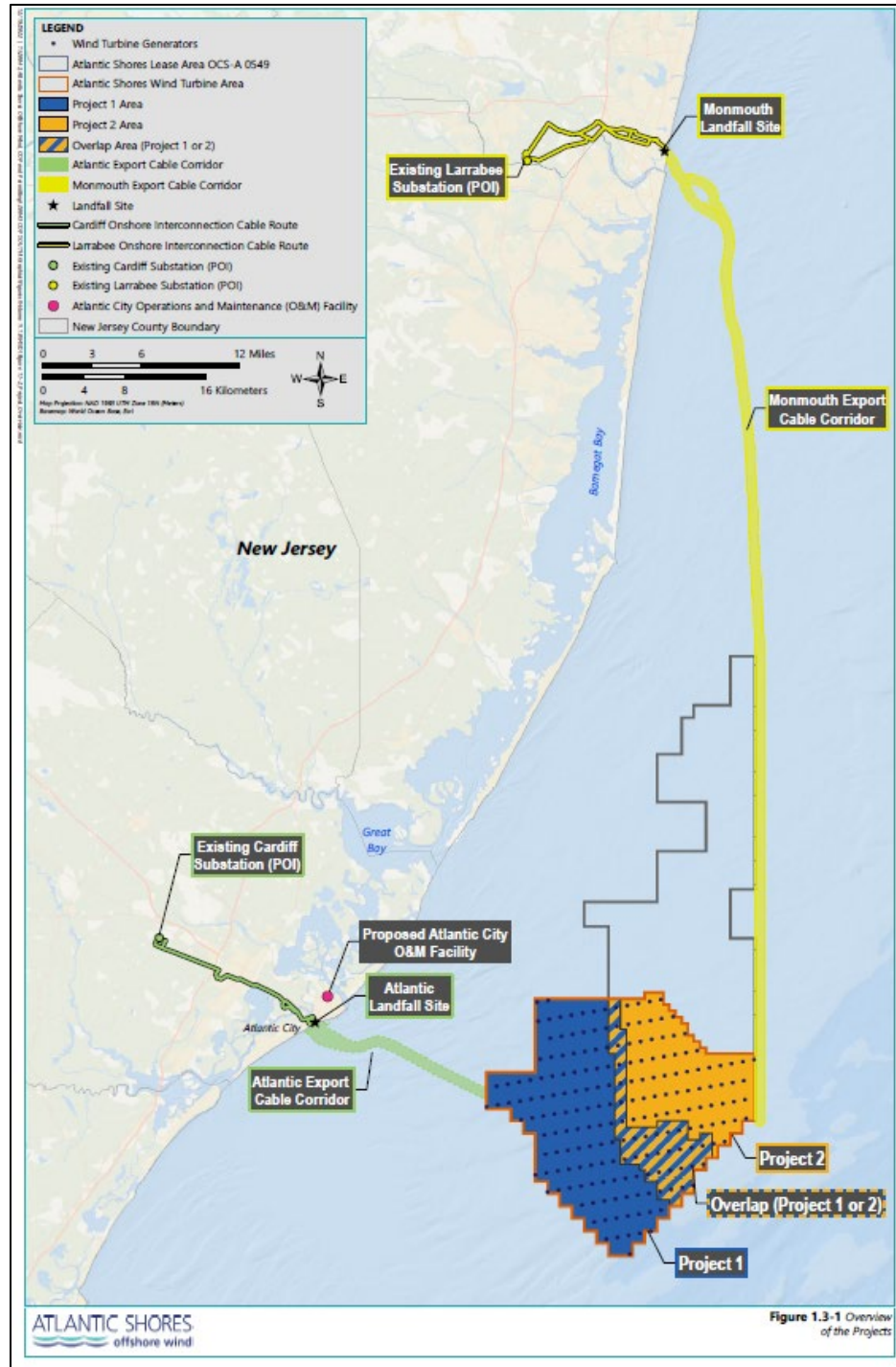
2.0 BACKGROUND INFORMATION

2.1 Overview of the Projects

Atlantic Shores' Lease Area is located on the Outer Continental Shelf (OCS) within the New Jersey Wind Energy Area (NJWEA), which was identified by BOEM as suitable for offshore renewable energy development through a multi-year, public environmental review process. The Projects will be located in an approximately 102,124-acre (413.3-square kilometer [km²]) Wind Turbine Area (WTA) located in the southern portion of the Lease Area (see Figure 2.1-1). Project 1 is located in the western 54,175 acres (219.2 km²) of the WTA, and Project 2 is located in the eastern 31,847 acres (128.9 km²) of the WTA with a 16,102-acre (65.2-km²) Overlap Area that could be used by either Project 1 or Project 2. Figure 2.1-1 also depicts the boundaries of the Project 1 and Project 2 areas within the WTA.

The Projects will collectively consist of up to 200 WTGs and associated foundations, inter-array cables connecting the WTGs, and offshore substations. The offshore substations utilized for the Projects will include up to 10 Onshore Substations (OSSs). Energy from the WTGs will be delivered to shore via 230 kV to 525 kV high voltage alternating current or high voltage direct current export cables. Up to four export cables will be installed within each of two possible Export Cable Corridors, for a total of up to eight export cables. The export cables will traverse federal and New Jersey state waters to deliver energy from the OSSs to landfall sites located in Monmouth County (the Monmouth Landfall Site) and/or Atlantic County (the Atlantic Landfall Site), New Jersey. The offshore-to-onshore transition at the landfall sites will occur via horizontal directional drilling to avoid nearshore and shoreline impacts. From the Monmouth and Atlantic Landfall Sites, new 230 kV to 525 kV high voltage alternating current or high voltage direct current onshore interconnection cables will travel underground along existing roadways, utility rights-of-way, and/or along bike paths to up to two new onshore substation sites (one for each onshore point of interconnection), where transmission will be stepped up or stepped down in preparation for interconnection with the electrical grid. Onshore interconnection cables will continue from each of the new onshore substations to proposed points of interconnection into the electrical grid at the existing Larrabee Substation in Howell, New Jersey (for the Monmouth Landfall Site) or the existing Cardiff Substation in Egg Harbor Township, New Jersey (for the Atlantic Landfall Site). Once operational, the Projects will be supported by a new operations and maintenance (O&M) facility that will be located in Atlantic City, New Jersey. The O&M facility will be the primary location for O&M operations including material storage, day-to-day management of inspection and maintenance activities, vehicle parking, marine coordination, vessel docking, and dispatching of technicians. Atlantic Shores intends to purchase and develop a shoreside parcel in Atlantic City, New Jersey that was formerly used for vessel docking or other port activities.

Figure 2.1-1. Overview of the Projects.



2.2 Regulatory Framework

2.2.1 *Section 106 and Section 110(f) of the NHPA*

Section 106 of the NHPA of 1966 requires federal agencies to consider the effects of their undertakings on historic properties, which are defined per 36 CFR § 800.16 to include any property that is listed in or has been determined eligible for listing in the NRHP or is an NHL. Section 110(f) of the NHPA further requires that federal agencies undertake such planning and actions as may be necessary to minimize harm to any NHL that may be directly and adversely affected by an undertaking. Historic properties can include marine archaeological resources, terrestrial archaeological sites, above-ground historic properties (e.g., buildings, sites, monuments, and landscapes), and Traditional Cultural Properties.

The regulations at 36 CFR § 800.8 provide for use of the NEPA process to fulfill a federal agency's NHPA Section 106 review obligations in lieu of the procedures set forth in 36 CFR § 800.3 through 800.6. Under these provisions, either issuance of a Record of Decision (ROD) and implementation of relevant conditions or the execution of a MOA will resolve adverse effects to historic properties caused by the Projects, including to NHLs for which BOEM must provide a higher standard of care, as required by Section 110(f) of the NHPA. This HPTP was developed to support ongoing consultations and will be finalized for inclusion in the MOA issued in accordance with 40 CFR §1500-1508, and 36 CFR § 800.8 and 800.10.

All activities implemented under this HPTP will be conducted in accordance with any conditions imposed by BOEM in its ROD and with applicable local, state and federal regulations and permitting requirements. Responsibilities for specific compliance actions are described in further detail in Section 5.2 – Organizational Responsibilities.

2.2.2 *Municipal Regulations*

Before implementation, any on-site mitigation measures will be coordinated with local municipalities and commissions to obtain approvals, as appropriate. These may include, but are not limited to building permits, zoning, land use, planning, historic commissions, and design review boards.

2.2.3 *Preservation Easements and Restrictions*

Preservation easements and restrictions protect significant historic, archaeological, or cultural resources. Any mitigation work would comply with the conditions of all extant historic preservation easements.

2.3 Summary of HPTP Development

This HPTP was developed by Atlantic Shores for inclusion in the FEIS in support of BOEM's consultation pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR § 800.8. In addition to BOEM's formal Section 106 consultation meetings, Atlantic Shores invited the interested consulting parties to a series of meetings to review conceptual mitigation measures for the adversely affected historic properties on October 16, 18, 19, 30 and November 1, 2023. Atlantic Shores anticipates the HPTP may be revised based on comments received directly from the interested consulting parties or via the ongoing BOEM led Section 106 consultations.

3.0 HISTORIC PROPERTIES - SIGNIFICANCE, EFFECTS, AND MITIGATION MEASURES

3.1 Historic Properties Included in the HPTP

This HPTP describes the mitigation measures for the below listed historic property, as identified in Table 3.1-1.

Table 3.1-1. Historic Properties included in the HPTP

Property ID	Address	Municipality	NRHP Status	Ownership
133	Great Egg Coast Guard Station	Longport	NRHP-Listed	Borough of Longport

Discussions are provided below for each historic property included in the HPTP, which include:

- a physical description of the property,
- a narrative summarizing their historic context,
- the applicable NRHP criteria for Historic Properties with a focus on the contribution of each property's maritime visual setting to its significance and integrity,
- the visual effects of the Projects on each property, and
- measures to mitigate adverse effects on each property.

Maps and photographs are included in Attachment A - Aboveground Historic Property Information and Visual Effects Assessments.

The mitigation measures described herein were developed by individuals who meet the Secretary of the Interior's *Professional Qualifications Standards* (36 CFR § 61) and are appropriate to fully address the nature, scope, size, and magnitude of adverse effects including cumulative effects caused by the Projects. These mitigation measures may also include actions to respond to some reasonably foreseeable hazards unrelated to the Project that pose risks to the long-term preservation of the affected historic properties, such as climate change.

3.2 Historic Context of the Borough of Longport

The borough of Longport City is located on the southern tip of Absecon Island and adjacent to Margate City. Developed as a seaside resort by Philadelphia businessman, Simpson McCullough, Longport was incorporated in 1898. The borough is named after McCullough's friend James Long who had owned but not developed the land prior to McCullough. Once noteworthy for its collection of late Victorian architecture, the borough has suffered from intense weather events because of its precarious position, losing 1st through 10th avenues to the ocean between 1900 and 1916. While the borough remains primarily residential in nature, its proximity to Atlantic City made it a desirable real estate market starting in the 1980s which saw much of the Victorian-era housing and historic landmarks replaced with high-density housing units (LPL, 2023; NYT, 2023).

3.2.1 Great Egg Coast Guard Station

3.2.1.1 Description and Existing Conditions

The building is located a block from the Risely Channel at 2301 Atlantic Avenue in Longport, Atlantic County, New Jersey. The Great Egg Coast Guard Station was constructed in 1939 and is a two-and-a-half-story building with a central lookout tower and one-story wings on either side of the main block. As of 1994 the building is used by the Longport Historical Society and Museum.

3.2.1.2 Historic Significance and Setting

The Colonial Revival-style building was one of approximately 42 similar stations constructed by the United States Coast Guard during the Great Depression. The building was used as a coast guard station from 1939 to 1948 and served as the Borough of Longport Borough Hall from 1948-1990. An earlier Coast Guard station was located across Atlantic Avenue but was abandoned in 1914. The Great Egg Coast Guard Station has a maritime function as a former Coast Guard station with views to the Risely Channel, Egg Harbor, and the Atlantic Ocean from its tower. According to the National Register Nomination, the crew of the Great Egg Coast Guard Station performed tasks such as “monitoring speed boat races, dragging for dead bodies, assisting boats and swimmers in distress, and performing other acts related to water safety and recovery.” The Great Egg Coast Guard Station is eligible under Criterion C for its architecture as an extant example of a Roosevelt-era Coast Guard station (Berkey, 2005).

3.2.1.3 Project Effect on the Historic Property

Ocean views are integral to the history and original function of the Great Egg Coast Guard Station and the Projects are anticipated to be partially visible from within the upper stories and tower of the building and will be a focus of viewer attention from within the building when viewing the ocean.

4.0 MITIGATION MEASURES

BOEM and Atlantic Shores have identified steps to implement these measures in consultation with interested consulting parties, led by individuals who meet the qualifications specified in the Secretary of the Interior's Qualifications Standards for History and Architectural History (36 CFR 61).

4.1 Purpose and Intended Outcome

The purpose of this HPTP is to provide funding to the Borough of Longport for the planning or implementation of preservation, restoration, rehabilitation, cyclical maintenance, resiliency planning, disaster recovery, or other associated activities to ensure the long-term preservation of the Great Egg Coast Guard Station.

4.2 Scope of Work

The scope of work will be determined in consultation with the interested consulting parties.

4.3 Standards

All projects funded through this HPTP must meet the Secretary of the Interior's Standards for Treatment of Historic Properties and all local laws and regulations.

4.4 Methodology

The methodology will be determined in consultation with the interested consulting parties.

4.5 Documentation

Existing conditions, including documentation and photography will be completed prior to any work commencing and as-built documentation and photography will be completed at the end of the project. All draft and final documentation will be developed in consultation with the interested consulting parties and will be provided to the interested consulting parties for review and comment. The documentation will be included in the annual reporting to BOEM.

4.6 Funds and Accounting

Funding amounts were determined to be sufficient by BOEM in consultation with the interested consulting parties and are identified in an attachment to the MOA.

5.0 IMPLEMENTATION

5.1 Timeline

The timeline for implementation of the mitigation measures is identified in the MOA.

5.2 Organizational Responsibilities

5.2.1 *Bureau of Ocean Energy Management (BOEM)*

BOEM remains responsible for making all federal decisions and determining compliance with Section 106. BOEM has reviewed this HPTP to ensure, at minimum, it includes the content required.

- BOEM, in consultation with the interested consulting parties, will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA;
- BOEM will be responsible for sharing the annual summary report with the interested consulting parties; and
- BOEM is responsible for consultation related to dispute resolution.

5.2.2 *Atlantic Shores Offshore Wind, LLC*

Atlantic Shores will be responsible for the following:

- Considering the comments provided by the interested consulting parties in the development of this HPTP;
- Depositing funding for the implementation of this HPTP in a dedicated account specified by the interested consulting parties prior to the commencement of the mitigation measures;
- Releasing RFPs and selecting qualified professionals as specified above;
- Managing funding and implementing the mitigation measures as specified in Section 4.0;
- Providing documentation to the interested consulting parties for review and comment as specified in Section 4.0;
- Annual Reporting to BOEM on progress in implementation of this HPTP;
- Ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations; and
- Provide notification to BOEM and the interested consulting parties when the HPTP implementation is complete.

5.2.3 *Interested Consulting Parties*

The interested consulting parties will be responsible for the following:

- Providing review and comment on the proposed mitigation measures described in Section 4.0.

5.2.4 Other Parties, as Appropriate

Additional consulting parties are not anticipated, should any be determined, this will be updated.

5.3 Schedule

All mitigation measures must be completed within the timeframes outlined in the MOA. The schedule for funding, commencing, implementing, and completing the mitigation measures described in Section 4.0 will be completed according to the timelines outlined in the MOA, unless a different timeline is agreed upon by interested consulting parties and accepted by BOEM.

6.0 REFERENCES

Berkey, Joan. 2005. *Great Egg Coast Guard Station*. National Register of Historic Places Registration Form. Available at: <https://npgallery.nps.gov/NRHP/> (Accessed August 2023).

Code of Federal Regulations (CFR). 2021a. 36 CFR § 800 – Protection of Historic Properties [incorporating amendments effective December 15, 2021]. Available at <https://www.ecfr.gov/current/title-36/chapter-VIII/part-800>. Accessed March 31, 2022.

CFR. 2021b. 36 CFR § 61.4(e)(1) – Procedures for State, Tribal, and Local Government Historic Preservation Programs [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4\(e\)\(1\)](https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4(e)(1)). Accessed March 31, 2022.

CFR. 2021c. 36 CFR § 65.2(c)(2) – National Historic Landmarks Program – Effects of Designation [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2\(c\)\(2\)](https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2(c)(2)). Accessed March 31, 2022.

CFR. 2022. 40 CFR § 1500 – National Environmental Policy Act Implementing Regulations. Available at <https://www.ecfr.gov/current/title-40/chapter-V/subchapter-A>. Accessed March 31, 2022.

Federal Register. 1997. 62 FR 33708 – The Secretary of the Interior’s Historic Preservation Professional Qualifications Standards. Office of the Federal Register, National Archives and Records Administration. Washington, D.C. Available at <https://www.govinfo.gov/app/details/FR-1997-06-20/97-16168>. Accessed March 31, 2022.

Longport Public Library (LPL). 2023. “History.” Available at <https://www.longportpubliclibrary.org/about-us/history> (Accessed January 2023).

NETRonline (NETR). 2023. *Historic Aerials* [website]. Available at: <https://historicaerials.com/> (Accessed February 2023).

NYTimes.com (NYT). 2023. “LONGPORT JOURNAL; History’s Echoes in a Town Changed by Storms and Wealth.” Available at <https://www.nytimes.com/1989/12/17/nyregion/longport-journal-history-s-echoes-in-a-town-changed-by-storms-and-wealth.html> (Accessed January 2023).

United States Code. 2016. Title 54 - National Historic Preservation Act [as amended through December 16, 2016]. Available at <https://www.achp.gov/sites/default/files/2018-06/nhpa.pdf>. Accessed March 31, 2022.

ATTACHMENT A.
ABOVEGROUND HISTORIC PROPERTY INFORMATION AND VISUAL EFFECTS ASSESSMENT

Great Egg Coast Guard Station

2301 Atlantic Avenue
Longport, Atlantic County, NJ



Photograph of property



Photograph of property context



Photograph from property looking toward Projects

Historic Designation NRHP-Listed
Distance to Nearest Turbine 13.13
Number of Blade Tips Visible 0
Property Acreage within Study Area 0.26
Property Acreage within PAPE 0
Percentage of Property with Potential Visibility 0
Visible Light Units
Nacelle Aviation 0
Mid Tower Aviation 0
Coast Guard 0

Significance
The Great Egg Coast Guard Station was constructed in 1939 and is a two-and-a-half-story building with a central lookout tower and one-story wings on either side of the main block. The Colonial Revival-style building was an active Coast Guard station from 1939 to 1948 and was the Borough Hall from 1948-1990. The Great Egg Coast Guard Station is eligible under Criterion C for its architecture as an extant example of a Roosevelt-era Coast Guard station.

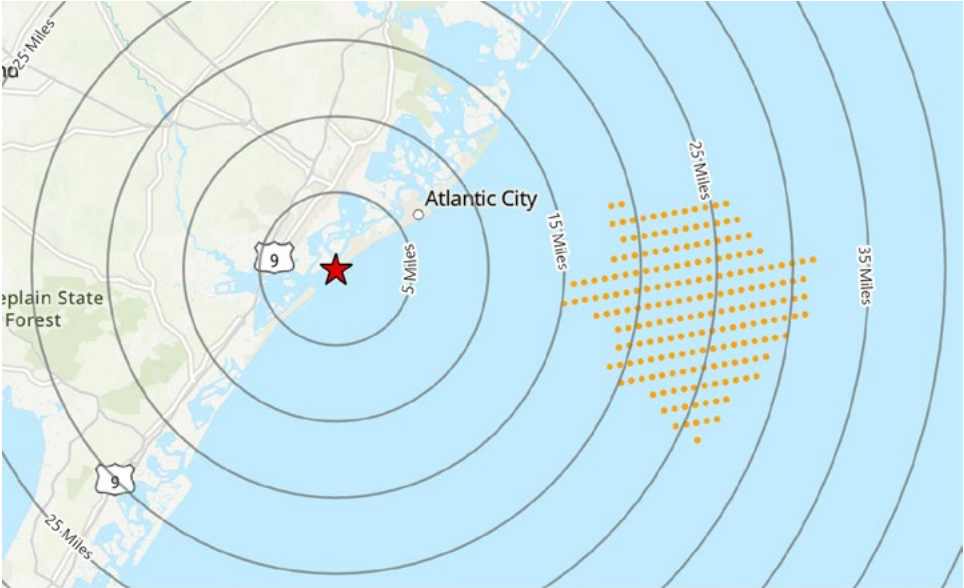
Maritime Setting
The Great Egg Coast Guard Station has a maritime function as a former U.S. Coast Guard station with views of the Atlantic Ocean from its tower.

Effect Recommendation
Adverse Effect

The Projects are anticipated to be visible from within the tower of the Great Egg Coast Guard Station and may be a significant focus of visitor attention when viewing the Atlantic Ocean.



Esri ArcGIS Online "World Imagery" map service



Esri ArcGIS Online "World Topographic Map" map service

Photograph Location

Historic Property Location

Wind Turbine Generator

Preliminary Area of Potential Effects (PAPE)

Historic Property Boundary

Distance from Resource (5-Statute Mile Increment Rings)

Atlantic Shores South Offshore Wind Project

Historic Resources Visual Effects Assessment

**ATTACHMENT 13 – HISTORIC PROPERTY TREATMENT PLAN FOR MISSOURI AVENUE
BEACH (CHICKEN BONE BEACH) IN ATLANTIC CITY, ATLANTIC COUNTY, NEW
JERSEY**

Historic Property Treatment Plan

for the

Atlantic Shores Offshore Wind

Lease Area OCS-A 0499

Missouri Avenue Beach (Chicken Bone Beach)
Atlantic City, Atlantic County, New Jersey

Submitted to:



Bureau of Ocean Energy Management
U.S. Department of the Interior

Prepared for:



Atlantic Shores Offshore Wind LLC



Environmental Design & Research, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
www.edrdpc.com

May 2024

ABSTRACT

Federal Undertaking: Atlantic Shores Offshore Wind Projects

Location: Outer Continental Shelf, offshore New Jersey

Federal and
State Agencies: Bureau of Ocean Energy Management
National Park Service
U.S. Army Corps of Engineers
New Jersey Historic Preservation Office
Advisory Council on Historic Preservation

Regulatory Process: National Environmental Policy Act
Section 106 of the National Historic Preservation Act
Section 110(f) of the National Historic Preservation Act

Purpose: This Historic Property Treatment Plan provides background data, historic property information, and detailed steps that will be implemented to carry out mitigation actions to resolve adverse effects from the Atlantic Shores South Projects

Adverse Visual Effect
Finding for: Missouri Avenue Beach (Chicken Bone Beach), Atlantic City, Atlantic County, New Jersey

Submitted By: Atlantic Shores Offshore Wind, LLC

Date: May 2024

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1.0 INTRODUCTION

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) (54 USC 306108) and its implementing regulations, and in compliance with Section 110(f) of the NHPA (54 USC 306107), the Bureau of Ocean Energy Management (BOEM) has determined the Atlantic Shores South Offshore Wind Projects (the Projects) will have an adverse effect on historic properties. A historic property is defined per 36 CFR § 800.16 as any property that is listed in, or has been determined eligible for listing in, the National Register of Historic Places (NRHP), or is a National Historic Landmark (NHL). This Historic Property Treatment Plan (HPTP) for the Missouri Avenue Beach (Chicken Bone Beach), which has been recommended to be eligible for the NRHP; (hereinafter, the Historic Property) provides background data, historic property information, and detailed mitigation actions that will be implemented to resolve adverse effects from the Projects. Atlantic Shores Offshore Wind, LLC (Atlantic Shores) has provided this HPTP in accordance with BOEM's Findings of Adverse Effects (FoAE) for the Projects under the National Historic Preservation Act of 1966 (NHPA).

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- **Section 6.0, References**, is a list of works cited in this HPTP.

2.0 BACKGROUND INFORMATION

2.1 Overview of the Projects

Atlantic Shores' Lease Area is located on the Outer Continental Shelf (OCS) within the New Jersey Wind Energy Area (NJWEA), which was identified by BOEM as suitable for offshore renewable energy development through a multi-year, public environmental review process. The Projects will be located in an approximately 102,124-acre (413.3-square kilometer [km²]) Wind Turbine Area (WTA) located in the southern portion of the Lease Area (see Figure 2.1-1). Project 1 is located in the western 54,175 acres (219.2 km²) of the WTA, and Project 2 is located in the eastern 31,847 acres (128.9 km²) of the WTA with a 16,102-acre (65.2-km²) Overlap Area that could be used by either Project 1 or Project 2. Figure 2.1-1 also depicts the boundaries of the Project 1 and Project 2 areas within the WTA.

The Projects will collectively consist of up to 200 WTGs and associated foundations, inter-array cables connecting the WTGs, and offshore substations. The offshore substations utilized for the Projects will include up to 10 Onshore Substations (OSSs). Energy from the WTGs will be delivered to shore via 230 kV to 525 kV high voltage alternating current or high voltage direct current export cables. Up to four export cables will be installed within each of two possible Export Cable Corridors, for a total of up to eight export cables. The export cables will traverse federal and New Jersey state waters to deliver energy from the OSSs to landfall sites located in Monmouth County (the Monmouth Landfall Site) and/or Atlantic County (the Atlantic Landfall Site), New Jersey. The offshore-to-onshore transition at the landfall sites will occur via horizontal directional drilling to avoid nearshore and shoreline impacts. From the Monmouth and Atlantic Landfall Sites, new 230 kV to 525 kV high voltage alternating current or high voltage direct current onshore interconnection cables will travel underground along existing roadways, utility rights-of-way, and/or along bike paths to up to two new onshore substation sites (one for each onshore point of interconnection), where transmission will be stepped up or stepped down in preparation for interconnection with the electrical grid. Onshore interconnection cables will continue from each of the new onshore substations to proposed points of interconnection into the electrical grid at the existing Larrabee Substation in Howell, New Jersey (for the Monmouth Landfall Site) or the existing Cardiff Substation in Egg Harbor Township, New Jersey (for the Atlantic Landfall Site). Once operational, the Projects will be supported by a new operations and maintenance (O&M) facility that will be located in Atlantic City, New Jersey. The O&M facility will be the primary location for O&M operations including material storage, day-to-day management of inspection and maintenance activities, vehicle parking, marine coordination, vessel docking, and dispatching of technicians. Atlantic Shores intends to purchase and develop a shoreside parcel in Atlantic City, New Jersey that was formerly used for vessel docking or other port activities.

Figure 2.1-1. Overview of the Projects.

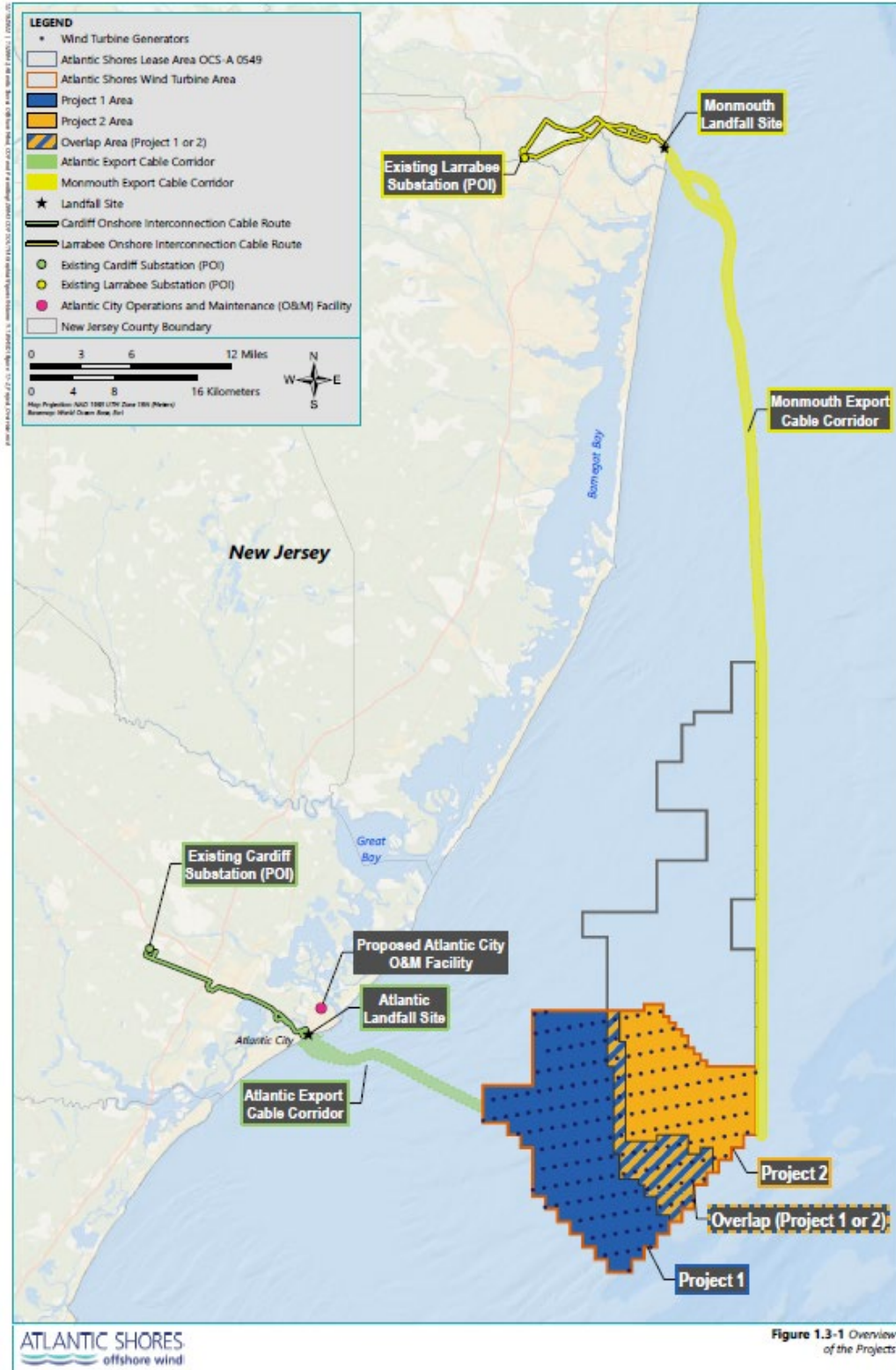


Figure 1.3-1 Overview of the Projects

2.2 Regulatory Framework

2.2.1 *Section 106 and Section 110(f) of the NHPA*

Section 106 of the NHPA of 1966 requires federal agencies to consider the effects of their undertakings on historic properties, which are defined per 36 CFR § 800.16 to include any property that is listed in, or has been determined eligible for listing in, the NRHP, or is an NHL. Section 110(f) of the NHPA further requires that federal agencies undertake such planning and actions as may be necessary to minimize harm to any NHL that may be directly and adversely affected by an undertaking. Historic properties can include marine archaeological resources, terrestrial archaeological sites, above-ground historic properties (e.g., buildings, sites, monuments, and landscapes), and Traditional Cultural Properties.

The regulations at 36 CFR § 800.8 provide for use of the NEPA process to fulfill a federal agency's NHPA Section 106 review obligations in lieu of the procedures set forth in 36 CFR § 800.3 through 800.6. Under these provisions, either issuance of a Record of Decision (ROD) and implementation of relevant conditions or the execution of a MOA will resolve adverse effects to historic properties caused by the Projects, including to NHLs for which BOEM must provide a higher standard of care, as required by Section 110(f) of the NHPA. This HPTP was developed to support ongoing consultations and will be finalized for inclusion in the MOA issued in accordance with 40 CFR §1500-1508, and 36 CFR § 800.8 and 800.10.

All activities implemented under this HPTP will be conducted in accordance with any conditions imposed by BOEM in its ROD and with applicable local, state and federal regulations and permitting requirements. Responsibilities for specific compliance actions are described in further detail in Section 5.2 – Organizational Responsibilities.

2.2.2 *Municipal Regulations*

Before implementation, any on-site mitigation measures will be coordinated with local municipalities and commissions to obtain approvals, as appropriate. These may include, but are not limited to building permits, zoning, land use, planning, historic commissions, and design review boards.

2.2.3 *Preservation Easements and Restrictions*

Preservation easements and restrictions protect significant historic, archaeological, or cultural resources. Any mitigation work would comply with the conditions of all extant historic preservation easements.

2.3 Summary of HPTP Development

This HPTP was developed by Atlantic Shores for inclusion in the FEIS in support of BOEM's consultation pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR § 800.8. In addition to BOEM's formal Section 106 consultation meetings, Atlantic Shores invited the interested consulting parties to a series of meetings to review conceptual mitigation measures for the adversely affected historic properties on October 16, 18, 19, 30 and November 1, 2023. Atlantic Shores anticipates the HPTP may be revised based on comments received directly from the interested consulting parties or via the ongoing BOEM led Section 106 consultations.

3.0 HISTORIC PROPERTIES - SIGNIFICANCE, EFFECTS, AND MITIGATION MEASURES

3.1 Historic Properties Included in the HPTP

This HPTP describes the mitigation measures for the below listed historic properties, as identified in Table 3.1-1.

Table 3.1-1. Historic Properties included in the HPTP

Property ID	Property Name	Address	NRHP Status	Ownership
114	Missouri Avenue Beach (Chicken Bone Beach)	N/A	NRHP-Eligible (EDR-Recommended)	Public

Discussions are provided below for each historic property included in the HPTP, which include:

- a physical description of the property,
- a narrative summarizing their historic context,
- the applicable NRHP criteria for the Historic Property with a focus on the contribution of each property's maritime visual setting to its significance and integrity,
- the visual effects of the Projects on each property, and
- measures to resolve adverse effects to each property.

Maps and photographs are included in Attachment A - Aboveground Historic Property Information and Visual Effects Assessment.

The mitigation measures described herein were developed by individuals who meet the Secretary of the Interior's *Professional Qualifications Standards* (36 CFR § 61) and are appropriate to fully address the nature, scope, size, and magnitude of adverse effects including cumulative effects caused by the Projects. These mitigation measures may also include actions to respond to some reasonably foreseeable hazards unrelated to the Project that pose risks to the long-term preservation of the affected historic properties, such as climate change.

3.2 Historic Context of Atlantic City

Atlantic City is in the extreme eastern extent of Atlantic County on Absecon Island on the coast of the Atlantic Ocean. The city is bordered to the northeast by the city of Brigantine and to the southwest by Ventnor City. The first recorded Euro-American settler was Jeremiah Leed who built a house in the vicinity of Atlantic City in 1783. In 1850, Dr. Jonathan Pitney proposed the development of a seaside resort on the island. In 1852, he and other investors secured a railroad charter, and the Camden and Atlantic Railroad was constructed with its terminus in Atlantic City in 1854. The city was formally incorporated the same year and the resort quickly became a popular tourist destination for visitors from Philadelphia and its suburbs. Atlantic City saw the height of its popularity in the late nineteenth and into the early twentieth century. A financial and commercial district was constructed along Atlantic Avenue and included high-style banks as well as commercial and institutional buildings. The 1950s brought a decline in visitation due to the advent

of air travel and the newly formed highway system in the United States. To revive the city, gambling was legalized in 1976 and Atlantic City enjoyed a boom in tourism (Allaback and Milliken, 1995; ACFPL, 2022).

3.3 Missouri Avenue Beach (Chicken Bone Beach)

3.3.1 Description and Existing Conditions

Missouri Avenue Beach is an expanse of beach bounded by the Playground Pier on the east, the Boardwalk on the north, and the Kennedy Plaza to the northwest. The beach is the widest on the east adjacent to the pier and tapers toward its west end. Restoration projects since the 1990s have converted a strip of the sand on the ocean side of the Boardwalk into a dune that is traversed by wood-plank ramps to maintain public access to the beach from the boardwalk. Aside from a non-historic wood frame arch with the name "Missouri Avenue Beach," there are no structures currently associated with the beach.

3.3.2 Historic Significance and Setting

From the end of the 1920s to the 1960s, Missouri Avenue Beach was Atlantic City's de facto Black beach. African Americans were discouraged, to the point of effective exclusion, from enjoying the city's beaches, Boardwalk, hotels, and eating establishments outside of formally designated places, times of day, or times of the year. African American members of the Atlantic City Beach Patrol were assigned exclusively to what locals came to call Chicken Bone Beach. What started as a derogatory name was in time adopted by some as a demonstration of pride for their beach. During this time, the Northside neighborhood grew as a popular Black entertainment district known for its music scene at Black-owned nightclubs like Club Harlem. Black tourists and celebrities alike who came for the city's nightlife spent their days at Missouri Avenue Beach (HABS No. NJ-1161; Bear, 2019; PBS, 2019; CBBHF 2022). The Missouri Avenue Beach (Chicken Bone Beach) is recommended to meet NRHP Criterion A in the area of Black Heritage for its association with Atlantic City's Black community. This significance is directly related to the resource's maritime setting as a beach for the African American community from the end of the 1920s to the 1960s.

3.3.3 Project Effect on the Historic Property

The Missouri Avenue Beach (Chicken Bone Beach) is a segment of the beach on the Atlantic Ocean and as such, will have unobstructed views of the Projects from 87.37 percent of the beach. The Projects will be a significant focus of visitor attention while on the beach and therefore, the Projects will have an adverse effect on the setting of the Missouri Avenue Beach (Chicken Bone Beach).

4.0 MITIGATION MEASURES

BOEM and Atlantic Shores have identified steps to implement these measures in consultation with interested consulting parties, led by individuals who meet the qualifications specified in the Secretary of the Interior's Qualifications Standards for History and Architectural History (36 CFR 61).

4.1 Traditional Cultural Property (TCP) Study

4.1.1 Purpose and Intended Outcome

Per the request of the NJHPO, Atlantic Shore will provide funding to hire a Secretary of the Interior Qualified Professional to produce a study to determine if the Missouri Avenue Beach (Chicken Bone Beach) qualifies as a TCP per the National Park Service's (NPS)'s *National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties* (Parker and King, 1992). The consultant will work with the Chicken Bone Beach Historical Foundation and the interested consulting parties to develop a methodology and exact scope of work.

4.1.2 Scope of Work

The exact scope of work will be determined in consultation with the interested consulting parties.

4.1.3 Standards

The project will comply with following standards:

- *National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties*;
- The Secretary of the Interior's *Standards for Treatment of Historic Properties* (36 CFR 68);
- The Secretary of the Interior's *Professional Qualifications Standards* (36 CFR Part 61), as applicable; and
- All applicable local ordinances, laws, and regulations.

4.1.4 Methodology

Atlantic Shores will release a request for proposals (RFP) for services and select qualified professionals to perform the scope of work.

4.1.5 Documentation

- RFPs;
- Proposals by qualified consultants in response to the RFP.
- Preliminary drafts; and
- Final reports.

4.1.6 *Funds and Accounting*

Funding amounts were determined to be sufficient by BOEM in consultation with the interested consulting parties and are identified in an attachment to the MOA.

4.2 **Development and Installation of Interpretive Signage**

4.2.1 *Purpose and Intended Outcome*

Per the request of the Chicken Bone Beach Historical Foundation, Inc. the purpose of this HPTP is to provide funding to develop and install signage at the Missouri Avenue Beach (Chicken Bone Beach) to increase public awareness of the history and significance of this historic property.

4.2.2 *Scope of Work*

This scope of work will consist of the following:

- Development of the text and design of the sign in consultation with the interested consulting parties;
- Consultation with the City of Atlantic City to determine location of installation of the sign;
- Obtain installation approvals. Should applications be required, consultation with the interested parties to review and complete the applications may be necessary;
- Draft sign to be provided to the interested consulting parties for review and comment;
- Update sign per comments received;
- Fabricate final signage to be provided to the interested consulting parties for review and comment; and
- Install sign at approved location.

4.2.3 *Standards*

The project will comply with following standards:

- The Secretary of the Interior's *Standards for Treatment of Historic Properties* (36 CFR 68);
- The Secretary of the Interior's *Professional Qualifications Standards* (36 CFR Part 61), as applicable; and
- All applicable local ordinances, laws, and regulations.

4.2.4 *Methodology*

Atlantic Shores will release a request for proposals (RFP) for services and select qualified professionals to perform the scope of work listed above.

4.2.5 *Documentation*

- RFPs;
- Proposals by qualified consultants in response to the RFP.

- Permit applications, if applicable;
- Preliminary drafts; and
- Final signage

4.2.6 Funds and Accounting

Funding amounts were determined to be sufficient by BOEM in consultation with the consulting parties and are identified in an attachment to the MOA.

4.3 Promotion of Missouri Avenue Beach’s (Chicken Bone Beach) Heritage as a Jazz Venue

4.3.1 Purpose and Intended Outcome

Per the request of the Chicken Bone Beach Historical Foundation, Inc. the purpose of this HPTP is to provide funding to promote the history and significance of Missouri Avenue Beach (Chicken Bone Beach) through the Youth Jazz Institute.

4.3.2 Scope of Work

The exact scope of work will be determined in consultation with the interested consulting parties.

4.3.3 Standards

The project will comply with following standards:

- The Secretary of the Interior’s *Standards for Treatment of Historic Properties* (36 CFR 68);
- The Secretary of the Interior’s *Professional Qualifications Standards* (36 CFR Part 61), as applicable; and
- All applicable local ordinances, laws, and regulations.

4.3.4 Methodology

The methodology will be determined in consultation with the interested consulting parties.

4.3.5 Documentation

All documentation will be submitted to the interested consulting parties for review and comment.

4.3.6 Funds and Accounting

Funding amounts were determined to be sufficient by BOEM in consultation with the consulting parties and are identified in an attachment to the MOA.

5.0 IMPLEMENTATION

5.1 Timeline

The timeline for implementation of the mitigation measures is identified in the MOA.

5.2 Organizational Responsibilities

5.2.1 Bureau of Ocean Energy Management (BOEM)

BOEM remains responsible for making all federal decisions and determining compliance with Section 106. BOEM has reviewed this HPTP to ensure, at minimum, it includes the content required.

- BOEM in consultation with the interested consulting parties, will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA;
- BOEM will be responsible for sharing the annual summary report with the interested consulting parties; and
- BOEM is responsible for consultation related to dispute resolution.

5.2.2 Atlantic Shores Offshore Wind, LLC

Atlantic Shores will be responsible for the following:

- Considering the comments provided by the interested consulting parties in the development of this HPTP;
- Depositing funding for the implementation of this HPTP in a dedicated account specified by the interested consulting parties prior to the commencement of the mitigation measures;
- Releasing RFPs and selecting qualified professionals as specified above;
- Managing funding and implementing the mitigation measures as specified in Section 4.0;
- Providing documentation to the interested consulting parties for review and comment as specified in Section 4.0;
- Annual Reporting to BOEM on progress in implementation of this HPTP;
- Ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations; and
- Provide notification to BOEM and the interested consulting parties when the HPTP implementation is complete.

5.2.3 Interested Consulting Parties

The interested consulting parties will be responsible for the following:

- Providing review and comment on the proposed mitigation measures described in Section 4.0.

5.2.4 Other Parties, as Appropriate

Additional consulting parties are not anticipated, should any be determined, this will be updated.

5.3 Schedule

All mitigation measures must be completed within the timeframes outlined in the MOA. The schedule for funding, commencing, implementing, and completing the mitigation measures described in Section 4.0 will be completed according to the timelines outlined in the MOA, unless a different timeline is agreed upon by interested consulting parties and accepted by BOEM.

6.0 REFERENCES

Allaback, S., and C. Milliken. 1995. Resorts & Recreation: an Historic Theme Study of the New Jersey Coastal Heritage Trail Route. Sandy Hook Foundation, Inc. and National Park Service, U.S. Department of the Interior. Available at https://www.nps.gov/parkhistory/online_books/nj1/index.htm (Accessed October 2022).

Atlantic City Free Public Library. 2022. *Atlantic City History*. Available at: <http://acfpl.org/ac-history-menu/atlantic-city-faq-s/15-heston-archives/147-atlantic-city-history-22.html> (Accessed February 2023).

Atlantic City Free Public Library. 2022. *Atlantic City History*. Available at: <http://acfpl.org/ac-history-menu/atlantic-city-faq-s/15-heston-archives/147-atlantic-city-history-22.html> (Accessed February 2023).

Bear, C. 2019. *Keeping the History of African American Tourism Alive in Atlantic City's Northside*. National Trust for Historic Preservation. January 19, 2019. Available at <https://savingplaces.org/stories/keeping-the-history-of-african-american-tourism-alive-in-atlantic-citys-northside#.Y0g0s9fMIdU> (Accessed October 2022).

Chicken Bone Beach Historical Foundation, Inc. (CBBHF). 2022. *Chicken Bone Beach in Atlantic City: Our History*. Available at <https://chickenbonebeach.org/history/> (Accessed October 2022).

Code of Federal Regulations (CFR). 2021a. 36 CFR § 800 – Protection of Historic Properties [incorporating amendments effective December 15, 2021]. Available at <https://www.ecfr.gov/current/title-36/chapter-VIII/part-800>. Accessed March 31, 2022.

CFR. 2021b. 36 CFR § 61.4(e)(1) – Procedures for State, Tribal, and Local Government Historic Preservation Programs [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4\(e\)\(1\)](https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4(e)(1)). Accessed March 31, 2022.

CFR. 2021c. 36 CFR § 65.2(c)(2) – National Historic Landmarks Program – Effects of Designation [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2\(c\)\(2\)](https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2(c)(2)). Accessed March 31, 2022.

CFR. 2022. 40 CFR § 1500 – National Environmental Policy Act Implementing Regulations. Available at <https://www.ecfr.gov/current/title-40/chapter-V/subchapter-A>. Accessed March 31, 2022.

Federal Register. 1997. 62 FR 33708 – The Secretary of the Interior's Historic Preservation Professional Qualifications Standards. Office of the Federal Register, National Archives and Records Administration. Washington, D.C. Available at <https://www.govinfo.gov/app/details/FR-1997-06-20/97-16168>. Accessed March 31, 2022.

Historic American Buildings Survey (HABS). HABS No. NJ-1161. Atlantic City Boardwalk, Beachfront between Fredericksburg & Maine Avenues, Atlantic City, Atlantic County, NJ. Library of Congress Prints and Photographs Division Washington, D.C. Available at <https://tile.loc.gov/storage-services/master/pnp/habshaer/nj/nj1400/nj1459/data/nj1459data.pdf> (Accessed December 2022).

NETRonline (NETR). 2023. *Historic Aerials* [website]. Available at: <https://historicaerials.com/> (Accessed February 2023).

Parker, Patricia L. and Thomas F. King. 1992. *National Register Bulletin, Guidelines for Evaluating and Documenting Traditional Cultural Properties*. United States Department of the Interior, National Park Service, Interagency Resources Division. Available at: <https://www.nps.gov/subjects/nationalregister/upload/NRB38-Completenessweb.pdf>. (Accessed January 2024).

PBS. 2019. *State of the Arts: Chicken Bone Beach Jazz*. Available at <https://www.pbs.org/video/chicken-bone-beach-jazz-f59gkj/> (Accessed October 2022).

United States Code. 2016. Title 54 - National Historic Preservation Act [as amended through December 16, 2016]. Available at <https://www.achp.gov/sites/default/files/2018-06/nhpa.pdf>. Accessed March 31, 2022.

ATTACHMENT A.
ABOVEGROUND HISTORIC PROPERTY INFORMATION AND VISUAL EFFECTS ASSESSMENT

Missouri Avenue Beach (Chicken Bone Beach)

Atlantic City, Atlantic County, NJ



Photograph of property



Photograph of property context



Photograph from property looking toward Projects

Historic Designation NRHP-Eligible (EDR-Recommended)
Distance to Nearest Turbine 11.2
Number of Blade Tips Visible 200
Property Acreage within Study Area 8.69
Property Acreage within PAPE 7.6
Percentage of Property with Potential Visibility 87.37
Visible Light Units
Nacelle Aviation 200
Mid Tower Aviation 200
Coast Guard 46

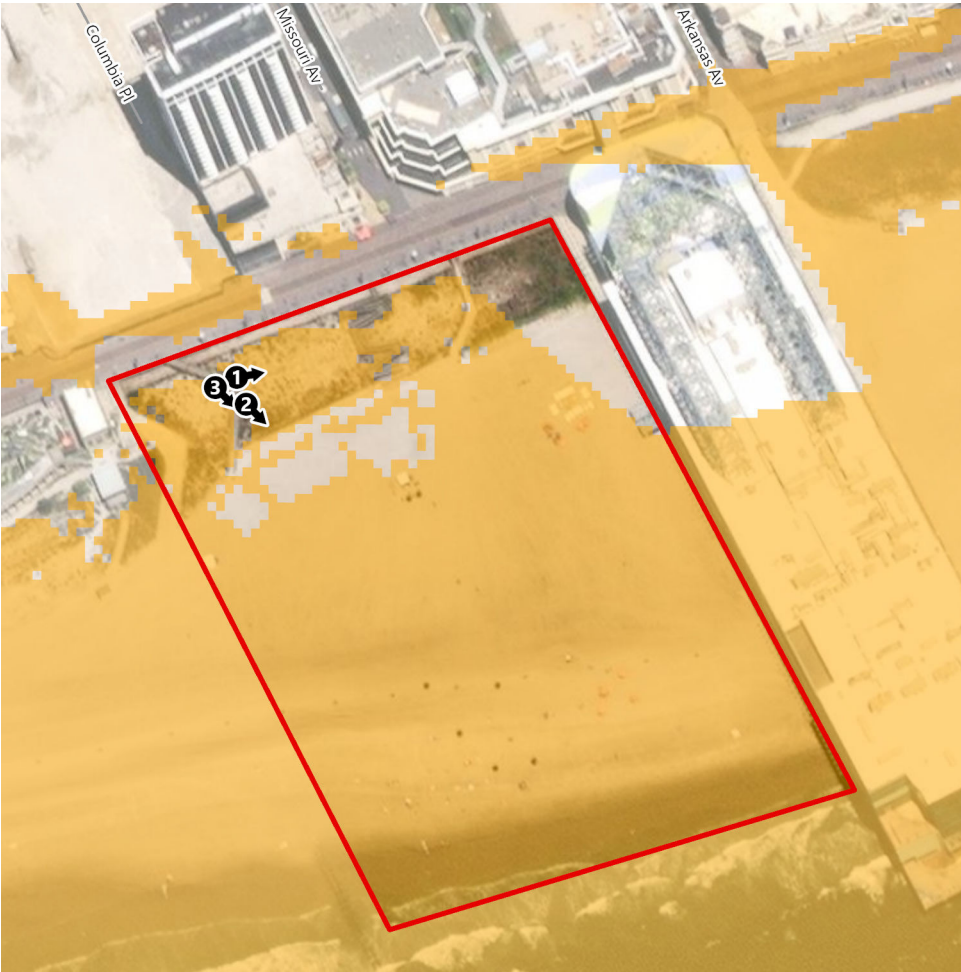
Significance

From the end of the 1920s to the 1960s, Missouri Avenue Beach was effectively Atlantic City’s official black beach. African American members of the Atlantic City Beach Patrol were assigned exclusively to what locals came to call Chicken Bone Beach. Missouri Avenue Beach (Chicken Bone Beach) is significant under NRHP Criterion A for its association with the African American history of Atlantic City.

Maritime Setting

The significance of the Missouri Avenue Beach (Chicken Bone Beach) is directly related to its maritime setting as a beach for the African American community from the end of the 1920s to the 1960s.

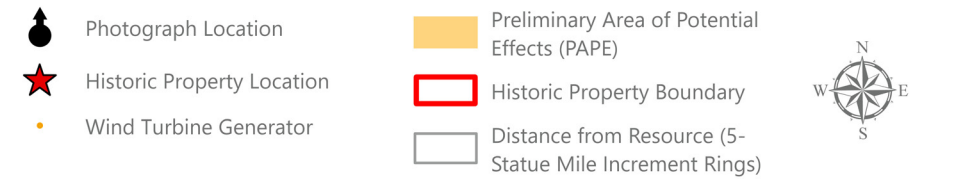
Effect Recommendation
Adverse Effect
Unobstructed views of the Projects due to the historic property’s location on the Atlantic Ocean



Esri ArcGIS Online "World Imagery" map service



Esri ArcGIS Online "World Topographic Map" map service



**ATTACHMENT 14 – HISTORIC PROPERTY TREATMENT PLAN FOR ST. LEONARD’S
TRACT HISTORIC DISTRICT IN VENTNOR CITY, ATLANTIC COUNTY, NEW JERSEY**

Historic Property Treatment Plan for the Atlantic Shores Offshore Wind Lease Area OCS-A 0499

The Saint Leonard's Tract Historic District Ventnor City, Atlantic County, New Jersey

Submitted to:



Bureau of Ocean Energy Management
U.S. Department of the Interior

Prepared for:



Atlantic Shores Offshore Wind LLC



Environmental Design & Research, D.P.C.
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May 2024

ABSTRACT

Federal Undertaking:	Atlantic Shores Offshore Wind Projects
Location:	Outer Continental Shelf, offshore New Jersey
Federal and State Agencies:	Bureau of Ocean Energy Management National Park Service U.S. Army Corps of Engineers New Jersey Historic Preservation Office Advisory Council on Historic Preservation
Regulatory Process:	National Environmental Policy Act Section 106 of the National Historic Preservation Act Section 110(f) of the National Historic Preservation Act
Purpose:	This Historic Property Treatment Plan provides background data, historic property information, and detailed steps that will be implemented to carry out mitigation actions to resolve adverse effects from the Atlantic Shores South Projects
Adverse Visual Effect Finding for:	Saint Leonard's Tract Historic District, Ventnor City, Atlantic County, New Jersey
Submitted By:	Atlantic Shores Offshore Wind, LLC
Date:	May 2024

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Table 3.1-1. Historic Properties included in the HPTP6

LIST OF ATTACHMENTS

Attachment A - Aboveground Historic Property Information and Visual Effects Assessments

LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
ADLS	Aircraft Detection Lighting System
APE	Area of Potential Effects
BOEM	Bureau of Ocean Energy Management
CFR	Code of Federal Regulations
COP	Construction and Operations Plan
DEIS	Draft Environmental Impact Statement
EDR	Environmental Design and Research, D.P.C.
FEIS	Final Environmental Impact Statement
FoAE	Findings of Adverse Effect
FR	Federal Register
ICF	Interconnection Facility
HPTP	Historic Property Treatment Plan
MOA	Memorandum of Agreement
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act of 1966
NPS	National Park Service
NRHP	National Register of Historic Places
NJHPO	New Jersey Historic Preservation Office
NJWEA	New Jersey Wind Energy Area
OCS	Outer Continental Shelf
OSS	Onshore Substation
PAPE	Preliminary Area of Potential Effects
RFP	Request for Proposals
ROD	Record of Decision
USCG	United States Coast Guard
WTG	Wind Turbine Generator

1.0 INTRODUCTION

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) (54 USC 306108) and its implementing regulations, and in compliance with Section 110(f) of the NHPA (54 USC 306107), the Bureau of Ocean Energy Management (BOEM) has determined the Atlantic Shores South Offshore Wind Projects (the Projects) will have an adverse effect on historic properties. A historic property is defined per 36 CFR § 800.16 as any property that is listed in, or has been determined eligible for listing in, the National Register of Historic Places (NRHP), or is a National Historic Landmark (NHL). This Historic Property Treatment Plan (HPTP) for the Saint Leonard's Tract Historic District, in Ventnor City, Atlantic County, New Jersey, (hereinafter, the Historic Property) provides background data, historic property information, and detailed mitigation actions that will be implemented to resolve adverse effects from the Projects. BOEM, in consultation with the New Jersey Historic Preservation Office (NJHPO), determined the Saint Leonard's Tract Historic District to be eligible for listing on the National Register of Historic Places (NRHP) through consultation. Atlantic Shores Offshore Wind, LLC (Atlantic Shores) has provided this HPTP in accordance with BOEM's Findings of Adverse Effects (FoAE) for the Projects under the National Historic Preservation Act of 1966 (NHPA).

BOEM used the National Environmental Policy Act (NEPA) substitution process to fulfill its Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)), and BOEM has notified the Advisory Council on Historic Preservation (ACHP), the NJHPO, and interested consulting parties of BOEM's decision to use this process.

This HPTP describes the mitigation measures to resolve adverse effects on historic properties, the implementation steps, and timeline for actions. The mitigation measures are based on the evaluations and outreach performed by Atlantic Shores as well as outreach to the interested consulting parties performed by BOEM. This HPTP document has undergone revision and refinement in consultation with the NJHPO, the ACHP, and other consulting parties throughout the NEPA substitution process. This HPTP is included in the Memorandum of Agreement (MOA) issued in accordance with 36 CFR §§ 800.8, 800.10.

This HPTP is organized into the following sections:

- **Section 1.0, Introduction**, outlines the content of this HPTP.
- **Section 2.0, Background Information**, briefly summarizes the Projects and describes the cultural resources regulatory contexts (federal, tribal, state, and local, including preservation restrictions) applicable to the HPTP.
- **Section 3.0, Historic Property – Context, Significance, and Effects**, provides a physical description of the historic property included in this HPTP, describes their historic context, the applicable NRHP criteria for each property with a focus on the contribution of each property's maritime visual setting to its significance and integrity, describes the potential visual effect of the Projects on each property.

- **Section 4.0, Mitigation Measures**, identifies the specific steps to carry out the mitigation actions. The mitigation action includes a detailed description, intended outcome, methods, standards, and requirements for documentation.
- **Section 5.0, Implementation**, establishes the organizational responsibilities for implementing the mitigation actions, as identified in Section 4.0 of this HPTP.
- **Section 6.0, References**, is a list of works cited in this HPTP.

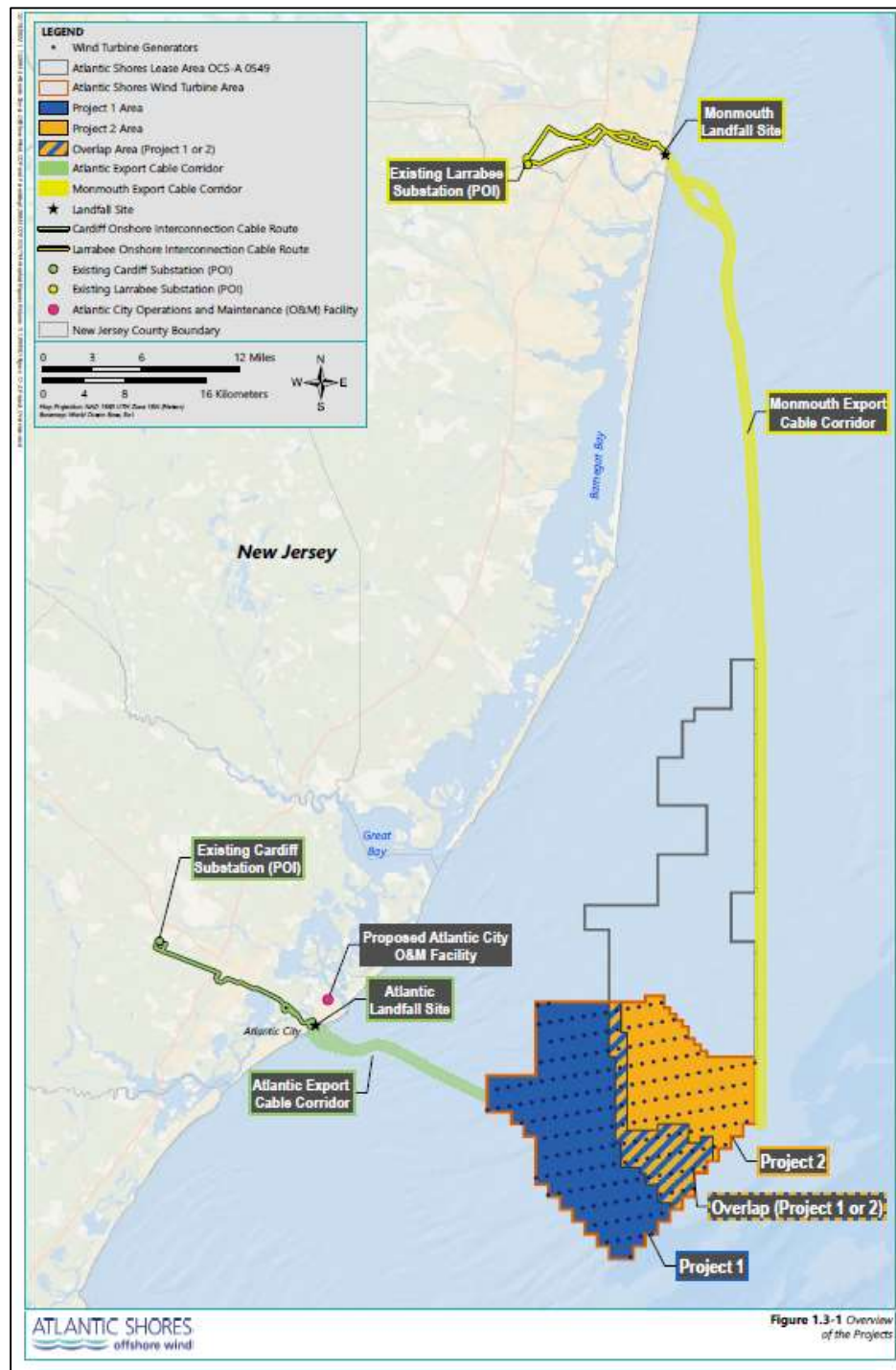
2.0 BACKGROUND INFORMATION

2.1 Overview of the Projects

Atlantic Shores' Lease Area is located on the Outer Continental Shelf (OCS) within the New Jersey Wind Energy Area (NJWEA), which was identified by BOEM as suitable for offshore renewable energy development through a multi-year, public environmental review process. The Projects will be located in an approximately 102,124-acre (413.3-square kilometer [km²]) Wind Turbine Area (WTA) located in the southern portion of the Lease Area (see Figure 2.1-1). Project 1 is located in the western 54,175 acres (219.2 km²) of the WTA, and Project 2 is located in the eastern 31,847 acres (128.9 km²) of the WTA with a 16,102-acre (65.2-km²) Overlap Area that could be used by either Project 1 or Project 2. Figure 2.1-1 also depicts the boundaries of the Project 1 and Project 2 areas within the WTA.

The Projects will collectively consist of up to 200 Wind Turbine Generators (WTGs) and associated foundations, inter-array cables connecting the WTGs, and offshore substations. The offshore substations utilized for the Projects will include up to 10 Onshore Substations (OSSs). Energy from the WTGs will be delivered to shore via 230 kV to 525 kV high voltage alternating current or high voltage direct current export cables. Up to four export cables will be installed within each of two possible Export Cable Corridors, for a total of up to eight export cables. The export cables will traverse federal and New Jersey state waters to deliver energy from the OSSs to landfall sites located in Monmouth County (the Monmouth Landfall Site) and/or Atlantic County (the Atlantic Landfall Site), New Jersey. The offshore-to-onshore transition at the landfall sites will occur via horizontal directional drilling to avoid nearshore and shoreline impacts. From the Monmouth and Atlantic Landfall Sites, new 230 kV to 525 kV high voltage alternating current or high voltage direct current onshore interconnection cables will travel underground along existing roadways, utility rights-of-way, and/or along bike paths to up to two new OSS sites (one for each onshore point of interconnection), where transmission will be stepped up or stepped down in preparation for interconnection with the electrical grid. Onshore interconnection cables will continue from each of the new onshore substations to proposed points of interconnection into the electrical grid at the existing Larrabee Substation in Howell, New Jersey (for the Monmouth Landfall Site) or the existing Cardiff Substation in Egg Harbor Township, New Jersey (for the Atlantic Landfall Site). Once operational, the Projects will be supported by a new operations and maintenance (O&M) facility that will be located in Atlantic City, New Jersey. The O&M facility will be the primary location for O&M operations including material storage, day-to-day management of inspection and maintenance activities, vehicle parking, marine coordination, vessel docking, and dispatching of technicians. Atlantic Shores intends to purchase and develop a shoreside parcel in Atlantic City, New Jersey that was formerly used for vessel docking or other port activities.

Figure 2.1-1. Overview of the Projects.



2.2 Regulatory Framework

2.2.1 *Section 106 and Section 110(f) of the NHPA*

Section 106 of the NHPA of 1966 requires federal agencies to consider the effects of their undertakings on historic properties, which are defined per 36 CFR § 800.16 to include any property that is listed in, or has been determined eligible for listing in, the NRHP, or is an NHL. Section 110(f) of the NHPA further requires that federal agencies undertake such planning and actions as may be necessary to minimize harm to any NHL that may be directly and adversely affected by an undertaking. Historic properties can include marine archaeological resources, terrestrial archaeological sites, above-ground historic properties (e.g., buildings, sites, monuments, and landscapes), and Traditional Cultural Properties.

The regulations at 36 CFR § 800.8 provide for use of the NEPA process to fulfill a federal agency's NHPA Section 106 review obligations in lieu of the procedures set forth in 36 CFR § 800.3 through 800.6. Under these provisions, either issuance of a Record of Decision (ROD) and implementation of relevant conditions or the execution of a MOA will resolve adverse effects to historic properties caused by the Projects, including to NHLs for which BOEM must provide a higher standard of care, as required by Section 110(f) of the NHPA. This HPTP was developed to support ongoing consultations and will be finalized for inclusion in the MOA issued in accordance with 40 CFR §1500-1508, and 36 CFR § 800.8 and 800.10.

All activities implemented under this HPTP will be conducted in accordance with any conditions imposed by BOEM in its ROD and with applicable local, state and federal regulations and permitting requirements. Responsibilities for specific compliance actions are described in further detail in Section 5.2 – Organizational Responsibilities.

2.2.2 *Municipal Regulations*

Before implementation, any on-site mitigation measures will be coordinated with local municipalities and commissions to obtain approvals, as appropriate. These may include, but are not limited to building permits, zoning, land use, planning, historic commissions, and design review boards.

2.2.3 *Preservation Easements and Restrictions*

Preservation easements and restrictions protect significant historic, archaeological, or cultural resources. Any mitigation work would comply with the conditions of all extant historic preservation easements.

2.3 Summary of HPTP Development

This HPTP was developed by Atlantic Shores for inclusion in the FEIS in support of BOEM's consultation pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR § 800.8. In addition to BOEM's formal Section 106 consultation meetings, Atlantic Shores invited the interested consulting parties to a series of meetings to review conceptual mitigation measures for the adversely affected historic properties on October 16, 18, 19, 30 and November 1, 2023. Atlantic Shores anticipates the HPTP may be revised based on comments received directly from the interested consulting parties or via the ongoing BOEM led Section 106 consultations.

3.0 HISTORIC PROPERTY – CONTEXT, SIGNIFICANCE, AND EFFECTS

3.1 Historic Properties Included in the HPTP

This HPTP describes the mitigation measures for the below listed historic property, as identified in Table 3.1-1.

Table 3.1-1. Historic Properties included in the HPTP

Property ID	Property Name	Address	NRHP Status	Ownership
103	Saint Leonard's Tract Historic District	Ventnor and Atlantic Avenues roughly bounded by the shoreline, South Surrey Avenue, North Cambridge Avenue, and the Intercoastal Waterway	NRHP-Eligible (NJHPO-Determined)	Private

Discussions are provided below for each historic property included in the HPTP, which include:

- a physical description of the property,
- a narrative summarizing their historic context,
- the applicable NRHP criteria for Historic Properties with a focus on the contribution of each property's maritime visual setting to its significance and integrity,
- the visual effect of the Projects on each property, and
- measures to resolve adverse effects to each property.

Maps and photographs are included in Attachment A - Aboveground Historic Property Information and Visual Effects Assessments.

The mitigation measures described herein were developed by individuals who meet the Secretary of the Interior's *Professional Qualifications Standards* (36 CFR § 61) and are appropriate to fully address the nature, scope, size, and magnitude of adverse effects including cumulative effects caused by the Projects. These mitigation measures may also include actions to respond to some reasonably foreseeable hazards unrelated to the Project that pose risks to the long-term preservation of the affected historic property, such as climate change.

3.2 Historic Context of Ventnor City

Located in Atlantic County on Absecon Island, Ventnor City is situated south of Atlantic City and north of Margate City. Throughout most of the nineteenth century, Ventnor City remained undeveloped hills and meadows, while Atlantic City and South Atlantic City (present day Margate City), grew and saw increasing development. In 1881, the Camden and Atlantic Railroad connected Atlantic City to Margate City through Ventnor City, requiring the grading of many of the hills in the area. By 1888, the Camden and Atlantic Land Company built a train station in Ventnor, providing direct passenger access to the area for the first time. The Land Company subsequently built three cottages within the city. The name "Ventnor" was chosen in 1889, referencing the seaside resort in Ventnor, England (Smith, 1963).

By the turn of the twentieth century, the lowland marshes in Ventnor were filled, and Ventnor saw additional development, including several houses, a post office, and additional buildings. In 1900, Atlantic County built the Longport Speedway - a gravel road connecting Atlantic City to Longport through Ventnor. Ventnor City was then officially incorporated in 1903. Following incorporation, the city continued to develop, adding additional houses, bath houses, a newspaper, a boat works, a pharmacy, and a boardwalk over the next decade. The twentieth century saw increased development, solidifying Ventnor City as a popular summer resort (Smith, 1963; Ventnor City, 2022).

3.3 Saint Leonard's Tract Historic District

3.3.1 *Description and Existing Conditions*

The Saint Leonard's Tract Historic District is a grouping of approximately 250 residences located along Ventnor and Atlantic Avenues roughly bounded by the shoreline, South Surrey Avenue, North Cambridge Avenue, and the Intercoastal Waterway in Ventnor City, Atlantic County, New Jersey. The district is designed in a distinct grid pattern with larger residential lots than typically seen in Ventnor City. The contributing residences are like those of planned suburb communities of the late nineteenth and early twentieth centuries (New Jersey Office of Historic Preservation, 1986).

3.3.2 *Historic Significance and Setting*

In 1896, the Saint Leonard's Land Company purchased the land that was to become the Saint Leonard's Tract Historic District. The land was then re-mapped, laying out the streets 250 feet apart rather than the 300 feet, which was standard in Ventnor City. This change permitted larger corner lots with a relatively small proportion of interior lots. Most of the residences were then constructed between 1906 and 1930. Eventually property owners formed their own association to formally perpetuate deed restrictions, which included zoning, style, and design regulations regarding set back requirements, permitted uses, and other aesthetic choices. Only one building was permitted per lot, which resulted in a community of larger homes, many of which were architect-designed. The district is eligible for the NRHP under Criterion A and C as a planned oceanside community with strict building requirements for its architecture. The Saint Leonard's Tract Historic District is located between the Atlantic Ocean and the Intercoastal Waterway with many residences having views of one or both bodies of water. The setting of the district on a coastal barrier and the presence of water view along the perimeter of the district are integral to its character and feeling (Smith, 1963; Ventnor City, 2022; New Jersey Office of Historic Preservation, 1986).

3.3.3 *Project Effect on the Historic Property*

The Saint Leonard's Tract Historic District is a grouping of approximately 250 residences located along Ventnor and Atlantic Avenues roughly bounded by the shoreline, South Surrey Avenue, North Cambridge Avenue, and the Intercoastal Waterway in Ventnor City, Atlantic County, New Jersey. The Saint Leonard's Tract Historic District is surrounded by modern (non-historic) architecture to the east and west, however it has retained the architectural character of a planned oceanside community. Additionally, since the Historic District is located between the Atlantic Ocean and the Intercoastal Waterway, many of the residences have water views of one or both bodies of water. The setting of the district on a coastal barrier and the presence

of water view along the perimeter of the district are integral to its character and feeling. This character-defining feature has been retained throughout its history since initial conception. It is anticipated that the Project will be visible from the Saint Leonard's Tract Historic District, especially from the southern boundary which has direct views of the ocean. This will impact the district's original setting and feeling as an oceanside community with an unrestricted view of the water. The Projects may also be visible from properties within the district that are more inland, especially from upper stories and/or rooftop views. Historically these views were unrestricted, with views of the ocean creating the distinct setting and feeling within the district. Therefore, the Projects will have an adverse effect on the setting of the Saint Leonard's Tract Historic District.

4.0 MITIGATION MEASURES

BOEM and Atlantic Shores have identified steps to implement these mitigation measures in consultation with interested consulting parties, led by individuals who meet the qualifications specified in the Secretary of the Interior's Qualifications Standards for History and Architectural History (36 CFR 61).

4.1 Purpose and Intended Outcome

The purpose of this HPTP is to provide funding to the Saint Leonard's Tract Historic District for the documentation, commemoration, interpretation, or other related activities to preserve and promote the historic district. The funding may be used toward activities such as photo documenting the current conditions of the historic district, documenting the history of the historic district, establishing a summer docent program with guided tours of the historic district, development and installation of signage, creation of a podcast, updating the historic district's website, and/or creation of an interpretive exhibit.

4.2 Scope of Work

Atlantic Shores will work with BOEM and the St. Leonard's Association to determine the final scope of work within the maximum mitigation funding amount identified to resolve adverse effects to the St. Leonard's Tract Historic District in the Memorandum of Agreement, Attachment 6 (Mitigation Funding Amounts). BOEM, the St. Leonard's Association, and Atlantic Shores will consult on which projects may be completed with the available funding. Atlantic Shores, BOEM, and St. Leonard's Association will determine the final scope of work through consultation prior to releasing Requests for Proposals or providing funding for specific projects. BOEM, in consultation with the St. Leonard's Association, will review and comment on the RPFs prepared by Atlantic Shores prior to release. BOEM, in consultation with the St. Leonard's Association, will select the consultants to implement the projects identified in the final scope of work.

One or more of the following projects may be selected for implementation, based on the priorities of the St. Leonard's Association and available funding. The final scope of work will identify the project(s) selected.

- Creation of a Photographic Survey of the Association's Existing Historic Homes
Atlantic Shores will release a Request for Proposals and engage a contractor to prepare a photographic survey of the existing condition of the historic district, including contributing historic properties.
- Research and Preparation of Public Educational Materials on the history of St. Leonard's Tract
Atlantic Shores will release a Request for Proposals and engage a contractor to conduct research and prepare public educational materials on the history of St. Leonard's Tract. The contractor will work with the St. Leonard's Association to determine the scope and format for the materials. These may include:
 - Preparation of a book on the history of the St. Leonard's Tract
 - Preparation of a script and educational materials for a summer docent program to provide guided tours twice a month from Memorial Day to Labor Day
 - Preparation of text and photographs for use in public signage commemorating the history of St. Leonard's Tract
 - Preparation of text and photographs to be used to disseminate information on the history of St. Leonard's Tract on the Association's website

- Preparation of scripts for a podcast series, "St. Leonard's Tract-Where History Happens." Each podcast episode would be approximately 15 minutes in length
- Signage commemorating the history of the St. Leonard's Tract
Atlantic Shores will release a Request for Proposals and engage a contractor to prepare signage commemorating the history of St. Leonard's Tract. Signage may be placed:
 - Near specific historic houses to share their unique histories and features of interest
 - Delineating the boundaries of the historic district. This may include the placement of 6 vertical signs next to the most heavily travelled roads (Atlantic, Ventnor, and Dorset Avenues) that are the major thoroughfares into and out of the Tract.

Any signage placed in public rights-of-way may require approval by the City of Ventnor City. Atlantic Shores and the selected signage contractor will coordinate with the City of Ventnor City on any necessary approvals or permits prior to installation.

- Website and Podcast Support
Atlantic Shores will provide funding to the St. Leonard's Association to expand the Association's website to include information on the history of the historic district and to provide support for equipment and technology upgrades to produce and disseminate a podcast series, "St. Leonard's Tract-Where History Happens."

4.3 Standards

The project will comply with following standards:

- The Secretary of the Interior's *Standards for Treatment of Historic Properties* (36 CFR 68);
- The Secretary of the Interior's *Professional Qualifications Standards* (36 CFR Part 61), as applicable; and
- All applicable local ordinances, laws, and regulations.

4.4 Methodology

The methodology will be determined in consultation with the interested consulting parties.

4.5 Documentation

All draft and final documentation will be developed in consultation with the interested consulting parties and will be provided to the interested consulting parties for review and comment. The documentation will be included in the annual reporting to BOEM.

4.6 Funds and Accounting

Funding amounts were determined to be sufficient by BOEM in consultation with the interested consulting parties and are identified in an attachment to the MOA.

5.0 IMPLEMENTATION

5.1 Timeline

The timeline for implementation of the mitigation measures is identified in the MOA.

5.2 Organizational Responsibilities

5.2.1 *Bureau of Ocean Energy Management (BOEM)*

BOEM remains responsible for making all federal decisions and determining compliance with Section 106. BOEM has reviewed this HPTP to ensure, at minimum, it includes the content required.

- BOEM, in consultation with the interested consulting parties, will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA;
- BOEM will be responsible for sharing the annual summary report with the interested consulting parties; and
- BOEM is responsible for consultation related to dispute resolution.

5.2.2 *Atlantic Shores Offshore Wind, LLC*

Atlantic Shores will be responsible for the following:

- Considering the comments provided by the interested consulting parties in the development of this HPTP;
- Releasing RFPs and selecting qualified professionals in consultation with the interested consulting parties;
- Directly engaging, contracting, funding, and managing all contractors/consultants to ensure completion of the mitigation measures as specified in Section 4.0.
- Providing documentation to the interested consulting parties for review and comment as specified in Section 4.0;
- Annual Reporting to BOEM on progress in implementation of this HPTP;
- Ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribal Nations; and
- Provide notification to BOEM and the interested consulting parties when the HPTP implementation is complete.

5.2.3 *Interested Consulting Parties*

The participating parties will be responsible for the following:

- Providing review, comment, and approval as described in Section 4.2 on the proposed mitigation measures described in Section 4.0.

- Producing a podcast and upgrading the Association's website with financial support of Atlantic Shores as described in Section 4.2.

5.2.4 Other Parties, as Appropriate

Additional interested consulting parties are not anticipated, should any be determined, this will be updated.

5.3 Schedule

All mitigation measures must be completed within the timeframes outlined in the MOA. The schedule for funding, commencing, implementing, and completing the mitigation measures described in Section 4.0 will be completed according to the timelines outlined in the MOA, unless a different timeline is agreed upon by interested consulting parties and accepted by BOEM.

6.0 REFERENCES

Code of Federal Regulations (CFR). 2021a. 36 CFR § 800 – Protection of Historic Properties [incorporating amendments effective December 15, 2021]. Available at <https://www.ecfr.gov/current/title-36/chapter-VIII/part-800>. Accessed March 31, 2022.

CFR. 2021b. 36 CFR § 61.4(e)(1) – Procedures for State, Tribal, and Local Government Historic Preservation Programs [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4\(e\)\(1\)](https://www.ecfr.gov/current/title-36/chapter-I/part-61#p-61.4(e)(1)). Accessed March 31, 2022.

CFR. 2021c. 36 CFR § 65.2(c)(2) – National Historic Landmarks Program – Effects of Designation [incorporating amendments effective December 15, 2021]. Available at [https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2\(c\)\(2\)](https://www.ecfr.gov/current/title-36/chapter-I/part-65#p-65.2(c)(2)). Accessed March 31, 2022.

CFR. 2022. 40 CFR § 1500 – National Environmental Policy Act Implementing Regulations. Available at <https://www.ecfr.gov/current/title-40/chapter-V/subchapter-A>. Accessed March 31, 2022.

Federal Register. 1997. 62 FR 33708 – The Secretary of the Interior’s Historic Preservation Professional Qualifications Standards. Office of the Federal Register, National Archives and Records Administration. Washington, D.C. Available at <https://www.govinfo.gov/app/details/FR-1997-06-20/97-16168>. Accessed March 31, 2022.

NETRonline (NETR). 2023. *Historic Aerials* [website]. Available at: <https://historicaerials.com/> (Accessed February 2023).

New Jersey Office of Historic Preservation. 1986. St. Leonard’s Tract Historic District – Historic District Survey Form. On File with the NJHPO.

Smith, Sarah Thompson. 1963. The History of Ventnor, New Jersey. Available at <https://downbeachbuzz.com/wp-content/uploads/2015/11/History-Of-Ventnor.pdf> (Accessed February 2023).

United States Code. 2016. Title 54 - National Historic Preservation Act [as amended through December 16, 2016]. Available at <https://www.achp.gov/sites/default/files/2018-06/nhpa.pdf>. Accessed March 31, 2022.

University of Pennsylvania. 2003. Harry Sternfeld, 1888-1976: A Finding Aid for Architectural Drawings, ca. 1907-1921, in The Architectural Archives, University of Pennsylvania. Available at <https://www.design.upenn.edu/sites/default/files/036Sternfeld.pdf>. Accessed February 2023.

Ventnor City, New Jersey. 2022. The History of Ventnor City. Available at: <https://www.ventnorcity.org/the-history-of-ventnor-city> (Accessed August 2022).

ATTACHMENT A.
ABOVEGROUND HISTORIC PROPERTY INFORMATION AND VISUAL EFFECTS
ASSESSMENTS

ATTACHMENT 15 – TERRESTRIAL ARCHAEOLOGY PHASED IDENTIFICATION PLAN

Phased Identification Plan: Terrestrial Archaeological Resources

Atlantic Shores South Offshore Wind Project – Onshore Facilities

Monmouth and Atlantic County, New Jersey

Confidential - Not for Public Distribution

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March 2024

LIST OF ATTACHMENTS

Attachment A. Larrabee Proposed Phased IB Survey Areas

Attachment B. Cardiff Proposed Phased IB Survey Areas

1.0 INTRODUCTION

Atlantic Shores Offshore Wind, LLC (Atlantic Shores), a 50/50 joint venture between EDF-RE Offshore Development, LLC, a wholly owned subsidiary of EDF Renewables, Inc. (EDF Renewables) and Shell New Energies US LLC (Shell) has proposed to construct the Atlantic Shores Onshore Interconnection Facilities (Onshore Facilities) located in the Boroughs of Manasquan and Borough of Sea Girt, Township of Howell and Township of Wall, Monmouth County, New Jersey and the City of Atlantic City and City of Pleasantville, Egg Harbor Township, Atlantic County, New Jersey. The Onshore Facilities will support Atlantic Shores' proposal to develop two offshore wind energy generation projects (the Projects) within Bureau of Ocean and Energy Management (BOEM) Lease Area OCS-A 0499 (the Lease Area). The proposed Onshore Facilities are being reviewed by the New Jersey Department of Environmental Protection (NJDEP), New Jersey State Historic Preservation Office (NJHPO), the Bureau of Ocean and Energy Management (BOEM), and other relevant New Jersey State and/or Federal agencies and consulting partners under Section 7:4 of the New Jersey Administrative Code (NJAC), the State of New Jersey Executive Order #215, the National Environmental Policy Act (NEPA), and/or Section 106 of the National Historic Preservation Act (NHPA), as applicable. The information included in this Phased Identification Plan for Terrestrial Archaeological Resources (the Plan) is intended to assist these agencies in their review of the Projects' potential effect on terrestrial archaeological resources.

The following document is a supplement to the Projects' Terrestrial Archaeology Resource Assessment (TARA) distributed for NHPA Section 106 Consultation. Preparation of the TARA is ongoing while property access permissions are acquired to conduct Phase IB archaeological investigations for potential substation locations, landfalls, and associated onshore cable routes. BOEM has determined, in accordance with Section 106 regulations (36 CFR § 800.4 (b)(2)), that a Phased Identification approach is appropriate for the survey, reporting, and consultation related to this outstanding archaeological investigation. Given the onshore routes would be buried in existing road rights-of-way or installed via HDD below the ground surface, no phased identification to identify and evaluate above ground historic properties is anticipated.

The Phased Identification Plan below serves as a process document detailing the areas where phased identification survey will be conducted, the steps Atlantic Shores will take to complete the required cultural resources survey, and a schedule of associated milestones. All milestones are anticipated to be

completed before issuance of the Final Environmental Impact Statement (FEIS) and BOEM's Record of Decision (ROD).

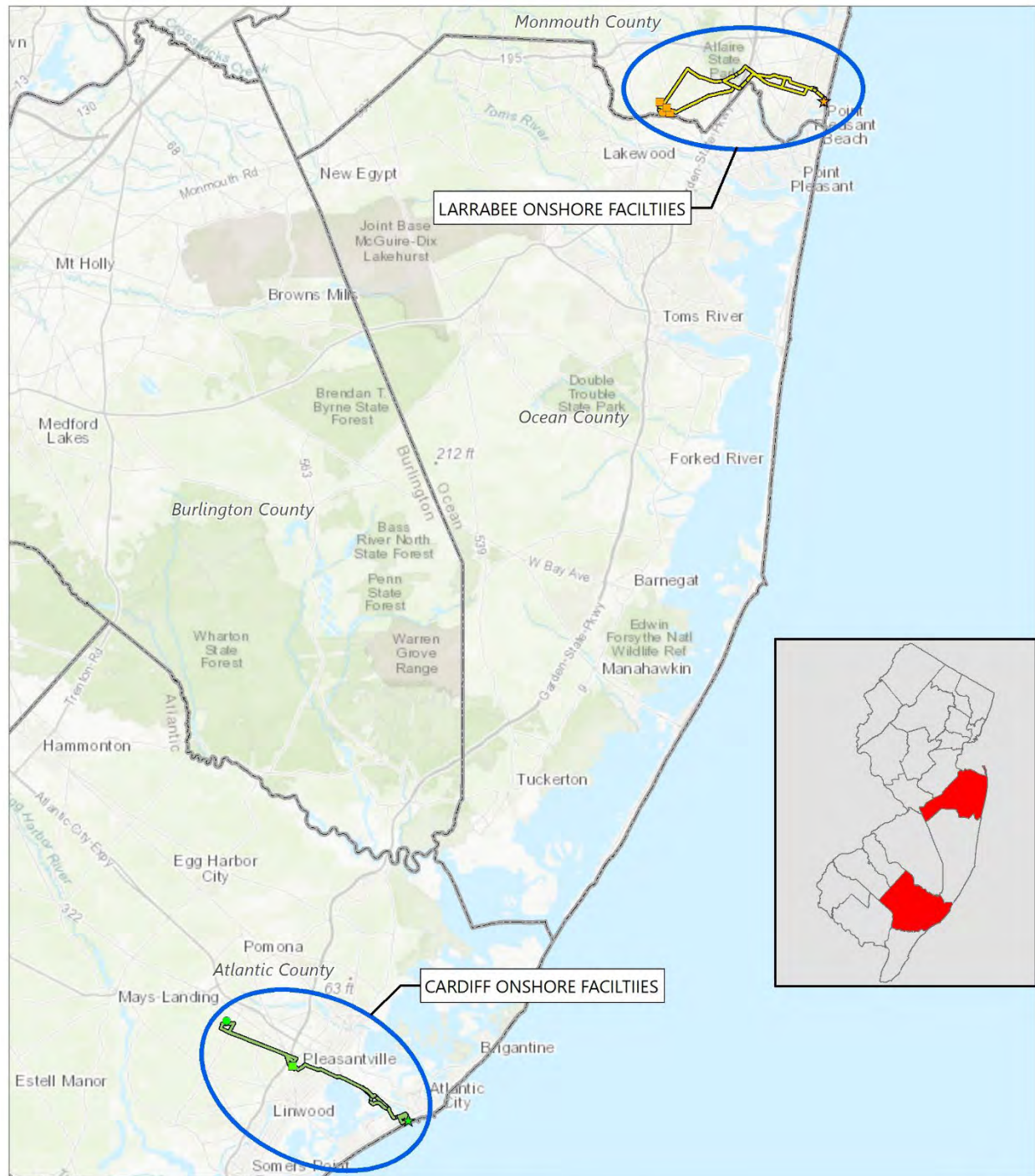
1.1 Description of the Undertaking

Atlantic Shores proposes to construct, operate, and maintain the Onshore Facilities (including landfalls, onshore interconnection cables, onshore substations and/or converter stations, and an Operations and Maintenance [O&M] facility) to connect the offshore portions of the Projects to existing Points of Interconnection (POIs). Export cables will deliver energy from the offshore generation facilities to proposed landfall sites located in either Monmouth County (the Monmouth Landfall Site) and/or Atlantic County (the Atlantic Landfall Site), New Jersey. From the landfall sites, onshore cables will follow onshore interconnection cable routes (onshore routes) proposed within existing roadway, utility rights-of-way (ROWs), and/or along bike paths to existing Points of Interconnection (POIs) for connection to the electrical grid. Along the onshore routes, onshore substations and/or converter stations are also proposed (Figure 1).

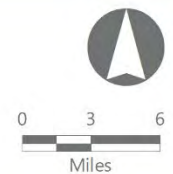
To support the assessment of potential physical effects to historic properties and terrestrial archaeological resources within the Projects, Atlantic Shores established a preliminary area of potential effects (APE) for physical effects to historic properties and terrestrial archaeological resources which incorporates all areas of onshore ground disturbing activity, or other construction activities that could result in demolition or alteration of existing buildings or other built features.

The Projects overall PAPE for physical effects consists of three distinct PAPEs; two PAPEs for the Project's proposed Onshore Interconnection Cable Routes and associated onshore facilities and one PAPE for the O&M Facility. The Cardiff and Larrabee Physical Effects PAPEs include the export cable landfall sites, the onshore transmission cable routes, the proposed onshore substation and/or converter station sites, and the Points of Interconnection (POIs) . A detailed description of each of the three PAPERs can be found within the TARA, which are in Appendix II-P1 and II-P2 of the Project's COP (EDR, 2021, 2022). A summary of the facilities including the breadth and depth of physical effects are tabulated in Table 1.

Figure 1. Regional Onshore Project Area



- | | |
|---|--|
| ★ Atlantic Landfall Site | ★ Monmouth Landfall Site |
| ■ Cardiff Onshore Substation and/or Converter Station | ■ Potential Larrabee Onshore Substation and/or Converter Station |
| ● Existing Cardiff Substation (POI) | ● Existing Larrabee Substation (POI) |
| — Cardiff Onshore Interconnection Cable Route | — Larrabee Onshore Interconnection Cable Route |



Basemap: Esri ArcGIS Online "World Topographic Map" map service.

Table 1. Summary of PAPEs for Physical Effects

Project Component	Maximum Horizontal Effect	Maximum Vertical Effect
Larrabee Facilities		
Monmouth Landfall Site	8.32 ac. (3.37 ha)	16.8 ft. (5.12m)
Larrabee Onshore Interconnection Cable Route ^b	187.94 ac. (76.06 ha) Trenching: 20 ft. (6 m)	Open Trenching 11.5 ft. (3.5 m) Specialty Installation 30 ft. (9 m)
Lanes Pond Road Site	16.27 ac.	60 ft. (18.3 m)
Brook Road Site ^a	99.37 ac.	60 ft. (18.3 m)
Randolph Road Site	24.64 ac.	60 ft. (18.3 m)
Cardiff Facilities		
Atlantic Landfall Site	2.90 ac. (1.17 ha)	16.8 ft. (5.12m)
Cardiff Onshore Interconnection Cable Route ^b	319.56 ac. (129.31 ha) Trenching: 20 ft. (6 m)	Open Trenching 11.5 ft. (3.5 m) Specialty Installation 30 ft. (9 m)
Fire Road Site	19.71 ac. (7.98 ha)	60 ft. (18.3 m)
O&M Facility	1.22 ac. (0.49 ha)	Up to 60 ft. (18.3m) if pilings or similar construction methods are required.

- a. The Brook Road Site is now proposed to be developed separately under the New Jersey Board of Public Utilities (NJBPU) State Agreement Approach (SAA). This plan therefore no longer considers any phased identification at this location as no specific actions or effects are proposed by Atlantic Shores. However, the Brook Road site has been retained in this table since Atlantic Shores may utilize future facilities at this site. Further information detailing the status of the Brook Road Site can be found in the TARA (EDR, 2022).
- b. Trenchless portions of the PAPE, including planned HDD and/or jack and bore locations, are included as part of the Onshore Routes. The maximum vertical effect of these installations is described as "Specialty Installation" in this table.

The final Area of Potential Effects (APE) will be formally determined by BOEM in consultation with NJHPO as part of the Section 106 consultation process. The process for identifying and evaluating effects on historic properties resulting from the construction and operation of the Projects will involve consultation with BOEM and the NJHPO, Native American Tribes/Nations, and other consulting parties with a demonstrated interest in the historic properties (e.g., historic preservation organizations).

As of August 2023, targeted Phase IB survey was completed for the majority of the Cardiff Physical Effects PAPE and portions of the Larrabee Onshore Interconnection Cable Route PAPE. As such, this Plan will focus on Phased Identification for portions of the Project PAPE that still require Phase IB survey.

2.0 PHASED IDENTIFICATION

Atlantic Shores is proposing phased identification to allow sufficient time to complete constructability assessments of the proposed onshore routes, finalize the onshore routes, and progress real estate and right-of-way negotiations on the associated parcels required for the selected route. Atlantic Shores will obtain all required permits and access permissions before starting any work. These steps are required in order to gain site access and perform the planned Phase IB surveys. See Section 4.0 below for the proposed schedule of phased identification activities.

Informed by a synthesis of the research presented in the TARA for onshore facilities (EDR, 2021, 2022) the PAPE was categorized into “Disturbed”, “Potentially Undisturbed”, and “Paved” areas. Following discussion with NJHPO and BOEM staff, the “Disturbed”, “Potentially Undisturbed”, and “Paved” areas within the PAPE were further subdivided to correspond to the categories described in NJHPO’s *Guidelines for Phase I Archaeological Investigations: Identification of Archaeological Resources* (hereafter *Guidelines*; NJHPO, 2019). A detailed description of each sensitivity category is presented in the TARA (EDR, 2022: Section 1.5). The archaeological reconnaissance and desktop assessment results from the TARA for onshore facilities (EDR, 2022: Figures 14, 21, 31 and 38) depict the archaeological sensitivity of the PAPE as well as the “Potential Phase IB Areas” which are portions of the proposed Onshore Facilities assigned as Medium or Medium-High archaeological sensitivity and where targeted Phase IB survey was recommended.

In August 2023, targeted Phase IB survey was completed for 19.98 acres of the Cardiff Onshore Facilities PAPE and approximately 4.77 acres of the Larrabee Onshore Facilities PAPE. The results of these survey efforts are presented in the TARA (EDR, 2022: Sections 2.3.9, 3.3.9, and 3.4.7). The “Potential Phase IB Survey Areas” depicted in Attachment A and B of this Plan illustrate the areas within the Larrabee and Cardiff Onshore Facilities PAPE that still require targeted Phase IB survey. These areas are described below and presented in Table 2:

LARRABEE PAPE

- Unpaved public ROW north and south of Sea Girt Avenue between 3rd Avenue and Sea Girt Plaza (Attachment A, Sheet 1);
- Unpaved Public ROW of Main Street between Ridge Ave and James Place within 500 ft. of surface fresh water (Attachment A, Sheet 2);

- Unpaved public ROW on the south side of Sea Girt Avenue between Old Mill Road and Begonia Avenue within 500 feet of surface fresh water (Attachment A, Sheet 2);
- Portions of the Edgar Felix Memorial Bikeway between Main Street and the State Highway 35 overpass within 500 feet of fresh surface water (Attachment A, Sheet 2);
- Portions of the Edgar Felix Memorial Bikeway near its intersection with the Wall Township Bike Path within mapped eolian soil deposits (Attachment A, Sheet 3);
- "Potentially Undisturbed" areas of the Wall Township Bike Path adjacent to the paved path (Attachment A, Sheet 3);
- Unpaved public ROW north and south of Tiltens Corner Road between Hidden Brook Drive and White Boulevard within mapped eolian soil deposits (Attachment A, Sheet 4);
- Portions of the Edgar Felix Memorial Bikeway between Ramshorn Drive and Hospital Road within mapped eolian soil deposits (Attachment A, Sheet 5);
- Unpaved public ROW adjacent to Hospital Road south of the intersection with the Edgar Felix Memorial Bikeway within 500 feet of surface fresh water (Attachment A, Sheet 5);
- "Potentially Undisturbed" area surrounding a parking lot on Hospital Road south of the Manasquan River planned to contain an HDD exit pit and partially within 500 feet of surface fresh water (Attachment A, Sheet 6);
- "Potentially Undisturbed" portions of Robert L. Brice Memorial Park planned to contain an HDD entry pit within 500 feet of surface fresh water (Attachment A, Sheet 7);
- "Potentially Undisturbed" portions of the parcel north of the intersection of Lakewood Allenwood Road and Metedeconk Road planned to contain an HDD exit pit (Attachment A, Sheet 7);
- Unpaved public ROW adjacent to portions of Lakewood Allenwood Road between Herbertsville Road and Virginia Drive within mapped eolian soil deposits (Attachment A, Sheet 8);
- Unpaved public ROW adjacent to portions of Lakewood Allenwood Road and west of Vienna Road within mapped eolian soil deposits (Attachment A, Sheet 9);
- Within "Potentially Undisturbed" areas of the Lanes Pond Road Site as indicated by the "Potential Phase IB Survey Areas" depicted in Attachment A (Sheet 10) and;
- Within "Potentially Undisturbed" areas of the Randolph Road Site as indicated by the "Potential Phase IB Survey Areas" depicted in Attachment A (Sheet 10).

CARDIFF PAPE

- "Potentially Undisturbed" areas adjacent to Delancy Avenue within mapped eolian soil deposits (Attachment B, Sheet 1)
- Unpaved public ROW on the south side of Reega Avenue between Ivins Avenue and English Creek Avenue within mapped eolian soil deposits within 500 feet of surface fresh water (Attachment B, Sheet 2)

Table 2. Summary of identified "Potential Phase IB Survey Areas" for Proposed Onshore Facility Sites

Onshore Facility Site	Recommended Additional Measures to Identify Archaeological Resources	Attachment Mapping
Larrabee Physical Effects PAPE 237.17 ac.	Combined Phase IB STP Survey 44.35 ac. (18.7%)	Attachment A
Larrabee Onshore Route 187.94 ac.	Targeted Phase IB STP Survey 21.58 ac. (11.5%)	Sheets: 1-9
Lanes Pond Road Site 16.27 ac.	Targeted Phase IB STP Survey 10.87 ac. (66.81%)	Sheet: 10
Randolph Road Site 24.64 ac.	Targeted Phase IB STP Survey 11.90 ac. (48.30%)	Sheet: 10
Cardiff Physical Effects PAPE 342.15 ac.	Combined Phase IB STP Survey 0.12 ac. (0.03%)	Attachment B
Cardiff Onshore Route 319.56 ac.	Targeted Phase IB STP Survey 0.12 ac. (0.03%)	Sheets: 1-2
O&M Facility PAPE 1.22 ac.	No further investigation	N/A

3.0 METHODS

Atlantic Shores has and will continue to follow the general survey methodology outlined by NJHPO *Guidelines* (2019) for any necessary Phase IB archaeological survey. A detailed description of the methodology used in the Phase IB survey efforts is described within the TARA (EDR, 2022: Section 1.5.1). The results of all Phase IB surveys conducted to date are presented within TARA. (EDR 2022: Sections 2.3.9 and 3.3.9). The Phase IB survey results for the remaining areas previously described in Section 2.0 will be presented in an addendum to the TARA at a future date. Tentative scheduling for future Phase IB efforts and submission of the addendum is subsequently presented in Section 4.0 of this Plan.

To further mitigate the potential (however unlikely) for encountering archaeological resources during installation of the Onshore Facilities, Atlantic Shores has prepared a Monitoring Plan and Post Review Discoveries Plan (MPRDP) for terrestrial archaeological resources, which includes stop-work and notification procedures to be followed if a cultural resource is encountered during installation. The MPRDP can be found within Attachment 5 of the Memorandum of Agreement (MOA) executed among BOEM, SHPOs, consulting Native American Tribes, and potentially other consulting parties (BOEM, 2023). The MPRDP outlines the steps for dealing with potential unanticipated discoveries of cultural resources, including human remains, during the construction of the proposed Onshore Facilities. In summary the MPRDP:

- Presents to regulatory and review agencies the plan Atlantic Shores and its contractors and consultants will follow to prepare for and potentially respond to unanticipated cultural resources (i.e., terrestrial archaeological) discoveries;
- Includes provisions and procedures allowing for a Cultural Monitor (Archaeologist) and Tribal Monitors to be present during construction and installation activities conducted in targeted areas of concern as identified in the TARA and through consultation with Native American Tribes; and
- Provides guidance and instruction to Atlantic Shores personnel and its contractors and consultants as to the proper procedures to be followed in the event of an unanticipated cultural resource (i.e., terrestrial archaeological) discovery.

4.0 SCHEDULE

Section 106 Phased Identification Plan – Schedule			
Pre-Rod Phased Identification Task	Approx Start Date	Approx Time to Complete**	Approx Task Complete Date
TARA Field Effort			
Larrabee and Cardiff Onshore Route Survey (remaining roadside areas)***	Contingent on retrieval of survey authorization	2 weeks	No later than end of 2024, see Section 2.0 for a list of remaining roadside areas to be surveyed.
Larrabee Parcel Survey (Lanes Pond Road, and/or Randolph Road Sites)***	Contingent on parcel selection/purchase*	Variable: Assumed maximum 25 acres of survey, 3 weeks	No later than end of 2024
Temp Workspaces/Inaccessible Parcels***	Contingent on identification/access*	Approximately 8 acres/day	No later than end of 2024
Phase II Archaeological Assessment	If necessary*	TBD	No later than end of 2024
TARA Addendum			
Section 106 Memorandum of Agreement			No later than 25-March-2024
TARA addendum (including Phase IB results) ***	Contingent on access to remaining areas and mobilization for subsequent survey		TBD, note that Phase IB survey must be complete, and results presented before construction in affected areas can begin.
Final Environmental Impact Statement (FEIS) Current Target February 9, 2024			
Record of Decision (ROD) Current Target March 25, 2024			

* Assumed two weeks to mobilize from confirmation of access/permit execution.

** Assumed 8-person survey crew for all activities.

*** Pending the award of the New Jersey Board of Public Utilities (NJBPU) 3rd solicitation for Offshore Wind Renewable Energy Certificate (OREC).

5.0 REFERENCES

- Bureau of Ocean Energy Management (BOEM). 2023. *Atlantic Shores Offshore Wind South Draft Environmental Impact Statement, Volume II, Appendix I, Attachment A, Draft Memorandum of Agreement Among the Bureau of Ocean Energy Management, the State Historic Preservation Officer of New Jersey, The Advisory Council on Historic Preservation, Atlantic Shores Offshore Wind Project 1, LLC, and Atlantic Shores Offshore Wind Project 2, LLC Regarding the Atlantic Shores Offshore Wind South Project*. Available at: https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Atlantic-Shores-South_Appl_FOE_DEIS.pdf (Accessed October 2023).
- EDR. 2021. *Phase IA Terrestrial Archaeological Resources Assessment, Atlantic Shores Offshore Wind Project – Operations and Maintenance Facility, Atlantic City, Atlantic County, New Jersey*. Prepared for Atlantic Shores Offshore Wind, LLC. December 2021.
- EDR. 2022b. *Terrestrial Archaeological Resources Assessment, Atlantic Shores Offshore Wind Project – Onshore Interconnection Facilities, Monmouth and Atlantic County, New Jersey*. Prepared for Atlantic Shores Offshore Wind, LLC. August 2022, Revised October 2023.
- New Jersey Historic Preservation Office (NJHPO). 2000. *Guidelines for Preparing Cultural Resources Management Archaeological Reports Submitted to the Historic Preservation Office*. New Jersey Historic Preservation Office, Department of Environmental Protection, Trenton, New Jersey.
- NJHPO. 2019. *Guidelines for Phase I Archaeological Investigations: Identification of Archaeological Resources*. Available at: <https://www.nj.gov/dep/hpo/1identify/arkeoguide1.htm#3.4> (Accessed September 2021).

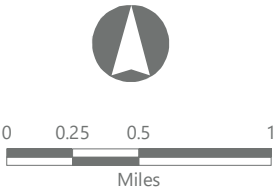
Attachment A.
Larrabee Potential Phased IB Survey Areas

Atlantic Shores South
Offshore Wind Project
– Onshore Facilities

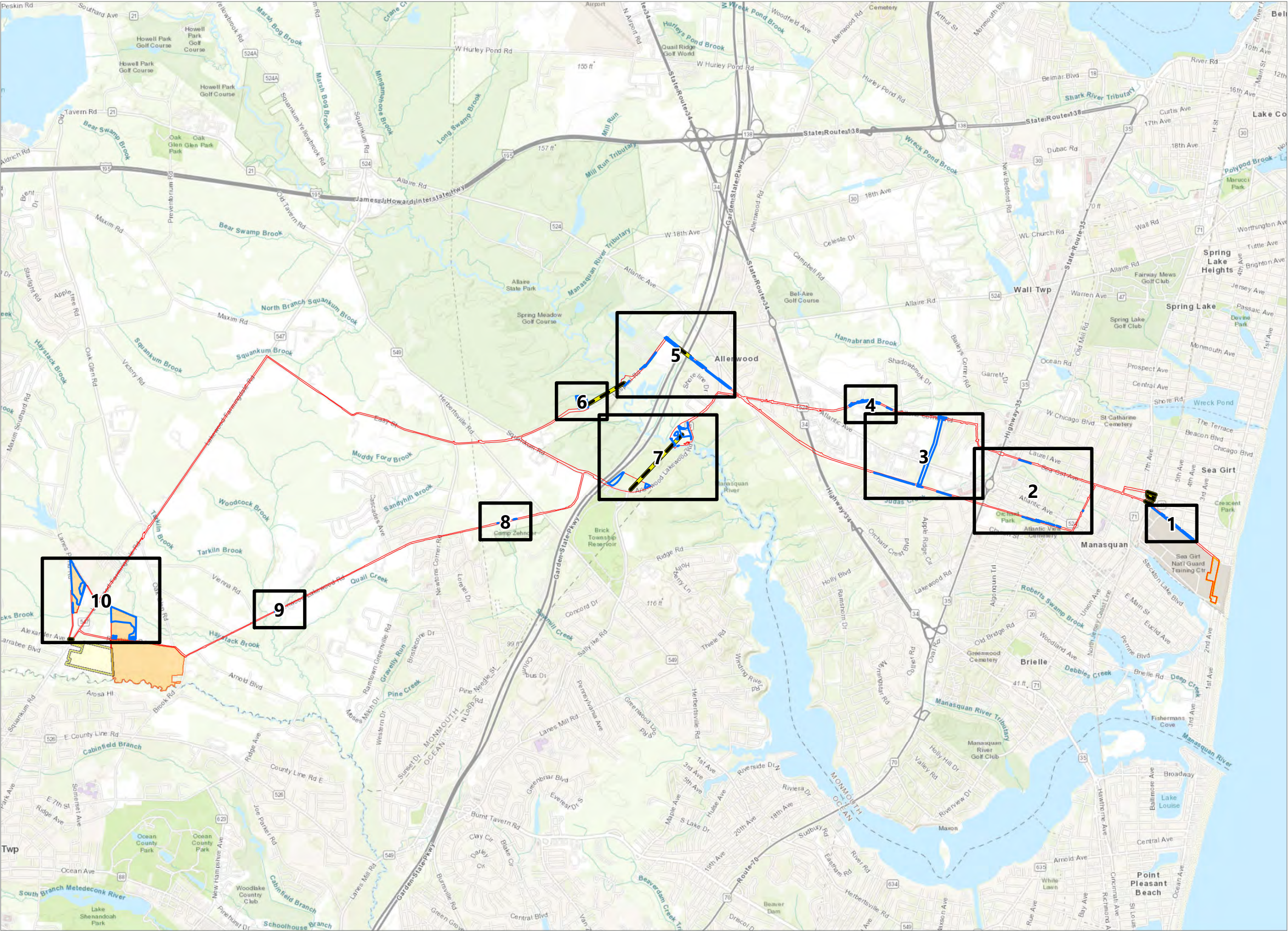
Monmouth and Atlantic County
New Jersey

*Phased Identification Plan:
Terrestrial Archaeological Resources*

- Sheet Index
- Larrabee Physical Effects PAPE
- Trenchless PAPE (HDD or J&B)
- Monmouth Landfall Site
- Substation and/or Converter Station Option
- Larrabee PAPE Boundary
- Phase 1B Survey Area
- Larrabee Point of Interconnection (POI)



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Atlantic Shores South
Offshore Wind Project
– Onshore Facilities

Monmouth and Atlantic County
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*Phased Identification Plan:
Terrestrial Archaeological Resources*

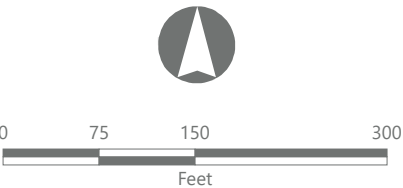
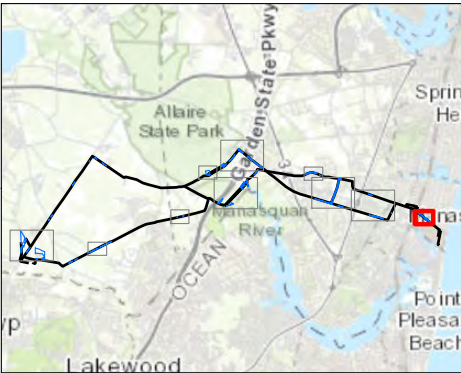
Larrabee Physical Effects PAPE

- Routing Option
- Larrabee PAPE Boundary

Archaeological Sensitivity

- Low Sensitivity
- Medium-High Sensitivity
- Roadway/Paved

Potential Phase 1B Survey Area



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Atlantic Shores South
Offshore Wind Project
– Onshore Facilities

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New Jersey

Phased Identification Plan:
Terrestrial Archaeological Resources

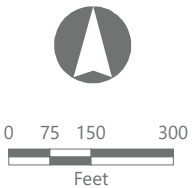
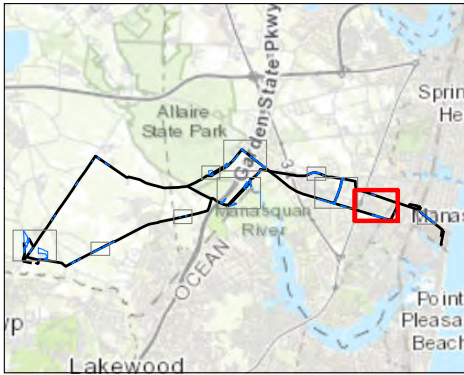
Larrabee Physical Effects PAPE

- Routing Option
- Larrabee PAPE Boundary

- Edgar Felix Memorial Bikeway (former Farmingdale and Squan Village Railroad)

- Archaeological Sensitivity
- Excluded from Field Survey Consideration
 - Low Sensitivity
 - Medium-High Sensitivity
 - Roadway/Paved

- Potential Phase 1B Survey Area



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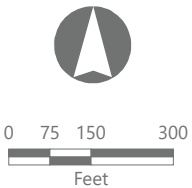
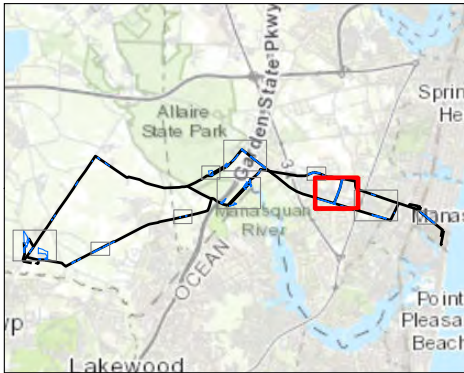


Atlantic Shores South
Offshore Wind Project
– Onshore Facilities

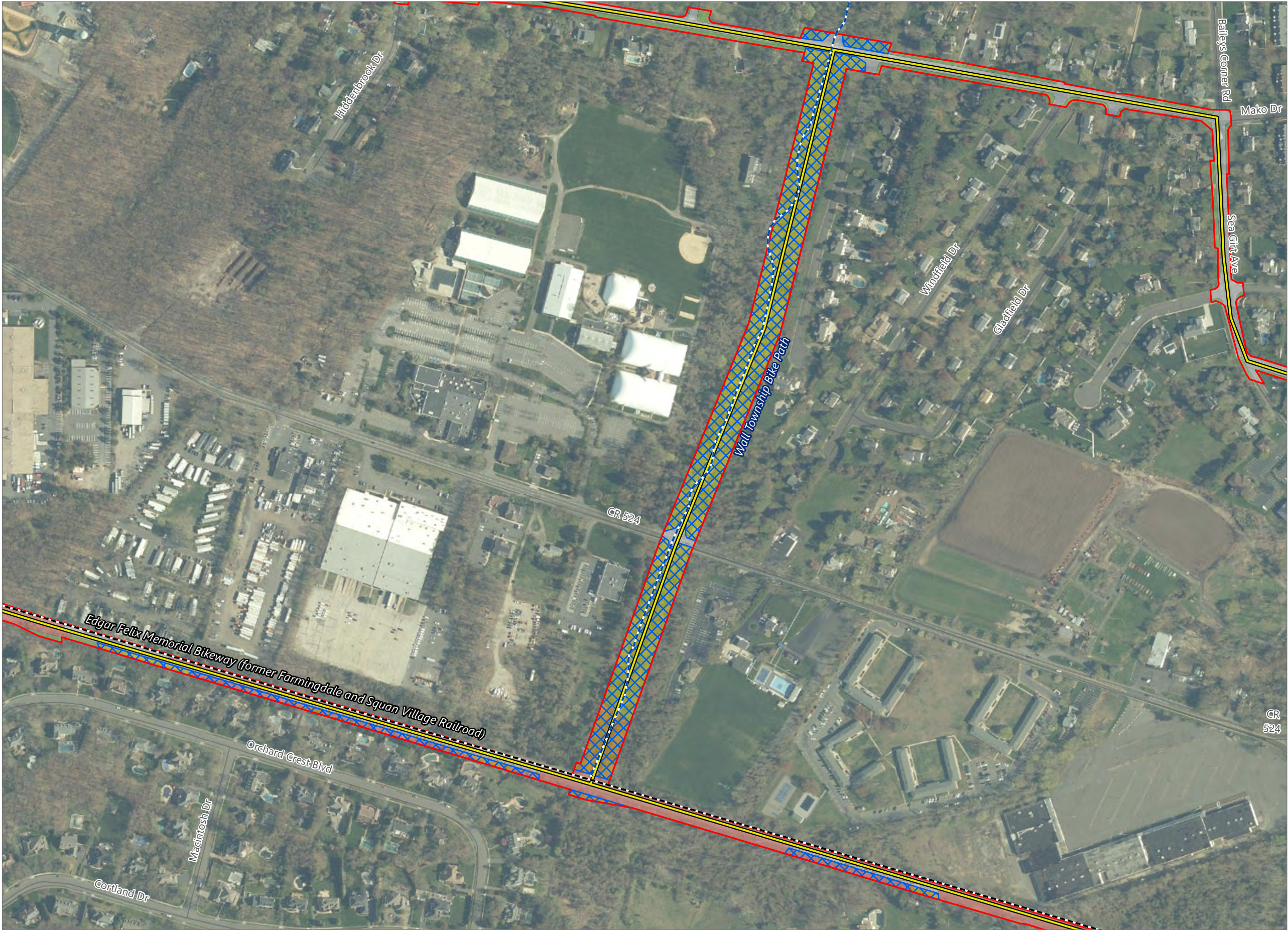
Monmouth and Atlantic County
New Jersey

Phased Identification Plan:
Terrestrial Archaeological Resources

- Larrabee Physical Effects PAPE**
- Routing Option
 - Larrabee PAPE Boundary
 - Edgar Felix Memorial Bikeway (former Farmingdale and Squan Village Railroad)
 - Wall Township Bike Path
 - Archaeological Sensitivity
 - Excluded from Field Survey Consideration
 - Low Sensitivity
 - Medium Sensitivity
 - Medium-High Sensitivity
 - Roadway/Paved Medium-High Sensitivity
 - Roadway/Paved
 - Potential Phase 1B Survey Area



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Atlantic Shores South
Offshore Wind Project
– Onshore Facilities

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New Jersey

*Phased Identification Plan:
Terrestrial Archaeological Resources*

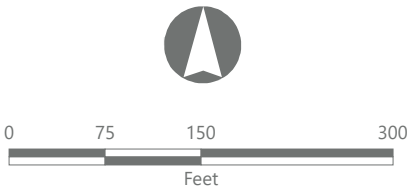
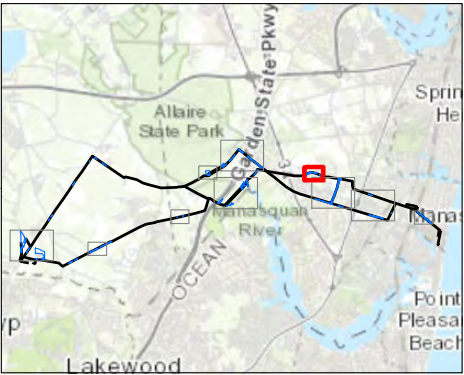
Larrabee Physical Effects PAPE

- Routing Option
- Larrabee PAPE Boundary

Archaeological Sensitivity

- Excluded from Field Survey Consideration
- Low Sensitivity
- Medium Sensitivity
- Medium-High Sensitivity
- Roadway/Paved

Potential Phase 1B Survey Area



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offshore wind

EDR

Atlantic Shores South
Offshore Wind Project
– Onshore Facilities

Monmouth and Atlantic County
New Jersey

Phased Identification Plan:
Terrestrial Archaeological Resources

Larrabee Physical Effects PAPE

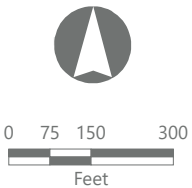
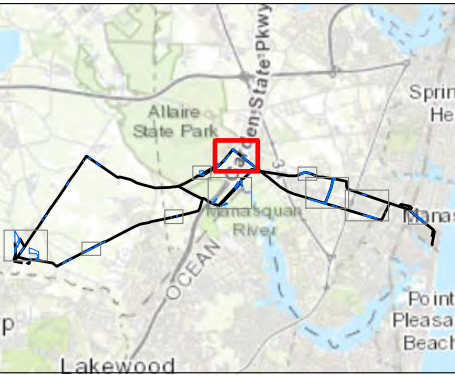
- Routing Option
- Trenchless PAPE (HDD or J&B)
- Larrabee PAPE Boundary

- Edgar Felix Memorial Bikeway (former Farmingdale and Squan Village Railroad)

Archaeological Sensitivity

- Excluded from Field Survey Consideration
- Low Sensitivity
- Medium Sensitivity
- Medium-High Sensitivity
- Roadway/Paved Medium-High Sensitivity
- Roadway/Paved

- Potential Phase 1B Survey Area



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Atlantic Shores South
Offshore Wind Project
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Monmouth and Atlantic County
New Jersey

*Phased Identification Plan:
Terrestrial Archaeological Resources*

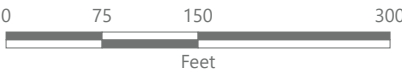
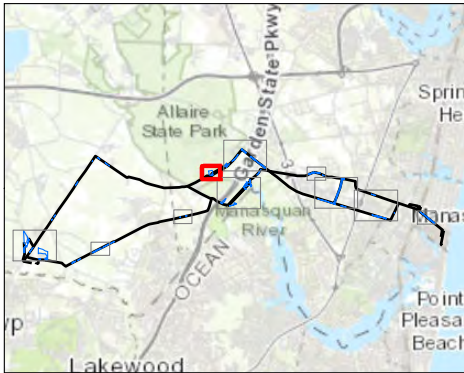
Larrabee Physical Effects PAPE

- Routing Option
- Trenchless PAPE (HDD or J&B)
- Larrabee PAPE Boundary

Archaeological Sensitivity

- Excluded from Field Survey Consideration
- Low Sensitivity
- Medium Sensitivity
- Medium-High Sensitivity
- Roadway/Paved

Potential Phase 1B Survey Area



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Atlantic Shores South
Offshore Wind Project
– Onshore Facilities

Monmouth and Atlantic County
New Jersey

*Phased Identification Plan:
Terrestrial Archaeological Resources*

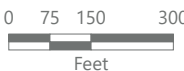
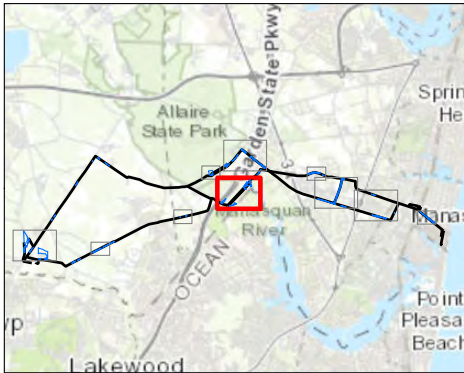
Larrabee Physical Effects PAPE

- Routing Option
- Trenchless PAPE (HDD or J&B)
- Larrabee PAPE Boundary

Archaeological Sensitivity

- Excluded from Field Survey Consideration
- Low Sensitivity
- Medium Sensitivity
- Medium-High Sensitivity
- Roadway/Paved

Potential Phase 1B Survey Area



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Atlantic Shores South
Offshore Wind Project
– Onshore Facilities

Monmouth and Atlantic County
New Jersey

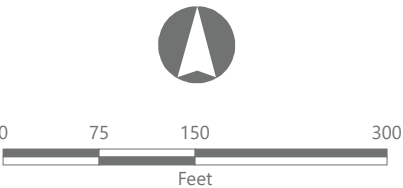
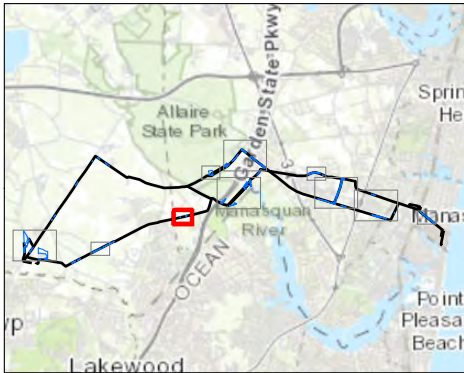
*Phased Identification Plan:
Terrestrial Archaeological Resources*

Larrabee Physical Effects PAPE

- Routing Option
- Larrabee PAPE Boundary

- Archaeological Sensitivity
- Excluded from Field Survey Consideration
 - Low Sensitivity
 - Medium-High Sensitivity
 - Roadway/Paved

- Potential Phase 1B Survey Area



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Atlantic Shores South
Offshore Wind Project
– Onshore Facilities

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*Phased Identification Plan:
Terrestrial Archaeological Resources*

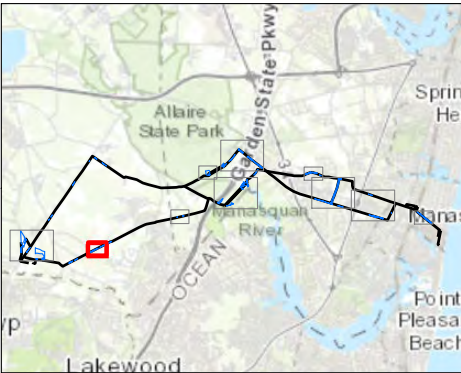
Larrabee Physical Effects PAPE

- Routing Option
- Larrabee PAPE Boundary

Archaeological Sensitivity

- Excluded from Field Survey Consideration
- Low Sensitivity
- Medium Sensitivity
- Medium-High Sensitivity
- Roadway/Paved

Potential Phase 1B Survey Area



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– Onshore Facilities

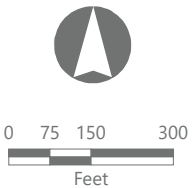
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Phased Identification Plan:
Terrestrial Archaeological Resources

- Larrabee Physical Effects PAPE
- Routing Option
 - Trenchless PAPE (HDD or J&B)
 - Substation and/or Converter Station Option
 - Larrabee PAPE Boundary

- Archaeological Sensitivity
- Excluded from Field Survey Consideration
 - Low Sensitivity
 - Medium Sensitivity
 - Medium-High Sensitivity
 - Roadway/Paved

- Potential Phase 1B Survey Area
- Larrabee Point of Interconnection (POI)



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Attachment B.
Cardiff Potential Phased IB Survey Areas

Atlantic Shores South
Offshore Wind Project
– Onshore Facilities

Monmouth and Atlantic County
New Jersey

*Phased Identification Plan:
Terrestrial Archaeological Resources*

Sheet Index

Cardiff Physical Effects PAPE

Trenchless PAPE (HDD or J&B)

Fire Road Substation and/or
Converter Station

Atlantic Landfall Site

Cardiff PAPE Boundary

Potential Phase 1B Survey Area

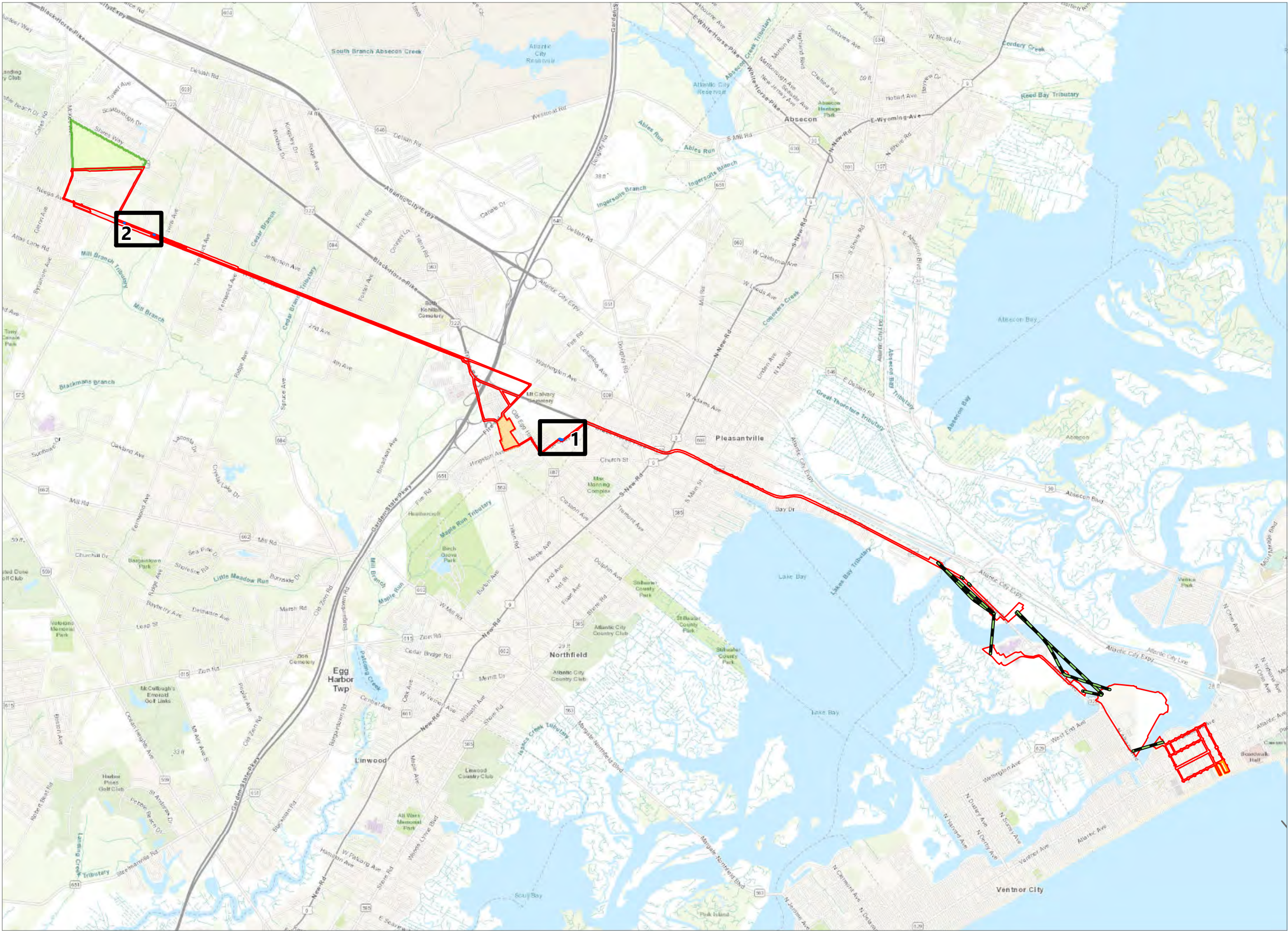
Cardiff Point of Interconnection (POI)

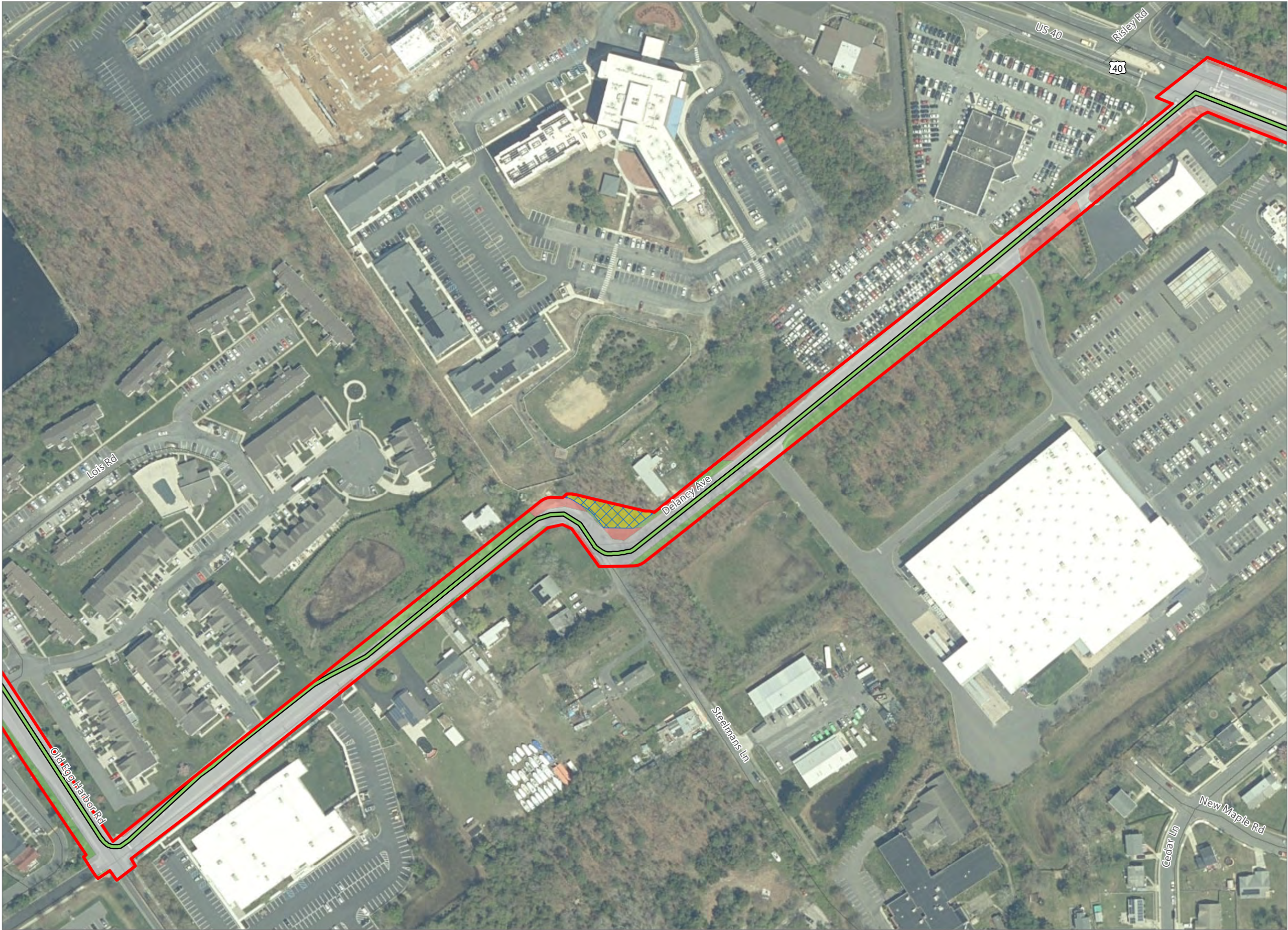


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**Atlantic Shores South
Offshore Wind Project
– Onshore Facilities**

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***Phased Identification Plan:
Terrestrial Archaeological Resources***

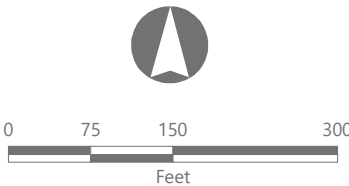
Cardiff Physical Effects PAPE

- Routing Option
- Cardiff PAPE Boundary

Archaeological Sensitivity

- Excluded from Field Survey Consideration
- Low Sensitivity
- Medium Sensitivity
- Roadway/Paved

Potential Phase 1B Survey Area



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offshore wind

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Offshore Wind Project
– Onshore Facilities

Monmouth and Atlantic County
New Jersey

*Phased Identification Plan:
Terrestrial Archaeological Resources*

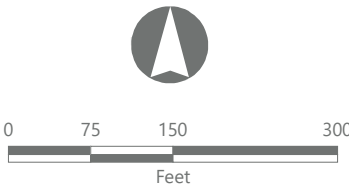
Cardiff Physical Effects PAPE

- Routing Option
- Cardiff PAPE Boundary

Atlantic County Bikeway East (former
West Jersey and Atlantic Railroad)

- Archaeological Sensitivity
- Excluded from Field Survey Consideration
 - Low Sensitivity
 - Medium Sensitivity
 - Medium-High Sensitivity
 - Roadway/Paved

Potential Phase 1B Survey Area



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