

MATTHEW J. PLATKIN  
ATTORNEY GENERAL OF NEW JERSEY  
R.J. Hughes Justice Complex  
25 Market Street, P.O. Box 093  
Trenton, NJ 08625-0093  
Attorney for Plaintiff State of New Jersey  
Department of Environmental Protection

By: Dianna E. Shinn (242372017)  
Deputy Attorney General  
(609) 376-2789

SUPERIOR COURT OF NEW JERSEY, CAPE MAY COUNTY  
CHANCERY DIVISION  
Docket No. C-55-22

NEW JERSEY DEPARTMENT OF  
ENVIRONMENTAL PROTECTION,  
Plaintiff,

v.

CITY OF NORTH WILDWOOD, "XYZ  
CONTRACTORS" 1-10, "JOHN  
AND/OR JANE DOES" 1-10,  
Defendants.

Civil Action

**CERTIFICATION OF  
CHRISTOPHER CONSTANTINO IN  
SUPPORT OF PLAINTIFF NEW  
JERSEY DEPARTMENT OF  
ENVIRONMENTAL PROTECTION'S  
OPPOSITION TO CITY OF NORTH  
WILDWOOD'S MOTION FOR LEAVE TO  
FILE COUNTERCLAIM**

I, CHRISTOPHER CONSTANTINO, of full age, certify and say:

1. I am an Environmental Specialist 3 within the Division of Resilience Engineering and Construction, Office of Coastal Engineering ("OCE") at the Department of Environmental Protection ("DEP"). I am responsible for tasks that include but are not limited management of coastal storm risk management (CRSM) projects overseen by the DEP and U.S. Army Corps of Engineers, ensuring these projects comply with the various environmental policies

and regulations that have jurisdiction, and the development of and/or oversight in the development of permit applications, environmental impact statements and/or compliance statements for these and other CRSM projects. I have been an employee with DEP since September 2004 and have been assigned to OCE since that time. Prior to my employment with DEP, I was employed as a Computer Specialist and Field Assistant at the Stockton College (currently Stockton University) Coastal Research Center (CRC) from 1997 until September 2004 where the CRC focused on monitoring the conditions of New Jersey's beaches and dunes and on the performance of various CRSM projects along the New Jersey coast. I graduated from Stockton College in May 1998 with a Bachelor of Science in Marine Science.

2. I make this certification in support of the DEP's opposition to the City of North Wildwood's ("NWW") Motion for Leave to File a Counterclaim.
3. Attached hereto as **Exhibit 1** to my certification is a true and correct copy of the fully-executed State Aid Agreement ("SAA") between DEP and NWW, dated March 1, 2022. I am familiar with this SAA as I am the assigned DEP representative overseeing DEP's responsibilities related to the Hereford Inlet to Cape May Inlet, New

Jersey Hurricane and Storm Damage Reduction Project  
(Project Number 6040-NW-1) ("the Project"). This SAA  
outlines the responsibilities of DEP and NWW related to  
the Project.

4. On the 49<sup>th</sup> page of the SAA is Appendix D to the SAA,  
which lists the Block and Lot numbers of the properties  
for which easements were to be acquired by DEP in NWW for  
the Project. There is no date certain by which those  
easements are to be acquired, and my understanding is  
that DEP has already obtained all but one of those  
easements.

I certify that the foregoing statements made  
by me are true. I am aware that if any of  
the foregoing statements by me are willfully  
false, I am subject to punishment.

Dated: 01-13-2023

  
\_\_\_\_\_  
Christopher Constantino



**CONSTANTINO  
CERTIFICATION  
EXHIBIT 1**

**STATE AID AGREEMENT**  
**BETWEEN**  
**THE DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**AND**  
**THE CITY OF NORTH WILDWOOD**  
**FOR CONSTRUCTION OF THE**  
**HEREFORD INLET TO CAPE MAY INLET, NEW JERSEY**  
**HURRICANE AND STORM DAMAGE REDUCTION PROJECT**  
**PROJECT NUMBER 6040-NW-I**

THIS AGREEMENT made and executed this \_\_\_\_\_1st\_\_\_\_\_ day of \_\_\_\_\_March\_\_\_\_\_, Two Thousand and Twenty Two **BY AND BETWEEN THE CITY OF NORTH WILDWOOD**, a Municipal Corporation in the County of Cape May, New Jersey, hereinafter called the “Municipality”, and the **STATE OF NEW JERSEY, DEPARTMENT OF ENVIRONMENTAL PROTECTION**, hereinafter called the “Department”, **CLIMATE AND FLOOD RESILIENCE, DIVISION OF COASTAL ENGINEERING**, hereinafter called the “Division”.

WHEREAS, Construction of the Hereford Inlet to Cape May Inlet, New Jersey Hurricane and Storm Damage Reduction Project, hereinafter referred to as the “Project”, was authorized by Section 1401(3) of the Water Resources Development Act of 2016, Public Law 114-322; and

WHEREAS, under the Construction heading, Chapter 4, Title X, Division A of the Disaster Relief Appropriations Act of 2013, Public Law 113-2 (127 Stat. 24-25) enacted January 29, 2013, hereinafter “DRAA 13,” certain projects, or elements thereof, under study by the U.S. Army Corps of Engineers, hereinafter referred to as the “Corps”, for reducing flooding and storm damage risks in areas along the Atlantic Coast within the North Atlantic Division of the Corps that were affected by Hurricane Sandy are authorized for construction pursuant to DRAA13 to the extent DRAA13 funds are available; and

WHEREAS, the Assistant Secretary of the Army (Civil Works) on February 1, 2016 determined that the Project is technically feasible, economically justified, and environmentally acceptable; and

WHEREAS, Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended, (33 U.S.C. 2213) specifies the cost-sharing requirements applicable to the Project; and

WHEREAS, pursuant to DRAA 13, the Secretary of the Army is directed to finance the non-Federal cash contribution for certain projects using DRAA 13 funds in accordance with the provisions of Section 103(k) of the Water Resources Development Act of 1986, Public Law 99-662, to complete initial construction of the Project; and

WHEREAS, the provisions of Section 902 of the Water Resources Development Act of 1986, as amended, do not apply to DRAA 13 funds that will be used for design and construction of the Project; and

WHEREAS, the Department, as the non-Federal sponsor, and the Army Corps of Engineers entered into a Project Partnership Agreement, hereinafter referred to as the “PPA,” on January 17, 2017, attached hereto as Appendix A, for the initial construction of storm damage reduction measures in the City of North Wildwood, City of Wildwood, Borough of Wildwood Crest and Township of Lower, pursuant to the requirements of DRAA 13, and for periodic renourishment, operation, and maintenance of the Project; and

WHEREAS, the Department and the Municipality desire to enter into this State Aid Agreement for the initial construction of the Project; and

WHEREAS, the periodic renourishment portion of the Project is authorized for fifty years from the start of initial construction, at a four-year renourishment cycle, each renourishment being subject to subsequent State Aid Agreements; and

WHEREAS, the Department has the full authority to perform all of its responsibilities for the Project under New Jersey State Law PL 92, c. 148; PL 95, c. 164 and N.J.S.A. 12:6A-1, et seq.; and

WHEREAS, the Municipality has the full authority to perform all of its responsibilities for the Project under N.J.S.A. §§ 40:56-1, et seq., 40:69A-1, et seq., and 40A:12-1, et seq. and the applicable municipal code, and the Mayor of the Municipality is duly authorized to enter this Agreement; and

WHEREAS, the total cost of the entire Project, including initial beachfill construction and renourishment over 50 years, based on the March 2014 price level, is estimated at \$104,030,000.00, as defined in the PPA and January 23, 2015 Chief's Report issued by the Department of the Army, attached hereto as Appendix B; and

WHEREAS, the estimated cost of initial construction of the Project is projected to be \$21,600,000.00, with the Federal Government's 65% share of such costs projected to be \$14,040,000.00, and the Department's 35% share of such costs projected to be \$7,560,000.00. The Municipality is required to cost share \$1,000,000.00 for the initial construction of the Project as well as any Municipal-requested additional work and betterments, as set forth in attached Appendix C. This estimated cost includes the sand placement on the beach and dune, mobilization and demobilization, dune crossovers, dune planting and fencing, project related stormwater outfall improvements, and Engineering & Design/Supervision & Administration (E&D/S&A) costs within the City of North Wildwood, City of Wildwood, Borough of Wildwood Crest and Township of Lower; and

WHEREAS, future renourishment costs over the fifty-year life of the Project is 50% federal and 50% non-federal as set forth in the Chief's Report. During a periodic renourishment event, the Department anticipates that 75% of the non-federal share will be paid by the Department and the remaining 25% will be paid by the Municipality, and will be subject to a future State Aid Agreement; and

WHEREAS, with the exception of all alleyways and paper streets, the Municipality offers public parking within every public right of way in the City and further offers public parking-lots East of Atlantic Avenue at 1st & Surf Avenue and 15th Avenue & the Beach, as governed by existing municipal ordinance; and

WHEREAS, the Municipality currently provides public access points and crossovers to the to the beach and oceanfront at: 2<sup>nd</sup> Avenue and Ocean Avenue; 3<sup>rd</sup> Avenue and J. F. Kennedy



Boulevard/Beach Drive; 4<sup>th</sup> Avenue and J. F. Kennedy Boulevard/Beach Drive; 5<sup>th</sup> Avenue and J. F. Kennedy Boulevard/Beach Drive; 6<sup>th</sup> Avenue and J. F. Kennedy Boulevard/Beach Drive; 7<sup>th</sup> Avenue and J. F. Kennedy Boulevard/Beach Drive; 8<sup>th</sup> Avenue and J. F. Kennedy Boulevard/Beach Drive; 9<sup>th</sup> Avenue and J. F. Kennedy Boulevard/Beach Drive; 10<sup>th</sup> Avenue and J. F. Kennedy Boulevard/Beach Drive; 11<sup>th</sup> Avenue and J. F. Kennedy Boulevard/Beach Drive; 12<sup>th</sup> Avenue and J. F. Kennedy Boulevard/Beach Drive; 13<sup>th</sup> Avenue and J. F. Kennedy Boulevard/Beach Drive; 14<sup>th</sup> Avenue; 15<sup>th</sup> Avenue; 16<sup>th</sup> Avenue and Boardwalk; 17<sup>th</sup> Avenue and Boardwalk; 18<sup>th</sup> Avenue and Boardwalk, 19<sup>th</sup> Avenue and Boardwalk (Between 19<sup>th</sup> & 18<sup>th</sup> Avenues); 20<sup>th</sup> Avenue and Boardwalk; 21<sup>st</sup> Avenue and Boardwalk; 22<sup>nd</sup> Avenue and Boardwalk; 23<sup>rd</sup> Avenue and Boardwalk (between 23<sup>rd</sup> and 22<sup>nd</sup> Avenues); 24<sup>th</sup> Avenue and Boardwalk; 25<sup>th</sup> Avenue and Boardwalk (between 25<sup>th</sup> and 24<sup>th</sup> Avenues); 26<sup>th</sup> Avenue and Boardwalk (between Juniper and 26<sup>th</sup> Avenues); and

WHEREAS, the Municipality currently provides seasonal permanent restroom facilities at: 7<sup>th</sup> Avenue and J. F. Kennedy Boulevard, 15<sup>th</sup> Avenue (at the lifeguard headquarters), and 25<sup>th</sup> Avenue (on the boardwalk). The Municipality provides seasonal temporary restrooms at: approximately 20 locations along the beachfront. And the Municipality provides year-round temporary restrooms at Old New Jersey and Spruces Avenues, 15<sup>th</sup> Avenue (at the lifeguard headquarters), and 23<sup>rd</sup> Avenue (on the boardwalk); and

WHEREAS, the expenditure of public funds is conditioned upon compliance with the Department's Coastal Zone Management Rules and all other applicable laws, rules and regulations; and

WHEREAS, through the DRAA 2013, additional money was appropriated to the U.S. Department of Housing and Urban Development, hereinafter "HUD," to be allocated as Disaster Recovery Community Development Block Grants ("CDBG-DR") to Superstorm Sandy impacted states, including the State of New Jersey, in order to provide crucial funding for recovery efforts involving housing, economic development, infrastructure and prevention of further damage to affected areas; and

WHEREAS, pursuant to FR-5696-N-06, on November 18, 2013, the State of New Jersey received a second allocation of HUD funding through the New Jersey Department of Community

Affairs, hereinafter “DCA,” as the designated entity to administer the State’s CDBG-DR Program per 24 CFR 570.501; and

WHEREAS, \$50 million of the second allocation of CDBG-DR funds is reserved for the Department’s Office of Flood Hazard Risk Reduction Measures to support the Corps’ efforts by acquiring the necessary real estate for this and other Projects, and will supplement expenses not covered by the Corps’ reimbursement; and

WHEREAS, to be eligible for CDBG-DR funding for reimbursement of real estate acquisition costs, the Municipality must comply with all CDBG-DR requirements and procedures.

WHEREAS, once any portion of the Project is complete, the Municipality will be responsible for all routine operations, maintenance and associated costs of the Project in the Municipality between periodic renourishment of the Project.

NOW THEREFORE, all Parties hereto do mutually agree as follows:

(1) The Department, in cooperation with the Municipality, shall acquire the perpetual easements for the private properties listed in Appendix D necessary for construction, renourishment activities, and maintenance of the Project, and in some cases for the borrowing, excavating, and removing of sand and soil. The Municipality shall provide to the Department perpetual easements on or across any municipally owned properties also listed on Appendix D. The perpetual easement types required for all properties listed in Appendix D are located in Appendix E. In addition to the above, the easements shall provide access to the Department and the Corps, their representatives, agents, contractors and assigns, and shall provide for public access to and use of the entire beachfront and tidal lands in the Project construction area. The perpetual easements shall also provide the access necessary to ensure the protection of threatened and endangered wildlife and vegetation and for the implementation and enforcement of the beach wildlife and Seabeach Amaranth management plan developed under Clause (7) below, to the Department, and the Corps, their agents, employees, and contractors. The forms of easements shall be provided by the Department to the Municipality.

(2) In satisfying its obligations in this Agreement, the Municipality shall comply with all of the Department's Coastal Zone Management Rules (N.J.A.C. 7:7 et seq.), including but not limited to: Dunes (7:7-9.16); Overwash Areas (7:7-9.17); Coastal High Hazard Areas (7:7-9.18); Erosion Hazard Areas (7:7-9.19); Beaches (7:7-9.22); Endangered or Threatened Wildlife or Plant Species Habitat (7:7-9.36); and Coastal Engineering (7:7-15.11).

(3) Bulldozing, excavation or mechanical alteration of any beach and dune is strictly prohibited, except as permitted by the Department's Standards for Beach and Dune Activities in accordance with N.J.A.C. 7:7-10 or as permitted by any other valid permits from the Department pursuant to New Jersey's Coastal Zone Management Rules and with the concurrence of the Division and the Corps. The Municipality shall not conduct or allow obstructions or encroachments that reduce the level of protection of the Project or hinder operation and maintenance of the Project.

(4) The Municipality shall provide and maintain all existing public access and parking areas. All public access resulting from the operation of this Agreement shall be provided in a nondiscriminatory manner in accordance with law.

(5) The Municipality acknowledges all lands now or formerly flowed by the mean high tide are owned by the State of New Jersey, excluding any riparian interests previously granted by the State, and that title to any lands which cease to be flowed by the mean high tide as a result of the shore protection or dredging project remains in the State of New Jersey.

(6) The Municipality as a public entity recognizes its continuing obligation to ensure compliance with the Public Trust Doctrine in accordance with the laws of the State of New Jersey.

(7) The Municipality, pursuant to the Endangered Species Act (16 U.S.C. 1531, et. seq.), its implementing regulations (50 CFR Part 17), and the U.S. Fish and Wildlife Service document entitled, "Biological Opinion on the Effects of Federal Beach Nourishment Activities Along the Atlantic Coast of New Jersey Within the U.S. Army Corps of Engineers, Philadelphia District on the Piping Plover (*Charadrius melodus*) and Seabeach Amaranth (*Amaranthus pumilus*)", and to ensure consistency with endangered and threatened species provisions of New Jersey's Coastal Zone Management Rules (N.J.A.C. 7:7-9.36) and New Jersey's Endangered and Nongame Species Conservation Act (N.J.S.A. 23:2A); shall develop and implement one beach species management plan for the entire municipality. The federally approved management plan entitled, "The City of North Wildwood Beach Management

Plan for the Protection of Federally and State Listed Species”, dated December 2018, has been approved by the U.S. Fish & Wildlife Service and the Department’s Endangered & Nongame Species Program.

(8) All Project costs are estimates subject to adjustment by the Government, increases or decreases in equipment and material costs, and inflation, and are not to be construed as the total financial responsibilities of the Government, the State of New Jersey as the Non-Federal Sponsor and the Municipality. However, such adjustments will not impact the Municipality’s financial responsibilities for the initial construction of the Project. The cost of the Project may increase due to unanticipated additional work or betterments to the Project as requested by the Municipality. Municipally-requested additional work or betterments shall be paid 100% by the Municipality for non-shore protection work. Any unanticipated additional work or betterments requests that are considered shore protection work may be cost shared by the Department, if funds are available. The final cost will be based on actual cost as documented by records maintained by the Department and the Corps. The Department will invoice the Municipality for the Municipality’s financial obligations regarding any increase in Project cost, prior to bid solicitation for the construction contract for a particular phase of the Project. Payment shall be made by the Municipality within 30 days of its receipt of the invoice, unless a longer time period is agreed to by the Department. Should the Municipality be unable to pay any increased costs due to lack of funds, it must inform the Department prior to the construction of any future betterment. The Department will invoice the Municipality for any unanticipated Municipal requested additional work or betterments to the Project.

(9) If the Municipality fails to provide its share of the funding in the time and manner required or otherwise breaches any obligation under this Agreement, then the Department reserves all legal recourse including but not limited to seeking injunctive relief to force compliance or commencing an action in a court of appropriate jurisdiction to obtain an account and to recover the State’s share of any funds provided to the Municipality under this Agreement, plus interest, legal costs and other expenses. If the Municipality fails to provide its share of the funding in the time and manner required or otherwise breaches any obligation under this Agreement, the Department reserves the right to cease its performance under this Agreement. Further, if the Municipality fails to provide its share, or any portion thereof, of the funding in the time and manner required, the Department reserves the right to withhold from the Municipality payment of funds for present or future work on any phase of the

Project necessary for the Department to recover that share of the funding that the Municipality has failed to provide. Prior to instituting any action under this provision, the Department shall serve the Municipality with a written notice of the violation of the Agreement and the Municipality shall have 60 days to cure any breach or nonpayment. In addition, if the Municipality fails to perform in accordance with this Agreement, its eligibility for future shore protection funds may be impacted.

(10) Costs associated with the donation of the necessary municipally owned perpetual easements shall be initially borne by the Municipality and the costs can be submitted to the Department for reimbursement subsequent to execution of this Agreement. Costs not directly related to the Project shall be denied reimbursement. In order to receive reimbursement for all associated costs, the Municipality shall abide by all requirements and procedures set forth in the CDBG Grant Agreement attached in Appendix F.

(11) If the Department fails to receive annual appropriations or the federal share provided for under the PPA in amounts sufficient to meet the Department's project costs for the then current upcoming fiscal year, the Department shall so notify the Municipality in writing, and 60 days thereafter either party may elect without penalty to terminate this Agreement or to suspend future performance under this Agreement. Such suspension shall remain in effect until such time as the Department receives sufficient appropriations or until either party elects to terminate this Agreement. Any such termination shall not relieve the parties of liability for any obligation previously incurred.

(12) All notices under this Agreement shall be sent in writing to:

For the Department:

Director  
Division of Coastal Engineering  
1510 Hooper Avenue, Suite 140  
Toms River, New Jersey 08753

For the Municipality:

Mayor  
City of North Wildwood  
901 Atlantic Avenue  
North Wildwood, New Jersey 08260

(13) The Municipality herein represents that it has complied with all conditions and obligations imposed by any prior State Aid Agreement with the Department or the Division or has entered into a compliance schedule, which is made a part of this Agreement and is attached hereto.

(14) The waiver of a breach of any of the terms or conditions of this Agreement by the Department shall not constitute a waiver of any subsequent breach. Any consent by the Department to a delay in the Municipality's performance of any obligation shall apply only to the particular transaction to which the consent to delay relates, and it shall not be applicable to any other obligation or transaction under this Agreement.

(15) In the event that any one or more of the provisions of this Agreement shall be determined to be void or unenforceable by a court of competent jurisdiction, or by law, such determination will not render this Agreement invalid or unenforceable and the remaining provisions hereof shall remain in full force and effect.

(16) Nothing contained herein shall be construed so as to create rights in any third party.

(17) This Agreement will take effect upon execution by all parties and will remain in effect, except as otherwise provided in the Agreement, and can be amended by agreement of the parties.

(18) This Agreement may be executed in counterparts.

(19) If any provision of this Agreement or the application thereof to any person or circumstances is found to be invalid, the remainder of the provisions of this Agreement and the application of such provision to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

(20) This Agreement shall be interpreted in accordance with the laws of the State of New Jersey.

(21) Once any portion of the Project is complete, the Municipality is responsible for all future routine operation, maintenance and associated costs of the Project between jointly performed beach renourishment. The Municipality is not required to independently perform Project renourishment. In

order to perform certain beach and dune maintenance activities, the Municipality must have a valid beach and dune maintenance permit issued from the Department's Division of Land Resource Protection. Future non-routine maintenance of the Project shall be addressed in further detail by a future State Aid Agreement signed by the parties.

(22) The Municipality agrees to comply with all CDBG-DR requirements and procedures as set forth in Appendix F. Failure to comply with said requirements and procedures will impact the Municipality's eligibility for real estate acquisition reimbursement.

(23) All parties understand and agree that the intent of this Project is to provide shoreline stabilization and storm damage reduction along the Atlantic Ocean in the City of North Wildwood. This Project has been designed by the U.S. Army Corps of Engineers and reviewed and approved by the Department and the Municipality. Due to natural forces and/or changing conditions, there is no guarantee that the beachfill will persist or maintain its engineering integrity and effectiveness post construction.

PROJECT# - 6040-NW-I


IN WITNESS WHEREOF, the Municipality and the Department have hereunto set their respective names on the day and year first above written.

**CITY OF NORTH WILDWOOD**

ATTESTED:

BY 

Patrick T. Rosenello  
Mayor  
City of North Wildwood




W. Scott Jett  
Municipal Clerk  
City of North Wildwood




PROJECT# - 6040-NW-I

STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
WATERSHED AND LAND MANAGEMENT  
DIVISION OF RESILIENCE ENGINEERING & CONSTRUCTION  
OFFICE OF COASTAL ENGINEERING

ATTESTED:

BY   
\_\_\_\_\_  
William T. Dixon  
Assistant Director  
Office of Coastal Engineering

APPROVED:

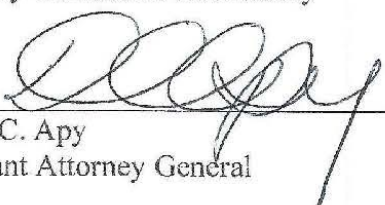
BY   
\_\_\_\_\_  
Dennis Reinknecht  
Director  
Division of Resilience Engineering & Construction

AUTHORIZED:

BY   
\_\_\_\_\_  
Vincent Mazzei  
Assistant Commissioner  
Watershed and Land Management

The aforementioned agreement has been reviewed and approved as to form.

Gurbir S. Grewal  
Attorney General of New Jersey

BY   
\_\_\_\_\_  
David C. Apy  
Assistant Attorney General

**APPENDIX A**  
**THE PPA**

PROJECT PARTNERSHIP AGREEMENT  
BETWEEN  
THE DEPARTMENT OF THE ARMY  
AND  
THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
FOR  
THE HEREFORD INLET TO CAPE MAY INLET, NEW JERSEY  
HURRICANE AND STORM DAMAGE REDUCTION PROJECT

THIS AGREEMENT is entered into this 17<sup>th</sup> day of Jan, 2017, by and between the Department of the Army (hereinafter the "Government"), represented by the U.S. Army Engineer, Philadelphia District (hereinafter the "District Engineer") and the New Jersey Department of Environmental Protection (hereinafter the "Non-Federal Sponsor"), represented by the Commissioner.

WITNESSETH, THAT:

WHEREAS, under the Construction heading, Chapter 4, Title X, Division A of the Disaster Relief Appropriations Act of 2013, Public Law 113-2 (127 Stat. 24 – 25) enacted January 29, 2013 (hereinafter "DRAA 13"), certain projects, or elements thereof, under study by the Corps of Engineers for reducing flooding and storm damage risks in areas along the Atlantic Coast within the North Atlantic Division of the Corps that were affected by Hurricane Sandy are authorized for construction pursuant to DRAA 13 to the extent DRAA 13 funds are available;

WHEREAS, the Assistant Secretary of the Army (Civil Works) on February 1, 2016 determined that the Project is technically feasible, economically justified, and environmentally acceptable;

WHEREAS, Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended, (33 U.S.C. 2213) specifies the cost-sharing requirements applicable to the Project;

WHEREAS, pursuant to DRAA 13, the Secretary of the Army is directed to finance the non-Federal cash contribution for certain projects using DRAA 13 funds in accordance with the provisions of Section 103(k) of the Water Resources Development Act of 1986, Public Law 99-662; and the interest rate for such payments shall be determined in accordance with Section 106 of the Water Resources Development Act of 1986;

WHEREAS, the provisions of Section 902 of the Water Resources Development Act of 1986, as amended, do not apply to DRAA 13 funds that will be used for design and construction of the Project;

WHEREAS, this Agreement covers design and initial construction of the Project only, and any periodic renourishment will be subject to additional authorization, applicable cost-sharing, and execution of a subsequent agreement between the Government and Non-Federal Sponsor for such work;

WHEREAS, 33 U.S.C. 701h authorizes the Government to undertake, at the Non-Federal Sponsor's full expense, additional work while the Government is carrying out the Project; and

WHEREAS, the Government and the Non-Federal Sponsor have the full authority and capability to perform in accordance with the terms of this Agreement.

NOW, THEREFORE, the parties agree as follows:

#### ARTICLE I - DEFINITIONS

A. The term "Project" means design and initial construction of the hurricane and storm damage reduction project for Hereford Inlet to Cape May Inlet, New Jersey which provides for a dune and berm extending approximately 4.5 miles from Herford Inlet to Cape May Inlet encompassing the towns of North Wildwood, Wildwood Crest and Lower Township with Project dimensions consisting of a +16-foot North American Vertical Datum 1988 (NAVD 1988) dune, with 25 foot dune crest on a 75 foot berm that is 6.5-foot NAVD 1988 in elevation within North Wildwood, Wildwood, Wildwood Crest and Lower Township, with dune side slopes of 1V:5H and berm side slopes of 1V:30H; and approximately 64 acres of dune grass, 28,000 linear feet of sand fence, 44 extended crossovers, 7 new pedestrian crossovers, 7 extended handicap crossovers, 6 new handicap crossovers, 8 existing vehicle crossover extensions, and 5 new vehicle crossovers, as generally described in the report of the Chief of Engineers for New Jersey Shore Protection, Hereford Inlet and Cape May Inlet, Cape May County, New Jersey dated January 23, 2015, and determined by the Assistant Secretary of the Army (Civil Works) on February 1, 2016 to be technically feasible, economically justified, and environmentally acceptable (hereinafter the "Decision Document").

B. The term "construction costs" means all costs incurred by the Government and Non-Federal Sponsor in accordance with the terms of this Agreement that are directly related to design and construction of the Project and are cost shared. The term includes, but is not necessarily limited to: the Government's preconstruction engineering and design costs; the Government's engineering and design costs during construction; the Non-Federal Sponsor's creditable costs and the Government's costs of investigations to identify the existence and extent of hazardous substances; the costs of historic preservation activities except for data recovery for archaeological remains; the Government's supervision and administration costs; the Government's costs of monitoring; the Government's costs of participation in the Project Coordination Team; the Non-Federal Sponsor's creditable costs for providing real property interests and performing relocations; and the Government's costs of audit. The term does not include

any costs for periodic renourishment; any costs for operation, maintenance, repair, rehabilitation, or replacement; any costs of dispute resolution; any costs for betterments; any costs for additional work; or the Non-Federal Sponsor's cost of negotiating this Agreement.

C. The term "real property interests" means lands, easements, and rights-of-way, including those required for relocations and borrow and dredged material disposal areas. Acquisition of real property interests may require the performance of relocations.

D. The term "relocation" means the provision of a functionally equivalent facility to the owner of a utility, cemetery, highway, railroad, or public facility when such action is required in accordance with applicable legal principles of just compensation. Providing a functionally equivalent facility may include the alteration, lowering, raising, or replacement and attendant demolition of the affected facility or part thereof.

E. The term "functional portion thereof" means a portion of the Project that has been completed and that can function independently, as determined in writing by the "District Engineer", although the remainder of the Project is not yet complete.

F. The term "betterment" means a difference in the construction of an element of the Project that results from the application of standards that the Government determines exceed those that the Government would otherwise apply to the construction of that element.

G. The term "additional work" means items of work related to, but not included in, the Project that the Government will undertake on the Non-Federal Sponsor's behalf while the Government is carrying out the Project, with the Non-Federal Sponsor responsible for all costs and any liabilities associated with such work.

H. The term "payment period" means a period of 30 years beginning upon the date specified in the written notice provided by the District Engineer pursuant to Article VII.B.1.

I. The term "principal amount" means that portion of the non-Federal cash contribution of the construction costs for which payment is deferred pursuant to Article VII.B., plus interest during design and construction determined in accordance with Article VII.B.3.b.

## ARTICLE II - OBLIGATIONS OF THE PARTIES

A. In accordance with Federal laws, regulations, and policies, the Government shall undertake design and construction of the Project using DRAA 13 funds. In the event that there are insufficient DRAA 13 funds to complete design and construction of the Project, such completion shall be subject to Congress providing additional Project authorization and appropriations as well as the Non-Federal Sponsor providing funds required to cover its share of the remaining work.

1. The Non-Federal Sponsor shall contribute 35 percent of the construction costs allocated by the Government to hurricane and storm damage reduction and 100 percent of construction costs allocated by the Government to beach improvements with exclusively private benefits. In accordance with the provisions of Article III and IV, the Non-Federal Sponsor shall provide the real property interests, relocations, and investigations for hazardous substances required for construction, operation, and maintenance of the Project. After considering the estimated amount of credit the Government expects to afford to the Non-Federal Sponsor for such real property interests, relocations, and investigations for hazardous substances, the Government shall determine the estimated cash contributions required for the Non-Federal Sponsor to meet its share of construction costs allocated to hurricane and storm damage reduction. To the extent there are sufficient DRAA 13 funds, the Government, in accordance with the provisions of Article VII.B., shall defer payment of the cash contributions that the Non-Federal Sponsor would have otherwise been required to provide during design and construction of the Project in order to meet its cost share. In addition, in accordance with Article VII.C., the Non-Federal Sponsor shall provide the full amount of the funds required to cover the construction costs allocated to beach improvements with exclusively private benefits.

2. When the District Engineer determines that the construction of the Project, or a functional portion thereof, is complete, the District Engineer shall so notify the Non-Federal Sponsor in writing and the Non-Federal Sponsor shall operate, maintain, repair, rehabilitate, and replace the Project or such functional portion thereof. The Government shall furnish the Non-Federal Sponsor with an Operation, Maintenance, Repair, Rehabilitation, and Replacement Manual (hereinafter the "OMRR&R Manual") and copies of all as-built drawings for the completed work.

B. To the extent practicable and in accordance with Federal laws, regulations, and policies, the Government shall afford the Non-Federal Sponsor the opportunity to review and comment on solicitations for contracts, including relevant plans and specifications, prior to the Government's issuance of such solicitations; proposed contract modifications, including change orders; and contract claims prior to resolution thereof. Ultimately, the contents of solicitations, award of contracts, execution of contract modifications, and resolution of contract claims shall be exclusively within the control of the Government.

C. The Government may include in its solicitation an optional bid item that the contractor shall take out and maintain Comprehensive General Liability Insurance which policy shall name the Non-Federal Sponsor and the participating municipality as additional insured and the policy may not be cancelled, terminated, or modified without 15 calendar days written advance notice to the Government and the Non-Federal Sponsor. The Non-Federal Sponsor shall be responsible for all additional costs associated with this bid item. Moreover, the Government's Contracting Officer may decline to include such insurance requirements in any individual contract for construction of the Project where the requirements may result in a restriction in full and open

competition, as defined by the Federal Acquisition Regulation, or other applicable procurement regulations. Nothing contained in this paragraph shall be construed to affect or limit in any way any rights or obligations of either party under any other provision of this Agreement, including the obligation of the Non-Federal Sponsor to hold and save the Government free from damages as described in Article X.

D. The Government, as it determines necessary, shall undertake the identification, survey, or evaluation of historic properties and other actions associated with historic preservation. All costs incurred by the Government for such work shall be included in construction costs and shared in accordance with the provisions of this Agreement except that in the unlikely event that there are costs associated with data recovery of archaeological remains, such costs shall be borne entirely by the Government; however, for costs allocable to beach improvements with exclusively private benefits, such costs are 100 percent a Non-Federal Sponsor responsibility.

E. At least annually and after storm events, the Non-Federal Sponsor, at no cost to the Government, shall perform surveillance of the Project to determine losses of material and provide results of such surveillance to the Government.

F. Not less than once each year, the Non-Federal Sponsor shall inform affected interests of the extent of risk reduction afforded by the Project.

G. The Non-Federal Sponsor shall participate in and comply with applicable Federal floodplain management and flood insurance programs.

H. In accordance with Section 402 of the Water Resources Development Act of 1986, as amended (33 U.S.C. 701b-12), the Non-Federal Sponsor shall prepare a floodplain management plan for the Project within one year after the effective date of this Agreement and shall implement such plan not later than one year after completion of construction of the Project. The plan shall be designed to reduce the impacts of future flood and coastal events in the project area, including but not limited to, addressing those measures to be undertaken by non-Federal interests to preserve the level of flood and storm damage risk reduction provided by such work. The Non-Federal Sponsor shall provide an information copy of the plan to the Government.

I. The Non-Federal Sponsor shall publicize floodplain information in the area concerned and shall provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with the Project.

J. The Non-Federal Sponsor shall prevent obstructions or encroachments on the Project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) that might reduce the level of protection the Project affords, hinder operation and maintenance of the Project, or interfere with the Project's proper function.

K. For those shores, other than Federal shores, protected pursuant to this Agreement using Federal funds, the Non-Federal Sponsor shall ensure the continued public use of such shores compatible with the authorized purpose of the Project.

L. The Non-Federal Sponsor shall provide and maintain necessary access roads, parking areas, and other associated public use facilities, open and available to all on equal terms, as described in the Decision Document.

M. The Non-Federal Sponsor shall not use Federal Program funds to meet any of its obligations under this Agreement unless the Federal agency providing the funds verifies in writing that the funds are authorized to be used for the Project. Federal program funds are those funds provided by a Federal agency plus any non-Federal contribution required as a matching share therefor.

N. Except as provided in Article V, the Non-Federal Sponsor shall not be entitled to any credit or reimbursement for costs it incurs in performing its responsibilities under this Agreement.

O. In carrying out its obligations under this Agreement, the Non-Federal Sponsor shall comply with all the requirements of applicable Federal laws and implementing regulations, including, but not limited to: Title VI of the Civil Rights Act of 1964 (P.L. 88-352), as amended (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto; the Age Discrimination Act of 1975 (42 U.S.C. 6102); and the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Army Regulation 600-7 issued pursuant thereto.

P. The Non-Federal Sponsor may request in writing that the Government perform betterments or additional work on behalf of the Non-Federal Sponsor. Each request shall be subject to review and approval by the Division Engineer for the North Atlantic Division. If the Government agrees to such request, the Non-Federal Sponsor, in accordance with Article VII.C., must provide funds sufficient to cover the costs of such work in advance of the Government performing the work.

### ARTICLE III - REAL PROPERTY INTERESTS, RELOCATIONS, AND COMPLIANCE WITH PUBLIC LAW 91-646, AS AMENDED

A. The Government, after consultation with the Non-Federal Sponsor, shall determine the real property interests needed for construction, operation, and maintenance of the Project and, if applicable, any additional real property interests needed for betterments or additional work. The Government shall provide the Non-Federal Sponsor with general written descriptions, including maps as appropriate, of the real property interests that the Government determines the Non-Federal Sponsor must provide for construction, operation, and maintenance of the Project, and shall provide the Non-Federal Sponsor with a written notice to proceed with acquisition. The Non-Federal Sponsor shall acquire the real property interests and shall provide the Government with



authorization for entry thereto in accordance with the Government's schedule for construction of the Project. The Non-Federal Sponsor shall ensure that real property interests provided for the Project are retained in public ownership for uses compatible with the authorized purposes of the Project.

B. The Government, after consultation with the Non-Federal Sponsor, shall determine the relocations necessary for construction, operation, and maintenance of the Project, and shall provide the Non-Federal Sponsor with general written descriptions, including maps as appropriate, of such relocations and shall provide the Non-Federal Sponsor with a written notice to proceed with such relocations. The Non-Federal Sponsor shall perform or ensure the performance of these relocations in accordance with the Government's construction schedule for the Project.

C. To the maximum extent practicable, not later than 30 calendar days after the Government provides to the Non-Federal Sponsor written descriptions and maps of the real property interests and relocations required for construction, operation, and maintenance of the Project, the Non-Federal Sponsor may request in writing that the Government acquire all or specified portions of such real property interests that are owned by private interests, or perform the necessary relocations. If the Government agrees to such a request, the Non-Federal Sponsor, in accordance with Article VII.C., must provide funds sufficient to cover the costs of the acquisitions or relocations in advance of the Government performing the work. The Government shall acquire the real property interests and perform the relocations, applying Federal laws, policies, and procedures. The Government shall acquire real property interests in the name of the Non-Federal Sponsor except, if acquired by eminent domain, the Government shall convey all of its right, title and interest to the Non-Federal Sponsor by quitclaim deed or deeds. The Non-Federal Sponsor shall accept delivery of such deed or deeds. The Government's providing real property interests or performing relocations on behalf of the Non-Federal Sponsor does not alter the Non-Federal Sponsor's responsibility under Article IV for the costs of any clean up and response related thereto.

D. The Non-Federal Sponsor shall comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 C.F.R. Part 24, in acquiring real property interests for construction, operation, and maintenance of the Project and shall inform all affected persons of applicable benefits, policies, and procedures in connection with said Act. No person shall be displaced from their residence or business due to an exercise of the authority provided by N.J.S.A. App. §§ A:9-51.5-51.7 or N.J.S.A. § 12:3-64 until all relocation benefits and services required to be provided prior to displacement under said Act and Uniform Regulations have been provided.

## ARTICLE IV - HAZARDOUS SUBSTANCES

A. The Non-Federal Sponsor shall be responsible for undertaking any investigations to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (hereinafter "CERCLA") (42 U.S.C. 9601-9675), that may exist in, on, or under real property interests required for construction, operation, and maintenance of the Project. However, for real property interests that the Government determines to be subject to the navigation servitude, only the Government shall perform such investigations unless the District Engineer provides the Non-Federal Sponsor with prior specific written direction, in which case the Non-Federal Sponsor shall perform such investigations in accordance with such written direction.

B. In the event it is discovered that hazardous substances regulated under CERCLA exist in, on, or under any of the required real property interests, the Non-Federal Sponsor and the Government, in addition to providing any other notice required by applicable law, shall provide prompt written notice to each other, and the Non-Federal Sponsor shall not proceed with the acquisition of such real property interests until the parties agree that the Non-Federal Sponsor should proceed.

C. If hazardous substances regulated under CERCLA are found to exist in, on, or under any required real property interests, the parties shall consider any liability that might arise under CERCLA and determine whether to initiate construction, or if already initiated whether to continue construction, suspend construction, or terminate construction.

1. Should the parties initiate or continue construction, the Non-Federal Sponsor shall be responsible, as between the Government and the Non-Federal Sponsor, for the costs of cleanup and response, including the costs of any studies and investigations necessary to determine an appropriate response to the contamination. Such costs shall be paid solely by the Non-Federal Sponsor without reimbursement or credit by the Government.

2. In the event the parties cannot reach agreement on how to proceed or the Non-Federal Sponsor fails to provide any funds necessary to pay for cleanup and response costs or to otherwise discharge the Non-Federal Sponsor's responsibilities under this Article upon direction by the Government, the Government may suspend or terminate construction but may undertake any actions it determines necessary to avoid a release of such hazardous substances.

D. The Non-Federal Sponsor and the Government shall consult with each other in an effort to ensure that responsible parties bear any necessary cleanup and response costs as defined in CERCLA. Any decision made pursuant to this Article shall not relieve any third party from any liability that may arise under CERCLA.

E. As between the Government and the Non-Federal Sponsor, the Non-Federal Sponsor shall be considered the operator of the Project for purposes of CERCLA liability. To the maximum extent practicable, the Non-Federal Sponsor shall operate, maintain, repair, rehabilitate, and replace the Project in a manner that will not cause liability to arise under CERCLA.

#### ARTICLE V - CREDIT FOR REAL PROPERTY INTERESTS, RELOCATIONS, AND INVESTIGATIONS FOR HAZARDOUS SUBSTANCES

A. The Government shall include in construction costs, and credit towards the Non-Federal Sponsor's share of such costs, costs incurred after January 29, 2013 to acquire real property interests from private owners determined by the Government to be required for construction, operation, and maintenance of the Project; to perform relocations for construction, operation, and maintenance of the Project; and to perform any investigation for hazardous substances for construction, operation, and maintenance of the Project.

B. To the maximum extent practicable, no later than 6 months after it provides the Government with authorization for entry a real property interest or pays compensation to the private owner, whichever occurs later, the Non-Federal Sponsor shall provide the Government with documents sufficient to determine the amount of credit to be provided for the real property interest in accordance with paragraphs C.1.a. through C.1.c. of this Article. For incidental costs associated with the acquisition of real property interests, for costs associated with relocations performed by the Non-Federal Sponsor, and for costs associated with investigations for hazardous substances, the Non-Federal Sponsor shall provide the Government with documentation sufficient for the Government to determine the amount of credit to be provided in accordance with paragraphs C.1.d., C.2., and C.3. of this Article no less frequently than on a biannual basis, to the maximum extent practicable. The Government shall provide the Non-Federal Sponsor with a list of the documents and any specific requirements necessary for credit.

C. The Government and the Non-Federal Sponsor agree that the amount of costs eligible for credit that are allocated by the Government to construction costs shall be determined and credited in accordance with the following procedures, requirements, and conditions, as well as additional guidelines to be developed and mutually agreed upon by the Government and the Non-Federal Sponsor. Such costs shall be subject to audit in accordance with Article XII.C. to determine reasonableness, allocability, and allowability of costs.

##### 1. Real Property Interests.

a. General Procedure. The Non-Federal Sponsor shall obtain, for each real property interest acquired from a private owner after January 29, 2013, an appraisal of the fair market value of such interest on the date of acquisition that is prepared by a qualified appraiser who is acceptable to the parties. To the maximum

extent practicable, the appraisal shall meet the data documentation and reporting standards described in the Uniform Appraisal Standards for Federal Land Acquisitions (2000). The appraisal must be prepared in accordance with the applicable rules of just compensation, as specified by the Government. In the case of interests in lands subject to shore erosion, appraisals will determine fair market value considering non-speculative, reasonably calculable benefits that increase the property's value, regardless of whether those benefits are enjoyed to a lesser or greater degree by others in the community.

(1) Except for real property interests acquired through eminent domain proceedings instituted after the effective date of this Agreement, the Non-Federal Sponsor shall submit an appraisal for each real property interest to the Government for review and approval no later than, to the maximum extent practicable, 60 calendar days after the Non-Federal Sponsor provides the Government with an authorization for entry for such interest or concludes the acquisition of the interest through negotiation or eminent domain proceedings, whichever occurs later. If after coordination and consultation with the Government, the Non-Federal Sponsor is unable to provide an appraisal that is acceptable to the Government, the Government shall obtain an appraisal to determine the fair market value of the real property interest for crediting purposes.

(2) The Government shall credit the Non-Federal Sponsor the amount actually paid to the private owner of such real property interests but not to exceed the appraised amount approved by the Government. Except for interests in lands subject to shore erosion, where the amount paid by the Non-Federal Sponsor exceeds the approved appraised amount, the Government, at the request of the Non-Federal Sponsor, shall consider all factors relevant to determining fair market value and, in its sole discretion, after consultation with the Non-Federal Sponsor, may approve in writing an amount greater than the appraised amount for crediting purposes.

b. Eminent Domain Procedure. For real property interests acquired by eminent domain proceedings instituted after the effective date of this Agreement, the Non-Federal Sponsor shall notify the Government in writing of its intent to institute such proceedings and submit the appraisals of the specific real property interests to be acquired for review and approval by the Government.

(1) If the Government provides written approval of the appraisals, the Non-Federal Sponsor shall use the amount set forth in such appraisals as the estimate of just compensation for the purpose of instituting the eminent domain proceeding. Except as provided in paragraph C.1.b.(3) below, fair market value for crediting purposes shall be either the amount of the court award for the real property interests taken or the amount of any stipulated settlement or portion thereof that the Government approves in writing.

(2) If the Government provides written disapproval of the appraisals, the Government and the Non-Federal Sponsor shall consult to promptly resolve the issues that are identified in the Government's written disapproval. In the

event the issues cannot be resolved, the Non-Federal Sponsor may use the amount set forth in its appraisal as the estimate of just compensation for purpose of instituting the eminent domain proceeding. However, fair market value for crediting purposes shall be the amount of the court award for the real property interests taken (or the amount of any stipulated settlement, if applicable), or the amount determined by an appraisal prepared by the Government, whichever is less.

(3) For interests in lands subject to shore erosion acquired by eminent domain proceedings, fair market value for crediting purposes shall be the lesser of the amount of the court award for the real property interests taken (or the amount of any stipulated settlement, if applicable), or the approved appraisal amount, whichever is less.

c. Waiver of Appraisal. Except as required by paragraph C.1.b. of this Article, the Government may waive the requirement for an appraisal pursuant to this paragraph if, in accordance with 49 C.F.R. Section 24.102(2):

(1) the private owner is donating the property to the Non-Federal Sponsor and releases the Non-Federal Sponsor in writing from its obligation to appraise the property, and the Non-Federal Sponsor submits to the Government a copy of the private owner's written release; or

(2) the Non-Federal Sponsor determines that an appraisal is unnecessary because the valuation problem is uncomplicated and the anticipated value of the property proposed for acquisition is estimated at \$10,000 or less, based on a review of available data. When the Non-Federal Sponsor determines that an appraisal is unnecessary, the Non-Federal Sponsor shall prepare the written waiver valuation required by Section 24.102(2) and submit a copy thereof to the Government for approval.

d. Incidental Costs. The Government shall include in construction costs and credit towards the Non-Federal Sponsor's share of such costs, the incidental costs, documented to the satisfaction of the Government, that the Non-Federal Sponsor incurred after January 29, 2013 in acquiring from private owners any real property interests required pursuant to Article III for construction, operation, and maintenance of the Project. Such incidental costs shall include closing and title costs, appraisal costs, survey costs, attorney's fees, plat maps, mapping costs, actual amounts expended for payment of any relocation assistance benefits provided in accordance with Article III.C., and other payments by the Non-Federal Sponsor for items that are generally recognized as compensable, and required to be paid, by applicable state law due to the acquisition of a real property interest pursuant to Article III.

2. Relocations. The Government shall include in construction costs and credit towards the Non-Federal Sponsor's share of such costs, the costs, documented to the satisfaction of the Government, that the Non-Federal Sponsor incurred after January 29, 2013 in the performance of any relocations directly related to construction, operation, and maintenance of the Project.

a. For a relocation other than a highway, the costs shall be only that portion of relocation costs that the Government determines is necessary to provide a functionally equivalent facility, reduced by depreciation, as applicable, and by the salvage value of any removed items.

b. For a relocation of a highway, which is any highway, roadway, street, or way, including any bridge thereof, that is owned by a public entity, the costs shall be only that portion of relocation costs that would be necessary to accomplish the relocation in accordance with the design standard that the State of New Jersey would apply under similar conditions of geography and traffic load, reduced by the salvage value of any removed items.

c. Relocation costs include actual costs of performing the relocation; planning, engineering and design costs; supervision and administration costs; and documented incidental costs associated with performance of the relocation, as determined by the Government. Relocation costs do not include any costs due to betterments, as determined by the Government, nor any additional cost of using new material when suitable used material is available.

d. Any credit afforded under the terms of this Agreement for the costs of relocations for construction, operation, and maintenance of the Project is subject to satisfactory compliance with applicable Federal labor laws covering non-Federal construction, including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (labor standards originally enacted as the Davis-Bacon Act, the Contract Work Hours and Safety Standards Act, and the Copeland Anti-Kickback Act). Notwithstanding any other provision of this Agreement, credit may be withheld, in whole or in part, as a result of the Non-Federal Sponsor's failure to comply with its obligations under these laws.

3. Investigations in accordance with Article IV. The Government shall include in construction costs and credit towards the Non-Federal Sponsor's share of such costs, the costs, documented to the satisfaction of the Government, that the Non-Federal Sponsor incurred after January 29, 2013 in the performance of any investigations for hazardous substances that may exist in, on, or under real property interests directly related to construction, operation, and maintenance of the Project:

D. Notwithstanding any other provision of this Agreement, the Non-Federal Sponsor shall not be entitled to credit for costs incurred by the Non-Federal Sponsor:

1. for real property interests that were previously provided as an item of local cooperation for another Federal project;

2. to provide real property interests (other than those acquired through relocations) that are owned or controlled by other public entities;

3. to provide any additional real property interests, relocations, or investigations in accordance with Article IV.A. that the Government determines are needed for betterments or additional work; or

4. to defend against claims or litigation relating to an exercise of the authority provided by N.J.S.A. App. §§ A:9-51.5-51.7 or N.J.S.A. § 12:3-64, except for costs solely related to the amount of compensation due to private owners for real property interests taken for the Project.

#### ARTICLE VI - PROJECT COORDINATION TEAM

To provide for consistent and effective communication, the parties shall establish a Project Coordination Team to discuss the progress of design and construction and significant issues or actions. The Project Coordination Team shall include the Government's Project Manager and the Non-Federal Sponsor's counterpart and one senior representative each from the Government and Non-Federal Sponsor. The Non-Federal Sponsor's costs for participation on the Project Coordination Team shall be paid solely by the Non-Federal Sponsor without reimbursement or credit by the Government.

#### ARTICLE VII - METHOD OF PAYMENT

A. As of the effective date of this Agreement, the construction costs are projected to be \$21,605,000, with the Government's share of such costs projected to be \$14,043,000, the Non-Federal Sponsor's share of such costs projected to be \$7,562,000, and the Non-Federal Sponsor's deferred payment of funds, excluding interest during design and construction, is projected to be \$6,288,000; the costs for betterments are projected to be \$0; and the costs for additional work are projected to be \$0. These amounts are estimates only that are subject to adjustment by the Government and are not to be construed as the total financial responsibilities of the Government and the Non-Federal Sponsor.

B. Deferred Payment of Cash Contributions for Design and Construction of the Project.

1. Upon determination by the District Engineer that (1) construction of the Project is complete; or (2) construction of the Project is terminated pursuant to Article VIII, the District Engineer shall immediately issue a written notification to the Non-Federal Sponsor specifying which of the above events occurred and the day, month, and year of such occurrence.

2. Immediately after the date of the District Engineer's written notice pursuant to paragraph B.1. of this Article, the Government shall conduct a final accounting of the construction costs. If outstanding relevant claims and appeals or eminent domain proceedings prevent a final accounting of the construction costs from

being conducted in a timely manner, the Government shall conduct an interim accounting and furnish the Non-Federal Sponsor with written notice of the results of such interim accounting. Once all outstanding relevant claims and appeals and eminent domain proceedings are resolved, the Government shall complete the final accounting and furnish the Non-Federal Sponsor with written notice of the results of such final accounting. The interim or final accounting, as applicable, shall determine the construction costs. In addition, for each set of costs, the interim or final accounting, as applicable, shall determine each party's required share thereof, and each party's total contributions thereto as of the date of such accounting. Such final accounting does not limit the Non-Federal Sponsor's responsibility to pay its share of construction costs, including contract claims or any other liability that may become known after the final accounting.

3. The Government shall maintain records of Federal obligations each month during design and construction of the Project, and shall determine for each month a monthly amount equal to the non-Federal share of Federal obligations. Each monthly amount shall be assumed to have taken place at the mid-point of that month. Any non-Federal cash contributions required for preconstruction engineering and design conducted prior to the effective date of this Agreement to meet the non-Federal cost share of construction costs shall be included in the first monthly amount.

a. In the event the Non-Federal Sponsor elects to make a payment during design and construction of the Project or the Government determines at any time that it does not have sufficient funds to allow the Non-Federal Sponsor to defer its cash contributions pursuant to the provisions of paragraph B. of this Article, the Non-Federal Sponsor shall provide such cash payment during design and construction of the Project, as determined by the Government, by delivering a check payable to "FAO, USAED, Philadelphia (E5)" to the District Engineer, or by providing an Electronic Funds Transfer of such required cash contributions in accordance with procedures established by the Government. Interest shall be charged on the amount of each Federal obligation made in lieu of the non-Federal cash contribution for the period between the month of the applicable Federal obligation and the month of the payment by the Non-Federal Sponsor. In computing the interest charges applied to the amount of each Federal obligation, the Government shall use an interest rate determined by the Secretary of the Treasury, taking into consideration the average market yields on outstanding marketable obligations of the United States with remaining periods of maturity equal to the length of time in months between the month of that Federal obligation and the month of that payment by the Non-Federal Sponsor, plus a premium of one-eighth of one percentage point for transaction costs.

b. During the design and construction of the Project, the Government shall charge interest on each monthly amount that is not paid in accordance with paragraph B.3.a. of this Article. The interest rate shall be determined in accordance with paragraph B.5. of this Article. Interest shall be compounded annually on each anniversary of that monthly amount until the date of the District Engineer's written notice pursuant to paragraph B.1. of this Article. In the event that such notice is less than twelve months after the month of that monthly amount, or the month of the last such



anniversary, if any, additional interest shall be charged for that number of months, and the additional interest shall be equal to the sum of the monthly amount plus compound interest as of any such previous anniversary, multiplied by the interest rate, multiplied by that number of months, divided by twelve.

c. During design and construction of the Project, the Government shall provide in writing to the Non-Federal Sponsor on a quarterly basis an accounting of all such monthly amounts incurred to date and the estimated interest applied to each monthly amount through that quarter.

4. Not later than 30 calendar days after the date of the District Engineer's written notice pursuant to paragraph B.1. of this Article, the Government shall: (1) complete the final or interim accounting, as applicable, in accordance with paragraph B.2. of this Article; (2) calculate all monthly amounts, the compound interest applied during design and construction of the Project to all monthly amounts, the principal amount, and the annual installments for payment of the principal amount, which shall be substantially equal; and (3) provide the Non-Federal Sponsor with written notification of the results of such accounting and such calculations. To calculate the annual installments, the Government shall amortize the principal amount over the payment period, beginning on the date of date of the District Engineer's written notice pursuant to paragraph B.1. of this Article using the interest rate determined in accordance with paragraph B.5. of this Article. If the determination of the principal amount and annual installments was based on an interim accounting, not later than 30 calendar days after completion of the final accounting, the Government shall: (1) recalculate all monthly amounts, the compound interest applied during design and construction of the Project to all monthly amounts, the principal amount, and the annual installments for payment of the principal amount, which shall be substantially equal; and (2) provide the Non-Federal Sponsor with written notification of the results of such final accounting and such recalculations. Any difference between the principal amount and the recalculated principal amount shall be amortized over the remaining portion of the payment period as of the date of such notification, using the interest rate determined in accordance with paragraph B.5. of this Article.

5. In accordance with Section 106 of WRDA 1986, the interest rate to be used in computing the interest during design and construction of the Project under paragraph B.3.b. of this Article and in calculating or recalculating the annual installments in accordance with paragraph B.4. of this Article shall be determined by the Secretary of the Treasury, taking into consideration the average market yields on outstanding marketable obligations of the United States with remaining periods of maturity comparable to the payment period during the month preceding the Government fiscal year in which the first Federal construction contract for the Project is awarded, plus a premium of one-eighth of one percentage point for transaction costs.

6. Until the end of the payment period, the Government, not later than 30 calendar days prior to each five year anniversary of the date of the District Engineer's written notice pursuant to paragraph B.1. of this Article, shall complete a recalculation of

the annual installments by amortizing the remaining balance of the principal amount over the remaining portion of the payment period and shall provide the Non-Federal Sponsor with such recalculated annual installments. The interest rate to be used in such recalculations shall be determined by the Secretary of the Treasury, taking into consideration the average market yields on outstanding marketable obligations of the United States with remaining periods of maturity comparable to the payment period during the month that represents each five year anniversary of the month preceding the Government fiscal year in which the first Federal construction contract is awarded, plus a premium of one-eighth of one percentage point for transaction costs.

7. The Non-Federal Sponsor shall pay the first annual installment, as determined in accordance with paragraph B.4. of this Article, within 30 calendar days after the date the Government provides written notification to the Non-Federal Sponsor in accordance with paragraph B.4. of this Article, by delivering a check payable to "FAO, USAED, Philadelphia (E5)" to the District Engineer or providing an Electronic Funds Transfer in accordance with procedures established by the Government. Thereafter, until the end of the payment period, the Non-Federal Sponsor shall pay an annual installment, as determined in accordance with paragraph B.4. or paragraph B.6. of this Article, as applicable, on each anniversary of the date of date of the District Engineer's written notice pursuant to paragraph B.1. of this Article, by delivering a check payable to "FAO, USAED, Philadelphia (E5)" to the District Engineer or providing an Electronic Funds Transfer in accordance with procedures established by the Government.

8. Notwithstanding paragraph B.7. of this Article, the Non-Federal Sponsor, in its sole discretion, may prepay the principal amount, in whole or in part, at any time without penalty. In addition, there shall be no additional interest charges on any portion of the principal amount that is prepaid within 30 calendar days after the Government provides written notification to the Non-Federal Sponsor in accordance with paragraph B.4. of this Article. In the event of such prepayment, the Government, not later than 30 calendar days after receipt of the prepayment, shall recalculate the annual installments by amortizing the outstanding portion of the principal amount over the remaining portion of the payment period as of the date of such recalculation, using the interest rate used most recently under paragraph B.4. or paragraph B.6. of this Article, and shall provide written notification to the Non-Federal Sponsor of the recalculated annual installments. The Non-Federal Sponsor shall pay the recalculated annual installments, if any, in accordance with paragraph B.7. of this Article.

9. Not later than 30 calendar days after the payment period has elapsed, the Government shall: (1) conduct an accounting and determine the total payments that the Non-Federal Sponsor has made in accordance with this Agreement; and (2) provide the Non-Federal Sponsor with written notification of the results of such accounting. In the event the non-interest component of total payments is less than the principal amount, the Non-Federal Sponsor, not later than 30 calendar days after receipt of the written notification from the Government, shall provide to the Government the amount of the shortage, by delivering a check payable to "FAO, USAED, Philadelphia (E5)" to the District Engineer or providing an Electronic Funds Transfer in accordance with

procedures established by the Government. In the event the non-interest component of the total payments exceeds the principal amount, the Government shall seek such appropriations as are necessary to refund the amount of the excess to the Non-Federal Sponsor.

10. Any delinquent payment owed by the Non-Federal Sponsor shall be charged interest at a rate, to be determined by the Secretary of the Treasury, equal to 150 per centum of the average bond equivalent rate of the 13 week Treasury bills auctioned immediately prior to the date on which such payment became delinquent, or auctioned immediately prior to the beginning of each additional 3 month period if the period of delinquency exceeds 3 months.

11. Nothing herein shall constitute, nor be deemed to constitute, an obligation of future appropriations by the Congress. Further, nothing in this Agreement shall commit the Government to obligate funds beyond the amount of available appropriations.

C. Payment of Costs for Beach Improvements with Exclusively Private Benefits; and Costs for Real Property Interests, Relocations, Betterments, and Additional Work Provided on Behalf of the Non-Federal Sponsor.

1. No later than 30 calendar days of receiving written notice of the amount of funds required to cover any such costs, as applicable, the Non-Federal Sponsor shall make the full amount of such required funds available to the Government by delivering a check payable to "FAO, USAED, Philadelphia (E5)" to the District Engineer, or by providing an Electronic Funds Transfer of such funds in accordance with procedures established by the Government. If at any time the Government determines that additional funds are required to cover any such costs, as applicable, the Non-Federal Sponsor shall provide those funds within 30 calendar days from receipt of written notice from the Government.

#### ARTICLE VIII - TERMINATION OR SUSPENSION

A. If at any time the Non-Federal Sponsor fails to fulfill its obligations under this Agreement, the Government may suspend or terminate design and construction of the Project unless the Assistant Secretary of the Army (Civil Works) determines that continuation of such work is in the interest of the United States or is necessary in order to satisfy agreements with other non-Federal interests.

B. If the Government determines at any time that the DRAA 13 funds made available for design and construction of the Project are not sufficient to complete such work, the Government shall so notify the Non-Federal Sponsor in writing, and upon exhaustion of such funds, the Government shall suspend design and construction until there are sufficient funds appropriated by the Congress and cash contributions provided by the Non-Federal Sponsor to allow design and construction to resume.

C. If hazardous substances regulated under CERCLA are found to exist in, on, or under any required real property interests, the parties shall follow the procedures set forth in Article IV.

D. In the event of termination, the parties shall conclude their activities relating to design and construction of the Project, as applicable. To provide for this eventuality, the Government may reserve a percentage of available funds as a contingency to pay the costs of termination, including any costs of resolution of real property acquisition, resolution of contract claims, and resolution of contract modifications.

E. Any suspension or termination shall not relieve the parties of liability for any obligation previously incurred. Any delinquent payment owed by the Non-Federal Sponsor pursuant to this Agreement shall be charged interest at a rate, to be determined by the Secretary of the Treasury, equal to 150 per centum of the average bond equivalent rate of the 13 week Treasury bills auctioned immediately prior to the date on which such payment became delinquent, or auctioned immediately prior to the beginning of each additional 3 month period if the period of delinquency exceeds 3 months.

#### ARTICLE IX - OPERATION, MAINTENANCE, REPAIR, REHABILITATION, AND REPLACEMENT

A. The Non-Federal Sponsor, at no cost to the Government, shall operate, maintain, repair, rehabilitate, and replace the Project. The Non-Federal Sponsor shall conduct its operation, maintenance, repair, rehabilitation, and replacement responsibilities in a manner compatible with the authorized purpose of the Project and in accordance with applicable Federal and State laws and specific directions prescribed by the Government in the OMR&R Manual and any subsequent amendments thereto. Nothing in this paragraph is intended to affect eligibility under Public Law 84-99 (33 U.S.C. 701n).

B. The Government may enter, at reasonable times and in a reasonable manner, upon real property interests that the Non-Federal Sponsor now or hereafter owns or controls to inspect the Project, and, if necessary, to undertake any work necessary to the functioning of the Project for its authorized purpose. If the Government determines that the Non-Federal Sponsor is failing to perform its obligations under this Agreement and the Non-Federal Sponsor does not correct such failures within a reasonable time after notification by the Government, the Government may undertake any operation, maintenance, repair, rehabilitation, or replacement of the Project. No operation, maintenance, repair, rehabilitation, or replacement by the Government shall relieve the Non-Federal Sponsor of its obligations under this Agreement or preclude the Government from pursuing any other remedy at law or equity to ensure faithful performance of this Agreement.

#### ARTICLE X - HOLD AND SAVE

The Non-Federal Sponsor shall hold and save the Government free from all damages arising from design, construction, operation, maintenance, repair, rehabilitation, and replacement of the Project, except for damages due to the fault or negligence of the Government or its contractors.

#### ARTICLE XI - DISPUTE RESOLUTION

As a condition precedent to a party bringing any suit for breach of this Agreement, that party must first notify the other parties in writing of the nature of the purported breach and seek in good faith to resolve the dispute through negotiation. If the parties cannot resolve the dispute through negotiation, they may agree to a mutually acceptable method of non-binding alternative dispute resolution with a qualified third party acceptable to the parties. Each party shall pay an equal share of any costs for the services provided by such a third party as such costs are incurred. The existence of a dispute shall not excuse the parties from performance pursuant to this Agreement.

#### ARTICLE XII - MAINTENANCE OF RECORDS AND AUDIT

A. The parties shall develop procedures for maintaining books, records, documents, or other evidence pertaining to Project costs and expenses in accordance with 33 C.F.R. 33.20 for a minimum of three years after the final accounting. To the extent permitted under applicable Federal laws and regulations, the parties shall each allow the other to inspect such books, records, documents, or other evidence.

B. The Non-Federal Sponsor is responsible for complying with the Single Audit Act Amendments of 1996 (31 U.S.C. 7501-7507). To the extent permitted under applicable Federal laws and regulations, the Government shall provide to the Non-Federal Sponsor and independent auditors any information necessary to enable an audit of the Non-Federal Sponsor's activities under this Agreement. The costs of non-Federal audits shall be paid solely by the Non-Federal Sponsor without reimbursement or credit by the Government.

C. Pursuant to 31 U.S.C. 7503, the Government may conduct audits in addition to any audit that the Non-Federal Sponsor is required to conduct under the Single Audit Act Amendments of 1996. The Government's costs of audits for design and construction of the Project shall be included in construction costs.

#### ARTICLE XIII - RELATIONSHIP OF PARTIES

In the exercise of their respective rights and obligations under this Agreement, the Government and the Non-Federal Sponsor each act in an independent capacity, and neither is to be considered the officer, agent, or employee of the other. Neither party

shall provide, without the consent of the other party, any contractor with a release that waives or purports to waive any rights a party may have to seek relief or redress against that contractor.

#### ARTICLE XIV - NOTICES

A. Any notice, request, demand, or other communication required or permitted to be given under this Agreement shall be deemed to have been duly given if in writing and delivered personally or mailed by certified mail, with return receipt, as follows:

If to the Non-Federal Sponsor:

Commissioner  
New Jersey Department of Environmental Protection  
401 E. State St.  
7<sup>th</sup> Floor, East Wing  
P.O. Box 402  
Trenton, New Jersey 08625-0402

If to the Government:

District Engineer  
U.S. Army Engineer District, Philadelphia  
Wanamaker Building  
100 Penn Square East  
Philadelphia, PA 19107-3390

B. A party may change the recipient or address for such communications by giving written notice to the other party in the manner provided in this Article.

#### ARTICLE XV - CONFIDENTIALITY

To the extent permitted by the laws governing each party, the parties agree to maintain the confidentiality of exchanged information when requested to do so by the providing party.

#### ARTICLE XVI - THIRD PARTY RIGHTS, BENEFITS, OR LIABILITIES

Nothing in this Agreement is intended, nor may be construed, to create any rights, confer any benefits, or relieve any liability, of any kind whatsoever in any third person not a party to this Agreement.


ARTICLE XVII - OBLIGATIONS OF FUTURE APPROPRIATIONS

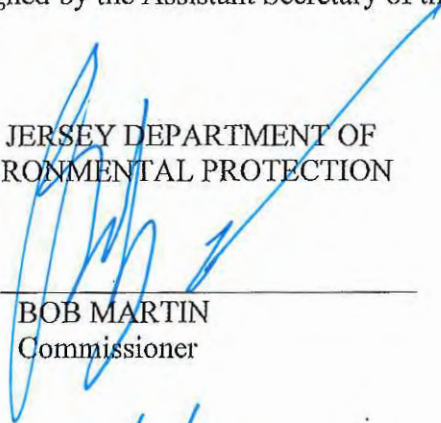
The Non-Federal Sponsor intends to fulfill fully its obligations under this Agreement. Nothing herein shall constitute, nor be deemed to constitute, an obligation of future appropriations by the legislature of the State of New Jersey, where creating such an obligation would be inconsistent with New Jersey Constitution Article 8, Section 2, Paragraphs 2 and 3, N.J.S.A. 59:13-1 et seq., and N.J.S.A. 59:1-1 et seq. of the State of New Jersey.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, which shall become effective upon the date it is signed by the Assistant Secretary of the Army (Civil Works).

DEPARTMENT OF THE ARMY

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:   
MICHAEL A. BLISS  
Lieutenant Colonel, U.S. Army  
District Engineer

BY:   
BOB MARTIN  
Commissioner

DATE: 17 JAN 17

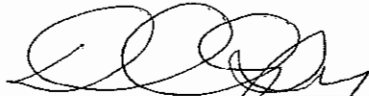
DATE: 1/11/2017

## CERTIFICATE OF AUTHORITY

I, David C. Apy, do hereby certify that I am the principal legal officer of the New Jersey Department of Environmental Protection, that the New Jersey Department of Environmental Protection is a legally constituted public body with full authority and legal capability to perform the terms of the Agreement between the Department of the Army and the New Jersey Department of Environmental Protection in connection with the Hereford Inlet to Cape May Inlet, New Jersey Hurricane and Storm Damage Reduction Project, and to pay damages, if necessary, in the event of the failure to perform in accordance with the terms of this Agreement, as required by Section 221 of Flood Control Act of 1970, Public Law 91-611, as amended (42 U.S.C. Section 1962d-5b), and that the persons who have executed this Agreement on behalf of the New Jersey Department of Environmental Protection have acted within their statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this

10<sup>TH</sup> day of JANUARY 2017.



\_\_\_\_\_  
DAVID C. APY  
Assistant Attorney General



CERTIFICATION REGARDING LOBBYING

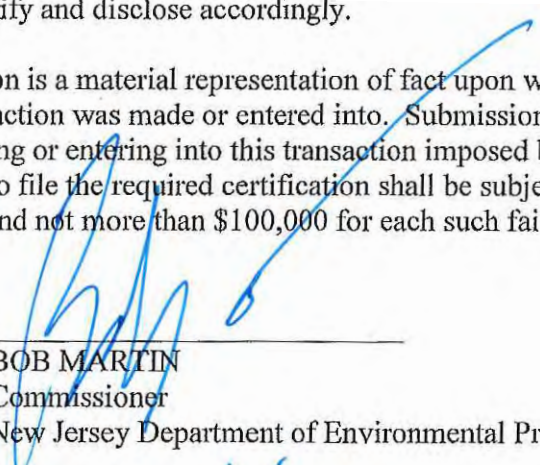
The undersigned certifies, to the best of his or her knowledge and belief that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

  
\_\_\_\_\_  
BOB MARTIN  
Commissioner  
New Jersey Department of Environmental Protection

DATE: 1/4/2017

AMENDMENT NO. 1 TO THE  
PROJECT PARTNERSHIP AGREEMENT  
BETWEEN  
THE DEPARTMENT OF THE ARMY  
AND  
THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
FOR  
THE HEREFORD INLET TO CAPE MAY INLET, NEW JERSEY  
HURRICANE AND STORM DAMAGE REDUCTION PROJECT

THIS AMENDMENT is entered into this 16 day of JAN, 2018, by and between the Department of the Army (hereinafter the "Government"), represented by the U.S. Army Engineer, Philadelphia District (hereinafter the "District Engineer"), and the New Jersey Department of Environmental Protection (hereinafter the "Non-Federal Sponsor"), represented by the Commissioner.

WITNESSETH, THAT:

WHEREAS, on January 17, 2017 the Government and the Non-Federal Sponsor entered into an agreement (hereinafter the "Agreement") for the construction of the Hereford Inlet to Cape May Inlet, New Jersey, Hurricane and Storm Damage Reduction Project (hereinafter the "Project");

WHEREAS, the Agreement contains certain requirements for the eligibility of specific reimbursable or creditable Lands, Easements, Rights-of-Way, Relocations and Disposal Area (LERRD) acquisition costs;

WHEREAS, the Government and the Non-Federal Sponsor desire to modify the Agreement to allow for the reimbursement or crediting of amounts over the approved fair market appraisal value for lands subject to shore erosion, if pre-approved in writing by the Government;

WHEREAS, the Government and the Non-Federal Sponsor desire to modify the Agreement to allow fair market value for crediting and reimbursement purposes to include the amount of a court award for the real property interests taken, where the Non-Federal Sponsor has initiated such eminent domain proceedings with an appraisal approved by the Government in writing.

NOW THEREFORE, the parties agree to amend the Agreement by:

1. Deleting ARTICLE V.C.1.a(2) in its entirety, and replacing it with the following:

“(2) The Government shall credit the Non-Federal Sponsor the amount actually paid to the private owner of such real property interests but not to exceed the appraised amount approved by the Government. Where the amount paid by the Non-Federal Sponsor exceeds the approved appraised amount, the Government, at the request of the Non-Federal Sponsor, shall consider all factors relevant to determining fair market value and, in its sole discretion, after consultation with the Non-Federal Sponsor, may approve in writing an amount greater than the appraised amount for crediting purposes.”

2. Deleting ARTICLE V.C.1.b(3) in its entirety, and replacing it with the following:


“(3) For interests in lands subject to shore erosion acquired by eminent domain proceedings, the Government will credit the amount of the court award or stipulated settlement only to the extent that the court award or stipulated settlement considered non-speculative, reasonably calculable benefits that increase the property’s value, regardless of whether those benefits are enjoyed to a lesser or greater degree by others in the community. If the court award or stipulated settlement did not consider such benefits, fair market value for crediting shall be limited to the amount determined by an approved appraisal considering such benefits.”

2. All other terms and conditions of the Agreement remain unchanged.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the day and year first written above, which shall become effective upon the date it is signed by the District Engineer.

DEPARTMENT OF THE ARMY

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:   
**KRISTEN N. DAHLE**  
Lieutenant Colonel, U.S. Army  
District Engineer

BY:   
**BOB MARTIN**  
Commissioner

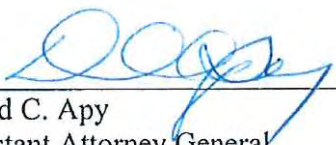
DATE: 16 JAN 2018

DATE: 1/10/2018

CERTIFICATE OF AUTHORITY

I, David Apy, do hereby certify that I am the principal legal officer of the New Jersey Department of Environmental Protection, that the New Jersey Department of Environmental Protection is a legally constituted public body with full authority and legal capability to perform the terms of this Amendment to the Agreement between the Department of the Army and the New Jersey Department of Environmental Protection in connection with the Hereford Inlet to Cape May Inlet, New Jersey, Hurricane and Storm Damage Reduction Project, and to pay damages, if necessary, in the event of the failure to perform in accordance with the terms of this Agreement, as required by Section 221 of Flood Control Act of 1970, Public Law 91-611, as amended (42 U.S.C. Section 1962d-5b), and that the persons who have executed the Amendment to the Agreement on behalf of the New Jersey Department of Environmental Protection have acted within their statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this  
9TH day of JANUARY 2018.

  
\_\_\_\_\_  
David C. Apy  
Assistant Attorney General

**APPENDIX B**  
**CHIEF'S REPORT**



**DEPARTMENT OF THE ARMY**  
CHIEF OF ENGINEERS  
2600 ARMY PENTAGON  
WASHINGTON, DC 20310-2600

DAEN (1105-2-10a)

JAN 23 2015

SUBJECT: New Jersey Shore Protection, Hereford Inlet to Cape May Inlet, New Jersey

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on the study of hurricane and storm damage reduction for coastal communities located between Hereford Inlet and Cape May Inlet, Cape May County, New Jersey. It is accompanied by the report of the district and division engineers. This report is an interim response to a resolution by the Committee on Transportation and Infrastructure of the United States House of Representatives, adopted December 1987 and by the Committee on Environment and Public Works of the United States Senate dated December 1987 and an interim response to PL 113-2, the Disaster Relief Appropriations Act. The resolutions requested the Secretary of the Army to review existing reports of the Chief of Engineers for the entire coast of New Jersey with a view to study, in cooperation with the State of New Jersey, its political subdivisions and agencies and instrumentalities thereof, the changing coastal processes along the coast of New Jersey. Preconstruction engineering and design activities for the Hereford Inlet to Cape May Inlet, New Jersey, project will continue under the study authority cited above. The Corps of Engineers intends to undertake initial construction of the project under the authority of, and using funds provided in, PL 113-2. I am recommending that the Congress authorize periodic nourishment and any initial construction of the project that will not be completed using PL 113-2 funds.

2. The reporting officers recommend authorization of the National Economic Development Plan that consists of a dune and berm construction using sand obtained from an onshore beach borrow source located at the southern end of Five Mile Island (the Wildwoods). The recommended plan extends approximately 4.5 miles from Hereford Inlet to Cape May Inlet and will encompass the towns of North Wildwood, Wildwood, Wildwood Crest and Lower Township. Dimensions of the project are a +16-foot North American Vertical Datum 1988 (NAVD88) dune, with a 25-foot wide dune crest on a 75-foot wide berm that is +6.5-foot NAVD88 in elevation within North Wildwood, Wildwood, Wildwood Crest and Lower Township. Side slopes for the dune will be 1V:5H and slopes for the berm will be 1V:30H. The plan includes approximately 64 acres of dune grass, 28,000 linear feet of sand fence, 44 extended crossovers, seven new pedestrian crossovers, seven extended handicap crossovers, six new handicap crossovers, eight existing vehicle crossover extensions and five new vehicular crossovers. The sand will be pumped from the southern borrow area using mobile back-passing technology to hydraulically pump sand from the Wildwood and Wildwood Crest borrow source to the placement area. Initial construction for the project will remove approximately 1,527,250 cubic yards (cy) of sand from the approved borrow zone, which includes a design quantity of 1,136,000 cy and advanced nourishment of 391,000 cy. Periodic nourishment is included in project design to maintain the integrity of the design beach template over the project period of analysis. Nourishment requirements were

DAEN

SUBJECT: New Jersey Shore Protection, Hereford Inlet to Cape May Inlet, New Jersey

determined by considering losses resulting from diffusion of the design beach fill planform and natural background erosion. Following the initial construction, approximately 391,000 cy of material will be back-passed every four years throughout the 50-year period of analysis for the periodic nourishment of the selected plan. Since the recommended plan would not have any significant adverse effects, no mitigation measures (beyond management practices and avoidance) or compensation measures would be required.

3. The New Jersey Department of Environmental Protection (NJDEP) is the non-federal cost sharing sponsor for all features. Based on a March 2014 price level, the estimated total nourishment cost is \$104,030,000, which includes the project first cost of initial construction of \$21,600,000 and a total of 12 periodic nourishments at a total cost of \$82,430,000. Cost sharing is applied in accordance with the provisions of Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended by Section 215 of WRDA 1999, as follows:

a. Shore protection features are cost-shared at a rate of 65 percent federal and 35 percent non-federal for the initial construction. Thus the federal share of the project first cost is \$14,040,000 and the non-federal share is estimated at \$7,560,000 which includes the costs of land, easements, rights-of-way, relocations, and dredged or excavated material disposal areas (LERRD). LERRD costs are estimated at about \$1,270,000. The non-federal sponsor will receive credit for the costs of LERRD toward the non-federal share.

b. Periodic nourishment will be cost shared 50 percent federal and 50 percent non-federal. It is expected to have costs of \$5,950,000 for year 4 and 8, and \$6,190,000 every four years thereafter, except in year 24, which assumes major nourishment is required at a cost of \$7,920,000. In addition, nourishment activities include monitoring costs estimated to average about \$138,000 over the 50-year period for a total of \$6,900,000.

c. The NJDEP would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, an average annual cost currently estimated at \$150,000 over the 50-year period of analysis.

4. Based on a 3.375-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be \$2,669,000, including monitoring and OMRR&R. All project costs are allocated to the authorized purpose of shoreline protection. The recommended plan has average annual benefits of \$6,252,000. The net national economic development (NED) benefits of the project are \$3,583,000 and the benefit to cost ratio (BCR) is 2.3. In addition to providing protection from coastal storms, the dunes and berm create habitat for bird nesting and coastal plant species. The 64 acres of Cape American Beach Grass has the potential to develop into a more diverse plant community in a stable dune system. This project should benefit the piping plover habitat in the North Wildwood by stabilizing the beaches through regular periodic nourishment and improve the overall quality of the beach habitat.

DAEN

SUBJECT: New Jersey Shore Protection, Hereford Inlet to Cape May Inlet, New Jersey

5. Risk and uncertainty has been explicitly factored into the economic analysis of this project. Chapter 6 of ER 1105-2-100, entitled "Risk Based Analysis for Evaluation of Hydrology/Hydraulics and Economics in Shore Protection Studies" specifies the analysis requirements for shore protection projects, the fundamental requirement being that all shore protection analyses adopt a life cycle approach. A risk and uncertainty analysis that incorporated key economic, hydraulic and sea level change parameters was performed for the feasibility study. This risk and uncertainty plan was peer reviewed by the Jacksonville District of the Army Corps of Engineers and approved by North Atlantic Division. The project is not intended to, nor will it, reduce risk to loss of life during major storm events. Loss of life can only be prevented by residents and visitors following the local evacuation plans that are already in place. These residual risks have been communicated to the NJDEP.

6. In accordance with the Corps of Engineering Circular (EC 1165-2-212) on sea level change, the study performed a sensitivity analysis to look at the effects that different rates of accelerated sea level rise could have on the recommended plan. The plan was formulated using a historical or low rate of sea level rise of 0.013 feet/year. The sensitivity analysis used additional accelerated rates, which includes what the EC defines as intermediate and high rates of 0.023 feet/year and 0.056 feet/year, respectively. The analysis found that the influence of current sea level rise on the project is relatively low as compared to other factors causing erosion (waves, currents, winds and storms). The magnitude of the short-term storm induced erosion during hurricane events have a much greater effect along the New Jersey coastline than those indicated by the natural long term shoreline trends. Adaptive management will be used including monitoring and adding additional volume of sand during periodic nourishments to compensate for significant accelerated sea level rise beyond the current observed rate should it become necessary.

7. In accordance with the Corps of Engineers Circular (EC 1165-2-214) on the review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and rigorous review process to ensure technical quality. This includes a District Quality Control review, an Agency Technical Review (ATR), an Independent External Peer Review (IEPR) (Type 1), and a Corps Headquarters policy and legal review. The IEPR was completed by Battelle Memorial Institute. All comments from the above referenced reviews have been addressed and incorporated into the final documents. Overall, the reviews resulted in improvements to the technical quality of the report.

8. Washington level review indicates that the project recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land related resources implementation studies and complies with other administrative and legislative policies and guidelines. Also, the views of interested parties, including federal, state and local agencies have been considered. During the State and Agency (S&A) review, comments were received from the U.S. Environmental Protection Agency (EPA) and the Department of the Interior (DOI). Other



DAEN

SUBJECT: New Jersey Shore Protection, Hereford Inlet to Cape May Inlet, New Jersey

agencies indicated they either had no comments or provided none. The EPA reiterated a comment on the draft report concerning the potential for erosion at dune cross over locations due to their alignment. The Corps responded that the final report had addressed the concern, and the seaward side of all of the vehicular and pedestrian crossovers would be constructed at an angle to the dune, not perpendicular, in order to enhance dune resiliency. The DOI commented on the consideration given to borrow from the inlet area and the potential listing of the Red Knot as a threatened species under the Endangered Species Act. The Corps responded that the recommended plan has no borrow from the Hereford Inlet. The Corps has been engaged in Endangered Species Act consultation with the U.S. Fish and Wildlife Service (FWS) regarding the red knot, which was listed as a threatened species following receipt of the DOI S&A comments. The district will coordinate any potential impacts related to this coastal project with the FWS and incorporate protection measures into the project plan as the design phase continues.

9. I generally concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the periodic nourishment associated with the project to reduce hurricane and storm damages for Hereford Inlet to Cape May Inlet, New Jersey and any initial construction of the project that will not be completed with PL 113-2 funds be authorized in accordance with the reporting officers' recommended plan, with such modifications as in the discretion of the Chief of Engineers may be advisable. The estimated cost of the project is \$104,030,000, which includes an estimated total cost for periodic nourishment of \$82,430,000 for 12 cycles of periodic nourishment and an estimated total cost of \$21,600,000 for initial construction that would be reduced by any initial construction undertaken using PL 113-2 funds. My recommendation is subject to cost sharing, financing, and other applicable requirements of federal laws and policies, including Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended by Section 215 of WRDA 1999. This recommendation is subject to the non-federal sponsor agreeing to comply with all applicable federal laws and policies, including that it will:

a. Provide a minimum of 35 percent of initial project costs assigned to coastal storm damage reduction, plus 100 percent of initial project costs assigned to protecting undeveloped private lands and other private shores which do not provide public benefits, and 50 percent of periodic nourishment costs assigned to coastal storm damage reduction, plus 100 percent of periodic nourishment costs assigned to protecting undeveloped private lands and other private shores which do provide public benefits, and as further defined below:

1) Provide all lands, easements, and rights-of-way, including suitable borrow areas, and perform or ensure performance of all relocations determined by the federal government to be necessary for the initial construction, periodic nourishment, operation, and maintenance of the project;

2) Provide during construction any additional amounts necessary to make its total contribution equal to 35 percent of initial project costs assigned to hurricane and storm

DAEN

SUBJECT: New Jersey Shore Protection, Hereford Inlet to Cape May Inlet, New Jersey

damage reduction plus 100 percent of initial project costs assigned to protecting undeveloped private lands and other private shores which do not provide public benefits;

b. Operate, maintain, repair, replace, and rehabilitate the completed project, or functional portion of the project, at no cost to the federal government, in a manner compatible with the project's authorized purposes and in accordance with applicable federal and state laws and regulations and any specific directions prescribed by the federal government;

c. Give the federal government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-federal sponsor, now or hereafter, owns or controls for access to the project for the purpose of inspection, and, if necessary, after failure, to perform by the non-federal sponsor, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the project. No completion, operation, maintenance, repair, replacement, or rehabilitation by the federal government shall relieve the non-federal sponsor of responsibility to meet the non-federal sponsor's obligations, or to preclude the federal government from pursuing any other remedy at law or equity to ensure faithful performance;

d. Hold and save the United States free from all damages arising from the initial construction, periodic nourishment, operation, maintenance, repair, replacement, and rehabilitation of the project, except for damages due to the fault or negligence of the United States or its contractors;

e. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended, 42 U.S.C. 9601-9675, that may exist in, on, or under lands, easements, or rights-of-way that the federal government determines to be required for the initial construction, periodic nourishment, operation, and maintenance of the project. However, for lands that the federal government determines to be subject to the navigation servitude, only the federal government shall perform such investigations unless the federal government provides the non-federal sponsor with prior specific written direction, in which case the non-federal sponsor shall perform such investigations in accordance with such written direction;

f. Assume complete financial responsibility, as between the federal government and the non-federal sponsor for all necessary cleanup and response costs of any CERCLA regulated materials located in, on, or under lands, easements, or rights-of-way that the federal government determines to be necessary for the initial construction, periodic nourishment, operation, or maintenance of the project;

DAEN

SUBJECT: New Jersey Shore Protection, Hereford Inlet to Cape May Inlet, New Jersey

g. Agree that the non-federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, replace, and rehabilitate the project in a manner that will not cause liability to arise under CERCLA

h. Participate in and comply with applicable federal floodplain management and flood insurance programs.

i. Not use federal funds to meet the non-federal sponsor's share of total project costs unless the federal granting agency verifies in writing that the use of such funds for the project is authorized;

j. Prevent obstructions of or encroachment on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) which might reduce the level of protection it affords, hinder operation and maintenance or future periodic nourishment, or interfere with its proper function, such as any new developments on project lands or the addition of facilities which would degrade the benefits of the project;

k. Not less than once each year, inform affected interests of the extent of protection afforded by the project;

l. Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in preventing unwise future development in the floodplain, and in adopting such regulations as may be necessary to prevent unwise future development and to ensure compatibility with protection levels provided by the project;

m. For so long as the project remains authorized, ensure continued conditions of public ownership and use of the shore upon which the amount of federal participation is based;

n. Provide and maintain necessary access roads, parking areas, and other public use facilities, open and available to all on equal terms; and

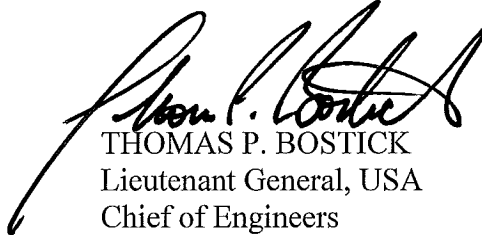
o. At least twice annually and after storm events, perform surveillance of the beach to determine losses of nourishment material from the project design section and provide the results of such surveillance to the federal government.

10. The recommendation contained herein reflects the information available at this time and current departmental policies governing the formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to Congress as a

DAEN

SUBJECT: New Jersey Shore Protection, Hereford Inlet to Cape May Inlet, New Jersey

proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsor, the state, interested federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.



THOMAS P. BOSTICK  
Lieutenant General, USA  
Chief of Engineers

**APPENDIX C**  
**PROJECT 6040-NW-I**  
**HEREFORD INLET TO CAPE MAY INLET, NEW JERSEY**  
**HURRICANE AND STORM DAMAGE REDUCTION PROJECT**  
**CITY OF NORTH WILDWOOD COST SHARING ANALYSIS**

**Hereford Inlet to Cape May Inlet**  
**City of North Wildwood**  
**Beachfill Cost Estimate**  
**Cost Estimate based upon executed PPA**

**ESTIMATED TOTAL INITIAL CONSTRUCTION COST    \$21,600,000.00**

**FEDERAL AND NON-FEDERAL ESTIMATED COST SHARE**

65% Federal Share	\$14,040,000.00
35% Non-Federal Share	\$ 7,560,000.00
Total	<u>\$21,600,000.00</u>

**NON-FEDERAL ESTIMATED COST SHARE**

State of New Jersey Share	\$ 6,560,000.00
<b>City of North Wildwood Share</b>	<b><u>\$ 1,000,000.00</u></b>
Total	<u>\$ 7,560,000.00</u>

**APPENDIX D****PERPETUAL STORM DAMAGE REDUCTION EASEMENTS WILL BE ACQUIRED FOR:**

<b>BLOCK</b>	<b>LOT</b>	<b>DESCRIPTIONS/REMARKS</b>
289.03	1	PUBLIC-OBTAINED
315.02	1	PUBLIC-OBTAINED
316.02	1	PUBLIC-OBTAINED
317.02	1	PUBLIC-OBTAINED
317.02	2	PUBLIC-OBTAINED
317.03	1	PUBLIC-OBTAINED
317.03	1.01	PUBLIC-OBTAINED

**PERPETUAL STORM DAMAGE REDUCTION FOR PIER/STRUCTURE EASEMENTS WILL BE ACQUIRED FOR:**

<b>BLOCK</b>	<b>LOT</b>	<b>DESCRIPTIONS/REMARKS</b>
288.02	1	PRIVATE-NOT OBTAINED
290.01	1	PRIVATE-NOT OBTAINED
291.01	1	PUBLIC-NOT OBTAINED
317.03	1	PUBLIC-NOT OBTAINED

**APPENDIX E**  
**DRAFT PERPETUAL STORM DAMAGE REDUCTION EASEMENT**  
**(SUBJECT TO FURTHER REVISION)**

Prepared by:

---

**DEED OF DEDICATION AND PERPETUAL STORM**  
**DAMAGE REDUCTION EASEMENT**

THIS DEED OF DEDICATION AND PERPETUAL STORM DAMAGE REDUCTION EASEMENT is made this \_\_\_\_ day of \_\_\_\_\_ 2020 BY AND

BETWEEN

whose address is

referred to herein as Grantor,

AND

**THE CITY OF NORTH WILDWOOD**, a Municipal Corporation of the State of New Jersey whose post office address is Municipal Clerk, 901 Atlantic Avenue, North Wildwood, New Jersey 08260, **AND THE STATE OF NEW JERSEY** referred to herein collectively as the Grantees,

**WITNESSETH**

**WHEREAS**, Grantor is the owner of that certain tract of land, located in the City of North Wildwood, County of Cape May, State of New Jersey, and identified as **Block** \_\_\_\_\_, **Lot** \_\_\_\_\_, on the official tax map of the City of North Wildwood, hereinafter the “Property,” and Grantor holds the requisite interest to grant this Deed of Easement; and

**WHEREAS**, the Grantees recognize that the beach at the City of North Wildwood, New Jersey is subject to constant erosion and degradation, thereby destroying a valuable natural resource and threatening the safety and property of the Grantor and of all of the citizens of the State; and,

**WHEREAS**, the Grantees desire to participate with each other and the United States Army Corps of Engineers to construct the Hereford Inlet to Cape May Inlet, New Jersey Hurricane and Storm Damage Reduction Project, as defined in the January 17, 2017 Project Partnership Agreement between the Department of the Army and the State of New Jersey, hereinafter “Project”; and,

**WHEREAS**, construction of the Project includes periodic renourishment, which may be performed solely by the Grantees or in conjunction with the United States Army Corps of Engineers; and,

**WHEREAS**, in order to accomplish part of the Project, Grantees need a Perpetual Storm Damage Reduction Easement on portions of said Property herein described; and,

**WHEREAS**, the United States Army Corps of Engineers and/or State of New Jersey will not participate in the Project unless the Grantees acquire the real property interest herein described in all real property needed for the Project; and,

**WHEREAS**, the City of North Wildwood shall consider this Deed of Easement in establishing the full assessed value of any lands subject to such restrictions; and,

**WHEREAS**, the Grantor desires to cooperate in allowing the Project to take place on a portion of said Property; and,

**WHEREAS**, the Grantor acknowledges that it will benefit from the successful implementation of the Project; and,

**WHEREAS**, the Grantor acknowledges that after successful implementation of the Project the beach and dune are still subject to the forces of nature which can result in both erosion and accretion of the beach and dune; and,

**NOW, THEREFORE**, in consideration for the benefits to be received by the Grantor from the successful implementation of the Project, the Grantor grants and conveys to Grantees an irrevocable, assignable, perpetual and permanent easement as set forth herein:

**GRANT OF EASEMENT:** A perpetual and assignable easement and right-of-way for the Hereford Inlet to Cape May Inlet, New Jersey Hurricane and Storm Damage Reduction Project in, on, over and across that land of the Property described as **Block** \_\_\_\_, **Lot** \_\_\_\_, as shown on the City of North Wildwood official tax maps for the Blocks and Lots listed above for use by the State of New Jersey and the City of North Wildwood, their representatives, agents, contractors and assigns to:

- a. Construct, preserve, patrol, operate, maintain, repair, rehabilitate, and replace a public beach, dune system, and other erosion control and storm damage reduction measures together with appurtenances thereto, including the right to deposit sand, to accomplish any alterations of the contours on said land, to construct berms and dunes, and to nourish and re-nourish periodically;
- b. Move, temporarily store and remove equipment and supplies;
- c. Erect and remove temporary structures;
- d. Perform any other work necessary and incident to the construction, periodic renourishment, and maintenance of the Hereford Inlet to Cape May Inlet, New Jersey Hurricane and Storm Damage Reduction Project together with the right of public use and access;
- e. Post signs, plant vegetation on said dunes and berms;



- f. Erect, maintain, and remove silt screens and snow fences;
- g. Facilitate preservation of dune and vegetation through the limitation of public access to dune areas;
- h. Trim, cut, fell, and remove from said land all trees, underbrush, debris, obstructions, and any other vegetation, structures, and obstacles within the limits of the easement;

The easement reserves to the Grantor, the Grantor's heirs, successors and assigns the right to construct a private dune overwalk structure in accordance with any applicable Federal, State, or local laws or regulations, provided that such structure shall not violate the integrity of the dune in shape, dimension, or function. Prior approval of the plans and specifications for such structures must be obtained from the City of North Wildwood and the State of New Jersey. Such structures are to be considered subordinate to the construction, operation, maintenance, repair, rehabilitation, and replacement of the project. The easement reserves to the Grantor, the Grantor's heirs, successors, and assigns all such rights and privileges as may be used and enjoyed without interfering with or abridging the rights and easements hereby conveyed to the Grantees, subject however to existing easements for utilities and pipelines, existing public highways, existing paved public roads and existing public streets. Grantor hereby expressly agrees not to grade or excavate within the easement area or to place therein any structure or material other than a dune walkover as referenced above without prior approval of the plans and specifications for said activities from the City of North Wildwood, the State of New Jersey and/or any applicable Federal agency, as required.

**Duration of Easement:** The easement granted hereby shall be in perpetuity, and in the event that the City of North Wildwood or the State of New Jersey shall become merged with any other geo-political entity or entities, the easement granted hereby shall run in favor of surviving entities. The covenants, terms, conditions and restrictions of this Deed of Easement shall be binding upon, and inure to the benefit of the parties hereto and their respective personal representatives, heirs, successors and assigns and shall continue as a servitude running in perpetuity with the land.

**Municipality to Maintain Beach:** The City of North Wildwood agrees, consistent with all Federal, State and local statutes and regulations, that at all times it shall use its best, good-faith efforts to cause the beach area abutting Grantor's lands to be maintained, consistent with any applicable Federal, State or local laws or regulations, notwithstanding any action or inaction of the State of New Jersey, Department of Environmental Protection or the United States Army Corps of Engineers to maintain the beach area.

**Character of Property:** Notwithstanding the foregoing, nothing herein is intended or shall be deemed to change the overall character of the Property as private property; nothing herein shall be deemed to grant to the Grantees or otherwise permit the Grantees or any other person to cross over or use any part of the Property which is not within the Easement Area; nothing herein is intended or shall be deemed to alter the boundary lines or setback lines of the Property.

By the acceptance of this Deed of Easement, the City of North Wildwood agrees, to the extent allowed by applicable law, that the Lands burdened by the easement herein described shall not be excluded from the calculation of minimum square footage requirements when construing applications under the Zoning Ordinance of the City of North Wildwood.

**Miscellaneous:**

1. The enforcement of the terms of this Easement shall be at the discretion of the Grantees and any forbearance by Grantees to exercise their rights under this Easement in the event of any violation by Grantor shall not be deemed or construed to be a waiver by Grantees of such term or of any subsequent violation or of any of Grantees' rights under this Easement. No delay or omission by Grantees in the exercise of any right or remedy upon any violation by Grantor shall impair such rights or remedies or be construed as a waiver of such rights or remedies.
2. The interpretation and performance of this Deed of Easement shall be governed by the laws of the State of New Jersey.
3. If any provision of this Deed of Easement or the application thereof to any person or circumstance is found to be invalid, the remainder of the provisions of this Easement or the application of such provision to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby.
4. Any notice, demand, request, consent, approval or communication under this Deed of Easement shall be sent by regular first-class mail, postage prepaid and by Certified Mail, Return Receipt Requested, addressed to the mailing addresses set forth above or any other address of which the relocating party shall notify the other, in writing.
5. The captions in this Deed of Easement have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon its construction or interpretation.
6. Structures not part of the project are not authorized.
7. Grantor represents and warrants he/she/it holds the requisite ownership interest and authority to execute this Deed of Easement; and has made this Deed of Easement for the full and actual consideration as set forth herein.
8. This Deed may be executed in counterparts by the respective Parties, which together will constitute the original Deed.

**IN WITNESS WHEREOF**, with the parties understanding and agreeing to the above, they do hereby place their signatures on the date at the top of the first page.

Accepted by the  
**PROPERTY OWNER, GRANTOR**

Witnessed by:

\_\_\_\_\_  
GRANTOR

\_\_\_\_\_  
NOTARY PUBLIC OF THE  
STATE OF NEW JERSEY

Date \_\_\_\_\_

STATE OF NEW JERSEY  
COUNTY OF \_\_\_\_\_ SS.:

I CERTIFY that on \_\_\_\_\_ 2020,

personally came before me and this person acknowledged under oath, to my satisfaction that this person (or if more than one, each person);

- 1) is named in and personally signed this Deed of Easement; and
- 2) signed, sealed and delivered this Deed of Easement as his or her act and deed.

\_\_\_\_\_  
NOTARY PUBLIC OF THE  
STATE OF NEW JERSEY

Accepted by the  
**CITY OF NORTH WILDWOOD, GRANTEE**

Witnessed by:

BY: \_\_\_\_\_  
Patrick T. Rosenello  
Mayor

\_\_\_\_\_  
NOTARY PUBLIC OF THE  
STATE OF NEW JERSEY

Date \_\_\_\_\_

Accepted by the  
**STATE OF NEW JERSEY, GRANTEE**

Witnessed by:

BY: \_\_\_\_\_  
Dave Rosenblatt  
Assistant Commissioner  
Climate and Flood Resilience

\_\_\_\_\_  
NOTARY PUBLIC OF THE  
STATE OF NEW JERSEY

Date \_\_\_\_\_

Non-Executable Instrument

**APPENDIX E (Cont.)**

**DRAFT PERPETUAL STORM DAMAGE REDUCTION FOR PIER/STRUCTURE  
EASEMENT  
(SUBJECT TO FURTHER REVISION)**

Prepared by:

\_\_\_\_\_

**DEED OF DEDICATION AND PERPETUAL STORM DAMAGE REDUCTION  
FOR PIER/STRUCTURE EASEMENT**

THIS DEED OF DEDICATION AND PERPETUAL STORM DAMAGE REDUCTION FOR  
PIER/STRUCTURE EASEMENT is made this \_\_\_\_ day of \_\_\_\_\_, 2020 BY AND

BETWEEN

whose address is

referred to herein as Grantor,

AND

**THE CITY OF NORTH WILDWOOD**, a Municipal Corporation of the State of New Jersey whose  
post office address is Municipal Clerk, 901 Atlantic Avenue, North Wildwood, New Jersey 08260,  
**AND THE STATE OF NEW JERSEY** referred to herein collectively as the Grantees,

**WITNESSETH**

**WHEREAS**, Grantor is the owner of that certain tract of land, located in the City of North  
Wildwood, County of Cape May, State of New Jersey, and identified as **Block** \_\_\_\_\_, **Lot** \_\_\_\_\_, on  
the official tax map of the City of North Wildwood, hereinafter the "Property,"

**WHEREAS**, Grantor's Property currently includes a pier structure, commonly known as  
\_\_\_\_\_, hereinafter the "Pier"; and

**WHEREAS**, the Grantees recognize that the beach at the City of North Wildwood, New Jersey  
is subject to constant erosion and degradation, thereby destroying a valuable natural resource and  
threatening the safety and property of the Grantor and of all of the citizens of the State; and,

**WHEREAS**, the Grantees desire to participate with each other and the United States Army  
Corps of Engineers to construct the Hereford Inlet to Cape May Inlet, New Jersey Hurricane and Storm

Damage Reduction Project, as defined in the January 17, 2017 Project Partnership Agreement between the Department of the Army and the State of New Jersey, hereinafter “Project”; and,

**WHEREAS**, construction of the Project includes periodic renourishment, which may be performed solely by the Grantees or in conjunction with the United States Army Corps of Engineers; and,

**WHEREAS**, in order to accomplish part of the Project, Grantees need a Perpetual Storm Damage Reduction For Pier/Structure Easement on portions of said Property herein described; and,

**WHEREAS**, the United States Army Corps of Engineers and/or State of New Jersey will not participate in the Project unless the Grantees acquire the real property interest herein described in all real property needed for the Project; and,

**WHEREAS**, the City of North Wildwood shall consider this Deed of Easement in establishing the full assessed value of any lands subject to such restrictions; and,

**WHEREAS**, the Grantor desires to cooperate in allowing the Project to take place on a portion of said Property; and,

**WHEREAS**, with respect to the Pier, it is the intent of the Grantor to grant an easement for the beach area below the Pier and only to an area above the surface of the beach necessary for Grantees to undertake the actions authorized by this Deed of Easement and it is not the intent of Grantor to grant any easement or other rights on, over or above the Pier (the “Pier Easement Area”); and

**WHEREAS**, the Grantor acknowledges that it will benefit from the successful implementation of the Project; and,

**WHEREAS**, the Grantor acknowledges that after successful implementation of the Project the beach and dune are still subject to the forces of nature which can result in both erosion and accretion of the beach and dune; and,

**NOW, THEREFORE**, in consideration for the benefits to be received by the Grantor from the successful implementation of the Project, the Grantor grants and conveys to Grantees an irrevocable, assignable, perpetual and permanent easement as set forth herein:

**GRANT OF EASEMENT:** A perpetual and assignable easement and right-of-way for the Atlantic Coast of New Jersey, Hereford Inlet to Cape May Inlet, New Jersey Hurricane and Storm Damage Reduction Project in, on, over and across that portion of land of the Property known as **Block \_\_, Lot \_\_**, as shown on the City of North Wildwood official tax maps, described on the attached metes and bounds description with plot plan attached hereto as Exhibit A for use by the State of New Jersey, the City of North Wildwood, and the United States Army Corps of Engineers and its contractors, and each of their representatives, agents, contractors and assigns to:

a. Construct, preserve, patrol, operate, maintain, repair, rehabilitate, and replace a public beach, dune system, and other erosion control and storm damage reduction measures together with appurtenances thereto, including the right to deposit sand, to accomplish any alterations of the contours on said land, to construct berms and dunes, and to nourish and re-nourish periodically;

- b. Move, temporarily store and remove equipment and supplies;
- c. Erect and remove temporary structures;
- d. Perform any other work necessary and incident to the construction, periodic renourishment, and maintenance of the Atlantic Coast of New Jersey, Hereford Inlet to Cape May Inlet, New Jersey Hurricane and Storm Damage Reduction Project together with the right of public use and access;
- e. Post signs, plant vegetation on said dunes and berms;
- f. Erect, maintain, and remove silt screens and snow fences;
- g. Facilitate preservation of dune and vegetation through the limitation of access to dune areas;
- h. Trim, cut, fell, and remove from said land all trees, underbrush, debris, obstructions, and any other vegetation, structures, and obstacles within the limits of the easement (except the Pier as more particularly described in the blueprints and documents attached as Exhibit B hereto);

subject however to existing easements for utilities and pipelines, existing public highways, existing paved public roads and existing public streets

The Grantor reserves the right to reconstruct, operate, maintain, repair, and replace the Pier for all land uses including, but not limited to recreation, entertainment and/or commercial uses in accordance with any applicable Federal, State, or local laws or regulations, provided that the Pier shall not violate the integrity of the dune, beach, or other storm damage reduction measures in shape, dimension or function, and that prior written approval of the plans and specifications for any construction, repair or replacement of the Pier that requires grading, excavation or any other activity affecting the dune or beach is obtained from the City of North Wildwood, the State of New Jersey, and the District Engineer, U.S. Army Corps of Engineers, District Philadelphia, which may be conditioned upon such terms, conditions, and requirements as the City of North Wildwood, the State of New Jersey, and the District Engineer, U.S. Army Corps of Engineers, District Philadelphia may determine to be necessary to protect the Atlantic Coast of New Jersey, Hereford Inlet to Cape May Inlet, Hurricane and Storm Damage Reduction Project, including, but not limited to, a requirement to implement impact avoidance, minimization, and mitigation measures to restore the dune, beach, or other storm damage reduction measures to their previous condition.

The Grantor further reserves to the Grantor, the Grantor's heirs, successors and assigns the right to construct a dune overwalk structure in accordance with any applicable Federal, State, or local laws or regulations, provided that such structure shall not violate the integrity of the dune in shape, dimension, or function and that prior approval of the plans and specifications for such structures must be obtained from the City of North Wildwood and the State of New Jersey, and provided further that such structures are to be considered subordinate to the construction, operation, maintenance, repair, rehabilitation, and replacement of the Project. The Grantor further reserves to the Grantor, the Grantor's heirs, successors, and assigns all such rights and privileges as may be used and enjoyed without interfering with or abridging the rights and easements hereby conveyed to the Grantees.

**Duration of Easement:** The easement granted hereby shall be in perpetuity, and in the event that the City of North Wildwood or the State of New Jersey shall become merged with any other geo-political entity or entities, the easement granted hereby shall run in favor of surviving entities. The covenants, terms, conditions and restrictions of this Deed of Easement shall be binding upon, and inure to the benefit of the parties hereto and their respective personal representatives, heirs, successors and assigns and shall continue as a servitude running in perpetuity with the land.

**Municipality to Maintain Beach:** The City of North Wildwood agrees, consistent with all Federal, State and local statutes and regulations, that at all times it shall use its best, good-faith efforts to cause the beach area abutting Grantor's lands to be maintained, consistent with any applicable Federal, State or local laws or regulations, notwithstanding any action or inaction of the State of New Jersey, Department of Environmental Protection or the United States Army Corps of Engineers to maintain the beach area.

**Character of Property:** Notwithstanding the foregoing, nothing herein is intended or shall be deemed to change the overall character of the Property as private property; nothing herein shall be deemed to grant to the Grantees or otherwise permit the Grantees or any other person to cross over or use any part of the Property which is not within the Easement Area; nothing herein is intended or shall be deemed to alter the boundary lines or setback lines of the Property.

By the acceptance of this Deed of Easement, the City of North Wildwood agrees, to the extent allowed by applicable law, that the Lands burdened by the easement herein described shall not be excluded from the calculation of minimum square footage requirements when construing applications under the Zoning Ordinance of the City of North Wildwood.

**Miscellaneous:**

1. The enforcement of the terms of this Easement shall be at the discretion of the Grantees and any forbearance by Grantees to exercise their rights under this Easement in the event of any violation by Grantor shall not be deemed or construed to be a waiver by Grantees of such term or of any subsequent violation or of any of Grantees' rights under this Easement. No delay or omission by Grantees in the exercise of any right or remedy upon any violation by Grantor shall impair such rights or remedies or be construed as a waiver of such rights or remedies.
2. The interpretation and performance of this Deed of Easement shall be governed by the laws of the State of New Jersey.
3. If any provision of this Deed of Easement or the application thereof to any person or circumstance is found to be invalid, the remainder of the provisions of this Easement or the application of such provision to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby.
4. Any notice, demand, request, consent, approval or communication under this Deed of Easement shall be sent by regular first-class mail, postage prepaid and by Certified Mail, Return Receipt Requested, addressed to the mailing addresses set forth above or any other address of which the relocating party shall notify the other, in writing.



5. The captions in this Deed of Easement have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon its construction or interpretation.
6. Structures not part of the Project or permitted under this Deed are not authorized.
7. Grantor represents and warrants he/she/it holds the requisite ownership interest and authority to execute this Deed of Easement; and has made this Deed of Easement for the full and actual consideration as set forth herein.
8. This Deed may be executed in counterparts by the respective Parties, which together will constitute the original Deed.

Non-Executable Easement

**IN WITNESS WHEREOF**, with the parties understanding and agreeing to the above, they do hereby place their signatures on the date at the top of the first page.

Accepted by the  
**PROPERTY OWNER, GRANTOR**

Witnessed by:

\_\_\_\_\_  
GRANTOR

\_\_\_\_\_  
NOTARY PUBLIC OF THE  
STATE OF NEW JERSEY

Date \_\_\_\_\_

STATE OF NEW JERSEY  
COUNTY OF \_\_\_\_\_ SS.:

I CERTIFY that on \_\_\_\_\_ 2020,

personally came before me and this person acknowledged under oath, to my satisfaction that this person (or if more than one, each person);

- 1) is named in and personally signed this Deed of Easement; and
- 2) signed, sealed and delivered this Deed of Easement as his or her act and deed.

\_\_\_\_\_  
NOTARY PUBLIC OF THE  
STATE OF NEW JERSEY

Accepted by the  
**CITY OF NORTH WILDWOOD, GRANTEE**

Witnessed by:

BY: \_\_\_\_\_  
Patrick T. Rosenello  
Mayor

\_\_\_\_\_  
NOTARY PUBLIC OF THE  
STATE OF NEW JERSEY

Date \_\_\_\_\_

Accepted by the  
**STATE OF NEW JERSEY, GRANTEE**

Witnessed by:

BY: \_\_\_\_\_  
Dave Rosenblatt  
Assistant Commissioner  
Climate and Flood Resilience

\_\_\_\_\_  
NOTARY PUBLIC OF THE  
STATE OF NEW JERSEY

Date \_\_\_\_\_

Non-Executable Instrument

## APPENDIX F

### ADDITIONAL FEDERAL FUNDED AGREEMENT PROVISIONS COMMUNITY DEVELOPMENT BLOCK GRANT FUNDED PROJECTS

#### GRANT AGREEMENT BETWEEN CITY OF NORTH WILDWOOD AND THE STATE OF NEW JERSEY BY AND FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### ADDITIONAL FEDERAL FUNDED AGREEMENT PROVISIONS COMMUNITY DEVELOPMENT BLOCK GRANT FUNDED PROJECTS

#### **I. BACKGROUND**

In the aftermath of Superstorm Sandy, the United States Congress, through the Disaster Relief Appropriations Act of 2013, Public Law 113-2, appropriated approximately sixteen billion dollars (\$16,000,000,000) to HUD to be allocated as disaster recovery community development block grants among states, including the State of New Jersey (“State”), to provide crucial funding for recovery efforts (“Program” or “Activity”) involving housing, economic development, infrastructure and the prevention of further damage to affected areas. Through the State’s approved “Community Development Block Grant Disaster Recovery Action Plan” (“Action Plan”) and Action Plan Amendments, it has received a U.S. Department of Housing and Urban Development (“HUD”) Community Development Block Grant (“CDBG” or “CDBG-DR”) for funding Superstorm Sandy (“Sandy”) disaster recovery and other eligible events in calendar years 2011, 2012, and 2013.

The purpose of this Addendum is to set forth requirements and procedures in addition to those stated in the State Aid Agreement between the City of North Wildwood (“Subrecipient”) and the New Jersey Department of Environmental Protection (“Department”) for the Hereford Inlet to Cape May Inlet, New Jersey Hurricane and Storm Damage Reduction Project, hereinafter referred to as the “Project”, supported in part by CDBG-DR funds.

#### **II. ASSURANCES**

Subrecipient and any agents, employees, assigns, contractors, subcontractors or other third parties receiving funds for CDBG-DR Programs under this agreement shall be responsible for complying with all applicable CDBG-DR Program and CDBG regulations, guidelines and standards, including all administration and compliance requirements set forth by this addendum.

Subrecipients shall be responsible for requiring that all of its contractors and subcontractors adhere to all applicable State and Federal laws and regulations, and to conduct all necessary monitoring for such compliance.

Subrecipient agrees to comply with all applicable Federal CDBG-DR, and cross-cutting statutes and regulations, subject to waivers cited in the Federal Register / Vol. 78, No. 43 / Tuesday, March 5, 2013, Department of Housing and Urban Development, [Docket No. FR-5696-N-01] Allocations, Common

Application, Waivers, and Alternative Requirements for Grantees Receiving Community Development Block Grant Disaster Recovery Funds in Response to Hurricane Sandy.

In the occasion that two or more applicable rules, regulations, or procedures related to this agreement, incorporated into or otherwise referenced herein are in conflict with one another, the most proscriptive rule, regulation, or procedure shall apply.

**THE SUBRECIPIENT HEREBY AGREES TO THE FOLLOWING PROVISIONS (AS APPLICABLE):**

**III. GENERAL PROVISIONS**

- A. It shall implement the CDBG-DR Program using the CDBG-DR funds so as to give maximum feasible priority to activities to benefit low and moderate income families in accordance with the HUD-approved Action Plan Action Plan Amendments.
- B. It shall adhere to Section 312 of the Stafford Act and 76 FR 71060 (published November 16, 2011), regarding duplication of benefit requirements applicable to the CDBG-DR Program. Subrecipient shall ensure that no Program component supported by CDBG funds are also receiving financial assistance from any other program or from insurance or any other source for the same purpose. Subrecipient agrees as a condition for funding to repay the funding if it later receives other disaster assistance funding for the same purposes herein.
- C. It shall enforce safeguards to prohibit employees from using positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties, in accordance with CDBG regulations.
- D. It shall abide by and enforce the conflict of interest requirement set forth in 24 CFR 570.611, 24 CFR 85.36 and 24 CFR 84.42 and 24 CFR 570.489. Except for approved eligible administrative and personnel costs, none of Subrecipient's designees, agents, subcontractors, members, Departments, employees, consultants, and no other public official who exercises or who has exercised any functions or responsibilities with respect to the CDBG-funded Program during his or her tenure, or who is in a position to participate in a decision-making process or gain inside information with regard to the Program, has or shall have any interest, direct or indirect, in any contract or subcontract or the proceeds thereof for work performed in connection with the Program or in any Activity, or benefit there from, which is part of this Agreement at any time during or after such person's tenure unless all procedures for an exception have been documented and submitted in writing to the DCA and DCA has approved such exception.
- E. It shall comply with the provisions of the Hatch Act that limit the political activity of employees and HUD regulations governing political activity at 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.
- F. It shall comply with HUD rules prohibiting 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 Subrecipients Receiving CDBG Disaster Recovery Funds in Response (March 5, 2013). Subrecipient shall provide the State and HUD, and any of their representatives or agents, access to and the right to examine all records, books, papers, or documents related to the Grant funds.

- G. It shall comply with the provisions in 24 CFR 570.200(c) regarding special assessments to recover capital costs if imposed.
- H. In addition to the lobbying restrictions set forth in the Agreement, Subrecipient certifies that no federally appointed funds shall be used for lobbying purposes regardless of level of government.
- I. It certifies that it shall provide a drug-free workplace in compliance with the Drug-Free Workplace Act of 1988, as amended and with 2 CFR Part 182 and Part 2429. Further, it will endeavor to ensure that contractors, subcontractors, and any third parties providing CDBG-funded services are in compliance with the Drug-Free Workplace Act of 1988, as amended, and with 4 CFR Part 182 and Part 2429.
- J. It shall comply with the following requirements, subject to waivers cited in the Federal Register/Vol. 78, No. 43/Tuesday, March 5, 2013, Department of Housing and Urban Development, [Docket No. FR-5696-N-01] Allocations, Common Application, Waivers, and Alternative Requirements for Grantees Receiving CDBG Disaster Recovery Funds in Response to Hurricane Sandy. It shall comply with the requirements of Title 24 of the CFR, 570 (the U.S. Housing and Urban Development regulations concerning CDBG).
- K. It shall establish procedures for responding to citizens' complaints regarding activities carried out utilizing these CDBG-DR funds. Citizens will be provided with an appropriate address, phone number, and times during which they may submit such complaints. The State or the Subrecipient, as the case may be, will provide a written response to every citizen complaint within fifteen (15) working days of the complaint.

**SUBRECIPIENT FURTHER CERTIFIES THAT IT WILL COMPLY WITH THE FOLLOWING MANDATORY CONTRACT PROVISIONS:**

**IV. PERSONAL IDENTIFIABLE INFORMATION**

- A. Subrecipient agrees to comply with the Privacy Act of 1974 and HUD rules and regulations related to the protection of personal identifiable information. The Department shall provide and require Subrecipient and all staff, consultants, contractors, and sub-contractors to sign a Non-Disclosure Agreement to protect any personal identifiable information necessary to complete its scope of work. If Subrecipient is procured for the design, development, or operation of a system of records on individuals, it shall do so in compliance with 48 CFR 24.102, et seq.

**V. ENVIRONMENTAL REGULATORY COMPLIANCE**

- A. Subrecipient must comply with the following HUD CDBG-DR environmental regulations at 24 CFR 58, and other federal environmental requirements, included but not limited to:
  1. Executive Order 11990, Protection of Wetlands;
  2. The Coastal Zone Management Act Sections 307(c)(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. It shall comply with Executive Order 12088, as amended by Executive Order 12580, relating to the prevention, control and abatement of water pollution; 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 (50 CFR 402), as amended;
5. The Fish and Wildlife Coordination Act of 1958, as amended;
6. Wild and Scenic Rivers Act of 1968 (Sections 7(b) and (c)), as amended;
7. Executive Order 11738, 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), and 40 CFR 6, 51, 93), which prohibits engaging in, supporting in any way, or providing financial assistance for, licensing or permitting, or approving any activity which does not conform to the State implementation plan for national primary and secondary ambient air quality standards.
9. The Farmland Protection Policy Act, 7 U.S.C.A. §4201 et seq., which requires 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, explosive and flammable operations;
12. Requirements at 24 CFR 58.5(i) relating to toxic chemicals and radioactive materials;
13. Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. §6901, et seq.), and
14. 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.

## **VI. FINANCIAL MANAGEMENT AND PROCUREMENT**

- A. It shall adhere to the principles and standards governing federal grant distribution set forth in OMB Circular A-87 (Cost Principles for State, Local and Indian Tribal Governments) as amended; A-102 (Grants and Cooperative Agreements with State and Local Governments) as amended and made part of State regulations; OMB Circular A-133 (Audits of States, Local Governments, and Non-Profit Organizations) revised; OMB Circular A-21 (Cost Principals for Educational Institutions); and OMB Circular A-122 (Costs Principles for Non-Profit Organizations).
- B. It shall comply with the uniform administrative procedures set forth in 24 CFR 85 (Administrative Requirements for Grants and Cooperative Agreements to State, Local and Federally Recognized Indian Tribal Governments). Where the New Jersey Local Public Contract Law is more stringent, it shall comply with N.J.S.A. 40A:11 et seq.
- C. It shall comply with the administrative requirements at 24 CFR 85.35 prohibiting 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 subject to 2 CFR Part 2424. Additional policies concerning debarment and suspension are contained at 2 CFR Part 180 and 2 CFR Part 2424. It shall certify that it, and all contractors and subcontractors are

not 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 24 CFR 24 (CDBG funds may not be provided to excluded or disqualified persons) <https://www.sam.gov/portal/public/SAM/>;

- D. It shall comply with all requirements imposed by the State concerning special requirements of law, program requirements, and other administrative requirements; and
- E. It shall comply with 24 CFR Part 570, Part 84 and Part 85 regarding the management and disposition of cash, real and personal property acquired with CDBG-DR funds.
- F. It 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 contactors, subcontractors and third parties). These standards apply from the date CDBG-DR funds are first spent until five years after the closeout of the Program.
  1. It cannot change the use or planned use of any such property (including the beneficiaries of such use) from that for which the acquisition or improvement was made, without first providing citizen review and comment and either:
    - a. The new use meets one of the national objectives (see 24\_CFR 570.482) and is not a building for the general conduct of government;
    - b. The requirements of 24 CFR 570.489(j) are met.
  2. If the change of use does not qualify, Subrecipient may retain or dispose of the property if the CDBG-DR Program is reimbursed for the fair market value of the property, less any portion of the value that is attributable to non-CDBG-DR funds.
  3. Following the reimbursement the property shall no longer be subject to any CDBG-DR requirements.

## **VII. RECORDS AND RECORDS RETENTION**

- A. The [State Agency] shall maintain, and require each Subrecipient maintain, all Program records required by 24 CFR 570.506 for five years following termination or expiration of the Agreement. These records shall include the following as applicable:
  - The executed Agreement;
  - Description, geographic location and budget of each funded Activity;
  - Eligibility and national objective determinations for each Activity;
  - Personnel files;
  - Property management files;
  - HUD monitoring correspondence;
  - Citizen participation compliance documentation;
  - Fair Housing and Equal Opportunity records;
  - Environmental review and regulatory compliance documents;
  - Documentation of compliance with other federal requirements (e.g., Davis-Bacon, Uniform Relocation Act, and Lead-Based Paint); and



- Documentation with other State requirements (e.g. the provisions at N.J.S.A. 52:14-34.4 et seq., notice of availability of grant funds).

**B. FINANCIAL RECORDS** to be maintained include:

- Chart of accounts;
- Manual on accounting procedures;
- Accounting journals and ledgers;
- Source documentation (such as purchase orders, invoices, canceled checks);
- Procurement files (such as bids, contracts);
- Status of Subrecipient reimbursements;
- Real property inventory, if applicable;
- Bank account records (including revolving loan fund records, if applicable);
- Draw down requests;
- Payroll records and reports including timesheets or timecards as applicable;
- Financial reports;
- Audit files; and
- Relevant financial correspondence.

**C. ACTIVITY** records should include the following documentation:

- Eligibility of the Activity for Grant Funding;
- Evidence of having met a national objective (See 24 CFR 570.482);
- Grant Funding Agreement entered into between the [State Agency] and the Subrecipient;
- Any bids or contracts;
- Characteristics and locations of the Programs and each Program Activity;
- Compliance with special program requirements, such as coordination and cooperation with the N.J. Department of Health;
- Budget and expenditure information (including draw requests); and
- The status of the Program and each Activity thereunder.

**D. LITIGATION/CLAIMS:** If any litigation, claim, negotiation, audit, monitoring, inspection or other action has been started before the expiration of the required five year record retention period, required by 24 CFR 570.506 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 period, whichever is later.

**VIII. FEDERAL LABOR STANDARDS**

A. It shall administer and enforce the labor standards requirement set forth in 24 CFR 570.603 and any other regulations issued to implement such requirements;

- B. It shall comply with Section 110 of the Housing and Community Development Act of 1974, as amended and as set forth in 24 CFR 570.603 to ensure that all laborers and mechanics employed by c contractors and subcontractors for CDBG-related services are paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Davis-Bacon Act, as amended.;
- C. It shall comply with the Davis-Bacon Act, as amended (40 U.S.C. 3141 et seq.), and described in the Agreement above. The Act does not apply to construction contracts at or below \$2,000 (arbitrarily separating a project into contracts below \$2,000 is not permitted), and it does not apply to rehabilitation of residential structures containing less than eight units;
- D. It shall comply with the Contract Work Hours and Safety Standards Act (40 U.S.C. 327 et seq.), requiring that mechanics and laborers (including watchmen and guards) employed on federally assisted contracts be paid wages of not less than one and one-half times their basic wage rates for all hours worked in excess of forty in a work-week;
- E. It shall comply with the Federal Fair Labor Standards Act (29 U.S.C. 201 et seq.), requiring that covered 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;
- F. It shall comply with the Copeland “Anti-Kickback” Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR 3);
- G. It shall comply with the following HUD regulations and/or guidance:
  - 1. 24 CFR 570.489(1): Debarment and suspension
  - 2. 24 CFR 570.603: Labor standards
  - 3. 24 CFR 570.609: Use of debarred, suspended, or ineligible contractors or counties
  - 4. HUD Handbook 1344.1 Federal Labor Standards Compliance in Housing and Community Development Programs;
- H. It shall comply with the following Department of Labor regulations in parallel with HUD requirements above:
  - 1. 29 CFR 1: Procedures for Predetermination of Wage Rates
  - 2. 29 CFR 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)
  - 3. 29 CFR 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)
  - 4. 29 CFR 6: Rules of Practice for Administrative Proceedings Enforcing Labor Standards In Federal and Federally Assisted Construction Contracts and Federal Service Contracts
  - 5. 29 CFR 7: Practice Before the Administrative Review Board With Regard to Federal and Federally Assisted Construction Contracts.

## **IX. FAIR HOUSING AND NON-DISCRIMINATION**

- A. Any act of unlawful discrimination committed by Subrecipient or failure to comply with the following obligations when applicable shall be grounds for termination of this Agreement or other enforcement action. Subrecipient shall agree to comply with:

1. Title VI of the Civil Rights Act of 1964 and as amended in 1988, 42 U.S.C. §200d et seq., as amended, and the regulations issued pursuant thereto (24 CFR 1), which provide that no person in the United States shall on the grounds or 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.
2. 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.
3. Title II of the Civil Rights Act of 1968 (25 U.S.C. 1301-1303, Indian Civil Rights Act).
4. Architectural Barriers Act of 1968.
5. Title IX of the Education Amendments Act of 1972.
6. Section 504 of the Rehabilitation Act of 1973, as amended, 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 on the basis of age under any program receiving federal funding assistance.
7. Section 508 of the Rehabilitation Act of 1973.
8. 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.
9. Section 104(b)(2) of the Housing Community Development Act of 1974.
10. Age Discrimination Act of 1975.
11. Title II of the Americans with Disabilities Act of 1990.
12. Housing for Older Persons Act of 1995 (“HOPA”).
13. It shall require every building or facility (other than a privately owned residential structure) designed, constructed, or altered with funds provided to it to comply with any accessibility requirements, as required by Title III of the Americans with Disabilities Act of 1990 (42 U.S.C.A. § 12101 et seq.), and shall be responsible for conducting inspections to ensure compliance with these specifications any contractor or subcontractor.
14. It shall take affirmative steps and use its best efforts to afford small and disadvantaged businesses, minority business enterprises, and veteran and women’s business enterprises the maximum practicable opportunity to participate in the performance of this contract. As used in this contract, the terms “small business” means a business that meets the criteria set forth in section 3(a) of the

Small Business Act, as amended (15 U.S.C. 632), and “minority and women’s business enterprise” means a business at least fifty-one (51) percent owned and controlled by minority group members or women. For the purpose of this definition, “minority group members” are Afro-Americans, Spanish-speaking, Spanish surnamed or Spanish-heritage Americans, Asian-Americans, and American Indians. It may rely on written representations by businesses regarding their status as minority and female business enterprises in lieu of an independent investigation.

**X. SECTION 3 REQUIREMENTS**

- A. Subrecipient shall ensure that requirements under Section 3 of the Housing and Urban Development Act of 1968 (HUD Act of 1968) shall apply to all individual properties assisted with these funds, regardless of the actual amount spent on each individual unit/property. Compliance with the provisions of Section 3 of the HUD Act of 1968, as amended, and as implemented by the regulations set forth in 24 CFR 135, and all applicable rules and orders issued hereunder prior to the execution of this contract, shall be a condition of the Federal financial assistance provided under this contract and binding upon the [State Agency], Subrecipient and third-party entities. Subrecipient certifies and agrees that no contractual or other disability exists that would prevent compliance with these requirements. Subrecipient certifies and agree that no contractual or other disability exists that would prevent its compliance with these requirements.
- B. Subrecipient shall ensure compliance with the statutory and regulatory requirements of Section 3 in its own operations, and those of covered contractors or third parties. These responsibilities include:
1. Making efforts to meet the minimum numerical goals found at 24 CFR 135.30;
  2. Complying with the specific responsibilities at 24 CFR 135.32; and
  3. Submitting Annual Summary reports in accordance with 24 CFR 135.90.
- C. If covered contractors and subcontractors receive awards that exceed \$100,000 for the construction and rehabilitation activities listed above, responsibility for Section 3 compliance is shared between the [State Agency] and that firm (or if it is the Subrecipient’s covered contractor, then the Subrecipient and that firm), (with the exception of the submission of the Section 3 Annual report (Form HUD 60002), which must be submitted by the, or the Subrecipient, to DCA).
- D. The following language shall be included in all contracts and subcontracts:**
1. *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.*
  2. *The parties to this contract agree to comply with HUD's regulations in 24 CFR 135, 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 135.*
  3. *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 shall 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.*

4. *The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR 135, 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 135. The contractor shall not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR 135.*
5. *The contractor shall 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 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR 135.*
6. *Noncompliance with HUD's regulations in 24 CFR 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.*
7. *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. 450e) 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).*

## **XI. NONDISCRIMINATION AND FAIR HOUSING**

- A. In delivering programmatic activity supported by CDBG funds, or in contracting with third parties for services supported by CDBG funds, Subrecipient shall comply with the following:
  1. Executive Order 11063: Equal Opportunity in Housing, November 20, 1962, as amended by Executive Order 12259, and the regulations issued pursuant thereto, which pertains to equal opportunity in housing and non-discrimination in the sale or rental of housing built with federal assistance.
  2. Executive Order 11246: EEO and Affirmative Action Guidelines for Federal Contractors Regarding Race, Color, Gender, Religion, and National Origin, September 25, 1965 and Executive Order 11375: Amending Executive Order No. 11246, October 13, 1967, which provide that no person shall be discriminated against on the basis of race, color, religion, sex, or national origin in all phases of employment during the performance of federal or federally assisted construction contracts. Further contractors and subcontractors on federal and federally assisted construction contracts shall take affirmative action to insure fair treatment in 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.
  3. Executive Order 12086: Consolidation of contract compliance functions for equal employment opportunity, October 5, 1978.
  4. Executive Order 12892: Leadership and Coordination of Fair Housing in Federal Programs: Affirmatively Furthering Fair Housing, January 17, 1994.

5. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994.
6. Executive Order 13166: Improving Access To Services For Persons With Limited English Proficiency, August 11, 2000.
7. Executive Order 13217: Community-Based Alternatives for Individuals with Disabilities, June 19, 2001.
8. Executive Order 13330: Human Service Transportation Coordination, February 24, 2004.
9. And affirms it shall comply with implementing regulations for the above:
  - a. 24 CFR 1: Nondiscrimination in Federally Assisted Programs of HUD.
  - b. 24 CFR 3: Nondiscrimination on the Basis of Sex in Education Programs or Activities receiving Federal Financial Assistance.
  - c. 24 CFR 5.105: Other Federal Requirements.
  - d. 24 CFR 6: Nondiscrimination in Programs, Activities Receiving Assistance under Title I of the Housing and Development Act of 1974.
  - e. 24 CFR 8: Nondiscrimination Based on Handicap in Federally Assisted Programs and Activities of the Department of Housing and Urban Development.
  - f. 24 CFR 50.4(l) and 58.5 (j): Environmental Justice.
  - g. 24 CFR 91.225(a)(1): Affirmatively Furthering Fair Housing.
  - h. 24 CFR 91.325(a)(1): Affirmatively Furthering Fair Housing.
  - i. 24 CFR 91.325(b)(5): Compliance with Anti-discrimination laws.
  - j. 24 CFR 91.520: Performance Reports.
  - k. 24 CFR 100-125: Fair Housing.
  - l. 24 CFR 107: Non-discrimination and Equal Opportunity in Housing Under Executive Order 11063 (State Community Development Block Grant Grantees).
  - m. 24 CFR 121: Collection of Data.
  - n. 24 CFR 135: Economic Opportunities for Low- and Very Low-Income Persons.
  - o. 24 CFR 146: Non-discrimination on the Basis of Age in HUD Programs or Activities Receiving Federal Financial Assistance.
  - p. 24 CFR 570.206(c): Fair Housing Activities.
  - q. 24 CFR 570.487(b): Affirmatively Furthering Fair Housing.
  - r. 24 CFR 570.487(e): Architectural Barriers Act and Americans with Disabilities Act (State Community Development Block Grant Grantees).
  - s. 24 CFR 570.490(a)(b): Recordkeeping requirements.
  - t. 24 CFR 570.491: Performance Reviews and Audits.

- u. 24 CFR 570.495(b): HCDA Section 109 nondiscrimination.
- v. 24 CFR 570.506(g): Fair Housing and equal opportunity records.
- w. 24 CFR 570.601: Affirmatively Further Fair Housing.
- x. 24 CFR 570.608 and Part 35: Lead-Based Paint.
- y. 24 CFR 570.614: Architectural Barriers Act and Americans with Disabilities Act.
- z. 24 CFR 570.904: Equal Opportunity and Fair Housing Review
- aa. 24 CFR 570.912: Nondiscrimination compliance

**APPENDIX G**

**GUIDELINES FOR MANAGING RECREATION ACTIVITIES IN PIPING PLOVER  
BREEDING HABITAT ON THE U.S. ATLANTIC COAST TO AVOID TAKE UNDER  
SECTION 9 OF THE ENDANGERED SPECIES ACT**

Northeast Region, U.S. Fish & Wildlife Service, April 15, 1994

<http://www.fws.gov/northeast/pipingplover/recguide.html>



GUIDELINES FOR MANAGING RECREATIONAL ACTIVITIES  
IN PIPING PLOVER BREEDING HABITAT ON THE U.S. ATLANTIC COAST  
TO AVOID TAKE UNDER SECTION 9 OF THE ENDANGERED SPECIES ACT

Northeast Region, U.S. Fish and Wildlife Service

April 15, 1994

The following information is provided as guidance to beach managers and property owners seeking to avoid potential violations of Section 9 of the Endangered Species Act (16 U.S.C. 1538) and its implementing regulations (50 CFR Part 17) that could occur as the result of recreational activities on beaches used by breeding piping plovers along the Atlantic Coast. These guidelines were developed by the Northeast Region, U.S. Fish and Wildlife Service (Service), with assistance from the U.S. Atlantic Coast Piping Plover Recovery Team. The guidelines are advisory, and failure to implement them does not, of itself, constitute a violation of the law. Rather, they represent the Service's best professional advice to beach managers and landowners regarding the management options that will prevent direct mortality, harm, or harassment of piping plovers and their eggs due to recreational activities.

Some land managers have endangered species protection obligations under Section 7 of the Endangered Species Act (see section I below) or under Executive Orders 11644 and 11989<sup>1</sup> that go beyond adherence to these guidelines. Nothing in this document should be construed as lack of endorsement of additional piping plover protection measures implemented by these land managers or those who are voluntarily undertaking stronger plover protection measures.

This document contains four sections: (I) a brief synopsis of the legal requirements that afford protection to nesting piping plovers; (II) a brief summary of the life history of piping plovers and potential threats due to recreational activities during the breeding cycle; (III) guidelines for protecting piping plovers from recreational activities on Atlantic Coast beaches; and (IV) literature cited.

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<sup>1</sup> Executive Order 11644, Use of Off-Road Vehicles on the Public Lands and Executive Order 11989, Off-Road Vehicles on Public Lands pertain to lands under custody of the Secretaries of Agriculture, Defense, and Interior (except for Indian lands) and certain lands under the custody of the Tennessee Valley Authority.

## I. LEGAL CONSIDERATIONS

Section 9 of the Endangered Species Act (ESA) prohibits any person subject to the jurisdiction of the United States from harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting listed wildlife species. It is also unlawful to attempt such acts, solicit another to commit such acts, or cause such acts to be committed. A "person" is defined in Section 3 to mean "an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States." Regulations implementing the ESA (50 CFR 17.3) further define "harm" to include significant habitat modification or degradation that results in the killing or injury of wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering. "Harass" means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Penalties for violations of Section 9 are provided in Section 11 of the ESA; for threatened species, these penalties include fines of up to \$25,000, imprisonment for not more than six months, or both.

Section 10 of the ESA and related regulations provide for permits that may be granted to authorize acts prohibited under Section 9, for scientific purposes or to enhance the propagation or survival of a listed species. States that have Cooperative Agreements under Section 6 of the ESA, may provide written authorization for take that occurs in the course of implementing conservation programs. For example, State agencies have authorized certain biologists to construct predator exclosures for piping plovers. It is also legal for employees or designated agents of certain Federal or State agencies to take listed species without a permit, if the action is necessary to aid sick, injured, or orphaned animals or to salvage or dispose of a dead specimen.

Section 10 also allows permits to be issued for take that is "incidental to, and not the purpose of, carrying out an otherwise lawful activity" if the Service determines that certain conditions have been met. An applicant for an incidental take permit must prepare a conservation plan that specifies the impacts of the take, steps the applicant will take to minimize and mitigate the impacts, funding that will be available to implement these steps, alternative actions to the take that the applicant considered, and the reasons why such alternatives are not being utilized.

Section 7 of the ESA may be pertinent to beach managers and landowners in situations that have a Federal nexus. Section 7 requires Federal agencies to consult with the Service (or National Marine Fisheries Service for marine species) prior to authorizing, funding, or carrying out activities that may affect listed species. Section 7 also requires that these agencies use their authorities to further the conservation of listed species. Section 7 obligations have caused Federal land management agencies to implement piping plover protection measures that go beyond those required to avoid take, for example by conducting research on threats to piping plovers. Other examples of Federal activities that may affect piping plovers along the Atlantic Coast, thereby triggering Section 7 consultation, include permits for beach nourishment or disposal of dredged material (U.S. Army Corps of Engineers) and funding of beach restoration projects (Federal Emergency Management Authority).

Piping plovers, as well as other migratory birds such as least terns, common terns, American oystercatchers, laughing gulls, herring gulls, and great black-backed gulls, their nests, and eggs are also protected under the Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712). Prohibited acts include pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting such conduct. Violators may be fined up to \$5000 and/or imprisoned for up to six months.

Almost all States within the breeding range of the Atlantic Coast piping plover population list the species as State threatened or endangered (Northeast Nongame Technical Committee 1993). Various laws and regulations may protect State-listed species from take, but the Service has not ascertained the adequacy of the guidelines presented in this document to meet the requirements of any State law.

## II. LIFE HISTORY AND THREATS FROM HUMAN DISTURBANCE

Piping plovers are small, sand-colored shorebirds that nest on sandy, coastal beaches from South Carolina to Newfoundland. Since 1986, the Atlantic Coast population has been protected as a threatened species under provisions of the U.S. Endangered Species Act of 1973 (U.S. Fish and Wildlife Service 1985). The U.S. portion of the population was estimated at 875 pairs in 1993 (U.S. Fish and Wildlife Service 1993). Many characteristics of piping plovers contribute to their susceptibility to take due to human beach activities.

### LIFE HISTORY

Piping plovers begin returning to their Atlantic Coast nesting beaches in mid-March (Coutu et al. 1990, Cross 1990, Goldin 1990, MacIvor 1990, Hake 1993). Males establish and defend territories and court females (Cairns 1982). Eggs may be present on the beach from mid-April through late July. Clutch size is generally four eggs, and the incubation period<sup>2</sup> usually lasts for 27-28 days. Piping plovers fledge only a single brood per season, but may reneest several times if previous nests are lost. Chicks are precocial<sup>3</sup> (Wilcox 1959, Cairns 1982). They may move hundreds of yards from the nest site during their first week of life (see Table 1, Summary of Chick Mobility Data). Chicks remain together with one or both parents until they fledge (are able to fly) at 25 to 35 days of age. Depending on date of hatching, flightless chicks may be present from mid-May until late August, although most fledge by the end of July (Patterson 1988, Goldin 1990, MacIvor 1990, Howard et al. 1993).

Piping plover nests are situated above the high tide line on coastal beaches, sand flats at the ends of sandspits and barrier islands, gently sloping foredunes, blowout areas behind primary dunes, and washover areas cut into or between dunes. They may also nest on areas where suitable dredge material has been deposited. Nest sites are shallow scraped depressions in substrates ranging from fine grained sand to mixtures of sand and pebbles, shells or cobble (Bent 1929, Burger 1987a, Cairns 1982, Patterson 1988, Flemming et al. 1990, MacIvor 1990, Strauss 1990).

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<sup>2</sup> "Incubation" refers to adult birds sitting on eggs, to maintain them at a favorable temperature for embryo development.

<sup>3</sup> "Precocial" birds are mobile and capable of foraging for themselves within several hours of hatching.

Nests are usually found in areas with little or no vegetation although, on occasion, piping plovers will nest under stands of American beachgrass (*Ammophila breviligulata*) or other vegetation (Patterson 1988, Flemming et al. 1990, MacIvor 1990). Plover nests may be very difficult to detect, especially during the 6-7 day egg-laying phase when the birds generally do not incubate (Goldin 1994).

Plover foods consist of invertebrates such as marine worms, fly larvae, beetles, crustaceans or mollusks (Bent 1929, Cairns 1977, Nicholls 1989). Feeding areas include intertidal portions of ocean beaches, washover areas, mudflats, sandflats, wrack lines<sup>4</sup>, and shorelines of coastal ponds, lagoons or salt marshes (Gibbs 1986, Coutu et al. 1990, Hoopes et al. 1992, Loegering 1992, Goldin 1993). Studies have shown that the relative importance of various feeding habitat types may vary by site (Gibbs 1986, Coutu et al. 1990, McConnaughey et al. 1990, Loegering 1992, Goldin 1993, Hoopes 1993) and by stage in the breeding cycle (Cross 1990). Adults and chicks on a given site may use different feeding habitats in varying proportion (Goldin et al. 1990). Feeding activities of chicks may be particularly important to their survival. Cairns (1977) found that piping plover chicks typically tripled their weight during the first two weeks post-hatching; chicks that failed to achieve at least 60% of this weight gain by day 12 were unlikely to survive. During courtship, nesting, and brood rearing, feeding territories are generally contiguous to nesting territories (Cairns 1977), although instances where brood-rearing areas are widely separated from nesting territories are not uncommon (see Table 1). Feeding activities of both adults and chicks may occur during all hours of the day and night (Burger 1993) and at all stages in the tidal cycle (Goldin 1993, Hoopes 1993).

## THREATS FROM NONMOTORIZED BEACH ACTIVITIES

Sandy beaches that provide nesting habitat for piping plovers are also attractive recreational habitats for people and their pets. Nonmotorized recreational activities can be a source of both direct mortality and harassment of piping plovers. Pedestrians on beaches may crush eggs (Burger 1987b, Hill 1988, Shaffer and Laporte 1992, Cape Cod National Seashore 1993, Collazo et al. 1994). Unleashed dogs may chase plovers (McConnaughey et al. 1990), destroy nests

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<sup>4</sup> Wrack is organic material including seaweed, seashells, driftwood and other materials deposited on beaches by tidal action.

(Hoopes et al. 1992), and kill chicks (Cairns and McLaren 1980).

Pedestrians may flush incubating plovers from nests (see Table 2, Summary of Data on Distances at Which Plovers React to Disturbance), exposing eggs to avian predators or causing excessive cooling or heating of eggs. Repeated exposure of shorebird eggs on hot days may cause overheating, killing the embryos (Bergstrom 1991). Excessive cooling may kill embryos or retard their development, delaying hatching dates (Welty 1982). Pedestrians can also displace unfledged chicks (Strauss 1990, Burger 1991, Hoopes et al. 1992, Loegering 1992, Goldin 1993). Fireworks are highly disturbing to piping plovers (Howard et al. 1993). Plovers are particularly intolerant of kites, compared with pedestrians, dogs, and vehicles; biologists believe this may be because plovers perceive kites as potential avian predators (Hoopes et al. 1992).

#### THREATS FROM MOTOR VEHICLES

Unrestricted use of motorized vehicles on beaches is a serious threat to piping plovers and their habitats. Vehicles can crush eggs (Wilcox 1959; Tull 1984; Burger 1987b; Patterson et al. 1991; *United States of America v. Breezy Point Cooperative, Inc.*, U.S. District Court, Eastern District of New York, Civil Action No. CV-90-2542, 1991; Shaffer and Laporte 1992), adults, and chicks. In Massachusetts and New York, biologists documented 14 incidents in which 18 chicks and 2 adults were killed by vehicles between 1989 and 1993 (Melvin et al. 1994). Goldin (1993) compiled records of 34 chick mortalities (30 on the Atlantic Coast and 4 on the Northern Great Plains) due to vehicles. Many biologists that monitor and manage piping plovers believe that many more chicks are killed by vehicles than are found and reported (Melvin et al. 1994). Beaches used by vehicles during nesting and brood-rearing periods generally have fewer breeding plovers than available nesting and feeding habitat can support. In contrast, plover abundance and productivity has increased on beaches where vehicle restrictions during chick-rearing periods have been combined with protection of nests from predators (Goldin 1993; S. Melvin, pers. comm., 1993).

Typical behaviors of piping plover chicks increase their vulnerability to vehicles. Chicks frequently move between the upper berm or foredune and feeding habitats in the wrack line and intertidal zone. These movements place chicks in the paths of vehicles driving along the berm or through the intertidal zone. Chicks stand in, walk, and run along tire ruts, and sometimes have

difficulty crossing deep ruts or climbing out of them (Eddings et al. 1990, Strauss 1990, Howard et al. 1993). Chicks sometimes stand motionless or crouch as vehicles pass by, or do not move quickly enough to get out of the way (Tull 1984, Hoopes et al. 1992, Goldin 1993). Wire fencing placed around nests to deter predators (Rimmer and Deblinger 1990, Melvin et al. 1992) is ineffective in protecting chicks from vehicles because chicks typically leave the nest within a day after hatching and move extensively along the beach to feed (see Table 1).

Vehicles may also significantly degrade piping plover habitat or disrupt normal behavior patterns. They may harm or harass plovers by crushing wrack into the sand and making it unavailable as cover or a foraging substrate, by creating ruts that may trap or impede movements of chicks, and by preventing plovers from using habitat that is otherwise suitable (MacIvor 1990, Strauss 1990, Hoopes et al. 1992, Goldin 1993).

### III. GUIDELINES FOR PROTECTING PIPING PLOVERS FROM RECREATIONAL DISTURBANCE

The Service recommends the following protection measures to prevent direct mortality or harassment of piping plovers, their eggs, and chicks.

#### MANAGEMENT OF NONMOTORIZED RECREATIONAL USES

On beaches where pedestrians, joggers, sun-bathers, picnickers, fishermen, boaters, horseback riders, or other recreational users are present in numbers that could harm or disturb incubating plovers, their eggs, or chicks, areas of at least 50 meter-radius around nests above the high tide line should be delineated with warning signs and symbolic fencing<sup>5</sup>. Only persons engaged in rare species monitoring, management, or research activities should enter posted areas. These areas should remain fenced as long as viable eggs or unfledged chicks are present. Fencing is intended to prevent accidental crushing of nests and repeated flushing of incubating adults, and to provide an area where chicks can rest and seek shelter when large numbers of people are on

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<sup>5</sup> "Symbolic fencing" refers to one or two strands of light-weight string, tied between posts to delineate areas where pedestrians and vehicles should not enter.

the beach.

Available data indicate that a 50 meter buffer distance around nests will be adequate to prevent harassment of the majority of incubating piping plovers. However, fencing around nests should be expanded in cases where the standard 50 meter-radius is inadequate to protect incubating adults or unfledged chicks from harm or disturbance. Data from various sites distributed across the plover's Atlantic Coast range indicates that larger buffers may be needed in some locations (see Table 2). This may include situations where plovers are especially intolerant of human presence, or where a 50 meter-radius area provides insufficient escape cover or alternative foraging opportunities for plover chicks.<sup>6</sup>

In cases where the nest is located less than 50 meters above the high tide line, fencing should be situated at the high tide line, and a qualified biologist should monitor responses of the birds to passersby, documenting his/her observations in clearly recorded field notes. Providing that birds are not exhibiting signs of disturbance, this smaller buffer may be maintained in such cases.

On portions of beaches that receive heavy human use, areas where territorial plovers are observed should be symbolically fenced to prevent disruption of territorial displays and courtship. Since nests can be difficult to locate, especially during egg-laying, this will also prevent accidental crushing of undetected nests. If nests are discovered outside fenced areas, fencing should be extended to create a sufficient buffer to prevent disturbance to incubating adults, eggs, or unfledged chicks.

Pets should be leashed and under control of their owners at all times from April 1 to August 31 on beaches where piping plovers are present or have traditionally nested. Pets should be prohibited on these beaches from April 1 through August 31 if, based on observations and experience, pet owners fail to keep pets leashed and under control.

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<sup>6</sup> For example, on the basis of data from an intensive three year study that showed that plovers on Assateague Island in Maryland flush from nests at greater distances than those elsewhere (Loegering 1992), the Assateague Island National Seashore established 200 meter buffers zones around most nest sites and primary foraging areas (Assateague Island National Seashore 1993). Following a precipitous drop in numbers of nesting plover pairs in Delaware in the late 1980's, that State adopted a Piping Plover Management Plan that provided 100 yard buffers around nests on State park lands and included intertidal areas (Delaware Department of Natural Resources and Environmental Control 1990).



Kite flying should be prohibited within 200 meters of nesting or territorial adult or unfledged juvenile piping plovers between April 1 and August 31. Fireworks should be prohibited on beaches where plovers nest from April 1 until all chicks are fledged. (See the Service's February 4, 1997 [Guidelines for Managing Fireworks in the Vicinity of Piping Plovers and Seabeach Amaranth on the U.S. Atlantic Coast.](#))

## MOTOR VEHICLE MANAGEMENT

The Service recommends the following minimum protection measures to prevent direct mortality or harassment of piping plovers, their eggs, and chicks on beaches where vehicles are permitted. Since restrictions to protect unfledged chicks often impede vehicle access along a barrier spit, a number of management options affecting the timing and size of vehicle closures are presented here. Some of these options are contingent on implementation of intensive plover monitoring and management plans by qualified biologists. It is recommended that landowners seek concurrence with such monitoring plans from either the Service or the State wildlife agency.

### Protection of Nests

All suitable piping plover nesting habitat should be identified by a qualified biologist and delineated with posts and warning signs or symbolic fencing on or before April 1 each year. All vehicular access into or through posted nesting habitat should be prohibited. However, prior to hatching, vehicles may pass by such areas along designated vehicle corridors established along the outside edge of plover nesting habitat. Vehicles may also park outside delineated nesting habitat, if beach width and configuration and tidal conditions allow. Vehicle corridors or parking areas should be moved, constricted, or temporarily closed if territorial, courting, or nesting plovers are disturbed by passing or parked vehicles, or if disturbance is anticipated because of unusual tides or expected increases in vehicle use during weekends, holidays, or special events.

If data from several years of plover monitoring suggests that significantly more habitat is available than the local plover population can occupy, some suitable habitat may be left unposted if the following conditions are met:

1. The Service OR a State wildlife agency that is party to an agreement under Section 6 of the ESA provides written concurrence with a plan that:

A. Estimates the number of pairs likely to nest on the site based on the past monitoring and regional population trends.

AND

B. Delineates the habitat that will be posted or fenced prior to April 1 to assure a high probability that territorial plovers will select protected areas in which to court and nest. Sites where nesting or courting plovers were observed during the last three seasons as well as other habitat deemed most likely to be pioneered by plovers should be included in the posted and/or fenced area.

AND

C. Provides for monitoring of piping plovers on the beach by a qualified biologist(s). Generally, the frequency of monitoring should be not less than twice per week prior to May 1 and not less than three times per week thereafter. Monitoring should occur daily whenever moderate to large numbers of vehicles are on the beach. Monitors should document locations of territorial or courting plovers, nest locations, and observations of any reactions of incubating birds to pedestrian or vehicular disturbance.

AND

2. All unposted sites are posted immediately upon detection of territorial plovers.

### Protection of Chicks

Sections of beaches where unfledged piping plover chicks are present should be temporarily closed to all vehicles not deemed essential. (See the provisions for essential vehicles below.) Areas where vehicles are prohibited should include all dune, beach, and intertidal habitat within the chicks' foraging range, to be determined by either of the following methods:

1. The vehicle free area should extend 1000 meters on each side of a line drawn through the nest site and perpendicular to the long axis of the beach. The resulting 2000 meter-wide area of protected habitat for plover chicks should extend from the ocean-side low water line to the bay-side low water line or to the farthest extent of dune habitat if no bay-side intertidal habitat exists. However, vehicles may be allowed to pass through portions of the protected area that are considered inaccessible to plover chicks because of steep topography, dense vegetation, or other naturally-occurring obstacles.

OR

2. The Service OR a State wildlife agency that is party to an agreement under Section 6 of the ESA provides written concurrence with a plan that:

A. Provides for monitoring of all broods during the chick-rearing phase of the breeding season and specifies the frequency of monitoring.

AND

B. Specifies the minimum size of vehicle-free areas to be established in the vicinity of unfledged broods based on the mobility of broods observed on the site in past years and on the frequency of monitoring. Unless substantial data from past years show that broods on a site stay very close to their nest locations, vehicle-free areas should extend at least 200 meters on each side of the nest site during the first week following hatching. The size and location of the protected area should be adjusted in response to the observed mobility of the brood, but in no case should it be reduced to less than 100 meters on each side of the brood. In some cases, highly mobile broods may require protected areas up to 1000 meters, even where they are intensively monitored. Protected areas should extend from the ocean-side low water line to the bay-side low water line or to the farthest

extent of dune habitat if no bay-side intertidal habitat exists. However, vehicles may be allowed to pass through portions of the protected area that are considered inaccessible to plover chicks because of steep topography, dense vegetation, or other naturally-occurring obstacles. In a few cases, where several years of data documents that piping plovers on a particular site feed in only certain habitat types, the Service or the State wildlife management agency may provide written concurrence that vehicles pose no danger to plovers in other specified habitats on that site.

#### Timing of Vehicle Restrictions in Chick Habitat

Restrictions on use of vehicles in areas where unfledged plover chicks are present should begin on or before the date that hatching begins and continue until chicks have fledged. For purposes of vehicle management, plover chicks are considered fledged at 35 days of age or when observed in sustained flight for at least 15 meters, whichever occurs first.

When piping plover nests are found before the last egg is laid, restrictions on vehicles should begin on the 26th day after the last egg is laid. This assumes an average incubation period of 27 days, and provides a 1 day margin of error.

When plover nests are found after the last egg has been laid, making it impossible to predict hatch date, restrictions on vehicles should begin on a date determined by one of the following scenarios:

1) With intensive monitoring: If the nest is monitored at least twice per day, at dawn and dusk (before 0600 hrs and after 1900 hrs) by a qualified biologist, vehicle use may continue until hatching begins. Nests should be monitored at dawn and dusk to minimize the time that hatching may go undetected if it occurs after dark. Whenever possible, nests should be monitored from a distance with spotting scope or binoculars to minimize disturbance to incubating plovers.

OR

2) Without intensive monitoring: Restrictions should begin on May 15 (the earliest probable hatch date). If the nest is discovered after May 15, then restrictions should start immediately.

If hatching occurs earlier than expected, or chicks are discovered from an unreported nest, restrictions on vehicles should begin immediately.

If ruts are present that are deep enough to restrict movements of plover chicks, then restrictions on vehicles should begin at least 5 days prior to the anticipated hatching date of plover nests. If a plover nest is found with a complete clutch, precluding estimation of hatching date, and deep ruts have been created that could reasonably be expected to impede chick movements, then restrictions on vehicles should begin immediately.

### Essential Vehicles

Because it is impossible to completely eliminate the possibility that a vehicle will accidentally crush an unfledged plover chicks, use of vehicles in the vicinity of broods should be avoided whenever possible. However, the Service recognizes that life-threatening situations on the beach may require emergency vehicle response. Furthermore, some "essential vehicles" may be required to provide for safety of pedestrian recreationists, law enforcement, maintenance of public property, or access to private dwellings not otherwise accessible. On large beaches, maintaining the frequency of plover monitoring required to minimize the size and duration of vehicle closures may necessitate the use of vehicles by plover monitors.

Essential vehicles should only travel on sections of beaches where unfledged plover chicks are present if such travel is absolutely necessary and no other reasonable travel routes are available. All steps should be taken to minimize number of trips by essential vehicles through chick habitat areas. Homeowners should consider other means of access, eg. by foot, water, or shuttle services, during periods when chicks are present.

The following procedures should be followed to minimize the probability that chicks will be crushed by essential (non-emergency) vehicles:

1. Essential vehicles should travel through chick habitat areas only during daylight hours, and should be guided by a qualified monitor who has first determined the location of all unfledged plover chicks.
2. Speed of vehicles should not exceed five miles per hour.
3. Use of open 4-wheel motorized all-terrain vehicles (ATVs) or non-motorized all-terrain bicycles is recommended whenever possible for monitoring and law enforcement because of the improved visibility afforded operators.
4. A log should be maintained by the beach manager of the date, time, vehicle number and operator, and purpose of each trip through areas where unfledged chicks are present. Personnel monitoring plovers should maintain and regularly update a log of the numbers and locations of unfledged plover chicks on each beach. Drivers of essential vehicles should review the log each day to determine the most recent number and location of unfledged chicks.

Essential vehicles should avoid driving on the wrack line, and travel should be infrequent enough to avoid creating deep ruts that could impede chick movements. If essential vehicles are creating ruts that could impede chick movements, use of essential vehicles should be further reduced and, if necessary, restricted to emergency vehicles only.

#### SITE-SPECIFIC MANAGEMENT GUIDANCE

The guidelines provided in this document are based on an extensive review of the scientific literature and are intended to cover the vast majority of situations likely to be encountered on piping plover nesting sites along the U.S. Atlantic Coast. However, the Service recognizes that site-specific conditions may lead to anomalous situations in which departures from this guidance may be safely implemented. The Service recommends that landowners who believe such situations exist on their lands contact either the Service or the State wildlife agency and, if appropriate, arrange for an on-site review. Written documentation of agreements regarding departures from this guidance is recommended.

In some unusual circumstances, Service or State biologists may recognize situations where this guidance provides insufficient protection for piping plovers or their nests. In such a case, the Service or the State wildlife agency may provide written notice to the landowner describing additional measures recommended to prevent take of piping plovers on that site.

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Table 1. Summary of Chick Mobility Data

<u>Source</u>	<u>Location</u>	<u>Data</u>
Patterson 1988 (p.40)	Maryland and Virginia	18 of 38 broods moved to feeding areas more than 100 meters from their nests; 5 broods moved more than 600 meters (distance measured parallel to wrackline).
Cross 1989 (p.23)	Virginia	At three sites, observers relocated broods at mean distances from their nests of 153 m +/-97m (44 observations, 14 broods), 32 m +/-7 m (8 observations, 3 broods), and 492 m +/-281 m (12 observations, 4 broods).
Coatu et al. 1990 (p.12)	North Carolina	Observations of 11 broods averaged 212 m from their nests; 3 broods moved 400-725 m from nest sites.
Strauss 1990 (p.33)	Massachusetts	10 chicks moved more than 200 m during first 5 days post-hatch while 19 chicks moved less than 200 meters during same interval.
Loefering 1992 (p.72)	Maryland	Distances broods moved from nests during first 5 days post-hatch averaged 195 m in Bay habitat (n=10), 141 m in Interior habitat (n=36), and 131 m in Ocean habitat (n=41). By 21 days, average movement in each habitat had, respectively, increased to 850 m (n=1), 464 m (n=10), and 187 m (n=69). One brood moved more than 1000 m from its nest.
Melvin et al. 1994	Massachusetts and New York	In 14 incidents in which 18 chicks were killed by vehicles, chicks were run over $\leq$ 10 m to $\leq$ 900 m from their nests. In 7 of these instances, mortality occurred $\geq$ 200 m from the nest.

Table 2. Summary of Data on Distances at which Piping Plovers React to Disturbance

<u>Source</u>	<u>Location</u>	<u>Data</u>
<u>Flushing of Incubating Birds by Pedestrians</u>		
Flemming et al. 1988 (p.326)	Nova Scotia	Adults usually flushed from the nests at distances <40 m; however, great variation existed and reaction distances as great as 210 m were observed.
Cross 1990 (p.47)	Virginia	Mean flushing distances in each of two years were 47 m (n=181, range = 5 m to 300 m) and 25 m (n=214, range = 2 m to 100 m).
Loefering 1992 (p.61)	Maryland	Flushing distances averaged 78 m (n=43); range was 20 m to 174 m. Recommended use of 225 m disturbance buffers on his site.
Cross and Terwilliger 1993	Virginia	Mean flushing distance for all years on all sites (Virginia plover sites, 1986-91) was 63 m (n=201, SD=31, range = 7 m to 200 m). Differences among years were not significant, but differences among sites were.
Hoopes 1993 (p.72)	Massachusetts	Mean flushing distance for incubating plovers was 24 m (n=31).
<u>Disturbance to Non-incubating Birds</u>		
Hoopes 1993 (p.89)	Massachusetts	Mean response distance (all ages, all behaviors) was 23 m for pedestrian disturbances (range = 10 m to 60 m), 40 m for vehicles (range = 30 m to 70 m), 46 m for dogs/pets (range = 20 m to 100 m), and 85 m for kites (range = 60 m to 120 m).
Goldin 1993b (p.74)	New York	Average flushing distance for adult and juvenile plovers was 18.7 m for pedestrian disturbances (n=585), 19.5 m for joggers (n=185), and 20.4 m for vehicles (n=111). Pedestrians caused chicks to flush at an average distance of 20.7 m (n=175), joggers at 32.3 m (n=37), and vehicles at 19.3 m (n=7). Tolerance of individual birds varied; one chick moved 260 m in direct response to 20 disturbances in 1 hour.

