

**STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF LAND USE REGULATION**

Mail Code 501-02A, P.O. Box 420, Trenton, New Jersey 08625-0420

Telephone: (609) 777-0454 or Fax: (609) 777-3656
www.state.nj.us/dep/landuse



PERMIT

<p>In accordance with the laws and regulations of the State of New Jersey, the Department of Environmental Protection hereby grants this permit to perform the activities described below. This permit is revocable with due cause and is subject to the limitations, terms and conditions listed below and on the attached pages. For the purpose of this document, "permit" means "approval, certification, registration, authorization, waiver, etc." Violation of any term, condition or limitation of this permit is a violation of the implementing rules and may subject the permittee to enforcement action.</p>		<p>Approval Date OCT 26 2012</p>
		<p>Expiration Date OCT 26 2017</p>
<p>Permit Number(s)</p> <p>1500-10-0002.1, CAF120001 WFD120001 WFD120002 CSW120001 FWW120001</p>	<p>Type of Approval(s)</p> <p>CAFRA Individual Permit Waterfront Development In-water and Upland Individual Permits Coastal Wetlands Permit Freshwater Wetlands Individual Permit Water Quality Certificate</p>	<p>Enabling Statute(s)</p> <p>NISA 13:9B FWW NISA 58:16A FHA NISA 13:19 CAFRA NISA 12:5-3 WFD NISA 13:9A COAST WET NISA 58:10A-1 POLLUTION NISA 40:55D-93-99SWM</p>
<p>Permittee:</p> <p>NJDOT 1035 Parkway Avenue P.O. Box 600 Trenton, NJ 08625</p>	<p>Site Location:</p> <p>Project: Route 72 Manahawkin Bay Bridges Municipalities: Stafford & Ship Bottom County: Ocean</p>	
<p>Description of Authorized Activities</p> <ul style="list-style-type: none"> • This permit authorizes the expansion and improvement of the Route 72 bridges over Manahawkin Bay, between Stafford and Ship Bottom, Ocean County. Subject to the conditions contained here in the activities authorized are: The rehabilitation of the 4 existing Route 72 bridge segments, which are from west to east: Hilliard's Thorofare Bridge, Bay Bridge, West Thorofare Bridge, and East Thorofare Bridge. • Construction of a new bridge parallel to the Bay Bridge, including the construction of 16 new piers • Replacement of bulkheads and installation of scour countermeasures • Reconfiguration of Route 72 including the Marsha Drive intersection in Stafford • Construction of traffic and drainage improvements including a stormwater pump station in Ship Bottom • Construction of two bio-retention basins and an extended detention wetland • Construction of 6 public access parking lots • Intelligent Transportation System improvements along Route 72 to the Garden State Parkway <p>This permit also includes a Coastal Wetlands Permit authorizing the permanent loss of 0.17 acres of coastal wetlands and the temporary impact to 0.27 acres of coastal wetlands, and a Freshwater Wetlands Individual Permit authorizing the permanent impact of 0.01 acres of emergent freshwater wetlands and 0.04 acres of State open waters, and the temporary impact of 0.01 acres of freshwater wetlands and 3.05 acres of State open waters.</p>		
<p>Prepared by:</p> <p><i>Becky Mazzei</i> Becky Mazzei</p>	<p>Date</p> <p>10/26/12</p>	<p>Received and/or Recorded by County Clerk</p>
<p>THIS PERMIT IS NOT EFFECTIVE AND NO CONSTRUCTION APPROVED BY THIS PERMIT, OR OTHER REGULATED ACTIVITY, MAY BE UNDERTAKEN UNTIL THE APPLICANT HAS SATISFIED ALL PRE-CONSTRUCTION CONDITIONS AS SET FORTH HEREIN.</p>		
<p align="center">This permit is not valid unless authorizing signature appears on the last page.</p>		

CONDITIONS APPLICABLE TO ALL LAND USE PERMITS:

1. In accordance with the applicable regulations, any person who is aggrieved by this decision or any of the conditions of this approval may request a hearing within 30 days after notice of the decision is published in the DEP Bulletin. This request must include a completed copy of the Administrative Hearing Request Checklist. The DEP Bulletin is available through the Department's website at <http://www.nj.gov/dep/bulletin> and the Checklist is available through Division's website at <http://www.nj.gov/dep/landuse/forms/lurpaahr.pdf>. In addition to your hearing request, you may file a request with the Office of Dispute Resolution to engage in alternative dispute resolution. Please see the website www.nj.gov/dep/odr for more information about this process;
2. The permittee, its contractors and subcontractors shall comply with all conditions of this permit, supporting documents and approved drawings; and
 - i. Plans and specification in the application and conditions imposed by this permit shall remain in full force and effect so long as the proposed development or any portion thereof is in existence, unless modified by the department in writing;
 - ii. If this permit contains a condition that must be satisfied prior to the commencement of construction, the permittee must comply with such condition(s) within the time required by the permit or, if no time specific requirement is imposed, then within seven months of the effective date of the permit, or provide evidence satisfactory to the Department that such condition(s) cannot be satisfied; and
 - iii. Any noncompliance with this permit constitutes a violation, and is grounds for enforcement action, as well as suspension and/or termination of the permit; This approval does not in any way affect the right of the State to seek and collect monetary penalties or to take other enforcement action, should it be determined that a violation has occurred onsite;
3. It shall not be a defense for this permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit;
4. The permittee shall take all reasonable steps to prevent, minimize or correct any adverse impact on the environment resulting from activities conducted pursuant to the permit, or from noncompliance with the permit;
5. The issuance of this permit shall in no way expose the State of New Jersey or the Department to liability for the sufficiency or correctness of the design of any construction, structure or structures. Neither the State nor the Department shall, in any way, be liable for the loss of life or property which may occur by virtue of the activity of development resulting from any permit;
6. The permittee shall immediately inform the Department of any unanticipated adverse effects on the environment not described in the application or in the conditions of this permit. The Department may, upon discovery of such unanticipated adverse effects, and upon the failure of the permittee to submit a report thereon, notify the permittee of its intent to suspend the permit;
7. This permit can be modified, suspended or terminated for cause. The filing of a request to modify an issued permit by the permittee, or a notification of planned changes or anticipated noncompliance does not stay any condition of this permit;
8. This permit does not convey any property rights of any sort, or any exclusive privilege;
9. A copy of the permit and other authorizing documents including all approved plans and drawings shall be maintained at the authorized site at all times and made available to Department representatives or their designated agents immediately upon request.

- i. The permittee shall also furnish to the Department within a reasonable time any information that the Department requests to determine compliance with this permit or to determine whether cause exists for suspension or termination of this permit; and
 - ii. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by the permit;
10. The permittee shall allow an authorized representative of the Department, upon notification under current rule and upon the presentation of credentials, to:
 - i. Enter upon the permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - iii. Inspect at reasonable times any facilities, equipment, practices or operations regulated or required under the permit. Failure to allow reasonable access under this section shall be considered a violation of this chapter and subject the permittee to enforcement action; and
 - iv. Sample or monitor at reasonable times for the purposes of assuring compliance with applicable rules;
11. No change in plans or specifications upon which this permit is issued shall be made except with the prior written permission of the Department;
12. The permittee shall provide reports to the Department as follows:
 - i. Monitoring results shall be reported at the intervals specified elsewhere in this permit;
 - ii. The permittee shall immediately report to the Department by telephone at (877) 927-6337 any noncompliance that may endanger health or the environment. In addition, the permittee shall report all noncompliance to Bureau of Coastal and Land Use Compliance and Enforcement, 401 E. State Street, 4th Floor, P.O. Box 422, Mail Code: 401-04C, Trenton, NJ 08625, in writing within five business days of the time the permittee becomes aware of the noncompliance. The written notice shall include: a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter;
 - iii. Where the permittee becomes aware that it failed to submit any relevant facts in an application, or submitted incorrect information in an application or in any report to the Department, it shall promptly submit such facts or information;
13. Development which requires soil disturbance, the creation of drainage structures, or changes in natural contours shall conduct operations in accordance with the latest revised version of "Standards for Soil Erosion Sediment Control in New Jersey," promulgated by the New Jersey State Soil Conservation Committee, pursuant to the Soil Erosion and Sediment Control Act of 1975, N.J.S.A. 4:24-42 et seq. and N.J.A.C. 2:90-1.3 through 1.14. and must obtain any required approvals from the local Soil Conservation District;
14. If any condition or this permit is determined to be legally unenforceable, modifications and additional conditions may be imposed by the Department as necessary to protect the public interest;
15. This permit is not transferable to any person unless the transfer is approved by the Department;
16. The permittee must obtain any and all other Federal, State and/or local approvals. Authorization to undertake a regulated activity under these rules does not indicate that the activity also meets the requirements of any

other rule, plan or ordinance. It is the applicant's responsibility to obtain all necessary approvals for a proposed project;

17. While the regulated activities are being undertaken, neither the permittee nor its agents shall cause or permit any unreasonable interference with the free flow of a regulated feature by placing or dumping any materials, equipment, debris or structures within or adjacent to the regulated area. Upon completion or abandonment of the work, the permittee and/or its agents shall remove and dispose of in a lawful manner all excess materials, debris, equipment, silt fences and other temporary soil erosion and sediment control devices from all regulated areas. Only clean non-toxic fill shall be used where necessary;
18. All excavated material and dredge material shall be disposed of in a lawful manner. (For example, it shall be placed outside of any flood hazard area, riparian zone, regulated water, freshwater/coastal wetlands and adjacent transition area, and in such a way as to not interfere with the positive drainage of the receiving area);
19. This permit or Verification shall be recorded in its entirety in the office of the County Clerk or the Registrar of Deeds and Mortgages for each county where this project is located. Verified notice of this action shall be forwarded to the Department immediately thereafter.

CONDITIONS APPLICABLE TO SPECIFIC PROJECT:

20. All necessary local, Federal, and other state approvals must be obtained by the applicant prior to the commencement of the herein-permitted activities. Approvals from the following agencies may be required:
 - a. U.S. Army Corps of Engineers
 - b. U.S. Coast Guard
 - c. NJDEP Bureau of Tidelands
21. The NJDEP Bureau of Marine Water Monitoring shall be notified of the start of in-water construction *each year, 45 days prior to its commencement*, so that they can assess the need for shellfish bed closures. (BMWM, P.O. Box 405, Leeds Point, NJ 08220)
22. Vegetation within **50 feet** of the top of bank of Manahawkin Bay, and within **300 feet** of its Category 1 tributaries, shall only be disturbed in the areas specifically shown on the approved drawings. No other riparian zone vegetation shall be disturbed for any reason. This condition applies to all channels onsite regardless of the contributory drainage area.
23. All temporarily disturbed areas of the Manahawkin Bay channel shall be restored to pre-construction conditions. Characteristics that shall be replicated include channel shape, width and meandering, ratio of shallow areas to deep areas, anticipated flow rate and velocity, and substrate type. Additionally, the channel bottom shall be restored to pre-construction elevations to ensure there is no loss of intertidal/subtidal shallows.
24. No raw concrete shall come in contact with the water. All geotextile mattresses and grout conveyances shall be tightly sealed to prevent leakage of grout/concrete. Any grout/concrete that comes in contact with the water must be removed immediately. No pumped water from grout/concrete operations may be discharged directly to the waterway. All pumped water shall be discharged to a holding tank and disposed of properly.
25. No hot work, debris, or construction material may enter any waterway as part of this project. This includes sandblasting material, paint, or epoxy and any concrete work by-products. If welding or burning is to take place, a layer of flame-proof material shall be the uppermost protective containment material.
26. Prior to any site preparation, the permittee shall submit to this Division for review and approval a Conservation/Restriction easement for the Public Access Areas authorized by this permit. Upon written approval from this Division, the permittee shall record this with the Ocean County Clerk (the Registrar of Deeds and Mortgages). Said Restriction shall run with and be binding upon all successive owners. **No fees shall be charged to the public for use of the public access areas authorized by this permit.**

27. Any monuments or survey disks which are disturbed during this project shall not be reset, but shall be returned to the NJ Geological Survey at NJDEP Geological and Water Survey, P. O. Box 420, Mail Code: 29-01, Trenton, NJ 08625-0420, (609) 292-1185.
28. The use of Green Acres encumbered parkland, even temporarily, requires prior Green Acres approval at a minimum. Therefore, should plans change to include any usage (even temporary) of the above listed parcels, the permittee shall contact Green Acres immediately at (609) 984-0500.
29. This permit to conduct a regulated activity in a wetland or open water includes the Division's approval of a Water Quality Certificate for these activities.

T&E Conditions

30. The existing Route 72 Bridges over Manahawkin Bay may provide nesting habitat for the State endangered Peregrine Falcon (*Falco peregrinus*). The permittee shall conduct a pre-construction survey for Peregrine Falcons within the project footprint (i.e., "Route 72 Manahawkin Bay Bridges"). This survey shall be conducted in consultation with the NJDEP Division of Fish and Wildlife Endangered and Nongame Species Program (NJDEP-ENSP) and shall be performed by a qualified biologist. The surveys shall be conducted in the spring of 2013 and consist of: one within mid-to-late March; the second the first two weeks of April, during peak nesting season, and the third one in early May. During each survey, observations should record peregrines in courtship displays, displaying territorial behavior, presence of eggs and/or chicks, etc. In the event that the surveys identify the presence of Peregrine Falcons nesting on any of the bridge structures, the permittee shall develop a plan in consultation with the NJDEP-ENSP to avoid impacts to the species in accordance with the State of New Jersey's Endangered and Nongame Species Conservation Act (N.J.S.A. 23:2A-1) and the Federal Migratory Bird Treaty Act (16 USC 703-712).
31. To minimize impacts to threatened and endangered wading bird species habitat (e.g., black-crowned and yellow-crowned night heron), the permittee shall plant a row of red cedar trees or something comparable along the entire marsh-side length of the parking lot depicted on sheet PP1-10. The plantings will serve as a living screen between human activities within the parking lot and suitable foraging habitat within the marsh, and will achieve compliance with N.J.A.C. 7:7E-3.38.

Seasonal Timing Restriction

32. To protect *winter flounder, river herring, anadromous fisheries, and SAV habitat* within Manahawkin Bay, a timing restriction on in-water construction activities shall apply from **January 1 to June 30** of each year. If coffer dams are constructed prior to the timing restriction, construction within the cofferdams may proceed during the timing restriction. Dewatering of cofferdams must include properly sized temporary sediment basins or other filtering methods to reduce turbidity. The water areas receiving return water discharged from cofferdams must be encompassed by a turbidity barrier. The turbidity barrier must be located parallel to the open water channel and anchored to the shoreline or other fixed feature to maintain free tidal flow.

Air Quality Conditions

33. The permittee shall ensure that all on-road vehicles and non-road construction equipment operated at, or visiting, the project site comply with the 3 minute idling limit, pursuant to N.J.A.C. 7:27-14 and 15.
34. The permittee shall ensure that all diesel non-road construction equipment used during the construction of the project use ultra-low sulfur fuel (<15 ppm sulfur) in accordance with the federal Nonroad Diesel Rule, 40 CFR Parts 9, 69, 80, 86, 89, 94, 1039, 1051, 1065, 1068.
35. The permittee shall ensure that all diesel non-road construction equipment greater than 100 horsepower used during the construction of the project has: engines that meet the USEPA Tier 4 non-road emission standards; or an engine that meets USEPA Tier 2 non-road emission standards plus the best available emission control that is technologically feasible for that application and verified by the USEPA or the California Air Resources Board (CARB) to reduce particulate matter emissions, subject to a. through c. below. A list of verified

emission control technologies can be found at <http://epa.gov/cleandiesel/verification/verif-list.htm> for USEPA and at <http://www.arb.ca.gov/diesel/verdev/verdev.htm>.

- a. In the absence of a technologically feasible and appropriate control technology verified by USEPA or CARB for a particular diesel non-road construction equipment, the Division may allow the contractor to use the best available emission control technology verified by the Mine Safety and Health Administration and/or the Switzerland BUWAL program VERT Filter List to reduce particulate matter emissions <http://www.vert-dpf.eu/>
 - b. If the contractor demonstrates to the Division's satisfaction that it is not feasible to use any control technology, or installation of a control technology would create a safety hazard, including impaired visibility for the operator, the Division may grant a waiver from this condition. The waiver can also be granted if problems arise with the control technology during the construction project.
 - c. Diesel non-road construction equipment onsite for ten working days or less over the life of the project is not required to comply with this condition.
36. The permittee shall send bi-annual reports to NJDEP, Bureau of Mobile Sources, PO Box 420, Mail Code 401-02E, Trenton, N.J. 08625-0420. The bi-annual reports shall include summaries of the vehicles/equipment retrofitted, the types of retrofit devices used, any problems encountered with installation or operation of the devices, estimate of emissions reduced, and results of field audits or testing done to ensure compliance with these diesel emission reduction requirements. The reporting shall be done using forms on www.stopthesoot.org.

Submerged Aquatic Vegetation and Shellfisheries Conditions

37. SAV plants within areas where permanent impacts are proposed, shall be transplanted to the maximum extent practicable, to a designated mitigation area in accordance with a schedule to be determined within the final SAV mitigation plan.
38. All Turbidity barriers shall be installed prior to any in-water work being performed between **July 1** and **December 31** of each year and maintained for the duration of construction activities.
39. Silt fencing and/or floating turbidity barriers must be installed prior to and be maintained for the duration of any dewatering discharging effluent into Manahawkin Bay.
40. Work must be performed within existing and proposed rights-of-way and/or temporary construction easements as shown on the approved plans. Barges and other construction equipment used for construction purposes may not be staged or anchored in water areas outside of these boundaries.
41. Within one-year prior to rehabilitation work on the three trestle bridges, the applicant must perform a submerged aquatic vegetation (SAV) survey of the water areas under the bridges and the areas immediately adjacent to the bridges including any proposed construction easement areas shown on the approved plans. The permittee shall conduct the survey based upon the submitted document entitled "Pre-Construction Sampling Plan: 8/29/12 Submerged Aquatic Vegetation", but the permittee shall modify this plan to include transects under the existing trestle bridges. These areas shall also be monitored post-construction for the presence of SAV. A copy of this survey shall be provided to the Division of Land Use Regulation prior to construction.
42. A final SAV mitigation plan shall be provided to the Department for review and approval. In-kind mitigation for **2.12 acres** of permanent impacts to SAV habitat shall be provided at a 3:1 planting ratio. A combination of *Zostera marina* (eelgrass) and *Ruppia maritima* (widgeon grass) shall be planted. The applicant shall develop this mitigation plan in coordination the NJDEP Bureau of Shellfisheries (contact Ms. Kira Dacanay) and the National Marine Fisheries Service during the preparation phase of this plan. The plan shall provide details including, but not limited to, ratios of the species planted, monitoring and success criteria for planted SAV, monitoring and success criteria for areas of potentially permanent SAV impacts, areas proposed for planting, source SAV beds, and proposed monitoring reference sites. The plantings shall be monitored and replanted

annually for a minimum of three years to ensure a no net loss. Additional monitoring and replanting may be necessary to achieve a no net loss performance standard. A copy of this survey shall be provided to the Division of Land Use Regulation within 30 days of completion of the survey activity.

- 43. Water areas shall be monitored for permanent impacts (resulting from temporary activities) immediately following project construction and shall continue yearly for two years. If vegetation and/or habitat has been adversely affected by the construction activities and/or shading, and fails to reestablish within that two-year time period, the applicant shall provide compensatory planting and monitoring in accordance with the approved SAV mitigation plan.
- 44. In the event that monitoring identifies additional permanent impacts to SAV resulting from construction or shading a supplemental SAV mitigation plan shall be provided to the Department for review and approval within 90 days of completion of post construction monitoring activities conducted in accordance with the above permit condition. This plan shall provide details that demonstrate compliance with the two previous permit conditions. The applicant shall develop this mitigation in coordination the NJDEP Bureau of Shellfisheries (contact Ms. Kira Dacanay) and the National Marine Fisheries Service during the preparation phase of this plan. The plan shall provide details including, but not limited to, ratios of the species planted, monitoring and success criteria for planted SAV, monitoring and success criteria for areas of potentially permanent SAV impacts, areas proposed for planting, source SAV beds, and proposed monitoring reference sites.
- 45. *Prior to mitigation plantings* in accordance with an approved mitigation plan, the applicant must obtain a Scientific Collecting Permit from the New Jersey Division of Fish and Wildlife.
- 46. The applicant shall provide monetary compensation for the permanent impacts to **1.06 acres** of shellfish habitat. The contribution will be placed in an account earmarked for a specific shellfish restoration project in Barnegat Bay. The details of the project are to be designed and agreed upon between the New Jersey Department of Environmental Protection, the National Marine Fisheries Administration, and U.S. Army Corps of Engineers. Using a modified version of the recreational docks and piers formula

Shellfish Monetary Contribution Formula

$$\text{\$} = A * 100 * \text{density} * 0.25$$

Where:

- A = impact area (46,350 sq. ft.)
- 100 = life expectancy of bridge (years)
- Density = 0.35 for moderate density of clams
- 0.25 = price per clam

$$\text{\$} = (46,350)(100)(0.35)(0.25) = \$405,562$$

with 46,350 square feet (1.06 acres) of permanent impact to moderate density shellfish habitat, the monetary contribution equals **\\$ 405,562**.

WETLANDS, INTERTIDAL SUBTIDALSHALLOWS & STATE OPEN WATER MITIGATION CONDITIONS

- 47. The permittee shall mitigate for the **permanent** loss of 1.98 acres of intertidal and subtidal shallows through a mitigation project on Cedar Bonnet Island. Within 90 days of the date of this permit, the permittee shall submit a final design of the mitigation project to the Division of Land Use Regulation for review and approval and include all of the applicable items listed on the checklist entitled **Checklist for Completeness: Creation, Restoration or Enhancement for a Freshwater Wetland Mitigation Proposal** located at <http://www.nj.gov/dep/landuse/forms/index.html>

48. The permittee shall submit an application for all applicable permits required by the Department for the construction of the Cedar Bonnet Island Mitigation Project, which may include a Coastal General Permit No. 29 (N.J.A.C. 7:7-7.29) and a Freshwater Wetlands Statewide General Permit No. 16 (N.J.A.C. 7:7A-5.16).
49. The permittee shall mitigate for the **permanent** loss of 0.17 acres of coastal wetlands, 0.01 acres of freshwater wetlands and 0.04 acres of state open waters through the Creation and Enhancement of 0.99 acres of coastal wetlands located within the project right-of-way. Within 90 days of the date of this permit, the permittee shall submit a final design of the mitigation project to the Division of Land Use Regulation for review and approval in accordance with the requirements of N.J.A.C. 7:7E-3B and include all of the applicable items listed on the checklist entitled **Checklist for Completeness: Creation, Restoration or Enhancement for a Freshwater Wetland Mitigation Proposal located at <http://www.nj.gov/dep/landuse/forms/index.html>**. In-kind replacement of wetland buffer areas shall be provided to the maximum extent feasible.
50. The permittee shall submit a final design for the restoration of 0.27 acres of coastal wetlands, 0.01 acres of freshwater wetlands temporarily impacted by project activities for review and approval by the Department
51. The proposed on-site mitigation for permanent impacts shall be conducted in accordance with an implementation schedule to be submitted to the Department for approval within **90 days prior to the initiation of regulated activities authorized by this permit**.
52. If the permittee is considering conducting a creation, restoration or enhancement project, the following conditions shall apply:
 - a. **Prior to the completion of the mitigation project**, the permittee shall complete, sign and file with the County Clerk (the Registrar of Deeds and Mortgages in some counties), a conservation restriction that meets the requirements of N.J.A.C. 7:7E-3.27(h)6 or provide equivalent protection through an alternative means that shall be approved by the Department.
 - b. The permittee shall notify the Mitigation Unit at the Division of Land Use Regulation in writing **at least 30 days prior to the start of construction of the wetland mitigation project** to arrange an on-site pre-construction meeting among the permittee, the contractor, the consultant and the Division.
 - c. To ensure the intent of the mitigation design and its predicted wetland hydrology is realized in the landscape, the mitigation designer shall be present on-site during all critical stages of mitigation construction and during the restoration of any temporarily impacted areas. Critical stages of construction include but are not limited to herbicide applications, earthmoving activities, planting, and inspections.
 - d. The permittee shall be responsible for ensuring that best management practices are used throughout construction to control the spread and colonization of highly invasive plants. Specifically, all equipment, especially tracks and tires, must be thoroughly cleaned every time equipment or vehicles move from an area containing invasive plants or from off-site to the mitigation area. For information on the specific species that are considered to be invasive, please refer to the Invasive Plant Atlas at <http://www.invasiveplantatlas.org/index.html>.
 - e. In the event that changes to the mitigation design are necessary to ensure success of the project as a result of on-site conditions, the mitigation designer shall immediately notify the Division in writing and submit an alternative plan which achieves the proposed wetland conditions. Any modifications to the plan that are reviewed and approved by the Division must be shown on a signed and sealed revised plan. The As-Built plans required as a part of the Construction Completion Report may serve as the signed and sealed revised plan required to be submitted as part of the construction modification process described above if time constraints warrant such action and have been approved by the Division in writing.

- f. **Within 30 days of final grading of the mitigation site and prior to planting**, the permittee shall notify the Mitigation Unit at the Division of Land Use Regulation in writing to arrange a post-grading construction meeting among the permittee, contractor, consultant and the Division.
- g. **Within 30 days following the final planting of the mitigation project**, the permittee shall submit a Construction Completion Report to the Division detailing as-built conditions (see below) and any changes to the approved mitigation plan that were made during construction (N.J.A.C. 7:7E-3B.5(b)). The Construction Completion Report shall contain, at a minimum, the following information:
- i. A completed Wetland Mitigation Project Completion of Construction Form. This form is located at <http://www.nj.gov/dep/landuse/forms/index.html> and certifies that the mitigation project has been constructed as designed and that the proposed area of wetland creation, restoration or enhancement has been accomplished;
 - ii. As-Built plans which depict final grade elevations at one foot contours and include a table of the species and quantities of vegetation that were planted including any grasses that may have been used for soil stabilization purposes; and
 - iii. Photos of the constructed wetland mitigation project with a photo location map as well as the GPS waypoints in NJ state plane coordinates NAD 1983.
- i. **Within 30 days following final planting of the mitigation project**, the permittee shall post the mitigation area with permanent signs which identify the site as a wetland mitigation project and that all-terrain vehicle use, motorbike use, mowing, dumping, draining, cutting and/or removal of plant materials is prohibited and that violators shall be prosecuted and fined to the fullest extent under the law. The signs must also state the name of the permittee, a contact name and phone number, and the Department's permit number.
- j. The permittee shall monitor the mitigation for 5 full growing seasons beginning the year after the mitigation project has been completed. The permittee shall submit monitoring reports to the Division of Land Use Regulation no later than December 31st of each full monitoring year (N.J.A.C. 7:7E-3B.5(b)). All monitoring reports must include the standard items identified in the checklists entitled Wetland Mitigation Monitoring Project Checklist and Tidal Wetland Mitigation Monitoring Checklist. The Wetland Mitigation Monitoring Project Checklist and Tidal Wetland Mitigation Monitoring Checklist are located at <http://www.nj.gov/dep/landuse/forms/index.html>. The permittee shall submit monitoring reports to the Division of Land Use Regulation, no later than December 31st of each full monitoring year.
- k. Once the required monitoring period has expired and the permittee has submitted the final monitoring report, the Division will make the finding that the mitigation project is either a success or a failure. In accordance with N.J.A.C. 7:7E-3B.5(b)3, the mitigation project will be considered successful if the permittee demonstrates all of the following:
- i. That the goals of the wetland mitigation project, including acreage and the required transition area, as stated in the approved wetland mitigation proposal and the permit have been satisfied. The permittee shall submit a field wetland delineation of the wetland mitigation project based on the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989) which shows the exact acreage of State open waters, emergent, scrub/shrub and/or forested wetlands in the mitigation area;
 - ii. The site has an 85 percent survival and 85 percent area coverage of the mitigation plantings or target hydrophytes, which are species native to the area and similar to ones identified on the mitigation planting plan. All plant species in the mitigation area must be healthy and thriving and all trees must be at least five feet in height;

- iii. The site is less than 10 percent coverage by invasive or noxious species.
 - iv. The site contains hydric soils or there is evidence of reduction occurring in the soil; and,
 - v. The proposed hydrologic regime as specified in the mitigation proposal has been satisfied.
1. The permittee is responsible for assuming all liability for any corrective work necessary to meet the success criteria established above (N.J.A.C. 7:7E-3B.5(d)9). The Division will notify the permittee in writing if the mitigation project is considered to be a failure. Within 30 days of notification, the permittee shall submit a revised mitigation plan to meet the success criteria identified above for Division review and approval. The financial surety, if required, will not be released by the Division until such time that the permittee satisfies the success criteria as stipulated above.

RIPARIAN ZONE COMPENSATION CONDITIONS

53. The permittee shall mitigate for the permanent loss of 1.51 acres of forested and 0.19 acres of grassed riparian zone vegetation at a ratio of 2:1 compensation through a mitigation project at Cedar Bonnet Island. Within 90 days of the date of this permit, the permittee shall submit a final design of the mitigation project to the Division of Land Use Regulation for review and approval. In addition, **at least 90 days prior to the initiation of regulated activities authorized by this permit**, the permittee shall submit a proposal to provide 1:1 compensation for the temporary impact to 0.20 acres of grassed riparian zone vegetation. The mitigation proposal shall be designed in accordance with the applicable standards at N.J.A.C. 7:13-10.2(t) and (u).
54. The proposed riparian compensation shall be conducted in accordance with an implementation schedule to be submitted to the Department for approval within **90 days prior to the initiation of regulated activities authorized by this permit**.
55. **Prior to the completion of the riparian zone compensation project**, the permittee shall either sign a Department approved conservation restriction to protect the permanent impact compensation area from future development that would remove the vegetation planted in accordance with N.J.A.C. 7:13-10.2(t)3 or provide equivalent protection through an alternative means that shall be approved by the Department.
56. **The permittee shall monitor the riparian project for at least 3 years** beginning the year after the riparian zone compensation project has been completed (N.J.A.C. 7:13-10.2(u)5). **The permittee shall submit monitoring reports to the Division of Land Use Regulation, no later than December 31st of each full monitoring year.**
 - a. All monitoring reports except the final one must include documentation and field data demonstrating that the goals of the riparian zone compensation project will be achieved as stated in the approved riparian zone compensation proposal and the permit requirements will be satisfied. If the permittee is finding problems with the compensation project and does not anticipate the site will be a full success, recommendations on how to rectify the problems shall be included in the report with a time frame in which they will be completed.
 - b. The final monitoring report must include documentation and data demonstrating the following:
 - i. That the goals of the riparian zone compensation project as stated in the approved riparian zone compensation proposal and the permit conditions have been satisfied.
 - ii. That at least 85 percent of the compensation plantings have survived and that at least 85 percent of the compensation area is established with native species similar to ones identified on the compensation planting plan. All plant species in the compensation area must be healthy and thriving. All trees must be at least 5 feet in height; and

- iii. That the site is less than 10 percent occupied by invasive or noxious species.
57. If the riparian compensation project does not meet the success criteria established above the project shall be considered a failure and the permittee shall submit a revised riparian compensation plan. The revised plan shall be submitted within 60 days of receipt of notification from the Division indicating the riparian compensation project was a failure.
 58. If the Division determines that the riparian zone compensation project is not constructed in conformance with the approved plan, the permittee will be notified in writing by the Department and will have 60 days to submit a proposal to indicate how the project will be corrected.

Stormwater Conditions

59. All excavated material and dredged spoils shall be disposed of in a lawful manner outside of any flood hazard area riparian zone, open water, freshwater wetland and adjacent transition area, and in such a way as to not interfere with the positive drainage of the receiving area unless specifically approved by the Department.
60. The permittee shall make specific arrangements to ensure the continuous maintenance and efficient operation of all proposed stormwater management measures onsite. This includes the inspection (and cleaning where necessary) of any and all constructed wetland extended detention basin, bio-retention basin, and inlets at least four times per year and after every major storm totaling 1 inch of rainfall or more, the use of appropriate soil conservation practices onsite, and any other reasonable effort required to maintain the stormwater management system in good working order.
61. The permittee shall ensure that the bioretention basin to be constructed near Morris Boulevard is constructed with a bottom surface elevation of 6 feet, as shown on the approved plan entitled "CONSTRUCTED STORMWATER WETLAND CROSS-SECTIONS, ROUTE 72 MANAHAWKIN BAY BRIDGES, CONTRACT NOS. 025113850, 026118012, 026118013 & 026118014", certified October 23, 2012 by Parsons Brinckerhoff, Inc. In addition, the permittee shall ensure that the bottom surface elevation of the forebay in the constructed stormwater wetland is at elevation 1.5 feet and that the bottom surface elevation of the wetland is at elevation -2.50 feet.
62. Any future expansion or alteration of the approved stormwater management system, which would affect water quality, increase the rate or volume of stormwater leaving the site, affect the infiltration capacity on the site, or alter the approved low impact site design, shall be reviewed and approved by the Department prior to construction. This includes any proposed changes to the discharge characteristics of any basin, the construction of new inlets or pipes that tie into the storm sewer network and/or the replacement of existing inlets or pipes with structures of different capacity.
63. Prior to the start of construction, the permittee shall submit for review and approval, a plan with associated design reports for the retrofit of existing stormwater basins that demonstrates that the project is nitrogen neutral and that the TSS removal requirements for the project will be satisfied in accordance with the NJ Stormwater Management rules (N.J.A.C. 7:8). The required level of treatment for TSS removal is the equivalent of 4.78 acres treated to 80% TSS removal. The basins to be included in the plan are, at a minimum, the following four basins: Basins #70-WB-51.25, 70-WB-57.73, 70-WB-57.19, and 195-EB-16.71. Should it be determined that these four basins do not satisfy the goal of nitrogen neutrality and 80% TSS removal, then additional retrofits shall be incorporated into the project as necessary. In the event that additional retrofits are determined to be necessary, then the permittee shall submit additional plans and reports for review and approval prior to the start of construction. Upon receiving Department approval of the aforementioned plan, the permittee shall initiate basin retrofit activities within 9 months. Once basin retrofit activities commence, the permittee shall have 1 year to complete these activities.
64. The drawings hereby approved are 73 plan sheets entitled:

“NEW JERSEY DEPARTMENT OF TRANSPORTATION, ROUTE 72 MANAHAWKIN BAY BRIDGES, CONTRACT NOS. 025113850, 026118012, 026118013 & 026118014,” consisting of 195 sheets dated April 3 2012 prepared by PARSONS BRINCKERHOFF, INC. revised as noted, signed and certified on October 23, 2012, and prepared by PARSONS BRINCKERHOFF, INC.

- a. “TYPICAL SECTIONS,” sheets TS-1 to TS-11, each sheet certified April 3, 2012,
- b. “PERMIT PLANS SET #1,” sheets PP1-1 to PP1-12, with sheets PP1-4, PP1-7, PP1-9, and PP1-10 last revised September 19, 2012, and sheets PP1-6, PP1-8, and PP1-11 last revised June 14, 2012,
- c. “PERMIT PLANS SET #3, SHEETS PP3-1 TO PP3-12,” last revised on September 20, 2012,
- d. “PERMIT PLANS, SUBMERGED AQUATIC VEGETATION, SHEETS SAV-1 TO SAV-5 AND SAV-9 TO SAV-12,” no revision date,
- e. “PERMIT PLANS, SUBMERGED AQUATIC VEGETATION, SHEETS SAV-6 TO SAV-8,” last revised on September 21,
- f. “SHIP BOTTOM PERMIT PLANS,” sheets SB-1 to SB-12, each sheet certified April 3, 2012,
- g. “CONSTRUCTED STORMWATER WETLAND CROSS-SECTIONS”, sheet unnumbered, undated, unrevised,
- h. “CONSTRUCTION DETAILS,” sheet DTL-2/DTL-1, undated and unrevised

“NEW JERSEY DEPARTMENT OF TRANSPORTATION, BUREAU OF STRUCTURAL ENGINEERING, ROUTE 72 MANAHAWKIN BAY BRIDGES, CONTRACT NO. 026118012”

- a. “GENERAL PLAN AND ELEVATION -1”, sheet 78 of 195, no certification date,
- b. “GENERAL PLAN AND ELEVATION -2”, sheet 79 of 195, no certification date,
- c. “GENERAL PLAN AND ELEVATION -3”, sheet 80 of 195, no certification date,
- d. “ABUTMENT DETAILS”, sheet 81 of 195, no certification date,

“NEW JERSEY DEPARTMENT OF TRANSPORTATION, BUREAU OF STRUCTURAL ENGINEERING, ROUTE 72 MANAHAWKIN BAY BRIDGES, CONTRACT NO. 026118014”

- a. “GENERAL PLAN AND ELEVATION -1”, sheet 82 of 195, no certification date,
- b. “GENERAL PLAN AND ELEVATION -2”, sheet 83 of 195, no certification date,
- c. “GENERAL PLAN AND ELEVATION -3”, sheet 84 of 195, no certification date,

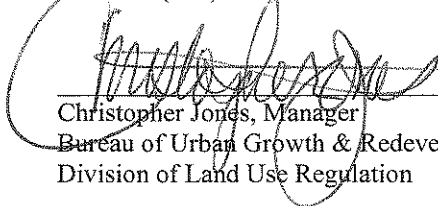
“NEW JERSEY DEPARTMENT OF TRANSPORTATION, BUREAU OF STRUCTURAL ENGINEERING, ROUTE 72 MANAHAWKIN BAY BRIDGES, CONTRACT NO. 026118013”

- a. “HILLIARDS THOROFARE GENERAL PLAN AND ELEVATION”, sheet 85 of 195, no certification date,
- b. “WEST THOROFARE GENERAL PLAN AND ELEVATION”, sheet 86 of 195, no certification date,
- c. “EAST THOROFARE GENERAL PLAN AND ELEVATION”, sheet 87 of 195, no certification date,

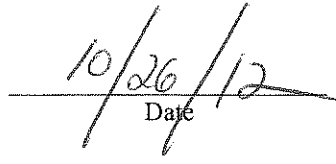
“NEW JERSEY DEPARTMENT OF TRANSPORTATION, BUREAU OF STRUCTURAL ENGINEERING, ROUTE 72 MANAHAWKIN BAY BRIDGES, CONTRACT NO. 026118012”

- a. “RETAINING WALL NO. 1”, sheet 88 of 195, no certification date, and
- b. “RETAINING WALL NO. 2”, sheet 89 of 195 no certification date.

If you need clarification on any section of this permit or conditions, please contact our Technical Support Call Center at (609) 777-0454.



 Christopher Jones, Manager
 Bureau of Urban Growth & Redevelopment
 Division of Land Use Regulation



 Date

Original sent to Agent to record

C: Applicant

Municipal Construction Officials

USFWS c/o Steve Mars

U.S. Army Corps c/o Mike Hayduk

NMFS c/o Karen Greene

NJDEP Compliance & Enforcement, Toms River Office c/o Michele Kropilak

NJDEP Bureau of Shellfisheries c/o Kira Dacanay