

ROY COOPER
Governor
MARY PENNY KELLEY
Secretary
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General Counsel



TO: The Coastal Resources Commission

FROM: Christine A. Goebel, DEQ Assistant General Counsel

DATE: December 13, 2024 (for the December 16, 2024 Special CRC Meeting)

RE: **Variance Request by NC Department of Transportation (CRC-VR-24-13)**

Petitioner NC Department of Transportation (NCDOT) owns the NC Highway 12 right-of-way (NC 12) in Dare County in the area of the Pea Island Visitor's Center. The Site is currently developed with NC 12, which in this area, has been subject to ocean over wash, including during a November 15-17 storm. Petitioner now proposes to protect NC12 with a new sandbag structure. Petitioner submitted a request to modify CAMA Major Permit No. 86-99 (the Permit) in order to develop the new sandbag structure which would be covered by a constructed dune. On December 4, 2024, DCM issued a modification of CAMA Major Permit No. 86-99 but conditioned out those aspects of the proposed sandbag structure which did not meet the Commission's Rules, including the size and color of the sandbags, the size of the sandbag structure, and the impacts to existing dunes. Petitioner now seeks a variance from the Commission's sandbag rule and dune protection rules in order to develop the project as shown in its application.

The following additional information is attached to this memorandum:

Attachment A: Relevant Rules
Attachment B: Stipulated Facts
Attachment C: Petitioner's Positions and Staff's Responses to Variance Criteria
Attachment D: Petitioner's Variance Request Materials
Attachment E: Stipulated Exhibits including powerpoint

cc(w/enc.): Colin Justice, Special Deputy AG and Petitioner's Counsel, electronically
Mary Lucasse, Special Deputy AG and CRC Counsel, electronically



ATTACHMENT A**RELEVANT RULES****SECTION .0300 - OCEAN HAZARD AREAS****15A NCAC 07H .0301 OCEAN HAZARD CATEGORIES**

The Ocean Hazard categories of AECs encompass the natural hazard areas along the Atlantic Ocean shoreline where, because of their vulnerability to erosion or other adverse effects of sand, wind, and water, uncontrolled or incompatible development could endanger life or property. Ocean hazard areas include beaches, frontal dunes, inlet lands, and other areas in which geologic, vegetative and soil conditions may subject the area to erosion or flood damage.

15A NCAC 07H .0302 SIGNIFICANCE OF THE OCEAN HAZARD CATEGORY

(a) Hazards associated with ocean shorelines are due to the constant forces exerted by waves, winds, and currents upon the unstable sands that form the shore. During storms, these forces are intensified and can cause changes in the bordering landforms and to structures located on them. Ocean hazard area property is in the ownership of a large number of private individuals as well as several public agencies and is used by a vast number of visitors to the coast. Ocean hazard areas are critical due to both the severity of the hazards and the intensity of interest in these areas.

(b) The location and form of the various hazard area landforms, in particular the beaches, dunes, and inlets, are in a permanent state of flux, responding to meteorologically induced changes in the wave climate. For this reason, the siting of development on and near these landforms shall be subject to the provisions in this Section in order to avoid their loss or damage. The flexible nature of these landforms presents hazards to development situated immediately on them and offers protection to the land, water, and structures located landward of them. The value of each landform lies in the particular role it plays in affording protection to life and property. Development shall not diminish the energy dissipation and sand storage capacities of the landforms essential to the maintenance of the landforms' protective function.

15A NCAC 07H .0303 MANAGEMENT OBJECTIVE OF OCEAN HAZARD AREAS

(a) The CRC recognizes that absolute safety from the destructive forces of the Atlantic Ocean shoreline is an impossibility for development located adjacent to the coast. The loss of life and property to these forces, however, can be greatly reduced by the proper location and design of structures and by care taken in prevention of damage to natural protective features particularly primary and frontal dunes. Therefore, it is the CRC's objective that development in ocean hazard areas shall be sited to minimize danger to life and property and achieve a balance between the financial, safety, and social factors that are involved in hazard area development.

(b) The rules set forth in this Section shall further the goals set out in G.S. 113A-102(b), to minimize losses to life and property resulting from storms and long-term erosion, prevent encroachment of permanent structures on public beach areas, preserve the natural ecological conditions of the barrier dune and beach systems, and reduce the public costs of development within ocean hazard areas, and protect common-law and statutory public rights of access to and use of the lands and waters of the coastal area.

15A NCAC 07H .0305 DEFINITION AND DESCRIPTION OF LANDFORMS

This Rule describes natural and man-made features that are found within the ocean hazard area of environmental concern.

(1) Ocean Beaches. Ocean beaches are lands consisting of unconsolidated soil materials that extend from the mean low water line landward to a point where either:

(a) the growth of vegetation occurs; or

(b) a distinct change in slope or elevation alters the configuration of the landform, whichever is farther landward.

(4) Frontal Dunes. The frontal dune is the first mound of sand located landward of ocean beaches that has stable and natural vegetation present.

15A NCAC 07H .0308 SPECIFIC USE STANDARDS FOR OCEAN HAZARD AREAS

(b) Ocean Shoreline Erosion Control Activities:

(1) Use Standards Applicable to all Erosion Control Activities:

(A) All oceanfront erosion response activities shall be consistent with 15A NCAC 07H .0308 and G.S.113A-115.1.

(B) Permanent erosion control structures may cause significant adverse impacts on the value and enjoyment of adjacent properties or public access to and use of the ocean beach, and, therefore, unless specifically authorized under the Coastal Area Management Act, are prohibited. Such structures include bulkheads, seawalls, revetments, jetties, groins, and breakwaters.

(C) Rules concerning the use of oceanfront erosion response measures apply to all oceanfront properties without regard to the size of the structure on the property or the date of its construction.

(D) Shoreline erosion response projects shall not be constructed in beach or estuarine areas that sustain habitat for fish and wildlife species, as identified by State or federal natural resource agencies during project review, unless mitigation measures are incorporated into project design, as set forth in Rule .0306(h) of this Section.

(E) Project construction shall be timed to minimize adverse effects on biological activity.

(F) Prior to completing any erosion response project, all exposed remnants of or debris from failed erosion control structures must be removed by the permittee.

(G) Permanent erosion control structures that would otherwise be prohibited by these standards may be permitted on finding by the Division that:

(i) the erosion control structure is necessary to protect a bridge that provides the only existing road access on a barrier island, that is vital to public safety, and is imminently threatened by erosion as defined in Part (a)(2)(B) of this Rule;

- (ii) the erosion response measures of relocation, beach nourishment or temporary stabilization are not adequate to protect public health and safety; and
- (iii) the proposed erosion control structure will have no adverse impacts on adjacent properties in private ownership or on public use of the beach.

(H) Structures that would otherwise be prohibited by these standards may also be permitted on finding by the Division that:

(i) the structure is necessary to protect a State or federally registered historic site that is imminently threatened by shoreline erosion as defined in Part (a)(2)(B) of this Rule;

(ii) the erosion response measures of relocation, beach nourishment or temporary stabilization are not adequate and practicable to protect the site;

(iii) the structure is limited in extent and scope to that necessary to protect the site; and

(iv) a permit for a structure under this Part may be issued only to a sponsoring public agency for projects where the public benefits outweigh the significant adverse impacts. Additionally, the permit shall include conditions providing for mitigation or minimization by that agency of significant adverse impacts on adjoining properties and on public access to and use of the beach.

(I) Structures that would otherwise be prohibited by these standards may also be permitted on finding by the Division that:

(i) the structure is necessary to maintain an existing commercial navigation channel of regional significance within federally authorized limits;

(ii) dredging alone is not practicable to maintain safe access to the affected channel;

(iii) the structure is limited in extent and scope to that necessary to maintain the channel;

(iv) the structure shall not have significant adverse impacts on fisheries or other public trust resources; and

(v) a permit for a structure under this Part may be issued only to a sponsoring public agency for projects where the public benefits outweigh the significant adverse impacts. Additionally, the permit shall include conditions providing for mitigation or minimization by that agency of any significant adverse impacts on adjoining properties and on public access to and use of the beach.

(J) The Commission may renew a permit for an erosion control structure issued pursuant to a variance granted by the Commission prior to 1 July 1995. The Commission may authorize the replacement of a permanent erosion control structure that was permitted by the Commission pursuant to a variance granted by the Commission prior to 1 July 1995 if the Commission finds that:

(i) the structure will not be enlarged beyond the dimensions set out in the permit;

(ii) there is no alternative to replacing the structure that will provide the same or similar benefits as determined by DCM based on costs and engineering options; and

(iii) the replacement structure will comply with all applicable laws and with all rules, other than the rule or rules with respect to which the Commission granted the

variance, that are in effect at the time the structure is replaced.

(K) Proposed erosion response measures using innovative technology or design shall be considered as experimental and shall be evaluated on a case-by-case basis to determine consistency with 15A NCAC 07M .0200 and general and specific use standards within this Section.

(2) Temporary Erosion Control Structures:

(A) Permittable temporary erosion control structures shall be limited to sandbags placed landward of mean high water and parallel to the shore.

(B) Temporary erosion control structures as defined in Part (A) of this Subparagraph may be used to protect only imminently threatened roads and associated right of ways and buildings and their associated septic systems. A structure is considered imminently threatened if its foundation, septic system, or right-of-way in the case of roads is less than 20 feet away from the erosion scarp. Buildings and roads located more than 20 feet from the erosion scarp or in areas where there is no obvious erosion scarp may also be found to be imminently threatened when site conditions, such as a flat beach profile or accelerated erosion, increase the risk of imminent damage to the structure.

(C) Temporary erosion control structures shall be used to protect only the principal structure and its associated septic system, but not appurtenances such as pools, gazebos, decks or any amenity that is allowed under Rule .0309 of this Section as an exception to the erosion setback requirement.

(D) Temporary erosion control structures may be placed waterward of a septic system when there is no alternative to relocate it on the same or adjoining lot so that it is landward of or in line with the structure being protected.

(E) Temporary erosion control structures shall not extend more than 20 feet past the sides of the structure to be protected except to align with temporary erosion control structures on adjacent properties, where the Division has determined that gaps between adjacent erosion control structures may result in an increased risk of damage to the structure to be protected. The landward side of such temporary erosion control structures shall not be located more than 20 feet waterward of the structure to be protected or the right-of-way in the case of roads. If a building or road is found to be imminently threatened and at an increased risk of imminent damage due to site conditions such as a flat beach profile or accelerated erosion, temporary erosion control structures may be located more than 20 feet waterward of the structure being protected. In cases of increased risk of imminent damage, the location of the temporary erosion control structures shall be determined by the Director of the Division of Coastal Management or the Director's designee in accordance with Part (A) of this Subparagraph.

(F) Temporary erosion control structures may remain in place for up to eight years for a building and its associated septic system, a bridge or a road. The property owner shall be responsible for removal of any portion of the temporary erosion control structure exposed above grade within 30 days of the end of the allowable time period.

(G) An imminently threatened structure or property may be protected only once, regardless of ownership, unless the threatened structure or property is located in a community that is actively pursuing a beach nourishment project or an inlet relocation or stabilization project in accordance with Part (H) of this Subparagraph. Existing temporary erosion control structures may be permitted for additional eight-year periods provided that the structure or property being protected is still

imminently threatened, the temporary erosion control structure is in compliance with requirements of this Subchapter, and the community in which it is located is actively pursuing a beach nourishment or an inlet relocation or stabilization project in accordance with Part (H) of this Subparagraph. In the case of a building, a temporary erosion control structure may be extended, or new segments constructed, if additional areas of the building become imminently threatened. Where temporary structures are installed or extended incrementally, the time period for removal under Part (F) or (H) of this Subparagraph shall begin at the time the initial erosion control structure was installed. For the purpose of this Rule:

- (i) a building and its septic system shall be considered separate structures,
- (ii) a road or highway may be incrementally protected as sections become imminently threatened. The time period for removal of each contiguous section of temporary erosion control structure shall begin at the time that the initial section was installed, in accordance with Part (F) of this Subparagraph.

(H) For purposes of this Rule, a community is considered to be actively pursuing a beach nourishment or an inlet relocation or stabilization project in accordance with G.S. 113A-115.1 if it:

- (i) has been issued an active CAMA permit, where necessary, approving such project; or
- (ii) has been identified by a U.S. Army Corps of Engineers' Beach Nourishment Reconnaissance Study, General Reevaluation Report, Coastal Storm Damage Reduction Study, or an ongoing feasibility study by the U.S. Army Corps of Engineers and a commitment of local or federal money, when necessary; or
- (iii) has received a favorable economic evaluation report on a federal project; or
- (iv) is in the planning stages of a project designed by the U.S. Army Corps of Engineers or persons meeting applicable State occupational licensing requirements and initiated by a local government or community with a commitment of local or state funds to construct the project or the identification of the financial resources or funding bases necessary to fund the beach nourishment, inlet relocation or stabilization project.

If beach nourishment, inlet relocation, or stabilization is rejected by the sponsoring agency or community, or ceases to be actively planned for a section of shoreline, the time extension is void for that section of beach or community and existing sandbags are subject to all applicable time limits set forth in Part (F) of this Subparagraph.

(I) Once a temporary erosion control structure is determined by the Division of Coastal Management to be unnecessary due to relocation or removal of the threatened structure, it shall be removed to the maximum extent practicable by the property owner within 30 days of official notification from the Division of Coastal Management regardless of the time limit placed on the temporary erosion control structure. If the temporary erosion control structure is determined by the Division of Coastal Management to be unnecessary due to the completion of a storm protection project constructed by the U.S. Army Corps of Engineers, a large-scale beach nourishment project, or an inlet relocation or stabilization project, any portion of the temporary erosion control structure exposed above grade shall be removed by the property owner within 30 days of official notification from the Division of Coastal Management regardless of the time limit placed on the temporary erosion control structure. (J) Removal of temporary erosion control structures is not required if they

are covered by sand. Any portion of the temporary erosion control structure that becomes exposed above grade after the expiration of the permitted time period shall be removed by the property owner within 30 days of official notification from the Division of Coastal Management.

(K) The property owner shall be responsible for the removal of remnants of all portions of any damaged temporary erosion control structure.

(L) Sandbags used to construct temporary erosion control structures shall be tan in color and 3 to 5 feet wide and 7 to 15 feet long when measured flat. Base width of the temporary erosion control structure shall not exceed 20 feet, and the total height shall not exceed 6 feet, as measured from the bottom of the lowest bag.

(M) Soldier pilings and other types of devices to anchor sandbags shall not be allowed.

(N) Existing sandbag structures may be repaired or replaced within their originally permitted dimensions during the time period allowed under Part (F) or (G) of this Subparagraph.

(3) Beach Nourishment. Sand used for beach nourishment shall be compatible with existing grain size and in accordance with Rule .0312 of this Section.

(4) Beach Bulldozing. Beach bulldozing is defined as the process of moving natural beach material from any point seaward of the vegetation line to create a protective sand dike or to obtain material for any other purpose is considered development and may be permitted as an erosion response if the following conditions are met:

(A) The area on which this activity is being performed shall maintain a slope of adequate grade so as to not endanger the public or the public's use of the beach and shall follow the pre-emergency slope as closely as possible. The movement of material utilizing a bulldozer, front end loader, backhoe, scraper, or any type of earth moving or construction equipment shall not exceed one foot in depth measured from the pre-activity surface elevation;

(B) The activity shall not exceed the lateral bounds of the applicant's property unless permission is obtained from the adjoining land owner(s);

(C) Movement of material from seaward of the mean low water line will require a CAMA Major Development and State Dredge and Fill Permit;

(D) The activity shall not increase erosion on neighboring properties and shall not have an adverse effect on natural or cultural resources as identified by the NC Department of Natural and Cultural Resources.

(E) The activity may be undertaken to protect threatened on-site waste disposal systems as well as the threatened structure's foundations.

(c) Dune Protection, Establishment, Restoration and Stabilization.

(1) No development shall be permitted that involves the removal or relocation of primary or frontal dune sand or vegetation that would adversely affect the integrity of the dune's function as a protective barrier against flooding and erosion. Other dunes within the ocean hazard area shall not be disturbed unless the development of the property is otherwise impracticable. Any disturbance of these other dunes shall be allowed only to the extent permitted by this Rule.

(2) Any new dunes established shall be aligned to the greatest extent possible with existing adjacent dune ridges and shall be of the same configuration as adjacent natural dunes.

(3) Existing primary and frontal dunes shall not, except for beach nourishment and emergency situations, be broadened or extended in an oceanward direction.

(4) Adding to dunes shall be accomplished in such a manner that the damage to existing vegetation is minimized. The filled areas shall be replanted or temporarily stabilized until planting can be completed.

(5) Sand used to establish or strengthen dunes shall be of the same general characteristics as the sand in the area in which it is to be placed.

(6) No new dunes shall be created in inlet hazard areas. Reconstruction or repair of existing dune systems as defined in Rule .0305 of this Section and within the Inlet Hazard Area may be permitted.

(7) Sand held in storage in any dune, other than the frontal or primary dune, shall remain on the lot or tract of land to the maximum extent practicable and may be redistributed within the Ocean Hazard AEC provided that it is not placed any farther oceanward than the crest of a primary dune, if present, or the crest of a frontal dune.

(8) No disturbance of a dune area shall be allowed when other techniques of construction can be utilized and alternative site locations exist to avoid dune impacts.

1. Petitioner, the North Carolina Department of Transportation (NCDOT), is an agency of the State of North Carolina.
2. “The general purpose of the Department of Transportation is to provide for the necessary planning, construction, maintenance, and operation of an integrated statewide transportation system for the economical and safe transportation of people and goods as provided for by law.” G.S. § 143B-346
3. NCDOT owns, controls, and maintains a public right-of-way easement through the Pea Island National Wildlife Refuge (“Refuge”) on Hatteras Island in Dare County, North Carolina. The Refuge is managed by the U.S. Fish and Wildlife Service. The right-of-way easement is shown on the site plans attached as a stipulated exhibit. The site of the variance request is near the Refuge Visitor’s Center located within the Refuge on Hatteras Island (“Visitor Center Hot Spot”) and is also shown on stipulated exhibits.
4. The public highway through the public right-of-way easement through the Refuge is known as NC Highway 12 (“NC 12”). NC 12 provides the only roadway connection between the mainland and Hatteras Island, one of several barrier islands that comprise the Outer Banks.
5. NC 12 is North Carolina’s eastern-most primary route which runs throughout the entire Outer Banks from Corolla, Dare County in the northeastern part of the state, to the community of Sea Level in southeastern Carteret County.
6. In 2010, a coastal monitoring program was established to assist NCDOT and FHWA, in cooperation with other state and federal agencies, in planning future transportation needs from Oregon Inlet to Rodanthe. The coastal monitoring program considers factors such as Atlantic Ocean shoreline erosion, accelerated sea level rise, potential for island breaches, and vulnerability to coastal processes.
7. Beach erosion, dune loss, and risk to NC 12 have been particularly severe near the Refuge Visitor Center. This area has been identified as a “hot spot” at least as early as 2002 in a vulnerability study. It was more recently discussed by the NC 12 Task Force in a February 2023 report available here: <https://www.darenc.gov/home/showpublisheddocument/11865/638114401900770000> The Visitor Center Hot Spot is adjacent to, and runs parallel to, the Atlantic Ocean and the Pamlico Sound.
8. The Visitor Center Hot Spot is characterized by low topography/elevations transitioning from the Refuge ponds to a flat beach and ocean within a few hundred feet. This topography subjects this area to erosive wave energy and coastal flooding. Historic aerial images of the Visitor Center Hot Spot from the DCM Map Viewer are attached as a stipulated exhibit, as are images from the DCM Map Viewer of historic shorelines and erosion rates.
9. The Visitor Center Hot Spot is located within the Ocean Erodible Area of Environmental Concern and per G.S. 113A-118, any development within that AEC requires authorization through a CAMA permit.

10. The 2020 CRC Average Annual Erosion Rate at the Visitor Center Hot Spot is 7.5'/year.
11. The total width of the island at this location ranges between 3,500 and 5,800 feet; however, much of that area is occupied by the Refuge ponds. The area of land through which NC 12 travels between the ocean and Refuge ponds is as narrow as 245 feet. A topographical map and areal photos are attached as a stipulated exhibit.
12. Due to storm and tidal events and the geomorphology of this area, the Visitor Center Hot Spot is susceptible to shoreline erosion, overwash, coastal flooding, the loss of beach and dunes, and sand cover. These circumstances can undermine the integrity of the road, making travel by the general public unsafe and forcing NCDOT to close the road.
13. The Visitor Center Hot Spot and project area fall within an area previously approved through CAMA Major Permit No. 86-99 authorizing dune maintenance.
14. CAMA Major Permit No. 86-99, initially issued on September 4, 1999 but modified many times since, authorizes NCDOT to perform dune maintenance along NC 12 on Hatteras Island. The most recent renewal of this permit was in December 2021 for a period of five years. Dune maintenance is authorized in specific areas where DCM has previously reviewed and authorized development, as shown on three vicinity maps that depict the covered areas, attached as stipulated exhibits.
15. The portions of the 1,300 linear feet of proposed maintenance and repair of sand dunes that are above high water as depicted on the attached drawings are approved under the maintenance clause of CAMA Major Permit No. 86-99.
16. A coastal storm during November 15-17, 2024 severely impacted the primary dune along NC 12 at the Visitor Center Hot Spot. Ocean overwash removed approximately 1,000 linear feet of the dune, exposing the highway's edge of pavement to the high surf. The roadway flooding and pavement drop-off produced hazardous traffic conditions, so NCDOT temporarily closed NC 12 to all traffic between the Marc Basnight Bridge and the village of Rodanthe on November 15th. NCDOT temporarily rebuilt the primary dune as maintenance work authorized under CAMA Permit No. 86-99.
17. NCDOT proposes repairing 1,300 linear feet of primary dune and installing 1,100 linear feet of Permashield trapezoidal sandbags along NC 12 as shown in the attached permit drawings, and in a product specification document, both attached as stipulated exhibits.
18. Approximately 1300 linear feet of the dune would be removed to allow placement of sandbag, then the dune would be rebuilt covering the sandbags.
19. NCDOT has committed to developing a vegetation plan with DCM, WRC and the Refuge for the reconstructed dune in the areas that have vegetation at the time this project starts.

20. The proposed temporary sandbag structure being requested by NCDOT would meet the following plan specifications:
- a. The temporary sandbags (multi-cellular trapezoidal shaped, woven polypropylene, white in color as represented in Exhibit 04) would be placed in two adjoining rows parallel to the shoreline. The oceanward row would be 6' high and have an 8' wide base. The landward row would be 4' high and have a 6' wide base.
 - b. Both rows would be placed 2' below the grade of the roadway and directly adjacent to each other with a combined base of 14' wide.
 - c. The sandbags would be placed 10' from the edge of pavement and would be entirely covered by a reconstructed dune.
 - d. The sandbags and reconstructed dune would be placed within NCDOT right-of-way.
 - e. The bags would be dry-filled with clean sand from a stockpile on the State of NC property at the end of Lifeboat Station Road and the Lifeboat Station Road right of way. The sand used would be compatible and have the same general characteristics as the sand in the existing dune and beach of the project area.
 - f. That sand would also be used to construct a dune on the bags approximately 6' high and 25' wide.
 - g. Sand would not be dredged from the swash zone on the beach. There would be no wetland impacts.
 - h. There would be approximately 950 square feet of open water impacts where a portion of the dune would extend below the normal high water line.
21. DOT asserts that the alternative sandbags are only available in the color white.
22. The proposed work area along NC 12 near the Refuge Visitor Center has the following conditions present:
- i. The proposed work area is situated within the Visitor Center Hot Spot area,
 - j. NC 12 is the only road providing any means of travel to/from the island for residents or visitors to access emergency services, doctors, utilities, and other essential needs, and
 - k. The proposed work area is located within the Ocean Hazard Area of Environmental Concern (AEC).
23. The portions of the 1,300 linear feet of proposed maintenance and repair of sand dunes that are above high water as depicted on the attached drawings are approved under the maintenance clause of CAMA Major Permit No. 86-99.

24. NCDOT's permit modification request to install 1,100 linear feet of Permashield trapezoidal sandbags along NC 12 in the Visitor Center Hot Spot was granted by DCM on December 4, 2024, a copy of which is attached as a stipulated exhibit, but the CAMA Permit modification imposed conditions, including the following conditions from which NCDOT now petitions the CRC for a variance:

- Condition 9: In keeping with 15A NCAC 07H .0308(b)(2)(L) of the rules of the Coastal Resources Commission, the sandbags shall be tan in color and 3 to 5 feet wide and 7 to 15 feet long when measured flat. Base width of the temporary erosion control structure shall not exceed 20 feet, and the total height shall not exceed 6 feet, as measured from the bottom of the lowest bag.
- Condition 12: No development shall be permitted that involves the removal or relocation of primary or frontal dune sand or vegetation that would adversely affect the integrity of the dune's function as a protective barrier against flooding and erosion. These areas shall be identified by NCDOT and submitted to DCM for approval at the preconstruction meeting [07H .0308(c)(1)].
- Condition 13: No portion of the proposed dunes shall be placed below Normal High Water. [07H .0305(1); 07H .305(4); 07H .0308(c)(2); 07H .0308(c)(3)].

A copy of the modification request and the stamped drawings are attached as stipulated exhibits.

25. NCDOT seeks variances from permit conditions number 9, 12, and 13, to construct the sandbag structure as proposed in its modification request dated November 24, 2024.

26. USFWS manages the Refuge and is the only adjacent riparian landowner. Following receipt of notice, USFWS indicated that it has no objection to NCDOT's proposed sandbag structure in that location. A copy of USFWS's completed adjacent riparian landowner form is attached as a stipulated exhibit.

27. The USFWS Pea Island National Wildlife Refuge (PINWR) issued a Special Use Permit to NCDOT for the proposed project on December 13, 2024 (Permit #2024-013G), a copy of which is attached.

28. The Minor Modification of CAMA Permit 86-99 issued on December 4, 2024 includes a note that: "The permittee is advised that approval from the U.S. Fish and Wildlife Service (USFWS) and/or the National Park Service (NPS), may be required, for work within the Pea Island National Wildlife Refuge and/or the Cape Hatteras National Seashore. If required, these approvals shall be obtained prior to the initiation of any activities approved under this modification."

29. DCM received comments from the USFWS PINWR on December 2, 2024 stating that it will be consulting with the USFWS Ecological Services office through an Intra-Service Section 7 consultation for piping plovers and sea turtles.

30. DCM received comments from the USFWS Ecological Services Office on December 2, 2024

stating that they have no objections, but that an Intra-Service Section 7 consultation will be required.

31. Notice of the proposed project was also put on DCM's website and a screenshot of the website notice is attached as a stipulated exhibit. Notice of the proposed project was also posted on the site and photographs of the posted placard are attached as stipulated exhibits. DCM has not received any comments from the public regarding this project. If it does by the time of the variance hearing, DCM will share those comments with the Commission.
32. National Park Service, which manages Cape Hatteras National Seashore, indicated that it supports temporary installation of sandbags along NC 12 at the Refuge Visitor Center, a copy of which is attached as a stipulated exhibit.
33. USACE provided a comment which indicated that it has no objection to the project as proposed, a copy of which is attached as a stipulated exhibit. USACE authorized the proposed project under Regional General Permit 198000048 (COE Action ID No. SAQ-2024-02198) which was issued on December 13, 2024, a copy of which is attached as a stipulated exhibit.
34. NCWRC indicated that it had "no additional comments" in response to NCDOT's proposed permit modification, a copy of which is attached as a stipulated exhibit.
35. On December 9, 2024, DWR issued a 401 Water Quality Certification for the proposed project, a copy of which is attached as a stipulated exhibit. DWR assigned the Project Number 20241626.
36. The NCDOT Historic Architecture Group Leader provided comments to NCDOT on November 25, 2024 stating that NCDOT can proceed with the project under its exclusions checklist since it's within disturbed ROW.
37. NCDOT has stipulated that the proposed development is inconsistent with CRC Rules as required by 15A NCAC 7J.0701, a statement of which is attached as a stipulated exhibit.
38. The type of alternative sandbags NCDOT is requesting for the Visitor Center Hot Spot temporary sandbag structure were previously granted a variance in February 2022 by the Coastal Resource Commission ("CRC") for use by NCDOT on the old NC 12 cul-de-sac at the north end of Rodanthe. (Variance #CRC-VR-21-07). Photographs of the alternative sandbags used at the Rodanthe cul-de-sac are attached as stipulated exhibits.
39. The type of alternative sandbags NCDOT is requesting for the Visitor Center Hot Spot temporary sandbag structure were previously granted a variance in 2020 by the Coastal Resource Commission ("CRC") for use by NCDOT along NC 12 on Ocracoke Island in 2020 (Variance #CRC-VR-20-06). The proposed alternative sandbags were not used on Ocracoke Island due to funding and contract limitations at that time.

Stipulated Exhibits:

1. Modification Request materials including Permit application drawings, topographic and aerial maps, Permashield sandbag product information
2. DCM Map Viewer of Site with historic photos, historic shorelines, erosion rates/factors
3. Maps from previous 86-99 approval areas
4. CAMA Permit No. 86-99 issued 12/4/2024
5. USFWS Refuge adjacent riparian owner comments and SUP
6. Notice placard photos and DCM website notice screengrab
7. NPS comments.
8. USACE comments and permit
9. WRC comments.
10. DWR 401 issued 12/9/24
11. Stipulation of inconsistency.
12. Photos of Permashield bags used at Rodanthe cul-de-sac
13. Powerpoint with ground and aerial photographs of the Site

PETITIONER'S and STAFFS' POSITIONS**ATTACHMENT C**

To qualify for a variance, Petitioner must show all of the following:

- I. Will Unnecessary Hardships result from strict application of the rules, standards, or orders? If so, Petitioner must identify the unnecessary hardships.**

Petitioner's Position: Yes.

Strict application of the applicable development rules, standards, or orders issued by the CRC will cause Petitioner North Carolina Department of Transportation (NCDOT) unnecessary hardship.

NC 12 is the only road connecting Hatteras Island with the mainland. A coastal storm during November 15–17, 2024 severely impacted the primary dune along NC 12 at the Pea Island National Wildlife Refuge (“Refuge”) Visitor Center. Ocean overwash removed approximately 1,000 linear feet of the dune, exposing the highway’s edge of pavement to the high surf. The roadway flooding and pavement drop-off produced hazardous traffic conditions, so NCDOT temporarily closed NC 12 to all traffic between the Marc Basnight Bridge and the village of Rodanthe on November 15th. NCDOT rebuilt the primary dune as maintenance work authorized under CAMA Permit No. 86-99. Fortunately, the pavement was not damaged and the road has been reopened, but accelerated erosion along this section of the Refuge shoreline has left NC 12 extremely vulnerable to damage from ocean overwash events.

The Refuge Visitor Center area is a “hot spot” as identified by the NC 12 Task Force. Frequent ocean overwash events and the high rate of shoreline erosion has increased the vulnerability of the highway. This increased vulnerability necessitates the installation of temporary sandbags to protect the highway pavement infrastructure. Traditional sandbags (those conforming with 15A NCAC 07H .0308(b)(2)(L)) have been problematic to remove from the old “S-curves” area of NC 12 near Rodanthe, so the Refuge and Cape Hatteras National Seashore have expressed opposition to the use of traditional sandbags and preference for use of the proposed trapezoidal sandbag system.

A. Proposed dune repair

NCDOT proposes repairing 1,300 linear feet of primary dune and installing 1,100 linear feet of Permashield trapezoidal sandbags along NC 12, as shown in the attached permit drawings. (Exhibit 03) These sandbags use heavy polypropylene fabric that is only available in the color white. The trapezoidal design is stronger than traditional smaller sandbags, and the material will hold up better than the fabric used in traditional sandbags. The sandbag sections are 50 feet in length, and each 50’ section is separated every 2’ by a sewn baffle. NCDOT proposes to use two rows of sandbags. The oceanward row would be 6’ high and have an 8’ wide base. The landward row would be 4’ high and have a 6’ wide base. Both rows would be placed 2’ below the grade of the roadway and directly adjacent to each other with a combined base of 14’ wide. The sandbags would be placed 10’ from the edge of pavement and would be entirely covered by the reconstructed dune. The reconstructed dune dimensions would be approximately 6’ high and 25’ wide. The sandbag would be above the NHWL as surveyed on 11/20/2024 by NCDOT and NCDOT, a small portion (approximately 950 square feet) of the protective dune would extend below the NHWL.

The Permashield bags can be quickly dry filled, unlike the traditional conforming sandbags that need to be hydraulically pumped with sand from the swash zone of the beach. For this project, sand would not be dredged from the swash zone on the beach, reducing impact to the beach. The sandbags would be dry-filled with sand from the stockpile on the State of NC property at the end of Lifeboat Station Road and the Lifeboat Station Road ROW. Clean sand would be used for filling the sandbags and reconstructing the dunes, free of vegetation and debris. Sand for the sandbags and dune reconstruction shall be of the same general characteristics as the sand in the existing dune. A steel installation platform would be used to support the alternative sandbags during the filling operation. The sandbag volume is approximately 1,870 cubic yards, and the dune volume is approximately 5,650 cubic yards. The sandbags and reconstructed dune would be placed within NCDOT Right-of-Way (ROW), and the project would result in approximately 950 square feet of open water impacts (where a portion of the reconstructed dune would extend below NHWL) and no wetland impacts.

On November 15th, and pursuant to the authority granted by G.S. 136-28.1 (e), the NCDOT Chief Engineer issued an emergency waiver from statutory bidding requirements in order to obtain the equipment and/or contractors for assistance with all necessary repairs to maintain NC 12. With this waiver and State funds being used for this project, the lengthy contracting time has been removed to expedite the repairs. The contractor that installs Permashield sandbags is currently working in western North Carolina and could send a work crew to install the sandbags on short notice. They anticipate the project could be completed in 1 week. Staging for the contractor and sand stockpiles would be within NCDOT ROW just north of the Visitor Center on the west side of NC 12.

B. Background

The CRC has granted a variance to use this trapezoidal sandbag system in two prior instances. This trapezoidal sandbag system was previously installed on the old NC 12 cul-de-sac at the north end of Rodanthe, as authorized by CAMA Permit No. 106-12 Minor Modification by CRC Variance Issued 2/23/2022. In June 2020, The CRC granted NCDOT's variance petition (CRC-VR 20-06) to use this same style of alternative sandbags on Ocracoke Island. However, due to funding and contracting limitations at the time, the trapezoidal sandbags were not installed.

This sandbag project is a temporary solution for maintaining NC 12 on the Refuge. NCDOT has recently been awarded a PROTECT Planning Grant from FHWA to conduct a Planning and Environmental Linkages (PEL) study that includes comprehensive resiliency planning, alternatives development and evaluation, and robust public engagement for NC 12 on Pea Island. Also known as Solving Access for NC 12 in Dare County (SAND), this project will establish a solid foundation for future project development and construction, with the goal of streamlining subsequent environmental review, accelerating project delivery, and securing the long-term resiliency of NC 12. NCDOT anticipations the SAND project will determine short-term and long-term solutions for maintaining NC 12 on Pea Island National Wildlife Refuge. When those solutions are implemented, NCDOT would remove the temporary sandbags when no longer needed to protect the roadway of NC 12. With the stronger material and design, the Permashield bags can be more effectively removed when they are no longer needed. NCDOT anticipates

quicker and more complete removal of Permasield sandbags as opposed to the challenging removal of traditional sandbags. For this reason, the Refuge and Cape Hatteras National Seashore prefer use of the trapezoidal sandbags.

NCDOT would like to begin work as soon as possible to protect NC 12 because it is a critical link needed to connect people, products, and places safely and efficiently to the southern Outer Banks. A breach of NC 12 at this site would take extensive time and funding for pavement repairs. In the event of a breach at the Visitor Center, the only way to leave the southern Outer Banks would be via the emergency Rodanthe-Stumpy Point ferry route or by traveling south by ferry to Ocracoke and Swan Quarter/Cedar Island. The significant reduction in access to Hatteras Island would not be sufficient for the residents, and the operation of the emergency ferry would cost approximately \$55,200 per day for the reduced access.

NCDOT would also prefer to start the project in time to avoid impacting the shorebird and sea turtle nesting seasons that start in February 2025. If the project start date is delayed for any reason, NCDOT would work closely with the Refuge to ensure the project does not negatively impact nesting activities. A Special Use Permit has been requested from the Refuge for the project.

C. Permit status

On November 24, 2024, NCDOT requested an emergency modification of CAMA Major Permit No. 86-99. On December 4, 2024, DCM issued a minor modification authorizing installation of 1,100 linear feet of sandbags, but imposed conditions, including the following conditions from which NCDOT now petitions the CRC for a variance:

9. In keeping with 15A NCAC 07H .0308(b)(2)(L) of the rules of the Coastal Resources Commission, the sandbags shall be tan in color and 3 to 5 feet wide and 7 to 15 feet long when measured flat. Base width of the temporary erosion control structure shall not exceed 20 feet, and the total height shall not exceed 6 feet, as measured from the bottom of the lowest bag.

12. No development shall be permitted that involves the removal or relocation of primary or frontal dune sand or vegetation that would adversely affect the integrity of the dune's function as a protective barrier against flooding and erosion. These areas shall be identified by NCDOT and submitted to DCM for approval at the preconstruction meeting [07H .0308(c)(1)].

13. No portion of the proposed dunes shall be placed below Normal High Water. [07H .0305(1); 07H .0305(4); 07H .0308(c)(2); 07H .0308(c)(3)].

D. Identification of hardships

Strict application of the rules pertaining to sandbag size and color cause would NCDOT unnecessary hardship by preventing NCDOT from utilizing an alternative sandbag design which could better protect the road and could be installed with less impact to the beach. The proposed reconfiguration using trapezoidal sandbags would have a narrower footprint than if conforming-

sized sandbags were used, amounting to less square footage occupied by sandbags. The Refuge and Seashore have also indicated a preference for the trapezoidal sandbag system.

Strict application of the minimum setback rules would cause NCDOT unnecessary hardship by preventing NCDOT from adequately protecting the road from overwash. The goal of the work NCDOT is proposing is repair of the dune within existing right of way.

Strict application of the rules prohibiting removal or relocation of the primary or frontal dune would cause NCDOT unnecessary hardship by preventing NCDOT from effectively repairing the dune as proposed to protect NC 12.

The proposed trapezoidal sandbag system is expected to better protect the highway than the currently permitted sandbag structure. The proposed sandbags could be filled using dry sand which would eliminate open water impacts in the swash zone. The trapezoidal sandbag system would provide public benefits and be aligned with the spirit and intent of the Coastal Area Management Act (CAMA) and Coastal Resource Commission's (CRC) rules by reducing impacts to the beach during installation, requiring less maintenance, and being easier to clean up after damage from storm events and removal after use.

Staffs' Position: Yes.

Staff agree that strict application of the Commission's rules for dune protection at 15A NCAC 7H .0308(c)(1), (c)(2), and (c)(3) and for temporary erosion control structures (orientation, size and color) found at 15A NCAC 7H .0308(b)(2)(L), from which NCDOT seeks a variance, cause it unnecessary hardships.

NCDOT is seeking a variance from 15A NCAC 7H .0308(c)(1)-(3) which are the Commission's dune protection, establishment, restoration and stabilization rules. These rules require that development does not involve the removal of a dune, that new dunes shall be aligned with adjacent natural dunes, and that dunes shall not be broadened or extended in an oceanward direction. In this case, NCDOT proposes to remove some existing dune and then after placing the sandbag structure within the right-of-way and landward of high water, cover it with sand and re-vegetate it in areas where there was natural vegetation at the start of the project. There does not appear to be room within the right-of-way to place sandbags and sand to construct a new dune landward of any existing dunes. The reconstructed dune that was rebuilt as a temporary measure after the November 15-17 storm will be disturbed in order to install the proposed sandbags. Staff note that this section of NC 12 is the vehicular access from the North to the southern portion of Hatteras Island. The proposed sandbags are a temporary measure while NCDOT works with numerous stakeholders, including DCM, to develop and implement a long-term solution. (NCDOT has designed the sandbag structure and constructed dune to be as landward as possible while still maintaining the highway within the right-of-way of NC 12.

NCDOT is also seeking a variance from sandbag orientation, size, and color rules found at 15A NCAC 7H .0308(b)(2)(L), in order to use non-standard size sandbags and to authorize the use of white sandbags instead of tan. The Commission sets limitations on the size of individual sandbags to ensure that they are well-defined and limited in application. In this case, NCDOT seeks to use these differently designed and installed sandbags because they state the trapezoidal design is stronger than traditional sandbags and they state the material will hold up better than the fabric used in traditional sandbags. NCDOT also states that the nontraditional sandbags can be installed at a faster rate, they require less maintenance because NCDOT expects them to be easier to repair if damage occurs during storm events, and NCDOT expects them to be easier to remove when they are no longer needed. Strict adherence to these rules creates an unnecessary hardship that would make it more difficult for NCDOT to protect this portion of NC 12 for continued public transportation use in a timely manner.

II. Do the hardships result from conditions that are peculiar to the property, such as the location, size, or topography of the property? Explain.

Petitioner's Position: Yes.

The Refuge Visitor Center area of NC 12 is particularly vulnerable to overwash due to the erosion rate being high and the narrow area of land between the ocean and the Refuge ponds just west of NC 12. The duration and frequency of storms including Hurricane Matthew (2016), Hurricane Florence (2018) and Hurricane Dorian (2019) has accelerated erosion. The beach profile in the hot spot is flat, subjecting the reconstructed dunes built after the hurricanes to the maximum wave energy generated by subsequent northeasters and other smaller tropical storm events. This hot spot is characterized by low topography/elevations transitioning from the Refuge ponds to a flat beach and ocean within a few hundred feet. This topography subjects this area to erosive wave energy created by storm surge from the Atlantic Ocean. Ocean wave energy on the outer banks is higher than anywhere else on the North Carolina coast, and east coast of the U.S., due to its close proximity to the continental shelf edge and deeper nearshore waters which create less bottom drag on wind-generated wave energy.

Staffs' Position: Yes.

Staff notes that the Project Area of NC 12 at the Pea Island Visitor Center Hot Spot has a high erosion rate and is particularly narrow at this location making it vulnerable to damage from erosion. This is seen in the various photographs contained in the stipulated exhibits and in the facts above. There is little elevation in this area, leaving imminently threatened NC 12 particularly vulnerable in this hot spot. For these reasons, Staff agree that this accelerated erosion is quickly altering the low topography of the site and that these are conditions peculiar to the property which contribute to NCDOT's hardships.

III. Do the hardships result from actions taken by the petitioner? Explain.

Petitioner's Position: No.

NCDOT's statutory purpose is to provide "an integrated statewide transportation system for the economical and safe transportation of people and goods as provided for by law." N.C. General Statutes § 143B-346

The hardships facing NCDOT in maintaining safe travel in the Refuge Visitor Center area are the result of topography- and weather-related factors and are beyond the control of NCDOT. For decades, NCDOT has collaborated with other state and federal agencies to study and evaluate options for maintaining safe transportation in the area in light of topography and weather challenges.

Staffs' Position: No.

Staff's position is that the hardships facing NCDOT in maintaining safe travel in the Visitor Center Hot Spot area do not result from actions taken by NCDOT. NCDOT and the other participants in the multiple studies of NC 12 have long recognized the vulnerability of this area and have made efforts to develop and implement a long-term solution to maintain NC 12. Staff agree that temporary erosion control measures are needed to protect this portion of NC 12 in a timely manner.

IV. Is the requested variance (1) consistent with the spirit, purpose, and intent of the rules, standards, or orders, (2) will secure public safety and welfare; and (3) will preserve substantial justice? Explain.

Petitioner's Position: Yes.

A. Consistent with the spirit, purpose, and intent of the rules, standards, or orders.

NCDOT's proposed use of a trapezoidal sandbag system is consistent with the spirit, purpose, and intent of the rules pertaining to the use of temporary erosion control structures in the Ocean Hazard Area of Environmental Concern (AEC) and its specific use standards found under 15A NCAC 7H.0308(b).

When considering the storm and ocean wave climate and the resultant erosion rates in this area, any style polypropylene bag filled with sand will be only temporary and certainly will not exceed their usefulness beyond the eight-year timeframe allowed per 7H.0308(b)(2)(F). The proposed alternative sandbag structure would be limited to 4 feet above existing grade when installed and would be buried within a protective dune. The sandbags would be within NCDOT's existing right of way.

The currently permitted smaller sandbags are susceptible to scatter when they fail during a storm event. NCDOT's opinion is that the proposed alternative temporary erosion control structure would fail less often, when damage does occur the proposed bags would fragment less, and the proposed structure would be easier to remove once its usefulness ends; therefore it is consistent with the intent of the specific use standard 7H.0308(b)(2)(K). Although the size and color of the

alternative sandbags do not comply with 7H.0308(b)(2)(L), the proposed temporary erosion control structure is consistent with the remaining standards in (b)(2). The proposed temporary erosion control structure to be built using the trapezoidal sandbag system would have a base width (14 feet) which is significantly less than the currently permitted 20 feet and the proposed height is less than the maximum allowed 6 feet. NCDOT would cover the proposed structure with a protective dune.

The proposed temporary erosion structure was designed by NCDOT to comply with 7H.0308(b)(H)(iii) by “limiting the extent and scope necessary” to provide some measure of protection to the highway during storm overwash events. Also, NCDOT feels the proposed sandbag system would reduce impacts to the beach during construction because the proposed bags could be filled using dry sand, which eliminates the current impacts of extending a hydraulic pump and pipe from the surf zone across the beach.

Requests to modify a major CAMA permit are subject to the same processing procedure applicable to the original permit application or to a limited review if circulation would serve no purpose as determined by DCM per NCAC 7J.0405(a). NCDOT submitted a modification request on November 24, 2024 which was circulated for comments. U.S. Fish and Wildlife Service, which manages the adjacent Refuge, indicated that they have no objection to NCDOT’s proposed temporary sandbag structure. NPS, which manages the Seashore, indicated that it supports temporary installation of sandbags. U.S. Army Corps of Engineers commented that it has no objection to the project as proposed. N.C. Wildlife Resources Commission indicated that it had no additional comments.

NCDOT feels the specific use standard found under 7H.0308(b)(1)(K) provides the ability for the CRC and DCM regulatory staff to consider “erosion control measures using innovative technology or design” as experimental on a case by case basis” This use of this trapezoidal sandbag structure (if allowed) will provide data for review by DCM regulatory staff and NCDOT regarding their effectiveness in protecting NC 12 and their associated environmental impacts. In June 2020, The CRC granted NCDOT’s variance petition (CRC-VR 20-06) to use this same style of alternative sandbags on Ocracoke Island. Due to funding limitations at the time, those alternative sandbags were not installed. This trapezoidal sandbag system was previously installed on the old NC 12 cul-de-sac at the north end of Rodanthe, as authorized by CAMA Permit No. 106-12 Minor Modification by CRC Variance Issued 2/23/2022.

B. Secure the public safety and welfare.

This variance request would serve to provide benefits to public safety and welfare for the residents and visitors travelling to and from Hatteras Island. NC 12 is the only road access to Hatteras Island and loss of vehicular access from erosion or storm and tidal events can severely impact access to Hatteras Island, especially during the summer months which are the peak public travel period. In the event of a breach at the Visitor Center, the only way to leave the southern Outer Banks would be via the emergency Rodanthe-Stumpy Point ferry route or by traveling south by ferry to Ocracoke and Swan Quarter/Cedar Island. The significant reduction in access to Hatteras Island would not be sufficient for the residents, and the operation of the emergency ferry would cost

approximately \$55,200 per day for the reduced access. Granting the requested variance would allow NCDOT to protect access to Hatteras Island while State and Federal agencies cooperate to identify and implement long term solutions.

C. Preserve substantial justice.

The requested variance will preserve substantial justice by enabling NCDOT to employ a better temporary erosion control structure to protect public access Hatteras Island. NCDOT believes that the spirit of the CRC rules supports a decision to allow NCDOT to use a nonconforming alternative sandbag to protect the primary transportation route to Hatteras Island. The social and economic benefits to the public of maintaining short-term vehicular access outweigh any significant environmental impact. Loss of vehicular access from erosion or storm and tidal events can severely impact homes and travel to and from Hatteras Island, especially during the summer months which are the peak public travel period. Granting the proposed variance would allow NCDOT to continue to provide access. For these reasons, the petitioner feels that granting of this variance will preserve substantial justice.

Staffs' Position: Yes.

Staff agrees that the new sandbag structure and created dune meets the spirit of the Commission's rules where it will help retain access and safe transportation along NC 12 in this area. While it will impact existing dunes, NC DOT proposes to construct dunes on top of the sandbag structure within the existing right-of-way. Staff also agrees that the proposed use of alternative sandbags that are larger and white in color, in order to maintain access on NC 12 in the area of the Pea Island Visitor Center Hot Spot while NC DOT continues to study alternatives to maintain transportation longer-term is consistent with the spirit, purpose, and intent of the Commission's rules.

Staff agrees that the variance request to allow construction of the sandbag structure and constructed dune and the use of alternative sandbags will secure public safety and welfare. It is staff's position that the need to keep a public transportation connection open for access through Hatteras Island is essential and will further public safety and welfare.

Staff agrees with the Petitioner that the variance will preserve substantial justice as it will allow the Petitioner to protect NC 12 in the short- and mid-term with alternative sandbags while working toward a long-term solution for transportation along Hatteras Island. This will allow the continued use by the public and residents of Hatteras Island, while also studying and eventually implementing a long-term solution for the Pea Island Visitor Center Hot Spot.

ATTACHMENT D

Petitioner's Petition Materials

(without initial proposed facts or duplicative exhibits)

CAMA VARIANCE REQUEST FORM

DCM FORM 11 CAMA Maj
DCM FILE No.: 86-99

PETITIONER'S NAME NC Department of Transportation

COUNTY WHERE THE DEVELOPMENT IS PROPOSED Dare

Pursuant to N.C.G.S. § 113A-120.1 and 15A N.C.A.C. 07J .0700 *et seq.*, the above named Petitioner hereby applies to the Coastal Resources Commission (CRC) for a variance.

VARIANCE HEARING PROCEDURES

A variance petition will be considered by the CRC at a regularly scheduled meeting, heard in chronological order based upon the date of receipt of a complete petition. 15A N.C.A.C. 07J .0701(e). A complete variance petition, as described below, must be *received* by the Division of Coastal Management (DCM) a minimum of six (6) weeks in advance of the first day of a regularly scheduled CRC meeting to be eligible for consideration by the CRC at that meeting. 15A N.C.A.C. 07J .0701(e). The final set of stipulated facts must be agreed to at least four (4) weeks prior to the first day of a regularly scheduled meeting. 15A N.C.A.C. 07J .0701(e). The dates of CRC meetings can be found at DCM's website: **www.nccoastalmanagement.net**

If there are controverted facts that are significant in determining the propriety of a variance, or if the Commission determines that more facts are necessary, the facts will be determined in an administrative hearing. 15A N.C.A.C. 07J .0701(b).

VARIANCE CRITERIA

The petitioner has the burden of convincing the CRC that it meets the following criteria:

- (a) Will strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships? Explain the hardships.
- (b) Do such hardships result from conditions peculiar to the petitioner's property such as the location, size, or topography of the property? Explain.
- (c) Do the hardships result from actions taken by the petitioner? Explain.
- (d) Will the variance requested by the petitioner (1) be consistent with the spirit, purpose, and intent of the rules, standards or orders issued by the Commission; (2) secure the public safety and welfare; and (3) preserve substantial justice? Explain.

Please make your written arguments that Petitioner meets these criteria on a separate piece of paper. The Commission notes that there are some opinions of the State Bar which indicate that non-attorneys may not represent others at quasi-judicial proceedings such as a variance hearing before the

Commission. These opinions note that the practice of professionals, such as engineers, surveyors or contractors, representing others in quasi-judicial proceedings through written or oral argument, may be considered the practice of law. Before you proceed with this variance request, you may wish to seek the advice of counsel before having a non-lawyer represent your interests through preparation of this Petition.

For this variance request to be complete, the petitioner must provide the information listed below. The undersigned petitioner verifies that this variance request is complete and includes:

- X The name and location of the development as identified on the permit application;
- X A copy of the permit decision for the development in question;
- ** A copy of the deed to the property on which the proposed development would be located;
- X A complete description of the proposed development including a site plan;
- X A stipulation that the proposed development is inconsistent with the rule at issue;
- X Proof that notice was sent to adjacent owners and objectors*, as required by 15A N.C.A.C. 07J .0701(c)(7);
- N/A Proof that a variance was sought from the local government per 15A N.C.A.C. 07J .0701(a), if applicable;
- X Petitioner's written reasons and arguments about why the Petitioner meets the four variance criteria, listed above;
- X A draft set of proposed stipulated facts and stipulated exhibits. Please make these verifiable facts free from argument. Arguments or characterizations about the facts should be included in the written responses to the four variance criteria instead of being included in the facts.
- X This form completed, dated, and signed by the Petitioner or Petitioner's Attorney.

**Please contact DCM or the local permit officer for a full list of comments received on your permit application. Please note, for CAMA Major Permits, the complete permit file is kept in the DCM Morehead City Office.*

****NCDOT owns, controls, and maintains a public right-of-way easement on NC Highway 12, Pea Island National Wildlife Refuge, Hatteras Island in Dare County, North Carolina.**

Due to the above information and pursuant to statute, the undersigned hereby requests a variance.

_____ Signature of Petitioner or Attorney			_____ Date
Colin Justice, Special Deputy Attorney General			cjustice@ncdoj.gov
_____ Printed Name of Petitioner or Attorney			_____ Email address of Petitioner or Attorney
1505 Mail Service Center			(919) 707-4533
_____ Mailing Address			_____ Telephone Number of Petitioner or Attorney
Raleigh	NC	27699-1505	(919) 733-9329
_____ City	_____ State	_____ Zip	_____ Fax Number of Petitioner or Attorney

DELIVERY OF THIS HEARING REQUEST

This variance petition must be **received** by the Division of Coastal Management at least six (6) weeks before the first day of the regularly scheduled Commission meeting at which it is heard. A copy of this request must also be sent to the Attorney General's Office, Environmental Division, 15A N.C.A.C. 07J .0701(e).

Contact Information for DCM:

By mail, express mail or hand delivery:

Director
Division of Coastal Management
400 Commerce Avenue
Morehead City, NC 28557

By Fax:
(252) 247-3330

By Email:

Check DCM website for the email address of the current DCM Director
www.nccoastalmanagement.net

Contact Information for Attorney General's Office:

By mail:

Environmental Division
9001 Mail Service Center
Raleigh, NC 27699-9001

By express mail:

Environmental Division
114 W. Edenton Street
Raleigh, NC 27603

By Fax:

(919) 716-6767



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

December 6, 2024

Dawn Washington
Refuge Manager
Pea Island National Wildlife Refuge
100 Conservation Way
Manteo, NC 27954

Subject: **CAMA Major Permit No. 86-99** – Notice of petition for Variance to allow installation of sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County

Dear Madam,

This letter is to provide notice that the North Carolina Department of Transportation (NCDOT) is petitioning the Coastal Resources Commission (CRC) for a variance from certain conditions of the December 4, 2024 modification of CAMA Major Permit No. 86-99. NCDOT expects the variance to be heard by the CRC via an online meeting on December 16, 2024 at 10:00 A.M. If you have comments or objections to NCDOT's variance request, please contact Division of Coastal Management Director Tancred Miller at tancred.miller@deq.nc.gov or 252-515-5432.

Sincerely,

DocuSigned by:
Paul Williams
7C79B0D2941F47E...

Paul Williams
Division One Environmental Officer



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

December 6, 2024

David E. Hallac
Superintendent
Cape Hatteras National Seashore
1401 National Park Drive
Manteo, NC 27954

Subject: **CAMA Major Permit No. 86-99** – Notice of petition for Variance to allow installation of sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County

Dear Sir,

This letter is to provide notice that the North Carolina Department of Transportation (NCDOT) is petitioning the Coastal Resources Commission (CRC) for a variance from certain conditions of the December 4, 2024 modification of CAMA Major Permit No. 86-99. NCDOT expects the variance to be heard by the CRC via an online meeting on December 16, 2024 at 10:00 A.M. If you have comments or objections to NCDOT's variance request, please contact Division of Coastal Management Director Tancred Miller at tancred.miller@deq.nc.gov or 252-515-5432.

Sincerely,

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Paul Williams
7C79B0D2941F47E...

Paul Williams
Division One Environmental Officer



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

December 6, 2024

Kyle Barnes
NCDOT Coordinator – Division 1 & 4
US Army Corps of Engineers
2407 West Fifth St.
Washington, NC 27889

Subject: **CAMA Major Permit No. 86-99** – Notice of petition for Variance to allow installation of sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County

Dear Sir,

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Sincerely,

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Paul Williams
7C79B0D2941F47E...

Paul Williams
Division One Environmental Officer



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

December 6, 2024

Garcy Ward
Environmental Specialist, Transportation Permitting Branch
North Carolina Department of Environmental Quality
943 Washington Square Mall
Washington, NC 27889

Subject: **CAMA Major Permit No. 86-99** – Notice of petition for Variance to allow installation of sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County

Dear Sir,

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Sincerely,

DocuSigned by:
Paul Williams
7C79B0D2941F47E...

Paul Williams
Division One Environmental Officer



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

December 6, 2024

Travis W. Wilson
Eastern DOT Habitat Conservation Coordinator
Habitat Conservation Division
NC Wildlife Resources Commission
1718 Hwy 56 West
Creedmoor, NC 27522

Subject: **CAMA Major Permit No. 86-99** – Notice of petition for Variance to allow installation of sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County

Dear Sir,

This letter is to provide notice that the North Carolina Department of Transportation (NCDOT) is petitioning the Coastal Resources Commission (CRC) for a variance from certain conditions of the December 4, 2024 modification of CAMA Major Permit No. 86-99. NCDOT expects the variance to be heard by the CRC via an online meeting on December 16, 2024 at 10:00 A.M. If you have comments or objections to NCDOT's variance request, please contact Division of Coastal Management Director Tancred Miller at tancred.miller@deq.nc.gov or 252-515-5432.

Sincerely,

DocuSigned by:

Paul Williams

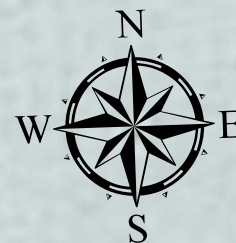
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Paul Williams
Division One Environmental Officer

CAMA VARIANCE PETITION
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Petitioner, North Carolina Department of Transportation, through its attorney, Colin Justice, Special Deputy Attorney General, stipulates that the proposed development that is the subject of the Variance Petition is inconsistent with Coastal Resources Commission Rules 15A NCAC 7H .0308(a)(2)(L); 7H .308(c)(1); and 07H .0308(c)(3).

Colin Justice
Special Deputy Attorney General
NC Bar No. 42965
Attorney for NC Dept. of Transportation
NC Dept. of Justice-Transportation Division
1505 Mail Service Center
Raleigh, NC 27699-1505
Phone: (919) 707-4480
Fax: (919) 733-9329



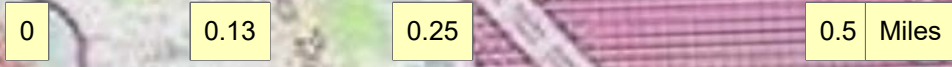
Start Project
35.717409°
-75.493666°

NHWL
11/20/2024

1,100 Linear Foot
Sandbag Structure

1,300 Linear Foot
Reconstructed Dune

End Project
35.714051°
-75.492293°

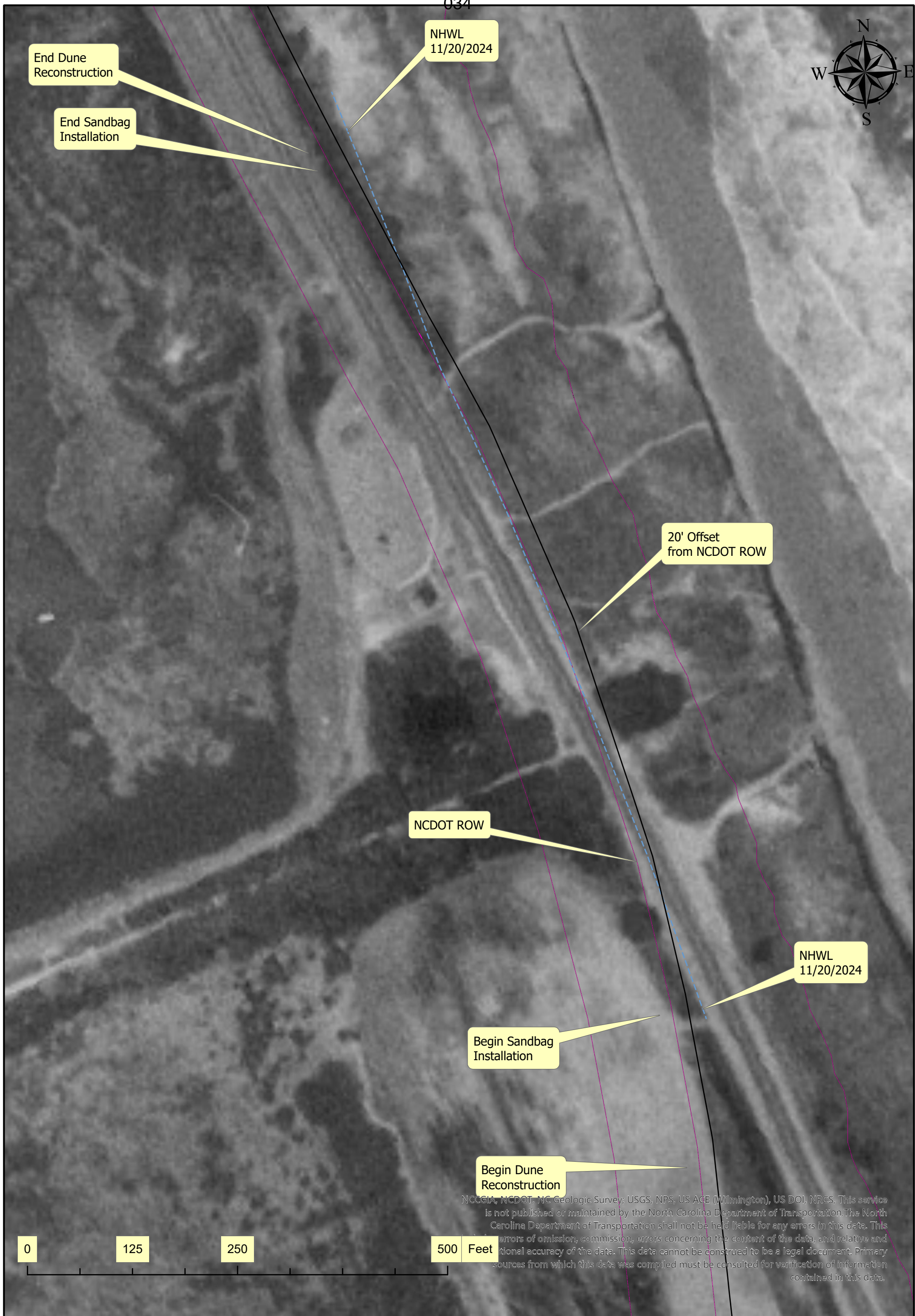


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Pea Island NWR Visitor Center Sandbag Project on NC 12

Date: 11/24/2024
Author: Paul Williams
Scale: 1:10,000



034

NHWL
11/20/2024

End Dune
Reconstruction

End Sandbag
Installation



20' Offset
from NCDOT ROW

NCDOT ROW

NHWL
11/20/2024

Begin Sandbag
Installation

Begin Dune
Reconstruction

0 125 250 500 Feet

NCCGIA, NCDOT, NC Geologic Survey, USGS, NPS, US ACE (Wilmington), US DOI, NRCS. This service is not published or maintained by the North Carolina Department of Transportation. The North Carolina Department of Transportation shall not be held liable for any errors in this data. This data cannot be construed to be a legal document. Primary sources from which this data was compiled must be consulted for verification of information contained in this data.



Pea Island NWR Visitor Center Sandbag Project on NC 12 1993 Imagery

Date: 12/6/2024
Imagery: USGS DOQQ
Author: Paul Williams
Scale: 1:1,250



035

NHWL
11/20/2024

End Dune
Reconstruction

End Sandbag
Installation



20' Offset
from NCDOT ROW

NCDOT ROW

NHWL
11/20/2024

Begin Sandbag
Installation

Begin Dune
Reconstruction

0 125 250 500 Feet

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Pea Island NWR Visitor Center Sandbag Project on NC 12 1998 Imagery

Date: 12/6/2024
Imagery: USGS DOQQ
Author: Paul Williams
Scale: 1:1,250



036

NHWL
11/20/2024

End Dune
Reconstruction

End Sandbag
Installation



20' Offset
from NCDOT ROW

NCDOT ROW

NHWL
11/20/2024

Begin Sandbag
Installation

Begin Dune
Reconstruction

0 125 250 500 Feet

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legal document. Primary sources from which this data was compiled must be consulted for
verification of information contained in this data.



Pea Island NWR Visitor Center Sandbag Project on NC 12 6/7/2012 Imagery

Date: 12/6/2024
Imagery: NCDOT
Photogrammetry Unit
Author: Paul Williams
Scale: 1:1,250



037

NHWL
11/20/2024

End Dune
Reconstruction

End Sandbag
Installation



20' Offset
from NCDOT ROW

NCDOT ROW

NHWL
11/20/2024

Begin Sandbag
Installation

Begin Dune
Reconstruction

0 125 250 500 Feet

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Pea Island NWR Visitor Center Sandbag Project on NC 12 10/16/2016 Imagery

Date: 12/6/2024
Imagery: NCDOT
Photogrammetry Unit
Author: Paul Williams
Scale: 1:1,250



038

NHWL
11/20/2024

End Dune
Reconstruction

End Sandbag
Installation



20' Offset
from NCDOT ROW

NCDOT ROW

NHWL
11/20/2024

Begin Sandbag
Installation

Begin Dune
Reconstruction

0 125 250 500 Feet

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**Pea Island NWR Visitor Center
Sandbag Project on NC 12
10/5/2020 Imagery**

Date: 12/6/2024
Imagery: NCDOT
Photogrammetry Unit
Author: Paul Williams
Scale: 1:1,250

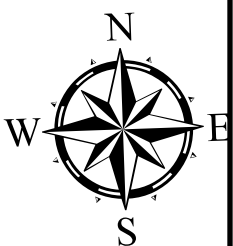


039

NHWL
11/20/2024

End Dune
Reconstruction

End Sandbag
Installation



20' Offset
from NCDOT ROW

NCDOT ROW

NHWL
11/20/2024

Begin Sandbag
Installation

Begin Dune
Reconstruction

0 125 250 500 Feet

This service is not published or maintained by the North Carolina Department of Transportation. The North Carolina Department of Transportation shall not be held liable for any errors in this data. This data cannot be construed to be a legal document. Primary sources from which this data was compiled must be consulted for verification of information contained in this data.



Pea Island NWR Visitor Center Sandbag Project on NC 12 11/18/2024 Imagery

Date: 12/3/2024
Imagery: NCDOT Aviation
11/18/2024 Drone Flight
Author: Paul Williams
Scale: 1:1,250

ATTACHMENT E

Stipulated Exhibits



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

November 24, 2024

Lee Cannady
NC Division of Coastal Management
943 Washington Square Mall
Washington, NC 27889

Subject: **CAMA Major Permit No. 86-99** – Emergency Modification Request for the Installation of Sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County
WBS # 51214.01S

Dear Mr. Cannady,

The November 15 – 17 coastal storm on the Outer Banks severely impacted the primary dune along NC 12 at the Pea Island National Wildlife Refuge (Refuge) Visitor Center. The ocean overwash completely removed approximately 1,000 linear feet of the dune, exposing the highway edge of pavement to the high surf. The roadway flooding and pavement drop-off produced hazardous traffic conditions. The North Carolina Department of Transportation (NCDOT) temporarily closed NC 12 to all traffic between the Marc Basnight Bridge and the village of Rodanthe on November 15th while NCDOT Maintenance rebuilt the dune, with the dune maintenance work authorized under CAMA Permit No. 86-99. NCDOT Maintenance forces has rebuilt the primary dune to protect NC 12, but accelerated erosion along this section of the Refuge has left NC 12 extremely vulnerable to ocean overwash events. Fortunately, NC 12 did not experience pavement damage during this event.

The Visitor Center area is a “hot spot”, as identified by the NC 12 Task Force. Frequent ocean overwash events and the high rate of shoreline erosion has increased the vulnerability of the highway. The increasing vulnerability of this location necessitates the installation of temporary sandbags to protect the pavement infrastructure. As traditional sandbags have been problematic to remove from the old “S-curves” area of NC 12 near Rodanthe, the Refuge and the Cape Hatteras National Seashore have expressed opposition to the use of traditional sandbags.

NCDOT proposes repairing 1,300 linear feet of primary dune and installing 1,100 linear feet of Permashield sandbags along NC 12, as shown in the attached permit drawings.

This sandbag system was previously authorized and installed on the old NC 12 cul-de-sac

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
DIVISION ONE
113 AIRPORT DRIVE, SUITE 100
EDENTON, NC 27932

Telephone: (252) 482-1850
Fax: (252) 482-8722
Customer Service: 1-877-368-4968

Location:
113 AIRPORT DRIVE, SUITE 100
EDENTON, NC 27932

at the north end of Rodanthe, as authorized by CAMA Permit No. 106-12 Minor Modification by CRC Variance issued 2/23/2022. The Permashield sandbag system uses heavy polypropylene fabric that is only available in the color white. The trapezoidal design is stronger than traditional sandbags, and the material will hold up better than the fabric used in traditional sandbags. The sandbag sections are 50 feet in length, and each 50' section is separated every 2' by a sewn baffle. NCDOT proposes to use two rows of sandbags. The oceanward row would be 6' high and have an 8' wide base. The landward row would be 4' high and have a 6' wide base. Both rows would be placed 2' below the grade of the roadway and directly adjacent to each other with a combined base of 14' wide. The sandbags would be placed 10' from the edge of pavement and would be entirely covered by the reconstructed dune. The reconstructed dune dimensions would be approximately 6' high and 25' wide and above the NHWL as surveyed in on 11/20/2024 by NCDOT and NCDCM. The Permashield bags can be quickly dry filled, unlike the traditional sandbags that need to be hydraulically pumped with sand from the swash zone of the beach. For this project, sand would not be dredged from the swash zone on the beach. The sandbags and reconstructed dune would be placed within NCDOT Right-of-Way (ROW), and the project would result in no open water and no wetland impacts.

The sandbag volume is approximately 1,870 cubic yards, and the dune volume is approximately 5,650 cubic yards. The sandbags would be dry-filled with sand from the stockpile on the State of NC property at the end of Lifeboat Station Road and the Lifeboat Station Road ROW. Clean sand would be used for filling the sandbags and reconstructing the dunes, free of vegetation and debris. Sand for the sandbags and dune reconstruction shall be of the same general characteristics as the sand in the existing dune. A steel installation platform would be used to support the alternative sandbags during the filling operation.

On November 15th, and pursuant to the authority granted by G.S. 136-28.1 (e), the NCDOT Chief Engineer issued an emergency waiver from statutory bidding requirements in order to obtain the equipment and/or contractors for assistance with all necessary repairs to maintain NC 12. With this waiver and State funds being used for this project, the lengthy contracting time has been removed to expedite the repairs. The contractor that installs Permashield sandbags is currently working in western North Carolina and could send a work crew to install the sandbags on short notice. They anticipate the project could be completed in 1 week. Staging for the contractor and sand stockpiles would be within NCDOT ROW just north of the Visitor Center on the west side of NC 12.

This sandbag project is a temporary solution for maintaining NC 12 on the Refuge. NCDOT has recently been awarded a PROTECT Planning Grant from FHWA to conduct a Planning and Environmental Linkages (PEL) study that includes comprehensive resiliency planning, alternatives development and evaluation, and robust public engagement for NC 12 on Pea Island. Also known as Solving Access for NC 12 in Dare County (SAND), this project will establish a solid foundation for future project development and construction, with the goal of streamlining subsequent environmental review, accelerating project delivery, and securing the long-term resiliency of NC 12. NCDOT anticipations the SAND project will determine short-term and long-term solutions for maintaining NC 12 on Pea Island National Wildlife Refuge. When those

solutions are implemented, NCDOT would remove the temporary sandbags when no longer needed to protect the roadway of NC 12. With the stronger material and design, the Permashield bags can be more effectively removed when they are no longer needed. NCDOT anticipates quicker and more complete removal of Permashield sandbags as opposed to the challenging removal of traditional sandbags.

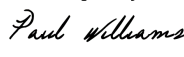
NCDOT would like to begin work as soon as possible to protect NC 12. NC 12 is a critical link needed to connect people, products, and places safely and efficiently to the southern Outer Banks. A breach on NC 12 at this site would take extensive time and funding for pavement repairs. In the event of a breach at the Visitor Center, the only way to leave the southern Outer Banks would be via the emergency Rodanthe-Stumpy Point ferry route or by traveling south by ferry to Ocracoke and Swan Quarter/Cedar Island. The significant reduction in access to Hatteras Island would not be sufficient for the residents, and the operation of the emergency ferry would cost approximately \$55,200 per day for the reduced access.

NCDOT would also prefer to start the project in time to avoid impacting the shorebird and sea turtle nesting seasons that start in February 2025. If the project start date is delayed for any reason, NCDOT would work closely with the Refuge to ensure the project doesn't impact nesting activities. A Special Use Permit has been requested from the Refuge for the project. A Copy of the SUP will be provided to you as soon as it is issued.

Included with this letter are the location map, permit drawings, permit application, site photos, and associated documentation. If you have any questions, please contact me at pcwilliams2@ncdot.gov or (252) 482-1861. Please use **WBS # 51214.01S** for any permit fees required.

Sincerely,

Clemmon W. "Win" Bridgers, Jr., PE
Division One Engineer

DocuSigned by:

7C79B0D2941F47E...

Paul Williams
Division One Environmental Officer

DCM MP-1

APPLICATION for Major Development Permit

(last revised 12/27/06)



North Carolina DIVISION OF COASTAL MANAGEMENT

1. Primary Applicant/ Landowner Information			
Business Name N.C. Department Of Transportation		Project Name (if applicable) NC 12 - Pea Island Visitor Center Sandbag Project	
Applicant 1: First Name Paul	MI C	Last Name Williams	
Applicant 2: First Name	MI	Last Name	
<i>If additional applicants, please attach an additional page(s) with names listed.</i>			
Mailing Address 113 Airport Road, Suite 100		PO Box	City Edenton
		State NC	
ZIP 27932	Country	Phone No. 252 - 482 - 1861 ext.	FAX No. 252 - 482 - 8722
Street Address (if different from above)		City	State
		ZIP	
Email pcwilliams2@ncdot.gov			

2. Agent/Contractor Information			
Business Name			
Agent/ Contractor 1: First Name	MI	Last Name	
Agent/ Contractor 2: First Name	MI	Last Name	
Mailing Address		PO Box	City
		State	
ZIP		Phone No. 1 - - ext.	Phone No. 2 - - ext.
FAX No.	Contractor #		
Street Address (if different from above)		City	State
		ZIP	
Email			

<Form continues on back>

3. Project Location				
County (can be multiple) Dare		Street Address Pea Island NWR Visitor Center		State Rd. # NC 12
Subdivision Name		City Rodanthe	State NC	Zip 27968 -
Phone No. - - - - - ext.		Lot No.(s) (if many, attach additional page with list)		
a. In which NC river basin is the project located? Pasquotank		b. Name of body of water nearest to proposed project Atlantic Ocean		
c. Is the water body identified in (b) above, natural or manmade? <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Manmade <input type="checkbox"/> Unknown		d. Name the closest major water body to the proposed project site. Atlantic Ocean		
e. Is proposed work within city limits or planning jurisdiction? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		f. If applicable, list the planning jurisdiction or city limit the proposed work falls within. Dare		

4. Site Description	
a. Total length of shoreline on the tract (ft.) 2,000	b. Size of entire tract (sq.ft.) 200,000 sq. ft.
c. Size of individual lot(s) (If many lot sizes, please attach additional page with a list)	d. Approximate elevation of tract above NHW (normal high water) or NWL (normal water level) 1' <input checked="" type="checkbox"/> NHW or <input type="checkbox"/> NWL
e. Vegetation on tract Adjacent dune system has American beach grass and Sea Oats with the majority of the project area having very little vegetation remaining from the eroded storm conditions.	
f. Man-made features and uses now on tract NC 12	
g. Identify and describe the existing land uses <u>adjacent</u> to the proposed project site. Pea Island National Wildlife Refuge, conservation	
h. How does local government zone the tract? US Dept. of the Interior	i. Is the proposed project consistent with the applicable zoning? (Attach zoning compliance certificate, if applicable) <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
j. Is the proposed activity part of an urban waterfront redevelopment proposal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
k. Has a professional archaeological assessment been done for the tract? If yes, attach a copy. If yes, by whom?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA All work will be within actively maintained NCDOT ROW
l. Is the proposed project located in a National Registered Historic District or does it involve a National Register listed or eligible property? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

<Form continues on next page>

m. (i) Are there wetlands on the site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
(ii) Are there coastal wetlands on the site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
(iii) If yes to either (i) or (ii) above, has a delineation been conducted? (Attach documentation, if available)	<input type="checkbox"/> Yes <input type="checkbox"/> No
n. Describe existing wastewater treatment facilities.	none
o. Describe existing drinking water supply source.	none
p. Describe existing storm water management or treatment systems.	none

5. Activities and Impacts	
a. Will the project be for commercial, public, or private use?	<input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Public/Government <input type="checkbox"/> Private/Community
b. Give a brief description of purpose, use, and daily operations of the project when complete.	Stabilize and repair of storm damaged primary dune to protect the roadway of NC Highway 12, including the installation of temporary sandbags. This project will enhance the protection of NC 12 at the Pea Island Visitor Center "Hot Spot".
c. Describe the proposed construction methodology, types of construction equipment to be used during construction, the number of each type of equipment and where it is to be stored.	NCDOT proposes repairing 1,300 linear feet of primary dune and installing 1,100 linear feet of Permashield sandbags along NC 12, as shown in the attached permit drawings. The sandbag sections are 50 feet in length with a trapezoidal cross section, and each 50' section is separated every 2' by a sewn baffle. NCDOT proposes to use two rows of sandbags. The oceanward row would be 6' high and have an 8' wide base. The landward row would be 4' high and have a 6' wide base. Both rows would be placed 2' below the grade of the roadway and directly adjacent to each other with a combined base of 14' wide. The sandbags would be placed 10' from the edge of pavement and would be entirely covered by the reconstructed dune. The reconstructed dune dimensions would be approximately 6' high and 25' wide and above the NHWL. The sandbags and reconstructed dune would be placed within NCDOT Right-of-Way (ROW), and the project would result in no open water and no wetland impacts. The sandbag volume is approximately 1,870 cubic yards, and the dune volume is approximately 5,650 cubic yards. The sandbags would be dry-filled with sand from the State of NC property at the end of Lifeboat Station Road and the Lifeboat Station Road ROW. Clean sand would be used for filling the sandbags and reconstructing the dunes, free of vegetation and debris. Sand for the sandbags and dune reconstruction shall be of the same general characteristics as the sand in the existing dune. A steel installation platform would be used to support the alternative sandbags during the filling operation. Equipment used will be dump trucks, excavators, and loaders. Staging for the contractor and sand stockpiles would be within NCDOT ROW just north of the Visitor Center on the west side of NC 12.
d. List all development activities you propose.	Install 1,100 linear feet of Permashield sandbags in a 1,300 linear foot reconstructed primary dune along NC 12 at the Pea Island Visitor Center.
e. Are the proposed activities maintenance of an existing project, new work, or both?	Both = maintenance dunes and the installation of new temp. sandbags.
f. What is the approximate total disturbed land area resulting from the proposed project?	32,500 ^{cb} Sq.Ft or <input type="checkbox"/> Acres
g. Will the proposed project encroach on any public easement, public accessway or other area that the public has established use of?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA

h. Describe location and type of existing and proposed discharges to waters of the state. Surface runoff from NC 12	
i. Will wastewater or stormwater be discharged into a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
If yes, will this discharged water be of the same salinity as the receiving water?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
j. Is there any mitigation proposed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
If yes, attach a mitigation proposal.	

<Form continues on back>

6. Additional Information

In addition to this completed application form, (MP-1) the following items below, if applicable, must be submitted in order for the application package to be complete. Items (a) – (f) are always applicable to any major development application. Please consult the application instruction booklet on how to properly prepare the required items below.

- | |
|--|
| a. A project narrative. |
| b. An accurate, dated work plat (including plan view and cross-sectional drawings) drawn to scale. Please give the present status of the proposed project. Is any portion already complete? If previously authorized work, clearly indicate on maps, plats, drawings to distinguish between work completed and proposed. |
| c. A site or location map that is sufficiently detailed to guide agency personnel unfamiliar with the area to the site. |
| d. A copy of the deed (with state application only) or other instrument under which the applicant claims title to the affected properties. |
| e. The appropriate application fee. Check or money order made payable to DENR. |
| f. A list of the names and complete addresses of the adjacent waterfront (riparian) landowners and signed return receipts as proof that such owners have received a copy of the application and plats by certified mail. Such landowners must be advised that they have 30 days in which to submit comments on the proposed project to the Division of Coastal Management. |
| Name Dawn Washington, USFWS, Pea Island National Wildlife Refuge Phone No. 252-473-1131 |
| Address P. O. Box 1969, 100 Conservation Way, Manteo, NC 27954 |
| Name _____ Phone No. _____ |
| Address _____ |
| Name _____ Phone No. _____ |
| Address _____ |
| g. A list of previous state or federal permits issued for work on the project tract. Include permit numbers, permittee, and issuing dates.
CAMA Major Permit No. 86-99 |
| h. Signed consultant or agent authorization form, if applicable. |
| i. Wetland delineation, if necessary. |
| j. A signed AEC hazard notice for projects in oceanfront and inlet areas. <i>(Must be signed by property owner)</i> |
| k. A statement of compliance with the N.C. Environmental Policy Act (N.C.G.S. 113A 1-10), if necessary. If the project involves expenditure of public funds or use of public lands, attach a statement documenting compliance with the North Carolina Environmental Policy Act. |

7. Certification and Permission to Enter on Land

I understand that any permit issued in response to this application will allow only the development described in the application. The project will be subject to the conditions and restrictions contained in the permit.

I certify that I am authorized to grant, and do in fact grant permission to representatives of state and federal review agencies to enter on the aforementioned lands in connection with evaluating information related to this permit application and follow-up monitoring of the project.

I further certify that the information provided in this application is truthful to the best of my knowledge.

Date 11/24/2024

Print Name Paul Williams

Signature 
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Please indicate application attachments pertaining to your proposed project.

- DCM MP-2 Excavation and Fill Information
- DCM MP-3 Upland Development
- DCM MP-4 Structures Information
- DCM MP-5 Bridges and Culverts

Form DCM MP-3

UPLAND DEVELOPMENT

(Construction and/or land disturbing activities)

Attach this form to Joint Application for CAMA Major Permit, Form DCM MP-1. Be sure to complete all other sections of the Joint Application that relate to this proposed project. Please include all supplemental information.

GENERAL UPLAND DEVELOPMENT

a. Type and number of buildings, facilities, units or structures proposed.

1

b. Number of lots or parcels.

1

c. Density (give the number of residential units and the units per acre).

N/A

d. Size of area to be graded, filled, or disturbed including roads, ditches, etc.

32,500 sq.ft.

e. If the proposed project will disturb more than one acre of land, the Division of Land Resources must receive an erosion and sedimentation control plan at least 30 days before land-disturbing activity begins.

f. List the materials (such as marl, paver stone, asphalt, or concrete) to be used for impervious surfaces.

N/A

(i) If applicable, has a sedimentation and erosion control plan been submitted to the Division of Land Resources?

Yes No NA

(ii) If yes, list the date submitted:

g. Give the percentage of the tract within the coastal shoreline AEC to be covered by impervious and/or built-upon surfaces, such as pavement, building, rooftops, or to be used for vehicular driveways or parking.

N/A

h. Projects that require a CAMA Major Development Permit may also require a Stormwater Certification.

(i) Has a site development plan been submitted to the Division of Water Quality for review?

Yes No NA

(ii) If yes, list the date submitted: _____

i. Give the percentage of the entire tract to be covered by impervious and/or built-upon surfaces, such as pavement, building, rooftops, or to be used for vehicular driveways or parking.

N/A

j. Describe proposed method of sewage disposal.

N/A

k. Have the facilities described in Item (i) received state or local approval?

Yes No NA

If yes, attach appropriate documentation.

l. Describe location and type of proposed discharges to waters of the state (e.g., surface runoff, sanitary wastewater, industrial/commercial effluent, "wash down" and residential discharges).

N/A

m. Does the proposed project include an innovative stormwater design?

Yes No NA

If yes, attach appropriate documentation.

m. Describe proposed drinking water supply source (e.g., well, community, public system, etc.)
N/A

n. (i) Will water be impounded? Yes No NA
(ii) If yes, how many acres?

o. When was the lot(s) platted and recorded?
N/A

p. If proposed development is a subdivision, will additional utilities be installed for this upland development?
 Yes No NA

11/24/2024
Date
NC 12 - Pea Island Visitor Center Sandbag Project
Project Name
Paul Williams
Applicant Name
DocuSigned by: <i>Paul Williams</i>
Applicant Signature 7C79B0D2941F47E...

Setting Back for Safety: A Guide to Wise Development Along the Oceanfront

When you build along the oceanfront, you take a calculated risk. Natural forces of water and wind collide with tons of force, even on calm days.

Man-made structures cannot be guaranteed to survive the force of a hurricane. Long-term erosion (or barrier island migration) may take from two to ten feet of the beach each year, and, sooner or later, will threaten oceanfront structures. These are the facts of life for oceanfront property owners.

The Coastal Resources Commission (CRC) has adopted rules for building along the oceanfront. The rules are intended to avoid an unreasonable risk to life and property, and to limit public and private losses from storm and long-term erosion. These rules lessen but do not eliminate the element of risk in oceanfront development.

As you consider building along the oceanfront, the CRC wants you to understand the rules and the risks. With this knowledge, you can make a more informed decision about where and how to build in the coastal area.

The Rules

When you build along the oceanfront, coastal management rules require that the structure be sited to fit safely into the beach environment.

Structures along the oceanfront, less than 5,000 square feet in size, must be behind the frontal dune, landward of the crest of the primary dune, and set back from the first line of stable natural vegetation a distance equal to 30 times the annual erosion rate (a minimum of 60 feet). The setback calculation increases as the size of the structure increases [15A NCAC 7H.0306(a)(2)]. For example: A structure between 5,000 and 10,000 square feet would require a setback from the first line of stable, natural vegetation to a distance equal to 60 times the annual erosion rate (a minimum of 120 feet). The graduated setback continues to increase through structure sizes greater than 100,000 square feet.

The beachfront is an ever-changing landform. The beach and the dunes are natural “shock absorbers,” taking the beating of the wind and waves and protecting the inland areas. By incorporating building setbacks into the regulations, you have a good chance of enjoying the full life of the structure. At first, it seems very inviting to build your dream house as close to the beach as possible, but in five years you could find the dream has become a nightmare as high tides and storm tides threaten your investment.

The Exception

The Coastal Resources Commission recognized that these rules, initially passed in June 1979, might prove a hardship for some property owners. Therefore, they established an exception for lots that cannot meet the setback requirement. The exception allows buildings in front of the current setback, if the following conditions apply:

- 1) the lot must have been platted as of June 1, 1979, and is not capable of being enlarged by combining with adjoining land under the same ownership;
- 2) development must be constructed as far back on the property as possible and in no case less than 60 feet landward of the vegetation line;
- 3) no development can take place on the frontal dune;
- 4) special construction standards on piling depth and square footage must be met; and
- 5) all other CAMA, state and local regulations must be met.

The exception is not available in the Inlet Hazard Area.

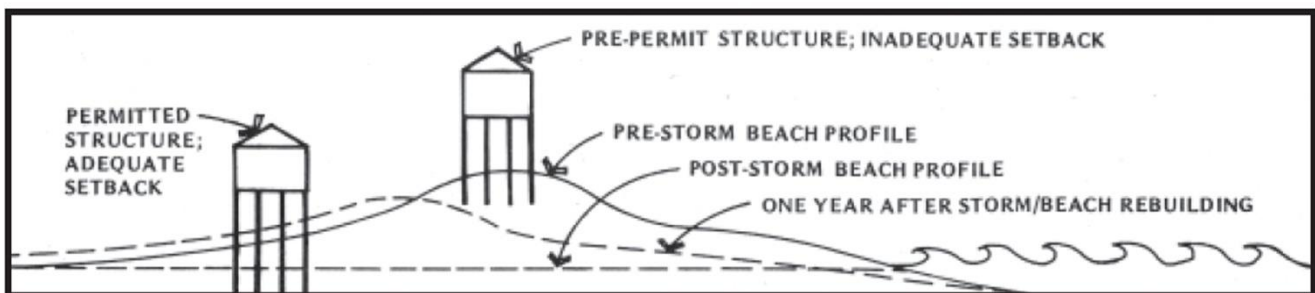
To determine eligibility for the exception the Local Permit Officer will make these measurements and observations:

_____ required setback from vegetation line

_____ exception setback (maximum feasible)

_____ rear property line setback

_____ max. allowable square footage on lowest floor



The Reasons

After the storm, the house on the dune will be gone. The other house has a much better chance of survival.

From: [Williams, Paul C](#)
To: [Brittingham, Cathy](#); [Cannady, Lee](#); [Lane, Stephen](#)
Subject: FW: [EXTERNAL] Overwash at Pea Island Visitor Center
Date: Monday, November 18, 2024 9:47:51 AM
Attachments: [image001.png](#)

For discussion today.

Paul C. Williams, Jr.
Division Environmental Officer
Division One
NC Department of Transportation

(252) 482-1861 office
(252) 333-9812 mobile
(252) 482-8722 fax
pcwilliams2@ncdot.gov

113 Airport Dr.
Suite 100
Edenton, NC 27932



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Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

From: Washington, Dawn M <dawn_washington@fws.gov>
Sent: Friday, November 15, 2024 3:16 PM
To: Williams, Paul C <pcwilliams2@ncdot.gov>
Cc: Martin, Rebekah <rebekah_p_martin@fws.gov>; Beyer, Arthur <arthur_beyer@fws.gov>
Subject: Re: [EXTERNAL] Overwash at Pea Island Visitor Center

CAUTION: External email. Do not click links or open attachments unless verified. Report suspicious emails with the Report Message button located on your Outlook menu bar on the Home tab.

Thank you Paul for clarifying everything in this email.

As you stated the Refuge has a strong preference to not use traditional sandbags on Pea Island NWR. The problems of remnant sandbags are multi-faceted. With this current situation we have consulted with our Realty ROW and NEPA folks who are in agreement. Please let us know an update from CAMA on your application's status on Monday so that we can move forward with a solution together.

Dawn

Dawn Washington (she/her)
Refuge Manager at Alligator River and Pea Island NWRs
Deputy of the Coastal North Carolina NWR Complex
100 Conservation Way
Manteo, NC 27954
Office: 252-473-1131 x40163
Cell: 252-553-0562

From: Williams, Paul C <pcwilliams2@ncdot.gov>
Sent: Friday, November 15, 2024 2:38 PM
To: Washington, Dawn M <dawn_washington@fws.gov>
Cc: Martin, Rebekah <rebekah_p_martin@fws.gov>; Beyer, Arthur <Arthur_Beyer@fws.gov>
Subject: [EXTERNAL] Overwash at Pea Island Visitor Center

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Dawn,

As discussed today, the current coastal storm has resulted in severe overwash at the Pea Island NWR Visitor Center, as shown in the attached photos from this morning. I'm estimating 1000 linear feet of the primary dune along NC 12 has been washed away, exposing the pavement to the high surf. NCDOT maintenance is currently placing sand from the ROW along the exposed edge-of-pavement to maintain a minimal dune to protect the roadway though the storm event. Maintenance expects at least one more overwash event during the next high tide that will impact the site. NCDOT Highway Division One is anticipating an Emergency Declaration from the Secretary of Transportation later today for this event.

As experienced last winter, NCDOT anticipates frequent coastal storms to continue this year. With

the current profile of the beach and normal high water line in the vicinity of the Visitor Center, NC 12 is extremely vulnerable to storm impacts at this location. As NC 12 is a critical link to Hatteras Island, NCDOT has started planning a short term solution to maintain the roadway and prevent pavement damage at the Visitor Center on Pea Island NWR. NCDOT is proposing a sandbag project along NC 12 and within the existing ROW to protect the highway from overwash events.

The last large sandbag project on the Refuge was at Mirlo Beach. That project was in response to the storm damage produced by Hurricane Sandy. That sandbag project, as with previous sandbag projects in the area, used the “traditional” sandbags as specified by CAMA Rules (15A NCAC 07H .0308) to protect NC 12. With the completion of the Rodanthe Bridge, NC 12 was removed from the area of the Refuge bypassed by the bridge. Since then, NCDOT has removed the majority of the sandbags at Mirlo Beach, but many remnant sandbags remain. NCDOT is currently planning to complete the remnant sandbag removal this winter. Removal of the remnant sandbags has been problematic and highly impactful to the beach, with a significant number of sandbag fragments left on the Refuge to be cleaned up. The traditional sandbags have been difficult to entirely remove from the Refuge.

As the traditional sandbags have been problematic to remove, NCDOT proposes using a more robust sandbag system for the Pea Island Visitor Center. NCDOT installed a Permashield sandbag system just south of the Refuge on a cul-de-sac at the end of the old NC 12. The product was approved with a CAMA Variance and uses heavy polypropylene fabric. The trapezoidal design is stronger than traditional sandbags, and the material would hold up better than the fabric used in commercially available traditional sandbags. The Permashield bags can be dry filled, unlike the traditional sandbags that need to be hydraulically pumped with sand from the swash zone of the beach. With the stronger material, and with the design, the Permashield bags can be removed more effectively when they are no longer needed. NCDOT anticipates quicker and more complete removal of Permashield sandbags as opposed to the challenging removal of traditional sandbags.

NCDOT proposes the use of the Permashield sandbag system at the Pea Island Visitor Center to protect NC 12. Our staff is currently working on permit drawings for the project. Before submitting an application and drawings for a Special Use Permit, please confirm the strong preference of the Refuge to not use traditional sandbags on Pea Island NWR. We’ve discussed the problems of remnant sandbags several times, but NCDOT needs documentation of the Refuge’s experience and concerns regarding traditional sandbag projects on Pea Island.

Thanks,

Paul C. Williams, Jr.
Division Environmental Officer
Division One
NC Department of Transportation

(252) 482-1861 office
(252) 333-9812 mobile

PermaShield™ Product Specifications

Patented Design Characteristics:

- Shape: Isosceles Trapezoid Prism – Turns lateral earth pressure or lateral water pressure into a downward force due to the angular wall design. (See illustration A below)
- Heights available: 2', 3', 4', and 6' (See illustration B below)
- Section Length: 50'
- Stackable to any height. (See illustration C below)
- Multi-cellular design: Isolates damage to a cell to keep the section from failing. Each 50' section is separated every 2' by a sewn baffle that acts as a natural expansion joint. Each 50' L section includes 25 cells. (See illustrations D and E)
- Can accept a variety of fill materials. Sand or other earthen materials, or concrete for permanent applications. (See approximate weights of sand filled and concrete filled section heights in illustration F)
- Mounting knobs to mount entire 50' L section on installation platform for quick installation. (See illustration G)
- Installation Platforms for sand and concrete materials. (See illustrations H and I)

Product Material:

8 oz Woven Polypropylene (100% virgin material)

- UV resistance: depending on direct sunlight exposure: 70% after 2000 hours (For dune applications, PermaShield will be buried under sand that forms the dune.)
- Chain Stitching

Connectivity: Ability to connect one 50' section to another:

- Male connection on one end; Female connection on the other end (See illustration J)
- Secured together with strapping with "D" rings as seen in the picture below. (See illustration K)

Dimensions by Sections Heights Available:

2' Section:	50' L x 4' W x 2' H
3' Section:	50' L x 5' W x 3' H
4' Section:	50' L x 6' W x 4' H
6' Section:	50' L x 8' W x 6' H

Testing:

- USACE tested in 2011 at the Vicksburg, MS test lab. Full report available upon request.
- Report Title: Evaluation of Rapid Installation Barrier System (RIBS) Flood Fighting Barrier.
- Material is physically tested according to a wide range of ASTM standards. (Full list available.)

Illustration A: Isosceles Trapezoid Prism design turns lateral pressure into a downward force.

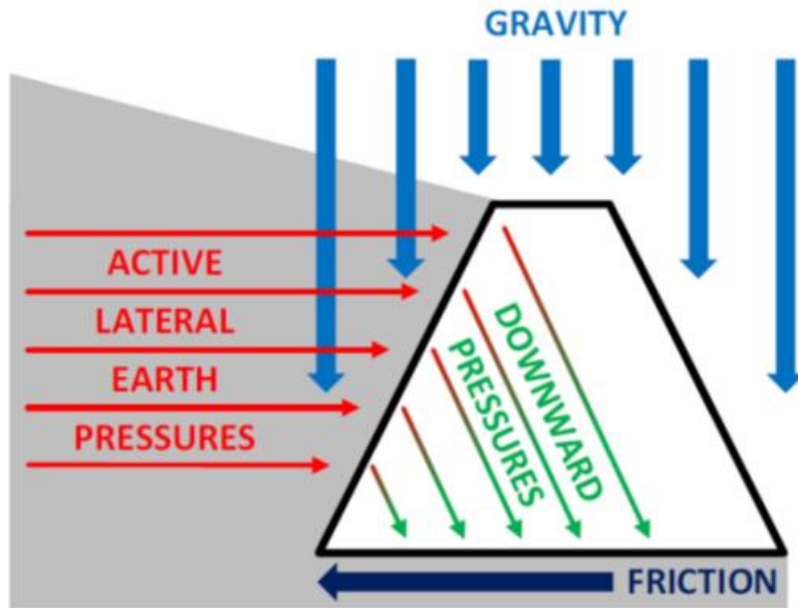


Illustration B: Heights available.

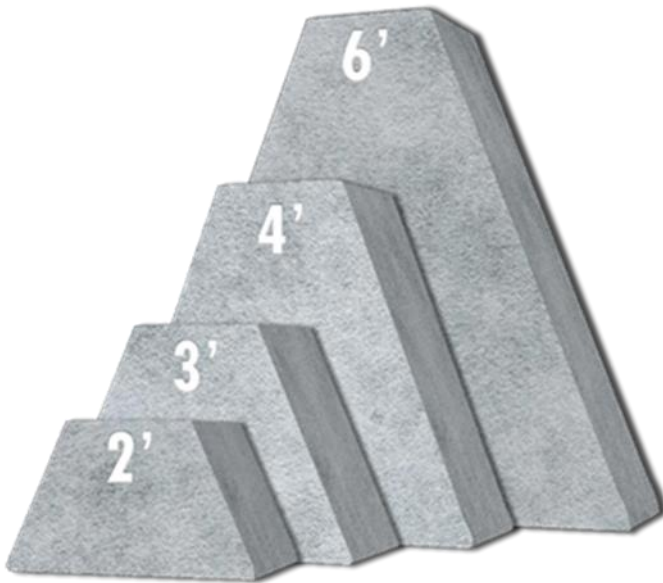


Illustration C: Stacking Examples that combine different height products.

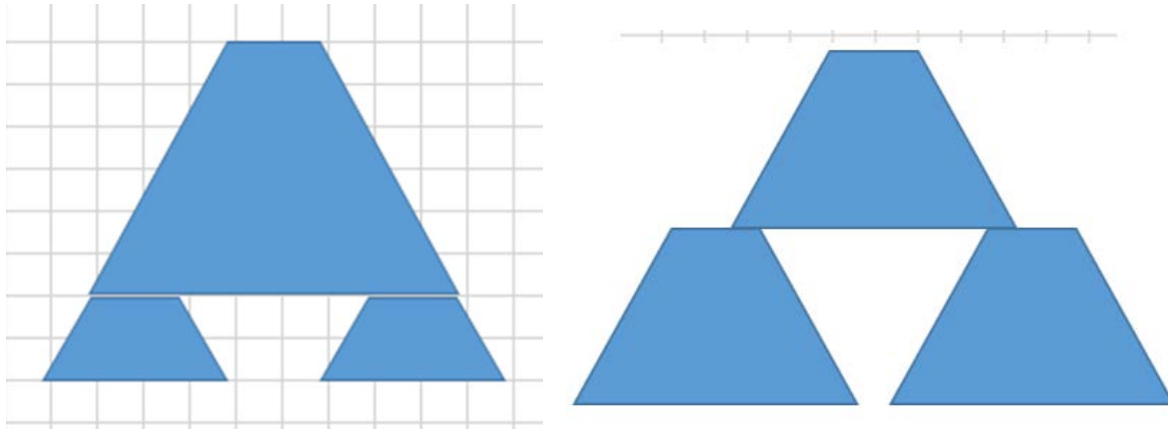


Illustration D: Multi-cellular Design

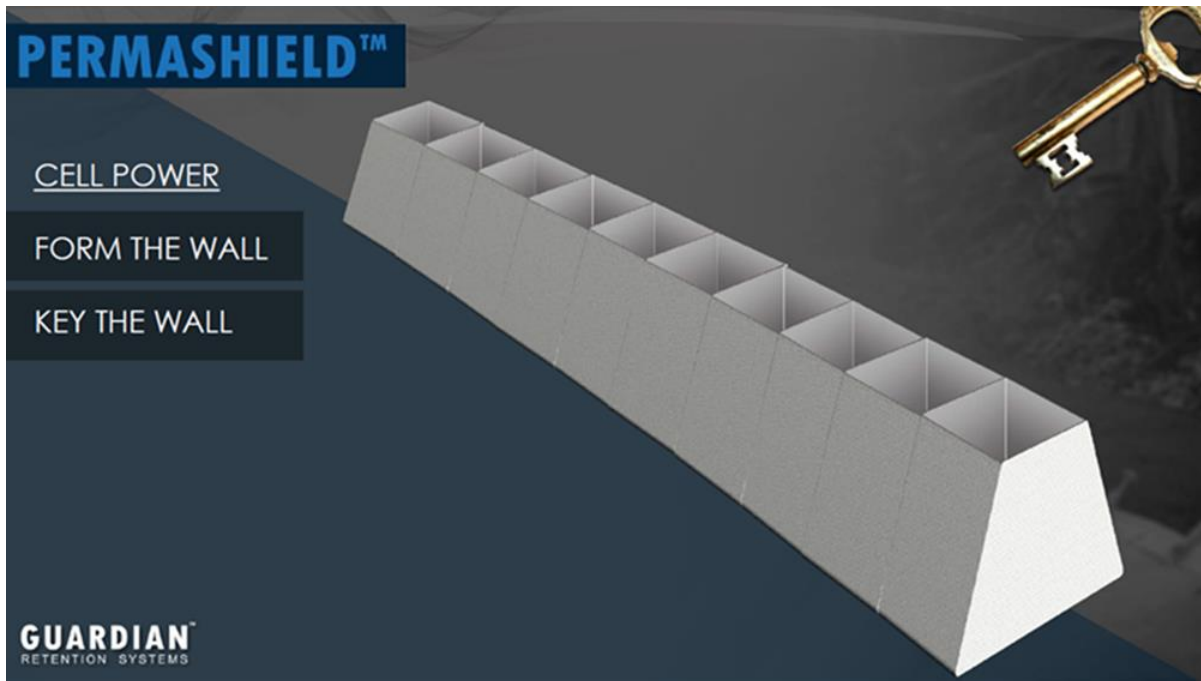


Illustration E: Example cell dimensions

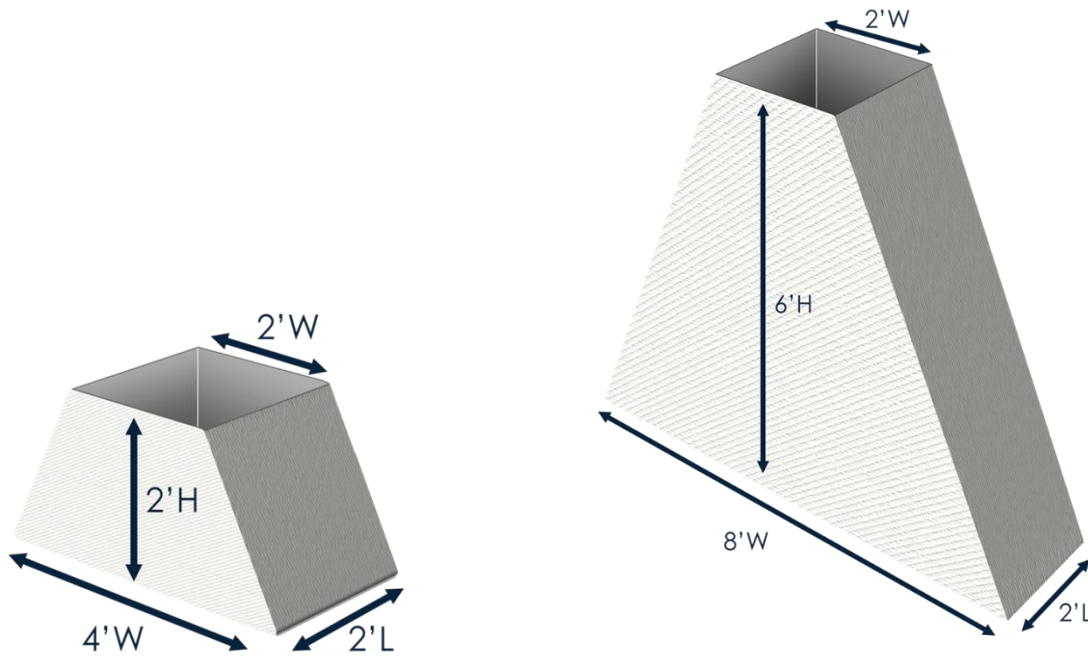


Illustration F: Approximate section weights with sand fill and concrete fill.

Sand Fill:

- 2' H Section: 11 yards / 14 tons
- 3' H Section: 20 yards / 25.45 tons
- 4' H Section: 30 yards / 38 tons
- 6' H Section: 55 yards / 70 tons

Concrete Fill:

- 2' H Section: 11 yards / 22.45 tons
- 3' H Section: 20 yards / 40.8 tons
- 4' H Section: 30 yards / 61.2 tons
- 6' H Section: 55 yards / 112.2 tons

Illustration G: Mounting Knobs



Illustration H: Installation Platform for sand for quick and efficient fill.



Illustration I: Installation Platform for concrete for quick and efficient fill.



Illustration J: Female End with strapping



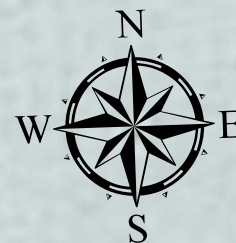
Illustration K: "D" Ring Strapping





Photos from the morning of 11/15/2024





Start Project
35.717409°
-75.493666°

NHWL
11/20/2024

1,100 Linear Foot
Sandbag Structure

1,300 Linear Foot
Reconstructed Dune

End Project
35.714051°
-75.492293°

0 0.13 0.25 0.5 Miles

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Pea Island NWR Visitor Center Sandbag Project on NC 12

Date: 11/24/2024
Author: Paul Williams
Scale: 1:10,000



End Dune Reconstruction

End Sandbag Installation

NHWL
11/20/2024

RECEIVED

DEC 03 2024

DCM-RALEIGH

20' Offset
from NCDOT ROW

NCDOT ROW

NHWL
11/20/2024

Begin Sandbag
Installation

Begin Dune
Reconstruction

0

125

250

500 Feet

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Pea Island NWR Visitor Center Sandbag Project on NC 12 11/18/2024 Imagery

Date: 12/3/2024
Imagery: NCDOT Aviation
11/18/2024 Drone Flight
Author: Paul Williams
Scale: 1:1,250

WBS#: 5124.01S

CONTRACT: DA00XXX

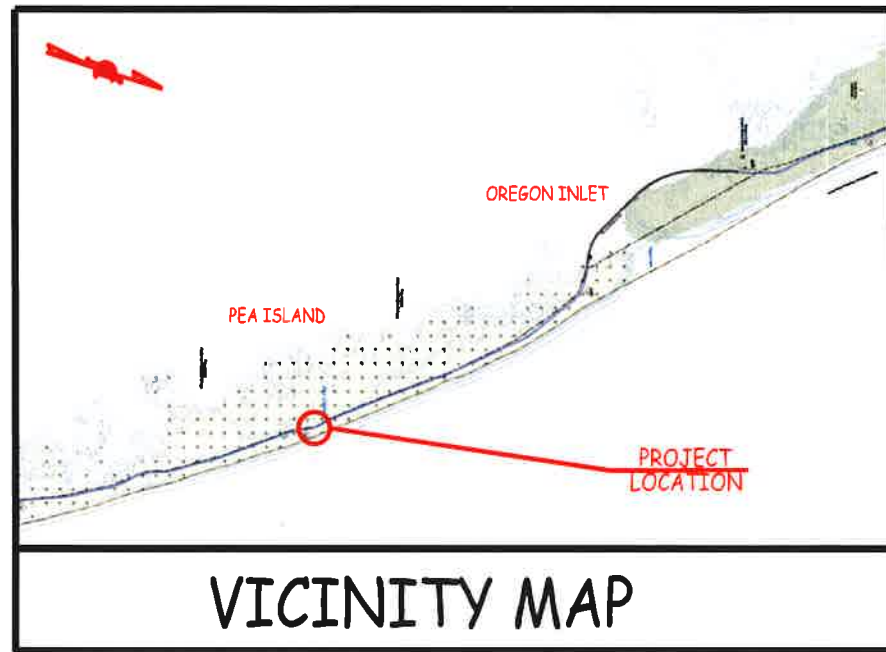
067

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	TOTAL SHEETS
N.C.	5124.01S	1
STATE FUNDING	F.A.FUNDING	DESCRIPTION
5124.01S		CONST, PE

DARE COUNTY

LOCATION: NC 12 PEA ISLAND VISITOR CENTER
TYPE OF WORK: SANDBAG INSTALLATION & DUNE CONSTRUCTION



RECEIVED

NOV 26 2024

DCM-RALEIGH

END PROJECT
STATION 23+00.00



NTS

PROJECT LENGTH

TOTAL LENGTH PROJECT: 1,300 L.F.

Prepared in the Office of:
DIVISION OF HIGHWAYS
113 Airport Drive, Edenton NC 27932

D.H. STALLINGS
DRAWN BY:

J. S. ABEL, Jr.
DIVISION PROJECT TEAM LEAD

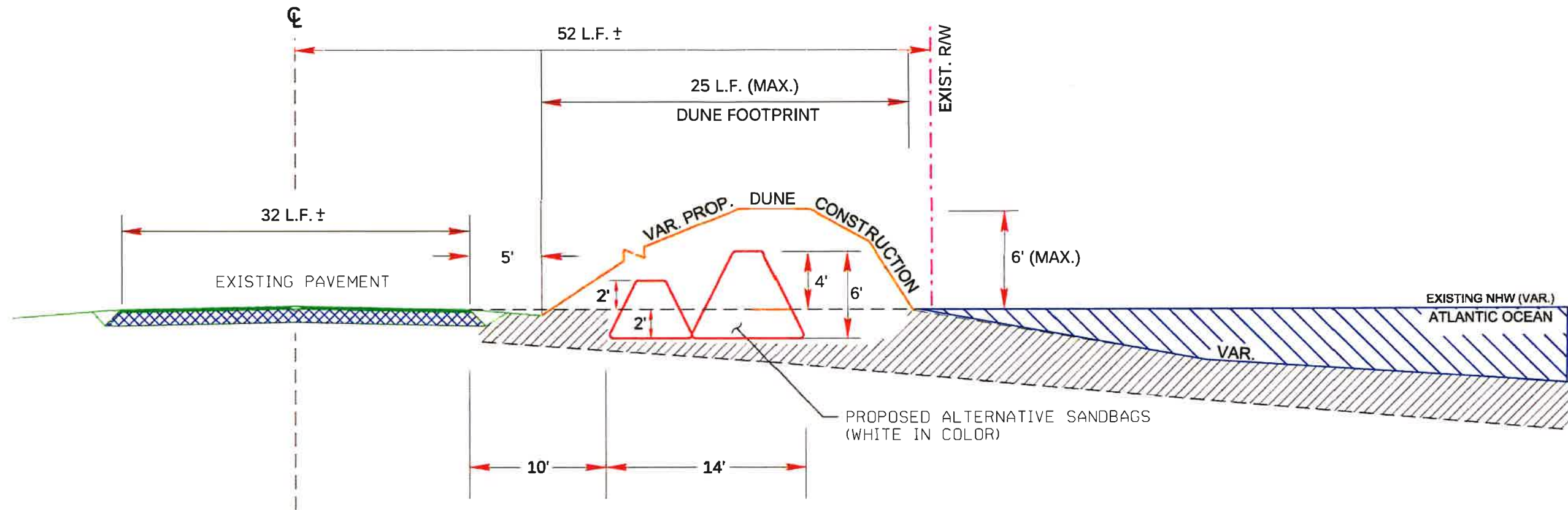
MARK WINSLOW
DIVISION PROPOSALS ENGINEER



SANDBAG INSTALLATION

NC 12 PEA ISLAND VISITOR CENTER

CROSS SECTION



* MATERIAL USED FOR DUNE CONSTRUCTION SHALL HAVE BEACH QUALITY CHARACTERISTICS AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT

SANDBAG INSTALLATION:	1,100 L.F. ±
	22 SECTIONS (4')
	22 SECTIONS (6')
SANDBAG VOLUME:	1,870 C.Y. ±
DUNE RECONSTRUCTION:	1,300 L.F. ±
DUNE VOLUME:	5,650 C.Y. ±

TYPICAL SECTION A
-L- STA. 11+81 TO STA. 22+81

RECEIVED

NOV 26 2024

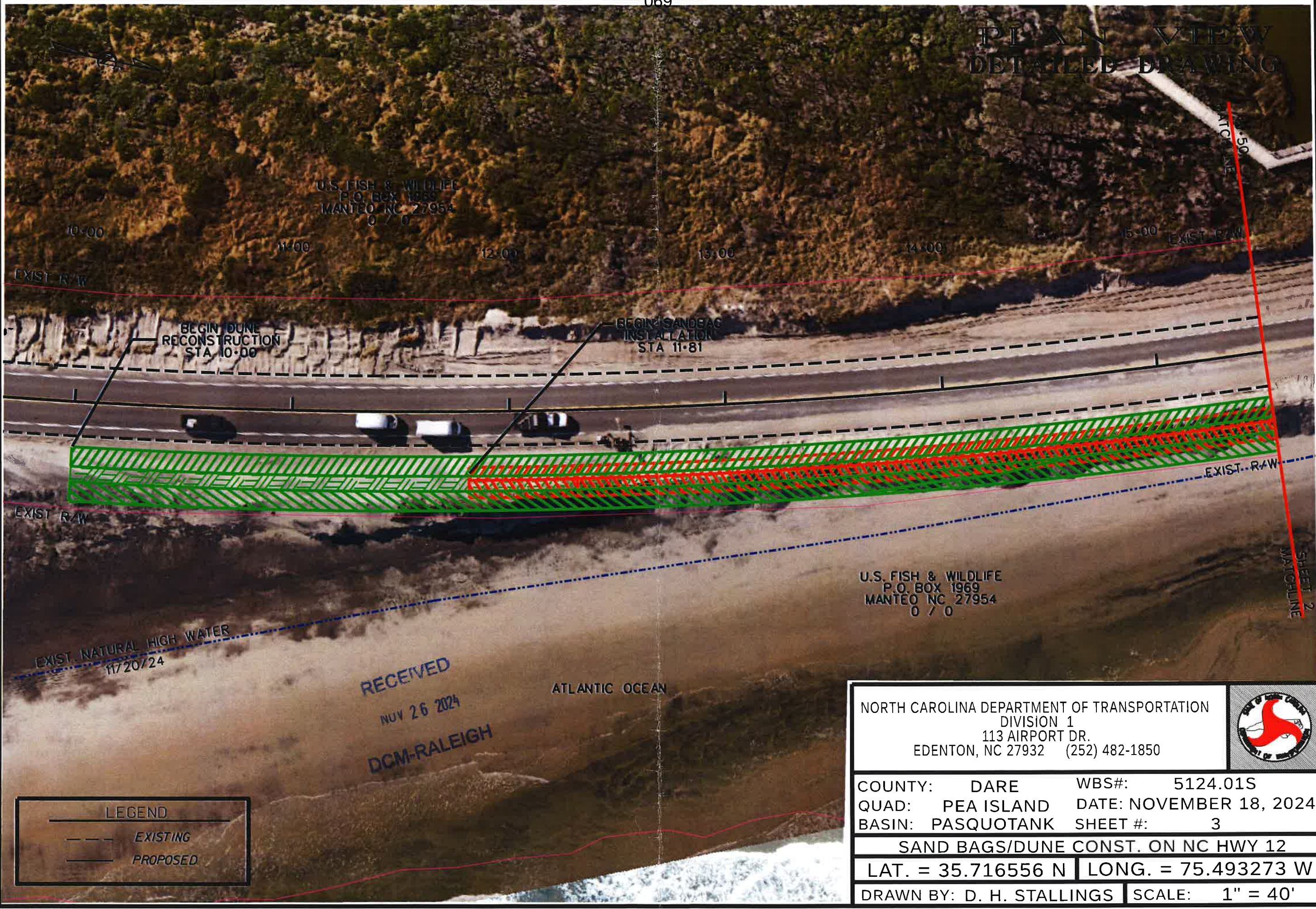
DCM-RALEIGH

NTS

PLAN VIEW DETAILED DRAWING

U.S. FISH & WILDLIFE
P.O. BOX 1969
MANTEO, NC 27954
0 / 0

U.S. FISH & WILDLIFE
P.O. BOX 1969
MANTEO, NC 27954
0 / 0



BEGIN DUNE
RECONSTRUCTION
STA 10+00

BEGIN SANDEAG
INSTALLATION
STA 11+81

EXIST. NATURAL HIGH WATER
11/20/24

RECEIVED
NOV 26 2024
DCM-RALEIGH

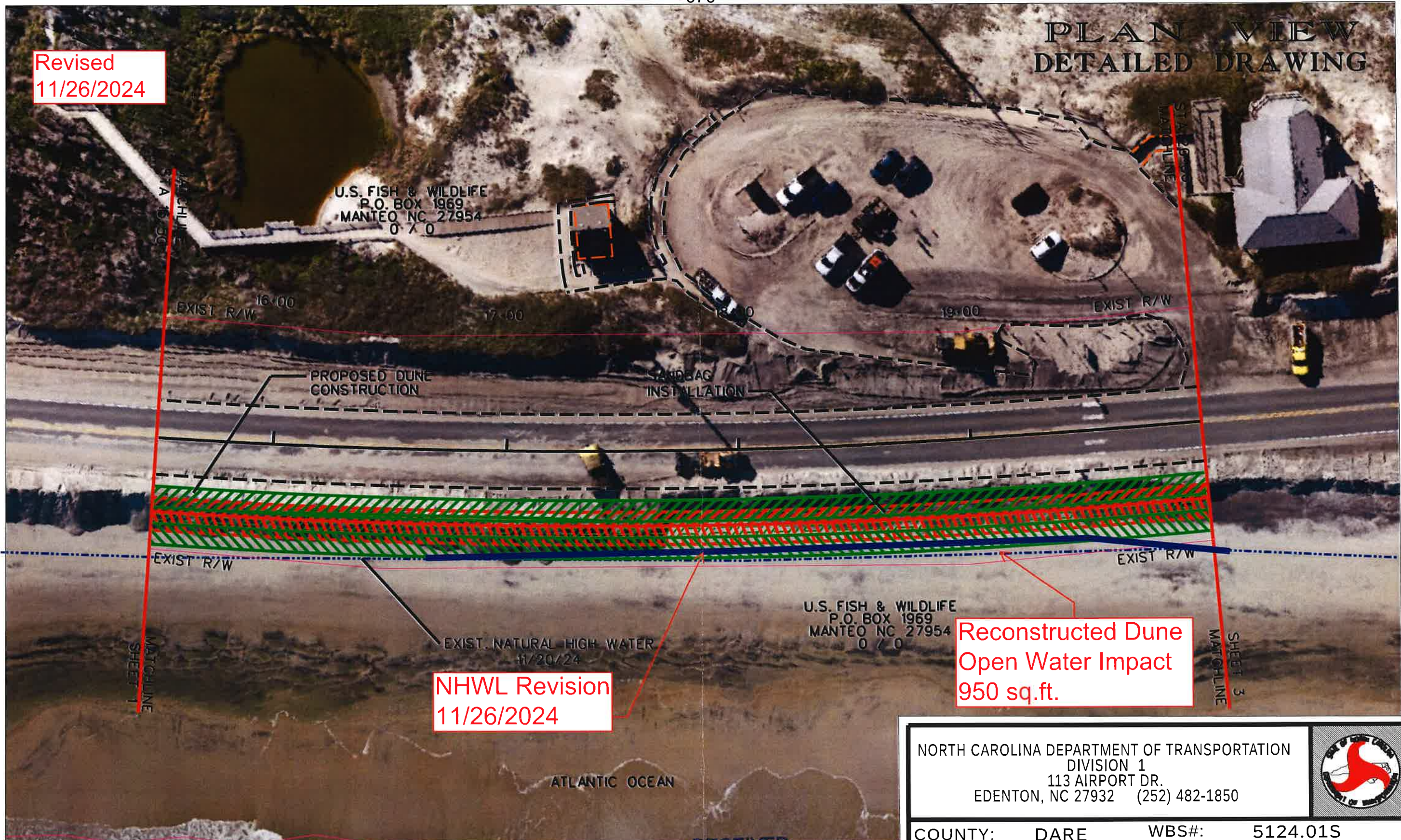
ATLANTIC OCEAN

LEGEND	
	EXISTING
	PROPOSED

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION 1 113 AIRPORT DR. EDENTON, NC 27932 (252) 482-1850		
COUNTY: DARE	WBS#: 5124.01S	
QUAD: PEA ISLAND	DATE: NOVEMBER 18, 2024	
BASIN: PASQUOTANK	SHEET #: 3	
SAND BAGS/DUNE CONST. ON NC HWY 12		
LAT. = 35.716556 N	LONG. = 75.493273 W	
DRAWN BY: D. H. STALLINGS	SCALE: 1" = 40'	

PLAN VIEW DETAILED DRAWING

Revised
11/26/2024



NHWL Revision
11/26/2024

Reconstructed Dune
Open Water Impact
950 sq.ft.

LEGEND	
---	EXISTING
—	PROPOSED

RECEIVED
NOV 26 2024
DCM-RALEIGH

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION 1 113 AIRPORT DR. EDENTON, NC 27932 (252) 482-1850		
COUNTY: DARE	WBS#: 5124.01S	
QUAD: PEA ISLAND	DATE: NOVEMBER 18, 2024	
BASIN: PASQUOTANK	SHEET #: 4	
SAND BAGS/DUNE CONST. ON NC HWY 12		
LAT. = 35.716556 N	LONG. = 75.493273 W	
DRAWN BY: D. H. STALLINGS	SCALE: 1" = 40'	

PLAN VIEW DETAILED DRAWING

U.S. FISH & WILDLIFE
P.O. BOX 1959
MANTEO NC 27954
0 / 0

END SANDBAG
INSTALLATION
STA 22+81.00

END PROPOSED DUNE
CONSTRUCTION
STA 23+00.00

U.S. FISH & WILDLIFE
P.O. BOX 1969
MANTEO NC 27954
0 / 0

EXIST. NATURAL HIGH WATER
11/20/24

MATCHLINE
SHEET 2

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION 1
113 AIRPORT DR.
EDENTON, NC 27932 (252) 482-1850



COUNTY: DARE WBS#: 5124.01S
QUAD: PEA ISLAND DATE: NOVEMBER 18, 2024
BASIN: PASQUOTANK SHEET #: 5

SAND BAGS/DUNE CONST. ON NC HWY 12

LAT. = 35.716556 N LONG. = 75.493273 W

DRAWN BY: D. H. STALLINGS SCALE: 1" = 40'

LEGEND

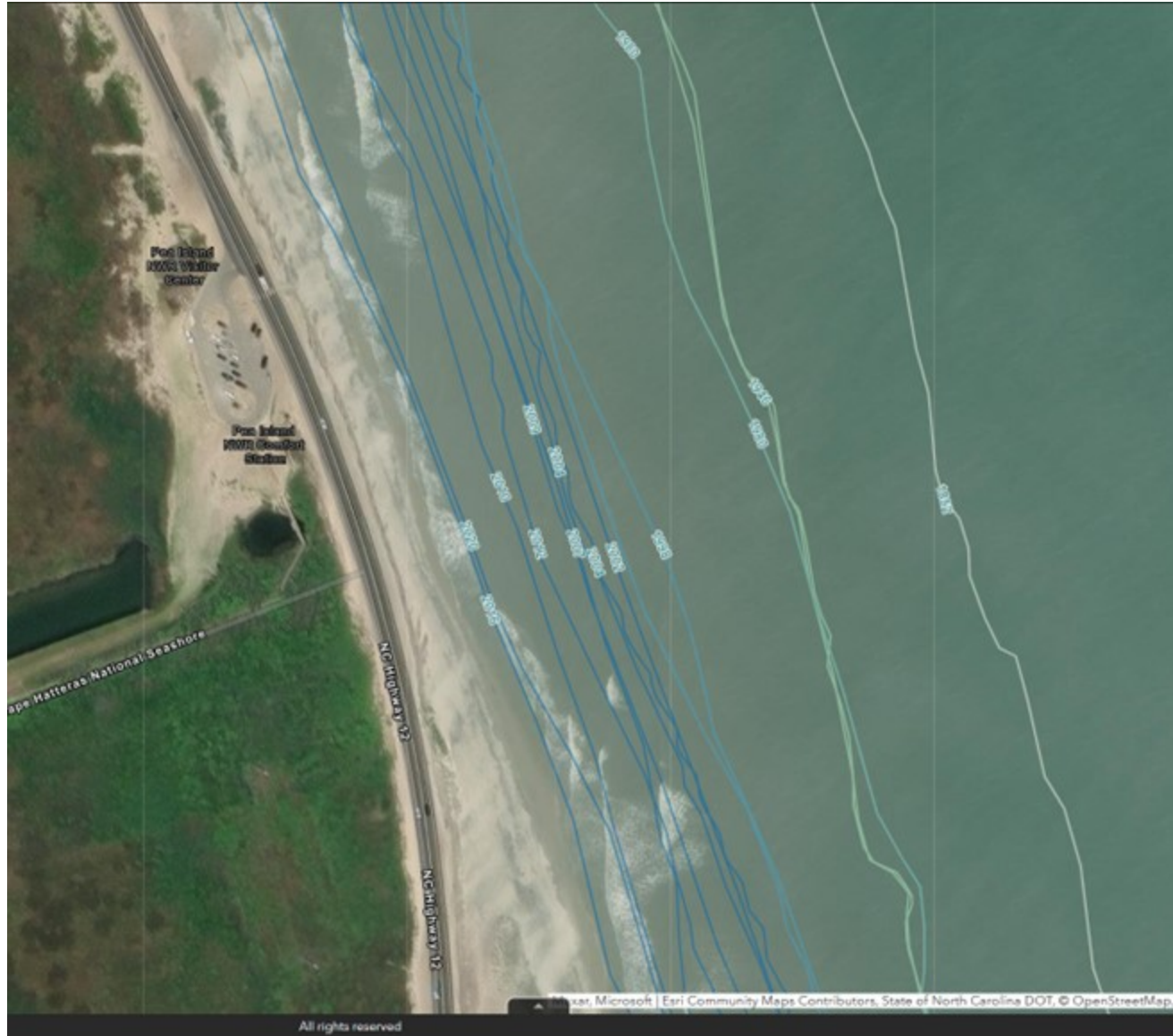
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— PROPOSED

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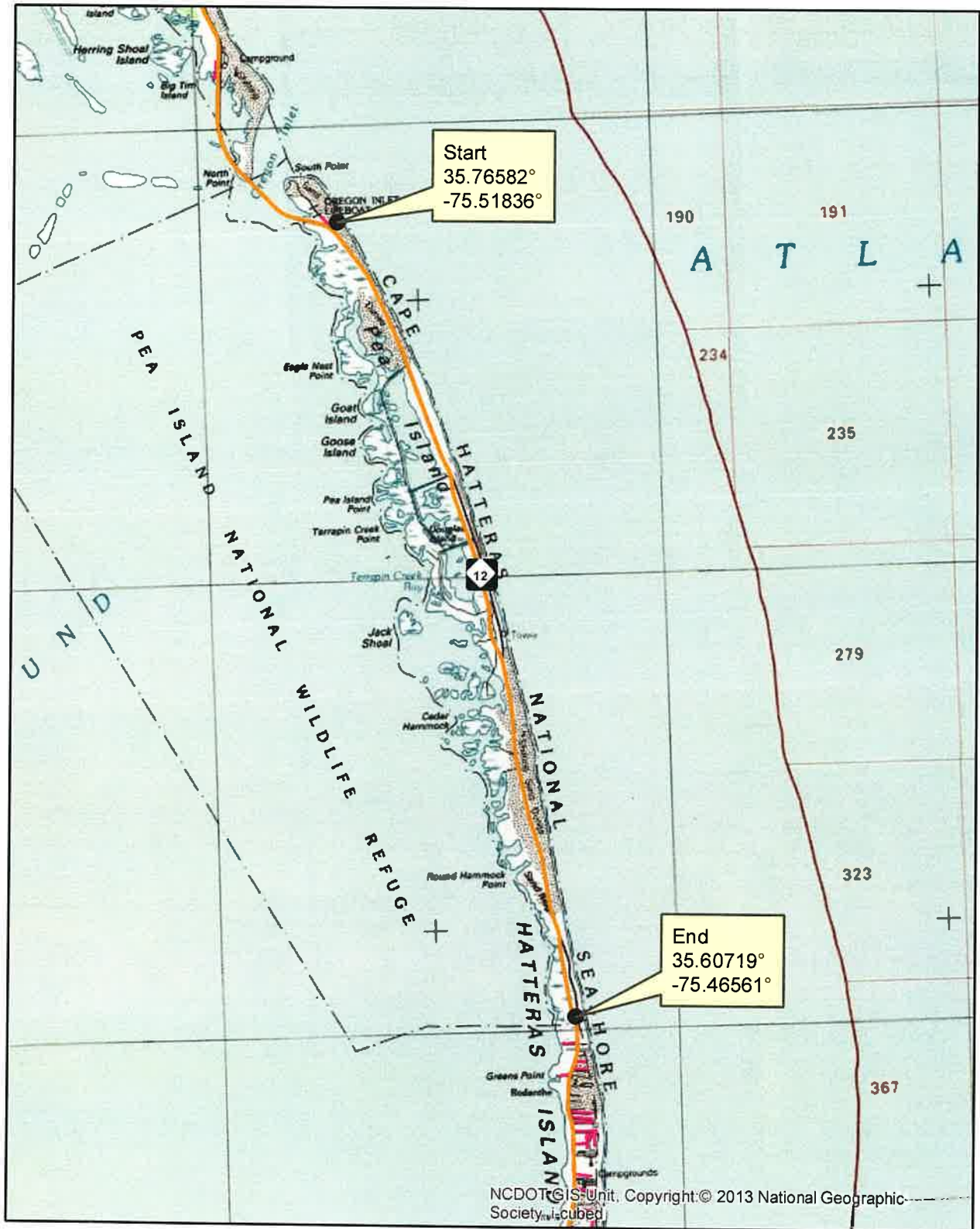
NOV 26 2024

DCM-RALEIGH

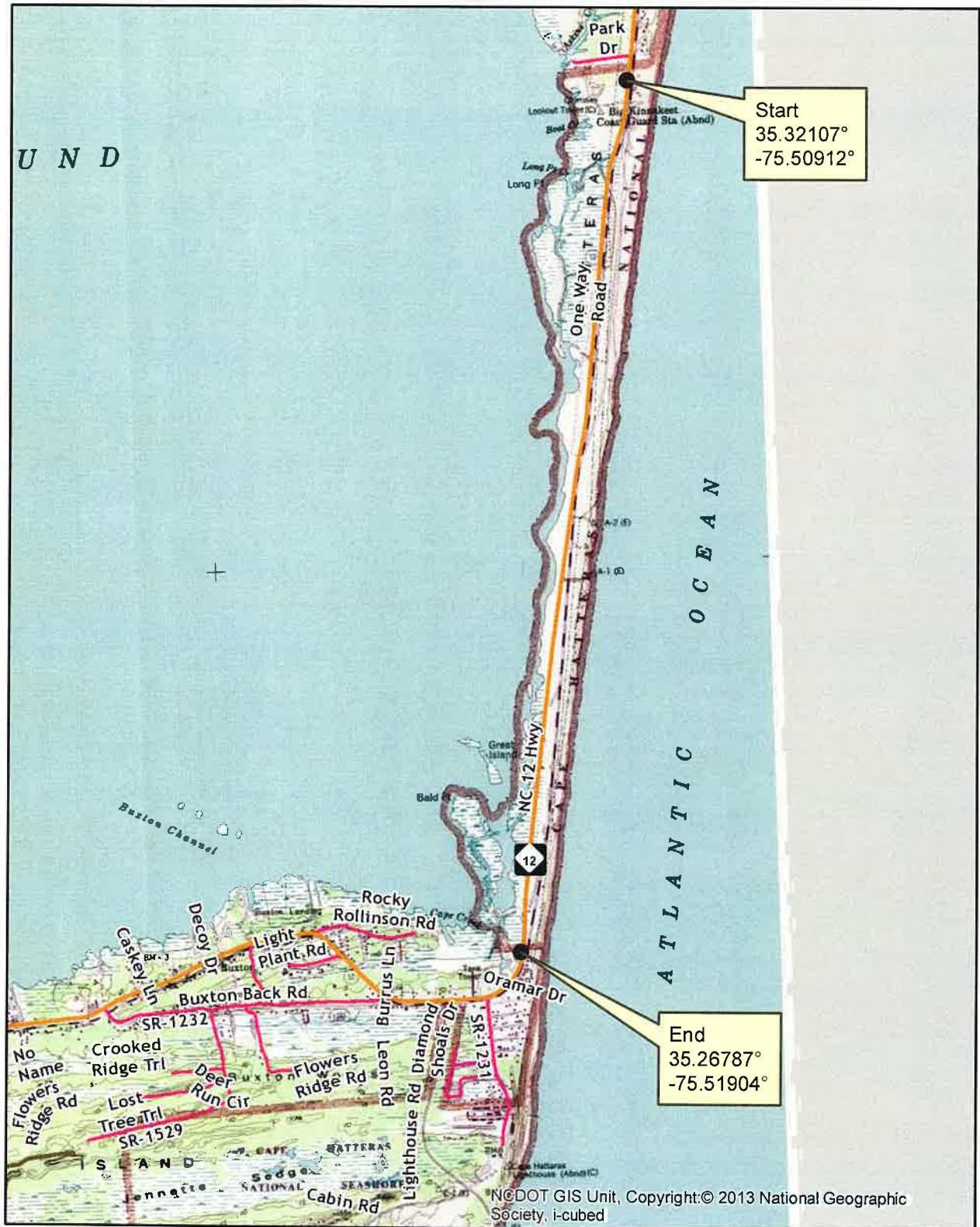




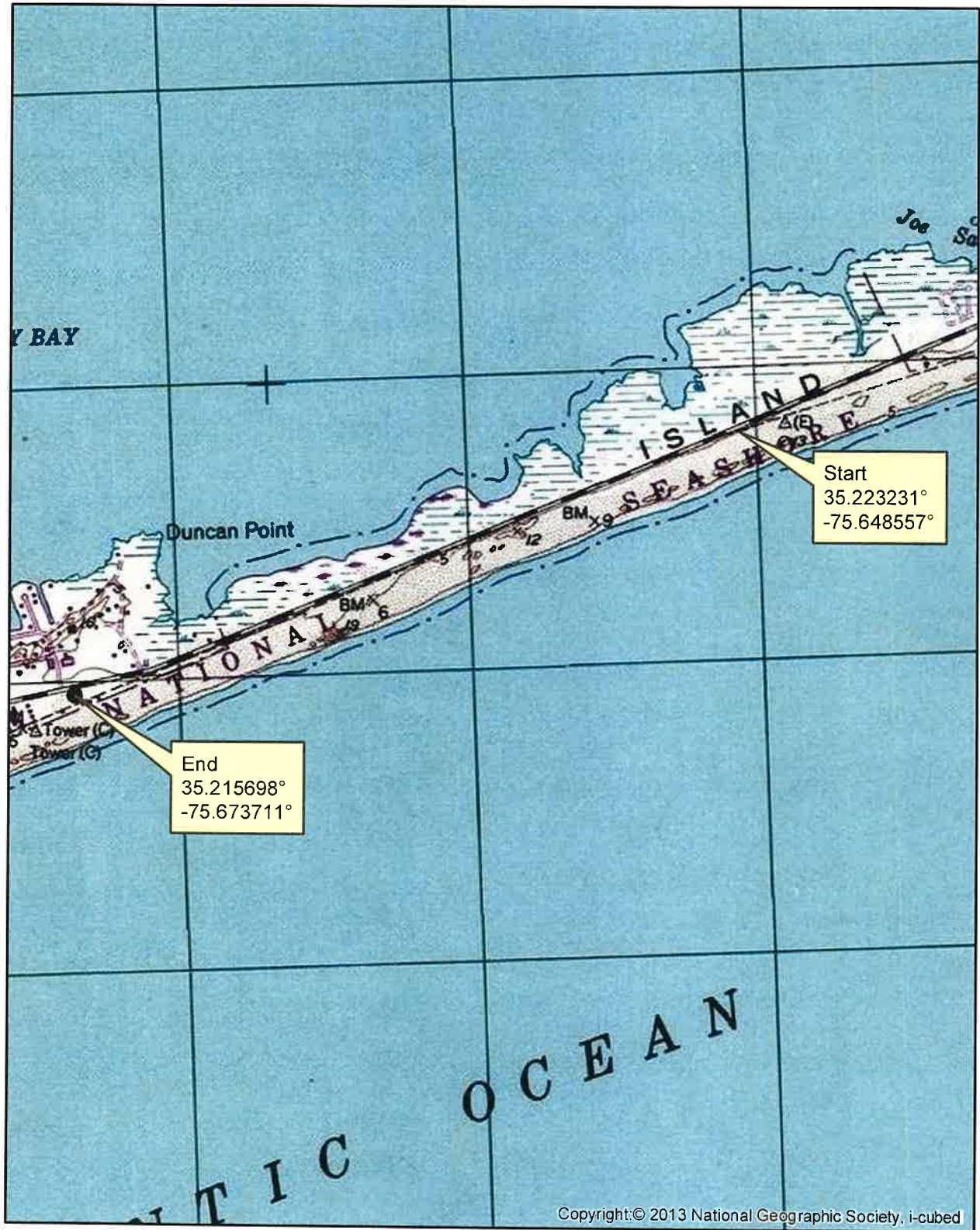
CAMA Permit No. 86-99 Pea Island Dune Maintenance Area



CAMA Permit No. 86-99 Avon - Buxton Dune Maintenance Area



CAMA Permit No. 86-99 Hatteras Village Dune Maintenance Area



Permit Class
MODIFICATION/MINOR

077

Permit Number
86-99

STATE OF NORTH CAROLINA
Department of Environmental Quality
and
Coastal Resources Commission

Permit

for

Major Development in an Area of Environmental Concern
pursuant to NCGS 113A-118

Excavation and/or filling pursuant to NCGS 113-229

Issued to **N.C. Department of Transportation, 113 Airport Drive, Suite 100, Edenton, NC 27932**

Authorizing development in Dare County at adj. Atlantic Ocean, NC Highway 12, Pea Island National Wildlife Refuge, as requested in the permittee's application dated 11/24/24, including attached workplan drawings (6) as referenced in Condition No. 2 of this permit and AEC Hazard Notice dated 11/22/24.

This permit, issued on **December 4, 2024**, is subject to compliance with the application (where consistent with the permit), all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to fines, imprisonment or civil action; or may cause the permit to be null and void.

- 1) Unless specifically altered herein, this Minor Modification authorizes the installation of 1,100 linear feet of temporary erosion control structures (sandbags) along NC Highway 12 within the Pea Island National Wildlife Refuge, including the use of an upland source of sand to fill the sandbags from the stockpile on the State of NC property at the end of Lifeboat Station Road and the Lifeboat Station Road ROW, all as depicted on the attached workplan drawings unless altered herein. [07J .0202].
- 2) Unless specifically altered herein, all work authorized by this permit shall be carried out in accordance with the attached workplan drawings (6): 1 dated 12/3/24; 1 dated as received 11/26/24; 1 dated 11/15/24; and 3 dated 11/18/24. [07J .0202(c)].

(See attached sheets for Additional Conditions)

This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date.

This permit must be accessible on-site to Department personnel when the project is inspected for compliance.


Any maintenance work or project modification not covered hereunder requires further Division approval.

All work must cease when the permit expires on

December 31, 2026

In issuing this permit, the State of North Carolina agrees that your project is consistent with the North Carolina Coastal Management Program.

Signed by the authority of the Secretary of DEQ and the Chair of the Coastal Resources Commission.


for Tancred Miller, Director
Division of Coastal Management

This permit and its conditions are hereby accepted.

Signature of Permittee

ADDITIONAL CONDITIONS

NOTE: The permittee is advised that approval from the U.S. Fish and Wildlife Service (USFWS) and/or the National Park Service (NPS), may be required, for work within the Pea Island National Wildlife Refuge and/or the Cape Hatteras National Seashore. If required, these approvals shall be obtained prior to the initiation of any activities approved under this modification.

- 3) In order to protect sea turtle and shorebird populations, no work on the beach or forward of the dunes shall be conducted during the sea turtle and piping plover nesting season from April 1st to November 15th of any year without first obtaining approval from the N.C. Division of Coastal Management (DCM) in consultation with the Wildlife Resources Commission (WRC) and the United States Fish and Wildlife Service (USFWS). [07H .0308(b)(1)(E)].
- 4) Should the operations encounter sand that could be considered non-compatible with the characteristics of the native beach, the permittee shall immediately cease operations and contact the DCM Transportation Project Field Representative in Washington by phone at (252) 948-3855 or by email at lee.cannady@deq.nc.gov. Permitted activities shall resume only after resolution of the issue of sand compatibility. [07H .0308(c)(5)].
- 5) Construction staging areas shall be located within NCDOT ROW, only in upland areas landward of any applicable buffers, and not in wetlands or waters of the State. [07J .0202(c)].
- 6) No excavation or fill shall occur within wetlands of the State, without permit modification. [07J .0202(c)].
- 7) All fill material shall be clean and free of any pollutants, except in trace quantities. [07H .0308(c)(5)].

Temporary Erosion Control Structures (Sandbags)

- 8) The authorized temporary erosion control structures (sandbags) shall conform to the use standards found in 15A NCAC 07H .0308(b)(2), including but not limited to, the timelines and requirements for removal found in 15A NCAC 07H .0308(b)(2)(F) through 15A NCAC 07H .0308(b)(2)(J), or in accordance with any variances granted by the N.C. Coastal Resources Commission.
- 9) In keeping with 15A NCAC 07H .0308(b)(2)(L) of the rules of the Coastal Resources Commission, the sandbags shall be tan in color and 3 to 5 feet wide and 7 to 15 feet long when measured flat. Base width of the temporary erosion control structure shall not exceed 20 feet, and the total height shall not exceed 6 feet, as measured from the bottom of the lowest bag.
- 10) Soldier pilings and other types of devices to anchor the sandbags shall not be allowed. [07H .0308(b)(2)(M)].
- 11) Any temporary erosion control structures within the project area that are no longer necessary shall be removed in their entirety, including the removal of remnants of all portions of any damaged temporary erosion control structures. [07H .0308(b)(2)(K)].

ADDITIONAL CONDITIONS**Dune Reconstruction**

NOTE: The portions of the 1,300 linear feet of proposed maintenance and repair of sand dunes that are above Normal High Water as depicted on the attached drawings are approved under the maintenance clause of CAMA Major Permit No. 86-99.

- 12) No development shall be permitted that involves the removal or relocation of primary or frontal dune sand or vegetation that would adversely affect the integrity of the dune's function as a protective barrier against flooding and erosion. These areas shall be identified by NCDOT and submitted to DCM for approval at the preconstruction meeting [07H .0308(c)(1)].
- 13) No portion of the proposed dunes shall be placed below Normal High Water. [07H .0305(1); 07H .305(4); 07H .0308(c)(2); 07H .0308(c)(3)].
- 14) Any new dunes established shall be aligned to the greatest extent possible with existing adjacent dune ridges and shall be of the same configuration as adjacent natural dunes. [07H .0308(c)(2)].

Sedimentation and Erosion Control

- 15) This project shall conform to all requirements of the N.C. Sedimentation Pollution Control Act and the N.C. Department of Transportation's (NCDOT's) Memorandum of Agreement with the N.C. Division of Energy, Mineral and Land Resources. [07J .0209(a)].

Historical and Cultural Resource Protection

- 16) If the permittee discovers any previously unknown historic or archaeological resources while accomplishing the authorized work, it shall immediately stop work and notify the N.C. Department of Cultural and Natural Resources, the U.S. Fish and Wildlife Service, and DCM, to initiate the required coordination procedures. [07H .0306(b)].

General

- 17) If it is determined that additional permanent and/or temporary impacts are necessary that are not shown on the attached workplan drawings or described in the authorized permit application, a permit modification and/or additional authorization from DCM shall be required. In addition, any changes in the approved plan may also require a permit modification and/or additional authorization from DCM. The permittee shall contact the DCM Transportation Field Representative in Washington prior to commencement of any such activity for this determination and any permit modification. [07J .0201].
- 18) The permittee and/or its contractor shall contact the DCM Transportation Project Field Representative in Washington by phone at (252) 948-3855 or by email at lee.cannady@deq.nc.gov to request a preconstruction conference prior to project initiation. [G.S 113A-120(b); 07J .0209(a)].
- 19) All conditions and stipulations of the active permit remain in force under this Minor Modification unless altered herein. [07J .0209(a)].

ADDITIONAL CONDITIONS

- NOTE:** A CAMA/Dredge and Fill Permit is a determination that the proposed development meets the CAMA/Dredge and Fill laws and CRC's rules for coastal development. It is not a determination of private property ownership or an authorization to trespass onto property owned by someone other than the Permittee.
- NOTE:** This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date. Any development authorized under this permit that occurs prior to the expiration of the twenty (20) day appeal period or completion of an appeal process, shall be done at the permittee's risk.
- NOTE:** Development authorized by this Minor Modification shall only be conducted on lands owned by the N.C. Department of Transportation (NCDOT), and/or their Right-of-Ways and/or easements and/or on federal lands with federal authorization.
- NOTE:** This Minor Modification does not eliminate the need to obtain any additional permits, approvals or authorizations that may be required. This includes approval, if required, from the U.S. Army Corps of Engineers (USACE) and/or the N.C. Division of Water Resources (DWR).
- NOTE:** The U.S. Army Corps of Engineers is reviewing this project as a Regional Permit 198000048 (Action ID SAW-2024-02198).
- NOTE:** This Minor Modification shall be attached to the original of Permit No. 86-99, which was issued on September 4, 1999, as well as all subsequent modifications, renewals, letters of authorization and maintenance approvals, and copies of all documents shall be readily available on site when a Division representative inspects the project for compliance.
- NOTE:** A minor modification application processing fee of \$100 was received by DCM for this project.

From: [Jordan, Gary](#)
To: [Brittingham, Cathy](#); [Washington, Dawn M](#); [Beyer, Arthur](#); [Johnson, Meaghan E](#); [Wilson, Travis W](#); [Kyle Barnes](#); [Ward, Garcy](#); [Furr, Mary P](#); [Wilkerson, Matt T](#)
Cc: [Bodnar, Gregg](#); [Lane, Stephen](#); [Cannady, Lee](#); [Williams, Paul C](#)
Subject: Re: [EXTERNAL] FW: CAMA Permit No. 86-99 – Emergency Modification Request for the Installation of Sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County
Date: Monday, December 2, 2024 8:09:09 AM
Attachments: [image002.png](#)

CAUTION: External email. Do not click links or open attachments unless verified. Report suspicious emails with the Report Message button located on your Outlook menu bar on the Home tab.

Hi Cathy,

The USFWS Ecological Services has no objections to this. Since the Refuge will have to issue a Special Use Permit, that will trigger an Intra-Service Section 7 consultation between the Refuge and my office. If the project is completed before the piping plover and sea turtle nesting seasons, then I see no problems with that.

Gary Jordan
 Fish and Wildlife Biologist, Liaison to NCDOT, Bat Ecologist
 U.S. Fish and Wildlife Service
 3916 Sunset Ridge Rd
 Raleigh, NC 27607
 MS Teams Phone: 984-308-0822

From: Brittingham, Cathy <cathy.brittingham@deq.nc.gov>
Sent: Tuesday, November 26, 2024 6:14 PM
To: Washington, Dawn M <dawn_washington@fws.gov>; Beyer, Arthur <Arthur_Beyer@fws.gov>; Johnson, Meaghan E <Meaghan_Johnson@nps.gov>; Wilson, Travis W. <travis.wilson@ncwildlife.org>; Jordan, Gary <gary_jordan@fws.gov>; Kyle Barnes <Kyle.W.Barnes@usace.army.mil>; Ward, Garcy <garcy.ward@deq.nc.gov>; Furr, Mary P. <mpfurr@ncdot.gov>; Wilkerson, Matt T <mtwilkerson@ncdot.gov>
Cc: Bodnar, Gregg <gregg.bodnar@deq.nc.gov>; Lane, Stephen <stephen.lane@deq.nc.gov>; Cannady, Lee <lee.cannady@deq.nc.gov>
Subject: [EXTERNAL] FW: CAMA Permit No. 86-99 – Emergency Modification Request for the Installation of Sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hello everyone,

I am re-sending this request for your agency's comments because **Sheet #4 of the permit**

drawings has been revised for this minor modification request. I have added the revised set of permit drawings as an attachment to this email, and I have removed the outdated set of permit drawings. Everything else remains the same.

The revision is due to an adjustment of the high water line on Sheet #4. With the revised high water line, the reconstructed dune on the proposed temporary nontraditional sandbags would impact approximately 950 sq. ft. of open waters. The temporary nontraditional sandbags themselves would not impact open waters.

Please let me or DCM Field Representative Lee Cannady know if you have any questions or concerns. My contact information is below. Lee can be reached by email at lee.cannady@deq.nc.gov, or by phone at (252) 948-3355.

Also attached please find a memorandum requesting your agency's comments. Please feel free to return the completed memorandum, or simply reply to this email. Either method of response is acceptable. **Your agency's comments are requested no later than December 2, 2024. I very sincerely apologize for the short turnaround time requested for your comments, especially during Thanksgiving week.** The expedited timeframe is necessary for DCM to make a permit decision as expeditiously as possible so that NCDOT can begin work as soon as possible.

Sincerely,

Cathy Brittingham

Cathy Brittingham

Transportation Project Coordinator, Division of Coastal Management

North Carolina Department of Environmental Quality

Office: (919) 707-9149

Please note my new email address: cathy.brittingham@deq.nc.gov

Mailing Address:

c/o DWR Transportation Permitting Branch

1617 Mail Service Center

Raleigh, NC 27699-1617

Physical Address:

512 North Salisbury Street

Archdale Building, 12th Floor, Room 1204C

Raleigh, NC 27604



Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

From: Brittingham, Cathy

Sent: Monday, November 25, 2024 4:24 PM

To: Arthur_Beyer (Arthur_Beyer@fws.gov) <Arthur_Beyer@fws.gov>; Johnson, Meaghan E <Meaghan_Johnson@nps.gov>; Wilson, Travis W. <travis.wilson@ncwildlife.org>; Jordan, Gary <Gary_Jordan@fws.gov>; Kyle Barnes <Kyle.W.Barnes@usace.army.mil>; Ward, Garcy <garcy.ward@deq.nc.gov>; Furr, Mary P. <mpfurr@ncdot.gov>; Wilkerson, Matt T <mtwilkerson@ncdot.gov>

Cc: Bodnar, Gregg <gregg.bodnar@deq.nc.gov>; Lane, Stephen <stephen.lane@deq.nc.gov>; Cannady, Lee <lee.cannady@deq.nc.gov>

Subject: FW: CAMA Permit No. 86-99 – Emergency Modification Request for the Installation of Sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County

Importance: High

Hello,

Attached for your review please find nine files that constitute a request from NCDOT for a Minor Modification of CAMA Major Permit No. 86-99 to conduct work within the NCDOT Right-of-Way in the vicinity of the Pea Island National Wildlife Refuge Visitor Center. The NCDOT request is to repair approximately 1,300 linear feet of primary dune and install approximately 1,100 linear feet of a temporary nontraditional (Permashield) sandbag structure adjacent to NC Highway 12 to protect the road from erosion damage. The proposed work is in response to severe erosion caused by the November 15-17 coastal storm on the Outer Banks. NCDOT Maintenance forces have rebuilt the primary dune to protect NC 12, but accelerated erosion along this section of the Refuge has left NC 12 extremely vulnerable to ocean overwash events.

Also attached please find a memorandum requesting your agency's comments. Please feel free to return the completed memorandum, or simply reply to this email. Either method of response is acceptable. **Your agency's comments are requested no later than November 29, 2024. I very sincerely apologize for the short turnaround time requested for your comments, especially during Thanksgiving week.** The expedited timeframe is necessary for DCM to make a permit decision as expeditiously as possible so that NCDOT can begin work as soon as possible.

For your convenience, here are some excerpts from the application:

- In the attached email dated November 15, 2024, the USFWS Refuge expresses a strong

preference not to use traditional sandbags.

- Although the PermaShield Product Specifications make mention of concrete, the proposed project would only use sand for fill.
- The PermaShield sandbag system uses heavy polypropylene fabric that is only available in the color white. The trapezoidal design is stronger than traditional sandbags, and the material will hold up better than the fabric used in traditional sandbags.
- NCDOT proposes to use two rows of temporary nontraditional (PermaShield) sandbags. The oceanward row would be 6-feet high and have an 8-foot wide base. The landward row would be 4-feet high and have a 6-foot wide base. Both rows would be placed 2-feet below the grade of the roadway and directly adjacent to each other with a combined base of 14-feet wide.
- The 1,100 linear feet of temporary nontraditional (PermaShield) sandbags would be placed 10-feet from the edge of pavement and would be entirely covered by the reconstructed dune. The reconstructed dune dimensions would be approximately 1,300 feet in length, 6-feet high and 25-feet wide.
- The temporary nontraditional (PermaShield) sandbags would be dry-filled with sand from the stockpile on the State of NC property at the end of Lifeboat Station Road and the Lifeboat Station Road ROW. Sand for the sandbags and dune reconstruction would be of the same general characteristics as the sand in the existing dune.
- NCDOT estimates that it would take the contractor approximately one week to install the temporary nontraditional (PermaShield) sandbags, beginning shortly after all permits are attained.
- NCDOT will remove the temporary nontraditional (PermaShield) sandbags when they are no longer needed.

Please let me or DCM Field Representative Lee Cannady know if you have any questions or concerns. My contact information is below. Lee can be reached by email at lee.cannady@deq.nc.gov, or by phone at (252) 948-3355.

Thank you so much for your expedited review and comment.

Sincerely,

Cathy

Cathy Brittingham

Transportation Project Coordinator, Division of Coastal Management

North Carolina Department of Environmental Quality

Office: (919) 707-9149

Please note my new email address: cathy.brittingham@deq.nc.gov

Mailing Address:

c/o DWR Transportation Permitting Branch

**N.C. DIVISION OF COASTAL MANAGEMENT
ADJACENT RIPARIAN PROPERTY OWNER NOTIFICATION/WAIVER FORM
CERTIFIED MAIL · RETURN RECEIPT REQUESTED or HAND DELIVERY**

(Top portion to be completed by owner or their agent)

Name of Property Owner: North Carolina Department of Transportation

Address of Property: NC 12, Pea Island NWR Visitor Center, Hatteras Island

Mailing Address of Owner: 113 Airport Dr., Edenton, NC 27932

Owner's email: pcwilliams2@ncdot.gov Owner's Phone#: (252)482-1861

Agent's Name: Paul Williams Agent Phone #: _____

Agent's Email: _____

**ADJACENT RIPARIAN PROPERTY OWNER'S CERTIFICATION
(Bottom portion to be completed by the Adjacent Property Owner)**

I hereby certify that I own property adjacent to the above referenced property. The individual applying for this permit has described to me, as shown on the attached drawing, the development they are proposing. A description or drawing, with dimensions, must be provided with this letter.

I **DO NOT** have objections to this proposal.* I **DO** have objections to this proposal.

***This does not grant authorization from the Refuge without a Special Use Permit.**

If you have objections to what is being proposed, you must notify the N.C. Division of Coastal Management (DCM) in writing within 10 days of receipt of this notice. Correspondence should be mailed to 401 S. Griffin St., Ste. 300, Elizabeth City, NC, 27909. DCM representatives can also be contacted at (252) 264-3901. No response is considered the same as no objection if you have been notified by Certified Mail.

WAIVER SECTION (Choose only one)

I understand that any proposed pier, dock, mooring pilings, boat ramp, breakwater, boathouse, lift, or groin must be set back a minimum distance of 15' from my area of riparian access unless waived by me (this does not apply to bulkheads or riprap revetments). (If you wish to waive the setback, you **must sign** the appropriate blank below.)

I **DO** wish to waive some/all of the 15' setback _____
Signature of Adjacent Riparian Property Owner

-OR-

I **DO NOT** wish to waive the 15' setback requirement (initial the blank) _____

Signature of Adjacent Riparian Property Owner: _____

Typed/Printed name of ARPO: Dawn Washington, Refuge Manager

Mailing Address of ARPO: P.O. Box 1969, Manteo, NC 27954

ARPO's email: Dawn_Washington@fws.gov ARPO's Phone#: 252-473-1131

Date: 11/27/2024 *waiver is valid for up to one year from ARPO's Signature*

TIPS FOR ADJACENT RIPARIAN OWNER NOTIFICATION & WAIVER FORMS

CAMA Regulations require notice of proposed development to the Adjacent Riparian Property Owners (15A NCAC 7J.0204(b)(5)). Proof of actual notice (a sign-off by the owner on this form) or certified mail return receipts (showing *delivery* of notice) are needed.

The purpose of this notice is to make adjacent riparian property owners aware of the proposed development so that they have an opportunity to provide comments (or potentially object to) the proposed development, and to give DCM an opportunity to consider these comments/objections before a permit decision is made. “Permission” of adjacent property owners is not necessarily required for DCM to issue a permit; however, permission must be obtained for certain types of proposed developments if they fall within a 15’ setback area along the riparian access area of the adjacent property, as determined solely by DCM. It is in the applicant’s best interest to provide comprehensive and accurate notice so that any concerns or objections can be resolved early in the permit review process. In addition, if the adjacent riparian property owner appeals the permit decision, insufficient notice could be a basis for granting such an appeal.

Who is an Adjacent Riparian Property Owner?

What is Adjacent? (Note: DCM reads this broadly to ensure comment by potentially impacted neighbors)

- A property that shares a boundary line with the site of proposed development; AND
- A property that fronts a natural or manmade waterbody that is connected to coastal waters and can support some form of navigation, even a kayak or canoe, including a common canal system or a manmade basin.
- Easement holders? Yes, if the easement could be impacted by the proposed development.
- Streets/Roads? Only if the street/road could be impacted by the proposed development. This might include street-ends which might be used for parking and beach access.
- Holders of recognized submerged lands claims/shellfish franchises.

What is Riparian?

Do the boundaries of the adjacent property legally intersect with the water at mean high tide? If there is a question about whether an adjacent property is considered “riparian,” please reach out to DCM Staff - especially on the oceanfront beach where there may be undeveloped parcels on the beach or in the water.

Who/What is a Property Owner?

For private individuals (or families), send notice to the address listed on the tax card. If the property is owned by an Inc. or LLC, please send notice to the person listed as the registered agent on the NC Secretary of State’s Corporations Look Up site: <https://www.sosnc.gov/search/index/corp>. For Condominiums or neighborhoods with an owners’ association (HOA/POA), send notice to the association (which is usually a corporation, for which you send notice to its registered agent).

What is Notice, and how do I ensure it is received?

- You can meet with your adjacent property owner, provide a description or drawing of the proposed development, and ask them to sign this form and return it to DCM; OR
- You can hand-deliver this form and a description or drawing, and ask your neighbor to return it to DCM (consider providing them with a stamped envelope); OR
- You can mail this form by USPS Certified Mail, return receipt requested (the Green Card). If you choose this option, you must provide either the signed & returned green card OR track the certified mail package number on USPS.GOV’s online tracking system, and provide the tracking print-out as proof of delivery to DCM

If you have any questions about this process, please reach out to DCM Staff and DCM Legal Counsel and we will work to answer your questions.

From: [Williams, Paul C](#)
To: [Brittingham, Cathy](#); [Cannady, Lee](#); [Lane, Stephen](#)
Subject: FW: [EXTERNAL] Overwash at Pea Island Visitor Center
Date: Monday, November 18, 2024 9:47:51 AM
Attachments: [image001.png](#)

For discussion today.

Paul C. Williams, Jr.
Division Environmental Officer
Division One
NC Department of Transportation

(252) 482-1861 office
(252) 333-9812 mobile
(252) 482-8722 fax
pcwilliams2@ncdot.gov

113 Airport Dr.
Suite 100
Edenton, NC 27932



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Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

From: Washington, Dawn M <dawn_washington@fws.gov>
Sent: Friday, November 15, 2024 3:16 PM
To: Williams, Paul C <pcwilliams2@ncdot.gov>
Cc: Martin, Rebekah <rebekah_p_martin@fws.gov>; Beyer, Arthur <arthur_beyer@fws.gov>
Subject: Re: [EXTERNAL] Overwash at Pea Island Visitor Center

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Thank you Paul for clarifying everything in this email.

As you stated the Refuge has a strong preference to not use traditional sandbags on Pea Island NWR. The problems of remnant sandbags are multi-faceted. With this current situation we have consulted with our Realty ROW and NEPA folks who are in agreement. Please let us know an update from CAMA on your application's status on Monday so that we can move forward with a solution together.

Dawn

Dawn Washington (she/her)
Refuge Manager at Alligator River and Pea Island NWRs
Deputy of the Coastal North Carolina NWR Complex
100 Conservation Way
Manteo, NC 27954
Office: 252-473-1131 x40163
Cell: 252-553-0562

From: Williams, Paul C <pcwilliams2@ncdot.gov>
Sent: Friday, November 15, 2024 2:38 PM
To: Washington, Dawn M <dawn_washington@fws.gov>
Cc: Martin, Rebekah <rebekah_p_martin@fws.gov>; Beyer, Arthur <Arthur_Beyer@fws.gov>
Subject: [EXTERNAL] Overwash at Pea Island Visitor Center

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Dawn,

As discussed today, the current coastal storm has resulted in severe overwash at the Pea Island NWR Visitor Center, as shown in the attached photos from this morning. I'm estimating 1000 linear feet of the primary dune along NC 12 has been washed away, exposing the pavement to the high surf. NCDOT maintenance is currently placing sand from the ROW along the exposed edge-of-pavement to maintain a minimal dune to protect the roadway though the storm event. Maintenance expects at least one more overwash event during the next high tide that will impact the site. NCDOT Highway Division One is anticipating an Emergency Declaration from the Secretary of Transportation later today for this event.

As experienced last winter, NCDOT anticipates frequent coastal storms to continue this year. With

the current profile of the beach and normal high water line in the vicinity of the Visitor Center, NC 12 is extremely vulnerable to storm impacts at this location. As NC 12 is a critical link to Hatteras Island, NCDOT has started planning a short term solution to maintain the roadway and prevent pavement damage at the Visitor Center on Pea Island NWR. NCDOT is proposing a sandbag project along NC 12 and within the existing ROW to protect the highway from overwash events.

The last large sandbag project on the Refuge was at Mirlo Beach. That project was in response to the storm damage produced by Hurricane Sandy. That sandbag project, as with previous sandbag projects in the area, used the “traditional” sandbags as specified by CAMA Rules (15A NCAC 07H .0308) to protect NC 12. With the completion of the Rodanthe Bridge, NC 12 was removed from the area of the Refuge bypassed by the bridge. Since then, NCDOT has removed the majority of the sandbags at Mirlo Beach, but many remnant sandbags remain. NCDOT is currently planning to complete the remnant sandbag removal this winter. Removal of the remnant sandbags has been problematic and highly impactful to the beach, with a significant number of sandbag fragments left on the Refuge to be cleaned up. The traditional sandbags have been difficult to entirely remove from the Refuge.

As the traditional sandbags have been problematic to remove, NCDOT proposes using a more robust sandbag system for the Pea Island Visitor Center. NCDOT installed a Permashield sandbag system just south of the Refuge on a cul-de-sac at the end of the old NC 12. The product was approved with a CAMA Variance and uses heavy polypropylene fabric. The trapezoidal design is stronger than traditional sandbags, and the material would hold up better than the fabric used in commercially available traditional sandbags. The Permashield bags can be dry filled, unlike the traditional sandbags that need to be hydraulically pumped with sand from the swash zone of the beach. With the stronger material, and with the design, the Permashield bags can be removed more effectively when they are no longer needed. NCDOT anticipates quicker and more complete removal of Permashield sandbags as opposed to the challenging removal of traditional sandbags.

NCDOT proposes the use of the Permashield sandbag system at the Pea Island Visitor Center to protect NC 12. Our staff is currently working on permit drawings for the project. Before submitting an application and drawings for a Special Use Permit, please confirm the strong preference of the Refuge to not use traditional sandbags on Pea Island NWR. We’ve discussed the problems of remnant sandbags several times, but NCDOT needs documentation of the Refuge’s experience and concerns regarding traditional sandbag projects on Pea Island.

Thanks,

Paul C. Williams, Jr.
Division Environmental Officer
Division One
NC Department of Transportation

(252) 482-1861 office
(252) 333-9812 mobile



General Activities Special Use Permit

Station #: 42540

(For Official Use Only)

Permit #: 2024-013G

Permit Term: From 12/15/24 To 2/15/25

1) Principal Investigator Name/Affiliation: Paul Williams/NC Department of Transportation

- 2) Permit Status: a) Approved: If approved, provide special conditions (if any) in the text box below.
- b) Denied: If denied, provide justification in the text box below.

[Type in additional Special Conditions or Justification for Denied Permit in the space provided]

This special use permit provides Paul Williams of the NC Department of Transportation (NCDOT) and designated staff access to Pea Island National Wildlife Refuge for activities described in the previously received General Activities Special Use Permit Application (attached). The proposed activity involves the installation of sandbags along 1,100 feet of NC 12 at the Pea Island National Wildlife Refuge Visitor Center. Work is anticipated to take a week.

Conditions:

1. Staging and parking of vehicles and equipment is not allowed within the Refuge Visitor Center parking lot.
2. Only clean sand from Pea Island that is of similar characteristic to sand along the adjacent dune is to be used for dune reconstruction and sandbag fill.
3. Only Permasield sandbags are to be used for this project. NCDOT will be responsible for the removal of all sandbags 10 years from the date of installation if still in place.
4. All work is to remain within the NCDOT Right-of-Way.

Service and Refuge conditions apply (attached).

- 3) Are there additional special conditions attached to the permit? Yes No
- 4) Are licenses/permits required, and have they been verified? Yes No N/A
- 5) Are Insurance and/or Certification(s) required, and have they been verified? Yes No N/A
- 6) Is an Assurance of Animal Care or Institutional Animal Approval form needed? Yes No N/A
- If yes, is the form attached? Yes No
- 7) Has a Minimum Requirements Decision Assessment been conducted? Yes No N/A
- If yes, is assessment attached? Yes No
- 8) Record of Payments: Exempt Partial Full
- Amount of payment: Record of partial payment:
- 9) Is a surety bond or security deposit required? Yes No N/A

This permit is issued by the U.S. Fish and Wildlife Service and accepted by the applicant signed below, subject to the terms, covenants, obligations, and reservations, expressed or implied herein, and to the notice, conditions, and requirements included or attached. A copy of this permit should be kept on-hand so that it may be shown at any time to any refuge staff.

10) Permit approved/issued by: (Signature and title)
ARTHUR BEYER Digitally signed by ARTHUR BEYER
Date: 2024.12.13 12:17:49 -05'00'

Date: _____

11) Permit accepted by: (Signature of permittee)
DocuSigned by:
Paul Williams
7C79B0D2941F47E...

Date: 12/13/2024

General Conditions and Requirements

- 1) Responsibility of Permittee: The permittee, by operating on the premises, shall be considered to have accepted these premises with all facilities, fixtures, or improvements in their existing condition as of the date of this permit. At the end of the period specified or upon earlier termination, the permittee shall give up the premises in as good order and condition as when received except for reasonable wear, tear, or damage occurring without fault or negligence. The permittee will fully repay the Service for any and all damage directly or indirectly resulting from negligence or failure on his/her part, and/or the part of anyone of his/her associates, to use reasonable care.
- 2) Operating Rules and Laws: The permittee shall keep the premises in a neat and orderly condition at all times, and shall comply with all municipal county, and State laws applicable to the operations under the permit as well as all Federal laws, rules, and regulations governing national wildlife refuges and the area described in this permit. The permittee shall comply with all instructions applicable to this permit issued by the refuge official in charge. The permittee shall take all reasonable precautions to prevent the escape of fires and to suppress fires and shall render all reasonable assistance in the suppression of refuge fires.
- 3) Use Limitations: The permittee's use of the described premises is limited to the purposes herein specified and does not, unless provided for in this permit, allow him/her to restrict other authorized entry onto his/her area; and allows the U.S. Fish and Wildlife Service to carry on whatever activities are necessary for: (1) protection and maintenance of the premises and adjacent lands administered by the U.S. Fish and Wildlife Service; and (2) the management of wildlife and fish using the premises and other U.S. Fish and Wildlife Service lands.
- 4) Transfer of Privileges: This permit is not transferable, and no privileges herein mentioned may be sublet or made available to any person or interest not mentioned in this permit. No interest hereunder may accrue through lien or be transferred to a third party without the approval of the Regional Director of the U.S. Fish and Wildlife Service and the permit shall not be used for speculative purposes.
- 5) Compliance: The U.S. Fish and Wildlife Service's failure to require strict compliance with any of this permit's terms, conditions, and requirements shall not constitute a waiver or be considered as a giving up of the U.S. Fish and Wildlife Service's right to thereafter enforce any of the permit's terms or conditions.
- 6) Conditions of Permit not Fulfilled: If the permittee fails to fulfill any of the conditions and requirements set forth herein, the U.S. Fish and Wildlife Service shall retain all money paid under this permit to be used to satisfy as much of the permittee's obligation as possible.
- 7) Payments: All payment shall be made on or before the due date to the local representative of the U.S. Fish and Wildlife Service by a postal money order or check made payable to the U.S. Fish and Wildlife Service.
- 8) Termination Policy: At the termination of this permit the permittee shall immediately give up possession to the U.S. Fish and Wildlife Service representative, reserving, however, the rights specified in paragraph 11 below. If he/she fails to do so, he/she will pay the U.S. Fish and Wildlife Service, as liquidated damages, an amount double the rate specified in this permit for the entire time possession is withheld. Upon yielding possession, the permittee will still be allowed to reenter as needed to remove his/her property as stated in paragraph 11 below. The acceptance of any fee for the liquidated damages or any other act of administration relating to the continued tenancy is not to be considered as an affirmation of the permittee's action nor shall it operate as a waiver of the U.S. Fish and Wildlife Service's right to terminate or cancel the permit for the breach of any specified condition or requirement.
- 9) Revocation Policy: The Regional Director of the U.S. Fish and Wildlife Service may revoke this permit without notice for noncompliance with the terms hereof, or for violation of general and/or specific laws or regulations governing national wildlife refuges, or for nonuse. It is at all times subject to discretionary revocation by the Director of the Service. Upon such revocation the U.S. Fish and Wildlife Service, by and through any authorized representative, may take possession of said premises for its own and sole use, and/or may enter and possess the premises as the agent of the permittee and for his/her account.
- 10) Damages: The U.S. Fish and Wildlife Service shall not be responsible for: any loss or damage to property including but not limited to crops, animals, and machinery; injury to the permittee or his/her relatives or to the officers, agents, employees, or any other(s) who are on the premises from instructions; the sufferance from wildlife or employees or representatives of the U.S. Fish and Wildlife Service carrying out their official responsibilities. The permittee agrees to hold the U.S. Fish and Wildlife Service harmless from any and all claims for damages or losses that may arise to be incident to the flooding of the premises resulting from any associated government river and harbor, flood control, reclamation, or Tennessee Valley Authority activity.
- 11) Removal of Permittee's Property: Upon the expiration or termination of this permit, if all rental charges and/or damage claims due to the U.S. Fish and Wildlife Service have been paid, the permittee may, within a reasonable period as stated in the permit or as determined by the U.S. Fish and Wildlife Service official in charge, but not to exceed 60 days, remove all structures, machinery, and/or equipment, etc., from the premises for which he/she is responsible. Within this period the permittee also must remove any other of his/her property including his/her acknowledged share of products or crops grown, cut, harvested, stored, or stacked on the premises. Upon failure to remove any of the above items within the aforesaid period, they shall become the property of the U.S. Fish and Wildlife Service.



GENERAL ACTIVITIES SPECIAL USE PERMIT APPLICATION



National Wildlife Refuge System

Refuge:

Address:

Attn: (Refuge Official)

E-Mail:

Phone #:

For Official Use Only:

Permit #:

Station #:

Permit Term: from to

Note: We do not require all information for each use. See instructions at the end of the notice and contact the refuge identified above to determine applicability of a particular item. Attach additional sheets to the application if the text spaces provided are inadequate.

1a) Identify the type of Permit you are applying for: New Renewal Modification Other

1b) Have you applied, or do you intend to apply, to any other refuges for this same activity? Yes No

1c) If yes, which refuges?

Applicant Information

2) Full Name: 3) Organization:

4) Physical Address:

City/State/Zip:

5) Mailing Address:

City/State/Zip:

6) Phone #: 7) Fax #:

8) E-mail:

9) List **known** assistants/subcontractors/subpermittees: (Only required if the assistants/subcontractors/subpermittees will be operating on the refuge without the permittee being present.)

Name/Business	Address	Phone #
Brandon Tatum, NCDOT Resident Engineer	1929-A N. Road St., Elizabeth City, NC 27909	(252) 207-6389
Beau Adams, Guardian Retention Systems	116 Cabin Creek Drive, Brooks, KY 40109	502-655-6036
Mark Gawlinski, NCDOT Maintenance	306 Simon St., Manteo NC 27954	(252) 484-5026

Activity Information

10a) Choose an Activity: Special Access Construction Event Cabins/Subsistence Group Visit

Educational Activity Ceremonial Activity Wood Cutting Trapping Mapping/Survey Other

10b) Specify type of activity if 'Other' was chosen:

Note: Depending on the activity for which you are requesting a permit, we may ask you for the following activity information. Please contact the specific refuge where the activity is being conducted to determine what information is required.

11) Describe activity by specifically identify timing (occupancy timeline), frequency, and how the activity is expected to proceed:

NCDOT proposes to install sandbags along NC 12 at the Pea Island National Wildlife Refuge Visitor Center. Please see attached addendum for description.

12) Specifically identify location(s) and/or attach a map: (GPS location(s) preferred)

South End - Lat:35.7174092° Long: -75.4936660°
North End - Lat:35.7140508° Long: -75.4922933°

13) If drones will be used, describe why the drone is needed and provide specifics on how it will be used:

No

14) Inquire with refuge if Plan of Operation is required. Is a Plan of Operation attached? Yes No N/A

For group, ceremonial, and educational activities provide:

15) Expected number of participants, if applicable: Children (1-18) Adults Total

16) Grade level of educational group, if applicable: Grade

17a) Will staff time/assistance be required for group activities? Yes No N/A

17b) If yes, what's the anticipated time frame?

Insurance Coverage/License/Certifications/Permits

Note: Contact the specific refuge headquarters office where the activity is going to be conducted to determine if any type of insurance, certification(s), or permit(s) will be required. We may process this Special Use Permit while the applicant obtains them.

18) List and attach a copy of any **insurance coverage(s)** you have such as general liability, aviation, grounding liability, contaminants applicator, medical evacuation, or others, if required:

Insurance Type	Carrier Name	Policy Number
N/A - State of NC self-insured		

19) List and attach a copy of any relevant licenses, certifications, and permits, if required:

License/Certification/Permit Type	Number (if applicable)	Issued to:
CAMA authorization required.	Will provide when issued.	NCDOT

Note: Not all information is required for each use. Please contact the specific refuge where the activity is being conducted to determine what information is required. Attach additional sheets to the application if the text spaces provided are inadequate.

20) Does activity require personnel to stay overnight onsite? Yes No

21) List names of personnel involved:

List Names	List Names	List Names
Beau Adams	Brandon Tatum	Mark Gawlinski

22) Specifically describe all major equipment/gear and materials used, if required:

Light Trucks, Excavator, Skid-steer, Loader, sandbag sled

23a) Provide detailed information on the logistics for onsite, intersite, and/or ship-to-shore transportation to or on the refuge, if required:

All access will be from NC 12. Equipment will not be placed on the beach.

23b) Provide descriptions, license plate, or I.D. numbers of vehicles used for onsite, intersite, and/or ship-to-shore transportation, if required:

Type of transportation (onsite, intersite, or ship-to-shore)	Equipment Type	License/I.D./Registration Numbers
Will be provided at a later date.		

24) Specifically describe onsite work and/or living accommodations:

N/A

25) Specifically describe onsite hazardous material storage or other onsite material storage space:

None

Sign, date, and print this form and return it to the refuge for processing. By signing this application, I agree my operations will conform to the information I have provided in this application, and I understand that any deviations or changes to this information must receive prior written approval.

26) Signature of Applicant: Paul Williams Date of Application: 11/22/2024
DocuSigned by:
7C79B0D2941F47E...

NOTICES

No Members of Congress or Resident Commissioner shall participate in any part of this contract or to any benefit that may arise from it, but this provision shall not pertain to this contract if made with a corporation for its general benefit.

The Permittee agrees to be bound by the equal opportunity "nondiscrimination in employment" clause of Executive Order 11246.

PRIVACY ACT STATEMENT

Authority: The information requested is authorized by the National Wildlife Refuge System Administration Act (16 U.S.C. 668dd-ee) and the Refuge Recreation Act (16 U.S.C. 460k-460k-4).

Purpose: To collect the applicant's information to process permits allowing for general activities such as: woodcutting; miscellaneous events (fishing tournaments, one-time events, other special events); cabin rentals; and education activities.

Routine Uses: The information will be used by the refuge's administrative office for processing General Activity Special Use permits. More information about the routine uses maybe found in the Systems of Records Notice, FWS-5 National Wildlife Refuge Special Use Permits.

Disclosure: Providing the information is voluntary. However, submission of information is required to process and approve general activity usage on the National Wildlife Refuge System.

PAPERWORK REDUCTION ACT STATEMENT

We are collecting this information subject to the Paperwork Reduction Act (44 U.S.C. 3501) to evaluate the qualifications, determine eligibility, and document permit applicants and to respond to requests made under the Freedom of Information Act and the Privacy Act of 1974. The information that you provide is required to obtain or retain a benefit; however, failure to provide all required information is sufficient cause for the U.S. Fish and Wildlife Service to deny a permit. False, fictitious, or fraudulent statements or representations made in the application may be grounds for revocation of the Special Use Permit and may be punishable by fine or imprisonment (18 U.S.C. 1001). According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. OMB has approved this information collection and assigned control number 1018-0102.

ESTIMATED BURDEN STATEMENT

The public reporting burden for this information collection varies based on the requested specific refuge use. We estimate the relevant public reporting burden for the Commercial Activity Special Use Permit Application form (General) to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Service Information Clearance Officer, U.S. Fish and Wildlife Service, 5275 Leesburg Pike, MS: PRB (JAO/3W), Falls Church, VA 22041-3803, or via email to Info_Coll@fws.gov. Please do not send your completed form to this address.

GENERAL CONDITIONS AND REQUIREMENTS

1) Responsibility of Permittee: We shall consider the permittee, by operating on the premises, to have accepted these premises with all facilities, fixtures, or improvements in their existing condition as of the date of this permit. At the end of the period specified or upon earlier termination, the permittee shall give up the premises in as good order and condition as when received except for reasonable wear, tear, or damage occurring without fault or negligence. The permittee will fully repay the Service for any and all damage directly or indirectly resulting from negligence or failure on his/her part, and/or the part of anyone of his/her associates, to use reasonable care.

2) Operating Rules and Laws: The permittee shall keep the premises in a neat and orderly condition at all times, and shall comply with all municipal, county, and State laws applicable to the operations under the permit as well as all Federal laws, rules, and regulations governing national wildlife refuges and the area described in this permit. The permittee shall comply with all instructions applicable to this permit issued by the refuge official in charge. The permittee shall take all reasonable precautions to prevent the escape of fires and to suppress fires and shall render all reasonable assistance in the suppression of refuge fires.

3) Use Limitations: The permittee's use of the described premises is limited to the purposes herein specified and does not, unless provided for in this permit, allow him/her to restrict other authorized entry onto his/her area; and allows the U.S. Fish and Wildlife Service to carry on whatever activities are necessary for: (1) protection and maintenance of the premises and adjacent lands administered by the U.S. Fish and Wildlife Service; and (2) the management of wildlife and fish using the premises and other U.S. Fish and Wildlife Service lands.

- 4) **Transfer of Privileges:** This permit is not transferable, and no privileges herein mentioned may be sublet or made available to any person or interest not mentioned in this permit. No interest hereunder may accrue through lien or be transferred to a third party without the approval of the Regional Director of the U.S. Fish and Wildlife Service and the permit shall not be used for speculative purposes.
- 5) **Compliance:** The U.S. Fish and Wildlife Service's failure to require strict compliance with any of this permit's terms, conditions, and requirements shall not constitute a waiver or be considered as a giving up of the U.S. Fish and Wildlife Service's right to thereafter enforce any of the permit's terms or conditions.
- 6) **Conditions of Permit not Fulfilled:** If the permittee fails to fulfill any of the conditions and requirements set forth herein, the U.S. Fish and Wildlife Service shall retain all money paid under this permit to be used to satisfy as much of the permittee's obligation as possible.
- 7) **Payments:** All payment shall be made on or before the due date to the local representative of the U.S. Fish and Wildlife Service by a postal money order or check made payable to the U.S. Fish and Wildlife Service.
- 8) **Termination Policy:** At the termination of this permit the permittee shall immediately give up possession to the U.S. Fish and Wildlife Service representative, reserving, however, the rights specified in paragraph 11 below. If he/she fails to do so, he/she will pay the U.S. Fish and Wildlife Service, as liquidated damages, an amount double the rate specified in this permit for the entire time possession is withheld. Upon yielding possession, we will still allow the permittee to reenter as needed to remove his/her property as stated in paragraph 11 below. The acceptance of any fee for the liquidated damages or any other act of administration relating to the continued tenancy is not to be considered as an affirmation of the permittee's action nor shall it operate as a waiver of the U.S. Fish and Wildlife Service's right to terminate or cancel the permit for the breach of any specified condition or requirement.
- 9) **Revocation Policy:** The Regional Director of the U.S. Fish and Wildlife Service may revoke this permit without notice for noncompliance with the terms hereof, or for violation of general and/or specific laws or regulations governing national wildlife refuges, or for nonuse. It is at all times subject to discretionary revocation by the Director of the Service. Upon such revocation the U.S. Fish and Wildlife Service, by and through any authorized representative, may take possession of said premises for its own and sole use, and/or may enter and possess the premises as the agent of the permittee and for his/her account.
- 10) **Damages:** The U.S. Fish and Wildlife Service shall not be responsible for: any loss or damage to property including but not limited to crops, animals, and machinery; injury to the permittee or his/her relatives, or to the officers, agents, employees, or any other(s) who are instructed to be on the premises; the sufferance from wildlife or employees or representatives of the U.S. Fish and Wildlife Service carrying out their official responsibilities. The permittee agrees to hold the U.S. Fish and Wildlife Service harmless from any and all claims for damages or losses that may arise to be incident to the flooding of the premises resulting from any associated government river and harbor, flood control, reclamation, or Tennessee Valley Authority activity.
- 11) **Removal of Permittee's Property:** Upon the expiration or termination of this permit, if all rental charges and/or damage claims due to the U.S. Fish and Wildlife Service have been paid, the permittee may, within a reasonable period as stated in the permit or as determined by the U.S. Fish and Wildlife Service official in charge, but not to exceed 60 days, remove all structures, machinery, and/or equipment, etc., from the premises for which he/she is responsible. Within this period the permittee also must remove any other of his/her property including his/her acknowledged share of products or crops grown, cut, harvested, stored, or stacked on the premises. Upon failure to remove any of the above items within the aforesaid period, they shall become the property of the U.S. Fish and Wildlife Service.

INSTRUCTIONS FOR COMPLETING APPLICATION

You may complete the application portion verbally, in person, or electronically and submit to the refuge for review. Note: Please read instructions carefully as not all information is required for each activity. Contact the specific refuge headquarters office where the activity is going to be conducted to determine applicability of a particular item. We may add special conditions or permit stipulations to permit prior to approval.

1a-1c) Identify if permit application is for new, renewal, or modification of an existing permit, whether or not you have or will be applying to another refuge for the same activity, and for which refuge(s). Permit renewals may not need all information requested. Contact the specific refuge headquarters office where the activity is going to be conducted if you have questions regarding the applicability of a particular item.

2-8) Provide full name, organization (if applicable), physical and/or mailing address, phone, fax, and e-mail.

9) Provide known names and addresses of assistants, subcontractors or subpermittees. Names and address are only required if the assistants, subcontractors or subpermittees will be operating on the refuge without the permittee being present. Volunteers, assistants, subcontractors or subpermittees that are accompanied by the permittee need not be identified.

10a) Activity type: check one of the following categories:

- Special Access;

- Construction;
- Event;
- Cabin/Subsistence (subsistence cabins are only allowed on Alaska Refuges);
- Educational Activity;
- Ceremonial Activity;
- Wood Cutting, Firewood Collection;
- Trapping (non-commercial);
- Mapping/Survey (non-commercial and non-archeological)
- Other:

10b) If "other" was chosen for activity type, specify the activity in the space provided.

11) Provide detailed information on the activity, including times, occupancy timeline, frequency, and how the activity is expected to proceed, etc. Permit renewals may not need activity description if the activity is unchanged from previous permit. Most repetitive activities, such as group visits, do not require an activity description for each visit. Contact the specific refuge headquarters office where the activity is going to be conducted to determine if we require an activity description.

12) Identify specific location (GPS coordinates preferred) if not at a named facility, and attach a map with location. Most repetitive activities, such as group visits, do not require a location. In addition, permit renewals may not require a location if the activity is essentially unchanged from the previous permit. Contact the specific refuge headquarters office where the activity is going to be conducted to determine if we require a location.

13) If a drone will be used for this activity, describe in detail why the drone is necessary to complete the activity and provide specifics on how the drone will be used.

14) Attach a Plan of Operation, if required. Most repetitive activities do not require a Plan of Operations for each visit. In addition, permit renewals may not require a Plan of Operations if the activity is essentially unchanged from the previous permit. Contact the specific refuge headquarters office listed where the activity is going to be conducted to determine if a Plan of Operations is required.

15-16) Provide an estimate of the number of adults, and children and grade level of group, if applicable.

17a-17b) Identify if group activities will require onsite refuge staff and the anticipated time frame, if applicable.

18) Provide name, type, carrier of insurance and attach copies, if required. Contact the specific refuge headquarters office where the activity is going to be conducted to determine if we require insurance and type of insurance.

19) Specifically identify type(s) and number(s) of other licenses, certifications or permits, and provide copies if required. Contact the specific refuge headquarters office where the activity is going to be conducted to determine the type(s) of licenses, certifications or permits required, and to coordinate the simultaneous application of several types of licenses, certifications or permits. We may or may not issue this Special Use Permit (SUP) while the permittee obtains other licenses, certifications, and/or permits.

20-21) Provide name(s) of any personnel required to stay overnight, if applicable.

22) Identify all equipment and materials that will be used, if required. Most repetitive events, such as group visits, do not require a list of equipment. In addition, permit renewals may not require a list of equipment if the event is essentially unchanged from the previous permit. Contact the specific refuge headquarters office where the activity is going to be conducted to determine if we require a list of equipment.

23a-23b) Provide vehicle descriptions and license plate or identification numbers of all vehicles, including boats and airplanes, if required. We only require motor vehicle descriptions for permittee vehicle, and/or if the vehicle will be operated on the refuge without the permittee being present. Motor vehicles accompanied by the permittee as part of a group (convoy) activity need not be identified if cleared in advance by the refuge supervisor. Specifically describe ship-to-shore, intersite (between islands, camps, or other sites) and onsite transportation mechanisms, and license plate or identification numbers, if required.

24) Specifically describe onsite work and/or living accommodations, if applicable.

25) Specifically describe onsite hazardous material storage, or other onsite material storage space (including on and offsite fuel caches).

26) Sign, date, and print the application. By signing this application, you agree your operations will conform to the information you have provided in this application, and understand that any deviations or changes to this information must receive prior written approval. Click on the Print button to print the application (if using the fillable version). The refuge official will review and, if approved, fill out the remaining information, sign, and return a copy to you for signature and acceptance.

**THIS APPLICATION FORM IS NOT VALID AS A PERMIT
BUT MAY BE USED AS A REFERENCE DOCUMENT ATTACHED TO THE OFFICIAL PERMIT.
ONLY OFFICIAL REFUGE PERSONNEL MAY ASSIGN A VALID PERMIT NUMBER AND PERMIT TERM
TO THIS APPLICATION FORM AFTER THE PERMIT HAS BEEN APPROVED.**

WBS#: 5124.01S

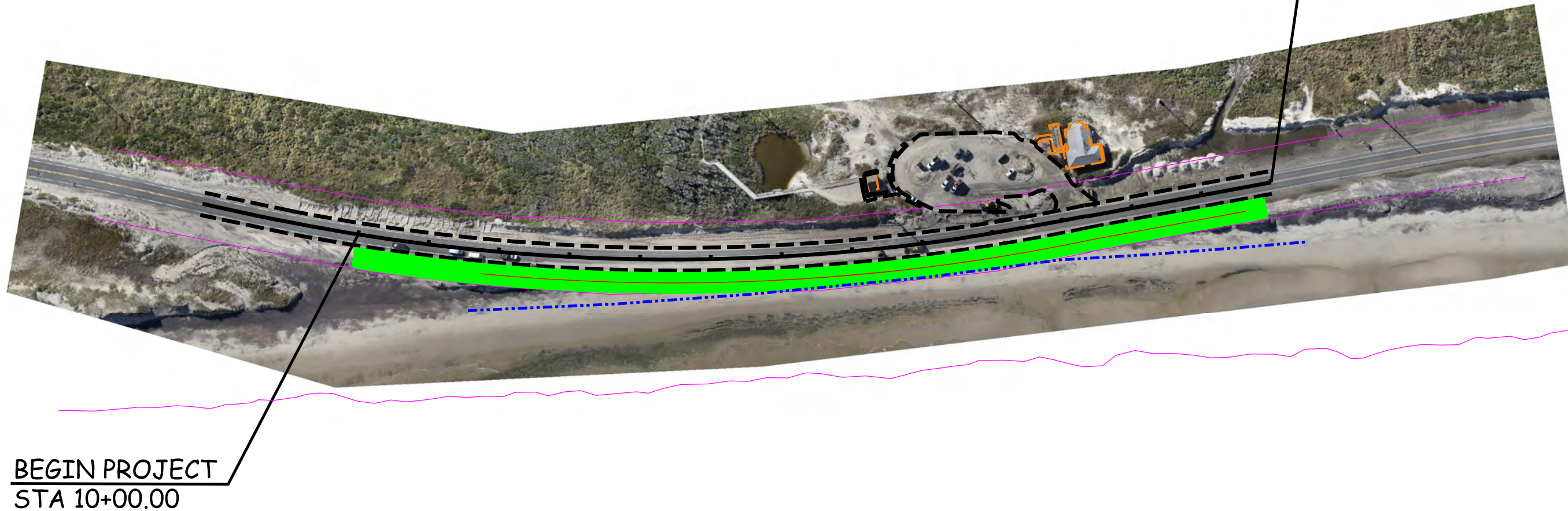
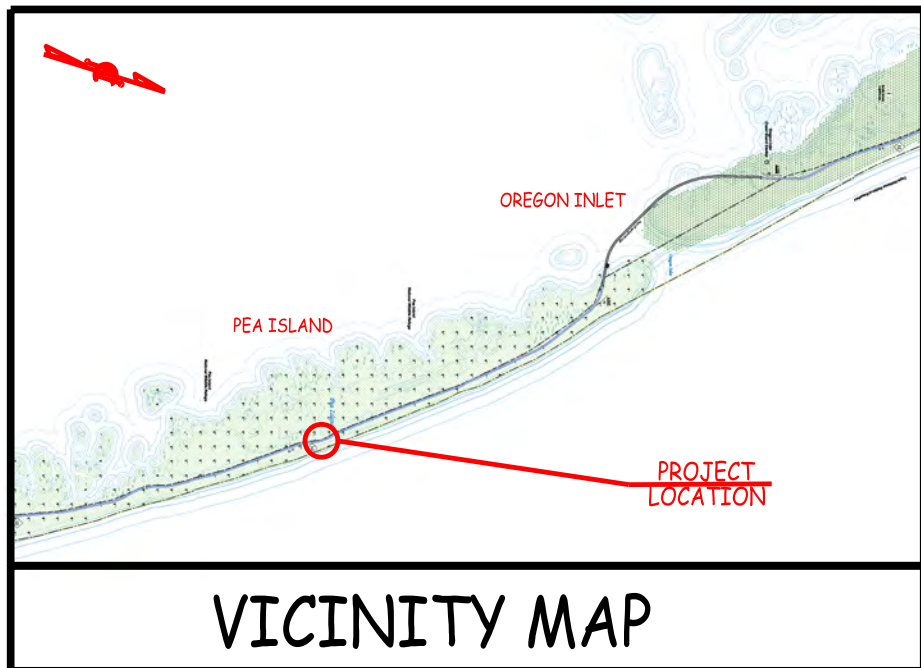
CONTRACT: DA00XXX

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	TOTAL SHEETS
N.C.	5124.01S	1
STATE FUNDING	F.A.FUNDING	DESCRIPTION
5124.01S		CONST, PE

DARE COUNTY

LOCATION: NC 12 PEA ISLAND VISITOR CENTER
TYPE OF WORK: SANDBAG INSTALLATION & DUNE CONSTRUCTION



NTS

PROJECT LENGTH

TOTAL LENGTH PROJECT: 1,300 L.F.

Prepared in the Office of:
DIVISION OF HIGHWAYS
113 Airport Drive, Edenton NC 27932

D.H. STALLINGS
DRAWN BY:

J. S. ABEL, Jr.
DIVISION PROJECT TEAM LEAD

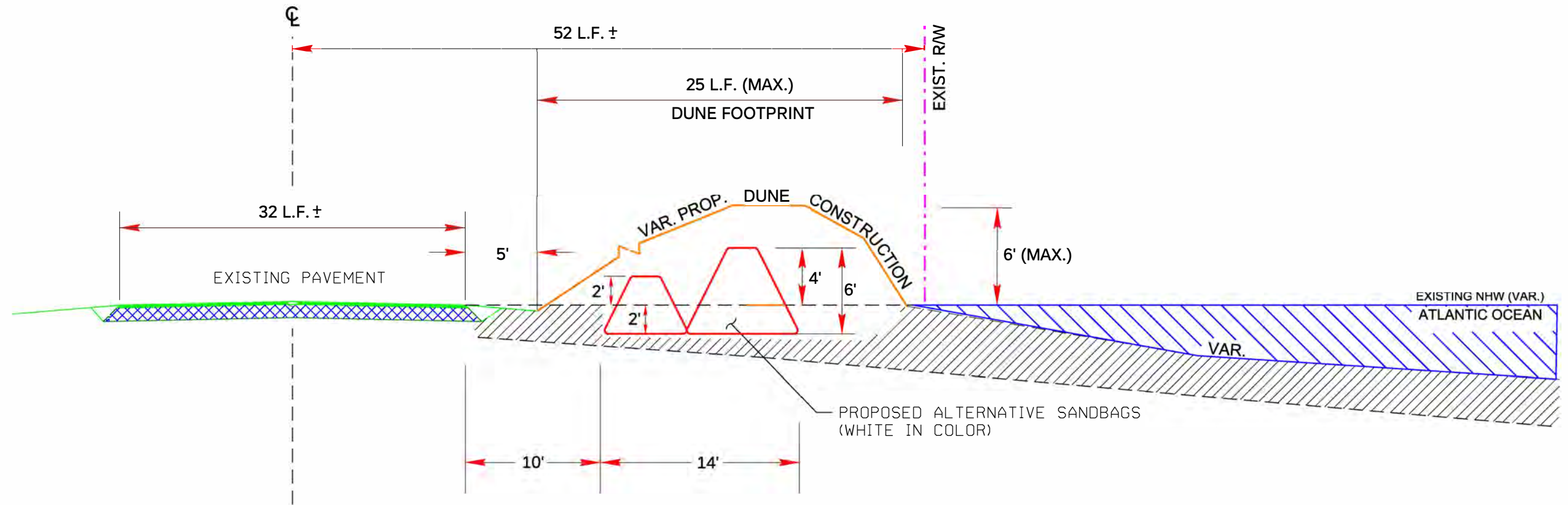
MARK WINSLOW
DIVISION PROPOSALS ENGINEER



SANDBAG INSTALLATION

NC 12 PEA ISLAND VISITOR CENTER

CROSS SECTION



* MATERIAL USED FOR DUNE CONSTRUCTION SHALL HAVE BEACH QUALITY CHARACTERISTICS AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT

SANDBAG INSTALLATION:	1,100 L.F. ±
	22 SECTIONS (4')
	22 SECTIONS (6')
SANDBAG VOLUME:	1,870 C.Y. ±
DUNE RECONSTRUCTION:	1,300 L.F. ±
DUNE VOLUME:	5,650 C.Y. ±

TYPICAL SECTION A
-L- STA. 11+81 TO STA. 22+81

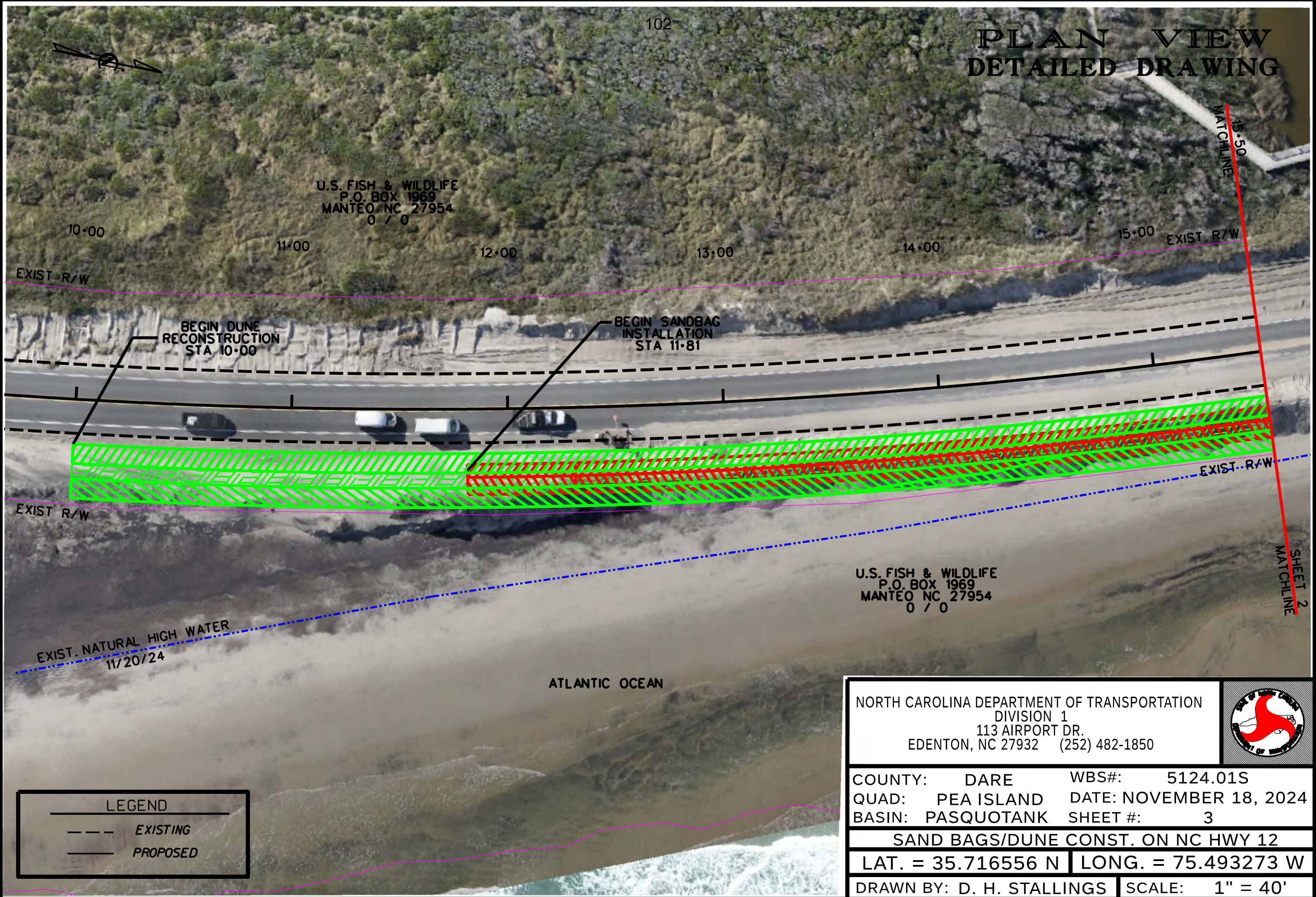
NTS

PLAN VIEW DETAILED DRAWING

102

U.S. FISH & WILDLIFE
P.O. BOX 1969
MANTEO NC 27954
0 / 0

U.S. FISH & WILDLIFE
P.O. BOX 1969
MANTEO NC 27954
0 / 0



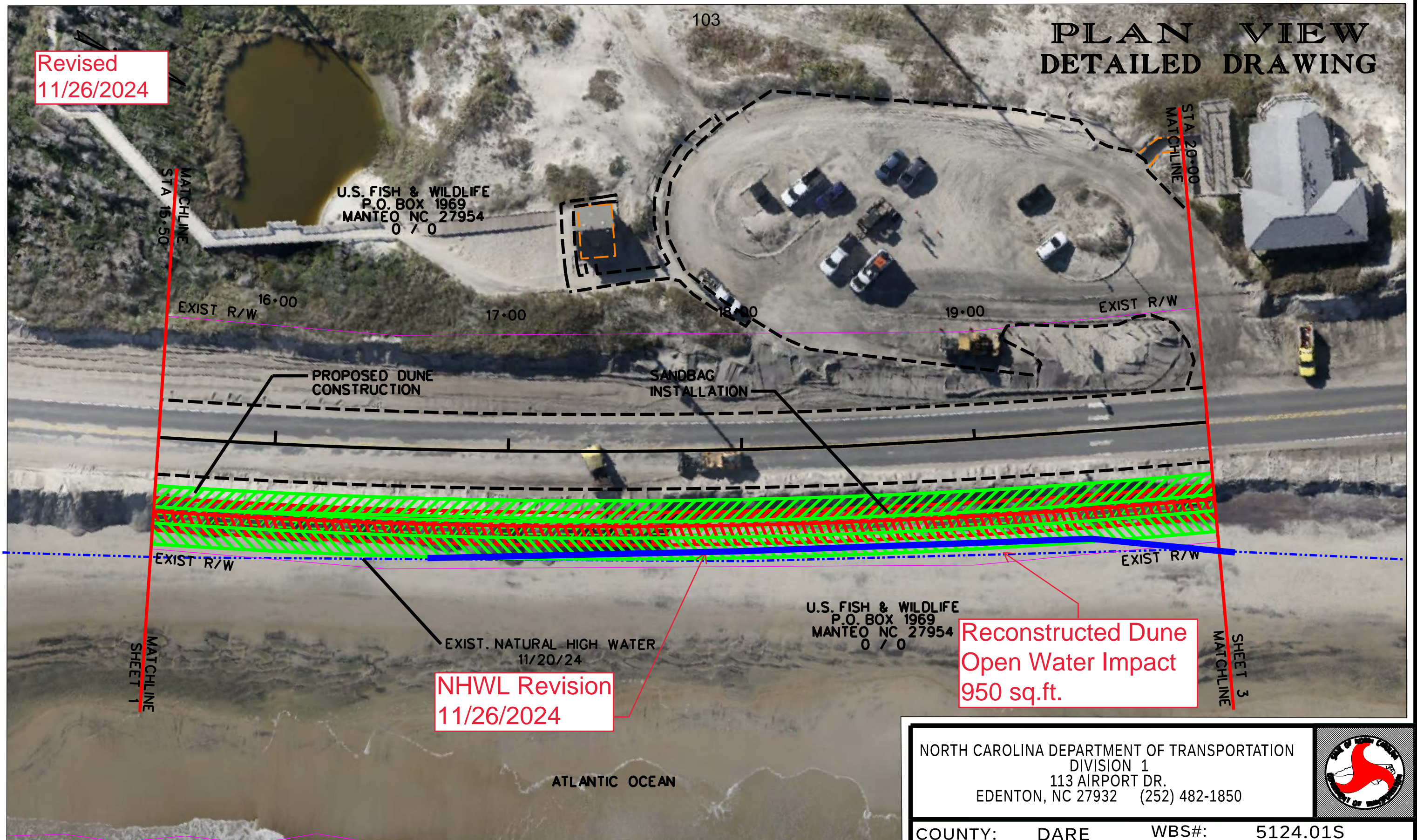
LEGEND	
---	EXISTING
—	PROPOSED

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION 1 113 AIRPORT DR. EDENTON, NC 27932 (252) 482-1850		
COUNTY: DARE	WBS#: 5124.01S	
QUAD: PEA ISLAND	DATE: NOVEMBER 18, 2024	
BASIN: PASQUOTANK	SHEET #: 3	
SAND BAGS/DUNE CONST. ON NC HWY 12		
LAT. = 35.716556 N		LONG. = 75.493273 W
DRAWN BY: D. H. STALLINGS		SCALE: 1" = 40'

SHEET 2
MATCHLINE

PLAN VIEW DETAILED DRAWING

Revised
11/26/2024

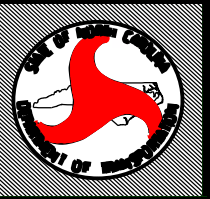


NHWL Revision
11/26/2024

Reconstructed Dune
Open Water Impact
950 sq.ft.

LEGEND	
---	EXISTING
—	PROPOSED

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION 1
113 AIRPORT DR.
EDENTON, NC 27932 (252) 482-1850



COUNTY: DARE WBS#: 5124.01S
QUAD: PEA ISLAND DATE: NOVEMBER 18, 2024
BASIN: PASQUOTANK SHEET #: 4

SAND BAGS/DUNE CONST. ON NC HWY 12

LAT. = 35.716556 N LONG. = 75.493273 W

DRAWN BY: D. H. STALLINGS SCALE: 1" = 40'

PLAN VIEW DETAILED DRAWING

104

U.S. FISH & WILDLIFE
P.O. BOX 1969
MANTEO NC 27954
0 / 0

END SANDBAG
INSTALLATION
STA 22+81.00

END PROPOSED DUNE
CONSTRUCTION
STA 23+00.00

U.S. FISH & WILDLIFE
P.O. BOX 1969
MANTEO NC 27954
0 / 0

21+00

22+00

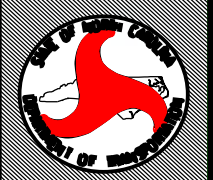
23+00

EXIST. NATURAL HIGH WATER
11/20/24

MATCHLINE
STA 20+00

MATCHLINE
SHEET 2

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION 1
113 AIRPORT DR.
EDENTON, NC 27932 (252) 482-1850



COUNTY: DARE WBS#: 5124.01S
QUAD: PEA ISLAND DATE: NOVEMBER 18, 2024
BASIN: PASQUOTANK SHEET #: 5

SAND BAGS/DUNE CONST. ON NC HWY 12

LAT. = 35.716556 N LONG. = 75.493273 W

DRAWN BY: D. H. STALLINGS SCALE: 1" = 40'

LEGEND	
	EXISTING
	PROPOSED



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

November 22, 2024

Memo To: Art Beyer, Assistant Refuge Manager
Pea Island National Wildlife Refuge

From: Paul Williams, Division Environmental Officer
NCDOT, Highway Division One



Subject: Special Use Permit Application for the Installation of Sandbags on NC 12
at the Pea Island National Wildlife Refuge Visitor Center

Addendum to SUP Application:

The November 15 – 17 coastal storm on the Outer Banks severely impacted the primary dune along NC 12 at the Pea Island National Wildlife Refuge Visitor Center. The ocean overwash completely removed approximately 1,000 linear feet of the dune, exposing the highway edge of pavement to the high surf. The roadway flooding and pavement drop-off produced hazardous traffic conditions. NCDOT temporarily closed NC 12 to all traffic between the Marc Basnight bridge and the village of Rodanthe on November 15th. Fortunately, NC 12 did not experience pavement damage during this event. NCDOT maintenance forces has since rebuilt the primary dune to protect NC 12, but accelerated erosion along the section of the Refuge has left NC 12 extremely vulnerable to ocean overwash events.

The Visitor Center area is a "hot spot", as identified by the NC 12 Task Force. Frequent ocean overwash events and the high rate of shoreline erosion has increased the vulnerability of the highway. The increasing vulnerability of this location necessitates the installation of sandbags to protect the pavement infrastructure. As traditional sandbags have been problematic to remove from previous projects, NCDOT proposes using a more robust sandbag system for the Pea Island Visitor Center site. Previously used on the old NC 12 cul-de-sac at the north end of Rodanthe, the Permashield sandbag system uses heavy polypropylene fabric that is white in color. The trapezoidal design is stronger than traditional sandbags, and the material will hold up better than the fabric used in commercially available traditional sandbags. The Permashield bags can be quickly dry filled, unlike the traditional sandbags that need to be hydraulically pumped with sand from the swash zone of the beach. With the stronger material and design, the Permashield bags can be more effectively removed when they are no longer needed. NCDOT anticipates quicker and more complete removal of Permashield sandbags as opposed to the challenging removal of traditional sandbags.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
DIVISION ONE
113 AIRPORT DRIVE, SUITE 100
EDENTON, NC 27932

Telephone: (252) 482-1850
Fax: (252) 482-8722
Customer Service: 1-877-368-4968

Location:
113 AIRPORT DRIVE, SUITE 100
EDENTON, NC 27932

Website: www.ncdot.gov

NCDOT proposes installing 1,100 linear feet of Permashield sandbags along NC 12, as shown in the attached permit drawings. These “alternative” sandbags are made of white polypropylene and have a trapezoidal cross section. The sandbag sections are 50 feet in length, and each 50’ section is separated every 2’ by a sewn baffle. NCDOT proposes to use two rows of sandbags. The oceanward row would be 6’ high and have an 8’ wide base. The landward row would be 4’ high and have a 6’ wide base. Both rows would be placed 2’ below the grade of the roadway and directly adjacent to each other with a combined base of 14’ wide. The sandbags would be placed 10’ from the edge of pavement and would be entirely covered by the reconstructed dune. The reconstructed dune dimensions would be approximately 6’ high and 25’ wide and above the NHWL as surveyed in on 11/20/2024 by NCDOT and NCDCM. Sand would not be dredged from the swash zone on the beach. The sandbags and reconstructed dune would be within NCDOT Right-of-Way (ROW), and the project would result in no open water and no wetland impacts.

The sandbags would be dry-filled with sand stockpiled by NCDOT Maintenance from the stockpile on the State of NC property at the end of Lifeboat Station Road and the Lifeboat Station Road ROW. Clean sand would be used for filling the sandbags and reconstructing the dunes, free of vegetation and debris. Sand for the sandbags and dune reconstruction shall be of the same general characteristics as the sand in the existing dune. A steel installation platform would be used to support the alternative sandbags during the filling operation.

The contractor that installs Permashield sandbags is currently working in western North Carolina and could send a work crew to install the sandbags on short notice. They anticipate the project could be completed in 1 week. Staging for the contractor and sand stockpiles would be within NCDOT ROW just north of the Visitor Center on the west side of NC 12. NCDOT anticipates all other authorizations/permits will be issued by the end of 2024. NCDOT prefers to complete this project in January 2025 to avoid impacting shorebird and sea turtle nesting seasons. Due to probable weather delays/impacts, an expiration date of Feb. 15th, 2025 is requested.

This sandbag project is a temporary solution for maintaining NC 12 on the Refuge. NCDOT has recently been awarded a PROTECT Planning Grant from FHWA to conduct a Planning and Environmental Linkages (PEL) study that includes comprehensive resiliency planning, alternatives development and evaluation, and robust public engagement for NC 12 on Pea Island. Also known as Solving Access for NC 12 in Dare County (SAND), this project will establish a solid foundation for future project development and construction, with the goal of streamlining subsequent environmental review, accelerating project delivery, and securing the long-term resiliency of NC 12. Within the next decade, NCDOT anticipations the SAND project will determine short-term and long-term solutions for maintaining NC 12 on Pea Island National Wildlife Refuge. When those solutions are implemented, NCDOT would remove the temporary sandbags when no longer needed to protect the roadway of NC 12.

**Alligator River &
Pea Island National Wildlife Refuges**



CONDITIONS FOR SPECIAL USE PERMITS & AUTHORIZED ACTIVITIES

1. The Permittee or authorized person, and all officers, agents, employees, representatives, and clients of the Permittee or authorized person, shall comply with all Refuge, Federal, State, and local regulations and conditions that apply to the special use activity. Failure to comply with any applicable regulation or condition, and all Federal laws, rules, and regulations governing National Wildlife Refuges and the area described in the Special Use Permit (Permit) or authorizing documents may result in revocation of the Permit or authorized activity and/or criminal prosecution. The Permit is non-transferable.
2. While engaged in a special use activity on the Refuge, the Permittee or authorized person, and his/her officers, agents, employees, or representatives, shall be in possession of a **copy** of the Permit or authorizing documents (including all attachments that contain conditions) and shall, upon request by an authorized Refuge official or by any authorized local, state, or federal law enforcement officer, display the **copy** authorizing their presence and activity on the Refuge and shall furnish any other licenses and identification documents as may be requested.
3. Any accident that results in a personal injury (i.e., an accident that requires professional medical treatment) shall be reported to the Refuge Manager within 24 hours of the accident.
4. Entry on the Refuge during nighttime hours (i.e., ½-hour after sunset to ½-hour before sunrise) is prohibited, **unless authorized in writing by the Refuge Manager**. Access to areas closed to the public is not allowed, unless authorized in writing by the Refuge Manager.
5. Vehicle travel shall only be on designated roads or routes of travel, **unless authorized in writing by the Refuge Manager**. Vehicles, boats, trailers, and other equipment shall be parked in such a manner that **roads and trails, including canoe trails and navigable waters, are not to be blocked**. Roads and trails need to be accessible to other Refuge visitors and to Refuge staff, cooperative farmers, fire trucks, emergency vehicles, maintenance equipment, and law enforcement patrols.
6. Vehicles with catalytic converters shall be restricted to paved roads, recently maintained gravel or dirt roads, or bare soil areas because of the high fire potential. Vehicles with catalytic converters shall not be parked over high vegetation or other fire hazardous materials.
7. All **locked** Refuge gates shall be closed and locked upon entering and leaving Refuge property.

Refuge gates should be left the way they are found (i.e., open, closed, either locked or unlocked as the case may be). All signs describing authorized and unauthorized entry through a gate shall be followed unless entry is allowed by this permit.

8. Refuge gate or building keys **shall not be loaned** to other agencies, companies, or persons. If there is a need for access by other persons, please have them contact the Refuge Manager. All Refuge keys shall be returned to the Refuge Manager, or a designated staff member, within 10 calendar days, after expiration or termination of the Permit or authorized activity.
9. All dogs (or any other pet) must be confined or on a leash while on the Refuge, **unless authorized in writing by the Refuge Manager**. Leashed pets must be under the immediate control of the Permittee or authorized person, or the leash must be secured to a stationary object. The leash shall not be in excess of 10 feet in length. Dogs are not allowed in areas where dogs are prohibited, unless authorized in writing by the Refuge Manager.
10. Possession or use of firearms, air guns, bows and arrows, cross bows, spears, or gigs; or illegal knives, weapons, or devices; or explosives of any type is prohibited on the Refuge when engaged in a special use activity, **unless authorized in writing by the Refuge Manager**.
11. Littering is prohibited. **All** materials brought into the Refuge shall be removed and properly disposed. Drink cans, bottles, candy wrappers, toilet paper, and other garbage and refuse shall not be left on the Refuge.
12. The Refuge Manager shall be contacted **before** any surface work is done. This includes mowing, road or trail improvements, digging, clearing or trimming of brush or vegetation, installation of structures, etc.
13. The use of herbicides and pesticides on Refuge property is prohibited, **unless authorized in writing by the Refuge Manager**. Unrestricted, over-the-counter-type, insect repellents may be used on or near the body and clothing to repel biting or stinging insects.
14. No permanent or semi-permanent markings shall be made on any Refuge building, structure, gate, post, sign, fence, tree, vegetation, or soil by either marking, painting, cutting, scratching, blazing, mowing, digging, or other destructive method, **unless authorized in writing by the Refuge Manager**. When needed, only temporary, removable markers (e.g., flagging tape, survey stakes, metal/paper/plastic tags, etc.) shall be used to mark site locations, plots, etc. Safety signs, informational signs, and any other signs required by law or regulation for the special use activity being conducted, shall be posted as required, **but only with prior authorization by the Refuge Manager**. All markers and signs shall be removed upon conclusion of the special use activity or upon expiration or termination of the Permit.

15. No permanent or semi-permanent fences, buildings, shelters, docks, piers, or other structures or facilities may be erected, built, or placed on the Refuge, **unless authorized in writing by the Refuge Manager**. No machinery, equipment, supplies, or materials may be placed or stored on the refuge, **unless authorized in writing by the Refuge Manager**.
16. All open fires are prohibited, **unless authorized in writing by the Refuge Manager**. Leaving an **authorized** open fire unattended or not completely extinguished is prohibited. Setting on fire or causing to be set on fire any timber, brush, grass, or other inflammable material, including camp or cooking fires, is prohibited, **unless authorized in writing by the Refuge Manager**. The use of cutting torches, arc welders, or any other open flame/sparking devices (which are required to conduct the special use activity) shall be exercised with caution and **only with prior authorization from the Refuge Manager or Refuge Fire Management Officer**. When use of these devices is necessary, the operator(s) shall have **immediate access to appropriate fire control equipment** (e.g., fire extinguishers, shovels, etc.) and **immediate communication access to local emergency services** (e.g., cellular telephone, two-way radio, etc.). Tobacco smokers shall practice caution when smoking; shall completely extinguish all matches, cigars, cigarettes, and pipes; and shall dispose of same in a proper container (e.g., a vehicle ash tray).
17. The Refuge Manager should be contacted **immediately** at ***(252) 553-0562*** upon discovery of any **wildfire**, or any leak, spill, or break in a pipeline, power line, canal, or dike, or any other accident or incident that has the potential to have an adverse impact on the soil, wildlife, or plants in the area. Any unusual wildlife sightings or suspected illegal activities should be reported to the Refuge Manager.
18. It is unlawful to disturb, destroy, injure, collect, or take any wildlife, plant, natural object, mineral, cultural or historical feature, or public property on the Refuge, **unless authorized in writing by the Refuge Manager**. State and federal collections or scientific use permit regulations and conditions also apply.
19. Wildlife shall not be harmed or harassed and disturbance shall be kept to a minimum, this includes all snakes (poisonous and non-poisonous snakes), **unless authorized in writing by the Refuge Manager**. State and federal collections or scientific use permit regulations and conditions also apply.
20. Any research or monitoring activities involving ground disturbance may require historic preservation consultation with the Regional Office and/or State Historic Preservation Office. Researchers must obtain an Archeological Resource Protection Act permit from the Regional Office prior to obtaining a special use permit from the refuge.
21. All researchers will be required to obtain appropriate State and Federal permits for the capture

and possession of protected species, for conducting regulated activities in wetlands, and for other regulated activities. Researchers may also need to provide an assurance of animal care form or an institutional animal approval form, if applicable.

22. Research collection activities must adhere to the Service's policy regarding disposition of biotic specimens:
 - i. You may use specimens collected under this permit, any components of any specimens (including natural organisms, enzymes, genetic materials or seeds), and research results derived from collected specimens for scientific or educational purposes only, and not for commercial purposes unless you have entered into a Cooperative Research and Development Agreement (CRADA) with us. We prohibit the sale of collected research specimens or transfers to third parties for commercial purposes. Breach of any of the terms of this permit will be grounds for revocation of this permit and denial of future permits. Furthermore, if you sell or otherwise transfer for commercial purposes collected specimens, any components thereof, or any products or research results developed from such specimens or their components without a CRADA, you will pay us a royalty rate of 20 percent of gross revenue from such sales. In addition to such royalty, we may seek other damages and injunctive relief against you (USFWS 2016). U.S. Fish and Wildlife Service. 2016. Director's Order No. 109, Amendment 11: Use of Specimens Collected on Fish and Wildlife Lands. March 31, 2016.
23. The use or possession of traps, snares, or other passive (i.e., unattended) collection devices, which are used to collect wildlife, is prohibited, **unless authorized in writing by the Refuge Manager**. Each individual trap, snare, or passive collection device shall have a weather-resistant, permanent tag attached with the Permittee's, authorized person's, and/or organization's name legibly marked on the tag **or** shall have the Permittee's, authorized person's, and/or organization's name legibly marked, imprinted, or engraved on the trap, snare, or device.
24. For protection of threatened, endangered, rare, sensitive or commercially desirable species, publication of specific collection locations (latitude/longitude) is prohibited. **The Refuge Manager (or designee) must approve the release of this information.** Photographic materials (photographs, digital images and videos) that document activities involving threatened and endangered species permitted by this Permit (e.g., handling wildlife, entering refuge during closed hours, collecting of any kind, entering a closed area, disturbing habitat, etc.) may not be posted in any public forum (Internet, Facebook, HerpNation, etc.) **unless authorized in writing by the Refuge Manager** and will result in the revocation of this Permit.
25. Permittee may use photographic materials in official (University/public agency) publications, including the Internet but must include a statement that the activity was conducted under the

provision of a Special Use Permit. All data collected on refuge lands will be shared with the U.S. Fish and Wildlife Service.

26. Recreational and commercial uses of unmanned aerial vehicles (drones) are prohibited on the refuge. Permitted research projects using UAS technology will be considered using Federal Aviation Administration (FAA), Office of Aviation Services (OAS), and Department of Interior (DOI) Aviation Policy guidelines.
27. All researchers are required to submit a final report to the refuge upon completion of their work. If the study is long-term, an interim progress report will be required. Failure to provide progress reports and/or final reports could result in the revocation of the current permit or jeopardize the issuance of future permits.
28. Researchers who publish the work in peer-reviewed publications are to provide copies to the refuge. All reports, presentations, posters, articles or other publications will acknowledge the Refuge System and appropriate refuges as partners in the research, provided that the Service does not otherwise deem it appropriate to issue a disclaimer. The acknowledgement recognizes that the research could not have been conducted without the existence of the refuge and its support and cooperation. The research organization/agency or personnel in conjunction with the Service will retain the use and ownership of all data/reports.
29. All researchers are required to follow the following guidelines for the disinfection of field equipment for amphibian pathogens (see attached)



U.S. FISH & WILDLIFE SERVICE
Pea Island
NATIONAL WILDLIFE REFUGE
Visitor Center - Open 9 - 4 Daily

NOTICE
CROSS WALK
DANGER TO PEDESTRIANS



NOTICE
CAMA, BEHIND BUREAU FOR



Home > About > Divisions > Coastal Management

Division of Coastal Management

Public Notice

On November 24, 2024, DCM received a minor modification request from the N.C. DOT (NCDOT) to address dune loss due to ocean over wash and the increasing potential to upgrade N.C. 12 at the Pea Island National Wildlife Refuge Visitor Center. DCM will accept comments to this notice until November 29, 2024.

[Learn more here!](#)



**Public Notice for
Emergency DOT Request**





An official website of the State of North Carolina. [How you know](#) ✓

State Government websites value user privacy. To learn more, [view our full privacy policy \(https://www.nc.gov/privacy\)](https://www.nc.gov/privacy).

Secure websites use HTTPS certificates. A lock icon or https:// means you've safely connected to the official website.



NORTH CAROLINA *Environmental Quality*



25
Nov

Public Notice for Emergency DOT Request



Mon, Nov 25 2024, 11am - Fri, Nov 29 2024, 12pm

On November 24, 2024, DCM received a minor modification request from the N.C. DOT to address dune loss due to ocean over wash and the increasing potential to threaten N.C. 12 at the Pea Island National Wildlife Refuge Visitor Center. The N.C. DOT requests to install approximately 1,100 linear feet of non-traditional temporary sandbags and repair approximately 1,300 linear feet of dune. DCM will accept comments to this notice until NOVEMBER 29, 2024. Comments or requests for application documentation can be made to:

Gregg Bodnar
Major Permits Coordinator
Division of Coastal Management
Phone: 252-515-5416
Email: Gregg.Bodnar@deq.nc.gov (<mailto:Gregg.Bodnar@deq.nc.gov>)

CONTACT INFO

Gregg Bodnar
☎ (252) 515-5416 (tel:(252) 515-5416)
✉ gregg.bodnar@deq.nc.gov (<mailto:gregg.bodnar@deq.nc.gov>)

From: [Johnson, Meaghan E](#)
To: [Brittingham, Cathy](#)
Cc: [Hallac, Dave](#)
Subject: Re: [EXTERNAL] FW: CAMA Permit No. 86-99 – Emergency Modification Request for the Installation of Sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County
Date: Tuesday, November 26, 2024 4:46:05 PM
Attachments: [image002.png](#)

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Hello Cathy,

We understand the emergency need for NCDOT to place sandbags along NC 12 at the Pea Island National Wildlife Refuge Visitor Center and support their temporary installation for the protection of pavement infrastructure. We will continue to work with NCDOT and partner agencies to identify additional short and long-term solutions for erosion in this and other hot spot areas along NC 12.

Thank you,
Meaghan

--

Meaghan E. Johnson
Acting Deputy Superintendent
 Chief of Resource Management and Science
 Outer Banks Group
 1401 National Park Drive
 Manteo, NC 27954
Cape Hatteras National Seashore - Fort Raleigh National Historic Site - Wright Brothers National Memorial

(252) 475-9020 (Office)
 (252) 473-7016 (Mobile)
meaghan_johnson@nps.gov

From: Brittingham, Cathy <cathy.brittingham@deq.nc.gov>

Sent: Monday, November 25, 2024 4:23 PM

To: Beyer, Arthur <Arthur_Beyer@fws.gov>; Johnson, Meaghan E <Meaghan_Johnson@nps.gov>;
 Wilson, Travis W. <travis.wilson@ncwildlife.org>; Jordan, Gary <gary_jordan@fws.gov>; Kyle Barnes
 <Kyle.W.Barnes@usace.army.mil>; Ward, Garcy <garcy.ward@deq.nc.gov>; Furr, Mary P.
 <mpfurr@ncdot.gov>; Wilkerson, Matt T <mtwilkerson@ncdot.gov>

Cc: Bodnar, Gregg <gregg.bodnar@deq.nc.gov>; Lane, Stephen <stephen.lane@deq.nc.gov>;
 Cannady, Lee <lee.cannady@deq.nc.gov>

Subject: [EXTERNAL] FW: CAMA Permit No. 86-99 – Emergency Modification Request for the Installation of Sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hello,

Attached for your review please find nine files that constitute a request from NCDOT for a Minor Modification of CAMA Major Permit No. 86-99 to conduct work within the NCDOT Right-of-Way in the vicinity of the Pea Island National Wildlife Refuge Visitor Center. The NCDOT request is to repair approximately 1,300 linear feet of primary dune and install approximately 1,100 linear feet of a temporary nontraditional (Permashield) sandbag structure adjacent to NC Highway 12 to protect the road from erosion damage. The proposed work is in response to severe erosion caused by the November 15-17 coastal storm on the Outer Banks. NCDOT Maintenance forces have rebuilt the primary dune to protect NC 12, but accelerated erosion along this section of the Refuge has left NC 12 extremely vulnerable to ocean overwash events.

Also attached please find a memorandum requesting your agency's comments. Please feel free to return the completed memorandum, or simply reply to this email. Either method of response is acceptable. **Your agency's comments are requested no later than November 29, 2024.** I very sincerely apologize for the short turnaround time requested for your comments, especially during Thanksgiving week. The expedited timeframe is necessary for DCM to make a permit decision as expeditiously as possible so that NCDOT can begin work as soon as possible.

For your convenience, here are some excerpts from the application:

- In the attached email dated November 15, 2024, the USFWS Refuge expresses a strong preference not to use traditional sandbags.
- Although the PermaShield Product Specifications make mention of concrete, the proposed project would only use sand for fill.
- The PermaShield sandbag system uses heavy polypropylene fabric that is only available in the color white. The trapezoidal design is stronger than traditional sandbags, and the material will hold up better than the fabric used in traditional sandbags.
- NCDOT proposes to use two rows of temporary nontraditional (Permashield) sandbags. The oceanward row would be 6-feet high and have an 8-foot wide base. The landward row would be 4-feet high and have a 6-foot wide base. Both rows would be placed 2-feet below the grade of the roadway and directly adjacent to each other with a combined base of 14-feet wide.
- The 1,100 linear feet of temporary nontraditional (Permashield) sandbags would be placed 10-feet from the edge of pavement and would be entirely covered by the reconstructed dune. The reconstructed dune dimensions would be approximately 1,300 feet in length, 6-feet high and 25-feet wide.
- The temporary nontraditional (Permashield) sandbags would be dry-filled with sand from the stockpile on the State of NC property at the end of Lifeboat Station Road and

the Lifeboat Station Road ROW. Sand for the sandbags and dune reconstruction would be of the same general characteristics as the sand in the existing dune.

- NCDOT estimates that it would take the contractor approximately one week to install the temporary nontraditional (Permashield) sandbags, beginning shortly after all permits are attained.
- NCDOT will remove the temporary nontraditional (Permashield) sandbags when they are no longer needed.

Please let me or DCM Field Representative Lee Cannady know if you have any questions or concerns. My contact information is below. Lee can be reached by email at lee.cannady@deq.nc.gov, or by phone at (252) 948-3355.

Thank you so much for your expedited review and comment.

Sincerely,

Cathy

Cathy Brittingham

Transportation Project Coordinator, Division of Coastal Management

North Carolina Department of Environmental Quality

Office: (919) 707-9149

Please note my new email address: cathy.brittingham@deq.nc.gov

Mailing Address:

c/o DWR Transportation Permitting Branch

1617 Mail Service Center

Raleigh, NC 27699-1617

Physical Address:

512 North Salisbury Street

Archdale Building, 12th Floor, Room 1204C

Raleigh, NC 27604



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From: [Williams, Paul C](#)
To: [Brittingham, Cathy](#)
Cc: [Cannady, Lee](#); [Lane, Stephen](#)
Subject: FW: [External] SAW-2024-02198 (NCDOT / 51214.01S / Pea Island Visitor Center Sandbag Project / NC 12 / Dare / Div 1)
Date: Tuesday, December 3, 2024 11:03:32 AM
Attachments: [image001.png](#)

Cathy,

The Corps action id is below.

Thanks,

Paul C. Williams, Jr.
Division Environmental Officer
Division One
NC Department of Transportation

(252) 482-1861 office
(252) 333-9812 mobile
(252) 482-8722 fax
pcwilliams2@ncdot.gov

113 Airport Dr.
Suite 100
Edenton, NC 27932



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Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

From: NCDOT_REG <NCDOT_REG@usace.army.mil>
Sent: Tuesday, December 3, 2024 9:57 AM
To: Williams, Paul C <pcwilliams2@ncdot.gov>
Cc: Barnes, Kyle W CIV USARMY CESAW (USA) <Kyle.W.Barnes@usace.army.mil>; Jones, M Scott (Scott) CIV USARMY CESAW (USA) <Scott.Jones@usace.army.mil>
Subject: [External] SAW-2024-02198 (NCDOT / 51214.01S / Pea Island Visitor Center Sandbag

Project / NC 12 / Dare / Div 1)

CAUTION: External email. Do not click links or open attachments unless verified. Report suspicious emails with the Report Message button located on your Outlook menu bar on the Home tab.

Good morning,

We have received your Pre-Construction Notification (PCN) RGP request, assigned action ID SAW-2024-02198, for the above project and forwarded it to Kyle Barnes for further processing.

Thank you,

Kaleigh Colwell
Regulatory Program Technician
USACE, Wilmington District

From: laserfiche.ncdenr.gov@mccicloud.io <laserfiche.ncdenr.gov@mccicloud.io>
Sent: Monday, December 2, 2024 11:25 AM
To: NCDOT_REG <NCDOT_REG@usace.army.mil>
Cc: SAW-PCN-RG <SAW-PCN-RG@usace.army.mil>
Subject: [Non-DoD Source] PCN - Dare - DOT

A new project has been received on 12/2/2024 11:24 AM for NC 12 - Pea Island Visitor Center Sandbag Project. The link below will take you to the project folder.

<https://edocs.deq.nc.gov/Laserfiche/index.aspx?db=WaterResources#id=3577893;view=browse>

This email was automatically generated by Laserfiche workflow. Please do not respond to this email address, as responses aren't monitored.

ROY COOPER
Governor
MARY PENNY KELLEY
Secretary
TANCRED MILLER
Director



DATE: November 25, 2024

FROM: Cathy Brittingham, DCM Transportation Project Coordinator

SUBJECT: **Minor Modification Request, CAMA Major Permit No. 86-99**

Applicant: NCDOT

Project Location: NC Highway 12, Pea Island National Wildlife Refuge, in Dare County.

Proposed Project: Repair approximately 1,300 linear feet of primary dune and install approximately 1,100 linear feet of a temporary nontraditional (Permashield) sandbag structure within the NCDOT Right-of-Way adjacent to NC Highway 12 to protect the road from erosion damage.

Please respond by e-mail and/or return this form to Cathy Brittingham at cathy.brittingham@deq.nc.gov **by close of business on November 29, 2024**. If you have any questions regarding the proposed project, please contact Cathy Brittingham or Lee Cannady. Cathy can be reached by phone at (919) 707-9149 or via email at cathy.brittingham@deq.nc.gov. Lee can be reached by phone at (252) 948-3855 or via email at lee.cannady@deq.nc.gov. When appropriate, in-depth comments with supporting data are requested.

REPLY This agency has no objection to the project as proposed.
Additional comments may be attached
 This agency has no comment on the proposed project.
 This agency approves of the project, only if the recommended changes are incorporated. See attached.
 This agency objects to the project for reasons described in the attached comments.

PRINT NAME Kyle Barnes

AGENCY USACE

SIGNATURE *Kyle Barnes*

DATE November 27, 2024

USACE will process this project by utilizing RGP 198000048 for impacts below the MHTL.



From: [Wilson, Travis W.](#)
To: [Brittingham, Cathy](#)
Subject: RE: CAMA Permit No. 86-99 – Emergency Modification Request for the Installation of Sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County
Date: Wednesday, November 27, 2024 10:39:31 AM
Attachments: [image001.png](#)

Cathy, thank you for taking the time to put together the bulleted points from the application, several of those address comments we had made in earlier request to use this type of bag. At this time WRC does not have any additional comments.

Travis W. Wilson

Eastern DOT Habitat Conservation Coordinator
Habitat Conservation Division

NC Wildlife Resources Commission

1718 Hwy 56 West
Creedmoor, NC 27522

New Phone: 919-707-4057

Fax: 919-528-2524

Travis.Wilson@ncwildlife.org

From: Brittingham, Cathy <cathy.brittingham@deq.nc.gov>
Sent: Tuesday, November 26, 2024 6:14 PM
To: Washington, Dawn M <dawn_washington@fws.gov>; Beyer, Arthur <arthur_beyer@fws.gov>; Johnson, Meaghan E <Meaghan_Johnson@nps.gov>; Wilson, Travis W. <travis.wilson@ncwildlife.org>; Jordan, Gary <Gary_Jordan@fws.gov>; Kyle Barnes <Kyle.W.Barnes@usace.army.mil>; Ward, Garcy <garcy.ward@deq.nc.gov>; Furr, Mary P. <mpfurr@ncdot.gov>; Wilkerson, Matt T <mtwilkerson@ncdot.gov>
Cc: Bodnar, Gregg <gregg.bodnar@deq.nc.gov>; Lane, Stephen <stephen.lane@deq.nc.gov>; Cannady, Lee <lee.cannady@deq.nc.gov>
Subject: FW: CAMA Permit No. 86-99 – Emergency Modification Request for the Installation of Sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County
Importance: High

Hello everyone,

I am re-sending this request for your agency's comments because **Sheet #4 of the permit drawings has been revised for this minor modification request.** I have added the revised set of permit drawings as an attachment to this email, and I have removed the outdated set of permit drawings. Everything else remains the same.

The revision is due to an adjustment of the high water line on Sheet #4. With the revised high water line, the reconstructed dune on the proposed temporary nontraditional sandbags would impact approximately 950 sq. ft. of open waters. The temporary nontraditional sandbags themselves would not impact open waters.

Please let me or DCM Field Representative Lee Cannady know if you have any questions or concerns. My contact information is below. Lee can be reached by email at lee.cannady@deq.nc.gov, or by phone at (252) 948-3355.

Also attached please find a memorandum requesting your agency's comments. Please feel free to return the completed memorandum, or simply reply to this email. Either method of response is acceptable. **Your agency's comments are requested no later than December 2, 2024. I very sincerely apologize for the short turnaround time requested for your comments, especially during Thanksgiving week.** The expedited timeframe is necessary for DCM to make a permit decision as expeditiously as possible so that NCDOT can begin work as soon as possible.

Sincerely,

Cathy Brittingham

Cathy Brittingham

Transportation Project Coordinator, Division of Coastal Management

North Carolina Department of Environmental Quality

Office: (919) 707-9149

Please note my new email address: cathy.brittingham@deq.nc.gov

Mailing Address:

c/o DWR Transportation Permitting Branch

1617 Mail Service Center

Raleigh, NC 27699-1617

Physical Address:

512 North Salisbury Street

Archdale Building, 12th Floor, Room 1204C

Raleigh, NC 27604



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From: Brittingham, Cathy

Sent: Monday, November 25, 2024 4:24 PM

To: Arthur_Beyer (Arthur_Beyer@fws.gov) <Arthur_Beyer@fws.gov>; Johnson, Meaghan E <Meaghan_Johnson@nps.gov>; Wilson, Travis W. <travis.wilson@ncwildlife.org>; Jordan, Gary <Gary_Jordan@fws.gov>; Kyle Barnes <Kyle.W.Barnes@usace.army.mil>; Ward, Garcy <garcy.ward@deq.nc.gov>; Furr, Mary P. <mpfurr@ncdot.gov>; Wilkerson, Matt T <mtwilkerson@ncdot.gov>

Cc: Bodnar, Gregg <gregg.bodnar@deq.nc.gov>; Lane, Stephen <stephen.lane@deq.nc.gov>; Cannady, Lee <lee.cannady@deq.nc.gov>

Subject: FW: CAMA Permit No. 86-99 – Emergency Modification Request for the Installation of Sandbags along NC 12 within Pea Island National Wildlife Refuge on Hatteras Island, Dare County

Importance: High

Hello,

Attached for your review please find nine files that constitute a request from NCDOT for a Minor Modification of CAMA Major Permit No. 86-99 to conduct work within the NCDOT Right-of-Way in the vicinity of the Pea Island National Wildlife Refuge Visitor Center. The NCDOT request is to repair approximately 1,300 linear feet of primary dune and install approximately 1,100 linear feet of a temporary nontraditional (Permashield) sandbag structure adjacent to NC Highway 12 to protect the road from erosion damage. The proposed work is in response to severe erosion caused by the November 15-17 coastal storm on the Outer Banks. NCDOT Maintenance forces have rebuilt the primary dune to protect NC 12, but accelerated erosion along this section of the Refuge has left NC 12 extremely vulnerable to ocean overwash events.

Also attached please find a memorandum requesting your agency's comments. Please feel free to return the completed memorandum, or simply reply to this email. Either method of response is acceptable. **Your agency's comments are requested no later than November 29, 2024.** I very sincerely apologize for the short turnaround time requested for your comments, especially during Thanksgiving week. The expedited timeframe is necessary for DCM to make a permit decision as expeditiously as possible so that NCDOT can begin work as soon as possible.

For your convenience, here are some excerpts from the application:

- In the attached email dated November 15, 2024, the USFWS Refuge expresses a strong preference not to use traditional sandbags.
- Although the PermaShield Product Specifications make mention of concrete, the proposed project would only use sand for fill.
- The PermaShield sandbag system uses heavy polypropylene fabric that is only available in the color white. The trapezoidal design is stronger than traditional sandbags, and the material will hold up better than the fabric used in traditional sandbags.
- NCDOT proposes to use two rows of temporary nontraditional (Permashield) sandbags. The oceanward row would be 6-feet high and have an 8-foot wide base. The landward row would be 4-feet high and have a 6-foot wide base. Both rows would be placed 2-feet below the grade of the roadway and directly adjacent to each other with a combined base of 14-feet wide.
- The 1,100 linear feet of temporary nontraditional (Permashield) sandbags would be

placed 10-feet from the edge of pavement and would be entirely covered by the reconstructed dune. The reconstructed dune dimensions would be approximately 1,300 feet in length, 6-feet high and 25-feet wide.

- The temporary nontraditional (Permashield) sandbags would be dry-filled with sand from the stockpile on the State of NC property at the end of Lifeboat Station Road and the Lifeboat Station Road ROW. Sand for the sandbags and dune reconstruction would be of the same general characteristics as the sand in the existing dune.
- NCDOT estimates that it would take the contractor approximately one week to install the temporary nontraditional (Permashield) sandbags, beginning shortly after all permits are attained.
- NCDOT will remove the temporary nontraditional (Permashield) sandbags when they are no longer needed.

Please let me or DCM Field Representative Lee Cannady know if you have any questions or concerns. My contact information is below. Lee can be reached by email at lee.cannady@deq.nc.gov, or by phone at (252) 948-3355.

Thank you so much for your expedited review and comment.

Sincerely,

Cathy

Cathy Brittingham

Transportation Project Coordinator, Division of Coastal Management

North Carolina Department of Environmental Quality

Office: (919) 707-9149

Please note my new email address: cathy.brittingham@deq.nc.gov

-

Mailing Address:

c/o DWR Transportation Permitting Branch

1617 Mail Service Center

Raleigh, NC 27699-1617

Physical Address:

512 North Salisbury Street

Archdale Building, 12th Floor, Room 1204C

Raleigh, NC 27604

ROY COOPER
Governor

MARY PENNY KELLEY
Secretary

RICHARD E. ROGERS, JR.
Director



NORTH CAROLINA
Environmental Quality

December 9, 2024

Mr. Paul Williams
NCDOT Division 1
113 Airport Drive
Edenton, NC 27932

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with
ADDITIONAL CONDITIONS for the Proposed Placement of Sandbags on the Beach Adjacent to NC 12
on Pea Island in Dare County, WBS No. 51214.01S
NCDWR Project No. 20241626

Dear Mr. Williams:

Attached hereto is a copy of Certification No. WQC007395 issued to The North Carolina Department of
Transportation (NCDOT) dated December 9, 2024.

This approval is for the purpose and design described in your application. The plans and specifications for this
project are incorporated by reference as part of this Water Quality Certification. If you change your project, you
must notify the Division and you may be required to submit a new application package with the appropriate fee. If
the property is sold, the new owner must be given a copy of this Certification and is responsible for complying with
all conditions. [15A NCAC 02H .0507(d)(2)]. This Certification does not relieve the permittee of the responsibility
to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those
required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout
Buffer regulations.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

Signed by:

Richard E. Rogers, Jr., Director
Division of Water Resources

cc: Kyle Barnes, USACE, Washington Regulatory Field Office
Cathy Brittingham, NC Division of Coastal Management
Lee Cannady, NC Division of Coastal Management
Garcy Ward, NC Division of Water Resources, Washington Regional Office
File Copy



401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to impact 0.02 acres of jurisdictional waters in Dare County. The project shall be constructed pursuant to the application dated received December 2, 2024. The authorized impacts are as described below:

Open Water Impacts

Site	Open Water Fill Permanent (ac)
NC 12	0.02

The application provides adequate assurance that the discharge of fill material into the waters of the Atlantic Ocean in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your application dated received December 2, 2024. Should your project change, you are required to notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) equal or exceed one-tenth acre or 300 linear feet of perennial stream, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (c). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

This Water Quality Certification neither grants nor affirms any property right, license, or privilege in any lands or waters, or any right of use in any waters. This Water Quality Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and does not create any prescriptive right or any right of priority regarding any usage of water. This Water Quality Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Water Quality Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded. Upon the presentation of proper credentials, the Division may inspect the property.

Condition(s) of Certification:

1. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.
2. This certification corresponds to the Regional General Permit No. 198000048 issued by the Corps of Engineers.
3. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)]



4. If activities must occur during periods of high biological activity (e.g. turtle nesting, or bird nesting), then biological monitoring and other requirements may be required at the request of other state or federal agencies and coordinated with these activities. [15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)]
5. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S. or protected riparian buffers. [15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)]
6. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials. [15A NCAC 02H.0506(b)(3)]
7. Sand used for dune construction and the filling of sandbags shall consist of compatible native material and be free of debris or other pollutants. [15A NCAC 02H.0506(b)(2)]
8. The dredging of sand or other materials from the swash zone is not authorized by this certification. [15A NCAC 02H.0506(b)(3)]
9. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0506(b)(3) and 15A NCAC 02H .0507(c)]
10. Sediment and erosion control measures shall not be placed in wetlands or surface waters or within 5 feet of the top of bank without prior approval from DWR. [15A NCAC 02H.0506(b); 15A NCAC 02H .0507(c)]
11. NCDOT shall be in compliance with the NCS00250 issued to the NCDOT, including the applicable requirements of the NCG01000.
12. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If the NCDWR determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the NCDWR may reevaluate and modify this certification. [15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)]
13. The Permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)]
14. The NCDOT will conduct a pre-construction meeting with all appropriate staff to ensure that the project supervisor and essential staff understand the permit conditions and any potential issues at the permitted site. NCDWR staff shall be invited to the pre-construction meeting. [15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)]
15. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete the "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0507(c)]
16. A copy of this Water Quality Certification shall be maintained on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)]

This Certification shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or



CAMA permit. Please be aware that impacting waters without first applying for and securing the issuance of a 401 Water Quality Certification violates Title 15A of the North Carolina Administrative Code (NCAC) 2H .0500. Title 15A NCAC 2H .0500 requires certifications pursuant to Section 401 of the Clean Water Act whenever construction or operation of facilities will result in a discharge into navigable waters, including wetlands, as described in 33 Code of Federal Regulations (CFR) Part 323. It also states any person desiring issuance of the State certification or coverage under a general certification required by Section 401 of the Federal Water Pollution Control Act shall file with the Director of the North Carolina Division of Water Quality. Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. Pursuant to G.S. 143-215.6A, these violations and any future violations are subject to a civil penalty assessment of up to a maximum of \$25,000.00 per day for each violation.

This approval and its conditions are final and binding unless contested [G.S. 143-215.5]. Please be aware that impacting waters without first applying for and securing the issuance of a 401 Water Quality Certification violates Title 15A of the North Carolina Administrative Code (NCAC) 2H .0500. Title 15A NCAC 2H .0500 requires certifications pursuant to Section 401 of the Clean Water Act whenever construction or operation of facilities will result in a discharge into navigable waters, including wetlands, as described in 33 Code of Federal Regulations (CFR) Part 323. It also states any person desiring issuance of the State certification or coverage under a general certification required by Section 401 of the Federal Water Pollution Control Act shall file with the Director of the North Carolina Division of Water Quality. Pursuant to G.S. 143-215.6A, these violations and any future violations are subject to a civil penalty assessment of up to a maximum of \$25,000.00 per day for each violation.

This Certification can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) within sixty (60) calendar days. Requirements for filing a Petition are set forth in Chapter 150B of the North Carolina General Statutes and Title 26 of the North Carolina Administrative Code. Additional information regarding requirements for filing a Petition and Petition forms may be accessed at <http://www.ncoah.com/> or by calling the OAH Clerk's Office at (919) 431-3000.

A party filing a Petition must serve a copy of the Petition on:

William F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601

If the party filing the Petition is not the permittee, then the party must also serve the recipient of the Certification in accordance with N.C.G.S 150B-23(a).

This the 9th day of December 2024

DIVISION OF WATER RESOURCES

Signed by:

04351F033762414...

Richard E. Rogers, Jr., Director

WQC No. 007395



CAMA VARIANCE PETITION
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Petitioner, North Carolina Department of Transportation, through its attorney, Colin Justice, Special Deputy Attorney General, stipulates that the proposed development that is the subject of the Variance Petition is inconsistent with Coastal Resources Commission Rules 15A NCAC 7H .0308(a)(2)(L); 7H .308(c)(1); and 07H .0308(c)(3).

Colin Justice
Special Deputy Attorney General
NC Bar No. 42965
Attorney for NC Dept. of Transportation
NC Dept. of Justice-Transportation Division
1505 Mail Service Center
Raleigh, NC 27699-1505
Phone: (919) 707-4480
Fax: (919) 733-9329



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NCDOT Variance Request (CRC-VR-24-13)
N.C. Coastal Resources Commission meeting
December 16, 2024

Installation of nontraditional temporary erosion control structures (sandbags)
NC Highway 12, Pea Island National Wildlife Refuge

Stephen Lane
Transportation Projects Field Representative
N.C. Division of Coastal Management
December 16, 2024





**Webcam photo.
Nov. 15, 2024.
Source: NCDOT.
Looking North.**





**Webcam photo.
Nov. 15, 2024.
Source: NCDOT.
Looking South.**





Vicinity Map.
Source:
Google Earth
2024.





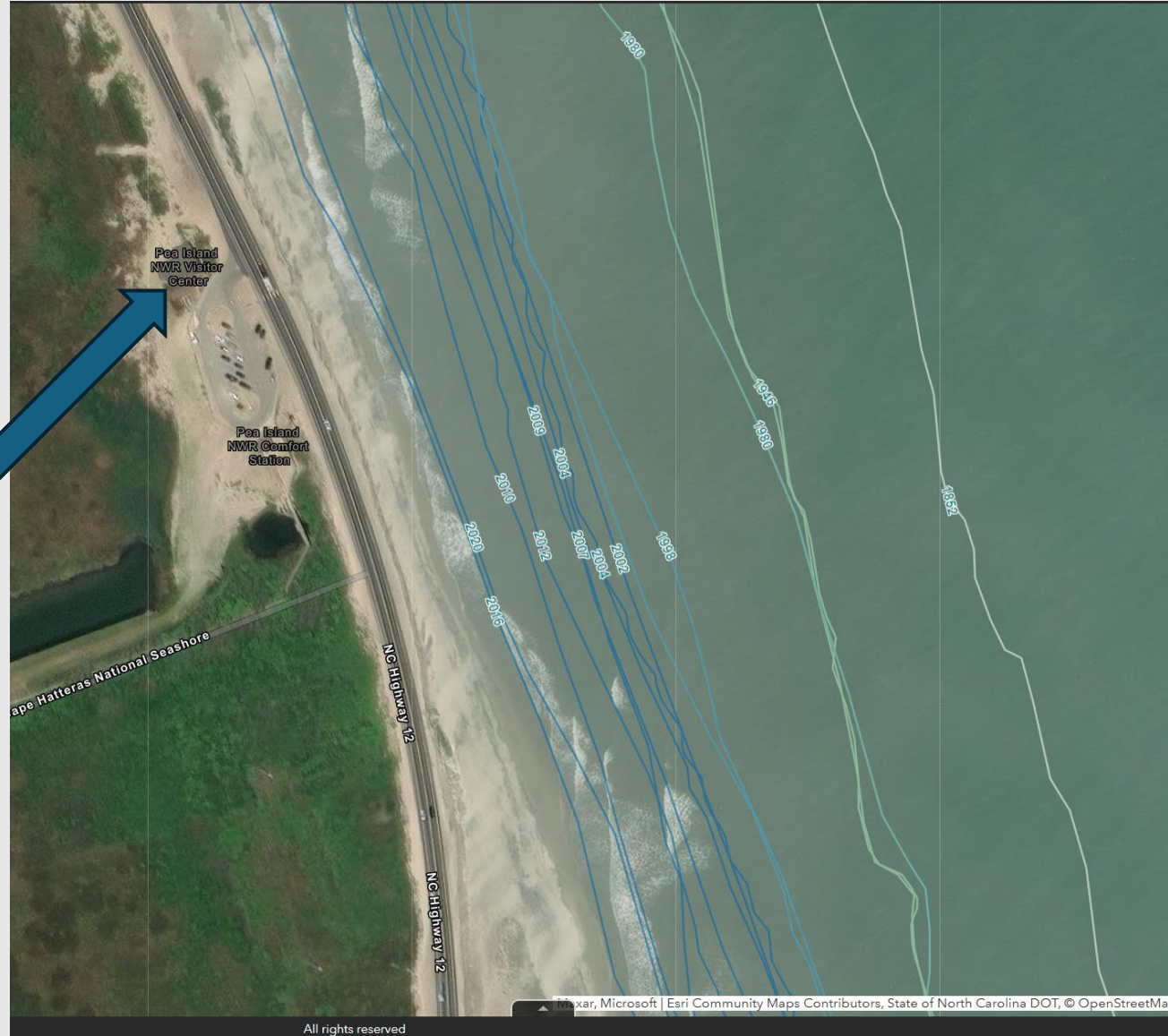
**NCDOT
Orthoimagery.
October 6, 2024**





**Historical
Shorelines
(1852 – 2020).
Source: DCM
ArcGIS
Online.**

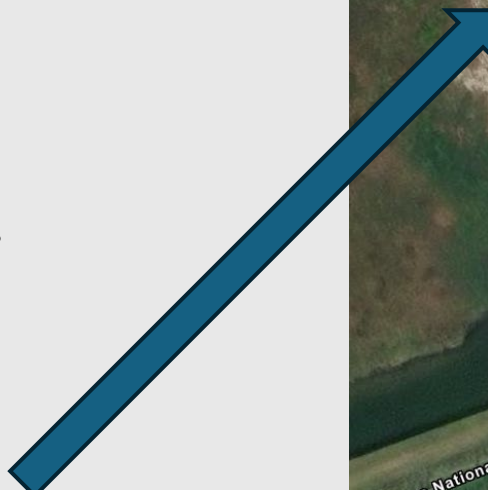
**Pea Island
NWR Visitor
Center.**





**Setback
Factors and
Erosion Rates.**
Source: DCM
ArcGIS
Online.

**Pea Island
NWR Visitor
Center.**





**December 12,
2024.
Looking North.
Source:
Stephen Lane.**

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**December 12,
2024.
Looking North.
Source: Lee
Cannady.**





**December 12, 2024.
Looking West.
Source: Stephen
Lane.**





December 12, 2024.
Looking North.
Source: Lee
Cannady.





**Dec. 12, 2024.
Northern end
of the project
looking South.
Source: Lee
Cannady.**





150



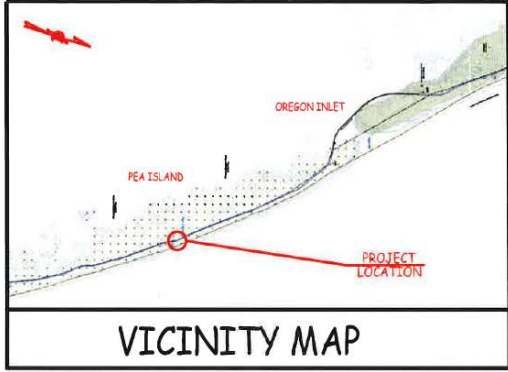
**December 12, 2024.
Looking East.
Source: Stephen
Lane.**



**Project
Location
Map.
Source:
NCDOT.**

WBS#: 5124.01S

CONTRACT: DA00xxx



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

DARE COUNTY

LOCATION: NC 12 PEA ISLAND VISITOR CENTER
TYPE OF WORK: SANDBAG INSTALLATION & DUNE CONSTRUCTION

STATE	STATE PROJECT REFERENCE NO.	ROUTE
N.C.	5124.01S	1
PROJECT NUMBER	S.A. NUMBER	DESCRIPTION
5124.01S		CONST. PE

RECEIVED
NOV 26 2024
DCM-RALEIGH



NTS

PROJECT LENGTH
TOTAL LENGTH PROJECT: 1,300 L.F.

Prepared in the Office of
DIVISION OF HIGHWAYS
113 Airport Drive, Edenton NC 27932

D.H. STALLINGS
DRAWN BY:

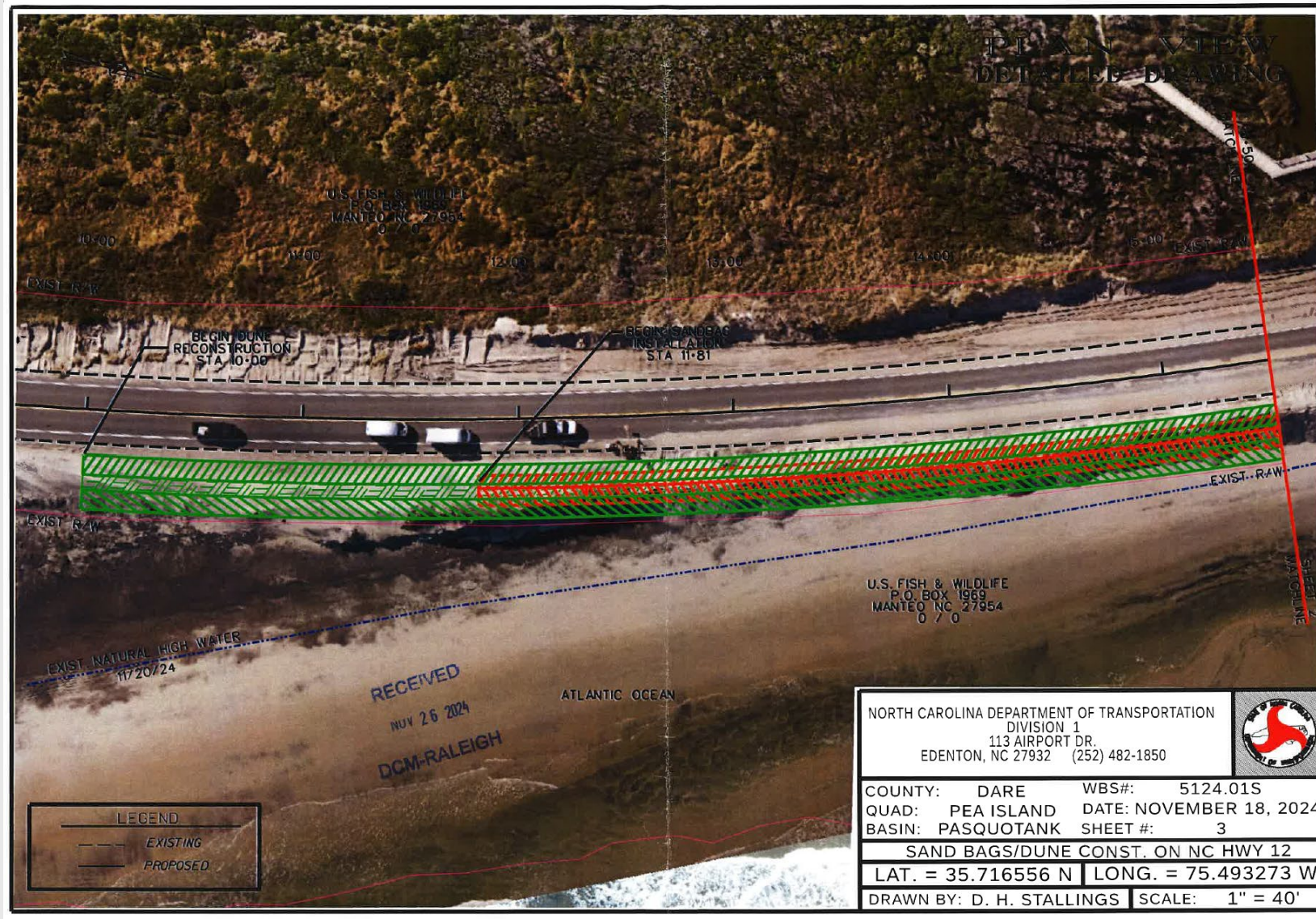
J. S. ABEL, Jr.
DIVISION PROJECT TEAM LEAD

MARK WINSLOW
DIVISION PROPOSALS ENGINEER



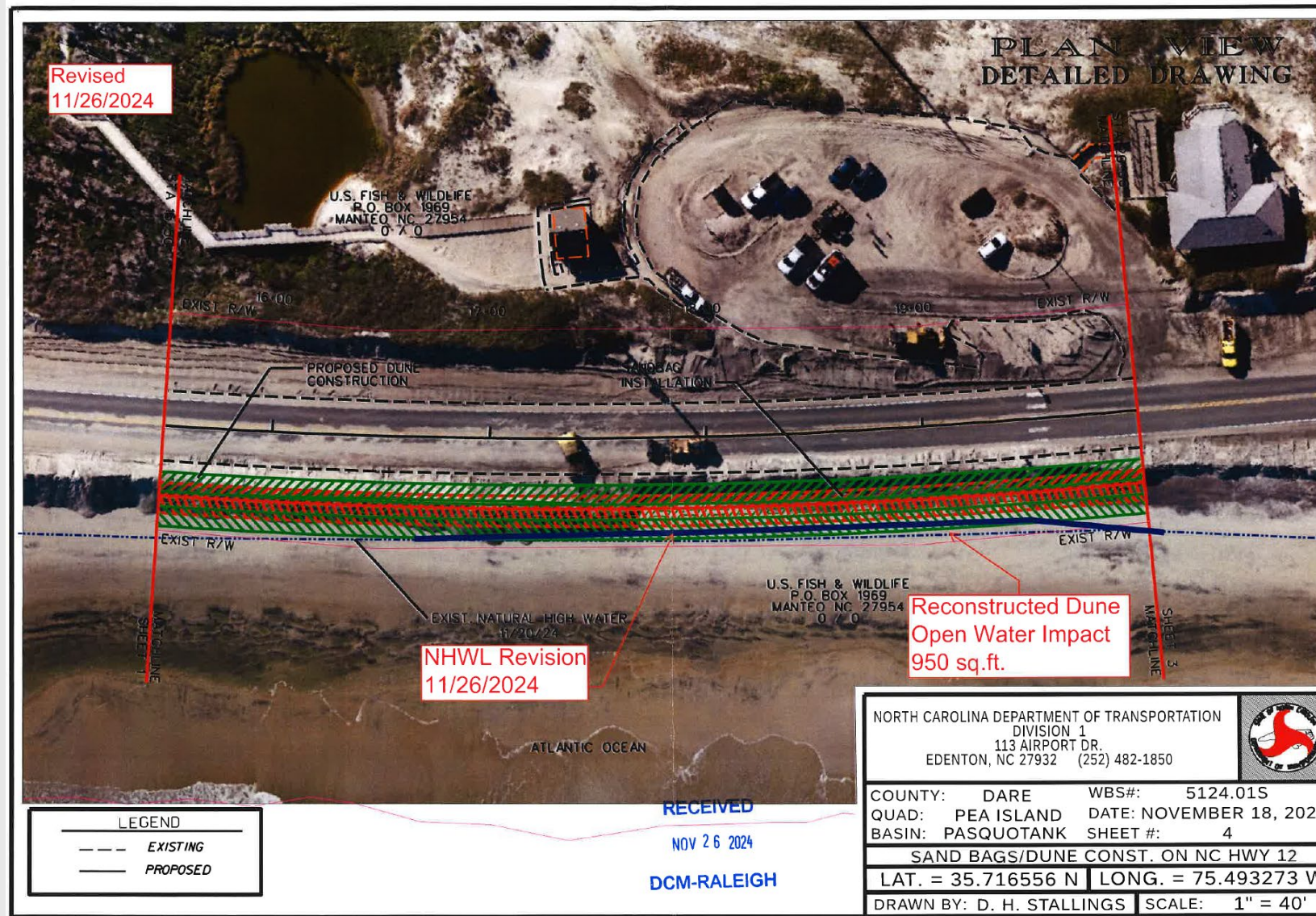


Plan View,
Southern
Section.
Source:
NCDOT.



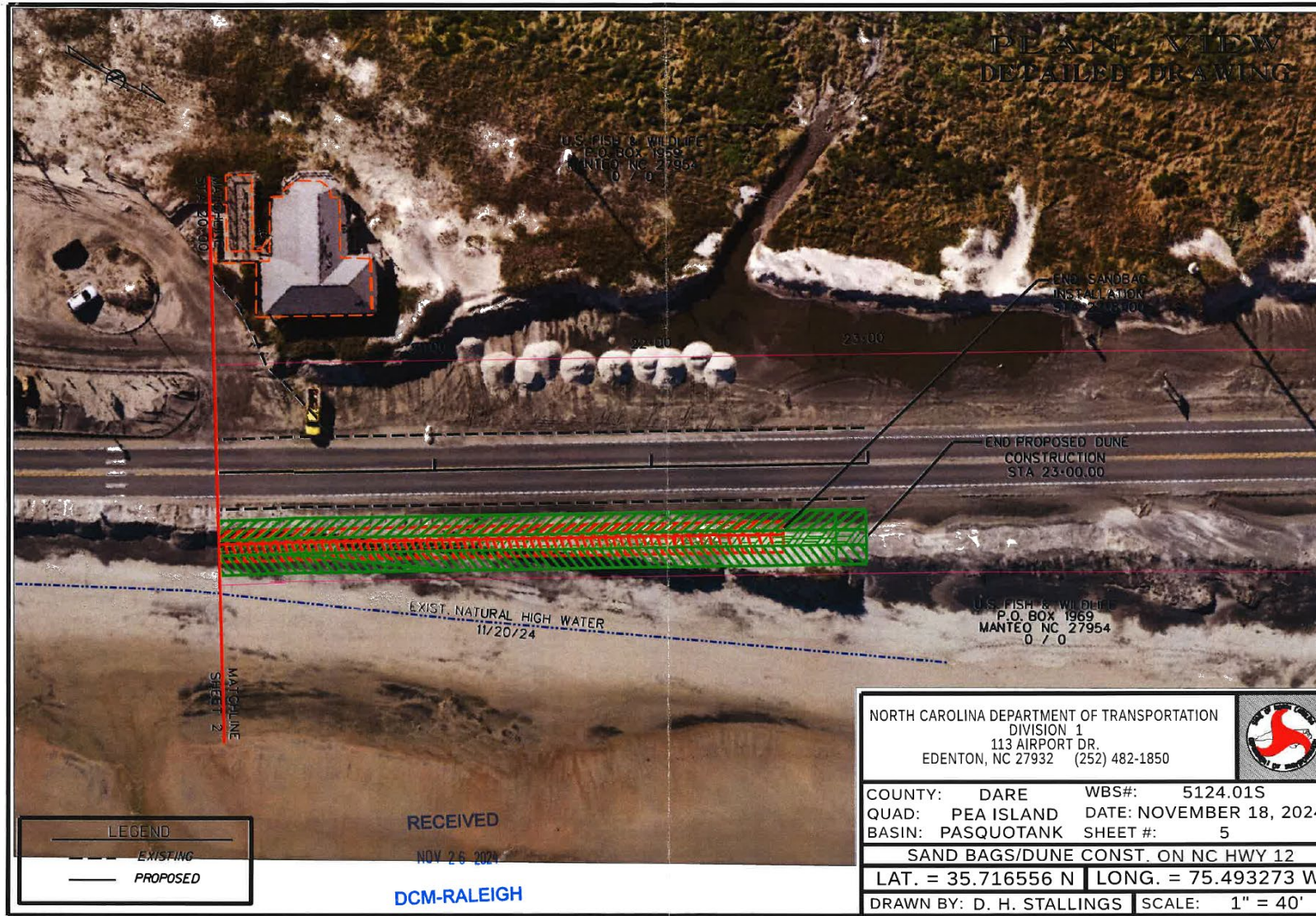


Plan View,
Middle
Section.
Source:
NCDOT.





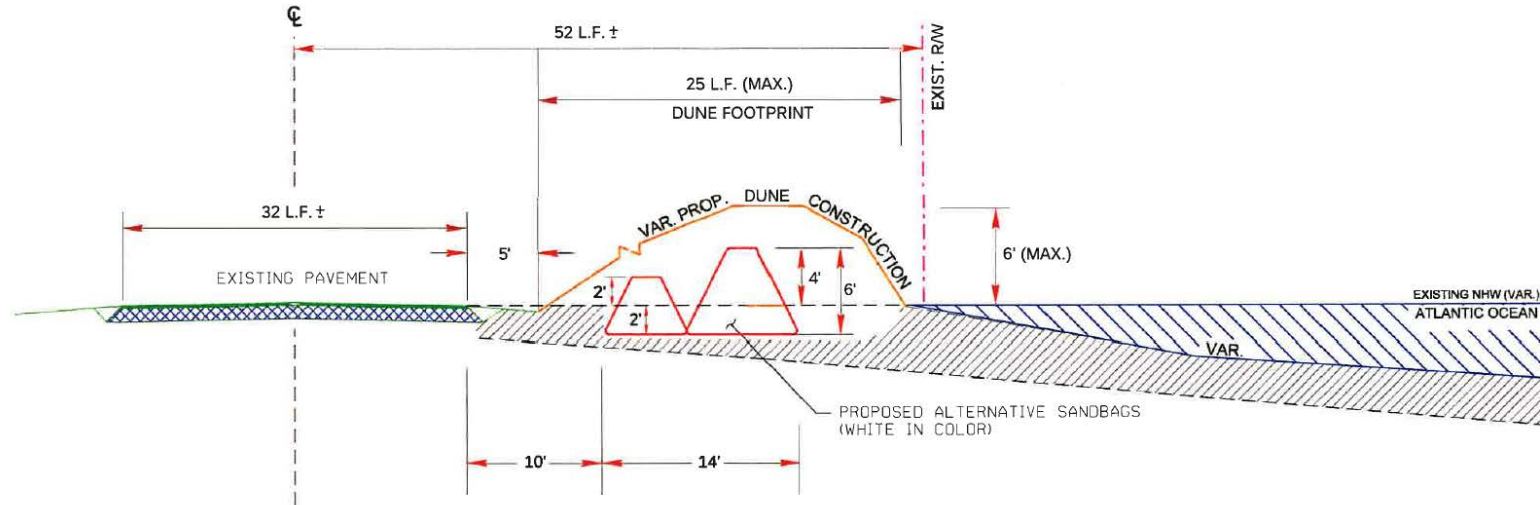
Plan View,
Northern
Section.
Source:
NCDOT.





PROJECT REFERENCE NO. 5/2/4/D/5	SHEET NO. 2
------------------------------------	----------------

SANDBAG INSTALLATION NC 12 PEA ISLAND VISITOR CENTER CROSS SECTION



* MATERIAL USED FOR DUNE CONSTRUCTION SHALL HAVE BEACH QUALITY CHARACTERISTICS AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT

SANDBAG INSTALLATION:	1,100 L.F. ±
	22 SECTIONS (4')
	22 SECTIONS (6')
SANDBAG VOLUME:	1,870 C.Y. ±
DUNE RECONSTRUCTION:	1,300 L.F. ±
DUNE VOLUME:	5,650 C.Y. ±

TYPICAL SECTION A
-L- STA. 11+81 TO STA. 22+81

RECEIVED

NOV 26 2024

DCM-RALEIGH

NTS

DHS
11/15/24

**Typical
Section.
Source:
NCDOT.**



PermaShield Product Specifications.



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Illustration E: Example cell dimensions

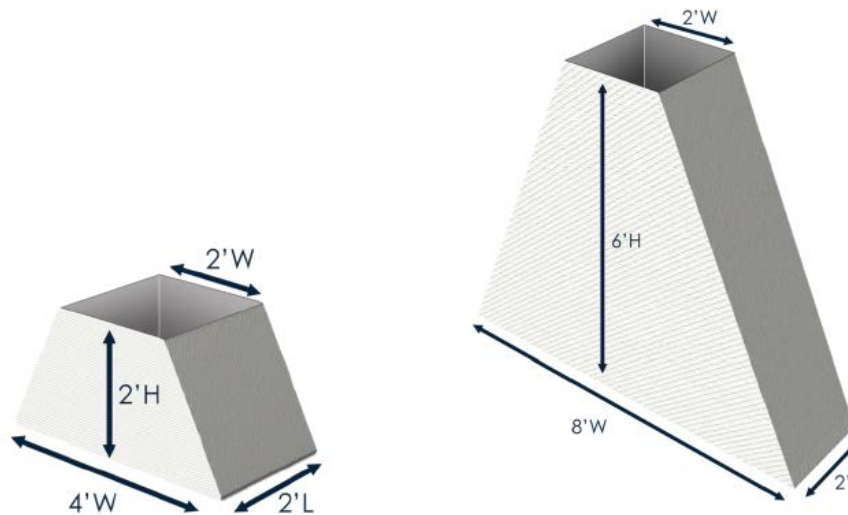


Illustration F: Approximate section weights with sand fill and concrete fill.

Sand Fill:

- 2' H Section: 11 yards / 14 tons
- 3' H Section: 20 yards / 25.45 tons
- 4' H Section: 30 yards / 38 tons
- 6' H Section: 55 yards / 70 tons





**Site Visit.
Nov. 20, 2024.
Waterward
limit of
proposed
sandbags.
Source:
Stephen Lane.**





Installation of PermaShield sandbags at Mirlo Beach.





**Installation of
PermaShield
sandbags at
Mirlo Beach.**





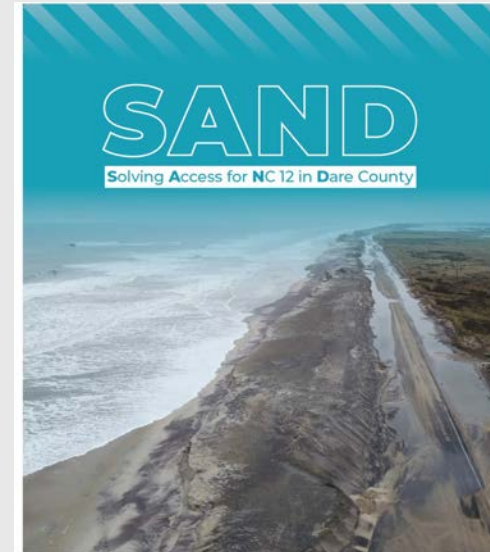
160

SAND – Solving Access for NC 12 in Dare County Grant Awarded April 2024

U.S. Department of Transportation Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Program



The North Carolina Department of Transportation will receive over \$1.8 million to conduct a study along an 11-mile stretch of Highway 12 between Oregon Inlet and Rodanthe on Pea Island. The goal of the study is to develop long-term, comprehensive plans for keeping the roadway passable during and following major storm events. The project will identify future construction projects, streamline environmental reviews, include public engagement and establish plans to secure the resiliency of the highway.



Source: NCDOT



VARIANCE CRITERIA G.S. 113A-120.1¹⁶¹



- (a) Any person may petition the Commission for a variance granting permission to use the person's land in a matter otherwise prohibited by rules or standards prescribed by the Commission, or orders issued by the Commission, pursuant to this Article. To qualify for a variance, the petitioner must show all of the following:
- (1) Unnecessary hardships would result from strict application of the development rules, standards, or orders.
 - (2) The hardships result from conditions that are peculiar to the property, such as the location, size, or topography.
 - (3) The hardships did not result from actions taken by the petitioner.
 - (4) The requested variance is consistent with the spirit, purpose and intent of the rules, standards or orders; will secure public safety and welfare; and will preserve substantial justice.
- (b) The Commission may impose reasonable and appropriate conditions and safeguards upon any variance it grants.