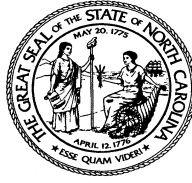


APPENDIX N

CENTRAL REACH PROJECT PERMITS



**North Carolina Department of Cultural Resources
State Historic Preservation Office**

Ramona M. Bartos, Administrator

Beverly Eaves Perdue, Governor
Linda A. Carlisle, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

December 22, 2011

Joshua Daniel
Tidewater Atlantic Research, Inc.
PO Box 2494
Washington, NC 27889

Re: Phase I Remote-Sensing Submerged Cultural Resource and Hard Bottom Survey of a Proposed
Borrow Area off Brunswick County, ER 11-2295

Dear Mr. Daniel:

Thank you for your email of November 28, 2011, transmitting the archaeological survey report by Tidewater Atlantic Research, Inc. for the above project.

During the course of the survey, a single magnetic anomaly was located within the project area. Based on your remote sensing findings, we concur with your recommendation that no further archaeological investigation be conducted in connection with this project. Despite being a high probability area for cultural resources, no potentially significant anomalies were identified indicating the project will not involve significant archaeological resources.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above-referenced tracking number.

Sincerely,

for Ramona M. Bartos



North Carolina Department of Environment and Natural Resources

Division of Water Quality

Beverly Eaves Perdue
Governor

Charles Wakild P E
Director

Dee Freeman
Secretary

June 18 2012

David Hewett Town Manager
Town of Holden Beach
110 Rothschild Street
Holden Beach NC 28462

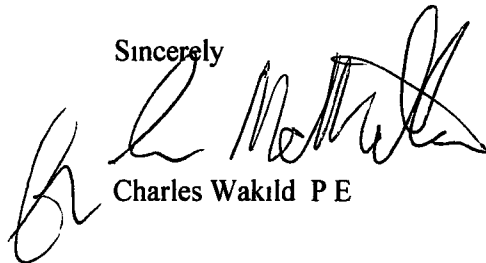
Re Town of Holden Beach Central Reach Beach Nourishment Brunswick County
Atlantic Ocean (30759 99 (1) SB)
DWQ Project # 20011836 Ver 3 USACE Action ID # SAW 2011 01914

APPROVAL of 401 Water Quality Certification with Additional Conditions MODIFICATION

Dear Mr Hewett

Attached hereto is a copy of Certification No 3780 issued to Mr David Hewett Town Manager of the Town of Holden Beach dated June 18 2012 **This Certification replaces the Certification issued February 13, 2009** In addition you should get any other federal state or local permits before you go ahead with your project including (but not limited to) Solid Waste Sediment and Erosion Control Stormwater Dam Safety Non discharge and Water Supply Watershed regulations If we can be of further assistance do not hesitate to contact us

Sincerely



Charles Wakild P E

CW/kah/ym

Attachments Certificate of Completion

cc Dave Timpy – Wilmington District USACOE
Chad Coburn – DWQ Wilmington Regional Office
Stephen Rynas – DCM Morehead City
Jeff Garnett – EPA Sam Nunn Federal Center 61 Forsyth Street SW Atlanta GA 30303
File Copy
Fran Way Applied Technology and Management Inc P O Box 20336 Charleston SC 29413

011836Ver3TOHoldenBeachCentralReachBeachRenourishment(Brunswick)401_IC_MOD

STATE OF NORTH CAROLINA
Department of Environment and Natural Resources
and
Coastal Resources Commission

Permit

for

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

X Excavation and/or filling pursuant to NCGS 113-229

Issued to **Town of Holden Beach, PO Box 449, Supply, NC 28462**

Authorizing development in Brunswick Counties at Atlantic Ocean, from 781 Ocean Blvd.

West to 240 Ocean Blvd. East, as requested in the permittee's application dated 12/15/11, AEC Hazard

Notice dated 7/9/12, and workplan drawings (20), 1-20 of 20 all dated 12/5/11.

This permit, issued on July 10, 2012, 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) In order to protect threatened and endangered species and to minimize adverse impacts to offshore, nearshore, intertidal and beach resources, no excavation or beach nourishment activities shall occur from April 1 to November 15 of any year without prior approval from the Division of Coastal Management in consultation with the Division of Marine Fisheries and the North Carolina Wildlife Resources Commission.

Excavation

- 2) All excavation activities shall take place entirely within the areas indicated on attached Sheet No. 17 of 20 (Project Borrow Site).

(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. An appeal requires resolution prior to work initiation or continuance as the case may be.

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

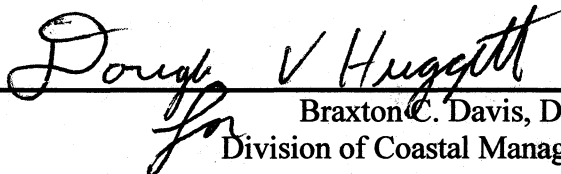
Any maintenance work or project modification not covered hereunder requires further Division approval.

All work must cease when the permit expires on

December 31, 2015

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 DENR and the Chairman of the Coastal Resources Commission.


Braxton C. Davis, Director
Division of Coastal Management

This permit and its conditions are hereby accepted.

Signature of Permittee

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Town of Holden Beach	File Number: 2012-00286	Date: September 28, 2012
Attached is:		See Section below
<input checked="" type="checkbox"/> INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
<input type="checkbox"/> PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
<input type="checkbox"/> PERMIT DENIAL	C	
<input type="checkbox"/> APPROVED JURISDICTIONAL DETERMINATION	D	
<input type="checkbox"/> PRELIMINARY JURISDICTIONAL DETERMINATION	E	

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://www.usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the district engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

**District Engineer, Wilmington Regulatory Division,
Attn: David Timpy, Project Manger
69 Darlington Avenue
Wilmington, NC 28403**

If you only have questions regarding the appeal process you may also contact:

**Mr. Jason Steele, Administrative Appeal Review Officer
CESAD-PDO
U.S. Army Corps of Engineers, South Atlantic Division
60 Forsyth Street, Room 10M15
Atlanta, Georgia 30303-8801
Phone: (404) 562-5137**

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date:

Telephone number:

For appeals on Initial Proffered Permits send this form to:

District Engineer, Wilmington Regulatory Division, Attn: David Timpy, 69 Darlington Avenue, Wilmington, North Carolina 28403

For Permit denials, Proffered Permits and approved Jurisdictional Determinations send this form to:

**Division Engineer, Commander, U.S. Army Engineer Division, South Atlantic, Attn: Mr. Jason Steele,
Administrative Appeal Officer, CESAD-PDO, 60 Forsyth Street, Room 10M15, Atlanta, Georgia 30303-8801
Phone: (404) 562-5137**



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

September 28, 2012

Regulatory Division

Action ID. SAW-2012-00286

The Town of Holden Beach
Attention: David W. Hewett
110 Rothschild Street
Holden Beach, North Carolina 28462

Dear Mr. Hewett:

In accordance with your written request of December 15, 2011, and the ensuing administrative record, enclosed are two copies of a permit to construct the Holden Beach Beach Fill Project, Brunswick County, North Carolina. Your proposed project consists of dredging, via a hopper dredge, approximately 1,300,000 cy of material from an offshore borrow area located 1.8 to 3.0 miles offshore of Oak Island and to place this material onto approximately 22,000 feet of shoreline in Holden Beach. The proposed area of beach fill is between Stations 40+00 and 260+00 and would taper (approximately 1,500- 2,000 ft) at each end of the beach fill. The proposed project design consists of a dune that is 9.5 ft high by 25 ft wide that would transition to a beach berm at an elevation of 7.0 ft NGVD29. The beach berm width would vary from 140 ft to 190 ft. The average fill placement density along the project area is 60 sf per linear foot along the entire project area.

You should acknowledge that you accept the terms and conditions of the enclosed permit by signing and dating each copy in the spaces provided ("Permittee" on page 3). Your signature, as permittee, indicates that, as consideration for the issuance of this permit, you voluntarily accept and agree to comply with all of the terms and conditions of this permit. All pages of both copies of the signed permit with drawings should then be returned to this office for final authorization. A self-addressed envelope is enclosed for your convenience.

Title 33, Part 325.1(f), of the Code of Federal Regulations reads, in part, that, "A \$10 fee will be charged for permit applications when the work is noncommercial in nature and provides personal benefits that have no connection with a commercial enterprise...", and "A fee of \$100 will be charged for permit applications when the planned or ultimate purpose of the project is commercial or industrial in nature and is in support of operations that charge for the production, distribution, or sale of goods or services." As your application fits the former category, you are requested to remit your check for \$10.00, made payable to the Finance and Accounting Officer, USAED, Wilmington. The check should accompany the signed and dated copies of your permit.

This correspondence contains a proffered permit for the above described site. If you object to this decision, you may request an administrative appeal under Corps regulations at 33 CFR part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this decision you must submit a completed RFA form to the South Atlantic Division, Division Office at the Following address:

Mr. Jason Steele, Administrative Appeal Review Officer
CESAD-ET-CO-R
U.S. Army Corps of Engineers, South Atlantic Division
60 Forsyth Street, Room 9M15
Atlanta, Georgia 30303-8801

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by November 28, 2012.

It is not necessary to submit an RFA form to the Division Office if you do not object to the decision in contained in this correspondence.

After the permit is authorized in this office, the original copy will be returned to you; the duplicate copy will be permanently retained in this office. If you have questions, please contact Dave Timpy at the Wilmington Regulatory Field Office, telephone 910-251-4634.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dale Beter", is written over a horizontal line.

Dale Beter, Chief
Wilmington Regulatory Field Office

Enclosures

SAW-2012-00286, SPECIAL CONDITIONS

1. In accordance with 33 U.S.C. 1341(d), all conditions of the North Carolina Division of Water Quality 401 Certification and the North Carolina Division of Coastal Management CAMA Major Permit are incorporated as part of the Department of the Army permit. Therefore, they are not listed as special conditions.
2. This Department of the Army permit does not obviate the need to obtain other Federal, State or local authorizations required by law.
3. All work authorized by this permit must be performed in strict compliance with the attached plans, which are a part of this permit. Any modification to these plans must be approved by the U.S. Army Corps of Engineers (Corps) prior to implementation.
4. Except as authorized by this permit or any Corps approved modification to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.
5. Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands.
6. The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.
7. Violations of these conditions or violations of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act must be reported in writing to the Wilmington District Corps within 24 hours of the permittee's discovery of the violation.
8. All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality at (919) 733-5083, ext. 526 or (800) 662-7956 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.
9. Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used.

10. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, shall be available at the project site during construction and maintenance of this project.

11. The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

12. The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the waterway to its former conditions. If the permittee fails to comply with this direction, the Secretary or his representative may restore the waterway, by contract or otherwise, and recover the cost from the permittee.

13. The authorized structure and associated activity must not interfere with the public's right to free navigation on all navigable waters of the United States. No attempt will be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work for reason other than safety.

14. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal, relocation, or alteration. The permittee shall notify NOAA/NATIONAL OCEAN SERVICE Chief Source Data Unit N CS261, 1315 E West HWY- RM 7316, Silver Spring, MD 20910-3282 at least two weeks prior to beginning work and upon completion of work.

15. If submerged cultural resources are encountered during the operation, the District Engineer will be immediately notified so that coordination can be initiated with the Underwater Archeology Unit (UAU) of the Department of Cultural Resources. In emergency situations, the permittee should immediately contact Mr. Chris Southerly at (910) 458-9042, Fort Fisher, so that a full assessment of the artifacts can be made.

16. The permittee will comply with all U.S. Coast Guard (USCG) regulations for dredging operations. The permittee will contact Mr. Joseph Edge, U.S. Coast Guard, Sector North Carolina Waterways Management at (252) 247-4525 at least 30 days prior to construction.

Contact with the U.S. Coast Guard will initiate the Local Notice for Mariners procedures to ensure all safety precautions for aids to navigation are implemented. The permittee will notify our office when this coordination with the U.S. Coast Guard has been commenced and updates will be provided to Wilmington District, Regulatory Division, Wilmington Regulatory Field Office, Attn: Mr. Dave Timpy.

17. This permit authorizes beach nourishment activities to be carried out one time along the entire reach of the requested project area. Any request to carry out additional activities within the area where nourishment activities have been completed under this permit will require additional authorization.

18. The permittee shall provide the Corps a final set of construction plans for the authorized project prior to construction.

19. A pre-construction meeting must be held with our office at least two weeks prior to conducting the work to ensure the contractor fully understands the conditions of this permit. Participates may include, but not limited to, representatives from NC Division of Coastal Management, NC Division of Water Quality, NC Wildlife Resource Commission, and U.S. Coast Guard.

20. The contractors name, phone number, and address, including a field contact name and number, will be submitted to the Wilmington District prior to any work.

21. In order to protect juvenile finfish resources, no excavation or filling activities will be permitted between the dates of April 1st and September 30th of any year without the prior approval of the North Carolina Division of Coastal Management and the Corps.

22. In order to protect nesting piping plover and sea turtles and to reduce the likelihood of adverse impacts to manatees, the placement of sediment and beach grading from April 1st through November 15th is prohibited.

23. All mobilization and demobilization work shall be conducted outside the shorebird nesting season from April 1st thru August 31st and outside the sea turtle nesting season from May 1st thru November 15th.

24. The Permittee shall conduct surveys for sea beach amaranth both before, and for three years after, sediment placement is totally complete in order to avoid direct burial and to monitor recovery of the plant. The three years of post-construction monitoring for seabeach amaranth should be conducted during the summer months.



25. A representative of the Corps will periodically and randomly inspect the work for compliance with these conditions. Deviations from these procedures may result in cessation of work until the problem is resolved to the satisfaction of the Corps.

26. All necessary precautions and measures will be implemented so that any activity will not kill, injure, capture, pursue, harass, or otherwise harm any protected federally listed species

(such as sea turtles, whales, manatee, sturgeon (Shortnose and Atlantic), and piping plover). While accomplishing the authorized work, if the permittee discovers or observes a damaged or hurt listed endangered or threatened species, the District Engineer will be immediately notified so that required coordination can be initiated with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service.

27. In the event an incidental sea turtle, whale, manatee, sturgeon (Shortnose and Atlantic) take occurs by a dredge, the permittee must stop all dredging operations and contact the Wilmington District Corps for consultation to determine the appropriate action, including the immediate implementation of sea turtle conservation measures that must be taken. The permittee shall immediately notify the Corps, Wilmington District, Regulatory Division, Wilmington Regulatory Field Office, Attn: Mr. Dave Timpy, by email at: David.L.Timpy@usace.army.mil, or by telephone at: (910) 251-4634 that an incidental take has occurred.

28. Routine beach surveillance will be conducted during construction to prevent unintentional damage to sea turtles and their nesting areas. If a nest or a turtle crawl is identified in the project area, the permittee will immediately stop all beach disposal activities and contact the Wilmington District and the North Carolina Wildlife Resources Commission to determine appropriate action.

29. The permittee understands and agrees that, even where it is in full compliance with the terms and conditions of this permit and other required authorizations, incidental take of sea turtles or other endangered species by the permittee may require suspension of the permit by the Corps. The amount of incidental take that will trigger suspension, and the need for any such suspension, shall be determined at the time in the sole discretion of the Corps. The permittee understands and agrees on behalf of itself, its agents, contractors, and other representatives, that no claim, legal action in equity or for damages, adjustment, or other entitlement against the Corps shall arise as a result of such suspension or related action.

30. No dredging shall occur outside of the authorized borrow area without prior approval of the Corps.

31. No dredged material shall be placed at any time in waters outside the permitted beach nourishment disposal area. Material shall be placed on the beach from hopper dredge to the beach via a pipeline.


32. All material used for the beach nourishment must be beach compatible, clean, free of debris and clay, and free of any pollutants except in trace quantities. The permittee shall ensure that an inspector is present during all beach disposal activities and immediately reports to the Corps should any potentially incompatible material be placed on the beach. During dredging operations, material placed on the beach shall be inspected daily to ensure compatibility. During dredging operations, a sediment analysis of the material placed on the beach, including shell content (calcium carbonate) percentage and color shall be submitted to the Wilmington District, Regulatory Division, Wilmington Regulatory Field Office, Attn: Mr. Dave Timpy, on a WEEKLY basis until completion of the project. This analysis shall include, at a minimum, the location of the sample station, shell percentage, silt/clay content, grain size, and color as

indicated by the Munsell Color Chart. If during the sampling process non-beach compatible material, including large amounts of shell, is or has been placed on the beach all work shall stop immediately and the Corps be notified by the permittee and/or its contractors to determine the appropriate plan of action.

33. All borrow material placed on the beach will be evaluated by color using the Munsell Color Chart. All material placed on the beach must have a hue of 10YR, a value between 5 and 8 (a chroma of 4 or less is required for values of 7 and 8, and a chroma of 3 or less is required for values of 5 and 6). If any material is placed on the beach that does not meet these criteria all work must stop and the Corps must be notified to determine the appropriate action. These measures are to ensure that all sediment placed on the beach is similar to the historic, native beach in sand grain size, density, shear resistance, heavy mineral content, moisture content, and color. The Permittee shall cease all work if any deviations from the accepted levels of beach compatible material are observed and contact Wilmington District, Regulatory Division, Wilmington Regulatory Field Office, Attn: Mr. Dave Timpy.

34. The permittee shall document soil colors along eight sample beach profiles using the Munsell Color Chart. This monitoring should take place as soon after placement of material is complete. The permittee will document soil color at the surface, -0.5 ft, -1 ft and -2 ft at each sample site.

35. Visual surveys of escarpments shall be made along the beach fill area immediately after completion of construction. Between April 1st and December 1st, all escarpments in the newly placed beach fill that exceed 18 inches shall be graded to match adjacent grades on the beach. Removal of any escarpments during the sea turtle hatching season (May 1 through November 15) shall be coordinated with the North Carolina Wildlife Resources Commission.

36. A representative of the Corps, Regulatory Division will periodically and randomly inspect the work for compliance with these conditions. Deviations from these procedures may result in cessation of work until the problem is resolved to the satisfaction of the Corps. No claim, legal action in equity or for damages, adjustment, or other entitlement shall be asserted against the United States on account of any such required cessation or related action, by the permittee, its agents, contractors, or other representatives. 

37. The permittee shall provide written notification of project completion immediately upon completion of the work authorized by this permit.

38. The permittee will provide two copies of the as-built surveys of the offshore borrow dredged during this project and the beach fill areas within 30 days of project completion to the Wilmington District, Regulatory Division, Wilmington Regulatory Field Office, Attn: Mr. Dave Timpy.

DA Permit Special Conditions for Hopper Dredge Operations
Action ID #SAW-2012-00026
Town of Holden Beach

1. Endangered Species Protection:

a. Hopper dredging is being approved under the South Atlantic Regional Biological Opinion (RBO) which can be viewed on the ERDC web site at the following link: <http://el.erdc.usace.army.mil/seaturtles/refs-bo.cfm>. The National Marine Fisheries Service (NMFS) has directed that the RBO issued to the Corps serve as the formal consultation for the Holden Beach Beach Nourishment project. The RBO includes an Incidental Take Statement (ITS) issued to the Corps for its civil and military hopper dredging projects. Under the RBO/ITS, incidental takes are authorized on a Fiscal Year (FY) (October 1 - September 30) basis to be metered out by the Division Commander, South Atlantic Division, U.S. Army Corps of Engineers for the southeastern United States for Corps civil and military projects. The Permittee is hereby advised to avoid any incidental take in that such take may trigger the cessation of hopper dredging for the remainder of that FY. The Permittee understands and agrees that, even where it is in full compliance with the terms and conditions of the RBO/ITS, incidental take by the Permittee may require suspension of the permit by the Corps. The amount of incidental take that will trigger suspension, and the need for any such suspension, shall be determined at the time in the sole discretion of the Corps. The Permittee understands and agrees on behalf of itself, its agents, contractors, and other representatives, that no claim, legal action in equity or for damages, adjustment, or other entitlement against the Corps shall arise as a result of such suspension or related action.

b. Dredging operations **shall cease immediately** upon the first incidental take, and thereafter as directed by the Corps, until the District Engineer, or his designee, notifies the Permittee to resume dredging. The Permittee shall immediately notify the Corps, Wilmington District, Dave Timpy that an incidental take has occurred. The Sea Turtle Mortality Report, attached to this permit, will be filled out by the Observer immediately (within 6 hours) and e-mailed in pdf format to takereport.nmfs@noaa.gov and Corps, Wilmington District, Dave Timpy. The permittee shall contact the National Dredging Quality Management (DQM) program (<http://dqm.usace.army.mil/>) to assure that project information is loaded and data is being appropriately transferred prior to project commencement.

2. Pre-Dredging Submittals:

a. No dredging shall be performed by a hopper dredge without the inclusion of a rigid sea turtle deflector device. Within 15 days of the anticipated start date, the Permittee shall electronically submit drawings showing the proposed device and its attachment to the Corps, Wilmington District, Dave Timpy. These drawings shall include the approach angle for any and all depths to be dredged during the dredging.

b. The Permittee shall electronically submit detailed drawings showing the proposed draghead grating system(s) and draghead(s), and documentation that supports grate sizing (such as dredge pump manufacturer's recommended maximum particle size dimension(s), etc.).

c. The permittee shall electronically submit an operational plan to achieve protection of sea turtles during the hopper dredging operation.

A copy of the approved drawings and calculations shall be available on the vessel during the dredging. No dredging work shall be allowed to commence until approval of the turtle deflector device has been granted by the Corps, Wilmington District. Sample Turtle Deflector Design Details are available on the website listed in special condition number 11.

3. Pre-Dredging Inspection:

A pre-dredging inspection of the hopper dredge shall be performed by the Corps, Wilmington District in accordance with the protocol entitled "COE SEA TURTLE INSPECTION CHECKLIST FOR HOPPER DREDGES for Corps projects or Corps/Army Permitted Project" located on the website listed in special condition number 11 below.

4. Hopper Dredge Equipment:

Hopper dredge dragheads shall be equipped with sea turtle deflectors which are rigidly attached. Deflectors shall be solid with no openings in the face. Such designs will be considered provided sufficient information is included indicating a particular modification is effective in minimizing potential turtle takes. Corps technical staff will coordinate with NOAA Fisheries on the effectiveness of this alternate design. No dredging shall be performed by a hopper dredge without an installed turtle deflector device approved by the Corps. Sample Turtle Deflector Design Details are on the first web site indicated in special condition number 11 below.

a. Deflector Design:

- (1) The leading V-shaped portion of the deflector shall have an included angle of

less than 90 degrees. Internal reinforcement shall be installed in the deflector to prevent structural failure of the device. The leading edge of the deflector shall be designed to have a plowing effect of at least 6" depth when the drag head is being operated. Appropriate instrumentation or indicator shall be used and kept in proper calibration to insure the critical "approach angle". (Information Only Note: The design "approach angle" or the angle of lower drag head pipe relative to the average sediment plane is very important to the proper operation of a deflector. If the lower drag head pipe angle in actual dredging conditions varies tremendously from the design angle of approach used in the development of the deflector, the 6" plowing effect does not occur. Therefore, every effort should be made to insure this design "approach angle" is maintained with the lower drag pipe.)

- (2) If adjustable depth deflectors are installed, they shall be rigidly attached to the

drag head using either a hinged aft attachment point or an aft trunnion attachment point in association with an adjustable pin front attachment point or cable front attachment point with a stop set to obtain the 6" plowing effect. This arrangement allows fine-tuning the 6" plowing

effect for varying depths. After the deflector is properly adjusted there shall be NO openings between the deflector and the drag head that are more than 4" by 4".

b. In-flow Baskets and overflow screening:

(1) The Permittee shall ensure that baskets or screening are installed over the hopper inflow(s) with no greater than 4" x 4" openings. The method selected shall depend on the construction of the dredge used and shall be approved by the District Engineer prior to commencement of dredging. The screening shall provide 100% screening of the hopper inflow(s). The screens and/or baskets shall remain in place throughout the performance of the work. The turtle deflector device and inflow screens shall be maintained in operational condition for the entire dredging operation.

(2) The Permittee shall install and maintain floodlights suitable for illumination of the baskets or screening to allow the observer to safely monitor the hopper baskets or screening to allow the observer to safely monitor the hopper basket(s) during non-daylight hours or other periods of poor visibility. Safe access shall be provided to the inflow baskets or screens to allow the observer to inspect for turtles, turtle parts, or damage.

(3) The Permittee shall implement 100% overflow screening if inflow screening is not practicable and if prior approval has been granted by the Corps, Wilmington District.

c. Draghead grating:

(1) Draghead grating may be used to prevent over-sized objects (relative to respective pump and distribution system designs) from reaching and becoming lodged or damaging the dredge pump and/or slurry distribution system. The Permittee may not use a draghead grating system that would prevent turtle remains from entering the hopper inflow screening. Detailed drawings showing the proposed draghead grating system(s) and draghead(s), and documentation that supports grate sizing (such as dredge pump manufacturer's recommended maximum particle size dimension(s), etc.) shall be submitted. Exceptions for smaller draghead screens will be considered as necessary (e.g., in areas containing ordnance or excessive debris likely to clog or damage the pumps) with supporting justifications. No dredging shall begin until the District has approved all grating and screening.

d. Hopper Dredge Operation:

(1) The Permittee shall operate the hopper dredge to minimize the possibility of taking sea turtles and to comply with the requirements stated in the Incidental Take Statement provided by the NMFS in their RBO.

(2) The turtle deflector device and inflow screens shall be maintained in operational condition for the entire dredging operation.

(2) When initiating dredging, suction through the drag heads shall be allowed just

long enough to prime the pumps, and then the drag heads must be placed firmly on the bottom. When lifting the drag heads from the bottom, suction through the drag heads shall be allowed just long enough to clear the lines, and then must cease. Pumping water through the drag heads shall cease while maneuvering or during travel to/from the disposal area. If the required dredging section includes compacted fine sands or stiff clays, a properly configured arrangement of teeth may enhance dredge efficiency, which reduces total dredging hours, and "turtle takes." The operation of a drag head with teeth must be monitored for each dredged section to insure that excessive material is not forced into the suction line. When excess high-density material enters the suction line, suction velocities drop to extremely low levels causing conditions for plugging of the suction pipe. Dredge operators should configure and operate their equipment to eliminate all low-level suction velocities. Pipe plugging in the past was easily corrected, when low suction velocities occurred, by raising the drag head off the bottom until the suction velocities increased to an appropriate level. Pipe plugging cannot be corrected by raising the drag head off the bottom. Arrangements of teeth and/or the reconfiguration of teeth should be made during the dredging process to optimize the suction velocities.

(3) Raising the drag head off the bottom to increase suction velocities is not acceptable. The primary adjustment for providing additional mixing water to the suction line should be through water ports. To insure that suction velocities do not drop below appropriate levels, the Dredging Inspector for the Permittee shall monitor production meters throughout the job and adjust primarily the number and opening sizes of water ports. Water port openings on top of the drag head or on raised standpipes above the drag head shall be screened before they are utilized on the dredging project. If a dredge section includes sandy shoals on one end of tract line and mud sediments on the other end of the tract line, the equipment shall be adjusted to eliminate drag head pick-ups to clear the suction line.

(4) The drag head shall be buried a minimum of 6 inches in the sediment at all times.

Although the over depth prism is not the required dredging prism, the Permittee shall achieve the required prism by removing the material from the allowable over depth prism.

(5) During turning operations the pumps must either be shut off or reduced in speed

to the point where no suction velocity or vacuum exists.

(6) These operational procedures are intended to stress the importance of balancing

the suction pipe densities and velocities in order to keep from taking sea turtles. As stated in Condition #2, the Permittee shall develop and submit a written operational plan to minimize turtle takes.

5. Recording charts for Hopper Dredge(s):

The recording system shall be capable of capturing data at variable intervals but with a frequency of not less than every 60 seconds. All data shall be time correlated to a 24-hour clock and the recording system shall include a method of daily evaluation of the data collected. This

data shall be made available at the request of the issuing District.

6. The National Dredging Quality Management (DQM) Program:

The Corps former Silent Inspector program has been replaced by the National Dredging Quality Management (DQM) Program. DQM is the Corps' next generation automated dredging monitoring system and analysis tools for the modern Corps dredging manager. The mission of the National DQM Program is to provide the Corps dredging manager with a nationally standardized low cost remote monitoring and documentation system. This system provides the Corps with timely data access, multiple reporting formats, full technical support, including dredge certifications, data quality control, database management, and support for the DQM operating system. On board the dredge, sensors continually monitor dredge activities, operations, and efficiency. Information from these sensors is routed to the National DQM Support Center for data processing, storage and publishing. The DQM system must have been certified by the Engineer Research and Development Center (EEDC) within the last year and comply with the latest specifications for hopper dredges. Questions regarding certification should be addressed to the DQM support center at 877-840-8024. Additional information, including the current required hopper dredge specifications at DQM is available at <http://dqm.usace.army.mil/Default.aspx>.

7. (Atlantic Only) Sea Turtle Non-Capture Trawl Sweeping

In order to minimize or reduce taking of turtles during dredging, non-capture trawling is required. This type of trawling is designed to use non-capture type trawling equipment to sweep in the proximity of the dredging operations in order to stimulate sea turtles to move out of the dredge path. No sea turtles will be captured using this trawling technique. Non-capture trawl sweeping shall be performed 48 hours prior to initiating dredging and shall continue throughout dredging operations. Conduct non-capture trawl sweeping operations in the vicinity of dredge operations, but maintain a safe distance from the dredge. Trawl equipment used (e.g. trawling nets) and trawl sweeping operations shall be conducted such that no sea turtles or other marine organism by-catch are captured. As much as possible, non-capture trawl sweeping shall be conducted to maximize the amount of time during each 24-hour trawl day that the trawl equipment (e.g. trawling nets) sweeps the bottom sediment in the vicinity of the dredging operation (i.e. maximize the bottom time with the trawling equipment). Such trawling in the vicinity of the dredge shall be conducted continuously, stopping after every 4 to 6 hours to check the condition of the trawl equipment and assure that no turtles have been captured.

a. Non-capture Trawl Sweeping Period:

Non-capture trawl sweeping shall be conducted as described below:

(1) A day of non-capture trawl sweeping shall be defined as 24 hours of continuous trawling.

(2) Non-capture trawl sweeping may be conducted as 24-hours of trawling as a continuous trawl; however, two separate crews must be available on board to work two 12-hour shifts.

b. Turtle Handling and Endangered Species Permits:

No sea turtles are to be intentionally captured during non-capture trawl sweeping operations. No endangered species permits to handle sea turtles are required for non-capture trawl sweeping. Should a sea turtle become entangled in the trawling nets; the nearest marine facility will be notified for arrangements to be made to transfer the animal as needed.

c. Reporting:

A daily log will be kept for each non-capture trawl sweeping operations. The non-capture trawl sweeping log will be submitted to the Corps, Wilmington District, Dave Timpy at the completion of the project. Data to be included with this log daily will include:

(1) GIS coordinate of trawl locations at the start and end of each sweep

(2) Times recorded for each trawl sweep duration;

(3) Description of dredge proximity during each sweep;

(4) General notes as appropriate (e.g. condition of equipment at the end of each sweep, snags occurring during each sweep, incidental debris, etc.).

(5) Water Quality and Physical Measurements: Water temperature measurements shall be taken at the water surface each day using a laboratory thermometer. Weather conditions shall be recorded from visual observations and instruments on the trawler. Weather conditions, air temperature, wind velocity and direction, sea state-wave height, and precipitation shall be recorded on the Sea Turtle Trawling Report on the web site indicated in special conditions number 12 below. High and low tides shall be recorded.

d. Non-Capture Trawl Sweeping Equipment:

(1) To reduce the chances of sea turtles becoming entangled and caught in the net webbing during non-capture trawl sweeping, the Contractor shall use standard flat-style shrimp trawling nets. Nets shall have one to two-inch webbing holes, the webbing should be made of nylon material (preferably dipped.)

(2) The bag end of these nets shall be completely cut out so that the nets remaining

on the rigging are approximately 30 to 50-feet long. The nets shall be long enough to provide a trailing length of net in the water to "stimulate turtles" to move but not be long enough to be able to twist when: 1) being pulled in the water; 2) being pulled up and onto the deck; 3) the vessel is stationary; or 4) the trawl vessel turns while trawling. This net length may be shorter or longer depending on the specific configurations of the trawler and its rigging, but must be set up to

specifically prevent the twisting of the net. The nets should be installed and adjusted such that organisms are not being collected (turtles and other by-catch).

- (3) The bag end of the nets shall be cut away to create a large open end on the nets.

The webbing shall be monitored so that tears and rips do not occur in the remaining webbing that might entangle and capture organisms (particularly turtles).

- (4) To ensure that the lead line and mouth of the trawl nets maintain contact with the

seafloor as best as possible, the lead line of each net shall be rigged with weights, mud rollers, tickler chains and/or trawling cookies (as appropriate for the environmental conditions and sediment type).

For the first 48 hours after beginning non-capture trawling operations, pull and check the nets every hour to evaluate and document the:

- (a) Status of the nets (particularly twisting of the tail end);

- (b) Net contents (turtles and other bycatch) and, after the first 48-hours

and

appropriate net configuration has been established, gradually increase trawling times to a maximum of 2-3-hours.

8. Endangered Species Observers:

During dredging operations, observers approved by the National Oceanic and Atmospheric Administration – Fisheries (NOAA-Fisheries) sea turtles, sturgeon (Shortnose and Atlantic) and whales shall be aboard to monitor for the presence of the species. Observer coverage shall be 100 percent (24hr/day) and shall be conducted year round. During transit to and from the disposal area, the observer shall monitor from the bridge during daylight hours for the presence of endangered species, especially the Northern right whale, during the period December through March. During dredging operations, while dragheads are submerged, the observer shall continuously monitor the inflow and/or overflow screening for turtles and/or turtle parts and sturgeon (Shortnose and Atlantic) and/or sturgeon (Shortnose and Atlantic) parts. Upon completion of each load cycle, dragheads should be monitored as the draghead is lifted from the sea surface and is placed on the saddle in order to assure that sea turtles that may be impinged within draghead are not lost and un-accounted for. Observers shall physically inspect dragheads and inflow and overflow screening/boxes for threatened and endangered species take. Other abiotic and biotic debris found in the screens during their examination for sea turtle or sturgeon (Shortnose and Atlantic) parts shall be recorded and then disposed of so as not to impede the functioning of the screens during the next load cycle.

a. Monitoring Reports: The results of the monitoring shall be recorded on the appropriate observation sheets. There is a sheet for each load, a daily summary sheet, and a weekly summary sheet. In addition, there will be a post dredging summary sheet. Observations sheets will be

completed regardless of whether any takes of sturgeon (Shortnose or Atlantic), whales, or sea turtles occur. In the event of any sea turtle or sturgeon (Atlantic or Shortnose) take by the dredge, appropriate incident reporting forms shall be completed. In the event an incidental sea turtle, whales, manatee, sturgeon (Shortnose or Atlantic) take occurs by a dredge, the permittee must stop all dredging operations and contact the Wilmington District for consultation to determine the appropriate action, including the immediate implementation of sea turtle conservation measures that must be taken. The permittee shall immediately notify Wilmington District, Regulatory Division, Wilmington Regulatory Field Office, Attn: Mr. Dave Timpy, by email David.L.Timpy@usace.army.mil or by telephone at (910) 251-4634 that an incidental take has occurred. Additionally, all specimens shall be photographed with a digital camera. These photographs shall be attached to respective reports for documentation. Dredging of subsequent loads shall not commence until all appropriate reports are completed from the previous dredging load to ensure completeness and thoroughness of documentation associated with the incidental take Reports shall be submitted to the Corps within 24-hours of the take. Copies of the forms shall be legible. Observer forms may be accessed on the web site indicated in special condition number 12 below.

b. Endangered Species Observer(s): A list of endangered species observer-biologists (ESOs) that have been NMFS-approved to monitor threatened/endangered species takes by hopper dredges can be obtained by contacting NOAA Fisheries' Northeast Region, Protected Resources Division. The main contact is Ms. Julie Crocker; she can be reached at julie.crocker@noaa.gov or 978-281-9300 ext.6530.

c. The Permittee shall provide a digital camera, with an image resolution capability of at least 300 dpi, in order to photographically report all incidental takes, without regard to species, during dredging operations. Immediately following the incidental take of any threatened or endangered species, images shall be provided, via email, CD, DVD, or USB (thumb/flash/jump drive) to the Contracting Officer's Representative in a .JPG or .TIF format and shall accompany incidental take forms. The nature of findings shall be fully described in the incidental take forms including references to photographs.

9. Manatee, Sea Turtle, Sturgeon, and Whale Sighting Reports

Any take concerning a manatee, sea turtle, sturgeon (Shortnose or Atlantic), or whale (Atlantic only); or sighting of any injured or incapacitated manatees, sea turtles, or whales shall be reported immediately to the Corps, Wilmington District, c/o Dave Timpy.

A copy of the incidental take report shall be provided within 24 hours of the incident. The Permittee shall also immediately report any collision with and/or injury to a manatee to the United States Fish and Wildlife Service. If a sea turtle is taken by the dredge (live or dead), the Permittee shall email a PDF version of the incidental take report to NOAA-Fisheries Southeast Region at the following email address within 24 hours of the take: takereport.nmfsse@noaa.gov and to the Corps, Wilmington District, c/o Dave Timpy.

10. Disposition of Sea Turtles or Turtle Parts

a. Turtles taken by hopper dredge

(1) Dead turtles - Upon removal of sea turtle and/or parts from the draghead or screening, observers shall take photographs as to sufficiently document major characteristics of the turtle or turtle parts including but not limited to dorsal, ventral, anterior, and posterior views. For all photographs taken, a backdrop shall be prepared to document the dredge name, observer company name, contract title, time, date, species, load number, location of dredging, and specific location taken (draghead, screening, etc.). Carcass/turtle parts shall also be scanned for flipper and Passive Integrated Transponder (PIT) tags. Any identified tags shall be recorded on the "Sea Turtle Incidental Take Form" that is included in the "Endangered Species Observer Program Forms" located on the web site indicated in special condition number 12 below. Turtle parts which cannot be positively identified to species, on board the dredge or barge(s) shall be preserved by the observer(s) for later identification. A tissue sample shall be collected from any lethally taken sea turtle and submitted under the process stated in the "Protocol for Collecting Tissue Samples from Turtles for Genetic Analysis" found in the CONSTRUCTION FORMS AND DETAILS below. All genetic samples collected shall be submitted to NMFS within 30-days of collection and verification of submittal to NMFS shall be provided to the Corps, Wilmington District, c/o Dave Timpy. After all data collection is complete, the sea turtle parts shall be placed in plastic bags, labeled as to the time, date, and dredged reach of collection, kept frozen and transported to the Sea Turtle Hospitable, Surf City, North Carolina. If no local facility is capable of receiving the sea turtle/parts, they should be marked (spray paint works well), weighted down and disposed of in accordance with the direction of the Corps, Wilmington District, c/o Dave Timpy.

(2) Live Turtles - Observer(s) shall measure, weigh, scan for PIT tags, tag (Iconnel flipper and PIT tags (if PIT tag not located during scan, and only if observer is qualified to tag using PIT tags)), and photograph any live turtle(s) incidentally taken by the dredge. Observer(s) (or their authorized representative) shall coordinate with the Corps, Wilmington District, c/o Dave Timpy and Doug Piatkowski, to transport, as soon as possible, the live turtle(s) taken by the dredge to an approved rehabilitation facility in the project area.

11. Report Submission:

The Permittee shall maintain a log detailing all incidents, including sightings, collisions with, injuries, or killing of manatees, sea turtles, sturgeon (Shortnose or Atlantic), or whales occurring during the contract period. The data shall be recorded on forms available on the website as indicated in special condition number 12. All data in original form shall be forwarded directly to the Wilmington District Corps within 10 days of collection. Following project completion, a report summarizing the above incidents and sightings shall be submitted to:

Dave Timpy
Regulatory Division
Army Corps of Engineers
Wilmington District

Doug Piatkowski
Environmental Resources Branch
Army Corps of Engineers
Wilmington District

National Marine Fisheries Service
Protected Species Management Branch
263 13th Avenue South
St. Petersburg, Florida 33701

Molly Ellwood
Southeastern Permit Coordinator
NCWRC/Habitat Conservation Program
127 Cardinal Drive
Wilmington, North Carolina 28405

Dr. Matthew Godfrey
North Carolina Wildlife Resources Commission
1507 Ann Street
Beaufort, North Carolina 28516

12. Reporting Forms:

In order to avoid use of outdated forms, the Permittee is directed to the following website for forms and attachments required under this permit. Links to these forms are under the heading "Turtle Information".

<http://el.erdc.usace.army.mil/seaturtles>

(List of forms required under this permit include: Sea Turtle/Pre and Post-Hopper Dredging Project Checklist, Endangered Species Observer Program Forms, Sea Turtle Tagging and Relocation Report, and Sea Turtle Trawling Report.)

DEPARTMENT OF THE ARMY PERMIT

Permittee: Town of Holden Beach

Permit No.: SAW-2012-00286

Issuing Office: CESA W-RG-L

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: To provide beach restoration along eroding sections of the Holden Beach shoreline sufficient to maintain the island's restored protective and recreational beachfront and natural dune system. The proposed plan includes dredging, via a hopper dredge, approximately 1,300,000 cy of material from an offshore borrow area located 1.8 to 3.0 mi offshore of Oak Island and to place this material onto approximately 22,000 ft (4.18 mi) of shoreline in Holden Beach, Brunswick County, North Carolina.

Project Location: Oak Island and Holden Beach, Brunswick County, North Carolina

General Conditions:

1. The time limit for completing the work authorized ends on **December 31, 2017**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit,

Special Conditions:

SEE ATTACHED SPECIAL CONDITIONS

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. **Reevaluation of Permit Decision.** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. **Extensions.** General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

(PERMITTEE) Town of Holden Beach, David W. Hewett

(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

(DISTRICT ENGINEER) STEVEN A. BAKER, COLONEL

(DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFeree)

(DATE)

*U.S. GOVERNMENT PRINTING OFFICE: 1986 - 717-425

ADDITIONAL CONDITIONS

- 3) Excavation shall not exceed -42.5' NGVD29.
- 4) Excavation shall be accomplished by a hopper dredge. Use of any other method of excavation shall require modification of this permit.

Beach Nourishment

- 5) This permit authorizes beach nourishment activities to be carried out one (1) time along the entire reach of the requested project area. Any request to carry out additional activities within an area where nourishment activities have been completed under this permit shall require a modification of this permit.
- 6) Prior to the initiation of beach nourishment activity along each section of beach, the existing mean high water line shall be surveyed and a copy provided to the Division of Coastal Management.

NOTE: The permittee is advised that the State of North Carolina claims title to all currently submerged lands and any future lands that are raised above the Mean High Water level as a result of this project.

- 7) Prior to the initiation of any beach nourishment activity above the mean high water contour line within the limits of the permittee's jurisdiction, easements or similar legal instruments shall be obtained from all affected property owners.
- 8) Prior to the initiation of any beach nourishment activity, the permittee shall coordinate with the Division of Coastal Management to determine the static vegetation line that shall be used as the reference point for measuring future oceanfront setbacks. The static vegetation line, which is defined as the vegetation line that existed within one year prior to the onset of initial project construction, shall be established using on-ground observation and survey or aerial imagery. This static vegetation line shall then be marked and a survey depicting this static vegetation line shall be submitted to the Division of Coastal Management prior to any beach nourishment activities.
- 9) The seaward nourishment limit shall be conducted in accordance with the approved work plats labeled Plan View (Sheets 3-15 of 20).
- 10) Temporary dikes shall be used to retain and direct flow of material parallel to the shoreline to minimize surf zone turbidities. The temporary dikes shall be removed and the beach graded in accordance with approved profiles upon completion of pumping activities in that particular section of beach.
- 11) Should the dredging operations encounter sand deemed non-compatible with 15A NCAC 07H .0312 (Technical Standards for Beach Fill Projects), the dredge operator shall immediately cease operation and contact the Division of Coastal Management. Dredge operations shall resume only after resolution of the issue of sand compatibility.
- 12) In order to prevent leakage, dredge pipes shall be routinely inspected. If leakage is found and repairs cannot be made immediately, pumping of material shall stop until such leaks are fixed.

ADDITIONAL CONDITIONS

- 13) Once a section is complete, piping and heavy equipment shall be removed or shifted to a new section and the area graded and dressed to final approved slopes.
- 14) Land-based equipment necessary for beach nourishment work shall be brought to the site through existing accesses. Should the work result in any damage to existing accesses, the accesses shall be restored to pre-project conditions immediately upon project completion in that specific area.

NOTE: The permittee is advised that any new access site would require a modification of this permit.

- 15) Where oceanfront development exists at elevations nearly equal to that of the native beach, a low protective dune shall be pushed up along the backbeach to prevent slurry from draining towards the development.
- 16) Dune disturbance shall be kept to a minimum. Any alteration of existing dunes shall be coordinated with the Division of Coastal Management as well as the appropriate property owner(s). All disturbed areas shall be restored to original contours and configuration with reference to the surveyed normal high water line and shall be revegetated immediately following project completion in that section of beach.

Mitigation and Monitoring

- 17) Unless specifically altered herein, the permittee shall implement all mitigation and monitoring commitments made in the permit application, and project purpose and description, that was prepared for this project.
- 18) Immediately after completion of the beach nourishment project, and prior to the next three sea turtle nesting seasons, beach compaction shall be monitored and tilling shall be conducted as deemed necessary by the Division of Coastal Management in coordination with appropriate review agencies.
- 19) Immediately after completion of any phase of the beach nourishment project, and prior to the next three nesting seasons, monitoring shall be conducted to determine if escarpments are present that would adversely affect nesting sea turtles and/or public access. If such escarpments are present, the permittee shall coordinate with the Division of Coastal Management for necessary remediation.

Cultural Resource Protection

- 20) Prior to any excavation or beach nourishment activities, the permittee shall contact the NCDCCR Underwater Archaeology Branch at (910) 458-9042 to determine the location of any significant historical resources located within the project area to assure avoidance and incidental impacts during operations.
- 21) There exists the possibility that the authorized activities may unearth a beached shipwreck. Should such a finding occur, the permittee shall immediately move to another area. The NCDCCR Underwater Archaeology Branch shall be contacted at (910) 458-9042 to determine appropriate response procedures.

ADDITIONAL CONDITIONS

General

- 22) This permit shall not be assigned, transferred, sold, or otherwise disposed of to a third party without the written approval of the Division of Coastal Management.
- 23) The permittee and his contractor shall schedule a pre-construction conference with the Division of Coastal Management prior to the initiation of any dredging activities.
- 24) No attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work.

NOTE: The permittee's contractor is advised to contact the U.S. Coast Guard at (910) 815-4895, ext. 108 to discuss operations and appropriate lighting, markers, etc. for all dredge equipment.

- 25) The permittee shall obtain any necessary authorizations or approvals from the US Army Corps of Engineers prior to initiation of any permitted activity. All conditions of this Federal approval shall be adhered to.
- 26) The permittee and/or his contractor shall provide for proper storage and handling of all oils, chemicals, hydraulic fluids, etc., necessary to carry out the project.
- 27) The N.C. Division of Water Quality has authorized the proposed project under General Water Quality Certification No. 3780 (DWQ Project No. 20011836, Ver. 3), which was issued on 6/18/12. Any violation of the Water Quality Certification shall also be considered a violation of this CAMA Permit.
- 28) No sand shall be placed on any sand bags that have been determined by the Division of Coastal Management to be subject to removal under 15A NCAC 07H .0308(a)(2). In order to ensure compliance with this condition, the Division of Coastal Management shall be contacted at (910) 796-7215 prior to project initiation so that Division staff may meet on site with the permittee and/or contractor.
- 29) This Major Modification shall be attached to the original of Permit No. 14-02, which was issued on 2/1/02, as well as all subsequent modification, renewals and refinements, and copies of all documents shall be readily available on site when Division personnel inspect the project for compliance.
- 30) All conditions and stipulations of the active permit remain in force under this minor modification unless altered herein.

ADDITIONAL CONDITIONS

- NOTE:** The permittee is advised that the Division of Coastal Management shall regulate the removal of existing sandbags and the placement of new sandbags in accordance with 15A NCAC 07H .0308(a)(2)(F), or in accordance with any variances granted by the N.C. Coastal Resources Commission.
- NOTE:** This permit does not eliminate the need to obtain any additional state, federal or local permits, approvals or authorizations that may be required.
- NOTE:** Future nourishment activities may require a modification of this permit. The permittee shall contact a representative of the Division at (910) 796-7215 prior to the commencement of any such activity for this determination.

NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

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 Quality (DWQ) Regulations in 15 NCAC 2H Section 0500 to Mr David Hewett Town Manager of the Town of Holden Beach to nourish approximately 22 000 linear feet of shoreline by placing up to 1 310 000 cubic yards of beach compatible sand on approximately 52 acres of beach above Mean High Water (MHW) and approximately 140 acres below MHW from Station 40+00 to Station 260+00 The sand source of this project is a borrow area of approximately 590 acres to be dredged as described within the application filed on the 15th day of February of 2012 with additional information received on June 11 2012 This project covers approximately 4.2 miles of shoreline in the Lumber River Basin in association with the Town of Holden Beach nourishment project Brunswick County North Carolina

The application and supporting documentation provides adequate assurance that the proposed work 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 the supporting documentation and conditions hereinafter set forth

This approval is only valid for the purpose and design submitted in the application materials and as described in the Public Notice and the Division of Coastal Management Applications and modifications If the project is changed prior to notification a new application for a new Certification is required If the property is sold the new owner must be given a copy of the Certification and approval letter and is thereby responsible for complying with all conditions of this Certification Any new owner must notify the Division and request the Certification be issued in their name Should wetland or stream fill be requested in the future additional compensatory mitigation may be required as described in 15A NCAC 2H 0506 (h) (6) and (7) If any plan revisions from the approved site plan result in a change in stream or wetland impact or an increase in impervious surfaces the DWQ shall be notified in writing and a new application for 401 Certification may be required For this approval to be valid compliance with the conditions listed below is required

Conditions of Certification

1 Impacts Approved

The following impacts are hereby approved as long as all of the other specific and general conditions of this Certification (or Isolated Wetland Permit) are met No other impacts are approved including incidental impacts

Type of Impact	Amount Approved (Units)	Plan Location or Reference
Beach (Above Mean High Water)	52 acres	Application and Public Notice
Open Water (near shore) below MHW filled	140 acres	Application and Public Notice
Open Water (off shore source dredge)	590 acres	Application and Public Notice

Sediment and Erosion Control

- 2 Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters and lands:
 - a The erosion and sediment control measures for the project must be designed, installed, operated and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*
 - b The design, installation, operation and maintenance of the sediment and erosion control measures must be such that they equal or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor owned or leased borrow pits associated with the project.
 - c For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*
 - d The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act
- 3 No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts depicted in the 404/401 Permit Application. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best Management Practices, shall be performed so that no violations of state water quality standards, statutes, or rules occur.
- 4 Sediment and erosion control measures shall not be placed in wetlands or waters to the maximum extent practicable. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, they shall be removed and the natural grade restored within six months of the date that the Division of Land Resources has released the project.

Continuing Compliance

- 5 Mr. David Hewett, Town Manager of the Town of Holden Beach, shall conduct construction activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with section 303(d) of the Clean Water Act) and any other appropriate requirements of State law and federal law. Mr. David Hewett, Town Manager of the Town of Holden Beach, shall require its contractors (and/or agents) to comply with all of the terms of this Certification, and shall provide each of its contractors (and/or agents) a copy of this Certification. A copy of this Certification shall be included in the construction contract and available on the job site at all times. If the Division 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 Division may reevaluate and modify this Certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15A NCAC 2H 0507(d). Before modifying the Certification, the Division shall notify Mr. David Hewett, Town Manager of the Town of Holden Beach, the US Army Corps of Engineers, and provide public notice in accordance with 15A NCAC 2H 0503 and provide opportunity for a public hearing in accordance with 15A NCAC 2H 0504. Any new or revised conditions shall be provided to Mr. David Hewett, Town Manager of the Town of Holden Beach, in writing, shall be provided to the United States Army Corps of Engineers for reference in any Permit.

issued pursuant to Section 404 of the Clean Water Act and shall also become conditions of the 404 Permit for the project

Other conditions

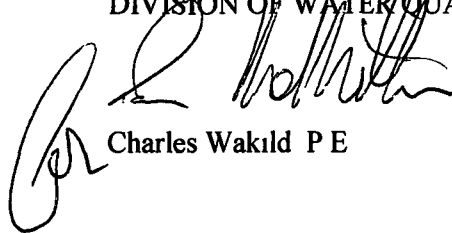
- 6 Any final construction plans for this project must include or reference the application and plans approved by the DWQ under this authorization letter and certification
- 7 All applicable moratoriums shall be observed as required by the NC Division of Marine Fisheries NC Wildlife Resources US Fish and Wildlife and National Marine Fisheries
- 8 This Certification covers the one time event of beach renourishment for the Town of Holden Beach at the location previously specified Any future activity that includes work in the inter tidal zone or additional renourishment will require a new 401 Water Quality application and certification
- 9 Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules and any subsequent modifications the applicant is required to return the attached certificate of completion to the 401 Oversight/Express Review Permitting Unit North Carolina Division of Water Quality 1650 Mail Service Center Raleigh NC 27699 1650

Also, this approval to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application shall expire upon expiration of the 404 or CAMA Permit

If this Certification is unacceptable to you you have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this Certification This request must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings 6714 Mail Service Center Raleigh NC 27699 6714 If modifications are made to an original Certification you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification Unless such demands are made this Certification shall be final and binding

This the 18th day of June 2012
DIVISION OF WATER QUALITY



Charles Wakild P E

CW/kah/ym

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