

# NC COASTAL RESOURCES COMMISSION

November 27-29, 2018

Brick Landing Plantation

Ocean Isle Beach, NC

The State Government Ethics Act mandates that at the beginning of any meeting the Chair remind all the members of their duty to avoid conflicts of interest and inquire as to whether any member knows of any conflict of interest or potential conflict with respect to matters to come before the Commission. If any member knows of a conflict of interest or potential conflict, please state so at this time.

## Tuesday, November 27<sup>th</sup>

### 10:00 COASTAL RESOURCES ADVISORY COUNCIL MEETING

### 12:00 LUNCH

### 1:00 DIVISION OF COASTAL MANAGEMENT OVERVIEW & COMMISSIONER ORIENTATION (Event Room)

- Open Meetings Law, Public Records Law, Ethics Act & Conflicts of Interest Ethics Letters, and CRC Operating Procedures Mary Lucasse
- Training on Variance Procedures Mary Lucasse
- Division of Coastal Management Overview Braxton Davis
- Public Trust Area of Environmental Concern Christy Goebel
- CAMA Permitting Gregg Bodnar
- Federal Consistency Daniel Govoni
- Review of Ocean Hazard AEC Setback Lines (*CRC-18-18*) Ken Richardson

### 3:00 BREAK

### 3:15 COMMISSION CALL TO ORDER\* (Event Room)

- Roll Call Renee Cahoon, Chair
- Chair's Comments
- Boards & Commissions Reimbursements, BEACON and Waivers OSHR Temporary Solutions

### 3:30 VARIANCES

- Zito - (*CRC-VR-18-04*), Nags Head, oceanfront setback Frank Jennings  
Christine Goebel, Esq.  
Christopher Seawell, Esq.
- Town of Caswell Beach - (*CRC-VR-18-06*), oceanfront setback Debbie Wilson  
Christine Goebel, Esq.  
Justin Humphries, Esq.

### 5:00 RECESS

## Wednesday, November 28<sup>th</sup>

### 8:30 COMMISSION CALL TO ORDER\* (Event Room)

- Roll Call Renee Cahoon, Chair
- Chair's Comments
- Approval of April 10-11, 2018 Meeting Minutes
- Executive Secretary's Report Braxton Davis
- CRAC Report Greg "rudi" Rudolph

### 9:30 HURRICANE FLORENCE & TROPICAL STORM MICHAEL OVERVIEW

- Coastal Impacts Braxton Davis
- Community Impacts Chris May, Exec. Dir.  
Cape Fear COG  
Samantha Burdick, Planner  
Eastern Carolina Council

**10:45 BREAK**

**11:00 COASTAL ISSUES**

- GenX Update

Sheila Holman,  
DEQ Asst. Secretary  
Renee Cahoon, Chair

**11:45 PUBLIC INPUT AND COMMENT**

**12:00 LUNCH**

**1:15 CRC RULE DEVELOPMENT**

- Periodic Review Rule Re-adoption Schedule (*CRC-18-16*)
- Major Permit Renewals (*CRC-18-17*)
- Consideration of Unvegetated Beach Designation – Surf City (*CRC-18-25*)
- 15A NCAC 7H .2700 Marsh Sills General Permit – Consideration of Temporary/Permanent Rulemaking, Fiscal Note Approval (*CRC-18-26*)

Mike Lopazanski  
Courtney Spears  
Ken Richardson  
Daniel Govoni

**2:45 BREAK**

**3:00 ACTION ITEMS**

- Consideration of Final Adoption 15A NCAC 7B .0802 Public Hearing and Local Adoption Requirements & 7B. 0803 Certification and Use of the Plan (CRC Delegation of Certification)
- Consideration of Final Adoption 15A NCAC 7H .0209 - Coastal Shorelines (Stormwater Correction)
- Consideration of Final Adoption 15A NCAC 7K .0208 - Single Family Residences Exempted (LPO Authority)
- Review of Public Comments & Consideration of Final Adoption 15A NCAC 7H .0308 Specific Use Standards & 7K .0103 Maintenance and Repair (Dune Rules) (*CRC-18-21*)
- Consideration of Final Adoption 15A NCAC 7H .0308; 7H .1704 and 7H .1705 Temporary Erosion Control Structures (Sandbags)
- Consideration of Fiscal Analysis Approval 15A NCAC 7H .0309 Exceptions (Outfalls) (*CRC-18-22*)
- Consideration of Fiscal Analysis Approval 15A NCAC 7J .0409 Civil Penalties (*CRC-18-23*)
- Consideration of Fiscal Analysis Approval 15A NCAC 7H .0304 State Ports Inlet Management AEC (*CRC-18-27*)

Mike Lopazanski

Heather Coats

**4:00 LEGAL UPDATES**

- Update on Litigation of Interest to the Commission
- Update on The Riggings and Temporary Erosion Control Structures Legislation

Mary Lucasse

**4:45 RECESS**

## **Thursday, November 29<sup>th</sup>**

**9:00 COMMISSION CALL TO ORDER\* (Event Room)**

- Roll Call
- Chair's Comments

Renee Cahoon, Chair

**9:15 BEACH AND INLET MANAGEMENT**

- Town of Oak Island Development Line Amendment (*CRC-18-28*)
- Ocean Erodible AEC and Setback Factor Update Study – Long-term Erosion Rates (*CRC-18-20*)
- CRC Science Panel IHA Delineation Update (*CRC-18-24*)
- Commission Discussion of IHA Management

Ken Richardson  
Ken Richardson

Bill Birkemeier, Science Panel  
Ken Richardson



**10:30 BREAK**

**10:45 BEACH AND INLET MANAGEMENT**

- Dredged Material Management In NC

Justin McCorcle, USACE  
Layton Bedsole, New Hanover  
Co. Shore Protection  
Greg “rudi” Rudolph,  
Carteret Co. Shore Protection

**12:00 OLD/NEW BUSINESS**

Renee Cahoon, Chair

**12:15 ADJOURN**

Executive Order 34 mandates that in transacting Commission business, each person appointed by the governor shall act always in the best interest of the public without regard for his or her financial interests. To this end, each appointee must recuse himself or herself from voting on any matter on which the appointee has a financial interest. Commissioners having a question about a conflict of interest or potential conflict should consult with the Chairman or legal counsel.

*\* Times indicated are only for guidance and will change. The Commission will proceed through the agenda until completed; some items may be moved from their indicated times.*

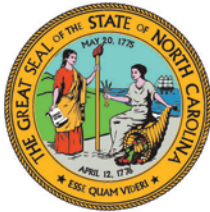


N.C. Division of Coastal Management

[www.nccoastalmanagement.net](http://www.nccoastalmanagement.net)

Next Meeting: February 27-28, 2019

TBD



NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

BRAXTON C. DAVIS  
Director

September 4, 2018

**MEMORANDUM**

**CRC-18-18**

**TO:** Coastal Resources Commission  
**FROM:** Ken Richardson, *Shoreline Management Specialist*  
**SUBJECT:** Review of Ocean Hazard AEC Setback Lines

**Ocean Hazard AEC**

The Ocean Hazard Setback for siting oceanfront development is measured in a landward direction from the first line of stable and natural vegetation (vegetation line), the static vegetation line, or the measurement line. Setback distance is calculated by multiplying a Setback Factor (a.k.a. “erosion rate”) times a graduated variable that corresponds to the size of the proposed structure (*see Table 1*). The Setback Factor represents the statistically smoothed and blocked, average annual, long-term shoreline change rates, which are updated approximately every 5 years. For purposes of establishing a minimum construction setback, “2” is the default minimum Setback Factor, which includes those areas with erosion rates less than 2 feet/year and areas where accretion is measured.

Oceanfront Setback Factors were established by the Coastal Resources Commission (CRC) under the Coastal Area Management Act (CAMA) in 1979 to minimize losses of life and property resulting from storms and long-term erosion, while also preventing encroachment of permanent structures on public beach areas, preserving the natural ecological conditions of the barrier dune and beach systems, and reducing the public costs of inappropriately-sited development. To accomplish the management objectives for the Ocean Hazard Area, Setback Factors serve two purposes: 1) to properly site oceanfront development, and; 2) to determine the landward-most extent of the Ocean Erodible Area of Environmental Concern (OEA) - the area where there is a substantial possibility of future shoreline erosion.



**Table 1.** Setback Factors & graduated setback.

<b>Structure Size</b>	<b>Setback (feet)</b>	<b>example “setback factor = 2”</b>
< 5,000 sqft.	Minimum 60 feet, or 30 x setback factor	$2 \times 30 = 60 \text{ feet}$
$\geq 5,000$ sqft.	Minimum 120 feet, or 60 x setback factor	$2 \times 60 = 120 \text{ feet}$
$\geq 10,000$ sqft.	Minimum 130 feet or 65 x setback factor	$2 \times 65 = 130 \text{ feet}$
$\geq 20,000$ sqft.	Minimum 140 feet or 70 x setback factors	$2 \times 70 = 140 \text{ feet}$
$\geq 40,000$ sqft.	Minimum 150 feet or 75 x setback factor	$2 \times 75 = 150 \text{ feet}$
$\geq 60,000$ sqft.	Minimum 160 feet or 80 x setback factor	$2 \times 80 = 160 \text{ feet}$
$\geq 80,000$ sqft.	Minimum 170 feet or 85 x setback factor	$2 \times 85 = 170 \text{ feet}$
$\geq 100,000$ sqft.	Minimum 180 feet or 90 x setback factor	$2 \times 90 = 180 \text{ feet}$

North Carolina’s oceanfront shoreline changes rates have historically been calculated using the End-Point method since the first study was conducted in 1979. This method uses the earliest and most current shoreline data points where they intersect at any given shore-perpendicular transect. The distance between the two shorelines (shore-transect intersect) is then divided by the time, or number of years, between the two shorelines. Since the current method used to calculate shoreline change rates has been consistent since 1979, it provides the CRC with results that can be generally compared to those from previous studies. With the advancement of mapping technology and a greater inventory of shoreline data, results from methods that can incorporate multiple (more than two) shorelines will be compared during the 2018-2019 update.

Additionally, because setbacks can help preserve spaces that can serve as undeveloped buffer areas for storms, the U.S. Federal Emergency Management Administration (FEMA) currently uses North Carolina’s erosion rate updates to award Community Rating System (CRS) points to qualified coastal communities. The CRS is used by FEMA to assess flood insurance rates for these communities. FEMA’s current policy allows North Carolina’s oceanfront erosion rate update to account for fifty (50) CRS points only if the state’s erosion rates are updated every five years. Loss of these points could potentially result in increased flood insurance rates for certain coastal communities.

## **Setback Lines**

Oceanfront Setback Lines for development are measured in a landward direction from the vegetation line, the static vegetation line, or the measurement line.

- A. Vegetation Line, or First Line of Stable & Natural Vegetation (FLSNV)** The FLSNV is the primary reference feature for measuring oceanfront setbacks. This line represents



the boundary between the normal dry-sand beach, and the more stable uplands. If the vegetation has been planted, it may be considered “stable” when most of the plant stems are from continuous rhizomes rather than planted individual root sets. Planted vegetation may be considered “natural” when most of the plants are mature and additional species native to the region have been recruited, providing stem and rhizome densities that are like adjacent areas that are naturally occurring.

While the vegetation line has been used as an oceanfront setback measurement line since 1979, the CRC has previously determined that when vegetation moves oceanward after a beach nourishment project, this represents an artificial situation that should not be considered “stable and natural” and therefore should not be used for measuring oceanfront setbacks. In 1995, the CRC codified a method of measuring setbacks on nourished beaches that utilizes the surveyed pre-project existing vegetation line, which became known as the “Static Vegetation Line.”

**B. Static Vegetation Line (SVL):** The SVL is established in areas within the boundaries of a large-scale beach fill project (>300,000 cubic yards) and represents the vegetation line that existed within one year prior to the onset of project construction. A static line is established in coordination with the Division of Coastal Management. Once a static line is established, setbacks are measured from either the static line or the vegetation line, whichever is more landward. In addition, once a static line is established it does not expire.

The CRC’s static line rule was based on three primary issues: 1) evidence that nourished beaches can have higher erosion rates than natural beaches, 2) no assurance that funding for future nourishment projects would be available for maintenance work as the original project erodes away, and 3) structures could be more vulnerable to erosion damage since their siting was tied to an artificially-forced system. The intent of the static line provisions has been to recognize that beach nourishment is an erosion response necessary to protect existing development but should not be a stimulus for new development on sites that are not otherwise suitable for building.

**C. Static Vegetation Line Exception:** Over time, the Commission found that some communities had demonstrated a long-term commitment to beach nourishment and maintenance of their nourished beaches. Due to this long-term commitment, beach vegetation had become stable and migrated oceanward of the static line. In many cases, proposed development on lots within these communities could meet the required setback from the new vegetation line but could not be permitted since they did not meet the setback from the static vegetation line.



To recognize local government efforts to address erosion through a documented long-term commitment to beach nourishment, and to offer relief from the static line requirements, the CRC adopted Static Vegetation Line Exception procedures in 2009. The Static Vegetation Line Exception allows a community to measure setbacks from the vegetation line rather than the static line, but includes certain limitations and conditions.

To be eligible for this exception, a community must petition the CRC by providing a beach management plan that describes the project area and design; identify sediment sources; identify funding sources to maintain the initial large-scale project; and, provide an update on project effectiveness and how it will continue to be maintained. The plan must be updated and presented to the CRC every 5 years for reauthorization. Under the exception, development must meet the required setback from the vegetation line, no portion of a building or structure can be oceanward of the landward-most adjacent neighbor or an average line of construction is determined by DCM, and no swimming pools may be permitted seaward of static line.

**D. Development Line:** In 2016, the Commission provided a second alternative to the Static Line by promulgating “Development Line” procedures. The Development Line allows use of the vegetation line for setback determinations, with local governments setting the oceanward limit of structures, subject to CRC approval. Unlike with the Static Line Exception, there is no requirement for a demonstrated long-term commitment to beach nourishment or beach management plan. The following conditions are required:

1. Development line is mapped by the community using an average line of construction and must be referenced in local ordinance(s).
2. Represents the seaward-most allowable limit of oceanfront development.
3. Must be approved by the CRC. Once approved, only the community can request a change.
4. Development must meet the applicable setback from the vegetation line.
5. No swimming pools may be permitted seaward of the static line.

Currently there are twenty-one North Carolina communities with a static line. Eight of those communities have CRC-authorized Static Vegetation Line Exceptions, and four of them have CRC-approved Development Lines (*see Table 2*).



**Table 2.** List of Communities with Static Vegetation Lines, SVL Exceptions and Development Lines.

<b>Community</b>	<b>SVL</b>	<b>SVL Exception</b>	<b>DVL</b>
<b>Ocean Isle</b>	<b>Yes</b>	<b>Yes</b>	<i>No</i>
<b>Oak Island</b>	<b>Yes</b>	<i>No</i>	<b>Yes</b>
<b>Caswell Beach</b>	<b>Yes</b>	<i>No</i>	<i>No</i>
<b>Bald Head Island</b>	<b>Yes</b>	<i>No</i>	<i>No</i>
<b>Kure Beach</b>	<b>Yes</b>	<i>No</i>	<b>Yes</b>
<b>Carolina Beach</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Wrightsville Beach</b>	<b>Yes</b>	<b>Yes</b>	<i>No</i>
<b>Figure Eight Island</b>	<i>No</i>	<i>No</i>	<b>Yes</b>
<b>Topsail Beach</b>	<b>Yes</b>	<i>No</i>	<i>No</i>
<b>North Topsail Beach</b>	<b>Yes</b>	<i>No</i>	<i>No</i>
<b>Emerald Isle</b>	<b>Yes</b>	<b>Yes</b>	<i>No</i>
<b>Indian Beach</b>	<b>Yes</b>	<b>Yes</b>	<i>No</i>
<b>Salter Path</b>	<b>Yes</b>	<b>Yes</b>	<i>No</i>
<b>Pine Knoll Shores</b>	<b>Yes</b>	<b>Yes</b>	<i>No</i>
<b>Atlantic Beach</b>	<b>Yes</b>	<b>Yes</b>	<i>No</i>
<b>Buxton</b>	<b>Yes</b>	<i>No</i>	<i>No</i>
<b>Rodanthe</b>	<b>Yes</b>	<i>No</i>	<i>No</i>
<b>Nags Head</b>	<b>Yes</b>	<i>No</i>	<i>No</i>
<b>Kill Devil Hills</b>	<b>Yes</b>	<i>No</i>	<i>No</i>
<b>Kitty Hawk</b>	<b>Yes</b>	<i>No</i>	<i>No</i>
<b>Southern Shores</b>	<b>Yes</b>	<i>No</i>	<i>No</i>

**E. Measurement Line:** A Measurement Line represents the post-storm location of a vegetation line if a storm causes overwash or a loss of vegetation so that not enough vegetation exists to determine oceanfront setbacks. This line is located by using the most current pre-storm aerial photography to map the pre-storm vegetation line, and then moving it landward a distance equal to the average width of the beach recession caused by the storm. Measurement lines are generally temporary until the vegetation is re-established to the point where it can once again be used for determining oceanfront setbacks but may also be permanently designated by the CRC.



<b>Key Differences</b>	<b>SVL Exception</b>	<b>DVL</b>
Approved by CRC	✓	✓
Measure Setbacks from FLSNV (not SVL)	✓	✓
Mapped & Managed by Community	✗	✓
CRC Reauthorization Required	✓	✗
Structures could potentially move seaward of adjacent structure	✗	✓
Beach Management Plan Required	✓	✗
Swimming Pools Seaward of SVL	✗	✗
Eliminates Static Vegetation Line	✗	✗





ROY COOPER  
*Governor*

MICHAEL S. REGAN  
*Secretary*

WILLIAM F. LANE  
*General Counsel*

TO: The Coastal Resources Commission

FROM: Christine A. Goebel, DEQ Assistant General Counsel

DATE: November 16, 2018 (for the November 27-29, 2018 CRC Meeting)

RE: **Variance Request by Michael and Catherine Zito (CRC-VR-18-04)**

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Petitioners Michael and Catherine Zito (“Petitioners”) own property at 10224 Sea Gull Drive (the “Site”) in the South Nags Head area of the Town of Nags Head. The property is located within the Commission’s Ocean Hazard Area of Environmental Concern (“AEC”). This area of Nags Head is subject to a “static line” following a large-scale beach nourishment project in 2011.

In October of 2016, Petitioners former 2-story piling-supported structure was destroyed by fire. In July of 2017, Petitioners filed an initial CAMA Minor Permit application seeking to re-develop a new structure in the same size and in the same footprint as the pre-existing structure. After completing the application in spring of 2018, on April 26, 2018, the Town of Nags Head’s Coastal Area Management Act (“CAMA”) Local Permitting Officer (“LPO”) denied Petitioners’ CAMA Minor Permit application as the proposed addition does not meet the applicable 180’ setback from the static line and does not meet the 60’ setback exception under 15A NCAC 7H .0309. In August of 2018, Petitioners, through counsel, filed this variance petition to request the Commission vary the oceanfront setback rules so it can develop the re-developed structure as proposed.

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.): Christopher Seawell, Esq., Petitioner’s Counsel, electronically  
Mary Lucasse, Special Deputy AG and CRC Counsel, electronically  
Kelly Wyatt, Town of Nags Head CAMA LPO, electronically





**RELEVANT STATUTES OR RULES****APPENDIX A****15A NCAC 07H .0301 OCEAN HAZARD CATEGORIES**

The next broad grouping is composed of those AECs that are considered natural hazard areas along the Atlantic Ocean shoreline where, because of their special vulnerability to erosion or other adverse effects of sand, wind, and water, uncontrolled or incompatible development could unreasonably endanger life or property. **Ocean hazard areas include beaches**, frontal dunes, inlet lands, and other areas in which geologic, vegetative and soil conditions indicate a substantial possibility of excessive erosion or flood damage.

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

(a) The primary causes of the hazards peculiar to the Atlantic shoreline are 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 significant 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, therefore, because of both the severity of the hazards and the intensity of interest in the 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 appropriate location of structures on and near these landforms must be reviewed carefully in order to avoid their loss or damage. As a whole, the same flexible nature of these landforms which presents hazards to development situated immediately on them 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. (The role of each landform is described in detail in Technical Appendix 2 in terms of the physical processes most important to each.) Overall, however, the energy dissipation and sand storage capacities of the landforms are most essential for 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 indigenous to the Atlantic 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 to provide management policies and standards for ocean hazard areas that serve to eliminate unreasonable 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 purpose of these Rules shall be to further the goals set out in G.S. 113A-102(b), with particular attention to minimizing losses to life and property resulting from storms and long-term erosion, preventing encroachment of permanent structures on public beach areas, preserving the natural ecological conditions of the barrier dune and beach systems, and reducing the public costs of inappropriately sited development. Furthermore, it is the objective of the Coastal Resources Commission to protect present common-law and statutory public rights of access to and use of the lands and waters of the coastal area.**

**15A NCAC 07H .0304 AECS WITHIN OCEAN HAZARD AREAS**

The ocean hazard AECs contain all of the following areas:

(1) Ocean Erodible Area. This is the area where there exists a substantial possibility of excessive erosion and significant shoreline fluctuation. The oceanward boundary of this area is the mean low water line. The landward extent of this area is determined as follows:

(a) a distance landward from the first line of stable and natural vegetation as defined in 15A NCAC 07H .0305(a)(5) to the recession line established by multiplying the long-term annual erosion rate times 60; provided that, where there has been no long-term erosion or the rate is less than two feet per year, this distance shall be set at 120 feet landward from the first line of stable natural vegetation. For the purposes of this Rule, the erosion rates are the long-term average based on available historical data. The current long-term average erosion rate data for each segment of the North Carolina coast is depicted on maps entitled "2011 Long-Term Average Annual Shoreline Rate Update" and approved by the Coastal Resources Commission on May 5, 2011 (except as such rates may be varied in individual contested cases, declaratory, or interpretive rulings). In all cases, the rate of shoreline change shall be no less than two feet of erosion per year. The maps are available without cost from any Local Permit Officer or the Division of Coastal Management on the internet at <http://www.nccoastalmanagement.net>; and (b) a distance landward from the recession line established in Sub-Item (1)(a) of this Rule to the recession line that would be generated by a storm having a one percent chance of being equaled or exceeded in any given year.

**15A NCAC 07H .0306 GENERAL USE STANDARDS FOR OCEAN HAZARD AREAS**

(a) In order to protect life and property, all development not otherwise specifically exempted or allowed by law or elsewhere in the Coastal Resources Commission's rules shall be located according to whichever of the following is applicable:

(1) The ocean hazard setback for development is measured in a landward direction from the vegetation line, the static vegetation line, or the measurement line, whichever is applicable.

(2) In areas with a development line, the ocean hazard setback line shall be set at a distance in accordance with Subparagraphs (a)(3) through (9) of this Rule. In no case shall new development be sited seaward of the development line.

(3) In no case shall a development line be created or established below the mean high water line.

(4) The setback distance shall be determined by both the size of development and the shoreline long term erosion rate as defined in Rule .0304 of this Section. "Development size" is defined by total floor area for structures and buildings or total area of footprint for development other than structures and buildings. Total floor area includes the following:

(A) The total square footage of heated or air-conditioned living space;

(B) The total square footage of parking elevated above ground level; and

(C) The total square footage of non-heated or non-air-conditioned areas elevated above ground level, excluding attic space that is not designed to be load-bearing.

Decks, roof-covered porches, and walkways are not included in the total floor area unless they are enclosed with material other than screen mesh or are being converted into an enclosed space with material other than screen mesh.

**(5) With the exception of those types of development defined in 15A NCAC 07H .0309, no development, including any portion of a building or structure, shall extend oceanward of the ocean hazard setback distance.** This includes roof overhangs and elevated structural components that are cantilevered, knee braced, or otherwise extended beyond the support of pilings or footings. The ocean hazard setback is established based on the following criteria:

(A) A building or other structure less than 5,000 square feet requires a minimum setback of 60 feet or 30 times the shoreline erosion rate, whichever is greater;

**15A NCAC 07H .0309 USE STANDARDS FOR OCEAN HAZARD AREAS: EXCEPTIONS**

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(b) Where application of the oceanfront setback requirements of Rule .0306(a) of this Subchapter would preclude placement of permanent substantial structures on lots existing as of June 1, 1979, buildings shall be permitted seaward of the applicable setback line in ocean erodible areas, but not inlet hazard areas or unvegetated beach areas, if each of the following conditions are met:

(1) The development is set back from the ocean the maximum feasible distance possible on the existing lot and the development is designed to minimize encroachment into the setback area;

(2) The development is at least 60 feet landward of the vegetation line or static vegetation line, whichever is applicable;

(3) The development is not located on or in front of a frontal dune, but is entirely behind the landward toe of the frontal dune;

(4) The development incorporates each of the following design standards, which are in addition to those required by Rule .0308(d) of this Subchapter.

(A) All pilings shall have a tip penetration that extends to at least four feet below mean sea level;

(B) The footprint of the structure shall be no more than 1,000 square feet, and the total floor area of the structure shall be no more than 2,000 square feet. For the purpose of this Section, roof-covered decks and porches that are structurally attached shall be included in the calculation of footprint;

(C) Driveways and parking areas shall be constructed of clay, packed sand or gravel except in those cases where the development does not abut the ocean and is located landward of a paved public street or highway currently in use. In those cases concrete, asphalt or turfstone may also be used;

(D) No portion of a building's total floor area, including elevated portions that are cantilevered, knee braced or otherwise extended beyond the support of pilings or footings, may extend oceanward of the total floor area of the landward-most adjacent building. When the geometry or orientation of a lot precludes the placement of a building in line with the landward most adjacent structure of similar use, an average line of construction shall be determined by the Division of Coastal Management on a case-by-case basis in order to determine an ocean hazard setback that is landward of the vegetation line, static vegetation line or measurement line, whichever is applicable, a distance no less than 60 feet.

(5) All other provisions of this Subchapter and other state and local regulations are met. If the development is to be serviced by an on site waste disposal system, a copy of a valid permit for such a system shall be submitted as part of the CAMA permit application.

**15A NCAC 07J .0210                    REPLACEMENT OF EXISTING STRUCTURES**

Replacement of structures **damaged or destroyed by natural elements, fire or normal deterioration** is considered development and requires CAMA permits. Replacement of structures shall be permitted if the replacements is consistent with current CRC rules. Repair of structures damaged by natural elements, fire or normal deterioration is not considered development and shall not require CAMA permits. The CRC shall use the following criteria to determine whether proposed work is considered repair or replacement.

- (1) **NON-WATER DEPENDENT STRUCTURES.** Proposed work is considered replacement if the cost to do the work exceeds 50 percent of the market value of an existing structure immediately prior to the time of damage or the time of request. Market value and costs are determined as follows:
  - (a) Market value of the structure does not include the value of the land, value resulting from the location of the property, value of accessory structures, or value of other improvements located on the property. Market value of the structure shall be determined by the Division based upon information provided by the applicant using any of the following methods:
    - (i) appraisal;
    - (ii) replacement cost with depreciation for age of the structure and quality of construction; or
    - (iii) tax assessed value.
  - (b) The cost to do the work is the cost to return the structure to its pre-damaged condition, using labor and materials obtained at market prices, regardless of the actual cost incurred by the owner to restore the structure. It shall include the costs of construction necessary to comply with local and state building codes and any improvements that the owner chooses to construct. The cost shall be determined by the Division utilizing any or all of the following:
    - (i) an estimate provided by a North Carolina licensed contractor qualified by license to provide an estimate or bid with respect to the proposed work;
    - (ii) an insurance company's report itemizing the cost, excluding contents and accessory structures; or
    - (iii) an estimate provided by the local building inspections office.

**STIPULATED FACTS****ATTACHMENT B**

1. Petitioners Michael and Catherine Zito ("Petitioners") own an oceanfront lot located at 10224 Seagull Drive (the "Lot") in South Nags Head, Dare County, North Carolina (Lot 48 and adjacent washed out road parcel, Goosewing Subdivision). The Lot and this portion of Goosewing Subdivision were platted in 1977, as shown on the subdivision plat recorded on March 24, 1977 in Map Book 9, Page 57 of the Dare County Registry.
2. Petitioners purchased the Lot on August 29, 2008, as evidenced by a deed recorded at Book 1777, Page 455 of the Dare County Registry, a copy of which is attached. In 2016, the Town of Nags Head closed Seagull Drive, and adjacent owners such as Petitioners, were deeded half the width of the platted road (subject to an access easement by other subdivision lot owners), as noted in the resolution recorded at Book 2125, Page 243 of the Dare County Registry, a copy of which is attached. The Lot (original and washout) are shown on the survey of the Zito Lot sealed by Manson Ray Meekins, P.L.S. on December 13, 2017, attached ("Meekins Survey").
3. The current Lot is approximately 73 feet wide by 140 feet deep, for a total of 10,220 square feet (or 0.23 acres), as shown on the Meekins Survey. The CAMA Minor Permit application including the Site Survey is attached.
4. The Lot is in Flood Zone VE (Elevations 11' & 12') as shown on the Meekins Survey.
5. The Lot is within the Ocean Erodible Area of Environmental Concern ("AEC"), a subcategory of the Ocean Hazard AEC designated by the Coastal Resources Commission ("CRC") in 15A NCAC 7H .0304.
6. The Annual Average Erosion Rate at the Lot is 6' per year with the applicable setback for a building measuring 5,000 square feet or less in Total Floor Area is 180' landward of the applicable setback line ( $6 \times 30 = 180$ ).
7. Petitioners' former two-story piling-supported home was built in 1982. While the tax card lists the area of the prior structure as 1,536 square feet, a 2008 appraisal of the prior structure lists a 32' by 28' footprint, for a two-story total area of approximately 1,792 square feet of heated space and 384 square feet of detached uncovered wood slated decking. The site also included an a/c platform, stairs, and a gravel driveway. Photos of the former home from the 2007 map of the access road, Dare County Tax Card and Google Earth are attached as stipulated exhibits. A copy of the 2008 appraisal is also attached.
8. On October 10, 2016, the home was destroyed by fire. The septic tank and drain field remained. A Google Earth Photo of the Lot taken on March 24, 2017 is attached as a stipulated exhibit.
9. Beginning shortly after the fire, Town officials communicated with Petitioners' counsel Mr. Seawell and Petitioners' consultant Mr. Wood to find out if Petitioners planned to try and re-build, and if not, would require removal of the septic system and drain field.

10. On or about July 31, 2017, Petitioners' attorney Mr. Seawell submitted an initial CAMA Minor Permit application to the Town of Nags Head's CAMA Local Permit Officer ("LPO") for review. Following the Town's receipt of the application on August 4, 2017, on August 15, 2017, LPO Kelly Wyatt notified Petitioners' consultant Mr. Wood of several deficiencies in the CAMA permit application and specifically the site plan survey. Due to the incomplete nature of the application, it was placed on hold.
11. Petitioners' CAMA Minor Permit Application remained on hold until the application was deemed complete after the March 1, 2018 septic authorization was received by the Town. A copy of the CAMA Minor Permit application materials is attached as a stipulated exhibit.
12. Petitioners propose to rebuild his home in the same 32' x 28' footprint of the home destroyed, with a resulting maximum Total Floor Area of 1,792 square feet (not the 2,048 listed on the CAMA minor permit application). Additionally, Petitioners have also proposed 384 square feet of detached uncovered wood slated decking an HVAC platform and two sets of stairs. Petitioners also propose that their driveway would be constructed of clay, packed sand or gravel per 15A NCAC 7H .0309 (a)(2).
13. If Petitioners rebuild in the same location, the southeast corner of the house would be approximately 12' landward of the static vegetation line and the northeast corner of the proposed dwelling is approximately 20' landward of the static vegetation line.
14. The existing septic tank and drain field were authorized for use for a reconstructed home, as evidenced by the attached Improvement Permit No. 27602, issued on March 1, 2018.
15. The CRC has adopted an erosion setback ("Erosion Setback") requirement that applies to development along the oceanfront. 15A NCAC 7H .0306(a).
16. The Erosion Setback is generally measured from the first line of stable natural vegetation ("FLSNV"). "This line represents the boundary between the normal dry-sand beach, which is subject to constant flux due to waves, tides, storms and wind, and more stable upland areas. [It] is generally located at or immediately oceanward of the seaward toe of the frontal dune or erosion escarpment." 15A NCAC 7H .0305(a)(5).
17. In the case of the Lot and this area of Nags Head, oceanfront erosion setbacks are measured from a Static Vegetation Line, which is the location of the FLSNV immediately before a large-scale beach nourishment project per 15A NCAC 7H .0305(a)(6) and 7H .0306 (a)(11). In this case, the Town undertook a large-scale beach nourishment project in 2010, and a Static Vegetation Line was established at that time. The Static Vegetation Line is shown on the Meekins Survey.
18. Based on a site visit by DCM District Manager Frank Jennings on August 7, 2018, he determined that if he were to delineate the FLSNV on the Lot, it would be in the approximate location of the Static Vegetation Line, as shown on the Meekins Survey. Mr. Jennings checked the FLSNV following Hurricane Florence, and it remained in the same place.

19. On the Lot, structures measuring less than 5,000 square feet must be set back at a distance of 30 times the long-term annual erosion rate affecting the Lot from the FLSNV. 15A NCAC 07H .0306(a)(5)(A). The average annual erosion rate for the Lot is 6 feet per year. Therefore, the Erosion Setback applicable to the Lot, for the 1,792 square foot Total Floor Area, is 180 feet (30 years x 6 feet).
20. On Petitioners' Lot, the 180-foot setback from the Static Vegetation Line is located across South Bodie Isle Court, which is seen on the Meekins Survey and the attached aerial photographs.
21. On Petitioners' Lot, a 60-foot setback from the Static Vegetation Line would be located just behind the proposed house footprint, based on scaling 60-feet on the Meekins Survey.
22. Petitioners stipulate that the proposed development is inconsistent with the applicable Erosion Setback rule requiring development to meet the 180' ocean erosion setback of 15A NCAC 7H .0306, and with the "grandfather" rule of 15A NCAC 7H .0309(b) which would allow re-building if the proposed building was placed 60-feet landward of the Static Vegetation Line and the other conditions of this grandfather provision were met.
23. As part of the CAMA Minor Permit process, Petitioners sent notice of the proposed development to their adjacent riparian neighbors, Ms. Cornell and The Mandozzis, by certified mail, return receipt requested. Ms. Cornell returned the form and indicated that she did not object to the development, as seen on the attached form. The Mandozzis received the certified letter on August 7, 2017, but the completed form was not received by the LPO.
24. On April 26, 2018, the CAMA LPO for the Town of Nags Head denied Petitioners' CAMA Minor Permit application, through the attached denial letter. The Minor Permit was denied due to the proposed house not meeting the applicable ocean erosion setbacks.
25. The CRC's rules governing variance procedures require that "[b]efore filing a petition for a variance from a rule of the Commission, the person must seek relief from local requirements restricting use of the property, and there must not be pending litigation between the petitioner and any other person which may make the request for a variance moot." 15A NCAC 7J .0701(a).
26. The Town has a rear building setback of 25 feet ("Town Setback"), as shown on the Meekins Survey. This setback area is currently where the septic field is located. For this reason, Petitioners have not sought relief from the Town's Setback because even with a variance from the Town Setback, they would not move the septic field from its current location. Additionally, they wish to re-build the house in the same footprint as the burned house. Petitioners seek a variance from the procedural rule 15A NCAC 7J .0701(a) so as to not have to seek a local variance first.
27. Petitioners seek a variance from the Commission to construct the 1,792 square foot residence as proposed in their CAMA minor permit application, along with the 384 square feet of open decking- the same size as the former residence, the HVAC platform, two sets of stairs and the clay/sand/gravel driveway and parking area.



28. Aerial and ground-level photographs of the Lot and the surrounding properties are attached as exhibits and as part of the PowerPoint exhibit.

29. As part of the variance process, Petitioners are required by 15A NCAC 7J .0701(c)(7) to send notice to their adjacent riparian neighbors to inform them they are seeking this variance from the Commission. Copies of these notice letters, dated August 16, 2018, and the certified mail receipts are attached.

30. In this matter, the Division of Coastal Management is represented by Christine Goebel, Assistant General Counsel for DEQ. The Petitioners are represented by Christopher Seawell, Esq. of the firm of Aldridge, Seawell & Twichell, PLLC.

31. Pursuant to a duly issued CAMA major permit, the Town has authorized the Town Manager to execute a construction contract for the dredging, placement and grading of environmental protection measures in connection with a beach nourishment project to be completed during the year 2019 for 3,731,661 cubic yards of sand on 52,800 linear feet of the Town's shoreline for a total bid of \$34,712,459.20. The Petitioners' property is included in the area to be nourished by this proposed project.

32. Without a variance from the Commission, the Petitioners could receive a CAMA permit to develop the area waterward of the 180-foot setback and behind the Static Vegetation Line for the uses listed in 15A NCAC 7H .0309(a), including campsites, an elevated deck up to 500 square feet, unenclosed, uninhabitable gazebos with a footprint up to 200 square feet, storage sheds up to 200 square feet, a swimming pool, or the other listed uses.

33. An October 17, 2018 affidavit of Kelly Wyatt, the Town's Deputy Planning Director, states that none of the uses listed in the Commission's rule at 15A NCAC 7H .0309(a) and referenced in Fact 32 above are allowed for the Site with the possible exception of sand fences, based on the Town's current zoning regulations, if no principal structure is also constructed. A copy of Ms. Wyatt's affidavit is attached. However, Petitioners could seek a variance from the Board of Adjustment asking the Town to vary their ordinances to allow one of the uses allowed by 15A NCAC 7H .0309(a), using the Town's variance process under Section 48-598 of the Nags Head Code of Ordinances, a copy of which is attached.

Stipulated Exhibits

1. Zito Deed recorded at Book 1777, Page 455
2. Town of Nags Head road closure resolution recorded at Book 2125, Page 243
3. December 13, 2017 Meekins Survey
4. CAMA Minor Permit Application Materials
5. Dare County Tax Card for the Lot
6. 2008 Appraisal
7. Google Earth Photo of burned house dated March 24, 2017
8. Emails from LPO noting incomplete application and hold
9. March 1, 2018 Improvement Permit No. 27602 for Septic and field
10. Notice of CAMA permit sent to adjacent neighbors, certified receipts and tracking, and Ms. Cornells' returned form
11. April 26, 2018 Denial Letter
12. Notices of Variance Request to neighbors
13. Affidavit of Kelly Wyatt dated October 17, 2018
14. Nags Head Variance Ordinance at 48-598
15. Powerpoint presentation of Site photos and 2008 Road Closure map

**PETITIONERS' and STAFF'S POSITIONS****ATTACHMENT C**

As an initial matter, Petitioners seek a variance from the Commission's procedural requirement for variances at 15A NCAC 7J .0701, which requires that a Petitioner must first "seek relief from local requirements restricting use of the property." As stated in Fact 26, Petitioners do not wish to seek a variance from the Town's rear lot setback, as the existing septic system is located in this area, and because they wish to rebuild in the former home's footprint. Staff recommend that Petitioners not be required to first seek a local variance in this circumstance.

**I. Will strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships? If so, the petitioner must identify the hardships.**

**Petitioners' Position: Yes.**

The Petitioners submit that the imposition of the rules, standards and orders will cause unnecessary hardship in the following respects:

1. The Petitioners are not seeking to expand their development of the property in any respect from the development that existed prior to the destruction of the home by fire in 2016. In that sense, this is not a new development or expansion of an existing structure that was located on the Petitioners' property. Petitioners are simply seeking to replace what was destroyed by fire.
2. The surrounding oceanfront properties in Goose Wing Subdivision also cannot comply with the only requirement that the Petitioners cannot meet, which is a 60-foot landward setback from the static vegetation line. Consequently, the Petitioners are not seeking to construct their dwelling in a better place than any other structures in the area or to have any advantage not applicable to other surrounding properties.
3. If the Petitioners are not granted this variance, the lot the Petitioners own becomes unbuildable.

**Staff's Position: No.**

Despite the phrasing by Petitioners in their argument above, the proposed 1,792 square foot house and associated development is considered to be new development as it is the replacement of 100% of the structure and does not meet the repair criteria described in 15A NCAC 7J .0210. As stated in 7J .0210, the

replacement of structures damaged or destroyed by natural elements, fire or normal deterioration is considered development and requires CAMA permits. Replacement of structures shall be permitted if the replacements is consistent with current CRC rules. Repair of structures damaged by natural elements, fire or normal deterioration is not considered development and shall not require CAMA permits.

This rule goes on to state that for non-water-dependent structures, the “proposed work is considered replacement if the cost to do the work exceeds 50 percent of the market value of an existing structure immediately prior to the time of damage or the time of request.”

In order to replace the structure that existed before the fire, Petitioners seek a variance from the Commission’s oceanfront setback rules, which prohibit development waterward of the applicable 180' setback (6'/year erosion rate x 30) from the static line (which is essentially in the same location as the current first line of stable and natural vegetation). However, the Commission’s rules regarding the Ocean Hazard AEC acknowledge that shoreline erosion is part of the oceanfront system, and the intent of the rules is “minimizing losses to life and property resulting from storms and long-term erosion, preventing encroachment of permanent structures on public beach areas, preserving the natural ecological conditions of the barrier dune and beach systems, and reducing the public costs of inappropriately sited development” (15A NCAC 07H .0303(b)).

Staff contend that while Petitioner faces a hardship by not being able to re-build a house similar to that destroyed in the fire, given the high average annual erosion rate at the Site (6'/year) and the long-term erosion which has impacted the Site, the strict application of the Commission’s oceanfront setback rules does not cause Petitioner an *unnecessary* hardship. While the erosion rate is based on the average rate of shoreline change in the past, a structure rebuilt in the same footprint as the prior house with the waterward piling 12' landward of the static line, could soon be threatened given the long-term history of erosion at this Site, demonstrated by the fact that a portion of Seagull Drive that was closed by the Town in front of the Site (Fact 36) and the presence of houses on the beach in the vicinity of the Site.

The Commission offers an exception to the oceanfront erosion setbacks in 7H .0309 (b) for lots platted "pre-CAMA" in 1979 (see the rules reprinted above). However, the proposed location of the new house cannot meet the minimum setback of 60' landward of the static line required of the provision as the two waterward pilings would be 12' and 20' landward of the static line.

For these reasons, Staff contends that allowing Petitioner to build a new structure waterward of both the 180' setback and of the minimum 60' setback of the oceanfront setback exception provision would constitute inappropriately sited development.

Staff note that while the proposed Site is located among other non-conforming properties which also cannot meet the 180' setback or the minimum 60' oceanfront setback exception provision of 7H .0309(b), this fact has no bearing on Petitioners' own ability to satisfy the variance criteria and should not be considered by the Commission in determining whether Petitioner suffers an unnecessary hardship based on a strict application of the Commission's oceanfront setback rules.

**II. Do such hardships result from conditions peculiar to the petitioner's property, such as location, size, or topography of the property? Explain.**

**Petitioners' Position: Yes.**

1. The hardship or condition is unique to the Petitioners' property in that the structure on the property was destroyed by fire.
2. The Petitioners' propose rebuilding is unique in the sense it will not require the installation of a new septic system and drain field. The existing system will continue to be used.

**Staff's Position: No.**

Staff contends that any hardship suffered by Petitioners is primarily due to the long-term significant erosion at this Site, with a high average erosion rate of 6' per year. This variance request is to waive oceanfront erosion setback on lot with a history of erosion in order to build not only seaward of the 180' setback, but also seaward of the required minimum 60' oceanfront setback exception provision in 7H .0309(b). Staff notes that the hardship of the shoreline erosion on the lot, and specifically that which has occurred since Petitioners' purchase of the lot in 2008, is not atypical for an ocean shoreline. In this area and in this region and along the state's oceanfront, there are other areas which experience high erosion rates which are contemplated in the Commission's rules for the Ocean Hazard AECs and in determining setbacks. Additionally, the Site was within the bounds of the Town's 2010 beach nourishment project, and while that project offered temporary relief at the Site, the current vegetation line has retreated landward and is located in the general area of the pre-nourishment static line. Staff identify no peculiar conditions on the property which cause Petitioners' hardship, and note that the fact that the septic system survived the fire is not a condition of the property, such as size, location or topography, as required by the statute.

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

**Petitioners' Position: No.**

1. The hardships result from the imposition of the CAMA setback rule.
2. Further, the hardships result from the fact that the structure located on the property was destroyed by fire and not the result of any action taken by the Petitioners.

**Staff's Position: No.**

Staff agree that Petitioners did not cause the hardships of the long-term erosion of the dune systems and resulting vegetation line and static line, or the house fire.

**IV. 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.**

**Petitioners' Position: Yes.**

1. The intent of the ordinance is not to make properties unbuildable but to limit development. If this variance is not granted, this lot will be unbuildable.
2. Granting this variance will preserve substantial justice in that the Petitioners will be allowed to reconstruct a home which was destroyed by fire through no fault of the Petitioners, and will not require the installation of a new septic system and drain field.
3. The rebuilding of the Petitioners' home lost by fire will not have a negative effect on the public on the public safety and welfare.
4. Substantial justice will also prevail in that other adjoining property owners of Goose Wing Subdivision continue to enjoy their homes even though they cannot comply with the 60-foot setback regulation that the Petitioners cannot meet and to allow the Petitioners and to rebuild will provide equal justice to all property owners in Goose Wing Subdivision.

**Staff's Position: No.**

Staff contends that granting a variance to the Petitioners in order to vary the Commission's oceanfront erosion setback rules to allow the Petitioners to build a structure waterward of both the 180' setback and waterward of the minimum 60' oceanfront setback exception is not consistent with the spirit, purpose, and intent of the Commission's rules. The Commission's rules have required oceanfront erosion setbacks since 1979 and all structures are required to meet an oceanfront setback (in this case, 180-feet) landward of the vegetation line, static line, or development line. The Commission has made limited exceptions for some types of development oceanward of the required setback, including the minimum 60' oceanfront setback exception provision in 7H .0309(b), and also authorizes limited development within the setback (See the nine types of development listed in 07H .0309). The purpose of the Commission's Ocean Hazard rules is stated at 15A NCAC 7H .0303(b), which notes that

The purpose of these Rules shall be to further the goals set out in G.S. 113A-102(b), with particular attention to minimizing losses to life and property resulting from storms and long-term erosion, preventing encroachment of permanent structures on public beach areas, preserving the natural ecological conditions of the barrier dune and beach systems, and reducing the public costs of inappropriately sited development. Furthermore, it is the objective of the Coastal Resources Commission to protect present common-law and statutory public rights of access to and use of the lands and waters of the coastal area.

While Staff are sympathetic to Petitioners' circumstances, Staff believes the Commission should strictly enforce the oceanfront erosion setback requirements in order to prevent the re-development of inappropriately-sited structures, in this case only 12' and 20' landward of the vegetation line (static and actual), regardless of the cause of loss of the original structure.

As reflected in the Stipulated Facts, another nourishment project is being pursued by the Town of Nags Head, and so there is a possibility that the first line of stable and natural vegetation could move further waterward. Under existing rules, the Town could then apply for a Static Line Exception or a Development Line to offer relief from the setback line in the future.

Staff contends that granting a variance will not secure public safety and welfare. Allowing a 1,792 square foot structure just 12' from the static line at a Site with a 6'/year average annual erosion rate in an area that has a history of structures on the ocean beach will not secure public safety and welfare since the variance would be authorizing inappropriately-sited development which can quickly interfere with the public trust beach, be at greater risk for loss of property, may become a cost to local government and the public (as has occurred in this area) should the structure need to be removed from the beachfront, and may become a cost to the public in the form of future post-storm debris removal.

Staff contends that granting a variance would not preserve substantial justice where the Commission's rules already provide exceptions to the oceanfront setbacks by allowing a minimum 60' setback instead of the standard 180' setback, and this variance would go further by allowing new development just 12' from the static line and existing vegetation line which is also the where the vegetation line was located before the 2010 nourishment project.

Petitioners argue that "the intent of the ordinance is not to make properties unbuildable but to limit development. If this variance is not granted, this lot will be unbuildable." Staff disagree, and contend that the intent of the Commission's rules is to prevent inappropriately sited development, like that proposed which also fails to meet the smaller minimum oceanfront setback exception provision, particularly in an area with a 6' per year average annual erosion rate. Staff also note, that based on the CAMA and the Commission's rules, without a variance, Petitioners could still receive a CAMA permit for those structures limited in size and found at 15A NCAC 7H .0309 (a). While Petitioners argue that these structures are not allowed by local ordinance, but Staff note that a local variance of the ordinances is possible, and is not relevant in considering the variance by this Commission of the CAMA and the Commission's rules.

**ATTACHMENT D:  
PETITIONERS' VARIANCE REQUEST MATERIALS**



**ATTACHMENT E:**  
**STIPULATED EXHIBITS INCLUDING POWERPOINT**

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July 31, 2018

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Retired

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

North Carolina Attorney General's Office  
Environmental Division  
114 W. Edenton Street  
Raleigh, NC 27603

Re: Variance Application - Michael A. Zito, Jr. and wife, Catherine M. Zito  
Dare County, North Carolina

Dear Sir or Madam:

Enclosed please find the CAMA Variance Request Form on behalf of the above individuals with regard to property located in Nags Head, Dare County, North Carolina.

We are aware of the guidance of local variance prerequisites recited in a memo dated October 6, 2017 issued by Christine A. Goebel, Assistant Attorney General. We do not believe that applies in this situation. This application with regard to reconstruction of a house destroyed by fire, which we understand needs to be replaced in the exact same location if at all.

We look forward to hearing from you.

Yours sincerely,

  
Christopher L. Seawell

CLS/cah

Enclosures

Cc: Mr. and Mrs. Michael A. Zito, Jr.

**CAMA VARIANCE REQUEST FORM**

**DCM FORM 11**  
**DCM FILE No.:** \_\_\_\_\_

PETITIONER'S NAME Michael A. Zito, Jr. and wife, Catherine M. Zito

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](http://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.

## **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

**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

## **PROPOSED STIPULATED FACTS AND STIPULATED EXHIBITS**

- 1. The Petitioners, Michael A. Zito, Jr. and wife, Catherine M. Zito, currently own a lot located at 10224 E. Sea Gull Drive, Nags Head, North Carolina, also known as Lot 48, Goose Wing Subdivision.**
- 2. At the time the Petitioners acquired Lot 48, Goose Wing Subdivision in August 2008, there was a single family dwelling located on said property. On the 10th day of October, 2016, a fire destroyed the dwelling. However, the septic system, including the septic tank and drain field used in connection with the prior improvements are still located on the property and has been approved, see Exhibit "D". Attached survey to Exhibit "D" incorrectly shows the location of decks and steps. The correct location is Exhibit "C". This does not affect the validity of the wastewater permit.**
- 3. The Petitioners' lot was accessed by a public street known as Sea Gull Drive.**
- 4. By resolution by the Town of Nags Head, recorded in the office of the Register of Deeds of Dare County on October 12, 2016, the Town of Nags Head abandoned Sea Gull Drive to the east of the Petitioners' property, and the resolution purported to extend the property line of the Petitioners' 30 feet eastward to the center line of former Sea Gull Drive. However, said resolution recited as to that additional parcel, it was subject to access easements and rights of all property owners within Goose Wing Subdivision. The resolution is part of attached Exhibit "B".**
- 5. The Petitioners are proposing to reconstruct a 32 foot by 28 foot single family dwelling with approximately 384 square feet of open wood slatted decking on the north and west side of the dwelling, which proposed construction is more particularly shown on attached Exhibit "C".**
- 6. The former dwelling which was located on the property is now proposed to be rebuilt, was originally constructed in the year 1982. The contemplated structure is to be in the exact location and has the exact dimensions as the destroyed structure. The proposed location is set forth on the attached plat entitled "Survey Site Plan for Michael Zito and Catherine M. Zito", dated July 16, 2018, prepared by Manson Ray Meekins, Registered Surveyor, which is attached hereto as Exhibit "C".**
- 7. Exhibit "C" also shows the following setbacks and information:**
  - a. The static vegetation line.**
  - b. The minimum building setback lines under the applicable Nags Head Zoning Ordinance. The Petitioners' proposed construction complies with said Nags Head Zoning**

**Ordinance setback requirements.**

- c. The existing septic tank and drain field located on the Property.**
- 8. On the 31st day of July, 2017, the Petitioner, through their authorized agent, applied for a CAMA minor permit to reconstruct the single family dwelling which had been located on the property prior to its destruction by fire.**
- 9. The Commission's current published annual erosion rate for this property is two (2) feet per year.**
- 10. The Petitioners' Lot 48, Goose Wing Subdivision, was platted prior to June 1, 1979, in the year 1977.**
- 11. The Petitioners' application indicates that the development is set back from the ocean the maximum feasible distance possible on the existing lot and the development is designed to minimize encroachment into the setback area.**
- 12. The Petitioners' proposed development is not located on or in front of a frontal dune, but is entirely behind the landward toe of the frontal dune.**
- 13. The Petitioners' development incorporates the following design standards:**

  - a. All pilings shall have a tip penetration that extends to at least four feet below mean sea level.**
  - b. The footprint of the structure shall be no more than 1,000 square feet, and the total floor area of the structure shall be no more than 2,000 square feet.**
  - c. Driveways and parking areas shall be constructed of clay, packed sand or gravel except in those cases where the development does not abut the ocean and is located landward of a paved public street or highway currently in use. In those cases concrete, asphalt or turfstone may also be used.**
  - d. No portion of a building's total floor area, including elevated portions that are cantilevered, knee braced or otherwise extended beyond the support pilings or footings will extend oceanward of the total floor area of the landward-most adjacent building.**
- 14. The proposed development complies with all of the use standards for ocean hazard areas, as provided under Section 15A N.C.A.C. 07H.0309, with the exception of the requirement that the development is at least 60 feet landward of the static vegetation line.**

**15. The proposed development by the Petitioners meets all other applicable State and local regulations.**

**16. The development site is served by its onsite wastewater disposal system. A copy of the valid permit for such system was submitted as part of the CAMA permit application.**

**17. As reflected in Exhibit "C", the southeast corner of the proposed dwelling is approximately 12 feet landward of the static vegetation line and the northeast corner of the proposed dwelling is approximately 20 feet landward of the static vegetation line.**

## **PETITIONER'S STATEMENT REGARDING VARIANCE CRITERIA**

**A. Will strict application of the applicable development rules, standards, or orders issued by the Commission cause the Petitioner unnecessary hardship? Explain the hardships standards would result in unnecessary hardship.**

**The Petitioners submit that the imposition of the rules, standards and order will cause unnecessary hardship in the following respects:**

**1. The Petitioners are not seeking to expand their development of the property in any respect from the development that existed prior to the destruction of the home by fire in 2016. In that sense, this is not a new development or expansion of an existing structure that was located on the Petitioners' property. Petitioners are simply seeking to replace what was destroyed by fire.**

**2. The surrounding oceanfront properties in Goose Wing Subdivision also cannot comply with the only requirement that the Petitioners cannot meet, which is a 60 foot landward setback from the static vegetation line. Consequently, the Petitioners are not seeking to construct their dwelling in a better place than any other structures in the area or to have any advantage not applicable to other surrounding properties.**

**3. If the Petitioners are not granted this variance, the lot the Petitioners own becomes unbuildable.**



**B. Do such hardships result from conditions peculiar to the Petitioner's property, such as its location, size or topography of the property? Explain.**

**1. The hardship or condition is unique to the Petitioners' property in that the structure on the property was destroyed by fire.**

**2. The Petitioners' proposed rebuilding is unique in the sense it will not require the installation of a new septic system and drain field. The existing system will continue to be used.**

**C. The hardships did not result from actions taken by the Petitioner. Explain.**

- 1. The hardships result from the imposition of the CAMA setback rule.**
- 2. Further, the hardships result from the fact that the structure located on the property was destroyed by fire and not the result of any action taken by the Petitioners.**
- 3. The hardship results from the erosion of the property by the Atlantic Ocean.**

**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.**

**1. The intent of the ordinance is not to make properties unbuildable but to limit development. If this variance is not granted, this lot will be unbuildable.**

**2. Granting this variance will preserve substantial justice in that the Petitioners will be allowed to reconstruct a home which was destroyed by fire through no fault of the Petitioners, and will not require the installation of a new septic system and drain field.**

**3. The rebuilding of the Petitioners' home lost by fire will not have any negative effect on the public on the public safety and welfare.**

**4. Substantial justice will also prevail in that other adjoining property owners of Goose Wing Subdivision continue to enjoy their homes even though they cannot comply with the 60 foot setback regulation that the Petitioners cannot meet and to allow the Petitioners and to rebuild will provide equal justice to all property owners in Goose Wing Subdivision.**

# **EXHIBIT "A"**



## Town of Nags Head

Planning and Development  
Department

Post Office Box 99  
Nags Head, North Carolina 27959  
[www.nagsheadnc.gov](http://www.nagsheadnc.gov)

Telephone 252-441-7016  
FAX 252-441-4290

April 26, 2018

**CERTIFIED MAIL – 7016 0910 0000 6155 7206**  
**RETURN RECEIPT REQUESTED**

Michael and Catherine Zito  
11816 May's Chapel Road  
Timonium, MD 21093

**RE: DENIAL OF CAMA MINOR DEVELOPMENT PERMIT**  
**APPLICATION NUMBER- # 17-36**  
**PROJECT ADDRESS- 10224 E. Seagull Drive**

Dear Property Owners:

After reviewing your application in conjunction with the development standards required by the Coastal Area Management Act (CAMA) and our locally adopted Land Use Plan and Ordinances, it is my determination that no permit may be granted for the project which you have proposed.

This decision is based on my findings that your request violates NCGS 113A-120(a)(8) which requires that all applications be denied which are inconsistent with CAMA guidelines and Local Land Use Plans. You have applied to re-construct a single family dwelling following a loss of the existing structure by fire. Specifically, you are proposing to construct a 32 ft. x 28 ft. dwelling with approximately 384 sf. of detached open wood slatted decking on the north and west side of the dwelling. Code Section 15A NCAC 07H .0309, Use Standards for Ocean Hazard Areas: Exceptions provides a mechanism for permanent substantial structures to be constructed on lots existing as of June 1, 1979. The lot in question was platted in 1977 therefore making it a candidate for review under this code section.

Upon review, I have determined to the requested scope of work to be inconsistent with 15A NCAC 07H .0309(b), which states that: *Where application of the oceanfront setback requirements of Rule .0308(a) of this Subchapter would preclude placement of permanent substantial structures on lots existing as of June 1, 1979, buildings shall be permitted seaward of the applicable setback line in ocean erodible areas, but not inlet hazard areas or unvegetated beach areas, if each of the following conditions are met:*

- (1) *The development is set back from the ocean the maximum feasible distance possible on the existing lot and the development is designed to minimize encroachment into the setback area;*
- (2) *The development is at least 60 feet landward of the vegetation line or static vegetation line, whichever is applicable;*
- (3) *The development is not located on or in front of a frontal dune, but is entirely behind the landward toe of the frontal dune;*
- (4) *The development incorporates each of the following design standards, which are in addition to those requires by Rule .0308(d) of this Subchapter.*

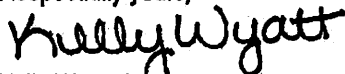
- (a) All pilings shall have a tip penetration that extends to at least four feet below mean sea level;
  - (b) The footprint of the structure shall be no more than 1,000 square feet, and the total floor area of the structure shall be no more than 2,000 square feet. For the purpose of this Section, roof-covered decks and porches that are structurally attached shall be included in the calculation of footprint;
  - (c) Driveways and parking areas shall be constructed of clay, packed sand or gravel except in those cases where the development does not abut the ocean and is located landward of a paved public street or highway currently in use. In those cases concrete, asphalt or turfstone may also be used;
  - (d) No portion of a building's total floor area, including elevated portions that are cantilevered, knee braced or otherwise extended beyond the support pilings or footings may extend ocean ward of the total floor area of the landward-most adjacent building. When the geometry or orientation of a lot precludes the placement of a building in line with landward most adjacent structure of similar use, an average line of construction shall be determined by the Division of Coastal Management on a case-by-case basis in order to determine an ocean hazard setback that is landward of the vegetation line, static vegetation line or measurement line, whichever is applicable, a distance no less than 60 feet.
- (5) All other provisions of this Subchapter and other state and local regulations are met. If the development is to be serviced by an on-site waste disposal system, a copy of a valid permit for such a system shall be submitted as part of the CAMA permit application.

The applicant has shown compliance with Subsections (1), (3), (4a), (4b), (4c), (4d) and (5) above. The applicant has not demonstrated compliance with Subsection (2), that the development is at least 60 feet landward of the of the static vegetation line. Based upon the most recent survey provided by Seaboard Surveying & Planning, Inc. dated 10/18/17 the home is setback approximately 12 ft. landward of the static vegetation line.

Should you wish to appeal my decision to the Coastal Resource Commission or request a variance from that group, please contact me so I can provide you with the proper forms and any other information you may require.

The Division of Coastal Management central office in Morehead City must receive appeal notices within twenty (20) days of the date of this letter in order to be considered.

Respectfully yours;



Kelly Wyatt, L.P.C.  
Town of Nags Head  
P.O. Box 99  
Nags Head, NC 27959

cc: Yvonne Carver, Field Representative, DCM  
Chris Seawell, Attorney for Zito's

# **EXHIBIT “B”**

B: 1777 P: 455  
08/29/2008 04:22 PM  
Doc Code: DEED  
Barbara N. Gray, Register of Deeds

Doc Id: 6246261  
Receipt #: 08-3925  
NCExcise Tax pd: \$877.00  
Dare CO, NC

6246261 B: 1777 P: 455 Page 1 of 2 8/29/08 4:22 PM

UNOFFICIAL  
DARE COUNTY  
3048-08



REAL ESTATE  
TRANSFER TAX

\$4,385<sup>00</sup>

Space Above This Line For Recording Data

**DEED**

This instrument prepared by Robert B. Hobbs, Jr., a licensed North Carolina Attorney

D3251-1RH

Return to M. Peebles Harrison, Rose, Harrison & Gilreath, PO Box 1087, Nags Head, NC 27959

Excise Tax: \$877.00  
Transfer Tax: \$4,385.00

Tax Parcel: 007480000  
LT Number 3048-08

North Carolina, Dare County

THIS GENERAL WARRANTY DEED made this 29th day of August, 2008, by and between KEN A. STARR and wife, TERRI L. STARR (hereinafter referred to as "Grantor"), and MICHAEL A. ZITO, JR. and wife, CATHERINE M. ZITO, whose mailing address is 11816 Mays Chapel Road, Timonium, MD 21093 (hereinafter referred to as "Grantee"):

WITNESSETH:

That the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has given, granted, bargained, sold, and conveyed, and by these presents does hereby give, grant, bargain, sell, and convey unto said Grantee, Grantee's heirs, successors, administrators and assigns, all of that certain piece, parcel, or tract of land situate, lying and being in the Town of Nags Head, Nags Head Township, Dare County, State of North Carolina, and being more particularly described as follows:

Lot No. 48 of the subdivision known as Goose Wing as shown on a map or plat thereof made by Rose & Purcell, Inc. Engineers, dated January, 1977, and recorded in Map Book 9, Page 57, Public Registry of Dare County, North Carolina.

The Grantees herein shall have the right of access to the Atlantic Ocean and State Road No. 1243 over and across the area designated "Access Areas", which said right is to be held in common with each owner in the subdivision.

Together with all of Grantors right, title and interest in and to that certain easement recorded in Book 1678, Page 228, and amended by instruments recorded in Book 1742, Page 149 and Book 1766, Page 110, of the Dare County Registry.





Being the same property conveyed to Grantor by Deed filed in Book 1742, Page 150, Dare County Registry.

TO HAVE AND TO HOLD the above described lands and premises, together with all appurtenances thereunto belonging, or in anywise appertaining, unto the Grantee, Grantee's heirs, successors, administrators, and assigns forever.

AND THE SAID GRANTOR COVENANTS to and with said Grantee, Grantee's heirs, successors, administrators, and assigns, that Grantor is lawfully seized in fee simple of said lands and premises, and have full right and power to convey the same to the Grantee in fee simple, and that said lands and premises are free from any and all encumbrances, except as set forth herein, and that the Grantor will warrant and defend the title against the lawful claims of all persons whomsoever, with the exception of the following: Ad valorem taxes for the year 2009 and subsequent years, easements and restrictions of record, and any local, county, state, or federal laws, ordinances, or regulations relating to zoning, environment, subdivision, occupancy, use, construction, or development of the subject property.

IN WITNESS WHEREOF, the Grantor has duly executed and sealed this document, this the day and year first above written.

GRANTOR: Ken A. Starr (SEAL) Terri L. Starr (SEAL)

STATE OF Virginia  
(COUNTY) (CITY) OF Chesterfield

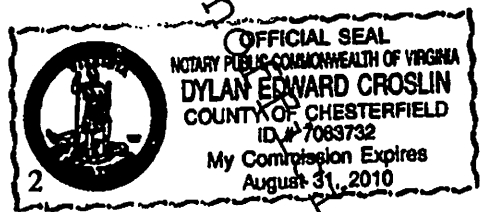
I, Dylan Edward Croslin, a Notary Public of the (County) (City) of Chesterfield, and State aforesaid, certify that Ken A. Starr and wife, Terri L. Starr personally appeared before me this day and acknowledged the execution of the foregoing instrument.

Witness my hand and seal this 26 day of Aug, 2008.

(AFFIX NOTARY SEAL)

Dylan Edward Croslin  
Notary Public  
Notary's printed or typed name: Dylan Edward Croslin

My commission expires: 8/31/10



700031129

Recorded: 10/12/2016 04:15:49 PM  
BY: Claudia Harrington  
Vanzolka McMurrin, Register of Deeds  
Dare County, NC

Fee Amt: \$28.00

NC Excise Tax: \$0.00

Please return to: Town of Nags Head, PO Box 99, Nags Head, NC 27959

**A RESOLUTION ORDERING THE CLOSING OF SEAGULL DRIVE IN SOUTH NAGS HEAD**  
(Revised 10/5/2016)

**WHEREAS**, on the 6<sup>th</sup> day of April 2016 the Board of Commissioners of the Town of Nags Head directed the Town Clerk to publish the resolution of Intent of the Board of Commissioners of the Town of Nags Head to consider closing the north-south portion of Seagull Drive in the *Coastland Times* newspaper once each week for four consecutive weeks and posting said resolution in two locations along said street advising the public that a public hearing would be conducted in the Town Hall at 9:00 a.m. on the 1<sup>st</sup> day of June 2016; AND

**WHEREAS**, the Town's Board of Commissioners further directed the Town Clerk to notify by certified mail, all persons owning property abutting on that portion of Seagull Drive proposed to be closed enclosing with such notification a copy of the resolution of Intent; AND

**WHEREAS**, the Town Clerk has advised the Board of Commissioners that on the date directed she sent notice to each of said abutting property owners by certified mail return receipt requested advising them of the day, time and place of the meeting, enclosing a copy of the Board of Commissioner's resolution of Intent, and advising said abutting property owners that the question as to the closing to said portion of Seagull Drive would be acted upon; AND

**WHEREAS**, the Town Clerk has advised the Board of Commissioners that none of the notices sent to abutting property owners on Seagull Drive has been returned undelivered; AND

**WHEREAS**, after full and complete consideration of the matter and after having granted full and complete opportunity for all interested persons to appear and register any objections that they might have with respect to the closing of said street; AND

**WHEREAS**, the north-south portion of Seagull Dr. is constantly threatened and damaged by the relentless wave action of the Atlantic Ocean resulting in chronic, persistent and inevitable erosion of that portion of the road; AND

**WHEREAS**, the north-south portion of Seagull Dr. is located entirely within the Goose Wing subdivision, does not connect any other public streets, is not needed for the public access to any other streets, neighborhoods, developments or facilities, and receives little, if any, use by anyone other than the owners of approximately nine (9) properties located along the street and those who rent the cottages located on those properties; AND

**WHEREAS**, the cost to maintain and continually repair the north-south portion of Seagull Dr. due to frequent and inevitable erosion is not justified by the benefit provided to the public by keeping that portion of the street open as a public street; AND

**WHEREAS**, the Board of Commissioners hereby finds and determines that the closing of said street is not contrary to the public interest and that no individual owning property either abutting the street or in the vicinity of said street or in the subdivision in which said street is located will, as a result of the proposed closing of the north-south portion of Seagull Dr., be thereby deprived of a reasonable means of ingress or egress to his property; AND

**WHEREAS**, it appears to the satisfaction of the BOC that the closing of said street will be in the public interest.

**NOW THEREFORE BE IT RESOLVED** by the Board of Commissioners of the Town of Nags Head, meeting in regular session, that the north-south portion of Seagull Drive located in South Nags Head, as more particularly described hereafter, is hereby ordered closed and all right, title and interest in those persons owning lots adjacent to the street; such title, for the width of the abutting land owned by them, to extend to the centerline of the herein closed street in accordance with the provision of GS 160A-299(c): All that north-south portion of Seagull Drive identified as extending from the property line between Lot 56 (10200 Seagull Drive-Dipaola) and Lot 55 (10204 Seagull Drive-Fohs) to the north - and running to the property line between Lot 21 (216 Seagull Drive) and Lot 22 (214 Seagull Drive) to the south - of the Goose Wing Subdivision.

UNOFFICIAL DOCUMENT

Provided, however, that this resolution shall not terminate or have any effect on the existing access easements and rights to all of Seagull Drive held by all property owners in Goose Wing Subdivision as shown on and created by the recorded plat of Goose Wing Subdivision, which access easements and rights are hereby acknowledged and reserved to all property owners in the Subdivision.

The Town Clerk is hereby ordered and directed to file in the office of the Register of Deeds of Dare County a certified copy of this resolution. Upon motion duly made by Comr. Demers and duly seconded by Mayor Pro Tem Walters, the above resolution was duly adopted by the Board of Commissioners at a regular meeting held on the 7<sup>th</sup> day of September 2016. Upon call for a vote all Commissioners voted in the affirmative.

This the 7<sup>th</sup> day of September 2016.

Robert C. Edwards  
Robert C. Edwards, Mayor  
Town of Nags Head

ATTEST:

Carolyn F. Morris  
Carolyn F. Morris, Town Clerk



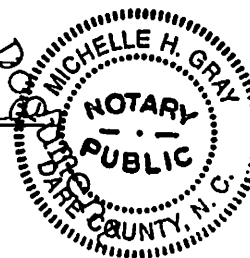
STATE OF NORTH CAROLINA  
COUNTY OF DARE

I, Michelle H Gray, a Notary Public for said County and State, do hereby certify that Robert C. Edwards personally appeared before me this day and acknowledged the due execution for the foregoing instrument.

WITNESS my hand and notarial seal, this the 5<sup>th</sup> day of October, 2016

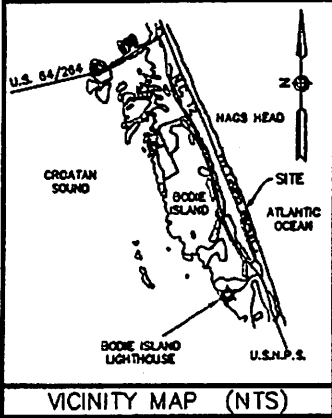
Michelle H Gray  
Notary Public

Commission expires: 10/4/20



UNOFFICIAL DOCUMENT

# **EXHIBIT “C”**



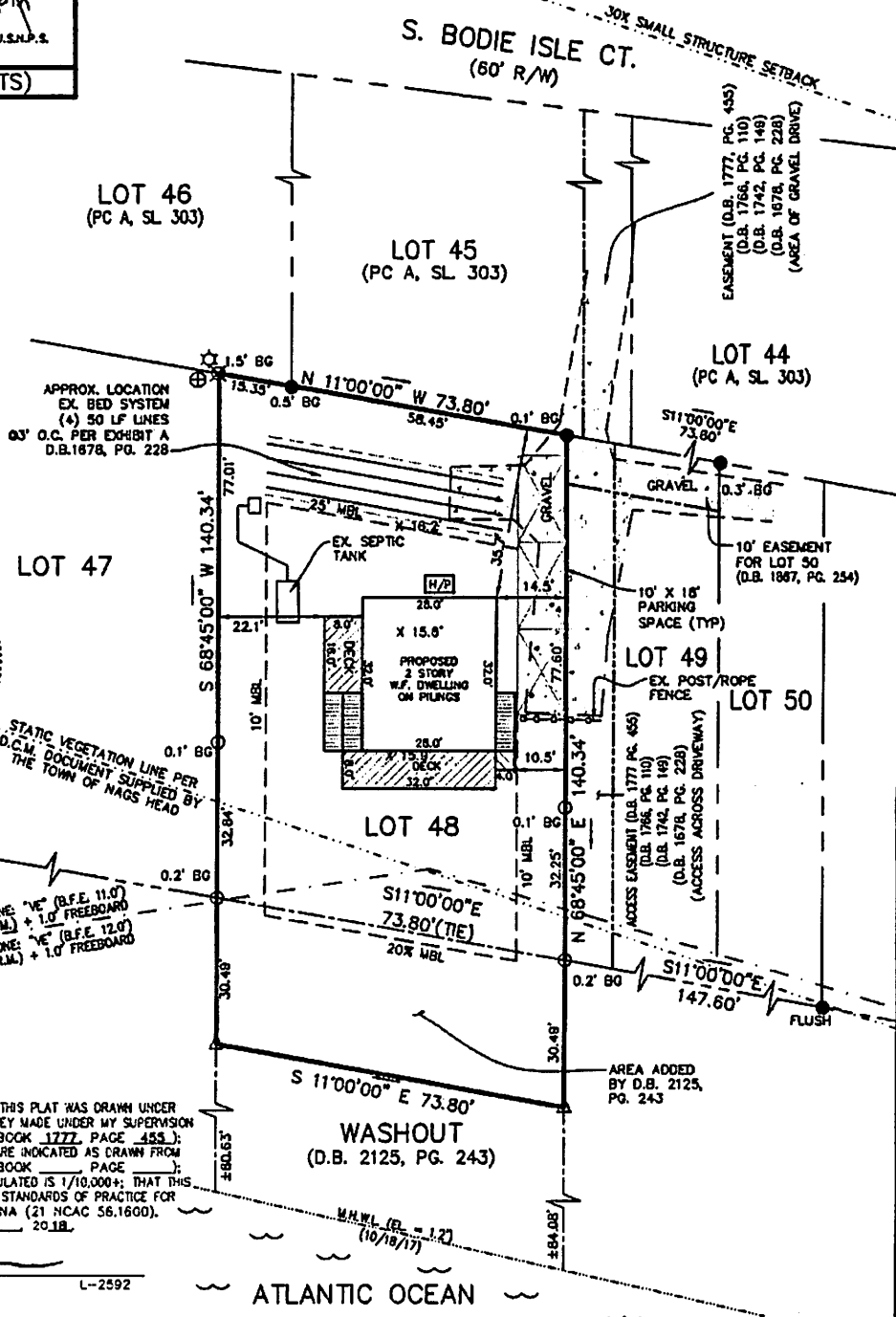
**NOTES:**

1. THIS SURVEY IS SUBJECT TO ANY FACTS THAT MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH.
2. AREA BY COORDINATE COMPUTATION = 10,192 S.F. (8,909 SF. WEST OF STATIC VEG. LINE)
3. F.I.R.M. ZONE: AS SHOWN
4. PIN NO.: 14 071813 73 0373
5. RECORDED REFERENCE: M.B. 9, PG. 57; DB 1777, PG. 455
6. MINIMUM BUILDING LINES (MBL), IF SHOWN HEREON, ARE PER THE CURRENT LOCAL ZONING REGULATIONS. OTHER SETBACKS AND/OR RESTRICTIONS MAY APPLY AND MUST BE VERIFIED PRIOR TO CONSTRUCTION.
7. ELEVATIONS (NAVD 1988): AS SHOWN
8. PROPOSED LOT COVERAGE: 2,001 S.F. (29.0%)
9. SITE PLAN REQUIREMENTS PER TOWN OF NAGS HEAD ZONING ORD. ARTICLE IV-SEC 48-123 AND ARTICLE III SEC 48-84.
10. THIS PROPERTY LIES WITHIN THE 540 FT C.A.M.A. O.E.A./A.E.C. AND THE 180 FT. C.A.M.A. STRUCTURE SETBACK.

VICINITY MAP (NTS)

**LEGEND**

- - EX. PIPE
- - EX. 3/4" REBAR
- - 1/2" REBAR SET
- - EX. CONC. MON.
- - CONC. MON. SET
- △ - EX. MAG NAIL & WASHER
- ▲ - CALCULATED POINT
- ⊗ - EX. 1" OPEN PIPE
- ⊕ - WATER METER
- ⊖ - PHONE PEDESTAL
- ⊙ - C.A.T.V.
- ⊕ - UTILITY POLE
- ⊖ - GUY WIRE
- ⊕ - FIRE HYDRANT
- ⊖ - ELECT. TRANS.
- AG - ABOVE GRADE
- BG - BELOW GRADE



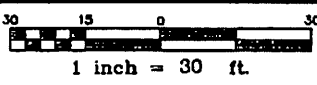
N.F.I.P. ZONE: "VE" (B.F.E. 11.0') (PER F.I.R.M.) + 1.0' FREEBOARD  
 N.F.I.P. ZONE: "VE" (B.F.E. 12.0') (PER F.I.R.M.) + 1.0' FREEBOARD

I, MANSON RAY MEEKINS, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK 1777, PAGE 455); THAT THE BOUNDARIES NOT SURVEYED ARE INDICATED AS DRAWN FROM (DEED DESCRIPTION RECORDED IN BOOK \_\_\_\_\_ PAGE \_\_\_\_\_); THAT THE RATIO OF PRECISION AS CALCULATED IS 1/10,000+; THAT THIS PLAT MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56.1600), THIS 18TH DAY OF \_\_\_\_\_ 2018.

SURVEYOR L-2592

REV. 07/13/18: SITE PLAN

SURVEY/ SITE PLAN FOR  
**MICHAEL A. ZITO, JR. & CATHERINE M. ZITO**  
 LOT 48 & ADJACENT PARCEL - GOOSEWING - NAGS HEAD  
 NAGS HEAD TOWNSHIP - DARE COUNTY - NORTH CAROLINA



**SEABOARD SURVEYING & PLANNING, INC. C-1538**  
 103F W. WOOD HILL DR., P.O. BOX 58, NAGS HEAD, NC 27959  
 OFFICE: (252) 480-9998 FAX: (252) 480-0571

# **EXHIBIT “D”**

Improvement Permit  
County of Dare  
PO Box Drawer 1000  
Manteo NC 27954



27602

Phone: (252) 475-5080

DARE COUNTY DEPARTMENT OF PUBLIC HEALTH

An Improvement Permit (IP) issued pursuant to this application is not affected by change in ownership provided the site and wastewater characteristics remain unchanged. An IP issued with a plat is valid without expiration. An IP issued with a site plan is valid for 60 months from the date of issuance.

PIN: 071815730373

Parcel: 007480000

Permit#: 27602

Owner Name: ZITO, MICHAEL A JR  
Owner Address: 11816 MAYS CHAPEL RD  
Owner Address: --  
TIMONIUM, MD21093

Permit Date: 3/1/2018  
Permit Type: Residential  
Owner Phone: (000)000-0000

DBA --

Location: 10224 E SEA GULL DR NAGS HEAD, NC  
Subdivision: GOOSE WING LOT: 48 BLK: SEC:

Category of System:	S-25	Size of Tank (gallons):	0
Type of Tank:	S-25	Width of Ditch:	0
Type of System:	S-25	Rock Above (inches):	0
Amount of Tile (feet):	0	Gallons per Day:	0
Rock Under (inches):	0	Previous Permit Number:	
Number of Bedrooms:	4	Feet from Body of Water:	0
Sleeping Capacity (persons):	8	Feet from Building:	0
Type of Water:	S-25		
Feet from Water Supply:	0		
Feet from Property Line:	0		

Comments:

REBUILD HOUSE THAT BURNED DOWN AND CONNECT TO EXISTING SEPTIC TANK

Note: This Permit is issued subject to all provisions of the 15A NCAC .1900 rules governing the installation of septic systems. The person making the installation must notify the Health Department when the septic tank system is ready for inspection. If any septic tank system or part thereof is covered before being inspected and approved, it shall be uncovered at the direction of the Health Officer at the expense of the one responsible for making the installation.

Issued 3/1/2018 By:

Rob Crawford  
Environmental Health Specialist

*Rmc* 3/1/18

Sewer Permit Fee: 0

*George Wood*  
Applicant Signature George Wood

County of Dare  
PO Box Drawer 1000  
Manteo NC 27954



**27602**  
Phone: (252) 475-5080

**DARE COUNTY DEPARTMENT OF PUBLIC HEALTH**  
**Authorization for Wastewater System Construction**

PIN: 071815730373 Parcel: 007480000 Permit#: 27602  
Owner Name: ZITO, MICHAEL A JR Permit Date: 3/1/2018  
Owner Address: 11816 MAYS CHAPEL RD  
-- Owner Phone: (000)000-0000  
TIMONIUM, MD21093

Location: 10224 E SEA GULL DR NAGS HEAD, NC  
Subdivision: GOOSE WING LOT: 48 BLK: SEC:

1. Original Improvement Permit No. --
2. Wastewater inspected by Rob Crawford *RC*
3. Any alteration in soil conditions (including location of structures and appurtenances) or modification in use, design wastewater flow or wastewater characteristics as specified in the associated improvement permit and application, may subject this authorization and associated permit(s) to revocation.

**Other Conditions:**

**PERMIT TO REBUILD HOUSE AND CONNECT TO EXISTING SEPTIC SYSTEM.**

This CA is valid for 60 months from the date of issuance.

Disclaimer: This permit does not relieve you of the responsibility to obtain any other necessary Federal, State or Local permit(s).

**Owner Certification**

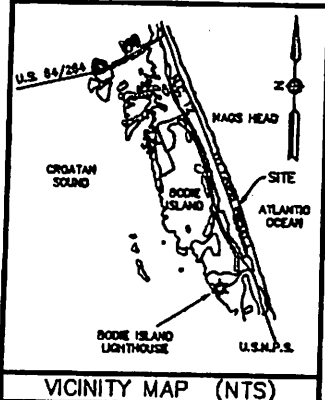
*V*  
Applicant or Owner Signature  
Applicant: GEORGE WOOD

Date

Authorized by County of Dare



7.7c  
16-062



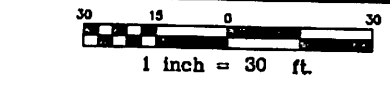
- NOTES:**
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  4. PIN NO.: 14 071815 73 0373
  5. RECORDED REFERENCE: M.B. 9, PG. 57; DB 1777, PG. 458
  6. MINIMUM BUILDING LINES (M.B.L.) IF SHOWN HEREON, ARE PER THE CURRENT LOCAL ZONING REGULATIONS. OTHER SETBACKS AND/OR RESTRICTIONS MAY APPLY AND MUST BE VERIFIED PRIOR TO CONSTRUCTION.
  7. ELEVATIONS (NAVD 1988): AS SHOWN
  8. PROPOSED LOT COVERAGE 2,001 S.F. (29.0%)
  9. SITE PLAN REQUIREMENTS PER TOWN OF NAGS HEAD ZONING ORD. ARTICLE IV-SEC 48-123 AND ARTICLE III SEC 48-84.
  10. THIS PROPERTY LIES WITHIN THE 540 FT C.A.M.A. O.E.A./A.E.C. AND THE 100 FT. C.A.M.A. STRUCTURE SETBACK.

- LEGEND**
- - EX. PIPE
  - - EX. 3/4" REBAR
  - - 1/2" REBAR SET
  - - EX. CONC. MON.
  - - CONC. MON. SET
  - ▲ - EX. MAG NAIL & WASHER
  - △ - CALCULATED POINT
  - - EX. 1" OPEN PIPE
  - - WATER METER
  - - PHONE PEDESTAL
  - - C.A.T.V.
  - - UTILITY POLE
  - - GUY WIRE
  - - FIRE HYDRANT
  - - ELECT. TRANS.
  - AD - ABOVE GRADE
  - BO - BELOW GRADE



Septic Layout Approved  
by DCDHHS, DPH, EH Unit  
On LOT 46 3-1-17  
By *[Signature]*

**PRELIMINARY PLAN  
NOT FOR RECORDATION  
CONVEYANCES OR SALES**



**SEABOARD SURVEYING & PLANNING, INC. C-1536**  
103F W. WOOD HILL DR., P.O. BOX 58, NAGS HEAD, NC 27959  
OFFICE: (252) 480-9998 FAX: (252) 480-0571

**SURVEY/ SITE PLAN FOR  
MICHAEL A. ZITO, JR. & CATHERINE M. ZITO  
LOT 48 & ADJACENT PARCEL - GOOSEWING - NAGS HEAD  
NAGS HEAD TOWNSHIP - DARE COUNTY - NORTH CAROLINA**

FILE: 1707822 SURVEYED: 10/18/17 CE PLATTED: 10/30/17 MJ

**EXHIBIT 'E'**

**CERTIFIED MAIL, RETURN RECEIPT REQUESTED or HAND DELIVERED**

July 31, 2017

Date

Jarrod Mandozzi & wife, Maria Mandozzi

Name of Adjacent Riparian Property Owner  
168 Venetian Drive

Address  
Islamorada, FL 33036

City, State Zip

**To Whom It May Concern:**

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to construction of a residence.

on my property at 10224 E Sea Gull Drive, Nags Head, North Carolina  
in Dare County, which is adjacent to your property. A copy of the application and project drawing is attached/enclosed for your review.

If you have no objections to the proposed activity, please mark the appropriate statement below and return to me as soon as possible. If no comments are received within 10 days of receipt of this notice, it will be considered that you have no comments or objections regarding this project.

If you have objections or comments, please mark the appropriate statement below and send your correspondence to: Kelly Wyatt, Town of Nags Head, P. O. Box 99, Nags Head, NC 27959

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or contact Kelly Wyatt, phone - 252-441-7016 or e-mail at kelly.wyatt@nagsheadnc.gov.

Sincerely,

  
Property Owner's Name

Michael A. Zito, Jr./Catherine M. Zito

410-274-7448

Telephone Number

Address

City

State

Zip

       I have no objection to the project described in this correspondence.

       I have objection(s) to the project described in this correspondence.

Adjacent Riparian Signature

Date

Print or Type Name

Telephone Number

Address

City

State

Zip

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**

Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)

ISLAMORADA FL 33036

0954

Postmark Here

07/31/2017

Postage \$3.35

Certified Fee \$0.00

Return Receipt Fee \$0.00

Restricted Delivery Fee \$0.00

Total Postage & Fees \$6.80

Sent to Jarrod Mandozzi

Street & Apt. No. or PO Box No. 168 Venetian Drive

City, State, ZIP+4 Islamorada, FL 33036

PS Form 3800, July 2014 See Reverse for Instructions

7015 0920 0002 3872 3678

**SENDER: COMPLETE THIS SECTION**

Complete items 1, 2, and 3.

Print your name and address on the reverse so that we can return the card to you.

Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Jarrod Mandozzi  
Maria Mandozzi  
168 Venetian Drive  
Islamorada, FL 33036

2. Article Number (Transfer from service label)  
7015 0920 0002 3872 3678



9590 9403 0238 5146 8788 01

PS Form 3811, April 2015 PSN 7530-02-000-9053

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature *[Signature]*

X Agent

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? Yes  No

3. Service Type  
 Priority Mail Express®  
 Registered Mail™  
 Adult Signature Restricted Delivery  
 Certified Mail®  
 Return Receipt for Merchandise  
 Collect on Delivery  
 Collect on Delivery Restricted Delivery  
 Signature Confirmation™  
 Insured Mail (over \$500)  
 Insured Mail Restricted Delivery (over \$500)

Domestic Return Receipt

**CERTIFIED MAIL RETURN RECEIPT REQUESTED or HAND DELIVERED**

July 31, 2017

Date

Elizabeth Ann Connell  
Name of Adjacent Riparian Property Owner  
19518 N 73rd Avenue  
Address  
Glendale, AZ 85308  
City, State Zip

**To Whom It May Concern:**

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to  
construction of a residence

on my property at 10224 E Sea Gull Drive, Nags Head, North Carolina  
in Dare County, which is adjacent to your property. A copy of the application and project  
drawing is attached/enclosed for your review.

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as possible. If no comments are received within 10 days of receipt of this notice, it will be considered that you have no  
comments or objections regarding this project.

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Kelly Wyatt, Town of Nags Head, P. O. Box 99, Nags Head, NC 27959

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or  
Kelly Wyatt, phone - 252-441-7016, or e-mail -at kelly.wyatt@nagsheadnc.gov.

Sincerely,

Michael A. Zito, Jr./Catherine M. Zito  
Property Owner's Name  
Michael A. Zito, Jr./Catherine M. Zito

410-274-7448  
Telephone Number

Address City State Zip

I have no objection to the project described in this correspondence.  
 I have objection(s) to the project described in this correspondence.

\_\_\_\_\_  
Adjacent Riparian Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print or Type Name

\_\_\_\_\_  
Telephone Number

Address City State Zip

7015 0920 0002 3872 3661

**U.S. Postal Service**  
**CERTIFIED MAIL® RECEIPT**  
*Domestic Mail Only*

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

OFFICIAL USE  
 GLENDALE, AZ 85308

Postage	\$3.35
Certified Fee	\$2.75
Return Receipt Fee (Endorsement Required)	\$0.00
Restricted Delivery Fee (Endorsement Required)	\$0.00
Total Postage & Fees	\$6.80

0954  
 01  
 Postmark  
 Here  
 07/31/2017

Sent To  
 Elizabeth Ann Connell  
 Street & Apt. No.,  
 or PO Box No. 19518 N 73rd Avenue  
 City, State, ZIP+4  
 Glendale, AZ 85308

PS Form 3800, July 2014 See Reverse for Instructions

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:  
 Elizabeth Ann Connell  
 19518 N 73rd Avenue  
 Glendale, AZ 85308



9590 9403 0238 5146 8787 71

2. Article Number (Transfer from service label)  
 015 0920 0002 3872 3661

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  
 Agent  
 Addressee  
 B. Received by (Printed Name)  
 C. Date of Delivery  
 D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below  No

*[Handwritten Signature]*  
*[Handwritten Name]*  
*[Handwritten Date: 8/3/17]*

*[Postmark: GLENDALE AZ 85308 AUG 3 2017]*

3. Service Type
- |  |   |
|--|---|
| <input type="checkbox"/> Adult Signature                               | <input type="checkbox"/> Priority Mail Express®                     |
| <input type="checkbox"/> Adult Signature Restricted Delivery           | <input type="checkbox"/> Registered Mail™                           |
| <input checked="" type="checkbox"/> Certified Mail®                    | <input type="checkbox"/> Registered Mail Restricted Delivery        |
| <input type="checkbox"/> Certified Mail Restricted Delivery            | <input checked="" type="checkbox"/> Return Receipt for Merchandise  |
| <input type="checkbox"/> Collect on Delivery                           | <input type="checkbox"/> Signature Confirmation™                    |
| <input type="checkbox"/> Collect on Delivery Restricted Delivery       | <input type="checkbox"/> Signature Confirmation Restricted Delivery |
| <input type="checkbox"/> Insured Mail                                  |   |
| <input type="checkbox"/> Insured Mail Restricted Delivery (over \$500) |   |

**CERTIFIED MAIL, RETURN RECEIPT REQUESTED or HAND DELIVERED**

July 31, 2017

Date

Elizabeth Ann Connell  
Name of Adjacent Riparian Property Owner  
19518 N 73rd Avenue  
Address  
Glendale, AZ 85308  
City, State Zip

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construction of a residence


on my property at 10224 E Sea Gull Drive, Nags Head, North Carolina  
in Dare County, which is adjacent to your property. A copy of the application and project  
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Kelly Wyatt, Town of Nags Head, P. O. Box 99, Nags Head, NC 27959

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or Kelly Wyatt, phone - 252-441-7016, or e-mail at kelly.wyatt@nagsheadnc.gov.


Sincerely,

  
Property Owner's Name  
Michael A. Zito, Jr./Catherine M. Zito

410-274-7448  
Telephone Number

Address City State Zip

I have no objection to the project described in this correspondence.  
 I have objection(s) to the project described in this correspondence.

  
Adjacent Riparian Signature  
Elizabeth Ann Connell  
Print or Type Name

8/3/2017  
Date  
720-341-5175  
Telephone Number

Address City State Zip  
19518 N. 73rd Ave. Glendale AZ 85308

B: 1777 P: 455  
08/29/2008 04:22 PM  
Doc Code: DEED  
Barbara M. Gray, Register of Deeds Dare CO, NC

Doc Id: 6246261  
Receipt #: 08-3926  
NCExcise Tax pd: \$877.00

6246261 B: 1777 P: 455 Page 1 of 2 8/29/08 4:22 PM

UNOFFICIAL  
DARE COUNTY  
LT 3048-08



REAL ESTATE  
TRANSFER TAX

\$4,385<sup>00</sup>

Space Above This Line For Recording Data

**DEED**

This instrument prepared by Robert B. Hobbs, Jr., a licensed North Carolina Attorney

D3251-1RH

Return to M. Peebles Harrison, Rose, Harrison & Gilreath, PO Box 1087, Nags Head, NC 27959

Excise Tax: \$877.00  
Transfer Tax: \$4,385.00

Tax Parcel: 007480000  
LT Number 3048-08

North Carolina, Dare County

THIS GENERAL WARRANTY DEED made this 29th day of August, 2008, by and between KEN A. STARR and wife, TERRI L. STARR (hereinafter referred to as "Grantor"), and MICHAEL A. ZITO, JR. and wife, CATHERINE M. ZITO, whose mailing address is 11816 Mays Chapel Road, Timonium, MD 21093 (hereinafter referred to as "Grantee"):

WITNESSETH:

That the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has given, granted, bargained, sold, and conveyed, and by these presents does hereby give, grant, bargain, sell, and convey unto said Grantee, Grantee's heirs, successors, administrators and assigns, all of that certain piece, parcel, or tract of land situate, lying and being in the Town of Nags Head, Nags Head Township, Dare County, State of North Carolina, and being more particularly described as follows:

Lot No. 48 of the subdivision known as Goose Wing as shown on a map or plat thereof made by Rose & Purcell, Inc. Engineers, dated January, 1977, and recorded in Map Book 9, Page 57, Public Registry of Dare County, North Carolina.

The Grantees herein shall have the right of access to the Atlantic Ocean and State Road No. 1243 over and across the area designated "Access Areas", which said right is to be held in common with each owner in the subdivision.

Together with all of Grantors right, title and interest in and to that certain easement recorded in Book 1678, Page 228, and amended by instruments recorded in Book 1742, Page 149 and Book 1766, Page 110, of the Dare County Registry.

RECEIVED

AUG 01 2018

DCM-MHD CITY  
Book 1777 Page 455-0001





UNOFFICIAL INSTRUMENT

Being the same property conveyed to Grantor by Deed filed in Book 1742, Page 150, Dare County Registry.

TO HAVE AND TO HOLD the above described lands and premises, together with all appurtenances thereunto belonging, or in anywise appertaining, unto the Grantee, Grantee's heirs, successors, administrators, and assigns forever.

AND THE SAID GRANTOR COVENANTS to and with said Grantee, Grantee's heirs, successors, administrators, and assigns, that Grantor is lawfully seized in fee simple of said lands and premises, and have full right and power to convey the same to the Grantee in fee simple, and that said lands and premises are free from any and all encumbrances, except as set forth herein, and that the Grantor will warrant and defend the title against the lawful claims of all persons whomsoever, with the exception of the following: Ad valorem taxes for the year 2009 and subsequent years, easements and restrictions of record, and any local, county, state, or federal laws, ordinances, or regulations relating to zoning, environment, subdivision, occupancy, use, construction, or development of the subject property.

IN WITNESS WHEREOF, the Grantor has duly executed and sealed this document, this the day and year first above written.

GRANTOR: [Signature] (SEAL)  
Ken A. Starr

[Signature] (SEAL)  
Terri L. Starr

STATE OF Virginia  
(COUNTY) (CITY) OF Chesterfield

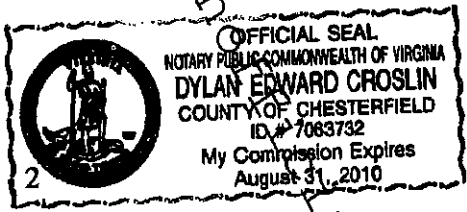
I, Dylan Edward Croslin a Notary Public of the (County) (City) of Chesterfield, and State aforesaid, certify that Ken A. Starr and wife, Terri L. Starr personally appeared before me this day and acknowledged the execution of the foregoing instrument.

Witness my hand and seal this 26 day of August, 2008.

(AFFIX NOTARY SEAL)

[Signature]  
Notary Public  
Notary's printed or typed name: Dylan Edward Croslin

My commission expires: 8/31/10



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AUG 01 2018

DCM-MHD CITY

Book 1777 Page 455-0002

UNOFFICIAL INSTRUMENT

700031129



Unofficial Document

Recorded: 10/12/2016 04:15:49 PM  
BY: Claudia Harrington  
Vanzolia McMurran, Register of Deeds  
Dare County, NC

Fee Amt \$26.00

NC Excise Tax: \$0.00

Please return to: Town of Nags Head, PO Box 99, Nags Head, NC 27959



**A RESOLUTION ORDERING THE CLOSING OF SEAGULL DRIVE IN SOUTH NAGS HEAD**  
(Revised 10/5/2016)

**WHEREAS**, on the 6<sup>th</sup> day of April 2016 the Board of Commissioners of the Town of Nags Head directed the Town Clerk to publish the resolution of intent of the Board of Commissioners of the Town of Nags Head to consider closing the north-south portion of Seagull Drive in the *Coastland Times* newspaper once each week for four consecutive weeks and posting said resolution in two locations along said street advising the public that a public hearing would be conducted in the Town Hall at 9:00 a.m. on the 1<sup>st</sup> day of June 2016; AND

**WHEREAS**, the Town's Board of Commissioners further directed the Town Clerk to notify by certified mail, all persons owning property abutting on that portion of Seagull Drive proposed to be closed enclosing with such notification a copy of the resolution of intent; AND

**WHEREAS**, the Town Clerk has advised the Board of Commissioners that on the date directed she sent notice to each of said abutting property owners by certified mail return receipt requested advising them of the day, time and place of the meeting, enclosing a copy of the Board of Commissioners' resolution of intent, and advising said abutting property owners that the question as to the closing to said portion of Seagull Drive would be acted upon; AND

**WHEREAS**, the Town Clerk has advised the Board of Commissioners that none of the notices sent to abutting property owners on Seagull Drive has been returned undelivered; AND

**WHEREAS**, after full and complete consideration of the matter and after having granted full and complete opportunity for all interested persons to appear and register any objections that they might have with respect to the closing of said street; AND

**WHEREAS**, the north-south portion of Seagull Dr. is constantly threatened and damaged by the relentless wave action of the Atlantic Ocean resulting in chronic, persistent and inevitable erosion of that portion of the road; AND

**WHEREAS**, the north-south portion of Seagull Dr. is located entirely within the Goose Wing subdivision, does not connect any other public streets, is not needed for the public access to any other streets, neighborhoods, developments or facilities, and receives little, if any, use by anyone other than the owners of approximately nine (9) properties located along the street and those who rent the cottages located on those properties; AND

**WHEREAS**, the cost to maintain and continually repair the north-south portion of Seagull Dr. due to frequent and inevitable erosion is not justified by the benefit provided to the public by keeping that portion of the street open as a public street; AND

**WHEREAS**, the Board of Commissioners hereby finds and determines that the closing of said street is not contrary to the public interest and that no individual owning property either abutting the street or in the vicinity of said street or in the subdivision in which said street is located will, as a result of the proposed closing of the north-south portion of Seagull Dr., be thereby deprived of a reasonable means of ingress or egress to his property; AND

**WHEREAS**, it appears to the satisfaction of the BOC that the closing of said street will be in the public interest.

**NOW THEREFORE BE IT RESOLVED** by the Board of Commissioners of the Town of Nags Head, meeting in regular session, that the north-south portion of Seagull Drive located in South Nags Head, as more particularly described hereafter, is hereby ordered closed and all right, title and interest in those persons owning lots adjacent to the street; such title, for the width of the abutting land owned by them, to extend to the centerline of the herein closed street in accordance with the provision of GS 160A-299(c): All that north-south portion of Seagull Drive identified as extending from the property line between Lot 56 (10200 Seagull Drive-Dipaola) and Lot 55 (10204 Seagull Drive-Fohs) to the north - and running to the property line between Lot 21 (216 Seagull Drive) and Lot 22 (214 Seagull Drive) to the south - of the Goose Wing Subdivision.

RECEIVED

AUG 01 2018

DCM-MHD CITY

UNOFFICIAL DOCUMENT

Provided, however, that this resolution shall not terminate or have any effect on the existing access easements and rights to all of Seagull Drive held by all property owners in Goose Wing Subdivision as shown on and created by the recorded plat of Goose Wing Subdivision, which access easements and rights are hereby acknowledged and reserved to all property owners in the Subdivision.

The Town Clerk is hereby ordered and directed to file in the office of the Register of Deeds of Dare County a certified copy of this resolution. Upon motion duly made by Comr. Demers and duly seconded by Mayor Pro Tem Walters, the above resolution was duly adopted by the Board of Commissioners at a regular meeting held on the 7<sup>th</sup> day of September 2016. Upon call for a vote all Commissioners voted in the affirmative.

This the 7<sup>th</sup> day of September 2016.

Robert C. Edwards  
Robert C. Edwards, Mayor  
Town of Nags Head

ATTEST:

Carolyn F. Morris  
Carolyn F. Morris, Town Clerk



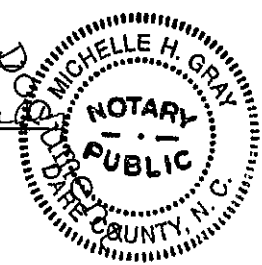
STATE OF NORTH CAROLINA  
COUNTY OF DARE

I, Michelle H Gray, a Notary Public for said County and State, do hereby certify that Robert C. Edwards personally appeared before me this day and acknowledged the due execution for the foregoing instrument.

WITNESS my hand and notarial seal, this the 5<sup>th</sup> day of October, 2016

Michelle H Gray  
Notary Public

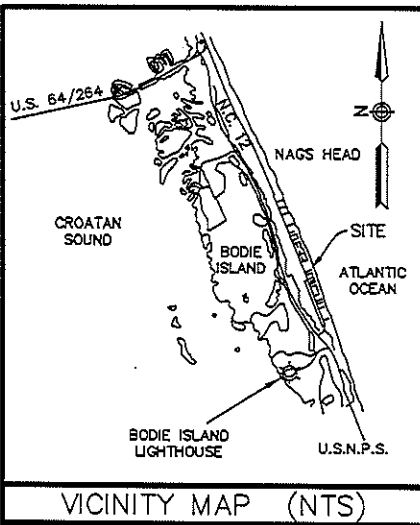
Commission expires: 10/4/20



RECEIVED

AUG 01 2018

DCM-MHD CITY

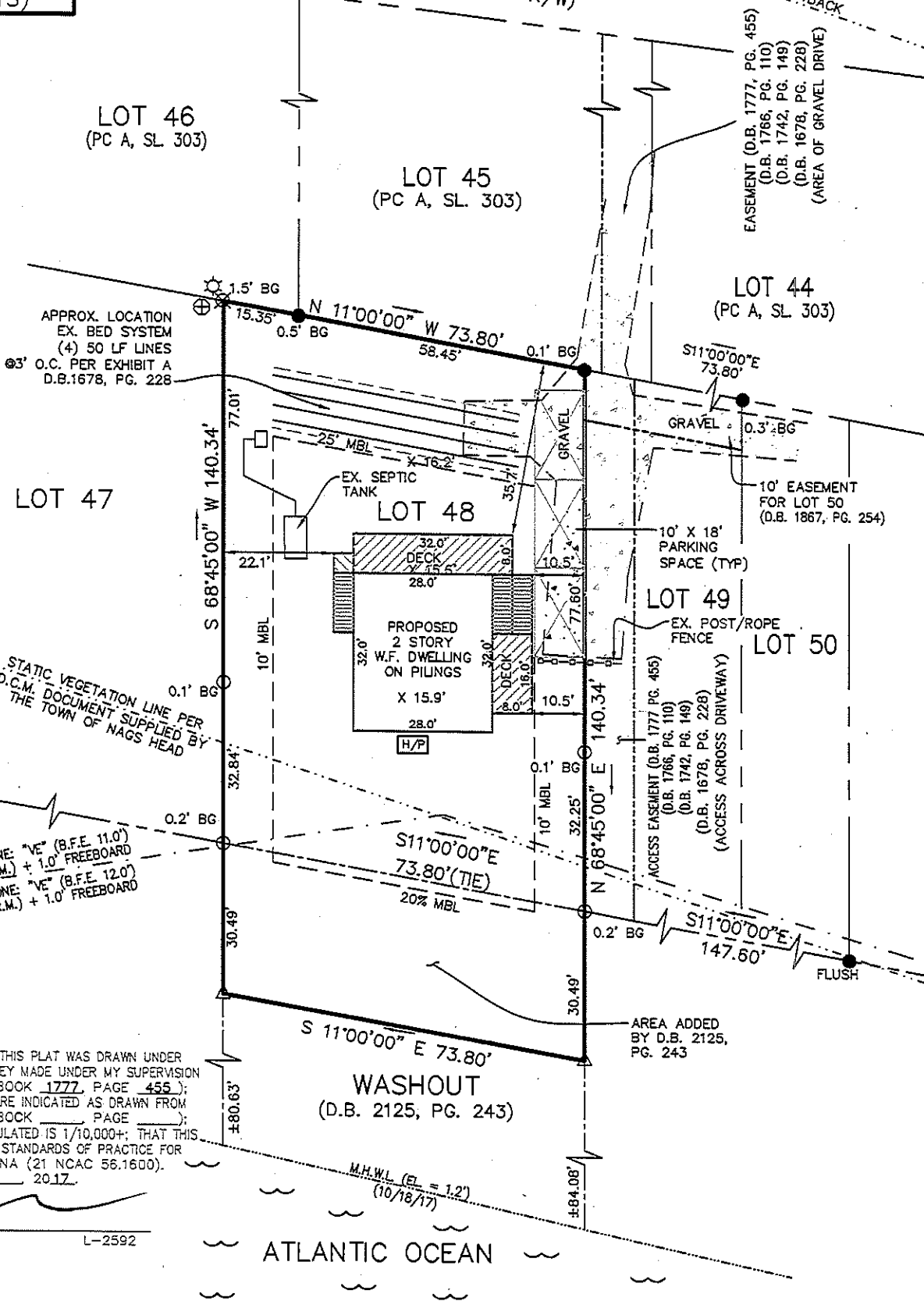
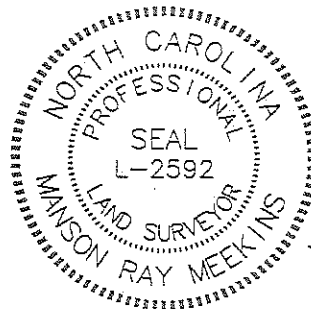


**NOTES:**

1. THIS SURVEY IS SUBJECT TO ANY FACTS THAT MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH.
2. AREA BY COORDINATE COMPUTATION = 10,192 S.F. (6,909 SF. WEST OF STATIC VEG. LINE)
3. F.I.R.M. ZONE: AS SHOWN
4. PIN NO.: 14 071815 73 0373
5. RECORDED REFERENCE: M.B. 9, PG. 57; DB 1777, PG. 455
6. MINIMUM BUILDING LINES (MBL), IF SHOWN HEREON, ARE PER THE CURRENT LOCAL ZONING REGULATIONS. OTHER SETBACKS AND/OR RESTRICTIONS MAY APPLY AND MUST BE VERIFIED PRIOR TO CONSTRUCTION.
7. ELEVATIONS (NAVD 1988): AS SHOWN
8. PROPOSED LOT COVERAGE: 2,001 S.F. (29.0%)
9. SITE PLAN REQUIREMENTS PER TOWN OF NAGS HEAD ZONING ORD. ARTICLE IV-SEC 48-123 AND ARTICLE III SEC 48-84.
10. THIS PROPERTY LIES WITHIN THE 540 FT C.A.M.A. O.E.A./A.E.C. AND THE 180 FT. C.A.M.A. STRUCTURE SETBACK.

VICINITY MAP (NTS)

- LEGEND**
- - EX. PIPE
  - - EX. 3/4" REBAR
  - - 1/2" REBAR SET
  - - EX. CONC. MON.
  - - CONC. MON. SET
  - ▲ - EX. MAG NAIL & WASHER
  - △ - CALCULATED POINT
  - ⊗ - EX. 1" OPEN PIPE
  - ⊕ - WATER METER
  - ⊖ - PHONE PEDESTAL
  - ⊙ - C.A.T.V.
  - ⊘ - UTILITY POLE
  - ⊗ - GUY WIRE
  - ⊕ - FIRE HYDRANT
  - ⊖ - ELECT. TRANS.
  - AG - ABOVE GRADE
  - BG - BELOW GRADE

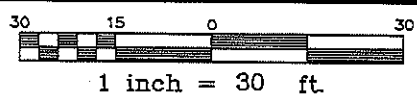


N.F.I.P. ZONE: "VE" (B.F.E. 11.0')  
(PER F.I.R.M.) + 1.0' FREEBOARD  
N.F.I.P. ZONE: "VE" (B.F.E. 12.0')  
(PER F.I.R.M.) + 1.0' FREEBOARD

I, MANSON RAY MEEKINS, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK 1777, PAGE 455); THAT THE BOUNDARIES NOT SURVEYED ARE INDICATED AS DRAWN FROM (DEED DESCRIPTION RECORDED IN BOOK \_\_\_\_\_, PAGE \_\_\_\_\_); THAT THE RATIO OF PRECISION AS CALCULATED IS 1/10,000+; THAT THIS PLAT MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56.1600). THIS 13TH DAY OF DECEMBER 2017.

*Manson Ray Meekins*  
SURVEYOR L-2592

SURVEY/ SITE PLAN FOR  
**MICHAEL A. ZITO, JR. & CATHERINE M. ZITO**  
 LOT 48 & ADJACENT PARCEL - GOOSEWING - NAGS HEAD  
 NAGS HEAD TOWNSHIP - DARE COUNTY - NORTH CAROLINA



**SEABOARD SURVEYING & PLANNING, INC. C-1536**  
 103F W. WOOD HILL DR., P.O. BOX 58, NAGS HEAD, NC 27959  
 OFFICE: (252) 480-9998 FAX: (252) 480-0571

Locality Nags Head Permit Number 17-036

Ocean Hazard  Estuarine Shoreline \_\_\_\_\_ ORW Shoreline \_\_\_\_\_ Public Trust Shoreline \_\_\_\_\_ Other \_\_\_\_\_

(For official use only)

Received

AUG 04 2017

**GENERAL INFORMATION**

**LAND OWNER - MAILING ADDRESS**

Name Michael A. Zito, Jr. and wife, Catherine M. Zito

DCM-EC

Address 11816 Mays Chapel Road

City Timonium State MD Zip 21093 Phone 410-274-7448

Email czito@lighthouseha.com mazito@kpmg.com

**AUTHORIZED AGENT**

Name Christopher L. Seawell

Address P. O. Box 339

City Manteo State NC Zip 27954 Phone 252-473-3484

Email cseawell@manteolaw.com

**LOCATION OF PROJECT: (Address, street name and/or directions to site; name of the adjacent waterbody.)**

10224 E Sea Gull Drive, Nags Head, NC 27959 Gausewing S/D

**DESCRIPTION OF PROJECT: (List all proposed construction and land disturbance.)**

Construction of residence.

SIZE OF LOT/PARCEL: 10,192 square feet \_\_\_\_\_ acres

PROPOSED USE: Residential  (Single-family  Multi-family ) Commercial/Industrial  Other

**COMPLETE EITHER (1) OR (2) BELOW (Contact your Local Permit Officer if you are not sure which AEC applies to your property):**

(1) OCEAN HAZARD AECs: TOTAL FLOOR AREA OF PROPOSED STRUCTURE: 2048 square feet (includes air conditioned living space, parking elevated above ground level, non-conditioned space elevated above ground level but excluding non-load-bearing attic space)

(2) COASTAL SHORELINE AECs: SIZE OF BUILDING FOOTPRINT AND OTHER IMPERVIOUS OR BUILT UPON SURFACES: \_\_\_\_\_ square feet (includes the area of the foundation of all buildings, driveways, covered decks, concrete or masonry patios, etc. that are within the applicable AEC. Attach your calculations with the project drawing.)

STATE STORMWATER MANAGEMENT PERMIT: Is the project located in an area subject to a State Stormwater Management Permit issued by the NC Division of Energy, Mineral and Land Resources (DEMLR)?  
YES \_\_\_\_\_ NO X

If yes, list the total built upon area/impervious surface allowed for your lot or parcel: \_\_\_\_\_ square feet.

**OTHER PERMITS MAY BE REQUIRED:** The activity you are planning may require permits other than the CAMA minor development permit, including, but not limited to: Drinking Water Well, Septic Tank (or other sanitary waste treatment system), Building, Electrical, Plumbing, Heating and Air Conditioning, Insulation and Energy Conservation, FIA Certification, Sand Dune, Sediment Control, Subdivision Approval, Mobile Home Park Approval, Highway Connection, and others. Check with your Local Permit Officer for more information.

**STATEMENT OF OWNERSHIP:**

I, the undersigned, an applicant for a CAMA minor development permit, being either the owner of property in an ABC or a person authorized to act as an agent for purposes of applying for a CAMA minor development permit, certify that the person listed as landowner on this application has a significant interest in the real property described therein. This interest can be described as: (check one)

X an owner or record title, Title is vested in name of Michael A. Zito, Jr. and wife, Catherine M. Zito,  
see Deed Book 1777 page 455 in the Dare County Registry of Deeds.

\_\_\_\_\_ an owner by virtue of inheritance. Applicant is an heir to the estate of \_\_\_\_\_  
\_\_\_\_\_ ; probate was in \_\_\_\_\_ County.

\_\_\_\_\_ if other interest, such as written contract or lease, explain below or use a separate sheet & attach to this application.

**NOTIFICATION OF ADJACENT RIPARIAN PROPERTY OWNERS:**

I furthermore certify that the following persons are owners of properties adjoining this property. I affirm that I have given ACTUAL NOTICE to each of them concerning my intent to develop this property and to apply for a CAMA permit.

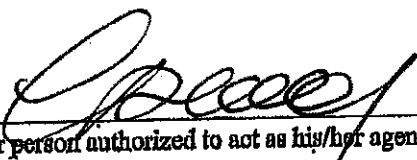
- | (Name)  | (Address)                                       |
|---|---|
| (1) <u>Elizabeth Ann Connell</u>                      | <u>19518 N 73rd Avenue, Glendale, AZ, 85308</u> |
| (2) <u>Jarrod Mandozzi &amp; wife, Maria Mandozzi</u> | <u>168 Venetian Drive, Islamorada, FL 33036</u> |
| (3) _____   | _____   |
| (4) _____   | _____   |

**ACKNOWLEDGEMENTS:**

I, the undersigned, acknowledge that the land owner is aware that the proposed development is planned for an area which may be susceptible to erosion and/or flooding. I acknowledge that the Local Permit Officer has explained to me the particular hazard problems associated with this lot. This explanation was accompanied by recommendations concerning stabilization and floodproofing techniques.

I furthermore certify that I am authorized to grant, and do in fact grant, permission to Division of Coastal Management staff, the Local Permit Officer and their agents to enter on the aforementioned lands in connection with evaluating information related to this permit application.

This the 31<sup>st</sup> day of July, 2017

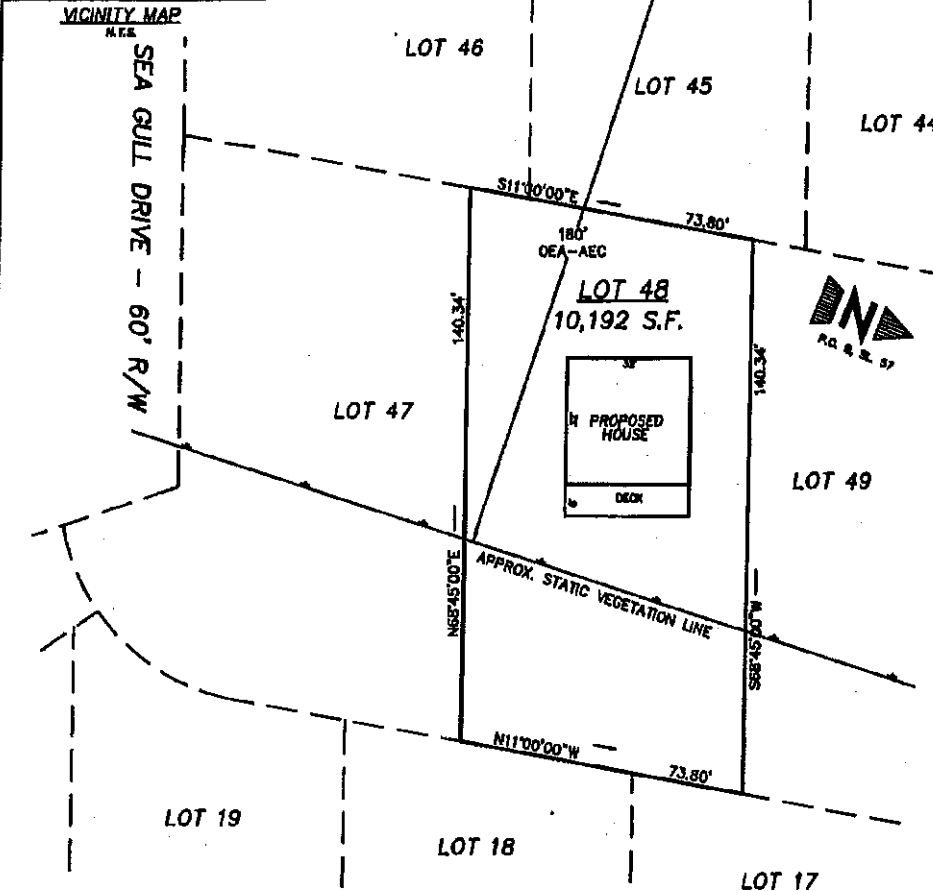
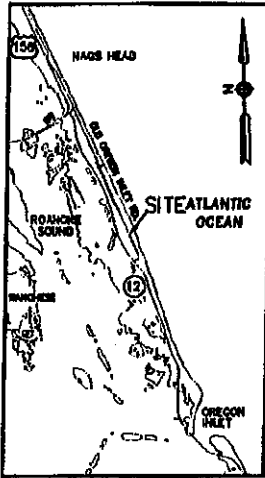
  
\_\_\_\_\_  
Landowner or person authorized to act as his/her agent for purpose of filing a CAMA permit application

*This application includes: general information (this form), a site drawing as described on the back of this application, the ownership statement, the Ocean Hazard AEC Notice where necessary, a check for \$100.00 made payable to the locality, and any information as may be provided orally by the applicant. The details of the application as described by these sources are incorporated without reference in any permit which may be issued. Deviation from these details will constitute a violation of any permit. Any person developing in an AEC without permit is subject to civil, criminal and administrative action.*

Received

AUG 04 2017

DCM-EC



*FCSN?*

*Setback measured from vegetation line*

*30 x 6 = 180'*

*when is setback line?*



SITE PLAN FOR

MICHAEL A. JR. & CATHERINE ZITO  
10224 E. SEA GULL DRIVE  
LOT 48, GOOSE WING  
TOWN OF NAGS HEAD, DARE COUNTY, N.C.

SCALE 1"=30'	DATE 6/29/17	DRAWN K.O.	PROJECT NO. 16062	SHEET 1 of 1
-----------------	-----------------	---------------	----------------------	-----------------

**ENVIRONMENTAL PROFESSIONALS, INC.**  
Planning for a Better Environment  
1404 S. Virginia Dare Trail  
P.O. BOX 3368 - KILL DEVIL HILLS, NC 27848  
PHONE (252) 441-0820 FAX (252) 441-0721

**AGENT AUTHORIZATION FOR CAMA PERMIT APPLICATION**

Name of Property Owner Requesting Permit: Michael A. Zito, Jr. and wife, Catherine M. Zito

Mailing Address: 11816 Mays Chapel Road  
Timonium, MD 21093

Phone Number: 410-274-7448

Email Address: mazito@kpmg.com

I certify that I have authorized Christopher L. Seawell  
Agent / Contractor

to act on my behalf, for the purpose of applying for and obtaining all CAMA permits  
necessary for the following proposed development: Construction of a residence.

at my property located at 10224 E Sea Gull Drive, Nags Head, North Carolina,  
in Dare County.

*I furthermore certify that I am authorized to grant, and do in fact grant permission to  
Division of Coastal Management staff, the Local Permit Officer and their agents to enter  
on the aforementioned lands in connection with evaluating information related to this  
permit application.*

Property Owner Information:

  
Signature

Michael A. Zito, Jr./Catherine M. Zito  
Print or Type Name

\_\_\_\_\_  
Title

7 / 24 / 17  
Date

This certification is valid through \_\_\_\_/\_\_\_\_/\_\_\_\_



# OCEAN HAZARD AEC NOTICE

Project is in an: X Ocean Erodible Area \_\_\_\_\_ High Hazard Flood Area \_\_\_\_\_ Inlet Hazard Area

Property Owner: Zito

Property Address: 10224 E. Sea Gull Dr.

Date Lot Was Platted: \_\_\_\_\_

This notice is intended to make you, the applicant, aware of the special risks and conditions associated with development in this area, which is subject to natural hazards such as storms, erosion and currents. The rules of the Coastal Resources Commission require that you receive an AEC Hazard Notice and acknowledge that notice in writing before a permit for development can be issued.

The Commission's rules on building standards, oceanfront setbacks and dune alterations are designed to minimize, but not eliminate, property loss from hazards. By granting permits, the Coastal Resources Commission does not guarantee the safety of the development and assumes no liability for future damage to the development. Permits issued in the Ocean Hazard Area of Environmental Concern include the condition that structures be relocated or dismantled if they become imminently threatened by changes in shoreline configuration. The structure(s) must be relocated or dismantled within two (2) years of becoming imminently threatened, and in any case upon its collapse or subsidence.

The best available information, as accepted by the Coastal Resources Commission, indicates that the annual long-term average ocean erosion rate for the area where your property is located is 0 feet per year.

The rate was established by careful analysis of aerial photographs of the coastline taken over the past 50 years.

Studies also indicate that the shoreline could move as much as 25 feet landward in a major storm.

The flood waters in a major storm are predicted to be about 11 feet deep in this area.

Preferred oceanfront protection measures are beach nourishment and relocation of threatened structures. Hard erosion control structures such as bulkheads, seawalls, revetments, groins, jetties and breakwaters are prohibited. Temporary sand bags may be authorized under certain conditions.

The applicant must acknowledge this information and requirements by signing this notice in the space below. Without the proper signature, the application will not be complete.

**SPECIAL NOTE:** This hazard notice is required for development in areas subject to sudden and massive storms and erosion. Permits issued for development in this area expire on December 31 of the third year following the year in which the permit was issued. Shortly before work begins on the project site, the Local Permit Officer must be contacted to determine the vegetation line and setback distance at your site. If the property has seen little change since the time of permit issuance, and the proposed development can still meet the setback requirement, the LPO will inform you that you may begin work. Substantial progress on the project must be made within 60 days of this setback determination, or the setback must be remeasured. Also, the occurrence of a major shoreline change as the result of a storm within the 60-day period will necessitate remeasurement of the setback. It is important that you check with the LPO before the permit expires for official approval to continue the work after the permit has expired. Generally, if foundation pilings have been placed and substantial progress is continuing, permit renewal can be authorized. It is unlawful to continue work after permit expiration.

For more information, contact:

Kelly Wyatt

Local Permit Officer

PO Box 99 Nags Head, NC

Address

Town of Nags Head

Locality

252-441-7016

Phone Number

6x90 = 540 AEC

[Signature] 7-24-17  
Property Owner Signature Date

County of Dare, North Carolina

\*Owner and Parcel information is based on current data on file and was last updated on August 03 2018

**Primary (100%) Owner Information:**

ZITO, MICHAEL A JR EUX  
 ZITO, CATHERINE M EUX  
 11816 MAYS CHAPEL RD  
 TIMONIUM MD 21093

**Parcel Information:**

Parcel: 007480000 PIN: 071815730373  
 District: 14- NAGS HEAD  
 Subdivision: GOOSE WING  
 LotBlkSect: LOT: 48 BLK: SEC:  
 Multiple Lots: -  
 PlatCabSlide: PL: 9 SL: 57 Units: 0

Deed Date: 10/12/2016

BkPg: 2125/0243 - RESOLUTION - CLOSING  
 SEAGULL DRIVE

Parcel Status: ACTIVE

Deed 8/29/2008 - BkPg: 1777/455

Property Use: VACANT LAND (PRIVATE)



10224 E SEA GULL DR

BUILDING USE & FEATURES	Tax Year Bldg Value: \$0	Next Year Bldg Value: \$0
Building Use:		
Exterior Walls:		Actual Year Built:
Full Baths:	Half Baths:	
Bedrooms:		
Heat-Fuel:		Finished sqft for building 1:
Heat-Type:		Total Finished SqFt for all bldgs: 0
Air Conditioning:		

Disclaimer: In instances where a dwelling contains unfinished living area, the square footage of that area is included in the total finished sqft on this record. However, the assessed value for finish has been removed.

MISCELLANEOUS USE	Tax Year Misc Value: \$0	Next Year Misc Value: \$0
-------------------	--------------------------	---------------------------

LAND USE	Tax Year Land Value: \$78,900	Next Year Land Value: \$78,900
----------	-------------------------------	--------------------------------

Land Description : 14-Ocean front

TOTAL LAND AREA: 6000 square feet

	Tax Year Total Value: \$78,900	Next Year Total Value: \$78,900
--	--------------------------------	---------------------------------

\*Values shown are on file as of August 03 2018

Uniform Residential Appraisal Report

File No. 53062255

The purpose of this summary appraisal report is to provide the lender/client with an accurate, and adequately supported, opinion of the market value of the subject property.

Property Address 10224 E SEA GULL DRIVE City NAGS HEAD State NC Zip Code 27959-8973

Owner MICHAEL AND CATHERINE ZITO Owner of Public Record KEN AND TERRI STARR County DARE

Legal Description LOT 48, GOOSE WING, PLAT CABINET 9, SLIDE 57, DCR

Assessor's Parcel # 007480000 Tax Year 2008 R.E. Taxes \$ 1,071.85

Neighborhood Name SOUTH NAGS HEAD AREA Map Reference 071815639295 Census Tract

Occupant [X] Owner [ ] Tenant [ ] Vacant [ ] Special Assessments \$ NONE KNOWN [ ] PUD HOA \$ [ ] per year [ ] per month

Property Rights Appraised [X] Fee Simple [ ] Leasehold [ ] Other (describe)

Assignment Type [X] Purchase Transaction [ ] Refinance Transaction [ ] Other (describe)

Lender/Client WELLS FARGO BANK, N.A. - 038499 Address 115 FULFORD AVENUE, #102, BEL AIR, MD 21014

Is the subject property currently offered for sale or has it been offered for sale in the twelve months prior to the effective date of this appraisal? [X] Yes [ ] No

Report data source(s) used, offering price(s), and date(s). MLS#56312 - CURRENTLY OFFERED AT \$440,000 - UNDER CONTRACT FOR \$438,500 - DAYS ON MARKET: 48

I [X] did [ ] did not analyze the contract for sale for the subject purchase transaction. Explain the results of the analysis of the contract for sale or why the analysis was not performed. THE SALES CONTRACT APPEARS AS NORMAL AND APPEARS TO BE AN ARMS-LENGTH TRANSACTION.

Contract Price \$ 438,500 Date of Contract 07/17/2008 Is the property seller the owner of public record? [X] Yes [ ] No Data Source(s) TAX OFFICE

Is there any financial assistance (loan charges, sale concessions, gift or downpayment assistance, etc.) to be paid by any party on behalf of the borrower? [X] Yes [ ] No

If Yes, report the total dollar amount and describe the items to be paid. \$ 4,500 CLOSING COSTS

Race [ ] racial [ ] of the [ ] are not [ ] sal factors.

Location [ ] Urban [X] Suburban [ ] Rural Property Values [ ] Increasing [X] Stable [ ] Declining PRICE AGF One Unit 65 %

Built-Up [ ] Over 75% [X] 25-75% [ ] Under 25% Demand/Supply [ ] Shortage [X] In Balance [ ] Over Supply \$(000) (yrs) 2-4 Unit %

Growth [ ] Rapid [X] Stable [ ] Slow Marketing Time [ ] Under 3 mths [X] 3-6 mths [ ] Over 6 mths 225 Low NEW Multi-Family %

Neighborhood Boundaries OREGON INLET TO THE SOUTH, KILL DEVIL HILLS TO THE NORTH, ATLANTIC OCEAN TO THE EAST, MANTEO TO THE WEST. 1000+ High 65+ Commercial 10 %

Neighborhood Description THE SUBJECT REPRESENTS THE OVERALL MARKETING AREA OF NAGS HEAD - OCEANFRONT - LOCATED ON THE OUTER BANKS OF NORTH CAROLINA WHERE LAND TO VALUE RATIOS TYPICALLY EXCEED THE NORM. ALL SERVICES OF THE AREA ARE CONSIDERED TO BE WITHIN A SHORT COMMUTE. NO ADVERSE INFLUENCES ARE EVIDENT

Market Conditions (including support for the above conclusions) SALES WITHIN THE AREA TEND TO BE SEASONAL WITH HIGHER SALES VOLUME IN THE LATE WINTER/EARLY SPRING BEFORE THE "HIGH SEASON" BEGINS. SALES ARE TYPICALLY CONVENTIONAL IN NATURE WITH SALES CONCESSIONS UNCOMMON

Other [ ] REFER TO RECORDED PLAT Area .18 ACRE Shape MOSTLY RECTANGULAR View OCEAN VIEW

Specific Zoning Classification RESIDENTIAL Zoning Description SINGLE FAMILY

Zoning Compliance [X] Legal [ ] Legal Nonconforming (Grandfathered Use) [ ] No Zoning [ ] Illegal (describe)

Is the highest and best use of the subject property as improved (or as proposed per plans and specifications) the present use? [X] Yes [ ] No If No, describe.

Utilities Public [X] Other (describe) [ ] Water Public [X] Other (describe) [ ] Off-site Improvements—Type Public [X] Private [ ]

Electricity [X] Gas [ ] Sanitary Sewer [X] PRIVATE SEPTIC Alley [ ]

FEMA Special Flood Hazard Area [X] Yes [ ] No FEMA Flood Zone VE FEMA Map # 375358 0718J FEMA Map Date 09/20/2008

Are the utilities and off-site improvements typical for the market area? [X] Yes [ ] No If No, describe.

Are there any adverse site conditions or external factors (easements, encroachments, environmental conditions, land uses, etc.)? [ ] Yes [X] No If Yes, describe. THE SUBJECT REPRESENTS A TYPICAL BUILDING LOT FOR THE AREA, WITH TYPICAL UTILITY EASEMENTS TO ACCOMMODATE SERVICES. THE SUBJECT PROPERTY HAS A PRIVATE SEPTIC TANK WHICH IS VERY COMMON FOR THE AREA AND HAS NO ADVERSE EFFECT ON THE PROPERTY VALUE.

GENERAL DESCRIPTION FOUNDATION EXTERIOR SCOPE INTERIOR

Units [X] One [ ] One with Accessory Unit [X] Concrete Slab [ ] Craw Space Foundation Walls PILINGS/AVE Floors VYL/W LAM/CPT/A

# of Stories 2 Full Basement [ ] Partial Basement Exterior Walls FIBER CMNT/AVE Walls PANELLING/AVE

Type [X] Det. [ ] Att. [ ] S. Det./End Unit Basement Area sq. ft. Roof Surface ASPHLT SHNGLES/A Trim/Finish PTD/STD WOOD/A

[X] Existing [ ] Proposed [ ] Under Const. Basement Finish % Gutters & Downspouts NONE/N/A Bath Floor VINYL/AVE

Design (Style) 2-STORY FBR CMNT [ ] Outside Entry/Exit [ ] Sump Pump Window Type VINYL/AVE Bath Waincot FIBERGLASS/AVE

Year Built 1982 Evidence of [ ] Infestation Storm Sash/Insulated INSULATED/AVE Car Storage [ ] None

Effective Age (Yrs) 13 [ ] Dampness [ ] Settlement Screens YES/AVE [X] Driveway # of Cars 2

Attic [ ] None Heating [X] FWA [ ] HWBB [ ] Radiant Amenities [ ] Wood Stove(s) # Driveway Surface GRAVEL/DIRT

[ ] Drop Slat [ ] Stairs [ ] Other [ ] Fuel ELECTRIC [ ] Fireplace(s) # [ ] Fence [ ] Garage # of Cars

[ ] Floor [X] Scudle Cooling [X] Central Air Conditioning [X] Patio/Deck [X] Porch [ ] Carport # of Cars

[ ] Finished [ ] Heated [ ] Individual [ ] Other [ ] Pool [ ] Other [ ] Att. [ ] Det. [ ] Built-in

Appliances [P] Refrigerator [X] Range/Oven [X] Dishwasher [ ] Disposal [ ] Microwave [P] Washer/Dryer [ ] Other (describe)

Finished area above grade contains: 7 Rooms 4 Bedrooms 3 Bath(s) 1,833 Square Feet of Gross Living Area Above Grade

Additional features (special energy efficient items, etc.) PORCH AND DECK OCEANSIDE WITH OCEAN VIEWS, VALUED BY BEING ON TOP FLOOR WITH FOUR SKYLIGHTS AND CEILING FAN; UPDATED WINDOWS AND SIDING.

Describe the condition of the property (including needed repairs, deterioration, renovations, remodeling, etc.). UPON INSPECTION, THE SUBJECT APPEARS IN AVERAGE CONDITION, CONSISTENT WITH ITS AGE AND MARKETING AREA.

Are there any physical deficiencies or adverse conditions that affect the livability, soundness, or structural integrity of the property? [ ] Yes [X] No If Yes, describe.

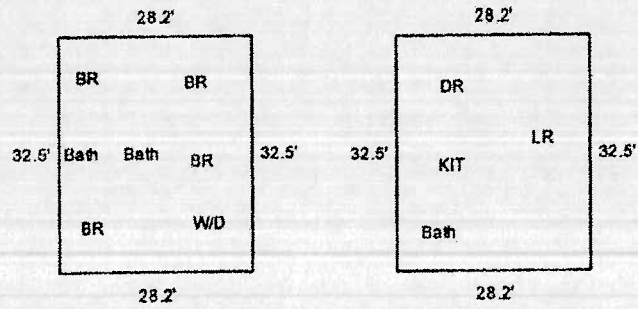
Does the property generally conform to the neighborhood (functional utility, style, condition, use, construction, etc.)? [X] Yes [ ] No If No, describe.

Form 75 March 2005 Produced using ACT software 308 214 8771 www.act-software.com Form 75 March 2005

Page 1 of 1

## FLOORPLAN

Borrower: MICHAEL AND CATHERINE ZITO	File No.: 53062255
Property Address: 10224 E SEA GULL DRIVE	Case No.: 0099950778
City: NAGS HEAD	State: NC
Lender: WELLS FARGO BANK, N.A. - 038499	Zip: 27959-8973



SKETCH CALCULATIONS		Perimeter	Area
<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">A1</div>	$A1 : 28.2 \times 32.5 =$ First Floor		916.5 916.5
<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">A2</div>	$A2 : 28.2 \times 32.5 =$ Second Floor		916.5 916.5
<b>Total Living Area</b>			<b>1833.0</b>





Bodie Island Ct

© 2018 Google

Google Earth

1993

Imagery Date: 3/24/2017 35°51'14.28" N 75°34'01.15" W elev 12 ft eye alt 483 ft



**From:** [Carver, Yvonne](#)  
**To:** [Goebel, Christine A](#)  
**Subject:** FW: [External] RE: Zito property  
**Date:** Wednesday, August 8, 2018 5:15:21 PM

---

Yvonne B. Carver  
Field Representative & District LPO Coordinator  
Division of Coastal Management  
NC Department of Environmental Quality

252-264-3901, ext. 232  
252-331-2951 (fax)  
yvonne.carver@ncdenr.gov  
401 S. Griffin St., Ste 300  
Elizabeth City, NC 27909

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

<https://deq.nc.gov/about/divisions/coastal-management/>

-----Original Message-----

From: Kelly Wyatt [<mailto:kelly.wyatt@nagsheadnc.gov>]  
Sent: Tuesday, October 17, 2017 1:25 PM  
To: George Wood <obxwood@yahoo.com>  
Cc: Chris Seawell <CSeawell@manteolaw.com>; Carver, Yvonne <yvonne.carver@ncdenr.gov>; Margaux Kerr <margaux.kerr@nagsheadnc.gov>  
Subject: [External] RE: Zito property

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you verify that the attachment and content are safe. Send all suspicious email as an attachment to [report.spam@nc.gov](mailto:report.spam@nc.gov).

Thank you for such a quick update - we will be on the lookout!

Kelly Wyatt, CZO, NCLID  
Deputy Planning Director & Zoning Administrator Town of Nags Head Department Phone: 252-441-7016 Direct  
Phone: 252-449-6042  
Fax: 252-441-4290  
Email: [Kelly.wyatt@nagsheadnc.gov](mailto:Kelly.wyatt@nagsheadnc.gov)  
Website: [www.nagsheadnc.gov](http://www.nagsheadnc.gov)

-----Original Message-----

From: George Wood  
Sent: Tuesday, October 17, 2017 1:17 PM  
To: Kelly Wyatt  
Cc: Chris Seawell; Yvonne Carver; Margaux Kerr  
Subject: Re: Zito property

The applicant has engaged a surveyor to prepare the plat in accordance with the Town's requirement. Certainly we had hoped to avoid this additional expense but recognize the necessity of the Town to have a plan that meets the submittal criteria.

> On Oct 17, 2017, at 1:02 PM, Kelly Wyatt <kelly.wyatt@nagsheadnc.gov> wrote:

>

> Good Afternoon Gentlemen-

>

> I am just following up on the CAMA Minor Permit submission for the Zito property located at 10224 E. Seagull Drive. This application was submitted on August 4, 2017 and since then there has been a couple of exchanges regarding the completeness of the application, the most recent on August 29th (see below). I have not heard a response to date - please let me know how you would like to proceed.

>

> Thank you,

> Kelly Wyatt

>

> Kelly Wyatt, CZO, NCLID

> Deputy Planning Director & Zoning Administrator Town of Nags Head

> Department Phone: 252-441-7016 Direct Phone: 252-449-6042

> Fax: 252-441-4290

> Email: Kelly.wyatt@nagsheadnc.gov

> Website: www.nagsheadnc.gov

>

> -----Original Message-----

> From: Kelly Wyatt

> Sent: Tuesday, August 29, 2017 8:44 AM

> To: George Wood

> Cc: Margaux Kerr; Chris Seawell; Andy Garman

> Subject: RE: Zito property

>

> Good Morning Mr. Wood-

> Thank you for your response. Unfortunately we cannot vary the requirements for the CAMA Minor Permit submittal. We need to be consistent with all submittals and believe it is even more so important to have a proper and accurate record of document submittals, etc. if the property owner proceeds to the CRC. I am sorry we cannot relief but again, we need to be consistent.

> Thank you,

> Kelly

>

> Kelly Wyatt, CZO, NCLID

> Deputy Planning Director & Zoning Administrator Town of Nags Head

> Department Phone: 252-441-7016 Direct Phone: 252-449-6042

> Fax: 252-441-4290

> Email: Kelly.wyatt@nagsheadnc.gov

> Website: www.nagsheadnc.gov

>

> -----Original Message-----

> From: George Wood

> Sent: Thursday, August 24, 2017 11:13 AM

> To: Kelly Wyatt

> Cc: Margaux Kerr; Chris Seawell

> Subject: Re: Zito property

>

> I talked with Mr. Seawell last night regarding this matter. We had hoped to minimize the cost to Ms. Zito so we could proceed to the CRC for the hearing. Is or can there be any relief from these requirements?

>> On Aug 24, 2017, at 10:42 AM, Kelly Wyatt <kelly.wyatt@nagsheadnc.gov> wrote:

>>

>> Good Morning George-

>> I just want to confirm that you are in receipt of the email below - again, the Zito CAMA application will remain on hold until this information is provided.

>> Thank you,

>> Kelly Wyatt

>>

>> Kelly Wyatt, CZO, NCLID

>> Deputy Planning Director & Zoning Administrator Town of Nags Head

>> Department Phone: 252-441-7016 Direct Phone: 252-449-6042

>> Fax: 252-441-4290

>> Email: Kelly.wyatt@nagsheadnc.gov

>> Website: www.nagsheadnc.gov

>>

>> -----Original Message-----

>> From: Kelly Wyatt

>> Sent: Tuesday, August 15, 2017 4:29 PM

>> To: George Wood

>> Cc: Margaux Kerr

>> Subject: RE: Zito property

>>

>> Good Afternoon George-

>> Hope you are doing well. I am reviewing the CAMA Application for Zito at 10224 Seagull. I realize that Mr. Seawell is the "applicant" but wanted to touch base with you on the site plan. A few things I noticed, which would render the application incomplete and place it "on-hold", concerns follow:

>>

>> - The site plan is not drawn to scale - it seems it likely was at some point but what was provided to us was a 8.5 x 11 so, 1" = 30' is not accurate.

>> - Is this a survey prepared by a licensed surveyor? New construction, should be prepared by a surveyor if it is not.

>> - The property is located in an area with an Erosion Rate of 6 ft. per year resulting in an 180 foot setback and the OEA at 540 feet. The setback line and OEA need to be on the survey.

>> - Local setback lines are not shown.

>> - Driveway, access should be shown.

>> - Septic location, repair area should be shown.

>> - Any dune disturbances must be shown.

>>

>> Please get back with me on these items as soon as possible.

>>

>> Thank you,

>> Kelly Wyatt

>>

>>

>>

>> Kelly Wyatt, CZO, NCLID

>> Deputy Planning Director & Zoning Administrator Town of Nags Head

>> Department Phone: 252-441-7016 Direct Phone: 252-449-6042

>> Fax: 252-441-4290

>> Email: Kelly.wyatt@nagsheadnc.gov

>> Website: www.nagsheadnc.gov

>>

>> -----Original Message-----

>> From: Kelly Wyatt

>> Sent: Wednesday, January 18, 2017 2:22 PM

>> To: George Wood

>> Subject: RE: Zito property

>>

>> Thanks George - if you can keep us in the loop that would be great.

>>



>> Kelly Wyatt, CZO, NCLID  
>> Deputy Planning Director & Zoning Administrator Town of Nags Head  
>> Department Phone: 252-441-7016 Direct Phone: 252-449-6042  
>> Fax: 252-441-4290  
>> Email: Kelly.wyatt@nagsheadnc.gov  
>> Website: www.nagsheadnc.gov

>>  
>> -----Original Message-----

>> From: George Wood  
>> Sent: Wednesday, January 11, 2017 4:13 PM  
>> To: Kelly Wyatt  
>> Subject: Re: Zito property

>>  
>> Yep got it. Talked with Chris Seawell today and he is going to advise  
>> her on which option to pursue, permits to rebuild or pursue payment  
>> from the insurance company. I will try to get a schedule

>>  
>> George Wood  
>> PO Box 3368  
>> Kill Devil Hills, NC 27948  
>> 252-423-1234  
>> www.woodywrites.com

>>  
>>> On Jan 11, 2017, at 3:57 PM, Kelly Wyatt <kelly.wyatt@nagsheadnc.gov> wrote:

>>>  
>>> Hi George,  
>>> Just wondering if you received my voice message regarding the zito property?  
>>> Thanks, Kelly

>>>  
>>>  
>>> Sent from my iPhone

>>>  
>>>> On Dec 20, 2016, at 5:01 PM, George Wood <obxwood@yahoo.com> wrote:

>>>>  
>>>> Thx. Just want to make sure I do not get her into trouble

>>>>  
>>>> George Wood  
>>>> PO Box 3368  
>>>> Kill Devil Hills, NC 27948  
>>>> 252-423-1234  
>>>> www.woodywrites.com

>>>> Try  
>>>>> On Dec 20, 2016, at 4:19 PM, Kelly Wyatt <kelly.wyatt@nagsheadnc.gov> wrote:

>>>>>  
>>>>> Good Afternoon George-  
>>>>> Just following up on our conversation from earlier today - I have mentioned bonding of the septic removal to  
Andy Garman and he feels like we will need our Town Attorney to weigh in on this one. As soon as we hear from  
the attorney I will let you know.  
>>>>> Thanks so much - talk soon,  
>>>>> Kelly

>>>>>  
>>>>> Kelly Wyatt, CZO, NCLID  
>>>>> Deputy Planning Director & Zoning Administrator Town of Nags Head  
>>>>> Department Phone: 252-441-7016 Direct Phone: 252-449-6042  
>>>>> Fax: 252-441-4290  
>>>>> Email:

>>>>> Kelly.wyatt@nagsheadnc.gov<<mailto:Kelly.wyatt@nagsheadnc.gov>>  
>>>>> Website: www.nagsheadnc.gov<<http://www.nagsheadnc.gov/>>  
>>>>>  
>>>>> <winmail.dat>  
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*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:**

1. The name and location of the development as identified on the permit application is:  
  
Michael A. Zito, Jr. and wife, Catherine M. Zito  
Application Number – 17-36  
10224 E. Sea Gull Drive, Nags Head, North Carolina
2. A copy of the permit decision for the development in question is attached as Exhibit “A”.
3. A copy of the deed to the property on which the proposed development would be located is attached as Exhibit “B”;
4. A description of the proposed project and plat is attached as Exhibit “C”.
5. Approved wastewater permit is attached as Exhibit “D”.
5. It is stipulated the proposed development is inconsistent with the rule at issue.
6. Proof that notice was sent to adjacent owners and objectors\*, as required by 15A N.C.A.C. 07L.0701(c)(7); See attached Exhibit “E”.

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

	July 31, 2018
Signature of Petitioner or Attorney	Date
Christopher L. Seawell	cseawell@manteolaw.com
Printed Name of Petitioner or Attorney	Email address of Petitioner or Attorney
P. O. Box 339	(252) 473-3484
Mailing Address	Telephone Number of Petitioner or Attorney
Manteo, NC 27954	(252) 473-2046
City State Zip	Fax Number of Petitioner or Attorney

RECEIVED

AUG 01 2018

DCM-MHD CITY

Improvement Permit  
County of Dare  
PO Box Drawer 1000  
Manteo NC 27954



**27602**  
Phone: (252) 475-5080

**DARE COUNTY DEPARTMENT OF PUBLIC HEALTH**

An Improvement Permit (IP) issued pursuant to this application is not affected by change in ownership provided the site and wastewater characteristics remain unchanged. An IP issued with a plat is valid without expiration. An IP issued with a site plan is valid for 60 months from the date of issuance.

PIN: 071815730373

Parcel: 007480000

Permit#: 27602

Owner Name: ZITO, MICHAEL A JR  
Owner Address: 11816 MAYS CHAPEL RD  
Owner Address: --  
TIMONIUM, MD21093

Permit Date: 3/1/2018  
Permit Type: Residential  
Owner Phone: (000)000-0000

DBA --

Location: 10224 E SEA GULL DR NAGS HEAD, NC  
Subdivision: GOOSE WING LOT: 48 BLK: SEC:

Category of System:	S-25	Size of Tank (gallons):	0
Type of Tank:	S-25	Width of Ditch:	0
Type of System:	S-25	Rock Above (inches):	0
Amount of Tile (feet):	0	Number of Bedrooms	4
Rock Under (inches):	0	Sleeping Capacity (persons):	8
Number of Bedrooms	4	Type of Water:	S-25
Sleeping Capacity (persons):	8	Feet from Water Supply:	0
Type of Water:	S-25	Feet from Property Line:	0
Feet from Water Supply:	0	Gallons per Day:	0
Feet from Property Line:	0	Previous Permit Number:	
		Feet from Body of Water:	0
		Feet from Building:	0

**Comments:**

**REBUILD HOUSE THAT BURNED DOWN AND CONNECT TO EXISTING SEPTIC TANK**

Note: This Permit is issued subject to all provisions of the 15A NCAC .1900 rules governing the installation of septic systems. The person making the installation must notify the Health Department when the septic tank system is ready for inspection. If any septic tank system or part thereof is covered before being inspected and approved, it shall be uncovered at the direction of the Health Officer at the expense of the one responsible for making the installation.

Issued 3/1/2018 By:

Sewer Permit Fee: 0

Rob Crawford  
Environmental Health Specialist

*Rmc* 3/1/18

*George Wood*  
Applicant Signature George Wood

RECEIVED

AUG 01 2018

DCM-MHD CITY

County of Dare  
PO Box Drawer 1000  
Manteo NC 27954



**27602**  
Phone: (252) 475-5080

**DARE COUNTY DEPARTMENT OF PUBLIC HEALTH**  
**Authorization for Wastewater System Construction**

PIN: 071815730373

Parcel: 007480000

Permit#: 27602

Owner Name: ZITO, MICHAEL A JR  
Owner Address: 11816 MAYS CHAPEL RD  
--  
TIMONIUM, MD21093

Permit Date: 3/1/2018

Owner Phone: (000)000-0000

Location: 10224 E SEA GULL DR NAGS HEAD, NC  
Subdivision: GOOSE WING LOT: 48 BLK: SEC:

1. Original Improvement Permit No. --
2. Wastewater inspected by Rob Crawford *RC*
3. Any alteration in soil conditions (including location of structures and appurtenances) or modification in use, design wastewater flow or wastewater characteristics as specified in the associated improvement permit and application, may subject this authorization and associated permit(s) to revocation.

Other Conditions:

**PERMIT TO REBUILD HOUSE AND CONNECT TO EXISTING SEPTIC SYSTEM.**

This CA is valid for 60 months from the date of issuance.

Disclaimer: This permit does not relieve you of the responsibility to obtain any other necessary Federal, State or Local permit(s).

Owner Certification

*V*  
Applicant or Owner Signature  
Applicant: GEORGE WOOD

Date

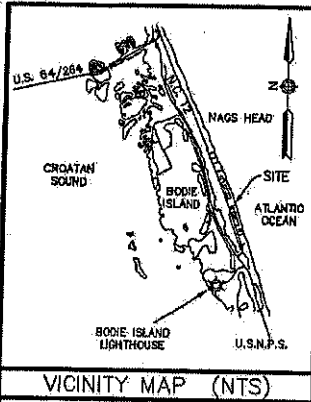
Authorized by County of Dare

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AUG 01 2018

DCM-MHD CITY

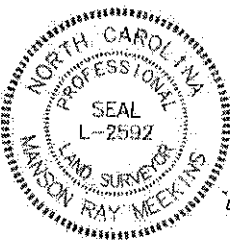
7.1c  
16-062



VICINITY MAP (NTS)

- NOTES:**
1. THIS SURVEY IS SUBJECT TO ANY FACTS THAT MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH.
  2. AREA BY COORDINATE COMPUTATION = 10,182 S.F. (6,809 SF WEST OF STATIC VEG. LINE)
  3. F.I.R.M. ZONE: AS SHOWN
  4. PIN NO.: 14 071815 73 0373
  5. RECORDED REFERENCE: M.B. 9, PG. 57; DB 1777, PG. 455
  6. MINIMUM BUILDING LINES (MBL), IF SHOWN HEREON, ARE PER THE CURRENT LOCAL ZONING REGULATIONS. OTHER SETBACKS AND/OR RESTRICTIONS MAY APPLY AND MUST BE VERIFIED PRIOR TO CONSTRUCTION.
  7. ELEVATIONS (NAVD 1988): AS SHOWN
  8. PROPOSED LOT COVERAGE: 2,001 S.F. (28.0%)
  9. SITE PLAN REQUIREMENTS PER TOWN OF NAGS HEAD ZONING ORD. ARTICLE IV-SEC 48-123 AND ARTICLE III SEC 48-84.
  10. THIS PROPERTY LIES WITHIN THE 540 FT. C.A.M.A. O.E.A./A.E.C. AND THE 180 FT. C.A.M.A. STRUCTURE SETBACK.

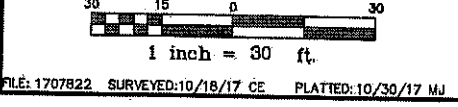
- LEGEND**
- EX. PIPE
  - EX. 3/4" REBAR
  - 1/2" REBAR SET
  - EX. CONC. MON.
  - ▲ CONC. MON. SET
  - △ EX. MAG. HAL. & WASHER
  - ⊙ CALCULATED POINT
  - EX. 1" OPEN PIPE
  - WATER METER
  - ⊙ PHONE PEDESTAL
  - ⊙ C.A.T.V.
  - ⊙ UTILITY POLE
  - GUY WIRE
  - ⊙ FIRE HYDRANT
  - ⊙ ELECT. TRANS.
  - AG — ABOVE GRADE
  - BG — BELOW GRADE



Septic Layout Approved  
by DCDHHS, DPH, EH Unit  
On LOT 46 3-1-17  
By *[Signature]*

**PRELIMINARY PLAT  
(NOT FOR RECORDATION  
CONVEYANCES OR SALES)**

SURVEY/ SITE PLAN FOR  
**MICHAEL A. ZITO, JR. & CATHERINE M. ZITO**  
LOT 48 & ADJACENT PARCEL - GOOSEWING - NAGS HEAD  
NAGS HEAD TOWNSHIP - DARE COUNTY - NORTH CAROLINA



**SEABOARD SURVEYING & PLANNING, INC. C-1536**  
103F W. WOOD HILL DR., P.O. BOX 58, NAGS HEAD, NC 27959  
OFFICE: (252) 480-9998 FAX: (252) 480-0571

RECEIVED

AUG 01 2018

DCM-MHD CITY

**CERTIFIED MAIL RETURN RECEIPT REQUESTED or HAND DELIVERED**

July 31, 2017

Date

Jarrold Mandozzi & wife, Maria Mandozzi

Name of Adjacent Riparian Property Owner  
168 Venetian Drive

Address  
Islamorada, FL 33036

City, State Zip

DCM-EC

ASG 04 2017

Received

To Whom It May Concern:

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to construction of a residence.

on my property at 10224 E Sea Gull Drive, Nags Head, North Carolina  
in Dare County, which is adjacent to your property. A copy of the application and project drawing is attached/enclosed for your review.

If you have no objections to the proposed activity, please mark the appropriate statement below and return to me as soon as possible. If no comments are received within 10 days of receipt of this notice, it will be considered that you have no comments or objections regarding this project.

If you have objections or comments, please mark the appropriate statement below and send your correspondence to:  
Kelly Wyatt, Town of Nags Head, P. O. Box 99, Nags Head, NC 27959

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or contact Kelly Wyatt, phone - 252-441-7016 or e-mail at kelly.wyatt@nagsheadnc.gov.

Sincerely,



Property Owner's Name  
Michael A. Zito, Sr./Catherine M. Zito

410-274-7448

Telephone Number

Address City State Zip

I have no objection to the project described in this correspondence.

I have objection(s) to the project described in this correspondence.

Adjacent Riparian Signature

Date

Print or Type Name

Telephone Number

Address City State Zip

**CERTIFIED MAIL RETURN RECEIPT REQUESTED or HAND DELIVERED**

July 31, 2017

Date

Elizabeth Ann Connell

Name of Adjacent Riparian Property Owner

19518 N 73rd Avenue

Address

Glendale, AZ 85308

City, State Zip

To Whom It May Concern:

This correspondence is to notify you as a riparian property owner that I am applying for a CAMA Minor permit to construction of a residence

on my property at 10224 E Sea Gull Drive, Nags Head, North Carolina

in Dare County, which is adjacent to your property. A copy of the application and project drawing is attached/enclosed for your review.

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If you have objections or comments, please mark the appropriate statement below and send your correspondence to: Kelly Wyatt, Town of Nags Head, P. O. Box 99, Nags Head, NC 27959

If you have any questions about the project, please do not hesitate to contact me at my address/number listed below, or Kelly Wyatt, phone - 252-441-7016, or e-mail at [kelly.wyatt@nagsheadnc.gov](mailto:kelly.wyatt@nagsheadnc.gov).

Sincerely,



Property Owner's Name

Michael A. Zito, Jr./Catherine M. Zito

410-274-7448

Telephone Number

Address

City

State

Zip

I have no objection to the project described in this correspondence.

I have objection(s) to the project described in this correspondence.

Adjacent Riparian Signature

Date

Print or Type Name

Telephone Number

Address

City

State

Zip



**U.S. Postal Service™**  
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**ISLAMORADA, FL 33036**  
**OFFICIAL USE**

Postage	\$3.75
Certified Fee	\$2.75
Return Receipt Fee (Endorsement Required)	\$0.00
Restricted Delivery Fee (Endorsement Required)	\$0.00
	\$0.70
<b>Total Postage &amp; Fees</b>	<b>\$6.80</b>

0954  
01

Postmark  
Here

07/31/2017

Sent To **Jarrold Mandozzi**  
**Maria Mandozzi**

Street & Apt. No.,  
or PO Box No. **168 Venetian Drive**

City, State, ZIP+4  
**Islamorada, FL 33036**

PS Form 3800, July 2014 See Reverse for Instructions

7015 0920 0002 3872 367A

Received

AUG 04 2017

DCM-EC

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
*Domestic Mail Only*

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**GLENDALE, AZ 85308**  
**OFFICIAL USE**

Postage	\$3.75
Certified Fee	\$2.75
Return Receipt Fee (Endorsement Required)	\$0.00
Restricted Delivery Fee (Endorsement Required)	\$0.00
	\$0.70
<b>Total Postage &amp; Fees</b>	<b>\$6.80</b>

0954  
01

Postmark  
Here

07/31/2017

Sent To **Elizabeth Ann Connell**

Street & Apt. No.,  
or PO Box No. **19518 N 73rd Avenue**

City, State, ZIP+4  
**Glendale, AZ 85308**

PS Form 3800, July 2014 See Reverse for Instructions

7015 0920 0002 3872 3661



## Town of Nags Head

Planning and Development  
Department

Post Office Box 99  
Nags Head, North Carolina 27959  
[www.nagsheadnc.gov](http://www.nagsheadnc.gov)

Telephone 252-441-7016  
FAX 252-441-4290

April 26, 2018

**CERTIFIED MAIL – 7016 0910 0000 6155 7206**  
**RETURN RECEIPT REQUESTED**

Michael and Catherine Zito  
11816 May's Chapel Road  
Timonium, MD 21093

**RE: DENIAL OF CAMA MINOR DEVELOPMENT PERMIT**  
**APPLICATION NUMBER- # 17-36**  
**PROJECT ADDRESS- 10224 E. Seagull Drive**

Dear Property Owners:

After reviewing your application in conjunction with the development standards required by the Coastal Area Management Act (CAMA) and our locally adopted Land Use Plan and Ordinances, it is my determination that no permit may be granted for the project which you have proposed.

This decision is based on my findings that your request violates NCGS 113A-120(a)(8) which requires that all applications be denied which are inconsistent with CAMA guidelines and Local Land Use Plans. You have applied to re-construct a single family dwelling following a loss of the existing structure by fire. Specifically, you are proposing to construct a 32 ft. x 28 ft. dwelling with approximately 384 sf. of detached open wood slatted decking on the north and west side of the dwelling. Code Section 15A NCAC 07H .0309, Use Standards for Ocean Hazard Areas: Exceptions provides a mechanism for permanent substantial structures to be constructed on lots existing as of June 1, 1979. The lot in question was platted in 1977 therefore making it a candidate for review under this code section.

Upon review, I have determined to the requested scope of work to be inconsistent with 15A NCAC 07H .0309(b), which states that: *Where application of the oceanfront setback requirements of Rule .0306(a) of this Subchapter would preclude placement of permanent substantial structures on lots existing as of June 1, 1979, buildings shall be permitted seaward of the applicable setback line in ocean erodible areas, but not inlet hazard areas or unvegetated beach areas, if each of the following conditions are met:*

- (1) *The development is set back from the ocean the maximum feasible distance possible on the existing lot and the development is designed to minimize encroachment into the setback area;*
- (2) *The development is at least 60 feet landward of the vegetation line or static vegetation line, whichever is applicable;*
- (3) *The development is not located on or in front of a frontal dune, but is entirely behind the landward toe of the frontal dune;*
- (4) *The development incorporates each of the following design standards, which are in addition to those requires by Rule .0308(d) of this Subchapter.*

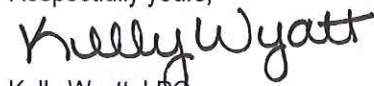
- (a) All pilings shall have a tip penetration that extends to at least four feet below mean sea level;
  - (b) The footprint of the structure shall be no more than 1,000 square feet, and the total floor area of the structure shall be no more than 2,000 square feet. For the purpose of this Section, roof-covered decks and porches that are structurally attached shall be included in the calculation of footprint;
  - (c) Driveways and parking areas shall be constructed of clay, packed sand or gravel except in those cases where the development does not abut the ocean and is located landward of a paved public street or highway currently in use. In those cases concrete, asphalt or turfstone may also be used;
  - (d) No portion of a building's total floor area, including elevated portions that are cantilevered, knee braced or otherwise extended beyond the support pilings or footings may extend ocean ward of the total floor area of the landward-most adjacent building. When the geometry or orientation of a lot precludes the placement of a building in line with landward most adjacent structure of similar use, an average line of construction shall be determined by the Division of Coastal Management on a case-by-case basis in order to determine an ocean hazard setback that is landward of the vegetation line, static vegetation line or measurement line, whichever is applicable, a distance no less than 60 feet.
- (5) All other provisions of this Subchapter and other state and local regulations are met. If the development is to be serviced by an on-site waste disposal system, a copy of a valid permit for such a system shall be submitted as part of the CAMA permit application.

The applicant has shown compliance with Subsections (1), (3), (4a), (4b), (4c), (4d) and (5) above. The applicant has not demonstrated compliance with Subsection (2), that the development is at least 60 feet landward of the of the static vegetation line. Based upon the most recent survey provided by Seaboard Surveying & Planning, Inc. dated 10/18/17 the home is setback approximately 12 ft. landward of the static vegetation line.

Should you wish to appeal my decision to the Coastal Resource Commission or request a variance from that group, please contact me so I can provide you with the proper forms and any other information you may require.

The Division of Coastal Management central office in Morehead City must receive appeal notices within twenty (20) days of the date of this letter in order to be considered.

Respectfully yours,

  
Kelly Wyatt, LPO  
Town of Nags Head  
P.O. Box 99  
Nags Head, NC 27959

cc: Yvonne Carver, Field Representative, DCM  
Chris Seawell, Attorney for Zito's

**ALDRIDGE, SEAWELL & TWICHELL, PLLC**

**ATTORNEYS AT LAW**

**805 North U.S. Highway 64  
Post Office Box 339  
Manteo, NC 27954**

**Christopher L. Seawell  
[cseawell@manteolaw.com](mailto:cseawell@manteolaw.com)**

August 16, 2018

**Laura M. Twichell  
[ltwichell@manteolaw.com](mailto:ltwichell@manteolaw.com)**

**G. Irvin Aldridge  
Retired**

**ph: (252) 473-3484  
fax: (252) 473-2046  
[www.manteolaw.com](http://www.manteolaw.com)**

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

Ms. Elizabeth Ann Connell  
19518 N 73<sup>rd</sup> Avenue  
Glendale, AZ 85308

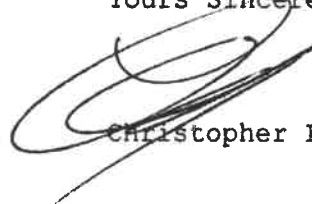
Re: CAMA Variance Request by Michael A. Zito, Jr. and wife,  
Catherine M. Zito, Nags Head, Dare County, North Carolina

Dear Ms. Connell:

This is to notify you that Michael A. Zito, Jr. and wife, Catherine M. Zito, are applying for a variance from the North Carolina Coastal Resources Commission. The purpose of this variance request is to allow for the reconstruction of their home, which was located at 10224 E. Sea Gull Drive, Nags Head, North Carolina, also known as Lot 48, Goose Wing Subdivision, which was destroyed by fire.

We had previously sent you a copy of the CAMA Variance Request Form on July 31, 2017 by certified mail, return receipt requested. The variance is projected to be heard at the September 19-20, 2018 meeting of the Coastal Resources Commission in Morehead City, North Carolina. If you wish to receive further information concerning the variance, you may contact me. If you wish to make comments on the variance, you may direct your comments to the North Carolina Division of Coastal Management headquarters at 401 South Griffin Street, Suite 300, Elizabeth City, North Carolina 27909. You may also contact the Division of Coastal Management at 252-264-3723.

Yours Sincerely,



Christopher L. Seawell

CLS/cah

**ALDRIDGE, SEAWELL & TWICHELL, PLLC**  
ATTORNEYS AT LAW  
805 North U.S. Highway 64  
Post Office Box 339  
Manteo, NC 27954

**Christopher L. Seawell**  
[cseawell@manteolaw.com](mailto:cseawell@manteolaw.com)

**Laura M. Twichell**  
[ltwichell@manteolaw.com](mailto:ltwichell@manteolaw.com)

August 16, 2018

**G. Irvin Aldridge**  
Retired

ph: (252) 473-3484  
fax: (252) 473-2046  
[www.manteolaw.com](http://www.manteolaw.com)

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

Mr. Jarrod Mandozzi  
Ms. Maria Mandozzi  
168 Venetian Drive  
Islamorada, FL 33036

Re: CAMA Variance Request by Michael A. Zito, Jr. and wife,  
Catherine M. Zito, Nags Head, Dare County, North Carolina

Dear Mr. and Mrs. Mandozzi:

This is to notify you that Michael A. Zito, Jr. and wife, Catherine M. Zito, are applying for a variance from the North Carolina Coastal Resources Commission. The purpose of this variance request is to allow for the reconstruction of their home, which was located at 10224 E. Sea Gull Drive, Nags Head, North Carolina, also known as Lot 48, Goose Wing Subdivision, which was destroyed by fire.

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Yours Sincerely,

  
Christopher L. Seawell

CLS/cah



Kelly Wyatt, first being duly sworn, deposes and says:

1. That she is Deputy Planning Director and Zoning Administrator for the Town of Nags Head and has personal knowledge of the information contained in this affidavit.

2. That she is familiar with the CAMA Variance Request that has been submitted to the Coastal Resources Commission for a variance in connection with the replacement of a home which was destroyed by fire on property owned by Michael A. Zito, Jr. and wife, Catherine M. Zito, located at 10224 Sea Gull Drive, South Nags Head, Dare County, North Carolina.

3. That she is aware that 15A NCAC 07H .0309 permits on property seaward of oceanfront setback requirements only nine enumerated types of development.

4. That in the event the home is not permitted to be rebuilt on the above described property, none of the nine enumerated uses of the property in 15A NCAC 07H. 0309 are permissible under the applicable governmental rules, regulations and ordinances, with the possible exception of sand fences. More specifically as to each one, please note the following:

a. Campsites - Chapter 48, Zoning would not permit a public campground/campsite in this district.

b. Driveways and parking areas with clay, packed sand or gravel - a driveway would be associated with access to a principal structure, if no such structure exists a stand-alone driveway or parking area would not be permitted.

c. Elevated Decks not exceeding 500 sf - A deck would be considered an accessory structure/use and could only be permitted in conjunction with a principal structure/use. A stand-alone deck could not be permitted.

d. Beach Accessway - A beach accessway is considered an accessory structure/use and could only be permitted in conjunction with a principal structure/use. There is no mechanism to permit a stand-alone beach accessway.

e. Unenclosed, uninhabitable gazebos - same as above, this would be considered an accessory structure/use and could not be permitted without a principal structure/use on the property.

f. Storage Sheds - storage sheds are considered accessory structures/uses and could not be permitted upon a property if not in conjunction with a principal structure/use.

g. Temporary Amusement Stand - not a permitted use within the Town.

h. Sand Fences - while the ordinance is silent I believe if sand fencing were necessary on this parcel for stabilization, management, etc. it would be allowed.

i. Swimming Pool - pools are considered accessory structures/uses and could not be permitted on a property that did not have a principal structure/use - a stand alone pool would not be permissible within the Town.

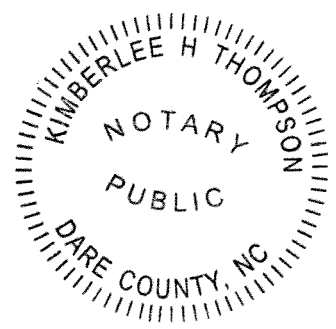
This the 17<sup>th</sup> day of October, 2018.

Kelly Wyatt (SEAL)  
Kelly Wyatt

Sworn to and subscribed before me this the 17<sup>th</sup> day of October, 2018.

Kimberlee H. Thompson  
Notary Public

My commission expires:  
12/20/2021



## Sec. 48-598. - Variances.

- (a) *Standards for granting a variance.* When unnecessary hardships would result from carrying out the strict letter of this chapter, the board shall vary any of the provisions of the ordinance upon a showing of all of the following:
- (1) Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.
  - (2) The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.
  - (3) The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.
  - (4) The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.
- (b) Under no circumstances shall the board of adjustment grant a variance to allow a use either expressly or by implication not permissible under the terms of this chapter in the district involved.
- (c) Appropriate conditions may be imposed on any variance, provided that the conditions are reasonably related to the variance. Violation of such conditions shall be deemed a violation of this chapter and punishable under article XV of this chapter.
- (d) Any other ordinance that regulates land use or development may specifically provide for variances consistent with the provisions of this subsection.
- (e) A variance that is granted shall be the minimum variance that will resolve the unnecessary hardship resulting from the strict application of the this chapter to the land, building or structure.
- (f)



No nonconforming use of neighboring lands, structures or buildings in the same district, and no permitted use of lands, structures or buildings in other districts shall be considered grounds for the issuance of a variance.

- (g) *Application requirements.* Each application for a variance must be in writing, accompanied by any associated administrative fee and shall include all of the following information:
- (1) A listing of the specific section(s) and subsection(s) of this chapter that the applicant is seeking to vary.
  - (2) For each provision the applicant is requesting to vary, a listing of how the provision applies to the property without the requested variance and how the applicant proposes the provision should be varied.
  - (3) A description of how the property can be used without the requested variance compared with how it could be used with the requested variance.
  - (4) A description of the unnecessary hardship which results from the strict application of this chapter.
  - (5) A description of the conditions that are peculiar to the property, such as location, size, or topography which cause the unnecessary hardship.
  - (6) A certification that the hardship did not result from actions taken by the applicant or the property owner other than the act of purchasing property with knowledge that circumstances exist requiring a variance.
  - (7) A narrative explaining how the requested variance is consistent with the spirit, purpose, and intent of this chapter, such that public safety is secured, and substantial justice is achieved.
  - (8) A certification that the requested variance, if granted, will not allow an increase or extension of an existing nonconforming structure or use of land.
  - (9) A certification that the requested variance, if granted, will not allow a use of the land otherwise prohibited in the applicable zoning district to occur on the property.
  - (10) A listing of the names and addresses of all of the persons listed in section 48-593(b) who are entitled to receive notice. The list shall be supplied by the applicant and shall be current according to the most recent tax listing abstract as filed in the office of the Dare County tax supervisor.

(h)

In addition to the foregoing requirements, when considering a variance from article II, chapter 22 of this Code, flood damage prevention, the board shall follow the additional provisions of such article.

- (i) *Amendments.* The owner of land which has been granted a variance may apply for an amendment to the previously granted variance. All of the standards for granting a variance shall apply to the consideration of an amendment to an existing variance. An amendment may only be granted if:
- (1) The circumstances on the property have substantially changed since the time of the granting of the prior variance in such a way that the use of the property in accordance with prior variance is itself an unnecessary hardship;  
or
  - (2) The amendment requested will be equal to or less of a variance than the previously granted variance.

(Ord. No. 13-11-035, Pt. I, 11-6-2013)



Division of Coastal Management

**NC COASTAL RESOURCES  
COMMISSION MEETING**

**November 27, 2018**

**MICHAEL & CATHERINE ZITO (CRC-VR-18-04)  
NAGS HEAD, OCEANFRONT SETBACK**

Frank Jennings, District Manager  
Yvonne Carver, Field Representative  
Northeastern District Office  
Elizabeth City, NC

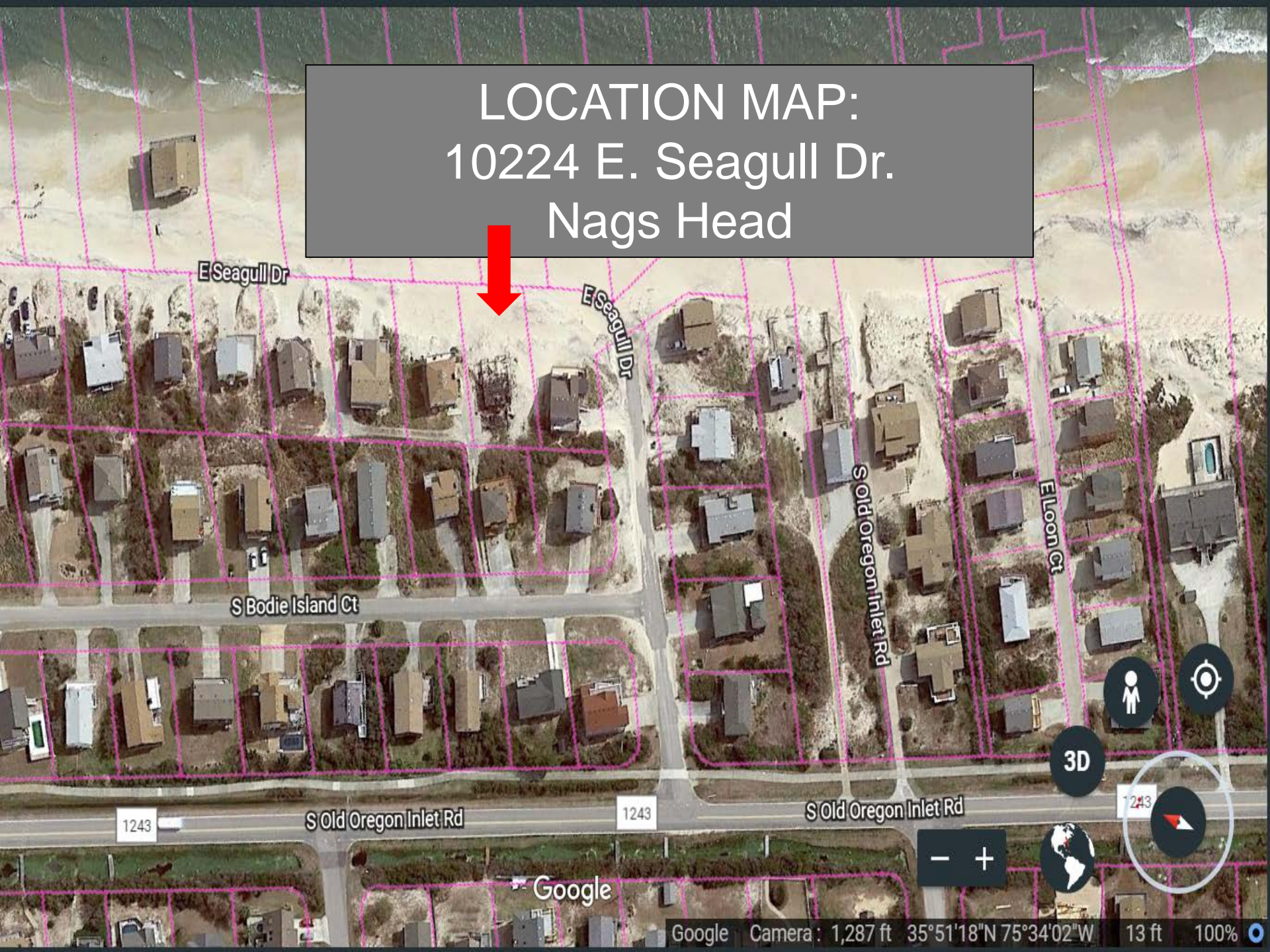


Nothing Compares  
**NORTH CAROLINA**

*Department of Environmental Quality*



LOCATION MAP:  
10224 E. Seagull Dr.  
Nags Head



1243

S Old Oregon Inlet Rd

1243

S Old Oregon Inlet Rd

1243

Google





10224 E. Seagull Drive, r X



1998 Imagery

SBF = 6



35.853893 -75.567261 Degrees

State of North Carolina DOT, Esri, HERE, Garmin, INCRE...



10224 E. Seagull Drive, r X



2016 Imagery

SBF = 6

100m  
300ft

35.853910 -75.567261 Degrees State of North Carolina DOT, Esri, HERE, Garmin



Photo taken by rental agent  
09/16/16 (3 weeks before fire)

☰ 007480000



**10224 E Sea Gull Dr**

Nags Head, NC 27959



Photo from Dare County Online GIS/Tax Record  
of Zito cottage before destroyed by fire.







Bodie Island Ct

© 2018 Google

1993

Imagery Date: 3/24/2017 35°51'14.28" N 75°34'01.15"



Photo taken by  
DCM Staff  
08/07/18







**Photo taken by  
DCM Staff  
08/07/18**



**Photo taken by  
DCM Staff  
08/07/18**



**Photo taken by  
DCM Staff  
08/07/18**





**Photo taken by  
DCM Staff  
08/07/18**







**Photo taken by  
DCM Staff  
08/07/18**



**Photo taken by  
DCM Staff  
08/07/18**







**Photo taken by  
DCM Staff  
08/07/18**

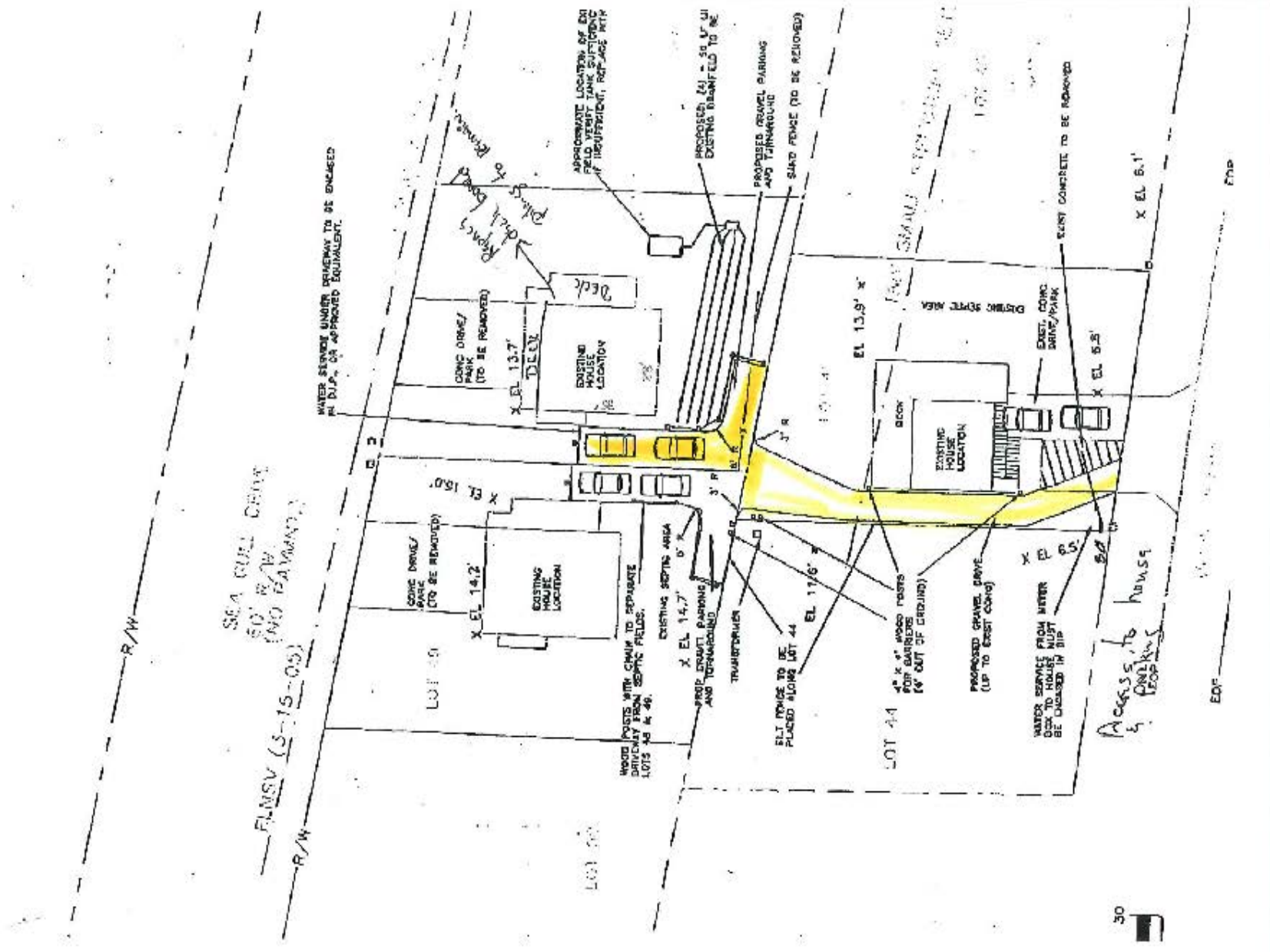




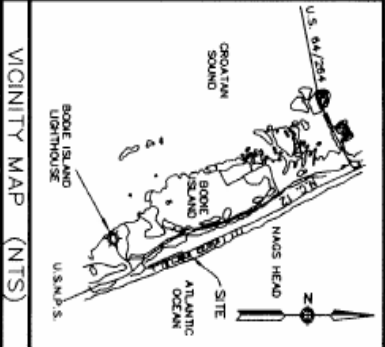
**Photo taken by  
DCM Staff  
08/07/18**

# 2007 Plat of Zito cottage

FROM SHARP, MICHAEL, CUTTEN & GRAHAM 2522811188 (TUE) JUL 24 2007 10:53/ST. 10:52/No. 7500000200 P 2 PAGE 02/03

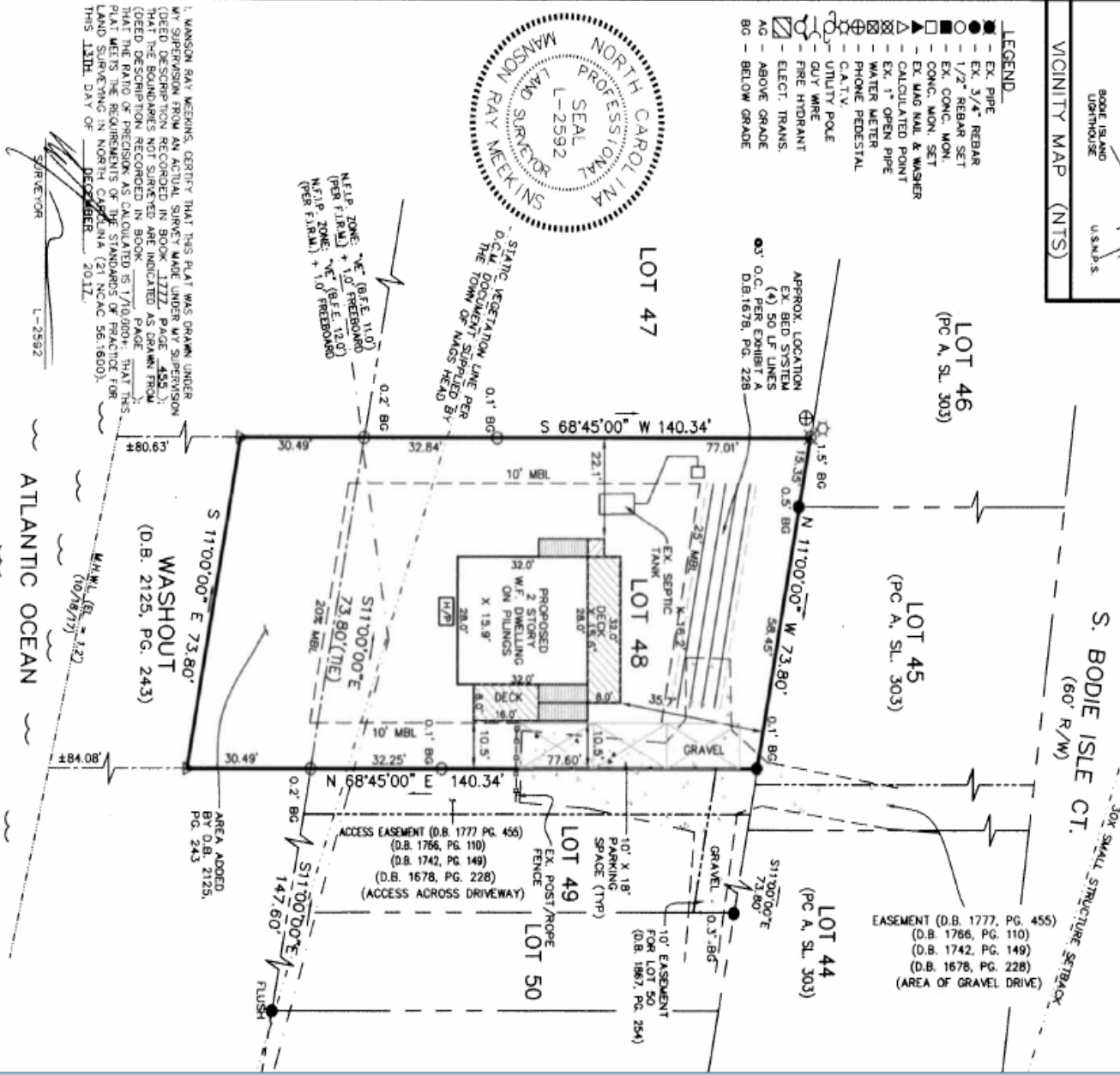






- NOTES:**
1. THIS SURVEY IS SUBJECT TO ANY FACTS THAT MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH.
  2. AREA BY COORDINATE COMPUTATION = 10,192 SF. (6,908 SF. WEST OF STATIC VEG. LINE)
  3. F.I.R.M. ZONE: AS SHOWN
  4. PIN NO.: 14 071815 73 0373
  5. RECORDED REFERENCE: M.B. 9, PG. 57; DB 1777, PG. 455
  6. MINIMUM BUILDING LINES (M.B.L.) IF SHOWN HEREON ARE PER THE CURRENT LOCAL ZONING REGULATIONS. OTHER SETBACKS AND/OR RESTRICTIONS MAY APPLY AND MUST BE VERIFIED PRIOR TO CONSTRUCTION.
  7. ELEVATIONS (NAVD 1988): AS SHOWN (29.0X)
  8. PROPOSED LOT COVERAGES PER TOWN OF NAGS HEAD ZONING ORD. ARTICLE IV-SEC 48-123 AND ARTICLE III SEC. 48-84
  9. THIS PROPERTY LIES WITHIN THE 540 FT. C.A.M.A. O.E.A./A.E.C. AND THE 180 FT. C.A.M.A. STRUCTURE SETBACK.

- LEGEND**
- - EX. PIPE
  - - EX. 3/4" REBAR
  - - 1/2" REBAR SET
  - - EX. CONC. MON.
  - - CONC. MON. SET
  - ▲ - EX. MAG NAIL & WASHER
  - △ - CALCULATED POINT
  - ⊗ - EX. 1" OPEN PIPE
  - ⊕ - WATER METER
  - ⊖ - CATV.
  - ⊙ - UTILITY POLE
  - ⊘ - GUY WIRE
  - ⊙ - FIRE HYDRANT
  - ⊖ - ELECT. TRANS.
  - ⊖ - ABOVE GRADE
  - ⊖ - BELOW GRADE



**MICHAEL A. ZITO, JR. & CATHERINE M. ZITO**  
 LOT 48 & ADJACENT PARCEL - PARCEL - NAGS HEAD  
 NAGS HEAD TOWNSHIP - DARE COUNTY - NORTH CAROLINA

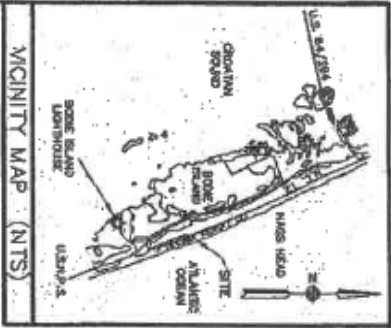
SURVEY/ SITE PLAN FOR

**SEABOARD SURVEYING & PLANNING, INC. C-1536**  
 103F W. WOOD HILL DR., P.O. BOX 58, NAGS HEAD, NC 27959  
 OFFICE: (252) 480-9998 FAX: (252) 480-0571

FILE: 1707822 SURVEYED: 10/18/17 CE PLATTED: 10/20/17 MA

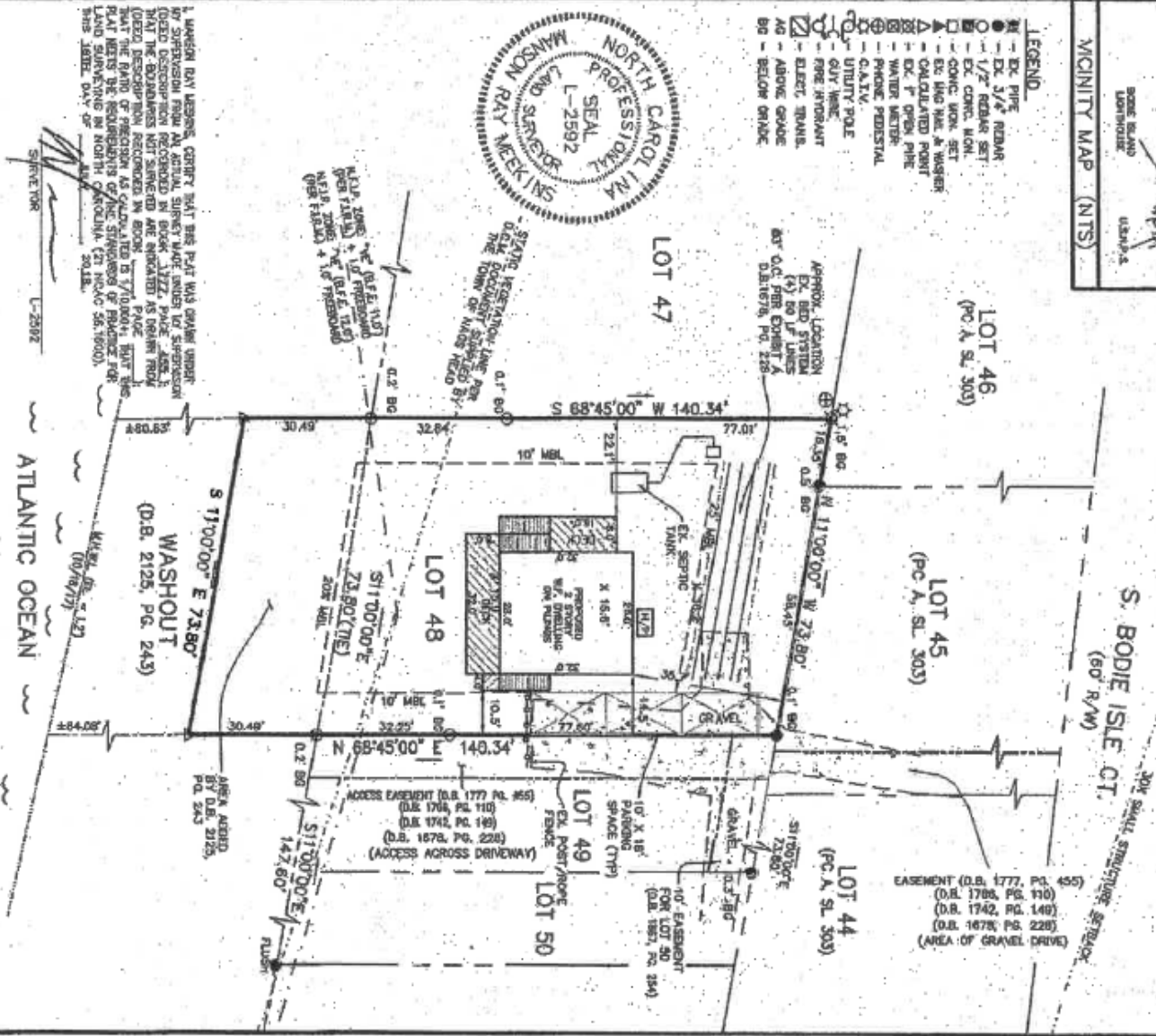
1 inch = 30 ft.

2017 Site Plan of Zito cottage; Reviewed by LPO



- NOTES**
1. THIS SURVEY IS SUBJECT TO ANY FACTS THAT MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH.
  2. AREA BY COORDINATE COMPUTATION = 10,182 S.F. (35,998 SQ. FEET OF STAKE WORK LINES)
  3. PLAT NO. 238E, 48-123 AND 1317.
  4. RECORDED RESOLUTIONS: N.C.S. 9, PG. 57, 58, 1177, PG. 493 (D.B. 1742, PG. 149).
  5. HERRIN BUILDING LINES (H.B.L.) FROM HERRIN, ARE FOR THE CURRENT LOCAL ZONING REGULATIONS. OTHER SETBACKS, AND/OR RESTRICTIONS MAY APPLY, AND MUST BE VERIFIED PRIOR TO CONSTRUCTION.
  6. ELEVATIONS (NAVD 1988): AS SHOWN.
  7. PROPOSED LOT COVERAGE: 2,001 S.F. (29.0%).
  8. SITE PLAN REQUIREMENTS PER TOWN OF NAGS HEAD ZONING ORD. ARTICLE IV-SEC 48-123 AND ARTICLE B, SEC 48-84.
  9. THIS PROPERTY LIES WITHIN THE 940 FT CALVA, OCEAN/AEC, AND THE 190 FT CALVA, STRUCTURE SETBACK.

- LEGEND**
- - EX. PIPE
  - - EX. 3/4" DIAM. 1/2" DEPTH SET
  - - EX. CORR. MON.
  - - CONC. WORK SET
  - △ - EX. HUB VAL. & WASHER
  - △ - EX. 1" OPEN PIPE
  - - WATER METER
  - - PHONE PEDestal
  - - C.A.T.V.
  - - UTILITY POLE
  - - GUY WIRE
  - - FIRE HYDRANT
  - - ELECT. TRAIL
  - - ABOVE GRADE
  - - BELOW GRADE



REV. 07/13/76, SITE PLAN

**MICHAEL A. ZITO, JR. & CATHERINE M. ZITO**  
 LOT 48 & ADJACENT PARCEL - COOSEWING - NAGS HEAD  
 NAGS HEAD TOWNSHIP - DARE COUNTY - NORTH CAROLINA



PL. 1707822 SURV-10-10/19/17 CE PLATERS: W/20/17 WL



SEABOARD SURVEYING & PLANNING, INC. C-1536  
 103F W. WOOD HILL DR., P.O. BOX 58, NAGS HEAD, NC 27959  
 OFFICE: (252) 450-9888 FAX: (252) 450-0571

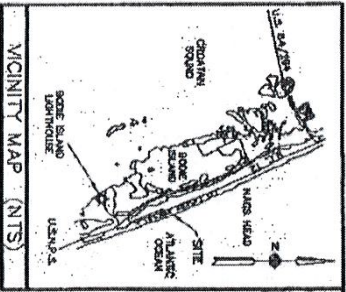
New Site Plan of Zito cottage received

RECEIVED

AUG 01 2018

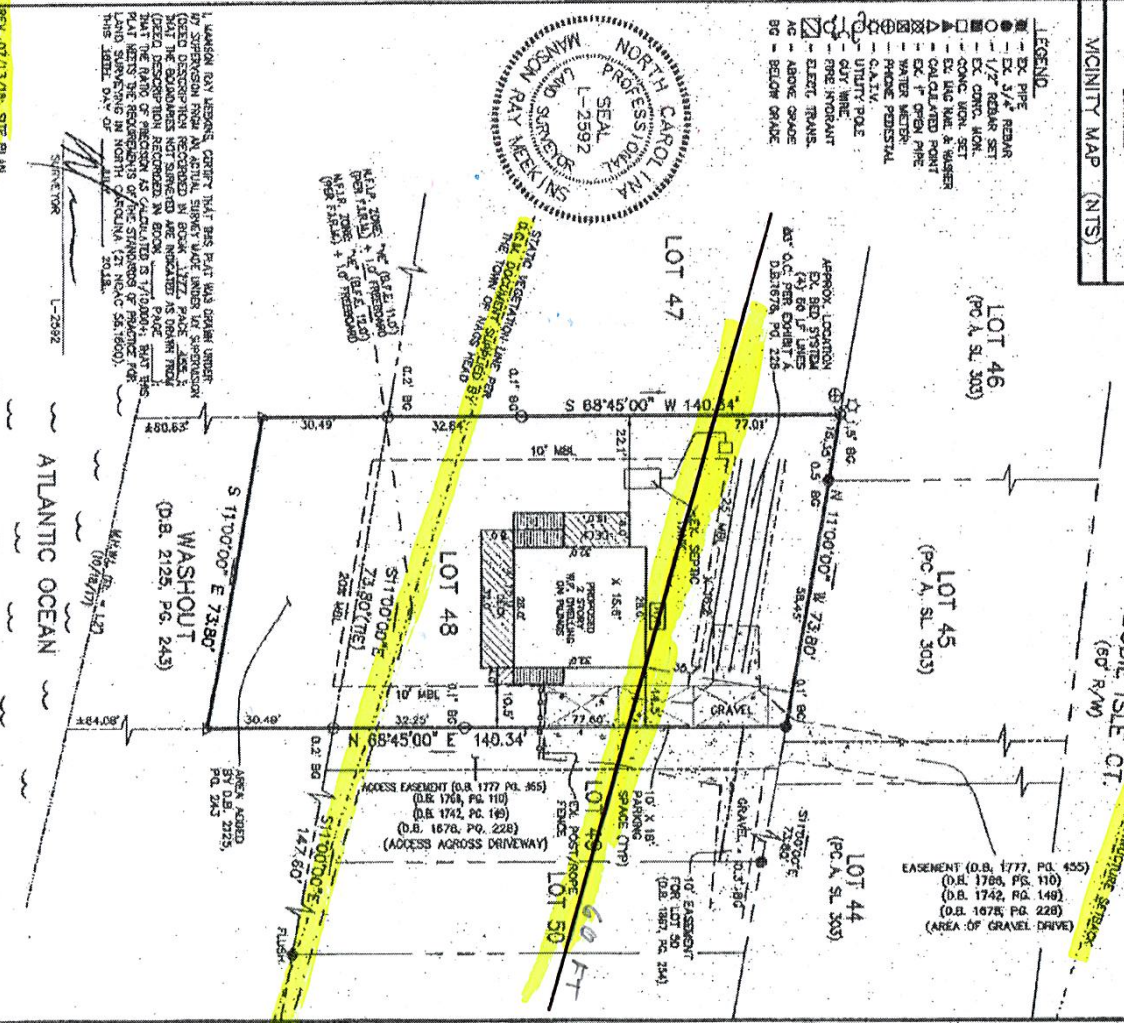
DCM-MHD CITY





- NOTES:
1. THIS SURVEY IS SUBJECT TO ANY FACTS THAT MAY BE DISCOVERED BY A FULL AND ACCURATE TITLE SEARCH.
  2. AREA OF RECORDATION = 10,182 SQ. FT. (6,909 SQ. FEET OF STATIC WEA. LINE)
  3. FIELD NOTES AS SHOWN
  4. PIN NO. 14 07816 75 4274
  5. RECORDED REFERENCE: A.L.S. & P.L. 37, 29 1777, PG. 455
  6. RECORDED REFERENCE: A.L.S. & P.L. 37, 29 1777, PG. 455
  7. RECORDED REFERENCE: A.L.S. & P.L. 37, 29 1777, PG. 455
  8. ELEVATIONS (JULY 1988) AS SHOWN HEREON ARE PER THE SURVEYOR'S FIELD BOOKS AND ARE TO BE USED AS SHOWN AND/OR INSTRUMENTS MANUFACTURED AND LISTED BE FORWARDED.
  9. PROPOSED LOT COVERAGE 2,000 S.F. (23.0M<sup>2</sup>)
  10. THE PROPERTY LIES WITHIN THE 340 FT. CALVA. O.E.A./A.E.C. AND THE 190 FT. CALVA. STRUCTURE SETBACK.

- LEGEND:
- EX. PIPE
  - EX. 3/4" RIGID
  - EX. 1/2" RIGID SET
  - EX. CONC. MON.
  - EX. CONC. MON. SET
  - ▲ EX. BIG HOLE & W/ASER
  - △ EX. CALCULATED POINT
  - EX. 1" OPEN PIPE
  - WATER METER
  - PROBE PENETRATION
  - G.A.T.V.
  - UTILITY POLE
  - GUY WIRE
  - POLE MOUNT
  - ELECT. TRANS.
  - ABOVE GRADE
  - BELOW GRADE



1. MANSOUR RAY MEKINS CERTIFY THAT THIS PLAN WAS DRAWN UNDER THE SUPERVISION OF AN ACTING SURVEYOR UNDER THE SUPERVISION OF (SEESE) DESIGNATION RECEIVED IN BOOK 1722 PAGE 455 & THAT THE DESIGNATIONS NOT SURVEYED ARE INDICATED AS OPEN FROM THE SURVEYOR'S RECORDS AS NOTED IN THE FIELD BOOKS. THIS PLAN MEETS THE REQUIREMENTS OF THE SURVEYORS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 N.C.A.C. 55.1600). THIS IS THE DAY OF JULY 2018.

REV. 07/13/18. SITE PLAN

**MICHAEL A. ZITO, JR. & CATHERINE M. ZITO**  
 LOT 48 & ADJACENT PARCEL - GOOSEWING - NAGS HEAD  
 NAGS HEAD TOWNSHIP - DARE COUNTY - NORTH CAROLINA



SURVEY/ SITE PLAN FOR  
 SEABOARD SURVEYING & PLANNING, INC. C-1536  
 103F W. WOOD HILL DR., P.O. BOX 58, NAGS HEAD, NC. 27959  
 OFFICE: (252) 480-9988 FAX: (252) 480-0571

New Site Plan of Zito cottage received; 60-ft Setback Line & Static Vegetation Line highlighted

SETBACK FOR GRAND FATHENED LOT

RECEIVED  
 AUG 01 2018  
 DCM-MHD CITY

# 15A NCAC 07J .0703 PROCEDURES FOR DECIDING VARIANCE PETITIONS

(f) To grant a variance, the Commission must affirmatively find each of the four factors listed in G.S. 113A-120.1(a).

- (1) that unnecessary hardships would result from strict application of the development rules, standards, or orders issued by the Commission;
- (2) that such hardships result from conditions peculiar to the petitioner's property such as location, size, or topography;
- (3) that such hardships did not result from actions taken by the petitioner; and
- (4) that the requested variance is consistent with the spirit, purpose and intent of the Commission's rules, standards or orders; will secure the public safety and welfare; and will preserve substantial justice.





ROY COOPER  
*Governor*

MICHAEL S. REGAN  
*Secretary*

WILLIAM F. LANE  
*General Counsel*

TO: The Coastal Resources Commission

FROM: Christine A. Goebel, DEQ Assistant General Counsel

DATE: November 15, 2018 (for the November 27-29, 2018 CRC Meeting)

RE: **Variance Request by the Town of Caswell Beach (CRC-VR-18-06)**

---

Petitioner Town of Caswell Beach (“Town”) owns oceanfront property south of the Oak Island Lighthouse on Caswell Beach Road. The property is located within the Commission’s Ocean Hazard Area of Environmental Concern (“AEC”). This area of Nags Head is subject to a “static line” following a large-scale beach nourishment project in 2009, and the average annual erosion rate is 2’/year.

In trying to address frequent stormwater flooding along Caswell Beach Road, and specifically in the 300- and 400- block area, the Town has worked with an engineering company and with DOT officials to investigate possible solutions to the issue. Following the approval of funding by DOT in July of 2018, in October of 2018, the Town filed a CAMA Minor Permit application seeking to construct a Dune Infiltration System (“DIS”) consisting of approximately 525 sq. ft. of chambers buried under the existing dune, where collected stormwater from the road would be pumped and treated. On October 17, 2018, DCM denied the permit application as the proposed DIS was not located landward of the applicable oceanfront erosion setback from the static line. On October 17, 2018, the Town filed this variance petition to request the Commission vary the oceanfront setback rules so it can develop the DIS as proposed.

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.): Justin Humphries, Esq., Petitioner’s Counsel, electronically  
 Mary Lucasse, Special Deputy AG and CRC Counsel, electronically



**RELEVANT STATUTES OR RULES****APPENDIX A****15A NCAC 07H .0301 OCEAN HAZARD CATEGORIES**

The next broad grouping is composed of those AECs that are considered natural hazard areas along the Atlantic Ocean shoreline where, because of their special vulnerability to erosion or other adverse effects of sand, wind, and water, uncontrolled or incompatible development could unreasonably endanger life or property. Ocean hazard areas include beaches, frontal dunes, inlet lands, and other areas in which geologic, vegetative and soil conditions indicate a substantial possibility of excessive erosion or flood damage.

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

(a) The primary causes of the hazards peculiar to the Atlantic shoreline are 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 significant 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, therefore, because of both the severity of the hazards and the intensity of interest in the 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 appropriate location of structures on and near these landforms must be reviewed carefully in order to avoid their loss or damage. As a whole, the same flexible nature of these landforms which presents hazards to development situated immediately on them 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. (The role of each landform is described in detail in Technical Appendix 2 in terms of the physical processes most important to each.) Overall, however, the energy dissipation and sand storage capacities of the landforms are most essential for 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 indigenous to the Atlantic 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 to provide management policies and standards for ocean hazard areas that serve to eliminate unreasonable 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 purpose of these Rules shall be to further the goals set out in G.S. 113A-102(b), with particular attention to minimizing losses to life and property resulting from storms and long-term erosion, preventing encroachment of permanent structures on public beach areas, preserving the natural ecological conditions of the barrier dune and beach systems, and reducing the public costs of inappropriately sited development. Furthermore, it is the objective of the Coastal Resources Commission to protect present common-law and statutory public rights of access to and use of the lands and waters of the coastal area.

**15A NCAC 07H .0304 AECS WITHIN OCEAN HAZARD AREAS**

The ocean hazard AECs contain all of the following areas:

(1) Ocean Erodible Area. This is the area where there exists a substantial possibility of excessive erosion and significant shoreline fluctuation. The oceanward boundary of this area is the mean low water line. The landward extent of this area is the distance landward from the first line of stable and natural vegetation as defined in 15A NCAC 07H .0305(a)(5) to the recession line established by multiplying the long term annual erosion rate times 90; provided that, where there has been no long term erosion or the rate is less than two feet per year, this distance shall be set at 120 feet landward from the first line of stable natural vegetation. For the purposes of this Rule, the erosion rates are the long-term average based on available historical data. The current long-term average erosion rate data for each segment of the North Carolina coast is depicted on maps entitled "2011 Long-Term Average Annual Shoreline Rate Update" and approved by the Coastal Resources Commission on May 5, 2011 (except as such rates may be varied in individual contested cases or in declaratory or interpretive rulings). In all cases, the rate of shoreline change shall be no less than two feet of erosion per year. The maps are available without cost from any Local Permit Officer or the Division of Coastal Management on the internet at <http://www.nccoastalmanagement.net>.

**15A NCAC 07H .0305 GENERAL IDENTIFICATION AND DESCRIPTION OF LANDFORMS**

(a) This Paragraph 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.

(2) Nearshore. The nearshore is the portion of the beach seaward of mean low water that is characterized by dynamic changes both in space and time as a result of storms.

(3) Primary Dunes. Primary dunes are the first mounds of sand located landward of the ocean beaches having an elevation equal to the mean flood level (in a storm having a one percent chance of being equaled or exceeded in any given year) for the area plus six feet. Primary dunes extend landward to the lowest elevation in the depression behind that same mound of sand (commonly referred to as the “dune trough.”)

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

(5) Vegetation Line. The vegetation line refers to the first line of stable and natural vegetation, which shall be used as the reference point for measuring oceanfront setbacks. This line represents the boundary between the normal dry sand beach, which is subject to constant flux due to waves, tides, storms and wind, and the more stable upland areas. The vegetation line is generally located at or immediately oceanward of the seaward toe of the frontal dune or erosion escarpment. The Division of Coastal Management or Local Permit Officer shall determine the location of the stable and natural vegetation line based on visual observations of plant composition and density. If the vegetation has been planted, it may be considered stable when the majority of the plant stems are from continuous rhizomes rather than planted individual rooted sets. Planted vegetation may be considered natural when the majority of the plants are mature and additional species native to the region have been recruited, providing stem and rhizome densities that are similar to adjacent areas that are naturally occurring. In areas where there is no stable and natural vegetation present, this line may be established by interpolation between the nearest adjacent stable natural vegetation by on-ground observations or by aerial photographic interpretation.

(6) Static Vegetation Line. In areas within the boundaries of a large-scale beach fill project, the vegetation line that existed within one year prior to the onset of project construction shall be defined as the “static vegetation line.” The “onset of project construction” shall be defined as the date sediment placement begins, with the exception of projects completed prior to the effective date of this Rule, in which case the award of the contract date will be considered the onset of construction. A static vegetation line shall be established in coordination with the Division of Coastal Management using on-ground observation and survey or aerial imagery for all areas of oceanfront that undergo a large-scale beach fill project. Once a static vegetation line is established,

and after the onset of project construction, this line shall be used as the reference point for measuring oceanfront setbacks in all locations where it is landward of the vegetation line. In all locations where the vegetation line as defined in this Rule is landward of the static vegetation line, the vegetation line shall be used as the reference point for measuring oceanfront setbacks. A static vegetation line shall not be established where a static vegetation line is already in place, including those established by the Division of Coastal Management prior to the effective date of this Rule. A record of all static vegetation lines, including those established by the Division of Coastal Management prior to the effective date of this Rule, shall be maintained by the Division of Coastal Management for determining development standards as set forth in Rule .0306 of this Section. Because the impact of Hurricane Floyd (September 1999) caused significant portions of the vegetation line in the Town of Oak Island and the Town of Ocean Isle Beach to be relocated landward of its pre-storm position, the static line for areas landward of the beach fill construction in the Town of Oak Island and the Town of Ocean Isle Beach, the onset of which occurred in 2000, shall be defined by the general trend of the vegetation line established by the Division of Coastal Management from June 1998 aerial orthophotography.

(7) Beach Fill. Beach fill refers to the placement of sediment along the oceanfront shoreline. Sediment used solely to establish or strengthen dunes shall not be considered a beach fill project under this Rule. A “large-scale beach fill project” shall be defined as any volume of sediment greater than 300,000 cubic yards or any storm protection project constructed by the U.S. Army Corps of Engineers.

(8) Erosion Escarpment. The normal vertical drop in the beach profile caused from high tide or storm tide erosion.

(9) Measurement Line. The line from which the ocean hazard setback as described in Rule .0306(a) of this Section is measured in the unvegetated beach area of environmental concern as described in Rule .0304(3) of this Section. Procedures for determining the measurement line in areas designated pursuant to Rule .0304(3) of this Section shall be adopted by the Commission for each area where such a line is designated pursuant to the provisions of G.S. 150B. These procedures shall be available from any local permit officer or the Division of Coastal Management. In areas designated pursuant to Rule .0304(3)(b) of this Section, the Division of Coastal Management shall establish a measurement line that approximates the location at which the vegetation line is expected to reestablish by: (A) determining the distance the vegetation line receded at the closest vegetated site to the proposed development site; and (B) locating the line of stable and natural vegetation on the most current pre-storm aerial photography of the proposed development site and moving this line landward the distance determined in Subparagraph (a)(1) of this Rule. The measurement line established pursuant to this process shall in every case be located landward of the average width of the beach as determined from the most current pre-storm aerial photography.

(10) Development Line. The line established in accordance with 15A NCAC 07J .1300 by local governments representing the seaward-most allowable location of oceanfront development. In areas that have development lines approved by the CRC, the vegetation line or measurement line

shall be used as the reference point for measuring oceanfront setbacks instead of the static vegetation line, subject to the provisions of Rule 07H .0306(a)(2) of this Section.

(b) For the purpose of public and administrative notice and convenience, each designated minor development permit-letting agency with ocean hazard areas may designate, subject to CRC approval in accordance with the local implementation and enforcement plan as defined in 15A NCAC 07I .0500, an identifiable land area within which the ocean hazard areas occur. This designated notice area must include all of the land areas defined in Rule .0304 of this Section. Natural or man-made landmarks may be considered in delineating this area.

### **15A NCAC 07H .0306 GENERAL USE STANDARDS FOR OCEAN HAZARD AREAS**

(a) In order to protect life and property, all development not otherwise specifically exempted or allowed by law or elsewhere in the Coastal Resources Commission's rules shall be located according to whichever of the following is applicable:

(1) The ocean hazard setback for development shall be measured in a landward direction from the vegetation line, the static vegetation line, or the measurement line, whichever is applicable.

(2) In areas with a development line, the ocean hazard setback shall be set in accordance with Subparagraphs (a)(3) through (9) of this Rule. In no case shall new development be sited seaward of the development line.

(3) In no case shall a development line be created or established on state owned lands or oceanward of the mean high water line or perpetual property easement line, whichever is more restrictive.

(4) The ocean hazard setback shall be determined by both the size of development and the shoreline long term erosion rate as defined in Rule .0304 of this Section. "Development size" is defined by total floor area for structures and buildings or total area of footprint for development other than structures and buildings. Total floor area includes the following:

(A) The total square footage of heated or air-conditioned living space;

(B) The total square footage of parking elevated above ground level; and

(C) The total square footage of non-heated or non-air-conditioned areas elevated above ground level, excluding attic space that is not designed to be load-bearing.

Decks, roof-covered porches, and walkways shall not be included in the total floor area unless they are enclosed with material other than screen mesh or are being converted into an enclosed space with material other than screen mesh.

(5) With the exception of those types of development defined in 15A NCAC 07H .0309, no development, including any portion of a building or structure, shall extend oceanward of the ocean hazard setback. This includes roof overhangs and elevated structural components that are cantilevered, knee braced, or otherwise extended beyond the support of pilings or footings. The ocean hazard setback shall be established based on the following criteria:

(A) A building or other structure less than 5,000 square feet requires a minimum setback of 60 feet or 30 times the shoreline erosion rate, whichever is greater;

**15A NCAC 07H .0309 USE STANDARDS FOR OCEAN HAZARD AREAS: EXCEPTIONS**

(a) The following types of development shall be permitted seaward of the oceanfront setback requirements of Rule .0306(a) of the Subchapter if all other provisions of this Subchapter and other state and local regulations are met:

- (1) campsites;
- (2) driveways and parking areas with clay, packed sand or gravel;
- (3) elevated decks not exceeding a footprint of 500 square feet;
- (4) beach accessways consistent with Rule .0308(c) of this Subchapter;
- (5) unenclosed, uninhabitable gazebos with a footprint of 200 square feet or less;
- (6) uninhabitable, single story storage sheds with a foundation or floor consisting of wood, clay, packed sand or gravel, and a footprint of 200 square feet or less;
- (7) temporary amusement stands;
- (8) sand fences; and
- (9) swimming pools.

In all cases, this development shall be permitted only if it is landward of the vegetation line or static vegetation line, whichever is applicable; involves no alteration or removal of primary or frontal dunes which would compromise the integrity of the dune as a protective landform or the dune vegetation; has overwalks to protect any existing dunes; is not essential to the continued existence or use of an associated principal development; is not required to satisfy minimum requirements of local zoning, subdivision or health regulations; and meets all other non-setback requirements of this Subchapter.

**STIPULATED FACTS****ATTACHMENT B**

1. Petitioner, the Town of Caswell Beach (“Petitioner” or “Town”) owns a 5.3-acre undeveloped oceanfront parcel located south of the Oak Island Lighthouse on Caswell Beach Road (“Road”) within the Town’s limits (the “Site”). The Site is bordered by the Atlantic Ocean to the south, Caswell Beach Road to the north, 217 Caswell Beach Road (Gary Studer) to the west and 301 Caswell Beach Road (Brian Murphy) to the east. The Site can be seen on ground level and aerial photography in the attached Powerpoint Presentation. A copy of the deed is attached.
2. Near the Site, Caswell Beach Road is a low spot where stormwater tends to collect. The Town has installed trench drains along the road in order to try and alleviate the flooding. Town Manager Chad Hicks has observed that during moderate rain events of 6” or more, the flooded roadway is impassable to low-clearance vehicles for up to 8 hours. In severe rain events, the road can be impassable to low-clearance vehicles for as much as two days. Additionally, the lowest-lying area in the 300 and 400 blocks of the Road can become impassable to high-clearance vehicles.
3. In addition to the trench drains, the Town temporarily uses portable pumps and fire trucks to pump stormwater off the road and into the sound or to the dunes following larger storm events. Town officials estimate that they use pumps to clear the road approximately four times per year on average.
4. Emergency services within the Town are provided by Brunswick County. Kat Corrigan, the EMS Operations Manager for Brunswick County expressed her concern about the ability to address emergencies within the Town’s limits during storm events, due to road flooding. A copy of her statement is attached as a stipulated exhibit.
5. Aerial photographs attached as part of the Powerpoint Presentation were taken by NOAA immediately following Hurricane Florence and show flooding on Caswell Beach Road. Additional ground-level photographs included in the Powerpoint Presentation show instances of flooding on Caswell Beach Road.
6. Since at least 2005, North Carolina Department of Transportation (“NCDOT”) and North Carolina State University (“NCSU”) have worked together on developing and installing Dune Infiltration Systems (“DIS”) as a low-cost way to address stormwater runoff issues on roads.
7. There is currently a similar DIS installed in Kure Beach, which re-directs stormwater from three existing stormwater outfalls at K Avenue into a 26-chamber DIS. This project received a variance from the Commission’s oceanfront erosion setback rule in 2008. A copy of the Commission’s Final Order in the 2008 Variance is attached.

8. Since 2017, officials with the Town and NCDOT have been discussing ways to address the flooding on Caswell Beach Road. A chain of emails from May of 2018 show communication between NCDOT and Town officials, attached as a stipulated exhibit.
9. Town officials met with resource agency representatives on March 16, 2017 to discuss floodwater pumping and the ability to receive a DWR permit to pump stormwater off the road. A copy of the meeting attendees and the project narrative are attached as stipulated exhibits.
10. The Town of Caswell Beach engaged the engineering firm W.K. Dickson to evaluate the effect of infiltrating stormwater pumped from the flooding areas on Caswell Beach Road to the proposed DIS at the Site and evaluate the quantity of water for the effect on the site's groundwater table. After performing these tests, it was determined in the October 20, 2018 Report, attached as a stipulated exhibit, that the water table mounding does not extend to Caswell Beach Road or to the neighboring properties and that the mound height is below ground.
11. At the July 2018 meeting of the NC Board of Transportation, the Board approved \$500,000 to be spent on the proposed project as part of NCDOT's High Impact-Low Cost program. Copies of the relevant portion of the July 2018 Board of Transportation minutes are attached as a stipulated exhibit, as are the relevant portion of the August 2018 minutes which confirm the Board's approval and delegation to the Secretary for approval of this project. A copy of the budget for the Dune Infiltration Project is attached as a stipulated exhibit and estimates that the Project can be completed within the amount approved for the project by NCDOT.
12. On August 28, 2018, NCDOT and Town officials met to discuss the project and visit the Site. A copy of the meeting minutes is attached as a stipulated exhibit, and note that the project is proposed to have a project bid in February 2019 and a start date in May 2019.
13. At this Site, the Town proposes a project that contains approximately 525 sq. ft. of buried infiltration high-density polyethylene chambers (approximately 105 chambers) that can store the stormwater until it can be absorbed by the groundwater after filtering through the dune sand. After the infiltration chambers are installed, they will be connected to the line that will run the length of Caswell Beach Road, which is approximately 1.25 miles. The project will begin at the Duke Energy Nuclear Pumping Station and run to the United States Coast Guard Station Oak Island. Following construction, the dune will be rebuilt on top of the chambers and vegetation will be planted. A copy of the project narrative is attached as a stipulated exhibit.
14. On or about October 17, 2018, the Town, through its Town Manager Chad Hicks, submitted a CAMA Minor Permit Application to DCM, through the Wilmington Regional Office. A copy of the Town's application materials is attached as a stipulate exhibit.
15. As part of the CAMA Minor Permit review process, the Town gave notice to the two adjacent riparian owners to the Site, Gary Studer and Brian Murphy. Copies of the email notice and responses are attached as stipulated exhibits.

16. Effective in 1979, the Commission adopted an erosion setback requirement that applies to structures along the oceanfront, within the Ocean Hazard Area of Environmental Concern (“AEC”). Rule 15A NCAC 7H .0306(a) The proposed development must be set back at a distance of 30-times the long-term annual erosion rate from the applicable vegetation line. Rule 15A NCAC 7H .0306(a)(1). At this Site, the long-term annual erosion rate is 2’/year and so the applicable setback is 60’ from the applicable vegetation line.

17. Before the Town’s large-scale beach nourishment project in 2009, the first line of stable and natural vegetation (“FLSNV”) was surveyed for post-project use as the static vegetation line, from which oceanfront erosion setbacks are measured in a landward direction. Aerial photographs of the Site with historic shorelines overlain are attached as stipulated exhibits.

18. The proposed project would be located landward of the static vegetation line (where the FLSNV was surveyed in 2009 before the Town’s large-scale nourishment project). The proposed project would be located waterward of the applicable 60’ setback from the static vegetation line.

19. On October 17, 2018, DCM, through Field Representative Tara MacPherson, denied the Town’s minor permit application because the proposed development was inconsistent with Rule 15A NCAC 7H .0306(a)(2) and NCGS 113A-120(a)(8). A copy of the denial letter is attached as a stipulated exhibit.

20. The Town seeks a variance from the Commission’s oceanfront erosion setback rules found at 15A NCAC 7H .0306(a)(2) in order to develop the proposed stormwater infiltration system as proposed. A copy of the Town’s October 17, 2018 Variance Petition is attached as Attachment D.

21. The Town is represented by Justin Humphries, Esq. and DCM Staff are represented by DEQ Asst. General Counsel Christine Goebel, Esq.

22. The Town stipulates that the proposed project is inconsistent with the oceanfront erosion setbacks of 15A NCAC 7H .0306(a)(2).

23. As part of the variance process, the Town has notified the adjacent riparian owners that they are seeking this variance. Copies of this notice are attached as stipulated exhibits.



**Stipulated Exhibits:**

1. Deed to the Site
2. Statement of Kat Corrigan, Brunswick County EMS Operations Manager
3. 2008 CRC Variance Order to Town of Kure Beach
4. May 2018 email chain between Town and NCDOT
5. March 16, 2017 scoping meeting attendance list and project narrative
6. October 20, 2018 report by W.K. Dickson to Town
7. July 2018 NC Board of Transportation agenda, and August minutes reflecting approval
8. NCDOT's proposed project budget breakdown
9. August 28, 2018 meeting minutes for NCDOT and Town meeting
10. Project narrative for DIS proposal
11. CAMA Minor Permit Application materials
12. Email notice of CAMA permit application to adjacent owners
13. Aerial photos of the Site, overlain with historic shorelines
14. October 17, 2018 CAMA permit denial letter
15. Notice to adjacent neighbors of this variance request
16. Powerpoint showing the Site, including pictures of past flooding events

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

- I. Will strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships? If so, the petitioner must identify the hardships.**

**Petitioners' Position: Yes.**

The Town of Caswell Beach has a rare opportunity to secure funding that will alleviate dangerous stormwater flooding along the low-lying areas and land surface along Caswell Beach Road. The areas of flooding cut off the Town, US Coast Guard Station Oak Island and the North Carolina Baptist Assembly from essential emergency services, sometimes for days at a time.

With the proposed Dune Infiltrating System (DIS) floodwater will be cleared from the road way with 12 hours in the critical flooding areas and filtered into the subsurface sand instead of being pumped for days into the ocean and marsh. This system will work best as presented in the maps provided to our Local Permit Officer.

**Staff's Position: Yes.**

The Town seeks a variance from the Commission's oceanfront setback rules which require development to be landward of the 60' setback as measured from the applicable static vegetation line. The Commission's Ocean Hazard rules are intended to protect oceanfront dunes by keeping significant development landward of these important features, and also to minimize losses to property from storms and long-term erosion. In this case, the dune infiltration system (DIS) is designed to be buried under the dunes near the location of the floodwater collection point and to filter stormwater underneath the dunes. Also, the existing dune will be reconstructed and revegetated over the top of the DIS after the system is put in place. As the proposed DIS is designed to work within/under the dunes, a strict application of the ocean erosion setback causes the Town unnecessary hardships.

- II. Do such hardships result from conditions peculiar to the petitioner's property, such as location, size, or topography of the property? Explain.**

**Petitioner's Position: Yes.**

The property in question is the only available property with the size and topography to accommodate this project. There are no properties left in Caswell Beach that are undeveloped and none that have as much acreage as the proposed site for the stormwater dune infiltration system.

**Staff's Position: Yes.**

Staff agree that the Town's hardships result from conditions peculiar to the Town's property, where there do not appear to be properties that are large enough to accommodate a DIS but are also wide enough to locate them more than 60' from the static line, that are also in the area of Caswell Beach Road where the flooding is most problematic. Additionally, Staff note that Caswell Beach is located on a narrow peninsula, limiting the placement of both a main east-west road and the development of a DIS that could also meet the setback.

**III. Do the hardships result from the actions taken by the Petitioner? Explain.****Petitioners' Position: No.**

There is nothing the Town of Caswell Beach has done that in anyway cause this hardship.

**Staff's Position: No.**

Staff agree that the Town's hardships do not result from their actions. On this narrow peninsula, there are limited options for addressing flooding along Caswell Beach Road. While pumping the stormwater into the sound or the ocean is an option, it takes a while for the pumps to lower the water to allow safe use of the road, limiting emergency access, while also impacting water quality. This DIS design would work to reduce or eliminate the need for pumping stormwater off Caswell Beach Road, and would have limited long-term impacts on the existing dune within the setback.

- IV. 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.**

**Petitioners' Position: Yes.**

The CAMA development rules are put in place to protect the safety and property of the people of North Carolina. Although this system is technically development it is more of an underground utility that will be used to mitigate flooding dangers in the town. Should the system be overtaken by a natural disaster there would be no danger to the public as in the case of a structure washing away.

This project will also serve public safety and welfare in several ways. By removing flooded stormwater from Caswell Beach Road emergency crews and vehicles will be able to access the residents, US Coast Guard Station Oak Island, and the NC Baptist Assembly.

The Town of Caswell Beach feels that justice is preserved by allowing a variance to be issued for this project. We do not foresee how this project could be of detriment to the State of North Carolina.

**Staff's Position: Yes.**

Staff contends that granting a variance in order to vary the Commission's oceanfront erosion setback rules to allow the development of the DIS is consistent with the spirit, purpose, and intent of the Commission's rules where the spirit of the oceanfront erosion setback rules is to protect oceanfront dune systems and to locate development more landward to reduce storm impacts. In this case, the impacts to the dune system will be short-term as the existing dune will be rebuilt and revegetated after installation of the DIS. Also, the risk of impacts to the DIS will be reduced because it will be buried under the dune. The proposed DIS system will address public safety and welfare by both limiting the need to close Caswell Beach Road due to stormwater flooding, and by reducing water quality impacts where the amount of stormwater needed to be pumped off the road will be reduced or eliminated. Locating the DIS within the existing dune in the setback area will only cause short-term impacts to the protective nature of the oceanfront dune. Staff agree that granting a variance would preserve substantial justice where the CAMA statute makes exceptions for buried utilities, but which do not include this new DIS system technology, despite the similarities in purpose.

**ATTACHMENT D:  
PETITIONERS' VARIANCE REQUEST MATERIALS**



## CAMA VARIANCE REQUEST FORM

DCM FORM 11

DCM FILE No.: Case B 18-01

PETITIONER'S NAME Town of Caswell Beach  
 COUNTY WHERE THE DEVELOPMENT IS PROPOSED Brunswick

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](http://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:**


\_\_\_\_\_ The name and location of the development as identified on the permit application;



- \_\_\_\_\_ 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;
- \_\_\_\_\_ A complete description of the proposed development including a site plan;
- \_\_\_\_\_ A stipulation that the proposed development is inconsistent with the rule at issue;
- \_\_\_\_\_ Proof that notice was sent to adjacent owners and objectors\*, as required by 15A N.C.A.C. 07J .0701(c)(7);
- \_\_\_\_\_ Proof that a variance was sought from the local government per 15A N.C.A.C. 07J .0701(a), if applicable;
- \_\_\_\_\_ Petitioner's written reasons and arguments about why the Petitioner meets the four variance criteria, listed above;
- \_\_\_\_\_ 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.
- \_\_\_\_\_ 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.*

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

	<u>10-17-18</u>
Signature of Petitioner or Attorney	Date
<u>Chad Hicks</u>	<u>chicks@caswellbeach.org</u>
Printed Name of Petitioner or Attorney	Email address of Petitioner or Attorney
<u>1100 Caswell Beach Rd,</u>	<u>(910) 200-3217</u>
Mailing Address	Telephone Number of Petitioner or Attorney
<u>Caswell Beach NC 28465</u>	<u>(866) 271-3641</u>
City State Zip	Fax Number of Petitioner or Attorney

OCT 17 2018



## 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.

**Yes. The Town of Caswell Beach has a rare opportunity to secure funding that will alleviate dangerous stormwater flooding along the low-lying areas and land surface along Caswell Beach Road. The areas of flooding cut off the Town, US Coast Guard Station Oak Island and the North Carolina Baptist Assembly from essential emergency services, sometimes for days at a time.**

**With the proposed Dune Infiltrating System (DIS) floodwater will be cleared from the road way within 12 hours in the critical flooding areas and filtered into the subsurface sand instead of being pumped for days into the ocean and marsh. This system will work best as presented in the maps provided to our Local Permit Officer.**

- (b) Do such hardships result from conditions peculiar to the petitioner's property such as the location, size, or topography of the property? Explain.

**Yes. The property in question is the only available property with the size and topography to accommodate this project. There are no properties left in Caswell Beach that are undeveloped and none that have as much acreage as the proposed site for the stormwater dune infiltration system.**

- (c) Do the hardships result from actions taken by the petitioner? Explain.

**No. There is nothing the Town of Caswell Beach has done that in anyway cause this hardship.**

- (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.

**Yes. The CAMA development rules are put in place to protect the safety and property of the people of North Carolina. Although this system is technically development it is more of an underground utility that will be used to mitigate flooding dangers in the town. Should the system be overtaken by a natural disaster there would be no danger to the public as in the case of a structure washing away.**

**This project will also secure public safety and welfare in several ways. By removing flooded stormwater from Caswell Beach Road emergency crews and vehicles will be able to access the residents, US Coast Guard Station Oak Island, and the NC Baptist Assembly.**

**The Town of Caswell Beach feels that justice is preserved by allowing a variance to be issued for this project. We do not foresee how this project could be of detriment to the State of North Carolina.**

**RECEIVED**

**OCT 17 2018**

**DCM WILMINGTON, NC**



**VARIANCE APPLICATION**

1. The project is a stormwater dune infiltration system that will be placed outside of the 60' static line in the 300 block of Caswell Beach Road.
2. Permit decision to be provided by LPO.
3. Deed attached.
4. Site plan attached. This project is approximately 525' feet of buried infiltration chambers that store water until it can be absorbed by the ground. This water is filtered through the sand before entering the water table. A pipe will be used that runs the length of Caswell Beach Road and to the infiltration system to transport the flood water. The system will be buried, and all dunes and plantings restored so that no evidence of the project will be visible.
5. The proposed project is outside of the static line but is within the 60' buffer making it inconstant with CAMA development rules. We request a variance to allow the project to be built inside the buffer zone.
6. Certified receipts attached.
7. Local government variance is not applicable.
8. The answers to the 4 variance criteria are attached.
9. Facts on project
  - a. Caswell Beach Road floods during storm events.
  - b. Flooding on Caswell Beach Road prevents emergency responders from accessing residents in need.
  - c. The project will be below ground and not visible.
  - d. Flood water pumped into the infiltration containers are filtered before entering the natural water table.
  - e. Caswell Beach has funding available to install project and eliminate dangerous flooding on Caswell Beach Road during most storm events.
  - f. Caswell Beach Road floods several times per year.
  - g. The project cannot be practically moved from the proposed location and work as designed.
  - h. The proposed project will be outside of the static line.
  - i. This project poses no danger or hindrances to the public.
  - j. This is an innovative project that is not harmful to the environment.
  - k. The project consists of approximately 525 square feet of underground piping and infiltration chambers.

**RECEIVED**

OCT 17 2018

DCM WILMINGTON, NC

**ATTACHMENT E:  
STIPULATED EXHIBITS INCLUDING POWERPOINT**

Brunswick County—Register of Deeds  
 Robert J. Robinson  
 Inst #217753 Book 1971Page 315  
 06/30/2004 10:46:19am Rec#95229

NET Elon Jess  
 TOTAL 38 REV \_\_\_\_\_ TC# 1  
 REC# \_\_\_\_\_ CK AMT \_\_\_\_\_ CK# \_\_\_\_\_  
 CASH \_\_\_\_\_ DEF \_\_\_\_\_ BY De

TS	AMT	DATE	BY	INITIALS
(B) 3	516	A	001	0100
(C) 3	516	B	037	0

QUITCLAIM DEED

The UNITED STATES OF AMERICA, acting by and through the Secretary of the Interior, acting by and through the Southeast Regional Director, National Park Service, under and pursuant to the power and authority contained in the provisions of the Federal Property and Administrative Services Act of 1949 (63 Stat. 377), as amended, and particularly as amended by Public Law 485, 91st Congress, and regulations and orders promulgated thereunder (hereinafter designated "Grantor"), for and in consideration of the perpetual use of the hereinafter described premises for public park and public recreation area purposes by the Town of Caswell Beach, North Carolina (hereinafter designated "Grantee"), released and quitclaimed to Grantee, and to its successors and assigns, subject to the reservations, exceptions, restrictions, conditions and covenants hereinafter expressed and set forth, all Grantor's right, title and interest in and to the following approximately 5.71 acres of described property, known as the Oak Island Light Tower, North Carolina, located at 300 A Caswell Beach Road, Caswell Beach, North Carolina 28465, more particularly described as follows:

Parcel "B"

Beginning at an iron rod in the northern right-of-way of N.C. Highway 133, the southeast corner of Lot 15, Block 3, Section "B" of Caswell Beach as recorded at Map Book 1, Page 123 of the Brunswick County Registry, having N.C. 1927 grid coordinates of N: 53314.49 E: 2292711.08 and being located South 74 degrees 50 minutes 39 seconds West 135.55 feet from USC&G monument "catwalk" on the Oak Island Lighthouse and further being in the western line of properties belonging to the U.S. Coast Guard; thence with said western line and the eastern line of the aforementioned Lot 15, North 19 degrees 30 minutes 56 seconds East 81.89 feet to an iron rod, the beginning corner of Parcel "A"; thence with parcel "A" South 75 degrees 23 minutes 28 seconds East 185.17 feet to an iron rod, a corner of parcel "A"; thence, South 14 degrees 36 minutes 32 seconds West 81.59 feet to an iron rod in the northern right-of-way of N.C. Highway 133, a corner of Parcel "A"; thence with the northern right-of-way of said Highway 133, North 75 degrees 23 minutes 28 seconds West 192.17 feet to the Point of Beginning. Being part of lands belonging to the U.S. Coast Guard described as the Oak Island Life Boat Station, District 5, C.G. Dated 1-17-39, under title "A" Property Report of the Brunswick County Registry containing 0.35 acres more or less and being all of Parcel "B".

Parcel "C"

Beginning at an iron pipe in the southern right-of-way of N.C. Highway 133, the northeast corner of Lot 1, Block 3, Section B, of Caswell Beach as recorded at Map Book 1, Page 123, of the Brunswick County Registry, said point being further located in the western line of lands belonging to the U.S. Coast Guard, and being South 19 degrees 31 minutes 25 seconds West 61.71 feet from a concrete monument, the southwest corner of Parcel "B", having N.C. 1927 grid coordinates of N:53314.49 E:2292711.08, South 74 degrees 50 minutes 39 seconds West 135.55 feet from USC&G Monument "Catwalk" on the Oak Island Lighthouse; thence

form the beginning, with said U.S. Coast Guard's western line and eastern line of said Lot 1 South 19 degrees 26 minutes 52 seconds West 136.61 feet to a concrete monument in said line; thence continuing, South 19 degrees 59 minutes 32 seconds East 233.35 feet to a point where said western line of U.S. Coast Guard lands intersects with the mean high water mark of the Atlantic Ocean; thence with said high water mark South 74 degrees 44 minutes 02 seconds East 564.31 feet to a point in the eastern line of the aforementioned U.S. Coast Guard lands; thence with said eastern line North 37 degrees 29 minutes 55 seconds East 266.43 feet to an iron pipe, the southwest corner of Lot 9, Block 2, Section "B" of Caswell Beach as recorded at Map Book 1, Page 123 of the Brunswick County Registry; thence with the eastern line of the U.S. Coast Guard's lands and the western line of said Lot 9 North 37 degrees 29 minutes 55 seconds East 142.70 feet to an iron rod in the southern right-of-way of N.C. Highway 133, the northwest corner of Lot 9; thence with the southern right-of-way of N.C. Highway 133, North 75 degrees 33 minutes 24 seconds East 690.0 feet to the Point of Beginning; being part of lands belonging to the U.S. Coast Guard described as the Oak Island Life Boat Station, district 5, C.G., dated 7-17-39, under Title "A" Property Report of the Brunswick County Registry, containing 5.36 acres more or less and being all of parcel "C".

This conveyance is made subject to any and all existing rights-of-way, easements and covenants and agreements affecting the above-described premises, whether or not the same now appear of record, including but not limited to the following:

1. A permit issued on March 1, 2002 to the Army Corps of Engineers for placement of an antenna on the light tower.
2. An easement conveyed to the Town of Caswell Beach on July 11, 1991 for the placement and maintenance of water service equipment.
3. An easement conveyed to Southern Bell Telephone and Telegraph Company on July 29, 1983.

To Have and to Hold the hereinbefore described property, subject to the reservations, exceptions, restrictions, conditions and covenants herein expressed and set forth unto the Grantee, its successors and assigns, forever.

Pursuant to authority contained in the Federal Property and Administrative Services Act of 1949, as amended, and applicable rules, regulations and orders promulgated thereunder, the General Services Administration determined the subject property to be surplus to the needs of the United States of America and assigned the property to the Department of the Interior for further conveyance to the Town of Caswell Beach, North Carolina.

It is agreed and understood by and between the Grantor and Grantee, and the Grantee, by its acceptance of this deed, does acknowledge its understanding of the agreement, and does covenant and agree for itself, and its successors and assigns, forever, as follows:



1. The property shall be used and maintained for the public purposes for which it was conveyed in perpetuity as set forth in the Program of Utilization and Plan contained in the application, submitted by the Grantee on June 23, 2003, which program and plan may be amended from time to time at the request of either the Grantor or Grantee, with the written concurrence of the other party, and such amendments shall be added to and become a part of the original application.

2. The Grantee shall, within 6 months of the date of this deed of conveyance, erect and maintain a permanent sign or marker near the point of principal access to the conveyed area which says:

This park land was acquired through the FEDERAL LANDS TO PARKS PROGRAM of the United States Department of the Interior, National Park Service, for the public's recreational use and enjoyment.

3. The property shall not be sold, leased, assigned, or otherwise disposed of except to another eligible governmental agency that the Secretary of the Interior agrees in writing can assure the continued use and maintenance of the property for public park or public recreational purposes subject to the same terms and conditions in the original instrument of conveyance. Any mortgage, lien, or any other encumbrance not wholly subordinate to the reverter interest of the Grantor shall constitute an impermissible disposal. However, this provision shall not preclude the Grantee and its successors or assigns from issuing revenue or other bonds related to the use of the property to the extent that such bond shall not in any way restrict, encumber, or constitute a lien on the property. Further, nothing in this provision shall preclude the Grantee from providing related recreational facilities and services compatible with the approved application, through concession agreements entered into with third parties, provided prior concurrence to such agreements is obtained in writing from the Secretary of the Interior.

4. From the date of this conveyance, the Grantee, its successors and assigns, shall submit biennial reports to the Secretary of the Interior, setting forth the use made of the property during the preceding 2-year period, and other pertinent data establishing its continuous use for the purposes set forth above, for ten consecutive reports and as further determined by the Secretary of the Interior.

5. All revenue received by the Grantee through concession agreements, use permits, or other fees generated by activities on the property shall be used only for the implementation of an approved Program of Utilization or the operation of park and recreation facilities and programs on the property. After the Program of Utilization is completed, and as long as the property is properly and sufficiently operated and maintained, the revenue may be used for other public park and recreational purposes by the Grantee. Any revenue received by the Grantee which is generated on or by the operation of the property shall not be used for non-recreational purposes. Any revenue received by the Grantee which is generated through the operation of the property shall be listed and accounted for in its biennial reports to the National Park Service.

6. The Grantor, and any representative it may so delegate, shall have the right of entry upon said premises at any time to conduct inspections of the property for the purpose of evaluating the Grantee's compliance with the terms and conditions of this deed.

7. The Grantee agrees that the U.S. Coast Guard (USCG) retains the unrestricted right: (a) to an "arc of visibility" easement; (b) to add a communications tower(s) and associated buildings and equipment and make any changes to the property as may be necessary for the USCG National Distress System; (C) to keep the aid to navigation and associated equipment in the light tower structure; (d) of access and ingress at all times for USCG personnel to service, add to, maintain, operate, repair and replace the aid to navigation and any associated equipment; and (e) to relocate or add any aids to navigation, or make any changes on any portion of the property as may be necessary for navigational purposes.

8. As part of the consideration for the Deed, the Grantee covenants and agrees for itself, its successors and assigns, that (1) the program for or in connection with which this Deed is made will be conducted in compliance with, and the Grantee, its successors and assigns, will comply with all requirements imposed by or pursuant to the regulations of the Department of the Interior in effect on the date of this Deed (43 C.F.R. Part 17) issued under the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d-1); (2) this covenant shall be subject in all respects to the provisions of said regulations; (3) the Grantee, its successors and assigns, will promptly take and continue to take such action as may be necessary to effectuate this covenant; (4) the United States shall have the right to seek judicial enforcement of this covenant, and (5) the Grantee, its successors and assigns, will (a) obtain from each other person (any legal entity) who, through contractual or other arrangements with the Grantee, its successors and assigns, is authorized to provide services or benefits under said program, a written agreement pursuant to which such other person shall, with respect to the services or benefits which he is authorized to provide, undertake for himself the same obligations as those imposed upon the Grantee, its successors and assigns, by this covenant, and (b) furnish a copy of such agreement to the Secretary of the Interior, or his successor; and that this covenant shall run with the land hereby conveyed, and shall in any event, without regard to technical classification or designation, legal or otherwise, be binding to the fullest extent permitted by law and equity for the benefit of, and in favor of the Grantor and enforceable by the Grantor against the Grantee, its successors and assigns.

9. The Grantee agrees to comply with the requirements of Public Law 90-480 (82 Stat. 718), the Architectural Barriers Act of 1968, as amended by Public Law 91-205 of 1970 (84 Stat. 49), and the Americans with Disabilities Act of 1990 (104 Stat. 337) to assure that development of facilities on conveyed surplus properties for public park and recreation purposes are accessible to the physically handicapped; and, further assure in accordance with Public Law 93-112, the Rehabilitation Act of 1973 (87 Stat. 394), that no otherwise qualified handicapped individual shall solely by reasons of his handicap be excluded from the participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

10. The Grantee, by acceptance of this deed, acknowledges that it has received the following notice of hazardous substance activity and reservation of access by the Grantor concerning the herein described lands. Each of these statements is given by the Grantor in compliance with Section 120(h)(3) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA), 42 U.S.C. §9620(h)(3):

(A) NOTICE Regarding Hazardous Substance Activity. Pursuant to 40 C.F.R. 373.2 and Section 120(h)(3)(A)(I) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA)(42 U.S.C. § 9620(h)(3)(A)(I), and based upon a complete search of agency files, the United States gives notice that no hazardous substances have been released or disposed of or stored for one year or more on the conveyed property.

(B) CERCLA Covenant. The Grantor warrants that all remedial action necessary to protect human health and the environment has been taken before the date of this conveyance. Grantor warrants that it shall take any additional response action found to be necessary after the date of this conveyance regarding hazardous substances located on the subject property on the date of this conveyance.

(1) This covenant shall not apply:

(a) in any case in which Grantee, its successors or assigns, or any successor in interest to the subject property or part thereof is a Potentially Responsible Party (PRP) with respect to the subject property immediately prior to the date of this conveyance; or

(b) to the extent but only to the extent that such additional response action or part thereof found to be necessary is the result of an act or failure to act of the Grantee, its successors or assigns, or any party in possession after the date of this conveyance that either:

(i) results in a release or threatened release of a hazardous substance that was not located on the subject property on the date of this conveyance; or

(ii) causes or exacerbates the release or threatened release of a hazardous substance the existence and location of which was known and identified to the applicable regulatory authority as of the date of this conveyance.

(2) In the event Grantee, its successors or assigns, seeks to have Grantor conduct any additional response action, and, as a condition precedent to Grantor incurring any additional cleanup obligation or related expenses, Grantee, its successors or assigns, shall provide Grantor 45 days written notice of such a claim. In order for the 45-day period to commence, such notice must include credible evidence that:

(a) the associated contamination existed prior to the date of this conveyance; and

(b) the need to conduct any additional response action or part thereof was not the result of any act or failure to act by the Grantee, its successors or assigns, or any party in possession.

- (C) Access. Grantor reserves a right of access to all portions of the subject property for environmental investigation, rededication or other corrective action. This reservation includes the right of access to and use of available utilities at reasonable cost to Grantor. These rights shall be exercisable in any case in which a remedial action, response action or corrective action is found to be necessary, or in which access is necessary to carry out a remedial action, response action, or corrective action on adjoining property. Pursuant to this reservation, the United States of America, and its respective officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable advance written notice to the record title holder) to enter upon the subject property and conduct investigations and surveys, to include drilling, test-pitting, bores, data and records compilation and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary, including but not limited to the installation and operation of monitoring wells and pump wells, and treatment facilities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with Grantee, its successors and assigns, and shall be performed in a manner that minimizes interruption with activities of authorized occupants.

11. Grantee acknowledges that this property is eligible for listing on the National Register of Historic Places. Grantee shall be on the lookout for archeological artifacts during any construction activities and shall take appropriate action should any artifacts be discovered. Grantee shall comply with the provisions of 36 C.F.R. Part 800, regarding protection of historic and cultural properties. Grantee's development plans shall avoid sites identified by a Cultural Resources Assessment of the property, and, prior to any alteration or construction on the property, Grantee shall consult with the North Carolina State Historic Preservation Office.

12. The Grantee agrees that the structure situated on the said property will be preserved and maintained in accordance with plans approved in writing by the North Carolina State Historic Preservation Office and development of the property shall be in compliance with the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings and the development plans shall be approved by the North Carolina State Historic Preservation Office.

13. The Grantee agrees to comply with the National Environmental Policy Act of 1969, as amended, the 1977 Amendments to the Federal Water Pollution Control Act (Clean Water Act of 1977), the Federal Disaster Protection Act of 1973 (87 Stat. 975), Executive Order 11288, Executive Order 11990 (May 24, 1977) for Protection of Wetlands and Executive Order 11988 (May 24, 1977) for Floodplain Management, where and to the extent said Amendments and Orders are applicable to the property herein conveyed, and Grantee shall be subject to any use restrictions issued under said Amendments and Orders.

14. The structure on this site was erected prior to 1978, at which time the use of lead-based paint (LBP) was common throughout the United States, including on government buildings. The age of the structure on the subject property suggests that there is a likelihood that LBP is present on this structure. While there have been significant efforts to limit dosages of lead in the workplace, these efforts to date have not identified the historical use of LBP as requiring special measures. Therefore no action has been taken with regard to LBP. The Grantee acknowledges that there is LBP on the structure and will comply with the regulations regarding LBP. Further, the Grantee shall be responsible for abating all LBP hazards prior to occupancy of the property by children six (6) years of age and under, as described in 24 C.F.R. § 35.24.

15. The Grantee shall comply with all applicable Federal, State, and local laws, regulations and standards that are or may become applicable to the Grantee's activities on the property being conveyed.

15. In the event there is a breach of any of the conditions and covenants herein contained by the Grantee, its successors and assigns, whether caused by the legal or other inability of the Grantee, its successors and assigns, to perform said conditions and covenants, or otherwise, all right, title and interest in and to said premises shall revert to and become the property of the Grantor at its option, which in addition to all other remedies for such breach shall have the right of entry upon said premises, and the Grantee, its successors and assigns, shall forfeit all right, title and interest in said premises and in any and all of the tenements, hereditaments and appurtenances thereunto belonging; provided, however, that the failure of the Secretary of the Department of the Interior to require in any one or more instances complete performance of any of the conditions or covenants shall not be construed as a waiver or relinquishment of such future performance, but the obligation of the Grantee, its successors and assigns, with respect to such future performance shall continue in full force and effect. The Grantee, by its acceptance of this deed, covenants and agrees for itself, and its successors and assigns, that in the event the Grantor exercises its option to revert all right, title, and interest in the property to the Grantor, or the Grantee voluntarily returns title to the property in lieu of a reverter, then the Grantee shall provide protection to and maintenance of said property at all times until such time as the title is actually reverted or returned to and accepted by the Grantor, including the period of any notice of intent to revert. Such protection and maintenance shall, at a minimum, conform to the standards prescribed by the General Services Administration in its Federal Property Management Regulations, 41 C.F.R. 101 - 47.402, in effect at the time of the reversion.

IN WITNESS WHEREOF, the Grantor has caused these presents to be executed in its name and on its behalf this the 18<sup>TH</sup> day of JUNE, 2004.

UNITED STATES OF AMERICA  
acting by and through the  
Secretary of the Interior



Through:

Regional Director  
Southeast Region  
National Park Service

By: Wallace C. Brittain  
Wallace C. Brittain  
Chief, Recreation and  
Conservation Division

WITNESSES:  
[Signature]  
[Signature]

STATE OF GEORGIA     )  
  )ss  
COUNTY OF FULTON    )

On this 18<sup>th</sup> day of JUNE, 2004, before me, the subscriber, personally appeared Wallace C. Brittain, National Park Service, of the United States Department of the Interior, a governmental agency of the United States of America, and known to me to be the same person described in and who executed the foregoing instrument, as the act and deed of the United States of America, for and on behalf of the Secretary of the Interior, duly designated, empowered and authorized so to do by said Secretary and he acknowledges that he executed the foregoing instrument for and on behalf of the United States of America for the purposes and uses therein described.

William Lamar Huie  
NOTARY PUBLIC

My commission expires:  
MAY 25, 2006

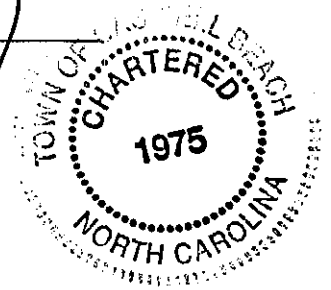


The foregoing conveyance is hereby accepted and the undersigned agrees, by this acceptance, to assume and be bound by all the obligations, conditions, covenants and agreements therein contained.

TOWN OF CASWELL  
STATE OF NORTH CAROLINA

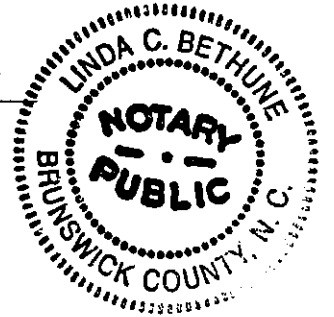
Judith A. Boney  
 STATE OF NORTH CAROLINA )  
 )ss  
 COUNTY OF BRUNSWICK )

By: Harry Q. Simmons, Jr.  
 Mayor



On this 25<sup>th</sup> day of June, 2004, before me, the undersigned Officer, personally appeared Harry Q. Simmons, Jr., to me known and known to me to be the same person whose name is subscribed to the foregoing acceptance, who being by me duly sworn, did depose and say that he is Mayor of the Town of Caswell Beach, North Carolina, that he is duly designated, empowered and authorized by Resolution/Certification of Authority to Acquire Property of the Town Council of the Town of Caswell Beach, North Carolina, which resolution was presented and adopted on June 12, 2003, to execute the foregoing acceptance and sign his name thereto; and that he signed his name thereto and acknowledges that he executed the foregoing instrument for and on behalf of the Town of Caswell Beach, North Carolina, for the purposes and uses therein described.

Linda C. Bethune  
 NOTARY PUBLIC



My Commission expires:

08-04-2007

STATE OF NORTH CAROLINA  
 COUNTY OF BRUNSWICK

The Foregoing (or annexed) Certificate(s) of William Lamar Huie, Linda C. Bethune

Notary(ies) Public is (are) Certified to be Correct.

This Instrument was filed for Registration on this 30 Day of June, 2004 in the Book and page shown on the First Page hereof.

Robert J. Robinson  
 ROBERT J. ROBINSON, Register of Deeds

# Brunswick County Emergency Services



(910)253-5383  
Phone

(910)253-4451  
Fax

October 26, 2018

To: Chad Hicks  
From: Kat Corrigan, EMS Operations Manager  
Subject: Flooding on Caswell Beach Road

Flooding can cause significant response delays for patients in affected areas. Significant flooding can prevent emergency vehicles from gaining access to persons with medical or other emergencies. Life saving measures could have a negative outcome with delayed response or inability to access. Additionally, flooded roads could have unforeseen hazards to include washouts, sinkholes, downed limbs, among other issues. These conditions can delay or prevent emergency response and access. Historic flooding has been seen in this area and causes these delayed responses. Brunswick County Emergency Services is concerned with the ability to address emergencies in Caswell Beach town limits during storm events.

**RECEIVED**  
OCT 30 2008



~~**RECEIVED**~~  
OCT 29 2008  
**Morehead City DCM**

**Morehead City DCM**

ROY COOPER  
ATTORNEY GENERAL

State of North Carolina

Department of Justice  
PO Box 629  
Raleigh, North Carolina  
27602

Reply to:  
Jennie W. Hauser  
Environmental Division  
9001 Mail Service Center  
Raleigh, NC 27699-9001  
Tel: (919)716-6600  
Fax: (919)716-6767  
jhauser@ncdoj.gov

October 29, 2008

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

Mr. Henry E. Beeker, Jr.  
Town of Kure Beach  
117 Settlers Lane  
Kure Beach, North Carolina 28449

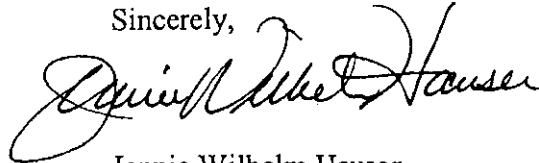
Re: Variance Request to Coastal Resources Commission  
By Henry E. Beeker, Jr./Town of Kure Beach  
CRC-VR-08-45

*K Ave + Atlantic Ave  
Outfalls*

Dear Mr. Beeker:

At its September 24, 2008 meeting, the Coastal Resources Commission voted to grant the above referenced variance request. Attached is a copy of the Final Order, signed by the Chairman of the Coastal Resources Commission. Prior to undertaking the development for which you sought a variance, you must first obtain a CAMA permit from your local permitting authority or the Division of Coastal Management.

Sincerely,



Jennie Wilhelm Hauser  
Special Deputy Attorney General  
Counsel to the Commission

c: Amanda P. Little  
Angela Willis, DCM Morehead City  
Robert R. Emory, Jr., Chairman

STATE OF NORTH CAROLINA  
COUNTY OF NEW HANOVER

BEFORE THE NORTH CAROLINA  
COASTAL RESOURCES COMMISSION  
CRC-VR-08-45

IN THE MATTER OF: )  
PETITION FOR VARIANCE )  
BY TOWN OF KURE BEACH )

FINAL ORDER

---

This matter was heard on oral arguments and stipulated facts at the regularly scheduled meeting of the North Carolina Coastal Resources Commission (hereinafter CRC) on September 24, 2008, in Sunset Beach, North Carolina pursuant to N.C.G.S. § 113A-120.1 and 15A NCAC 7J.0700, et seq. Assistant Attorney General Amanda Little appeared for the Department of Environment and Natural Resources, Division of Coastal Management; Mason Herndon, the North Carolina Division of Transportation (NCDOT) Division 3 Environmental Officer and applicant for the permit as the authorized agent of the Town of Kure Beach, appeared on behalf of Petitioner.

Upon consideration of the record documents and the arguments of the parties, the CRC adopts the following:

STIPULATED FACTS

1. Petitioner, the Town of Kure Beach owns the ocean outfall at K Avenue and Atlantic Ave. ("the project site"), Kure Beach, New Hanover County, NC.
2. The Town of Kure Beach has a number of stormwater outfalls that discharge onto the beach, sometimes directly flowing into the ocean with little infiltration into the sand.
3. The Department of Environment and Natural Resources, Division of Environmental Health-Shellfish Sanitation and Recreational Water Quality Section monitors the State's waters



by regular bacteriological testing. Due to the elevated bacteria levels in nearby swimming areas, Petitioner proposes to install a dune infiltration system at the project site to improve stormwater treatment at the existing outfall on Kure Beach.

4. In 2005, NCDOT, North Carolina State University (NCSU) and the Town of Kure Beach began collaborating to address the water quality issues associated with existing stormwater outfalls on the beach. The existing ocean outfalls carry runoff from US-421 and surrounding roads, parking lots, and rooftops. The Town requested assistance from NCSU Department of Biological and Agricultural Engineering to design a low-cost, effective alternative to treat this runoff. The result was the design of a Dune Infiltration System (DIS). Two of these systems were installed in February 2006 to capture stormwater runoff from the L Ave. outfall and the M Ave. outfall. Since their installation these systems have been monitored following storm events. Water quality testing of collected samples showed the systems to be very efficient in reducing stormwater flow and bacterial transport to the ocean areas.

5. Petitioner, through its authorized agent, applied for a CAMA Minor Development Permit to install a dune infiltration system (DIS) to treat stormwater at the existing K Ave. outfall. The application was dated May 13, 2008, and the project will be funded by NCDOT. The project proposes the installation of 26 stormchambers for stormwater storage and infiltration, a splitter box, and modification or retro-fit of existing drop inlets and outfall pipe. The design will divert inflow from 3 outfalls near K Avenue into a single DIS, and by combining these outfalls into one system, will allow for subsurface infrastructure to be avoided.

6. The project site is located within the Ocean Erodible Area of Environmental Concern (AEC) and the High Hazard Flood AEC, subcategories of the Ocean Hazard AEC designated by

the Coastal Resources Commission (CRC) in Rule 15A NCAC 7H .0304.

7. Effective in 1979, the CRC adopted an erosion setback requirement that applies to structures along the oceanfront. Rule 15A NCAC 7H .0306(a). The general rule is that development must be set back at a distance of 30 times the long-term annual erosion rate from the applicable vegetation line. Rule 15A NCAC 7H .0306(a)(1).

8. The annual long-term erosion rate at this property is 2 feet per year, making the ocean erosion setback for the property 60 feet from the static vegetation line.

9. The existing outfall terminates at the bulkhead along Atlantic Avenue. The Kure Beach static line is also located along this bulkhead; however, a well established dune system, frontal dune and first line of stable natural vegetation extend approximately 85 feet oceanward of the bulkhead, and the improvements needed at the project site must be made at the central collection point of the outfall within the ocean front setback.

10. Petitioner proposes to restore the disturbed area at the project site to natural contours and to replant with native species of vegetation.

11. The N.C. Division of Coastal Management Representative, Stephen Lane, denied the minor permit application by letter dated July 2, 2008, because the proposed development was inconsistent with Rule 15A NCAC 7H .0306(a)(3).

12. Petitioner filed this variance request on July 15, 2008, seeking relief from strict application of the Ocean Hazard AEC erosion setback rules and the exceptions to those rules in 15A NCAC 7H .0306(a) and .0309.

CONCLUSIONS OF LAW

1. The CRC has jurisdiction over the parties and the subject matter.
2. All notices for the proceeding were adequate and proper.
3. The Petitioner has demonstrated that strict application of certain of the CRC's Rules to the permit application will result in unnecessary hardship. Strict application of Rule 15A NCAC 7H .0306(a); .0309; .0601 would cause an unnecessary hardship because Petitioner would be unable to locate the Dune Infiltration System at any other location on the property.
4. The Petitioner has demonstrated that this hardship results from conditions peculiar to Petitioner's property such as the location, size, or topography of the property. The Petitioner's property is located oceanward of the existing roads, and the Dune Infiltration System must be situated where the existing outfall terminates at the bulkhead along Atlantic Avenue; however, the improvements needed at the project site must be made at the central collection point of the outfall within the ocean front setback. As a result, portions of Petitioner's proposed stormwater improvement project must take place, if at all, within the setback mandated by the CRC's rules.
5. The Petitioner has demonstrated that this hardship does not result from actions the Town has taken.
6. The Petitioner has demonstrated (a) that the requested variance is consistent with the spirit, purpose and intent of the Commission's rules, (b) that it will secure public safety and welfare, and (c) that it will preserve substantial justice. The proposed project will be consistent with the spirit, purpose, and intent of the CRC's rules in that Petitioner is seeking to install a system to provide treatment and disposal of stormwater, to remove stormwater discharge from the public beach, and, hopefully, to improve conditions for swimming at Kure Beach. Moreover,

installation of the Dune Infiltration System will afford an additional opportunity for NCDOT's study of such systems. The Town seeks to install the DIS to improve the existing stormwater treatment in order to improve overall water quality in the Town of Kure Beach.

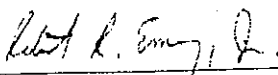
ORDER

THEREFORE, the variance from 15A NCAC 7H .0306(a); .0309; and .0601 is GRANTED.

The granting of this variance does not relieve Petitioner of the responsibility to obtain a CAMA permit from the proper permitting authority.

This variance is based upon the Stipulated Facts set forth above. The Commission reserves the right to reconsider the granting of this variance and to take any appropriate action should it be shown that any of the above Stipulated Facts is not true.

This the 29<sup>th</sup> day of October, 2008.

  
\_\_\_\_\_  
Robert R. Emory, Jr., Chairman  
Coastal Resources Commission

CERTIFICATE OF SERVICE

This is to certify that I have this day served the foregoing FINAL AGENCY DECISION upon the parties by the methods indicated below:

Henry E. Beeker, Jr.  
Town of Kure Beach  
117 Settlers Lane  
Kure Beach, NC 28449

CERTIFIED MAIL/  
RETURN RECEIPT REQUESTED

A.A. Canoutas, Esq.  
4506 W. Cascade Road  
Wilmington, NC 28412-6825

U.S. Mail

Amanda P. Little  
Assistant Attorney General  
N.C. Department of Justice

(Electronic mail and Hand Delivery)

Pamela A. Jones  
Certified Paralegal  
N.C. Department of Justice

(Electronic mail and Hand Delivery)

James H. Gregson  
Angela Willis  
Division of Coastal Management  
400 Commerce Avenue  
Morehead City, NC 28557

(Electronic Mail and U.S. Mail)

This the 29<sup>th</sup> day of October, 2008.



Jennie Wilhelm Hauser  
Special Deputy Attorney General  
N.C. Department of Justice  
P.O. Box 629  
Raleigh, NC 27602  
Counsel to the Commission

# SIGN UP SHEET SCOPING MEETING

038

Caswell Beach Drainage Project Scoping Meeting  
Caswell Beach  
Brunswick County

3/16/2017

Name	Agency	Phone	Email
Cameron Weaver	NCDEQ-DEACS	910-796-7303	<a href="mailto:Cameron.Weaver@ncdenr.gov">Cameron.Weaver@ncdenr.gov</a>
*Shane Staples	DCM-Fisheries	252-948-3950	<a href="mailto:Shane.Staples@ncdenr.gov">Shane.Staples@ncdenr.gov</a>
*Ken Riley	NOAA-NMF	252-728-8750	<a href="mailto:Ken.Riley@noaa.gov">Ken.Riley@noaa.gov</a>
X Kathy Matthews	US FWS	919-856-4520 x 27	<a href="mailto:Kathryn_Matthews@fws.gov">Kathryn_Matthews@fws.gov</a>
*Maria Dunn	NC WRC	252-948-3916	<a href="mailto:Maria.Dunn@ncwildlife.org">Maria.Dunn@ncwildlife.org</a>
Debbie Wilson	DCM	910-796-7266	<a href="mailto:Debra.Wilson@ncdenr.gov">Debra.Wilson@ncdenr.gov</a>
Jeremy Humphrey	DMF-Shellfish	910-796-7287	<a href="mailto:Jeremy.Humphrey@ncdenr.gov">Jeremy.Humphrey@ncdenr.gov</a>
Tyler Crumbley	USACE	910-251-4170	<a href="mailto:Tyler.Crumbley@usace.army.mil">Tyler.Crumbley@usace.army.mil</a>
X Chad Coburn	DWR-401	910-796-7379	<a href="mailto:Chad.Coburn@ncdenr.gov">Chad.Coburn@ncdenr.gov</a>
*Deborah Ahlers	Town of Caswell Beach	910-471-6578	<a href="mailto:DAhlers@caswellbeach.org">DAhlers@caswellbeach.org</a>
Carter Hubard	WK Dickson	910-742-4200	<a href="mailto:tchubard@wkdickson.com">tchubard@wkdickson.com</a>
George Kassler	Town of Caswell Beach	910-278-5471	<a href="mailto:GKassler@caswellbeach.org">GKassler@caswellbeach.org</a>
Dan O'Neill	Town of Caswell Beach	704-614-1633	<a href="mailto:DOneill@caswellbeach.org">DOneill@caswellbeach.org</a>
Brooks Surgan	DCM	910-796-7270	<a href="mailto:Brooks.Surgan@ncdenr.gov">Brooks.Surgan@ncdenr.gov</a>
Jim Gregson	DWR	910-796-7386	<a href="mailto:Jim.Gregson@ncdenr.gov">Jim.Gregson@ncdenr.gov</a>
Chad Hicks	Town of Caswell Beach	910-200-3217	<a href="mailto:Chicks@caswellbeach.org">Chicks@caswellbeach.org</a>
JD Potts	DMF-Shellfish	252-808-8154	<a href="mailto:J.Potts@ncdenr.gov">J.Potts@ncdenr.gov</a>
*Conference line X Not Available			

NCDENR  
WILMINGTON REGIONAL OFFICE  
127 CARDINAL DRIVE  
WILMINGTON, NC 28405  
910-796-7215, FAX 910-350-2004



**From:** [Kimes, D. Chad](#)  
**To:** [Deborah Ahlers](#)  
**Cc:** [Marks, Caitlin M](#); [Pytcher, Alan](#); [Hughes, Benjamin T](#); [Vancleef, Ronald T](#)  
**Subject:** Caswell Beach Infiltration Project- High Impact- Low Cost Project  
**Date:** Friday, May 25, 2018 10:44:10 AM  
**Attachments:** [image002.png](#)

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Mayor Ahlers,

At this time, it is anticipated that we will have \$500,000 funded to assist with the proposed infiltration system to improve drainage along Caswell beach road. This will be approved at our July Board of Transportation meeting.

This project will need to be started within one year of the official funding date, and completed within 2 years. It is our plans to do a reimbursable agreement with the Town, where the Town performs the work and we reimburse once the work is complete.

I recommend we have a meeting in the next few weeks so we can coordinate all of our efforts. I have copied our folks that will be involved with the project.

Thank you!

**Chad Kimes, PE**  
Deputy Division Engineer  
Division 3  
North Carolina Department of Transportation

910 341 2000 office  
910 675 0143 fax  
[ckimes@ncdot.gov](mailto:ckimes@ncdot.gov)

5501 Barbados Blvd.  
Castle Hayne, NC 28429



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

---

**From:** Barbour, Cheryl K  
**Sent:** Friday, May 18, 2018 4:28 PM  
**To:** Marks, Caitlin M <[cmmarks@ncdot.gov](mailto:cmmarks@ncdot.gov)>; Norman, Patrick A <[pnorman@ncdot.gov](mailto:pnorman@ncdot.gov)>  
**Cc:** Pytcher, Alan <[apytcher@ncdot.gov](mailto:apytcher@ncdot.gov)>; Kimes, D. Chad <[ckimes@ncdot.gov](mailto:ckimes@ncdot.gov)>  
**Subject:** RE: HI/LC Fund Request

Caitlin – we'll need an updated request form for WBS 47931 with the update figures. I will show it on the Board agenda as transferring \$490,428.56 from WBS 80084 but the increase on WBS 47931 will be for \$500k to zero out your FY 2019 HI/LC funds.

Thanks –

Cheryl

---

**From:** Marks, Caitlin M  
**Sent:** Friday, May 18, 2018 1:22 PM  
**To:** Norman, Patrick A <[pnorman@ncdot.gov](mailto:pnorman@ncdot.gov)>  
**Cc:** Pytcher, Alan <[apytcher@ncdot.gov](mailto:apytcher@ncdot.gov)>; Barbour, Cheryl K <[cherylbarbour@ncdot.gov](mailto:cherylbarbour@ncdot.gov)>; Kimes, D. Chad <[ckimes@ncdot.gov](mailto:ckimes@ncdot.gov)>  
**Subject:** RE: HI/LC Fund Request

Hello,

Following up on this fund request: We have heard back from Chad and he would like us to take \$500,000.00 from the NC133 project (WBS 80084) and apply it to the Caswell Beach Road Project (WBS 47931). Our understanding is that this will appear on the July BOT meeting. I am attaching an updated estimate for Caswell Beach Rd that includes the planning and design (previously we submitted only the construction budget). Please let us know if there is any additional documentation needed on our end to make this request.

Also, I remember Cheryl telling us there was roughly \$9,000.00 left in our budget that wasn't spent. Can you show me where I see this in SAP? If that's the case, we could technically pull \$500,000.00 less the ~\$9,000.00 amount from NC133 and add that plus the ~\$9,000 to Caswell to total \$500,000.00. I can do the math and resubmit the request if you can remind me of the balance number again.

Thanks for all of your help on this!

Caitlin

---

**From:** Marks, Caitlin M  
**Sent:** Friday, May 11, 2018 7:46 AM  
**To:** Norman, Patrick A <[pnorman@ncdot.gov](mailto:pnorman@ncdot.gov)>  
**Cc:** Pytcher, Alan <[apytcher@ncdot.gov](mailto:apytcher@ncdot.gov)>; Barbour, Cheryl K <[cherylbarbour@ncdot.gov](mailto:cherylbarbour@ncdot.gov)>  
**Subject:** RE: HI/LC Fund Request

Thanks, Patrick. We talked to Cheryl yesterday and are working with our Deputy Division Engineer to see how he wants to proceed and will be in touch with you and Cheryl. Thanks!

041  
North Carolina Department of Environmental Quality  
SCOPING MEETING REQUEST

Please complete all the information below. Call and email the appropriate coordinator with the completed form.

- Asheville Region - Alison Davidson 828-296-4698; [alison.davidson@ncdenr.gov](mailto:alison.davidson@ncdenr.gov)
- Fayetteville and Raleigh Regions - David Lee 919-791-4204; [david.lee@ncdenr.gov](mailto:david.lee@ncdenr.gov)
- Mooresville and Winston-Salem Regions - Marcia Allocco 704-235-2107; [marcia.allocco@ncdenr.gov](mailto:marcia.allocco@ncdenr.gov)
- Washington Region - Lyn Hardison 252-948-3842; [lyn.hardison@ncdenr.gov](mailto:lyn.hardison@ncdenr.gov)
- Wilmington Region - Cameron Weaver 910-796-7303; [cameron.weaver@ncdenr.gov](mailto:cameron.weaver@ncdenr.gov)

Project Name: Caswell Beach Road Drainage Project County: Brunswick

Applicant: Town of Caswell Beach Company: \_\_\_\_\_

Address: 1100 Caswell Beach Road City: Caswell Beach State: NC Zip: 28465

Phone: 910-278-5471 Fax: 866-271-3641 Email: chicks@caswellbeach.org

Physical Location of Project: Locations Along Caswell Beach Road

Engineer/Consultant: Carter Hubard Company: WK Dickson

Address: 909 Market Street City: Wilmington State: NC Zip: 28401

Phone: 910-762-4200 Fax: \_\_\_\_\_ Email: tchubard@wkdickson.com

Please provide a DETAILED project narrative, pdf site plan and a vicinity map with road names along with this Request form. The project narrative should include the following when available:

Existing Conditions- List of existing permits, previous project name(s) or owner name(s), existing compliance or pollution incidents, current conditions or development on site, size of tract, streams or wetlands on site\*, stream name and classification, historical significance of property, seasonal high water table elevation, riparian buffers, areas of environmental concern, setbacks

Proposed- Full scope of project with development phase plan, acreage to be disturbed, wetlands to be disturbed, waste treatment & water supply proposed, soils report availability, % impervious surface, stormwater treatment and number of bmps, public or private funding.

*\*Relative To Wetlands - Federal and coastal wetlands must be delineated by a US Army Corps Regulatory Official, Coastal Management Field Rep or a qualified environmental consultant prior to undertaking work such as filling, excavating or land clearing. The delineations must be approved by the US Army Corps of Engineers (USACE) and/or the Division of Coastal Management. Wetland delineations are valid for a period not to exceed five years from date of USACE approval.*

Please provide estimated investment & expected employment numbers: \$ 1,000,000, 10 Jobs

For the scoping meeting, it is best to provide a list of questions and topics of concern. It is helpful to know what you hope to gain from the meeting. Please have thoughts and presentations organized as much as possible to make the best use of time.

Agencies Involved: Check all agencies that may be involved with project:

- |  |   |  |   |  |
|--|---|--|---|--|
| <input checked="" type="checkbox"/> Marine Fisheries     | <input checked="" type="checkbox"/> National Marine Fisheries   | <input checked="" type="checkbox"/> U.S. Fish & Wildlife | <input checked="" type="checkbox"/> NC Wildlife Resources |  |
| <input checked="" type="checkbox"/> Coastal Management   | <input checked="" type="checkbox"/> Land Resources  | <input checked="" type="checkbox"/> Stormwater           | <input checked="" type="checkbox"/> Erosion Control)      | <input checked="" type="checkbox"/> U.S. Army Corps of Engineers |
| <input checked="" type="checkbox"/> Shellfish Sanitation | <input checked="" type="checkbox"/> Water Resources: ( <input checked="" type="checkbox"/> 401/buffer <input type="checkbox"/> NPDES <input type="checkbox"/> Non-discharge <input type="checkbox"/> Public Water Supply) |  |   |  |
| <input type="checkbox"/> Air Quality                     | <input type="checkbox"/> Solid Waste  | <input type="checkbox"/> UST                             | <input type="checkbox"/> Hazardous Waste _____            |  |
| <input type="checkbox"/> Other _____                     | <input type="checkbox"/> Other _____  |  |   |  |
| <input type="checkbox"/> Other _____                     | <input type="checkbox"/> Other _____  |  |   |  |
| <input type="checkbox"/> Other _____                     |   |  |   |  |

## Project Narrative

The Town of Caswell Beach is currently exploring options to remove stormwater flooding from Caswell Beach Road. Caswell Beach Road (State Road 1100) runs approximately three mile from the Town limits to the North Carolina Baptist Assembly and is geographically located between the Atlantic Ocean and Intracoastal Waterway Marsh System. Caswell Beach Road serves approximately 240 residential properties, United States Coast Guard Station Oak Island, Duke Energy Nuclear Pumping Station, and the North Carolina Baptist Assembly. The North Carolina Baptist Assembly provides religious retreat services for up to 1500 people onsite at any given time. This road provides the only ingress/egress for vehicles serving the above locations.

Due to stormwater flooding Caswell Beach Road becomes impassable to low clearance vehicles after minor storm events and impassable to high clearance emergency vehicles after moderate to major storm events.

The Town of Caswell Beach is exploring stormwater pumping options to relieve this problem. Town contracted engineers, WK Dickson of Wilmington, and stormwater expert, Dr. William Hunt of North Carolina State University, agree that in addition to the best stormwater management practices the Town has already adopted the installation of pumping stations in the critical flooding areas are the only solution to the flooding problem. At this time the Town respectfully requests a determination from the State of North Carolina as to whether or not a permit can be issued for this project.

## Existing Conditions

The Town has installed and maintains drainage and infiltration basin in the right of way of Caswell Beach Road. These apparatuses do not provide the necessary amount of stormwater control to allow the road to remain passable during rain events. The road is situated between the dunes and the marsh in an area approximately 500 feet wide. The high water table in this area makes further stormwater control by infiltration impractical.

## I N D E X

## BOARD OF TRANSPORTATION MEETING

June 28, 2018

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Approval – Resolution to approve the Southport and Fort Fisher Ferry	6345
<u>Information and Delegated Authority Items</u>	
Product Evaluation Program Awareness	6346
Cash Balance Handout	6346
Approval of Projects	6346
Approval-Award of Highway Construction Contracts from the June 2018 Letting	6346
Approval – Award of Contracts to Private Engineering Firms for Engineering Services	6375
Approval – Funds for Secondary Road Improvement Projects – Highway Fund and Highway Trust Fund	6387
Approval – Funds for Division-wide Small Construction, Statewide Contingency, Public Access and Economic Development	6388
Approval – Funds for Specific Spot Safety Improvement Projects	6391
<u>Action Items</u>	
Approval – Additions, Abandonments, and Road Name Changes to State Secondary Road System	6393
Approval – Public Transportation	6396
Approval - Public Transportation	6400
Approval – Rail Program	6402

**NCDOT JULY 2018 BOARD OF TRANSPORTATION AGENDA**  
**Funds Request**  
**Division-wide Small Construction, Statewide Contingency,**  
**Public Access, Economic Development, High Impact/Low Cost**

According to Executive Order No. 2 and G.S. 143B-350(g), the Board is requested to concur with staff recommendation and delegate authority to the Secretary to approve funds for specific Division-wide Small Construction / Statewide Contingency projects.

County	Description	Type	Amount
Div 1 Chowan	Realign intersection at NC-37/32 and SR 1108 (Indian Trail Rd) to allow safe turning movements WBS 80059	High Impact / Low Cost  TOTAL	\$450,000.00  \$450,000.00
Div 1 Hertford	Town of Ahoskie – WBS 80061 was established (02/18) to construct 3 lane section on NC 42 from New Bridge over Ahoskie Creek to South of US 13 for approximately 1600 feet Reduce funds	High Impact / Low Cost  TOTAL	(\$755,000.00)  (\$755,000.00)
Div 1 Martin	WBS 80085 was established (02/18) to construct a superstreet on US-17 from Hampton Ct to SR 1119 (Ralph Taylor Road)  Increase funds	High Impact / Low Cost  TOTAL	\$61,619.78  \$61,619.78
Div 1 Tyrrell	Town of Columbia – Construct approximately 1,250 ft of concrete sidewalk along US-64 Bus in front of middle school & high school  WBS 80092	High Impact / Low Cost  TOTAL	\$50,000.00  \$50,000.00
Div 3 Brunswick	Town of Caswell Beach – Caswell Beach Rd infiltration Stormwater Management Project; Install infiltration basins along Caswell Beach Rd at 4 locations WBS 47931	High Impact / Low Cost  TOTAL	\$500,000.00  \$500,000.00
Div 3 Brunswick	WBS 80084 was established (02/18) for roadway repair at the intersection of SR 1521 (Funston Road SE) approximately 1 mile in each direction to correct flooding issues  Reduce funds & transfer to WBS 47931	High Impact / Low Cost  TOTAL	(\$490,428.56)  (\$490,428.56)



**NCDOT JULY 2018 BOARD OF TRANSPORTATION AGENDA  
Funds Request  
Division-wide Small Construction, Statewide Contingency,  
Public Access, Economic Development, High Impact/Low Cost**

<b>County</b>	<b>Description</b>	<b>Type</b>	<b>Amount</b>
Div 3 Duplin	Patch and resurface the existing drive and replace existing driveway pipe at Lyman VFD located on SR 1801 (Lyman Rd) 0.2 miles from NC-111 towards SR 1815 WBS 48169	Contingency <hr/> TOTAL	\$65,000.00 <hr/> \$65,000.00
Div 7 Alamance	Town of Haw River – WBS 3607.3.08 was established (08/11) for widening, curb & gutter, and construction of sidewalk along NC-49 (Main St) between Lang and Stone St (Improvements to Main St sidewalk between Stone St and John Robert Watkins bridge) Increase funds	Contingency <hr/> TOTAL	\$20,000.00 <hr/> \$20,000.00
Div 7 Caswell	Town of Milton – Install pedestrian crossing, flashers, new sidewalk, and repair & replace existing sidewalk along and across NC-57 (Broad St) and SR 1614 (Fairview Dr) WBS 48166	Contingency <hr/> TOTAL	\$100,000.00 <hr/> \$100,000.00
Div 7 Guilford	City of Greensboro – Data collection regarding the use of the Greensboro Intermodal yard to assess the operational efficiencies and road access to the yard, estimation of container and trailer volumes over a defined forecast period, and identification of alternatives to handle expected volumes WBS 48185	Economic Development <hr/> TOTAL	\$250,000.00 <hr/> \$250,000.00
Div 9 Rowan	City of China Grove – Installation of 18" and 24" HDPE pipe culverts, curb and gutter, sidewalks, and asphalt patching on SR 2739 (Main St) WBS 48233	Contingency <hr/> TOTAL	\$98,000.00 <hr/> \$98,000.00
Div 10 Cabarrus	Town of Harrisburg – WBS 44833 was established (06/16) for the realignment of Saddle Creek at NC-49 Increase funds	Econ Development <hr/> TOTAL	\$119,602.33 <hr/> \$119,602.33

**NCDOT JULY 2018 BOARD OF TRANSPORTATION AGENDA  
Funds Request  
Division-wide Small Construction, Statewide Contingency,  
Public Access, Economic Development, High Impact/Low Cost**

**Deletions:**

Div 1, Dare County – WBS 80066 was established (02/18) for drainage rehabilitation in the Buxton area of Fessenden Center; completed with alternate fund source

**Summary:**

<b>Number of Divisions</b>	<b>5</b>
<b>Number of Projects</b>	<b>12</b>
<b>Small Construction Commitment</b>	<b>\$0.00</b>
<b>Public Access Commitment</b>	<b>\$0.00</b>
<b>Contingency Commitment</b>	<b>\$283,000.00</b>
<b>Economic Development Commitment</b>	<b>\$369,602.33</b>
<b>High Impact/Low Cost Commitment</b>	<b><u>(\$183,808.78)</u></b>
<b>TOTAL</b>	<b>\$468,793.55</b>

## I N D E X

## BOARD OF TRANSPORTATION MEETING

June 28, 2018

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Approval – Public Transportation	6396
Approval - Public Transportation	6400
Approval – Rail Program	6402

Approval – Strategic Transportation Investment Funds	6408
Approval – Funds for Specific Federal-Aid Projects	6420
Approval – Revisions to the 2018-2027 STIP	6449
Approval – Municipal and Special Agreements	6475
Approval – Municipal Street System Changes	6492
Approval – Preliminary Right of Way Plans	6497
Approval – Final Right of Way Plans	6499
Approval – Revisions of the Final Right of Way Plans	6501
Approval – Conveyance of Highway Right of Way Residues	6504
Approval – Conveyance of Permanent Easement	6505
Approval – Conveyance of Surplus Highway Right of Way	6506
Approval – Revision in Control of Access	6507
Approval –Allocation of Highway Maintenance Appropriations	6508
Committee Reports	6514
Adjournment	6514

**BOARD OF TRANSPORTATION MEETING****June 28, 2018****Call to Order**

Chairman Fox called the meeting of the Board of Transportation to order at 9:01 a.m. on Thursday, June 28, 2018, in Wilmington, North Carolina with the following members present: Fox, Szlosberg-Landis, Moran, Taft, Alford, Hunt, Molamphy, Pope, Clarke, Debnam, Overholt, Lathrop and Zimmer.

Board Members Jordan and Wells called in to the meeting.

Board Members Tulloss, Wells, Perkins, and Tarleton were absent.

**Swearing in of two new members of the Board of Transportation and three members transitioning positions on the Board.**

- **Thomas Taft, Jr. – Division 2**
- **Michael Alford – Division 3**
- **Hugh Overholt - From Division 2 to At-Large, Rural**
- **Landon Zimmer – From Division 3 to At-Large, State Ports and Aviation**
- **Grady Hunt – From At-Large, Rural to Division 6**

**Ethics Statement**

Chairman Fox read the Ethics Statement advising any Board Member that may have any conflict of interest or appearance of conflict to abstain from participation in that particular item and to file the proper paper work with the Secretary to the Board.

**Approval – Minutes of the May 31, 2018 Board Meeting**

The minutes of the May 31, 2018, Board of Transportation meeting were unanimously approved upon a motion by Board Member Clarke, seconded by Board Member Overholt.

**Road and Bridge Naming Honorary Designations**

Chairman Fox welcomed all guests and proceeded with the following Road and Bridge Naming Honorary Designations.

**NCDOT JULY 2018 BOARD OF TRANSPORTATION AGENDA  
Funds Request  
Division-wide Small Construction, Statewide Contingency,  
Public Access, Economic Development, High Impact/Low Cost**

According to Executive Order No. 2 and G.S. 143B-350(g), the Board is requested to concur with staff recommendation and delegate authority to the Secretary to approve funds for specific Division-wide Small Construction / Statewide Contingency projects.

County	Description	Type	Amount
Div 1 Chowan	Realign intersection at NC-37/32 and SR 1108 (Indian Trail Rd) to allow safe turning movements WBS 80059	High Impact / Low Cost  TOTAL	\$450,000.00  \$450,000.00
Div 1 Hertford	Town of Ahoskie – WBS 80061 was established (02/18) to construct 3 lane section on NC 42 from New Bridge over Ahoskie Creek to South of US 13 for approximately 1600 feet Reduce funds	High Impact / Low Cost  TOTAL	(\$755,000.00)  (\$755,000.00)
Div 1 Martin	WBS 80085 was established (02/18) to construct a superstreet on US-17 from Hampton Ct to SR 1119 (Ralph Taylor Road)  Increase funds	High Impact / Low Cost  TOTAL	\$61,619.78  \$61,619.78
Div 1 Tyrrell	Town of Columbia – Construct approximately 1,250 ft of concrete sidewalk along US-64 Bus in front of middle school & high school  WBS 80092	High Impact / Low Cost  TOTAL	\$50,000.00  \$50,000.00
Div 3 Brunswick	Town of Caswell Beach – Caswell Beach Rd infiltration Stormwater Management Project; Install infiltration basins along Caswell Beach Rd at 4 locations WBS 47931	High Impact / Low Cost  TOTAL	\$500,000.00  \$500,000.00
Div 3 Brunswick	WBS 80084 was established (02/18) for roadway repair at the intersection of SR 1521 (Funston Road SE) approximately 1 mile in each direction to correct flooding issues  Reduce funds & transfer to WBS 47931	High Impact / Low Cost  TOTAL	(\$490,428.56)  (\$490,428.56)



## I N D E X

## BOARD OF TRANSPORTATION MEETING

August 2, 2018

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<u>Information and Delegated Authority Items</u>	
Product Evaluation Program Awareness	6537
Cash Balance Handout	6537
<u>Action Items</u>	
Approval - Policy for the Use of Specific Funds for Internal Improvements at Schools	6537
Approval of Projects	6538
Approval-Award of Highway Construction Contracts from the July 2018 Letting	6539
Approval – Award of Contracts to Private Engineering Firms for Engineering Services	6546
Approval – Funds for Division-wide Small Construction, Statewide Contingency Projects	6598
Approval – Funds for Specific Spot Safety and Spot Mobility Improvement Projects	6601
Approval – Additions, Abandonments, and Road Name Changes to State Secondary Road System	6602
Approval – Public Transportation	6605
Approval - Public Transportation	6607
Approval – Rail Program	6612
Approval – Strategic Transportation Investment Funds	6614
Approval – Funds for Specific Federal-Aid Projects	6627

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Approval – Revisions to the 2018-2027 STIP	6657
Approval – Municipal and Special Agreements	6683
Approval – Preliminary Right of Way Plans	6703
Approval – Final Right of Way Plans	6705
Approval – Revisions of the Final Right of Way Plans	6706
Approval – Conveyance ROW Residue (HB 501)	6707
Approval – Conveyance of Highway Right of Way Residues	6712
Approval – Conveyance of Surplus Highway Right of Way	6713
Approval – Revisions in Control of Access	6714
Approval – Advance Acquisition of Highway Right of Way	6715
Approval – Allocation of Highway Maintenance Appropriations	6717
Approval – Submission of Comprehensive Transportation Plans for Mutual Adoption by the Board of Transportation	6718
Committee Reports	6720
Adjournment	6720

**BOARD OF TRANSPORTATION MEETING****August 2, 2018****Call to Order**

Chairman Fox called the meeting of the Board of Transportation to order at 9:00 a.m. on Thursday, August 2, 2018, in Raleigh, North Carolina with the following members present: Moran, Overholt, Taft, Alford, Tulloss, Szlosberg-Landis, Hunt, Fox, Molamphy, Wells, Bowles, Lathrop, Tarleton, Clarke and Debnam.

No member of the Board called in to the meeting.

Board members Zimmer, Jordan, Perkins, and Pope were absent.

The Honorable Mark A. Davis conducted the swearing in ceremony of Samuel Bowles, a new member of the Board of Transportation, representing Division 10.

**Ethics Statement**

Chairman Fox read the Ethics Statement advising all members of the Board that may have any conflict of interest or appearance of conflict to abstain from participation in that particular item and to file the proper paper work with the Secretary to the Board of Transportation.

**Approval – June 28, 2018 Board Meeting Minutes**

The minutes of the June 28, 2018, Board of Transportation meeting were unanimously approved upon a motion by Board Member Tarleton, seconded by Board Member Overholt.

**Secretary's Remarks**

Secretary Trogdon welcomed Mr. Samuel Bowles as the newest member of the Board. He introduced Darryl Bass, the new Director for Human Resources. Secretary Trogdon presented Tracy Dodson, former board member representing division 10, with a Road Gang Award in acknowledgement of her service to the Board since 2015. Secretary Trogdon presented Jay Swain, division engineer for division 13 the Road Gang Award in

## CASWELL BEACH ROAD DUNE INFILTRATION SYSTEM PROJECT BUDGET

DATE: 10/26/2018

Site 5: 299 Caswe

ITEM	ITEM	SCHEDULED	UNIT	UNIT	TOTAL
NO.	DESCRIPTION	QUANTITIES		PRICE	AMOUNT
1	Mobilization (5% of Total Cost)	1	LS	\$8,112.11	\$8,112.11
2	Clearing and Grubbing (Including shrub removal)	0.3	AC	\$7,000.00	\$2,024.79
3	Pump Input Port	4	EA	\$2,000.00	\$8,000.00
4	Furnish and Install Dune Infiltration System	105	EA	\$900.00	\$94,500.00
5	Dune Replanting	0.3	AC	\$17,000.00	\$4,917.36
6	Influent Line	220	LF	\$40.00	\$8,800.00
7	Remove and Replace Boardwalk	1	LS	\$15,000.00	\$15,000.00
8	Traffic Control	1	LS	\$5,000.00	\$5,000.00
9	Erosion Control	1	LS	\$4,000.00	\$4,000.00
10	Force Main Cleaning and Testing	1	LS	\$5,000.00	\$5,000.00
11	Force Main Isolation Valve Cut In	2	EA	\$7,500.00	\$15,000.00
12	Parking Area Cleanup	1	LS	\$5,000.00	\$5,000.00

<b>Construction Subtotal</b>	<b>\$175,354.26</b>
<b>Contingency</b>	<b>\$34,229.15</b>
<b>Professional Services</b>	<b>\$140,130.00</b>
<b>Force Main</b>	<b>\$150,000.00</b>

<b>Total Project Cost</b>	<b>\$499,713.41</b>
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October 30, 2018

Mr. Carter Hubard, P.E.  
WK Dickson & Co., Inc.  
300 N. Third Street, Suite 301  
Wilmington, North Carolina 28401

ECS Project No. 47-6645

Re: Dune Infiltration System Groundwater Mounding Evaluation  
Caswell Beach Dune Infiltration Site  
Caswell Beach, Brunswick County, North Carolina

Dear Mr. Hubard:

ECS Mid-Atlantic, LLC and ECS Southeast, LLP (ECS) are pleased to submit this report summarizing preliminary findings from a Dune Infiltration System Groundwater Mounding Evaluation conducted at the Caswell Beach Dune Infiltration site (i.e., site or subject site), located at 299 Caswell Beach Road, Caswell Beach, North Carolina (Figure 1). ECS was requested to observe the seasonal high water table (SHWT) and to perform infiltration testing within and in proximity to the proposed dune infiltration system (DIS) area at the subject site. This information was then used in conjunction with DIS plans provided by the Client to assess groundwater mounding height beneath and in proximity to the proposed DIS during storm events, during which time water would be pumped into the DIS. ECS understands that further work regarding groundwater mounding separation from the base of the proposed DIS and groundwater mounding elevations in comparison to surface elevations may be requested in the future. The purpose of our preliminary Groundwater Mounding Evaluation was to provide an initial estimation of groundwater mounding height that could result from stormwater pumping to the proposed DIS.

### **Proposed Dune Infiltration System Layout**

The Client has provided ECS with site plans and aerial photography depicting the proposed footprint and layout of the DIS. The DIS would have an area of approximately 11,000 square feet and would have dimensions of approximately 247.6 feet in length by 44.4 feet in width. The system would be comprised of three rows of infiltration chambers. Each row would contain approximately 35 chambers and the system would consist of approximately 105 chambers in total. Each domed infiltration chamber would be seven feet in length, five feet in width at the base, and three feet in height. The chambers would be installed within a 2-foot thick layer of gravel. The footprint of the proposed DIS is shown in Figure 2.

### **Field Methodology & Findings**

ECS mobilized to the site to conduct field work on July 10–11, 2018. ECS conducted an evaluation of the subsurface soil and groundwater conditions at six test boring locations,

which are referred to as borings I-1 through I-6 and are shown in Figure 2. The purpose of test boring installation and testing was to obtain information pertaining to soil composition, depth to groundwater, depth to the SHWT, and infiltration rate.

ECS conducted subsurface evaluation by advancing a hand auger boring to depths of 9.58–10.83 feet below ground surface (bgs) at each of the test boring locations. ECS visually classified the soils and obtained representative samples of each soil type encountered. Depth to groundwater and depth to the SHWT was also measured in each boring. Following installation, surface elevations at each boring location were measured by the Client and were provided to ECS. A summary of test boring information is provided as Table 1 and completed Infiltration Testing Forms that include soil composition data and other pertinent information are included as Appendix A.

**Table 1: Test boring information and descriptions.**

Test Boring	Boring Surface Elevation <sup>a</sup> (ft amsl <sup>b</sup> )	Boring Depth (ft bgs <sup>c</sup> )	Soil Description
I-1	13.397	10.83	Tan/grey medium- to coarse-grained sand
I-2	12.096	9.58	Tan/grey medium- to coarse-grained sand
I-3	12.139	10.17	Tan/grey medium- to coarse-grained sand
I-4	12.600	10.42	Tan/grey medium- to coarse-grained sand
I-5	13.949	10.83	Tan/grey medium- to coarse-grained sand
I-6	16.661	10.83	Tan/grey medium- to coarse-grained sand

<sup>a</sup>As surveyed by WK Dickson & Co., Inc.

<sup>b</sup>ft amsl = feet above mean sea level

<sup>c</sup>ft bgs = feet below ground surface

ECS measured depth to groundwater using an electronic water level meter and depth to the SHWT in each boring. Depth to groundwater ranged from 9.33–10.83 feet bgs and depth to the SHWT ranged from 8.33–9.83 feet bgs (Table 2). Groundwater and SHWT elevations were then calculated based on depth to groundwater/SHWT data and surveying data provided by the Client. Groundwater elevations in borings I-1 through I-6 ranged from 1.97–6.16 feet above mean sea level (amsl) and SHWT elevations ranged from 2.64–7.33 feet amsl (Table 2). A map showing groundwater equipotential contours and flow direction, based on groundwater levels measured on July 10–11, 2018, is included as Figure 3. Likewise, a map showing SHWT equipotential contours and flow direction is included as Figure 4. It can be observed in Figures 3 and 4 that the overall direction of groundwater flow, as measured during field activities, and SHWT flow are similar. In general, groundwater flows from the eastern and western margins of the focus area toward the center of the focus area. A north-to-south component of flow appears to exist at the western portion of the focus area and the gradient at the eastern portion of the focus area appears to be steeper than the gradient at the western portion of the focus area.



**Table 2: Test boring data and infiltration testing summary.**

Test Boring	Depth to Groundwater <sup>a</sup> (ft bgs <sup>b</sup> )	Groundwater Elevation (ft amsl <sup>c</sup> )	Depth to SHWT <sup>d</sup> (ft bgs)	SHWT Elevation (ft amsl)	Measured Infiltration Rate <sup>e</sup> (ft/day)	Estimated Horizontal Hydraulic Conductivity <sup>f</sup> (ft/day)
I-1	10.50	2.90	8.33	5.06	54.46	108.9
I-2	9.33	2.76	8.33	3.76	56.02	112.0
I-3	10.17	1.97	9.50	2.64	59.86	119.7
I-4	10.42	2.18	9.58	3.02	52.86	105.7
I-5	10.83	3.12	9.83	4.12	58.38	116.8
I-6	10.50	6.16	9.33	7.33	57.96	115.9

<sup>a</sup>As measured by ECS on July 10–11, 2018

<sup>b</sup>ft bgs = feet below ground surface

<sup>c</sup>ft amsl = feet above mean sea level

<sup>d</sup>SHWT = seasonal high water table

<sup>e</sup>Refers to vertical infiltration rate, as measured by ECS

<sup>f</sup>Refers to horizontal groundwater flow, which was estimated using vertical infiltration rate data and an estimated vertical/horizontal anisotropic ratio of 0.5.

ECS conducted infiltration testing using a compact constant head permeameter at borings located slightly offset from their respective hand auger test boring location. The purpose of infiltration testing was to estimate subsurface vertical infiltration rates. Infiltration tests are typically conducted at depths two feet above the SHWT or in the most restrictive soil horizon. Tests in clayey conditions are conducted for durations of up to 30 minutes. Infiltration testing yielded rates ranging from 52.86–59.86 feet/day, as shown in Table 2. Vertical infiltration rate data were then used to estimate horizontal hydraulic conductivity values, which were used in groundwater mounding calculations. Using a vertical to horizontal anisotropic ratio of 0.5, based on the permeable and unconsolidated nature of the soil, ECS estimates that hydraulic conductivity at the boring locations ranges from approximately 105.7–119.7 feet day, as shown in Table 2. These values indicate that hydraulic conductivity is fairly uniform at the tested boring locations.

### Groundwater Mounding Evaluation

ECS used field data collected as part of this study to conduct a groundwater mounding evaluation of the proposed DIS. The purpose of the evaluation was to estimate groundwater mounding height beneath and in proximity to the proposed DIS during storm events, during which time water would be pumped into the DIS. Per conversations with the Client, ECS conducted the mounding analysis under the assumption that the system would receive water at a rate of 1,000 gallons per minute (gpm) for a duration of 200 minutes, which is expected to be the system's peak flow rate.

The mounding analysis was conducted using a U.S. Geological Survey (USGS) spreadsheet solving the Hantush (1967) equation for groundwater mounding beneath an infiltration basin. The USGS mounding spreadsheet is capable of calculating maximum groundwater mounding heights across an impacted area at the end of a recharge event and is not designed to calculate the rate of groundwater mounding subsidence.

Necessary parameters to solve the Hantush equation are listed below and were quantified as follows:

- Recharge Rate and Duration: ECS used a recharge rate of 17.5 feet/day applied to an 11,000-square foot area, which is the estimated area of the proposed DIS. This recharge rate multiplied by the DIS area equates to a total system inflow of 1,000 gpm. The recharge duration was assumed to be 200 minutes, per conversations with the Client.
- Infiltration Basin Dimensions: The infiltration basin was assumed to have dimensions of 247.6 feet length by 44.4 feet width, per site plans provided by the Client.
- Horizontal Hydraulic Conductivity: The site's horizontal hydraulic conductivity was assumed to be 105.7 feet/day, which is the lowest derived value at the site. The lowest value was used to provide a conservative estimate of groundwater mounding height.
- Specific Yield: The aquifer's specific yield was estimated as 0.31, which was based on typical values for similar soil types published within USGS reporting by Johnson (1963).
- Initial Saturated Aquifer Thickness: The aquifer's initial saturated thickness, which represents the thickness of the aquifer's saturated zone prior to receiving recharge water, was estimated to be 27.2 feet. This value was used based on offsite geotechnical boring log data obtained by ECS as part of a different project, where the borings were installed approximately 0.75-mile west of the subject site. Boring log data from this offsite property indicates that a more restrictive silty sand/sandy silt layer is present at a depth of approximately 38 feet bgs. As such, the depth to the aquifer's base at the subject site was assumed to be 38 feet. Subtracting the greatest depth to groundwater measured at the site (10.83 feet) from the depth to the aquifer's base yielded a saturated thickness value of 27.2 feet.

The USGS spreadsheet was programmed to calculating groundwater mounding heights at distance intervals of 10–30 feet from the center of the basin. Calculated mound heights were entered into a GIS database and were used to interpolate mound heights across much of the site. Table 3 summarizes estimated groundwater mound heights from the center of the DIS and Figure 5 depicts groundwater mound height equipotential contours.

**Table 3: Summary of estimated groundwater mounding heights.**

Distance from Center of DIS <sup>a</sup> (feet)	Estimated Groundwater Mound Height (feet)	
	Perpendicular from Basin's Long Axis	Perpendicular from Basin's Short Axis
10	3.844	4.028
20	3.276	4.022
40	1.814	3.989
60	0.893	3.903
80	0.392	3.703
100	0.155	3.265
120	0.055	2.323
140	0.019	1.085
160	0.007	0.472
180	0.004	0.192
200	0.003	0.073
220	0.003	0.026
240	0.003	0.010

<sup>a</sup>DIS = dune infiltration system

## Conclusions

ECS is pleased to submit this report summarizing preliminary findings from a Dune Infiltration System Groundwater Mounding Evaluation conducted at the Caswell Beach Dune Infiltration site, located at 299 Caswell Beach Road, Caswell Beach, North Carolina. ECS was requested to observe the SHWT and to perform infiltration testing within and in proximity to the proposed DIS area at the subject site. This information was then used in conjunction with DIS plans provided by the Client to assess groundwater mounding height beneath and in proximity to the proposed DIS during storm events, during which time water would be pumped into the DIS. ECS understands that further work regarding groundwater mounding separation from the base of the proposed DIS and groundwater mounding elevations in comparison to surface elevations may be requested in the future. The purpose of our preliminary Groundwater Mounding Evaluation was to provide an initial estimation of groundwater mounding height that could result from stormwater pumping to the proposed DIS.

ECS conducted field work at the site on July 10–11, 2018. Six test borings were installed at the site using a hand auger. Soils were visually classified and depth to groundwater and depth to the SHWT was measured in each boring. Soils encountered in the borings generally consisted of tan/grey medium- to coarse-grained sand. ECS measured depth to groundwater using an electronic water level meter and depth to the SHWT in each boring. Depth to groundwater ranged from 9.33–10.83 feet bgs and depth to the SHWT ranged from 8.33–9.83 feet bgs. Groundwater and SHWT elevations were plotted on aerial imagery and were used to construct groundwater and SHWT equipotential maps. These maps show that the overall direction of groundwater flow, as measured during field activities, and SHWT flow are similar. In general, groundwater flows from the eastern and western margins of the focus area toward the center of the focus area. A north-to-south component of flow appears to exist at the

western portion of the focus area and the gradient at the eastern portion of the focus area appears to be steeper than the gradient at the western portion of the focus area.

ECS also conducted infiltration testing using a compact constant head permeameter at borings located slightly offset from their respective hand auger test boring location. The purpose of infiltration testing was to estimate subsurface vertical infiltration rates. Infiltration testing yielded rates ranging from 52.86–59.86 feet/day. Vertical infiltration rate data were then used to estimate horizontal hydraulic conductivity values, which were used in groundwater mounding calculations. Using a vertical to horizontal anisotropic ratio of 0.5, based on the permeable and unconsolidated nature of the soil, ECS estimates that hydraulic conductivity at the boring locations ranges from approximately 105.7–119.7 feet day.

Field data were used to conduct a groundwater mounding evaluation of the proposed DIS. The purpose of the evaluation was to estimate groundwater mounding height beneath and in proximity to the proposed DIS during storm events, during which time water would be pumped into the DIS. Per conversations with the Client, ECS conducted the mounding analysis under the assumption that the system would receive water at a rate of 1,000 gallons per minute (gpm) for a duration of 200 minutes, which is expected to be the system's peak flow rate. The mounding analysis was conducted using a USGS spreadsheet solving the Hantush (1967) equation for groundwater mounding beneath an infiltration basin. Parameter values for recharge rate and duration, infiltration basin dimensions, horizontal hydraulic conductivity, specific yield, and initial saturated aquifer thickness were input to the spreadsheet. Resulting groundwater mound heights ranged from approximately 4.03 feet at the center of the DIS to less than 0.01 feet at a distance of 200 feet from the center of the DIS. Overall, groundwater mound height is predicted to decline rapidly beyond the outer margins of the DIS.

ECS understands that further work regarding groundwater mounding separation from the base of the proposed DIS and groundwater mounding elevations in comparison to surface elevations may be requested in the future. It is recommended that six supplemental borings be installed at the site, at locations previously provided to the Client, to expand the focus area of the evaluation. Currently, the portion of the site where groundwater and SHWT elevations can be projected is limited to the focus area polygon comprising the area between existing borings I-1 through I-6. The recommended supplemental borings would expand the focus area and would allow for the interpolation of groundwater and SHWT elevations at further reaches of the site. This data could then be used in conjunction with groundwater mound heights to assess groundwater mound separation distances from DIS components and the ground surface.

### **Limitations**

The work performed in conjunction with this project, and the data developed, are intended as a description of available information at the tested locations indicated and the dates specified. Generally accepted industry standards were used in the preparation of this report. Results from future testing may vary significantly as a result of natural conditions, a changing environment, or the limits of analytical capabilities. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a specific location not evaluated. Actual conditions may vary.

ECS appreciates the opportunity to assist WK Dickson & Co., Inc. with this Dune Infiltration System Groundwater Mounding Evaluation. Please feel free to contact ECS at (540) 785-6624 if you have any comments or questions regarding this report.

Sincerely,  
ECS Mid-Atlantic, LLC



Michael L. Maloy, CPG  
Principal Geologist



Thomas P. Nelson, CPG  
Senior Hydrogeologist

## Figures





**Figure 1: Site Location Map**

Caswell Beach Dune Infiltration Site  
299 Caswell Beach Road, Caswell Beach, NC

**Legend**

 Site Boundary








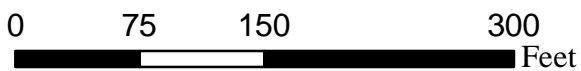


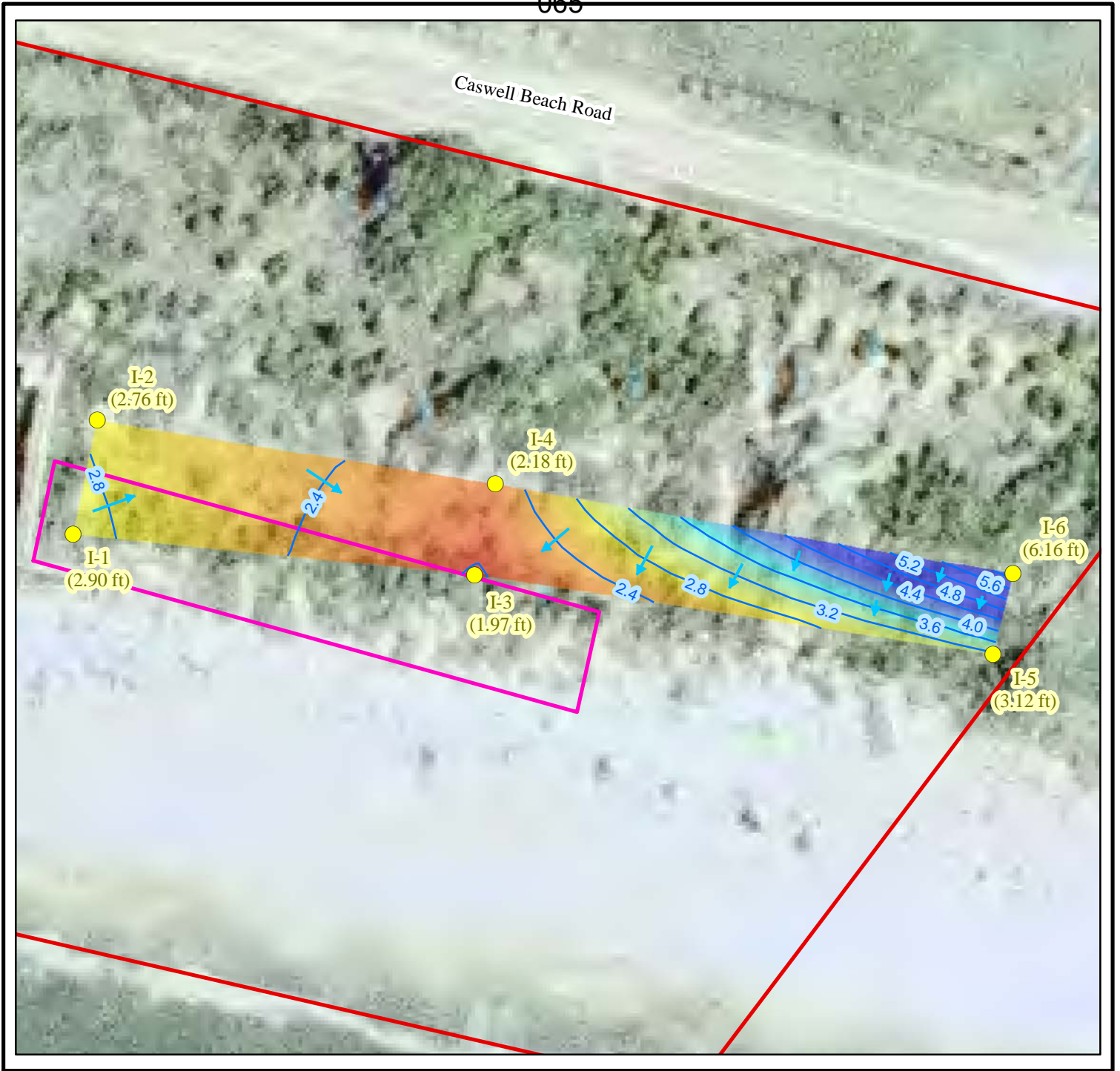
**Figure 2: Site Layout Map & Testing Locations**

Caswell Beach Dune Infiltration Site  
299 Caswell Beach Road, Caswell Beach, NC

**Legend**

-  Site Boundary
-  Dune Infiltration System Footprint
-  Test Boring





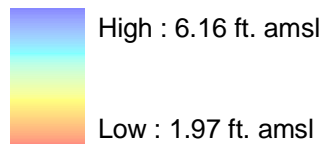
### Figure 3: Groundwater Equipotential Map

Caswell Beach Dune Infiltration Site  
299 Caswell Beach Road, Caswell Beach, NC

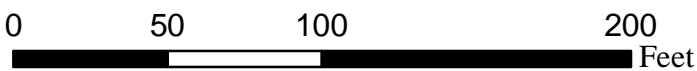
#### Legend

- Site Boundary
- Test Boring
- Dune Infiltration System Footprint
- Groundwater Equipotential Contour (C.I. = 0.4 ft)
- ➔ Groundwater Flow Direction

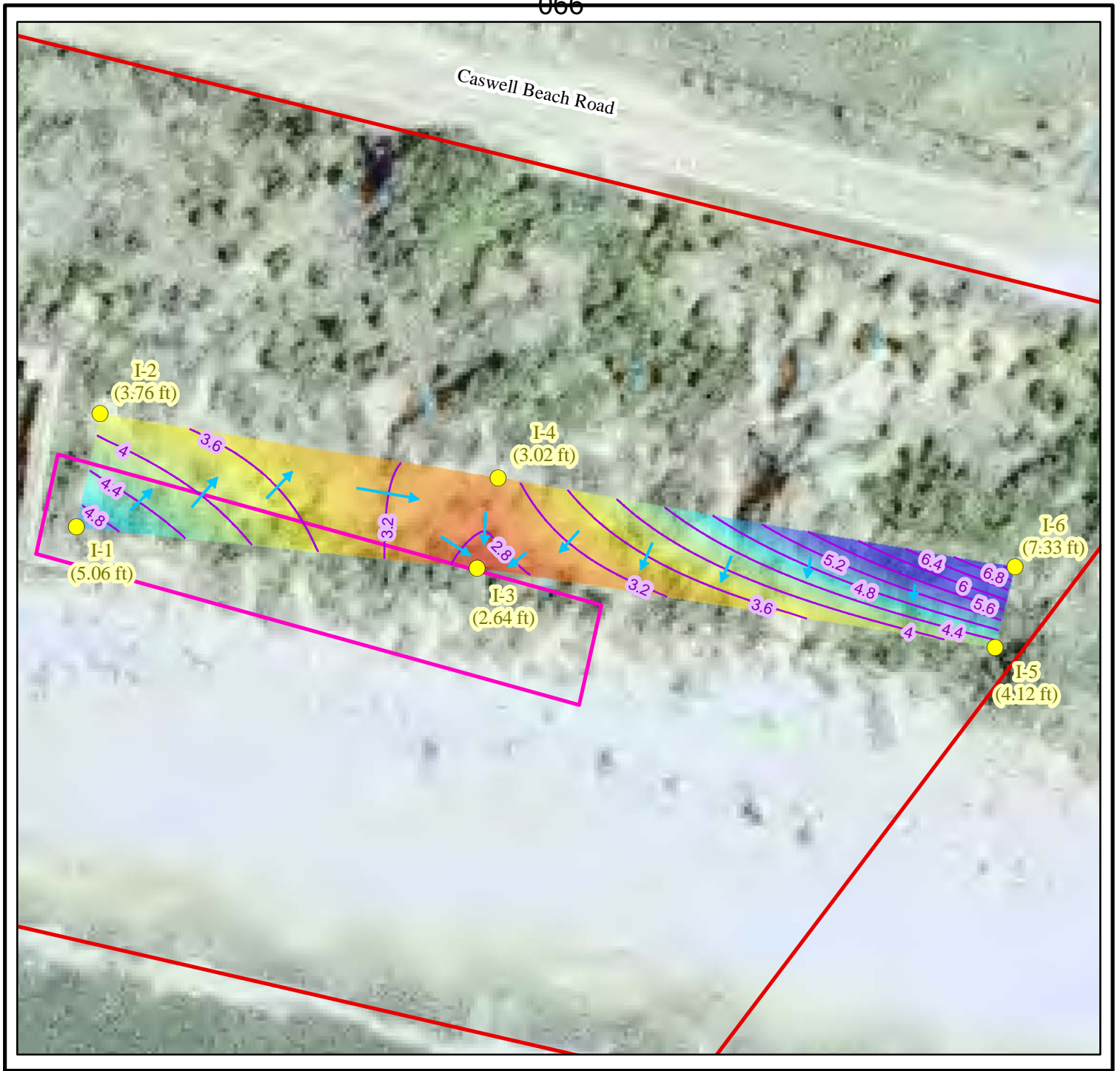
#### Groundwater Elevation



*Map Notes:*  
Groundwater elevations are in units of feet above mean sea level







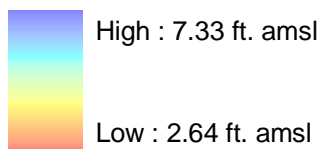
**Figure 4: Seasonal High Water Table Equipotential Map**

Caswell Beach Dune Infiltration Site  
299 Caswell Beach Road, Caswell Beach, NC

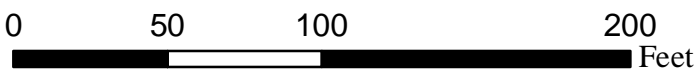
**Legend**

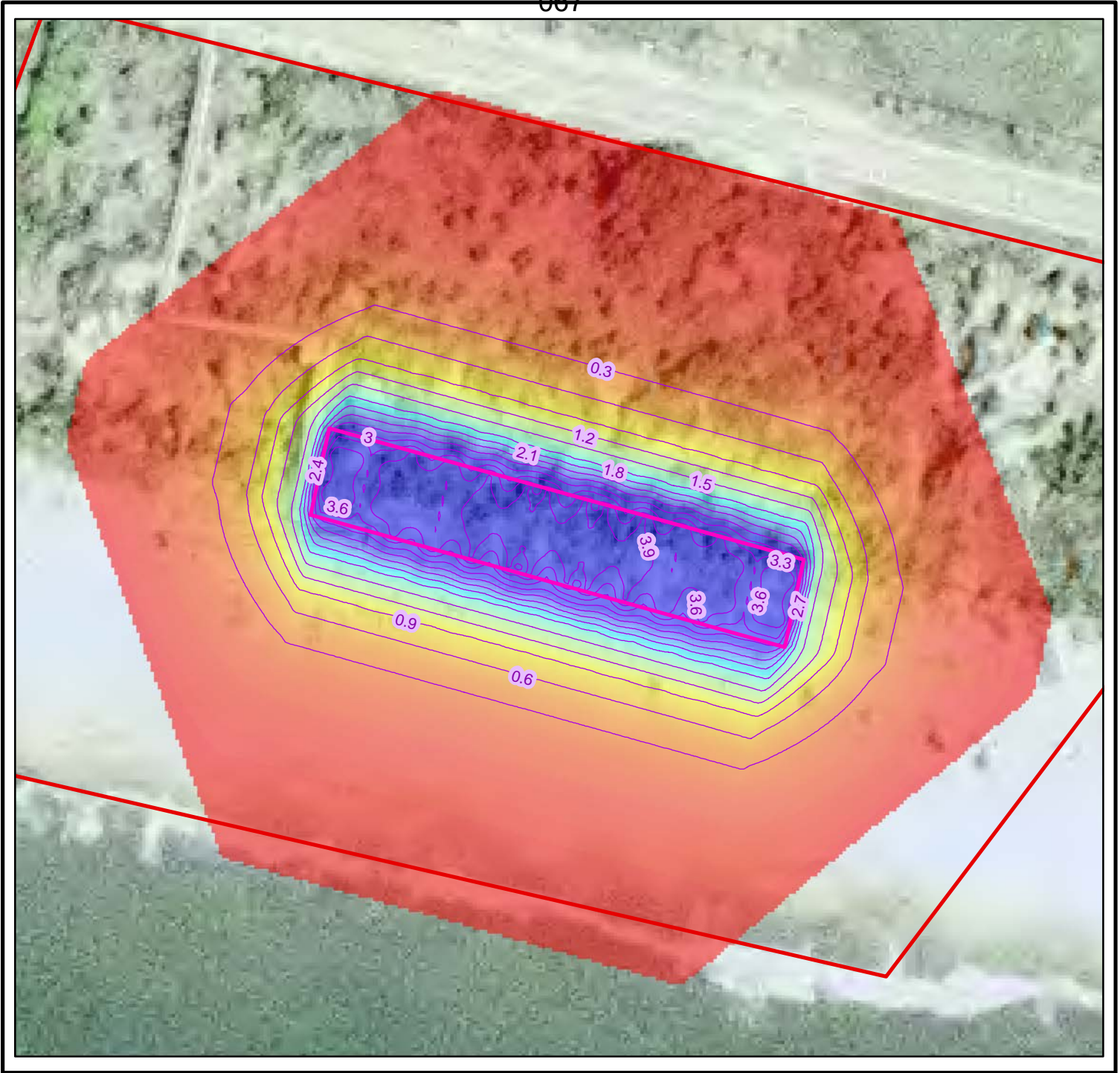
- Site Boundary
- Test Boring
- Dune Infiltration System Footprint
- SHWT Equipotential Contour (C.I. = 0.4 ft.)
- SHWT Flow Direction

**SHWT Elevation**



*Map Notes:*  
SHWT elevations are in units of feet above mean sea level









**Figure 5: Estimated Groundwater Mounding Height Map**


Caswell Beach Dune Infiltration Site  
299 Caswell Beach Road, Caswell Beach, NC

**Legend**

-  Site Boundary
-  Dune Infiltration System Footprint
-  Groundwater Mound Height Contour (C.I. = 0.3 ft)

**Estimated Groundwater Mound Height**

 High : 4.03 ft.  
Low : 0.00 ft.

0      50      100      200  
 Feet



*Map Note:*  
 (1) Values represent estimated groundwater mound heights, not groundwater elevations.

**Appendix A**  
**Infiltration Testing Forms**



Infiltration Testing Form  
 Caswell Beach Infiltration Study  
 Caswell Beach, Brunswick County, North Carolina  
 ECS Project No. 47-6645 & 49-7321  
 July 10<sup>th</sup> – 11<sup>th</sup>, 2018

<u>Location</u>	<u>Depth</u>	<u>USCS</u>	<u>Soil Description</u>
I-1	0-130"	SP	Tan/gray medium to coarse SAND

Seasonal High Water Table was estimated to be at 100 inches below the existing grade elevation.

Groundwater was encountered at 126 inches below the existing grade elevation.

Test was conducted at 70 inches below existing grade elevation

Infiltration Rate: 27.23 inches per hour

Ground elevation is 13.397'

<u>Location</u>	<u>Depth</u>	<u>USCS</u>	<u>Soil Description</u>
I-2	0-115"	SP	Tan/gray medium to coarse SAND

Seasonal High Water Table was estimated to be at 100 inches below the existing grade elevation.

Groundwater was encountered at 112 inches below the existing grade elevation.

Test was conducted at 60 inches below existing grade elevation

Infiltration Rate: 28.01 inches per hour

Ground elevation is 12.096'

<u>Location</u>	<u>Depth</u>	<u>USCS</u>	<u>Soil Description</u>
I-3	0-122"	SP	Tan/gray medium to coarse SAND

Seasonal High Water Table was estimated to be at 114 inches below the existing grade elevation.

Groundwater was encountered at 122 inches below the existing grade elevation.

Test was conducted at 48 inches below existing grade elevation

Infiltration Rate: 29.93 inches per hour

Ground elevation is 12.139'

070  
Infiltration Testing Form  
Caswell Beach Infiltration Study  
Caswell Beach, Brunswick County, North Carolina  
ECS Project No. 47-6645 & 49-7321  
July 10<sup>th</sup> – 11<sup>th</sup>, 2018

<u>Location</u>	<u>Depth</u>	<u>USCS</u>	<u>Soil Description</u>
I-4	0-125"	SP	Tan/gray medium to coarse SAND

Seasonal High Water Table was estimated to be at 115 inches below the existing grade elevation.

Groundwater was encountered at 125 inches below the existing grade elevation.

Test was conducted at 36 inches below existing grade elevation

Infiltration Rate: 26.43 inches per hour

Ground elevation is 12.60'

<u>Location</u>	<u>Depth</u>	<u>USCS</u>	<u>Soil Description</u>
I-5	0-130"	SP	Tan/gray medium to coarse SAND

Seasonal High Water Table was estimated to be at 118 inches below the existing grade elevation.

Groundwater was encountered at 130 inches below the existing grade elevation.

Test was conducted at 24 inches below existing grade elevation

Infiltration Rate: 29.19 inches per hour

Ground elevation is 13.949'

<u>Location</u>	<u>Depth</u>	<u>USCS</u>	<u>Soil Description</u>
I-6	0-130"	SP	Tan/gray medium to coarse SAND

Seasonal High Water Table was estimated to be at 112 inches below the existing grade elevation.

Groundwater was encountered at 126 inches below the existing grade elevation.

Test was conducted at 60 inches below existing grade elevation

Infiltration Rate: 28.98 inches per hour

Ground elevation is 16.661'

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## MEETING MINUTES

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909 Market Street, Wilmington, North Carolina 28401 910-762-4200

### **Caswell Beach Road Stormwater Management Project NC DOT Project Review**

**DATE:** AUGUST 28, 2018, 10 AM

**WKD #:** 20170196.00.RA

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#### **Meeting Participants:**

- Ben Hughes, PE, District Engineer, NC DOT
- Ron Van Cleef – Division Project Engineer, NC DOT
- Anthony Law, Assistant Division Construction Engineer, NC DOT
- Chad Kimes, PE, Deputy Division Engineer, NCDOT
- Caitlin Marks, PE, Division Project Manager, NC DOT
- Chad Hicks, Town Administrator
- Deborah Ahlers, Mayor
- Carter Hubard, PE – Project Engineer, WK Dickson

#### **Meeting Summary**

In the past year the Town has had storm events that have flooded Caswell Beach Road causing the road to be impassable. Vehicles have been stranded and accidents have occurred. The Town has problems with ponded water in these areas for many years.

The Town has relied on temporary pumping of the water towards the sound or to the dunes but with limited success as the discharge of water near the flooded areas limits the effectiveness of pumping. The Town has installed trench drains (in the flood prone areas which do not have outlets).

WK Dickson has been working with the Town to reduce the impacts of flooding. A Clean Water Management Trust Fund application has been submitted for a dune infiltration system DIS. The DIS plan was originally to drawdown stormwater from four areas of Caswell Beach Road and discharge below ground in four dune infiltration systems located south of each area between the frontal dunes. The concept has been presented to regulatory agencies in a scoping meeting with positive response. The Town has approached property owners to check the owner's willingness to grant easement. Due to some reluctance by property owners, the Town

has decided to pursue using a parcel of Town property across from the Lighthouse. WK Dickson has evaluated the site and confirmed that a dune infiltration system is feasible by testing and analysis of the seasonal high-water table, insitu permeability, and groundwater mounding analysis. The 8-inch reuse main that was constructed as part of the sewer project is being considered to convey the stormwater from the flooding areas to the DIS system. The subject reuse main is inactive due to Oak Island discharging treated effluent at the golf course rather than the previously planned location at the Baptist Assembly. Pressure testing of the reuse main will be needed and valves added.

NCDOT has committed to assist with funding of this project as a high impact low cost project. The funding schedule is to have the project bid in February with a start date in May. The encroachment agreement can be simplified if the connection to the reuse force main is a near side tap and the planned pump suction piping is located below ground or with break away stand pipe 10 feet clear of the recovery zone. Caitlin Marks will be tracking the project costs and schedule. Ron Van Cleef will be the DOT project manager. A summary report is needed for DOT use in documenting the effectiveness of the project.

WK Dickson will be working on the design and permitting of the project. Permitting anticipated is a CAMA minor permit. A cost estimate will be provided by the end of October.

(Following the meeting, DOT representatives visited the project area)





Site 4 (Public Beach Access):  
749 Caswell Beach Rd  
Available Area: 12,000 SF

Site 3 (Residential):  
619 Caswell Beach Rd  
Available Area: 9,000 SF

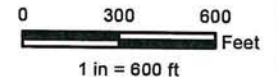
Site 2 (Residential):  
419 & 423 Caswell Beach Rd  
Available Area: 9,600 SF

Site 1 (Residential):  
311 & 313 Caswell Beach Rd  
Available Area: 2,900 SF

**Legend**

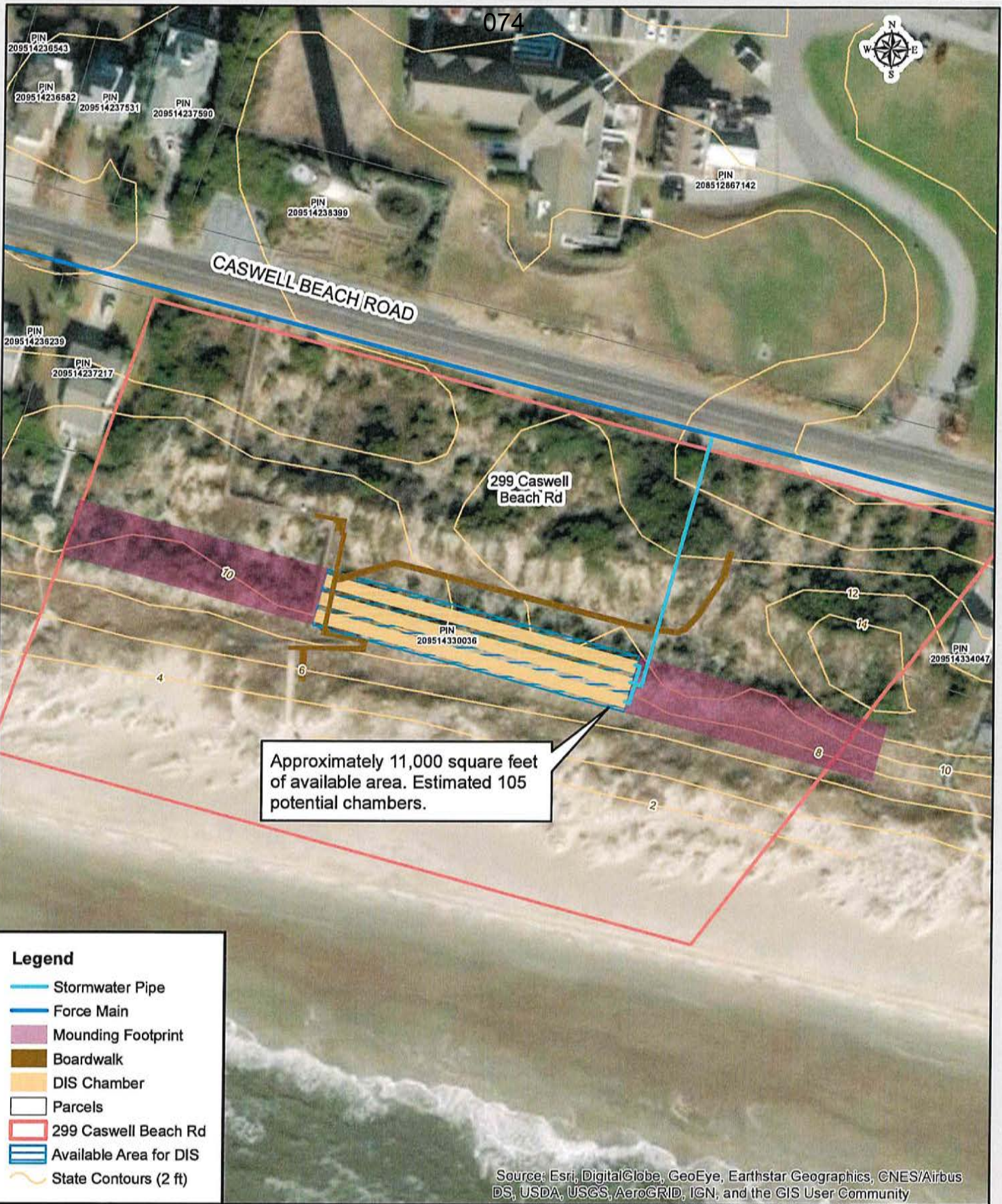
- Available Area for DIS
- Potential Project Sites

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community





074



Approximately 11,000 square feet of available area. Estimated 105 potential chambers.

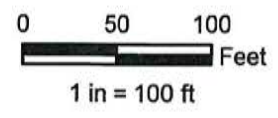
**Legend**

-  Stormwater Pipe
-  Force Main
-  Mounding Footprint
-  Boardwalk
-  DIS Chamber
-  Parcels
-  299 Caswell Beach Rd
-  Available Area for DIS
-  State Contours (2 ft)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



**Caswell Beach Road Stormwater Management Project**  
**Figure 6 - Proposed Project Aerial Map**  
**Site 5 - 299 Caswell Beach Rd**





## Project Narrative

The Town of Caswell Beach is currently exploring options to remove stormwater flooding from Caswell Beach Road. Caswell Beach Road (State Road 1100) runs approximately three miles from the Town limits to the North Carolina Baptist Assembly and is geographically located between the Atlantic Ocean and Intracoastal Waterway Marsh System. Caswell Beach Road serves approximately 240 residential properties, United States Coast Guard Station Oak Island, Duke Energy Nuclear Pumping Station, and the North Carolina Baptist Assembly. The North Carolina Baptist Assembly provides religious retreat services for up to 1500 people onsite at any given time. This road provides the only ingress/egress for vehicles serving the above locations.

Due to stormwater flooding Caswell Beach Road becomes impassable to low clearance vehicles after minor storm events and impassable to high clearance emergency vehicles after moderate to major storm events.

The Town of Caswell Beach contracted engineers, WK Dickson of Wilmington to help devise a solution for this flooding problem. It was determined that the best solution to remove and filter the water would be a dune infiltration system. This system will consist of approximately 525' of buried infiltration chambers. The water would enter the chambers and from there leach into the ground water table after being filtered by stone and sand. The water will be piped to the central infiltration site by pump.

## Existing Conditions

The Town has installed and maintains drainage and infiltration basin in the right of way of Caswell Beach Road. These apparatuses do not provide the necessary amount of stormwater control to allow the road to remain passable during heavy rain events. The road is situated between the dunes and the marsh in an area approximately 500 feet wide. The high-water table in this area makes further stormwater control by infiltration on the roadside impractical.



Justin Humphries <jhumphries@kinglawonline.com>

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## CAMA Variance Caswell Beach

1 message

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**Carter Hubard** <tchubard@wkdickson.com>

Wed, Oct 31, 2018 at 2:00 PM

To: Justin Humphries <justin@kinglawonline.com>, "dahlers@caswellbeach.org" <dahlers@caswellbeach.org>, Chad Hicks <chicks@caswellbeach.org>

Cc: Marc Horstman <mhorstman@wkdickson.com>

Justin,

The proposed dune infiltration system chamber material is high density polyethylene

T. Carter Hubard, P.E.

Project Manager

***WK Dickson & Co., Inc.***

300 N. Third Street, Suite 301 (We've moved! Note our new address.)

Wilmington, NC 28401

O 910-762-4200

Direct 910-442-1850

Mob 910-520-2734

Email: [tchubard@wkdickson.com](mailto:tchubard@wkdickson.com)

[www.wkdickson.com](http://www.wkdickson.com)

Connect with us: [Facebook](#) | [Twitter](#) | [LinkedIn](#)



Locality Town of Caswell Beach Permit Number CasB 18-01

Ocean Hazard  Estuarine Shoreline \_\_\_\_\_ ORW Shoreline \_\_\_\_\_ Public Trust Shoreline \_\_\_\_\_ Other \_\_\_\_\_  
(For official use only)

**GENERAL INFORMATION**

**LAND OWNER**

Name Town of Caswell Beach  
Address 1100 Caswell Beach Rd.  
City Caswell Beach State NC Zip 28465 Phone 910-278-5471  
Email Chicks@caswellbeach.org

**AUTHORIZED AGENT**

Name Chad Hicks ↑ Same  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_  
Email \_\_\_\_\_

LOCATION OF PROJECT: (Address, street name and/or directions to site. If not oceanfront, what is the name of the adjacent waterbody.) South of Lighthouse on Long Bay 251NB037 Parcel ID #

DESCRIPTION OF PROJECT: (List all proposed construction and land disturbance.) See attached  
11,000 sq ft Disturbed

SIZE OF LOT/PARCEL: \_\_\_\_\_ square feet 5.3 acres

PROPOSED USE: Residential  (Single-family  Multi-family  ) Commercial/Industrial  Other

COMPLETE EITHER (1) OR (2) BELOW (Contact your Local Permit Officer if you are not sure which AEC applies to your property):

1) OCEAN HAZARD AECs: TOTAL FLOOR AREA OF PROPOSED STRUCTURE: 525 square feet (includes conditioned living space, parking elevated above ground level, non-conditioned space elevated above ground level but excluding non-load-bearing attic space)

2) COASTAL SHORELINE AECs: SIZE OF BUILDING FOOTPRINT AND OTHER IMPERVIOUS OR BUILT UPON SURFACES: \_\_\_\_\_ square feet (includes the area of the roof/drip line of all buildings, driveways, covered decks, concrete or masonry patios, etc. that are within the applicable AEC. Attach your calculations with the project drawing.)

TATE STORMWATER MANAGEMENT PERMIT: Is the project located in an area subject to a State Stormwater management Permit issued by the NC Division of Water Quality?  
ES \_\_\_\_\_ NO \_\_\_\_\_

yes, list the total built upon area/impervious surface allowed for your lot or parcel; \_\_\_\_\_ square feet.

RECEIVED

OCT 16 2018



**OTHER PERMITS MAY BE REQUIRED:** The activity you are planning may require permits other than the CAMA minor development permit, including, but not limited to: Drinking Water Well, Septic Tank (or other sanitary waste treatment system), Building, Electrical, Plumbing, Heating and Air Conditioning, Insulation and Energy Conservation, FIA Certification, Sand Dune, Sediment Control, Subdivision Approval, Mobile Home Park Approval, Highway Connection, and others. Check with your Local Permit Officer for more information.

**STATEMENT OF OWNERSHIP:**

I, the undersigned, an applicant for a CAMA minor development permit, being either the owner of property in an AEC or a person authorized to act as an agent for purposes of applying for a CAMA minor development permit, certify that the person listed as landowner on this application has a significant interest in the real property described therein. This interest can be described as: (check one)

an owner or record title, Title is vested in Town of Caswell Beach, see Deed Book 30 page 545 in the Brunswick County Registry of Deeds.

an owner by virtue of inheritance. Applicant is an heir to the estate of \_\_\_\_\_; probate was in \_\_\_\_\_ County.

if other interest, such as written contract or lease, explain below or use a separate sheet & attach to this application.

**NOTIFICATION OF ADJACENT PROPERTY OWNERS:**

I furthermore certify that the following persons are owners of properties adjoining this property. I affirm that I have given **ACTUAL NOTICE** to each of them concerning my intent to develop this property and to apply for a CAMA permit.

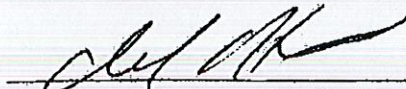
(Name)	(Address)
(1) <u>Gary Studer</u>	<u>217 Caswell Beach Rd.</u>
(2) <u>Brian Murphy</u>	<u>301 Caswell Beach Rd.</u>
(3) _____	_____
(4) _____	_____

**ACKNOWLEDGEMENTS:**

I, the undersigned, acknowledge that the land owner is aware that the proposed development is planned for an area which may be susceptible to erosion and/or flooding. I acknowledge that the Local Permit Officer has explained to me the particular hazard problems associated with this lot. This explanation was accompanied by recommendations concerning stabilization and floodproofing techniques.

I furthermore certify that I am authorized to grant, and do in fact grant, permission to Division of Coastal Management staff, the Local Permit Officer and their agents to enter on the aforementioned lands in connection with evaluating information related to this permit application.

This the 16 day of Oct, 2018



Landowner or person authorized to act as his/her agent for purpose of filing a CAMA permit application

*This application includes: general information (this form), a site drawing as described on the back of this application, the ownership statement, the Ocean Hazard AEC Notice where necessary, a check for \$100.00 made payable to the locality, and any information as may be provided orally by the applicant. The details of the application as described by these sources are incorporated without reference in any permit which may be issued. Deviation from these details will constitute a violation of any permit. Any person developing in an AEC without permit is subject to civil, criminal and administrative action.*

OCT 16 2018



079  
OCEAN HAZARD AEC NOTICE

Project is in an:  Ocean Erodible Area  High Hazard Flood Area  Inlet Hazard Area

Property Owner: Town of Caswell Beach

Property Address: 300 A Caswell Beach Rd. Caswell Beach, NC 28565

Date Lot Was Platted: 4-02

This notice is intended to make you, the applicant, aware of the special risks and conditions associated with development in this area, which is subject to natural hazards such as storms, erosion and currents. The rules of the Coastal Resources Commission require that you receive an AEC Hazard Notice and acknowledge that notice in writing before a permit for development can be issued.

The Commission's rules on building standards, oceanfront setbacks and dune alterations are designed to minimize, but not eliminate, property loss from hazards. By granting permits, the Coastal Resources Commission does not guarantee the safety of the development and assumes no liability for future damage to the development. Permits issued in the Ocean Hazard Area of Environmental Concern include the condition that structures be relocated or dismantled if they become imminently threatened by changes in shoreline configuration. The structure(s) must be relocated or dismantled within two (2) years of becoming imminently threatened, and in any case upon its collapse or subsidence.

The best available information, as accepted by the Coastal Resources Commission, indicates that the annual long-term average ocean erosion rate for the area where your property is located is 2 feet per year.

The rate was established by careful analysis of aerial photographs of the coastline taken over the past 50 years.

Studies also indicate that the shoreline could move as much as 3-7 feet landward in a major storm.

The flood waters in a major storm are predicted to be about 4-16 feet deep in this area.

Preferred oceanfront protection measures are beach nourishment and relocation of threatened structures. Hard erosion control structures such as bulkheads, seawalls, revetments, groins, jetties and breakwaters are prohibited. Temporary sand bags may be authorized under certain conditions.

The applicant must acknowledge this information and requirements by signing this notice in the space below. Without the proper signature, the application will not be complete.

[Signature] 10-17-18  
Property Owner Signature Date

**SPECIAL NOTE:** This hazard notice is required for development in areas subject to sudden and massive storms and erosion. Permits issued for development in this area expire on December 31 of the third year following the year in which the permit was issued. Shortly before work begins on the project site, the Local Permit Officer must be contacted to determine the vegetation line and setback distance at your site. If the property has seen little change since the time of permit issuance, and the proposed development can still meet the setback requirement, the LPO will inform you that you may begin work. Substantial progress on the project must be made within 60 days of this setback determination, or the setback must be re-measured. Also, the occurrence of a major shoreline change as the result of a storm within the 60-day period will necessitate re-measurement of the setback. It is important that you check with the LPO before the permit expires for official approval to continue the work after the permit has expired. Generally, if foundation pilings have been placed and substantial progress is continuing, permit renewal can be authorized. It is unlawful to continue work after permit expiration.

For more information, contact:

Tam McPherson  
Local Permit Officer

127 Cardinal Dr. Ext  
Address

Wilmington NC  
Locality

910 796-7425  
Phone Number



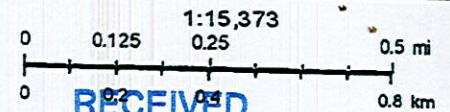
Brunswick County GIS Data Viewer

080



September 14, 2017

- |              |              |          |                   |
|--------------|--------------|----------|-------------------|
| Interstates  | — NC Hwy     | Parcels  | □ County Boundary |
| — Interstate | — State Road | □ Condo  |                   |
| — US Hwy     | — Minor      | □ Parcel |                   |



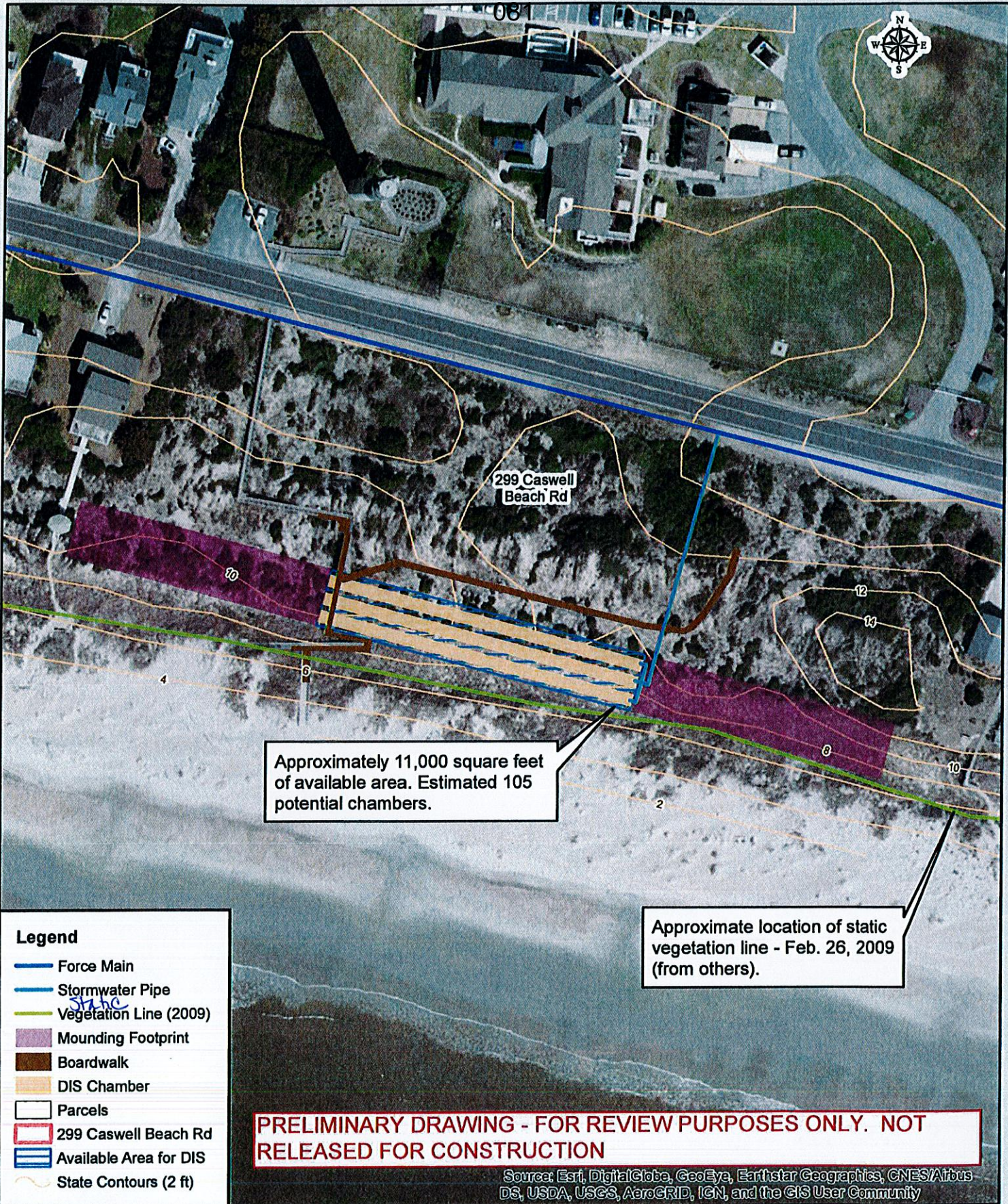
RECEIVED

OCT 16 2018










Brunswick County

DCM WILMINGTON, NC





**Legend**

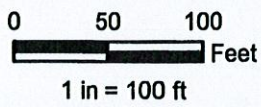
-  Force Main
-  Stormwater Pipe
-  Vegetation Line (2009)
-  Mounding Footprint
-  Boardwalk
-  Available Area for DIS
-  Parcels
-  299 Caswell Beach Rd
-  State Contours (2 ft)

**PRELIMINARY DRAWING - FOR REVIEW PURPOSES ONLY. NOT RELEASED FOR CONSTRUCTION**

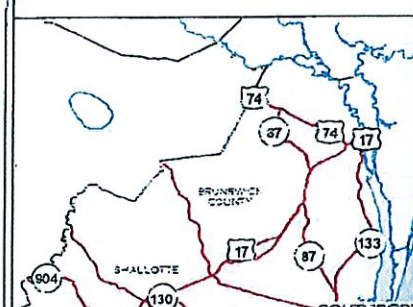
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



**Caswell Beach Road Stormwater Management Project**  
**Figure 6 - Proposed Project Aerial Map**  
**Site 5 - 299 Caswell Beach Rd**







Town of  
Caswell Beach  
2006/2007 CAMA  
Land Use Plan  
Community Facilities  
(Existing Water System  
and Planned Sewer  
Service Area) Map

- Legend**
- Primary Road
  - Roads
  - Municipal Limits
  - Main Distribution Lines
  - Distribution Lines
  - Water and Sewer Service Boundary

**IMPORTANT NOTE:**  
The water and sewer service boundary shown on this map is a generalization and is not site specific. It is intended to show that the planned sewer service will serve the existing platted and developable lots, and will not encroach into "Conservation Areas" or "Commercial Recreation Areas" (See Section 9 and Map 12 for a description of those areas).

1 inch equals 1,000 feet  
1 inch equals 0.19 miles

The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the office of Ocean and Coastal Resources Management, National Oceanic and Atmospheric Administration.



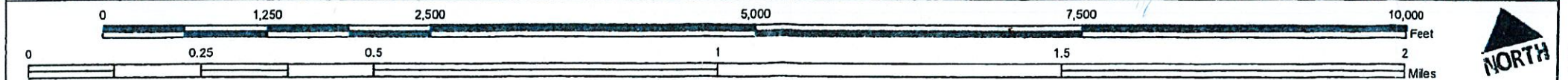
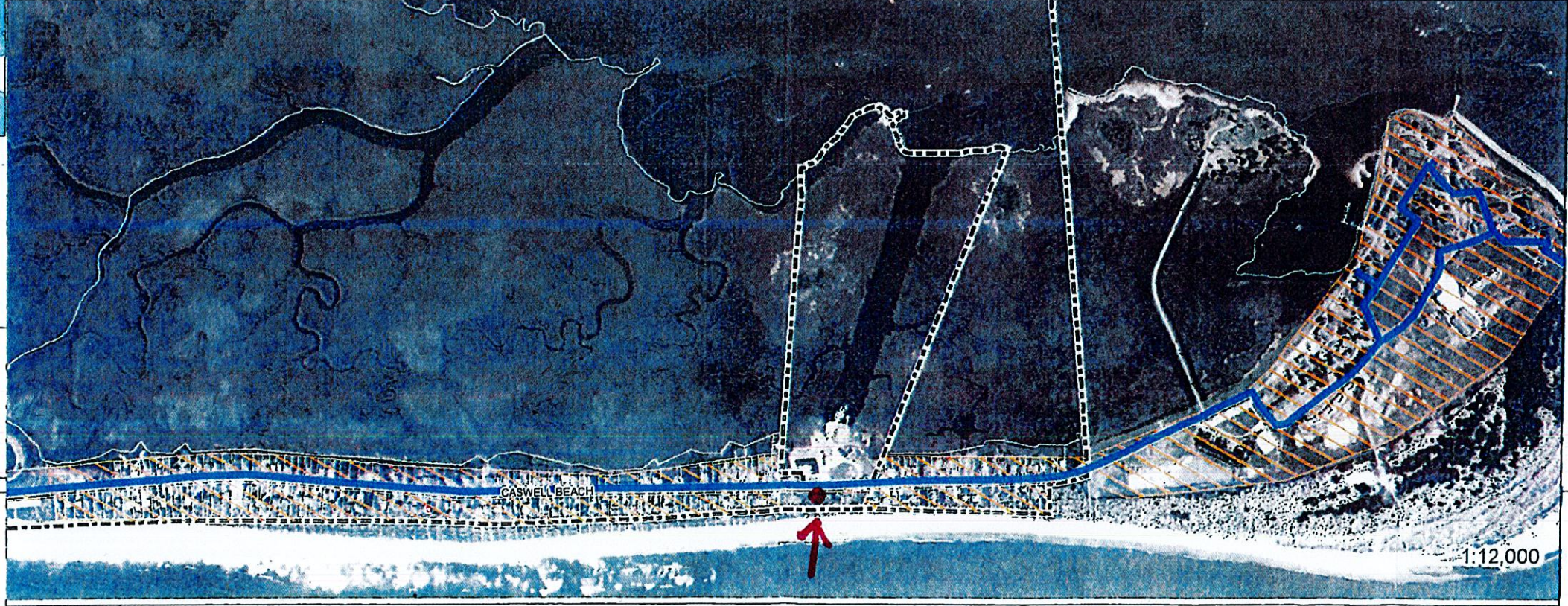
RECEIVED

OCT 16 2018  
DRAFT  
DCM WILMINGTON, NC

Map is to be used for general informational purposes only. Spatial data used to generate this map was gathered from disparate sources and represent a condition at a fixed period in time. 100% accuracy of spatial data to current circumstances cannot be guaranteed.

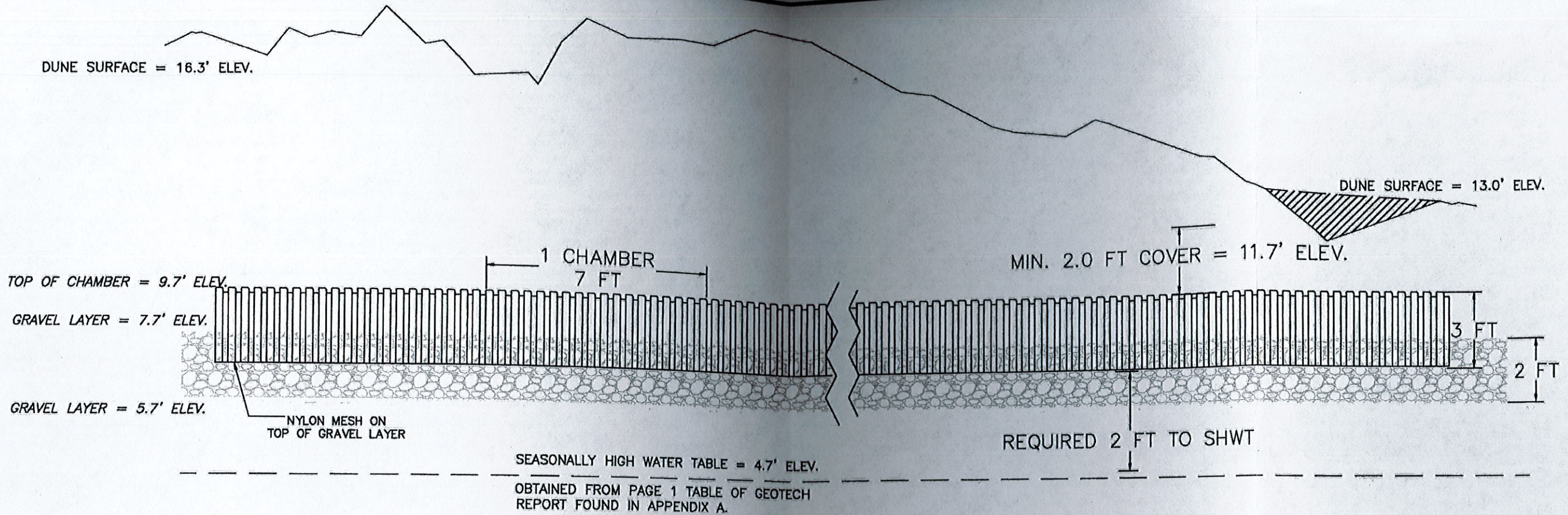
Map prepared by:  
Scott Logel  
Cape Fear Council of Governments  
1480 Harbour Drive  
Wilmington, NC 28401

▲ Western End of Town ▲      ▼ Eastern End of Town ▼

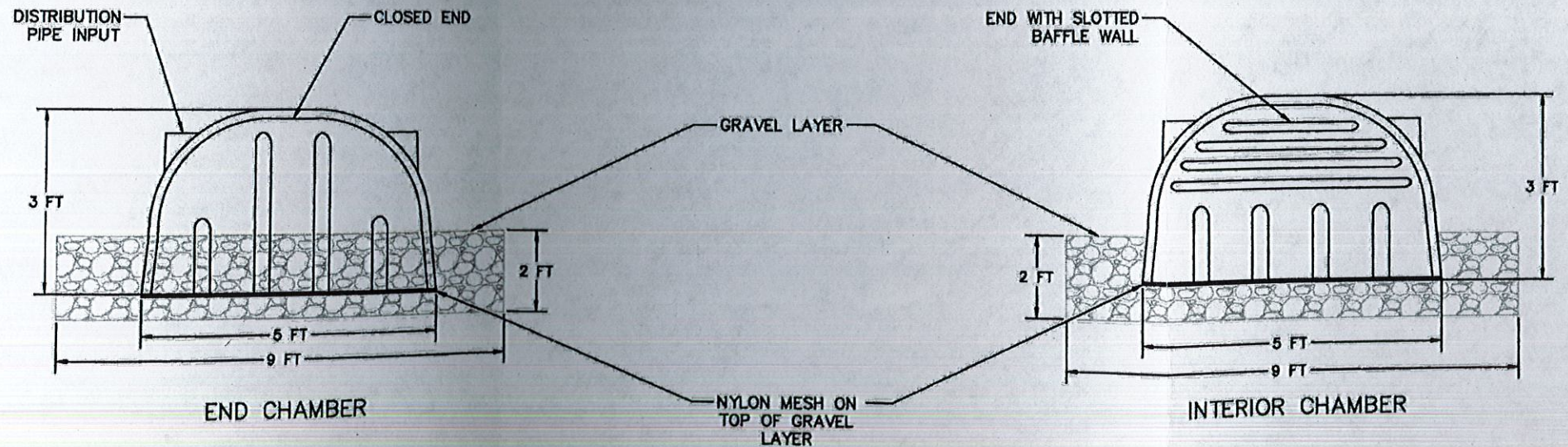


Map Created 1/6/07      MAP 11





NOTES:  
 1. THE ELEVATIONS SHOWN ON THIS FIGURE ARE APPROXIMATE AND ARE PROVIDED FOR RELATIVE REFERENCE ONLY. THESE ELEVATIONS AND MEASURE-DOWNS WERE OBTAINED FROM COUNTY GIS DATA SOURCE AND SHOULD NOT BE USED FOR ANY DETAILED DESIGN OR INSTALLATION ACTIVITIES. IT IS RECOMMENDED THAT A MORE DETAILED SITE SURVEY BE PERFORMED BY A NC LICENSED PROFESSIONAL LAND SURVEYOR BEFORE ANY DESIGN PLANS ARE GENERATED.



PRELIMINARY DRAWING- FOR REVIEW PURPOSES ONLY. NOT RELEASED FOR CONSTRUCTION.

RECEIVED  
 OCT 16 2018

DCM WILMINGTON, NC  
 NTS

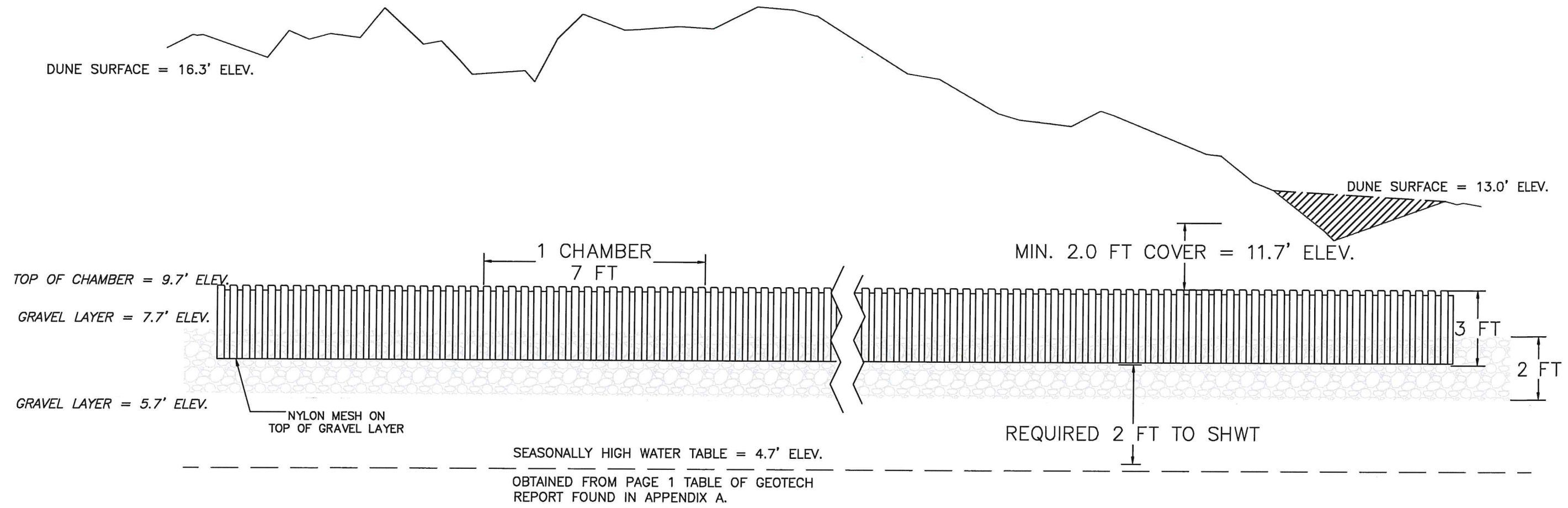


FIGURE 10 - SITE 5  
 APPROXIMATE DUNE INFILTRATION SYSTEM PROFILE  
 CASWELL BEACH ROAD STORMWATER MANAGEMENT PROJECT

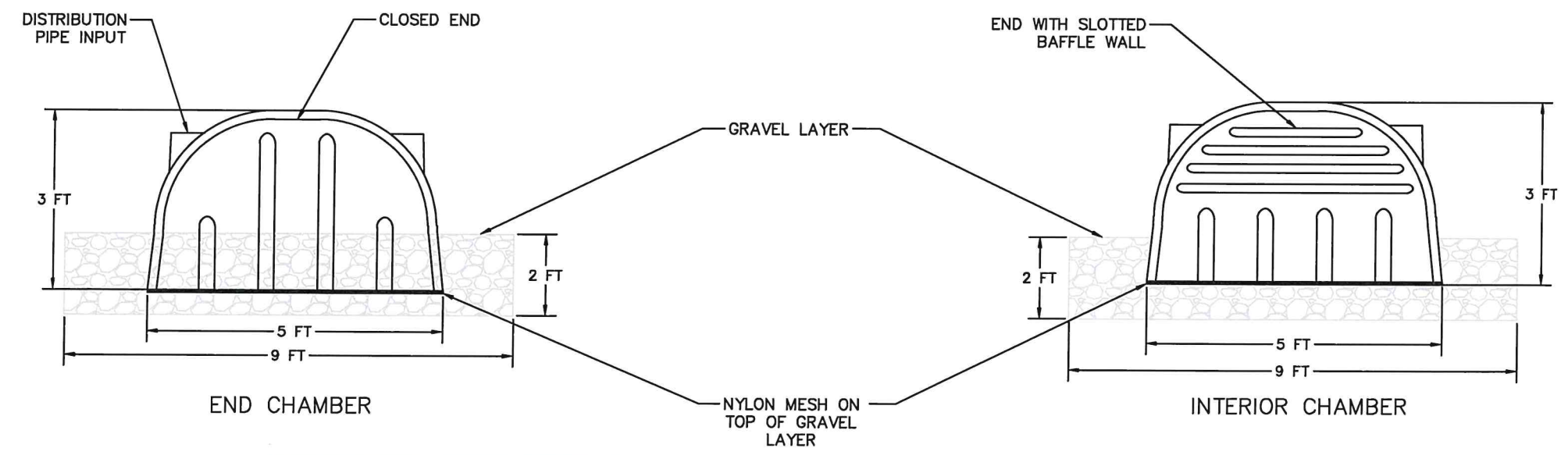


720 CORPORATE CENTER DRIVE  
 RALEIGH, NC 27607  
 (919) 782-0495  
 NC LICENSE NO. F-0374  
 Office Locations:  
 North Carolina Georgia  
 South Carolina





NOTES:  
1. THE ELEVATIONS SHOWN ON THIS FIGURE ARE APPROXIMATE AND ARE PROVIDED FOR RELATIVE REFERENCE ONLY. THESE ELEVATIONS AND MEASURE-DOWNS WERE OBTAINED FROM COUNTY GIS DATA SOURCE AND SHOULD NOT BE USED FOR ANY DETAILED DESIGN OR INSTALLATION ACTIVITIES. IT IS RECOMMENDED THAT A MORE DETAILED SITE SURVEY BE PERFORMED BY A NC LICENSED PROFESSIONAL LAND SURVEYOR BEFORE ANY DESIGN PLANS ARE GENERATED.



PRELIMINARY DRAWING- FOR REVIEW PURPOSES ONLY. NOT RELEASED FOR CONSTRUCTION.

NTS



FIGURE 10 - SITE 5  
APPROXIMATE DUNE INFILTRATION SYSTEM PROFILE  
CASWELL BEACH ROAD STORMWATER MANAGEMENT PROJECT



720 CORPORATE CENTER DRIVE  
RALEIGH, NC 27607  
(919) 782-0495  
NC LICENSE NO. F-0374  
Office Locations:  
North Carolina  
South Carolina  
Georgia

**Chad Hicks**

---

**From:** Murphy, Brian @ Washington DC <Brian.Murphy@cbre.com>  
**Sent:** Monday, October 15, 2018 6:24 PM  
**To:** Chad Hicks  
**Subject:** Re: Stormwater Issue on Caswell Beach Road

Chad, Please forward me a copy of the engineering report for my review. Also, when the engineers indicated that the dune infiltration system would have no impact on my property, do you know if they were aware that I have a basement and that it had been flooded previously when the Town pumped water into those dunes on a prior occasion? If they were aware of this when making the assessment that the system would not negatively impact my property then I support the Town's efforts providing, as you and I just discussed, the Town assumes liability for future flooding and agrees to discontinue pumping activities if the pumping causes my property to flood.

Thanks

Sent from my iPhone

On Oct 15, 2018, at 4:08 PM, Chad Hicks <[chicks@caswellbeach.org](mailto:chicks@caswellbeach.org)> wrote:

Hello Brian,  
I hate to throw this at you like this but I need a huge favor. We think that we have been awarded a grant from NCDOT that would alleviate the severe flooding on Caswell Beach Road. The proposed project that NCDOT would fund is to have the 3 areas that pond on CBR pumped into a dune infiltration system that would be installed on the lighthouse property dunes. This system would not be visible and will be underground. All dunes will be replaced and revegetated as soon as the project is installed. Here is my problem. I have until tomorrow to submit to CAMA "No Objection" from the adjacent property owners. I know this is fast but I give you my word that this system will not be visible and the property will be restored to prior condition. I have attached a map that shows where the project will be placed. Please feel free to call me at 910-200-3217 if you have any questions. Once again I apologize for the short notice.

Thank you,  
Chad Hicks

<Proposed Project Stormwater.pdf>



**Chad Hicks**

---

**From:** Gary Studer <gary.studer@yahoo.com>  
**Sent:** Tuesday, October 16, 2018 9:19 AM  
**To:** Chad Hicks  
**Subject:** Re: Proposed Project

Thanks much. Does the grant include the replacement of dunes and revegetating, or is that the Town's responsibility?

That's a good timetable if the grant comes through as projected. Slow time of year, tourist-wise. I guess all we have to contend with is the bridge!

On Tuesday, October 16, 2018, 8:47:51 AM EDT, Chad Hicks <chicks@caswellbeach.org> wrote:

Hello Gary,  
 Thanks for the quick response. The force main is the reclaimed water line that was installed but never put into operation. The mounding is the limit of water that would travel from the infiltration basins. The water in the chambers is absorbed into the sand and filtered and eventually ends in the groundwater. If we get this grant we hope to start in February and be done in 6 weeks. I will certainly keep you in the loop of this project. And once again thanks for you quick reply!  
 Chad

-----Original Message-----

From: Gary Studer <gary.studer@yahoo.com>  
 Sent: Monday, October 15, 2018 5:08 PM  
 To: Chad Hicks <chicks@caswellbeach.org>  
 Subject: Re: Proposed Project

Thanks for sharing this with us. We have no objection to the plan as presented. We do, however, have a couple of informational questions on the attachment..

Is the Force Main (heavy blue line) the existing sewer line?  
 What are the mounding footprints (purple areas)? We are not familiar with that term.  
 Where does the water go from the chambers?

If the Town is awarded the grant, when is the projected start date and completion date?

Please continue to keep us informed on the project. Hopefully, this will eliminate this long-time problem.

Gary and Judy

-----  
 On Mon, 10/15/18, Chad Hicks <chicks@caswellbeach.org> wrote:

Subject: Proposed Project  
 To: "Gary Studer" <gary.studer@yahoo.com>  
 Date: Monday, October 15, 2018, 4:05 PM

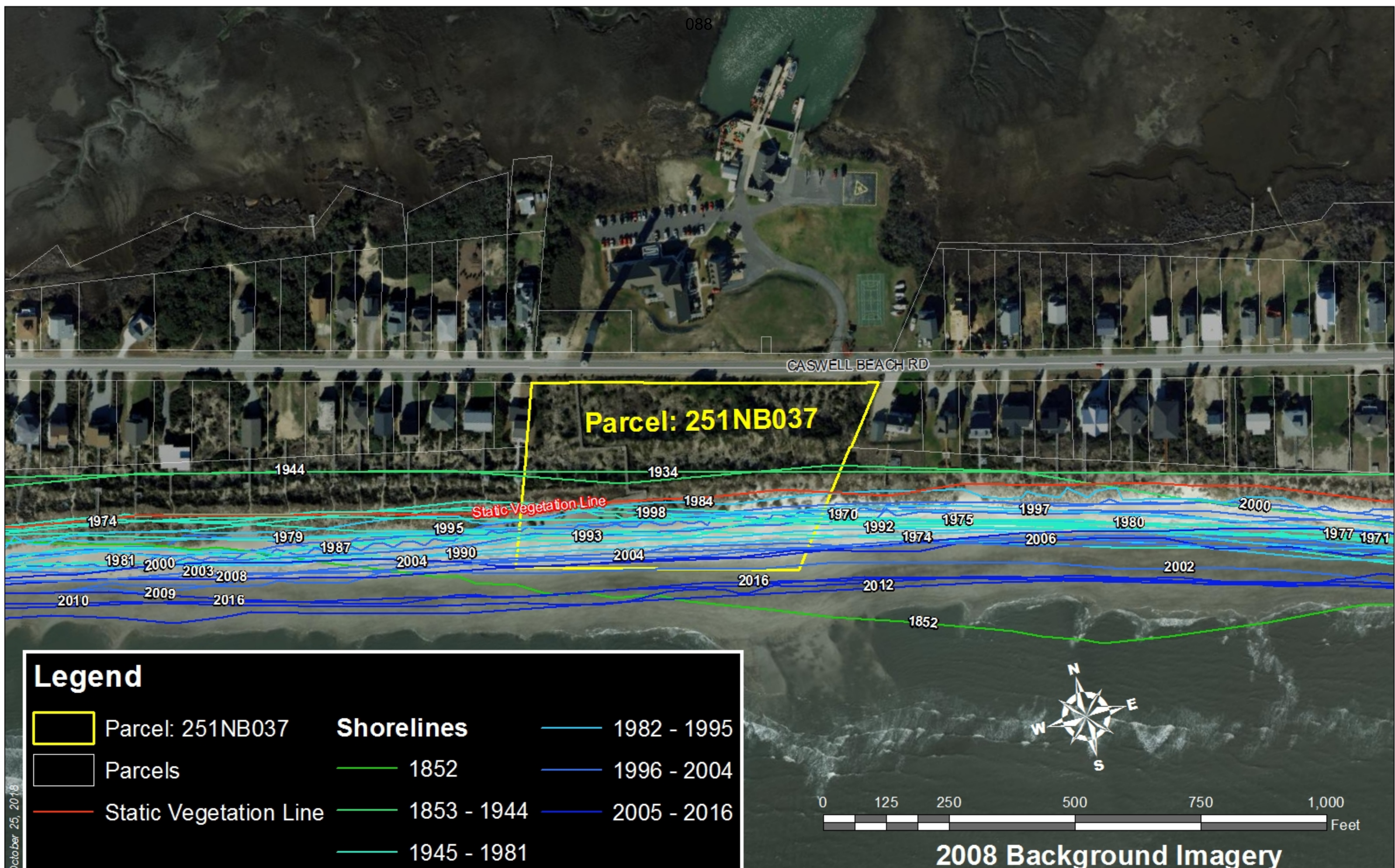
Hello Gary,  
I hate to throw this at you like this but I need a huge favor. We think that we have been awarded a grant from NCDOT that would alleviate the stormwater ponds on Caswell Beach Road. The proposed project that NCDOT would fund is to have the 3 areas that pond on CBR pumped into a dune infiltration system that would be installed on the lighthouse property dunes. This system would not be visible and will be underground. All dunes will be replaced and revegetated as soon as the project is installed.

Here is my problem. I have until tomorrow to submit to CAMA "No Objection" from the adjacent property owners. I know this is fast but I give you my word that this system will not be visible and the property will be restored to prior condition. I have attached

a map that shows where the project will be placed. Please feel free to call me at 910-200-3217 if you have any questions. Once again I apologize for the short notice.

Thank you,  
Chad Hicks





October 25, 2018












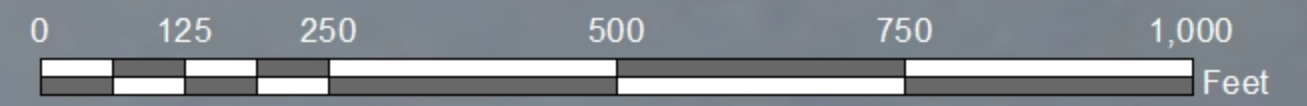


**Parcel: 251NB037**

CASWELL BEACH RD

**Legend**

	Parcel: 251NB037	<b>Shorelines</b>		1982 - 1995
	Parcels			1996 - 2004
	Static Vegetation Line			2005 - 2016
				



**2009 Background Imagery**

October 25, 2018

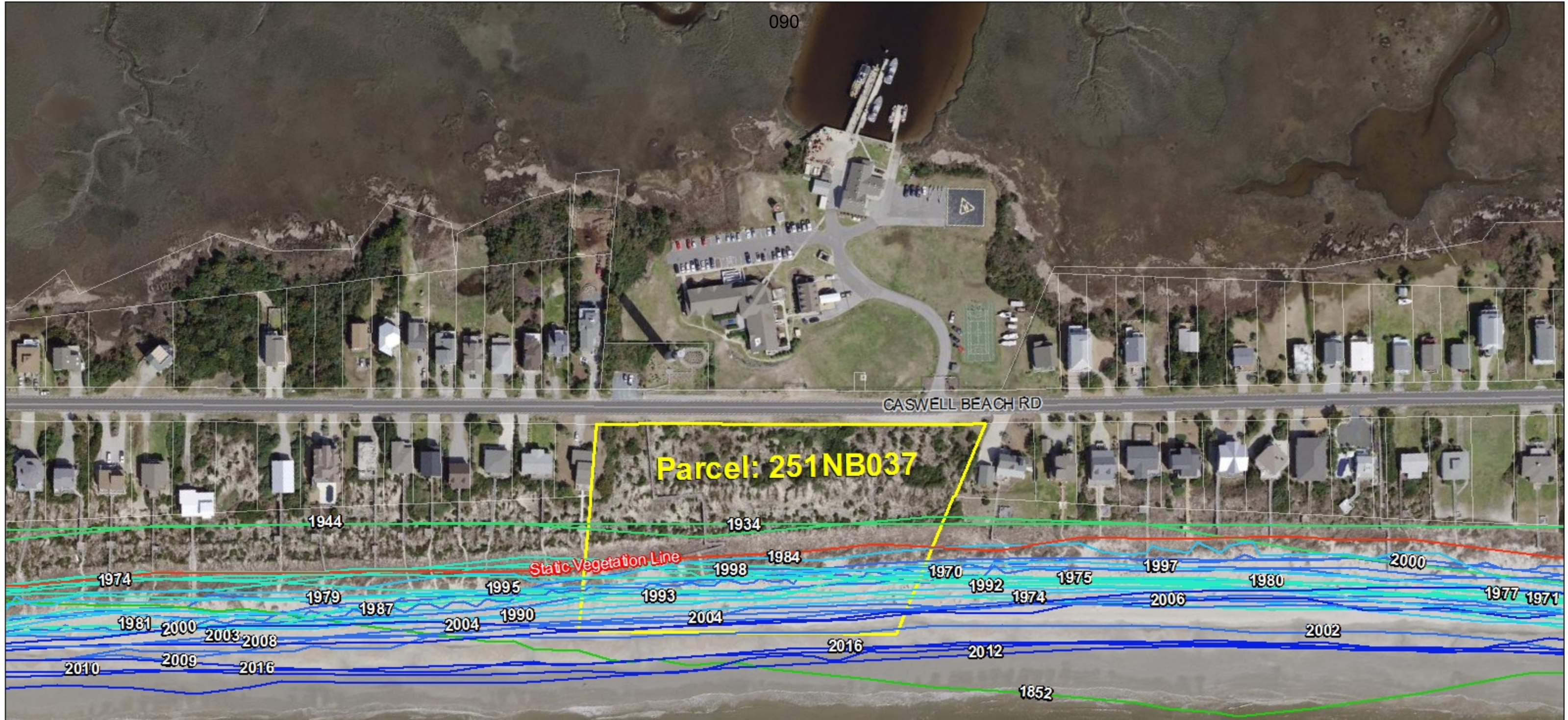


090










CASWELL BEACH RD

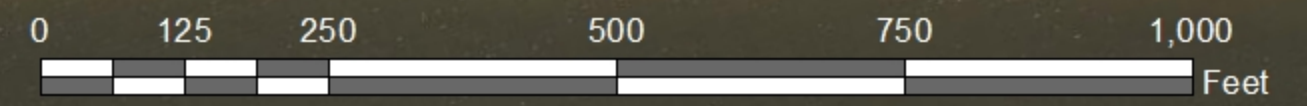
Parcel: 251NB037

Static Vegetation Line



**Legend**

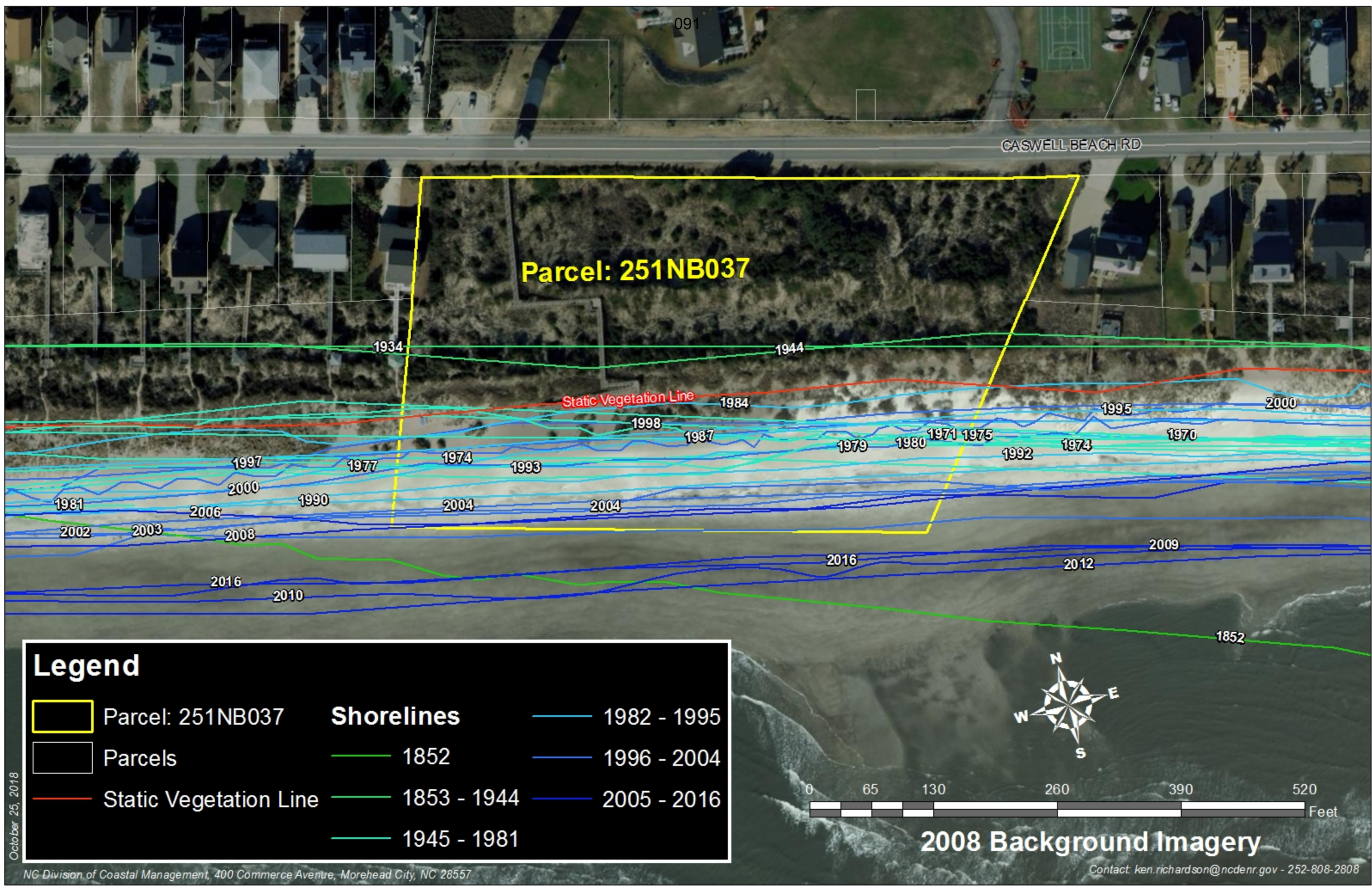
	Parcel: 251NB037	<b>Shorelines</b>		1982 - 1995	
	Parcels		1852		1996 - 2004
	Static Vegetation Line		1853 - 1944		2005 - 2016
			1945 - 1981		



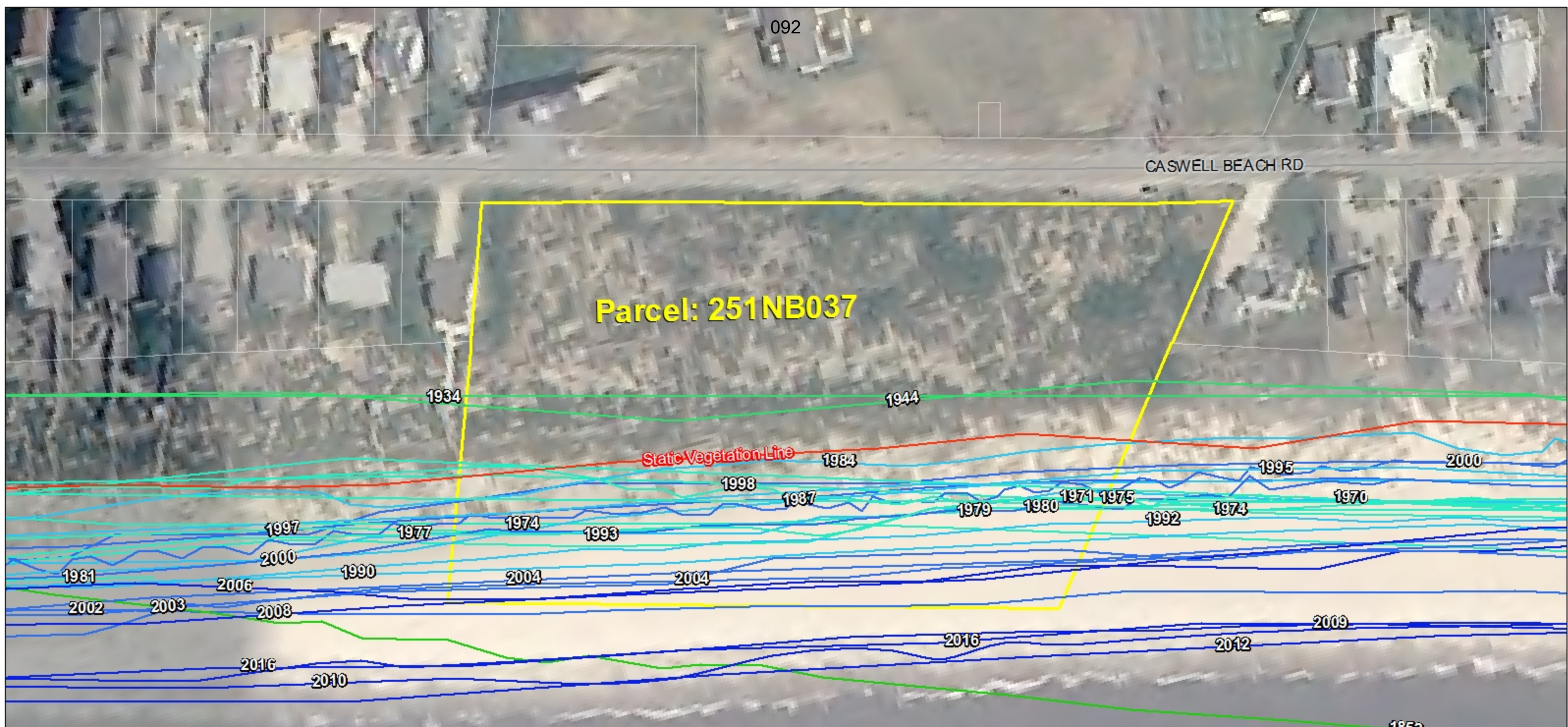
2016 Background Imagery

October 25, 2018












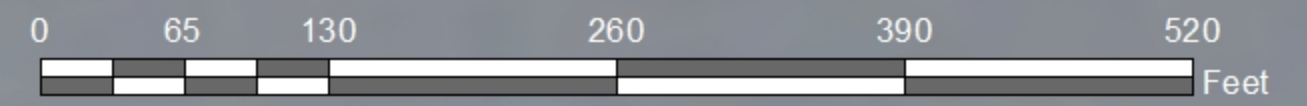






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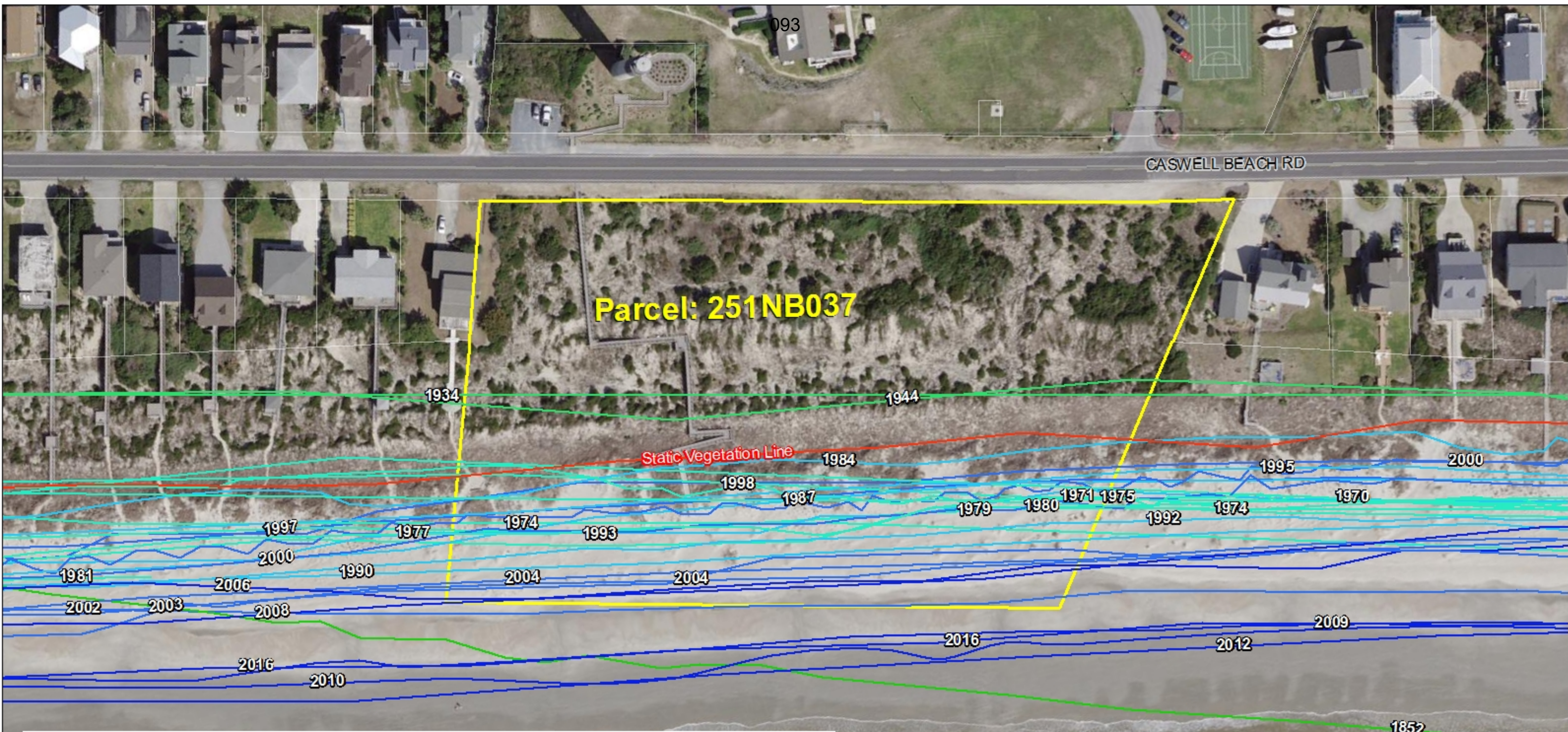
	Parcel: 251NB037	<b>Shorelines</b>		1982 - 1995
	Parcels			1996 - 2004
	Static Vegetation Line			2005 - 2016
				1945 - 1981



**2009 Background Imagery**

October 26, 2018














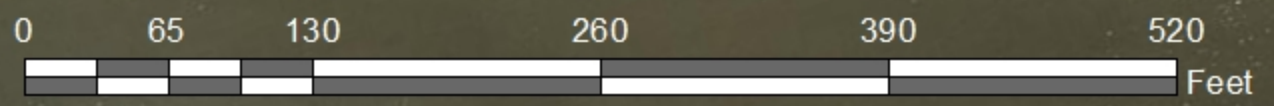
CASWELL BEACH RD

Parcel: 251NB037

Static Vegetation Line

**Legend**

	Parcel: 251NB037	<b>Shorelines</b>		1982 - 1995	
	Parcels		1852		1996 - 2004
	Static Vegetation Line		1853 - 1944		2005 - 2016
			1945 - 1981		



2016 Background Imagery

October 25, 2018





NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

BRAXTON C. DAVIS  
Director

October 17, 2018

Town of Caswell beach  
c/o Chad Hicks  
1100 Caswell Beach Road  
Caswell Beach, NC 28465

**RE: DENIAL OF CAMA MINOR DEVELOPMENT  
PERMIT APPLICATION NUMBER- CasB 18-01  
PROJECT ADDRESS: Parcel ID 251NB037 Caswell Beach, NC**

Dear Mr. Hicks:

After reviewing your application in conjunction with the development standards required by the Coastal Area Management Act (CAMA), it is my determination that no permit shall be granted for the project which you have proposed.

This decision is based on my findings that your request violates NCGS 113A-120(a)(8) which requires that all applications be denied which are inconsistent with CAMA guidelines. Specifically, the development for which you applied consists of the construction of a Dune Infiltration System, located within the 60 ft. Ocean Hazard Setback adjacent to the Atlantic Ocean.

Upon Review, I have determined the requested scope of work is inconsistent with 15 NCAC 07H .0306(a)(2) GENERAL USE STANDARDS OF OCEAN HAZARD AREAS, which states: *"With the exception of those types of development defined in 15A NCAC 07H .0309, no development, including any portion of a building or structure, shall extend oceanward of the ocean hazard setback distance"*; and 15 NCAC 07H .0309(a) USE STANDARDS FOR OCEAN HAZARD AREAS: EXCEPTIONS, which states: *"The following types of development shall be permitted seaward of the oceanfront setback requirements of Rule .0306(a) of the Subchapter if all other provisions of this Subchapter and other state and local regulations are met: (1) campsites; (2) driveways and parking areas with clay, packed sand or gravel; (3) elevated decks not exceeding a footprint of 500 square feet; (4) beach accessways consistent with Rule .0308(c) of this Subchapter; (5) unenclosed, uninhabitable gazebos with a footprint of 200 square feet or less; (6) uninhabitable, single-story storage sheds with a foundation of floor consisting of wood, clay, packed sand or gravel, and a footprint of 200 square feet or less; (7) temporary amusement stands; (8) sand fences; and (9) swimming pools"*.



Town of Caswell Beach

10/17/18

Page Two

Should you wish to appeal my decision or request a variance from the Coastal Resources Commission please contact me so I can provide you with the proper forms. The Division of Coastal Management must receive appeal notices within twenty (20) days of the date of this letter in order to be considered.

If you have any questions regarding this decision, please feel free to call me at (910) 796.7425.

Sincerely,



Tara MacPherson  
Field Specialist

Cc: C. Goebel, NCDEQ-OGC  
Braxton Davis, NC DCM, Morehead City  
WiRo Files





## Town of Caswell Beach

1100 Caswell Beach Road • Caswell Beach, NC 28465  
(910) 278-5471 • Fax: 1-866-271-3641 • Website: [www.caswellbeach.org](http://www.caswellbeach.org)

October 17, 2018

Dear Mr. Studer,

Thank you for your support of our stormwater project that will be located adjacent to your property. Because part of this project is within the 60' buffer of the static line we are required to seek a variance from CAMA to proceed with this project. North Carolina law requires us to notify you of our intention to seek the variance. If you have any objections to the project you may contact a representative from CAMA and voice those concerns. We will be seeking the variance from the Coastal Resource Commission at the November 28-29 meeting. This meeting will be held at:

DoubleTree  
2717 W. Fort Macon Rd.  
Atlantic Beach, NC 28512

You may also contact our Local Permit Officer, Ms. Tara MacPherson at the address below:

Field Specialist  
NC Division of Coastal Management  
Department of Environmental Quality  
910 796-7425 office  
910 395-3964 fax  
127 Cardinal Drive Ext  
Wilmington, NC 28405

Thank you again for your help and consideration on this matter.

Sincerely,

Chad Hicks  
Town of Caswell Beach



## Town of Caswell Beach

1100 Caswell Beach Road • Caswell Beach, NC 28465  
(910) 278-5471 • Fax: 1-866-271-3641 • Website: [www.caswellbeach.org](http://www.caswellbeach.org)

October 17, 2018

Dear Mr. Murphy,

Thank you for your support of our stormwater project that will be located adjacent to your property. Because part of this project is within the 60' buffer of the static line we are required to seek a variance from CAMA to proceed with this project. North Carolina law requires us to notify you of our intention to seek the variance. If you have any objections to the project you may contact a representative from CAMA and voice those concerns. We will be seeking the variance from the Coastal Resource Commission at the November 28-29 meeting. This meeting will be held at:

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Field Specialist  
NC Division of Coastal Management  
Department of Environmental Quality  
910 796-7425 office  
910 395-3964 fax  
127 Cardinal Drive Ext  
Wilmington, NC 28405

Thank you again for your help and consideration on this matter.

Sincerely,

Chad Hicks  
Town of Caswell Beach



7017 3380 0000 8626 8311

U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

OFFICIAL USE

Certified Mail Fee	\$ 3.45
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$ .50
Total Postage and Fees	\$ 6.70
Sent To	Brian Muirphy
Street and Apt. No., or PO Box No.	405 Vale Dr.
City, State, ZIP+4®	Alexandria VA 22314

Postmark Here  
OAK ISLAND, NC 28465  
OCT 17 2018

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7017 3380 0000 8626 8328

U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

OFFICIAL USE

Certified Mail Fee	\$ 3.45
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$ .50
Total Postage and Fees	\$ 6.70
Sent To	Gary & Judy Studer
Street and Apt. No., or PO Box No.	217 Cornwell Beach Rd.
City, State, ZIP+4®	Cornwell Beach NC 28465

Postmark Here  
OAK ISLAND, NC  
OCT 17 2018

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

RECEIVED

OCT 17 2018

DCM WILMINGTON, NC

**Goebel, Christine A**

---

**From:** Chad Hicks <chicks@caswellbeach.org>  
**Sent:** Thursday, November 1, 2018 3:57 PM  
**To:** 'gary.studer@yahoo.com'  
**Cc:** Goebel, Christine A; Justin Humphries  
**Subject:** [External] Caswell Beach Variance Request - Meeting Venue Change

**CAUTION:** External email. Do not click links or open attachments unless verified. Send all suspicious email as an attachment to Report Spam.

Dear Gary & Judy Studer

RE: Caswell Beach CAMA Coastal Resources Commission (CRC) variance request; change of meeting location.

We have been informed that the venue for the CRC meeting at which the Town of Caswell Beach CAMA variance request (for our Dune Infiltration project) will be held, has been changed from the Double Tree Hotel in Atlantic Beach to: **Brick Landing Plantation in Ocean Isle Beach.**

The Double Tree hotel will be closed until Spring due to damage from Hurricane Florence.

On the current draft agenda for the CRC meeting, variances are scheduled to start around 3pm on Tuesday, November 27<sup>th</sup> and will proceed in the order received (Zito, Lampley, Town of Caswell Beach) if all 3 go forward.

If the times or venue change again before November 27<sup>th</sup> we will notify you by email.

Thank you so very much for your understanding and assistance.

Cordially,  
Deborah

Deborah Ahlers, Mayor  
On behalf of Chad Hicks, Town Manager

PS Chad is out of the country on vacation

**Goebel, Christine A**

---

**From:** Chad Hicks <chicks@caswellbeach.org>  
**Sent:** Thursday, November 1, 2018 3:53 PM  
**To:** Murphy, Brian @ Washington DC  
**Cc:** Goebel, Christine A; Justin Humphries  
**Subject:** [External] Caswell Beach Variance Request - Meeting Venue Change

**CAUTION:** External email. Do not click links or open attachments unless verified. Send all suspicious email as an attachment to Report Spam.

Dear Brian Murphy

RE: Caswell Beach CAMA Coastal Resources Commission (CRC) variance request; change of meeting location.

We have been informed that the venue for the CRC meeting at which the Town of Caswell Beach CAMA variance request (for our Dune Infiltration project) will be held, has been changed from the Double Tree Hotel in Atlantic Beach to: **Brick Landing Plantation in Ocean Isle Beach.**

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Cordially,  
Deborah

Deborah Ahlers, Mayor  
On behalf of Chad Hicks, Town Manager

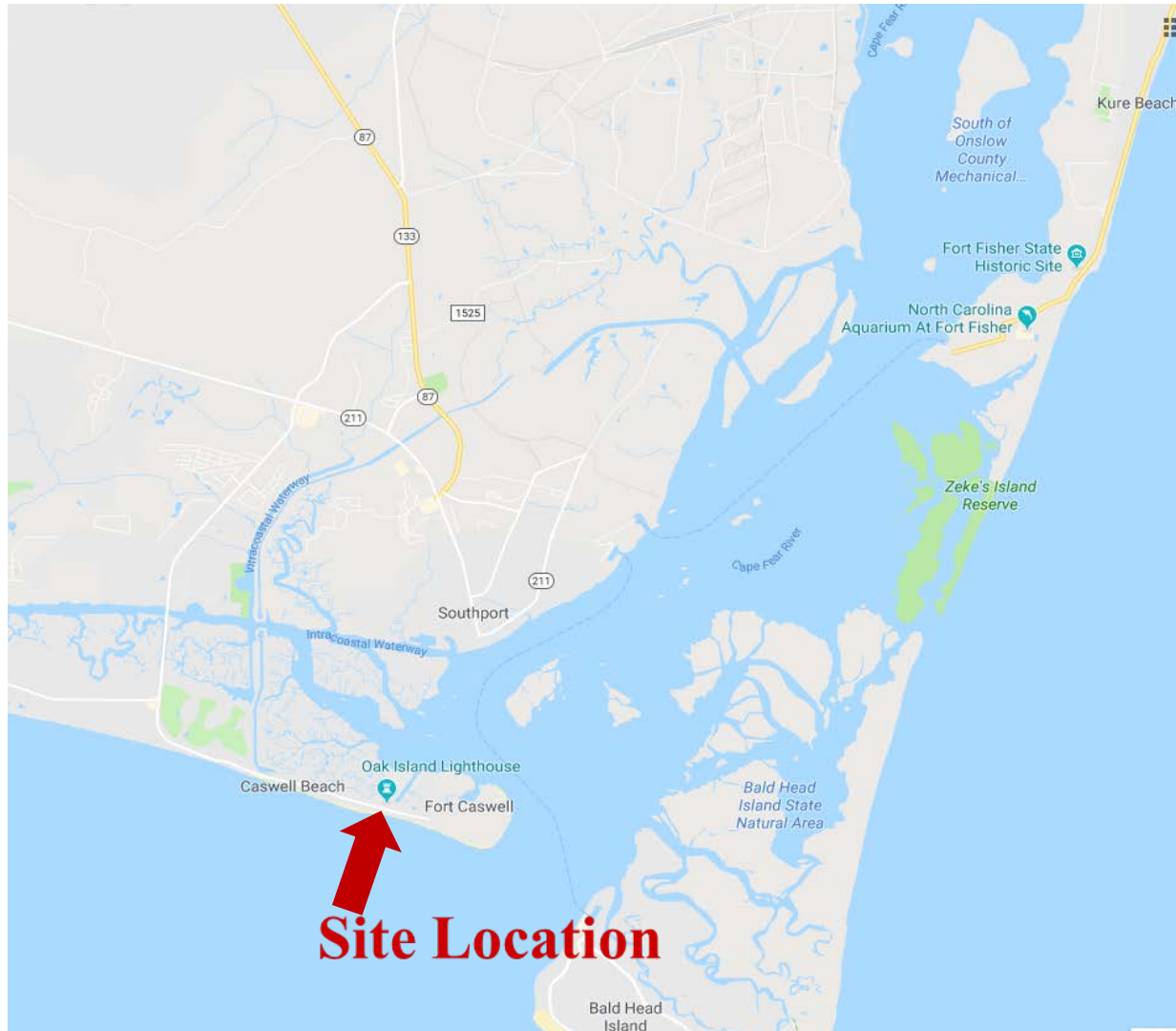
PS Chad is out of the country on vacation



# Caswell Beach Variance Request

101

November \_\_\_\_, 2018



**Site Location**

*Department of Environmental Quality*





View of Site Parcel Boundary  
Google Earth



102

1100

Caswell Beach Rd

-60 ft. setback from the  
Static Line

Existing Town Public  
Beach Accessway

Existing Feb. 2009 Static Line

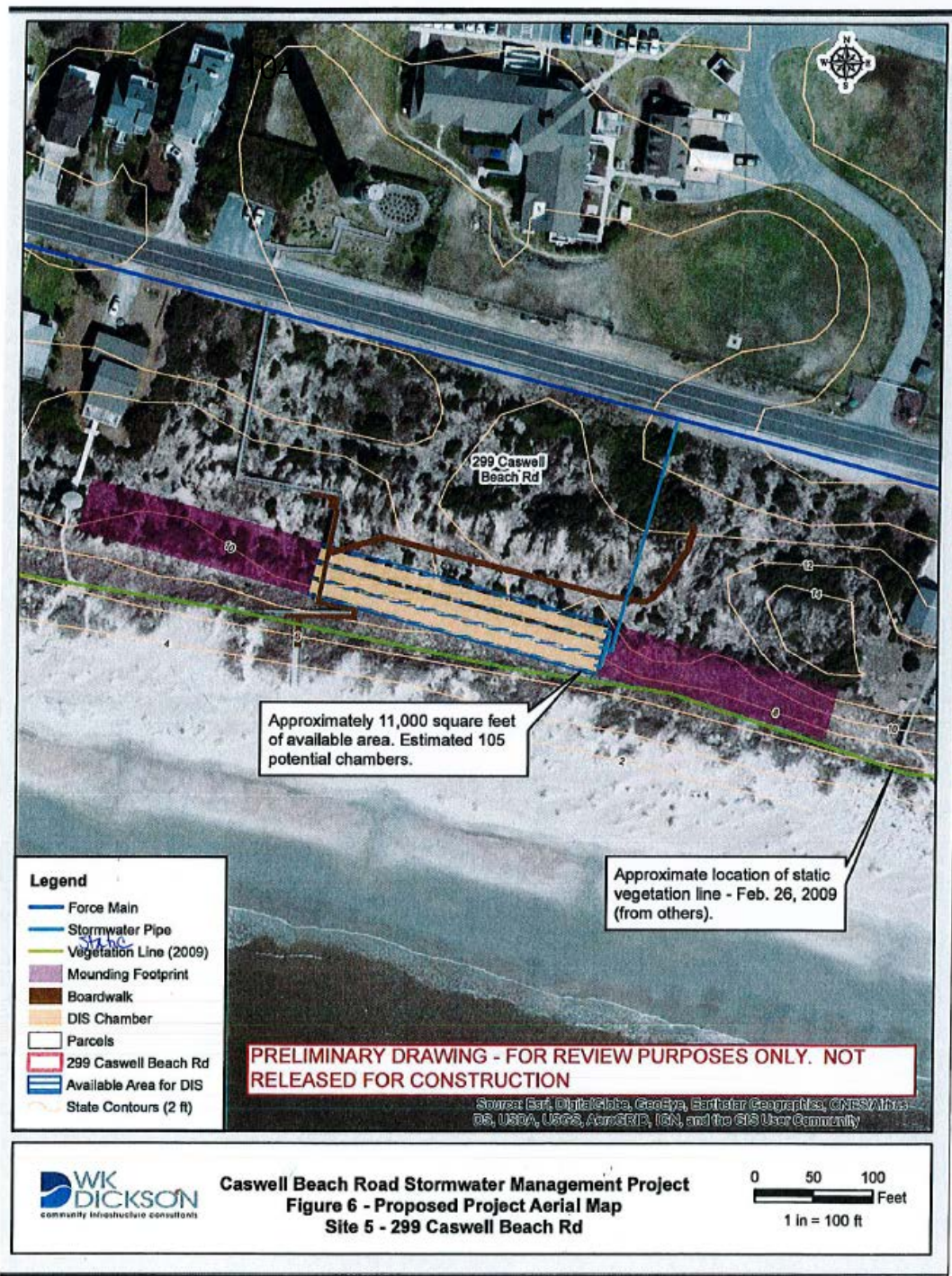


View of Project Site  
NOAA Photography  
September 17, 2018



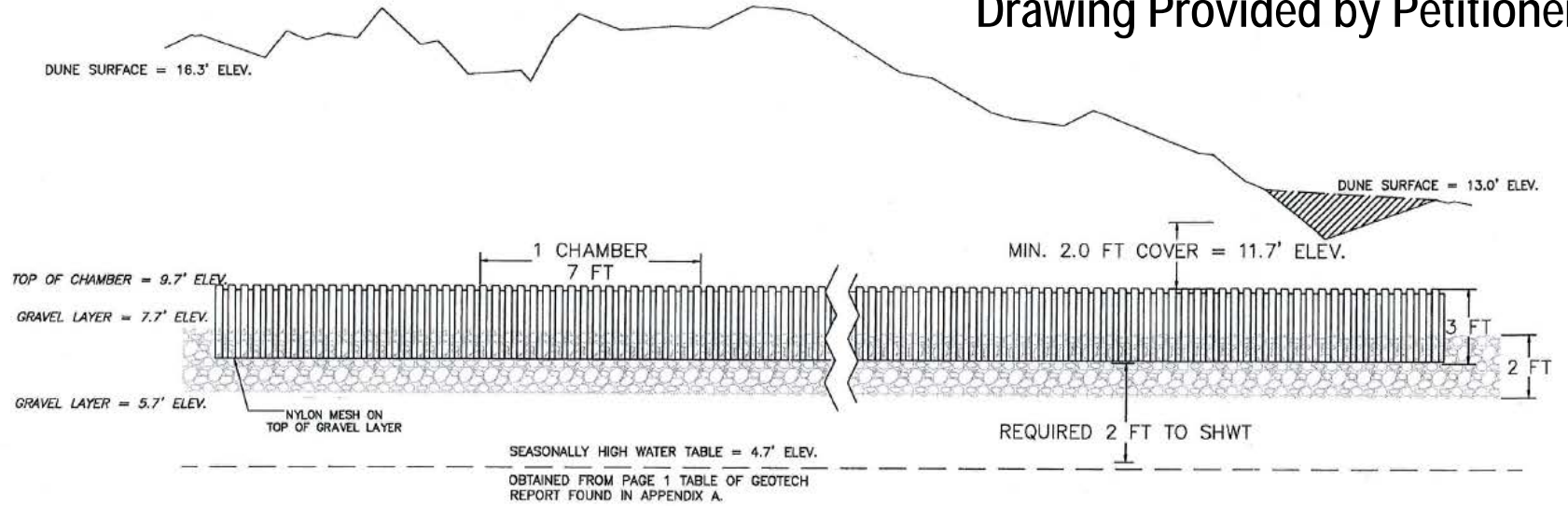
Site Location

# Proposed Dune Infiltration Project CAMA Permit Denial 18-01

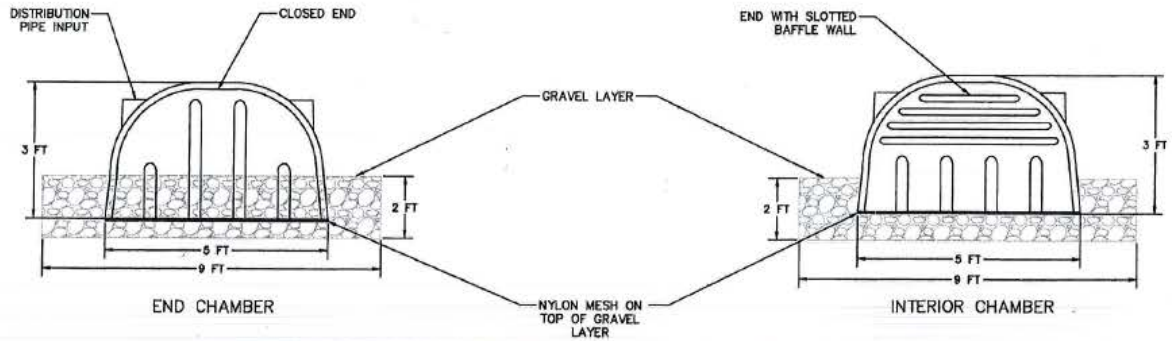




# Proposed Infiltration Chambers Drawing Provided by Petitioner



NOTES:  
1. THE ELEVATIONS SHOWN ON THIS FIGURE ARE APPROXIMATE AND ARE PROVIDED FOR RELATIVE REFERENCE ONLY. THESE ELEVATIONS AND MEASURE-DOWNS WERE OBTAINED FROM COUNTY GIS DATA SOURCE AND SHOULD NOT BE USED FOR ANY DETAILED DESIGN OR INSTALLATION ACTIVITIES. IT IS RECOMMENDED THAT A MORE DETAILED SITE SURVEY BE PERFORMED BY A NC LICENSED PROFESSIONAL LAND SURVEYOR BEFORE ANY DESIGN PLANS ARE GENERATED.



PRELIMINARY DRAWING- FOR REVIEW PURPOSES ONLY. NOT RELEASED FOR CONSTRUCTION.

RECEIVED  
OCT 16 2018

DCM WILMINGTON, NC  
NTS



FIGURE 10 - SITE 5  
APPROXIMATE DUNE INFILTRATION SYSTEM PROFILE  
CASWELL BEACH ROAD STORMWATER MANAGEMENT PROJECT



720 CORPORATE CENTER DRIVE  
RALEIGH, NC 27607  
(919) 782-0485  
NC LICENSE NO. F-0374  
Office Locations:  
North Carolina  
South Carolina  
Georgia



# View of Flooding on Caswell beach Road Post-Hurricane Matthew and Florence Photos Provided by Petitioner

196



*Department of Environmental Quality*

**View facing east of Flooding on Caswell beach Road  
Post-Hurricane Florence  
Photos Provided by Petitioner**





**View of Project Site Facing East**  
**DCM Photos**  
**11/6/18**

108





**View of Project Site Facing Southeast**  
**DCM Photos**  
**11/6/18**

109





**View of Project Site Facing Southwest** 110  
**DCM Photos**  
**11/6/18**



**NC COASTAL RESOURCES COMMISSION (CRC)**

**April 10-11, 2018**

**Sea Trail Convention Center**

**Sunset Beach, NC**

**Present CRC Members**

Renee Cahoon, Chair

Neal Andrew, Vice-Chair

Larry Baldwin

Rick Catlin

Denise Gibbs

Robert High

Doug Medlin

Phil Norris

Russell Rhodes

Jamin Simmons

Bill White

**Present CRAC Members**

Greg Rudolph, Chair

Spencer Rogers, co-Vice Chair

Bobby Outten, co-Vice Chair

Candy Bohmert

John Brodman

Jett Ferebee

David Kellam

Johnny Martin

Ike McRee

Mike Moore

Kris Noble

Todd Roessler

Dave Weaver

**Present from the Office of the Attorney General**

Mary L. Lucasse

**Present from the Department of Environmental Quality, Office of the General Counsel**

Drew Hargrove

**CALL TO ORDER/ROLL CALL**

Renee Cahoon called the meeting to order at 3:15 p.m. on April 10, 2018 reminding the Commissioners of the need to state any conflicts due to Executive Order Number 34 and the State Government Ethics Act. The State Government Ethics Act mandates that at the beginning of each meeting the Chair remind all members of their duty to avoid conflicts of interest and inquire as to whether any member knows of a conflict of interest or potential conflict with respect to matters to come before the Commission. If any member knows of a conflict of interest or a potential conflict of interest, please state so when the roll is called.



Angela Willis called the roll. Greg Lewis was absent. Larry Baldwin stated he would recuse himself from the Hunter Variance Request (CRC VR 18-02). Based upon this roll call Chair Cahoon declared a quorum.

### **CHAIR COMMENTS**

Chair Cahoon thanked Dare County for the use of their facility. Statements of Economic Interest are due to the State Ethics Commission by April 16. There will not be a July CRC meeting. If we have variances that need to be heard; we can have a phone conference to discuss those subject to the open meetings law. This decision is based on the high cost of travel.

Neal Andrew stated the Masonboro Island Coastal Reserve and existing oyster leases were discussed at the last meeting. Since that time there have been additional meetings and conversations regarding the existing oyster leases and The Natural Heritage Program's claim that it has jurisdiction over Masonboro Island Reserve. It is my opinion that jurisdiction over the oyster leases at Masonboro Island should be with DEQ and DCM. We met with DEQ and DNCR in Raleigh and have had preliminary meetings with some of the members of the General Assembly from southeastern North Carolina to discuss ways to clarify who has jurisdiction over the Coastal Reserve sites. The Natural Heritage Program rules are similar to the rules that reside within the Coastal Reserve so there seems to be some duplication. Rebecca has been working with the Natural Heritage Program to update a Memorandum of Understanding about who is going to manage and have jurisdiction over the sites.

### **VARIANCES**

#### **Hunter (CRC VR 18-02), Ocean Isle Beach, 30' Buffer**

#### **Drew Hargrove, Esq./Debbie Wilson; Todd Roessler, Esq.**

*\*\*Larry Baldwin recused himself from discussion or voting on this variance request.*

Debbie Wilson gave an overview of the site. Drew Hargrove, DEQ General Counsel, represented DCM staff and stated petitioner West Hunter owns property in Ocean Isle Beach. The property is adjacent to a manmade canal on two sides. The property is within the Coastal Shorelines AEC. Therefore, the first 30' landward from normal high water is subject to the Commission's 30-foot buffer rule which limits impervious surfaces and development within the buffer. Petitioner applied for a CAMA Minor Permit to construct a two-story piling supported residence. The Ocean Isle Beach LPO denied petitioner's permit application as a portion of the proposed house extended into the 30-foot buffer along the south side of the lot contrary to 15A NCAC 7H .0209(f)(10). Mr. Hargrove reviewed the stipulated facts of this variance request and stated staff and petitioner agree on all four statutory criteria which must be met to grant the variance request.

Todd Roessler, Esq. represented the petitioner and stated Petitioner is requesting two variances. The first is a request to vary the requirement of seeking a variance from the local government before asking for a variance from the Commission. The second seeks relief from the 30-foot buffer since strict application of this rule would only leave a 16-foot wide building footprint. Petitioner has proposed installing an engineered stormwater system on the lot.

**Neal Andrew made a motion to grant a variance from the procedural requirement of seeking a local variance. Phil Norris seconded the motion. The motion passed unanimously (High, Catlin, Medlin, Andrew, Cahoon, Simmons, Rhodes, White, Norris, Gibbs).**



**Neal Andrew made a motion that petitioner has shown that strict application of the development rules, standards, or orders issued by the Commission cause the petitioner an unnecessary hardship. Phil Norris seconded the motion. The motion passed unanimously (High, Catlin, Medlin, Andrew, Cahoon, Simmons, Rhodes, White, Norris, Gibbs).**

**Neal Andrew made a motion that petitioner has shown that hardships result from conditions peculiar to the property. Phil Norris seconded the motion. The motion passed unanimously (High, Catlin, Medlin, Andrew, Cahoon, Simmons, Rhodes, White, Norris, Gibbs).**

**Neal Andrew made a motion that petitioner has shown that hardships do not result from actions taken by petitioner. Phil Norris seconded the motion. The motion passed unanimously (High, Catlin, Medlin, Andrew, Cahoon, Simmons, Rhodes, White, Norris, Gibbs).**

**Neal Andrew made a motion that petitioner has shown that the variance request will be consistent with the spirit, purpose, and intent of the rules, standards, or orders issued by the Commission; will secure the public safety and welfare; and preserve substantial justice. The variance request should be conditioned to include the four standard stormwater conditions. Bill White seconded the motion. The motion passed unanimously (High, Catlin, Medlin, Andrew, Cahoon, Simmons, Rhodes, White, Norris, Gibbs).**

This variance request was granted.

**Sackett (CRC VR 18-03), Nags Head, Oceanfront Setback  
Drew Hargrove, Esq./Yvonne Carver; Charles Evans, Esq.**

Yvonne Carver gave an overview of the site. Drew Hargrove, DEQ General Counsel, represented staff and stated petitioner Dean Sackett owns a residence in South Nags Head. The property is located within the Commission's Ocean Hazard Area of Environmental Concern. This area of Nags Head is subject to the static line following a large-scale beach nourishment project in 2011. Petitioner filed a CAMA Minor Permit application seeking to construct a 72.33 square foot addition to the bottom floor of the piling-supported residence under an existing covered porch. The Town of Nags Head LPO denied petitioner's CAMA Minor Permit application as the proposed addition does not meet the applicable 105' setback from the static line. Mr. Hargrove reviewed the stipulated facts of this variance request and stated staff and petitioners disagree on all four statutory criteria which must be met to grant the variance.

Charles Evans represented the petitioners and reviewed the stipulated facts which petitioners contend support the granting of this variance request.

**Neal Andrew made a motion that petitioner has shown that strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships. Bill White seconded the motion. The motion passed with ten votes in favor (High, Catlin, Medlin, Baldwin, Andrew, Simmons, Rhodes, White, Norris, Gibbs) and one opposed (Cahoon).**

**Neal Andrew made a motion that petitioner has shown that hardships result from conditions peculiar to the petitioner's property. Bill White seconded the motion. The motion passed with ten votes in favor (High, Catlin, Medlin, Baldwin, Andrew, Simmons, Rhodes, White, Norris, Gibbs) and one opposed (Cahoon).**

**Neal Andrew made a motion that petitioner has shown that hardships do not result from actions taken by the petitioner. Bill White seconded the motion. The motion passed with ten votes in favor (High, Catlin, Medlin, Baldwin, Andrew, Cahoon, Simmons, White, Norris, Gibbs) and one opposed (Rhodes).**

**Neal Andrew made a motion that petitioner has shown the variance request will be consistent with the spirit, purpose and intent of the rules, standards, or orders issued by the Commission; will secure the public safety and welfare; and preserve substantial justice. Bill White seconded the motion. The motion passed with ten votes in favor (High, Catlin, Medlin, Baldwin, Andrew, Simmons, Rhodes, White, Norris, Gibbs) and one opposed (Cahoon).**

This variance request was granted.

#### **LEGAL UPDATES**

##### **Update on Litigation of Interest to the Commission**

**Mary Lucasse**

Mary Lucasse, CRC Counsel, reviewed the CRC and DCM cases which are currently active. *(handout provided and available from DCM)*

#### **MINUTES**

**Neal Andrew made a motion to approve the minutes of the February 2018 Coastal Resources Commission meeting. Larry Baldwin seconded the motion. The motion passed unanimously (Cahoon, Andrew, Baldwin, Catlin, Gibbs, High, Medlin, Norris, Rhodes, Simmons, White).**

#### **ACTION ITEMS**

##### **Fiscal Analysis 7H .0308, .1704, .1705 Temporary Erosion Control Structures (CRC 18-11)**

**Mike Lopazanski**

Mike Lopazanski stated the Commission has approved proposed amendments to the rules governing the use of temporary erosion control structures. The fiscal analysis indicates that there will be a cost savings from this action derived from the delayed costs associated with the removal of sandbags and the elimination of the requirement to plant vegetation on top of covered bags. The fiscal analysis has been approved by DEQ and OSBM.

**Doug Medlin made a motion to approve the fiscal analysis for 15A NCAC 7H .0308, 7H .1704, and 7H .1705 for public hearing. Larry Baldwin seconded the motion. The motion passed unanimously (High, Catlin, Medlin, Baldwin, Andrew, Cahoon, Simmons, Rhodes, White, Norris, Gibbs).**

## **EXECUTIVE SECRETARY'S REPORT**

Braxton Davis, DCM Director, gave the following report:

It is good to be back in Dare County. I spent some time yesterday with our esteemed chair and then with the mayors of Duck, Kitty Hawk and Nags Head. I was also able to tour NC-12 and meet with officials from the National Park Service and US Fish and Wildlife Service to discuss current and future issues and opportunities for improved coordination across our programs. I plan to continue meeting with local officials, stakeholders, and agency partners in different locations along the coast this year, to learn how DCM can do a better job in addressing issues that are unique to each region. I will now review some highlights since your last meeting:

### **FEDERAL BUDGET**

Last month, Congress passed a spending bill that allotted \$75M for state coastal management programs nationwide, a \$5M increase over FY17 levels. You may recall the funding support letter the Commission sent to the NC Congressional Delegation last fall, which was greatly appreciated. Our congressional delegation has been very supportive of the NC coastal program and the federal coastal management program in general. We are proud to have this kind of support for our program both locally and nationally, and we will keep you posted as the FY19 budget begins to take shape.

### **REGULATORY**

On the regulatory side of DCM, we are continuing to work on several beach and inlet management-related projects, including coordination of the permit application package for the Bogue Banks programmatic long-term oceanfront shoreline management project. We have also continued to work with our partners at the Department of Transportation's Ferry Division to respond to some serious shoaling issues at some of their ferry facilities. Division staff are also meeting with DOT later this week to discuss some longer-term solutions for the ferry facility at the north end of Ocracoke Island. Notable permit actions since your last meeting include the issuance of a permit to the Town of Nags Head to carry out a beach nourishment project that is of a similar scope and scale to their very successful 2011 nourishment project, and the issuance of a permit to the Village of Bald Head to place material dredged from Jay Bird Shoals along sections of their oceanfront beaches. Additionally, the Division granted a one-time federal consistency determination to the U.S. Army Corps of Engineers to perform maintenance dredging outside of established dredge windows of the Wilmington Harbor outer bar, with the dredged material to be placed along the beachfront on Caswell Beach and Oak Island. In this case, the Corps did not receive acceptable bids for the project during the original bid process late last year. The Corps therefore requested they be allowed to carry out the project during the 2018 summer moratoria. Following significant agency coordination, the one-time request was approved. In an effort to avoid this situation in the future, we are in the process of setting up a meeting with the Corps, DOT, and other interested state and federal agencies to discuss potential long-term solutions that can help avoid or minimize the need for future dredging outside the traditional environmental windows in NC.



## **POLICY & PLANNING**

### **Offshore Energy Update**

The Division continued to work with the Department and Governor's Office on activities related to the DOI 2019-2024 Draft Proposed Oil and Gas Leasing Program. At the end of February, DCM staff participated in a BOEM open house in Raleigh, where we answered attendee questions regarding the state's role in reviewing OCS activities. Staff also provided information and assisted in the review of the Governor's comment letter on the Draft Proposed Program, which was transmitted to BOEM on March 9<sup>th</sup>.

### **Land Use Plans**

The Division received two requests, one from The Town of Beaufort and the other from Perquimans County/Town of Hertford/Town of Winfall (joint LUP), for certification of amendments to land use plans under the Commission's recent delegation of authority. On March 5, 2018, the Division granted both requests for certification based on its finding that the plans met the substantive requirements outlined within the Commission's 7B Land Use Planning Requirements; there are no conflicts evident with either state or federal law or the State's Coastal Management Program; and the elected bodies of the Towns provided opportunity for the public to provide written comment following local adoption of the plan as required by N.C.G.S. § 113A-110 and 15A NCAC 7B .0802 and .0803.

### **Public Access Grants Program**

DCM has received 21 applications from 19 local governments requesting \$2.8 million in funding from the Public Beach and Coastal Waterfront Access Program. DCM has approximately \$1 million available for access projects during this fiscal year. Local governments whose proposals are selected will be notified by Wednesday, May 9<sup>th</sup>, to submit a Final Application with more detailed project information. Prior to submitting a Final Application, the local government is required to hold a public meeting or hearing to discuss its proposal and consider comments prior to its decision to submit a Final Application for state funds. Final Applications are anticipated to be due on or before 5 p.m. on Monday, Aug. 13, 2018. All final applicants will be notified in September whether their project has been selected for funding.

### **Coastal Reserves**

- **Summer Camps** Registration ongoing, **Promoting Living Shorelines for Erosion Control – A Workshop for Real Estate Professionals** (04/13, Beaufort), **5th Annual Terrapin Tally Training** (04/14, Masonboro)
- **Earth Day Events:** The Reserve will be joining the Crystal Coast Earth Day celebrations at Fort Macon, Atlantic Beach (04/21), the Wilmington Earth Day Festival (04/22), and OBX Earth Fair in Nags Head (04/22)
- **Spring Community Paddle** (04/27): Join the reserve staff for a paddle to the Masonboro Island Reserve for an evening of fun and education! Equipment is available for rental, see the Reserve website for more details and registration.
- **Sea Turtle Volunteer Info Session & Training** (05/01): The Reserve is hosting an informational session and training for all who are interested in volunteering for the 2018 sea turtle nesting season on Masonboro Island Reserve.
- **Local Advisory Committees:** Spring local advisory committee meetings will be held in May (check Reserve website and Division press releases for info)

- **Partnership agreements:** The Reserve is currently updating a number of its partnership agreements, including developing a new agreement with the Natural Heritage Program to more explicitly outline how the Reserve and Heritage Program work together to manage the complementary Reserve and State Nature Preserve designations.
- **2018 NCSG-NCCR & NERR Coastal Research Fellow:** NC Sea Grant, the Reserve and Division co-sponsor a graduate research fellowship each year for a student to conduct work within the sites of the Coastal Reserve. The 2018 fellow is Chris Moore, a doctoral student in Biology at East Carolina University. Under the advisement of Dr. April Blakeslee, Chris will be evaluating the success of shoreline stabilization practices in restoring biodiversity.
- The Reserve's spring **Tidal Flat newsletter** coming out in May.

### Staffing News

We are excited to welcome Amanda Cannon as our receptionist in the Morehead City office. Amanda and her family live in Havelock and she has had administrative experience working for several local businesses in the Morehead City area. Our NOAA Coastal Management Fellow, Monica Gregory, is rapidly approaching the end of her time with DCM. Monica has been working on an innovative resiliency evaluation and needs assessment project with five of our local governments. She has done an outstanding job in designing a process that engaged local government staff and residents, and presented many of her results to the CRAC yesterday. This is Monica's last CRC meeting as she moves on to her new position as a coastal advocate with the nonprofit 100 Miles, in Savannah GA, in May. We greatly appreciate her work for the NC Coastal Management Program, and wish her the best as she continues her career. Finally, Sean Farrell, a field representative in our Wilmington regional office, has accepted a position with the Department of Transportation. We are going to miss Sean, but also wish him the best in his new position. We are in the process of advertising for a replacement for Sean's position.

### CRAC UPDATE

Rudi Rudolph stated the CRAC requests a speaker be lined up to speak regarding GenX. This would provide clarity on what it is, how and why it's getting into the water, and who is taking the lead on addressing it. The CRAC also reviewed and discussed rules regarding existing, public stormwater outfalls. The CRAC is recommending draft language for the Commission's consideration that allows a local government or the State to rebuild within the existing footprint of the existing stormwater outfall. This will eliminate the need to go through the major permit process.

Chair Cahoon stated a GenX presentation could be scheduled for the September CRC meeting.

Tancred Miller presented the rule amendments to the ocean outfall rules and stated these amendments are based on a request for relief from the current rules to allow the extension of stormwater outfalls. The current rules do not allow new construction seaward of the vegetation line. The Commission asked the Advisory Council to look at amending the existing rules to allow the extension of ocean outfalls. The CRAC proposes revisions to the current rules to allow local and state government through the Major Permit process and would allow outfalls to be extended and not require an additional permit to maintain the outfall within the original footprint.

**Neal Andrew made a motion to approve the amendments to the ocean outfall rules for public hearing. Denise Gibbs seconded the motion. The motion passed unanimously (High, Catlin, Medlin, Baldwin, Andrew, Cahoon, Simmons, Rhodes, White, Norris, Gibbs).**

## **BEACH AND INLET MANAGEMENT**

### **Inlet Hazard Areas (CRC 18-12)**

#### **Mike Lopazanski**

Mike Lopazanski stated the Inlet Hazard Area of Environmental Concern (AEC) is part of the Ocean Hazard AEC. These geographic areas are vulnerable to the effects of sand, wind, water, and waves. Properties located along these shorelines are at an increased risk from erosion. The Inlet Hazard Area boundaries are referenced in a report from 1978 in 7H .0304. These maps were adopted by the Commission in 1978 and amended in 1981, but have not been changed since that time. The IHA AEC is based on aerial photography. The Commission re-evaluated IHAs because the inlet areas were dramatically different than that of the oceanfront. Ultimately the CRC decided upon a statistical approach looking at past shorelines. During the public hearings, there was a lot of criticism over the statistical approach. The Commission included setbacks from the first line of vegetation and kept density restrictions, but applied the erosion rate from the adjacent Ocean Erodible Area. There has been legislative interest in the Inlet Hazard Areas and in 2012 the Commission was directed to study the feasibility of creating a new AEC for lands adjacent to the mouth of the Cape Fear River. In 2014, the Legislature removed the Inlet Hazard Area designation for any inlet that had been closed for more than 15 years which applied to Mad Inlet. The CRC removed this area from the Inlet Hazard designations. The Legislation also addressed providing access to State Ports. The Commission conducted a comprehensive Inlet Management Study which included stakeholder input, local governments, the dredging industry, USACE and geologists. The Science Panel is currently working on the Inlet Hazard Area boundaries and a deep draft port management navigation based inlet management area of environmental concern is working its way through the rulemaking process. We have met with the Army Corps of Engineers which resulted in beach bulldozing being allowed below mean high water. The current rules for the IHA require development be set back from the first line of vegetation by using the erosion rate from the adjacent ocean erodible area, density is restricted in the IHAs, and new dunes in the inlet hazard areas are prohibited. When the maps, based on the Science Panel's recommendations, come to the Commission; the Commission will need to consider development standards within these areas. The Science Panel is delineating an area of inlet influence which is larger than the areas originally depicted in the 1978 study.

### **CRC Science Panel IHA Delineation Update (CRC 18-13)**

#### **Ken Richardson**

Ken Richardson stated in 2016, the Commission issued a Scope of Work to the Science Panel to do three things: develop a methodology for calculating the shoreline change rate; look at the oceanfront shoreline and determine where the transition point is between the inlet processes dominating the location of the shoreline versus the oceanfront; and provide the Commission with an updated set of maps and recommendations. There are a lot of challenges when looking at inlets. There needs to be a methodology that captures the migrating and oscillating inlets. The maps should be ready for presentation to the Commission in September. The Science Panel is looking at a hybrid vegetation line which represents a composite of the most landward position of the vegetation line. The Panel has looked at 50 years of data. The shoreline change rates will

use a linear regression methodology. Some of the statistical data that we are getting will allow us to use standard deviation and find the point along the shoreline where the inlet processes no longer dominate the oceanfront processes. There is also a 30- and 90-year risk line. This was developed by the Science Panel because there was discussion on zoning the inlet hazard area. The Science Panel will identify in their report where expert or professional judgment has been used to define the boundaries. In summary, the analysis has been done, the maps are ready for the Science Panel's review, and at the next Science Panel meeting the Panel should be able to approve and make recommendations to the Commission at the September meeting.

Sea Grant has been working on a web based program to demonstrate the changes that inlets have gone through over time. Spencer Rogers stated the site can be accessed at: [goncsu.edu/inletatlas](http://goncsu.edu/inletatlas). The "time machine" has a customized list of inlets in North Carolina. These are time lapsed photographs of every inlet in North Carolina between 1984 and 2016.

### **State Port Inlet Management AECs (CRC 18-14)**

#### **Heather Coats**

Heather Coats stated the Commission approved this AEC at the September 2016 meeting. However, legislation was passed in 2017 that changed the General Assembly's prior direction on temporary erosion control structures. Since this legislation could impact the utility of this AEC, the Commission put its work on this AEC on hold until the temporary erosion control amendments were finalized. In 2012, legislation was passed that directed the CRC to study the feasibility of creating a new AEC for lands adjacent to the Cape Fear River. The Commission was directed to identify regulatory concerns and strategies for creating a more efficient regulatory framework for this area. The final decision of the Commission was to recognize that there are issues that were identified at the Cape Fear Inlet, but that these issues may also apply to other inlets. The recommendation from the Commission was to take a more inclusive study of all inlets. The results of the inlet management study identified short and long-term priorities. One recommendation was the development of a new AEC for the State's two deep-draft inlets. During this time, legislation was passed to remove these inlets from the Inlet Hazard Area designations. DCM met with the local governments adjacent to these two inlets to identify their priorities for the rules changes. Staff drafted rules based on the Commission's objectives and local government input which included beneficial use of dredged materials requiring sand to go onto the beach or the nearshore area. The draft rules were sent to the local governments, the Army Corps of Engineers, State Ports Authority, Fort Macon and the National Park Service. Almost immediately we heard back from the Army Corps of Engineers regarding the beneficial use component of the rule. There was a lot of concern about unanticipated impacts from creating this rule. It was decided to create a working group to establish cost-sharing agreements between the Corps, local governments, and the State. For the boundaries, Carteret County proposed the inlet hazard areas as the AEC boundaries with the waterward extent including the ebb tidal delta. Caswell Beach felt the boundary should include Caswell Beach in its entirety and would terminate at the tower off Fort Caswell. Bald Head Island wanted the AEC to include all of South Beach. If the Commission approves the rule language and maps, then the next step will be the development of the fiscal analysis.

Larry Baldwin stated that State government should be added to 7H .0313(b) and (c) to allow the same activities as local governments.



**Neal Andrew made a motion to approve the rule language and maps for the State Port Inlet Management AEC, with the addition of “State Government” in 7H .0313, for public hearing. Phil Norris seconded the motion. The motion passed unanimously (High, Catlin, Medlin, Baldwin, Andrew, Cahoon, Simmons, Rhodes, White, Norris, Gibbs).**

### **Review of Ocean Hazard AEC Setback Line (CRC 18-15)**

#### **Ken Richardson**

Ken Richardson stated the Ocean Erodible Area by definition is the area where there exists a possibility of excessive erosion and significant shoreline fluctuation. This area is calculated by multiplying the setback factor times 90. On the oceanfront, there are many lines to consider in the management of oceanfront development. Setbacks are not determined by the shoreline change rate at each individual transect. Additional data processing is required in order to establish setback factors. Raw shoreline change rate data are smoothed using a 17-point running average. Smoothing effectively filters out shore-term dynamic shoreline phenomena such as beach cusps. Smoothed raw data are then blocked. Per CRC rules, the minimum setback factor is two feet per year. Transects with erosion values less than two feet per year are assigned a blocked rate value of two. Construction setback is measured landward from the first line of stable and natural vegetation, or the static vegetation line, whichever is applicable. The setback is based on the size of the structure and the erosion rate. Building in accordance with setbacks does not guarantee that the ocean will never threaten a structure, but it reduces the risk of property loss, reduces the encroachment of development onto public beaches, and can reduce the amount of tax money spent responding to problems that are exacerbated by poorly sited development. Where that has been no beach fill, the setback is measured from the first line of stable and natural vegetation using the graduated setback. Where there has been a beach fill project of less than 300,000 cubic yards, the setback is also measured from the first line of stable and natural vegetation using the graduated setback. Where a beach fill project was greater than 300,000 cubic yards the static vegetation line prevails. With a static vegetation line, the community can measure setbacks from the static vegetation line, or the CRC can approve a static line exception, or a development line. In determining which reference feature should be used to measure the setback, first ask if the community has a static vegetation line. If the answer is no, then measure from the first line of stable and natural vegetation. When beach fill projects are maintained there is a possibility that vegetation could grow seaward of the static vegetation line. In these cases, the CRC can grant a static vegetation line exception. The community must provide the CRC with a 30-year plan to maintain the initial beach fill project. The CRC reauthorizes these exceptions every five years. When the static vegetation line is applied, no portion of new construction can be oceanward of the landward most adjacent structure. No pools can be oceanward of the static vegetation line and structures greater than 5,000 square feet must meet the minimum setback of 120 feet or 60-times the shoreline erosion rate at the time of permit issuance whichever is greater. The development line is not the same as the static line exception. It is not used as a reference feature to measure setbacks. It is a line established by local government representing the seaward-most allowable location of oceanfront development. In areas that have development lines approved by the CRC, the vegetation line or measurement line shall be used as the reference point for measuring oceanfront setbacks instead of the static vegetation line. In no case shall new habitable development be sited oceanward of the development line and in no case shall the development line be created or established below the mean high water line. The setback

distance is determined by both the size of the development and the long-term erosion rate using the graduated setback. The static line exception provision that allows structures greater than 5,000 square feet to measure the setback based on 60-times the erosion rate cannot be used where a development line exists. Development line requests apply to the entire large-scale project area and can be extended to include an entire town's oceanfront jurisdiction. The development line utilizes the adjacent neighbor's site line approach and where development is not linear, an average line of construction may be used on a case-by-case basis. In no case, can a development line be established seaward of the seaward-most structure. Existing structures seaward of the development line may not be replaced if damaged more than 50 percent and the static vegetation line still applies to pools as they cannot be placed oceanward of the static line.

### **Hwy 12/Bonner Bridge/Hatteras Island Nourishment Projects Update**

#### **Jerry Jennings, NCDOT Division 1 Engineer**

Jerry Jennings stated from Kitty Hawk to Ocracoke there are historical hot spots, a few new areas of concern and three active projects: Bonner Bridge, Pea Island Bridge, and Rodanthe Bridge. The Bonner Bridge replacement bridge crosses Oregon Inlet immediately to the west of the existing bridge. The existing Bonner Bridge opened in 1963. Planning for the replacement of the bridge began in 1990. A contract was awarded to replace the bridge in 2011. There was a legal challenge and then a settlement agreement was reached to replace the bridge in 2015. Construction of the new bridge began in March 2016. The current bridge only has one navigation span with a width of 130 feet and the new bridge will have nine navigation spans each with about 300 feet in length. The new bridge uses a lot of precast concrete elements and will be barged or trucked to the site. It is almost completely stainless reinforcing steel and high durability concrete to protect against corrosion to provide a longer life. The work trestle on the north end of the bridge will be 6,300 feet in length. The demolition material from the old bridge will be used at offshore reef sites and a portion of the existing bridge will be retained at the south end. Another unique facet of this project is the SAV mitigation reef. As part of the bridge project we are impacting SAV and in order to mitigate for those impacts, this structure was constructed in the Sound to create a 50-acre wave shadow to provide habitat for SAV. The bridge project is about 79% contractually complete and about 68% of the onsite construction is completed. Some of the activities at the site are taking place 24 hours per day. The bridge is scheduled to open in late 2018 and the contract completion date, to include demolition of the old bridge, should be completed by fall 2019.

The Pea Island Bridge is 4-5 miles south of Bonner Bridge, located in the historical area of New Inlet. A breach formed during Hurricane Irene in August 2011 and a 660-foot steel bridge was constructed. Further damage occurred during Hurricane Sandy in October 2012 and planning began for a long-term solution. A contract was awarded in November 2015 and includes ½ mile long concrete structure. Onsite construction began in March 2016. The bridge opened to traffic in November 2017 and was named the Captain Richard Etheridge Bridge. The bridge is complete except for some final paving and paving marks.

The Rodanthe Bridge is also known as Mirlo Beach Bridge or S-Turns. This is a hot spot that has been a problem for years. A breach formed during Hurricane Irene in August 2011. The roadway was reconstructed and sandbags were placed. There was further damage from Hurricane Sandy in October 2012. A beach nourishment project was completed in September 2014, but there has

been extensive overwash during the recent nor'easters. Planning for a long-term solution has been underway for several years. The preferred alternative was selected in June 2015 and a Record of Decision was approved in December 2015. This preferred alternative is a 2.4-mile jug handle design. A contract was awarded in January 2017 and design and permitting are currently underway. Onsite construction will begin in summer 2018 with completion scheduled by 2020.

In Kitty Hawk, there are several projects to install or extend sandbags, reconstruct dunes, and rebuild roadway. The recent beach nourishment by the Town and County has provided significant protection to the roadway. The recent nor'easters caused minimal problems. The Canal Area and Birdwatcher Area have merged into one large site extending over three miles. The dunes are very unstable and have minimal vegetation. The combination of windblown sand and overwash are impacting the roadway, but there has been no pavement damage. This area requires almost continuous maintenance to keep sand off of the roadway and flooding of the roadway occurs regularly when overwash or heavy rain is trapped inside the dunes. This area is within the scope of the Bonner Bridge, but no project is currently funded. The area south of Avon Pier is becoming an emerging problem. Impacts to NC 12 have been limited to flooding to date due to the distance from the ocean. Overwash is overwhelming the existing drainage infrastructure along NC 12. The greatest impacts are to secondary roads and private properties east of NC 12. Buxton is a historical hot spot and a feasibility study was completed in 2016. A wide range of options were evaluated. No projects are currently funded in our transportation plan. The recent Dare County beach nourishment project provided a significant benefit to this area. There are soundside concerns southward towards Canadian Hole. We will coordinate with DCM and the National Park Service regarding options available. This is a very narrow part of the island. Hatteras Village is another historical hot spot and a feasibility study was completed in 2016. A wide range of options have been evaluated, but there are no projects currently funded in the transportation plan. There were minimal impacts from the recent weather events. With the exception of some dune maintenance this area has remained fairly stable with relatively minimal problems since Hurricane Isabel in 2003. A feasibility study was completed for Ocracoke in 2016 and a wide range of options were evaluated, but no projects are currently funded under the transportation plan. The biggest challenge here is that there is very little distance between the road and the ocean. Dune maintenance continues with the compatible sand from ferry dredge spoil site when needed and available. The Ocracoke South Dock is a new problem related to the ongoing changes with Hatteras Inlet. Short term improvements include sandbags and relocation and reconstruction of pavement. The Ferry Division has some planned dredging of some of the channel blockages in the area, and we are looking at some longer-term options that may be available. There are currently no projects funded in the current transportation plan. Progress is being made on Highway 12 and we appreciate the partnership and cooperation that we get from the Division of Coastal Management.

#### **PUBLIC INPUT AND COMMENT**

Dave Dawson of the Cape Hatteras Motel thanked Dare County for the recent beach nourishment and discussed beach stabilization options and the advantages of having a flat beach versus a dune.

**OLD/NEW BUSINESS**

Jamin Simmons stated he had a conversation with Ray Tooley, Hyde County, and the issue is not about CAMA rules, but upstream hydraulic trespass that would need some legislative action. Hyde County residents would appreciate a letter of support from the Commission.

Chair Cahoon appointed Mike Lopazanski as hearing officer for the public hearings.

**PUBLIC HEARINGS**

**15A NCAC 7H .0308 Specific Use Standards & 7K .0103 Maintenance and Repair (Dune Rules)**

Mike Lopazanski stated these amendments will offer flexibility in the ways that oceanfront sand dunes are maintained and managed and how accessways are constructed. These amendments require that sand remain on a lot to the maximum extent practicable, allow distribution of sand to the crest of a frontal dune, allow removal of sand from around structures provided it remains in the Ocean Hazard AEC, allow accessways to cross frontal dunes, preserve the volume of dunes while allowing access.

Steve Smith, Topsail Beach Commissioner, commented on Topsail Beach's concerns regarding the dune rules.

Cliff Ogburn, Nags Head Town Manager, commented on the improvements made in the amendments regarding Hatteras Ramps.

**15A NCAC 7K .0208 Single Family Residences Exempted (LPO Authority)**

These amendments correct the inconsistency with other exemptions and with the EMC's coastal stormwater rules.

No comments received.

**15A NCAC 7H .0209 Coastal Shorelines (Stormwater Correction)**

These amendments correct a conflict between the CRC's coastal shorelines rules and the EMC's coastal stormwater rules.

No comments received.

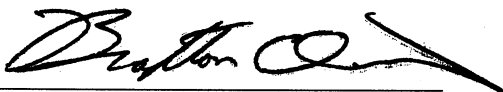
**15A NCAC 7B .0802 Public Hearing and Local Adoption Requirements & 7B .0803 Certification and Use of the Plan (CRC Delegation of Certification)**

These amendments streamline the land use plan certification process and delegates certification authority to the Division Director.

No comments received.

With no further business, the CRC adjourned.

Respectfully submitted,



Braxton Davis, Executive Secretary



Angela Willis, Recording Secretary





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**CRC-18-16**

August 30, 2018

**MEMORANDUM**

**TO:** Coastal Resources Commission

**FROM:** Mike Lopazanski

**SUBJECT:** Periodic Review of Existing Rules - Fiscal Analysis & Re-adoption Schedule

You may recall from last year that the Division has completed the public comment phase of the review for 15A NCAC 7H, 7I, 7J, 7K, 7L and 7M as to their classification as either “necessary with substantive public interest,” “necessary without substantive public interest” or “unnecessary.” This review is in compliance with the General Assembly mandate for the “Periodic Review and Expiration of Existing Rules” section of the APA (G.S. § 150B-21.3A). The Division received six public comments, all supportive of the classification of the rules.

At the July 2017 meeting, the CRC accept the draft report, with no amendments, as final for submission to the Rules Review Commission (RRC). The RRC approved the report on January 25, 2018 and forwarded it to the Joint Legislative Administrative Procedure Oversight Committee (APOC) for consultation. The final determination on an agency’s rules becomes effective when the APOC reviews the report or on the 61<sup>st</sup> day after having received the report from the RRC if the APOC does not meet. The APOC may disagree with the Commission’s determination and recommend to the General Assembly that the agency conduct a review of the rule the following year. As the APOC did not meet, the classification of the rules has become final and your rules are now eligible for re-adoption.

**Effect of Final Determination**

Rules designated as “necessary without substantive public interest” will remain in the NC Administrative Code and rules designated as “unnecessary” will be removed. Rules designated as “necessary with substantive public interest” must be re-adopted as if they were new rules following the usual rulemaking procedures. If the rules are not re-adopted, they will be removed from the Administrative Code.



## Schedule for Review of CRC Rules

With the APOC default approval of the report, the CRC may now publish the rules for public comment and begin the re-adoption process according a schedule negotiated with the RRC. Per the RRC rules, the Division can negotiate the schedule for re-adoption of rules depending on the number of rules and complexity of amendments. Given the frequency of amendments to the Commission's rules as a normal course of business, Staff is proposing a one-year re-adoption schedule with no rule amendments being proposed through this process. With the Commission's approval, Staff will prepare a notice of text and begin the 60-day public comment with the intent of having you re-adopt your rules at one of the first meetings in 2019. This will allow all of the rules to have the same re-adoption date and therefore be on the same schedule to repeat the Periodic Review Process in 10 years per the APA. Should public comment necessitate amendment of individual rules, the one-year schedule should allow adequate time to address any proposed changes.

As a reminder, 19 rules were classified as unnecessary due to the rules being old, no longer applicable, containing only introductory language, reiterating statute or generally superfluous. The majority of the rules (226 of 267) are designated as *Necessary With Substantive Public Interest* as they contain a directive, requirement or impose a standard. The remainder (22) have been designated as *Necessary Without Substantive Public Interest* as they contain management objectives, significance statements, are minor procedures or contact information.

Also attached is the accompanying fiscal analysis of the re-adoption. Since the proposed changes are administrative in nature, DCM does not believe that any regulated party will incur additional costs as a result of this action. The re-adoption does not require any affected party to take any specific action, and does not affect permitting costs nor add any additional regulatory burden.

These re-adoptions of the rules will have no impact on local governments. DCM does not expect any change in permits issued or the cost to secure permits.

Pursuant to G.S. 150B-21.4, the agency reports that the proposed re-adoption will not affect environmental permitting for the NC Department of Transportation (NCDOT).

The proposed re-adoption does not change the types of activities that are subject to CAMA permitting, nor will they affect the number of permit applications submitted for development. There will be no impact on DCM permit receipts, and DCM does not anticipate any fiscal impacts.

DCM anticipates the effective date of these rules to be May 1, 2019.

I will review the details of this process at our upcoming meeting in Wilmington.



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September 4, 2018

**MEMO TO:** Coastal Resources Commission

**FROM:** Doug Huggett  
Manager, Major Permits Section

**SUBJECT:** Major Permit Renewals (CRC-18-17)

As currently written, 15A NCAC 07J .0403 requires that all issued Major permits expire on December 31<sup>st</sup> of the third year following permit issuance. For example, all Major permits issued in 2018 carry an expiration date of December 31, 2021. 15A NCAC 07J .0404 allows for one relatively automatic 2-year permit renewal, with additional renewals available for projects where substantial development, either within or outside the Area of Environmental Concern, has begun and is continuing on a permitted project.

The number of active CAMA Major permits is growing each year, as new permits are issued and permits for existing long-term development projects (i.e. subdivisions, large-scale-commercial development, multi-phased beach nourishment projects, maintenance dredging projects) continue to be renewed. The expanding number of active projects is leading to ever-increasing work loads for Division staff, as the number of permit renewals that must be processed is increasing each year. The Division therefore suggests the Commission consider the following changes to the Rules governing permit renewals:

- a) **Lengthen the initial expiration date for most new Major permits to five years from the date of permit issuance, as opposed to the current expiration dates of December 31<sup>st</sup> of the third year following permit issuance.** This rule change would benefit permittees by giving them more initial time to initiate or complete their projects. This lengthened expiration date would also reduce workloads of Division staff, who would not be required to process as many renewal requests each year. Finally, by changing the expiration date calculation to five years from the date of issuance, all permits would be valid for the same amount of time, as opposed to the current system whereby the amount of time a permit is active is dependent on when during a given year the permit is issued. For example, a new permit issued in early January of 2018 will be valid until December



31, 2021 or almost 4 full years, whereas a new permit issued in late December of 2018 will also be valid until December 31, 2021, or slightly more than three years.

- b) **Lengthen the initial expiration date for publicly-sponsored, multi-phased beach nourishment and dredging projects, to 10 years from the date of permit issuance.** This rule change would acknowledge the multi-phased nature of these publicly sponsored projects, some of which are designed to be implemented for periods up to 50 years. The Division would then process future renewal requests for these projects under the existing provisions of 15A NCAC 07J .0404(b), which allow for renewals of up to 10 years for maintenance of previously approved projects.
  
- c) **Eliminate the provisions of 15A NCAC 07J .0404(b), which allow for the circulation to commenting State agencies of renewal requests that otherwise do not otherwise meet the criteria for permit renewal.** Staff believe this provision is unworkable given the length of time some of these permits may have been active, possible alterations of site characteristics over the active life of the permit, and the lack of any defined criteria upon which to make a determination on whether or not to issue the renewal following agency re-circulation. In addition, the work involved in reviewing and compiling documentation that needs to be circulated to other state and federal agencies is, in many cases, similar to that required for the circulation of a new permit application.



**SUBCHAPTER 7J - PROCEDURES FOR PROCESSING AND ENFORCEMENT OF MAJOR AND MINOR  
DEVELOPMENT PERMITS, VARIANCE REQUESTS, APPEALS FROM PERMIT DECISIONS,  
DECLARATORY RULINGS, AND STATIC LINE EXCEPTIONS**

**SECTION .0400 - FINAL APPROVAL AND ENFORCEMENT**

**15A NCAC 07J .0403 DEVELOPMENT PERIOD/COMMENCEMENT/CONTINUATION**

(a) New dredge and fill permits and CAMA ~~Major permits, shall expire five years from the date of permit issuance, with the exception of publicly sponsored, multi-phased beach nourishment and dredging projects, which shall expire ten years from the date of permit issuance. Minor permits,~~ excepting those authorizing beach bulldozing ~~when authorized~~ through issuance of a CAMA minor permit, shall expire on December 31 of the third year following the year of permit issuance.

(b) CAMA minor permits Pursuant to Subparagraph (a) of this Rule, a minor permit authorizing beach bulldozing shall expire 30 days from the date of permit issuance ~~when issued to a property owner(s)~~. Following permit expiration, the ~~applicant~~ permit holder is entitled to request an extension in accordance with Rule .0404(a) of this Section.

(c) Development After Permit Expiration Illegal. Any development ~~done undertaken~~ after permit expiration shall be considered unpermitted and shall constitute a violation of G.S. 113A-118 or G.S. 113-229. Any development ~~undertaken to be done~~ after permit expiration shall require either a new permit, or renewal of the original permit according to 15A NCAC 7J .0404 with the exception of Paragraph (e) of this Rule.

(d) Commencement of Development in Ocean Hazard AEC. No development shall begin until the oceanfront setback requirement can be established. When the possessor of a permit or a ruling of exception is ready to begin ~~construction development, he they~~ shall arrange a meeting with the appropriate permitting authority at the site to determine the oceanfront setback. This setback determination shall replace the one done at the time the permit was processed and approved and construction must begin within a period of 60 days from the date of that meeting. In the case of a major shoreline change within that period a new setback determination will be required before construction begins. Upon completion of the measurement, the permitting authority will issue a written statement to the permittee certifying the same.

(e) Continuation of Development in the Ocean Hazard AEC. Once development has begun under proper authorization, development in the Ocean Hazard AEC may continue beyond the authorized development period if, in the opinion of the permitting authority, substantial progress has been made and is continuing according to customary and usual building standards and schedules. In most cases, substantial progress begins with the placement of foundation pilings, and proof of the local building inspector's certification that the installed pilings have passed a floor and foundation inspection.

(f) Any permit that has been suspended ~~pursuant to G.S. 113A-121.1 as a result of a contested case petition or~~ by order of superior court for a period longer than six months shall be extended at the ~~applicant's permit holder's~~ written request for a period equivalent to the period of permit suspension, but not to exceed the development period authorized under Paragraphs (a) ~~or (b)~~ of this Rule.

(g) ~~An applicant-permit holder~~ may voluntarily suspend development under an active permit that is the subject of judicial review by filing a written notice with the Department once the review has started. ~~An applicant permit holder~~ shall obtain an extension of said permit if the permitting authority finds:

- (1) That the ~~applicant-permit holder~~ notified the permitting authority in writing of the voluntary suspension;
- (2) The period during which the permit had been subject to judicial review is greater than six months;
- (3) The ~~applicant-permit holder~~ filed a written request for an extension of the development period once the judicial review had been completed; and
- (4) The ~~applicant-permit holder~~ undertook no development after filing the notice of suspension. The period of permit extension shall be equivalent to the length of the judicial review proceeding, but not to exceed the development period authorized under Paragraph (a) of this Rule.

*History Note: Authority G.S. 113A-118;  
Eff. March 15, 1978;  
Amended Eff. August 1, 2002; April 1, 1995; July 1, 1989; March 1, 1985; November 1, 1984.*

**15A NCAC 07J .0404 DEVELOPMENT PERIOD EXTENSION**

(a) For CAMA minor permits authorizing beach bulldozing, the ~~applicant-permit holder~~ is entitled to request a one-time 30 day permit extension. No additional extensions shall be granted after the 30 day extension has expired. Notwithstanding this Paragraph, the ~~applicant-permit holder~~ is eligible to apply for another minor permit authorizing beach bulldozing following expiration of the 30 days permit extension.

(b) Where no development has been initiated during the development period, the permitting authority shall extend the authorized development period for no more than two years upon receipt of a signed and dated request from the ~~applicant~~ permit holder containing the following:

- (1) a statement of the intention of the ~~applicant~~ permit holder to complete the work within a reasonable time;
- (2) a statement of the reasons why the project will not be completed before the expiration of the current permit;
- (3) a statement that there has been no change of plans since the issuance of the original permit other than changes that would have the effect of reducing the scope of the project, or, previously approved permit modifications;
- (4) notice of any change in ownership of the property to be developed and a request for transfer of the permit if appropriate; and
- (5) a statement that the project is in compliance with all conditions of the current permit.

Where substantial development, either within or outside the AEC, has begun and is continuing on a permitted project, the permitting authority shall grant as many two-year extensions as necessary to complete the initial development, with the exception that publicly sponsored, multi-phased beach nourishment and dredging projects shall be granted ten-year extensions to allow for continued project implementation. For the purpose of this Rule, substantial development shall be deemed to have occurred on a project if the permittee can show that development has progressed beyond basic site preparation, such as land clearing and grading, and construction has begun and is continuing on the primary structure or structures authorized under the permit. For purposes of residential subdivision, installation of subdivision roads consistent with an approved subdivision plat shall constitute substantial development. Renewals for maintenance ~~and repairs~~ of previously approved projects may be granted for periods not to exceed 10 years.

~~(e) When an extension request has not met the criteria of Paragraph (b) of this Rule, the Department may circulate the request to the commenting state agencies along with a copy of the original permit application. Commenting agencies will be given three weeks in which to comment on the extension request. Upon the expiration of the commenting period the Department will notify the applicant promptly of its actions on the extension request.~~

~~(e)~~ Notwithstanding Paragraphs (b) ~~and (e)~~ of this Rule, an extension request may be denied on making findings as required in either G.S. 113A-120 or G.S. 113-229(e). Changes in circumstances or in development standards shall be considered and applied to the maximum extent practical by the permitting authority in making a decision on an extension request.

~~(e)~~ The applicant for a major development extension request must submit, with the request, a check or money order payable to the Department in the sum of one hundred dollars (\$100.00).

~~(e)~~ Modifications to extended permits may be considered pursuant to 15A NCAC 07J .0405.

*History Note:* Authority G.S. 113A-119; 113A-119.1; 113A-124(c)(8);  
Eff. March 15, 1978;  
Amended Eff. August 1, 2002; August 1, 2000; April 1, 1995; March 1, 1991; March 1, 1985; November 1, 1984.



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November 15, 2018

**MEMORANDUM**

**CRC-18-25**

**TO:** Coastal Resources Commission  
**FROM:** Ken Richardson, *Shoreline Management Specialist*  
**SUBJECT:** Consideration of Unvegetated Beach Designation – Surf City & North Topsail Beach

**Background:**

The Unvegetated Beach Area of Environmental Concern (AEC) is defined in 15A NCAC 07H .0304(3) and is one of three AECs within the Ocean Hazard system. An Unvegetated Beach can be designated by the CRC in areas where no stable and natural vegetation is present, including areas that have suddenly become unvegetated because of a hurricane or other major storm event. Under 15A NCAC 07H .0304(3)(b) the Commission may apply the Unvegetated Beach designation to an area that is suddenly unvegetated as a result of a storm; this designation may be for a specific period of time, or until stable and natural vegetation has re-established. Once the CRC designates an Unvegetated Beach, the Division of Coastal Management can establish a Measurement Line (15A NCAC 07H .0305(a)(9)) to serve as the reference feature from which oceanfront construction setbacks are measured until vegetation has re-established.

The Measurement Line is established by DCM, and approximates the location at which the vegetation line is expected to reestablish using the following methodology:

- (A) Determine the distance the vegetation line receded at the closest vegetated site to the proposed development site; and
- (B) Locating the line of stable and natural vegetation on the most current pre-storm aerial photography of the proposed development site and moving this line landward the distance determined in Subparagraph (a)(1) of 15A NCAC 07H .0305

The Measurement Line established pursuant to this process shall in every case be located landward of the average width of the beach as determined from the most current pre-storm aerial imagery.



The last Unvegetated Beach designation made by the CRC was for Hatteras Village following Hurricane Isabel in September 2003. This Unvegetated Beach AEC remained active for approximately ten years (November 2013), until the CRC determined that the first line of stable and natural vegetation had re-established.

### **Consideration of Unvegetated Beach Designation – Surf City & North Topsail Beach:**

Hurricane Florence (September 2018) severely impacted the oceanfront dune system along portions of Surf City and North Topsail Beach, and completely washed away the primary frontal dune along with any established vegetation. The geographic extent of the affected areas makes it impossible to interpolate a vegetation line in the field from adjacent post-storm vegetation across an area of unvegetated beach; and as previously mentioned, a Measurement Line cannot be established until an Unvegetated Beach AEC is first designated by the CRC.

The extent of an Unvegetated Beach AEC is determined by the Commission, and guidance for mapping a Measurement Line within this AEC is defined in Rule 15A NCAC 07H .0305(a)(9). However, after careful review of the rule language, it was determined by staff that additional clarity may be necessary, and therefore, we will be seeking the Commission’s guidance for future application of the rule. In the meantime, Staff concluded that there may be two options for the Commission to consider for the affected areas (Surf City and North Topsail Beach) on Topsail Island:

- 1) Measurement Line Option 1: measure the vegetation recession distance using pre- and post-storm imagery (2016-2018) for approximately 1,000 feet on each side of the unvegetated beach area. DCM determined that the first line of stable and natural vegetation receded an average of 20.7 feet (see Attachment A, Figure 1).
- 2) Measurement Line Option 2: Because the rule specifies that the Measurement Line in every case be located landward of the average width of the beach from pre-storm imagery, and does not indicate where to measure from, Staff calculated an average of the difference between pre- and post-storm beach width and determined that distance to be 52.9 feet; which is 32.2 feet greater than the average recession distance (see Attachment A, Figure 2).

### **Staff Request:**

To establish a reference feature (Measurement Line) for purpose of measuring oceanfront construction setbacks in areas where there is no vegetation due to Hurricane Florence, Staff is asking the Commission to consider and approve the following:

- 1) Designate an Unvegetated Beach Area of Environmental Concern, to remain in effect until stable and natural vegetation has re-established; and
- 2) Confirm and approve the method for delineating a Measurement Line
  - a. Calculate the average pre- and post-storm vegetation recession distance and measured that from the pre-storm vegetation line, or





- b. Calculate the average difference between pre- and post-storm beach width and measure that distance from pre-storm vegetation.

**ATTACHMENT A:** Maps Illustrating Extent of Proposed Unvegetated Beach at Surf City and North Topsail Beach

**ATTACHEMENT B:** Current Rules Pertaining to Unvegetated Beach AEC and Measurement Line



# ATTACHMENT A: MAPS ILLUSTRATING EXTENT OF PROPOSED UNVEGETATED BEACH AT SURF CITY AND NORTH TOPSAIL BEACH



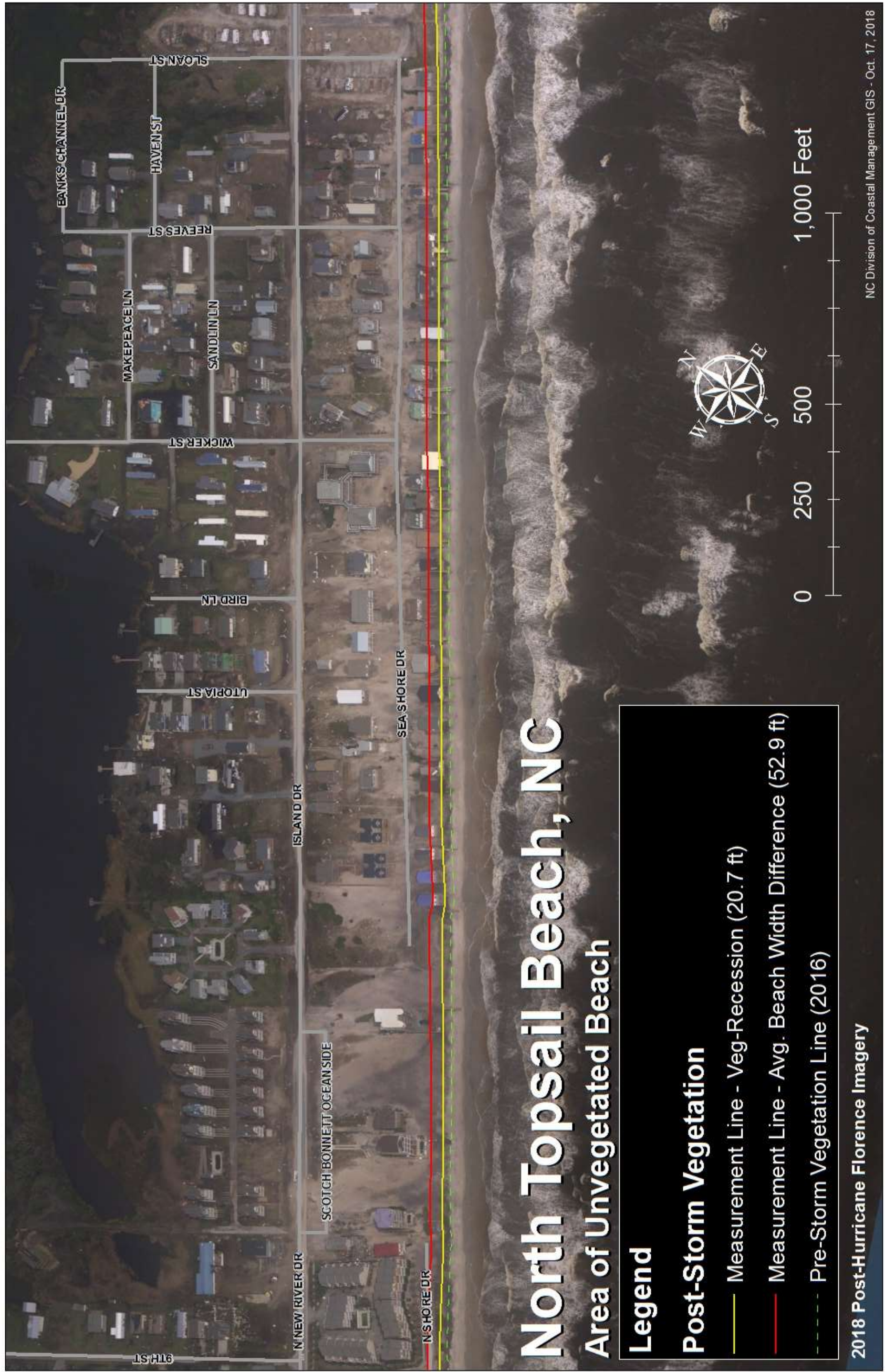


Figure 1. This map illustrates the extent of the proposed Unvegetated Beach AEC and Measurement Line alternatives at Surf City.





**Figure 2.** This map illustrates the extent of the proposed Unvegetated Beach AEC and Measurement Line alternatives at North Topsail Beach.







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## ATTACHEMENT B: CURRENT RULES PERTAINING TO UNVEGETATED BEACH AEC AND MEASUREMENT LINE

### 15A NCAC 07H .0304 AECS WITHIN OCEAN HAZARD AREAS

The ocean hazard AECs contain all of the following areas:

- (1) Ocean Erodible Area. This is the area where there exists a substantial possibility of excessive erosion and significant shoreline fluctuation. The oceanward boundary of this area is the mean low water line. The landward extent of this area is the distance landward from the first line of stable and natural vegetation as defined in 15A NCAC 07H .0305(a)(5) to the recession line established by multiplying the long-term annual erosion rate times 90; provided that, where there has been no long-term erosion or the rate is less than two feet per year, this distance shall be set at 120 feet landward from the first line of stable natural vegetation. For the purposes of this Rule, the erosion rates are the long-term average based on available historical data. The current long-term average erosion rate data for each segment of the North Carolina coast is depicted on maps entitled "2011 Long-Term Average Annual Shoreline Rate Update" and approved by the Coastal Resources Commission on May 5, 2011 (except as such rates may be varied in individual contested cases or in declaratory or interpretive rulings). In all cases, the rate of shoreline change shall be no less than two feet of erosion per year. The maps are available without cost from any Local Permit Officer or the Division of Coastal Management on the internet at <http://www.nccoastalmanagement.net>.
- (2) Inlet Hazard Area. The inlet hazard areas are natural-hazard areas that are especially vulnerable to erosion, flooding, and other adverse effects of sand, wind, and water because of their proximity to dynamic ocean inlets. This area extends landward from the mean low water line a distance sufficient to encompass that area within which the inlet migrates, based on statistical analysis, and shall consider such factors as previous inlet territory, structurally weak areas near the inlet, and external influences such as jetties and channelization. The areas on the maps identified as suggested Inlet Hazard Areas included in the report entitled INLET HAZARD AREAS, The Final Report and Recommendations to the Coastal Resources Commission, 1978, as amended in 1981, by Loie J. Priddy and Rick Carraway are incorporated by reference and are hereby designated as Inlet Hazard Areas, except for:
  - (a) the Cape Fear Inlet Hazard Area as shown on the map does not extend northeast of the Bald Head Island marina entrance channel; and
  - (b) the former location of Mad Inlet, which closed in 1997.In all cases, the Inlet Hazard Area shall be an extension of the adjacent ocean erodible areas and in no case shall the width of the inlet hazard area be less than the width of the adjacent ocean erodible area. This report is available for inspection at the Department of Environmental Quality, Division of Coastal Management, 400 Commerce Avenue, Morehead City, North Carolina or at the website referenced in Item (1) of this Rule. Photocopies are available at no charge.
- (3) Unvegetated Beach Area. Beach areas within the Ocean Hazard Area where no stable natural vegetation is present may be designated as an Unvegetated Beach Area on either a permanent or temporary basis as follows:
  - (a) An area appropriate for permanent designation as an Unvegetated Beach Area is a dynamic area that is subject to rapid unpredictable landform change due to wind and wave action.



The areas in this category shall be designated following studies by the Division of Coastal Management. These areas shall be designated on maps approved by the Coastal Resources Commission and available without cost from any Local Permit Officer or the Division of Coastal Management on the internet at the website referenced in Item (1) of this Rule.

- (b) An area that is suddenly unvegetated as a result of a hurricane or other major storm event may be designated by the Coastal Resources Commission as an Unvegetated Beach Area for a specific period of time, or until the vegetation has re-established in accordance with 15A NCAC 07H .0305(a)(5). At the expiration of the time specified or the re-establishment of the vegetation, the area shall return to its pre-storm designation.

*History Note: Authority G.S. 113A-107; 113A-107.1; 113A-113; 113A-124; Eff. September 9, 1977; Amended Eff. December 1, 1993; November 1, 1988; September 1, 1986; December 1, 1985; Temporary Amendment Eff. October 10, 1996; Amended Eff. April 1, 1997; Temporary Amendment Eff. October 10, 1996 Expired on July 29, 1997; Temporary Amendment Eff. October 22, 1997; Amended Eff. July 1, 2016; September 1, 2015; May 1, 2014; February 1, 2013; January 1, 2010; February 1, 2006; October 1, 2004; April 1, 2004; August 1, 1998.*

## **15A NCAC 07H .0305 GENERAL IDENTIFICATION AND DESCRIPTION OF LANDFORMS**

**(a) This Paragraph 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.
- (2) Nearshore. The nearshore is the portion of the beach seaward of mean low water that is characterized by dynamic changes both in space and time as a result of storms.
- (3) Primary Dunes. Primary dunes are the first mounds of sand located landward of the ocean beaches having an elevation equal to the mean flood level (in a storm having a one percent chance of being equaled or exceeded in any given year) for the area plus six feet. Primary dunes extend landward to the lowest elevation in the depression behind that same mound of sand (commonly referred to as the "dune trough.")
- (4) Frontal Dunes. The frontal dune is the first mound of sand located landward of the ocean beach that has stable and natural vegetation present.
- (5) Vegetation Line. The vegetation line refers to the first line of stable and natural vegetation, which shall be used as the reference point for measuring oceanfront setbacks. This line represents the boundary between the normal dry-sand beach, which is subject to constant flux due to waves, tides, storms and wind, and the more stable upland areas. The vegetation line is generally located at or immediately oceanward of the seaward toe of the frontal dune or erosion escarpment. The Division of Coastal Management or Local Permit Officer shall determine the location of the stable and natural vegetation line based on visual observations of plant composition and density. If the vegetation has been planted, it may be considered stable when the majority of the plant stems are from continuous rhizomes rather than planted individual rooted sets. Planted vegetation may be considered natural when the majority of the plants are mature and additional species native to the region have been recruited, providing stem and rhizome densities that are similar to adjacent areas that are naturally occurring. In areas where there is no stable and natural vegetation present, this line may be established by interpolation between the nearest adjacent stable natural vegetation by on-ground observations or by aerial photographic interpretation.



- (6) **Static Vegetation Line.** In areas within the boundaries of a large-scale beach fill project, the vegetation line that existed within one year prior to the onset of project construction shall be defined as the "static vegetation line". The "onset of project construction" shall be defined as the date sediment placement begins, with the exception of projects completed prior to the effective date of this Rule, in which case the award of the contract date will be considered the onset of construction. A static vegetation line shall be established in coordination with the Division of Coastal Management using on-ground observation and survey or aerial imagery for all areas of oceanfront that undergo a large-scale beach fill project. Once a static vegetation line is established, and after the onset of project construction, this line shall be used as the reference point for measuring oceanfront setbacks in all locations where it is landward of the vegetation line. In all locations where the vegetation line as defined in this Rule is landward of the static vegetation line, the vegetation line shall be used as the reference point for measuring oceanfront setbacks. A static vegetation line shall not be established where a static vegetation line is already in place, including those established by the Division of Coastal Management prior to the effective date of this Rule. A record of all static vegetation lines, including those established by the Division of Coastal Management prior to the effective date of this Rule, shall be maintained by the Division of Coastal Management for determining development standards as set forth in Rule .0306 of this Section. Because the impact of Hurricane Floyd (September 1999) caused significant portions of the vegetation line in the Town of Oak Island and the Town of Ocean Isle Beach to be relocated landward of its pre-storm position, the static line for areas landward of the beach fill construction in the Town of Oak Island and the Town of Ocean Isle Beach, the onset of which occurred in 2000, shall be defined by the general trend of the vegetation line established by the Division of Coastal Management from June 1998 aerial orthophotography.
- (7) **Beach Fill.** Beach fill refers to the placement of sediment along the oceanfront shoreline. Sediment used solely to establish or strengthen dunes shall not be considered a beach fill project under this Rule. A "large-scale beach fill project" shall be defined as any volume of sediment greater than 300,000 cubic yards or any storm protection project constructed by the U.S. Army Corps of Engineers.
- (8) **Erosion Escarpment.** The normal vertical drop in the beach profile caused from high tide or storm tide erosion.
- (9) **Measurement Line.** The line from which the ocean hazard setback as described in Rule .0306(a) of this Section is measured in the unvegetated beach area of environmental concern as described in Rule .0304(3) of this Section. Procedures for determining the measurement line in areas designated pursuant to Rule .0304(3) of this Section shall be adopted by the Commission for each area where such a line is designated pursuant to the provisions of GS. 150B. These procedures shall be available from any local permit officer or the Division of Coastal Management. In areas designated pursuant to Rule .0304(3)(b) of this Section, the Division of Coastal Management shall establish a measurement line that approximates the location at which the vegetation line is expected to reestablish by:
- (A) determining the distance the vegetation line receded at the closest vegetated site to the proposed development site; and
- (B) locating the line of stable and natural vegetation on the most current pre-storm aerial photography of the proposed development site and moving this line landward the distance determined in Subparagraph (a)(1) of this Rule.
- The measurement line established pursuant to this process shall in every case be located landward of the average width of the beach as determined from the most current pre-storm aerial photography.
- (10) **Development Line.** The line established in accordance with 15A NCAC 07J .1300 by local governments representing the seaward-most allowable location of oceanfront development. In areas that have development lines approved by the CRC, the vegetation line or measurement line shall be used as the reference point for measuring oceanfront setbacks instead of the static vegetation line, subject to the provisions of Rule .0306(a)(2) of this Section.

**(b) For the purpose of public and administrative notice and convenience, each designated minor development permit-letting agency with ocean hazard areas may designate, subject to CRC approval in accordance with the local implementation and enforcement plan as defined in 15A NCAC 07I .0500, an identifiable land area within which the ocean hazard areas occur. This designated notice area must include**



**all of the land areas defined in Rule .0304 of this Section. Natural or man-made landmarks may be considered in delineating this area.**

*History Note: Authority G.S. 113A-107; 113A-113(b)(6); 113A-124;  
Eff. September 9, 1977;  
Amended Eff. December 1, 1992; September 1, 1986; December 1, 1985; February 2, 1981;  
Temporary Amendment Eff. October 10, 1996;  
Amended Eff. January 1, 1997;  
Temporary Amendment Eff. October 10, 1996 Expired on July 29, 1997;  
Temporary Amendment Eff. October 22, 1997;  
Amended Eff. April 1, 2016; April 1, 2008; August 1, 2002; August 1, 1998*







NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

BRAXTON C. DAVIS  
Director

CRC-18-26

## MEMORANDUM

**TO:** Coastal Resources Commission  
**FROM:** Daniel Govoni  
**SUBJECT:** Fiscal Analysis and Amendments to 15A NCAC .2700 GP for the Construction of Marsh Sills

DCM has undertaken substantial efforts to advance marsh sills and other forms of living shorelines as alternatives to traditional bulkheads for estuarine shoreline stabilization in North Carolina. Marsh sills maintain existing connections between upland, intertidal, estuarine, and aquatic areas while providing shoreline erosion control. Marsh sills typically use native materials such as marsh plants, oyster shells, and occasionally minimal amounts of structural materials (e.g. stone) to stabilize estuarine shorelines, minimize erosion, and enhance habitats.

### General Permit (15A NCAC 7H .2700)

During the 2003 legislative session, the North Carolina Legislature approved House Bill 1028, which directed the Coastal Resources Commission (CRC) to adopt temporary and permanent rules to establish a general permit for the construction of “riprap sills.” The general permit was implemented as a temporary rule in 2004 and became a permanent rule on April 1, 2005. Significant discussions on the relative merits and use standards for this general permit took place during its development, including important issues such as the distance offshore that sill structures could be built, the consequences of trading one type of habitat (shallow bottom) for another (marsh protected by riprap), navigational and public trust concerns, the suitability of such structures along different types of shorelines, and the permitting requirements of other agencies such as the U.S. Army Corps of Engineers (USACE) and the N.C. Division of Water Resources (DWR). Due to these concerns, the existing general permit for the construction of marsh sills (15A NCAC 7H.2700) requires coordination with the N.C. Divisions of Marine Fisheries (DMF), DWR, and the USACE before issuance, which can take more time than is normally associated with other CAMA General Permits. Over that past few years, DCM has led interagency and stakeholder discussions focused on improving and streamlining the marsh sill general permit.

In 2016, the USACE submitted a federal consistency determination to DCM for the reissuance of USACE Nationwide Permits (NWP). NWPs are issued by the USACE on a national basis every



five years, and often include region-specific conditions. NWP's are designed to streamline USACE authorization of routine projects that produce minimal impacts to the nation's aquatic environment. Included in DCM's consistency review was a new USACE NWP 54 for living shorelines. NWP 54 requires additional inter-agency consultation through a Pre-Construction Notification (PCN), even for small-scale marsh sill structures that can be permitted under the existing General Permit 15A NCAC 7H .2700. A PCN requirement can add additional processing time to the CAMA General Permit process.

To address concerns with the PCN requirement and other interagency review issues, DCM worked with a stakeholder group that included the USACE, marine science community, DWR, DMF, N.C. Coastal Federation, NC Sea Grant, and the National Oceanic and Atmospheric Administration (NOAA) to determine how best to move forward with creating a more streamlined permitting process for marsh sills. For there to be an efficient streamlined general permit, all federal and state agency concerns must be addressed within the final CRC permit conditions. In early 2017, DCM compiled all of the comments and recommendations from the stakeholder group and drafted an amended general permit 15A NCAC 7H .2700. In 2018, the USACE used the draft amended GP .2700 as guidance in the development of a Regional General Permit (RGP) for Marsh Sills that would eliminate the PCN requirement and allow DCM to issue General Permits for marsh sills without a case-by-case federal review prior to issuance.

On September 5, 2018 the USACE issued a public notice proposing to authorize a RGP for the construction, maintenance, and repair of marsh sills. The USACE also submitted a federal consistency determination to DCM on October 22, 2018 to allow the state's official review of the RGP. As proposed, the RGP for the construction and maintenance of marsh sills includes all conditions that were agreed upon at the stakeholder meetings. DCM expedited the federal consistency review and determined that the proposed RGP is consistent with North Carolina's approved coastal management program on November 7, 2018.

Also, in October 2018, S.L. 2018-132 directed the CRC to adopt temporary rules to revise the CRC's general permit 15A NCAC 7H .2700 to be consistent with the proposed USACE RGP. Temporary rulemaking allows the Commission to adopt a rule with a shorter public comment period, expedited review by the Rules Review Commission (RRC), and no requirement for developing a fiscal analysis. The N.C. Administrative Procedure Act allows temporary rulemaking under specific criteria, including when directed by the General Assembly. Once the temporary rule language is approved, the Commission is required to:

- Submit the rule language and notice of hearing to the Office of Administrative Hearing (OAH) at least 30 business days prior to adopting the rule;
- Notify interested parties of the Commission's intent to adopt a temporary rule;
- Accept public comment for at least 15 business days;
- Hold a public hearing on the proposed rule no less than five business days after the rule and notice have been published.

The RRC will review the temporary rule within 15 days of adoption and the temporary rules will expire 270 days after publication in the NC Register or upon the effective date of a permanent rule.



The attached draft revision to the existing General Permit and fiscal analysis is provided below for consideration by the Commission. Staff recommends that the Commission approve the fiscal analysis and the rule revisions for temporary rulemaking, and initiate the permanent rulemaking process. I look forward to discussing these amendments at our upcoming meeting.

**SECTION .2700 – GENERAL PERMIT FOR THE CONSTRUCTION OF MARSHRIPRAP SILLS FOR WETLAND ENHANCEMENT IN ESTUARINE AND PUBLIC TRUST WATERS**

**15A NCAC 7H .2701 PURPOSE**

A general permit pursuant to this Section shall allow for the construction of marshriprap sills for wetland enhancement and shoreline stabilization in estuarine and public trust waters as set out in Subchapter 7J .1100 and according to the rules in this Section. Marsh sills are generally shore-parallel structures built in conjunction with existing, created, or restored wetlands. This general permit shall not apply within the Ocean Hazard System AECs or waters adjacent to these AECs with the exception of those portions of shoreline within the Inlet Hazard Area AEC that feature characteristics of Estuarine Shorelines. Such features include the presence of wetland vegetation, lower wave energy, and lower erosion rates than in the adjoining Ocean Erodible Area.

*History Note: Authority G.S. 113A-107; 113A-118.1;  
Temporary Eff. June 15, 2004;  
Eff. April 1, 2005.*

**15A NCAC 7H .2704 GENERAL CONDITIONS**

- (a) Structures authorized by a permit issued pursuant to this Section shall be marshriprap or stone sills conforming to the standards in these Rules.
- (b) Individuals shall allow authorized representatives of the Department of Environmental and Natural Resources (DENR) Quality (DEQ) to make periodic inspections at any time deemed necessary in order to insure that the activity being performed under authority of this general permit is in accordance with the terms and conditions prescribed in these Rules.
- (c) The placement of marshriprap or stone sills authorized in these Rules shall not interfere with the established or traditional rights of navigation of the waters by the public.
- (d) This permit shall not be applicable to proposed construction where the Department has determined, based on an initial review of the application, that notice and review pursuant to G.S. 113A-119 is necessary because there are unresolved questions concerning the proposed activity's impact on adjoining properties or on water quality, air quality, coastal wetlands, cultural or historic sites, wildlife, fisheries resources, or public trust rights.
- (e) This permit does not eliminate the need to obtain any other required state, local, or federal authorization.
- (f) Development carried out under this permit shall be consistent with all local requirements, AEC Guidelines as set out in Subchapter 7H. 0200, and local land use plans current at the time of authorization.

*History Note: Authority G.S. 113A-107; 113A-118.1;  
Temporary Eff. June 15, 2004;  
Eff. April 1, 2005.*



## 15A NCAC 7H .2705 SPECIFIC CONDITIONS

- (a) A general permit issued pursuant to this Section shall be applicable only for the construction of ~~marsh~~ ~~riprap or stone~~ sill structures built in conjunction with existing, created or restored wetlands. Planted wetland vegetation shall consist only of native species.
- (b) ~~This general permit shall not apply within the Ocean Hazard System Areas of Environmental Concern (AEC) or waters adjacent to these AECs with the exception of those portions of shoreline within the Inlet Hazard Area AEC that feature characteristics of Estuarine Shorelines. Such features include the presence of wetland vegetation, lower wave energy, and lower erosion rates than in the adjoining Ocean Erodible Area.~~
- (c) ~~On shorelines where no fill is proposed, the landward edge of the sill shall be positioned no more greater than 5 30 feet waterward of the waterward depth contour of locally growing wetlands or to the mid-tide depth contour, the normal high water or normal water level or five feet waterward of the existing wetlands whichever distance is greater.~~
- (d) ~~On shorelines where fill is proposed, the landward edge of the sill shall be positioned no more than 30 feet waterward of the existing mean high water or normal high water line.~~
- (e) (c) The permittee shall maintain the authorized sill including wetlands and tidal inundation and existing or planted wetlands in conformance with the terms and conditions of this permit, or the remaining sill structures shall be removed within 90 days of notification from the Division of Coastal Management.
- (f) (d) The height of sills shall not exceed six twelve inches above normal mean high water, normal water level, or the height of the adjacent wetland substrate, whichever is higher greater.
- (g) (e) Sill construction authorized by this permit shall be limited to a maximum length of 500 feet.
- (h) ~~Sills shall be porous to allow water circulation through the structure.~~
- (i) (f) The sills shall have at least one five-foot ~~drop-down or~~ opening every 100 feet and may be staggered or overlapped or left open as long as the five-foot ~~drop-down or~~ separation between sections is maintained. Overlapping sections shall not overlap more than 10 feet. Deviation from these drop-down opening requirements shall be allowable following coordination with the N.C. Division of Coastal Management the N.C. Division of Marine Fisheries and the National Marine Fisheries Service.
- (j) (g) The ~~sill~~ ~~riprap~~ structure shall not exceed a slope of a one and a half foot ~~rise~~ horizontal distance over a one two foot vertical rise ~~horizontal distance and a minimum slope of a one and a half foot rise over a one foot horizontal distance~~. The width of the structure on the bottom shall ~~be no not~~ exceed wider than 15 12 feet.
- (k) ~~For the purpose of protection of public trust rights, fill waterward of the existing mean high water line shall not be placed higher than the mean high water elevation.~~
- (l) ~~The permittee shall not claim title to any lands raised above the mean high or normal water levels as a result of filling or accretion.~~
- (m) (h) For water bodies ~~more narrower~~ than 150 feet, no portion of the structures shall ~~not~~ be positioned offshore more than one sixth (1/6) the width of the waterbody.
- (n) (i) The sill shall not be within a navigation channel or associated setbacks marked or maintained by a state or federal agency.
- (o) (j) The sill shall not interfere with leases or franchises for shellfish culture.
- (p) (k) All structures shall have a minimum setback distance of 15 feet between any parts of the structure and the adjacent property owner's riparian access corridor, unless either a signed waiver statement is obtained from the adjacent property owner or the portion of the structure





within 15 feet of the adjacent riparian access corridor is located no more than 25 feet from the normal mean high or normal water level. The riparian access corridor line is determined by drawing a line parallel to the channel, then drawing a line perpendicular to the channel line that intersects with the shore at the point where the upland property line meets the water's edge (as defined in NCAC 07H. 1205 paragraph t). Additionally, the sill shall not interfere with the exercise of riparian rights by adjacent property owners, including access to navigation channels from piers, or other means of access.

~~(q)~~ The sill shall not interfere with the exercise of riparian rights by adjacent property owners, including access to navigation channels from piers, or other means of access.

~~(+)~~ (l) Sills shall be marked at 50-foot intervals with yellow reflectors extending at least three feet above normal mean high water or normal water level and must be maintained for the life of the structure.

~~(s)~~ (m) If the crossing of wetlands with mechanized construction equipment is necessary, temporary construction mats shall be utilized for the areas to be crossed. The temporary mats shall be removed immediately upon completion of the construction of the sill/riprap structure. Material used to construct the sill shall not be stockpiled on existing wetlands or in open water unless fully contained in a containment structure supported by construction mats.

~~(t)~~ (n) Sedimentation and erosion control measures shall be implemented to ensure that eroded materials do not enter adjacent wetlands or waters.

~~(+)~~ (o) No excavation or filling other than that necessary for the construction and proper bedding of the sill structure of any native submerged aquatic vegetation is authorized by this general permit.

~~(v)~~ (p) Sills shall not be constructed within any native submerged aquatic vegetation. If submerged aquatic vegetation is present within a project area, a submerged aquatic vegetation survey should be completed during the growing season of April 1 thru September 30. All sills shall have a minimum setback of 10 feet from any native submerged aquatic vegetation.

~~(w)~~ (q) Sills shall not be constructed within any habitat that includes oyster reefs or shell banks. All sills shall have a minimum setback of 10 feet from any oysters, oyster beds, or shell banks.

~~(v)~~ (r) No excavation of the shallow water bottom or any wetland is authorized by this general permit

~~(w)~~ No more than 100 square feet of wetlands may be filled as a result of the authorized activity.

~~(x)~~ Backfilling of sill structures may be utilized only for the purpose of creating a suitable substrate for the establishment or reestablishment of wetlands. Only clean sand fill material may be utilized.

~~(y)~~ (s) The sill/riprap material shall consist of clean rock, marl, oyster shell, or masonry materials such as granite or broken concrete or other materials that are approved by the N.C. Division of Coastal Management. Sill/Riprap material shall be free of loose sediment or any pollutant, including exposed rebar. The sill material structures shall be of sufficient size and slope to prevent its movement from the approved alignment site by wave or current action.

~~(z)~~ If one or more contiguous acre of property is to be graded, excavated or filled, an erosion and sedimentation control plan shall be filed with the Division of Energy, Mineral, and Land Resources, or appropriate government having jurisdiction. The plan must be approved prior to commencing the land disturbing activity.

~~(aa)~~ In order to ensure that no adverse impacts occur to important fisheries resources, the Division of Marine Fisheries shall review and concur with the location and design of the proposed project prior to the issuance of this general permit.



(bb) Prior to the issuance of this general permit, Division staff shall coordinate with the Department of Administration's State Property Office to determine whether or not an easement shall be required for the proposed activity.

(cc) Following issuance of this general permit, the permittee shall contact the N.C. Division of Water Quality and the U.S. Army Corps of Engineers to determine any additional permit requirements. Any such required permits, or a certification from the U.S. Army Corps of Engineers appropriate agency(s) that no additional permits are required, shall be obtained and copies provided to the Division of Coastal Management prior to the initiation of any development activities authorized by this permit.



## **Fiscal & Regulatory Impact Analysis**

### **Marsh Sills**

Amendments to 15A NCAC 07H .2700, .2701, .2704, .2705  
General Permit For The Construction of Marsh Sills General and Specific Conditions

Prepared by

Daniel Govoni  
NC Division of Coastal Management  
(252) 808-2808 Ext. 233

November 7, 2018



## Basic Information

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Agency	DEQ, Division of Coastal Management (DCM) Coastal Resources Commission (CRC).
Title	General Permit for the Construction of Marsh Sills
Citation	15A NCAC 07H .2700
Description of the Proposed Rule	7H .2700 defines the specific development requirements for the construction of marsh sills. The proposed amendments will remove unnecessary coordination requirements and would also remove redundant and/or unnecessary conditions.
Agency Contact	Daniel Govoni Coastal Policy Analyst Daniel.Govoni@ncdenr.gov (252) 808-2808 ext. 233
Authority	113A-107(a) & (b); 113A-118.1
Necessity	The CRC is proposing to amend its rule governing the construction of marsh sills in order for this general permit to become consistent with other general permits that govern construction of shoreline stabilization methods such as bulkheads.
Impact Summary	State government: No Local government: No Substantial impact: No Federal government: No Private property owners: No





## Summary

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DCM has undertaken substantial efforts to advance marsh sills and other forms of living shorelines as alternatives to traditional bulkheads for estuarine shoreline stabilization in North Carolina. Living shorelines include a suite of options for shoreline erosion control that maintain existing connections between upland, intertidal, estuarine, and aquatic areas which are necessary for maintaining water quality, ecosystem services, and habitat values. Unlike vertical stabilization measures such as bulkheads, living shoreline techniques typically use native materials such as marsh plants, oyster shells, and occasionally minimal amounts of structural materials (e.g. stone) to stabilize estuarine shorelines, minimize erosion, and enhance habitats.

During the 2003 legislative session, the North Carolina Legislature approved House Bill 1028, a bill which authorized the Coastal Resources Commission to adopt temporary and permanent rules to establish a general permit for the construction of “riprap sills.” This was implemented as a temporary rule in 2004 and became a permanent rule on April 1, 2005. Significant discussions on the relative merits of this general permit were discussed during its development. Due to these concerns, the current General Permit for the construction of marsh sills requires coordination with the Division of Marine Fisheries (DMF), the Division of Water Resources (DWR), and the United States Army Corps of Engineers (Corps) before issuance. This coordination can take more time than normally associated with other CAMA General Permits for shoreline stabilization. During the intervening years, there has been an ongoing effort to modify the marsh sill general permit to remove the more time-consuming conditions.

In 2016, DCM began working with a stakeholder group that included representatives from the Corps, the marine science community, DWR, DMF, N.C. Coastal Federation, N.C. Sea Grant, and the National Oceanic and Atmospheric Administration to develop a streamlined permitting process for marsh sills that addresses all interested parties’ concerns within the permit conditions. Since several marsh sill studies have been concluded and numerous sills have been constructed, DMF agreed that there is no longer a need for DMF review of each potential marsh sill general permit. Also, DWR has revised their General Water Quality Certification, which no longer requires written concurrence for marsh sill projects that receive a CAMA General Permit. Additionally, on September 5, 2018 the Corps issued a public notice proposing to authorize a Regional General Permit (RGP) based on recommendations from the stakeholder group meetings. A RGP will remove coordination requirements with the Corps for marsh sill projects that receive a CAMA General Permit. The proposed rule amendments remove these agency coordination requirements and other redundant or unnecessary conditions.

## Description of Rule Amendment

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15A NCAC 7H. .2700, .2701, .2704. and .2705 include the Title, General and Specific Use Standards for the construction of marsh sills. The proposed amendments provide additional options in the construction materials of marsh sills, clarify how to measure width and height of sills, corrects ambiguous language, removes resource agency coordination requirements, and addresses wording changes to provide consistency with other CRC rules. By removing the



coordination requirements, the proposed amendments will reduce the permit processing time and all this general permit to be consistent with other shoreline stabilization general permits, such as bulkheads, that do not require any coordination.

## **Affected Parties**

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### Private Property Owners:

DCM does not anticipate any increased costs to private property owners as a result of the proposed rule amendments. There will not be any increase in permit fees nor change in permit receipts.

### NC Department of Transportation (DOT):

Pursuant to G.S. 150B-21.4, the agency declares that the proposed amendments to 15A NCAC 7H .0205 will not affect environmental permitting for the NC Department of Transportation.

### Local Government:

DCM does not anticipate any increased costs to Local Governments as a result of the proposed rule amendments. There will not be any increase in permit fees.

### Division of Coastal Management:

DCM permit review process will be reduced. The Division will not experience any change in permit receipts.

## **Cost/Benefits Summary**

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The Division of Coastal Management does not anticipate any increase in expenditures in the government or private sector as a result of this action. The proposed amendments will reduce conditions and remove resource agency coordination thus allowing this General Permit to become consistent with other General Permits. Therefore, staff does not anticipate any significant increase in the number of GPs sought under these rules as a result of the proposed amendments. Since the inception of this General Permit in 2005, DCM estimates that no more than four permits for this activity have been issued a year. DCM does not foresee any change in project costs for either design or construction as a result of this action.





NORTH CAROLINA  
*Environmental Quality*

ROY COOPER  
*Governor*

MICHAEL S. REGAN  
*Secretary*

BRAXTON C. DAVIS  
*Director*

**CRC-18-21**

September 4, 2018

**MEMORANDUM**

**TO:** Coastal Resources Commission

**FROM:** Mike Lopazanski

**SUBJECT:** Public Comment on Proposed Amendments to 15A NCAC 7H .0308 Specific Use Standards 7 7K .0103 Maintenance and Repair (Dune Rules)

Your rules (15A NCAC 7H .0305) include definitions of various landforms associated with the Ocean Hazard Area including Primary Dunes and Frontal Dunes. Frontal Dunes are defined as the first mound of sand located landward of the ocean beach that has stable and natural vegetation present. Primary Dunes are the first mounds of sand located landward of the ocean beaches having an elevation equal to the mean flood level (in a storm having a one percent chance of being equaled or exceeded in any given year) for the area, plus an additional six feet of elevation. Primary Dunes extend landward to the lowest elevation in the depression or dune tough behind that same mound of sand.

To avoid weakening the protective nature of Primary and Frontal dunes, no development is permitted that involves the removal or relocation of primary or frontal dune sand or vegetation thereon that would adversely affect the integrity of the dune. Other dunes within the ocean hazard area are not to be disturbed unless development of the property is otherwise impracticable. Any disturbance of these other dunes is allowed only to the extent permitted by 15A NCAC 07H .0308(b).

The intent of the dune rules, first enacted in 1981 was to set standards for dune creation that would require following natural dune alignments, and avoid "pushed-up" dikes on the oceanfront. The CRC also intended to prevent the creation of artificial dunes out on the "storm beach" that would create a false sense of security. The CRC also intended to restrict the building of primary and frontal dunes on the beachfront to circumvent oceanfront setbacks. From reviewing the CRC meeting minutes and materials in the early days of the coastal program, there was concern by the CRC that allowing the expansion of dunes out onto the beach (past the frontal dune) would lead to a false sense of security and stability, particularly in inlet areas.



In 1992, DCM staff realized that strict application of rules restricting the pushing of sand oceanward was in some cases impractical, as some degree of this activity was often necessary during the construction of buildings and driveways on oceanfront lots. The rule was amended to allow the redistribution of sand "held in storage" in other (secondary) dunes within the AEC, but no farther oceanward than the crest of the primary dune or landward toe of the frontal dune.

More recently, DCM staff has observed that shifting sand blown by storms and general prevailing winds has been covering decks, driveways, swimming pools, houses and buildings, both on the oceanfront as well as landward of the oceanfront area. The situation has created some problems for property owners trying to remove sand from around their structures while staying in compliance with the dune protection rules. Property owners have also been looking for ways to enhance the barrier dune system while being able to utilize their property, including the redistribution of sand on individual lots. Additionally, Commissioners have expressed an interest in ensuring that sand, particularly in areas associated with beach nourishment projects, remains within the beach and dune systems.

The proposed amendments to the dune-related rules (7H .0308 Specific Use Standards for Ocean Hazard Areas and 7K .0103 Maintenance and Repair), which are up for adoption at the upcoming meeting, address the redistribution of sand and Hatteras Ramps as follows with the intent of adding more flexibility:

### **Redistribution of Sand**

#### 7H .0308

- 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 or landward toe~~ dune, if present, or the crest of a frontal dune.

#### 7K .0103

- Redistribution of sand that results from storm overwash or aeolian transport around buildings, pools, roads, parking areas and associated structures is considered maintenance so long as the sand remains within the Ocean Hazard AEC. Individuals proposing either such activities must consult with the Division of Coastal Management or the local permit officer to determine whether the proposed activity qualifies for the exclusion under G.S. 113A-103(5)(b)(5).

### **Hatteras Ramps**

#### 7H .0308

- In order to ~~avoid weakening~~ preserve the protective nature of primary and frontal dunes a structural accessway (such as a "Hatteras ramp") ~~shall~~ may be provided for ~~any~~ off-road vehicle (ORV) or emergency vehicle access. Such accessways shall be no greater than ~~10~~ 15 feet in width and ~~shall may~~ be constructed of wooden sections fastened ~~together~~ together, or other materials approved by the Division, over the length of the affected dune area. Installation of a Hatteras ramp shall be done in a manner that will preserve the dune's function as a protective barrier against flooding and erosion



by not reducing the volume of the dune.

7H .0308

- Structural accessways may be constructed no more than six feet seaward of the waterward toe of the frontal or primary dune, provided they do not interfere with public trust rights and emergency access along the beach. Structural accessways are not restricted by the requirement to be landward of the FLSNV as described in 07H .0309(a).

The Commission approved proposed amendments for public hearing at their July 2017 meeting and the fiscal analysis at their February 2018 meeting. A public hearing was held in April 2018 and the received two comments below:

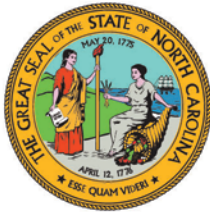
*Steve Smith, Topsail Beach Commissioner and Chairman of Topsail Shoreline Protection Commission, stated some of our communities have started erosion control structure plans and designs, will these amendments stop these plans? If you lose the frontal dune, will these amendments allow the community to come back and restore a frontal dune system in the area? This is unclear. Topsail Beach would like 7H .0308(b)(5), which states that “no new dunes shall be created in inlet hazard areas”, removed or modified. We would also like to see some strengthening of 7H .0308(d)(3) to say it is for all structures in the VE Zone and take into consideration that dune height plays as important of a role as pile depth. Topsail Beach is supportive of the areas in the amendments that address how to build in a dune area.*

*Cliff Ogburn, Town of Nags Head Town Manager, stated he speaks in support of the dune rules on behalf of the Nags Head Mayor and Board of Commissioners. These amendments as they pertain to allowing Hatteras Ramps to be made out of materials other than wood, allowing them to extend out onto the flat beach, and more dune protection. Nags Head has had a lot of sand that have created some dunes that are difficult to manage when it comes to providing access. We have more than 40 beach accesses and about half of them have vehicle access for the public or public safety workers. Being able to utilize these ramps will keep more of the dune in place and allow vehicle access without altering the dunes.*

While the creation of dunes in Inlet Hazard Areas has been a topic of discussion, it would be better addressed as part of the Commission’s current deliberations on the use standards for Inlet Hazard Areas. The creation of dunes could potentially affect development setbacks and should be part of a broader discussion of how to manage these areas.

15A NCAC 7H .0308(d)(3) references building construction standards for the oceanfront and the requirement that pilings have a tip penetration of eight feet below the lowest ground elevation and five feet below sea level for structures sited on or seaward of a primary dune. These construction standards used to also apply to the High Hazard Flood AEC (a sub category of the Ocean Hazard AEC) which corresponded to the VE Zones identified on FEMA Flood Insurance Rate Maps. The High Hazard Flood AEC was repealed by the Commission in 2015 due to its deference to the NC Building Code standards and National Flood Insurance Program (NFIP) standards. A broader application of your construction standards outside of the Ocean Hazard AEC should also be part of a separate discussion that includes the interaction of these rules with the NC Building Code and the NFIP. Staff therefore recommends that the Commission adopt the

proposed amendments without changes, and consider taking up the other issues raised in public comments for discussion at a later meeting.



NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

BRAXTON C. DAVIS  
Director

**CRC-18-22**

September 6, 2018

**MEMORANDUM**

**TO:** Coastal Resources Commission, and  
**FROM:** Tancred Miller  
**SUBJECT:** Ocean Outfalls Fiscal Analysis

The CRC began rulemaking on 15A NCAC 07H .0309 Use Standards for Ocean Hazard Areas: Exceptions, to provide flexibility in maintaining existing ocean outfalls that are owned or operated by a unit of State or local government.

The CRC was asked to allow for as-needed lengthening and shortening of existing outfall pipes, and routine maintenance and repairs due to weather exposure or storm damage.

The CRC has approved rule language to accommodate the request for regulatory relief for existing stormwater outfalls. Requests for new extensions must go through the CAMA Major Permitting process, 15A NCAC 07J .0200, for review by the appropriate state and federal agencies. Once a design is approved, NCDOT or the local government may extend or shorten the outfall within the permitted dimensions without the need for a new permit application each time; shortening or lengthening outfall structures within the authorized dimensions will be considered maintenance under 15A NCAC 07K .0103. Outfalls may not prevent pedestrian or vehicular access along the beach.

Staff has prepared the required fiscal analysis and it has been approved by the Department and by the Office of State Budget and Management (OSBM). Staff's analysis, which is attached, found that the fiscal impacts that may result from this action would include a \$400 CAMA permit application fee, plus engineering and construction costs that DCM is unable to estimate. These costs would be incurred only if the Department of Transportation or a responsible local government applied for a permit to extend any existing ocean outfall(s).

Beachgoers could also receive certain non-monetary benefits, including a reduction in public health risk, enhanced aesthetics, and improved access along the beach.

The proposed effective date of this amendment is February 1, 2019.



## **Fiscal Analysis**

### **15A NCAC 07H .0309 Use Standards for Ocean Hazard Areas: Exceptions**

#### **“Ocean Outfalls”**

Prepared by

Tancred Miller  
Coastal & Ocean Policy Manager  
Policy & Planning Section  
NC Division of Coastal Management  
(252) 808-2808, ext. 224

August 2018





## Summary

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Agency	DEQ, Division of Coastal Management (DCM) Coastal Resources Commission (CRC)
Title of the Proposed Rule	Use Standards for Ocean Hazard Areas: Exceptions
Citation	15A NCAC 07H .0309
Description of the Proposed Rule	7H .0309 describes the types of development that can be permitted seaward of the generally applicable oceanfront setbacks in the Ocean Hazard AEC (OHA).
Agency Contact	Tancred Miller Coastal and Ocean Policy Manager Tancred.Miller@ncdenr.gov (252) 808-2808 ext. 224
Authority	G.S. 113A-107(a); 113A-107(b); 113A-113(b)(6)a; 113A-113(b)(6)b; 113(b)(6)d; 113A-124.
Necessity	The proposed amendments are needed to facilitate maintenance of existing stormwater outfalls on ocean beaches.
Fiscal Impact Summary	State government: Yes NCDOT: Yes Local government: Yes Substantial impact: No



## Description of the Proposed Rules

There are 26 stormwater outfalls on the ocean beaches of North Carolina that are maintained either by a unit of state or local government, Table 1. Most of these outfalls are on the beaches of Dare and New Hanover Counties, in the towns of Kill Devil Hills, Nags Head, and Kure Beach. NCDOT maintains 10 outfalls, and the remaining 16 are maintained by a county or municipal government.

Site #	County	Town	Route	Nearest Intersection	Maintained By
1	Brunswick	Ocean Isle Beach	E. First St.	Greensboro	NCDOT
2	New Hanover	Hanby Beach	US 421	Ocean View	NCDOT
3	Dare	Nags Head	NC 12	Gallery Row	NCDOT
4	Dare	Nags Head	NC 12	Curlew St.	NCDOT
5	Dare	Nags Head	NC 12	Conch St.	NCDOT
6	Dare	Nags Head	NC 12	Southside Rd.	NCDOT
7	Dare	Nags Head	NC 12	Old OI Rd.	NCDOT
8	Dare	Kill Devil Hills	NC 12	Lake Club Dr.	NCDOT
9	Dare	Kill Devil Hills	NC 12	Martin St.	NCDOT
10	Dare	Kill Devil Hills	NC 12	Baum St.	NCDOT
11	Dare	Kill Devil Hills	NC 12	Oregon Ave.	Local Gov't
12	New Hanover	Hanby Beach	US 421	Kure Vil. Way	Local Gov't
13	New Hanover	Kure Beach	US 421	M Ave.	Local Gov't
14	New Hanover	Kure Beach	US 421	L and M Ave.	Local Gov't
15	New Hanover	Kure Beach	US 421	L Ave.	Local Gov't
16	New Hanover	Kure Beach	US 421	K Ave.	Local Gov't
17	New Hanover	Kure Beach	US 421	K Ave.	Local Gov't
18	New Hanover	Kure Beach	US 421	J Ave.	Local Gov't
19	New Hanover	Kure Beach	US 421	I Ave.	Local Gov't
20	New Hanover	Kure Beach	US 421	H Ave.	Local Gov't
21	New Hanover	Kure Beach	US 421	G Ave.	Local Gov't
22	New Hanover	Kure Beach	US 421	F Ave.	Local Gov't
23	New Hanover	Kure Beach	US 421	Davis Rd.	Local Gov't
24	New Hanover	Kure Beach	US 421	Pres. Davis Rd	Local Gov't
25	New Hanover	Kure Beach	US 421	Pres. Davis Rd	Local Gov't
26	New Hanover	Kure Beach	US 421	Assembly	Local Gov't

Table 1. Ocean outfalls maintained by state or local government

The outfalls are grandfathered, having been installed prior to subsequent limitations on oceanfront development under CAMA. Despite their grandfathered status, the CRC's rules do not allow for extension of existing outfalls, which creates a hardship and potential public safety hazard when beaches are widened through beach nourishment, Fig. 1. There is also a public health concern with having stormwater effluent discharging into the surf zone where swimmers are present.





Fig. 1 Non-extended outfall on a nourished beach

In other cases, particularly in New Hanover County, outfall pipes and framing may become exposed as the beach erodes, Fig. 2, creating an impediment to pedestrian and vehicular access. In these cases, the responsible government may wish to temporarily shorten the length of the pipe to allow lateral access.



Fig. 2 Exposed outfall pipe and framing on an eroded beach

The CRC was asked to consider adopting a regulatory mechanism to allow for the extension of existing ocean outfalls, whether in conjunction with a beach nourishment project, or to allow effluent to be released beyond the surf zone where swimmers are normally present, Fig. 3.





Fig. 3 Outfall buried and extended beyond the surf zone, and marked with warning signs

The CRC was also asked to allow for as-needed lengthening and shortening of existing outfall pipes, and routine maintenance and repairs due to exposure or storm damage.

The CRC has approved rule language to accommodate the request for regulatory relief for existing stormwater outfalls. Requests for new extensions must go through the CAMA Major Permitting process, 15A NCAC 07J .0200, for review by the appropriate state and federal agencies. Once a design is approved, NCDOT or the local government may extend or shorten the outfall within the permitted dimensions without the need for a new permit application each time; shortening or lengthening outfall structures within the authorized dimensions will be considered maintenance under 15A NCAC 07K .0103. Outfalls may not prevent pedestrian or vehicular access along the beach.

The proposed effective date of this amendment is February 1, 2019.

### **FISCAL IMPACTS**

The proposed amendment authorizes a new activity for the purposes of public health and safety, as currently the rules do not allow for extensions. The proposed rules apply to 26 stormwater outfalls along North Carolina's beaches. When an eligible unit of state or local government opts to maintain or extend an outfall, they will incur additional costs for engineering design and construction, as well as applicable permit fees. DCM is unable to predict the timing and frequency of stormwater outfall extensions.

The amendment does not require any affected party to take any specific action, does not affect permitting costs, and does not add any additional regulatory burden.

State Government/Division of Coastal Management

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The proposed rule change is not expected to noticeably affect the number of permit applications and fees submitted to DCM since action by an applicant is voluntary and there are four eligible applicants that would likely need only one permit each: NCDOT, Town of Kill Devil Hills, New Hanover County, and Town of Kure Beach. The CAMA Major Permit fee is \$400.





## NC Department of Transportation

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Pursuant to G.S. 150B-21.4(a1), the agency reports that the proposed amendment will improve environmental permitting for the NC Department of Transportation (NCDOT). The amendment will allow NCDOT the flexibility to maintain outfalls as necessary, and should NCDOT wish to extend any of their existing outfalls, they will now be able to do so. If NCDOT, at its discretion, opts to extend their outfalls, the vast majority of costs that they incur will be in engineering design and construction. General cost estimates for design and construction are not available because of the number of variables involved, such as the possible need to replace or retrofit existing structures, the types of materials involved, the length of pipe, need for in-water anchoring, and the amount of excavation required.

## Local Government

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DCM does not anticipate any fiscal impact on local governments, since applications for new extensions will most likely be included in the existing permitting process for beach nourishment projects. DCM does not expect any change in the number of permits issued, and there will be no increase in application fees. If a local government, at its discretion, opts to extend their outfalls, the vast majority of costs that they incur will be in engineering design and construction. General cost estimates for design and construction are not available because of the number of variables involved, such as the possible need to replace or retrofit existing structures, the types of materials involved, the length of pipe, need for in-water anchoring, and the amount of excavation required.

## Beachgoers

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If outfalls are extended beyond the surf zone, and/or actively lengthened and shortened in response to changes in beach width, beachgoers can expect to receive certain non-monetary benefits. Potential benefits include a reduction in public health risk, enhanced aesthetics, and improved access along the beach.

## Substantial Impact

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Pursuant to G.S. 150B-21.4(b1), the agency reports that the proposed amendment will not have a substantial economic impact.



## 15A NCAC 07H .0309 USE STANDARDS FOR OCEAN HAZARD AREAS: EXCEPTIONS

(a) The following types of development shall be permitted seaward of the oceanfront setback requirements of Rule .0306(a) of ~~the Subchapter~~ this Section if all other provisions of this Subchapter and other state and local regulations are met:

- (1) campsites;
- (2) driveways and parking areas with clay, packed sand or gravel;
- (3) elevated decks not exceeding a footprint of 500 square feet;
- (4) beach accessways consistent with Rule .0308(c) of this ~~Subchapter~~; Section;
- (5) unenclosed, uninhabitable gazebos with a footprint of 200 square feet or less;
- (6) uninhabitable, single-story storage sheds with a foundation or floor consisting of wood, clay, packed sand or gravel, and a footprint of 200 square feet or less;
- (7) temporary amusement stands;
- (8) sand fences; and
- (9) swimming pools.

In all cases, this development shall be permitted only if it is landward of the vegetation line or static vegetation line, whichever is applicable; involves no alteration or removal of primary or frontal dunes which would compromise the integrity of the dune as a protective landform or the dune vegetation; has overwalks to protect any existing dunes; is not essential to the continued existence or use of an associated principal development; is not required to satisfy minimum requirements of local zoning, subdivision or health regulations; and meets all other non-setback requirements of this Subchapter.

(b) Where application of the oceanfront setback requirements of Rule .0306(a) of this ~~Subchapter~~ Section would preclude placement of permanent substantial structures on lots existing as of June 1, 1979, buildings shall be permitted seaward of the applicable setback line in ocean erodible areas, but not inlet hazard areas or unvegetated beach areas, if each of the following conditions are met:

- (1) The development is set back from the ocean the maximum feasible distance possible on the existing lot and the development is designed to minimize encroachment into the setback area;
- (2) The development is at least 60 feet landward of the vegetation line or static vegetation line, whichever is applicable;
- (3) The development is not located on or in front of a frontal dune, but is entirely behind the landward toe of the frontal dune;
- (4) The development incorporates each of the following design standards, which are in addition to those required by Rule .0308(d) of this ~~Subchapter~~. Section.
  - (A) All pilings shall have a tip penetration that extends to at least four feet below mean sea level;
  - (B) The footprint of the structure shall be no more than 1,000 square feet, and the total floor area of the structure shall be no more than 2,000 square feet. For the purpose of this Section, roof-covered decks and porches that are structurally attached shall be included in the calculation of footprint;
  - (C) Driveways and parking areas shall be constructed of clay, packed sand or gravel except in those cases where the development does not abut the ocean and is located landward of a paved public street or highway currently in use. In those cases concrete, asphalt or turfstone may also be used;
  - (D) No portion of a building's total floor area, including elevated portions that are cantilevered, knee braced or otherwise extended beyond the support of pilings or footings, may extend oceanward of the total floor area of the landward-most adjacent building. When the geometry or orientation of a lot precludes the placement of a building in line with the landward most adjacent structure of similar use, an average line of construction shall be determined by the Division of Coastal Management on a case-by-case basis in order to determine an ocean hazard setback



that is landward of the vegetation line, static vegetation line or measurement line, whichever is applicable, a distance no less than 60 feet.

- (5) All other provisions of this Subchapter and other state and local regulations are met. If the development is to be serviced by an on-site waste disposal system, a copy of a valid permit for such a system shall be submitted as part of the CAMA permit application.
- (c) Reconfiguration and development of lots and projects that have a grandfather status under Paragraph (b) of this Rule shall be allowed provided that the following conditions are met:
  - (1) Development is setback from the first line of stable natural vegetation a distance no less than that required by the applicable exception;
  - (2) Reconfiguration shall not result in an increase in the number of buildable lots within the Ocean Hazard AEC or have other adverse environmental consequences.

For the purposes of this Rule, an existing lot is a lot or tract of land which, as of June 1, 1979, is specifically described in a recorded plat and which cannot be enlarged by combining the lot or tract of land with a contiguous lot(s) or tract(s) of land under the same ownership. The footprint is defined as the greatest exterior dimensions of the structure, including covered decks, porches, and stairways, when extended to ground level.

(d) The following types of water dependent development shall be permitted seaward of the oceanfront setback requirements of Rule .0306(a) of this Section if all other provisions of this Subchapter and other state and local regulations are met:

- (1) piers providing public access; and
- (2) maintenance and replacement of existing state-owned bridges and causeways and accessways to such bridges.

(e) Replacement or construction of a pier house associated with an ocean pier shall be permitted if each of the following conditions is met:

- (1) The ocean pier provides public access for fishing and other recreational purposes whether on a commercial, public, or nonprofit basis;
- (2) Commercial, non-water dependent uses of the ocean pier and associated pier house shall be limited to restaurants and retail services. Residential uses, lodging, and parking areas shall be prohibited;
- (3) The pier house shall be limited to a maximum of two stories;
- (4) A new pier house shall not exceed a footprint of 5,000 square feet and shall be located landward of mean high water;
- (5) A replacement pier house may be rebuilt not to exceed its most recent footprint or a footprint of 5,000 square feet, whichever is larger;
- (6) The pier house shall be rebuilt to comply with all other provisions of this Subchapter; and
- (7) If the pier has been destroyed or rendered unusable, replacement or expansion of the associated pier house shall be permitted only if the pier is being replaced and returned to its original function.

(f) In addition to the development authorized under Paragraph (d) of this Rule, small scale, non-essential development that does not induce further growth in the Ocean Hazard Area, such as the construction of single family piers and small scale erosion control measures that do not interfere with natural oceanfront processes, shall be permitted on those non-oceanfront portions of shoreline that exhibit features characteristic of an Estuarine Shoreline. Such features include the presence of wetland vegetation, and lower wave energy and erosion rates than in the adjoining Ocean Erodible Area. Such development shall be permitted under the standards set out in Rule .0208 of this Subchapter. For the purpose of this Rule, small scale is defined as those projects which are eligible for authorization under 15A NCAC 07H .1100, .1200 and 07K .0203.

(g) Transmission lines necessary to transmit electricity from an offshore energy-producing facility may be permitted provided that each of the following conditions is met:

- (1) The transmission lines are buried under the ocean beach, nearshore area, and primary and frontal dunes, all as defined in Rule ~~07H-0305~~, .0305 of this Section, in such a manner so



as to ensure that the placement of the transmission lines involves no alteration or removal of the primary or frontal dunes; and

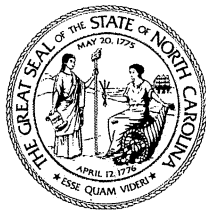
- (2) The design and placement of the transmission lines shall be performed in a manner so as not to endanger the public or the public's use of the beach.

(h) Existing stormwater outfalls within the Ocean Hazard AEC that are owned or maintained by a State agency or local government, may be extended oceanward subject to the provisions contained within 15A NCAC 07J .0200. Outfalls may be extended below mean low water, and may be maintained in accordance with 15A NCAC 07K .0103. Shortening or lengthening of outfall structures within the authorized dimensions, in response to changes in beach width, is considered maintenance under 15A NCAC 07K .0103. Outfall extensions may be marked with signage, and shall not prevent pedestrian or vehicular access along the beach. This Paragraph does not apply to existing stormwater outfalls that are not owned or maintained by a State agency or local government.

*History Note: Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b)(6)a; 113A-113(b)(6)b; 113A-113(b)(6)d; 113A-124;  
Eff. February 2, 1981;  
Amended Eff. June 1, 2010; February 1, 2006; September 17, 2002 pursuant to S.L. 2002-116; August 1, 2000; August 1, 1998; April 1, 1996; April 1, 1995; February 1, 1993; January 1, 1991; April 1, 1987.*







NORTH CAROLINA  
*Environmental Quality*

ROY COOPER  
*Governor*

MICHAEL S. REGAN  
*Secretary*

BRAXTON C. DAVIS  
*Director*

**CRC-18-23**

August 30, 2018

**MEMORANDUM**

**TO:** Coastal Resources Commission

**FROM:** Mike Lopazanski

**SUBJECT:** Fiscal Analysis 15A 7J .0409 – Civil Penalties

At the July 2017 CRC meeting, the Commission approved for public hearing minor amendments to 7J .0409, Civil Penalties in order to be consistent with time frame changes in §143B 279.16 resulting from SL 2011-145, and existing time frames required by the Commission regarding the issuance of a Notice of Violation and a Notice of Assessment. Other amendments include the manner in which NOV's are delivered, clarifying situations when restoration will be required, and deletion of a reference to a repealed Area of Environmental Concern.

The intent of NCGS §143B 279.16 is to provide extra time for a violator and the state to work together to resolve the violation, while the Commission's current rule mandates a quick turn-around period between restoration and the NOA. The 2011 legislation and CRC rule create a narrow timeline to assemble the necessary paperwork, which can be problematic for the Division. The amendments will increase the time period before an NOA is sent from 30 to 90 days, add language to distinguish cases where restoration is required from those where it is not required, and change "shall" to "may" to be consistent with the discretionary term "may" in NCGS § 113A-126.

Under Civil Penalty Assessment 07J .0409(f)(3), the notice of civil a penalty assessment "... shall be delivered personally or by registered mail, return receipt requested." The amendment will include only the two methods allowed for delivering Notices of Assessment under NCGS §113A-126, which are registered or certified mail, return receipt requested.

You will recall that in addition to the proposed rule language, the NC Administrative Procedures Act (APA) requires a fiscal impact analysis to accompany the rule change and also to be approved by the Commission. Staff has prepared the attached fiscal analysis for the proposed amendments in compliance with NC APA.



## Summary of Fiscal Analysis

Since the proposed changes are administrative in nature, DCM does not believe that any regulated party will incur additional costs as a result of this action. The amendments do not require any affected party to take any specific action, and do not affect permitting costs nor create any additional regulatory burdens.

These amendments will have no impact on local governments. DCM does not expect any change in permits issued or the cost to secure permits.

Pursuant to G.S. 150B-21.4, the agency reports that the proposed amendments will not affect environmental permitting for the NC Department of Transportation (NCDOT).

The proposed rule changes do not change the types of activities that are subject to CAMA permitting, nor will they affect the number of permit applications submitted for development. There will be no impact on DCM permit receipts, and DCM does not anticipate any fiscal impacts.

DCM anticipates the effective date of these rule amendments to be March 1, 2019.

The fiscal analysis has been approved by DEQ and by OSBM. Staff recommends Commission approval of the fiscal analysis.



**Fiscal Analysis**

**Civil Penalties**

15A NCAC 07J .0409

Prepared by

Mike Lopazanski  
Policy & Planning Section  
NC Division of Coastal Management  
(252) 808-2808, ext. 223

July 20, 2018

## Summary

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Agency	DEQ, Division of Coastal Management (DCM) Coastal Resources Commission (CRC)
Title of the Proposed Rule	Civil Penalties
Citation	15A NCAC 07J .0409
Description of the Proposed Rule	7J .0409 provides the procedures and standards governing the assessment, remission, settlement and appeal of civil penalties assessed by the Coastal Resources Commission and the Director pursuant to G.S. 113A-126(d).
Agency Contact	Mike Lopazanski Policy & Planning Section Chief Mike.Lopazanski@ncdenr.gov (252) 808-2808
Authority	G.S. 113A-124; G.S. 113A-126(d)
Necessity	The Coastal Resources Commission proposes to amend its administrative rules in order to comply with legislative changes to §143B 279.16 (Effective July 1, 2011), which mandates ten (10) days be added between the time the violator is sent a Notice of Violation (NOV) of an environmental statute or an environmental rule and the subsequent date the violator is sent a Notice of Assessment (NOA) for the civil penalty. The Commission is also proposing amendments to address procedural matters, clarifications and inconsistencies with other commission development rules for the coastal area.
Impact Summary	State government: No Local government: No Substantial impact: No Federal government: No Private citizens: No

## Introduction and Purpose

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The North Carolina Coastal Management Program administered by the Division of Coastal Management is a comprehensive regulatory program intended to guide development in the coastal area while protecting coastal resources, public trust and private property rights. As part of this comprehensive program, the Coastal Area Management Act (CAMA) allows for procedures and standards governing the assessment, remission, settlement and appeal of civil penalties assessed by the Coastal Resources Commission (CRC).

CAMA permits are not only a State permit, but also a federal (US Army Corps of Engineers) authorization as well. While the majority of development permits are issued to private property owners, permits are also issued to public entities, local governments, and non-profit organizations. If development is undertaken in an Area of Environmental Concern (AEC) under the CRC's jurisdiction without a CAMA permit or there is non-compliance with the terms and conditions of permitted development; this would also constitute a CAMA violation. The Division is provided enforcement authority through the CRC's rules as well as the Coastal Area Management Act §113A-126(d).



In 2011, the Regulatory Reform Act mandated that all regulatory divisions within the Department implement a tiered enforcement policy. Under this policy, Tier I violations receive warning letters and no civil penalties are assessed. A Tier II violation involve unauthorized work that has been completed, a Notice of Violation issuance and civil penalty assessment. These violations involve activities that could have been permitted if a permit had been sought by the applicant. Tier III is based on the seriousness of the violation, the degree of damage, or the length of time and include Continuing Notices of Violation, willful and intentional violations, dredge and fill violations, shellfish bed impacts, or unauthorized activities in Primary Nursery Areas. The Division may issue a Cease and Desist Order and civil penalties can be assessed based on the degree of impact on the resources according to penalty matrix (Schedule A). From 2012-2015, DCM has an average of 50 enforcement actions per year.

Minor amendments are needed to 7J .0409, Civil Penalties in order to be consistent with time frame changes to §143B 279.16 resulting from SL 2011-145 and time existing frames required by the Commission regarding the issuance of a Notice of Violation and a Notice of Assessment. Other amendments include the manner in which NOV's are delivered, clarifying situations when restoration will be required, and deletion of a reference to a repealed Area of Environmental Concern.

Since the proposed changes are administrative in nature, DCM does not believe that any regulated party will incur additional costs as a result of this action. The amendments do not require any affected party to take any specific action, and does not affect permitting costs nor add any additional regulatory burden.

These amendments will have no impact on local governments. DCM does not expect any change in permits issued or the cost to secure permits.

Pursuant to G.S. 150B-21.4, the agency reports that the proposed amendments will not affect environmental permitting for the NC Department of Transportation (NCDOT).

The proposed rule changes do not change the types of activities that are subject to CAMA permitting, nor will they affect the number of permit applications submitted for development. There will be no impact on DCM permit receipts, and DCM does not anticipate any fiscal impacts.

DCM anticipates the effective date of these rule amendments to be March 1, 2019.

## Description of the Proposed Rules

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The CRC is proposing the following amendments, based upon prior legislative changes and internal review:

- **07J .0409(e)** states that **Notices of Violation** issued by the Division “...shall be delivered personally or by registered mail, return receipt requested.” The CRC is proposing to amend this language to include the only two methods allowed for delivering Notices of Violation under NCGS §113A- 126, which are registered or certified mail, return receipt requested.
- **07J .0409(f)(2)** states that “The Director shall issue a notice of assessment [NOA] within 30 days after the Division determines that restoration of the adversely impacted resources is complete.” This rule can conflict with NCGS §143B 279.16 (Effective July 1, 2011), which mandates ten days be added between the time the violator is sent a Notice of Violation (NOV) of an environmental statute or an environmental rule and the subsequent date the violator is sent a Notice of Assessment (NOA) for the civil penalty.

The intent of NCGS §143B 279.16 is to provide extra time for a violator and the state to work together to resolve the violation, while the Commission’s current rule mandates a quick turn-around period between restoration and the NOA. The 2011 legislation and CRC rule has created a narrow timeline to assemble the necessary paperwork, which can be problematic for the Division. The Commission’s current rule also does not specify what happens to violators who are not required to restore resources (for example, contractors who are not also the property owner). Finally, the Commission’s current rule uses the mandatory term “shall,” which is inconsistent with the discretionary term “may” in NCGS § 113A-126. The Commission is therefore proposing to increase the time period before an NOA is sent from 30 to 90 days, adding language to distinguish cases where restoration is required from those where it is not required, and changing “shall” to “may.”

- **07J .0409(f)(3)** under Civil Penalty Assessment: states that the notice [of civil penalty assessment] “... shall be delivered personally or by registered mail, return receipt requested.” The Commission is proposing to amend this language to include only the two methods allowed for delivering Notices of Assessment under NCGS §113A-126, which are registered or certified mail, return receipt requested.
- **07J .0409(g)(4)(B) Schedule A Major Development Violations**, note (4) lists the “High Hazard Flood Area.” The High Hazard Flood AEC was repealed by the Commission in September 2015.
- **07J .0409(g)(4)(B) Schedule B Minor Development Violations**, note (1) lists the “High Hazard Flood Area.” The High Hazard Flood AEC was repealed by the Commission in September 2015.

## **COSTS OR NEUTRAL IMPACTS**

### NC Department of Transportation

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Pursuant to G.S. 150B-21.4, the agency reports that the proposed amendments will not affect environmental permitting for the NC Department of Transportation (NCDOT).

### Local Government

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These amendments will have no impact on local governments. DCM does not expect any change in permits issued or the cost to secure permits.

### Division of Coastal Management

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The proposed rule changes do not change the types of activities that are subject to CAMA permitting, nor will they affect the number of permit applications submitted for development. There will be no impact on DCM permit receipts, and DCM does not anticipate any fiscal impacts.

## **COST/BENEFIT SUMMARY**

The benefit of the rule change will be the increased timeframe for the Division of Coastal Management to assemble the necessary paperwork and work toward resolution of violations

while meeting the mandates of both §143B 279.16 and the Commissions interest in efficiently addressing Notices of Violation and Notices of Assessment.

**15A NCAC 07J .0409 CIVIL PENALTIES**

- (a) Purpose and Scope. These Rules provide the procedures and standards governing the assessment, remission, settlement and appeal of civil penalties assessed by the Coastal Resources Commission and the Director pursuant to G.S. 113A-126(d).
- (b) Definitions. The terms used herein shall be as defined in G.S. 113A-103 and as follows:
- (1) "Act" means the Coastal Area Management Act of 1974, G.S. 113A-100 through 134, plus amendments.
  - (2) "Delegate" means the Director or other employees of the Division of Coastal Management, or local permit officers to whom the Commission has delegated authority to act in its stead pursuant to this Rule.
  - (3) "Director" means the Director, Division of Coastal Management.
  - (4) "Respondent" means the person to whom a notice of violation has been issued or against whom a penalty has been assessed.
  - (5) "Person" is defined in the Coastal Area Management Act, G.S. 113A-103(9).
- (c) Civil penalties may be assessed against any person who commits a violation as provided for in G.S. 113A-126(d)(1) and (2).
- (d) Investigative costs. Pursuant to G.S. 113A-126(d)(4a) the Commission or Director may also assess a respondent for the costs incurred by the Division for investigation, inspection, and monitoring associated with assessment the civil penalty. Investigative costs shall be in addition to any civil penalty assessed. For a minor development violation, investigative costs shall not exceed one-half of the amount of the civil penalty assessed or one thousand dollars (\$1,000), whichever is less. For a major development violation, investigative costs shall not exceed one-half of the amount of the civil penalty assessed or two thousand five hundred dollars (\$2,500), whichever is less. The Division shall determine the amount of investigative costs to assess based upon factors including the amount of staff time required for site visits, investigation, enforcement action, interagency coordination, and for monitoring restoration of the site.
- (e) Notice of Violation. The Commission hereby authorizes employees of the Division of Coastal Management to issue in the name of the Commission notices of violation to any person engaged in an activity which constitutes a violation for which a civil penalty may be assessed. Such notices shall set forth the nature of the alleged violation, shall order that the illegal activity be ceased and affected resources be restored in accordance with 15A NCAC 07J .0410. The notice shall specify the time by which the restoration shall be completed as ordered by the Division. The notice shall be delivered ~~personally or~~ by registered ~~or certified~~ mail, return receipt requested.
- (f) Civil Penalty Assessment.
- (1) The Commission hereby delegates to the Director the authority to assess civil penalties according to the procedures set forth in Paragraph (g) of this Rule.
  - (2) ~~If restoration of affected resources is not required, the~~ The Director ~~shall~~ ~~may~~ issue a notice of assessment within ~~30~~ 90 days ~~from the date of the Notice of Violation.~~ ~~If restoration of affected resources is required, the Director may issue a Notice of Assessment within 60 days~~ after the Division determines that restoration of the adversely impacted resources is ~~complete- complete or due date of restoration completion.~~
  - (3) The notice of assessment shall specify the reason for assessment, how the assessment was calculated, when and where payment shall be made, and shall inform the respondent of the right to appeal the assessment by filing a petition for a contested case hearing with the Office of Administrative Hearings pursuant to G.S. 150B-23. The notice shall be delivered ~~personally or~~ by registered ~~or certified~~ mail, return receipt requested.
- (g) Amount of Assessment.
- (1) Civil penalties shall not exceed the maximum amounts established by G.S. 113A-126(d).
  - (2) If any respondent willfully continues to violate by action or inaction any rule or order of the Commission after the date specified in a notice of violation, each day the violation continues or is repeated shall be considered a separate violation as provided in G.S. 113A-126(d)(2).
  - (3) In determining the amount of the penalty, the Commission or Director shall consider the factors contained in G.S. 113A-126(d)(4).
  - (4) Pursuant to Subparagraph (g)(3) of this Rule, penalties for major development violations, including violations of permit conditions, shall be assessed in accordance with the following criteria.
    - (A) Major development which could have been permitted under the Commission's rules at the time the notice of violation is issued shall be assessed a penalty equal to two times the relevant CAMA permit application fee, plus investigative costs.
    - (B) Major development which could not have been permitted under the Commission's rules at the time the notice of violation is issued shall be assessed an amount equal to the relevant CAMA permit application fee, plus a penalty pursuant to Schedule A of this Rule, plus investigative costs. If a violation affects more than one area of environmental concern



(AEC) or coastal resource as listed within Schedule A of this Rule, the penalties for each affected AEC shall be combined. Any structure or part of a structure that is constructed in violation of existing Commission rules shall be removed or modified as necessary to bring the structure into compliance with the Commission's rules.

**SCHEDULE A**  
**Major Development Violations**

Size of Violation (sq. ft.)

Area of Environmental Concern Affected	≤ 100	101-500	501-1,000	1001-3000	3001-5000	5001-8000	8001-11,000	11,001-15,000	15,001-20,000	20,001-25,000	>25,000
Estuarine Waters or Public Trust Areas (1)	\$250	\$375	\$500	\$1,500	\$2,000	\$3,500	\$5,000	\$7,000	\$9,000	\$10,000	\$10,000
Primary Nursery Areas	\$100	\$225	\$350	\$850	\$1,350	\$2,850	\$4,350	\$3,000	\$1,000	n/a	n/a
Mudflats and Shell Bottom	\$100	\$225	\$350	\$850	\$1,350	\$2,850	\$4,350	\$3,000	\$1,000	n/a	n/a
Submerged Aquatic Vegetation	\$100	\$225	\$350	\$850	\$1,350	\$2,850	\$4,350	\$3,000	\$1,000	n/a	n/a
<b>Coastal Wetlands</b>	\$250	\$375	\$500	\$1,500	\$2,000	\$3,500	\$5,000	\$7,000	\$9,000	\$10,000	\$10,000
<b>Coastal Shorelines</b>	\$250	\$350	\$450	\$850	\$1,250	\$2,450	\$3,650	\$5,250	\$7,250	\$9,250	\$10,000
Wetlands (2)	\$100	\$200	\$300	\$700	\$1,100	\$2,300	\$3,500	\$4,750	\$2,750	\$750	n/a
ORW- Adjacent Areas	\$100	\$200	\$300	\$700	\$1,100	\$2,300	\$3,500	\$4,750	\$2,750	\$750	n/a
Ocean Hazard System (3)(4)	\$250	\$350	\$450	\$850	\$1,250	\$2,450	\$3,650	\$5,250	\$7,250	\$9,250	\$10,000
Primary or Frontal Dune	\$100	\$200	\$300	\$700	\$1,100	\$2,300	\$3,500	\$4,750	\$2,750	\$750	n/a
Public Water Supplies (5)	\$250	\$350	\$450	\$850	\$1,250	\$2,450	\$3,650	\$5,250	\$7,250	\$9,250	\$10,000
Natural and Cultural Resource Areas (6)	\$250	\$350	\$450	\$850	\$1,250	\$2,450	\$3,650	\$5,250	\$7,250	\$9,250	\$10,000

- (1) Includes the Atlantic Ocean from the normal high water mark to three miles offshore.
  - (2) Wetlands that are jurisdictional by the Federal Clean Water Act.
  - (3) If the AEC physically overlaps another AEC, use the greater penalty schedule.
  - (4) Includes the Ocean Erodible, **High Hazard Flood Area**, Inlet Hazard Area, and Unvegetated Beach Area.
  - (5) Includes Small Surface Water Supply, Watershed and Public Water Supply Well Fields.
  - (6) Includes Coastal Complex Natural Areas, Coastal Areas Sustaining Remnant Species, Unique Geological Formations, Significant Coastal Archaeological Resources, and Significant Coastal Historical Architectural Resources.
- (C) Assessments for violations by public agencies (i.e. towns, counties and state agencies) shall be determined in accordance with Parts (g)(4)(A) and (B) of this Rule.
- (D) Willful and intentional violations. The penalty assessed under Parts (g)(4)(A) and (B) of this Rule shall be doubled for willful and intentional violations except that the doubled penalties assessed under this Subparagraph shall not exceed ten thousand dollars (\$10,000) or be less than two thousand dollars (\$2,000) for each separate violation. A violation shall be considered to be willful and intentional when:
- (i) The person received written instructions from one of the Commission's delegates that a permit would be required for the development and subsequently undertook development without a permit; or
  - (ii) The person received written instructions from one of the Commission's delegates that the proposed development was not permissible under the Commission's rules,

- or received denial of a permit application for the proposed activity, and subsequently undertook the development without a permit; or
  - (iii) The person committed previous violations of the Commission's rules; or
  - (iv) The person refused or failed to restore a damaged area as ordered by one of the Commission's delegates. If necessary, the Commission or Division shall seek a court order to require restoration.
- (E) Assessments against contractors. Any contractor or subcontractor or person or group functioning as a contractor shall be subject to a notice of violation and assessment of a civil penalty in accordance with Paragraph (f) of this Rule. Such penalty shall be in addition to that assessed against the landowner. When a penalty is being doubled pursuant to Part (g)(4)(D) and the element of willfulness is present only on the part of the contractor, the landowner shall be assessed the standard penalty and the contractor shall be assessed the doubled penalty.
- (F) Continuing violations.
  - (i) Pursuant to G.S. 113A-126(d)(2), each day that the violation continues after the date specified in the notice of violation for the unauthorized activity to cease or restoration to be completed shall be considered a separate violation and shall be assessed an additional penalty.
  - (ii) Refusal or failure to restore a damaged area as ordered shall be considered a continuing violation and shall be assessed an additional penalty. When resources continue to be affected by the violation, the amount of the penalty shall be determined according to Part (g)(4)(B) of this Rule. The continuing penalty period shall be calculated from the date specified in the notice of violation for the unauthorized activity to cease or restoration to be completed and run until:
    - (I) the Division's order is satisfied, or
    - (II) the respondent enters into good faith negotiations with the Division, or
    - (III) the respondent contests the Division's order in a judicial proceeding by raising a justifiable issue of law or fact therein.

The continuing penalty period shall resume if the respondent terminates negotiations without reaching an agreement with the Division, fails to comply with court ordered restoration, or fails to meet a deadline for restoration that was negotiated with the Division.
- (5) Pursuant to Subparagraph (g)(3) of this Rule, civil penalties for minor development violations, including violations of permit conditions, shall be assessed in accordance with the following criteria:
  - (A) Minor development which could have been permitted under the Commission's rules at the time the notice of violation is issued shall be assessed a penalty equal to two times the relevant CAMA permit application fee, plus investigative costs.
  - (B) Minor development which could not have been permitted under the Commission's rules at the time the notice of violation is issued shall be assessed an amount equal to the relevant CAMA permit application fee, plus a penalty pursuant to Schedule B of this Rule, plus investigative costs. If a violation affects more than one area of environmental concern (AEC) or coastal resource as listed within Schedule B of this Rule, the penalties for each affected AEC shall be combined. Any structure or part of a structure that is constructed in violation of existing Commission rules shall be removed or modified as necessary to bring the structure into compliance with the Commission's rules.

SCHEDULE B  
Minor Development Violations

Area of Environmental Concern Affected	Size of Violation (sq. ft.)										
	≤ 100	101-500	501-1,000	1001-3000	3001-5000	5001-8000	8001-11,000	11,001-15,000	15,001-20,000	20,001-25,000	>25,000
<b>Coastal Shorelines</b>	\$225	\$250	\$275	\$325	\$375	\$450	\$525	\$625	\$750	\$875	\$1,000
ORW- Adjacent Areas	\$125	\$150	\$175	\$225	\$275	\$350	\$425	\$375	\$250	\$125	n/a
Ocean Hazard System (1)(2)	\$225	\$250	\$275	\$325	\$375	\$450	\$525	\$625	\$750	\$875	\$1,000
Primary or Frontal Dune	\$125	\$150	\$175	\$225	\$275	\$350	\$425	\$375	\$250	\$125	n/a
Public Water Supplies (3)	\$225	\$250	\$275	\$325	\$375	\$450	\$525	\$625	\$750	\$875	\$1,000
Natural and Cultural Resource Areas (4)	\$225	\$250	\$275	\$325	\$375	\$450	\$525	\$625	\$750	\$875	\$1,000

- (1) Includes the Ocean Erodible, ~~High Hazard Flood Area~~, Inlet Hazard Area, and Unvegetated Beach Area.
- (2) If the AEC physically overlaps another AEC, use the greater penalty schedule.
- (3) Includes Small Surface Water Supply, Watershed and Public Water Supply Well Fields.
- (4) Includes Coastal Complex Natural Areas, Coastal Areas Sustaining Remnant Species, Unique Geological Formations, Significant Coastal Archaeological Resources, and Significant Coastal Historical Architectural Resources.
- (C) Violations by public agencies (e.g. towns, counties and state agencies) shall be handled by the local permit officer or one of the Commission's delegates within their respective jurisdictions except that in no case shall a local permit officer handle a violation committed by the local government they represent. Penalties shall be assessed in accordance with Parts (g)(5)(A) and (B) of this Rule.
- (D) Willful and intentional violations. The penalty assessed under Parts (g)(5)(A) and (B) of this Rule shall be doubled for willful and intentional violations except that the doubled penalties assessed under this Subparagraph shall not exceed one thousand dollars (\$1,000.00) for each separate violation. A violation shall be considered to be willful and intentional when:
  - (i) The person received written instructions from the local permit officer or one of the Commission's delegates that a permit would be required for the development and subsequently undertook development without a permit; or
  - (ii) The person received written instructions from the local permit officer or one of the Commission's delegates that the proposed development was not permissible under the Commission's rules, or received denial of a permit application for the proposed activity, and subsequently undertook the development without a permit; or
  - (iii) The person committed previous violations of the Commission's rules; or
  - (iv) The person refused or failed to restore a damaged area as ordered by the local permit officer or one of the Commission's delegates. If necessary, a court order shall be sought to require restoration.
- (E) Assessments against contractors. Any contractor or subcontractor or person or group functioning as a contractor shall be subject to a notice of violation and assessment of a civil penalty in accordance with Paragraph (f) of this Rule. Such penalty shall be in addition to that assessed against the landowner. When a penalty is being doubled pursuant to Part (g)(5)(D) and the element of willfulness is present only on the part of the contractor, the landowner shall be assessed the standard penalty and the contractor shall be assessed the doubled penalty.
- (F) Continuing violations.

- (i) Pursuant to G.S. 113A-126(d)(2), each day that the violation continues after the date specified in the notice of violation for the unauthorized activity to cease and restoration to be completed shall be considered a separate violation and shall be assessed an additional penalty.
- (ii) Refusal or failure to restore a damaged area as ordered shall be considered a continuing violation and shall be assessed an additional penalty. The amount of the penalty shall be determined according to Part (g)(5)(B) of this Rule. The continuing penalty period shall be calculated from the date specified in the notice of violation for the unauthorized activity to cease and restoration to be completed and run until:
  - (I) the Commission delegate's order is satisfied, or
  - (II) the respondent enters into good faith negotiations with the local permit officer or the Division, or
  - (III) the respondent contests the local permit officer's or the Division's order in a judicial proceeding by raising a justiciable issue of law or fact therein.

The continuing penalty period shall resume if the respondent terminates negotiations without reaching an agreement with the local permit officer or the Division, fails to comply with court ordered restoration, or fails to meet a deadline for restoration that was negotiated with the local permit officer or the Division.

(h) Hearings and Final Assessment. Final decisions in contested case hearings concerning assessments shall be made by the Commission. The final decision shall be based on evidence in the official record of the contested case hearing, the administrative law judge's recommended decision, any exceptions filed by the parties and oral arguments. Oral arguments shall be limited to the facts in the official record.

(i) Referral. If any civil penalty as finally assessed is not paid, the Director on behalf of the Commission shall request the Attorney General to commence an action to recover the amount of the assessment.

(j) Reports to the Commission. Action taken by the Director shall be reported to the Commission at the next meeting. Such reports shall include information on the following:

- (1) respondent(s) against whom penalties have been assessed;
- (2) respondent(s) who have paid a penalty, requested remission, or requested an administrative hearing;
- (3) respondent(s) who have failed to pay; and
- (4) cases referred to the Attorney General for collection.

(k) Settlements. The Commission hereby delegates to the Director the authority to enter into a settlement of a civil penalty appeal at any time prior to decision in an administrative contested case hearing. Such settlements shall not require the approval of the Commission and shall not be considered a final Commission decision for purposes of G.S. 113A-123.

(l) Any settlement agreement proposed subsequent to a final Commission decision in the contested case shall be submitted to the Commission for approval.

*History Note: Authority G.S. 113A-124; 113A-126(d);  
 Eff. January 24, 1980;  
 ARRC Objection August 18, 1988;  
 Amended Eff. January 1, 1989; November 1, 1986; November 1, 1984;  
 ARRC Objection Lodged Eff. January 18, 1991;  
 Amended Eff. February 1, 2008; July 1, 1991; June 1, 1991.*





NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

BRAXTON C. DAVIS  
Director

CRC-18-27

November 15, 2018

**MEMORANDUM**

**TO:** Coastal Resources Commission

**FROM:** Heather Coats

**SUBJECT:** Fiscal Analysis 15A 7H .0304, 7H .0309 & 7H .0313 – State Ports Inlet Management AEC

At the April 2018 CRC meeting, the Commission approved for public hearing rule amendments that would create management objectives and use standards for a new State Ports Inlet Management AEC category. The new AEC category would be associated with the two inlets in North Carolina that include federally maintained shipping channels: Beaufort Inlet and the Cape Fear River Inlet. The new AEC category was a result of recommended priorities set in the CRC's Inlet Management Study.

The State Ports Inlet Management AEC proposed boundaries adjacent to the Cape Fear River Inlet consist of the entire oceanfront shoreline of the Town of Caswell Beach and the areas known as West Beach and South Beach within the Village of Bald Head Island. The proposed AEC boundaries adjacent to Beaufort Inlet are confined to the state and federal properties with Fort Macon State Park to the west and the westernmost portion of Cape Lookout National Seashore to the east.

The proposed rules create a new Area of Environmental Concern (AEC) for lands adjacent to the Cape Fear River Inlet and Beaufort Inlet which would allow greater flexibility to local and state agencies in the use of sandbags to protect threatened frontal and primary dunes, structures and infrastructure. The State Ports Inlet Management Area of Environmental Concern would be included within the Ocean Hazard category of AECs, as defined in 15A NCAC 07H .0304. The Ocean Hazard category currently includes the Ocean Erodible AEC, Inlet Hazard AEC and the Unvegetated Beach AEC.

The most significant proposed changes are as follows:

- Formalize removal of the Inlet Hazard Area designation for the lands adjacent to the mouth of the Cape Fear River and Beaufort Inlet, in accordance with legislation;
- Create a new AEC designation (State Ports Inlet Management AEC) for lands adjacent to the two inlets;



- Allow frontal and primary dunes to be classified as “imminently threatened” in the State Ports Inlet Management AEC;
- Broaden the definition of how a frontal or primary dune, structure or infrastructure may qualify as being imminently threatened in the State Ports Inlet Management AEC and to allow local governments or state agencies to apply for permits to protect threatened frontal or primary dunes with sandbags;
- Allow for the use of a larger size sandbag (i.e. “geotubes”) in the State Ports Inlet Management AEC;
- Allow for small scale development throughout the State Ports Inlet Management AEC that is consistent with an exception utilized in the former Inlet Hazard AEC;
- And maintain all other Ocean Hazard Use Standards in the State Ports Inlet Management AEC.

### Summary of Fiscal Analysis

The group most affected by these changes will be the two local governments, the Village of Bald Head Island and Town of Caswell Beach, within the State Ports Inlet Management Areas of Environmental Concern (AEC). The NC Baptist Assembly and the NC Division of Parks and Recreation at Fort Macon State Park may also benefit from the new designation. The AEC is not expected to affect the federal property at Cape Lookout National Seashore due to the undeveloped nature of the area.

Private land owners adjacent to the Cape Fear River Inlet in Caswell Beach and Bald Head Island may also indirectly benefit from the ability of their local governments to protect frontal dunes, which could in turn protect their property at reduced or no cost to them.

The NC Department of Transportation could potentially benefit should Caswell Beach Road again become threatened by erosion in the future.

DCM estimates that there is a potential cost savings for local governments of up to \$35,000 for a typical length revetment. These cost savings are derived from the cost difference between a geotextile tube estimated at \$325-975 per linear foot (dependent on the number of geotextile tubes used and diameter of the tube) vs. a standard sandbag revetment at \$425 per linear foot.

It is also estimated that there is a potential cost savings to property owners resulting from this action that could amount to \$31,875-\$42,500 per individual property. This estimate is based on varying average oceanfront property widths averaging from 75'-100' with a cost of \$425 per linear foot for the installation of sandbags that may in some cases be unneeded if the local government opted to protect the frontal dune oceanward of their property without assessing the property owner.

DCM anticipates the effective date of these rule amendments to be September 1, 2019. The fiscal analysis has been approved by DEQ and is under review by OSBM. Staff recommends that the Commission conditionally approve the fiscal analysis provided there are no significant revisions requested by OSBM.

**Fiscal Analysis**

**State Ports Inlet Management Area of Concern**

15A NCAC 07H .0304

15A NCAC 07H .0309

15A NCAC 07H .0313

Prepared by  
Heather Coats

NC Division of Coastal Management  
910-796-7302

November 15, 2018

Summary

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Agency	DEQ, Division of Coastal Management (DCM) Coastal Resources Commission (CRC)
Title of the Proposed Rules	AECs Within Ocean Hazard Areas Citation 15A NCAC 07H .0304 Use Standards for Ocean Hazard Areas: Exceptions 15A NCAC 07H .0309 Use Standards for State Ports Inlet Management Areas 15A NCAC 07H .0313
Description of the Proposed Rule	7H .0304 contains the CRC’s definitions of the Ocean Hazard Areas of Environmental Concern (AECs). The 7H .0309 rule contains the setback exceptions to the for Coastal Area Management Act permits in the Ocean Hazard AECs. The 7H .0313 Rule establishes the creation of a new AEC for lands adjacent to the two deep draft inlets providing access to the State’s ports.
Agency Contact	Heather Coats Beach and Inlet Management Project Coordinator Heather.Coats@ncdenr.gov (910) 796-7302
Authority	G.S. 113-229(cl); G.S. 113A-107; 113A-113; 113A-115; 113A-118; 113A-124
Necessity	The Coastal Resources Commission proposes to amend its administrative rules in order to comply with a legislative mandate (S.L. 2015-241) related to the removal of specific areas from the Inlet Hazard AEC. The amendments also include changes to create a new AEC. The amendments will provide greater flexibility to local governments and state agencies protecting life and property from the hazardous forces inherent to the oceanfront shoreline.
Impact Summary	State government: Yes Local government: Yes Substantial impact: No Federal government: No Private citizens: Yes

**Introduction and Purpose**

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In 2012, Section 4 of The Act to Study and Modify Certain Coastal Management Policies (S.L. 2012-202) directed the Coastal Resources Commission (CRC) to study the feasibility of creating a new Area of Environmental Concern (AEC) for the lands adjacent to the mouth of the Cape Fear River. The intent of the study was to consider the unique coastal morphologies and hydrographic conditions of the Cape Fear River region, and to determine if action was necessary to preserve, protect, and balance the economic and natural resources of this region through the elimination of overlapping AECs and by incorporating appropriate development standards into one single AEC unique to this location. The legislation specified



that the region studied should include Caswell Beach and the Village of Bald Head Island at a minimum. The CRC's findings on the Cape Fear River AEC Feasibility study acknowledged that the circumstances in the area may not be unique to only the Cape Fear area. The Commission recommended development of a more inclusive study of all the inlet areas, rather than limiting the creation of a new AEC to the Cape Fear region. The Inlet Management Study was then undertaken, which established numerous short and long-term priorities and recommendations, one of which was to create a new AEC designation for the areas adjacent to the state's two deep draft inlets (i.e. Cape Fear River and Beaufort Inlets).

Additional legislation entitled "An Act To Provide Further Regulatory Relief To The Citizens Of North Carolina By Providing For Various Administrative Reforms, By Eliminating Certain Unnecessary Burdens Or Outdated Statutes And Regulations and Modernizing Or Simplifying Cumbersome Or Outdated Regulations, And By Making Various Other Statutory Changes" (S.L. 2014-120) was also passed in the 2014 legislative session. Part 35.(c)(3) of the Act directed the CRC to repeal the Inlet Hazard Area designation for any locations including an inlet providing access to a State Port via a channel maintained by the United States Army Corps of Engineers (i.e. Cape Fear River and Beaufort Inlets). While these areas were thereby removed from the Inlet Hazard AEC designation, they remained within the Ocean Erodible AEC.

The CRC is therefore proposing the following changes as a result of the legislative mandate and discussions with the local governments and affected parties. The most significant proposed changes are as follows:

- Formalize removal of the Inlet Hazard Area designation for the lands adjacent to the mouth of the Cape Fear River and Beaufort Inlet, in accordance with legislation;
- Create a new AEC designation (State Ports Inlet Management AEC) for lands adjacent to the two inlets;
- Allow frontal and primary dunes to be classified as "imminently threatened" in the State Ports Inlet Management AEC;
- Broaden the definition of how a frontal or primary dune, structure or infrastructure may qualify as being imminently threatened in the State Ports Inlet Management AEC and to allow local governments or state agencies to apply for permits to protect threatened frontal or primary dunes with sandbags;
- Allow for the use of a larger size sandbag (i.e. "geotubes") in the State Ports Inlet Management AEC;
- Allow for small scale development throughout the State Ports Inlet Management AEC that is consistent with an exception utilized in the former Inlet Hazard AEC;
- And maintain all other Ocean Hazard Use Standards in the State Ports Inlet Management AEC.

The State Ports Inlet Management AEC proposed boundaries adjacent to the Cape Fear River Inlet consist of the entire oceanfront shoreline of the Town of Caswell Beach and the areas known as West Beach and South Beach within the Village of Bald Head Island. The proposed AEC boundaries adjacent to Beaufort Inlet are confined to the state and federal properties with Fort Macon State Park to the west and the westernmost portion of Cape Lookout National Seashore to the east.

The group most affected by these changes will be the two local governments, the Village of Bald Head Island and Town of Caswell Beach, within the State Ports Inlet Management Areas of Environmental Concern (AEC). The NC Baptist Assembly and the NC Division of Parks and Recreation at Fort Macon State Park may also benefit from the new designation. The AEC is not expected to affect the federal

property at Cape Lookout National Seashore due to the undeveloped nature of the area. Private land owners adjacent to the Cape Fear River Inlet in Caswell Beach and Bald Head Island may also indirectly benefit from the ability of their local governments to protect frontal dunes, which could in turn protect their property at reduced or no cost to them. The NC Department of Transportation could potentially benefit should Caswell Beach Road again become threatened by erosion in the future. DCM estimates that there is a potential **cost savings** for local governments of up to \$35,000 for a typical length revetment. These cost savings are derived from the cost difference between a geotextile tube estimated at \$325-975 per linear foot (dependent on the number of geotextile tubes used and diameter of the tube) vs. a standard sandbag revetment at \$425 per linear foot. It is also estimated that there is a potential cost savings to property owners resulting from this action that could amount to \$31,875-\$42,500 per individual property. This estimate is based on varying average oceanfront property widths averaging from 75'-100' with a cost of \$425 per linear foot for the installation of sandbags that may in some cases be unneeded if the local government opted to protect the frontal dune oceanward of their property without assessing the property owner. Given the unknowns related to future benefits, and limited historic need for sandbags at Caswell Beach, it would be difficult for DCM to estimate this savings. Other savings include the value of protecting property and dune habitat, which remains unquantified due to the complexity and variables involved. There are additional changes to the rules that are simply clarifications, and have no impact. These proposed rule changes are in the public interest and conform to the principles of G.S. 150B-19.1 and Executive Order 70.

DCM anticipates the effective date of these rule amendments to be September 1, 2019.

### **Description of the Proposed Rules**

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The proposed rules create a new Area of Environmental Concern (AEC) for lands adjacent to the Cape Fear River Inlet and Beaufort Inlet which would allow greater flexibility to local and state agencies in the use of sandbags to protect threatened frontal and primary dunes, structures and infrastructure. The State Ports Inlet Management Area of Environmental Concern would be included within the Ocean Hazard category of AECs, as defined in 15A NCAC 07H .0304. The Ocean Hazard category currently includes the Ocean Erodible AEC, Inlet Hazard AEC and the Unvegetated Beach AEC.

The proposed new AEC boundaries adjacent to the Cape Fear River Inlet would include the entire oceanfront shoreline of Caswell Beach, the oceanfront shoreline property owned by the North Carolina Baptist Assembly/Ft. Caswell, and the areas known as West Beach and South Beach within the Village of Bald Head Island. The AEC limits adjacent to Beaufort Inlet would be confined to the oceanfront and inlet shorelines of state property within Fort Macon State Park to the west and part of the federally-owned Cape Lookout National Seashore to the east (Figures 2-5). As previously stated, it should be noted that these areas currently fall within the Ocean Erodible AEC designation and will not result in an increase in CRC jurisdiction.

DCM currently issues permits for temporary erosion control structures pursuant to use standards described in 15A NCAC 7H .0308(a)(2) and 15A NCAC 7H .1700, which limits sandbags to protection of imminently threatened structures (buildings, roads and septic systems). Sandbags are not currently allowed to protect dunes or habitat. The CRC is proposing the following amendments, based upon a prior legislative mandate, Commission study recommendations, and discussions with stakeholders:

- Allowing local governments or state agencies to apply for permits to protect frontal or primary dunes as well as structures and infrastructure within the new AEC by changing the definition of what can be classified as imminently threatened within the State Ports Inlet Management AEC. The revised definition of “imminently threatened” would expand to allow a qualified person meeting applicable State occupational licensing requirements to certify that a frontal or primary dune, structure or

infrastructure would be threatened within six months due to erosion, based on specified rates of erosion within a 30-day time period.

- The use standards within the new AEC would also allow local governments and state agencies to utilize larger geotextile sand tubes rather than smaller individual sandbags (see Figure 1).

Figure 1. A single geotextile tube vs. a standard sandbag revetment.



Image sources: [www.tencategeotube.com](http://www.tencategeotube.com) & DCM

- Finally, the use standards for the new AEC designation would allow small-scale non-essential development that was also allowed under the former Inlet Hazard Area designation prior to the removal of these areas from the Inlet Hazard AEC via legislation.
- The overall sandbag structure size limit, other structure setbacks and all other use standards currently in place would still apply.

Figure 2.

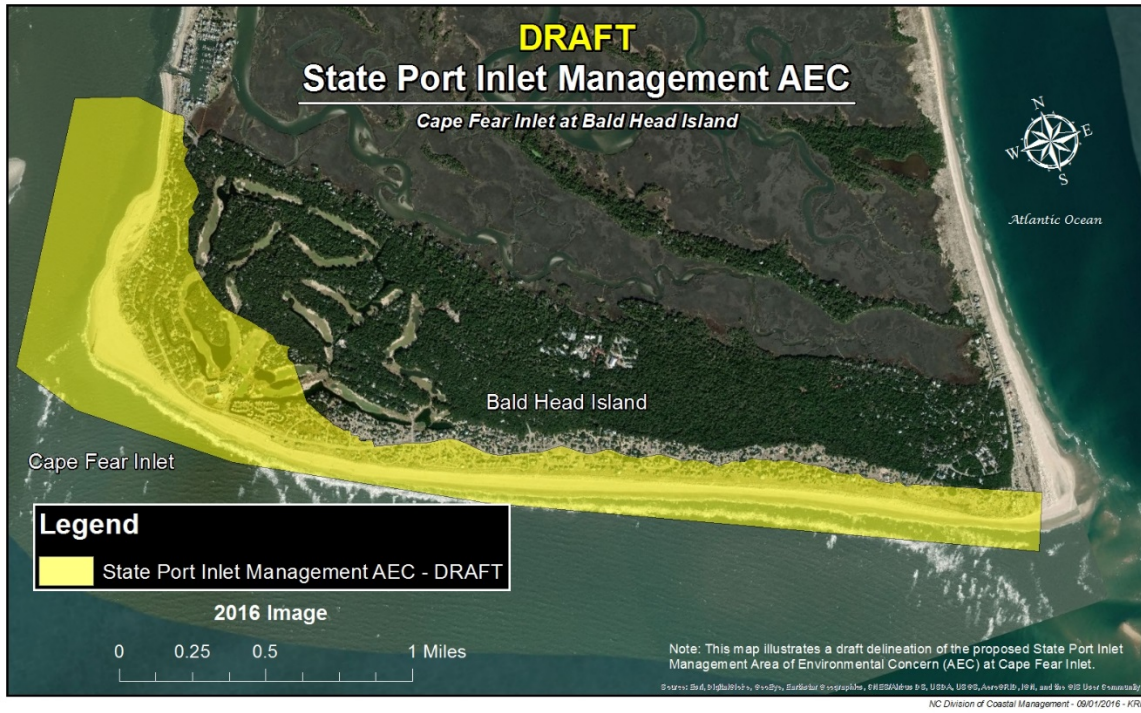




Figure 3.

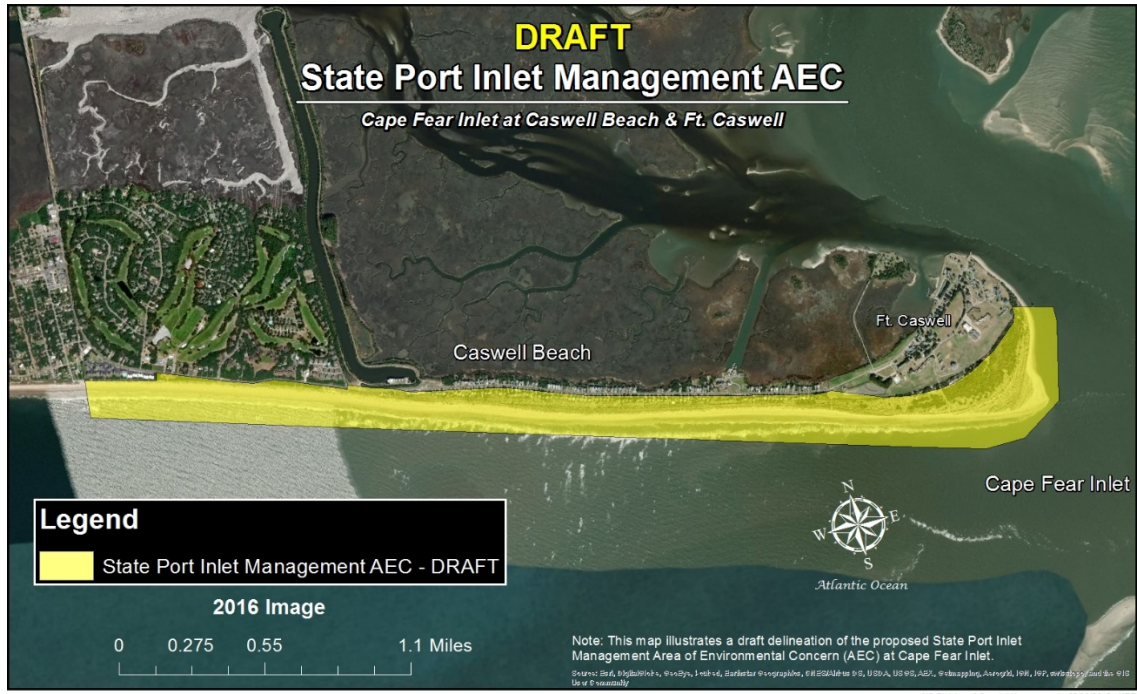


Figure .

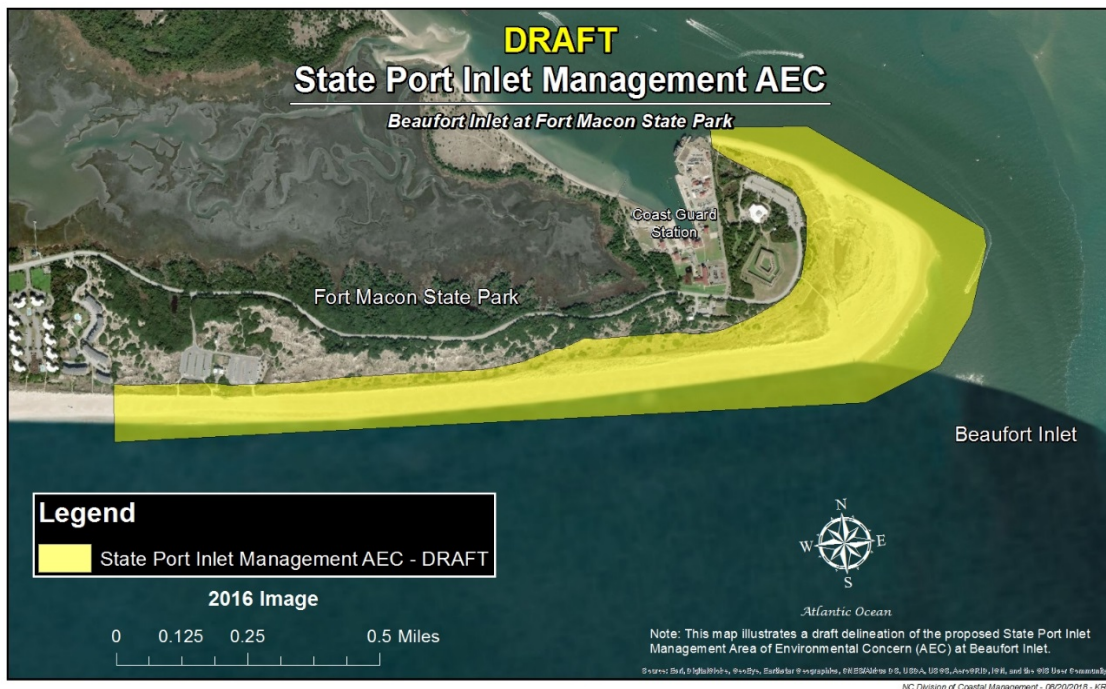
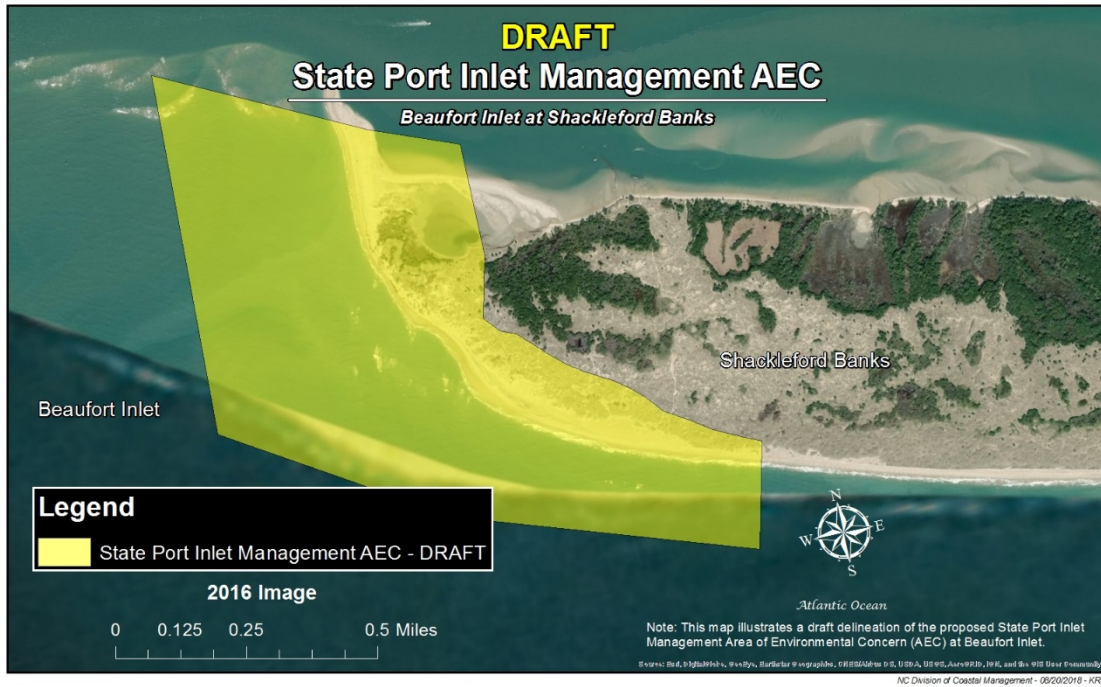


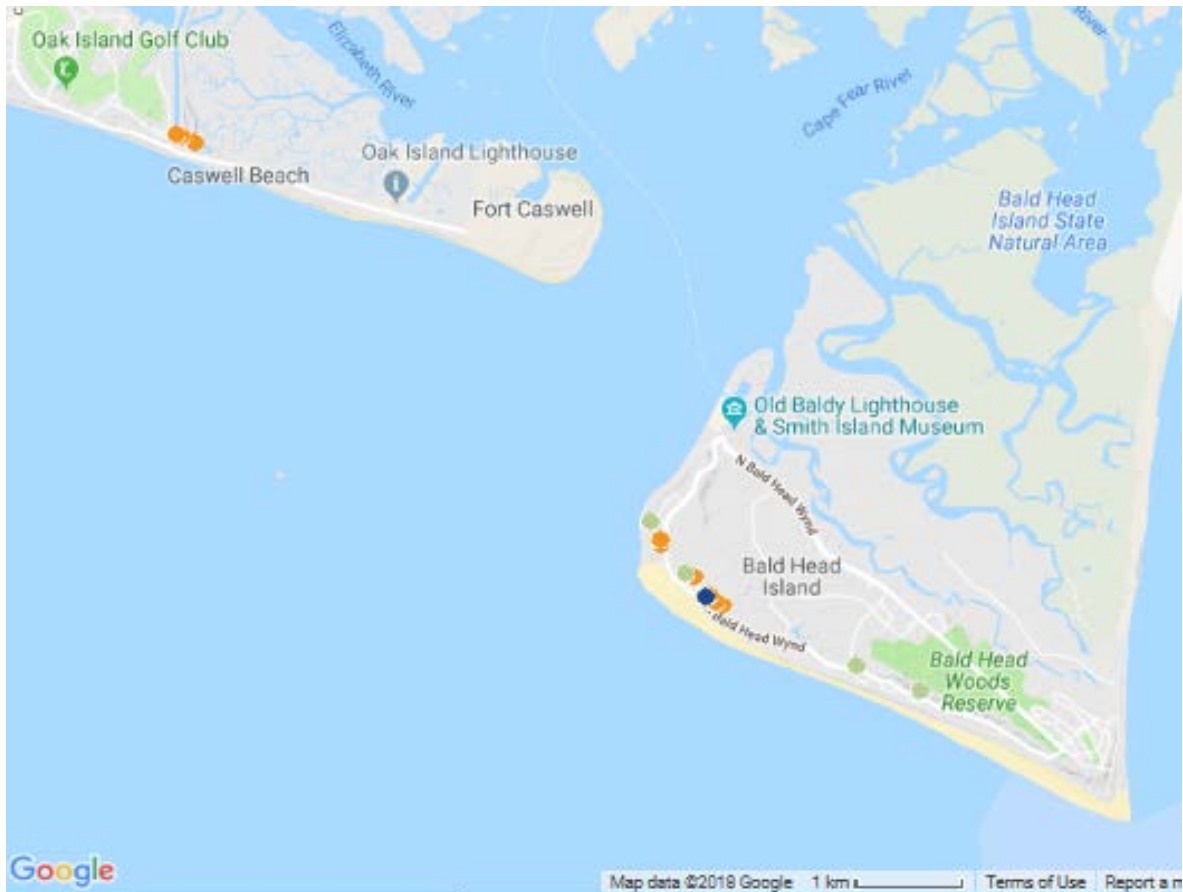
Figure 5.



## COSTS OR NEUTRAL IMPACTS

The CRC currently offers property owners the ability to install sandbags for temporary erosion control once their structure becomes imminently threatened, which is defined as the foundation or septic system being located less than 20 feet away from the erosion scarp (steep ridge). Local governments and state agencies can also install sandbags to protect threatened infrastructure and roads. In the period from 1996-2017, DCM permitted two sandbag structures on Caswell Beach, 15 sandbag structures on Bald Head Island, and no sandbag structures adjacent to Beaufort Inlet. Both Caswell Beach permits were issued to NCDOT to protect the roadway. On Bald Head Island, five of the permits were issued to the Village of Bald Head Island to protect roadways and infrastructure; the remaining permits were issued to private property owners. Over the most recent 10-year period from 2008 through 2017, DCM only issued one sand bag permit authorization to the Village Bald Head Island. This authorization entailed a minor modification of an existing permit and was issued via a variance from the Coastal Resources Commission’s rules. The variance allowed construction of the sandbag structure at greater dimensions than allowed under the current rules. It is believed that all of the permitted structures from 1996 through 2017 still remain on the beach in 2018 and are currently covered with sand.

Because the proposed amendments will make more areas eligible for sandbags due to the broadened definition of imminently threatened, the number of permits issued may increase, but any attempt to estimate a number of permits by the division would be speculative since the action would be dependent upon erosion events and the intentions of local governments. However, due to the low number of sandbag permits issued in recent years, a significant increase in applications is not expected. The application fee for a sandbag permit is \$400, and a minor modification to an active major permit costs \$100. Based on the one permit modification for sandbags issued within the proposed AEC over the past 10 years, DCM received \$100 in permit fees for the minor modification to an active major permit. DCM does not foresee any substantial changes in permit fees due to this rule change.



Permitted Sandbag Locations:	
<span style="color: orange;">●</span>	Installed
<span style="color: lightgreen;">●</span>	Removed
<span style="color: tan;">●</span>	Covered
<span style="color: blue;">●</span>	Washed Out
<span style="color: darkblue;">●</span>	Submerged

Figure 6. Sandbag structures adjacent to Cape Fear River Inlet. Some structures were permitted prior to 1996. Only one permit authorization for sandbags has been issued since 2008.

Department of Transportation

Pursuant to G.S. 150B-21.4, the agency reports that the proposed amendments to 7H.0304 and 7H .0309 & 7H .0313 will not significantly affect environmental permitting for the NC Department of Transportation (NCDOT). The primary benefit applicable to NCDOT is greater flexibility in protecting the roadway (through the use of “geotubes”) in Caswell Beach should it again become threatened by erosion. NCDOT therefore is not expected to experience any negative fiscal impacts associated with the proposed rule amendments and may benefit to an unquantified extent.



## Local Government

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Local governments within the AEC limits are expected to benefit from the increased flexibility in protecting structures and infrastructure through the use of “geotubes”, expanded definition of imminently threatened and the ability to use sandbags to protect dunes. While the proposed amendments are not expected to affect local government revenues or expenditures significantly, the ability to protect frontal and primary dunes prior to infrastructure being directly threatened will allow them to act more proactively to protect property and dune habitat, which may in turn serve to reduce damage to infrastructure. However, any attempt to quantify the benefit would be speculative since the action would be dependent upon erosion events and the intentions of local governments.

## Private Property Owners

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It is not anticipated that the proposed action will result in direct costs to private property owners as the ability to receive permits for the construction of “geotube” revetments will be limited to local governments and state agencies.

## Division of Coastal Management

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DCM does not anticipate that the proposed action will significantly increase operating cost over what is currently required for permitting, inspecting, and ensuring compliance of sandbag structures. The DCM does not anticipate any significant changes in permitting receipts due to the proposed action. The State Ports Inlet Management AEC boundaries fall within the current Ocean Hazard designation and therefore will not result in an increase in jurisdictional areas.

# BENEFITS

## Local Governments

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The cost to install a standard sandbag structure at a height of 6’ and maximum base width of 20’ is approximately \$425 per linear foot utilizing individual bags (standard size of 5’ x 15’). A single 6’-8’ diameter geotextile tube is estimated to cost approximately \$325/linear foot. The estimated cost to install a similarly sized structure out of larger geotextile tubes (i.e. “geotubes”) at similar dimensions is approximately \$975/linear foot, assuming a structure composed of three geotextile tubes. A single 6-8’ diameter tube could feasibly be used to provide some level of shoreline protection. However, geotubes can also be constructed to client-specified dimensions, so the estimate of \$975/linear foot for a larger revetment could be reduced through construction of one or two larger geotubes with a greater base width. Ultimately, the geotube revetment design would be left to the local government, provided they fell within the overall allowable size limits, and cost therefore cost is variable with the design. For purposes of this analysis, any reference to a single geotube assumes a 6’-8’ diameter structure at a cost of \$325/linear foot.

	Standard Sandbags	A single geotube	Three geotubes
170’ revetment length	\$72,250	\$55,250	\$165,750
350’ revetment length	\$148,750	\$113,750	\$341,250
750’ revetment length	\$318,750	\$243,750	\$731,250
950’ revetment length	\$403,750	\$308,750	\$926,250

Table 1. Estimated costs of standard revetment lengths based on length and structure composition.



Based on historical permits issued to local governments in the Cape Fear area- the length of permitted sandbag revetments ranged from 170' to 950' in length, with an average length of 350'. Using these dimensions, the cost savings to local governments could range from \$17,000- \$95,000 if a single span of geotubes were used instead of typical individual sandbags and would amount to approximately \$35,000 for the average size revetment length. While the cost escalates over that of a standard sandbag revetment if three geotubes are used, there is no mandate in the proposed rules requiring a larger geotube structure, nor to use geotubes over the smaller, standard-sized sandbags.

#### Private Property Owners

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Assuming the typical width of a privately-owned oceanfront lot to be 75-100 feet, if sandbag structures were to span the entire width of the lot, the typical installation cost will be about \$31,875-\$42,500. Because the proposed use standards would allow local and state agencies to protect dunes, structures and infrastructure, these costs, if entirely born by the local government, could in turn result in savings to individual property owners by also serving protection of their properties. While property owners may not recognize the full extent of these savings if the full costs were assessed to the property owners by the local government, the property owner could still experience a savings of \$7,500-\$1,000 if a single geotube were used instead of standard-sized sandbags.

#### NC Department of Transportation

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Pursuant to G.S. 150B-21.4, the agency reports that the proposed amendments to 7H .0304, 7H .0309 and 7H .0313 will not significantly affect environmental permitting for NCDOT. Again, the changes primarily allow NCDOT greater flexibility to use geotextile tubes to protect Caswell Beach Road, should it become threatened, or protect the adjacent frontal dunes, which could thereby result in an unquantified cost savings.

#### Division of Coastal Management

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The proposed rules are not expected to significantly affect the Division of Coastal Management. DCM could potentially benefit by the ability to spend less time on sandbag compliance and enforcement, and more time on other agency tasks. However, the fiscal benefit of this rule change to DCM cannot be quantified and is expected to be negligible.

#### State Government

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The proposed rules are not expected to significantly affect other state agencies. The Department of Natural and Cultural Resources could potentially benefit by the ability to utilize geotextile tubes instead of sandbags should they want to protect the Ft. Macon State Park property. However, due to numerous unknown factors, the fiscal benefit of this rule change to DCM cannot be quantified and is expected to be negligible.

Other potential cost benefits that might result from the proposed changes include the reduced loss of property and protection of dune habitat. These types of costs are not readily quantifiable.

### **COST/BENEFIT SUMMARY**

The greatest benefit of the proposed rule changes would be the greater flexibility allowed to local governments and state agencies in protecting frontal and primary dunes, structures, and infrastructure.

The quantified costs and benefits from these proposed rule changes do not exceed \$1,000,000 annually. Table 2 summarizes the range of estimated costs and benefits of this action. Benefits conferred to local governments are due to the lower cost of geotextile tube sandbag revetments compared to construction using traditional individual sandbags. Private property owners may benefit if local governments construct sandbag revetments to protect the frontal dune and thereby eliminate the need for private property owners to protect their property.

	<b>Benefit</b>	<b>Cost</b>	<b>Substantial Impact</b>
Private Citizens	\$7,500-\$42,500	None Known.	No
Local Government	\$17,000- \$95,000		No
NCDOT	Unquantified		No
State Government	Unquantified		No
Federal Government	Unquantified		No
<b>TOTAL</b>	<b>\$24,500-\$137,500</b>		No

Table 2. Estimated benefits of proposed rule changes.

There are no quantified costs or substantial impacts attributed to the proposed new AEC and rule changes.

**15A NCAC 07H .0304 AECs WITHIN OCEAN HAZARD AREAS**

The ocean hazard AECs contain all of the following areas:

- (1) Ocean Erodible Area. This is the area where there exists a substantial possibility of excessive erosion and significant shoreline fluctuation. The oceanward boundary of this area is the mean low water line. The landward extent of this area is the distance landward from the first line of stable and natural vegetation as defined in 15A NCAC 07H .0305(a)(5) to the recession line established by multiplying the long-term annual erosion rate times 90; provided that, where there has been no long-term erosion or the rate is less than two feet per year, this distance shall be set at 120 feet landward from the first line of stable and natural vegetation. For the purposes of this Rule, the erosion rates are the long-term average based on available historical data. The current long-term average erosion rate data for each segment of the North Carolina coast is depicted on maps entitled “2011 Long-Term Average Annual Shoreline Rate Update” and approved by the Coastal Resources Commission on May 5, 2011 (except as such rates may be varied in individual contested cases or in declaratory or interpretive rulings). In all cases, the rate of shoreline change shall be no less than two feet of erosion per year. The maps are available without cost from any Local Permit Officer or the Division of Coastal Management on the internet at <http://www.nccoastalmanagement.net>.
- (2) Inlet Hazard Area. The inlet hazard areas are natural-hazard areas that are especially vulnerable to erosion, flooding, and other adverse effects of sand, wind, and water because of their proximity to dynamic ocean inlets. This area extends landward from the mean low water line a distance sufficient to encompass that area within which the inlet migrates, based on statistical analysis, and shall consider such factors as previous inlet territory, structurally weak areas near the inlet, and external influences such as jetties and channelization. The areas on the maps identified as suggested Inlet Hazard Areas included in the report entitled INLET HAZARD AREAS, The Final Report and Recommendations to the Coastal Resources Commission, 1978, as amended in 1981, by Loie J. Priddy and Rick Carraway are incorporated by reference and are hereby designated as Inlet Hazard Areas, except for:
  - (a) ~~the Cape Fear Inlet Hazard Area as shown on the map does not extend northeast of the Bald Head Island marina entrance channel; and~~
  - (b) ~~the former location of Mad Inlet, which closed in 1997.~~
  - (a) the location of a former inlet which has been closed for at least 15 years.
  - (b) inlets that due to shoreline migration, no longer include the current location of the inlet.
  - (c) inlets providing access to a State Port via a channel maintained by the United States Army Corps of Engineers.In all cases, the Inlet Hazard Area shall be an extension of the adjacent ocean erodible areas and in no case shall the width of the inlet hazard area be less than the width of the adjacent ocean erodible area. This report is available for inspection at the Department of Environmental Quality, Division of Coastal Management, 400 Commerce Avenue, Morehead City, North Carolina or at the website referenced in Item (1) of this Rule. ~~Photocopies are available at no charge.~~
- (3) Unvegetated Beach Area. Beach areas within the Ocean Hazard Area where no stable and natural vegetation is present may be designated as ~~an~~ Unvegetated Beach ~~Area~~ Areas on either a permanent or temporary basis as follows:
  - (a) An area appropriate for permanent designation as an Unvegetated Beach Area is a dynamic area that is subject to rapid unpredictable landform change due to wind and wave action. The areas in this category shall be designated following studies by the Division of Coastal Management. These areas shall be designated on maps approved by the Coastal Resources

Commission and available without cost from any Local Permit Officer or the Division of Coastal Management on the internet at the website referenced in Item (1) of this Rule.

- (b) An area that is suddenly unvegetated as a result of a hurricane or other major storm event may be designated by the Coastal Resources Commission as an Unvegetated Beach Area for a specific period of time, or until the vegetation has re-established in accordance with 15A NCAC 07H .0305(a)(5). At the expiration of the time specified or the re-establishment of the vegetation, the area shall return to its pre-storm designation.

(4) State Ports Inlet Management Area. These are areas adjacent to and within Beaufort Inlet and the mouth of the Cape Fear River, providing access to a State Port via a channel maintained by the United States Army Corps of Engineers. These areas are unique due to the influence of federally-maintained channels, and the critical nature of maintaining shipping access to North Carolina's State Ports. These areas may require specific management strategies not warranted at other inlets to address erosion and shoreline stabilization. State Ports Inlet Management Areas shall extend from the mean low water line landward as designated on maps approved by the Coastal Resources Commission and available without cost from the Division of Coastal Management, and on the internet at the website referenced in Sub-item(1)(a) of this Rule.

#### **15A NCAC 07H .0309 USE STANDARDS FOR OCEAN HAZARD AREAS: EXCEPTIONS**

(a) The following types of development shall be permitted seaward of the oceanfront setback requirements of Rule .0306(a) of the Subchapter if all other provisions of this Subchapter and other state and local regulations are met:

- (1) campsites;
- (2) driveways and parking areas with clay, packed sand or gravel;
- (3) elevated decks not exceeding a footprint of 500 square feet;
- (4) beach accessways consistent with Rule .0308(c) of this Subchapter;
- (5) unenclosed, uninhabitable gazebos with a footprint of 200 square feet or less;
- (6) uninhabitable, single-story storage sheds with a foundation or floor consisting of wood, clay, packed sand or gravel, and a footprint of 200 square feet or less;
- (7) temporary amusement stands;
- (8) sand fences; and
- (9) swimming pools.

In all cases, this development shall be permitted only if it is landward of the vegetation line or static vegetation line, whichever is applicable; involves no alteration or removal of primary or frontal dunes which would compromise the integrity of the dune as a protective landform or the dune vegetation; has overwalks to protect any existing dunes; is not essential to the continued existence or use of an associated principal development; is not required to satisfy minimum requirements of local zoning, subdivision or health regulations; and meets all other non-setback requirements of this Subchapter.

(b) Where application of the oceanfront setback requirements of Rule .0306(a) of this Subchapter would preclude placement of permanent substantial structures on lots existing as of June 1, 1979, buildings shall be permitted seaward of the applicable setback line in ocean erodible areas and State Ports Inlet Management Areas, but not inlet hazard areas or unvegetated beach areas, if each of the following conditions are met:

- (1) The development is set back from the ocean the maximum feasible distance possible on the existing lot and the development is designed to minimize encroachment into the setback area;
- (2) The development is at least 60 feet landward of the vegetation line or static vegetation line, whichever is applicable;
- (3) The development is not located on or in front of a frontal dune, but is entirely behind the landward toe of the frontal dune;
- (4) The development incorporates each of the following design standards, which are in addition to those required by Rule .0308(d) of this Subchapter.
  - (A) All pilings shall have a tip penetration that extends to at least four feet below mean sea level;
  - (B) The footprint of the structure shall be no more than 1,000 square feet, and the total floor area of the structure shall be no more than 2,000 square feet. For the purpose of this Section, roof covered decks and porches that are structurally attached shall be included in the calculation of footprint;



(C) Driveways and parking areas shall be constructed of clay, packed sand or gravel except in those cases where the development does not abut the ocean and is located landward of a paved public street or highway currently in use. In those cases concrete, asphalt or turfstone may also be used;

(D) No portion of a building's total floor area, including elevated portions that are cantilevered, knee braced or otherwise extended beyond the support of pilings or footings, may extend oceanward of the total floor area of the landward-most adjacent building. When the geometry or orientation of a lot precludes the placement of a building in line with the landward most adjacent structure of similar use, an average line of construction shall be determined by the Division of Coastal Management on a case-by-case basis in order to determine an ocean hazard setback that is landward of the vegetation line, static vegetation line or measurement line, whichever is applicable, a distance no less than 60 feet.

(5) All other provisions of this Subchapter and other state and local regulations are met. If the development is to be serviced by an on-site waste disposal system, a copy of a valid permit for such a system shall be submitted as part of the CAMA permit application.

(c) Reconfiguration and development of lots and projects that have a grandfather status under Paragraph (b) of this Rule shall be allowed provided that the following conditions are met:

(1) Development is setback from the first line of stable natural vegetation a distance no less than that required by the applicable exception;

(2) Reconfiguration shall not result in an increase in the number of buildable lots within the Ocean Hazard AEC or have other adverse environmental consequences. For the purposes of this Rule, an existing lot is a lot or tract of land which, as of June 1, 1979, is specifically described in a recorded plat and which cannot be enlarged by combining the lot or tract of land with a contiguous lot(s) or tract(s) of land under the same ownership. The footprint is defined as the greatest exterior dimensions of the structure, including covered decks, porches, and stairways, when extended to ground level.

(d) The following types of water dependent development shall be permitted seaward of the oceanfront setback requirements of Rule .0306(a) of this Section if all other provisions of this Subchapter and other state and local regulations are met:

(1) piers providing public access; and

(2) maintenance and replacement of existing state-owned bridges and causeways and accessways to such bridges.

(e) Replacement or construction of a pier house associated with an ocean pier shall be permitted if each of the following conditions is met:

(1) The ocean pier provides public access for fishing and other recreational purposes whether on a commercial, public, or nonprofit basis;

(2) Commercial, non-water dependent uses of the ocean pier and associated pier house shall be limited to restaurants and retail services. Residential uses, lodging, and parking areas shall be prohibited;

(3) The pier house shall be limited to a maximum of two stories;

(4) A new pier house shall not exceed a footprint of 5,000 square feet and shall be located landward of mean high water;

(5) A replacement pier house may be rebuilt not to exceed its most recent footprint or a footprint of 5,000 square feet, whichever is larger;

(6) The pier house shall be rebuilt to comply with all other provisions of this Subchapter; and

(7) If the pier has been destroyed or rendered unusable, replacement or expansion of the associated pier house shall be permitted only if the pier is being replaced and returned to its original function.

(f) In addition to the development authorized under Paragraph (d) of this Rule, small scale, non-essential development that does not induce further growth in the Ocean Hazard Area, such as the construction of single family piers and small scale erosion control measures that do not interfere with natural oceanfront processes, shall be permitted on those nonoceanfront portions of shoreline that exhibit features characteristic of an Estuarine Shoreline. Such features include the presence of wetland vegetation, and lower wave energy and erosion rates than in the adjoining Ocean Erodible Area. Such development shall be permitted under the standards set out in Rule .0208 of this Subchapter. For the purpose of this Rule, small scale is defined as those projects which are eligible for authorization under 15A NCAC 07H .1100, .1200 and 07K .0203.

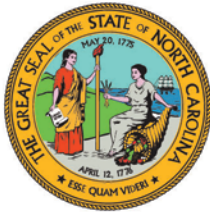
(g) Transmission lines necessary to transmit electricity from an offshore energy-producing facility may be permitted provided that each of the following conditions is met:

- (1) The transmission lines are buried under the ocean beach, nearshore area, and primary and frontal dunes, all as defined in Rule 07H .0305, in such a manner so as to ensure that the placement of the transmission lines involves no alteration or removal of the primary or frontal dunes; and
- (2) The design and placement of the transmission lines shall be performed in a manner so as not to endanger the public or the public's use of the beach.

**15A NCAC 07H .0313 USE STANDARDS FOR STATE PORTS INLET MANAGEMENT AREAS**

Development within State Ports Inlet Management areas, as defined by Rule .0304 of this Section, shall be permitted in accordance with the following standards:

- (a) All development in the State Ports Inlet Management Areas shall be set back from the first line of stable and natural vegetation, static vegetation line, or measurement line at a distance in accordance with 15A NCAC 7H .0306(a)(5), except for development exempted under 15A NCAC 7H .0309.
- (b) Notwithstanding the use standards for temporary erosion control structures described in 15A NCAC 7H .0308(a)(2), a local or state government may apply for a permit to seek protection of an imminently threatened frontal or primary dune, public and private structures and/or infrastructure within a State Ports Inlet Management Area. For the purpose of this rule, a frontal or primary dune, structure, or infrastructure shall be considered imminently threatened in a State Ports Inlet Management Area if:
  - (1) its foundation, septic system, right-of-way in the case of roads, or waterward toe of dune is less than 20 feet away from the erosion scarp; or
  - (2) site conditions, such as flat beach profile or accelerated erosion, increase the risk of imminent damage to the structure as determined by the Director of the Division of Coastal Management; or
  - (3) the frontal or primary dune or infrastructure will be imminently threatened within six (6) months as certified by persons meeting applicable State occupational licensing requirements; or
  - (4) the rate of erosion from the erosion scarp or shoreline within 100 feet of the infrastructure, structure, frontal or primary dune was greater than 20 feet over the preceding 30 days.Permit applications to protect property where no structures are imminently threatened require consultation with the US Army Corps of Engineers.
- (c) Temporary erosion control structures constructed by a local or state government shall have a base width not exceeding 20 feet, and a height not to exceed six feet. Individual sandbags shall be tan in color and be a minimum of three feet wide and seven feet in length when measured flat.
- (d) Established common-law and statutory public rights of access to the public trust lands and waters in State Ports Inlet Management Areas shall not be eliminated or restricted. Development shall not encroach upon public accessways nor shall it limit the intended use of the accessways.
- (e) Except where inconsistent with the above standards, all other rules in this Subchapter pertaining to development in the ocean hazard areas shall be applied to development within the State Ports Inlet Management Areas.
- (f) In addition to the types of development excepted under Rule .0309 of this Section, small scale, non-essential development that does not induce further growth in the State Ports Inlet Management Areas, such as the construction of single-family piers and small scale erosion control measures that do not interfere with natural inlet movement, may be permitted on those portions of shoreline within a designated State Ports Inlet Management Area that exhibit features characteristic of Estuarine Shoreline. Such features include the presence of wetland vegetation, lower wave energy, and lower erosion rates than in the adjoining Ocean Erodible Area. Such development shall be permitted under the standards set out in Rule .0208 of this Subchapter. For the purpose of this Rule, small scale is defined as those projects which are eligible for authorization under 15A NCAC 7H .1100, and.1200.



NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

BRAXTON C. DAVIS  
Director

November 15, 2018

**MEMORANDUM**

**CRC-18-28**

**TO:** Coastal Resources Commission  
**FROM:** Ken Richardson, *Shoreline Management Specialist*  
**SUBJECT:** Town of Oak Island Development Line Amendment Request

**Background:**

On April 1, 2016, the Commission's rules were amended to allow oceanfront communities with large-scale beach nourishment or inlet relocation projects to establish a "Development Line" as an alternative to the Static Vegetation Line Exception. Some will recall that a static vegetation line represents the vegetation line that existed just prior to a community's initial large-scale beach nourishment project and must be used for measuring oceanfront construction setbacks. A Development Line is established by a local government to represent the seaward-most allowable location of oceanfront development, provided the development can meet the setback measured from the first line of stable and natural vegetation. Under the CRC's Development Line Rule, buildings and accessory structures could potentially move seaward up to the approved Development Line if minimum setbacks are met. Local governments are required to request approval for a Development Line, or any subsequent amendments from the Commission according to the procedures outlined in 15A NCAC 7J. 1300.

To receive the CRC's approval for a Development Line, the petitioner shall establish the Development Line using on-ground observation and survey, or aerial imagery along the community's oceanfront jurisdiction or legal boundary. The proposed Development Line must extend the full length of the large-scale beach nourishment project area (length of static vegetation line) and may extend beyond the boundaries of the large-scale project to include the entire oceanfront jurisdiction or legal boundary of the petitioner. In establishing the Development Line, an adjacent neighbor sight-line approach is to be utilized, resulting in an average line of structures. In areas where the seaward edge of existing development is not linear, the Development Line may be determined by average line of construction on a case-by-case basis. In no case shall the Development Line be established seaward of the most seaward structure within the petitioner's oceanfront jurisdiction.



Once adopted, the petitioner shall then submit the following to the Director of the Division Coastal Management in accordance with CRC's rules (15A NCAC 07J. 1300):

1. A detailed survey of the Development Line; to also include the Static Vegetation Line
2. Copy of local regulations/ordinances associated with the Development Line
3. Record of local adoption of the Development Line by the petitioner

On June 14, 2016, the Town of Oak Island adopted the town's Development Line into their ordinances, and on September 14, 2016, the Town of Oak Island presented their proposed Development Line to the CRC and was unanimously approved by the Commission.

**Town of Oak Island Development Line Amendment Request:**

The Town is now requesting the CRC approval to amend a segment of their existing Development Line. This segment is located at the Town's eastern boundary (adjacent to the Town of Caswell Beach) and is approximately 1,200 feet (0.23 mile) in length (see Figure 1 and attached supporting information).

**Summary of Staff Review:**

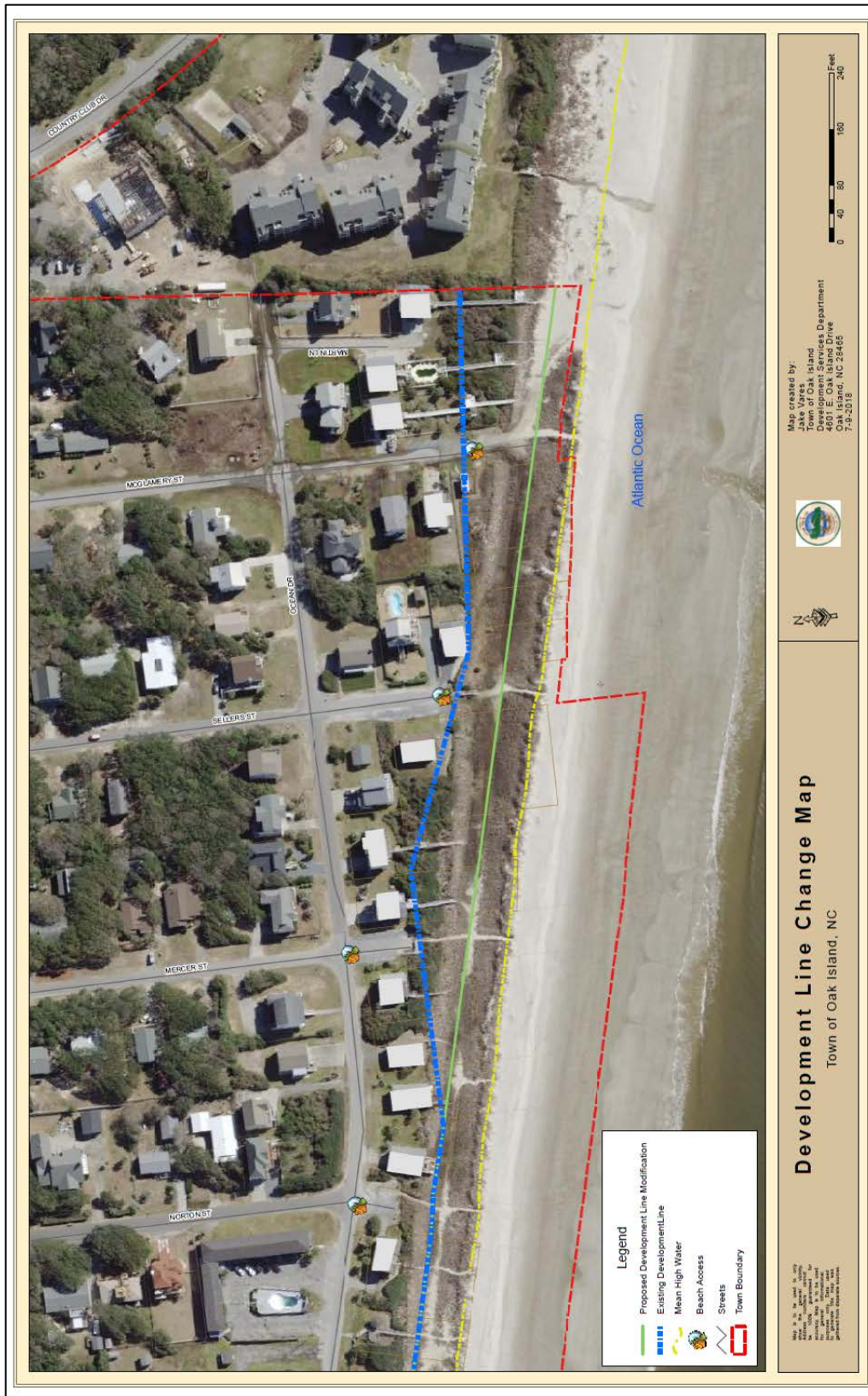
Staff have reviewed all information submitted by the petitioner and have determined that all required supporting information and documentation have been submitted and is attached for the Commission's consideration at the upcoming meeting in Ocean Isle.

By staff's analysis, the proposed amendment is on average 76 feet oceanward of the Town's current Development Line, and based on observations measured at existing structures, the proposed amendment could potentially allow seaward movement of structures between 12 and 131 feet (see Figure 2).





**Figure 1.** Town of Oak Island's Proposed Development Line Amendment (green line).





**Figure 2.** This map was prepared by DCM and illustrates the Town's existing Development Line (yellow) and proposed amendment (red). Oceanward movement ranges from approximately 12 feet to 131 feet (average 76 feet).



**ATTACHMENT A:** CRC DEVELOPMENT LINE PROCEDURES RULES (15A NCAC 07J .1300).

**ATTACHMENT B:** TOWN OF OAK ISLAND E-MAIL REQUESTING THE CRC'S APPROVAL OF THE TOWN'S DEVELOPMENT LINE.

**ATTACHMENT C:** TOWN OF OAK ISLAND PLANNING BOARD STATEMENT OF CONSISTENCY AND ZONING RECOMMENDATION.

**ATTACHMENT D:** TOWN OF OAK ISLAND TOWN COUNCIL STATEMENT OF CONSISTENCY AND ZONING RECOMMENDATION.

**ATTACHMENT E:** TOWN OF OAK ISLAND TOWN COUNCIL AGENDA (INCLUDES MAP SHOWN AND APPROVED).

**ATTACHMENT F:** TOWN COUNCIL ACTIONS REPORT.

**ATTACHMENT G:** TOWN COUNCIL APPROVED MINUTES.



# Attachment A: CRC DEVELOPMENT LINE PROCEDURES RULES (15A NCAC 07J .1300).

## SECTION .1300 – DEVELOPMENT LINE PROCEDURES

### 15A NCAC 07J .1301 REQUESTING THE DEVELOPMENT LINE

(a) Any local government, group of local governments involved in a regional beach fill project, or qualified owner's association with territorial jurisdiction over an area that is subject to ocean hazard area setbacks pursuant to 15A NCAC 07H .0305 may petition the Coastal Resources Commission for a Development Line for the purpose of siting oceanfront development in accordance with the provisions of this Section. A "qualified owner's association" is an owner's association, as defined in G.S. 47F-1-103(3), that has authority to approve the locations of structures on lots within the territorial jurisdiction of the association and has jurisdiction over at least one mile of ocean shoreline.

(b) A Development Line request shall apply to the entire large-scale project area as defined in 15A NCAC 07H .0305(a)(7) and, at the petitioner's request, may be extended to include the entire oceanfront jurisdiction or legal boundary of the petitioner.

(c) In determining where to position a requested Development Line, the petitioner shall use an adjacent neighbor sight-line approach, resulting in an average line of structures. In areas where the seaward edge of existing development is not linear, the petitioner may determine an average line of construction on a case-by-case basis. In no case shall a Development Line be established seaward of the most seaward structure within the petitioner's oceanfront jurisdiction.

(d) An existing structure that is oceanward of an approved Development Line may remain in place until damaged greater than 50 percent in accordance with Rule .0210 of this Subchapter. At that time it may only be replaced landward of the Development Line and shall meet the applicable ocean hazard setback requirements as defined in 15A NCAC 07H .0306(a).

(e) A request for a Development Line or amendment shall be made in writing by the petitioner and submitted to the CRC by sending the written request to the Director of the Division of Coastal Management. A complete request shall include the following:

- (1) A detailed survey of the Development Line using on-ground observation and survey or aerial imagery along the oceanfront jurisdiction or legal boundary, including:
  - (A) The Development Line, static vegetation line, mean high water line, and any other information necessary for a review of the petitioner's proposed Development Line, such as a pre-nourishment project mean high water line, local ordinances, or easements; and
  - (B) Surveyed Development Line spatial data in a geographic information systems (GIS) format referencing North Carolina State Plane North American Datum 83 US Survey Foot, to include Federal Geographic Data Committee (FGDC) compliant metadata;
- (2) All local regulations associated with the Development Line;
- (3) A record of local adoption of the Development Line by the petitioner; and
- (4) Documentation of incorporation of a Development Line into local ordinances or rules and regulations of an owner's association.

(f) Once a Development Line is approved by the Coastal Resources Commission, only the petitioner may request a change or reestablishment of the position of the Development Line.

(g) A Development Line request shall be submitted to the Director of the Division of Coastal Management, 400 Commerce Avenue, Morehead City, NC 28557. Written acknowledgement of the receipt of a completed Development Line request, including notification of the date of the meeting at which the request will be considered by the Coastal Resources Commission, shall be provided to the petitioner by the Division of Coastal Management.

(h) The Coastal Resources Commission shall consider a Development Line request no later than the second scheduled meeting following the date of receipt of a complete request by the Division of Coastal Management, unless the petitioner and the Division of Coastal Management agree upon a later date.

*History Note:* Authority G.S. 113A-107; 113A-113(b)(6); 113A-124;  
Eff. April 1, 2016;  
Amended Eff. September 1, 2017.





**15A NCAC 07J .1302 PROCEDURES FOR APPROVING THE DEVELOPMENT LINE**

(a) At the meeting that the Development Line request is considered by the Coastal Resources Commission, the following shall occur:

- (1) A representative for the petitioner shall orally present the request described in Rule .1301 of this Section. The Chairman of the Coastal Resources Commission may limit the time allowed for oral presentations based upon the number of speakers wishing to present.
- (2) Additional persons may provide written or oral comments relevant to the Development Line request. The Chairman of the Coastal Resources Commission may limit the time allowed for oral comments based upon the number of speakers wishing to speak.

(b) The Coastal Resources Commission shall approve a Development Line request if the request contains the information required and meets the standards set forth in Rule .1301 of this Section.

(c) The final decision of the Coastal Resources Commission shall be made at the meeting at which the matter is heard or in no case later than the next scheduled meeting. The final decision shall be transmitted to the petitioner by registered mail within 10 business days following the meeting at which the decision is reached.

(d) The decision to authorize or deny a Development Line is a final agency decision and is subject to judicial review in accordance with G.S. 113A-123.

*History Note:* Authority G.S. 113A-107; 113A-113(b)(6); 113A-123; 113A-124;  
Eff. April 1, 2016.

**15A NCAC 07J .1303 LOCAL GOVERNMENTS AND COMMUNITIES WITH DEVELOPMENT LINES**

A list of Development Lines in place for petitioners and any conditions under which the Development Lines exist in accordance with 15A NCAC 07J .1300, including the date(s) the Development Lines were approved, shall be maintained by the Division of Coastal Management. The list of Development Lines shall be available for inspection at the Division of Coastal Management, 400 Commerce Avenue, Morehead City, NC 28557, during business hours or on the Division's website [nccoastalmanagement.net](http://nccoastalmanagement.net).





*History Note:* Authority G.S. 113A-107; 113A-113(b)(6), 113A-124;  
Eff. April 1, 2016.



# ATTACHMENT B: TOWN OF OAK ISLAND E-MAIL REQUESTING THE CRC'S APPROVAL OF THE TOWN'S DEVELOPMENT LINE AMENDMENT.

To: Christenbury, Mike; Richardson, Ken  
Cc: Steve Edwards

**i** Follow up. Start by Monday, August 20, 2018. Due by Monday, August 20, 2018.  
You replied to this message on 8/21/2018 12:45 PM.

 Agenda Item Memo_TownCouncil_DevelopmentLine.pdf 3 MB	 Council_PlanConstStatement_DevelopmentLine_Approved_08_18.pdf 528 KB
 DevelopmentLineModification_OakIsland_2018.zip.zip_renamed 14 KB	 PB_PlanConst_DevelopmentLine.pdf 541 KB

**CAUTION:** External email. Do not click links or open attachments unless verified. Send all suspicious email as an attachment to [Report Spam](#).

Hey Ken,

The Oak Island Town Council recently approved a modification to our existing development line (see map on the attached agenda item memo). We did the required public notifications and also obtained the Planning Board recommendation. I have also attached the revised GIS layer. I am emailing you to request that we be placed on the next available CRC agenda to have this modification approved by them.

Thanks,  
**Jake Vares**  
Town of Oak Island  
4601 E. Oak Island Drive  
Oak Island, NC 28465  
910-201-8054

Pursuant to North Carolina General Statutes, Chapter 132, Public Records, this e-mail and any attachments, as well as any e-mail messages(s) that may be sent in response to it, may be considered public records and therefore are subject to public records requests for review and copying.



# ATTACHMENT C: TOWN OF OAK ISLAND PLANNING BOARD STATEMENT OF CONSISTENCY AND ZONING RECOMMENDATION.



## Oak Island Planning Board Statement of Consistency & Zoning Recommendation (As per NC General Statute 160A-383)

*Prior to adopting or rejecting any zoning amendment, the governing board shall adopt a statement describing whether its action is consistent with an adopted comprehensive plan and explaining why the board considers the action taken to be reasonable and in the public interest. The planning board shall advise and comment on whether the proposed amendment is consistent with any comprehensive plan that has been adopted and any other officially adopted plan that is applicable. The planning board shall provide a written recommendation to the governing board that addresses plan consistency and other matters as deemed appropriate by the planning board, but a comment by the planning board that a proposed amendment is inconsistent with the comprehensive plan shall not preclude consideration or approval of the proposed amendment by the governing board.*  
(NCGS 160A-383)

TEXT AMENDMENT:

7-<sup>26</sup>19-2018

REQUEST:

**Amend the text in Sec. 14-121. – Definitions and  
Sec. 14-125. - Use and development coverage; to  
Define the town ocean front development line and  
To adopt regulations that all ocean front parcels shall not build  
Principal structures seaward of the Oak Island, and  
CRC adopted, development line.**

STATEMENT OF CONSISTENCY & RECOMMENDATION:

The Town of Oak Island Planning Board hereby finds that the proposed text amendment is consistent with the Comprehensive CAMA Land Use Plan adopted January 10, 2017 because it will allow the town greater regulatory power to guide development within its jurisdiction. Further, the Board finds that the ordinance is reasonable and in the public interest because it is consistent with the Land Use Plan section that states “*The review and approval of waterfront development will address the protection and creation of public access to the water resources.*” Meaning, in context, the development line will give the town more flexibility on ocean-front parcels. At their meeting on July 19, 2018 the Planning Board voted to recommend approval of the proposed text amendment and stated that the, Planning Board finds and determines that the text amendment is not inconsistent with the goals, objectives and policies of the Land Use Plan and hereby recommends its APPROVAL.

The statement and motion were seconded and passed unanimously

  
Denise Pacula, Chair  
Mike Deleo



  
Lisa Stites, Town Clerk



# ATTACHMENT D: TOWN OF OAK ISLAND TOWN COUNCIL STATEMENT OF CONSISTENCY AND ZONING RECOMMENDATION.



## Oak Island Town Council Statement of Consistency & Zoning Recommendation (As per NC General Statute 160A-383)

*Prior to adopting or rejecting any zoning amendment, the governing board shall adopt a statement describing whether its action is consistent with an adopted comprehensive plan and explaining why the board considers the action taken to be reasonable and in the public interest. The planning board shall advise and comment on whether the proposed amendment is consistent with any comprehensive plan that has been adopted and any other officially adopted plan that is applicable. The planning board shall provide a written recommendation to the governing board that addresses plan consistency and other matters as deemed appropriate by the planning board, but a comment by the planning board that a proposed amendment is inconsistent with the comprehensive plan shall not preclude consideration or approval of the proposed amendment by the governing board.*  
(NCGS 160A-383)

TEXT AMENDMENT: **8-14-2018**

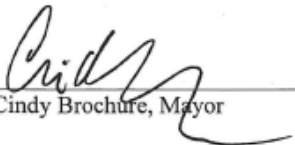
REQUEST:

**Amend the text in Sec. 14-121. – Definitions and  
Sec. 14-125. - Use and development coverage; to  
Define the town ocean front development line and  
To adopt regulations that all ocean front parcels shall not build  
Principal structures seaward of the Oak Island, and  
CRC adopted, development line.**

STATEMENT OF CONSISTENCY & RECOMMENDATION:

The Town of Oak Island Town Council hereby finds that the proposed text amendment is consistent with the Comprehensive CAMA Land Use Plan adopted January 10, 2017 because it will allow the town greater regulatory power to guide development within its jurisdiction. Further, the Council finds that the ordinance is reasonable and in the public interest because it is consistent with the Land Use Plan section that states “*The review and approval of waterfront development will address the protection and creation of public access to the water resources.*” Meaning, in context, the development line will give the town more flexibility on ocean-front parcels. At their meeting on August 14, 2018 the Town Council voted to approve the proposed text amendment and stated that the, Town Council finds and determines that the text amendment is not inconsistent with the goals, objectives and policies of the Land Use Plan and it is hereby APPROVED.

The statement and motion was seconded and passed unanimously

  
Cindy Brochure, Mayor



  
Lisa Stites, Town Clerk





# ATTACHMENT E: TOWN OF OAK ISLAND TOWN COUNCIL AGENDA.

**TOWN OF OAK ISLAND  
TOWN COUNCIL  
AGENDA ITEM MEMO**

Agenda Item: **Lisa**

Date: July 30, 2018



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**Issue:** Development Line Modification

**Department:** Planning & Zoning Administrator

**Presented by:** Steve Edwards & Jake Vares

**Presentation:** None

**Estimated Time for Discussion:** 30 Minutes

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**Subject Summary:**

A local government may petition the Coastal Resources Commission (CRC) for a development line to guide ocean front development. The development line would serve to mark the ocean-ward limit where structures could be built to, like a traditional setback line. On September 14th, 2016, staff presented the Town of Oak Island's adopted development line to the Coastal Resource commission for approval. The Coastal Resource commission approved the development line with some conditions which were all met. The current development line can be viewed on the Oak Island's website at: <https://www.arcgis.com/home/webmap/viewer.html?webmap=2bbcbad57598493387b5ba7934e2a965&extent=-78.208,33.9129,-78.204,33.9148>. The maps have multiple layers that can be toggled on and off such as: sandbags (past and present locations), beach accesses, water features, streets, aerial photograph, contours, mean high water (MHW) line, Shoreline Management Feasibility Study line, building footprints, undeveloped parcels, property lines, 1998 static vegetation line, 2012 Vegetation Line, berm line, ocean front structures, and the town development line is displayed prominently. The official definition of development line according to state regulation 15A NCAC 07H .0305 (10) is "The line established in accordance with 15A NCAC 07J .1300 by local governments representing the seaward-most allowable location of oceanfront development. In areas that have development lines approved by the CRC, the vegetation line or measurement line shall be used as the reference point for measuring oceanfront setbacks instead of the static vegetation line, subject to the provisions of 15A NCAC 07H .0306(a)(2)." Upon review of the development line on the eastern edge of Oak Island's ocean-front jurisdiction staff noticed it was overlain in such a way as to severely restrict the buildable area of those parcels.

A structure must also meet the CAMA setback requirements measured 60 feet landward from first line of stable and natural vegetation. The 60ft CAMA setback line is still in effect and is sometimes more stringent than the development line. The 60ft CAMA setback line must still be adhered to regardless of where the development line lays. The town's development line is the most seaward you can build a principal structure and a CAMA permit is still required for ocean-front properties. There are CAMA exceptions for accessory structures such as walkways, decks and gazebos that would still apply to accessory structures seaward of the development line. The exemptions are listed in the CAMA guidelines.

The mean high water (MHW) line shown on the map is the January 2000 USACE (United States Army Corps of Engineers) line that was adopted by Town ordinance, Section 14-129. The MHW line is the demarcation line where private property ends and public trust property begins. Most ocean front lots



are typically platted 150ft in depth, 50 feet wide, and the rear setback line and the MHW line are one in the same. A map showing the proposed development line change is attached to this agenda item memo.

In order for a municipality to have an ocean-front development line the town must follow the process detailed by the Division of Coastal Management (DCM) in section 300 15A NCAC 07J0 1301. The town must submit an aerial map showing the proposed development line and the current static vegetation line. The documentation of the adopted development line must be provided to DCM staff and the CRC for review and approval. The Town has already incorporated the Development Line into the Town Ordinance(s), and has provided a copy of the ordinance(s) that pertain to the development line to DCM staff. The reason for this requirement is that it shows the CRC that the Town recognizes the line as an enforceable building line limitation. The Coastal Resources Commission (CRC) has to approve a development line change and town staff would work with the Division of Coastal Management staff to have it placed on the CRC agenda for a vote. The Planning Board reviewed and recommended approval of the development line modification. Please remember to adopt the Plan Consistency Statement with your motion.

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**Attachments:** Ordinance excerpts, Planning Board Plan Consistency Statement, Proposed Development Line Modification Map

**Staff Recommendation/Action Needed:**

**Suggested Motion:** Motion to approve or deny the development line alteration and to adopt the associated plan consistency statement

**Funds Needed:** \$0.00

**Follow Up Action Needed:**

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## Attachment

### Sec. 14-121. - Definitions.

The following words, phrases, and terms, when used in this article, shall have meanings ascribed to them in this section, except where the context clearly indicates a different meaning. Definitions of this article shall be interpreted to be the same as those recognized by the state department of environment and natural resources, the coastal resources commission, and/or the division of coastal management.

*CRC* means the state coastal resources commission.

*Development* means any activity in a duly designated area of environmental concern involving, requiring, or consisting of the construction or enlargement of a structure; excavation, dredging, filling, dumping, or the removal of clay, silt, sand, gravel, or minerals; bulkheading, driving of pilings, clearing or installation of land as an adjunct of construction; alteration or removal of sand dunes, alteration of the shore, bank, or bottom of the Atlantic Ocean or any bay, sound, river, creek, stream, lake or canal.

*Development line* means the line established in accordance with 15A NCAC 07J.1300 by local governments representing the seaward-most allowable location of oceanfront development. In areas that have development lines approved by the CRC, the vegetation line or measurement line shall be used as the reference point for measuring oceanfront setbacks instead of the static vegetation line, subject to the provisions of 15A NCAC 07H.0306(a)(2).



*Division of coastal management* means a division of the state department of environment and natural resources charged by the state with the administration and enforcement of the Coastal Area Management Act of 1974.

**Sec. 14-125. - Use and development coverage.**

This article shall be applicable to all use of and development on ocean beaches in the town. Included, but not limited to the following, are types of uses and development activity to which this article applies. Specifically, this article is applicable to all oceanfront property owners intending to construct, repair or replace decks, walkways, and/or steps for the purpose of gaining access to the public ocean beach from private property along the oceanfront in the town. This article applies to all persons crossing ocean beaches for the purpose of gaining access to the beaches and Atlantic Ocean.

No structures shall be built seaward of the Oak Island development line except as allowed under CAMA regulations 15A NCAC 07H.0309.





**Oak Island Planning Board**  
**Statement of Consistency & Zoning Recommendation**  
 (As per NC General Statute 160A-383)

*Prior to adopting or rejecting any zoning amendment, the governing board shall adopt a statement describing whether its action is consistent with an adopted comprehensive plan and explaining why the board considers the action taken to be reasonable and in the public interest. The planning board shall advise and comment on whether the proposed amendment is consistent with any comprehensive plan that has been adopted and any other officially adopted plan that is applicable. The planning board shall provide a written recommendation to the governing board that addresses plan consistency and other matters as deemed appropriate by the planning board, but a comment by the planning board that a proposed amendment is inconsistent with the comprehensive plan shall not preclude consideration or approval of the proposed amendment by the governing board. (NCGS 160A-383)*

**TEXT AMENDMENT:** 7-<sup>26</sup>19-2018

**REQUEST:**

**Amend the text in Sec. 14-121. – Definitions and Sec. 14-125. – Use and development coverage; to Define the town ocean front development line and To adopt regulations that all ocean front parcels shall not build Principal structures seaward of the Oak Island, and CRC adopted, development line.**

**STATEMENT OF CONSISTENCY & RECOMMENDATION:**

The Town of Oak Island Planning Board hereby finds that the proposed text amendment is consistent with the Comprehensive CAMA Land Use Plan adopted January 10, 2017 because it will allow the town greater regulatory power to guide development within its jurisdiction. Further, the Board finds that the ordinance is reasonable and in the public interest because it is consistent with the Land Use Plan section that states "The review and approval of waterfront development will address the protection and creation of public access to the water resources." Meaning, in context, the development line will give the town more flexibility on ocean-front parcels. At their meeting on July 19, 2018 the Planning Board voted to recommend approval of the proposed text amendment and stated that the, Planning Board finds and determines that the text amendment is not inconsistent with the goals, objectives and policies of the Land Use Plan and hereby recommends its APPROVAL.

The statement and motion were recorded and passed unanimously

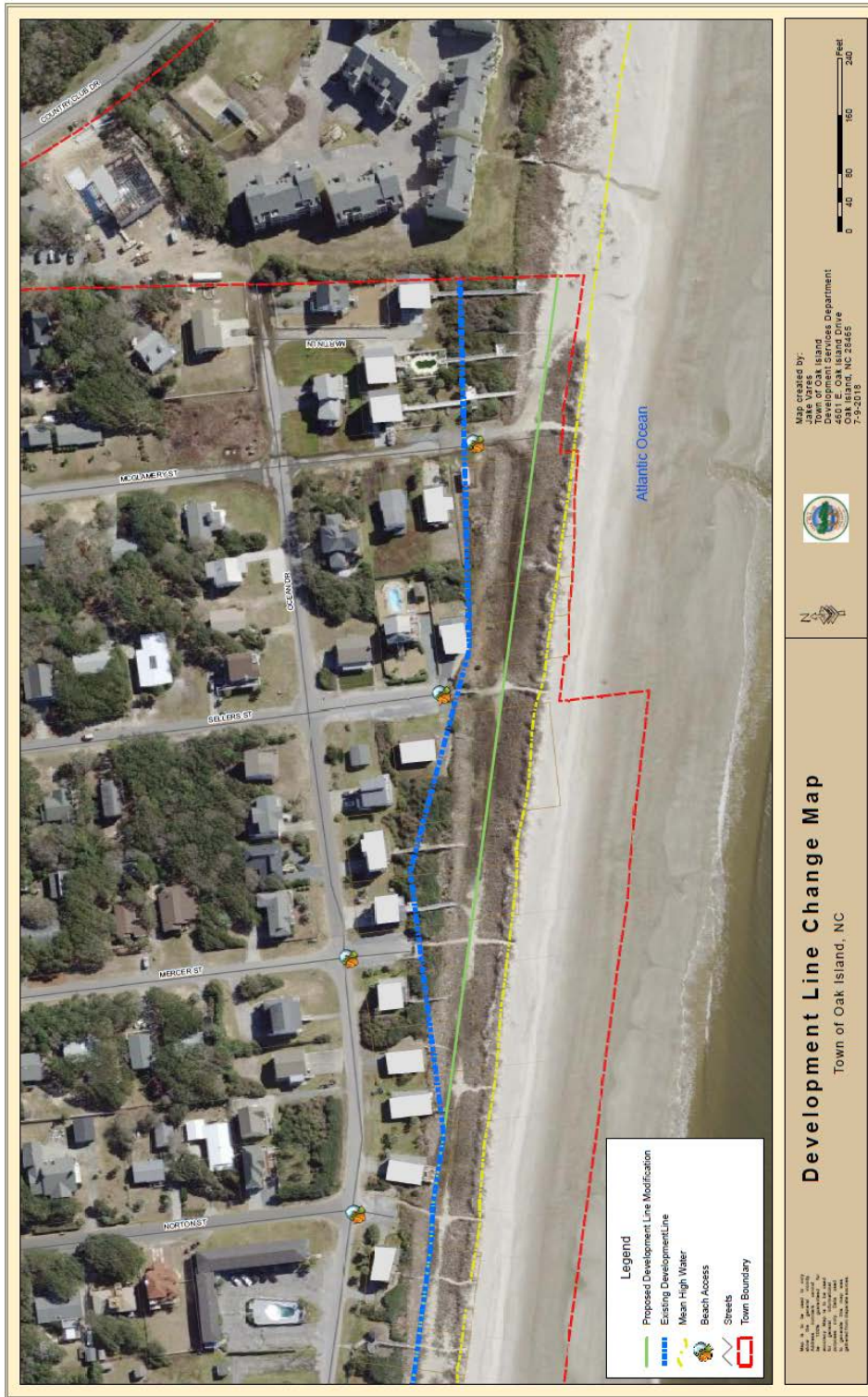
  
 Denise Paenta, Chair  
 Mike DeLo



  
 Lisa Stites, Town Clerk









PROPOSED AGENDA  
OAK ISLAND TOWN COUNCIL  
PUBLIC HEARING & REGULAR MEETING  
OCTOBER 9, 2018 – 6 P.M.  
COUNCIL CHAMBERS - OAK ISLAND TOWN HALL

CALL TO ORDER – Honorable Mayor Cin Brochure

Pledge of Allegiance to the Flag – Councilor Charlie Blalock

**PUBLIC HEARING I:** The purpose of the Public Hearing is to receive citizens’ comments on the proposed Unified Development Ordinance, which combines the planning and zoning ordinances into a single ordinance, and the amended zoning map.....p. 1-2

**PUBLIC HEARING I ACTION:** Council may take action on the proposed Unified Development Ordinance and amended zoning map.

PRESENTATIONS, PROCLAMATIONS AND RECOGNITIONS

- 1. End-of-season Beach Ambassadors Report – Skip Cox

ADJUSTMENT/APPROVAL OF THE AGENDA

PUBLIC COMMENTS - GENERAL TOPICS & AGENDA ITEMS

*To receive Citizen requests and comments on agenda items. Please state your name and address before addressing Council. Observance of the 3-minute time limit as described in Rule 4 (b) and 24 (2) (a) of the Council Rules of Procedure is appreciated. Written comments are also appreciated and should be submitted to the Town Clerk to be recorded in their entirety in the official Minutes. These may be given to the clerk following comments or via e-mail to [lstites@ci.oak-island.nc.us](mailto:lstites@ci.oak-island.nc.us).*

COUNCIL REPORTS (MAYOR AND COUNCIL)

REGULAR MEETING:

I. CONSENT AGENDA

*Note: A motion to approve the Consent Agenda shall not be debated. At the request of any Council member, an item shall be removed from the Consent Agenda and placed elsewhere in the Agenda for discussion/action. The Consent Agenda shall only be adopted by unanimous vote of those Council members present.*

- 1. Approval of Minutes
  - a. [August 14, 2018](#) (Public Hearings & Regular Meeting).....p. 3-8
- 2. [Approval of Resolution](#) Supporting Donation of Land at the 211/Midway Interchange from the North Carolina Department of Transportation to the Town of Oak Island for Public Uses and Emergency Services.....p. 9-11
- 3. Approval of Budget Ordinance Amendments
  - a. [To transfer funds](#) from Wastewater to Water for the purchase of a pick-up truck.....p. 12



b. <a href="#">To appropriate funds</a> from Capital Reserves to complete the water meter installation project.....	p. 13
4. Approval of <a href="#">Change Orders</a> for the Oak Island Pier project.....	p. 14-23
5. Approval of <a href="#">Amendment to Minutes</a> of May 9, 2017 Council meeting.....	p. 23A-B
II. ITEMS REMOVED FROM CONSENT AGENDA, IF ANY	
III. COMMITTEE APPOINTMENTS	
1. Beach Preservation Trust Fund Advisory Board (4 terms ending Sept. 2021)	
a. <a href="#">Cheryl Cook</a> .....	p. 24
b. <a href="#">Rosanne Fortner</a> .....	p. 25
c. <a href="#">Mollie Lloyd (Mary)</a> .....	p. 26
d. <a href="#">Janet Murphy</a> .....	p. 26A-C
2. Board of Adjustment	
a. <a href="#">Paula Chambers</a> .....	p. 26D-F
IV. ADMINISTRATIVE REPORTS	
1. Town Manager	
a. <a href="#">Department Reports</a> .....	p. 27-51
2. Town Attorney	
V. OLD BUSINESS	
1. <a href="#">Discussion of Pier Complex</a> .....	p. 52
a. <a href="#">Consideration of Proposal</a> to Hire a Management Company.....	p. 52A
2. Consideration of <a href="#">Proposed Amendments</a> to Sec. 26-1 Construction or other improvements within street right-of-way and Sec. 28-9 Parking on or obstructing sidewalks and public right-of-way.....	p. 53-59A
VI. NEW BUSINESS	
1. Consideration of <a href="#">Proposed Amendments</a> to Sec. 28-10 Parking Prohibitions and Sec. 28-10.1. - Public parking on town right-of-way.....	p. 60-64
2. Consideration of <a href="#">Proposed Amendments</a> to Sec. 18-254 – Prohibited Signs.....	p. 65-66
VII. ADJOURN	





# ATTACHEMENT F: TOWN COUNCIL ACTIONS REPORT.

**COUNCIL ACTIONS REPORT**  
OAK ISLAND TOWN COUNCIL  
PUBLIC HEARINGS & REGULAR MEETING  
AUGUST 14, 2018 – 6 P.M.  
COUNCIL CHAMBERS - OAK ISLAND TOWN HALL

CALL TO ORDER – Honorable Mayor Cin Brochure

INVOCATION AND PLEDGE OF ALLEGIANCE – Council member Charlie Blalock

**PUBLIC HEARING I:** The purpose of the Public Hearing is to receive citizens' comments on a proposed amendment to the Town's development line. (Local ordinance Section 14-121. - Definitions; and Section 14-125. - Use and development coverage - establish and define the town ocean front development line which represents the allowable location of oceanfront development. The proposed line stipulates no structures shall be built seaward of the proposed Oak Island development line except as allowed under CAMA regulations. The modification to the development line location is only on a small easternmost portion of the Town's oceanfront boundary): **There were no Public Comments.**

**PUBLIC HEARING I ACTION:** Council directed staff to request the Development Line Modification through the Coastal Resources Commission.

**PUBLIC HEARING II:** The purpose of the Public Hearing is to receive citizens comments on a request for a text amendment to amend the zoning ordinance text in Sec. 18-82 (k) Specific Regulations for accessory structures; to allow more than two accessory structures for properties greater than three quarters an acre in size, with a maximum of four accessory structures: **There were no Public Comments.**

**PUBLIC HEARING II ACTION:** Council approved the proposed amendments as presented.

**PUBLIC HEARING III:** The purpose of the Public Hearing is to receive citizens' comments on a request for a text amendment to amend the text in Sec. 8-78. - Application for permit, in the Oak Island Code of Ordinances, to mandate that development on property within an HOA/POA include documentation in the development permit application that compliance and permission is obtained from the HOA/POA board: **This item was removed from the agenda.**

**PUBLIC HEARING III ACTION:** no action taken as item was removed

**PUBLIC HEARING IV:** The purpose of the Public Hearing is to hear citizens' comments on a request for a text amendment to amend the text in Section 18-453. Major Subdivision Tree Plan; to require new major subdivisions on the mainland that are greater than 25 acres and more than twelve lots have a forestry plan submitted to the UDO Administrator before construction plans are approved: **There were no Public Comments.**

**PUBLIC HEARING IV ACTION:** The proposed text amendment was approved as presented.

## PRESENTATIONS, PROCLAMATIONS AND RECOGNITIONS

Johnny Martin, with Moffatt & Nichol, gave a presentation on the recent Army Corps of Engineers' dredging/sand placement project, the upcoming Lockwood Folly dredging and the planned Sea Turtle Habitat Restoration Project. The presentation will be summarized in the Minutes.

## ADJUSTMENT/APPROVAL OF THE AGENDA





PUBLIC COMMENTS - GENERAL TOPICS & AGENDA ITEMS

Public comments will be included/summarized in the Minutes.

COUNCIL REPORTS (MAYOR AND COUNCIL)

REGULAR MEETING:

I. CONSENT AGENDA

1. Approval of Minutes
  - a. June 29, 2018 (Special Meeting)
  - b. July 10, 2018 (Regular Meeting)
2. Approval of Final Plat for Lucas Cove
3. Approval of Change Orders #3 and #4 for the Pier Project
4. Approval of Budget Ordinance Amendments
  - a. For the purpose of rolling forward prior year Federal and State Drug Seizure funds for the Town's Police Department
  - b. To appropriate funds budgeted but not expended in FY 2017-18
  - c. To appropriate funds budgeted but not expended (water meter project) in FY 2017-18
5. Approval of Resolution for USDOT BUILD Trails Grant Resolution
6. Approval of Action to Direct Staff to Have an Easement Prepared for the Sea Biscuit Wildlife Shelter
7. Approval of Contract with Oak Island Water Rescue

The Consent Agenda was approved.

II. COMMITTEE APPOINTMENTS

1. Board of Adjustment (one unexpired term ending March 2021)
  - b. Martyn Hawkins

Council did not make an appointment to this Board.
1. Community Center Advisory Board (one unexpired term ending Oct. 2019)
  - a. Karen West

Council appointed Karen West.
2. Environmental Advisory Committee (one term ending June 2021)
  - a. Lindsey Winstead

Council appointed Lindsey Winstead.
3. Par 3 Golf Course Advisory Board (one unexpired term ending Jan. 2020 for an Oak Island resident outside of South Harbour)
  - a. Danie Corcoran

Council appointed Danie Corcoran.
4. Planning Board (two terms ending August 2021)
  - a. Cathy Bowes
  - b. Martyn Hawkins
  - c. Lynn McDowell

Council appointed Lynn McDowell and re-appointed Cathy Bowes.

III. ADMINISTRATIVE REPORTS

1. Town Manager: The Town Manager's report will be summarized for the Minutes.
  - a. Department Reports: Reports will be included as an attachment to the Minutes.
2. Town Attorney: The Town Attorney's report will be summarized in the Minutes.

IV. OLD BUSINESS



1. Consideration of Proposed Amendments to Sec. 26-1 Construction or other improvements within street right-of-way and Sec. 28-9 Parking on or obstructing sidewalks and public right-of-way: **This item was removed from the agenda.**
- V. NEW BUSINESS
  1. Consideration of Participation in Dredging the Lockwood Folly Inlet: **Council approved participation in the dredging.**
  2. Consideration of Scope of Work for FEMA Sea Turtle Habitat Restoration Project: **Council approved the Scope of Work.**
- VI. CLOSED SESSION to Consult with the Town Attorney on Pending Litigation pursuant to N.C.G.S. 143-318.11(a)(3): **No action was taken following Closed Session.**
- VII. ADJOURN



# ATTACHMENT G: TOWN COUNCIL APPROVED MINUTES.

MINUTES  
PROPOSED AGENDA  
OAK ISLAND TOWN COUNCIL  
PUBLIC HEARINGS & REGULAR MEETING  
AUGUST 14, 2018 – 6 P.M.  
COUNCIL CHAMBERS - OAK ISLAND TOWN HALL

Present: Mayor Cin Brochure, Mayor Pro Tempore Loman Scott, Council Members John W. Bach, Sheila M. Bell, Charlie K. Blalock and Jeff Winecoff, Assistant Manager/Town Clerk Lisa P. Stites, MMC, and Town Attorney Brian Edes.

Mayor Brochure called the meeting to order at 6 p.m. Council member Blalock gave the invocation and led the Pledge of Allegiance to the flag of the United States of America.

**PUBLIC HEARING I:** Mayor Brochure said the purpose of the Public Hearing was to receive citizens' comments on a proposed amendment to the Town's development line. (Local ordinance Section 14-121. - Definitions; and Section 14-125. - Use and development coverage - establish and define the town ocean front development line which represents the allowable location of oceanfront development. The proposed line stipulates no structures shall be built seaward of the proposed Oak Island development line except as allowed under CAMA regulations. The modification to the development line location is only on a small easternmost portion of the Town's oceanfront boundary).

There were no public comments. **Councilor Bell made a motion to close the Public Hearing at 6:03 p.m. Councilor Bach seconded the motion and it passed unanimously.**

**PUBLIC HEARING I ACTION:** Councilor Bell made a motion to approve the development line alteration, to adopt the associated plan consistency statement and to direct staff to present the request for an amended Development Line to the Coastal Resources Commission. Councilor Winecoff seconded the motion and it passed unanimously.

**PUBLIC HEARING II:** Mayor Brochure said the purpose of the Public Hearing was to receive citizens' comments on a request for a text amendment to amend the zoning ordinance text in Sec. 18-82 (k) Specific Regulations for accessory structures; to allow more than two accessory structures for properties greater than three quarters an acre in size, with a maximum of four accessory structures.

There were no public comments. **Councilor Winecoff made a motion to close the Public Hearing at 6:04 p.m. Councilor Bach seconded the motion and it passed unanimously.**

**PUBLIC HEARING II ACTION:** Councilor Bell said this would apply to properties greater than 3/4 acre; Planning and Zoning Director Jake Vares confirmed that.

**Mayor Pro Tempore Scott made a motion to approve the proposed text amendment to Sec. 18-82 (k) as presented and to adopt the associated plan consistency statement. Councilor Winecoff seconded the motion and it passed unanimously.**

**PUBLIC HEARING III:** The purpose of the Public Hearing was to receive citizens' comments on a request for a text amendment to amend the text in Sec. 8-78. - Application for permit, in the Oak Island Code of Ordinances, to mandate that development on property within an HOA/POA include documentation in the development permit application that compliance and permission is obtained from

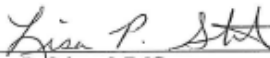


withdrew his motion. Councilor Bach made a motion to approve the scope of work with Moffatt & Nichol as presented with a not to exceed amount. Mayor Pro Tempore Scott seconded and the motion passed unanimously. Mr. Edes clarified that the motion included directing him to work on amending the contract.

VI. CLOSED SESSION: Councilor Bell made a motion to go into Closed Session at 7:15 p.m. to Consult with the Town Attorney on Pending Litigation pursuant to N.C.G.S. 143-318.11(a)(3) Councilor Blalock seconded and the motion passed unanimously.

Council returned to open session at 7:43 p.m. Mayor Brochure reported that no action had been taken in Closed Session.

Councilor Bell made a motion to adjourn at 7:43 p.m. Councilor Bach seconded the motion and it passed unanimously.

Attested:   
Lisa P. Stites, MMC  
Assistant Manager/Town Clerk

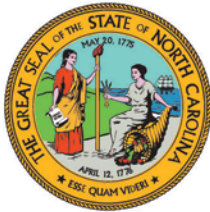


  
Cin Brochure, Mayor

*Clerk's Statement: Minutes are in compliance with the open meetings laws. The purpose of minutes per the open meetings laws is to provide a record of the actions taken by a Council or a Board and evidence that the actions were taken according to proper procedures. All actions of the Council are recorded in the official minutes. Not all portions of Town of Oak Island meetings are recorded verbatim in the official minutes, with general discussion items, reports, presentations, and public comments being paraphrased or summarized in many instances. Public comments in writing should be submitted to the clerk via hard copy, electronic mail, or other means so as to ensure an exact verbatim account. The Town of Oak Island provides full coverage of meetings on Government Channel 8 so that the Citizens and the Public may view and listen to the meetings in their entirety.*







NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

BRAXTON C. DAVIS  
Director

September 4, 2018

**MEMORANDUM**

**CRC-18-20**

**TO:** Coastal Resources Commission  
**FROM:** Ken Richardson, *Shoreline Management Specialist*  
**SUBJECT:** Ocean Erodible AEC and Setback Factor Update Study based on Long-term Average Annual Shoreline Change Rates

**Background**

Since 1980, the Division of Coastal Management has updated its oceanfront shoreline change rates approximately once every five years for calculating both oceanfront development setbacks (setback factors), and the landward boundary of the Ocean Erodible Area of Environmental Concern (15A NCAC 07H .0306 and 07H .0304). The last update became effective on January 31, 2013 and is now due to be updated.

Additionally, shoreline change rates are required to be updated every five years to keep North Carolina compliant with Federal Emergency Management Administration (FEMA) guidelines for the Community Rating System (CRS). This ensures that property owners in coastal communities that participate in the National Flood Insurance Program are eligible for fifty (50) additional CRS points, which can reduce insurance rates.

The Commission setback rules are used to site oceanfront development based on the size of the structure. In places where there is a high rate of erosion, buildings must be located farther from the shoreline than in places where there is less erosion. The construction setback equation depicted in Table 1 is used to site oceanfront development and determine the extent of the CRC's jurisdictional area for the Ocean Erodible Area of Environmental Concern (OEA) - the area where there is a substantial possibility of excessive shoreline erosion. A minimum factor of two (2) is applied if the erosion rate is less than two feet per year (see Table 1). This method of siting oceanfront development was initially established by the Coastal Resources Commission (CRC) in 1979.



**Table 1.** This table demonstrates an example of minimum construction setback based on structure size and minimum setback factor of 2.

Structure Size (square feet)	Construction Setback Equation	Minimum Setback (calculated using Setback Factor = 2 ft./yr.)
Less than 5,000	30 x Setback Factor	60
=>5,000 and < 10,000	60 x Setback Factor	120
=>10,000 and < 20,000	65 x Setback Factor	130
=>20,000 and < 40,000	70 x Setback Factor	140
=>40,000 and < 60,000	75 x Setback Factor	150
=>60,000 and < 80,000	80 x Setback Factor	160
=>80,000 and < 100,000	85 x Setback Factor	170
Greater than 100,000	90 x Setback Factor	180

## **Overview of 2018 Shoreline Change Update Study**

Setback Factors are based on the average annual long-term shoreline change rates calculated using the end-point methodology. This technique of calculating shoreline change rates is consistent with earlier studies and the results can be compared to those from previous studies. Applying the end-point method to the 2018 update study used the earliest (1933-1962) and most current shoreline (2016) to calculate change rates by measuring distance between the two shorelines (shore-transect intersect) and dividing by time. Raw shoreline change rates are statistically “smoothed and blocked” with neighboring transects to group adjacent shoreline segments that have similar rates into segments that can be assigned a single erosion rate. A “segment” of shoreline is defined as a portion of beach with statistically similar erosion rates and a minimum length of approximately 1,300 feet (400 meters). The mean shoreline change rate for a segment of beach serves as the Ocean Hazard Area Setback Factor.

The 2018 statewide mean shoreline change rate is equal to -2 feet per year (measured erosion), which is consistent with previous studies. Although the 2018 calculated setback factors show similar trends compared to the overall average of all the past six studies (Table 2), there was a slight erosion rate increase for portions of the coastline north of Cape Lookout, resulting in an increase in the average statewide setback factor. More specifically, erosion rate increases were identified at those areas adjacent to inlets and capes, and along the National Seashore. The following table illustrates a statewide comparison of shoreline length and setback factors for all six studies (1980-2018):



**Table 2.** This table illustrates a comparison of oceanfront Setback Factors (SBF) that were calculated using long-term average annual shoreline change rates. Values show the length of shoreline (miles and %) for categorized setback factors (far-left column). Total shoreline mileage is the length of shoreline analyzed and should not be interpreted as a “shrinking” or “expanding” shoreline. Of the 304.5 miles, 2 miles of shoreline was considered to have “no data,” meaning that only one shoreline was available.

Erosion Rate Studies	2016	2011	2003	1992	1986	1980
Miles (total)	304.5	307.4	312	300	237	245
SBF = 2	175.1 (57.5%)	190.2 (61.9%)	193 (62%)	165 (59%)	144 (61%)	149 (61%)
SBF = 2.5 to 5	66.5 (21.8%)	62.1 (20.2%)	64 (20%)	54 (19%)	43 (18%)	52 (21%)
SBF = 5.5 to 8	38.2 (12.6%)	31.5 (10.2%)	28 (9%)	30 (11%)	20 (8%)	22 (9%)
SBF > 8	22.6 (7.4%)	20.8 (6.8%)	27 (9%)	32 (11%)	22 (9%)	22 (9%)

Of the 304.5 miles of oceanfront shoreline analyzed, results show that approximately 69 percent of the shoreline is experiencing some degree of erosion, while 30 percent is accreting either due to beach nourishment or natural processes. Of the eroding portions of shoreline, 22.7 percent is eroding at rates less than two feet per year, while 22.9 percent is eroding between two and five feet per year (Table 3).

**Table 3.** This table illustrates a summary of length of shoreline (and percentage) and calculated shoreline change rates. The first row shows approximately 92 miles of oceanfront shoreline with measured accretion; the second row shows approximately 210 miles with measured erosion; and then subsequent rows show a breakdown of erosion from the total length of shoreline with measured erosion (210 miles).

Shoreline Change Rate Summary:	Miles	%
Accretion (all)	91.6	30.1%
Erosion (all)	209.5	68.8%
Erosion 2ft/Year or Less (>0, <=2)	69.3	22.7%
Erosion 2 to 5 Feet/Year (>2, <=5)	69.7	22.9%
Erosion 5 to 8 Feet Year (>5, <=8)	42.8	14.1%
Erosion More Than 8 Feet/Year	27.6	9.1%
Data Gaps (missing shoreline segment)	1.9	0.6%

## Next Steps

The 2018 update study report has been completed and is currently being reviewed by DCM staff and will be presented, along with the fiscal analysis, at the February 2019 CRC meeting. Although there are no action items for the Commission to consider at this meeting, staff will seek the Commission’s approval in February is anticipated that updated setback factors will go into effect in the summer or fall of 2019.

No action required at the November 2018 meeting.



## **APPENDIX A: CRC Rules Pertaining to Oceanfront Shoreline Change Rates and Setback Factors**





# Appendix A: CRC's Rules Pertaining to Oceanfront Shoreline Change Rates and Setback Factors

## 15A NCAC 07H .0304 AECs WITHIN OCEAN HAZARD AREAS

The ocean hazard AECs contain all of the following areas:

- (1) Ocean Erodible Area. This is the area where there exists a substantial possibility of excessive erosion and significant shoreline fluctuation. The oceanward boundary of this area is the mean low water line. The landward extent of this area is the distance landward from the first line of stable and natural vegetation as defined in 15A NCAC 07H .0305(a)(5) to the recession line established by multiplying the long-term annual erosion rate times 90; provided that, where there has been no long-term erosion or the rate is less than two feet per year, this distance shall be set at 120 feet landward from the first line of stable natural vegetation. For the purposes of this Rule, the erosion rates are the long-term average based on available historical data. The current long-term average erosion rate data for each segment of the North Carolina coast is depicted on maps entitled "2011 Long-Term Average Annual Shoreline Rate Update" and approved by the Coastal Resources Commission on May 5, 2011 (except as such rates may be varied in individual contested cases or in declaratory or interpretive rulings). In all cases, the rate of shoreline change shall be no less than two feet of erosion per year. The maps are available without cost from any Local Permit Officer or the Division of Coastal Management on the internet at <http://www.nccoastalmanagement.net>.
- (2) Inlet Hazard Area. The inlet hazard areas are natural-hazard areas that are especially vulnerable to erosion, flooding, and other adverse effects of sand, wind, and water because of their proximity to dynamic ocean inlets. This area extends landward from the mean low water line a distance sufficient to encompass that area within which the inlet migrates, based on statistical analysis, and shall consider such factors as previous inlet territory, structurally weak areas near the inlet, and external influences such as jetties and channelization. The areas on the maps identified as suggested Inlet Hazard Areas included in the report entitled INLET HAZARD AREAS, The Final Report and Recommendations to the Coastal Resources Commission, 1978, as amended in 1981, by Loie J. Priddy and Rick Carraway are incorporated by reference and are hereby designated as Inlet Hazard Areas, except for:
  - (a) the Cape Fear Inlet Hazard Area as shown on the map does not extend northeast of the Bald Head Island marina entrance channel; and
  - (b) the former location of Mad Inlet, which closed in 1997.In all cases, the Inlet Hazard Area shall be an extension of the adjacent ocean erodible areas and in no case shall the width of the inlet hazard area be less than the width of the adjacent ocean erodible area. This report is available for inspection at the Department of Environmental Quality, Division of Coastal Management, 400 Commerce Avenue, Morehead City, North Carolina or at the website referenced in Item (1) of this Rule. Photocopies are available at no charge.
- (3) Unvegetated Beach Area. Beach areas within the Ocean Hazard Area where no stable natural vegetation is present may be designated as an Unvegetated Beach Area on either a permanent or temporary basis as follows:
  - (a) An area appropriate for permanent designation as an Unvegetated Beach Area is a dynamic area that is subject to rapid unpredictable landform change due to wind and wave action. The areas in this category shall be designated following studies by the Division of Coastal Management. These areas shall be designated on maps approved by the Coastal Resources Commission and available without cost from any Local Permit Officer or the Division of Coastal Management on the internet at the website referenced in Item (1) of this Rule.
  - (b) An area that is suddenly unvegetated as a result of a hurricane or other major storm event may be designated by the Coastal Resources Commission as an Unvegetated Beach Area for a specific period of time, or until the vegetation has re-established in accordance with 15A NCAC 07H .0305(a)(5). At the expiration of the time specified or the re-establishment of the vegetation, the area shall return to its pre-storm designation.

*History Note:* Authority G.S. 113A-107; 113A-107.1; 113A-113; 113A-124;  
Eff. September 9, 1977;



*Amended Eff. December 1, 1993; November 1, 1988; September 1, 1986; December 1, 1985;  
Temporary Amendment Eff. October 10, 1996;  
Amended Eff. April 1, 1997;  
Temporary Amendment Eff. October 10, 1996 Expired on July 29, 1997;  
Temporary Amendment Eff. October 22, 1997;  
Amended Eff. July 1, 2016; September 1, 2015; May 1, 2014; February 1, 2013; January 1, 2010;  
February 1, 2006; October 1, 2004; April 1, 2004; August 1, 1998.*

## **15A NCAC 07h .0306 GENERAL USE STANDARDS FOR OCEAN HAZARD AREAS**

(a) In order to protect life and property, all development not otherwise specifically exempted or allowed by law or elsewhere in the Coastal Resources Commission's rules shall be located according to whichever of the following is applicable:

- (1) The ocean hazard setback for development shall be measured in a landward direction from the vegetation line, the static vegetation line, or the measurement line, whichever is applicable.
- (2) In areas with a development line, the ocean hazard setback shall be set in accordance with Subparagraphs (a)(3) through (9) of this Rule. In no case shall new development be sited seaward of the development line.
- (3) In no case shall a development line be created or established on state owned lands or oceanward of the mean high water line or perpetual property easement line, whichever is more restrictive.
- (4) The ocean hazard setback shall be determined by both the size of development and the shoreline long term erosion rate as defined in Rule .0304 of this Section. "Development size" is defined by total floor area for structures and buildings or total area of footprint for development other than structures and buildings. Total floor area includes the following:
  - (A) The total square footage of heated or air-conditioned living space;
  - (B) The total square footage of parking elevated above ground level; and
  - (C) The total square footage of non-heated or non-air-conditioned areas elevated above ground level, excluding attic space that is not designed to be load-bearing.Decks, roof-covered porches, and walkways shall not be included in the total floor area unless they are enclosed with material other than screen mesh or are being converted into an enclosed space with material other than screen mesh.
- (5) With the exception of those types of development defined in 15A NCAC 07H .0309, no development, including any portion of a building or structure, shall extend oceanward of the ocean hazard setback. This includes roof overhangs and elevated structural components that are cantilevered, knee braced, or otherwise extended beyond the support of pilings or footings. The ocean hazard setback shall be established based on the following criteria:
  - (A) A building or other structure less than 5,000 square feet requires a minimum setback of 60 feet or 30 times the shoreline erosion rate, whichever is greater;
  - (B) A building or other structure greater than or equal to 5,000 square feet but less than 10,000 square feet requires a minimum setback of 120 feet or 60 times the shoreline erosion rate, whichever is greater;
  - (C) A building or other structure greater than or equal to 10,000 square feet but less than 20,000 square feet requires a minimum setback of 130 feet or 65 times the shoreline erosion rate, whichever is greater;
  - (D) A building or other structure greater than or equal to 20,000 square feet but less than 40,000 square feet requires a minimum setback of 140 feet or 70 times the shoreline erosion rate, whichever is greater;
  - (E) A building or other structure greater than or equal to 40,000 square feet but less than 60,000 square feet requires a minimum setback of 150 feet or 75 times the shoreline erosion rate, whichever is greater;
  - (F) A building or other structure greater than or equal to 60,000 square feet but less than 80,000 square feet requires a minimum setback of 160 feet or 80 times the shoreline erosion rate, whichever is greater;



- (G) A building or other structure greater than or equal to 80,000 square feet but less than 100,000 square feet requires a minimum setback of 170 feet or 85 times the shoreline erosion rate, whichever is greater;
- (H) A building or other structure greater than or equal to 100,000 square feet requires a minimum setback of 180 feet or 90 times the shoreline erosion rate, whichever is greater;
- (I) Infrastructure that is linear in nature, such as roads, bridges, pedestrian access such as boardwalks and sidewalks, and utilities providing for the transmission of electricity, water, telephone, cable television, data, storm water, and sewer requires a minimum setback of 60 feet or 30 times the shoreline erosion rate, whichever is greater;
- (J) Parking lots greater than or equal to 5,000 square feet require a setback of 120 feet or 60 times the shoreline erosion rate, whichever is greater;
- (K) Notwithstanding any other setback requirement of this Subparagraph, a building or other structure greater than or equal to 5,000 square feet in a community with a static line exception in accordance with 15A NCAC 07J .1200 requires a minimum setback of 120 feet or 60 times the shoreline erosion rate in place at the time of permit issuance, whichever is greater. The setback shall be measured landward from either the static vegetation line, the vegetation line, or measurement line, whichever is farthest landward; and
- (L) Notwithstanding any other setback requirement of this Subparagraph, replacement of single-family or duplex residential structures with a total floor area greater than 5,000 square feet, and commercial and multi-family residential structures with a total floor area no greater than 10,000 square feet, shall be allowed provided that the structure meets the following criteria:
  - (i) the structure was originally constructed prior to August 11, 2009;
  - (ii) the structure as replaced does not exceed the original footprint or square footage;
  - (iii) it is not possible for the structure to be rebuilt in a location that meets the ocean hazard setback criteria required under Subparagraph (a)(5) of this Rule;
  - (iv) the structure as replaced meets the minimum setback required under Part (a)(5)(A) of this Rule; and
  - (v) the structure is rebuilt as far landward on the lot as feasible.
- (6) If a primary dune exists in the AEC on or landward of the lot where the development is proposed, the development shall be landward of the crest of the primary dune, the ocean hazard setback, or development line, whichever is farthest from vegetation line, static vegetation line, or measurement line, whichever is applicable. For existing lots, however, where setting the development landward of the crest of the primary dune would preclude any practical use of the lot, development may be located oceanward of the primary dune. In such cases, the development may be located landward of the ocean hazard setback, but shall not be located on or oceanward of a frontal dune or the development line. The words "existing lots" in this Rule shall mean a lot or tract of land that, as of June 1, 1979, is specifically described in a recorded plat and cannot be enlarged by combining the lot or tract of land with a contiguous lot or tract of land under the same ownership.
- (7) If no primary dune exists, but a frontal dune does exist in the AEC on or landward of the lot where the development is proposed, the development shall be set landward of the frontal dune, ocean hazard setback, or development line, whichever is farthest from the vegetation line, static vegetation line, or measurement line, whichever is applicable.
- (8) If neither a primary nor frontal dune exists in the AEC on or landward of the lot where development is proposed, the structure shall be landward of the ocean hazard setback or development line, whichever is more restrictive.
- (9) Structural additions or increases in the footprint or total floor area of a building or structure represent expansions to the total floor area and shall meet the setback requirements established in this Rule and 15A NCAC 07H .0309(a). New development landward of the applicable setback may be cosmetically, but shall not be structurally, attached to an existing structure that does not conform with current setback requirements.
- (10) Established common law and statutory public rights of access to and use of public trust lands and waters in ocean hazard areas shall not be eliminated or restricted. Development shall not encroach upon public accessways, nor shall it limit the intended use of the accessways.
- (11) Development setbacks in areas that have received large-scale beach fill as defined in 15A NCAC 07H .0305 shall be measured landward from the static vegetation line as defined in this Section,



unless a development line has been approved by the Coastal Resources Commission in accordance with 15A NCAC 07J .1300.

- (12) In order to allow for development landward of the large-scale beach fill project that cannot meet the setback requirements from the static vegetation line, but can or has the potential to meet the setback requirements from the vegetation line set forth in Subparagraphs (a)(1) and (a)(5) of this Rule, a local government, group of local governments involved in a regional beach fill project, or qualified "owners' association" as defined in G.S. 47F-1-103(3) that has the authority to approve the locations of structures on lots within the territorial jurisdiction of the association and has jurisdiction over at least one mile of ocean shoreline, may petition the Coastal Resources Commission for a "static line exception" in accordance with 15A NCAC 07J .1200. The static line exception shall apply to development of property that lies both within the jurisdictional boundary of the petitioner and the boundaries of the large-scale beach fill project. This static line exception shall also allow development greater than 5,000 square feet to use the setback provisions defined in Part (a)(5)(K) of this Rule in areas that lie within the jurisdictional boundary of the petitioner, and the boundaries of the large-scale beach fill project. If the request is approved, the Coastal Resources Commission shall allow development setbacks to be measured from a vegetation line that is oceanward of the static vegetation line under the following conditions:

- (A) Development meets all setback requirements from the vegetation line defined in Subparagraphs (a)(1) and (a)(5) of this Rule;
- (B) Development setbacks shall be calculated from the shoreline erosion rate in place at the time of permit issuance;
- (C) No portion of a building or structure, including roof overhangs and elevated portions that are cantilevered, knee braced, or otherwise extended beyond the support of pilings or footings, extends oceanward of the landward-most adjacent building or structure. When the configuration of a lot precludes the placement of a building or structure in line with the landward-most adjacent building or structure, an average line of construction shall be determined by the Division of Coastal Management on a case-by-case basis in order to determine an ocean hazard setback that is landward of the vegetation line, a distance no less than 30 times the shoreline erosion rate or 60 feet, whichever is greater;
- (D) With the exception of swimming pools, the development defined in Rule .0309(a) of this Section shall be allowed oceanward of the static vegetation line; and
- (E) Development shall not be eligible for the exception defined in Rule .0309(b) of this Section.

(b) No development shall be permitted that involves the removal or relocation of primary or frontal dune sand or vegetation thereon that would adversely affect the integrity of the dune. 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 15A NCAC 07H .0308(b).

(c) Development shall not cause irreversible damage to historic architectural or archaeological resources as documented by the local historic commission, the North Carolina Department of Natural and Cultural Resources, or the National Historical Registry.

(d) Development shall comply with minimum lot size and set back requirements established by local regulations.

(e) Mobile homes shall not be placed within the high hazard flood area unless they are within mobile home parks existing as of June 1, 1979.

(f) Development shall comply with the general management objective for ocean hazard areas set forth in 15A NCAC 07H .0303.

(g) Development shall not interfere with legal access to, or use of, public resources, nor shall such development increase the risk of damage to public trust areas.

(h) Development proposals shall incorporate measures to avoid or minimize adverse impacts of the project. These measures shall be implemented at the applicant's expense and may include actions that:

- (1) minimize or avoid adverse impacts by limiting the magnitude or degree of the action;
- (2) restore the affected environment; or
- (3) compensate for the adverse impacts by replacing or providing substitute resources.

(i) Prior to the issuance of any permit for development in the ocean hazard AECs, there shall be a written acknowledgment from the applicant to the Division of Coastal Management that the applicant is aware of the risks associated with development in this hazardous area and the limited suitability of this area for permanent structures. The acknowledgment shall state that the Coastal Resources Commission does not guarantee the safety of the development and assumes no liability for future damage to the development.





(j) All relocation of structures shall require permit approval. Structures relocated with public funds shall comply with the applicable setback line and other applicable AEC rules. Structures, including septic tanks and other essential accessories, relocated entirely with non-public funds shall be relocated the maximum feasible distance landward of the present location. Septic tanks shall not be located oceanward of the primary structure. All relocation of structures shall meet all other applicable local and state rules.

(k) Permits shall include the condition that any structure shall be relocated or dismantled when it becomes imminently threatened by changes in shoreline configuration as defined in 15A NCAC 07H .0308(a)(2)(B). Any such structure shall be relocated or dismantled within two years of the time when it becomes imminently threatened, and in any case upon its collapse or subsidence. However, if natural shoreline recovery or beach fill takes place within two years of the time the structure becomes imminently threatened, so that the structure is no longer imminently threatened, then it need not be relocated or dismantled at that time. This permit condition shall not affect the permit holder's right to seek authorization of temporary protective measures allowed pursuant to 15A NCAC 07H .0308(a)(2).

*History Note: Authority G.S. 113A-107; 113A-113(b)(6); 113A-124;  
Eff. September 9, 1977;  
Amended Eff. December 1, 1991; March 1, 1988; September 1, 1986; December 1, 1985;  
RRC Objection due to ambiguity Eff. January 24, 1992;  
Amended Eff. March 1, 1992;  
RRC Objection due to ambiguity Eff. May 21, 1992;  
Amended Eff. February 1, 1993; October 1, 1992; June 19, 1992;  
RRC Objection due to ambiguity Eff. May 18, 1995;  
Amended Eff. August 11, 2009; April 1, 2007; November 1, 2004; June 27, 1995;  
Temporary Amendment Eff. January 3, 2013;  
Amended Eff. September 1, 2017; February 1, 2017; April 1, 2016; September 1, 2013.*

## **15A NCAC 07J .0210 REPLACEMENT OF EXISTING STRUCTURES**

Replacement of structures damaged or destroyed by natural elements, fire or normal deterioration is considered development and requires CAMA permits. Replacement of structures shall be permitted if the replacements is consistent with current CRC rules. Repair of structures damaged by natural elements, fire or normal deterioration is not considered development and shall not require CAMA permits. The CRC shall use the following criteria to determine whether proposed work is considered repair or replacement.

- (1) **NON-WATER DEPENDENT STRUCTURES.** Proposed work is considered replacement if the cost to do the work exceeds 50 percent of the market value of an existing structure immediately prior to the time of damage or the time of request. Market value and costs are determined as follows:
  - (a) Market value of the structure does not include the value of the land, value resulting from the location of the property, value of accessory structures, or value of other improvements located on the property. Market value of the structure shall be determined by the Division based upon information provided by the applicant using any of the following methods:
    - (i) appraisal;
    - (ii) replacement cost with depreciation for age of the structure and quality of construction; or
    - (iii) tax assessed value.
  - (b) The cost to do the work is the cost to return the structure to its pre-damaged condition, using labor and materials obtained at market prices, regardless of the actual cost incurred by the owner to restore the structure. It shall include the costs of construction necessary to comply with local and state building codes and any improvements that the owner chooses to construct. The cost shall be determined by the Division utilizing any or all of the following:
    - (i) an estimate provided by a North Carolina licensed contractor qualified by license to provide an estimate or bid with respect to the proposed work;
    - (ii) an insurance company's report itemizing the cost, excluding contents and accessory structures; or
    - (iii) an estimate provided by the local building inspections office.
- (2) **WATER DEPENDENT STRUCTURES.** The proposed work is considered replacement if it enlarges the existing structure. The proposed work is also considered replacement if:



- (a) in the case of fixed docks, piers, platforms, boathouses, boatlifts, and free standing moorings, more than 50 percent of the framing and structural components (beams, girders, joists, stringers, or pilings) must be rebuilt in order to restore the structure to its pre-damage condition. Water dependent structures that are structurally independent from the principal pier or dock, such as boatlifts or boathouses, are considered as separate structures for the purpose of this Rule;
- (b) in the case of boat ramps and floating structures such as docks, piers, platforms, and modular floating systems, more than 50 percent of the square feet area of the structure must be rebuilt in order to restore the structure to its pre-damage condition;
- (c) in the case of bulkheads, seawalls, groins, breakwaters, and revetments, more than 50 percent of the linear footage of the structure must be rebuilt in order to restore the structure to its pre-damage condition.

*History Note:* Authority G.S. 113A-103(5)b.5.; 113A-107(a),(b);  
Eff. July 1, 1990;  
Amended Eff. August 1, 2007.





NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

BRAXTON C. DAVIS  
Director

November 15, 2018

**MEMORANDUM**

**CRC-18-24**

**TO:** Coastal Resources Commission  
**FROM:** Ken Richardson, *Shoreline Management Specialist*  
**SUBJECT:** CRC Science Panel Inlet Hazard Area (IHA) Delineation Update

**Background:**

The establishment of Areas of Environmental Concern (AEC) is authorized under the NC Coastal Area Management Act (CAMA) of 1974 (NCGS 113A-100 et seq.) and forms the foundation of the North Carolina Coastal Resources Commission's (CRC) permitting program for regulating coastal development. Specific rules defining three specific ocean hazard AECs appear in 15A NCAC 07H.0300: 1) Ocean Erodible, 2) Inlet Hazard, and 3) Unvegetated Beach AECs. The inlet hazard area (IHA) AEC is defined in 15A NCAC 07H.0301(3) as locations that "are especially vulnerable to erosion, flooding and other adverse effects of sand, wind, and water because of their proximity to dynamic ocean inlets."

Unlike other CRC jurisdictional areas, IHA boundaries are defined in a report referenced in the CRC's rules, 7H.0304(2). The current IHA boundaries correspond to maps originally developed by Priddy and Carraway (1978) for all the State's then-active inlets. The report designating the IHA boundaries was adopted by the CRC in 1979, with minor amendments since that time.

IHA boundaries in use today are based on statistical analysis (and to a lesser extent previous inlet location) of historical shoreline movement identified on multiple aerial photosets. In most cases, the statistical methods used in the 1978 study identified the landward-most shoreline position (99% confidence interval) projected to occur between 1978 and 1988. Originally, the Commission anticipated that these boundaries were to be updated at the end of the 1980s. However, due to a combination of factors, that update did not occur.



It was not until the late 1990s, after the CRC's Science Panel on Coastal Hazards was formed, that the need to update IHAs became more of a focal point of discussion. The following is a summarized timeline leading up to 2018:

- **1998-1999:** the newly-formed Science Panel recommended to the CRC that the IHAs were outdated and should be updated. The Science Panel recommended that DCM hire staff to work on inlet hazards data collection and analysis.
- **November 2002:** DCM hired a Coastal Hazards GIS Specialist to support all oceanfront and inlet data collection, mapping, and analysis efforts.
- **2004-2008:** data collection and mapping in preparation for updating IHAs. DCM worked extensively with the Science Panel to develop inlet delineation methodologies.
- **2009:** DCM synthesized data and study results into a report.
- **May & July 2010:** DCM presented a proposed IHA boundary update to the CRC.
- **2010-2012:** Given the concern over the increased size of the proposed IHAs, there were many questions about IHA rules, and if “risk” was the same for all areas within the proposed IHAs. Because there were unanswered questions related to IHA development standards, in addition to several key issues consuming much of the Commission's and Science Panel's time (i.e., the terminal groin and oceanfront erosion rate update studies), the IHA boundary update was temporarily put on hold.
- **2012:** The General Assembly directed the CRC to study the feasibility of creating a new AEC for the lands adjacent to the mouth of the Cape Fear River. Session Law 2012-202 required the CRC to consider the unique coastal morphologies and hydrographic conditions of the Cape Fear River region, and to determine if action is necessary to preserve, protect, and balance the economic and natural resources of this region through the elimination of current overlapping AECs by incorporating appropriate development standards into one single AEC unique to this location. During this study, the CRC found that while the Cape Fear River inlet did present a unique set of challenges, other inlets may have similar issues. The Commission therefore decided to undertake a comprehensive review of inlet-related issues and with the expectation of developing additional management tools that would allow the CRC to more proactively address the issues confronted by local governments in these dynamic areas.





- **February 2014:** The CRC asked the Science Panel to review a recommendation to remove IHA status from Mad Inlet, which had been naturally closed for some time. From this effort, the Panel made two recommendations that were presented to the CRC: 1) Mad Inlet was not at risk of reopening so IHA status should be removed; and, 2) current IHAs were severely out of date and needed to be updated.
- **September 2014:** DCM presented a report to the Commission that was prepared following a series of stakeholder meetings, entitled, “NC Coastal Resources Commission Inlet Management Study Findings and Policy Options.” Stakeholders made several recommendations to the CRC that pertained specifically to IHAs: 1) The CRC should task the Science Panel to complete the development of methods to define revised IHAs and potential inlet and near-inlet setback lines for CRC review; and, 2) The IHAs should be eliminated and incorporated into the Ocean Erodible Area (OEA) while applying the same development standards currently utilized in the OEA.
- **May 2016:** Staff proposed to the CRC to pick up work on the IHAs, and to update inlet shoreline change rates that were presented in 2010 – CRC unanimously approved.
- **July 2016:** At the CRC meeting in Beaufort, the Commission issued the following scope of work to the Science Panel:
  - 1) **Develop a methodology for calculating inlet shoreline change rates:** The Science Panel chose the linear regression method to measure shoreline change at inlets. This method incorporates multiple shorelines, versus the end-point method currently used on the oceanfront which only uses two shorelines (early and current). Inlet shoreline changes rates have not historically been used for determining construction setbacks at inlets.
  - 2) **Re-evaluate points along the oceanfront shoreline where inlet processes no longer influence shoreline position:** When the Science Panel first started working on updating IHA boundaries in 2005, the Panel evaluated changes in shoreline position over time to determine the location along the shoreline where inlet-related processes no longer have a dominant influence on the shoreline’s position.
  - 3) **Present results at a CRC Meeting.**



## **Summary of Current Inlet Hazard Area Rules:**

In 1981, the Commission began to recognize that inlet areas were more hazardous than the rest of the oceanfront, noting that out of the 70 structures impacted by erosion, 60 were near inlets. In addition to setbacks from the first line of stable and natural vegetation, the Commission included density restrictions, lot- and structure-size limits, a public access provision, a prohibition on beach bulldozing and the creation of new dunes, and a prohibition on permanent erosion control structures outside of public projects. Current IHA rules have remained relatively unchanged since adoption in 1981. The following is a summary of rules specific to IHAs:

1. **15A NCAC 07H .0304** (AECs Within Ocean Hazard Areas):
  - the Inlet Hazard Area shall be an extension of the adjacent ocean erodible areas and in no case shall the width of the inlet hazard area be less than the width of the adjacent ocean erodible area.
  
2. **15A NCAC 07H .0310** (Use Standards for Inlet Hazard Areas):
  - set back from the first line of stable natural vegetation a distance equal to the setback required in the adjacent ocean hazard area;
  - density of no more than one commercial or residential unit per 15,000 square feet of land area on lots subdivided;
  - residential structures of four units or less or non-residential structures of less than 5,000 square feet total floor area shall be allowed within the inlet hazard area, (except roads and bridges);
  - public rights of access to the public trust lands and waters in Inlet Hazard Areas shall not be eliminated or restricted. Development shall not encroach upon public accessways nor shall it limit the intended use of the accessways;
  - Access roads and the replacement of existing bridges are allowed (Added in 1995).
  - Residential piers are allowed along shorelines exhibiting features of estuarine shorelines (Clarified in 1995).
  
3. **15A NCAC 07H .0308** (Specific Use Standards for Ocean Hazard Areas):
  - No new dunes shall be created in inlet hazard areas.
  
4. **15A NCAC 07H .1800** (General Permit to Allow Beach Bulldozing in the Ocean Hazard AEC)
  - This general permit shall not apply to the Inlet Hazard AEC
  
5. **15A NCAC 7H .0309(b)** Use Standards for Ocean Hazard Areas:
  - Exceptions, in which certain lots platted prior to June 1, 1979 are eligible for an exception to the oceanfront setback rules is not applicable to the IHA.



## **Science Panel's 2018 Proposed Inlet Hazard Area Boundary Update:**

Since the 2016 CRC meeting, DCM staff has been working extensively with the Science Panel to delineate updated IHA boundaries using historical data, updated statistical and mapping methodologies, and expert knowledge of North Carolina's inlet and ocean processes. In June 2018, the Science Panel met in Wilmington to finalize their work on inlets, and DCM will be presenting the Panel's proposed IHA boundaries and discussing next steps at the Commission's November 2018 meeting in Ocean Isle Beach.

The process of delineating updated IHA boundaries has evolved since the Panel's 2010 proposal, and generally considered three major variables: 1) the spatial and temporal variability of the inlet shoreline relative positions over time; 2) the application of shoreline change statistical methods and landward-most location of all vegetation lines (hybrid-vegetation line), and; 3) expert knowledge of how inlet processes, geomorphology, and engineering (hard-structures, dredging, relocation) influence inlet behavior. The study included 10 of the state's 19 active inlets: 1) Tubbs; 2) Shallotte, 3) Lockwood Folly; 4) Carolina Beach; 5) Masonboro; 6) Mason; 7) Rich; 8) New Topsail; 9) New River, and; 10) Bogue. Other inlets were not included in the update study because they are within undeveloped State or Federal management lands (i.e., NC Coastal Reserve or State Park, US National Seashore).

## **Science Panel's Executive Summary of IHA Boundary 2018 Update Proposal to the CRC:**

The first North Carolina Inlet Hazard Areas (IHA) were developed in 1978 in recognition that shorelines adjacent to inlets are more dynamic than those along the oceanfront. At the time, the shoreline analysis methodology relied on the historic migration of inlet shorelines along the coast to delineate IHAs. Since that time, research has shown that in addition to inlet migration, the oscillations of the ocean shoreline adjacent to the inlet can also be a significant threat to development, and that the area of inlet influence extends further along the ocean shoreline than originally understood.

Forty years since the original IHA delineations, some of the inlets have changed significantly, with several inlets (Mad Inlet, Old Topsail Inlet, and New/Corncake Inlet) having closed completely. Others (New Topsail and Shallotte Inlets) have moved beyond the limits of the original IHA delineations. In 2004, the Science Panel began working on revising the IHA delineation methodology, leading to initial draft maps first presented in 2010. Due to a combination of issues including what use standards would be applied in the IHAs and the Science Panel being tasked with reviewing the use of terminal groins in NC, the effort was put on hold. In 2016, the Panel was asked by the Coastal Resources Commission to develop an inlet shoreline change rate calculation methodology and complete the update IHA Delineations.



Inlet shorelines behave differently than oceanfront shorelines not influenced by inlets. Oceanfront shorelines near inlets have long-term erosion rates approximately five times greater than other oceanfront shorelines. The shorelines inside the inlet, between the two islands, can migrate even faster. New Topsail Inlet has been moving south approximately 90 feet per year since the 1930s. Mason Inlet was moving at 365 feet per year before it was relocated and stabilized. Inlet shorelines can also fluctuate much more than those farther away from the inlets. These fluctuations may not increase the overall erosion rate but still contribute to the short-term risk to development.

Although inlet shorelines are more dynamic and locally unique, a common observation is a multi-year oscillation where the near-inlet shoreline on one side erodes rapidly while the other side accretes or gains sand. Over a period of years to decades, the erosion patterns may reverse; what was previously eroding recovers while the previous accretion disappears. This oscillation is most often caused by shifts in the alignment of the channel through the offshore bar, as it naturally oscillates from one side of the inlet to the other.

In 2010, the Panel developed draft IHAs for each of the developed inlets. Public comments criticized the effort in part because there were no proposed rule changes to accompany the much larger draft boundary updates. The prior drafts were also criticized because of the increased size of the draft IHAs and the fact that inlet risk within the areas varied considerably.

In response to the public comments on the prior IHA draft, the panel developed the Inlet Hazard Area Method (IHAM) to define the IHA, and to identify two “risk lines” that are calculated similarly to the CRC’s OEA mapping. Away from inlets, the existing vegetation line can be a useful indicator of the long-term erosion trend which offers several advantages in defining the Ocean Hazard Area. However, the dynamic oscillations near the inlets make a fixed IHA designation necessary. The dynamic oscillations near inlets were found to be better represented by a fixed, hybrid-vegetation line based on the most landward limits of all vegetation lines over the study period.

The IHAM establishes the “90-year Risk Line,” or landward limit of the IHA, by multiplying 90 times the annual inlet-shoreline erosion rate and measuring landward from the hybrid-vegetation line. This calculation is like the one applied in defining the landward limit of the Ocean Erodible Area and Ocean Hazard Area outside the IHA. The IHAM establishes the “30-year Risk Line” by multiplying 30 times the annual inlet-shoreline erosion rate, and measuring landward from the hybrid-vegetation line. Land seaward of the 30-year Risk Line is considered to be at relatively higher risk than areas landward of the 30-year line. Because inlet shorelines behave differently than non-inlet areas, there are several important differences in how the erosion rates are measured and how they are applied in mapping compared to the non-inlet shorelines:





- The alongshore boundary of the IHA is identified by an increase in shoreline change variability compared to adjacent shoreline, not influenced by the inlets.
- The erosion rates were analyzed using linear regression, a statistical method that takes advantage of the growing database of North Carolina shorelines and which better reflects the dynamic nature of inlets (rather than the endpoint method used in the OEA).
- Time periods for analysis were selected on an inlet-by-inlet basis, based on the available shoreline images that best represented the recent history of the inlet shoreline.
- The IHAM assumes homogeneous, erodible sediments; and in areas where the IHAM does not reflect the influence of underlying geology and dune topography, the Panel used professional judgement and their knowledge of each inlet to aid in the delineation of the landward IHA boundary.

The CRC's Ocean Erodible Area and Ocean Hazard Area identify areas where long-term erosion and severe storm impacts are significantly higher than other areas on the barrier shorelines. The maps in this report present the Panel's recommended IHA for each of the developed inlet shorelines where the inlet processes risk is equal to or greater than the long-term erosion and storm impacts. The landward limit of each IHA is defined by a 90-year Risk Line, and a 30-year Risk Line defines a higher level of risk. Because inlet oscillations make the existing vegetation line a poor indicator of future conditions, the proposed boundaries are fixed relative to the hybrid-vegetation line.

The Science Panel on Coastal Hazards recommends that the CRC consider subsequent IHA boundary updates every five years, to coincide with the oceanfront erosion rate and Ocean Erodible Area boundary updates. This report is submitted as a replacement for the 2010 report on the panel's recommendations.

### **Summary of New Maps**

At most inlets, the proposed IHA has expanded farther away from the inlet along the oceanfront-inlet shoreline. This longshore boundary was identified using statistical methods based primarily on standard deviation of relative position of historic shorelines, and to a lesser degree, the actual erosion rates. These techniques quantified the extent of shoreline variation (i.e., back and forth movement), and gave the Science Panel the ability to identify the oceanfront-inlet transitional boundary.

Similarly, to how the Ocean Erodible Area (OEA) boundary along the oceanfront is determined (90 times the setback factor), the Panel utilized the multiplier 90 times the shoreline change rate to be the landward-most IHA boundary. However, unlike the oceanfront OEA limit where the distance is measured from the first line of stable and natural vegetation, the Science Panel's landward boundary was measured landward at each transect starting from the landward-most location of all vegetation lines (hybrid-vegetation line). In some instances, the Science Panel



utilized their combined professional knowledge of underlying geology and specific inlet-related processes to modify the landward boundary.

The Panel acknowledged that risk within inlet hazard areas is not the same relative to a specific point in time, and felt it was important to identify areas within their proposed IHA with greatest potential to be influenced by inlet processes (erosion). Termed and defined by the Science Panel, the “30-Year Risk Line” was initially introduced to the CRC in 2010 as a method for delineating the landward extent of those areas within the proposed IHAs where the Science Panel believed the risk to be greatest. Like the landward boundary of the IHA, the “30-Year Risk Line” distance was calculated for each transect by multiplying the shoreline change rate times 30 measured from the landward-most location of all vegetation lines (hybrid-vegetation line).

It is important to remind the Commission that the terms “30- & 90-Year Risk Lines” are utilized by the Science Panel to describe their process of identifying areas with greatest potential to be influenced by both long- and short-term inlet related processes. These terms do not appear in CRC rule language. It is also important to note that the multipliers of 30 and 90 along with shoreline change are used in the Commission’s rules for siting oceanfront development, and are not intended to be predictive in nature, but are an indication of how the shoreline has changed over the preceding years.

The Science Panel’s proposed IHA boundary maps are attached. The following tables (Tables 1, 2 & 3) summarize boundary area changes, the number of lots less than 15,000 square feet, and structures greater than 5,000 square feet, that would be influenced by current IHA rules and the proposed IHA boundaries.



**Table 1.** This table illustrates area (acres) based on area of parcels within or intersecting both the existing IHA and proposed IHA. Negative values represent an acreage reduction, while positive values represent an acreage increase. Also note that Masonboro Inlet at Wrightsville Beach does not currently have a designated IHA.

<b>Location</b>	<b>Existing IHA (acres)</b>	<b>2018-Proposed IHA (acres)</b>	<b>Difference (acres)</b>	<b>Increase-Reduction (%)</b>
<b>Tubbs Inlet</b> <i>at Sunset Beach</i>	182	96.8	-85.2	-46.8%
<b>Tubbs Inlet</b> <i>at Ocean Isle</i>	123.5	84.3	-39.2	-31.7%
<b>Shallotte Inlet</b> <i>at Ocean Isle</i>	64.6	216.6	152	235.3%
<b>Shallotte Inlet</b> <i>at Holden Beach</i>	290.5	569.3	278.8	96.0%
<b>Lockwood Folly Inlet</b> <i>at Holden Beach</i>	64.1	189.5	125.4	195.6%
<b>Lockwood Folly Inlet</b> <i>at Oak Island</i>	126.7	229.7	103	81.3%
<b>Carolina Beach Inlet</b> <i>at Carolina Beach</i>	177.5	346	168.5	94.9%
<b>Masonboro Inlet</b> <i>at Wrightsville Beach</i>	0	90.8	90.8	100.0%
<b>Mason Inlet</b> <i>at Wrightsville Beach</i>	267.6	125.5	-142.1	-53.1%
<b>Mason Inlet</b> <i>at Figure Eight</i>	267.6	165.6	-102	-38.1%
<b>Rich Inlet</b> <i>at Figure Eight</i>	156.2	253.6	97.4	62.4%
<b>Rich Inlet</b> <i>at Lea-Hutaff Island</i>	117.7	409	291.3	247.5%
<b>New Topsail Inlet</b> <i>at Lea-Hutaff Island</i>	517.1	414.4	-102.7	-19.9%
<b>New Topsail Inlet</b> <i>at Topsail Beach</i>	256.9	427.4	170.5	66.4%
<b>New River Inlet</b> <i>at N. Topsail Beach</i>	85.2	144.8	59.6	70.0%
<b>Bogue Inlet</b> <i>at Emerald Isle</i>	136.1	429.5	293.4	215.6%
<b>TOTAL:</b>	<b>2833</b>	<b>4192.8</b>	<b>1359.5</b>	<b>48.0%</b>



**Table 2.** This table illustrates the number of structures (residential and commercial combined) within or intersecting either the existing IHA and proposed IHA and have a heated-area greater than 5,000 square feet. Negative values represent a reduction, while positive values represent an increase.

<b>Structures &gt; 5,000 square feet</b>	<b>IHA (current)</b>	<b>IHA (2018 proposed)</b>	<b>Difference</b>
<b>Tubbs Inlet</b> <i>at Sunset Beach</i>	0	0	0
<b>Tubbs Inlet</b> <i>at Ocean Isle</i>	5	4	-1
<b>Shallotte Inlet</b> <i>at Ocean Isle</i>	0	1	1
<b>Shallotte Inlet</b> <i>at Holden Beach</i>	5	9	4
<b>Lockwood Folly Inlet</b> <i>at Holden Beach</i>	0	0	0
<b>Lockwood Folly Inlet</b> <i>at Oak Island</i>	0	0	0
<b>Carolina Beach Inlet</b> <i>at Carolina Beach</i>	0	0	0
<b>Masonboro Inlet</b> <i>at Wrightsville Beach</i>	0	1	1
<b>Mason Inlet</b> <i>at Wrightsville Beach</i>	1	1	0
<b>Mason Inlet</b> <i>at Figure Eight</i>	9	5	-4
<b>Rich Inlet</b> <i>at Figure Eight</i>	2	9	7
<b>Rich Inlet</b> <i>at Lea-Hutaff Island</i>	0	0	0
<b>New Topsail Inlet</b> <i>at Lea-Hutaff Island</i>	0	0	0
<b>New Topsail Inlet</b> <i>at Topsail Beach</i>	0	0	0
<b>New River Inlet</b> <i>at N. Topsail Beach</i>	0	11	11
<b>Bogue Inlet</b> <i>at Emerald Isle</i>	2	0	-2
<b>TOTAL:</b>	<b>24</b>	<b>41</b>	<b>17</b>





**Table 3.** This table illustrates the number of lots (residential commercial combined) within, or intersecting either the existing IHA and proposed IHA, that have a lot less than 15,000 square feet (0.334 acres). Negative values represent a reduction, while positive values represent an increase.

<b>Lots &lt; 15,000 sqft. (0.334 acres)</b>	<b>IHA (current) # of Parcels</b>	<b>IHA (2018 proposed) # of Parcels</b>	<b>Difference</b>
<b>Tubbs Inlet</b> <i>at Sunset Beach</i>	156	16	-140
<b>Tubbs Inlet</b> <i>at Ocean Isle</i>	20	3	-17
<b>Shallotte Inlet</b> <i>at Ocean Isle</i>	146	403	257
<b>Shallotte Inlet</b> <i>at Holden Beach</i>	15	173	158
<b>Lockwood Folly Inlet</b> <i>at Holden Beach</i>	52	156	104
<b>Lockwood Folly Inlet</b> <i>at Oak Island</i>	49	116	67
<b>Carolina Beach Inlet</b> <i>at Carolina Beach</i>	0	17	17
<b>Masonboro Inlet</b> <i>at Wrightsville Beach</i>	NA	9	9
<b>Mason Inlet</b> <i>at Wrightsville Beach</i>	0	0	0
<b>Mason Inlet</b> <i>at Figure Eight</i>	4	7	3
<b>Rich Inlet</b> <i>at Figure Eight</i>	8	16	8
<b>Rich Inlet</b> <i>at Lea-Hutaff Island</i>	3	0	-3
<b>New Topsail Inlet</b> <i>at Lea-Hutaff Island</i>	3	1	-2
<b>New Topsail Inlet</b> <i>at Topsail Beach</i>	230	238	8
<b>New River Inlet</b> <i>at N. Topsail Beach</i>	137	542	405
<b>Bogue Inlet</b> <i>at Emerald Isle</i>	71	108	37
<b>TOTAL:</b>	<b>894</b>	<b>1805</b>	<b>911</b>



## **Summary of Proposed Inlet Hazard Area Rule Amendments:**

Some may recall that during the 2010 IHA update proposal, progress was eventually halted in part due to many unanswered questions related to what changes were envisioned for development standards within the proposed IHAs, especially given the increased size of the proposed areas. For this reason, staff is proposing the following concepts to be considered by the Commission while discussing amendments to existing rule language:

- All existing structures within the new IHAs be grandfathered; clarify that the existing grandfathering provisions contained within 15A NCAC 07H .0306(a)(5)(L) apply within IHAs.
- All lots under 15,000 square feet, platted before the effective date of these amendments, be grandfathered.
- Remove the distinction between “residential” and “commercial” structures.
- Limit all new construction to 5,000 square feet.
- Remove restrictions on the number of units allowed in a structure.
- Use the calculated erosion rates inside of the IHAs, instead of the rates from the adjacent OEAs.

This information is being provided to the Commission as a status update on the Panel’s progress, and to familiarize the CRC with current IHA rules and the Panel’s proposed boundaries. The Science Panel’s full report is complete and currently undergoing final review, and will be provided to the Commission at the February 2019 meeting.

Staff is asking for the Commission’s direction in development of amended rule language to accompany the newly delineated IHAs and methods report for presentation at the February 2019 meeting.

**APPENDIX A:** Existing rules pertaining to IHAs

**APPENDIX B:** Draft 2018 Proposed IHA maps



## Appendix A: Existing Rule Language Pertaining To IHAs:

### 15A NCAC 07H .0310 USE STANDARDS FOR INLET HAZARD AREAS

(a) Inlet areas as defined by Rule .0304 of this Section are subject to inlet migration, rapid and severe changes in watercourses, flooding and strong tides. Due to this extremely hazardous nature of the Inlet Hazard Areas, all development within these areas shall be permitted in accordance with the following standards:

- (1) All development in the inlet hazard area shall be set back from the first line of stable natural vegetation a distance equal to the setback required in the adjacent ocean hazard area;
- (2) Permanent structures shall be permitted at a density of no more than one commercial or residential unit per 15,000 square feet of land area on lots subdivided or created after July 23, 1981;
- (3) Only residential structures of four units or less or non-residential structures of less than 5,000 square feet total floor area shall be allowed within the inlet hazard area, except that access roads to those areas and maintenance and replacement of existing bridges shall be allowed;
- (4) Established common-law and statutory public rights of access to the public trust lands and waters in Inlet Hazard Areas shall not be eliminated or restricted. Development shall not encroach upon public accessways nor shall it limit the intended use of the accessways;
- (5) All other rules in this Subchapter pertaining to development in the ocean hazard areas shall be applied to development within the Inlet Hazard Areas.

(b) The inlet hazard area setback requirements shall not apply to the types of development exempted from the ocean setback rules in 15A NCAC 7H .0309(a), nor, to the types of development listed in 15A NCAC 7H .0309(c).

(c) In addition to the types of development excepted under Rule .0309 of this Section, small scale, non-essential development that does not induce further growth in the Inlet Hazard Area, such as the construction of single-family piers and small scale erosion control measures that do not interfere with natural inlet movement, may be permitted on those portions of shoreline within a designated Inlet Hazard Area that exhibit features characteristic of Estuarine Shoreline. Such features include the presence of wetland vegetation, lower wave energy, and lower erosion rates than in the adjoining Ocean Erodible Area. Such development shall be permitted under the standards set out in Rule .0208 of this Subchapter. For the purpose of this Rule, small scale is defined as those projects which are eligible for authorization under 15A NCAC 7H .1100, .1200 and 7K .0203.

*History Note:* Filed as a Temporary Amendment Eff. October 30, 1981, for a period of 70 days to expire on January 8, 1982;  
Filed as an Emergency Rule Eff. September 11, 1981, for a period of 120 days to expire on January 8, 1982;  
Authority G.S. 113A-107; 113A-113(b); 113A-124;  
Eff. December 1, 1981;  
Amended Eff. April 1, 1999; April 1, 1996; December 1, 1992; December 1, 1991;  
March 1, 1988.

### 15A NCAC 07H .0309 USE STANDARDS FOR OCEAN HAZARD AREAS: EXCEPTIONS

(a) The following types of development shall be permitted seaward of the oceanfront setback requirements of Rule .0306(a) of the Subchapter if all other provisions of this Subchapter and other state and local regulations are met:

- (1) campsites;
- (2) driveways and parking areas with clay, packed sand or gravel;
- (3) elevated decks not exceeding a footprint of 500 square feet;
- (4) beach accessways consistent with Rule .0308(c) of this Subchapter;
- (5) unenclosed, uninhabitable gazebos with a footprint of 200 square feet or less;
- (6) uninhabitable, single-story storage sheds with a foundation or floor consisting of wood, clay, packed sand or gravel, and a footprint of 200 square feet or less;
- (7) temporary amusement stands;
- (8) sand fences; and
- (9) swimming pools.



In all cases, this development shall be permitted only if it is landward of the vegetation line or static vegetation line, whichever is applicable; involves no alteration or removal of primary or frontal dunes which would compromise the integrity of the dune as a protective landform or the dune vegetation; has overwalks to protect any existing dunes; is not essential to the continued existence or use of an associated principal development; is not required to satisfy minimum requirements of local zoning, subdivision or health regulations; and meets all other non-setback requirements of this Subchapter.

(b) Where application of the oceanfront setback requirements of Rule .0306(a) of this Subchapter would preclude placement of permanent substantial structures on lots existing as of June 1, 1979, buildings shall be permitted seaward of the applicable setback line in ocean erodible areas, **but not inlet hazard areas** or unvegetated beach areas, if each of the following conditions are met:

- (1) The development is set back from the ocean the maximum feasible distance possible on the existing lot and the development is designed to minimize encroachment into the setback area;
- (2) The development is at least 60 feet landward of the vegetation line or static vegetation line, whichever is applicable;
- (3) The development is not located on or in front of a frontal dune, but is entirely behind the landward toe of the frontal dune;
- (4) The development incorporates each of the following design standards, which are in addition to those required by Rule .0308(d) of this Subchapter.
  - (A) All pilings shall have a tip penetration that extends to at least four feet below mean sea level;
  - (B) The footprint of the structure shall be no more than 1,000 square feet, and the total floor area of the structure shall be no more than 2,000 square feet. For the purpose of this Section, roof-covered decks and porches that are structurally attached shall be included in the calculation of footprint;
  - (C) Driveways and parking areas shall be constructed of clay, packed sand or gravel except in those cases where the development does not abut the ocean and is located landward of a paved public street or highway currently in use. In those cases concrete, asphalt or turfstone may also be used;
  - (D) No portion of a building's total floor area, including elevated portions that are cantilevered, knee braced or otherwise extended beyond the support of pilings or footings, may extend oceanward of the total floor area of the landward-most adjacent building. When the geometry or orientation of a lot precludes the placement of a building in line with the landward most adjacent structure of similar use, an average line of construction shall be determined by the Division of Coastal Management on a case-by-case basis in order to determine an ocean hazard setback that is landward of the vegetation line, static vegetation line or measurement line, whichever is applicable, a distance no less than 60 feet.
- (5) All other provisions of this Subchapter and other state and local regulations are met. If the development is to be serviced by an on-site waste disposal system, a copy of a valid permit for such a system shall be submitted as part of the CAMA permit application.

(c) Reconfiguration and development of lots and projects that have a grandfather status under Paragraph (b) of this Rule shall be allowed provided that the following conditions are met:

- (1) Development is setback from the first line of stable natural vegetation a distance no less than that required by the applicable exception;
- (2) Reconfiguration shall not result in an increase in the number of buildable lots within the Ocean Hazard AEC or have other adverse environmental consequences.

For the purposes of this Rule, an existing lot is a lot or tract of land which, as of June 1, 1979, is specifically described in a recorded plat and which cannot be enlarged by combining the lot or tract of land with a contiguous lot(s) or tract(s) of land under the same ownership. The footprint is defined as the greatest exterior dimensions of the structure, including covered decks, porches, and stairways, when extended to ground level.

(d) The following types of water dependent development shall be permitted seaward of the oceanfront setback requirements of Rule .0306(a) of this Section if all other provisions of this Subchapter and other state and local regulations are met:

- (1) piers providing public access; and
- (2) maintenance and replacement of existing state-owned bridges and causeways and accessways to such bridges.

(e) Replacement or construction of a pier house associated with an ocean pier shall be permitted if each of the following conditions is met:





- (1) The ocean pier provides public access for fishing and other recreational purposes whether on a commercial, public, or nonprofit basis;
  - (2) Commercial, non-water dependent uses of the ocean pier and associated pier house shall be limited to restaurants and retail services. Residential uses, lodging, and parking areas shall be prohibited;
  - (3) The pier house shall be limited to a maximum of two stories;
  - (4) A new pier house shall not exceed a footprint of 5,000 square feet and shall be located landward of mean high water;
  - (5) A replacement pier house may be rebuilt not to exceed its most recent footprint or a footprint of 5,000 square feet, whichever is larger;
  - (6) The pier house shall be rebuilt to comply with all other provisions of this Subchapter; and
  - (7) If the pier has been destroyed or rendered unusable, replacement or expansion of the associated pier house shall be permitted only if the pier is being replaced and returned to its original function.
- (f) In addition to the development authorized under Paragraph (d) of this Rule, small scale, non-essential development that does not induce further growth in the Ocean Hazard Area, such as the construction of single family piers and small scale erosion control measures that do not interfere with natural oceanfront processes, shall be permitted on those non-oceanfront portions of shoreline that exhibit features characteristic of an Estuarine Shoreline. Such features include the presence of wetland vegetation, and lower wave energy and erosion rates than in the adjoining Ocean Erodible Area. Such development shall be permitted under the standards set out in Rule .0208 of this Subchapter. For the purpose of this Rule, small scale is defined as those projects which are eligible for authorization under 15A NCAC 07H .1100, .1200 and 07K .0203.
- (g) Transmission lines necessary to transmit electricity from an offshore energy-producing facility may be permitted provided that each of the following conditions is met:
- (1) The transmission lines are buried under the ocean beach, nearshore area, and primary and frontal dunes, all as defined in Rule 07H .0305, in such a manner so as to ensure that the placement of the transmission lines involves no alteration or removal of the primary or frontal dunes; and
  - (2) The design and placement of the transmission lines shall be performed in a manner so as not to endanger the public or the public's use of the beach.

*History Note: Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b)(6)a; 113A-113(b)(6)b; 113A-113(b)(6)d; 113A-124; Eff. February 2, 1981; Amended Eff. June 1, 2010; February 1, 2006; September 17, 2002 pursuant to S.L. 2002-116; August 1, 2000; August 1, 1998; April 1, 1996; April 1, 1995; February 1, 1993; January 1, 1991; April 1, 1987.*

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

### (a) Ocean Shoreline Erosion Control Activities:

- (1) Use Standards Applicable to all Erosion Control Activities:
  - (A) All oceanfront erosion response activities shall be consistent with the general policy statements in 15A NCAC 07M .0200.
  - (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, 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) All permitted oceanfront erosion response projects, other than beach bulldozing and temporary placement of sandbag structures, shall demonstrate sound engineering for their planned purpose.
  - (E) Shoreline erosion response projects shall not be constructed in beach or estuarine areas that sustain substantial habitat for fish and wildlife species, as identified by natural resource agencies during project review, unless mitigation measures are incorporated into project design, as set forth in Rule .0306(i) of this Section.
  - (F) Project construction shall be timed to minimize adverse effects on biological activity.



- (G) Prior to completing any erosion response project, all exposed remnants of or debris from failed erosion control structures must be removed by the permittee.
  - (H) 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 which 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 provision (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.
  - (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 protect a state or federally registered historic site that is imminently threatened by shoreline erosion as defined in provision (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) any permit for a structure under this Part (I) may be issued only to a sponsoring public agency for projects where the public benefits outweigh the short or long range adverse impacts. Additionally, the permit shall include conditions providing for mitigation or minimization by that agency of any unavoidable adverse impacts on adjoining properties and on public access to and use of the beach.
  - (J) 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 adversely impact fisheries or other public trust resources; and
    - (v) any permit for a structure under this Part (J) may be issued only to a sponsoring public agency for projects where the public benefits outweigh the short or long range adverse impacts. Additionally, the permit shall include conditions providing for mitigation or minimization by that agency of any unavoidable adverse impacts on adjoining properties and on public access to and use of the beach.
  - (K) 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 practical alternative to replacing the structure that will provide the same or similar benefits; 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.
  - (L) 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 (2)(A) of this Subparagraph shall 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 as an exception to the erosion setback requirement.
- (D) Temporary erosion control structures may be placed seaward 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. The landward side of such temporary erosion control structures shall not be located more than 20 feet seaward 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 seaward 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 their designee in accordance with Part (2)(A) of this Subparagraph.
- (F) Temporary erosion control structures may remain in place for up to two years after the date of approval if they are protecting a building with a total floor area of 5000 sq. ft. or less and its associated septic system, or, for up to five years for a building with a total floor area of more than 5000 sq. ft. and its associated septic system. Temporary erosion control structures may remain in place for up to five years if they are protecting a bridge or a road. The property owner shall be responsible for removal of the temporary structure within 30 days of the end of the allowable time period.
- (G) Temporary sandbag erosion control structures may remain in place for up to eight years from the date of approval if they are located in a community that is actively pursuing a beach nourishment project, or if they are located in an Inlet Hazard Area adjacent to an inlet for which a community is actively pursuing an inlet relocation or stabilization project in accordance with G.S. 113A-115.1. For purposes of this Rule, a community is considered to be actively pursuing a beach nourishment, inlet relocation or stabilization project if it has:
  - (i) an active CAMA permit, where necessary, approving such project; or
  - (ii) 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) 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 and 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.



- (H) Once the temporary erosion control structure is determined by the Division of Coastal Management to be unnecessary due to relocation or removal of the threatened structure, a storm protection project constructed by the U.S. Army Corps of Engineers, a large-scale beach nourishment project, an inlet relocation or stabilization project, it 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.
  - (I) Removal of temporary erosion control structures is not required if they are covered by dunes with stable and natural vegetation.
  - (J) The property owner shall be responsible for the removal of remnants of all portions of any damaged temporary erosion control structure.
  - (K) Sandbags used to construct temporary erosion control structures shall be tan in color and three to five feet wide and seven to 15 feet long when measured flat. Base width of the structure shall not exceed 20 feet, and the height shall not exceed six feet.
  - (L) Soldier pilings and other types of devices to anchor sandbags shall not be allowed.
  - (M) An imminently threatened structure may be protected only once, regardless of ownership, unless the threatened structure is located in a community that is actively pursuing a beach nourishment project, or in an Inlet Hazard Area and in a community that is actively pursuing an inlet relocation or stabilization project in accordance with (G) of this Subparagraph. Existing temporary erosion control structures located in Inlet Hazard Areas may be eligible for an additional eight year permit extension provided that the structure 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, inlet relocation or stabilization project in accordance with Part (G) 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 (G) of this Subparagraph shall begin at the time the initial erosion control structure is installed. For the purpose of this Rule:
    - (i) a building and septic system shall be considered as separate structures.
    - (ii) a road or highway shall be allowed to be incrementally protected as sections become imminently threatened. The time period for removal of each section of sandbags shall begin at the time that section is installed in accordance with Part (F) or (G) of this Subparagraph.
  - (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 15A NCAC 07H .0312.
  - (4) Beach Bulldozing. Beach bulldozing (defined as the process of moving natural beach material from any point seaward of the first line of stable vegetation to create a protective sand dike or to obtain material for any other purpose) is 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 he has permission of 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;
    - (E) The activity may be undertaken to protect threatened on-site waste disposal systems as well as the threatened structure's foundations.
- (b) Dune Establishment and Stabilization. Activities to establish dunes shall be allowed so long as the following conditions are met:





- (1) Any new dunes established shall be aligned to the greatest extent possible with existing adjacent dune ridges and shall be of the same general configuration as adjacent natural dunes.
  - (2) Existing primary and frontal dunes shall not, except for beach nourishment and emergency situations, be broadened or extended in an oceanward direction.
  - (3) Adding to dunes shall be accomplished in such a manner that the damage to existing vegetation is minimized. The filled areas shall be immediately replanted or temporarily stabilized until planting can be successfully completed.
  - (4) 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.
  - (5) **No new dunes shall be created in inlet hazard areas.**
  - (6) Sand held in storage in any dune, other than the frontal or primary dune, may be redistributed within the AEC provided that it is not placed any farther oceanward than the crest of a primary dune or landward toe of a frontal dune.
  - (7) No disturbance of a dune area shall be allowed when other techniques of construction can be utilized and alternative site locations exist to avoid unnecessary dune impacts.
- (c) Structural Accessways:
- (1) Structural accessways shall be permitted across primary dunes so long as they are designed and constructed in a manner that entails negligible alteration on the primary dune. Structural accessways shall not be considered threatened structures for the purpose of Paragraph (a) of this Rule.
  - (2) An accessway shall be conclusively presumed to entail negligible alteration of a primary dune provided that:
    - (A) The accessway is exclusively for pedestrian use;
    - (B) The accessway is less than six feet in width;
    - (C) The accessway is raised on posts or pilings of five feet or less depth, so that wherever possible only the posts or pilings touch the frontal dune. Where this is deemed impossible, the structure shall touch the dune only to the extent absolutely necessary. In no case shall an accessway be permitted if it will diminish the dune's capacity as a protective barrier against flooding and erosion; and
    - (D) Any areas of vegetation that are disturbed are revegetated as soon as feasible.
  - (3) An accessway which does not meet Part (2)(A) and (B) of this Paragraph shall be permitted only if it meets a public purpose or need which cannot otherwise be met and it meets Part (2)(C) of this Paragraph. Public fishing piers shall not be deemed to be prohibited by this Rule, provided all other applicable standards are met.
  - (4) In order to avoid weakening the protective nature of primary and frontal dunes a structural accessway (such as a "Hatteras ramp") shall be provided for any off-road vehicle (ORV) or emergency vehicle access. Such accessways shall be no greater than 10 feet in width and shall be constructed of wooden sections fastened together over the length of the affected dune area.
- (d) Building Construction Standards. New building construction and any construction identified in .0306(a)(5) and 07J .0210 shall comply with the following standards:
- (1) In order to avoid danger to life and property, all development shall be designed and placed so as to minimize damage due to fluctuations in ground elevation and wave action in a 100-year storm. Any building constructed within the ocean hazard area shall comply with relevant sections of the North Carolina Building Code including the Coastal and Flood Plain Construction Standards and the local flood damage prevention ordinance as required by the National Flood Insurance Program. If any provision of the building code or a flood damage prevention ordinance is inconsistent with any of the following AEC standards, the more restrictive provision shall control.
  - (2) All building in the ocean hazard area shall be on pilings not less than eight inches in diameter if round or eight inches to a side if square.
  - (3) All pilings shall have a tip penetration greater than eight feet below the lowest ground elevation under the structure. For those structures so located on or seaward of the primary dune, the pilings shall extend to five feet below mean sea level.
  - (4) All foundations shall be adequately designed to be stable during applicable fluctuations in ground elevation and wave forces during a 100-year storm. Cantilevered decks and walkways shall meet this standard or shall be designed to break-away without structural damage to the main structure.

*History Note:* Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b)(6)a.,b.,d.; 113A-115.1; 113A-124; Eff. June 1, 1979;



*Filed as a Temporary Amendment Eff. June 20, 1989, for a period of 180 days to expire on December 17, 1989;*  
*Amended Eff. August 3, 1992; December 1, 1991; March 1, 1990; December 1, 1989;*  
*RRC Objection Eff. November 19, 1992 due to ambiguity;*  
*RRC Objection Eff. January 21, 1993 due to ambiguity;*  
*Amended Eff. March 1, 1993; December 28, 1992;*  
*RRC Objection Eff. March 16, 1995 due to ambiguity;*  
*Amended Eff. April 1, 1999; February 1, 1996; May 4, 1995;*  
*Temporary Amendment Eff. July 3, 2000; May 22, 2000;*  
*Amended Eff. May 1, 2013; July 1, 2009; April 1, 2008; February 1, 2006; August 1, 2002.*

## **15A NCAC 07H .0304 AECS WITHIN OCEAN HAZARD AREAS**

The ocean hazard AECs contain all of the following areas:

- (1) Ocean Erodible Area. This is the area where there exists a substantial possibility of excessive erosion and significant shoreline fluctuation. The oceanward boundary of this area is the mean low water line. The landward extent of this area is the distance landward from the first line of stable and natural vegetation as defined in 15A NCAC 07H .0305(a)(5) to the recession line established by multiplying the long-term annual erosion rate times 90; provided that, where there has been no long-term erosion or the rate is less than two feet per year, this distance shall be set at 120 feet landward from the first line of stable natural vegetation. For the purposes of this Rule, the erosion rates are the long-term average based on available historical data. The current long-term average erosion rate data for each segment of the North Carolina coast is depicted on maps entitled "2011 Long-Term Average Annual Shoreline Rate Update" and approved by the Coastal Resources Commission on May 5, 2011 (except as such rates may be varied in individual contested cases or in declaratory or interpretive rulings). In all cases, the rate of shoreline change shall be no less than two feet of erosion per year. The maps are available without cost from any Local Permit Officer or the Division of Coastal Management on the internet at <http://www.nccoastalmanagement.net>.
- (2) Inlet Hazard Area. The inlet hazard areas are natural-hazard areas that are especially vulnerable to erosion, flooding, and other adverse effects of sand, wind, and water because of their proximity to dynamic ocean inlets. This area extends landward from the mean low water line a distance sufficient to encompass that area within which the inlet migrates, based on statistical analysis, and shall consider such factors as previous inlet territory, structurally weak areas near the inlet, and external influences such as jetties and channelization. The areas on the maps identified as suggested Inlet Hazard Areas included in the report entitled INLET HAZARD AREAS, The Final Report and Recommendations to the Coastal Resources Commission, 1978, as amended in 1981, by Loie J. Priddy and Rick Carraway are incorporated by reference and are hereby designated as Inlet Hazard Areas, except for:
  - (a) the Cape Fear Inlet Hazard Area as shown on the map does not extend northeast of the Bald Head Island marina entrance channel; and
  - (b) the former location of Mad Inlet, which closed in 1997.In all cases, the Inlet Hazard Area shall be an extension of the adjacent ocean erodible areas and in no case shall the width of the inlet hazard area be less than the width of the adjacent ocean erodible area. This report is available for inspection at the Department of Environmental Quality, Division of Coastal Management, 400 Commerce Avenue, Morehead City, North Carolina or at the website referenced in Item (1) of this Rule. Photocopies are available at no charge.
- (3) Unvegetated Beach Area. Beach areas within the Ocean Hazard Area where no stable natural vegetation is present may be designated as an Unvegetated Beach Area on either a permanent or temporary basis as follows:
  - (a) An area appropriate for permanent designation as an Unvegetated Beach Area is a dynamic area that is subject to rapid unpredictable landform change due to wind and wave action. The areas in this category shall be designated following studies by the Division of Coastal Management. These areas shall be designated on maps approved by the Coastal Resources



Commission and available without cost from any Local Permit Officer or the Division of Coastal Management on the internet at the website referenced in Item (1) of this Rule.

- (b) An area that is suddenly unvegetated as a result of a hurricane or other major storm event may be designated by the Coastal Resources Commission as an Unvegetated Beach Area for a specific period of time, or until the vegetation has re-established in accordance with 15A NCAC 07H .0305(a)(5). At the expiration of the time specified or the re-establishment of the vegetation, the area shall return to its pre-storm designation.

*History Note:* Authority G.S. 113A-107; 113A-107.1; 113A-113; 113A-124;  
Eff. September 9, 1977;  
Amended Eff. December 1, 1993; November 1, 1988; September 1, 1986; December 1, 1985;  
Temporary Amendment Eff. October 10, 1996;  
Amended Eff. April 1, 1997;  
Temporary Amendment Eff. October 10, 1996 Expired on July 29, 1997;  
Temporary Amendment Eff. October 22, 1997;  
Amended Eff. July 1, 2016; September 1, 2015; May 1, 2014; February 1, 2013; January 1, 2010;  
February 1, 2006; October 1, 2004; April 1, 2004; August 1, 1998.



## APPENIX B: Draft 2018 Proposed IHA map





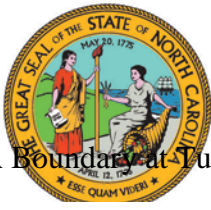


Figure 1. Proposed IHA Boundary at Tubbs Inlet - Sunset Beach





Figure 2. Proposed IHA Boundary at Tubbs Inlet - Ocean Isle

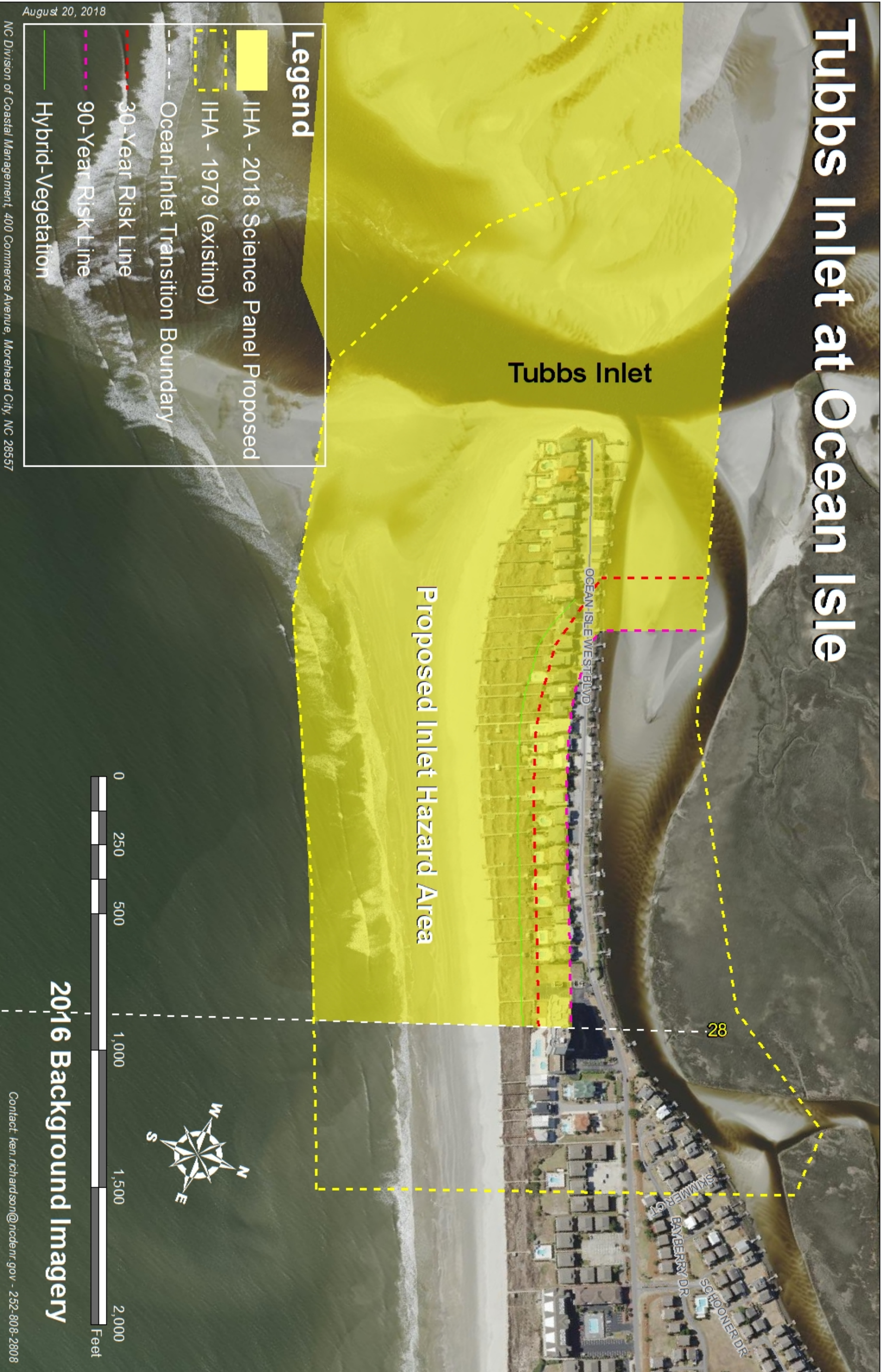




Figure 3. Proposed IHA Boundary Update at Shallotte Inlet - Ocean Isle





Figure 4. Proposed IHA Boundary Update at Shallotte Inlet - Holden Beach





Figure 5. Proposed IHA Boundary Update at Lockwood Folly Inlet - Holden Beach





Figure 6. Proposed IHA Boundary Update at Lockwood Folly Inlet - Oak Island





Figure 7. Proposed IHA Boundary Update at Carolina Beach Inlet - Carolina Beach

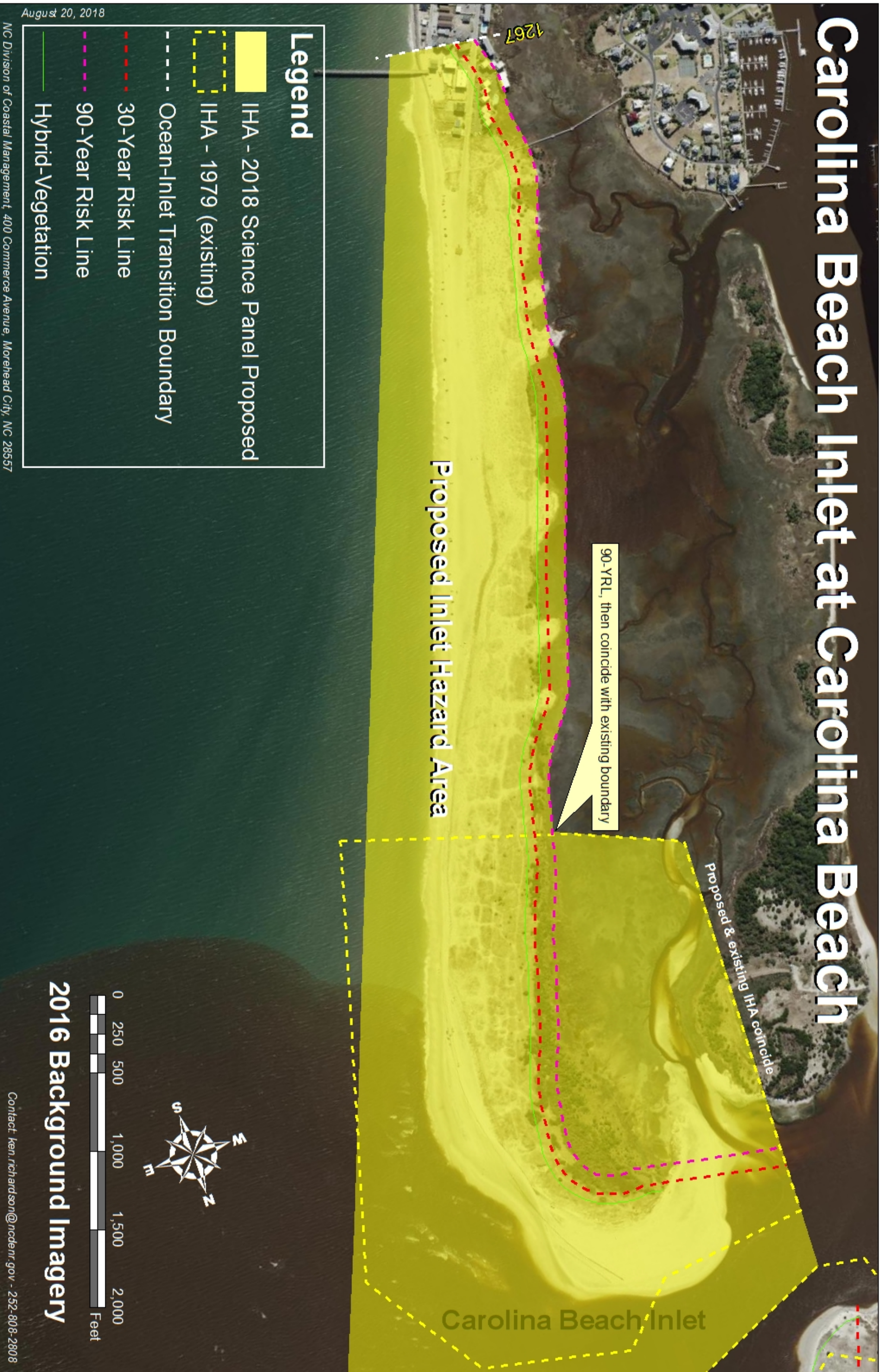




Figure 8. Proposed IHA Boundary Update at Masonboro Inlet - Wrightsville Beach





**Figure 9.** Proposed IHA Boundary Update at Mason Inlet - Wrightsville Beach

# Mason Inlet at Wrightsville Beach

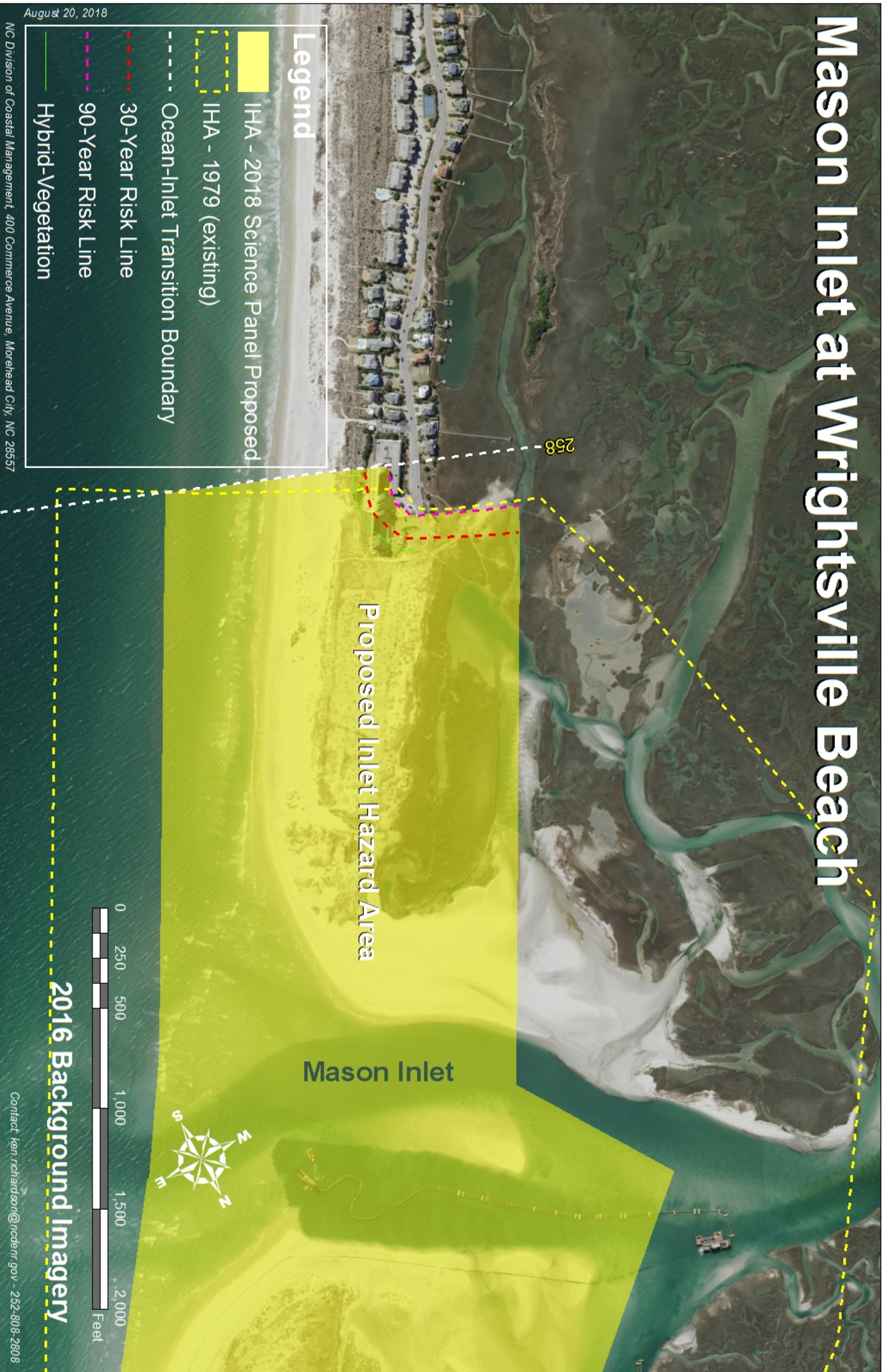




Figure 10. Proposed IHA Boundary Update at Mason Inlet - Figure Eight Island





Figure 11. Proposed IHA Boundary Update at Rich Inlet - Figure Eight Island





Figure 12. Proposed IHA Boundary Update at Rich & New Topsail Inlets - Lea-Hutaff Island

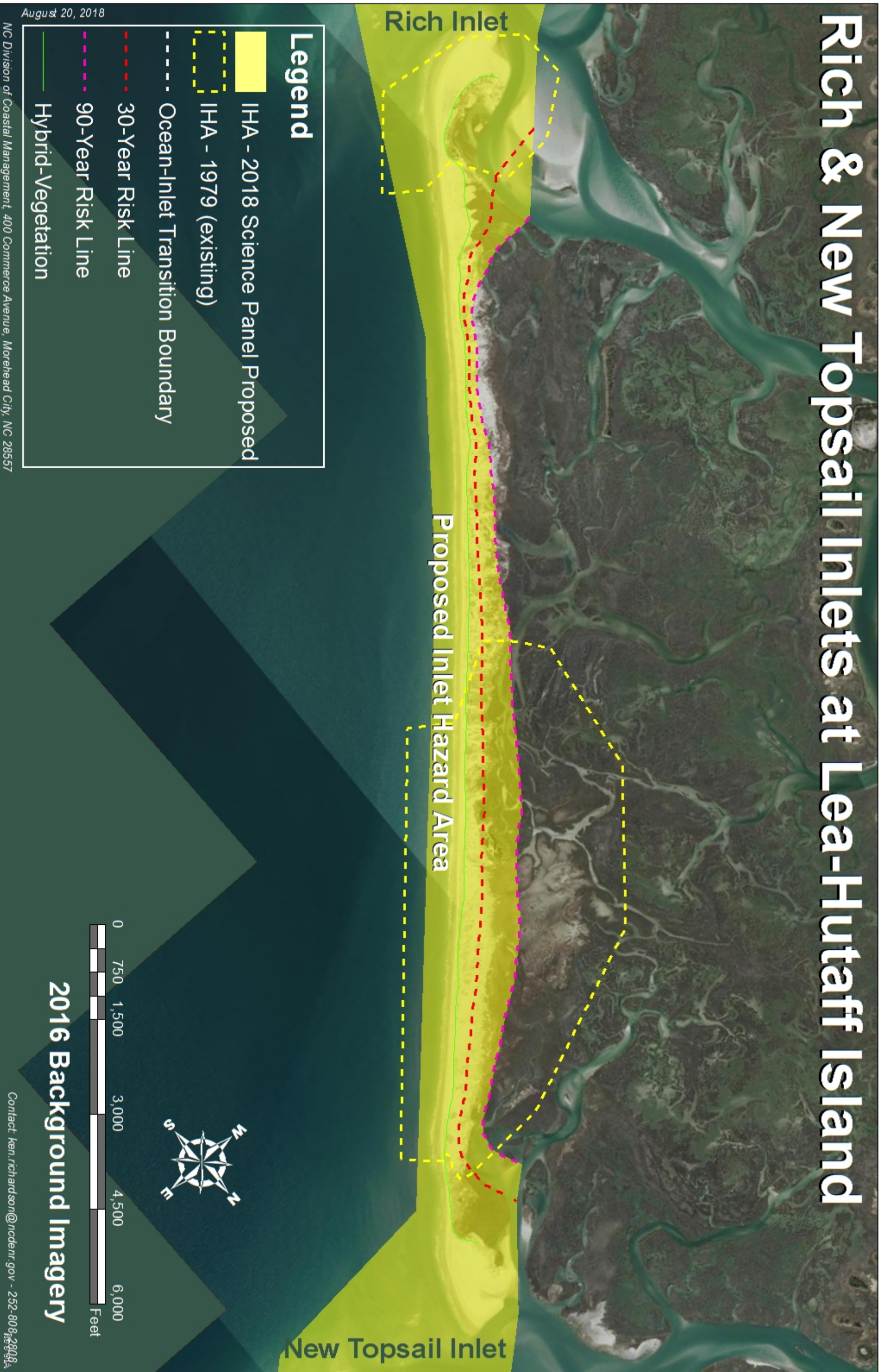




Figure 13. Proposed IHA Boundary Update at New Topsail Inlet - Topsail Beach

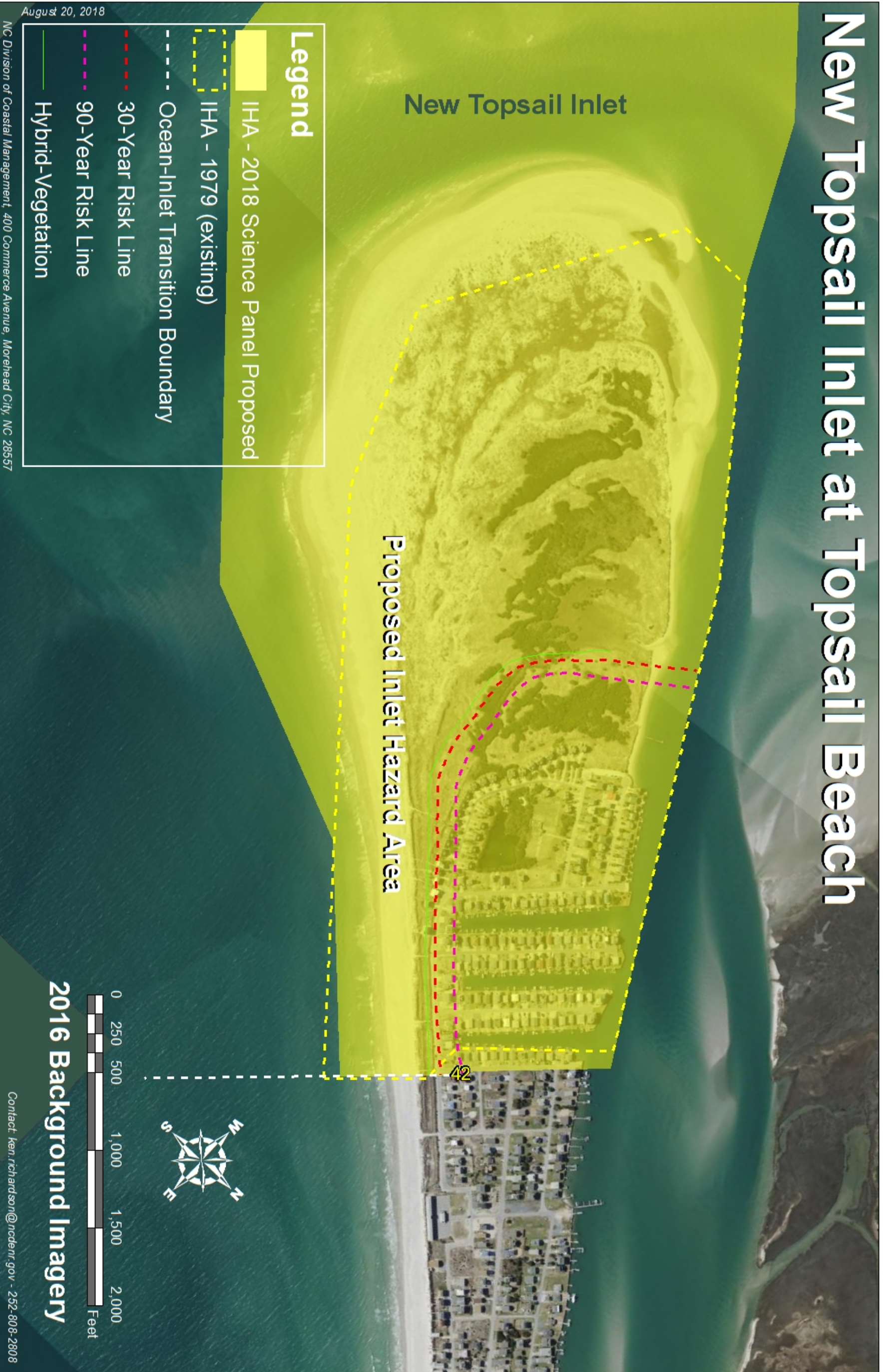




Figure 14. Proposed IHA Boundary Update at New River Inlet - North Topsail Beach





Figure 15. Proposed IHA Boundary Update at Bogue Inlet - Emerald Isle

