



## **NCDOT variance request (CRC-24-03)**

Greg Daisey  
Transportation Projects Field Representative  
Elizabeth City District  
Division of Coastal Management

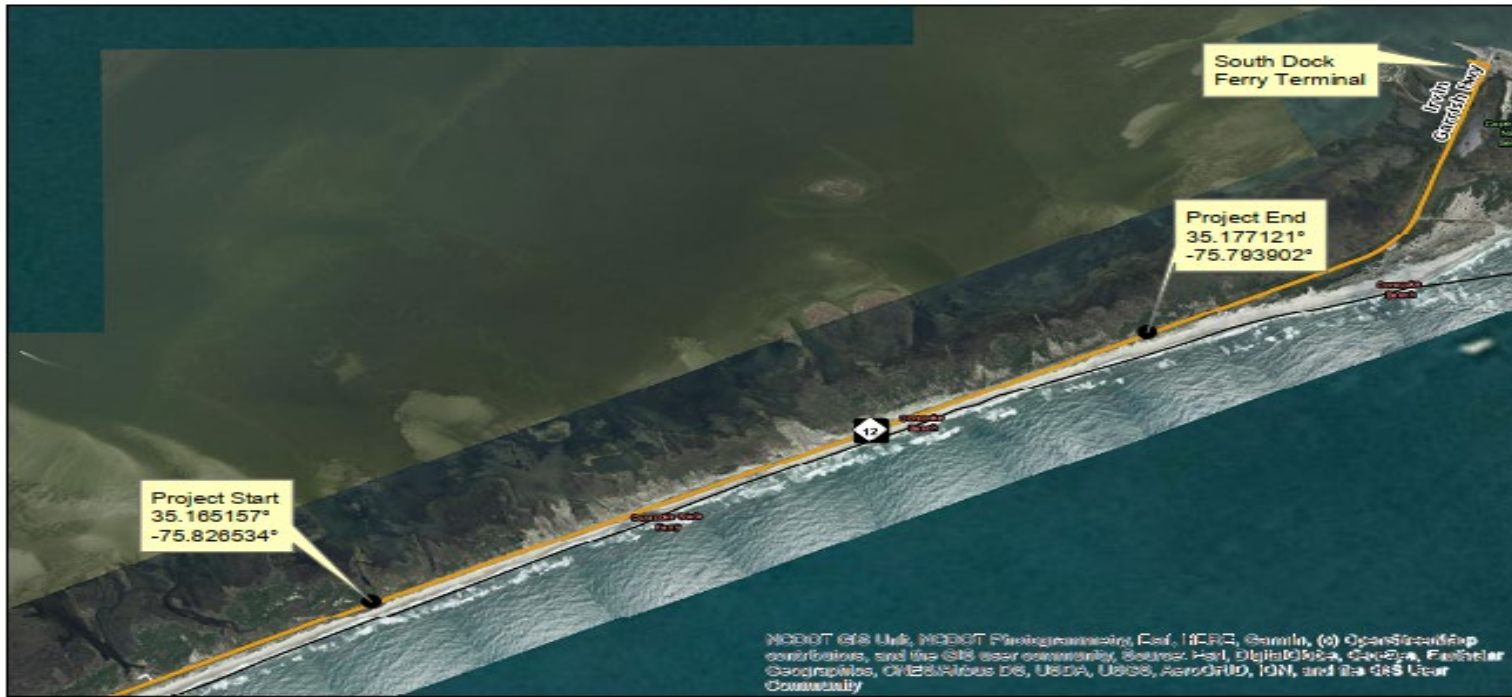
NC Coastal Resources Commission  
Meeting on June 11, 2020

*Department of Environmental Quality*

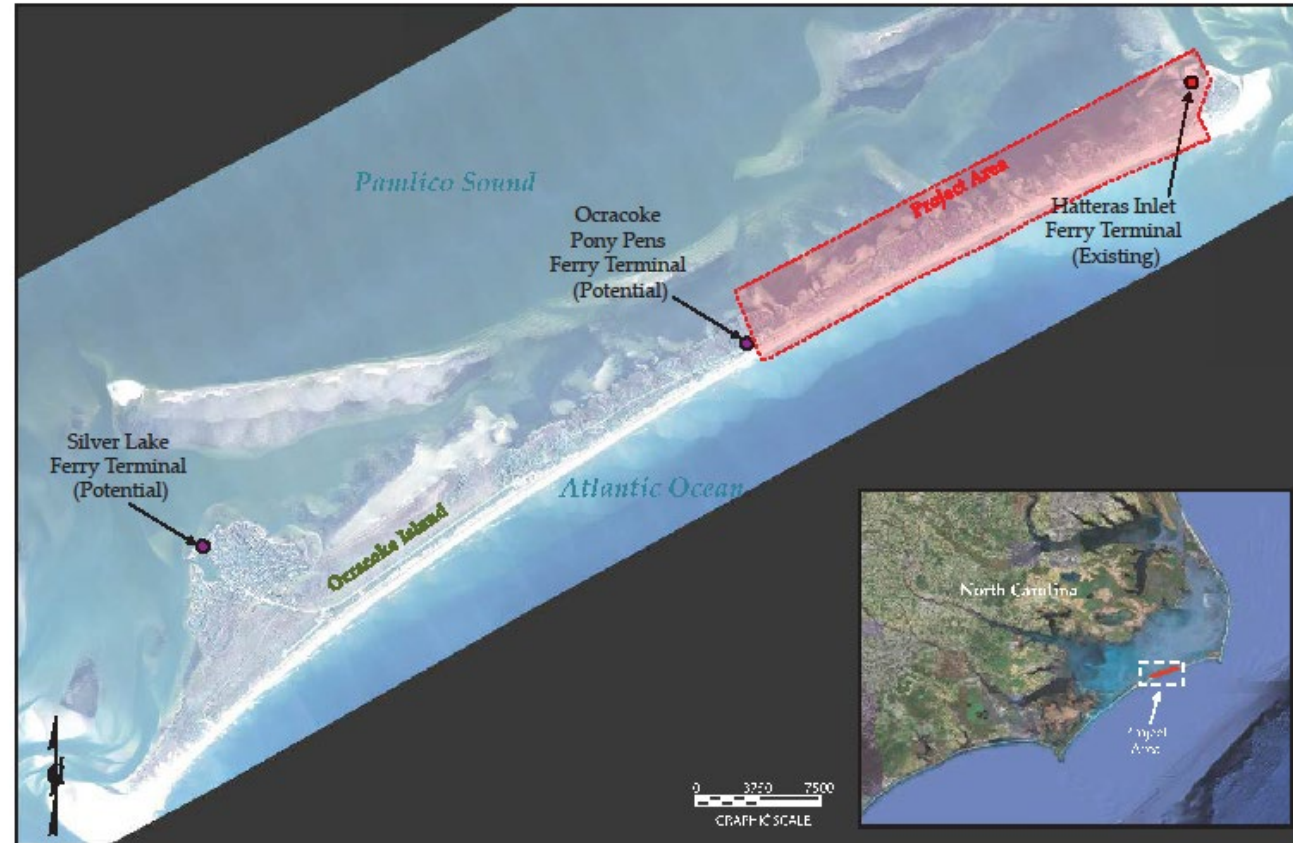


# NC Highway 12, North End of Ocracoke Island, Hyde County

NC 12 Sandbag Project  
Ocracoke Island  
Hyde County Quad Name Green Island



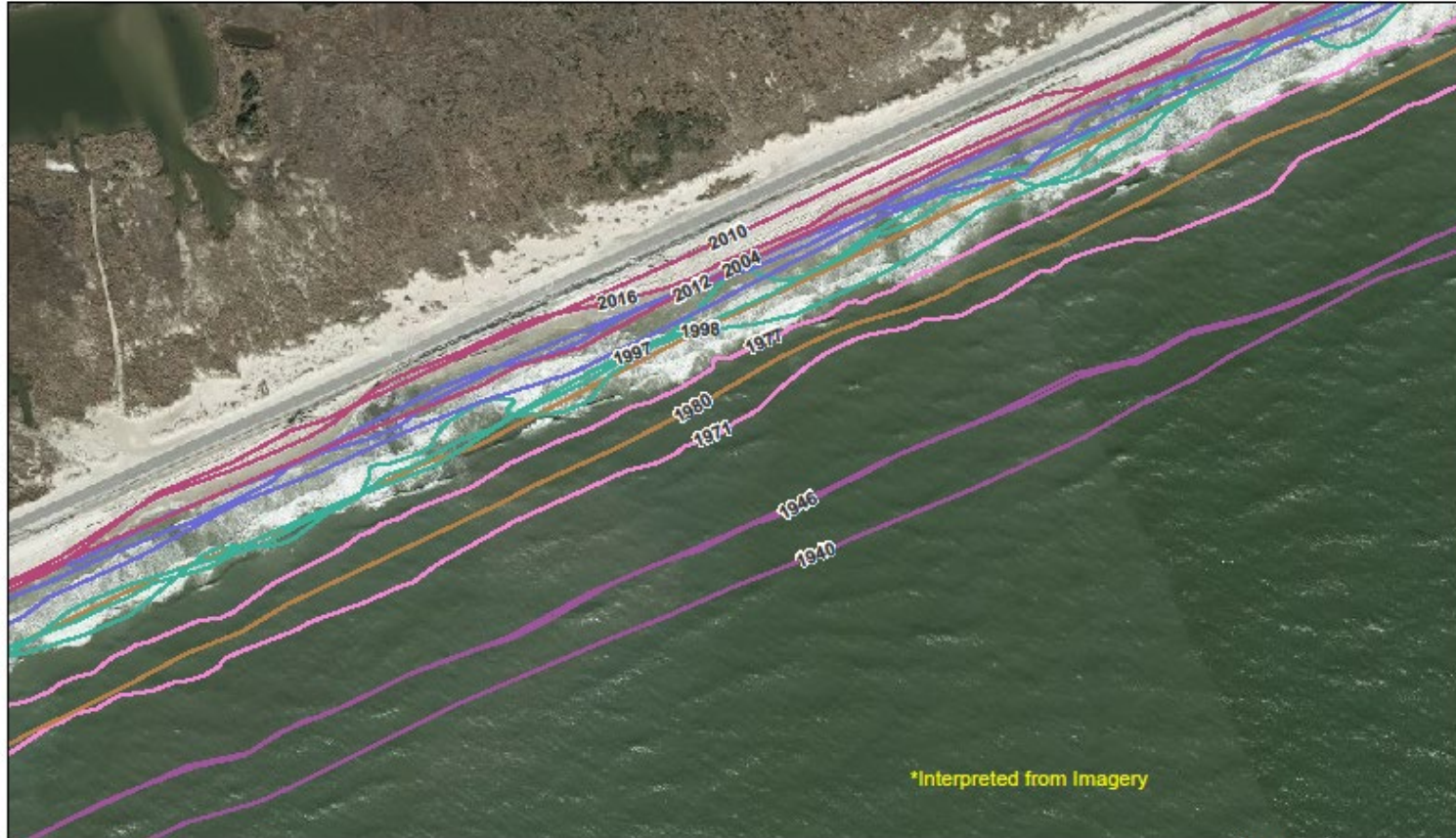
# DOT 2016 Feasibility Study Map



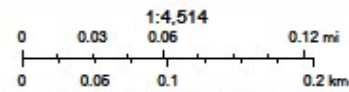
 NC 12 IMPROVEMENTS PROJECT FEASIBILITY STUDY	Hyde County NCDOT Div. 1	Project Study Area	Figure 2
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS BRANCH			



# Historical Oceanfront Shoreline - Project Location



5/8/2020, 11:04:23 AM



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatenzentrum, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

NC Department of Environmental Quality  
2017





Project Area  
Post Hurricane  
Dorian  
*Looking Southwest*

Photo by NCDOT September 8, 2019





Project Area  
*NC Highway 12*  
*Post Hurricane Dorian*

Photo by DCM September 2019





# Project Area

## *NC Highway 12*

### *Post Hurricane Dorian*

Photo by DCM September 2019





Project Area  
*NC Highway 12*  
*Post Hurricane Dorian*

Photo by DCM September 2019







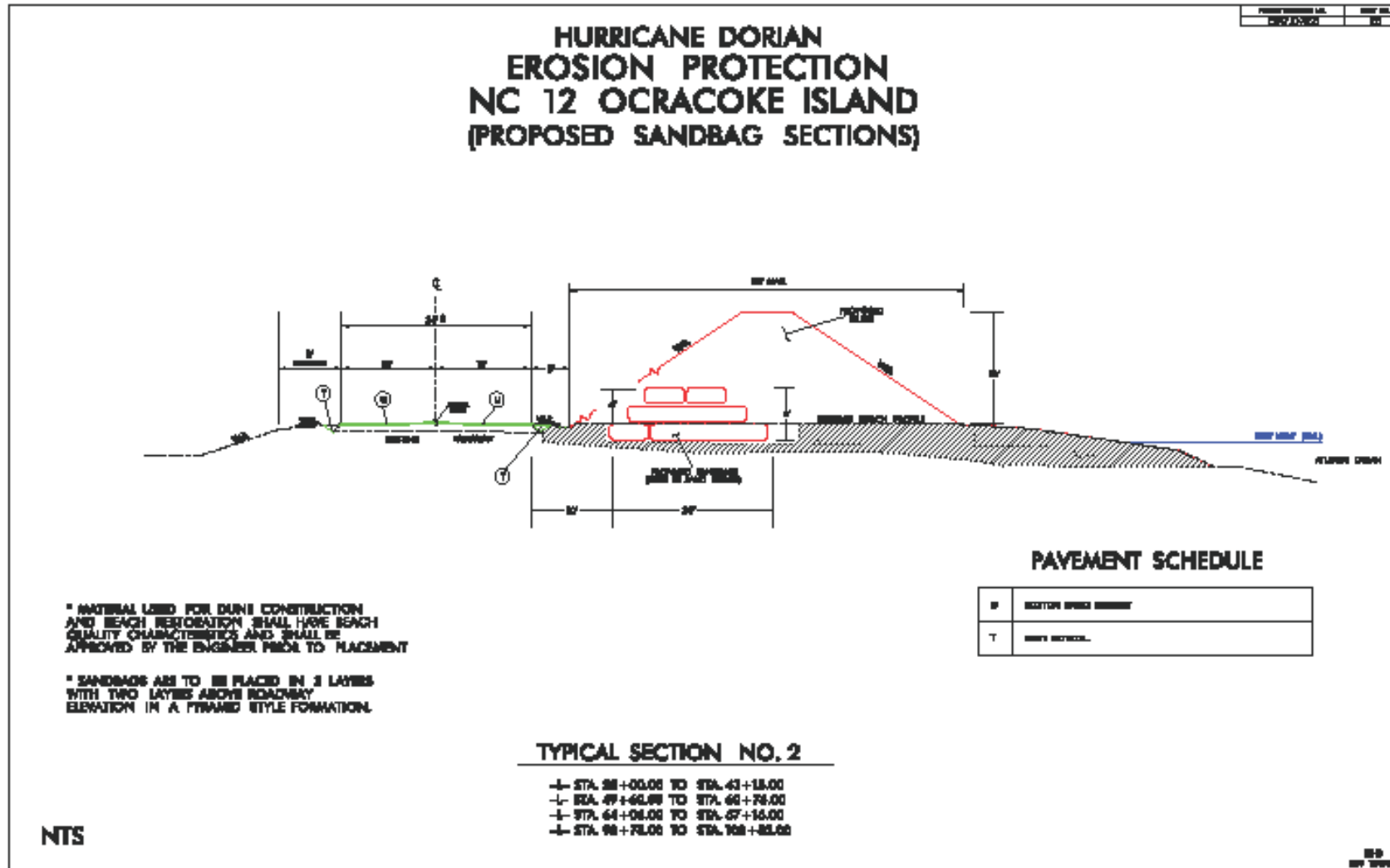
**Project Site**  
*NC Highway 12 Post  
Hurricane Dorian*

Photo by DCM September 2019



# Petitioner's Currently Approved Project Drawings

Emergency Major  
Modification  
CAMA Major Permit No.  
24-03  
issued September 2019



Drawings Submitted by NCDOT September 20, 2019





# Project Site

*Looking Northeast*

Photo by NCDOT October 14, 2019





# Project Site

*Looking Northeast*

Photo by NCDOT October 29, 2019



# Project Area

*Looking Northeast*



Photo by NCDOT October 29, 2019



# Project Area

*Looking Northeast*



Photo by NCDOT November 20, 2019



# Project Area

*Looking Southwest*



Photo by NCDOT November 20, 2019





# Project Area

*Looking Northeast*

Photo by DCM November 2019





# Project Site

*Looking Northeast*



Photo by NCDOT November 20, 2019



# Project Area

*Looking Southwest*



Photo by NCDOT March 2, 2020



# Project Site

*Looking Northeast*



Photo by NCDOT March 2, 2020





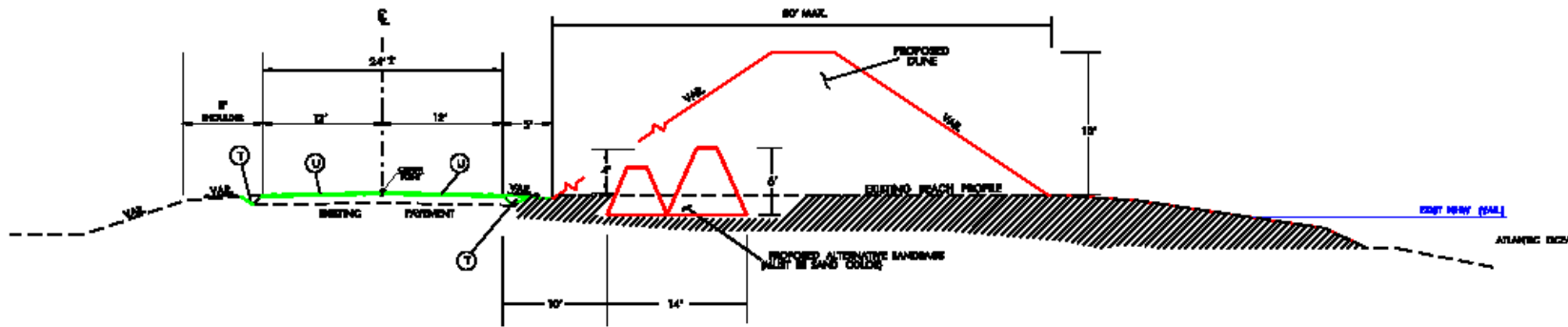
# Project Site

Photo by NCDOT March 2, 2020



# HURRICANE DORIAN EROSION PROTECTION NC 12 OCRACOKE ISLAND (PROPOSED SANDBAG SECTIONS)

DATE: 03/24/20  
DRAWN BY: [REDACTED]



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

### PAVEMENT SCHEDULE

U	EXISTING ADULT PAVEMENT
T	SAND MATERIAL

### TYPICAL SECTION NO. 2

- STA. 25+00.00 TO STA. 43+75.00
- STA. 49+60.00 TO STA. 60+76.00
- STA. 64+06.00 TO STA. 67+16.00
- STA. 85+95.00 TO STA. 96+00.00

NTS

REV 04/08/20



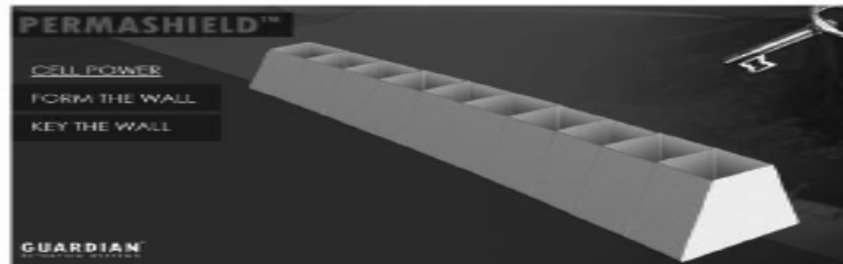
Petitioner's  
Proposed  
Project  
Drawings



## PermaShield Multi-Cellular Design

### Patented System

- Sold in 50' L sections; vary in height from 2' to 6'
- Can be cut to size to fit in confined spaces
- Baffles sewn together forming 25 trapezoidal shaped compartments



# Proposed Project Materials

Information Provided by NCDOT



# 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.**