



*Alternative Sandbags for Public Roads 07H .0308*  
*Consideration of Approval of Fiscal Analysis*  
*CRC-26-66*

**Coastal Resources Commission, August 26-27, 2026**

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# *Temporary Erosion Control Structures 07H .0308(b)(2)*

- Ocean Hazard AEC
- Imminently threatened roads, right of ways, and buildings and associated septic systems.
- Limited to sandbags at the mean high water and parallel to shore.
- 07H .0308(b)(2)(L) sets the dimensions and color of the individual bags
  - Tan in color
  - 3 to 5 feet wide and 7 to 15 feet long when measured flat. Base width not to exceed 20ft and 6ft high measured from the base of the lowest bag.

## *Example: NC DOT and NC 12*

- NC DOT has utilized alternative sandbags through a CRC variance three times.
  - NC 12 in Ocracoke – variance granted June 2020
  - Mirlo Beach – variance granted February 2022
  - Pea Island Visitors Center – variance granted December 2024
- Each example of alternative sandbags were the same design, though there would be potential for other makes and manufacturers.



# Mirlo Beach, Rodanthe



Illustration E: Example cell dimensions

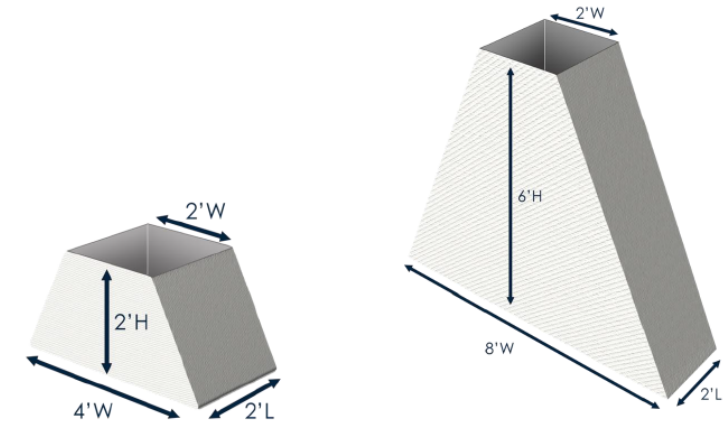


Illustration F: Approximate section weights with sand fill and concrete fill.

## Sand Fill:

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

# *Fiscal Analysis*

- Primary impact is a reduction of administrative delay associated with variance review and approval.
- Application is still required under the umbrella process.

# *Impact Analysis*

- Private Property Owners/Development Community
  - Does not alter existing standards or rules
  - Indirect effects include improved roadway protection, preserves access, supports emergency response and reduces risk of erosion isolating homes and businesses
- NC DOT
  - Expands potential options not requiring variance
  - Reduce administrative delays
  - Application with review still required, processing fees do not change
  - Reduction in administrative costs
    - 83.5 hours at \$6,439 in opportunity costs
- NC DCM
  - Reduces administrative workload
    - 56 hours at \$4,392 in opportunity costs
  - Application with review still required, processing fees do not change

# *Impact Analysis (cont.)*

- Coastal Resources Commission
  - Estimates approximately 13 collective hours for review of materials through variance hearing
- Local government
  - Would remain subject to standards and rules.
  - Indirect effects similar to public (access and infrastructure protection, evacuation routes, and access to emergency services)
- Other Resource Agencies
  - Application still required under umbrella process
  - Potential to comment
  - Potential for variance or conditioned permit
  - Promotes agency engagement and public transparency
- Natural Resources
  - Similar designs and associated impacts granted by variance
  - Application could be authorized by rule through umbrella process rather than repeated variance requests

## *07H .0308(b)(2)(L-O)*

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

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

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

(O) Sandbags used to construct temporary erosion control structures to protect public roads are not subject to the color and size limitations in 07H .0308(b)(2)(L). Base width of the temporary erosion control structures to protect public roads shall not exceed 30 feet, and the total height shall not exceed 10 feet, as measured from the bottom of the lowest bag.