Nothing Compares
NORTH CAROLINA

Overview of Marsh Sill Design and Local Site Conditions

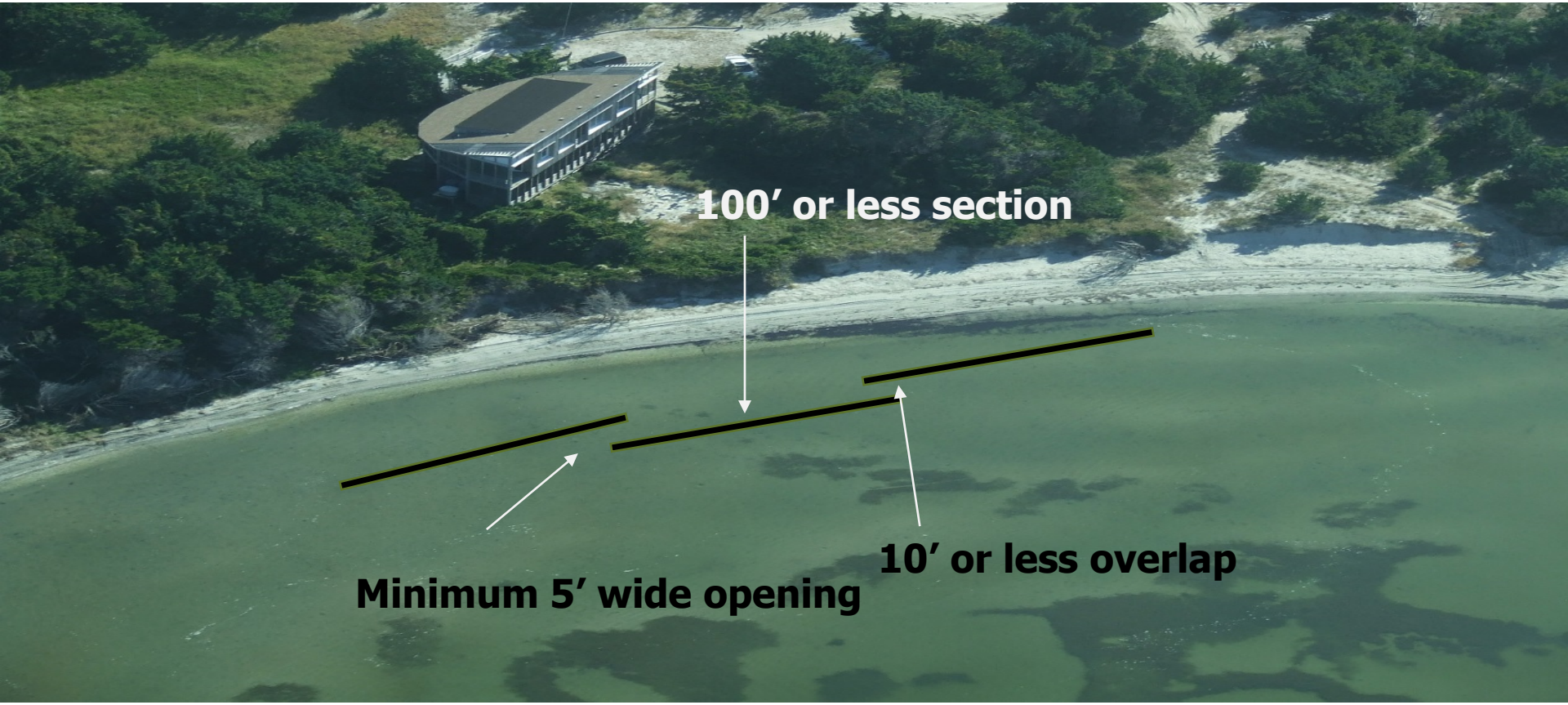
Aquatic Habitat and Resource Assessment

Fetch and Shoreline Orientation

Water Depth and Tidal Range

Sheetpile Sill

- Designed to have gaps in sheets or openings in sheets that meet or equal 1 inch per linear foot.
- Sill sections will be aligned to overlap generally every hundred feet with a five foot wide opening.
- Designed to have a height six inches or less above the normal water level (Wind Tide) or mean high water (lunar tide).



Sheetpile Sill

Sheetpile Sill

Sheetpile Sill

Riprap Sills

Riprap or Oyster Bag Sills

- Similar to sheetpile sills, a 5’ opening every 100’ as a general guideline is desirable on small projects. Larger projects or higher wave energies may necessitate longer sill sections and with bigger openings compensating/complementing the longer sections.
- Opening may be achieved by having the sill height dropdown, overlap similar to sheetpile sills or the sill can have gaps that are baffled by a smaller sill.
- Sill height is driven by wave energy, shoreline orientation, water depths, and tidal range. A sill height of 6 Inches to 1 foot above NWL or MHW is desirable. High energy sites may require the sill height to exceed a 1’.
- Sill slopes should not exceed a 1.5’ horizontal to 1’ vertical with a 2’:1’ more desirable.
- Backfill of sill structure may be required to achieve proper elevation for the establishment of marsh.

Riprap sill with Overlap

Riprap Sill with Overlap

Riprap Sill with Backfill

Oyster Bag Sill with Baffled Opening

Ripap Sill with Baffled Opening

Riprap Sill with Baffled Opening

Riparp Sill with Drop Downs


Questions
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