

APPENDIX B

**GEOTECHNICAL INVESTIGATIONS AND
SEDIMENT ANALYSIS**

**BOGUE INLET
CHANNEL RELOCATION
GEOTECHNICAL INVESTIGATION**

Prepared For:

Town of Emerald Isle, North Carolina

Prepared By:

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**BOGUE INLET
CHANNEL RELOCATION
GEOTECHNICAL INVESTIGATION**

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EXECUTIVE SUMMARY

Coastal Planning & Engineering, Inc. (CPE) was contracted by the Town of Emerald Isle as the consulting engineer for the repositioning of the main ebb tide channel in Bogue Inlet. The project involves the moving of the channel to a more central location between the west end of Bogue Banks and the east end of Bear Island. The primary purpose of the project is to create a stable channel that will divert tidal flow away from the western end of the Town of Emerald Isle. A portion of the material removed during construction of the channel will be used to close the existing channel and the remaining material will be used to nourish the shoreline on the west end of the Town of Emerald Isle.

From July 16th to July 18th 2002, CPE geologist conducted twenty-seven (27) jet probes within and adjacent to the proposed channel location and along the margins of Bogue Inlet. Logs were created for each jet probe that documents the penetration results, the observed sediment characteristics and location of each jet probe site.

From July 17th to 20th 2002, five (5) vibracores were obtained by Athena Technologies of Columbia, South Carolina under the direction of a Coastal Planning & Engineering, Inc. geologist. These five (5) cores were collected along the proposed channel location and were visually inspected, logged, sampled, analyzed, photographed and archived.