

COASTAL PLANNING & ENGINEERING OF NORTH CAROLINA, INC.

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June 27, 2014

Christopher Layton
Town Manager
Town of Duck
P.O. Box 8369
Duck, NC 27949

Subject: Invoices 1792990-R8-526 and 1792998-R8-526: Project Update

Dear Mr. Layton:

This letter serves as an update to you and your staff on CPE-NC's progress with regards to the Permitting and Design Services for the Town of Duck Beach Nourishment Project.

Invoice 1792990-R8-526 reflects our efforts in completing 63.7% of the permitting and design scope of work as of June 1, 2014. The increase from the previously reported completion of 53.5% of the scope reflects CPE-NC's efforts during the month of May, 2014. These efforts are associated with coordination with Town staff, development of environmental documents, and the engineering design of the beach fill.

Invoice 1792998-R8-526 reflects our efforts in completing 5.2% of the marine sand search investigation and borrow area design scope of work as of June 1, 2014. Note that the invoice distinguishes between the base cost of the sand search and the contingency associated with vibracores that may or may not be needed. The increase from the previously reported completion of 3.2% of the scope reflects CPE-NC's efforts during the month of May, 2014. These efforts consist of internal coordination, coordination with the Bureau of Ocean Energy Management (BOEM), and the sub-contractor (UNCW/AVS) providing survey vessel support. Preliminary mobilization efforts were also conducted during the month of May.

Permitting and Design:

Throughout the month of May, our engineering team completed the design alternative analysis ending up with 5 different alternatives for the Town to review. The results of the design alternative analysis were presented to the Town Council on May 21. At the meeting the Town approved a motion supporting the Hybrid Alternative, which consists of a 20 ft. wide and 20 ft. high dune fronted by a variable width berm of approximately 60 to 80 ft. The Hybrid design will require approximately 1,050,000 cy of sand. The SBEACH analysis conducted suggests the Hybrid Plan would provide a 92% reduction of storm impacts associated with a Storm with Hurricane Isabel Characteristics when compared to the "no-action" plan.

With regards to the environmental documentation, additional progress was made establishing the baseline natural environment information for the project area. CPE-NC staff also used available data on possible borrow area locations to develop draft language for borrow area impacts. Likewise, we are developing language based on current assumptions for the beach fill to document fill placement environmental impacts. A draft EA, BA, and EFH are all being developed simultaneously. We are working toward a mid-July submittal of all three draft documents to the USACE and BOEM.

Marine Sand Search and Borrow Area Design:

Through the month of May, CPE-NC personnel continued coordination with BOEM following the issuance of the permits that were received at the end of March. A 60 day status report and request for an extension of the operational window of the BOEM Authorization was requested and granted. We also coordinated extensively with the University of North Carolina, who was expected to provide the survey vessel for the preliminary geophysical survey. Ultimately, weather, shoaling of Oregon Inlet, and schedule conflicts with UNCW's research vessel made it necessary for us to find another survey vessel.

On June 7th the R/V Thunderforce was mobilized in Morehead City. The survey vessel arrived onsite the evening of June 8th and began survey operations on June 9th. Survey operations were completed on June 13th. We are currently reducing the data collected and planning for vibracore operations, which we anticipate beginning around July 14th.

Please feel free to contact me anytime for further clarification or explanation of the project.

Very truly yours,

COASTAL PLANNING & ENGINEERING OF NORTH CAROLINA, INC.

A handwritten signature in black ink, appearing to read 'K. Willson', is written over a light gray rectangular background.

Kenneth Willson
Project Manager