## COASTAL PLANNING & ENGINEERING OF NORTH CAROLINA, INC.

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August 25, 2014

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

Subject: Invoices 1834605-R8-526 and 1834607-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 1834605-R8-526 reflects our efforts in completing 75.0% of the permitting and design scope of work as of August 1, 2014. The increase from the previously reported completion of 68.5% of the scope reflects CPE-NC's efforts during the month of July, 2014. These efforts are associated with coordination with development of environmental documents and finalizing the engineering design.

Invoice 1834607-R8-526 reflects our efforts in completing 41.4% of the marine sand search investigation and borrow area design scope of work as of August 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 23.3% of the scope reflects CPE-NC's efforts during the month of June, 2014. These efforts were associated with data reduction and final report preparation for the preliminary geophysical survey as well as planning and execution of vibracore operations.

## Permitting and Design:

Throughout the month of July we continued to develop the environmental assessment. The engineering alternative analysis was developed and the engineering plan was written up and incorporated into the document. Available geotechnical information was also provided to allow for documentation of proposed sediment resources. CPE-NC environmental scientist used this information to finalize potential impacts of the project. We anticipate completion of the draft EA by mid-September, at which time it will be submitted to the USACE and BOEM.

## Marine Sand Search and Borrow Area Design:

Throughout the month of July, staff completed the preliminary analysis of data collected during the geophysical survey and began planning for vibracore operations. A final report was developed and submitted to BOEM on July 15<sup>th</sup>, which detailed the geophysical investigation. Staff spent most of the later part of July finalizing vibracore plans. On July 22, vibracore operations began offshore northern Dare County. Throughout the remainder of the month vibracore operations continued. Vibracore operations were completed on August 4<sup>th</sup> resulting in the collection of 100 vibracores within 3 primary investigation areas offshore Duck, Kitty Hawk, and Kill Devil Hills.

Since the vibracore samples arrived at the office in Wilmington on August 4<sup>th</sup>, staff has been photographing, logging, and sampling the vibracores for further analysis. Preliminary results of the vibracore analysis suggest that sufficient, high quality sediment is available to construct all three projects from the main investigation area offshore Kill Devil Hills. At this time, we are still evaluating the sediment characteristics of the areas sampled offshore of the Town of Duck. We have not yet formulated a definitive opinion on the quality and quantity of the material within those 2 investigation areas. We anticipate processing of the vibracore data will continue through the month of September. Also, we are planning for the detailed

borrow area geophysical survey and cultural resource investigation, which we anticipate being conducted in September.

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.

Kenneth Willson Project Manager