



**COASTAL PROTECTION ENGINEERING OF NORTH CAROLINA, INC**

4038 MASONBORO LOOP ROAD

WILMINGTON, NC 28409

910-399-1905

January 27, 2021

Cliff Ogburn  
Town Manager  
Town of Southern Shores  
5375 N. Virginia Dare Trail  
Southern Shores, NC 27949

**Re: Invoice for December 2020 and Project Update**

Dear Mr. Ogburn:

This letter serves as an update to you and your staff on our progress with regards to task orders on which Coastal Protection Engineering of North Carolina, Inc. (CPE) is currently providing services to the Town of Southern Shores. Along with this update letter, please find attached the following Invoice:

**Southern Shores 2022 Permitting and Design**

- **Invoice 666 – January 14, 2021**

Southern Shores 2020 Annual Monitoring and Initial Permitting Coordination:

This work is associated with the agreement executed on May 7, 2020 between CPE and the Town of Southern Shores. No invoice is provided for this project for work in December. Task 1 services are associated with data acquisition for the 2020 annual monitoring surveys. As previously reported, the data acquisition report was completed in August and a digital copy of the report was provided via email on November 23, 2020. Final Hard Copies of the report will be provided as an appendix to the 2020 monitoring report.

Throughout early November, CPE staff finalized the draft Beach Assessment Report, which updated shoreline and volumetric changes. A draft version of the report was provided to you on November 23. The results of the 2020 Beach Assessment were presented to Town Council during a workshop meeting on January 19. During this meeting, Council members requested additional information regarding the useable beach analysis included in Section V of the report, as well as volumetric changes that occurred specifically along the portion of the beach fill constructed in 2017. The draft report has been updated to reflect these requests. Final hard copies of the report will be provided to the Town by the end of this week.

Design and Environmental Permitting Services, 2022 Beach Nourishment Project:

This work is associated with the agreement executed on July 13, 2020 between CPE and the Town of Southern Shores. Invoice #626 reflects services completed through November 30, 2020. Task 1 services are associated with the development of environmental documents and permit applications. CPE staff continued the development of environmental documents and the CAMA Major Permit application through the month of December. The environmental documents (Environmental Assessment and Essential Fish Habitat assessment) are being developed through cooperation with the Towns of Duck, Southern Shores, Kitty Hawk and Kill Devil



Hills. Staff is currently working on finalizing the draft CAMA Major Permit application for the project. The Duck draft CAMA Permit Application was submitted on January 19, and we are coordinating with DCM staff regarding updates to the application, some of which will be applicable to the Southern Shores Permit Application.

Regarding Task 2, Engineering and Design, progress continued throughout December and into January on the numerical model that will be used in combination with the other Towns. As previously reported, the regional wave model has been setup and calibrated and modelers are finalizing calibration of the sediment transport and morphology model. Engineering staff continue to develop recommendations for beach fill configuration, including whether to include a dune in the design template, berm height elevation, and advanced fill density. These aspects of the project are being incorporated into a working draft of the engineering report associated with Task 2, which will provide engineering justification for the project and will support our permit application.

Task 3 reflects an increase from 40% complete to 44% complete. This effort is mostly reflective of work completed by both CPE and our sub-contractor APTIM to finalize the borrow area compatibility report, which includes updated composite information for Borrow Area A based on post-construction volumes remaining in the Borrow Area following the 2017 construction project. Likewise, the report will include updated sediment sampling results associated with the amended state sediment criteria rules, and documentation of the offshore reconnaissance investigation conducted in October 2020. We are currently working with APTIM to de-scope Task 3 given the results of the reconnaissance survey conducted in October; however, preliminary discussions suggest the cost to the client will be approximately 50% of the contracted amount for Task 3.

Invoice #666 reflects no increase in the percent complete for Tasks 4 and 5 during the month of December.

Please let me know if you have questions or comments on the invoice or project status.

Sincerely,

A handwritten signature in black ink, appearing to read "Ken Willson", written over a light blue horizontal line.

Ken Willson  
Senior Program Manager  
Coastal Protection Engineering of North Carolina, Inc.

Office: 910-399-1905

Mobile: 910-443-4471

[kwillson@coastalprotectioneng.com](mailto:kwillson@coastalprotectioneng.com)