COASTAL PLANNING & ENGINEERING OF NORTH CAROLINA, INC.

4038 MASONBORO LOOP ROAD, WILMINGTON, NC 28409 910-791-9494 PHONE 910-791-4129 FAX

June 23, 2017

Robert L. Outten
Dare County
954 Marshall C Collins Dr. Room 286
Manteo, NC 27954

Re: Dare County Beach Nourishment Project
Recommendation for Payment of Invoice 002 (Revised June 20, 2017)
Great Lakes Dredge and Dock (GLDD)

Dear Mr. Outten:

Attached is GLDD's invoice for work performed through June 10, 2017. **We recommend payment in the amount of $3,416,792.42.** The line items contained in the invoice are discussed below.

Item # II.A: Town of Duck Beach Fill

GLDD requested payment for 401,195.84 cubic yards ($3,450,284.22) of beach and dune fill. We have reviewed the survey data and have verified that a minimum of 401,195.84 cubic yards have been placed within the dune and beach fill template between Stations 87+63 and 112+00 and Stations 148+00 and 159+00 along the Town of Duck project at a cost of $7.65 per cubic yard. An additional 39,145.5 cubic yards has been placed between Stations 87+63 and 112+00 as only Borrow Area C was utilized to construct the template between these stations. The bid cost for the additional 20% of beach fill placed between Stations 87+63 and 112+00 is $0.00 per cubic yard. Therefore, there is no additional cost for the additional 20% material. The 36 acceptance sections from Stations 87+63 and 112+00 and Stations 148+00 and 159+00 have been accepted. Per GC-14.10, the contractor may request monthly progress payment based on completed acceptance sections, when a minimium of five (5) Acceptance Sections have been completed, surveyed and accepted. Therefore, we recommend payment of the requested amount, which is ($3,450,284.22 less 5% retainage.

Item # VII.D: Sea Turtler Relocation Trawling

GLDD has requested payment for 32.1625 days of relocation trawling, accomplished using two vessels, one (1) in Borrow Area A and one (1) in Borrow Area C. We have verified that trawlers were in operation for a minimum of 8 hours per day for 32 days and have verified the partial day times for the *Reva Rose* on 6/9/17. GLDD has met the specification GC-13; therefore, we recommend payment in the requested amount of $146,339.38 less 5% retainage.

Retainage

The contract specifies a 5% retainage on all payments. The cost of the work performed during this pay period is $3,596,623.60. The retainage for this invoice is $179,831.18

Payment Summary

Item No.	Item	Unit	Quantity	Unit Prices	CO#1 Cost	Invoice #2 Quantity	Invoice #2 Earnings
I. A.	Mobilization/Demobilization	L.S.	1	$8,150,000.00	$8,150,000.00	60.0%	$0.00
I. B.	Performance and Payment Bond	L.S.	1	$300,000.00	$300,000.00	1	$0.00
I. C.	Compliance Surveys of Borrow Area	L.S.	1	$64,000.00	$64,000.00	50.0%	$0.00
I. D.	Sea Turtle Abundance Trawling	Days	0	$4,600.00	$0.00	0	$0.00
II. A.	Hydraulic Beach Fill (Town of Duck)	C.Y.	1,180,000	$8.60	$10,148,000.00	401,195.84	$3,450,284.22
II. A-1.	Optional Additional 20% Beach Fill if only Borrow Area C is used to Construct the Town of Duck	C.Y.	236,000	$0.00	$0.00	39,145.5	$0.00
II. B.	Staging Area Beach Access Mats	L.F.	1,120	$105.00	$117,600.00	588	$0.00
III. A.	Hydraulic Beach Fill (Town of Kitty Hawk)	C.Y.	1,765,000	$7.65	$13,502,250.00	0	$0.00
IV. A.	Hydraulic Beach Fill (Town of Kill Devil Hills)	C.Y.	840,000	$7.40	$6,216,000.00	0	$0.00
	Additive Items						
V. A.	Sand Fencing (Kitty Hawk)	10 Ft Sections	1,900	$40.00	$76,000.00	0	$0.00
	Discretionary Items						
VI. A.	Mobilization/Demobilization for Beach Discharge Screening	L.S.	0	$70,000.00	$0.00	0	$0.00
VI. B.	Beach Discharge Screening	Days	0	$3,500.00	$0.00	0	$0.00
VI. C.	Removal of Screened Beach Discharge Material	C.Y.	0	$11.55	$0.00	0	$0.00
VI. D.	Dredge Intake Screening	C.Y.	0	$2.30	$0.00	0	$0.00
VI. E.	Mobilization for Removal of Oversized Material from Constructed Beach	L.S.	0	$8,000.00	$0.00	0	$0.00
VI. F.	Removal of Oversized Material from Constructed Beach	Days	0	$3,200.00	$0.00	0	$0.00
VII. A.	Turbidity Monitoring	Days	0	$2,250.00	$0.00	0	$0.00
VII. B.	Mobilization/Demobilization for Tilling	L.S.	0	$5,500.00	$0.00	0	$0.00
VII. C.	Beach Tilling	Acre	0	$585.00	$0.00	0	$0.00
VII. D.	Sea Turtle Relocation Trawling	Days	180	$4,550.00	$819,000.00	32.16	$146.339.38
VII. E.	Hopper Dredge Standby Rate (Per Dredge)	Days	0	$210,000.00	$0.00	0	$0.00
VII. F.	Cutterhead Dredge Standby Rate (Per Dredge)	Days	0	$177,500.00	$0.00	0	$0.00

VIII. A.	Sand Fencing (Kill Devil Hills)	10 Ft Sections	0	$40.00	$0.00	0	$0.00
VIII. B.	Sand Fencing (Duck)	10 Ft Sections	0	$40.00	$0.00	0	$0.00

Total Earned To Date:	**$8,880,363.60**
Retainage (5%):	**$444,018.18**
Earnings Minus Retainage:	**$8,436,345.42**
Previous Paid:	**$5,019,553.00**
Earnings This Period:	**$3,596,623.60**
Retainage This Period:	**$179,831.18**
Amount Due This Invoice:	**$3,416,792.42**

Note Quantities and Unit Price represent values established in CO #1.

The following table provides a breakdown of costs incurred for each Town's project based on Invoice 002. Items I.A through I.D are being paid for at a pro-rated basis by the Towns of Duck, Kitty Hawk and Kill Devil Hills with respect to the percent of the initial contract volume being placed in each Town. These pro-rated percentages are Town of Duck – 31.2%, Town of Kitty Hawk – 46.6%, and Town of Kill Devil Hills – 22.2%. The Town of Southern Shores has a separate mobilization and demobilization fee for which it will pay 100% of the cost.

Town	Item	Invoice #2 Total
Duck	Items I.A. - I.D.	$0.00
	Staging Areas Beach Access Mats	$0.00
	Hydraulic Beach Fill	$3,450,284.22
	Relocation Trawling	$146,339.38
	SUB TOTAL:	$3,596,623.60
	RETAINAGE (5%)	$179,831.18
	TOTAL DUE:	**$3,416,792.42**
Southern Shores	Items I.A. - I.D.	$0.00
	Hydraulic Beach Fill	$0.00
	Relocation Trawling	$0.00
	SUB TOTAL:	$0.00
	RETAINAGE (5%)	$0.00
	TOTAL DUE:	**$0.00**
Kitty Hawk	Items I.A. - I.D.	$0.00
	Hydraulic Beach Fill	$0.00
	Sand Fencing	$0.00
	Relocation Trawling	$0.00
	SUB TOTAL:	$0.00
	RETAINAGE (5%)	$0.00
	TOTAL DUE:	**$0.00**

Kill Devil Hills	Items I.A. - I.D.	$0.00
	Hydraulic Beach Fill	$0.00
	Relocation Trawling	$0.00
	SUB TOTAL:	$0.00
	RETAINAGE (5%)	$0.00
	TOTAL DUE:	**$0.00**
	Earnings This Period:	**$3,596,623.60**
	Retainage This Period:	**$179,831.18**
	Amount Due This Invoice:	**$3,416,792.42**

Please call me if you have any questions.

Sincerely,

COASTAL PLANNING & ENGINEERING, INC.

Julien Devisse, P.E.
Project Manager

cc: Ken Willson, CPE-NC
Chris Layton, Town of Duck
Peter Rascoe, Town of Southern Shores
Andy Stewart, Town of Kitty Hawk
Debbie Diaz, Town of Kill Devil Hills

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