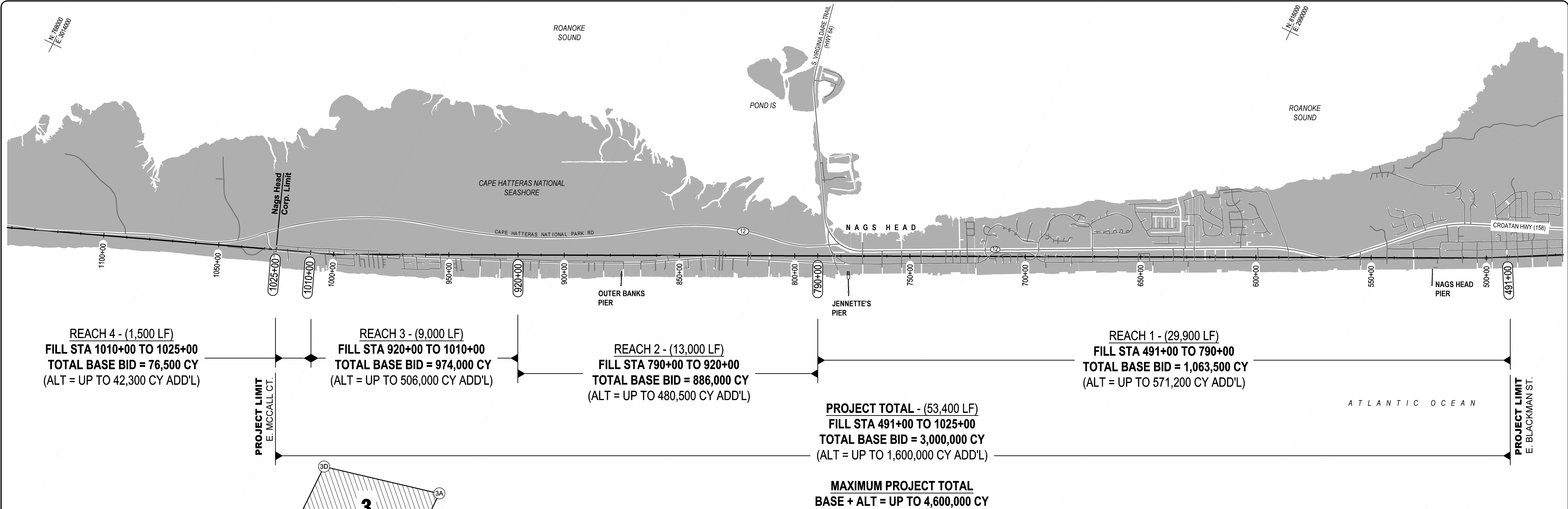




AVERAGE DISTANCE TO BEACH
FROM BORROW AREA 2:
REACH 1 - 6.8 MI.
REACH 2 - 3.4 MI.
REACH 3 - 2.8 MI.
REACH 4 - 3.0 MI.

BORROW AREA 2 - COORDINATE CHART		
System: US State Plane 1983		
Zone: NC 3200 Datum: NAD 1983 (feet)		
Point	Northing	Easting
2A	798,016	3,026,661
2B	798,016	3,028,405
2C	790,016	3,030,235
2D	790,016	3,028,492

AVERAGE DISTANCE TO BEACH
FROM BORROW AREA 3:
REACH 1 - 7.0 MI.
REACH 2 - 3.2 MI.
REACH 3 - 2.0 MI.
REACH 4 - 2.0 MI.

BORROW AREA 3 - COORDINATE CHART		
System: US State Plane 1983		
Zone: NC 3200 Datum: NAD 1983 (feet)		
Point	Northing	Easting
3A	791,622	3,024,190
3B	791,607	3,026,861
3C	786,601	3,028,006
3D	786,615	3,025,336

BASIS OF BID

Bidder will provide two bids for completion of the Work in accordance with the Contract Document.

Bid A -- All work (Mobilization/Demobilization, Base Volume Dredging and Placement, Alternate Volume Dredging and Placement, and Environmental Protection) to be accomplished in eight (8) months *between 12 April 2011 and 12 December 2011*.

Bid B -- All work to be accomplished in sixteen (16) months *between 12 April 2011 and 12 August 2012*, provided a minimum of two-thirds (2,000,000 cubic yards) of the Base Bid Dredging and Placement Volume is completed in six (6) months between 12 April and 12 October 2011.

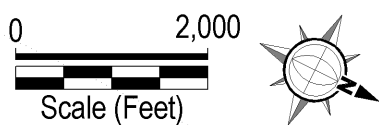
ORDER OF THE WORK

Beach filling operations shall be accomplished first in the central ~32,000 linear feet of the Project area (~lines 600+00 to 920+00), then the northernmost ~10,900 linear feet of the Project area (~lines 491+00 to 600+00), then the southernmost ~10,500 linear feet of the Project area (~lines 920+00 to 1025+00). The specific boundaries of initial work will be determined based on the total quantities of fill available under the Contract in consultation with the Owner, Engineer and Contractor.

If there is a hiatus in construction greater than 90 days, renourishment of the ends of completed sections may be required. The maximum overlap will be 3,000 linear feet (ie - 1,500 linear feet at the south end and 1,500 linear feet at the north end) of the Work Area completed prior to a hiatus in construction.

BASE BID (3 million CY) - Fill Schedule				
Reach #	Limits	Linear ft	Ave Unit vol (cy/ft)	Reach Volume (cy)
1	491+00 to 500+00	900	15	13,500
	500+00 to 635+00	13,500	30	405,000
	635+00 to 640+00	500	32	16,000
	640+00 to 645+00	500	36	18,000
	645+00 to 735+00	9,000	38	342,000
	735+00 to 740+00	500	41	20,500
	740+00 to 745+00	500	47	23,500
	745+00 to 790+00	4,500	50	225,000
2	790+00 to 855+00	6,500	50	325,000
	855+00 to 860+00	500	57	28,500
	860+00 to 865+00	500	71	35,500
	865+00 to 895+00	3,000	78	234,000
	895+00 to 900+00	500	86	43,000
	900+00 to 905+00	500	104	52,000
	905+00 to 920+00	1,500	112	168,000
3	920+00 to 995+00	7,500	112	840,000
	995+00 to 1000+00	500	104	52,000
	1000+00 to 1005+00	500	86	43,000
	1005+00 to 1010+00	500	78	39,000
4	1010+00 to 1014+60	460	78	35,900
	1014+60 to 1025+00	1,040	39	40,600
Totals	491+00 to 1025+00	53,400	56	3,000,000
REACH TOTALS				
Reach #	Limits	Linear ft	Ave Unit vol (cy/ft)	Reach Volume (cy)
1	491+00 to 790+00	29,900	36	1,063,500
2	790+00 to 920+00	13,000	68	886,000
3	920+00 to 1010+00	9,000	108	974,000
4	1010+00 to 1025+00	1,500	51	76,500
Total	491+00 to 1025+00	53,400	56	3,000,000

BASE BID + ALTERNATE BID Plan (Up To 4.6 million cy) - Fill Schedule				
Reach #	Limits	Linear ft	Ave Unit vol (cy/ft)	Reach Volume (cy)
1	491+00 to 500+00	900	23	20,700
	500+00 to 635+00	13,500	46	621,000
	635+00 to 640+00	500	49	24,500
	640+00 to 645+00	500	55	27,500
	645+00 to 735+00	9,000	58	522,000
	735+00 to 740+00	500	63	31,500
	740+00 to 745+00	500	73	36,500
	745+00 to 790+00	4,500	78	351,000
2	790+00 to 855+00	6,500	78	507,000
	855+00 to 860+00	500	89	44,500
	860+00 to 865+00	500	110	55,000
	865+00 to 895+00	3,000	120	360,000
	895+00 to 900+00	500	132	66,000
	900+00 to 905+00	500	158	79,000
	905+00 to 920+00	1,500	170	255,000
3	920+00 to 995+00	7,500	170	1,275,000
	995+00 to 1000+00	500	158	79,000
	1000+00 to 1005+00	500	132	66,000
	1005+00 to 1010+00	500	120	60,000
4	1010+00 to 1014+80	480	120	57,600
	1014+80 to 1025+00	1,020	60	61,200
Totals	491+00 to 1025+00	53,400	86	4,600,000
REACH TOTALS				
Reach #	Limits	Linear ft	Ave Unit vol (cy/ft)	Reach Volume (cy)
1	491+00 to 790+00	29,900	55	1,634,700
2	790+00 to 920+00	13,000	105	1,366,500
3	920+00 to 1010+00	9,000	164	1,480,000
4	1010+00 to 1025+00	1,500	79	118,800
Total	491+00 to 1025+00	53,400	86	4,600,000



NO.	REVISION	BY	DATE

CSE
Coastal Science & Engineering
PO Box 8056
Columbia South Carolina 29202
Phone 803-799-8949
www.coastalscience.com

CLIENT:

TOWN OF NAGS HEAD
5401 SOUTH CROATAN HWY
NAGS HEAD NC 27959

PROJECT:

TOWN OF NAGS HEAD
BEACH NOURISHMENT PROJECT

DRAWING TITLE:

OVERALL PROJECT PLAN
& FILL SCHEDULE

*Preliminary
Drawing
Not For
Construction*

SCALE:	AS SHOWN
DATE:	Jan 2011
DRAWN BY:	JJH
APPROVED BY:	TWK/HLK
PROJECT #:	2203-CD

SHEET NO:

02

OF: 21