

JOINT
PUBLIC NOTICE

CHARLESTON DISTRICT, CORPS OF ENGINEERS

1949 Industrial Park Road, Room 140

Conway, South Carolina 29526

and the

S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT

1362 McMillan Avenue, Suite 400

Charleston, South Carolina 29405

REGULATORY DIVISION

September 28, 2007

Refer to: P/N #2007-01983-3IV

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), and the South Carolina Coastal Zone Management Act (48-39-10 *et.seq.*) an application has been submitted to the Department of the Army and the S.C. Department of Health and Environmental Control by

HORRY COUNTY INFRASTRUCTURE AND REGULATION DIVISION
c/o COASTAL SCIENCE AND ENGINEERING (CSE)
P.O. BOX 8056
COLUMBIA, SOUTH CAROLINA 29202-8056

for a permit to perform beach nourishment in and adjacent to waters of the

ATLANTIC OCEAN

at a location beginning at the Apache Campground Pier and extending 6,400 linear feet and ending just south of Singleton Swash (Latitude 33.76022°, Longitude -78.78745°)

In order to give all interested parties an opportunity to express their views

N O T I C E

is hereby given that written statements regarding the proposed work will be received by both of the above mentioned offices until

12 O'CLOCK NOON, MONDAY, OCTOBER 29, 2007

from those interested in the activity and whose interests may be affected by the proposed work.

The proposed work consists of placing 400,00 cubic yards of beach quality sand along ~6,400 feet of oceanfront. The project area extends from the Apache Campground Pier to Singleton Swash, then continues south of the swash ~1,600 feet. The sand will be dredged from a shore-detached shoal situated a minimum of 12,000 feet offshore of the project area. The applicant proposes to hydraulically dredge the sand and place it on an ocean-certified hopper dredge. The sediment will then be pumped from the hopper dredge via a submerged pipe positioned ~1/2 mile offshore to a landing area. Once the material is placed, it will be shaped by land based equipment using temporary training dikes to direct the slurry discharge parallel to the shore. As construction reaches Singleton Swash, a temporary dike will be constructed across it to accommodate the pipeline and to control southern migration of the swash during the project. This will close the swash for a period not to exceed four days. Immediately upon completion of fill placement in Reach 1 south of Singleton Swash, the pipeline and dike will be removed and a pilot

channel will excavated for the swash across the active beach. According to the applicant, the total nourishment volume is ~90 percent of the volume contracted in the 1999 permit (92-2R-199) and is expected to provide benefits for a minimum of ten years. The purpose of the project is for erosion control and beach restoration.

NOTE: Plans depicting the work described in this notice are available and will be provided, upon receipt of a written request, to anyone that is interested in obtaining a copy of the plans for the specific project. The request must identify the project of interest by public notice number and a self-addressed stamped envelope must also be provided for mailing the drawings to you. Your request for drawings should be addressed to the

**U.S. Army Corps of Engineers
ATTN: REGULATORY DIVISION
1949 Industrial Park Road, Room 140
Conway, South Carolina 29526**

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. The work shown on this application must also be certified as consistent with applicable provisions the Coastal Zone Management Program (15 CFR 930). The District Engineer will not process this application to a conclusion until such certifications are received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact 188 acres of estuarine substrates and emergent wetlands utilized by various life stages of species comprising the red drum, shrimp, and snapper-grouper management complexes. Our initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

The District Engineer has consulted the most recently available information and has determined that the project will have no effect on any Federally endangered, threatened, or proposed species and will not result in the destruction or adverse modification of designated or proposed critical habitat. This public notice serves as a request to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for any additional information they may have on whether any listed or proposed endangered or threatened species or designated or proposed critical habitat may be present in the area which would be affected by the activity, pursuant to Section 7(c) of the Endangered Species Act of 1973 (as amended).

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), this public notice also constitutes a request to Indian Tribes to notify the District Engineer of any historic properties of religious and cultural significance to them that may be affected by the proposed undertaking.

In accordance with the NHPA, the District Engineer has also consulted the latest published version of the National Register of Historic Places for the presence or absence of registered properties, or properties listed as being eligible for inclusion therein, and this worksite

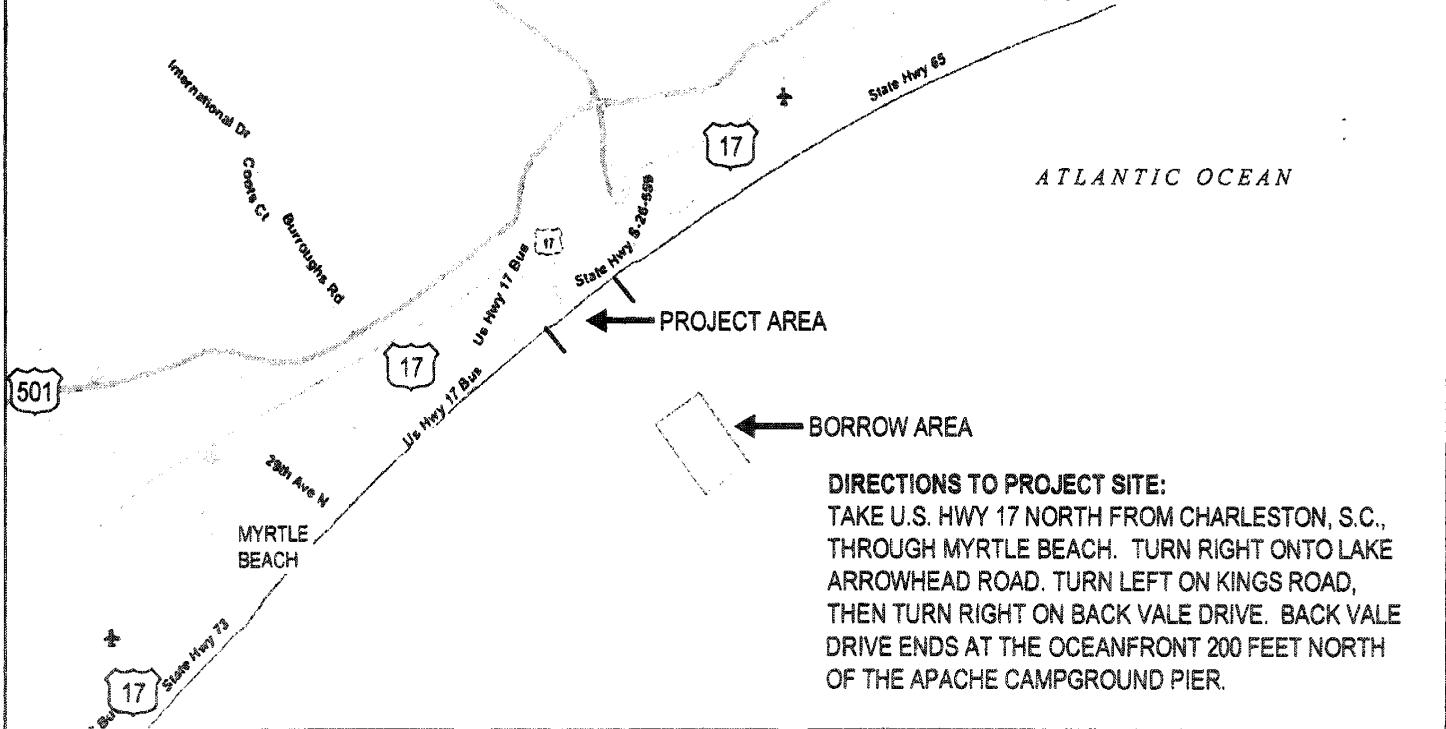
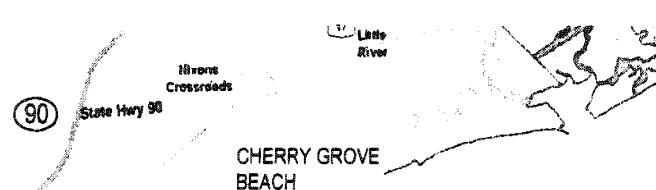
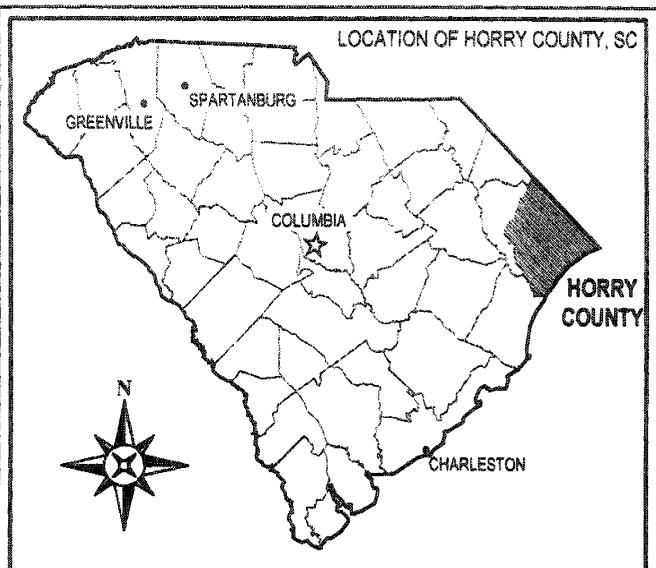
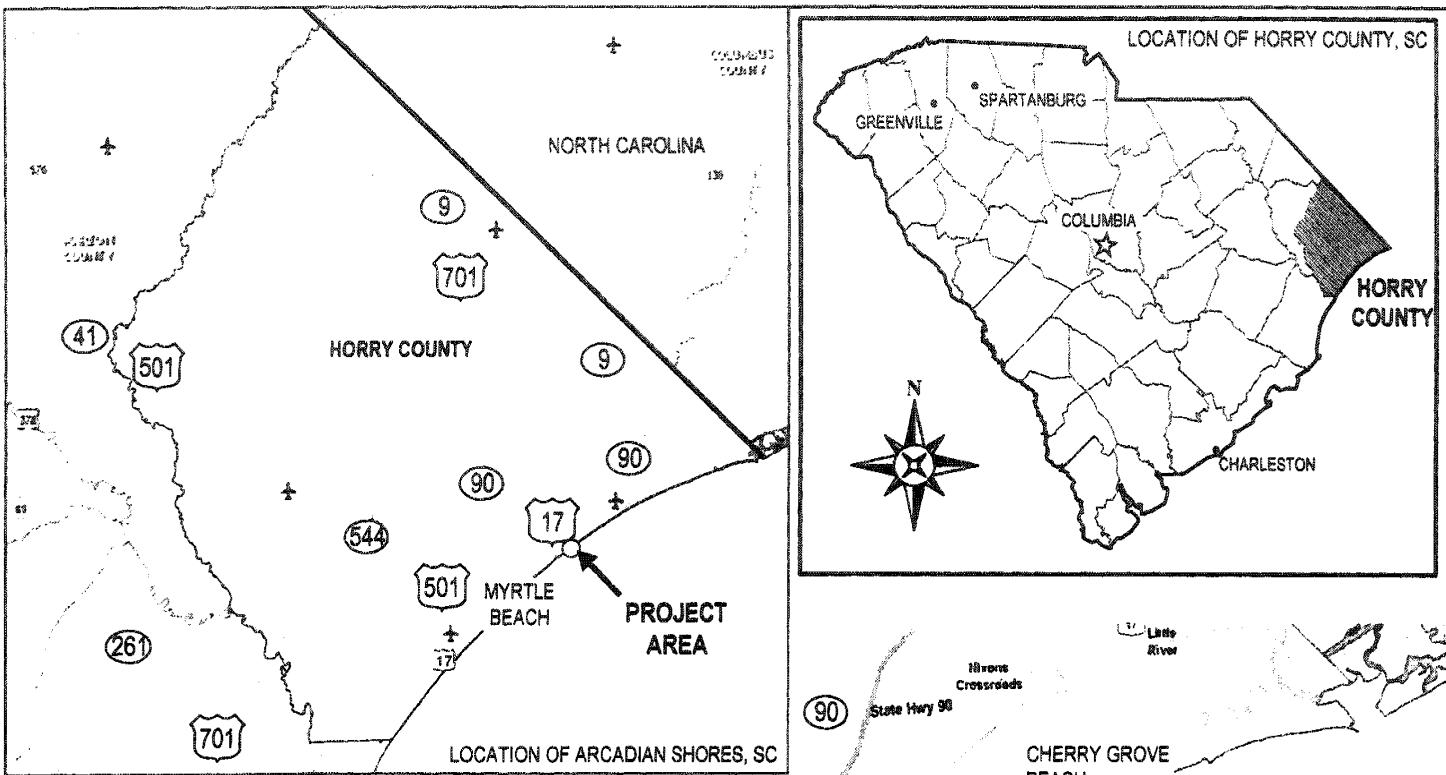
is not included as a registered property or property listed as being eligible for inclusion in the Register. To insure that other cultural resources that the District Engineer is not aware of are not overlooked, this public notice also serves as a request to the State Historic Preservation Office to provide any information it may have with regard to historic and cultural resources.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps of Engineers cannot undertake to adjudicate rival claims.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

If there are any questions concerning this public notice, please contact Chad Konickson at 843-365-1739.



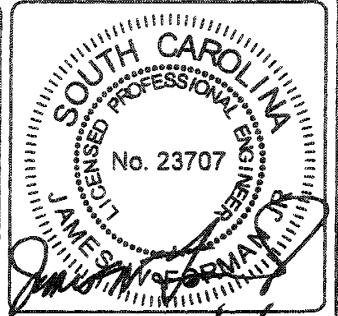
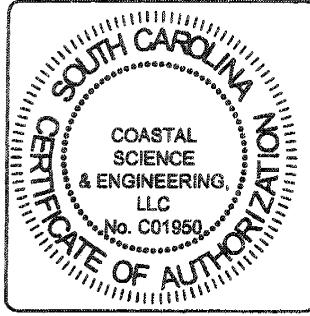
DIRECTIONS TO PROJECT SITE:
TAKE U.S. HWY 17 NORTH FROM CHARLESTON, S.C.,
THROUGH MYRTLE BEACH. TURN RIGHT ONTO LAKE
ARROWHEAD ROAD. TURN LEFT ON KINGS ROAD,
THEN TURN RIGHT ON BACK VALE DRIVE. BACK VALE
DRIVE ENDS AT THE OCEANFRONT 200 FEET NORTH
OF THE APACHE CAMPGROUND PIER.

AF SAC# 2007-01983-3IV
HC Horry County I&R Division
C/ Arcadian Shores Beach Nourishment
44 Horry County, South Carolina

AC September 20, 2007
COASTAL SCIENCE & ENGINEERING
PO BOX 8056
COLUMBIA, SC 29202

Sheet 1 of 16

TM88	01
PROJECT #	2238
	OF 16



BORROW AREA COORDINATE CHART

System: US State Plane 1983 Zone: SC 3900 Datum: NAD 1983 (feet)

POINT NAME	NORTHING	EASTING
A	2,679,542.550	697,458.360
B	2,683,587.230	700,397.850
C	2,686,278.760	693,917.920
D	2,684,234.090	690,978.430

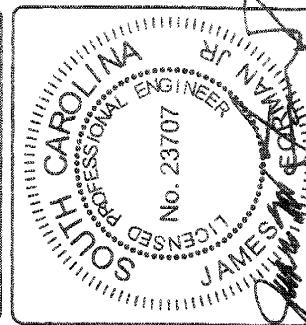
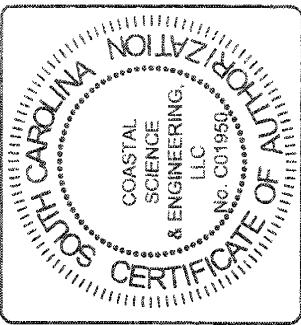
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REGIONAL BATHYMETRY PROVIDED BY USGS
(1999-2003 COMPOSITE).

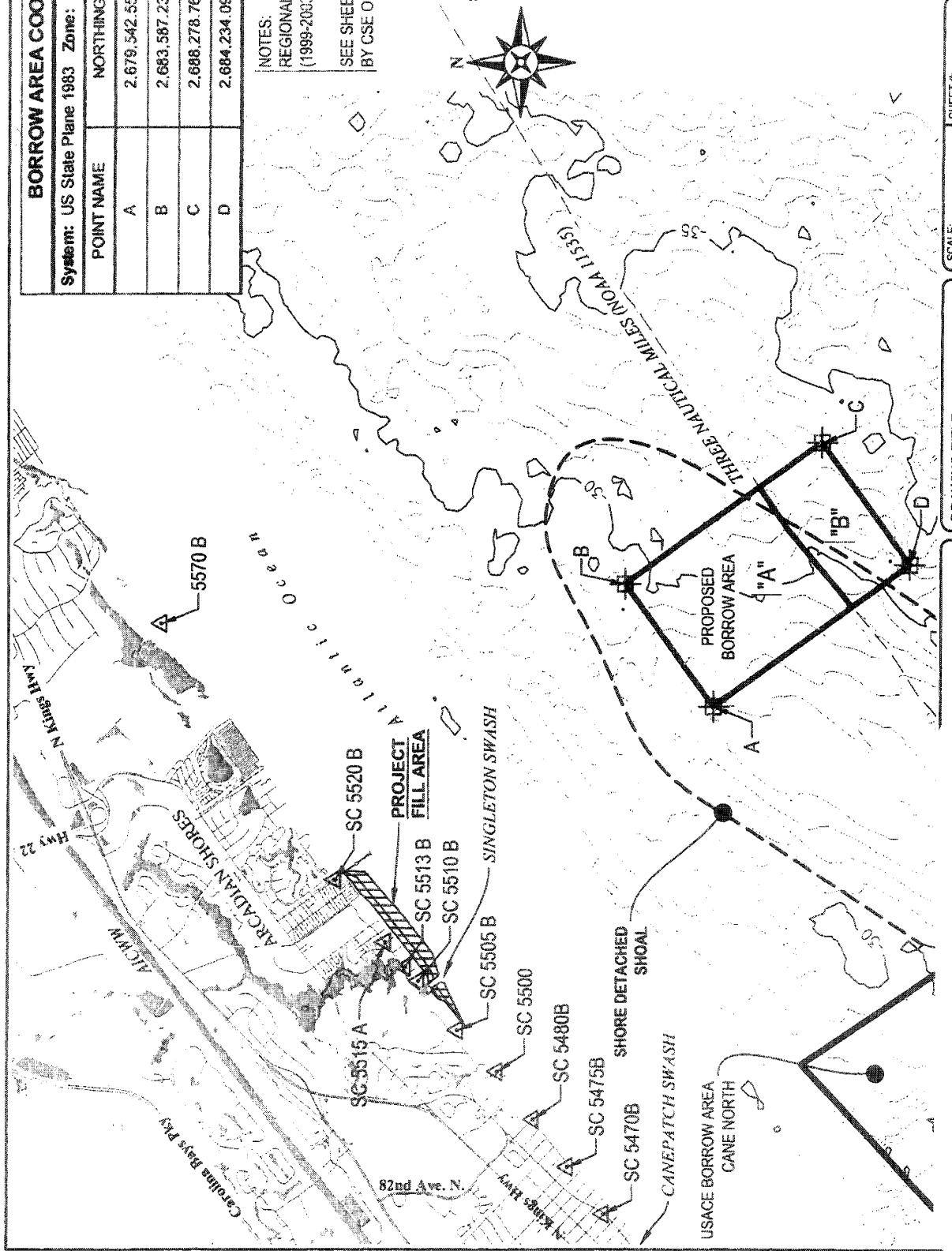
SEE SHEETS 13 FOR JULY 2007 BATHYMETRY
BY CSE OF PROPOSED BORROW AREA.



GRAPHIC SCALE (feet)



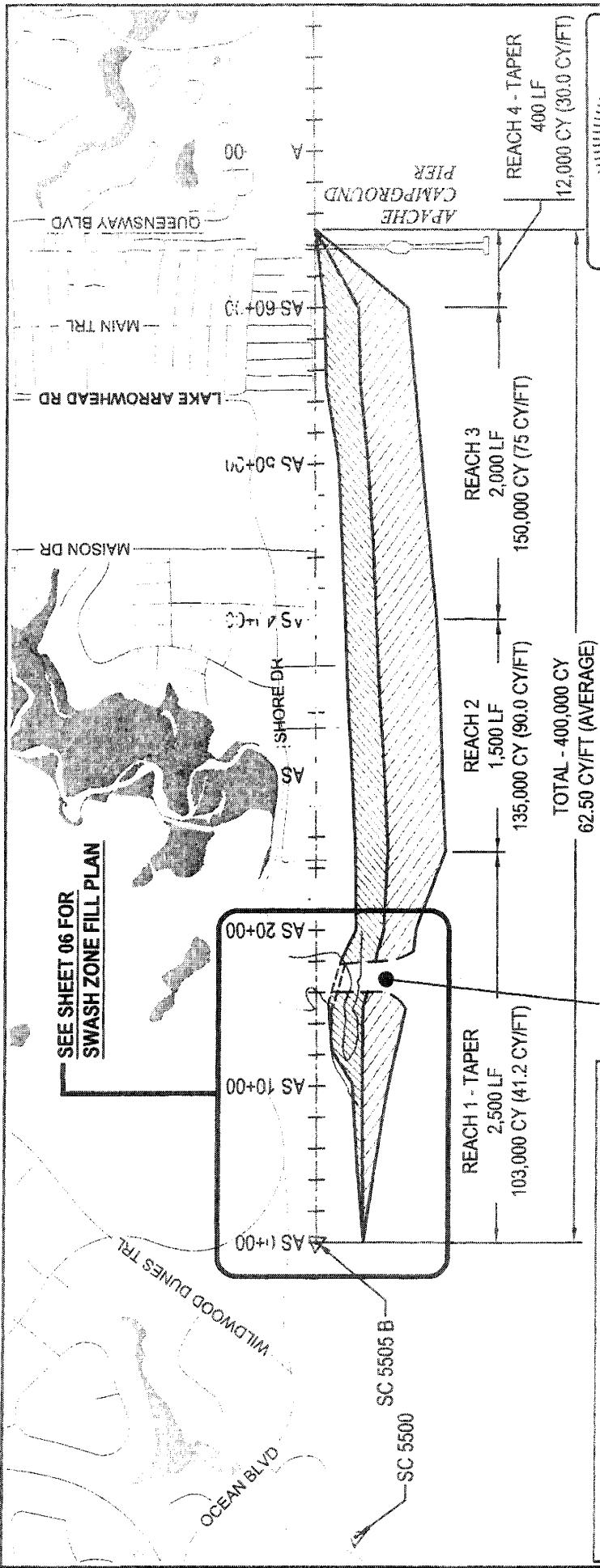
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SCALE:	AS SHOWN
DATE:	AUG 2007
TMN#	-
PROJECT #:	2236
OF 16	

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SEE SHEET 06 FOR
SWASH ZONE FILL PLAN



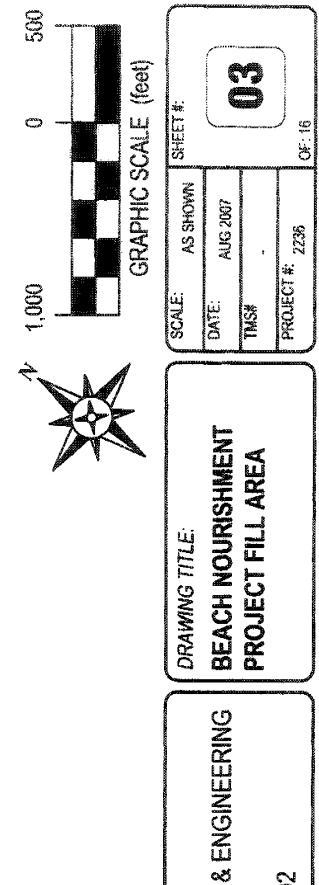
ARCADIAN SHORES FILL SCHEDULE					
	STATION	LENGTH (FT)	FILL DENSITY (CY/FT)	REACH VOLUME	
at	at				
0+00	AS 16+00	1,600	31.6	50,500	
6+00*	AS 18+00	200	0	0	
8+00	AS 28+00	700	75	52,500	
15+00	AS 40+00	1,500	90	135,000	
10+00	AS 50+00	2,000	75	150,000	
10+00	AS 64+00	400	30	12,000	
	TOTALS	6,400	62.5	400,000	

THE JOURNAL OF CLIMATE

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NOTE: SINGLETON SWASH TO BE CLOSED TEMPORARILY BY A SAND DIKE (UP TO 4 DAYS) WHILE REACH 1 IS CONSTRUCTED. IMMEDIATELY UPON COMPLETION OF REACH 1, THE TEMPORARY DIKE FOR THE PIPELINE ACCESS WILL BE REMOVED AND A PILOT CHANNEL CONSTRUCTED BETWEEN STATIONS AS 16+00 AND AS 18+00. THE PRESENT CHANNEL DISCHARGES ACROSS THE BEACH BETWEEN STATIONS AS 11+00 AND AS 18+00. SEE SHEET 06 FOR DETAILS.

A circular seal with a decorative border. The outer ring contains the text "SOUTH CAROLINA" at the top and "DEPARTMENT OF NATURAL RESOURCES" at the bottom. The inner circle contains the text "COASTAL SCIENCE & ENGINEERING, LLC" in the center, with "No. C01960" written vertically to the right.

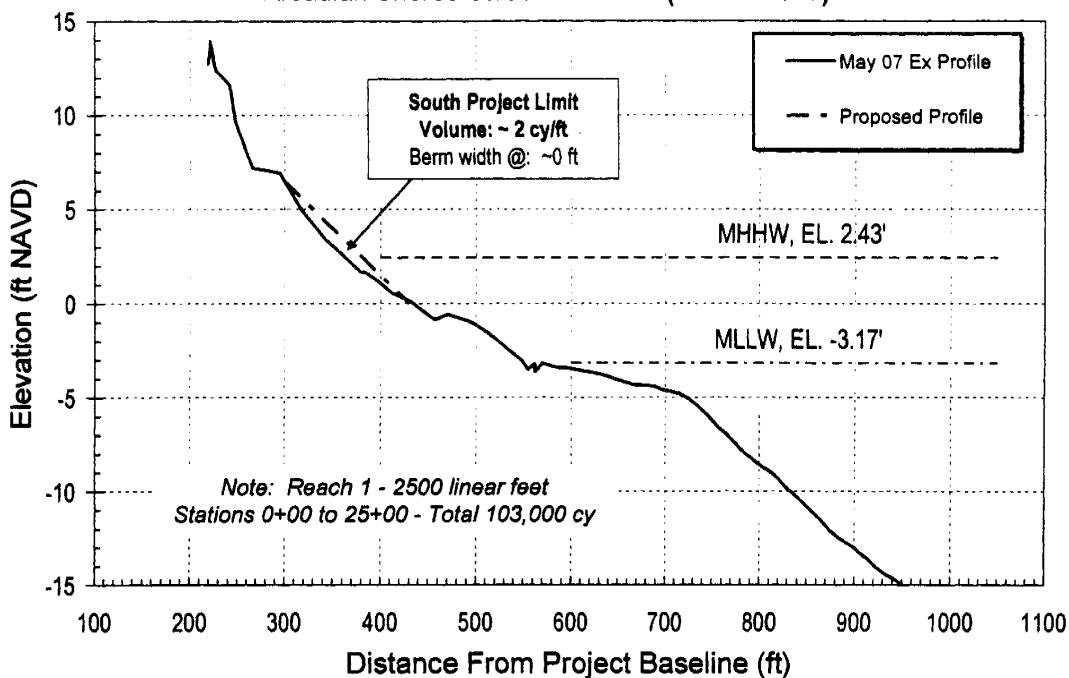


"Swash channel to be excavated by contractor upon full completion

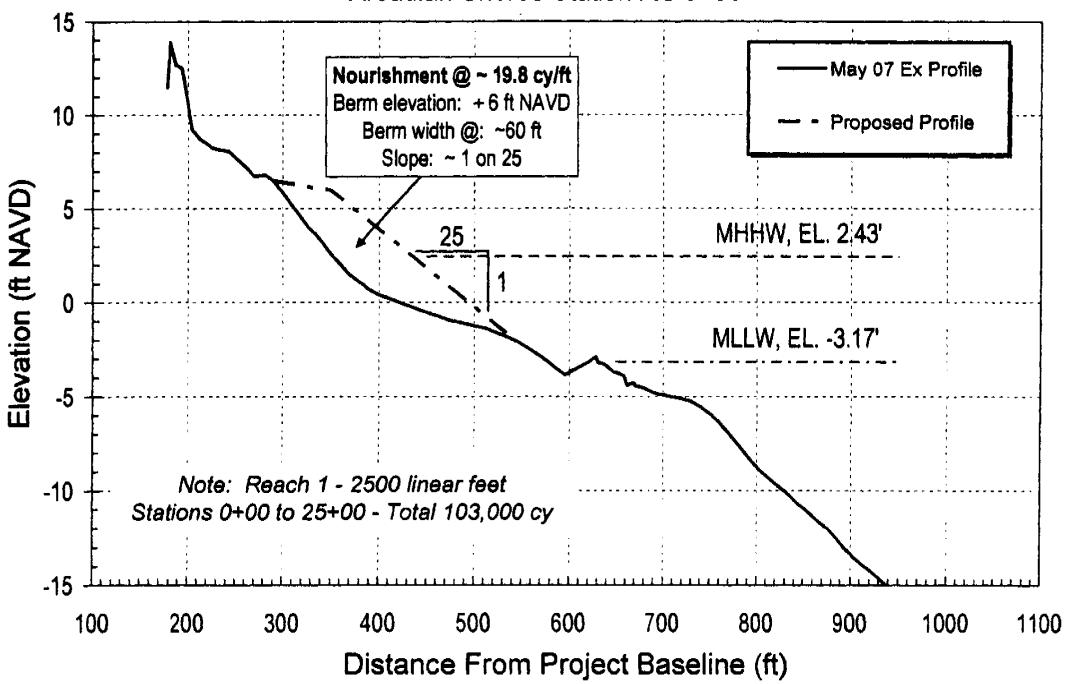
SAC# 2007-01983-3IV
Horry County I&R Division
Arcadian Shores Beach N
Horry County, South Carol

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Arcadian Shores Station AS 0+00 (OCRM 5505)



Arcadian Shores Station AS 5+00



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Horry County I&R Division
Arcadian Shores Beach Nourishment
Horry County, South Carolina

September 20, 2007

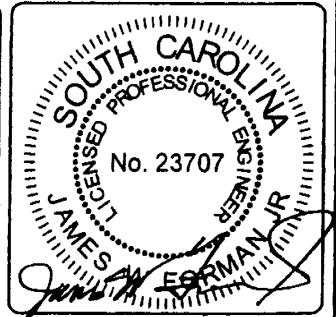
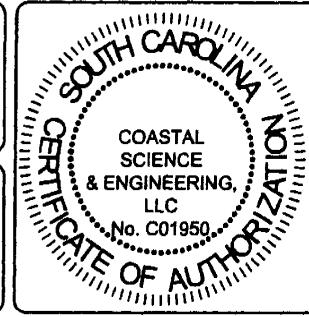
PO BOX 8056
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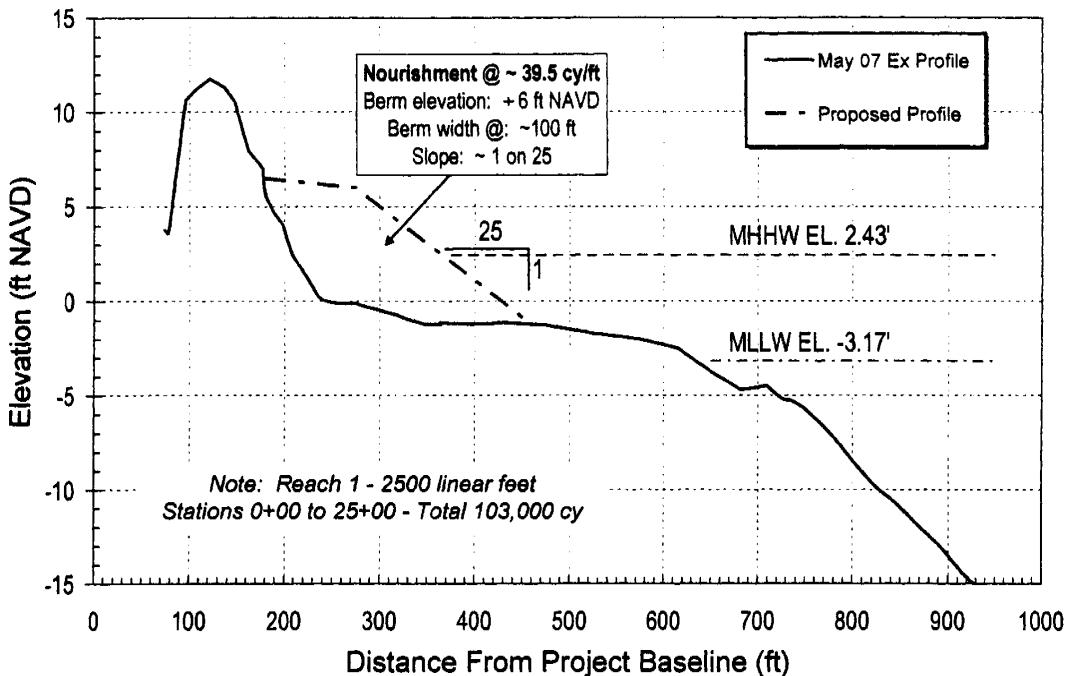
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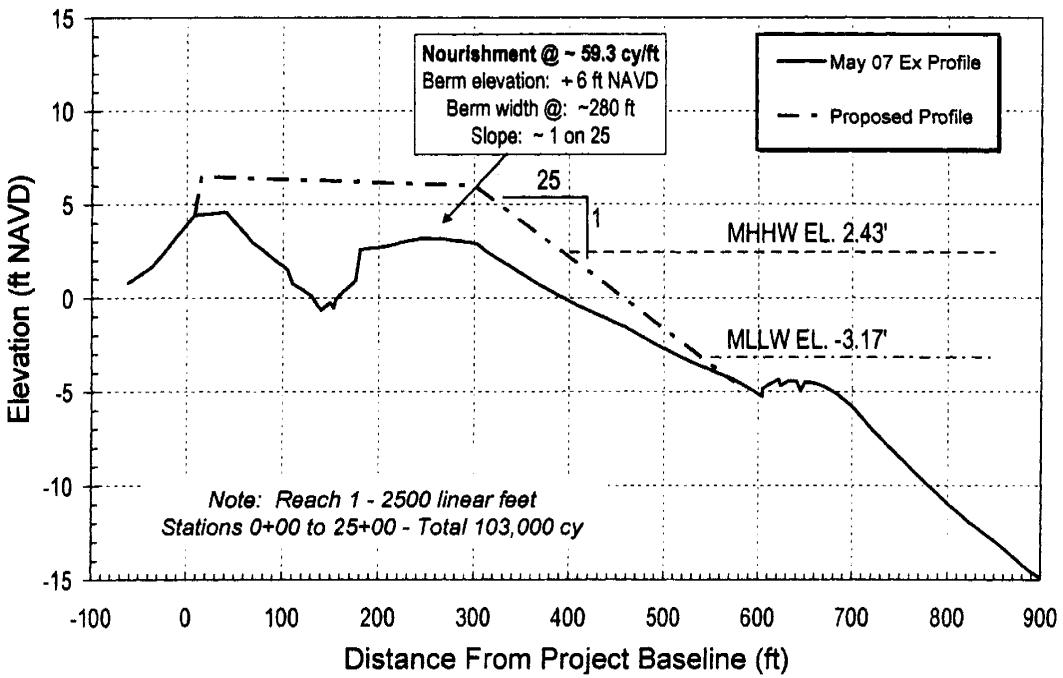


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Arcadian Shores Station AS 10+00



Arcadian Shores Station AS 15+00



ADDENDUM:

SAC# 2007-01983-3IV
Horry County I&R Division
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Horry County, South Carolina

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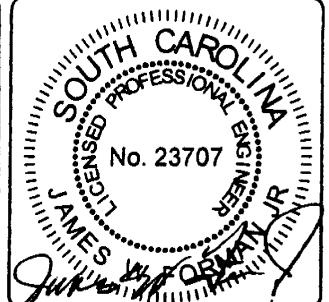
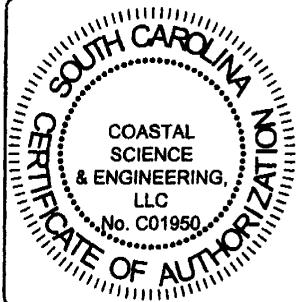
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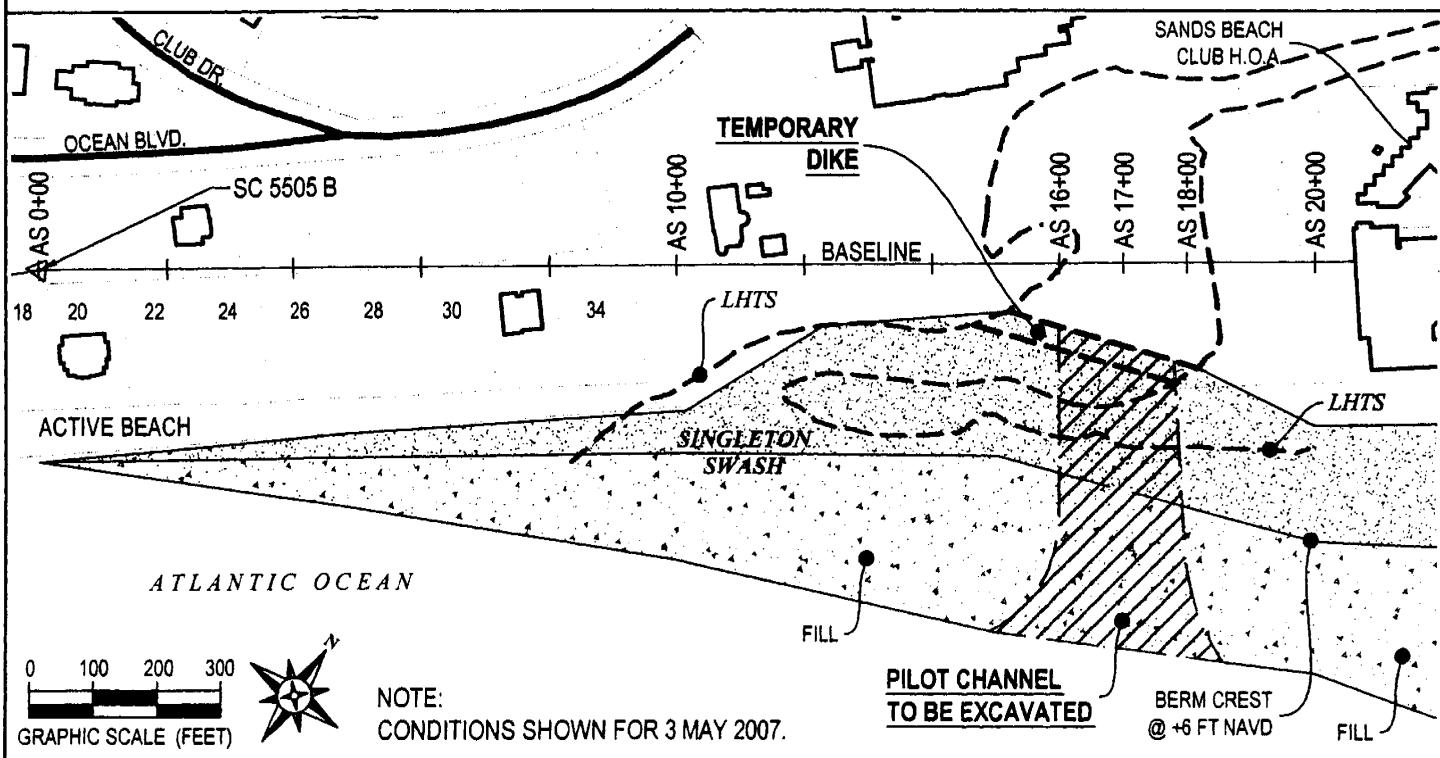
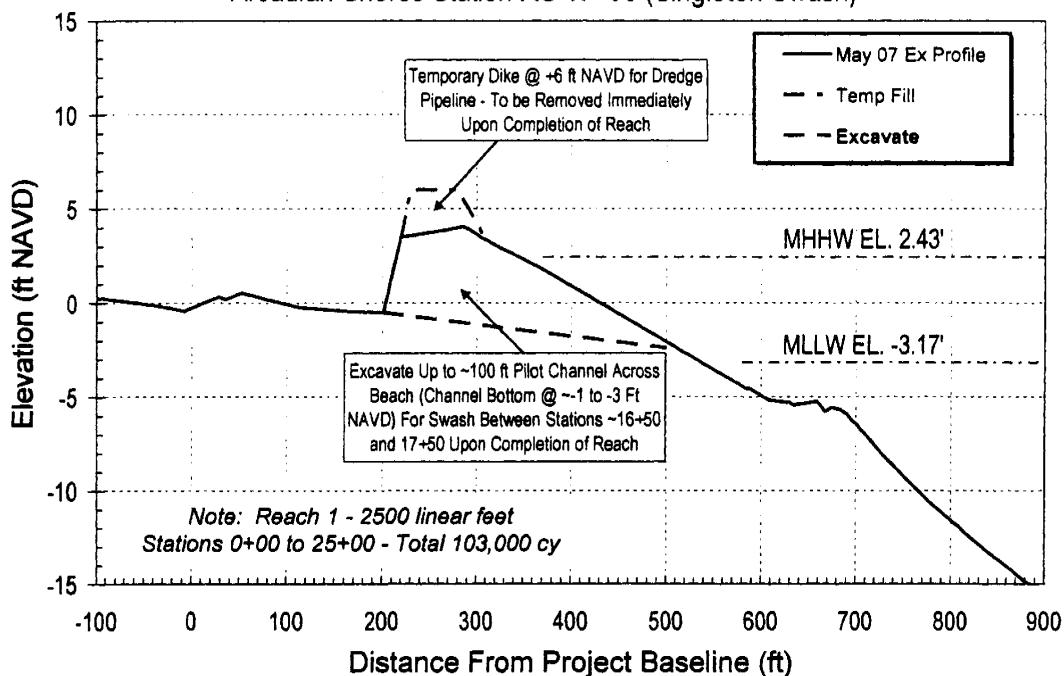
TM&M
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Arcadian Shores Station AS 17+00 (Singleton Swash)



APPLICANT:

SAC# 2007-01983-3IV
Horry County I&R Division
Arcadian Shores Beach Nourishment
Horry County, South Carolina

September 20, 2007

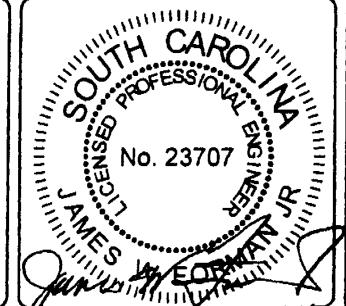
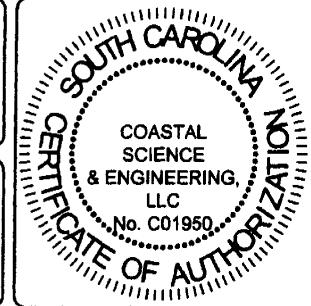
PO BOX 8056
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PROJECT #
2236

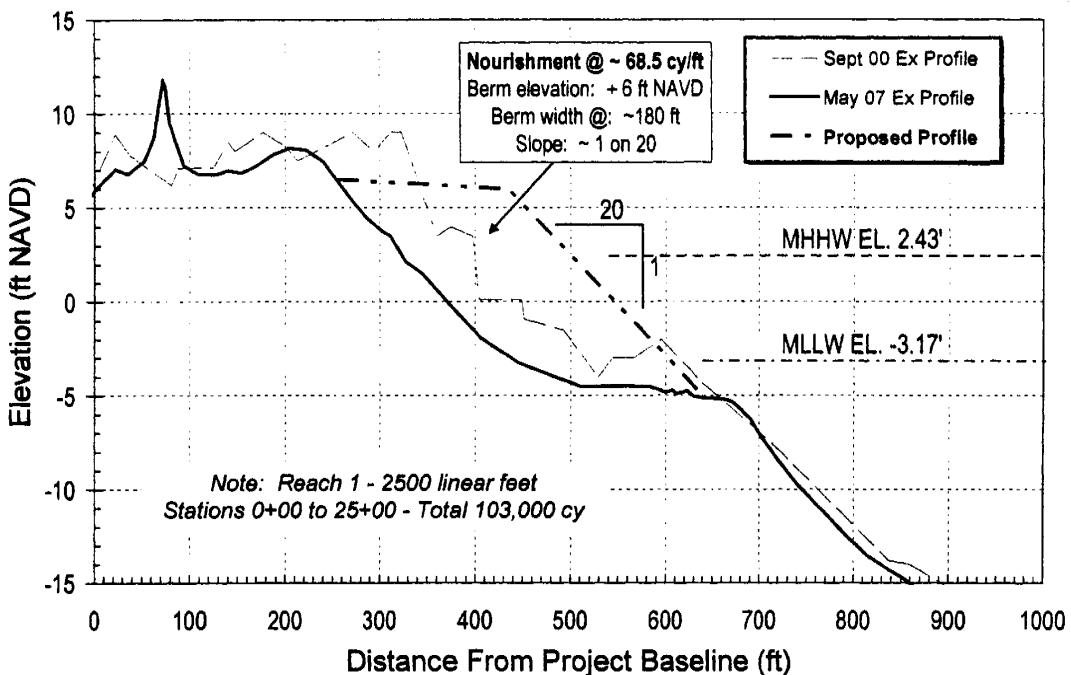
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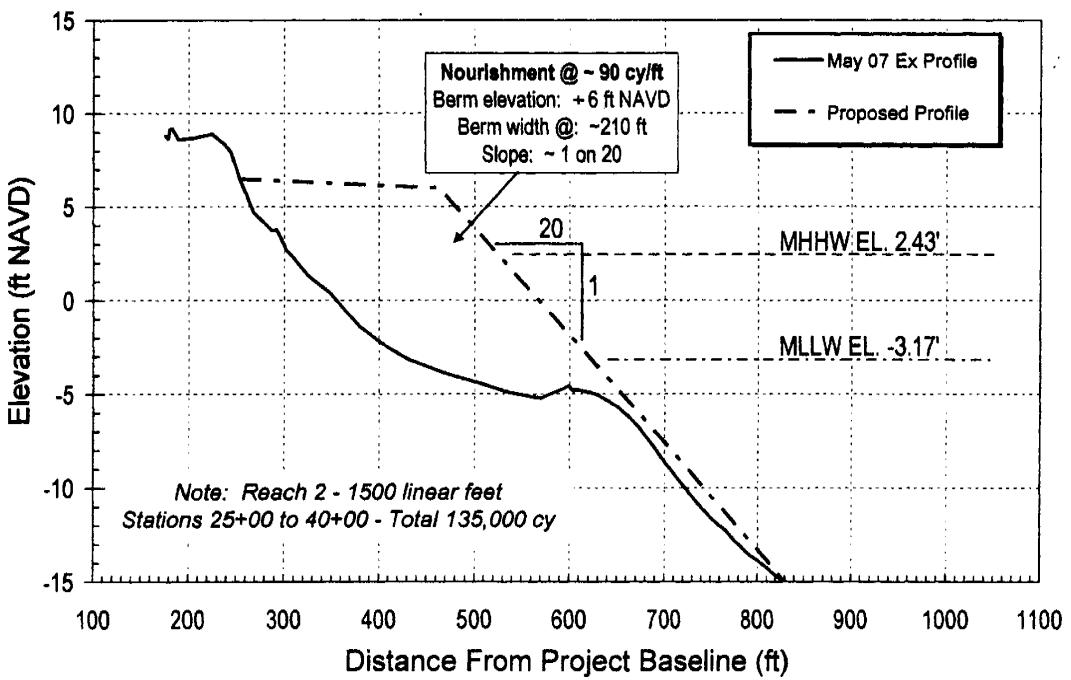


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Arcadian Shores Station AS 20+00



Arcadian Shores Station AS 25+00



APPLICANT:

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Horry County I&R Division
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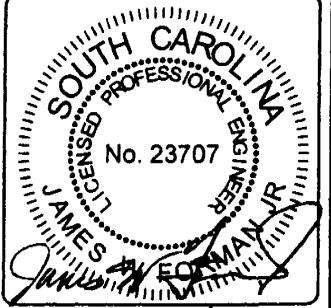
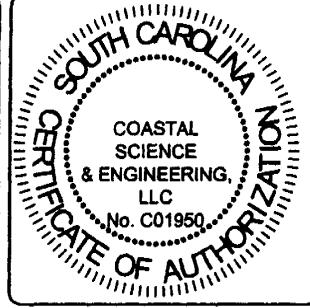
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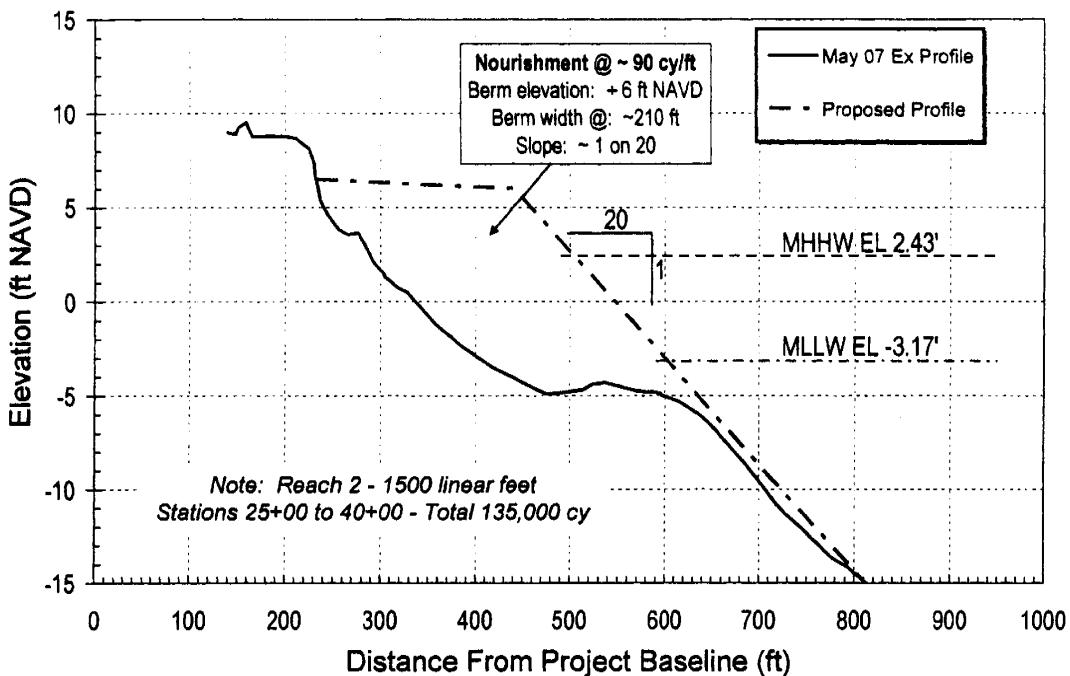
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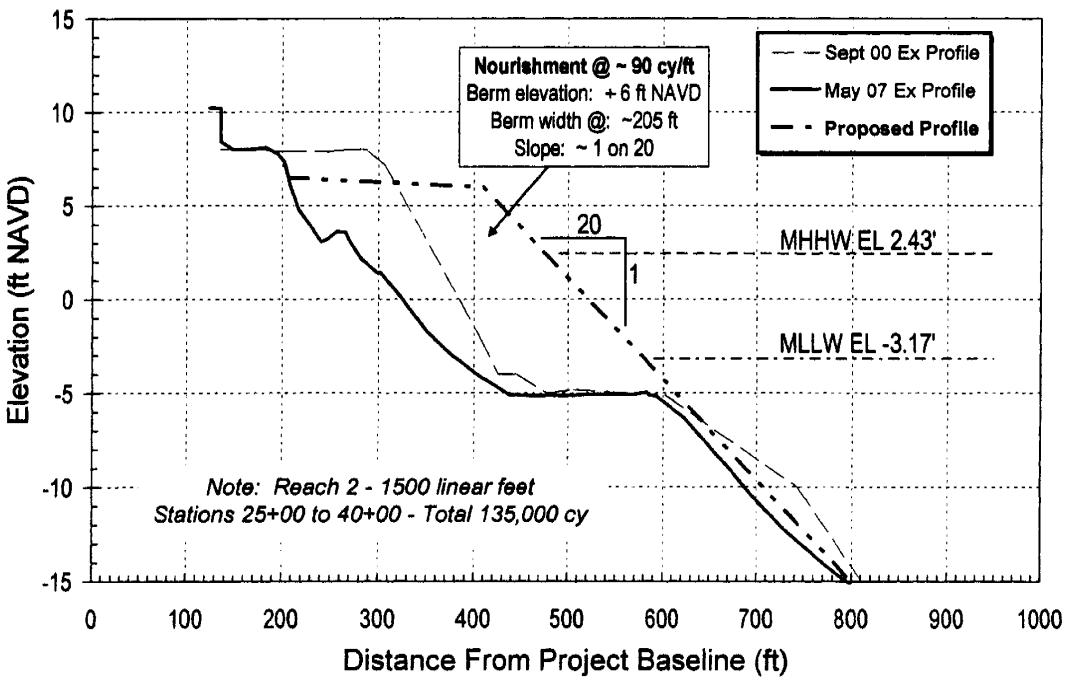


8/20/07

Arcadian Shores Station AS 30+00



Arcadian Shores Station AS 35+00



ADDENDUM:

SAC# 2007-01983-3IV
Horry County I&R Division
Arcadian Shores Beach Nourishment
Horry County, South Carolina

September 20, 2007

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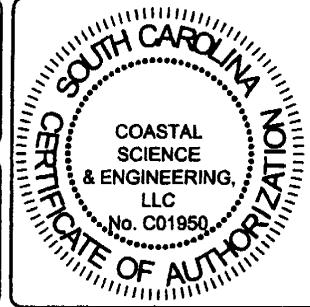
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TMSW
PROJECT #: 2236
OF: 18

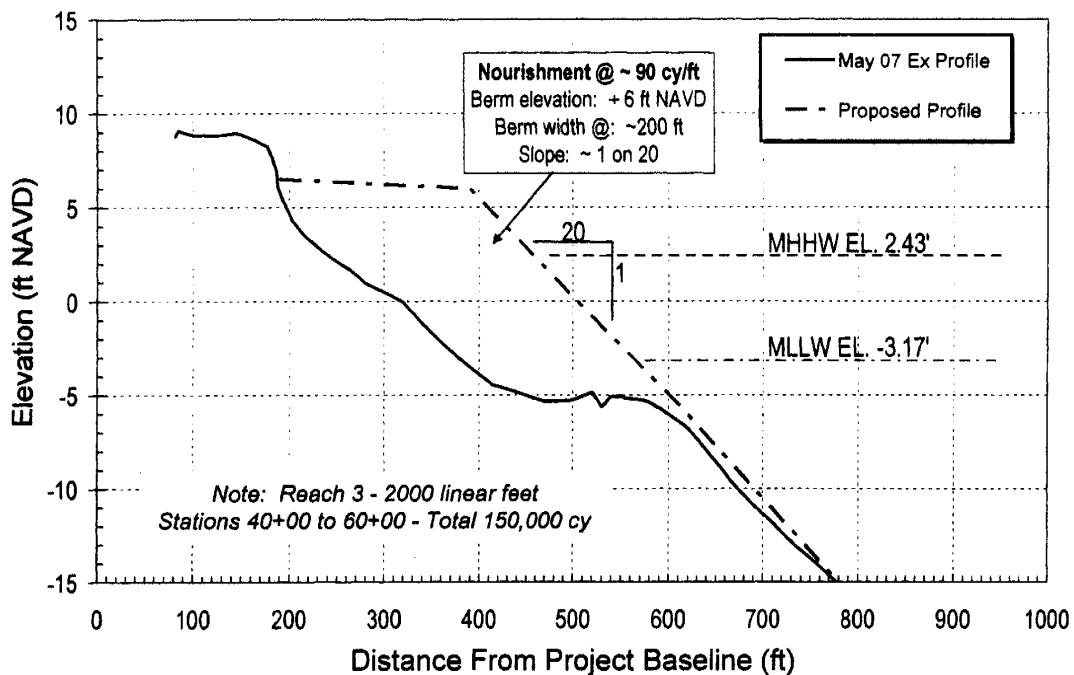
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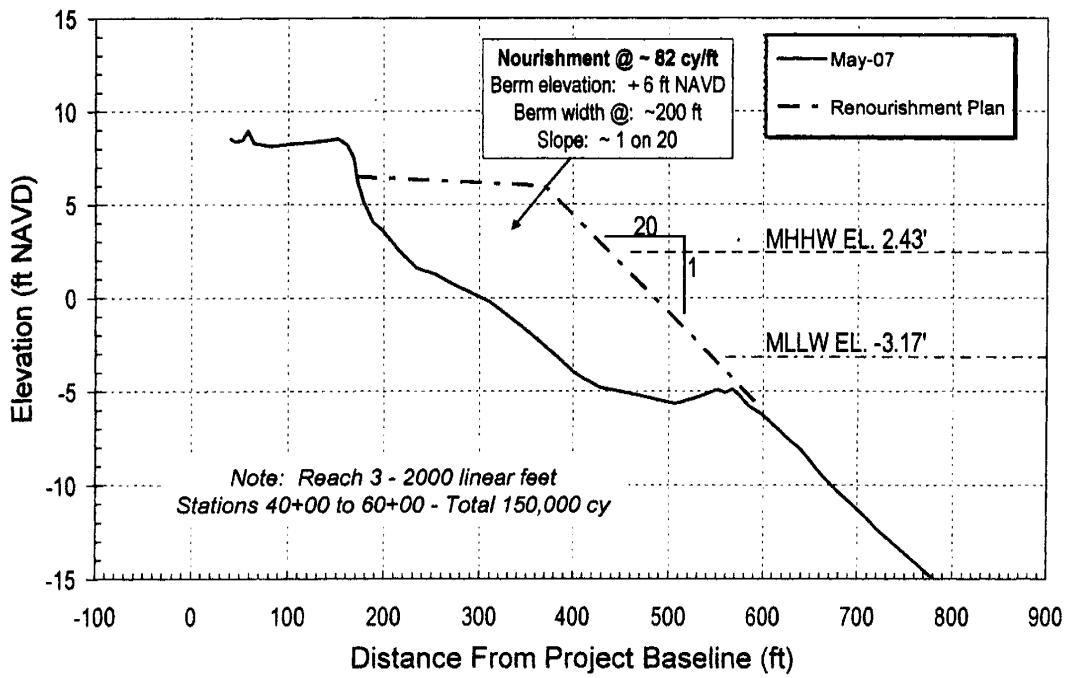


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Arcadian Shores Station AS 40+00



Arcadian Shores Station AS 45+00



APPLICANT:

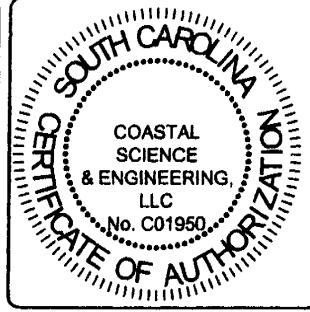
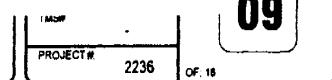
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Horry County I&R Division
Arcadian Shores Beach Nourishment
Horry County, South Carolina

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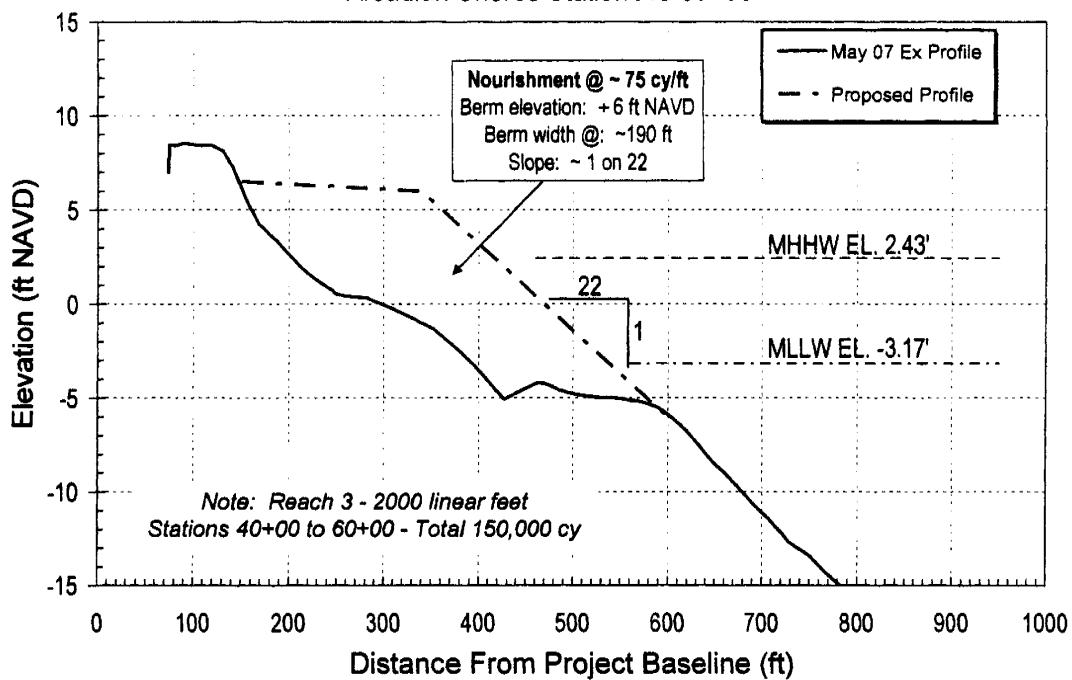
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COLUMBIA, SC 29202

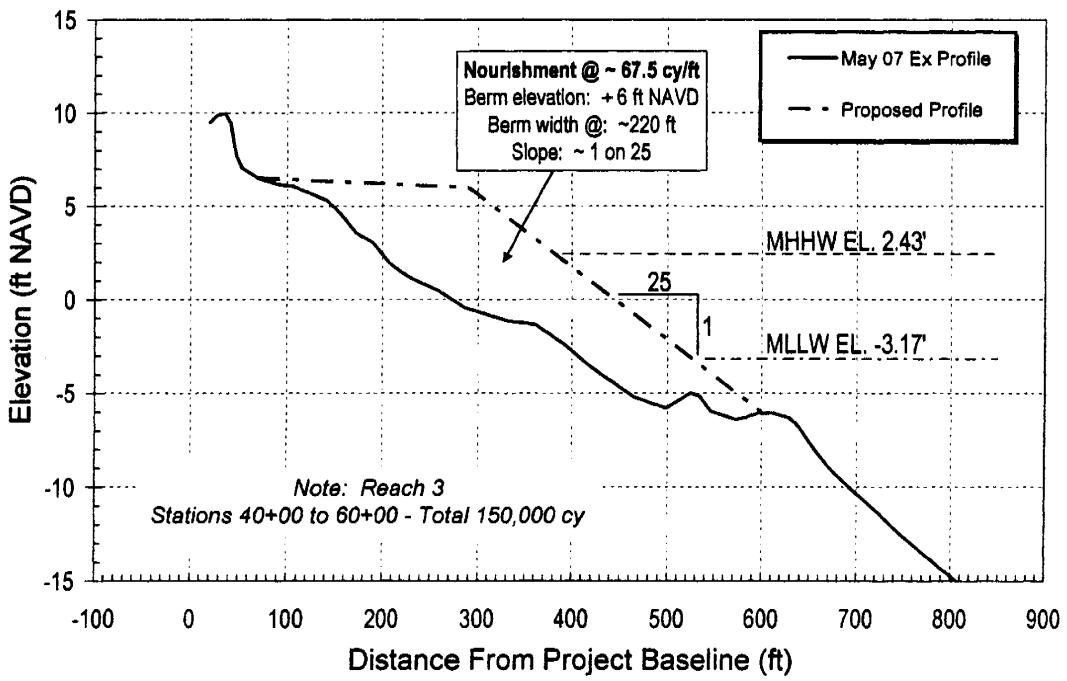
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Arcadian Shores Station AS 50+00



Arcadian Shores Station AS 55+00



APPLICANT:

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Horry County I&R Division
Arcadian Shores Beach Nourishment
Horry County, South Carolina

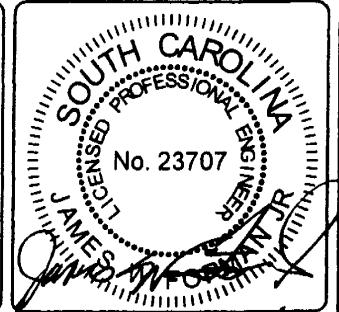
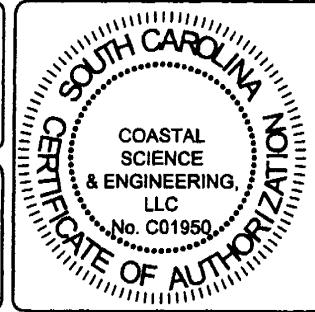
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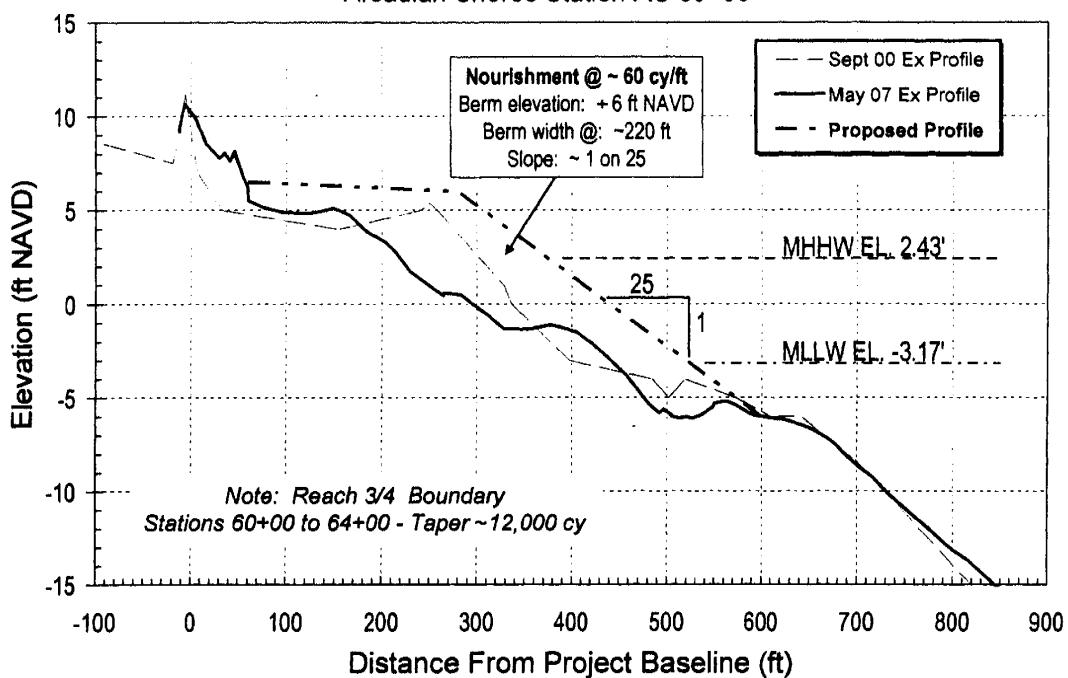
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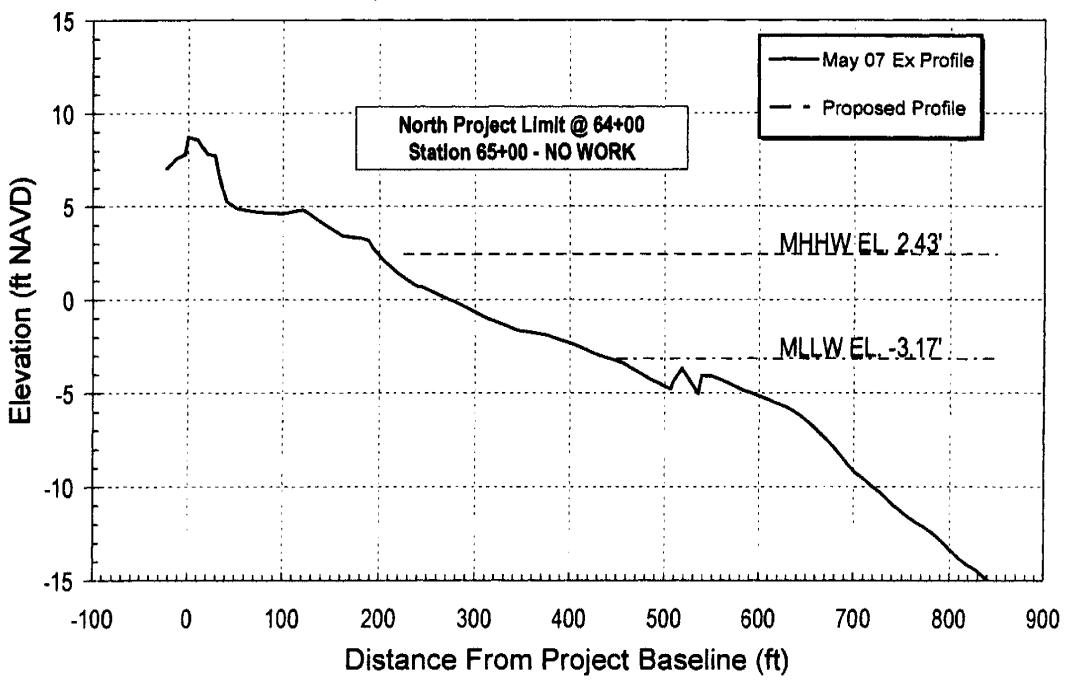


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Arcadian Shores Station AS 60+00



Arcadian Shores Station AS 65+00



APPLICANT:

SAC# 2007-01983-3IV
Horry County I&R Division
Arcadian Shores Beach Nourishment
Horry County, South Carolina

September 20, 2007

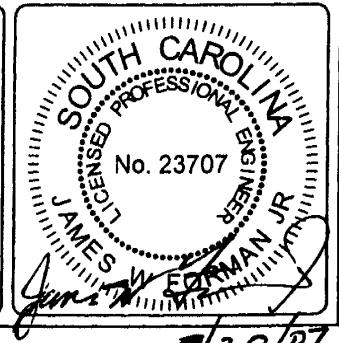
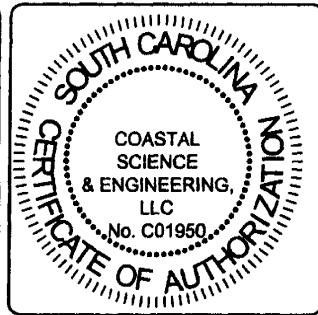
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COLUMBIA, SC 29202

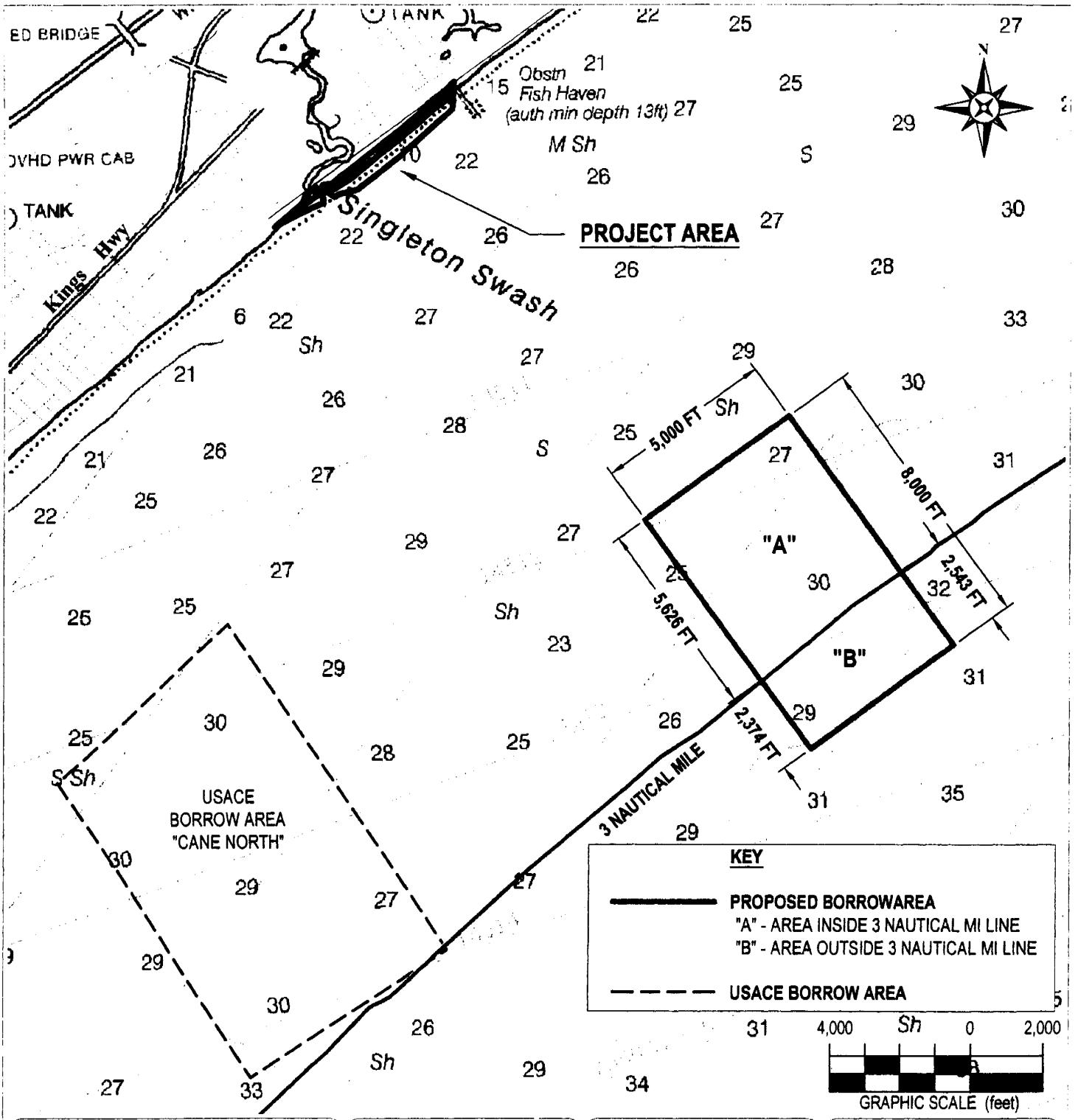
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TM&M
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2236
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APPLICANT:

SAC# 2007-01983-3IV
Horry County I&R Division
Arcadian Shores Beach Nourishment
Horry County, South Carolina

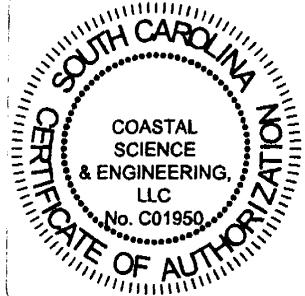
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PO BOX 8056
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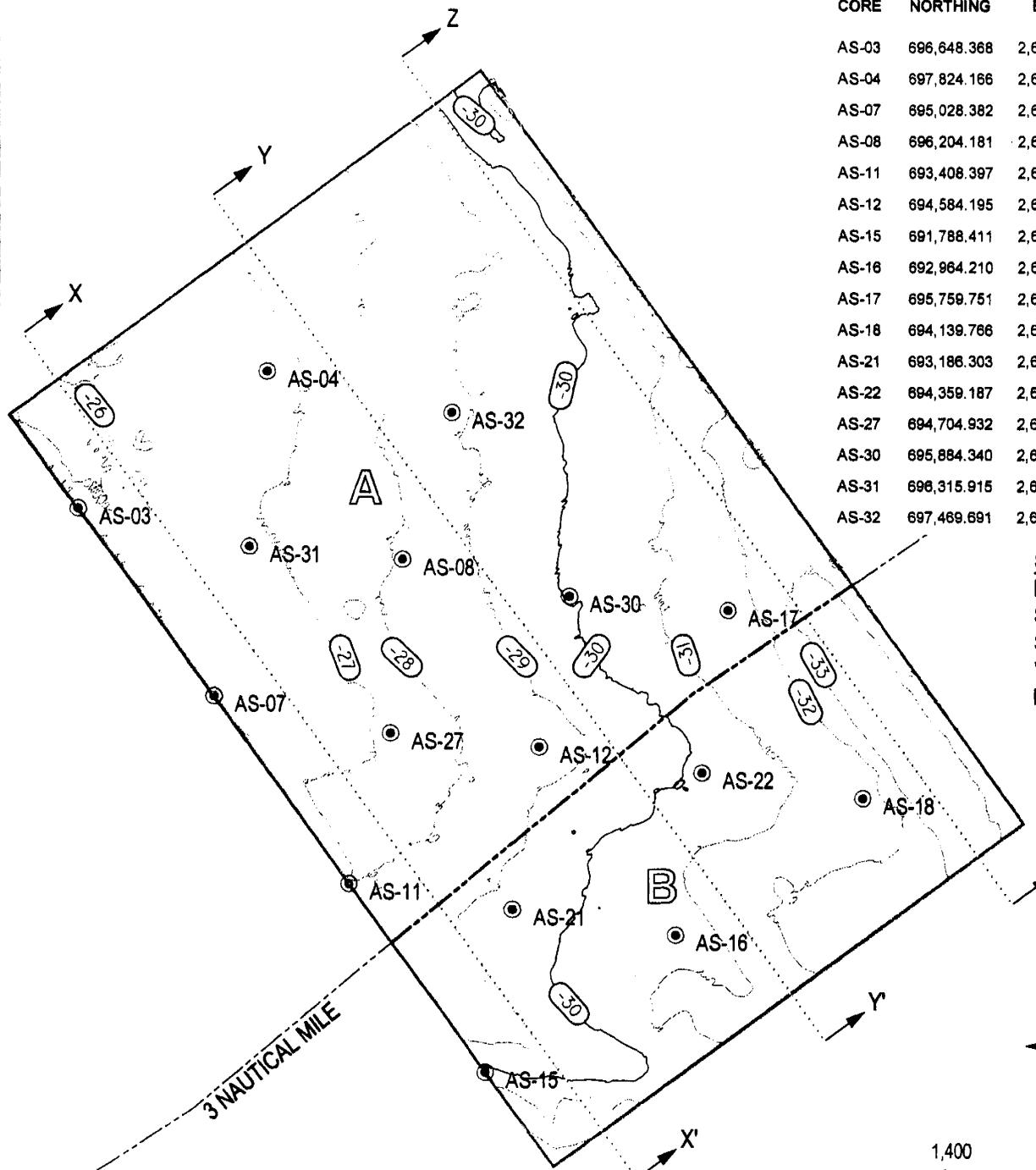
12
PROJECT # 2236 OF 16



8/20/07

CORE	NORTHING	EASTING	ELEV (MLLW FT)
AS-03	696,648.368	2,680,128.995	-26.24'
AS-04	697,824.166	2,681,746.868	-26.89'
AS-07	695,028.382	2,681,301.881	-25.95'
AS-08	696,204.181	2,682,919.753	-28.16'
AS-11	693,408.397	2,682,474.766	-27.74'
AS-12	694,584.195	2,684,092.639	-28.73'
AS-15	691,788.411	2,683,847.652	-30.14'
AS-16	692,964.210	2,685,265.524	-30.76'
AS-17	695,759.751	2,685,710.175	-31.65'
AS-18	694,139.766	2,686,883.059	-31.51'
AS-21	693,186.303	2,683,870.145	-29.46'
AS-22	694,359.187	2,685,490.128	-30.25'
AS-27	694,704.932	2,682,825.050	-27.2
AS-30	695,884.340	2,684,345.154	-30.07'
AS-31	696,315.915	2,681,599.068	-26.70'
AS-32	697,469.691	2,683,337.606	-28.87'

SURVEY DATUM:
HORIZONTAL:
 SPCS NAD 83 FEET
SC ZONE 3900
VERTICAL:
 MLLW FEET



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SAC# 2007-01983-3IV
 Horry County I&R Division
 Arcadian Shores Beach Nourishment
 Horry County, South Carolina

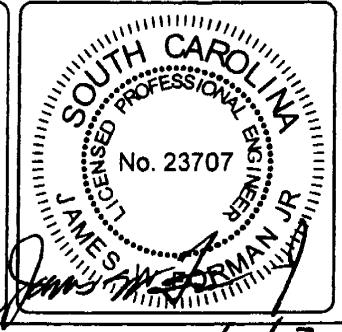
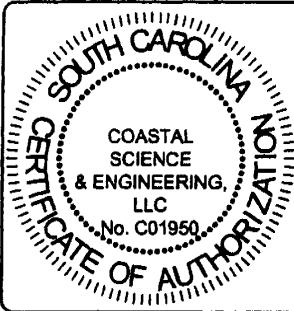
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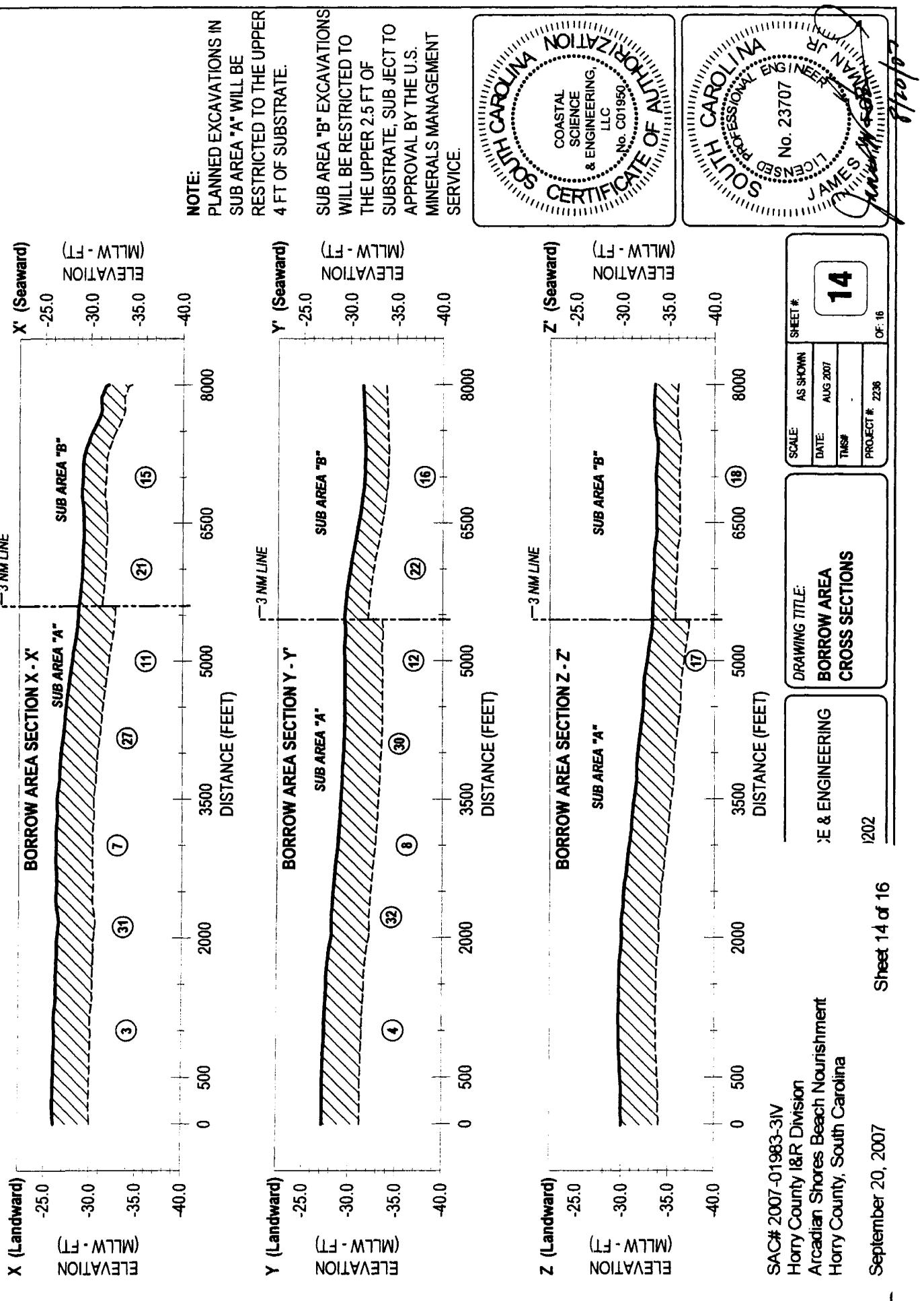
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Arcadian Shores, SC
Beach and Potential Borrow Area Sediment Characteristics - Summary
June 2007

Beach Samples					Grain Size Distributions			%Coarser Than 2 mm	% Mud	% Shell ¹	Sediment Description ²	
Locality	ID	Sample Position	Stations	Locality	Mean (mm)	Std Dev. (mm)	Skewness					
Beach	TD Comp	Toe of Dune	CSE 0000 - 2500		0.242	0.698	-0.232	0.2	0.0	2.1	FS,ws,ym	
	BC Comp	Berm Crest	-		0.230	0.733	-0.548	0.7	0.0	12.0	FS,ws,co-s	
	BF Comp	Beach Face	-		0.288	0.750	-0.014	0.0	0.0	11.2	MS,ws,ym	
	LTT Comp	Toe of Dune	-		0.418	0.543	-0.227	5.2	0.0	14.0	MS,pe,o-s	
	Beach Comp	All	-		0.286	0.623	-0.580	1.5	0.0	9.9	MS,mw,o-s	
Offshore Borrow Area		Sample ID	Limits (ft)	Water Depth (ft-MLLW)	Confirmation Depth (ft-MLLW)	Grain Size Distributions			%Coarser than 2 mm	% Mud	% Shell	Sediment Description ²
June 2007 Borings						Mean (mm)	Std Dev. (mm)	Skewness				
1	AB-03	0 - 2.8	-26.24	-29.04	0.213	0.632	-0.555	0.2	-	7.2	FS,mw,co-s	
2	AB-03	2.8 - 6.3	-29.04	-32.54	0.204	0.538	-0.766	1.5	-	11.4	FS,ms,so-s	
3	AB-04	0 - 3.3	-26.89	-30.19	0.297	0.558	-0.271	1.8	4.1	8.9	MS,ma,co-s	
4	AB-04	3.3 - 3.9	-30.19	-30.79	0.371	0.491	-0.027	5.8	-	16.7	MS,pe,o-s	
5	AB-04	3.9 - 5.7	-30.79	-32.59	0.393	0.491	-0.055	2.2	-	ND	MS,pa,co-s	
6	AB-07	0 - 2.3	-25.95	-28.25	0.217	0.574	-0.655	1.3	-	9.8	FS,ms,co-s	
7	AB-07	2.3 - 5.0	-28.25	-30.95	0.201	0.529	-0.753	0.5	-	10.0	FS,ms,co-s	
8	AB-08	0 - 2.6	-28.16	-30.76	0.316	0.592	-0.118	0.7	-	9.4	MS,ms,ym	
9	AB-08	2.6 - 4.5	-30.76	-32.66	0.216	0.511	-0.573	1.0	-	13.4	FS,ms,co-s	
10	AB-08	4.5 - 5.7	-32.66	-33.86	0.427	0.476	-0.096	5.3	-	ND	MS,pa,ym	
11	AB-11	0 - 3.1	-27.74	-30.84	0.287	0.608	-0.255	0.8	-	8.9	MS,mw,ym	
12	AB-11	3.1 - 6.3	-30.84	-34.04	0.198	0.514	-0.618	1.2	-	8.6	FS,ms,co-s	
13	AB-12	0 - 2.6	-28.73	-31.33	0.421	0.577	0.081	0.7	-	5.6	MS,ms,ym	
14	AB-12	2.6 - 5.8	-31.33	-34.53	0.404	0.467	0.083	2.3	-	16.6	MS,pe,ym	
15	AB-15	0 - 1.0	-30.14	-31.14	0.283	0.533	-0.090	0.8	-	7.6	MS,ma,co-s	
16	AB-15	1.0 - 2.8	-31.14	-32.94	0.204	0.512	-0.546	0.4	7.7	9.9	FS,ms,co-s	
17	AB-15	2.8 - 5.1	-32.94	-35.24	0.328	0.521	-0.159	1.1	17.1	ND	MS,mc,co-s	
18	AB-16	0 - 2.6	-30.76	-33.36	0.510	0.594	0.511	0.7	-	5.0	CS,ma,co-s	
19	AB-16	2.6 - 4.8	-33.36	-35.58	0.267	0.480	-0.202	0.7	-	12.3	MS,pe,co-s	
20	AB-17	0 - 2.3	-31.65	-33.95	0.471	0.541	0.281	1.6	-	6.9	MS,ma,co-s	
21	AB-18	0 - 2.5	-31.51	-34.01	0.653	0.618	0.138	3.1	-	5.0	CS,ms,ym	
22	AB-18	2.5 - 4.3	-34.01	-35.81	0.283	0.458	-0.324	2.0	-	13.2	FS,pa,co-s	
23	AB-21	0 - 1.9	-29.46	-31.35	0.445	0.586	0.061	0.9	1.4	5.8	MS,ms,ym	
24	AB-21	1.9 - 4.7	-31.36	-34.16	0.191	0.530	-0.733	0.8	6.6	10.5	FS,mw,co-s	
25	AB-22	0 - 2.8	-30.25	-33.05	0.432	0.590	0.169	0.9	1.4	5.2	MS,ms,ym	
26	AB-22	2.8 - 5.4	-33.06	-35.65	0.284	0.461	-0.246	1.9	-	20.0	MS,pa,co-s	
27	AB-27	0 - 2.2	-27.20	-29.40	0.336	0.577	-0.224	2.3	-	9.3	MS,mc,co-s	
28	AB-27	2.2 - 5.3	-29.40	-32.50	0.215	0.509	-0.645	1.1	-	10.6	FS,mc,co-s	
29	AB-30	0 - 1.8	-30.07	-31.87	0.453	0.598	0.188	0.8	1.0	6.7	MS,pa,co-s	
30	AB-30	1.8 - 4.2	-31.87	-34.27	0.292	0.483	-0.191	2.1	8.4	11.4	MS,pe,co-s	
31	AB-31	0 - 2.2	-26.70	-28.90	0.315	0.549	-0.159	1.0	9.9	12.0	MS,ms,ym	
32	AB-31	2.2 - 5.4	-28.90	-32.10	0.244	0.498	-0.418	1.1	-	11.6	FS,ms,co-s	
33	AB-32	0 - 1.7	-28.87	-30.57	0.419	0.606	0.041	1.1	1.6	5.6	MS,ms,ym	
34	AB-32	1.7 - 4.0	-30.57	-32.87	0.298	0.483	-0.194	1.8	-	13.2	MS,pe,co-s	
Averages**		Entire Borrow Area to Depths of Cores:			0.341	0.537	-0.168	1.5	1.8	9.2	MS,ms,co-s	
		Borrow Area Subsection A to 4 ft Depth of Cut:			0.325	0.546	-0.188	1.4	1.8	9.7	MS,ms,co-s	
		Borrow Area Subsection B to 2.5 ft Depth of Cut:			0.485	0.586	0.138	1.5	1.1	5.9	MS,ms,co-s	

¹ Calcium Carbonate percentages are based on beach samples taken at Myrtle Beach OCRM Stations 5300, 5320, 5350, 5410, 5430, 5445, 5460, 5470, and 5480.

² CS=Coarse Sand; MS=Medium Sand; FS=fine sand

ms=moderately sorted; mw=moderately well sorted; ws=well sorted; ps=poorly sorted

o-coarse skewed; sc-strongly coarse skewed; f-fine skewed; sym-symmetrical size distribution

** Averages are based on composite core length-averaged data

Note: Nearly all cores had only trace mud based on visual examination. The cores tested for mud had minor lesser bedding (thin mud lenses) in portions of the core.

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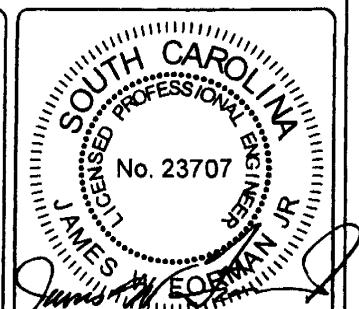
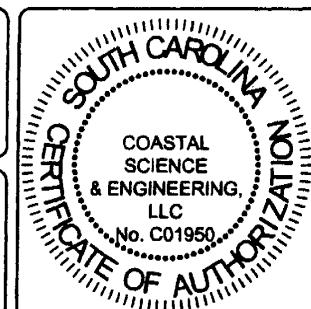
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Horry County, South Carolina

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Arcadian Shores, SC

Sediment Compatibility

Overfill ratios are Based on June 2007 Beach Surface Samples and Proposed Borrow Area Cores.

				Mean Grain Size		Std.Dev			
				(mm)	(phi)	(mm)	(phi)		
	Native Beach			0.286	1.806	0.623	0.683		
	Beach Composite								
Offshore Borrow Area		Limits (feet)	Sediment	% Mud	Moment Measures	X	Y	Overfill Ratio	
June 2007 Borings	Sample ID	Description*	sample interval	M _{fb}	σ _{fb}	(M _{fb} -M _{on})/σ _{on}	σ _{fb} /σ _{on}	(RA)	
AS-03	AS-03a	0 - 2.8	FS,mws,c-s	-	2.231	0.662	0.62	0.97	2.59
"	AS-03b	2.8 - 6.3	FS,ms,sc-s	-	2.293	0.894	0.71	1.31	1.84
AS-04	AS-04a	0 - 3.3	MS,ms,c-s	4.1	1.751	0.842	-0.08	1.23	1.08
"	AS-04b	3.3 - 3.9	MS,ps,c-s	-	1.431	1.026	-0.55	1.50	1.06
"	AS-04c	3.9 - 5.7	MS,ps,c-s	-	1.347	1.026	-0.67	1.50	1.08
AS-07	AS-07a	0 - 2.3	FS,ms,sc-s	-	2.204	0.801	0.58	1.17	1.78
"	AS-07b	2.3 - 5.0	FS,ms,sc-s	-	2.315	0.919	0.75	1.35	1.86
AS-08	AS-08a	0 - 2.6	MS,ms,sym	-	1.662	0.756	-0.21	1.11	1.01
"	AS-08b	2.6 - 4.5	FS,ms,sc-s	-	2.211	0.969	0.59	1.42	1.59
"	AS-08c	4.5 - 5.7	MS,ps,sym	-	1.228	1.071	-0.85	1.57	1.04
AS-11	AS-11a	0 - 3.1	MS,mws,sym	-	1.801	0.723	-0.01	1.06	1.03
"	AS-11b	3.1 - 6.3	FS,ms,sc-s	-	2.336	0.960	0.78	1.41	1.85
AS-12	AS-12a	0 - 2.6	MS,ms,sym	-	1.248	0.793	-0.82	1.18	1.00
"	AS-12b	2.6 - 5.8	MS,ps,sym	-	1.308	1.099	-0.73	1.61	1.06
AS-15	AS-15a	0 - 1.0	MS,ms,f-s	-	1.821	0.908	0.02	1.33	1.18
"	AS-15b	1.0 - 2.8	FS,ms,sc-s	7.7	2.293	0.966	0.71	1.41	1.74
"	AS-15c	2.8 - 5.1	MS,ms,c-s	17.1	1.630	0.941	-0.26	1.38	1.08
AS-16	AS-16a	0 - 2.6	CS,ms,f-s	-	0.971	0.751	-1.22	1.10	1.00
"	AS-16b	2.6 - 4.8	MS,ps,c-s	-	1.905	1.059	0.15	1.55	1.28
AS-17	AS-17a	0 - 2.3	MS,ms,f-s	-	1.086	0.886	-1.05	1.30	1.00
AS-18	AS-18a	0 - 2.5	CS,ms,sym	-	0.615	0.694	-1.74	1.02	1.00
"	AS-18b	2.5 - 4.3	FS,ps,sc-s	-	1.983	1.133	0.26	1.66	1.36
AS-21	AS-21a	0 - 1.9	MS,ms,sym	1.4	1.168	0.771	-0.93	1.13	1.00
"	AS-21b	1.9 - 4.7	FS,ms,sc-s	6.6	2.388	0.916	0.85	1.34	2.09
AS-22	AS-22a	0 - 2.8	MS,ms,sym	1.4	1.146	0.761	-0.97	1.12	1.00
"	AS-22b	2.8 - 5.4	MS,ps,c-s	-	1.816	1.117	0.01	1.64	1.26
AS-27	AS-27a	0 - 2.2	MS,ms,c-s	-	1.573	0.793	-0.34	1.18	1.01
"	AS-27b	2.2 - 5.3	FS,ms,sc-s	-	2.218	0.974	0.60	1.43	1.60
AS-30	AS-30a	0 - 1.8	MS,ms,f-s	1.0	1.142	0.739	-0.97	1.08	1.00
"	AS-30b	1.8 - 4.2	MS,ps,c-s	8.4	1.776	1.050	-0.04	1.54	1.20
AS-31	AS-31a	0 - 2.2	Ms,ms,sym	9.9	1.667	0.865	-0.20	1.27	1.08
"	AS-31b	2.2 - 5.4	FS,ms,sc-s	-	2.035	1.003	0.34	1.47	1.36
AS-32	AS-32a	0 - 1.7	MS,ms,sym	1.6	1.255	0.723	-0.81	1.06	1.00
"	AS-32b	1.7 - 4.0	MS,ps,c-s	-	1.756	1.050	-0.07	1.54	1.19
Composite	Entire Borrow Area		MS,ms,c-s	1.6	1.551	0.894	-0.37	1.31	1.28
	Subarea "A"		MS,ms,c-s	1.6	1.620	0.873	-0.27	1.28	1.23
	Aubarea "B"		MS,ms,f-s	1.1	1.043	0.772	-1.12	1.13	1.10

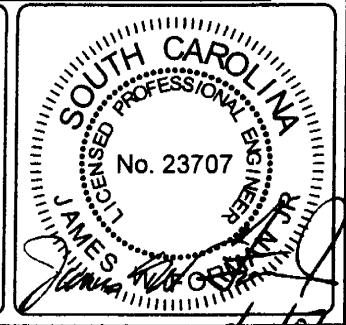
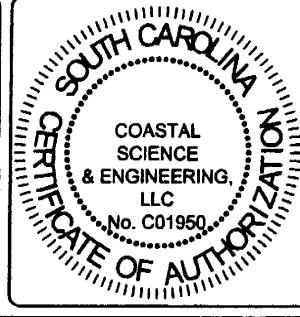
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