OFFICIAL FILE COPY
CLERK OF THE BOARD
OF COUNTY COMMISSIONERS
MIAMI-DADE COUNTY, FLORIDA

Memorandum

MIAMI-DADE COUNTY

Date: April 7, 2009

To: Honorable Chairman Dennis C. Moss and Members, Board of County Commissioners

From: George M. Burgess
County Manager

Agenda Item No. 5(N)

Resolution No. R-330-09

Subject: Class I Permit Application by Miami-Dade County to Renourish and Stabilize Hobie Beach and Virginia Key Beach Through the Dredging of Rock and Sediment and the Removal of Concrete Debris, the Placement of 23,337 Cubic Yards of Riprap Boulders and Sand for Multiple Renourishment Events, and the Repair of Three (3) Stormwater Outfalls to Improve Drainage, and to Authorize the Time of Completion of Work of the Subject Permit for a Period of Ten (10) Years

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Attached, please find for your consideration an application by Miami-Dade County for a Class I permit. Also attached is the recommendation of the Director of the Department of Environmental Resources Management and a resolution seeking the Board's approval of the aforesaid Class I permit.

Assistant County Manager

Memorandum

MIAMI-DADE COUNTY

Date: March 31, 2009

To: George M. Burgess
County Manager

From: Carlos Espinosa, PE, Director
Environmental Resources Management

Subject: Class I Permit Application by Miami-Dade County to Renourish and Stabilize Hobie Beach and Virginia Key Beach Through the Dredging of Rock and Sediment and the Removal of Concrete Debris, the Placement of 23,337 Cubic Yards of Riprap Boulders and Sand for Multiple Renourishment Events, and the Repair of Three (3) Stormwater Outfalls to Improve Drainage, and to Authorize the Time of Completion of Work of the Subject Permit for a Period of Ten (10) Years

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Recommendation

I have reviewed the attached Class I permit application by Miami-Dade County. Based upon the applicable evaluation factors set forth in Section 24-48.3 of the Code of Miami-Dade County, Florida, I recommend that the Board of County Commissioners (BCC) approve the issuance of a Class I permit for the reasons set forth below.

Scope

The project site is located along the southern shorelines of Hobie Island and Virginia Key along Rickenbacker Causeway in Miami-Dade County, in Commission District 7 (Commissioner Gimenez).

Fiscal Impact/Funding Source

Not applicable.

Track Record/Monitor

Not applicable.

Background

This project is intended to reduce the potential for continuing erosion and enhance Hobie Beach and Virginia Key Beach for recreational public use.

The subject Class I permit application involves the renourishment and stabilization of Hobie Beach and Virginia Key Beach through the dredging of rock and sediment and the removal of concrete debris, the placement of 23,337 cubic yards of riprap boulders and sand, and the repair of three (3) stormwater outfalls to improve drainage south of the Rickenbacker Causeway. The project area, including the submerged lands, is owned by the applicant, Miami-Dade County, and managed by the Miami-Dade County Public Works Department. The proposed project is required to be reviewed and approved by the BCC at a public hearing because the scope of work includes dredging and filling of tidal waters. Said work is not specifically referenced in Section 24-48.2 of the Code of Miami-Dade County (Code) as work that can be processed administratively with a short form application and requires a standard form application including a public hearing. Pursuant to Section 24-48.9 of the Code of Miami-Dade County, standard form Class I permit approvals are only valid for a period of three (3) years from the date of approval unless another time period is stated in the approving resolution. Due to the nature of this project, the applicant has requested that the permit for this project be valid for ten (10) years rather than the typical three (3) years to allow for multiple renourishment events as needed.

The project sites, known as Hobie Beach and Virginia Key Beach, are popular recreational areas that are utilized frequently by public beachgoers and water sports enthusiasts. The project sites consist of over 12,000 linear feet of partially vegetated, unconsolidated shorelines with rock and sand sediment. The vegetated areas along the shorelines are comprised of exotic tree species, including *Casuarina sp.* (Australian pine) and *Thespesia populnea* (seaside mahoe), and native tree species including *Rhizophora mangle* (red mangroves), *Laguncularia racemosa* (white mangroves), *Avicennia germinans* (black mangroves), and *Conocorpus erectus* (green buttonwood). The existing shorelines are experiencing varying degrees of erosion that reduce the width of the beaches and potentially undermine the adjacent upland roadways and parking facilities. As a result of current site conditions, the most significant source of erosion is stormwater runoff. Existing shoreline revetments, comprised of concrete slabs and debris, do not provide adequate stabilization of the shorelines adjacent to the existing bridges. In addition, parking sometimes occurs beyond the mean high water line (MHWL) due to the lack of physical barriers between the parking facilities and the shoreline, and presents an increased potential for beach erosion in the more heavily trafficked areas.

The applicant seeks authorization for the excavation of existing sediments and the placement of riprap boulders and sand waterward of the Mean High Water Line (MHWL) to stabilize and renourish eroded beach shorelines along Hobie Beach and Virginia Key Beach. To reduce the effects of stormwater runoff and minimize the potential for erosion, the applicant is also proposing to make improvements to the stormwater drainage system. These improvements consist of re-grading the existing upland parking facilities and roadways, creating upland swale areas to divert surface water runoff away from the shoreline, and improving existing outfall systems. A total of 23,337 cubic yards of riprap boulders and sand shall be incorporated into the proposed project for the proposed beach renourishment, riprap revetments, and the repair of the existing outfall systems. Specifically, the applicant shall excavate seven hundred fifty seven (757) cubic yards of rock and sediment and place 18,896 cubic yards of sand waterward of the existing MHWL to renourish the existing beaches. The sand will be obtained from inland quarries and trucked to the project site. The sand will then be graded to provide the recreational benefits associated with the project. To avoid impacts to existing mangroves on-site as a result of the proposed beach renourishment, the applicant has designed limerock riprap boulder revetments around the native trees; therefore, no impacts to existing mangroves are anticipated. The proposed revetments shall result in the placement of 2,538 cubic yards of riprap boulders waterward of the existing MHWL. The proposed project also involves the creation of numerous riprap revetments to further stabilize the subject shorelines. Specifically, existing concrete debris shall be removed and replaced with 1,544 cubic yards of riprap boulders waterward of the existing MHWL. Furthermore, the restoration of the three (3) existing outfall systems will result in the excavation of seventy eight (78) cubic yards of sediment and the placement of three hundred fifty nine (359) cubic yards of sand and riprap boulders waterward of the MHWL.

A seagrass survey report indicates that no adverse environmental impacts to benthic resources will occur as a result of this project, therefore no mitigation shall be required. The project has been designed to maintain a minimum fifteen (15) foot distance between the waterward limits of the project and all existing seagrass resources; therefore, no direct or indirect impacts to existing resources are anticipated. The applicant will utilize turbidity control devices to contain turbidity from construction operations. In addition, the applicant will be required to implement a seagrass monitoring program to evaluate offshore seagrass community health and vitality before and after construction activities.

The applicant is also requesting that the Class I permit be valid for a period of ten (10) years. Although standard form Class I permits are valid for three (3) years, staff noted that authorization for a ten (10) year period is consistent with the maximum timeframe allowed for extensions of standard form Class I permits in the Code of Miami-Dade County. DERM recommends approval of the requested ten (10) year permit which would allow for periodic renourishment of eroded segments of the beach as needed in order to maintain the storm protection functions of the beach for upland resources as well as appropriate recreational and environmental functions. The applicant will be required to notify DERM prior to performing any subsequent renourishment events.

The proposed project has been designed in accordance with all relevant Miami-Dade County coastal construction criteria and is consistent with all other Miami-Dade County coastal protection provisions. Please find attached a DERM Project Report which sets forth the reasons the proposed project is recommended for approval by DERM pursuant to the applicable evaluation factors set forth in Section 24-48.3 of the Code. The conditions, limitations, and restrictions set forth in the Project Report attached hereto are incorporated herein by references hereto.

Attachments

Attachment A: Class I Permit Application
Attachment B: Affidavit of Ownership and Hold Harmless Agreement
Attachment C: Owner/Agent Letter, Engineer Certification Letter and Project Sketches
Attachment D: Zoning Memorandum
Attachment E: Names and Addresses of Owners of All Riparian or Wetland Property Within Three Hundred (300) Feet of the Proposed Work
Attachment F: DERM Project Report

NOTICE OF PUBLIC HEARING ON AN APPLICATION BY MIAMI-DADE COUNTY FOR A CLASS I PERMIT TO RENOURISH AND STABILIZE HOBIE BEACH AND VIRGINIA KEY BEACH THROUGH THE DREDGING OF ROCK AND SEDIMENT AND THE REMOVAL OF CONCRETE DEBRIS, THE PLACEMENT OF 23,337 CUBIC YARDS OF RIPRAP BOULDERS AND SAND FOR MULTIPLE RENOURISHMENT EVENTS, AND THE REPAIR OF THREE (3) STORMWATER OUTFALLS TO IMPROVE DRAINAGE, AND TO AUTHORIZE THE TIME OF COMPLETION OF WORK OF THE SUBJECT PERMIT FOR A PERIOD OF TEN (10) YEARS

BOARD OF COUNTY COMMISSIONERS
MIAMI-DADE COUNTY, FLORIDA

NOTICE IS HEREBY GIVEN pursuant to Article IV, Division 1 of Chapter 24 of the Code of Miami-Dade County that the Miami-Dade County Board of County Commissioners will hold and conduct a Public Hearing on a request by Miami-Dade County for a Class I permit to renourish and stabilize Hobie Beach and Virginia Key Beach through the dredging of rock and sediment and the removal of concrete debris, the placement of 23,337 cubic yards of riprap boulders and sand for multiple renourishment events, and the repair of three (3) stormwater outfalls to improve drainage, and to authorize the time of completion of work of the subject permit for a period of ten (10) years. Such Public Hearing will be held on the 7th day of April 2009 at 9:30 AM in the County Commission Chambers on the 2nd Floor of the Stephen P. Clark Center at 111 NW 1st Street in Miami, Florida.

Plans and details concerning the work requested in the application may be reviewed by interested persons at the office of the Miami-Dade County Department of Environmental Resources Management, 4th Floor, 701 NW 1st Court, Miami, Florida, 33136-3912.

Oral statements will be heard and appropriate records made. For accuracy of records all important facts and arguments should be prepared in writing in triplicate, with two copies being submitted to the Deputy Clerk of the County Commission at the hearing or mailed to her beforehand (Kay Sullivan, Deputy Clerk), 111 NW 1st Street, Stephen P. Clark Center, Suite 17-202, Miami, Florida 33128; and with one copy being submitted beforehand to the Miami-Dade County Department of Environmental Resources Management, 4th Floor, 701 NW 1st Court, Miami, Florida, 33136-3912.

A person who decides to appeal any decision made by any Board, Agency, or Commission with respect to any matter considered at its meeting or hearing, will need a record of proceedings. Such person may need to ensure that a verbatim record of the proceedings is made, including the testimony and evidence upon which the appeal is to be based.

BOARD OF COUNTY COMMISSIONERS
MIAMI-DADE COUNTY, FLORIDA

HARVEY RUVIN, CLERK

BY: _____
Kay Sullivan, Deputy Clerk

MEMORANDUM

(Revised)

TO: Honorable Chairman Dennis C. Moss and Members, Board of County Commissioners

DATE: April 7, 2009

FROM: R. A. Cuevas, Jr. County Attorney

SUBJECT: Agenda Item No. 5(N)

Please note any items checked.

_____ **"4-Day Rule" ("3-Day Rule" for committees) applicable if raised**

_____ **6 weeks required between first reading and public hearing**

_____ **4 weeks notification to municipal officials required prior to public hearing**

_____ **Decreases revenues or increases expenditures without balancing budget**

_____ **Budget required**

_____ **Statement of fiscal impact required**

_____ **Bid waiver requiring County Mayor's written recommendation**

_____ **Ordinance creating a new board requires detailed County Manager's report for public hearing**

✓ **Housekeeping item (no policy decision required)**

✓ **No committee review**

Approved _____ Mayor
Override _____
Veto _____

Agenda Item No. 5(N)
4-7-09

RESOLUTION NO. R-330-09

RESOLUTION RELATING TO AN APPLICATION BY MIAMI-DADE COUNTY FOR A CLASS I PERMIT TO RENOURISH AND STABILIZE HOBIE BEACH AND VIRGINIA KEY BEACH THROUGH THE DREDGING OF ROCK AND SEDIMENT AND THE REMOVAL OF CONCRETE DEBRIS, THE PLACEMENT OF 23,337 CUBIC YARDS OF RIPRAP BOULDERS AND SAND FOR MULTIPLE RENOURISHMENT EVENTS, AND THE REPAIR OF THREE (3) STORMWATER OUTFALLS TO IMPROVE DRAINAGE, AND TO AUTHORIZE THE TIME OF COMPLETION OF WORK OF THE SUBJECT PERMIT FOR A PERIOD OF TEN (10) YEARS

WHEREAS, this Board desires to accomplish the purposes outlined in the accompanying memorandum, a copy of which is incorporated herein by reference,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that this Board having considered all the applicable factors contained within Section 24-48.3 of the Code of Miami-Dade County, hereby approves the application by Miami-Dade County for a Class I permit to renourish and stabilize Hobie Beach and Virginia Key Beach through the dredging of rock and sediment and the removal of concrete debris, the placement of 23,337 cubic yards of riprap boulders and sand for multiple renourishment events, and the repair of three (3) stormwater outfalls to improve drainage, and to authorize the time of completion of work of the subject permit for a period of ten (10) years, subject to the conditions set forth in the memorandum from the Director of the Miami-Dade County Department of Environmental Resources Management, a copy of which is attached hereto and made a part hereof. The issuance of this approval does not relieve the applicant from obtaining all applicable Federal, State, and local permits. The Class I permit granted hereby shall be valid for ten (10) years from the date of issuance of the permit.

The foregoing resolution was offered by Commissioner Carlos A. Gimenez, who moved its adoption. The motion was seconded by Commissioner Jose "Pepe" Diaz and upon being put to a vote, the vote was as follows:

Dennis C. Moss, Chairman aye
Jose "Pepe" Diaz, Vice-Chairman aye

Bruno A. Barreiro	absent	Audrey M. Edmonson	aye
Carlos A. Gimenez	aye	Sally A. Heyman	absent
Barbara J. Jordan	absent	Joe A. Martinez	aye
Dorrin D. Rolle	aye	Natacha Seijas	absent
Katy Sorenson	aye	Rebeca Sosa	aye
Sen. Javier D. Souto	aye		

The Chairperson thereupon declared the resolution duly passed and adopted this 7th day of April, 2009. This resolution shall become effective ten (10) days after the date of its adoption unless vetoed by the Mayor, and if vetoed, shall become effective only upon an override by this Board.

MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF COUNTY COMMISSIONERS

HARVEY RUVIN, CLERK

By: Kay Sullivan
Deputy Clerk

Approved by County Attorney as to form and legal sufficiency.

Peter S. Tell

Attachment A

Class I Permit Application

MIAMI-DADE COUNTY

Class I
Permit Application

RECEIVED

MAR 31 2009

DERM
ENVIRONMENTAL RESOURCES
REGULATION DIVISION

1. Application number	2. Date Day/Month/Year	3. For official use only
CC06-196		

4. Applicant Information:
Name: Miami-Dade County, Ysela Llort, Assistant County Manager
Address: 111 NW 1st St. Suite 2910
Miami, FL Zip Code: 33128
Phone #: (305) 375-1451 Fax #: (305) 375-1501
e-mail yllort@miamidade.gov

5. Applicant's authorized permit agent
Name: Coastal Systems International, Inc.
Address: 464 South Dixie Highway
Coral Gables, FL Zip Code: 33146
Phone #: (305) 661-3655 Fax #: (305) 661-1914
e-mail pcutt@coastalsystemsint.com

6. Describe the proposed activity, its purpose and intended use, including a description of the type of structures, if any, to be erected on fills, or pipe or float-supported platforms, and the type, composition and quantity of materials to be discharged or dumped and means of conveyance.

Class I Permit Application by Miami-Dade County to Renourish and Stabilize Hobie Beach and Virginia Key Beach Through the Dredging of Rock and Sediment and the Removal of Concrete Debris, the Placement of 23,337 Cubic Yards of Riprap Boulders and Sand for Multiple Renourishment Events, and the Repair of Three (3) Stormwater Outfalls to Improve Drainage, and to Authorize the Time of Completion of Work of the Subject Permit for a Period of Ten (10) Years.

	Dredged/Excavated		Filled/Deposited	
Volume of Material:	835 CY (Waterward of O.H.W. or M.H.W.)	CY (Landward of O.H.W. or M.H.W.)	23,337 CY (Waterward of O.H.W. or M.H.W)	CY (Landward of O.H.W. or M.H.W)

7. Proposed Use: (Check One)
- ☐ Private
- ☐ Commercial
- ☐ Other
- ☒ Public

8. Names and addresses of adjoining property owners whose property also adjoins the waterway.

Name: Miami Seaquarium
Address: 4400 Rickenbacker Causeway
Miami, FL Zip Code 33149

Name: City of Miami Dept. of P & D
Address: 3501 Rickenbacker Causeway
Miami, FL Zip Code 33130

9. Location where proposed activity exists or will occur.
Folio # 01-4208-000-0020
Street Address: Project will occur along the shoreline of Hobie Beach and Virginia Key Beach on the South ~~side of Rickenbacker Causeway~~
Latitude 25 44'80"-25 44'40" Longitude 80 12'20"-~~80 10'00"~~
Section 13,17,18,20 Township 54 Range 41,42
State FL County Miami-Dade In City or Town Miami Near City Or Town

10. Name of waterway at location of the activity.
Biscayne Bay

11. Date activity is proposed to:
Commence TBD Be completed TBD

12. Is any portion of this activity for which authorization is sought now complete?
☐ Yes
☒ No
If answer is "yes", give reasons in the remarks section. Indicate the existing work on the drawings.
Month and Year the activity was completed _____

13. List all approvals or certifications required by other Federal, state or local agencies for any structures, construction, discharges, deposits or other activities described in this application, including whether the project is a Development of Regional Impacts.

Issuing Agency	Type of Approval	Identification Number	Date of Application	Date of Approval
SFWMD	ERP	13-03310-P	4/10/06	8/9/07
CORPS	IP	SAJ-2006-3273 (IP-MJW)	4/10/06	pending

14. Has any other agency denied approval for any activity directly related to the activity described herein?
☐ Yes
☒ No

15. Remarks

16. Estimated project cost = $197,018.25

17. Contractor
Name: TBD License #: _____
Address: _____
_____ Zip Code: _____
Phone #: _____ Fax #: _____
e-mail _____

18. Application is hereby made for a permit or permit(s) to authorize the activities described herein. I agree to provide any additional information/data that may be necessary to provide reasonable assurance or evidence to show that the proposed project will comply with the applicable State Water Quality Standards or other environmental protection standards both during construction and after the project is completed. I also agree to provide entry to the project site for inspectors from the environmental protection agencies for the purpose of making the preliminary analyses of the site and monitoring permitted works, if permit is granted. I certify that I am familiar with the information contained in this application and that to the best of my knowledge and belief, such information is true, complete and accurate. I further certify that I possess the authority to undertake the proposed activities.

Signature of owner [signature]
Ysela Llort, Assistant County Manager,
Date Miami-Dade County 3/31/09

19. To obtain proprietary authorization for work on state-owned submerged lands, please include an additional copy of the following:
☐ 8½ x 11 Location Map
☐ 8½ x 11 Project Drawing
☐ Copy of Application

SUBSCRIBED AND SWORN TO ME THIS 31 DAY OF March, 20 09, BY Ysela Llort.
☑ PERSONALLY KNOWN ☐ PRODUCED IDENTIFICATION (PLEASE CHECK ONE)
TYPE OF ID PRODUCED _____ [signature] NOTARY PUBLIC

Notary Public State of Florida
John M White
My Commission DD771424
Expires 04/20/2012

Attachment B

Affidavit of Ownership and Hold Harmless Agreement

Affidavit of Ownership
and Hold Harmless Agreement

Personally Appeared Before Me, Ysela Llort, Assistant County Manager Miami-Dade County, that
(Property owner, lessee or Corporate Officer if owner is a corporation)
undersigned authority, and hereby swears and affirms under oath as follows:

1. That your affiant is the record owner or lessee of that certain property* more fully described as:

   The shoreline and submerged lands adjacent to Hobie Beach and Virginia Key Beach on the south side of Rickenbacker Causeway.

   * may attach legal description from public records or plat book or a copy of the warranty deed

2. That your affiant is also the riparian and/or littoral owner or lessee of that certain property that is the subject matter of Application No. CC06-196 for a Class I permit under and pursuant to Section 24-48 of the Code of Miami-Dade County to construct or engage in the following activity:

Class I Permit Application by Miami-Dade County to Renourish and Stabilize Hobie Beach and Virginia Key Beach Through the Dredging of Rock and Sediment and the Removal of Concrete Debris, the Placement of 23,337 Cubic Yards of Riprap Boulders and Sand for Multiple Renourishment Events, and the Repair of Three (3) Stormwater Outfalls to Improve Drainage, and to Authorize the Time of Completion of Work of the Subject Permit for a Period of Ten (10) Years.

3. That your affiant hereby swears and affirms its ownership or leasehold in the above noted property necessary for the work noted in Paragraph 2 above, and hereby agrees to: defend same and hold the County harmless from any and all liability, claims and damages of any nature whatsoever occurring, including or arising as a result of your affiant not having the proper title to all lands or proper leasehold to all lands that are the subject matter of this application.

STATE OF FLORIDA
COUNTY OF DADE

Ysela Llort
Owner/Applicant

Ysela Llort, Assistant County Manager, Miami-Dade County

BEFORE ME, the undersigned authority, personally appeared Ysela Llort, who, after being duly sworn, deposes and says that he/she has read the foregoing, and that the statements contained therein are true and correct to the best of his/her knowledge and belief.

Sworn to and subscribed before me this 31 (day) of March (month), 2007 (year).

Notary Signature John M White

Notary Seal Notary Public State of Florida John M White My Commission DD771424 Expires 04/20/2012

Attachment C

Owner/Agent Letter, Engineer Certification Letter, and Project Sketches

MIAMI-DADE COUNTY

Carlos Alvarez, Mayor

County Executive Office
County Manager
111 NW 1st Street • Suite 2910
Miami, Florida 33128-1994
T 305-375-5311 F 305-375-1262

miamidade.gov

PERMIT APPLICANT/AUTHORIZED AGENT STATEMENT

Note: Please insert applicable information

Date: March 23, 2009

To:
Miami-Dade County DERM
Class I Permitting Program
701 NW 1st Court
Miami, FL 33136

Re: Class I Permit Application Number CC06-196 by Miami-Dade County to Renourish and Stabilize Hobie Beach and Virginia Key Beach Through the Dredging of Rock and Sediment and the Removal of Concrete Debris, the Placement of 23,337 Cubic Yards of Riprap Boulders and Sand for Multiple Renourishment Events, and the Repair of Three (3) Stormwater Outfalls to Improve Drainage, and to Authorize the Time of Completion of Work of the Subject Permit for a Period of Ten (10) Years.

By the attached Class I Standard Form Permit Application with supporting documents, I, Ysela Llort, Assistant County Manager, Miami-Dade County, am the permit applicant/applicant's authorized agent (circle one) and hereby request permission to perform the following: to Renourish and Stabilize Hobie Beach and Virginia Key Beach Through the Dredging of Rock and Sediment and the Removal of Concrete Debris, the Placement of 23,337 Cubic Yards of Riprap Boulders and Sand for Multiple Renourishment Events, and the Repair of Three (3) Stormwater Outfalls to Improve Drainage, and to Authorize the Time of Completion of Work of the Subject Permit for a Period of Ten (10) Years. I understand that a Miami-Dade County Class I Standard Form Permit is required to perform this work.

If approval is granted for the proposed work by the Board of County Commissioners, complete and detailed plans and calculations of the proposed work shall be prepared by an engineer registered/licensed in the State of Florida in accordance with the minimum requirements of Chapter 24 of the Code of Miami-Dade County, Florida. Said plans and calculations shall be subject to the review and approval of the Department of Environmental Resources Management. The permit applicant will secure the services of an engineer registered/licensed in the State of Florida to conduct inspections throughout the construction period, and said engineer shall prepare all required drawings of record. In the event that the proposed work which is the subject of this Class I Permit application involves the cutting or trimming of a mangrove tree(s), a detailed plan of the proposed cutting or trimming shall be prepared by a licensed landscape architect and submitted to the Department for review and approval, and the permit applicant will secure the services of a licensed landscape architect to supervise the trimming or cutting.

Respectfully submitted,

Ysela Llort
Miami-Dade County, Assistant County Manager
or

_____
(Authorized Agent's name), Authorized Agent

COASTAL SYSTEMS INTERNATIONAL, INC.
464 South Dixie Highway • Coral Gables, Florida 33146
Tel: 305-661-3655 • Fax: 305-661-1914
www.coastalsystemsint.com

March 20, 2009

Miami-Dade County DERM
Class I Permitting Program
701 NW 1st Court
Miami, Florida 33136

RE: CLASS I STANDARD FORM PERMIT APPLICATION NUMBER CC06-196, CLASS I PERMIT APPLICATION BY MIAMI-DADE COUNTY TO RENOURISH AND STABILIZE HOBIE BEACH AND VIRGINIA KEY BEACH THROUGH THE DREDGING OF ROCK AND SEDIMENT AND THE REMOVAL OF CONCRETE DEBRIS, THE PLACEMENT OF 23,337 CUBIC YARDS OF RIPRAP BOULDERS AND SAND FOR MULTIPLE RENOURISHMENT EVENTS, AND THE REPAIR OF THREE (3) STORMWATER OUTFALLS TO IMPROVE DRAINAGE, AND TO AUTHORIZE THE TIME OF COMPLETION OF WORK OF THE SUBJECT PERMIT FOR A PERIOD OF TEN (10) YEARS.

Ladies and Gentlemen:

This letter will certify that I am an engineer registered/licensed in the State of Florida, qualified by education and experience in the area of construction, and that to the best of my knowledge and belief, the proposed work does not violate any laws of the State of Florida or any provision of the Code of Miami Dade County which may be applicable, that diligence and recognized standard practices of the engineering profession have been exercised in the engineer's design process for the proposed work, and in my opinion based upon my knowledge and belief, the following will not occur:

a. Harmful obstruction or undesirable alteration of the natural flow of the water within the area of the proposed work.

b. Harmful or increased erosion, shoaling of channels or stagnant areas of water. (Not applicable to class IV permits).

c. Material injury to adjacent property.

d. Adverse environmental impacts from changes in water quality or quantity. (Applicable to class IV permits only).

Further, I have been be retained by the applicant to provide inspections throughout the construction period and to prepare a set of reproducible record prints of drawings showing changes made during the construction process based upon the marked-up prints, drawings, and other data furnished by the contractor to me.

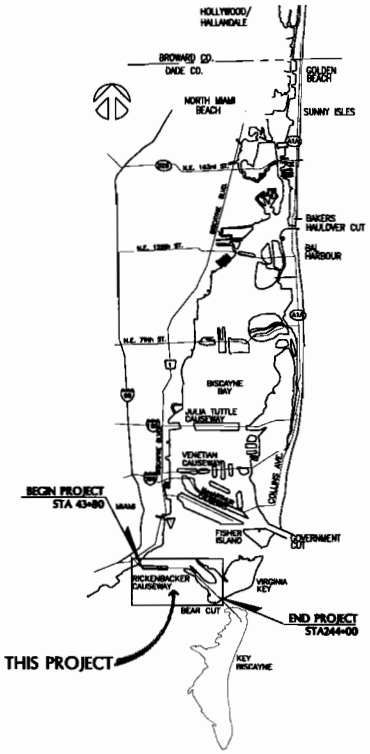
Sincerely,
Coastal Systems International, Inc.
FL EB #7087

Timothy K. Blankenship, P.E.
FL Reg. 55910

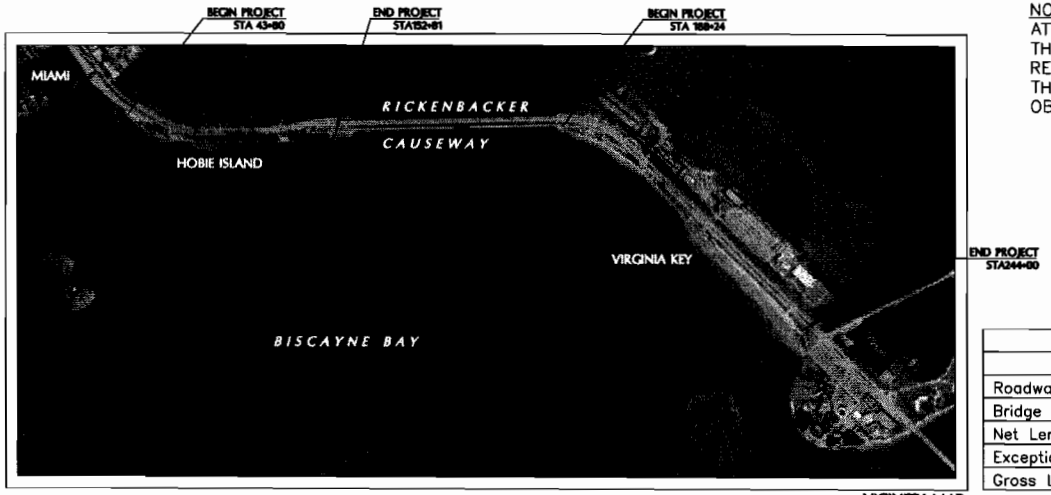
PLANS FOR PROPOSED IMPROVEMENTS
OF
RICKENBACKER CAUSEWAY SHORELINE AND ROADWAY PROTECTION

(FORMERLY RICKENBACKER CAUSEWAY RECREATIONAL FACILITY)

ON HOBIE ISLAND AND VIRGINIA KEY
MIAMI-DADE COUNTY PROJECT NO. 651014
FROM: STA. 43+80 TO: STA. 244+00



LOCATION MAP



VICINITY MAP

NOTE:
ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

LENGTH OF JOB		
	LIN. FT.	MILES
Roadway	9,163.23	1.74
Bridge	N/A	–
Net Length of Job	9163.23	1.74
Exceptions	0	–
Gross Length of Job	9163.23	1.74

PREPARED FOR

MIAMI-DADE

MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT
HIGHWAY DIVISION

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND ARE GOVERNED BY THE MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT STANDARDS AND SPECIFICATIONS PARTS 1, 2 AND 3. THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS. THE FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS, AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AS AMENDED BY CONTRACT DOCUMENTS.

Call 48 hours before you dig
It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

PREPARED BY

COASTAL SYSTEMS INTERNATIONAL
Coastal, Environmental Civil Engineering and Management
FL EB #7087
Tel: 305/661-3655
464 S. Dixie Hwy.
Coral Gables, FL 33146

ENGINEER OF RECORD:

T.K. BLANKENSHIP
FLORIDA REGISTRATION P.E. No. 55910

APPROVED _____ DIRECTOR OF PUBLIC WORKS
RECOMMENDED _____ ASSISTANT DIRECTOR
SUBMITTED _____ HIGHWAY DIVISION

PROPOSED	CHECK
DESIGN	DRAWN
DATE	SHEET 1 OF 120

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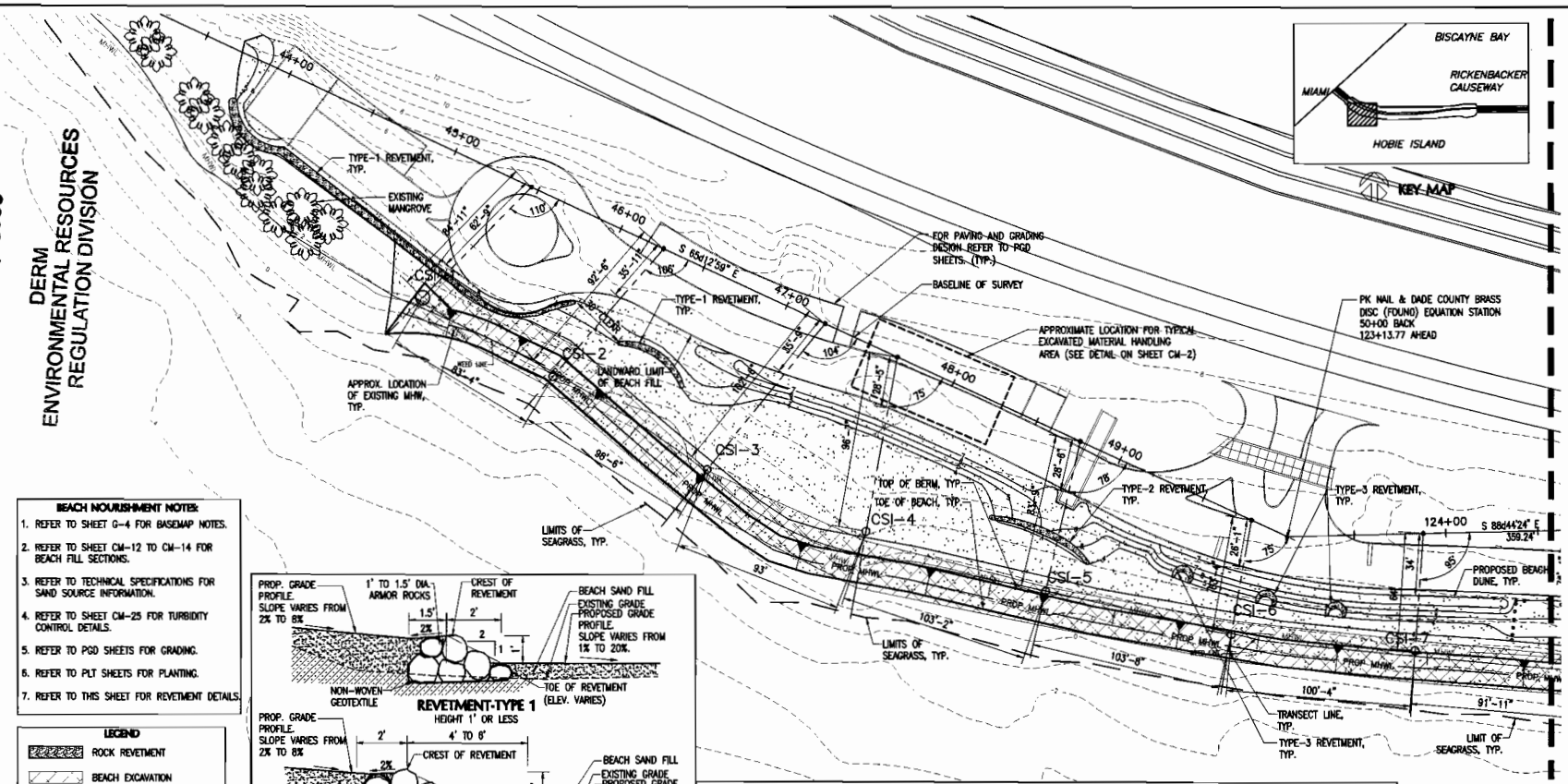


BEACH NOURISHMENT NOTES:

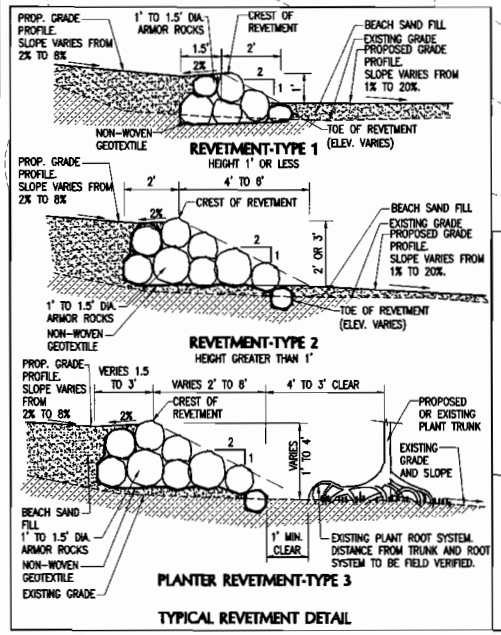
1. REFER TO SHEET G-4 FOR BASEMAP NOTES.
2. REFER TO SHEET CM-12 TO CM-14 FOR BEACH FILL SECTIONS.
3. REFER TO TECHNICAL SPECIFICATIONS FOR SAND SOURCE INFORMATION.
4. REFER TO SHEET CM-25 FOR TURBIDITY CONTROL DETAILS.
5. REFER TO PGD SHEETS FOR GRADING.
6. REFER TO PLT SHEETS FOR PLANTING.
7. REFER TO THIS SHEET FOR REVETMENT DETAILS.

LEGEND

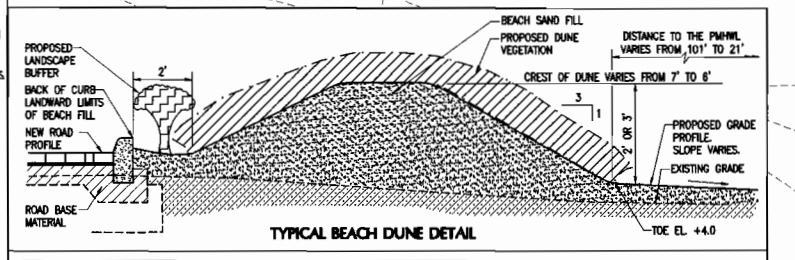
- ROCK REVETMENT
- BEACH EXCAVATION
- BEACH FILL
- CSI-43 — CSI MONUMENT
- SEAGRASS LIMIT (SEPT. 2007)
- PROP MHWL — PREDICTED CONSTRUCTION TEMPLATE MHWL
- MHWL — EXIST. MEAN HIGH WATER LINE
- TRANSECT LINE
- EXISTING CONTOUR
- DIRECTION OF SLOPE

COORDINATE TABLE

MONUMENT	EASTING	NORTHING	STATION
CSI-1	919453.1	514257.8	45+46'
CSI-2	919524.6	514214.9	46+26'
CSI-3	919608.9	514163.9	47+23'
CSI-4	919695.8	514130.7	47+66'
CSI-5	919793.7	514096.1	48+76'
CSI-6	919894.6	514074.4	49+79'
CSI-7	919994.6	514065.6	123+88'



TYPICAL REVETMENT DETAIL



TYPICAL BEACH DUNE DETAIL

REVETMENT PLANTER FILL PLACEMENT NOTES:

1. EDGE OF MANGROVE PLANTER SHALL BE STAKED BY THE OWNER PRIOR TO THE FILL PLACEMENT.
2. THE EDGE OF THE PLANTER SHALL BE PLACED WITH A MINIMUM OF A 1-FOOT BUFFER FROM ANY ROOT SYSTEMS.
3. THE REVETMENT SHALL BE CONSTRUCTED SLOPING AWAY FROM THE BUFFER TO PROTECT AND NOT DISTURB THE EXISTING MANGROVES.
4. THE REVETMENT SHALL BE CONSTRUCTED IN LAYERS IN CONJUNCTION WITH THE BEACH FILL TO REACH THE FINAL DESIGN GRADE ELEVATION THEREBY PREVENTING ANY FILL FROM IMPACTING THE MANGROVES AND ASSOCIATED ROOT SYSTEMS.

15 0 30
SCALE IN FEET
1" = 30'

NOTE:
ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV	DESCRIPTION	BY
02-02-09	-	DERM CLASS I PERMIT	

MIAMI-DADE
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MARIANO CORAL
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Coral Gables, FL 33146

RICKENBACKER CAUSEWAY RECREATIONAL FACILITY

BEACH FILL PLAN - HOBIE BEACH
MONUMENT CSI-1 - CSI-7

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BUNNINGHAM
FL REG. 55910

SCALE 1" = 30'
JOB: 224500
DATE 11/03/08
DRAWN: SV/VC

CM-1
24 OF 134 SHEETS

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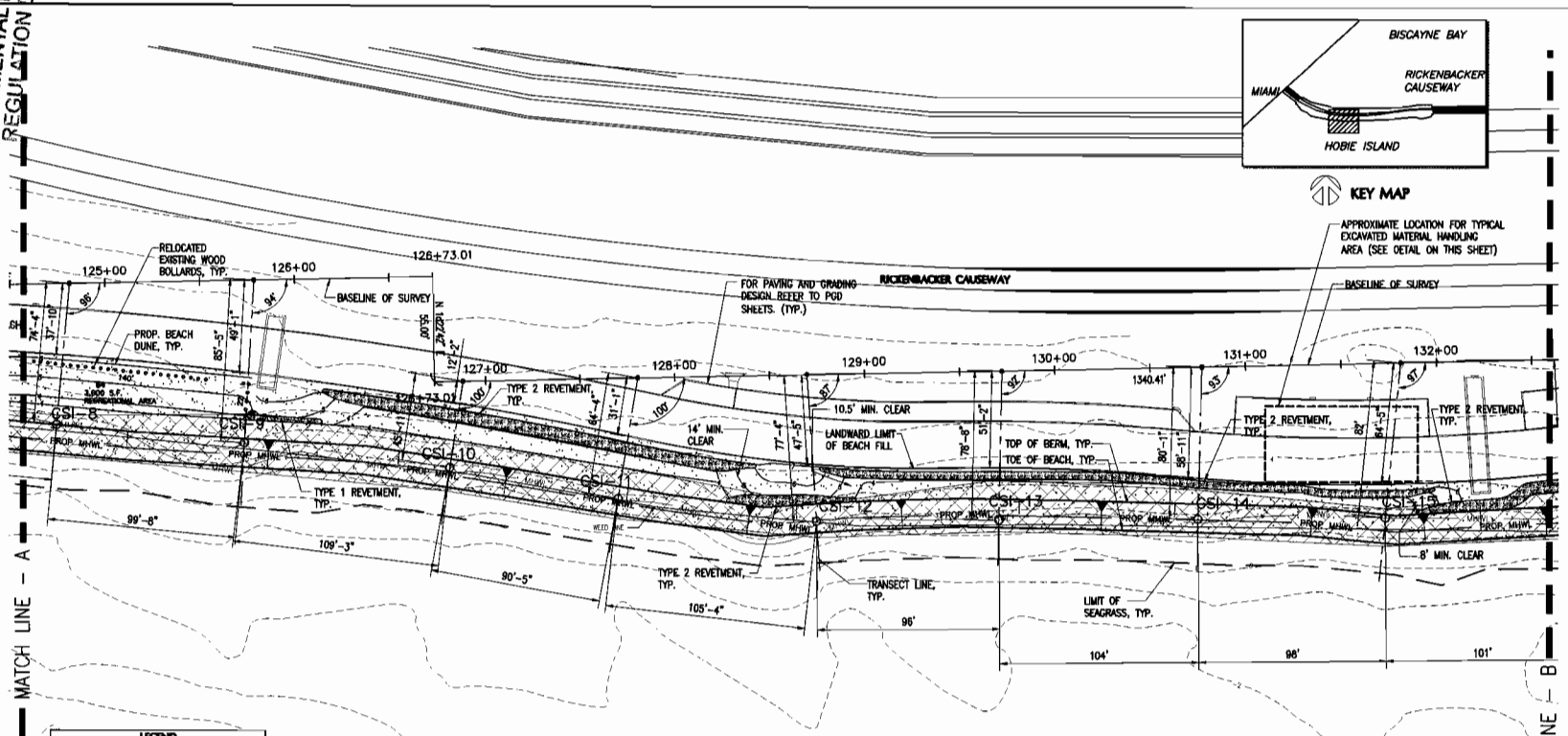


KEY MAP

LEGEND

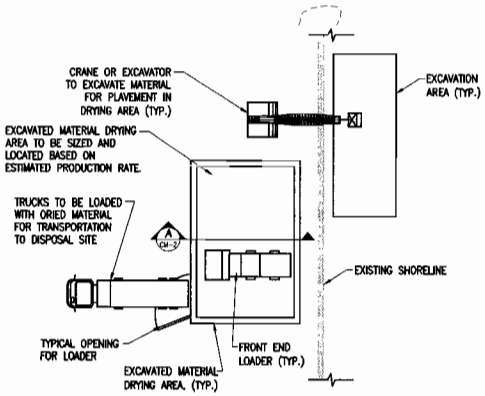
- ROCK REVETMENT
- BEACH EXCAVATION
- BEACH FILL
- CSI-43 CSI MONUMENT
- SEAGRASS LIMIT (SEPT. 2007)
- PROP MHWL — PREDICTED CONSTRUCTION TEMPLATE MHWL
- MHWL — EXIST. MEAN HIGH WATER LINE
- TRANSECT LINE
- EXISTING CONTOUR
- DIRECTION OF SLOPE

COORDINATE TABLE

MONUMENT	EASTING	NORTHING	STATION
CSI-8	920086.1	514057.5	124+82'
CSI-9	920185.3	514048.3	125+79'
CSI-10	920293.8	514035.8	126+88'
CSI-11	920381.5	514019.8	127+81'
CSI-12	920487.5	514007.9	128+70'
CSI-13	920583.3	514008.7	129+72'
CSI-14	920687.7	514009.8	130+77'
CSI-15	920785.5	514010.3	131+81'

BEACH NOURISHMENT NOTES:

1. REFER TO SHEET G-4 FOR BASEMAP NOTES.
2. REFER TO SHEET CM-12 TO CM-14 FOR BEACH FILL SECTIONS.
3. REFER TO TECHNICAL SPECIFICATIONS FOR SAND SOURCE INFORMATION.
4. REFER TO SHEET CM-25 FOR TURBIDITY CONTROL DETAILS.
5. REFER TO PGD SHEETS FOR GRADING.
6. REFER TO PLT SHEETS FOR PLANTING.
7. REFER TO SHEET CM-1 FOR REVETMENT DETAILS.



1 EXCAVATED MATERIAL HANDLING AREA PLAN
NTS

A DREGED MATERIAL HANDLING TYPICAL SECTION
NTS

EXCAVATED MATERIAL DRYING/HANDLING NOTES:

1. EXCAVATED MATERIAL WILL BE PLACED INTO A MATERIAL HANDLING AREA FOR DRYING AND LOADING ONTO DUMP TRUCKS FOR HAULING TO THE PLACEMENT SITE.
2. THE BARRIERS WITH IMPERMIABLE MEMBRANE WILL PREVENT DISCHARGE FROM EXCAVATED MATERIAL PLACED IN THE MARETIAL HANDLING AREAS.
3. IN ADDITION, LIMEROCK MOUNDS MAY ALSO BE CONSTRUCTED TEMPORARILY TO SERVE AS STAGING AND DRYING AREA.

15 0 30
SCALE IN FEET
1" = 30'

NOTE:
ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV	DESCRIPTION
02-02-09	-	DERM CLASS 1 PERMIT

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Water Management
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Coral Gables, FL 33146

RICKENBACKER CAUSEWAY RECREATIONAL FACILITY

BEACH FILL PLAN - HOBIE BEACH MONUMENT CSI-8 - CSI-15

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL. REG. 53610

SCALE: 1" = 30'
JOB: 224500
DATE: 11/03/08
DRAWN: SV/VC

CM-2
25 OF 134 SHEETS

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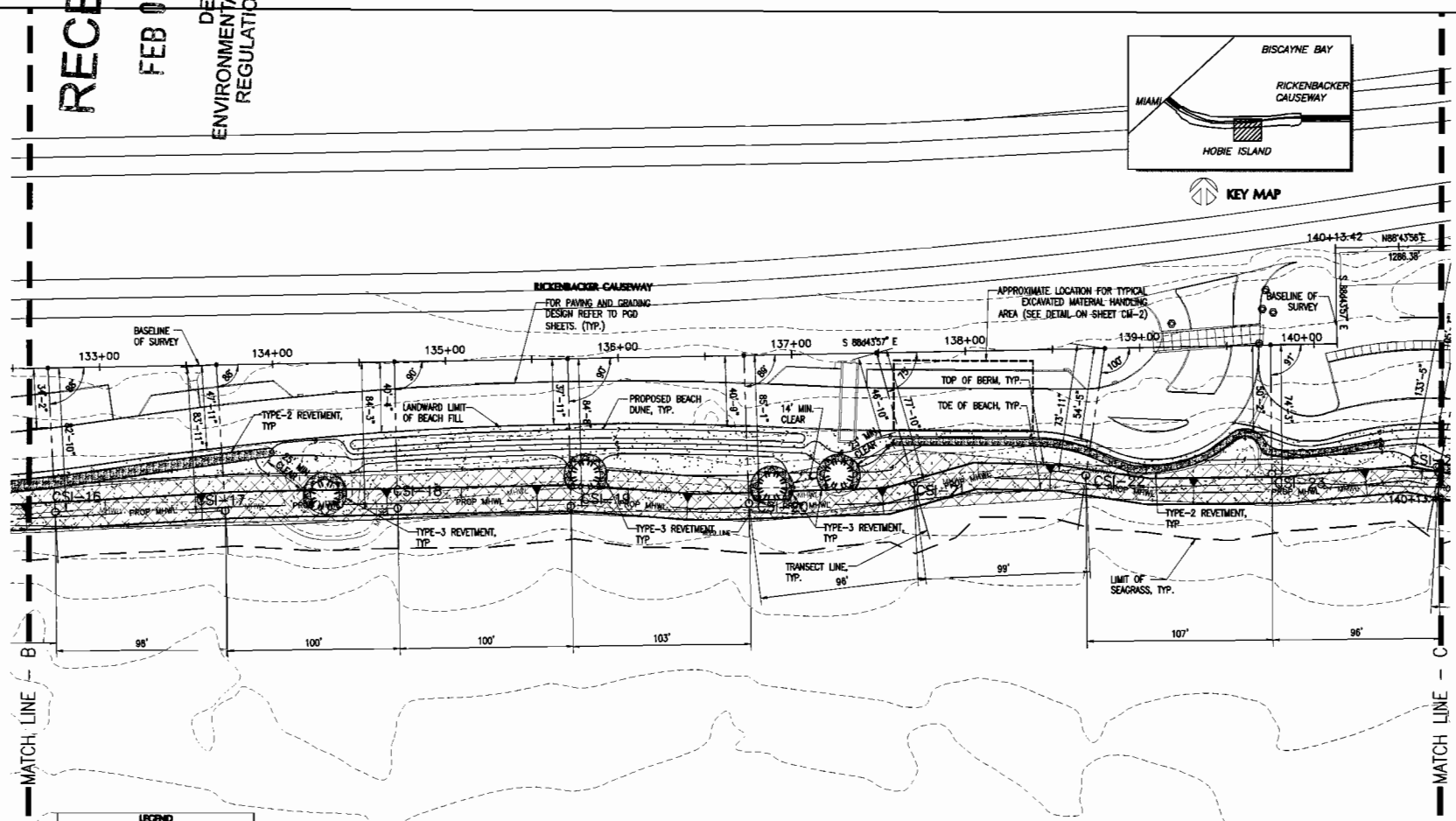

LEGEND

- ROCK REVETMENT
- BEACH EXCAVATION
- BEACH FILL
- CSI-43 CSI MONUMENT
- SEAGRASS LIMIT (SEPT. 2007)
- PROP MHWL — PREDICTED CONSTRUCTION TEMPLATE MHWL
- MHWL — EXIST. MEAN HIGH WATER LINE
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- EXISTING CONTOUR
- DIRECTION OF SLOPE

COORDINATE TABLE

MONUMENT	EASTING	NORTHING	STATION
CSI-16	920887.0	514011.2	132+70'
CSI-17	920985.3	514012.3	133+68'
CSI-18	921084.9	514014.1	134+70'
CSI-19	921185.2	514015.9	135+71'
CSI-20	921287.9	514017.8	136+73'
CSI-21	921382.9	514029.7	137+49'
CSI-22	921481.6	514034.2	138+80'
CSI-23	921588.2	514035.2	139+75'
CSI-24	921684.1	514036.1	140+98'

BEACH NOURISHMENT NOTES:

1. REFER TO SHEET G-4 FOR BASEMAP NOTES.
2. REFER TO SHEET CM-12 TO CM-14 FOR BEACH FILL SECTIONS.
3. REFER TO TECHNICAL SPECIFICATIONS FOR SAND SOURCE INFORMATION.
4. REFER TO SHEET CM-25 FOR TURBIDITY CONTROL DETAILS.
5. REFER TO PGD SHEETS FOR GRADING.
6. REFER TO PLT SHEETS FOR PLANTING.
7. REFER TO SHEET CM-1 FOR REVETMENT DETAILS.

15 0 30
SCALE IN FEET
1" = 30'

NOTE:
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and Management
FL EB #7087
Tel: 305/669-3655
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Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
BEACH FILL PLAN - HOBIE BEACH
MONUMENT CSI-16 - CSI-23

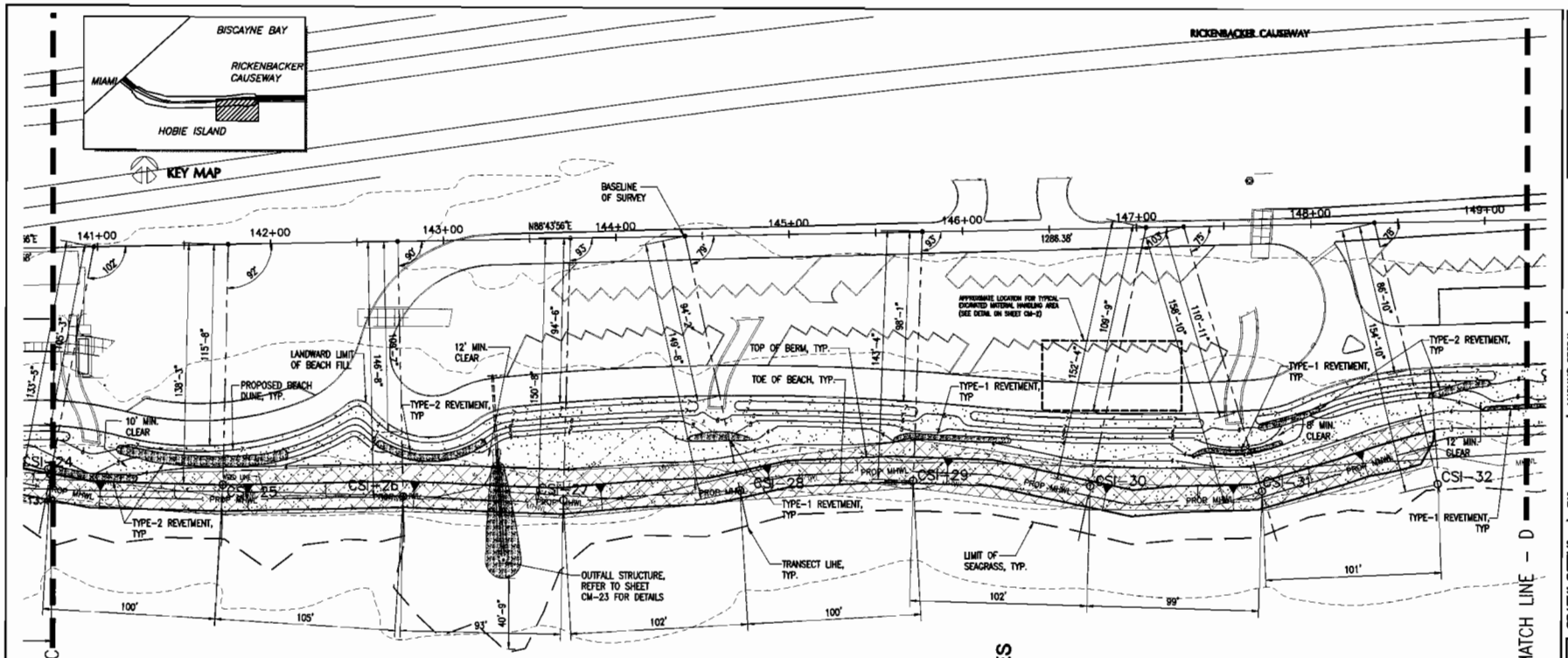
DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENGRIP
FL REG. 55910

SCALE: 1" = 30'
JOB: 224500
DATE: 11/03/08
DRAWN: SV/VC

CM-3
26 OF 134 SHEETS

20

FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-1-CM-4.dwg



BEACH NOURISHMENT NOTES:

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2. REFER TO SHEET CM-12 TO CM-14 FOR BEACH FILL SECTIONS.
3. REFER TO TECHNICAL SPECIFICATIONS FOR SAND SOURCE INFORMATION.
4. REFER TO SHEET CM-25 FOR TURBIDITY CONTROL DETAILS.
5. REFER TO PGD SHEETS FOR GRADING.
6. REFER TO PLT SHEETS FOR PLANTING.
7. REFER TO SHEET CM-1 FOR REVETMENT DETAILS.

COORDINATE TABLE

MONUMENT	EASTING	NORTHING	STATION
CSI-25	921783.8	514031.9	141+75'
CSI-26	921887.8	514024.4	142+73'
CSI-27	921980.9	514022.6	143+73'
CSI-28	922083.1	514028.6	144+40'
CSI-29	922182.8	514034.5	145+76'
CSI-30	922284.7	514031.7	147+05'
CSI-31	922383.2	514028.9	147+27'
CSI-32	922484.1	514033.1	148+36'

LEGEND

- ROCK REVETMENT
- BEACH EXCAVATION
- BEACH FILL
- CSI-43 CSI MONUMENT
- SEAGRASS LIMIT (SEPT. 2007)
- PROP MHWL PREDICTED CONSTRUCTION TEMPLATE MHWL
- MHWL EXIST. MEAN HIGH WATER LINE
- TRANSECT LINE
- EXISTING CONTOUR
- DIRECTION OF SLOPE

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REGULATION DIVISION

15 0 30
SCALE IN FEET
1" = 30'

NOTE:
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and Management
FL EB #7087
Tel: 305/461-3655
464 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
BEACH FILL PLAN - HOBIE BEACH
MONUMENT CSI-24 - CSI-32

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T. K. BLANKENSHIP
FL. REG. 55910

SCALE: 1" = 30'
JOB: 224500
DATE: 11/03/08
DRAWN: SV/VC

CM-4
27 OF 134 SHEETS

21

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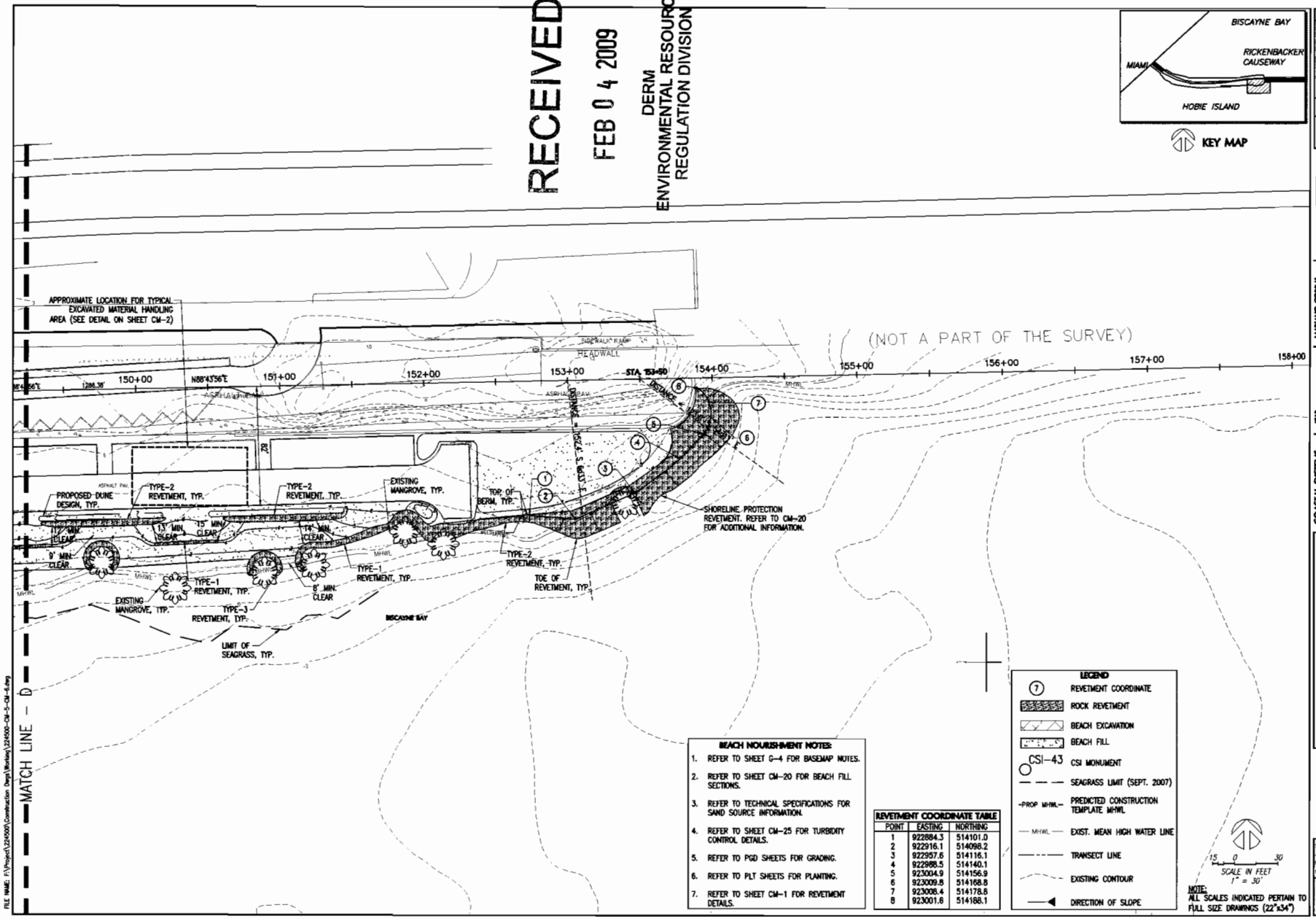

BEACH NOURISHMENT NOTES:

1. REFER TO SHEET G-4 FOR BASEMAP NOTES.
2. REFER TO SHEET CM-20 FOR BEACH FILL SECTIONS.
3. REFER TO TECHNICAL SPECIFICATIONS FOR SAND SOURCE INFORMATION.
4. REFER TO SHEET CM-25 FOR TURBIDITY CONTROL DETAILS.
5. REFER TO PGD SHEETS FOR GRADING.
6. REFER TO PLT SHEETS FOR PLANTING.
7. REFER TO SHEET CM-1 FOR REVETMENT DETAILS.

REVETMENT COORDINATE TABLE

POINT	EASTING	NORTHING
1	922884.3	514101.0
2	922916.1	514098.2
3	922957.6	514116.1
4	922988.5	514140.1
5	923004.9	514156.9
6	923009.8	514168.8
7	923008.4	514178.8
8	923001.6	514188.1

LEGEND

- (7) REVETMENT COORDINATE
- ROCK REVETMENT
- BEACH EXCAVATION
- BEACH FILL
- CSI-43 CSI MONUMENT
- SEAGRASS LIMIT (SEPT. 2007)
- -PROP MHWL- PREDICTED CONSTRUCTION TEMPLATE MHWL
- MHWL EXIST. MEAN HIGH WATER LINE
- TRANSECT LINE
- EXISTING CONTOUR
- DIRECTION OF SLOPE

15 0 30
SCALE IN FEET
1" = 30'

NOTE:
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MIAMI-DADE
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Coral Gables, FL 33146

RICKENBACKER CAUSEWAY RECREATIONAL FACILITY

BEACH FILL PLAN - HOBIE BEACH

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BUNKENSHIP
FL. REG. 56918

SCALE: 1" = XX'
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-5
28 OF 134 SHEETS

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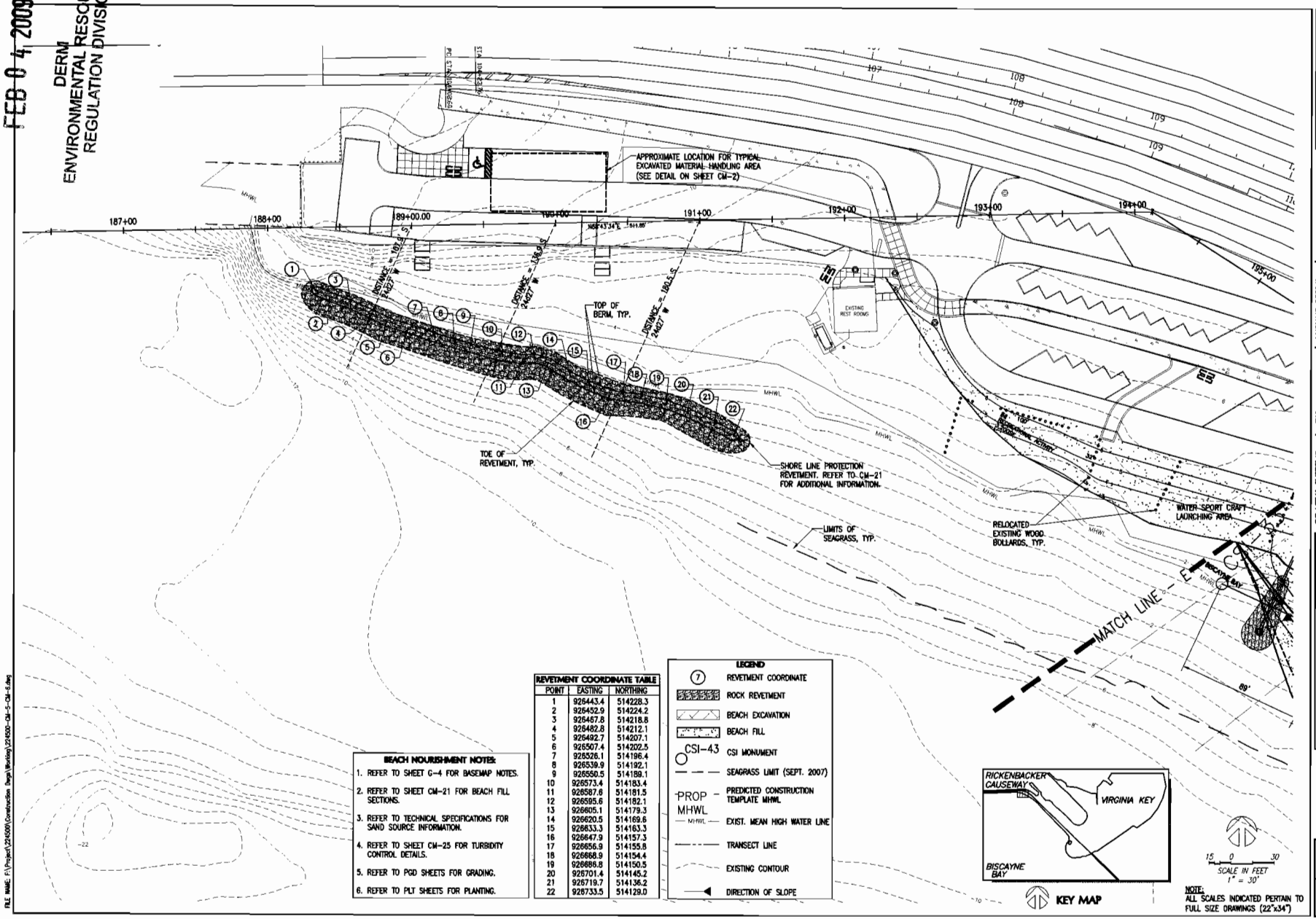

BEACH NOURISHMENT NOTES:

1. REFER TO SHEET G-4 FOR BASEMAP NOTES.
2. REFER TO SHEET CM-21 FOR BEACH FILL SECTIONS.
3. REFER TO TECHNICAL SPECIFICATIONS FOR SAND SOURCE INFORMATION.
4. REFER TO SHEET CM-25 FOR TURBIDITY CONTROL DETAILS.
5. REFER TO PGD SHEETS FOR GRADING.
6. REFER TO PLT SHEETS FOR PLANTING.

REVETMENT COORDINATE TABLE

POINT	EASTING	NORTHING
1	926443.4	514228.3
2	926452.9	514224.2
3	926467.8	514218.8
4	926482.8	514212.1
5	926492.7	514207.1
6	926507.4	514202.5
7	926526.1	514196.4
8	926539.9	514192.1
9	926550.5	514189.1
10	926573.4	514183.4
11	926587.6	514181.5
12	926595.6	514182.1
13	926605.1	514179.3
14	926620.5	514169.6
15	926633.3	514163.3
16	926647.9	514157.3
17	926656.9	514155.8
18	926668.9	514154.4
19	926686.8	514150.5
20	926701.4	514145.2
21	926719.7	514136.2
22	926733.5	514128.0

LEGEND

- (7) REVETMENT COORDINATE
- ROCK REVETMENT
- BEACH EXCAVATION
- BEACH FILL
- CSI-43 CSI MONUMENT
- SEAGRASS LIMIT (SEPT. 2007)
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- TRANSECT LINE
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- DIRECTION OF SLOPE

NOTE:
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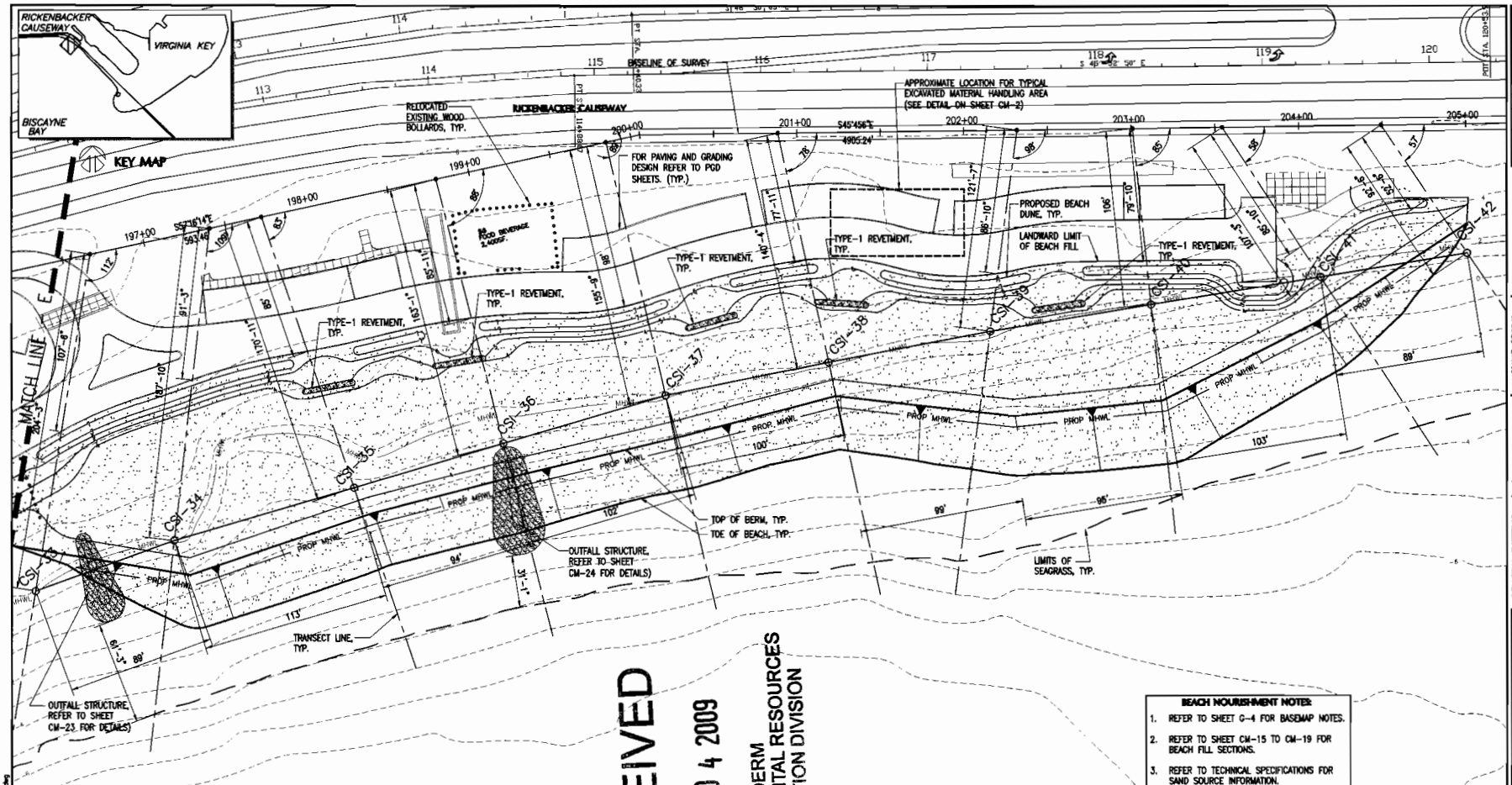
RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
BEACH FILL PLAN - VIRGINIA BEACH

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BURKEDSHIP
FL REG. 59610

SCALE: 1" = XX'
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-6
29 OF 134 SHEETS

23



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LEGEND

- ROCK REVETMENT
- BEACH EXCAVATION
- BEACH FILL
- CSI-43 CSI MONUMENT
- SEAGRASS LIMIT (SEPT. 2007)
- PROP MHWL — PREDICTED CONSTRUCTION TEMPLATE MHWL
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BEACH NOURISHMENT NOTES:

1. REFER TO SHEET G-4 FOR BASEMAP NOTES.
2. REFER TO SHEET CM-15 TO CM-19 FOR BEACH FILL SECTIONS.
3. REFER TO TECHNICAL SPECIFICATIONS FOR SAND SOURCE INFORMATION.
4. REFER TO SHEET CM-25 FOR TURBIDITY CONTROL DETAILS.
5. REFER TO PGD SHEETS FOR GRADING.
6. REFER TO PLT SHEETS FOR PLANTING.
7. REFER TO SHEET CM-1 FOR REVETMENT DETAILS.

COORDINATE TABLE

MONUMENT	EASTING	NORTHING	STATION
CSI-33	927070.2	514027.7	196+67'
CSI-34	927150.7	513990.5	197+40'
CSI-35	927249.7	513936.4	197+72'
CSI-36	927332.1	513691.5	198+80'
CSI-37	927421.5	513842.7	199+85'
CSI-38	927504.9	513787.6	200+88'
CSI-39	927586.4	513732.2	202+32'
CSI-40	927665.6	513675.5	203+01'
CSI-41	927748.8	513615.6	203+54'
CSI-42	927821.0	513563.5	204+49'

15 0 30
SCALE IN FEET
1" = 30'

NOTE:
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DATE	REV	DESCRIPTION	BY
02-02-09		DERM CLASS 1 PERMIT	

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COASTAL SYSTEMS INTERNATIONAL, INC
Coastal, Environmental
Civil Engineering
and Management
FL EB #7087
Tel: 305/663-3655
464 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
BEACH FILL PLAN - VIRGINIA BEACH
MONUMEN CSI-33 - CSI-42

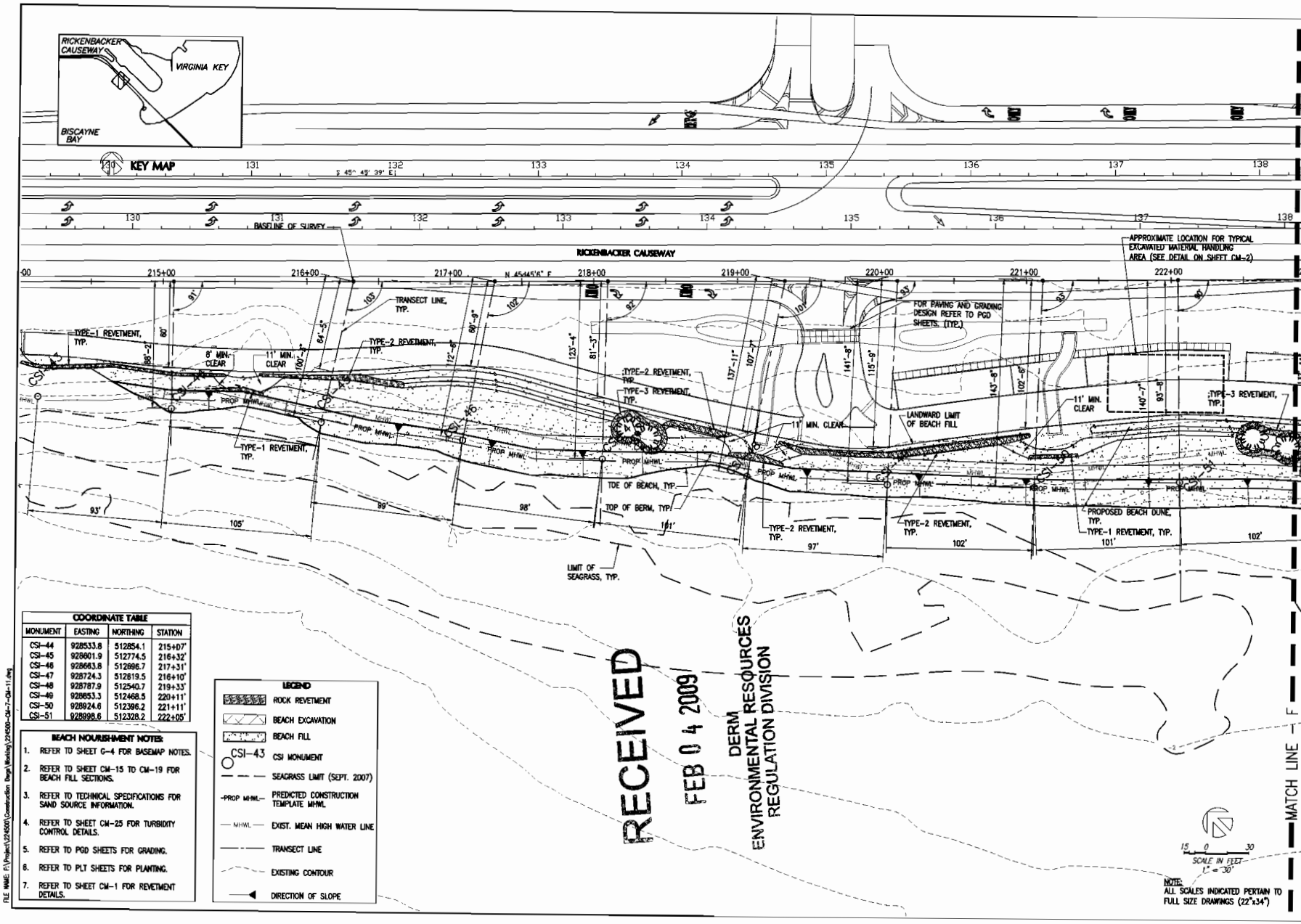
DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL REG. 55910

SCALE: 1" = 30'
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-7
30 OF 134 SHEETS

24

FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-7-CM-11.dwg



COORDINATE TABLE			
MONUMENT	EASTING	NORTHING	STATION
CSI-44	928533.8	512854.1	215+07'
CSI-45	928601.9	512774.5	216+32'
CSI-46	928663.8	512696.7	217+31'
CSI-47	928724.3	512619.5	216+10'
CSI-48	928787.9	512540.7	219+33'
CSI-49	928853.3	512468.5	220+11'
CSI-50	928924.6	512396.2	221+11'
CSI-51	928998.6	512328.2	222+05'

BEACH NOURISHMENT NOTES:

1. REFER TO SHEET G-4 FOR BASEMAP NOTES.
2. REFER TO SHEET CM-15 TO CM-19 FOR BEACH FILL SECTIONS.
3. REFER TO TECHNICAL SPECIFICATIONS FOR SAND SOURCE INFORMATION.
4. REFER TO SHEET CM-25 FOR TURBIDITY CONTROL DETAILS.
5. REFER TO PGD SHEETS FOR GRADING.
6. REFER TO PLT SHEETS FOR PLANTING.
7. REFER TO SHEET CM-1 FOR REVETMENT DETAILS.

LEGEND

- ROCK REVETMENT
- BEACH EXCAVATION
- BEACH FILL
- CSI-43 — CSI MONUMENT
- SEAGRASS LIMIT (SEPT. 2007)
- -PROP MHWL- — PREDICTED CONSTRUCTION TEMPLATE MHWL
- MHWL — EXIST. MEAN HIGH WATER LINE
- TRANSECT LINE
- EXISTING CONTOUR
- DIRECTION OF SLOPE

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FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-7-CM-11.dwg

DATE	REV	DESCRIPTION	BY
02-02-09	-	DERM CLASS I PERMIT	

MIAMI-DADE
Miami-Dade County Public Works Dept.
Stephen P. Clark CENTER
111 NW 1 ST
Miami, FL 33128

MARIANO CORRAL
Landscape Architecture
Golf Course Design
Land Planning
Urban Design
LA 0000834
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3801 SW 85 Court
Miami, FL 33165

CM
Civil Work, Inc.
Consulting Engineers
CA 07528
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81 N.W. 42nd Avenue
Suite 200
Miami, FL 33126

COASTAL SYSTEMS INTERNATIONAL, INC
Coastal, Environmental Civil Engineering and Management
FL LB 6700
tel: 305-443-3455
146 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
BEACH FILL PLAN - VIRGINIA BEACH
MONUMENT CSI-43 - CSI-51

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL REG 55910

SCALE: 1" = 30'
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-8
31 OF 134 SHEETS

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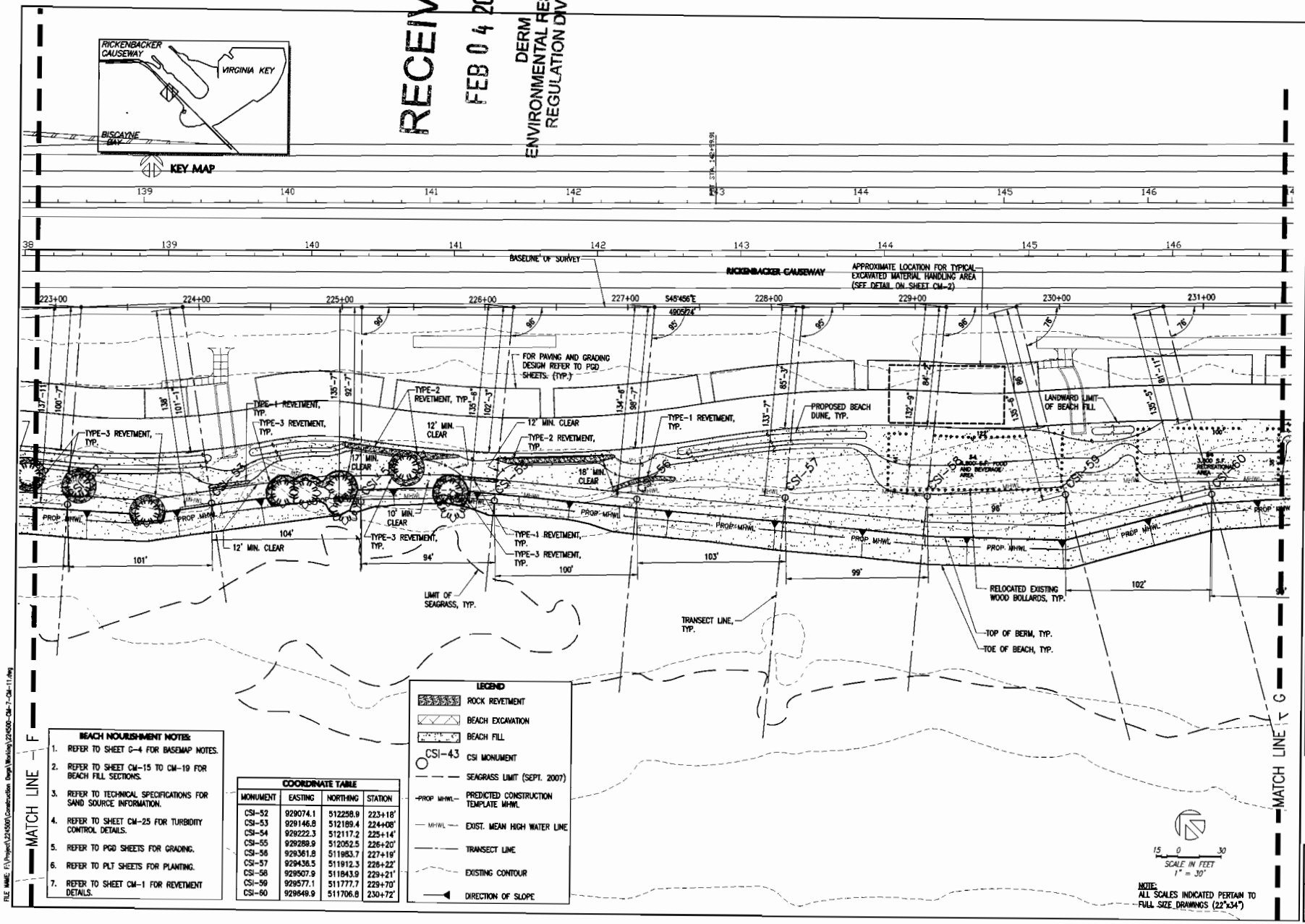

BEACH NOURISHMENT NOTES:

1. REFER TO SHEET C-4 FOR BASEMAP NOTES.
2. REFER TO SHEET CM-15 TO CM-19 FOR BEACH FILL SECTIONS.
3. REFER TO TECHNICAL SPECIFICATIONS FOR SAND SOURCE INFORMATION.
4. REFER TO SHEET CM-25 FOR TURBIDITY CONTROL DETAILS.
5. REFER TO PGD SHEETS FOR GRADING.
6. REFER TO PLT SHEETS FOR PLANTING.
7. REFER TO SHEET CM-1 FOR REVETMENT DETAILS.

COORDINATE TABLE

MONUMENT	EASTING	NORTHING	STATION
CSI-52	929074.1	512258.9	223+18'
CSI-53	929146.8	512189.4	224+08'
CSI-54	929222.3	512117.2	225+14'
CSI-55	929289.9	512052.5	226+20'
CSI-56	929361.8	511983.7	227+19'
CSI-57	929436.5	511912.3	228+22'
CSI-58	929507.9	511843.9	229+21'
CSI-59	929577.1	511777.7	229+70'
CSI-60	929649.9	511706.8	230+72'

LEGEND

- ROCK REVETMENT
- BEACH EXCAVATION
- BEACH FILL
- CSI-43 CSI MONUMENT
- SEAGRASS LIMIT (SEPT. 2007)
- PROP MHWL — PREDICTED CONSTRUCTION TEMPLATE MHWL
- MHWL — EXIST. MEAN HIGH WATER LINE
- TRANSECT LINE
- EXISTING CONTOUR
- DIRECTION OF SLOPE

NOTE:
ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV	DESCRIPTION	BY
02-02-09	-	DERM CLASS I PERMIT	

MIAMI-DADE
Miami-Dade County Public Works Dept.
Stephen P. Clark CENTER
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MARIANO CORRAL
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COASTAL SYSTEMS INTERNATIONAL, INC
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and Management
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464 S. Dixie Hwy.
Coral Gables, FL 33146

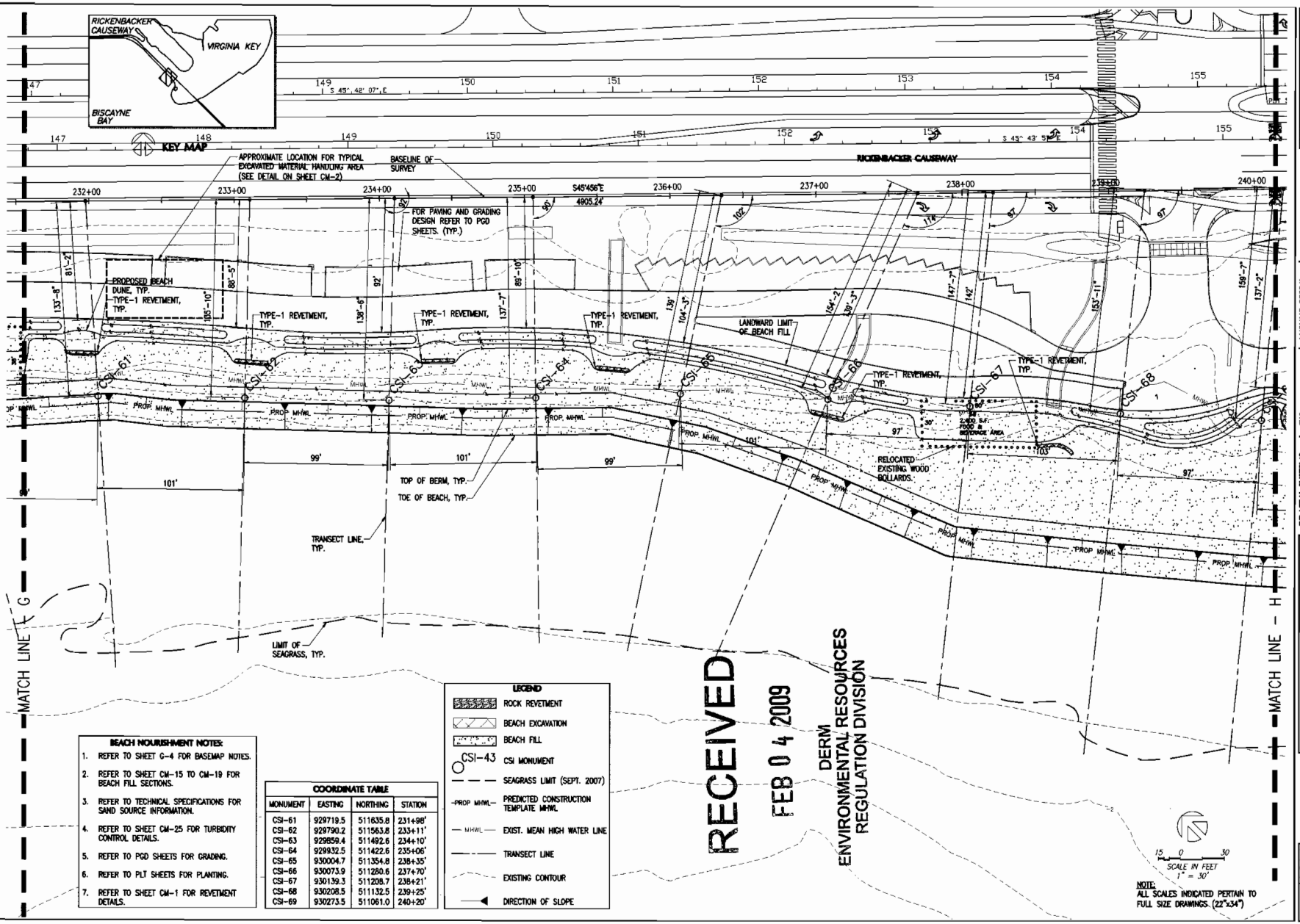
RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
BEACH FILL PLAN - VIRGINIA BEACH
MONUMENT CSI-52 - CSI-60

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL REG. 55510

SCALE: 1" =30'
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-9
32 OF 134 SHEETS

FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-7-CM-11.dwg



BEACH NOURISHMENT NOTES:

1. REFER TO SHEET G-4 FOR BASEMAP NOTES.
2. REFER TO SHEET CM-15 TO CM-19 FOR BEACH FILL SECTIONS.
3. REFER TO TECHNICAL SPECIFICATIONS FOR SAND SOURCE INFORMATION.
4. REFER TO SHEET CM-25 FOR TURBIDITY CONTROL DETAILS.
5. REFER TO PGD SHEETS FOR GRADING.
6. REFER TO PLT SHEETS FOR PLANTING.
7. REFER TO SHEET CM-1 FOR REVETMENT DETAILS.

COORDINATE TABLE

MONUMENT	EASTING	NORTHING	STATION
CSI-61	929719.5	511635.8	231+98'
CSI-62	929790.2	511563.8	233+11'
CSI-63	929859.4	511492.6	234+10'
CSI-64	929932.5	511422.6	235+06'
CSI-65	930004.7	511354.8	236+35'
CSI-66	930073.9	511280.6	237+70'
CSI-67	930139.3	511208.7	238+21'
CSI-68	930208.5	511132.5	239+25'
CSI-69	930273.5	511061.0	240+20'

LEGEND

- ROCK REVETMENT
- BEACH EXCAVATION
- BEACH FILL
- CSI-43 — CSI MONUMENT
- SEAGRASS LIMIT (SEPT. 2007)
- PROP MHWL — PREDICTED CONSTRUCTION TEMPLATE MHWL
- MHWL — EXIST. MEAN HIGH WATER LINE
- TRANSECT LINE
- EXISTING CONTOUR
- DIRECTION OF SLOPE

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ENVIRONMENTAL RESOURCES REGULATION DIVISION

15 0 30
SCALE IN FEET
1" = 30'

NOTE:
ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS. (22"x34")

DATE	REV	DESCRIPTION	BY
02-02-09	.	DERM CLASS I PERMIT	.

MIAMI-DADE
Miami-Dade County Public Works Dept.
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Coastal, Environmental Civil Engineering and Management
FL EB #7087
Tel: 305/663-3655
464 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
BEACH FILL PLAN - VIRGINIA BEACH MONUMENT CSI-61 - CSI-69

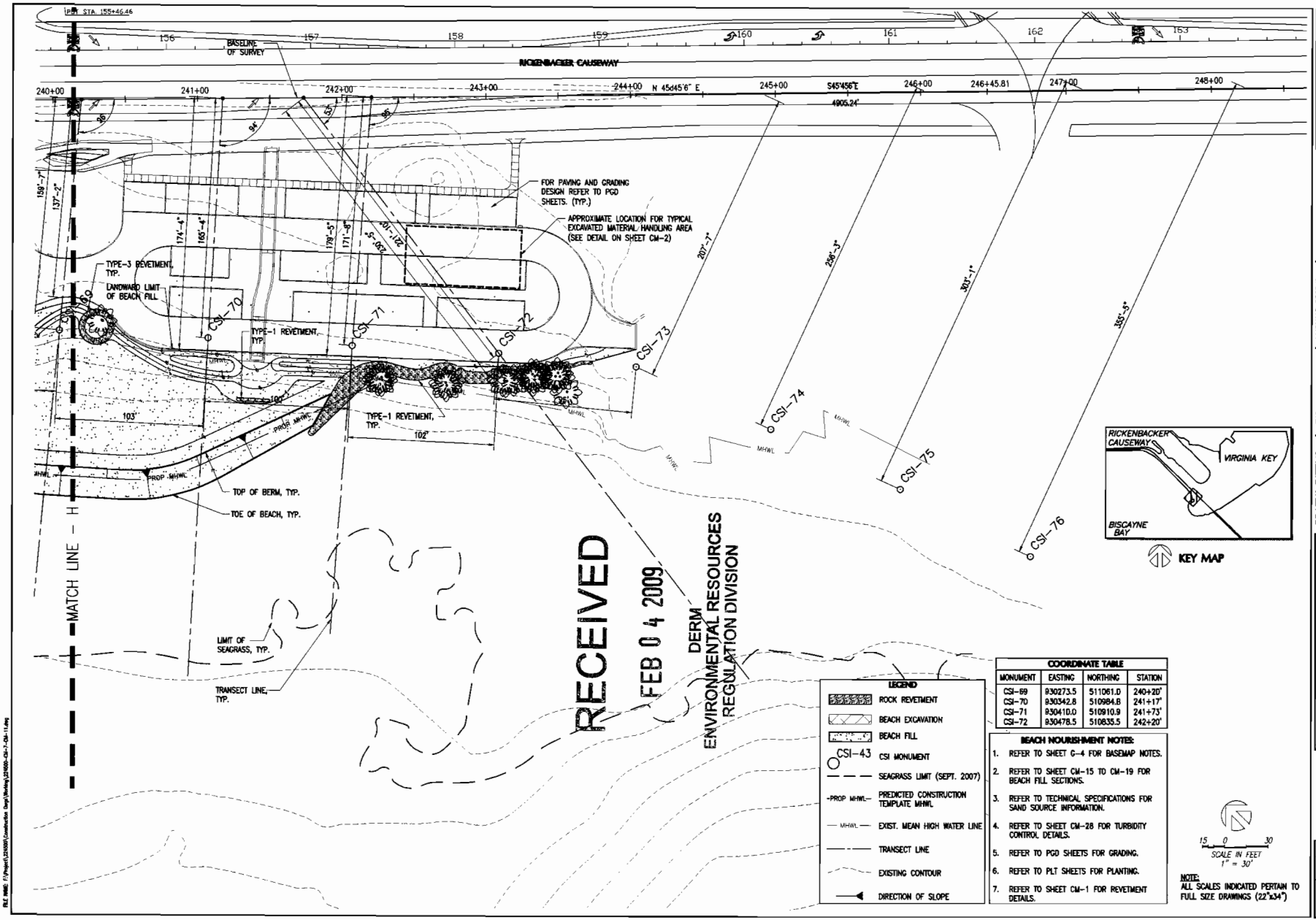
DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL REG. 53510

SCALE: 1" = 30'
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-10
33 OF 134 SHEETS

FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-7-CM-11.dwg

37



COORDINATE TABLE			
MONUMENT	EASTING	NORTHING	STATION
CSI-69	930273.5	511061.0	240+20'
CSI-70	930342.8	510984.8	241+17'
CSI-71	930410.0	510910.9	241+73'
CSI-72	930478.5	510835.5	242+20'

BEACH NOURISHMENT NOTES:

1. REFER TO SHEET G-4 FOR BASEMAP NOTES.
2. REFER TO SHEET CM-15 TO CM-19 FOR BEACH FILL SECTIONS.
3. REFER TO TECHNICAL SPECIFICATIONS FOR SAND SOURCE INFORMATION.
4. REFER TO SHEET CM-28 FOR TURBIDITY CONTROL DETAILS.
5. REFER TO PGD SHEETS FOR GRADING.
6. REFER TO PLT SHEETS FOR PLANTING.
7. REFER TO SHEET CM-1 FOR REVETMENT DETAILS.

NOTE:
ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV.	DESCRIPTION	BY
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MIAMI-DADE
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Urban Design
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tel (305) 553-1262
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Miami, FL 33165

CWI
Civil Works, Inc.
Consulting Engineers
CA 07528
tel 305 - 448 - 5955
10 N.W. 42nd Avenue
Suite 200
Miami, FL 33126

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Coastal, Environmental Civil Engineering and Management
FL LB #7067
tel 305/661-3655
4461 Ponce de Leon Blvd.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
BEACH FILL PLAN - VIRGINIA BEACH
MONUMENT CSI-69 - CSI-76

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANCKENSHIP
FL REG. 16910

SCALE: 1" = 30'
JOB: 224600
DATE: 11/03/08
DRAWN: VC

CM-11

FILE NAME: F:\Project\224600\Construction Dwgs\Working\224600-CSI-7-CSI-11.dwg

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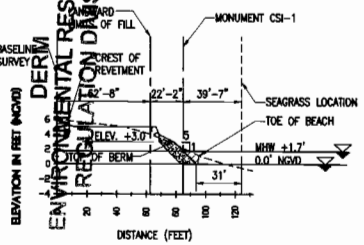
REGULATION DIVISION



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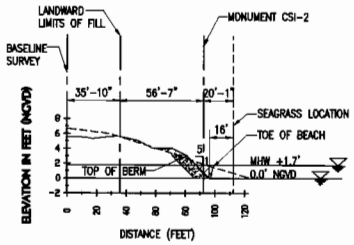
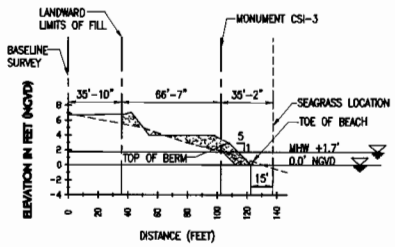
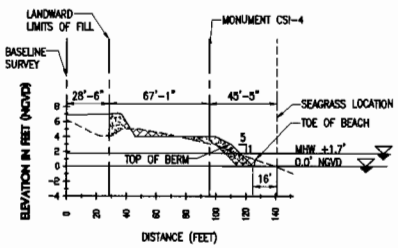


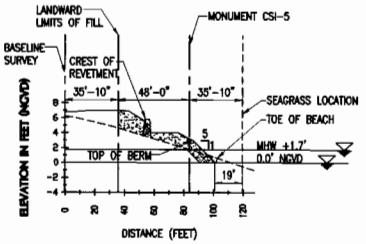
STATION 46+26 (CSI-02)



STATION 47+23 (CSI-03)



STATION 47+66 (CSI-04)



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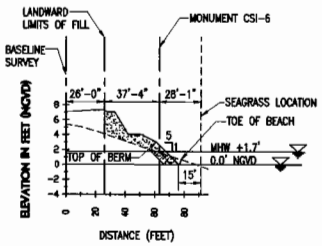

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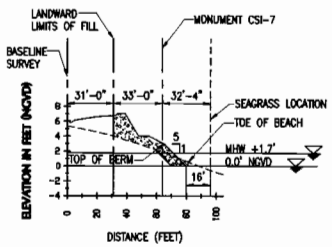
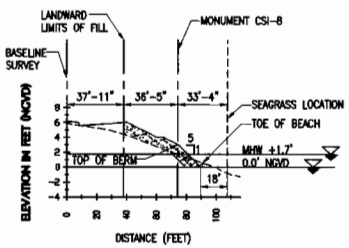


STATION 123+88 (CSI-07)



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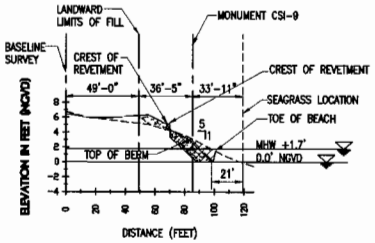

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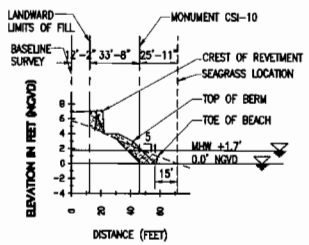

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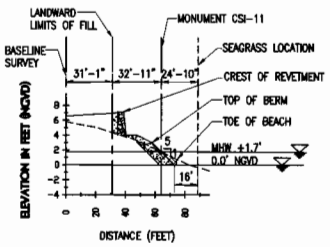
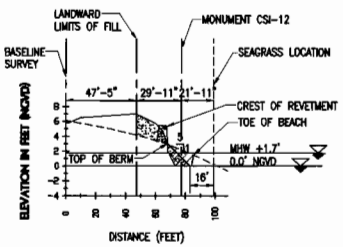


STATION 127+81 (CSI-11)



STATION 128+70 (CSI-12)

LEGEND

- PROPOSED SAND FILL
- AREA TO BE EXCAVATED
- EXIST. GRADE SURVEYED ON JULY-SEPTEMBER 2004.

SCALE IN FEET 1" = 8'

SCALE IN FEET 1" = 40'

NOTE: ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV	DESCRIPTION	BY
02-02-09		DERM CLASS I PERMIT	

MIAMI-DADE
Miami-Dade County Public Works Dept.
Stephen P. Clark CENTER
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Miami, FL 33128

MARIANO CORDAL
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Consulting Engineers
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tel: 305 - 448 - 5955
10 N.W. 42nd Avenue
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Miami, FL 33126

COASTAL SYSTEMS INTERNATIONAL, INC
Coastal, Environmental
Civil Engineering
and Management
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464 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
FILL SECTIONS - HORSE BEACH
MONUMENT CSI-1 - CSI-12

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL. REG. 55818

SCALE: AS SHOWN
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-12

35 OF 134 SHEETS

38

FILE NAME: J:\Project\224500\Construction Docs\Working\224500-CM-12-CM-14.dwg

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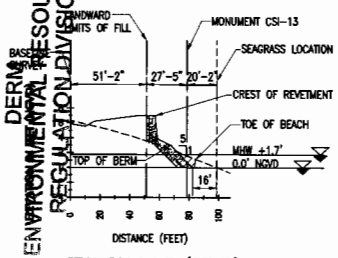
REGULATION DIVISION



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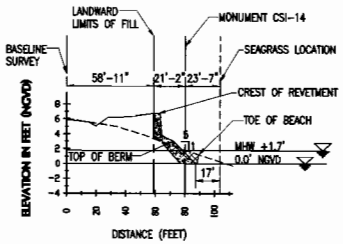

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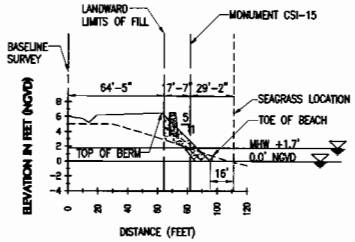
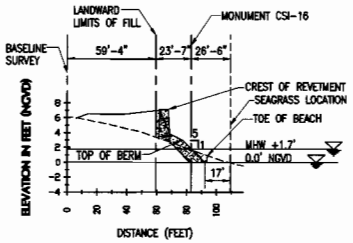
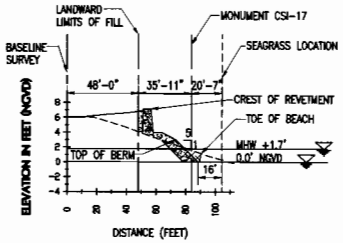


STATION 131+81 (CSI-15)



STATION 132+70 (CSI-16)



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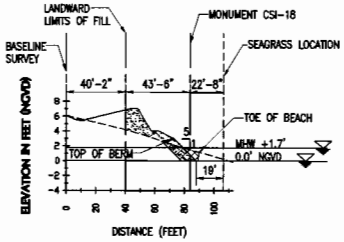

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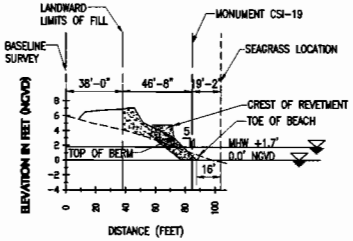

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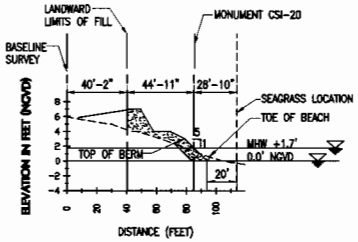
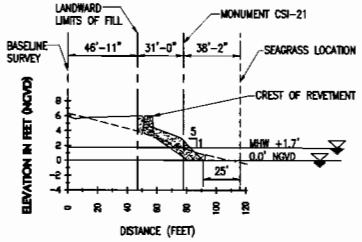


STATION 136+73 (CSI-20)



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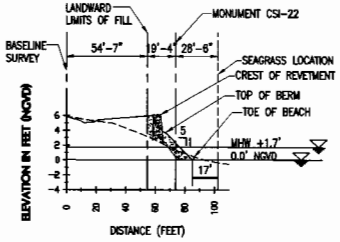

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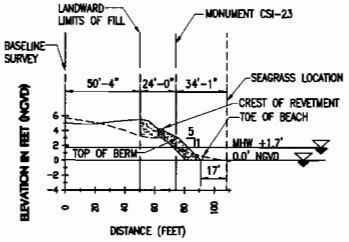
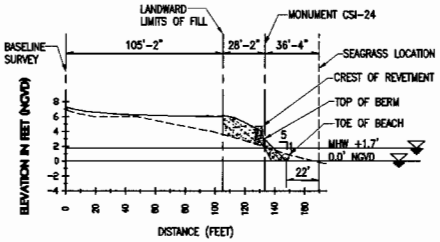


STATION 139+75 (CSI-23)



STATION 140+98 (CSI-24)

LEGEND

- PROPOSED SAND FILL
- AREA TO BE EXCAVATED
- EXIST. GRADE SURVEYED ON JULY-SEPTEMBER 2004.

SCALE IN FEET 1" = 8'

SCALE IN FEET 1" = 40'

NOTE:
ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV.	DESCRIPTION	BY
02-02-09	-	DERM CLASS I PERMIT	

MIAMI-DADE
Miami-Dade County Public Works Dept.
Stephen P. Clark CENTER
111 NW 1 ST
Miami, FL 33128

MARIANO CORDOVA
Civil Engineer Architecture
Coastal Zone Design
Land Planning
Urban Design
LA 0000834
tel. (305) 553-0262
3001 SW 89 Court
Miami, FL 33165

CWI
Civil Works, Inc.
Consulting Engineers
CA 07528
tel 305 - 448 - 5955
10 N.W. 42nd Avenue
San Rafael
Miami, FL 33126

COASTAL SYSTEMS INTERNATIONAL, INC
Coastal, Environmental Civil Engineering and Management
FL LB 27067
tel 305-445-1655
464 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
FILL SECTIONS - HORSE BEACH
MONUMENT CSI-13 - CSI-24

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL REG. 55818

SCALE: AS SHOWN
JOB: 224500
DATE: 11/03/08
DRAWING: VC

CM-13
35 OF 134 SHEETS

30

FILE NAME: F:\Project\224500\Construction Docs\Working\224500-CM-12-CM-13.dwg

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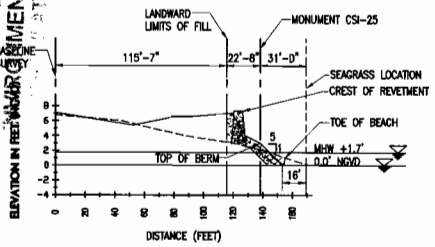
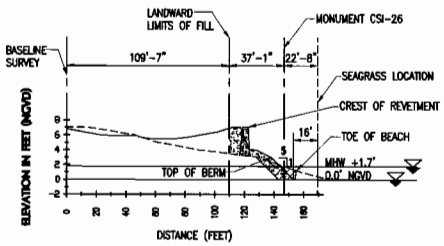
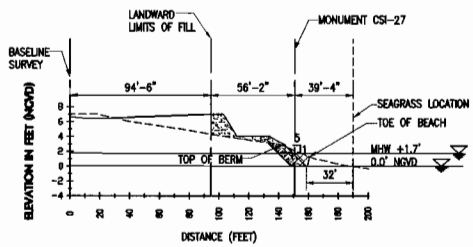
ENVIRONMENTAL RESOURCES
MANAGEMENT DIVISION



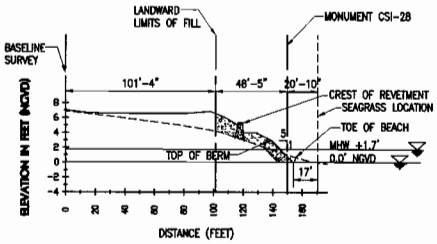
STATION 141+75 (CSI-25)



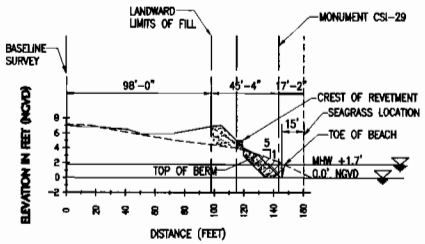
STATION 142+73 (CSI-26)



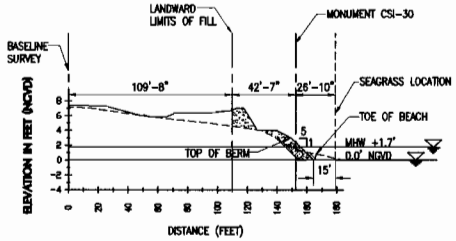
STATION 143+73 (CSI-27)



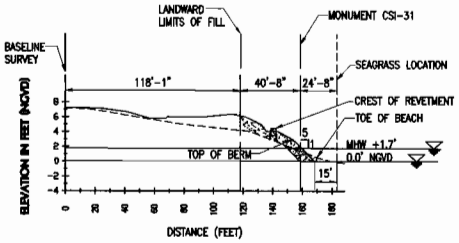
STATION 144+40 (CSI-28)



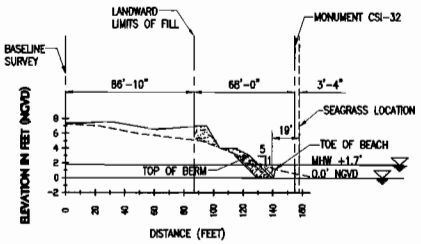
STATION 145+76 (CSI-29)



STATION 147+05 (CSI-30)



STATION 147+27 (CSI-31)



STATION 148+36 (CSI-32)

LEGEND

- PROPOSED SAND FILL
- AREA TO BE EXCAVATED
- EXIST. GRADE SURVEYED ON JULY–SEPTEMBER 2004.

SCALE IN FEET 1" = 8'

SCALE IN FEET 1" = 40'

NOTE: ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	BY	DESCRIPTION	BY
02-02-09		DERM CLASS I PERMIT	

MIAMI-DADE
Miami-Dade County Public Works Dept.
Stephen P. Clark CENTER
111 NW 1 ST
Miami, FL 33128

MARIANO COMBA
Landscape Architecture
Golf Course Design
Land Planning
Urban Design
LA 0000834
tel: (305) 551-1262
3001 SW 99 Court
Miami, FL 33165

CWI
Cal Works, Inc.
Consulting Engineers
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Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
FILL SECTIONS - HOME BEACH
MONUMENT CSI-25 - CSI-32

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL REG. 53410

SCALE: AS SHOWN
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-14
37 OF 134 SHEETS

31

FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-12-CM-14.dwg

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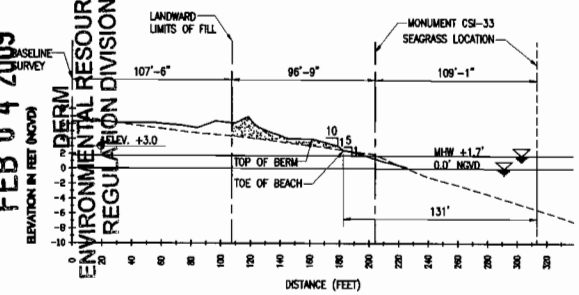
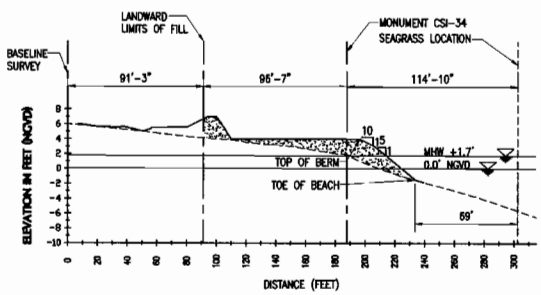
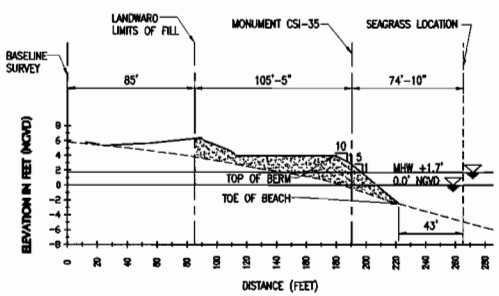
DERM
ENVIRONMENTAL RESOURCES
REGULATION DIVISION



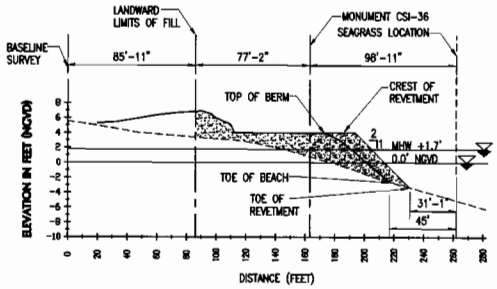
STATION 196+67 (CSI-33)



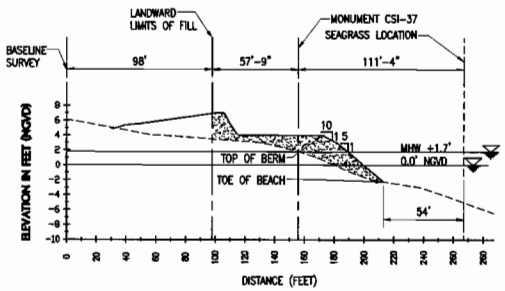
STATION 197+40 (CSI-34)



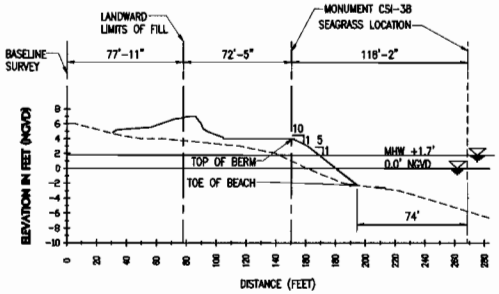
STATION 197+72 (CSI-35)



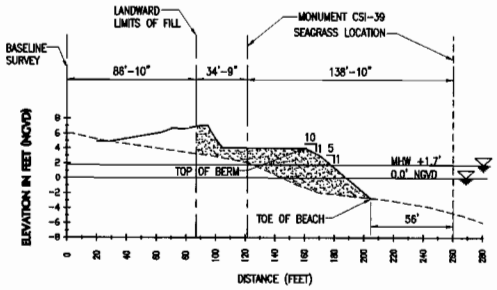
STATION 198+80 (CSI-36)



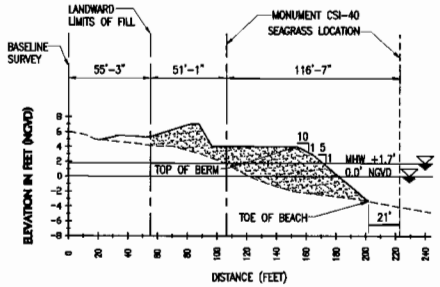
STATION 199+85 (CSI-37)



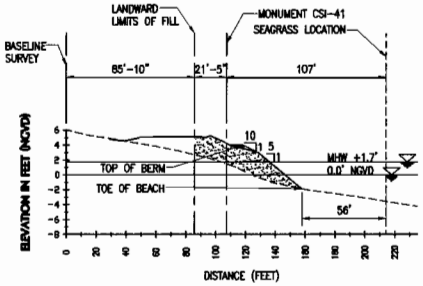
STATION 200+88 (CSI-38)



STATION 202+32 (CSI-39)



STATION 203+01 (CSI-40)



STATION 203+54 (CSI-41)

SCALE IN FEET 1" = 8'

SCALE IN FEET 1" = 40'

LEGEND

PROPOSED SAND FILL

EXISTING GRADE SURVEYED ON JULY-SEPTEMBER 2004.

NOTE: ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV	DESCRIPTION	BY
02-02-09		DERM CLASS I PERMIT	

MIAMI-DADE
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Miami, FL 33128

MARIANO CORRAL
Landscape Architecture
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Land Planning
Urban Design
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3901 NW 79th Court
Miami, FL 33165

CM
Civil Works, Inc.
Consulting Engineers
CA 07528
tel: 305 - 448 - 5955
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Suite 2-B
Miami, FL 33126

COASTAL SYSTEMS INTERNATIONAL, INC
Coastal, Environmental
Civil Engineering
Planning
and Management
FL LB #1907
tel: 305/445-1655
444 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
FILL SECTIONS - VIRGINIA BEACH
MONUMENT CSI-33 - CSI-41

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL REG. 55010

SCALE: AS SHOWN
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-15

32

FILE NAME: F:\Project\224500\Construction Docs\Working\224500-CM-15-CM-19.dwg

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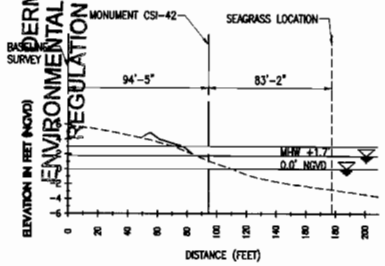
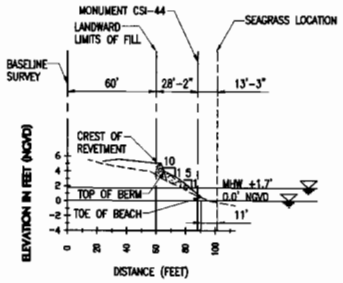
DERM
ENVIRONMENTAL RESOURCES
REGULATION DIVISION



STATION 204+49 (CSI-42)



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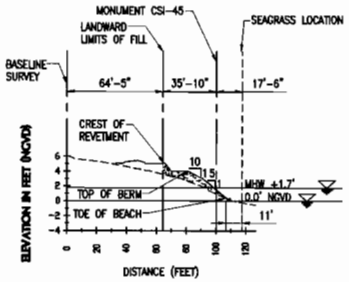
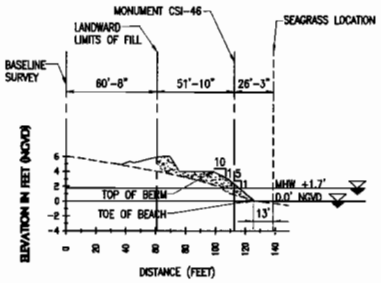
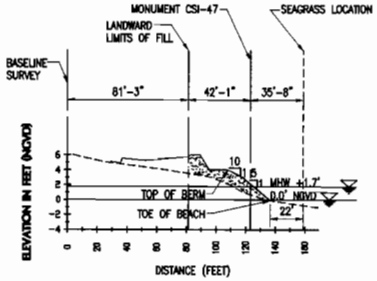


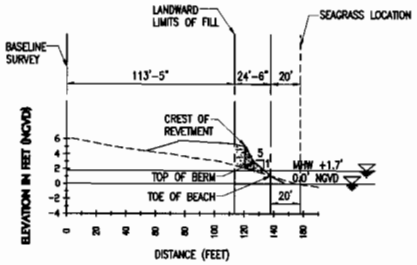
STATION 216+32 (CSI-45)



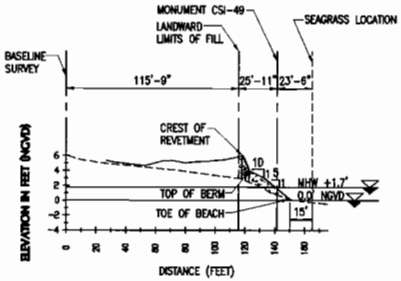
STATION 217+31 (CSI-46)



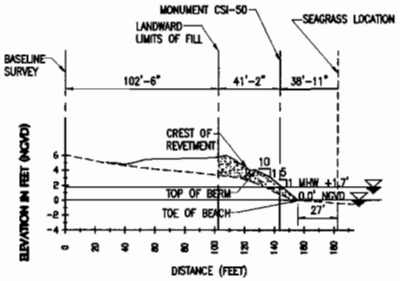
STATION 218+10 (CSI-47)



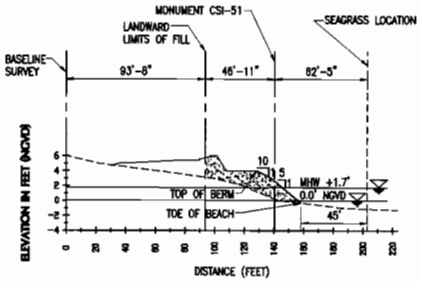
STATION 219+33 (CSI-48)



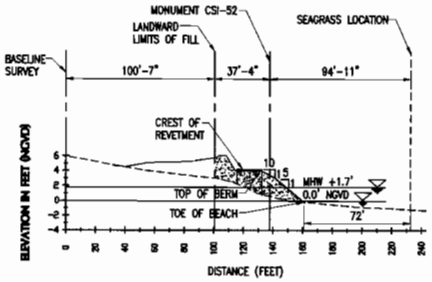
STATION 220+11 (CSI-49)



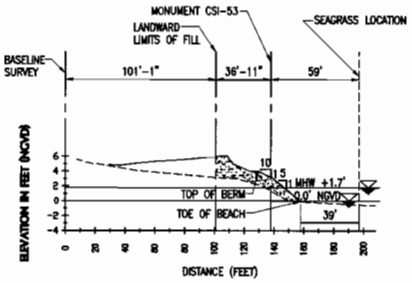
STATION 221+11 (CSI-50)



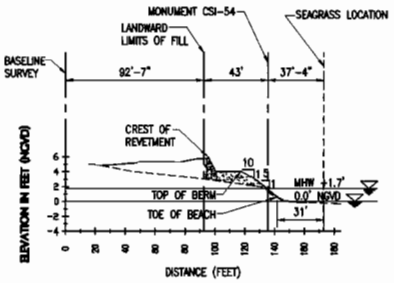
STATION 222+05 (CSI-51)



STATION 223+18 (CSI-52)



STATION 223+88 (CSI-53)



STATION 225+14 (CSI-54)

SCALE IN FEET 1" = 8'

SCALE IN FEET 1" = 40'

LEGEND

- PROPOSED SAND FILL
- EXISTING GRADE SURVEYED ON JULY-SEPTEMBER 2004.

NOTE: ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV	DESCRIPTION	BY
02-02-09		DERM CLASS I PERMIT	

MIAMI-DADE
Miami-Dade County Public Works Dept.
Stephen P. Clark CENTER
111 NW 1 ST
Miami, FL 33128

MARIANO CORBAL
Landscape Architecture
Golf Course Design
Land Planning
Urban Design
LA 0000834
tel: (305) 557-1262
3001 SW 109 Court
Miami, FL 33165

CMI
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Consulting Engineers
CA 07528
tel: 305 - 448 - 5955
70 N.W. 42nd Avenue
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COASTAL SYSTEMS INTERNATIONAL, INC
Coastal, Environmental Consultants and Management
FL EB #7087
Tel: 305/669-3655
464 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
FILL SECTIONS - VIRGINIA BEACH
MONUMENT CSI-42 - CSI-54

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. ELMENSHAP
FL REG. 59410

SCALE: AS SHOWN
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-16

39 OF 134 SHEETS

33

FILE NAME: F:\Projects\224500\Construction_Dwgs\Working\224500-CM-15-CM-19.dwg

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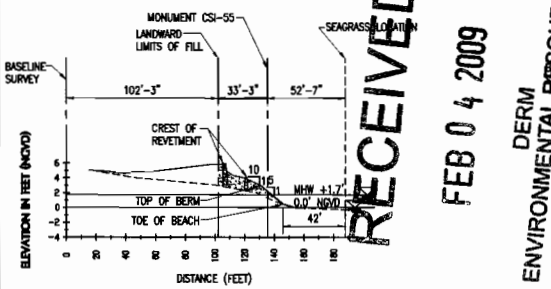
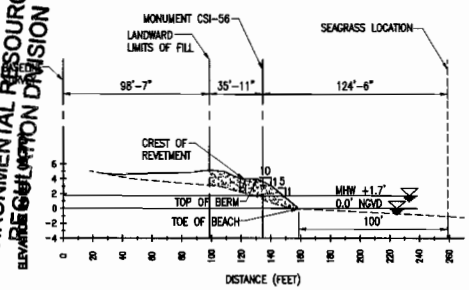
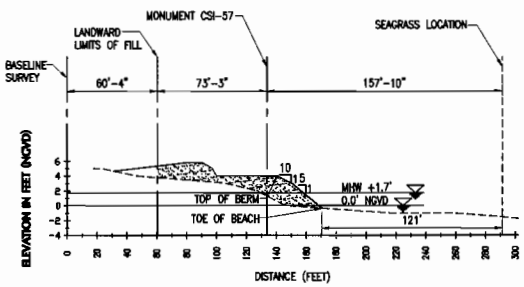
DERM
ENVIRONMENTAL RESOURCES
REGULATION DIVISION



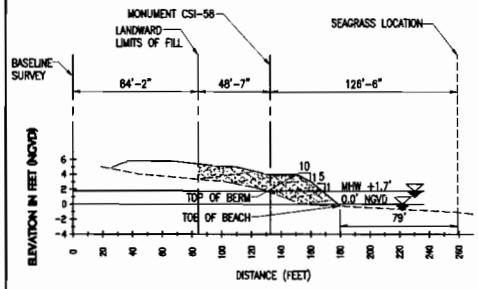
STATION 226+20 (CSI-55)



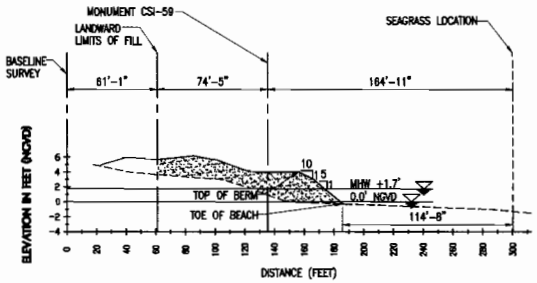
STATION 227+19 (CSI-56)



STATION 228+22 (CSI-57)



STATION 229+21 (CSI-58)



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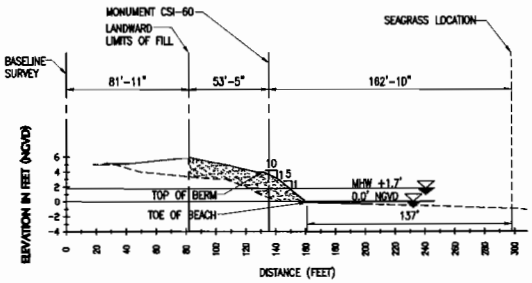
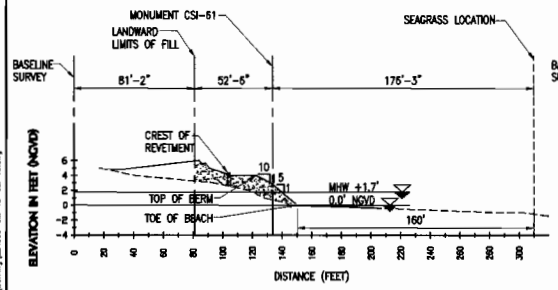
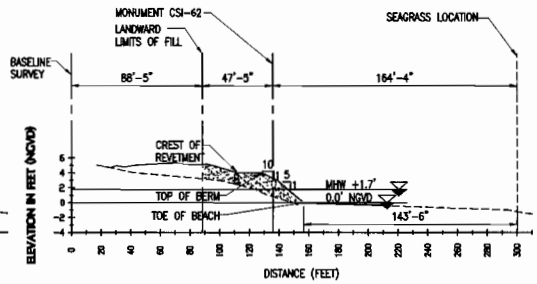


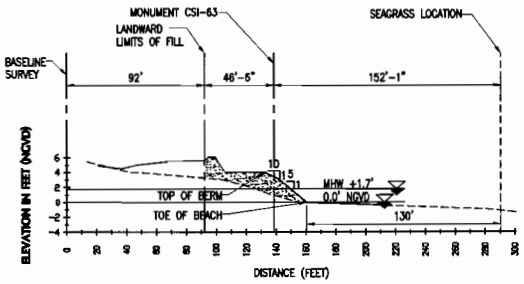
STATION 230+72 (CSI-60)



STATION 231+98 (CSI-61)



STATION 233+11 (CSI-62)



STATION 234+10 (CSI-63)

LEGEND

- PROPOSED SAND FILL
- EXISTING GRADE SURVEYED ON JULY-SEPTEMBER 2004.

SCALE IN FEET 1" = 8'

SCALE IN FEET 1" = 40'

NOTE: ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV	DESCRIPTION
02-02-09		DERM CLASS 1 PERMIT

MIAMI-DADE
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Consulting Engineers
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Coastal, Environmental
Civil Engineering
and Management
FL EB #7087
Tel: 305/663-3655
464 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY RECREATIONAL FACILITY

FILL SECTIONS - VIRGINIA BEACH MONUMENT CSI-55 - CSI-63

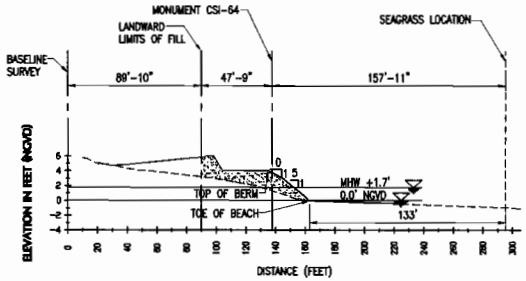
DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL. REG. 55910

SCALE: AS SHOWN
JOB: 224500
DATE: 11/03/08
DRAWN: VC

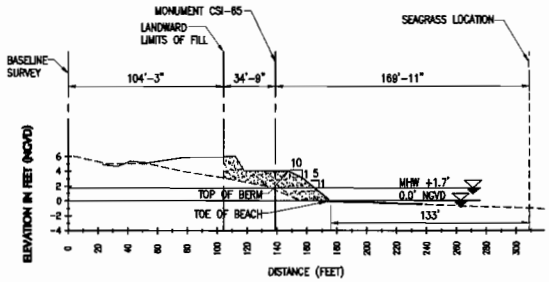
CM-17
40 OF 134 SHEETS

34

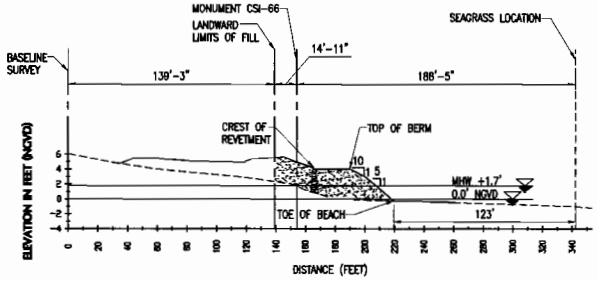
FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-15-CM-19.dwg



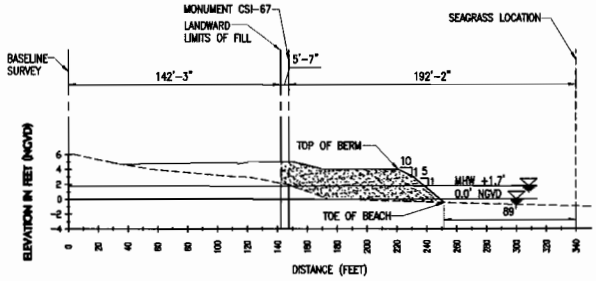
STATION 235+06 (CSI-64)



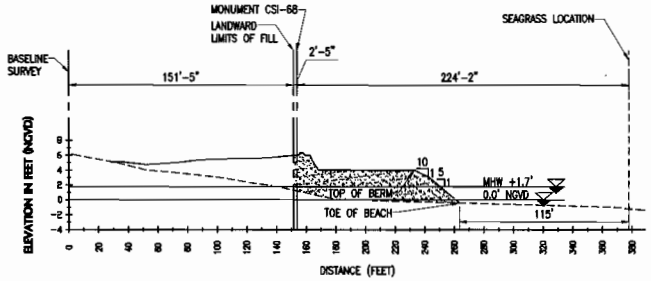
STATION 236+35 (CSI-65)



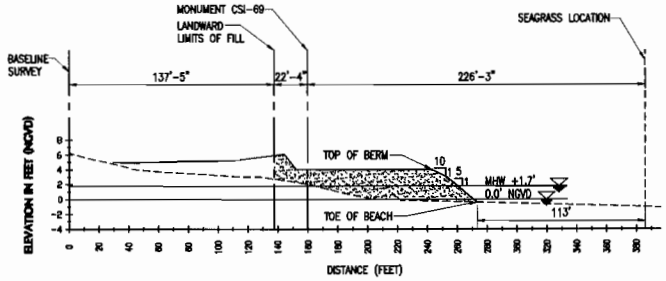
STATION 237+70 (CSI-66)



STATION 238+21 (CSI-67)



STATION 239+25 (CSI-68)



STATION 240+20 (CSI-69)

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ENVIRONMENTAL RESOURCES
REGULATION DIVISION

LEGEND

- PROPOSED SAND FILL
- EXISTING GRADE SURVEYED ON JULY-SEPTEMBER 2004.

SCALE IN FEET 1" = 8'

SCALE IN FEET 1" = 40'

NOTE: ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV	DESCRIPTION	BY
02-02-09	-	DERM CLASS 1 PERMIT	

MIAMI-DADE
Miami-Dade County Public Works Dept.
Stephen P. Clark CENTER
111 NW 1 ST
Miami, FL 33128

MARIANO CORRAL
Landscape Architecture
Golf Course Design
Land Planning
Urban Design
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CM
Civil Works, Inc.
Consulting Engineers
CA 07528
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10 NW 42nd Avenue
Suite 200
Miami, FL 33126

COASTAL SYSTEMS INTERNATIONAL, INC.
Coastal, Environmental
Civil Engineering
and Management
FL EB #7087
Tel. 305/663-5855
464 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY RECREATIONAL FACILITY

FILL SECTIONS - VIRGINIA BEACH MONUMENT CSI-64 - CSI-69

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL REG. 55810

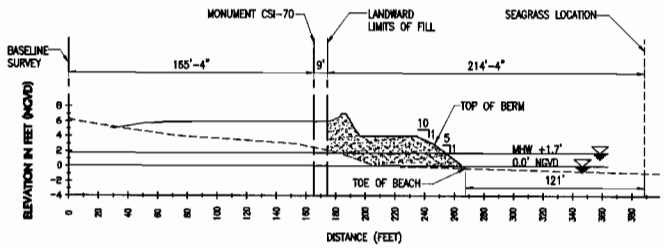
SCALE: AS SHOWN
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-18

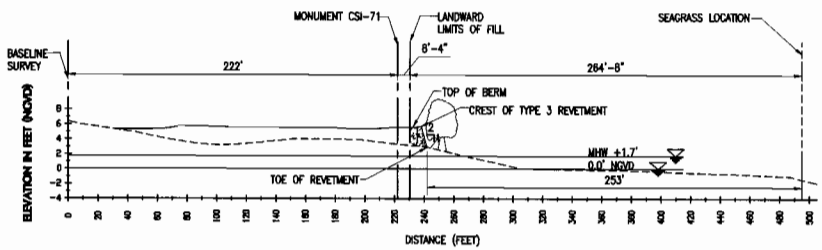
41 OF 134 SHEETS

35

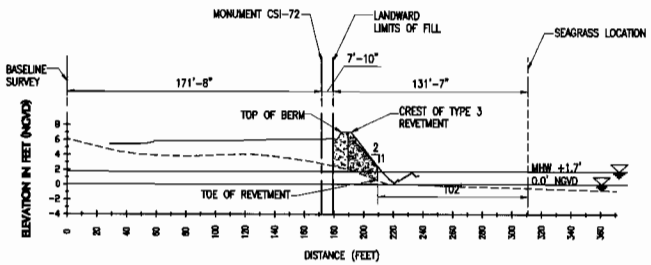
FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-15-CM-19.dwg



STATION 241+17 (CSI-70)



STATION 241+73 (CSI-72)



STATION 242+20 (CSI-71)

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DERM
ENVIRONMENTAL RESOURCES
REGULATION DIVISION

This Section is generated for Environmental Beach Permits Only

	Hobie Beach		Virginia Beach	
Beach Excavation		688.33 cy		-
Seaward MHWL	Contingency=	68.83 10%	Contingency=	0.00 10%
	Total=	**757 cy**	**Total=**	**- cy**
Beach Fill		503.96 cy		16674.2 cy
Seaward MHWL	Contingency=	50.40 10%	Contingency=	1667.42 10%
	Total=	**554 cy**	**Total=**	**18,342 cy**
Outfall Excavation	Outfall #1	37 cy	Outfall #2	35 cy
Seaward MHWL			Outfall #3	0.3 cy
	Contingency=	3.67 10%	Contingency=	3.49 10%
	Total=	**40 cy**	**Total=**	**38 cy**
Outfall Fill	Total=	59 cy	Total=	210 cy
Includes:	Total=	19 cy	Total=	39 cy
Outfall Revetment	Total Fill=	78 cy	Total Fill=	249 cy
6" Gravel Bed	Contingency=	7.79 10%	Contingency=	24.86 10%
	Total=	**86 cy**	**Total=**	**273 cy**
Large Revetment Excavation		**0 cy**		**0 cy**
Large Revetment Fill		262 cy	Total Tons=	1,142 cy
Shoreline Protection	Contingency=	26.19 10%	Contingency=	114.18 10%
No Gravel	**Total=**	**288 cy**	**Total=**	**1,256 cy**
Small Revetment Excavation		**0 cy**		**0 cy**
Small Revetment and Planter Fill				
Type 1	Total=	97 cy	Total=	131 cy
Type 2	Total=	781 cy	Total=	265 cy
Type 3	Total=	178 cy	Total=	856 cy
	Total Fill=	1,057 cy	Total Fill=	1,251 cy
	Contingency=	105.66 10%	Contingency=	125.13 10%
	Total=	**1,162 cy**	**Total=**	**1,376 cy**

LEGEND

PROPOSED SAND FILL

EXISTING GRADE SURVEYED ON JULY-SEPTEMBER 2004.

4 0 8
SCALE IN FEET
1" = 8'

20 0 40
SCALE IN FEET
1" = 40'

NOTE:
ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV	DESCRIPTION	BY
02-02-09	-	DERM CLASS 1 PERMIT	

MIAMI-DADE
Miami-Dade County Public Works Dept.
Stephen P. Clark CENTER
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MARIANO CORRAL
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COASTAL SYSTEMS INTERNATIONAL, INC
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and Management
FL EB #7087
Tel: 305/661-3655
464 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
FILL SECTIONS - VIRGINIA BEACH
MONUMENT CSI-70 - CSI-72

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BUNNENSHIP
FL REG. 55910

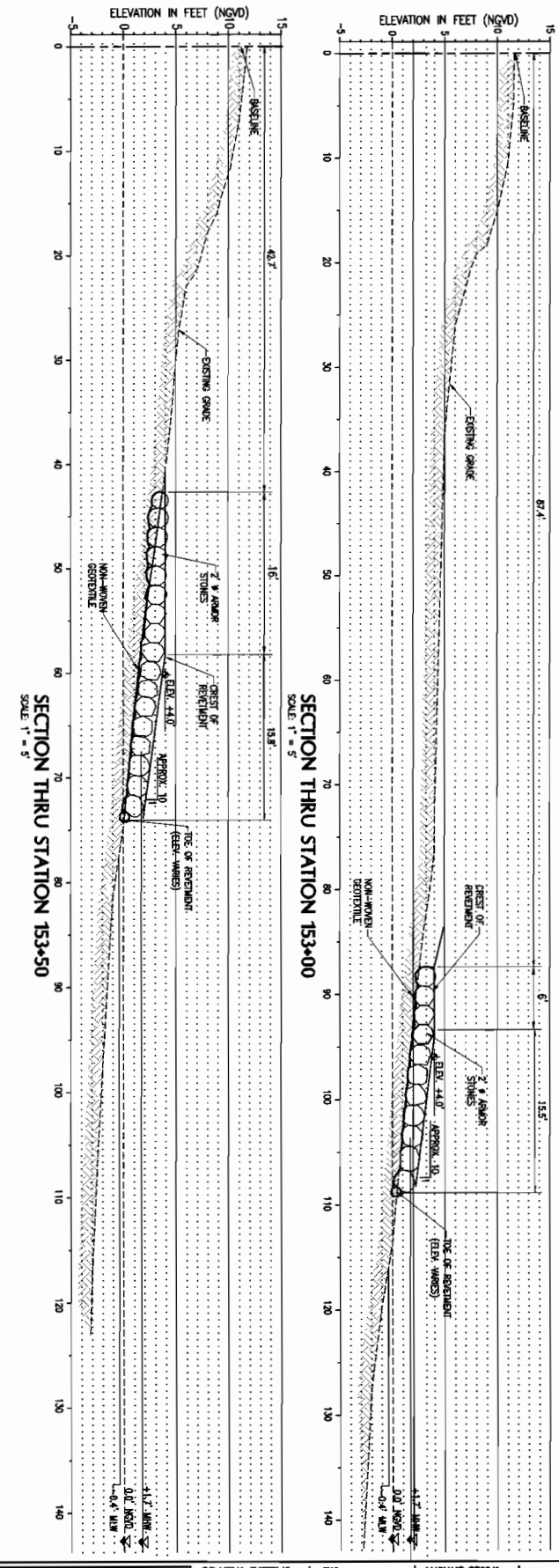
SCALE: AS SHOWN
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-19
42 OF 134 SHEETS

36

FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-15-CM-19.dwg

FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-20-CM-21.dwg



NOTE:
ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"X34")

2.5 0 5
SCALE IN FEET
1" = 5'

RECEIVED

FEB 0 4 2009

DERM
ENVIRONMENTAL RESOURCES
REGULATION DIVISION

SCALE AS NOTED
JOB 224500
DATE 11/03/08
DRAWN VC

CM-20
43 OF 134 SHEETS

DRAWING NOT VALID WITHOUT EMBOSSED SEAL

T. E. BOWDOIN
Reg. No. 39147

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
HOBIE BEACH - REVETMENT SECTIONS

COASTAL SYSTEMS INTERNATIONAL, INC
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and Management
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Miami, FL 33165

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Miami-Dade County Public Works Dept.
Stephen P. Clark CENTER
111 NW 1 ST
Miami, FL 33128

DATE	REV.	DESCRIPTION	BY
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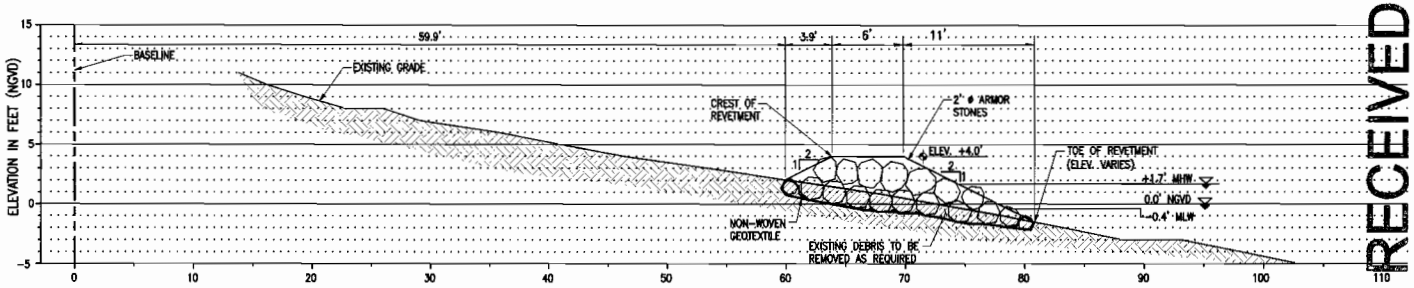
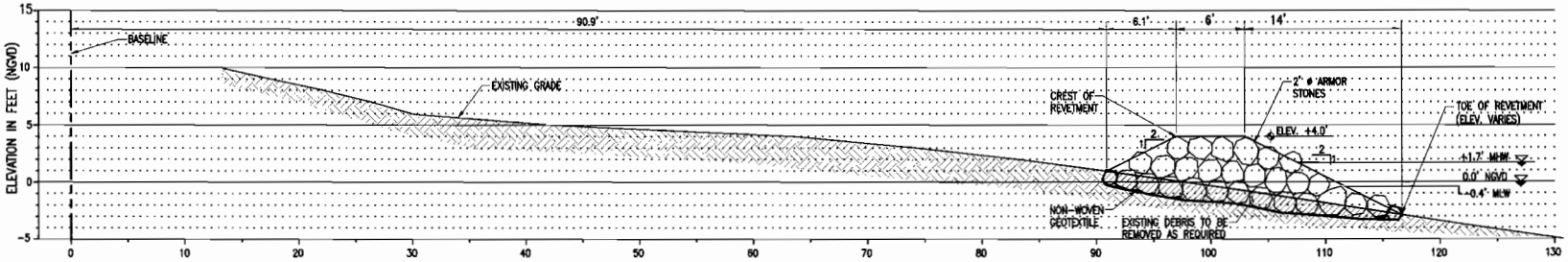


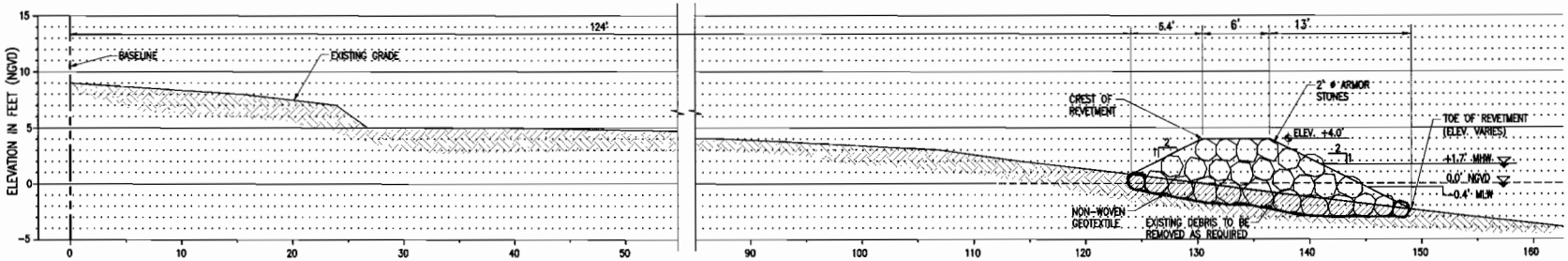
SECTION THRU STATION 189+00

SCALE: 1" = 5'



SECTION THRU STATION 190+00

SCALE: 1" = 5'



SECTION THRU STATION 191+00

SCALE: 1" = 5'

2.5 0 5
SACLE IN FEET
1" = 5'

NOTE:
ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

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DATE	REV	DESCRIPTION	BY
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Miami, FL 33126

COASTAL SYSTEMS INTERNATIONAL, INC
Coastal, Environmental
Civil Engineering
and Management
FL EB #7087
Tel: 305/661-3655
464 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
VIRGINIA KEY - REVETMENT SECTIONS

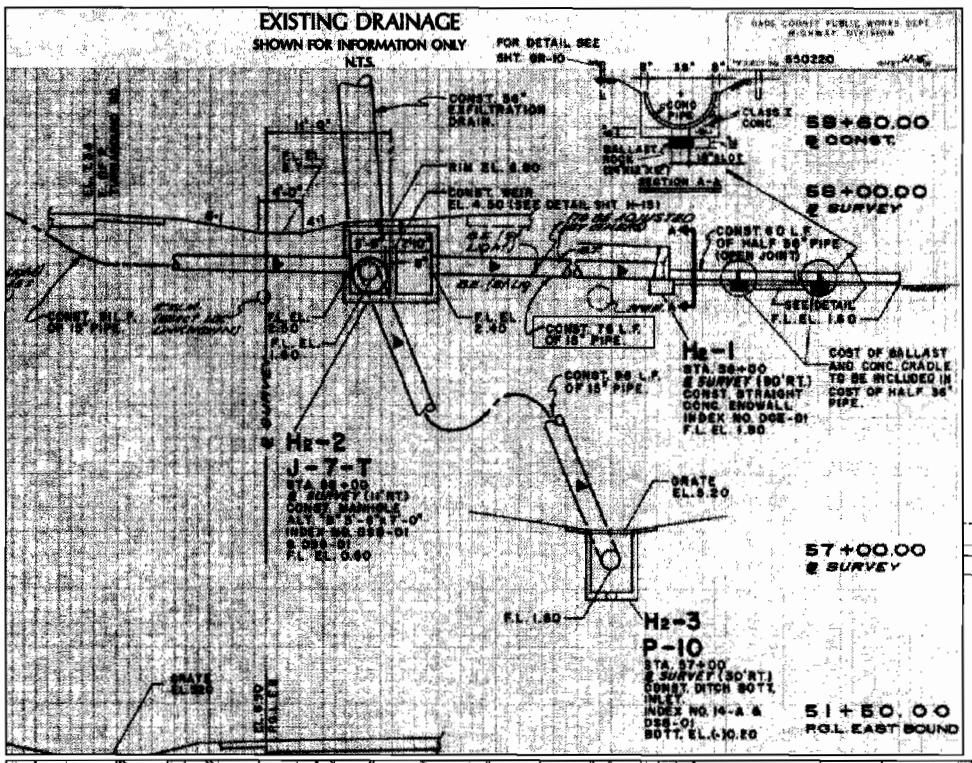
DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL REG. 55910

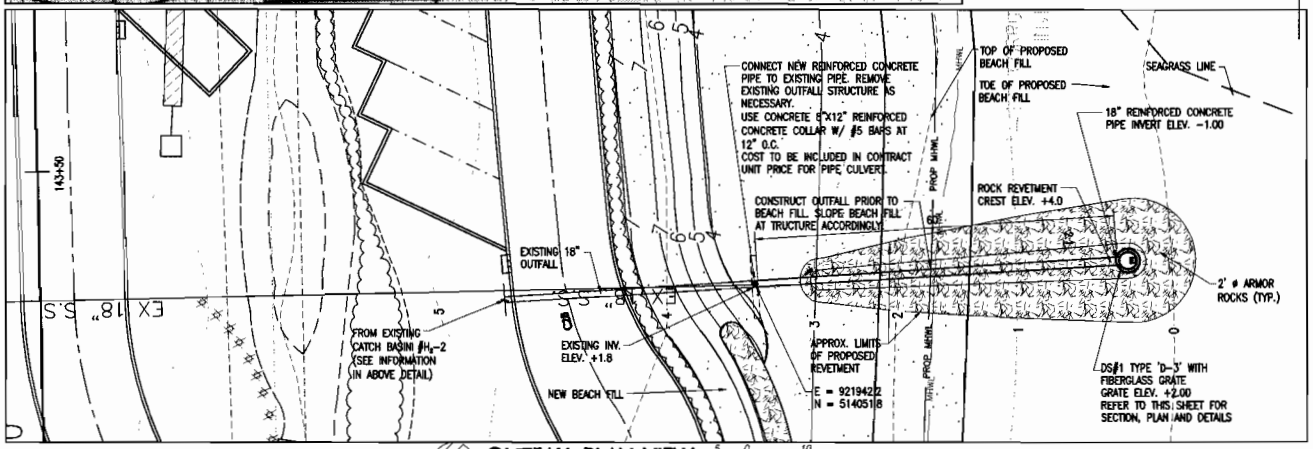
SCALE: AS NOTED
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-21
44 OF 134 SHEETS

FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-20-CM-21.dwg

28

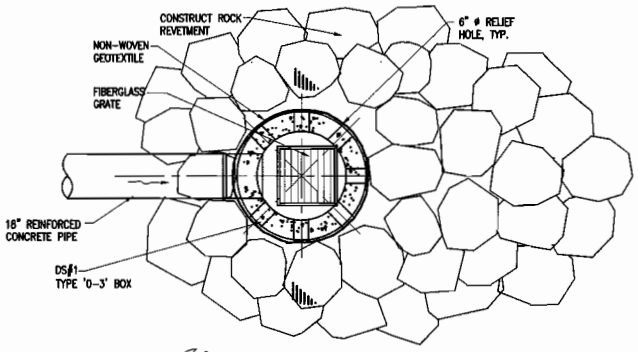




OUTFALL PLAN VIEW

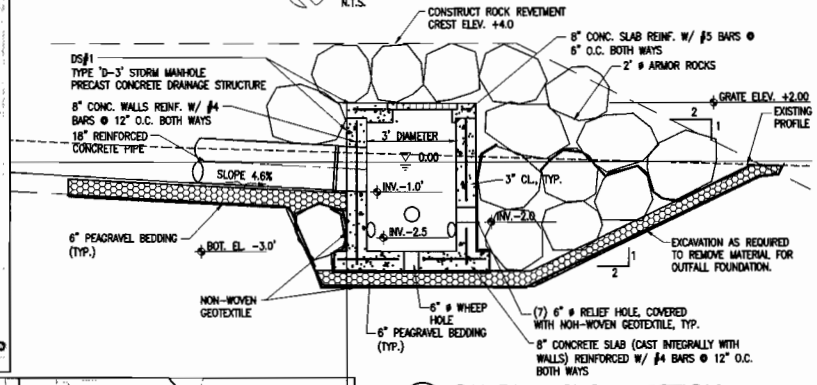
SCALE: 1" = 10'

SCALE IN FEET 1" = 10'



TYPICAL OUTFALL PLAN

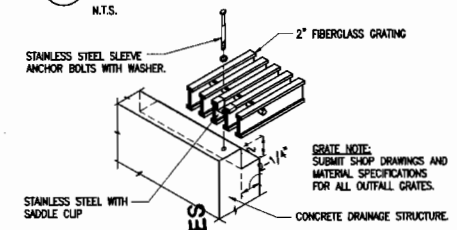
N.T.S.



1 OUTFALL CROSS SECTION

STA. 143+31.08

N.T.S.



GRATE NOTE:
SUBMIT SHOP DRAWINGS AND MATERIAL SPECIFICATIONS FOR ALL OUTFALL GRATES.

2 FIBERGLASS GRATE & FASTENERS DETAIL

N.T.S.

NOTE:
ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

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and Management
FL EB #7087
Tel. 305/663-3655
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Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
HOBIE BEACH OUTFALL PLAN SECTION & DETAILS
STA 143+00 OUTFALL

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
I. K. BUNKENSHIP
FL. REG. 55910

SCALE: AS SHOWN
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-22

45 OF 134 SHEETS

FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-22.dwg

139

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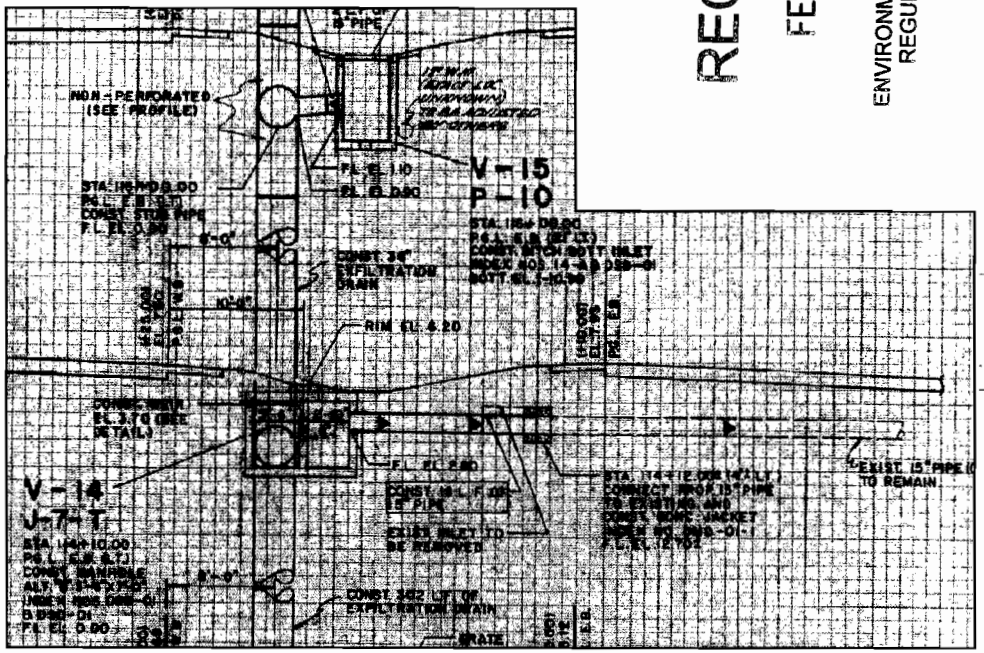
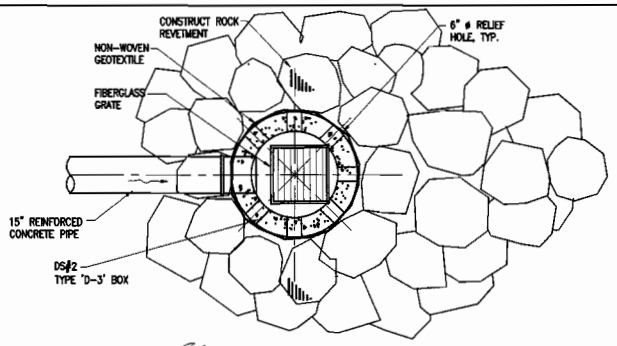
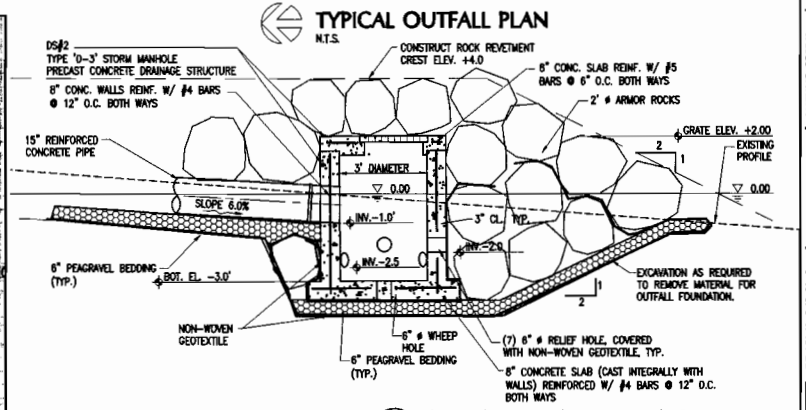
REGULATION DIVISION

EXISTING DRAINAGE
SHOWN FOR INFOMATION ONLY
N.T.S.

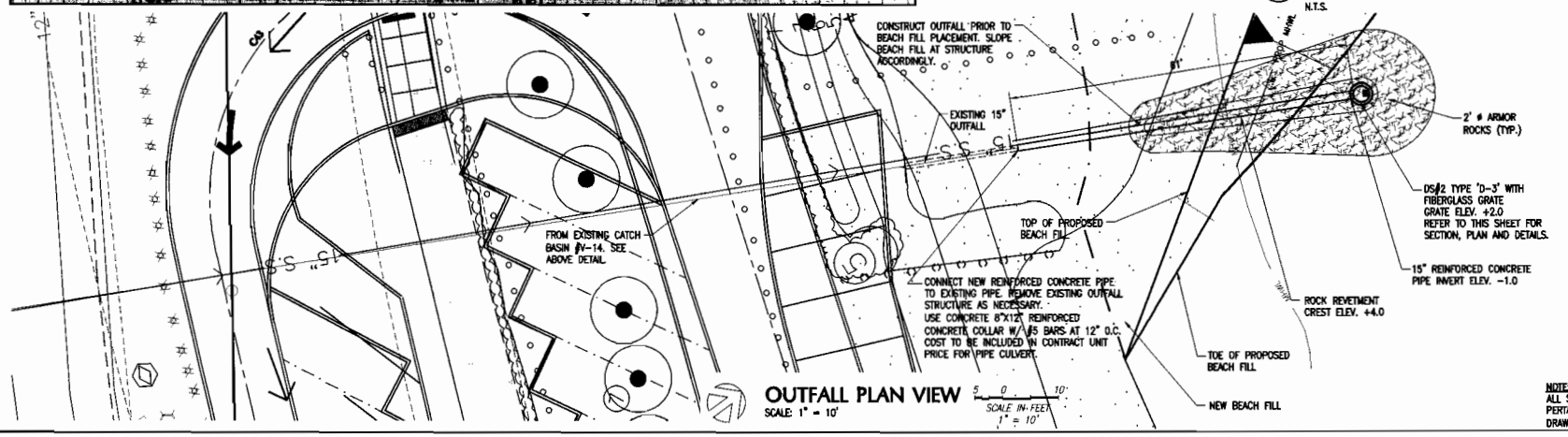




TYPICAL OUTFALL PLAN
N.T.S.



1 OUTFALL CROSS SECTION
STA. 143+31.08
N.T.S.



OUTFALL PLAN VIEW
SCALE: 1" = 10'

5 0 10'
SCALE IN FEET
1" = 10'

NOTE:
ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV.	DESCRIPTION	BY
02-02-09		DERM CLASS I PERMIT	

MIAMI-DADE
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Miami, FL 33128

MARIANO CORRAL
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Civil Engineering
and Management
FL EB #7087
Tel. 305/461-3655
464 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
VIRGINIA KEY OUTFALL PLAN SECTION & DETAILS
STA 196+00 OUTFALL

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL REG. 53310

SCALE:	AS SHOWN
JOB:	224500
DATE:	11/03/08
DRAWN:	VC

CM-23
46 OF 134 SHEETS

FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-23.dwg

40

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DERM
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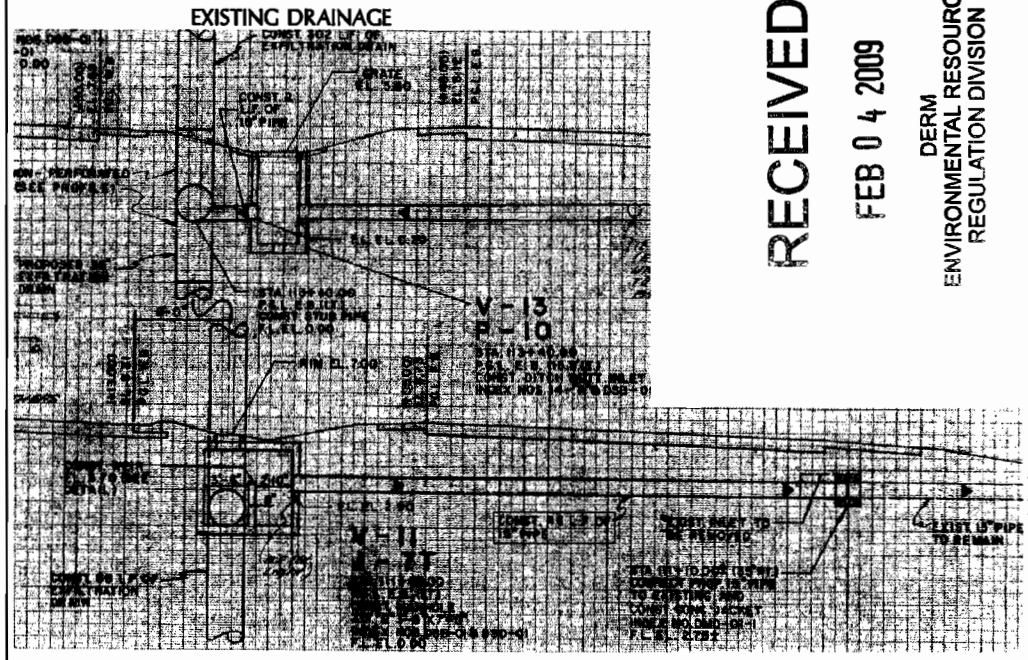
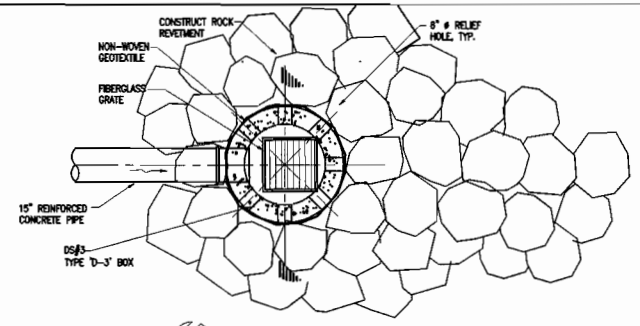
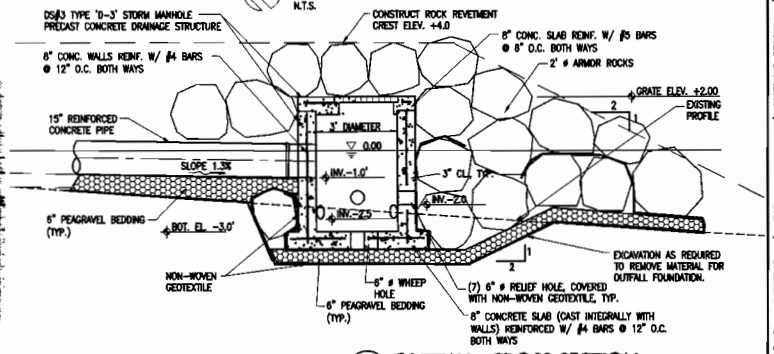
REGULATION DIVISION





TYPICAL OUTFALL PLAN

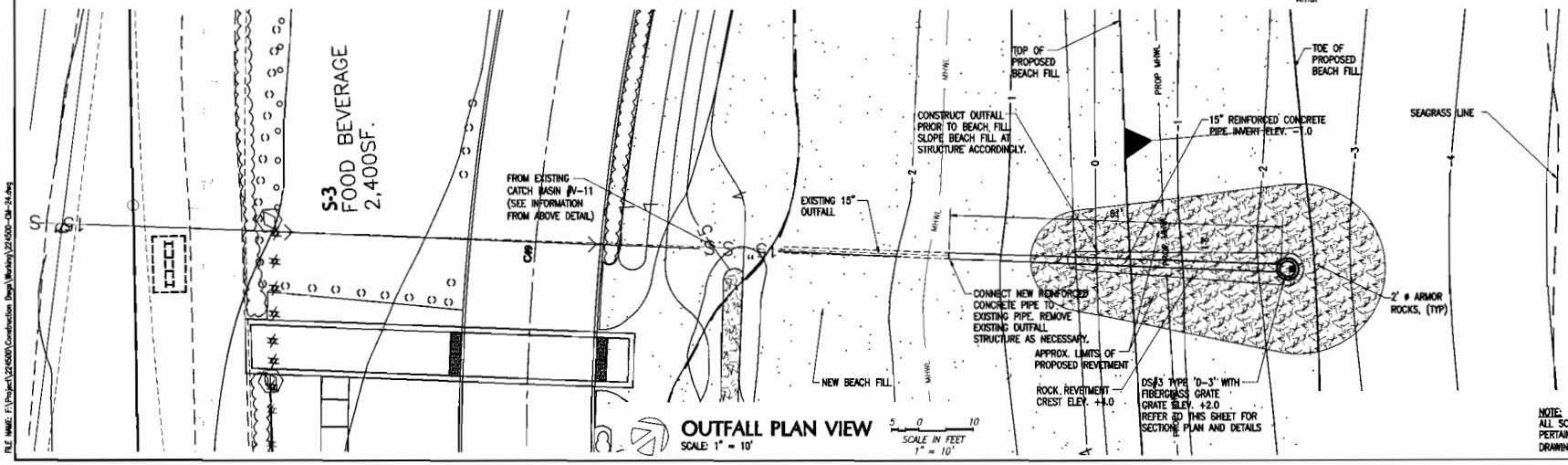
N.T.S.



1 OUTFALL CROSS SECTION

STA 143+31.08

N.T.S.



OUTFALL PLAN VIEW

SCALE: 1" = 10'

SCALE IN FEET 1" = 10'

NOTE:
ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV.	DESCRIPTION	BY
02-02-09		DERM CLASS 1 PERMIT	

MIAMI-DADE
Miami-Dade County Public Works Dept.
Stephen P. Clark CENTER
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Miami, FL 33128

MARIANO CORBAL
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Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
VIRGINIA KEY OUTFALL PLAN SECTION & DETAILS
STATION 199+00 OUTFALL

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL REG. 56610

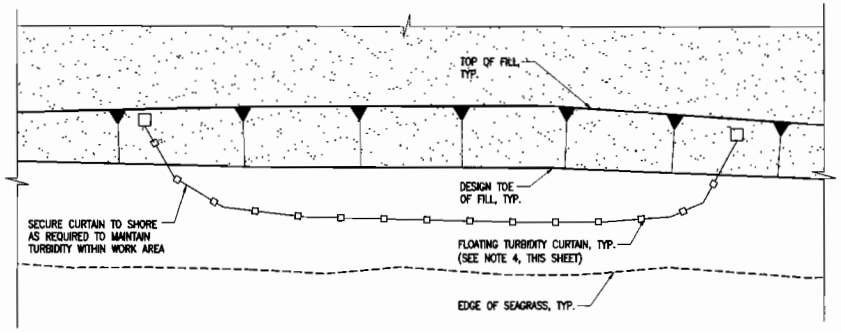
SCALE: AS SHOWN
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-24

47 OF 134 SHEETS

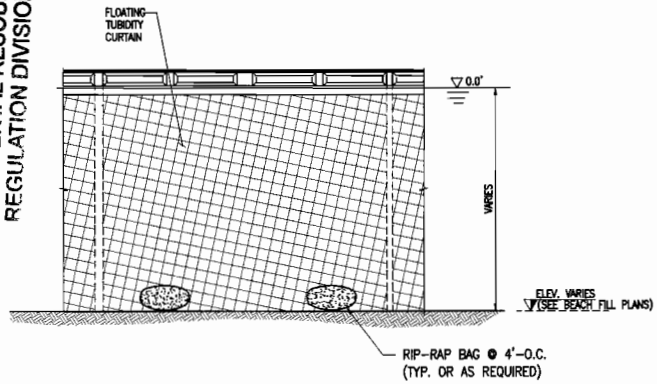
FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-24.dwg

147



TYPICAL TURBIDITY CONTROL PLAN
NTS

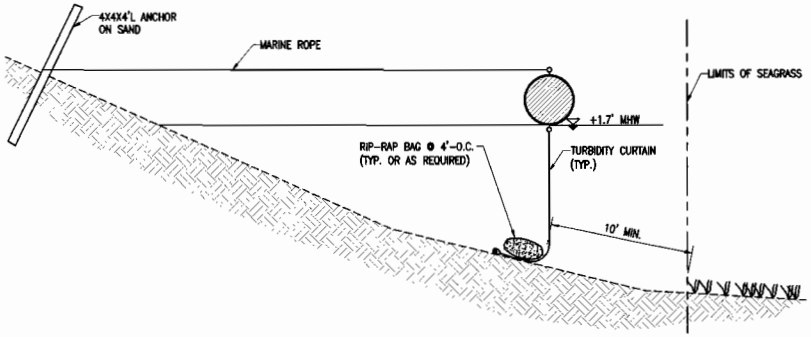
RECEIVED
FEB 0 4 2009
DERM
ENVIRONMENTAL RESOURCES
REGULATION DIVISION



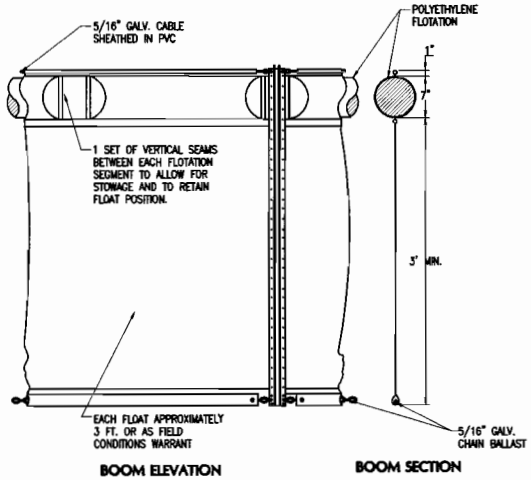
1 TURBIDITY CURTAIN DETAIL
NTS

TURBIDITY CONTROL NOTES:

1. REFER TO ENVIRONMENTAL PERMITS FOR TURBIDITY CONTROL REQUIREMENTS.
2. TURBIDITY CURTAINS SHALL BE OF SUFFICIENT LENGTH TO CONTROL TUBIDITY YET OF SUCH LENGTH TO PRECLUDE SCOURING OF MARINES RESOURCES, WHETHER WEIGHTED OR STAKED IN PLACE.
3. CURTAINS SHALL BE MADE OF MATERIAL IN WHICH MANATEES CANNOT BECOME ENTANGLED, ARE PROPERLY SECURED, AND ARE REGULARLY MONITORED TO AVOID MANATEE ENTRAPMENT. CURTAINS MUST NOT BLOCK MANATEE ENTRY TO OR EXIT FROM ESSENTIAL HABITAT.
4. CONTRACTOR SHALL DEPLOY SUFFICIENT SECTION LENGTH OF TURBIDITY CURTAIN FOR EFFICIENT TURBIDITY CONTROL. SECTIONS OF CURTAIN ARE TO BE RELOCATED ALONG BEACH FILL AS CONSTRUCTION PROGRESSES.
5. SUBMIT TURBIDITY CONTROL AND MONITORING PLAN FOR REVIEW AND APPROVAL.
6. CONTRACTOR SHALL MAINTAIN CURTAIN SO AS NOT TO IMPACT ANY ADJACENT SEAGRASS.



TYPICAL SECTION
NTS



2 CURTAIN BOOM DETAIL
NTS

NOTE:
ALL SCALES INDICATED PERTAIN TO FULL SIZE DRAWINGS (22"x34")

DATE	REV	DESCRIPTION	BY
02-02-09	-	DERM CLASS I PERMIT	

MIAMI-DADE
Miami-Dade County Public Works Dept.
Stephen P. Clark CENTER
111 NW 1 ST
Miami, FL 33128

MARIANO CORRAL
Landscape Architecture
Golf Course Design
Land Planning
Urban Design
LA 0000834
tel: (305) 551-1262
3001 SW 109 Court
Miami, FL 33165

CWI
Civil Works, Inc.
Consulting Engineers
CA 07528
tel: 305 - 448 - 5955
10 N.W. 42nd Avenue
Suite 200
Miami, FL 33126

COASTAL SYSTEMS INTERNATIONAL, INC
Coastal, Environmental
Civil Engineering
and Management
FL EB #7087
Tel: 305/661-3655
464 S. Dixie Hwy.
Coral Gables, FL 33146

RICKENBACKER CAUSEWAY
RECREATIONAL FACILITY
TURBIDITY CONTROL DETAILS

DRAWING NOT VALID WITHOUT EMBOSSED SEAL
T. K. BLANKENSHIP
FL. REG. 55690

SCALE: AS SHOWN
JOB: 224500
DATE: 11/03/08
DRAWN: VC

CM-25
48 OF 134 SHEETS

42

FILE NAME: F:\Project\224500\Construction Dwgs\Working\224500-CM-25.dwg

Attachment D

Zoning Memorandum

Memorandum

MIAMI-DADE COUNTY

Date: March 26, 2009

To: Lisa Spadafina, Manager
Coastal Resources Section
Environmental Resources Management

From: Lourdes Barrelli, Biologist II
Coastal Resources Section
Environmental Resources Management

Subject: Class I Permit Application by Miami-Dade County to Renourish and Stabilize Hobie Beach and Virginia Key Beach Through the Dredging of Rock and Sediment and the Removal of Concrete Debris, the Placement of 23,337 Cubic Yards of Riprap Boulders and Sand for Multiple Renourishment Events, and the Repair of Three (3) Stormwater Outfalls to Improve Drainage, and to Authorize the Time of Completion of Work of the Subject Permit for a Period of Ten (10) Years

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Pursuant to Section 24-48.2(II)(A)(7), of the Code of Miami-Dade County, Florida, a substantiating letter shall be submitted by the applicant stating that the proposed project does not violate any zoning laws. Said letter will be submitted after approval by the Miami-Dade County Board of County Commissioners and prior to issuance of the Class I permit.

Attachment E

Names and Addresses of Owners of All Riparian or Wetland Property Within Three Hundred (300) Feet of the Proposed Work

Use Avery® TEMPLATE 8160™ Feed Paper See instruction sheet for Easy Peel Feature AVERY® 8660™

Miami-Dade County Parks & Recreation
275 NW 2nd Street 4th Floor
Miami, FL
33128-1794

BPI
1450 NE 2nd Avenue
Miami, FL
33132-1308

City of Miami-Rickenbacker Marina
Asset Management Division
444 SW 2nd Avenue Suite #325
Miami, FL 33130-1910

City of Miami Department of P & D
Asset Management Division
444 SW 2 Avenue Suite 325
Miami, Fl 33130-1910

3301 Rickenbacker Marine
Attn: Ram Melwani
3301 Rickenbacker Causeway
Miami, FL 33149-1016

Étiquettes faciles à peler
Utilisez le gabarit AVERY® 8160MC
Sens de chargement
Consultez la feuille d'instruction
www.ave
1-800-GO

Attachment F

DERM Project Report

PROJECT REPORT

CLASS I PERMIT APPLICATION NO. CC06-196

MIAMI-DADE COUNTY TO RENOURISH AND STABILIZE HOBIE BEACH AND VIRGINIA KEY BEACH THROUGH THE DREDGING OF ROCK AND SEDIMENT AND THE REMOVAL OF CONCRETE DEBRIS, THE PLACEMENT OF 23,337 CUBIC YARDS OF RIPRAP BOULDERS AND SAND FOR MULTIPLE RENOURISHMENT EVENTS, AND THE REPAIR OF THREE (3) STORMWATER OUTFALLS TO IMPROVE DRAINAGE, AND TO AUTHORIZE THE TIME OF COMPLETION OF WORK OF THE SUBJECT PERMIT FOR A PERIOD OF TEN (10) YEARS

Date: March 26, 2009

Staff's recommendation of approval for the above-referenced permit application is based on the applicable evaluation factors under Section 24-48.3 of the Code of Miami-Dade County, Florida. The following is a summary of the proposed project with respect to each applicable evaluation factor:

1. **Potential Adverse Environmental Impact** – The proposed project is not reasonably expected to result in adverse environmental impacts.

2. **Potential Cumulative Adverse Environmental Impact** – The proposed project is not reasonably expected to result in cumulative adverse environmental impacts.

3. **Hydrology** - The proposed project is reasonably expected to improve surface water drainage and retention of stormwater on the upland areas adjacent to Hobie Beach and Virginia Key Beach (beaches). The proposed renovations to the existing upland parking facilities, roadways, and outfall systems have been designed to improve stormwater management and shall minimize the potential for continued erosion of the beaches. The proposed project is designed in accordance with DERM and the South Florida Water Management District (SFWMD) criteria and design standards.

4. **Water Quality** – The proposed project is reasonably expected to temporarily affect surface water quality. Minor increases in turbidity above background levels may occur within the project areas during the placement of sand and riprap directly waterward of the mean high water line. However, these impacts will be temporary in nature and will be minimized by the implementation of proper turbidity control devices. In addition, the proposed renovations to the existing upland parking facilities, roadways, and outfall systems have been designed to improve stormwater management, which shall minimize the potential for continued erosion of the beaches, and is reasonably expected to improve water quality within the vicinity of the project area.

5. **Wellfields** – Not applicable.

6. **Water Supply** – Not applicable.

7. **Aquifer Recharge** – Not applicable.

8. **Aesthetics** – The project is designed to be aesthetically compatible with the surrounding area. The proposed drainage improvements and placement of sand and riprap boulders shall enhance the existing public beach recreational areas by restoring sections of eroded beach and minimizing the potential for beach erosion.

9. **Navigation** – The proposed project is not reasonably expected to adversely affect navigation.

10. **Public Health** - The proposed project is not reasonably expected to adversely affect the public health.

11. **Historic Values** - The proposed project is not reasonably expected to adversely affect historic values.

12. **Archaeological Values** - The proposed project is not reasonably expected to adversely affect archaeological values.

13. **Air Quality** – The proposed project is not reasonably expected to adversely affect air quality.

14. **Marine and Wildlife Habitats** – The proposed project is not reasonably expected to adversely affect marine and wildlife habitats. The proposed project has been designed to avoid impacts to existing *Conocorpus erectus* (green buttonwood) trees and mangroves, including *Rhizophora mangle* (red mangroves), *Laguncularia racemosa* (white mangroves), and *Avicennia germinans* (black mangroves). This will be accomplished through the installation of riprap boulder revetments, that will serve as a buffer between the placement of the sand used to restore the eroded beaches and said trees. The proposed project will temporarily disturb marine fauna. However, the impacts are temporary in nature and suitable marine habitat will be available for the re-establishment of marine fauna. To avoid impacts to offshore seagrass beds, the project has also been designed to maintain a minimum fifteen (15) foot distance between the waterward extent of the proposed work and any existing seagrass beds. In addition, the applicant shall be required to implement a seagrass monitoring program to evaluate offshore seagrass community health and vitality before and after construction activities. Furthermore, the proposed project is not reasonably expected to adversely affect any rare, threatened or endangered species. The proposed project areas are not located within essential habitat for *Trichechus manatus* (West Indian Manatee).

15. **Wetland Soils Suitable for Habitat** – The proposed project does not involve any work in wetland soils.

16. **Floral Values** – The proposed project is not reasonably expected to adversely affect marine or wetland flora. There are no seagrass resources located in the footprint of the proposed project. To avoid impacts to offshore seagrass beds, the project has been designed to maintain a minimum fifteen (15) foot distance between the waterward extent of the proposed work and any existing seagrass beds. In addition, the applicant shall be required to implement a seagrass monitoring program to evaluate offshore seagrass community health and vitality before and after construction activities. The proposed project has been designed to avoid impacts to existing *Conocorpus erectus* (green buttonwood) trees and mangroves, including *Rhizophora mangle* (red mangroves), *Laguncularia racemosa* (white mangroves), and *Avicennia germinans* (black mangroves). This will be accomplished through the installation of riprap boulder revetments, that will serve as a buffer between the placement of the sand used to restore the eroded beaches and said trees.

17. **Fauna Values** - The proposed project will temporarily disturb marine fauna. Specifically, marine epifauna (animals living on the sediment surface or on the surface of other plants or animals) and infauna (animals living within submerged sediments) will be temporarily impacted from the placement of the sand. However, these impacts are temporary in nature and suitable marine habitat will be available for the re-establishment of marine fauna. In addition, the proposed project areas are not located within essential habitat for *Trichechus manatus* (West Indian Manatee).

18. **Rare, Threatened and Endangered Species** – The project is not reasonably expected to adversely affect any rare, threatened or endangered species. The proposed project areas are not located within essential habitat of *Trichechus manatus* (West Indian Manatee) and no endangered seagrasses were found in these areas during the seagrass survey.

19. **Natural Flood Damage Protection** - The proposed project is not reasonably expected to affect natural flood damage protection.

20. **Wetland Values** – The proposed project is not reasonably expected to affect wetland values. The proposed project has been designed to avoid impacts to existing *Conocorpus erectus* (green buttonwood) trees and mangroves, including *Rhizophora mangle* (red mangroves), *Laguncularia racemosa* (white mangroves), and *Avicennia germinans* (black mangroves). This will be accomplished through the installation of riprap boulder revetments, that will serve as a buffer between the placement of the sand used to restore the eroded beaches and said trees.

21. **Land Use Classification** – Pursuant to Section 24-48.2(II)(A)(7), of the Code of Miami-Dade County, Florida a substantiating letter shall be submitted stating that the proposed project does not violate any zoning laws. Said letter will be submitted after the approval by the Board of County Commissioners and prior to the issuance of a Class I permit.

22. **Recreation** - The proposed project is not reasonably expected to adversely affect recreation. The proposed project does not conflict with the Miami-Dade County Comprehensive Development Master Plan and Biscayne Bay Management Plan recreation elements.

23. **Other Environmental Values Affecting the Public Interest** - The proposed project is not reasonably expected to adversely affect other environmental values affecting the public interest. The proposed project will occur on lands owned entirely by the applicant and is expected to enhance Hobie Beach and Virginia Key Beach recreational areas for public use through drainage improvements and the restoration of eroded beach segments.

24. **Conformance with Standard Construction Procedures and Practices and Design and Performance Standards** – The proposed project complies with the standard construction procedures and practices and design and performance standards of the following:

    - Miami-Dade County Public Works Manual
    - Biscayne Bay Management Plan (Sections 33D-1 through 33D-4 of the Code of Miami-Dade County)
    - Chapter 33B of the Code of Miami-Dade County

25. **Comprehensive Environmental Impact Statement (CEIS)** – In the opinion of the Director, the proposed project is not reasonably expected to result in either adverse environmental impacts or cumulative adverse environmental impacts. As such, a CEIS was not required by DERM to evaluate the proposed project.

26. **Conformance with All Applicable Federal, State and Local Laws and Regulations** - The proposed project is in conformance with the following applicable State, Federal and local laws and regulations:

    a) Rules of the South Florida Water Management District (permit is required)
    b) Chapter 24 of the Code of Miami-Dade County
    c) Federal Endangered Species Act (US Fish and Wildlife Service)
    d) United States Clean Water Act (US Army Corps of Engineers permit)
    e) Biscayne Bay Aquatic Preserve Act

27. **Conformance with the Miami-Dade County Comprehensive Development Master Plan (CDMP)** - In the opinion of DERM, the proposed project is in conformance with the CDMP. The following is a summary of the proposed project as it relates to the CDMP:

LAND USE ELEMENT I:

Objective 2/Policy 2A - Level of Service. The proposed project does not involve new or significant expansion of existing urban land uses.

Objective 3/Policies 3A, 3B, 3C - Protection of natural resources and systems. – The proposed project is consistent with the Conservation and Coastal Management Elements of the CDMP and will enhance protected natural resources and systems. The project is compatible with surrounding land uses in Biscayne Bay and does not involve development in the Big Cypress area of Critical State concern or the East Everglades.

TRANSPORTATION ELEMENT II

Aviation Subelement/Objective 9 - Aviation System Expansion - There is no aviation element to the proposed project.

Port of Miami River Subelement/Objective 3 - Minimization of impacts to estuarine water quality and marine resources. The proposed project will not take place within the tidal waters of the Miami River.

CONSERVATION, AQUIFER RECHARGES AND DRAINAGE ELEMENT IV:

Objective 3/Policies 3A, 3B, 3D - Wellfield protection area protection. - The proposed project is not located within a wellfield protection area and does not involve agricultural uses.

Objective 3/Policy 3E - Limestone mining within the area bounded by the Florida Turnpike, the Miami-Dade/Broward Levee, N.W. 12 Street and Okeechobee Road. - The proposed project is not located within this area.

Objective 4/Policies 4A, 4B, 4C - Water storage, aquifer recharge potential and maintenance of natural surface water drainage. - The proposed project is not reasonably expected to adversely affect water storage or aquifer recharge potential. The proposed renovations to the existing upland parking facilities, roadways, and outfall systems have been designed to improve stormwater management and shall improve natural surface water drainage.

Objective 5/Policies 5A, 5B, 5F - Flood protection and cut and fill criteria. – The proposed project will provide enhanced flood protection from storm events through the restoration of the beaches and stormwater management improvements.

Objective 6/Policy 6A - Areas of highest suitability for mineral extraction. - The proposed project is not located in an area proposed or suitable for mineral extraction.

Objective 6/Policy 6B - Guidelines for rock quarries for the re-establishment of native flora and fauna. - The proposed project is not located in a rock quarry.

Objective 6/Policy 6D - Suitable fill material for the support of development. – The proposed project does not involve the removal of any fill appropriate for the support of development.

Objective 7/Policy 7A - No net loss of high quality, relatively unstressed wetlands. – The proposed project will not result in a net loss of high quality wetlands.

Objective 9/Policies 9A, 9B, 9C – Protection of habitat critical to federal, state, or County designated endangered, threatened, or rare species - The proposed project areas are not located within essential habitat of *Trichechus manatus* (West Indian Manatee) and no endangered seagrasses were found in these areas during the seagrass survey.

COASTAL MANAGEMENT ELEMENT VII:

Objective 1/Policy 1A - Tidally connected mangroves in mangrove protection areas – The project is not located within a designated "Mangrove Protection Area."

Objective 1/ Policy 1B - Natural surface flow into and through coastal wetlands. – The project will not affect natural surface flow into and through coastal wetlands.

Objective 1/ Policy 1C - Elevated boardwalk access through mangroves. – The proposed project does not involve the installation of an elevated boardwalk to provide access through mangroves.

Objective 1/Policy 1D - Protection and maintenance of mangrove forests and related natural vegetational communities. - The proposed project does not involve work in mangrove forests or coastal hammocks. The proposed project has been designed to avoid impacts to existing *Conocorpus erectus* (green buttonwood) trees and mangroves, including *Rhizophora mangle* (red mangroves), *Laguncularia racemosa* (white mangroves), and *Avicennia germinans* (black mangroves). This will be accomplished through the installation of riprap boulder revetments, that will serve as a buffer between the placement of the sand used to restore the eroded beaches and said trees.

Objective 1/Policy 1E - Mitigation for the degradation and destruction of coastal wetlands. Monitoring and maintenance of mitigation areas. – The proposed project does not involve the degradation or destruction of coastal wetlands. The proposed project has been designed to avoid impacts to existing *Conocorpus erectus* (green buttonwood) trees and mangroves, including *Rhizophora mangle* (red mangroves), *Laguncularia racemosa* (white mangroves), and *Avicennia germinans* (black mangroves). This will be accomplished through the installation of riprap boulder revetments, that will serve as a buffer between the placement of the sand used to restore the eroded beaches and said trees.

Objective 1/Policy 1G - Prohibition on dredging or filling of grass/algal flats, hard bottom or other viable benthic communities, except as provided for in Chapter 24 of the Code of Miami-Dade County, Florida. – The proposed project has been designed to minimize impacts to viable benthic communities. The placement of sand and riprap boulders associated with the renourishment and stabilization of the beaches is consistent with three (3) of the dredge and fill criteria listed in Section 24-48.3(2) of the Code of Miami-Dade County, Florida. In addition, the proposed project shall not result in the filling of grass/algal flats or hard bottom communities.

Objective 2/Policies 2A, 2B - Beach restoration and renourishment objectives. - The proposed project involves restoration of eroded beaches that do not contain any significant benthic communities. To avoid impacts to offshore seagrass beds, the project has been designed to maintain a minimum fifteen (15) foot distance between the waterward extent of the proposed work and any existing seagrass beds. In addition, the applicant shall be required to implement a seagrass monitoring program to evaluate offshore seagrass community health and vitality before and after construction activities. The proposed project has also been designed to avoid impacts to existing *Conocorpus erectus* (green buttonwood) trees and mangroves, including *Rhizophora mangle* (red mangroves),

Laguncularia racemosa (white mangroves), and *Avicennia germinans* (black mangroves). This will be accomplished through the installation of riprap revetments, that will serve as a buffer between the placement of the sand used to restore the eroded beaches and said trees. Furthermore, the proposed project is not reasonably expected to adversely affect any rare, threatened or endangered species. The proposed project areas are not located within essential habitat for *Trichechus manatus* (West Indian Manatee).

Objective 3/Policy 3E, 3F - Location of new cut and spoil areas for proper stabilization and minimization of damages. - The proposed project does not involve the development or identification of new cut or spoil areas.

Objective 5/Policy 5B - Existing and new areas for water-dependent uses. - The proposed project will enhance existing water-dependent uses associated with a public beach.

Objective 5/Policy 5D - Consistency with Chapter 33D, Miami-Dade County Code (shoreline access, environmental compatibility of shoreline development) - The proposed project has been evaluated by the Shoreline Development Review Committee. The thresholds for review under the Shoreline Ordinance do not apply and the proposed project is not subject to shoreline development review.

Objective 5/Policy 5F - The siting of water dependent facilities. - The proposed project does not involve the creation of any new water dependent facilities.

28. **Conformance with Chapter 33B, Code of Miami-Dade County** (East Everglades Zoning Overlay Ordinance) – The proposed project is not located within the East Everglades Area.

29. **Conformance with Miami-Dade County Ordinance 81-19** (Biscayne Bay Management Plan Sections 33D-1 through 33D-4 of the Code of Miami-Dade County) - The proposed project is in conformance with the Biscayne Bay Management Plan.

30. **Conformance with the Miami-Dade County Manatee Protection Plan** - The proposed project area is not located within essential habitat for *Trichechus manatus* (West Indian Manatee).

31. **Consistency with Miami-Dade County Criteria for Lake Excavation** – The proposed project does not involve lake excavation.

32. **Municipality Recommendation** – Pursuant to Section 24-48.2(II)(A)(7), Code of Miami-Dade County, Florida, a substantiating letter shall be submitted stating that the proposed project does not violate any zoning laws. Said letter will be submitted after the approval by the Board of County Commissioners and prior to the issuance of the Class I permit.

33. **Coastal Resources Management Line** - A coastal resources management line was not required for the proposed project, pursuant to Section 24-48.2(II)(A)(10)(b) of the Code of Miami-Dade County, Florida.

34. **Maximum Protection of a Wetland's Hydrological and Biological Functions** – The proposed project is not reasonably expected to impact wetland hydrological and biological functions.

35. **Class I Permit Applications Proposing to Exceed the Boundaries Described in Section D-5.03(2)(a) of the Miami-Dade County Public Works Manual** – DERM has considered the following factors:

    i. **Whether the proposed exceedance is the minimum necessary to avoid seagrasses or other valuable environmental resources** – Not applicable.
    ii. **Whether the proposed exceedance is the minimum necessary to achieve adequate water depth for mooring of a vessel** – Not applicable.
    iii. **Whether the applicant has provided notarized letters of consent to DERM from adjoining riparian property owners** – Not applicable.
    iv. **Whether any letters of objection from adjoining riparian property owners were received by DERM** – Not applicable.

The proposed project was also evaluated for compliance with the standards contained in Section 24-48.3(2), (3), and (4) of the Code of Miami-Dade County, Florida. The following is a summary of how the standards relate to the proposed project:

24-48.3 (2) Dredging and Filling for Class I Permit - The proposed project complies with the following criteria:

- Minimum dredging and spoiling for public navigation or public necessity.
- An alteration of physical conditions as may be necessary to enhance the quality or utility of adjacent waters.
- A physical modification necessary to protect public or private property.

24-48.3 (3) Minimum Water Depth Required for Boat Slips Created by the Construction or Placement of Fixed or Floating Docks and Piers, Piles and Other Structures Requiring a Permit Under Article IV, Division 1 of Chapter 24 of the Code of Miami-Dade County – The proposed project does not involve the construction of fixed or floating structures for mooring purposes.

24-48.3 (4) Clean Fill in Wetlands – The proposed project involves the placement of sand and riprap to restore sections of eroded beach. All the sand proposed for this project will meet the definition of clean fill as described in Section 24-5 of the Code of Miami-Dade County.

BASED ON THE FOREGOING, IT IS RECOMMENDED THAT A CLASS I PERMIT BE APPROVED.

Lisa Spadafina

Lisa Spadafina, Manager
Environmental Resources Regulation Division

Lourdes Barrelli

Lourdes Barrelli, Biologist II
Coastal Resources Section