Memorandum

MIAMI-DADE COUNTY

Date: July 20, 2010

Agenda Item No. 5(D)

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

From: George M. Burgess
County Manager

Subject: Resolution Relating to an Application by Miami-Dade County for a Class I Permit to Authorize the Filling of Tidal Waters and Halophytic Wetlands for the Construction of an Earthen Plug in the Card Sound Road Canal, Miami-Dade County, Florida

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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

Date: July 20, 2010

Memorandum

MIAMI-DADE COUNTY

To: George M. Burgess
County Manager

From: Carlos Espinosa, P.E., Director
Environmental Resources Management

Subject: Class I Permit Application by Miami-Dade County to Authorize the Filling of Tidal Waters and Halophytic Wetlands for the Construction of an Earthen Plug in the Card Sound Road Canal, Miami-Dade County, Florida

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Recommendation

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

Scope

The project site is located along the Card Sound Road Canal, Miami-Dade County, Florida, in Commission District 9.

Fiscal Impact/Funding Source

Permit fees of $16,338 will be funded by the Wetlands Trust Fund (Expenditure Index Code TFDEER05B under Project 618266, Project Detail ER005B). These one-time fees will not affect future County budgets.

Track Record/Monitor

Not applicable.

Background

The subject Class I permit application involves the filling of tidal waters and halophytic wetlands for the construction of an earthen plug within the Card Sound Road Canal in southern Miami-Dade County, Florida. The proposed project is required to be reviewed and approved by the Board at a public hearing because the scope of work is not specifically referenced in Section 24-48.2 of the Code as work that can be processed administratively with a short form application. Therefore, a standard form application including a public hearing is required.

The project site is located along the Card Sound Road Canal at property designated by folio number 30-9911-000-0010, Miami-Dade County, Florida. The proposed work will be conducted within a 203-acre property owned by Miami-Dade County and managed by the Miami-Dade County Department of Environmental Resources Management (DERM) Environmentally Endangered Lands (EEL) Program, which includes 285 linear feet of the Card Sound Road Canal right-of-way. The man-made borrow canal was excavated and used as fill for the construction of Card Sound Road in the 1920s and is one of the few canals in Miami-Dade County without a salinity control structure. The objectives of the proposed project are to improve hydrology and water quality within the aquifer and wetland areas adjacent to, and in the vicinity of, Card Sound Road in southern Miami-Dade County. The project will serve to plug the canal, which currently acts as a conduit to drain freshwater and exacerbates saltwater intrusion. By plugging the canal in the proposed location, the applicant expects to decrease saltwater intrusion into the freshwater aquifer upstream and to improve the

hydrology and overall health and productivity of the surrounding mangrove wetlands.

The construction of the 235 foot long earthen plug will involve the filling of tidal waters and halophytic wetlands within the Card Sound Road Canal. The project will impact 1,920 square feet of wetlands along the banks of the canal. However, the applicant is proposing to plant a minimum of 1,500 red mangrove seedlings in the 12,000 square feet of open water that will be filled to wetland elevation. This will result in a net increase of more than 10,000 square feet of wetland habitat. The area will be managed to ensure that the coverage of appropriate vegetative species is maintained in perpetuity, as part of the larger general maintenance activities for the South Dade Wetlands EEL Project. The enhancement of the native floral communities should increase wildlife utilization within and adjacent to the project area. Improved hydrology should also lead to higher productivity of small organisms at the base of the food chain.

The proposed project is not located within an area designated as essential manatee habitat for the West Indian Manatee (*Trichechus manatus*) by the Miami-Dade County Manatee Protection Plan (MDCMPP). However, manatees have been observed in the area. Therefore, the Class I permit will require that all standard manatee construction permit conditions shall be followed during all in-water construction operations. Additionally, the Class I permit will have conditions to minimize turbidity to protect rare, threatened, and endangered species.

The proposed project has been designed in accordance with all relevant Miami-Dade County coastal and wetland construction criteria and is consistent with all other Miami-Dade County coastal and wetland 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: Owner/Agent Letter, Engineer Certification Letter and Project Sketches
Attachment C: Zoning Memorandum
Attachment D: Names and Addresses of Owners of All Riparian or Wetland Property within Three Hundred (300) Feet of the Proposed Work
Attachment E: DERM Project Report

NOTICE OF PUBLIC HEARING ON AN APPLICATION BY MIAMI-DADE COUNTY FOR A CLASS I PERMIT TO AUTHORIZE THE FILLING OF TIDAL WATERS AND HALOPHYTIC WETLANDS FOR THE CONSTRUCTION OF AN EARTHEN PLUG IN THE CARD SOUND ROAD CANAL, MIAMI-DADE COUNTY, FLORIDA

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 Board of County Commissioners of Miami-Dade County will hold and conduct a Public Hearing on a request by Miami-Dade County for a Class I permit to authorize the filling of tidal waters and halophytic wetlands for the construction of an earthen plug in the Card Sound Road Canal, Miami-Dade County, Florida. Such Public Hearing will be held on the 20th day of July 2010 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, 6th Floor, 701 NW 1st Court, Miami, Florida 33136.

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 (Diane Collins, 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, 701 NW 1st Court, Miami, Florida 33136.

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: _____
Diane Collins, Deputy Clerk

MEMORANDUM

(Revised)

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

DATE: July 20, 2010

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

SUBJECT: Agenda Item No. 5 (D)

Please note any items checked.

_____ **"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**

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

✓ **No committee review**

_____ **Applicable legislation requires more than a majority vote (i.e., 2/3's ____, 3/5's ____, unanimous_____) to approve**

_____ **Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required**

Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 5(D)
7-20-10

RESOLUTION NO. _____

RESOLUTION RELATING TO AN APPLICATION BY MIAMI-DADE COUNTY FOR A CLASS I PERMIT TO AUTHORIZE THE FILLING OF TIDAL WATERS AND HALOPHYTIC WETLANDS FOR THE CONSTRUCTION OF AN EARTHEN PLUG IN THE CARD SOUND ROAD CANAL, MIAMI-DADE COUNTY, FLORIDA

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 authorize the filling of tidal waters and halophytic wetlands for the construction of an earthen plug in the Card Sound Road Canal, Miami-Dade County, Florida, 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 foregoing resolution was offered by Commissioner , who moved its adoption. The motion was seconded by Commissioner and upon being put to a vote, the vote was as follows:

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

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

The Chairperson thereupon declared the resolution duly passed and adopted this 20th day of July, 2010. 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

Approved by County Attorney as to form and legal sufficiency.

By:_____
Deputy Clerk

Peter S. Tell

Attachment A

Class I Permit Application

MIAMI-DADE COUNTY

RECEIVED
JUN 17 2010
DERM Coastal Resources Section

Class I Permit Application

FOR DEPARTMENTAL USE ONLY

Date Received:

Application Number: 2010-CLASSER-00319

Application Fee:

Application must be filled out in its entirety. Please indicate N/A for non-applicable fields.

1. Applicant Information:

Name: MIAMI-DADE COUNTY

Address: 111 N.W. 1ST St. #29th floor

MIAMI, FL. Zip Code: 33128

Phone #: 305-375-2911 Fax#:

Email: AH13@MIAMIDADE.GOV

* This should be the applicant's information for contact purposes.

2. Applicant's Authorized Permit Agent:

Agent is allowed to process the application, furnish supplemental information relating to the application and bind the applicant to all requirements of the application.

Name: MARINA BLANCO-PAPE, P.E.

Address: 701 N.W. 1ST Ct. 5th floor

MIAMI, FL. Zip Code: 33136

Phone #: 305-372-6950 Fax #: 305-372-6425

Email: PAPEMB@MIAMIDADE.GOV

3. Location where proposed activity exists or will occur (latitude and longitude are only necessary for properties without address or folio #):

Folio #(s): 30-9911-000-0010 Latitude: 25.3153765 Longitude: 80-

Street Address: Section: 11 Township: 59 Range: 39

In City or Town: Near City or Town:

Name of waterway at location of the activity: CARD SOUND ROAD CANAL

4. Describe the proposed activity (check all that apply):

- ☐ Seawall
  - ☐ New/Replacement Seawall
  - ☐ Seawall Cap
  - ☐ Batter Piles
  - ☐ King Piles
  - ☐ Footer/Toe Wall
  - ☐ Riprap
- ☐ Dock(s)
- ☐ Pier(s)
- ☐ Viewing Platform
- ☐ Boatlift
- ☐ Mooring Piles
- ☐ Fender Piles
- ☐ Davits
- ☐ Dredging
  - ☐ Maintenance
  - ☐ New
- ☒ Filling
- ☒ Mangrove Trimming
- ☒ Mangrove Removal
- ☒ Other:

Estimated project cost = $ 300,000.00

Are you seeking an after-the-fact approval (ATF)? ☐ Yes ☒ No If "Yes", describe the ATF work:

5. Proposed Use (check all that apply):

- ☐ Single Family
- ☐ Multi-Family
- ☐ Private
- ☒ Public
- ☐ Commercial
- ☐ Industrial
- ☐ Utility

6. If the proposed work relates to the mooring of vessels provide the following information (please also indicate if the applicant does not have a vessel):

Proposed Vessel Type (s): N/A

Vessel Make/Model (If known): N/A

Draft (s)(range in inches.): N/A Length (s)(range in feet.): N/A

Total Number of Slips: N/A

7. List all permits or certifications that have been applied for or obtained for the above referenced work:

Issuing Agency	Type of Approval	Identification Number	Application Date	Approval Date
SFWMD	GENERAL PERMIT	13-04800P	10/29/09	5/6/10
ACOE	"	2009-0451	10/29/09	PENDING

1 (IP-FF)

Revised 11/16/09

8. Contractor Information (If known): NOT KNOWN AT THIS TIME

Name: _____ License # (County/State): _____

Address: _____ Zip Code: _____

Phone #: _____ Fax #: _____ E-mail: _____

9. **IMPORTANT NOTICE TO APPLICANTS**: The written consent of the property owner is required for all applications to be considered complete. Your application WILL NOT BE PROCESSED unless the Applicant and Owner Consent portion of the application is completed below. You have the obligation to apprise the Department of any changes to information provided in this application.

Application is hereby made for a Miami-Dade County Class I permit to authorize the activities described herein. I agree to or affirm the following:

- I possess the authority to authorize the proposed activities at the subject property, and
- I am familiar with the information, data and plans contained in this application, and
- To the best of my knowledge and belief, the information, data and plans submitted are true, complete and accurate, and
- I will provide any additional information, evidence or data necessary to provide reasonable assurance that the proposed project will comply with the applicable State and County water quality standards both during construction and after the project is completed, and
- I am authorizing the permit agent listed in Section 2 of this application to process the application, furnish supplemental information relating to this application and bind the applicant to all requirements of this application, and
- I agree to provide access and allow entry to the project site to inspectors and authorized representatives of Miami-Dade County for the purpose of making the preliminary analyses of the site and to monitor permitted activities and adherence to all permit conditions.

DERM Coastal Resources Section
Natural Resources Regulation & Restoration
Division (NRRRD)

A. **IF APPLICANT IS AN INDIVIDUAL**

Signature of Applicant _____ Print Applicant's Name _____ Date _____

B. **IF APPLICANT IS OTHER THAN AN INDIVIDUAL OR NATURAL PERSON**
(Examples: Corporation, Partnership, Trust, LLC, LLP, etc.)

MIAMI-DADE COUNTY — Print Name of Applicant (Enter the complete name as registered) Registration/Incorporation

LOCAL GOVERNMENT — Type (Corp, LLC, LLP, etc.)

FLORIDA — State of

Under the penalty of perjury, I certify that I have the authority to sign this application on behalf of the Applicant, to bind the Applicant, and if so required to authorize the issuance of a bond on behalf of the Applicant. (If asked, you must provide proof of such authority to the Department). ***Please Note: If additional signatures are required, pursuant to your governing documents, operating agreements, or other applicable agreements or laws, you must attach additional signature pages. ***

Signature of Authorized Representative _____ ALEX MUÑOZ — Print Authorized Representative's Name ASSISTANT COUNTY MANAGER — Title _____ Date

C. **IF APPLICANT IS A JOINT VENTURE** Each party must sign below(If more than two members, list on attached page)

Print Name of Applicant (Enter the complete name as registered) Registration/Incorporation _____ Type (Corp, LLC, LLP, etc.) _____ State of _____

Print Name of Applicant (Enter the complete name as registered) Registration/Incorporation _____ Type (Corp, LLC, LLP, etc.) _____ State of _____

Under the penalty of perjury, I certify that I have the authority to sign this application on behalf of the Applicant, to bind the Applicant, and if so required to authorize the issuance of a bond on behalf of the Applicant. (If asked, you must provide proof of such authority to the Department). ***Please Note: If additional signatures are required, pursuant to your governing documents, operating agreements, or other applicable agreements or laws, you must attach additional signature pages. ***

Signature of Authorized Representative _____ Print Authorized Representative's Name _____ Title _____ Date _____

Signature of Authorized Representative _____ Print Authorized Representative's Name _____ Title _____ Date _____

Revised 11/16/09

10. WRITTEN CONSENT OF THE PROPERTY OWNER OF THE AREA OF THE PROPOSED WORK

I/We are the fee simple owner(s) of the real property located at N/A Miami-Dade County, Florida, otherwise identified in the public records of Miami-Dade County as Folio No. 30-9911-000-0010. I am aware and familiar with the contents of this application for a Miami-Dade County Class I Permit to perform the work on or adjacent to the subject property, as described in Section 4 of this application. I possess the riparian rights to the area of the proposed work (if applicable) and hereby consent to the work identified in this Class I Permit application.

A. IF THE OWNER(S) IS AN INDIVIDUAL

Signature of Owner	Print Owner's Name	Date
Signature of Owner	Print Owner's Name	Date

B. IF THE OWNER IS OTHER THAN AN INDIVIDUAL OR NATURAL PERSON

(Examples: Corporation, Partnership, Joint Venture, Trust, LLC, LLP, etc.)

Print Name of Owner (Enter the complete name as registered)	Type (Corp, LLC, LLP, etc.)	State of Registration/Incorporation
MIAMI-DADE COUNTY	LOCAL GOVERNMENT	FLORIDA

Address of Owner: 111 N.W. 1ST STREET, 29th FLOOR, MIAMI, FL. 33128

Under the penalty of perjury, I certify that I have the authority to sign this application on behalf of the Owner, to bind the Owner, and if so required to authorize the issuance of a bond on behalf of the Owner. (If asked, you must provide proof of such authority to the Department). ***Please Note: If additional signatures are required, pursuant to your governing documents, operating agreements, or other applicable agreements or laws, you must attach additional signature pages. ***

Signature of Authorized Representative	Print Authorized Representative's Name	Title	Date
	ALEX MUÑOZ	ASSISTANT COUNTY MANAGER	
Signature of Authorized Representative	Print Authorized Representative's Name	Title	Date

Please Review Above

Appropriate signature(s) must be included in:

Box 9: either A, B or C

AND

Box 10: either A or B

Attachment B

Owner/Agent Letter, Engineer Certification Letter and Project Sketches

PERMIT APPLICANT/ AUTHORIZED AGENT STATEMENT

Date: July 6, 2010

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

Re: Class I Standard Form Permit Application Number 2009-CLI-PER-00319

By the attached Class I Standard Form permit application with supporting documents, I, Mrs. Marina Blanco-Pape, P.E., Chief, Water Management Division, DERM, am the Applicant's Authorized Permit Agent and hereby request permission to perform the work associated with Class I permit application 2009-CLI-PER-00319. 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,

Mrs. Marina Blanco-Pape, P.E.
Chief, Water Management Division
Miami-Dade County Department of Environmental Resources Management (DERM)
Applicant's Authorized Permit Agent

MIAMI-DADE COUNTY
Carlos Alvarez, Mayor

Department of Environmental Resources Management
Water Management Division
701 NW 1st Court, 5th Floor
Miami, Florida 33136-3912
T 305-372-6529 F 305-372-6425

miamidade.gov

July 6, 2010

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

Re: Class I Standard Form Permit Application Number 2009-CLI-PER-00319

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 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,

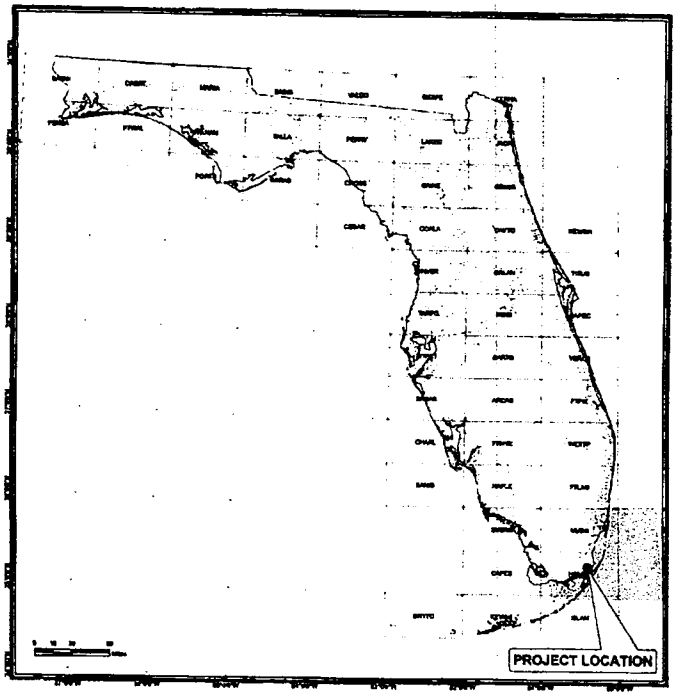
7/6/10

Juan A. Curiel, P.E. (P.E. #63890)
Chief, Stormwater Planning Section
Water Management Division
Miami-Dade County-DERM

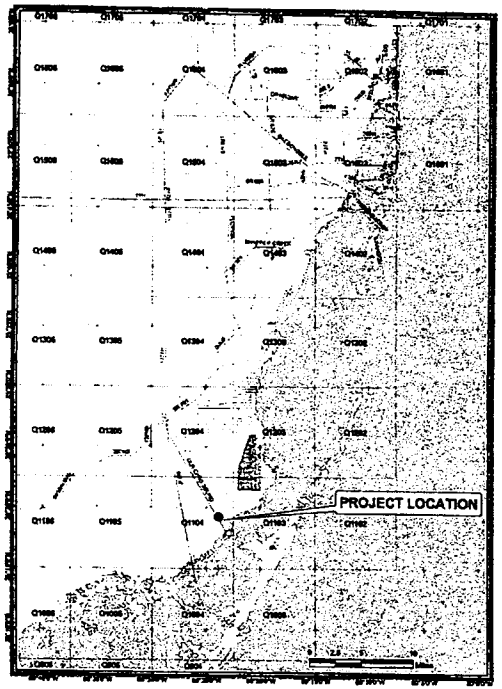
CONSTRUCTION OF AN EARTHEN PLUG AT THE OLD CARD SOUND ROAD CANAL

MIAMI DADE COUNTY
DEPARTMENT OF ENVIRONMENTAL RESOURCES MANAGEMENT (DERM)

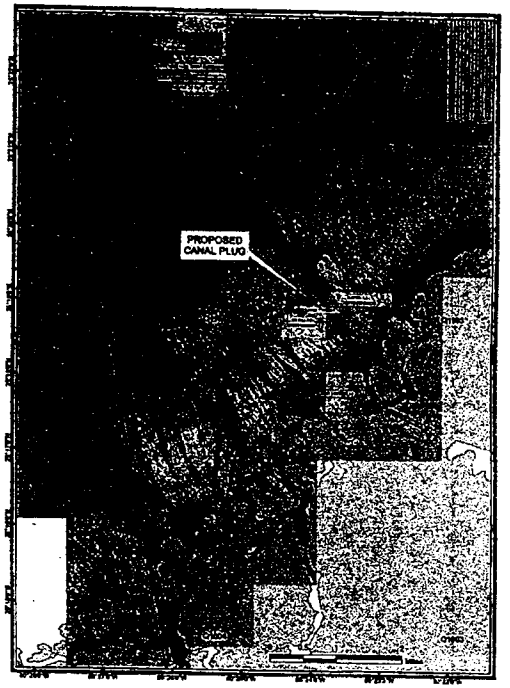
RECEIVED
MAY 13 2010
DERM Coastal Resources Section
Natural Resources Regulation & Restoration
Division (NRRRD)



STATE OF FLORIDA



LOCATION MAP



VICINITY MAP

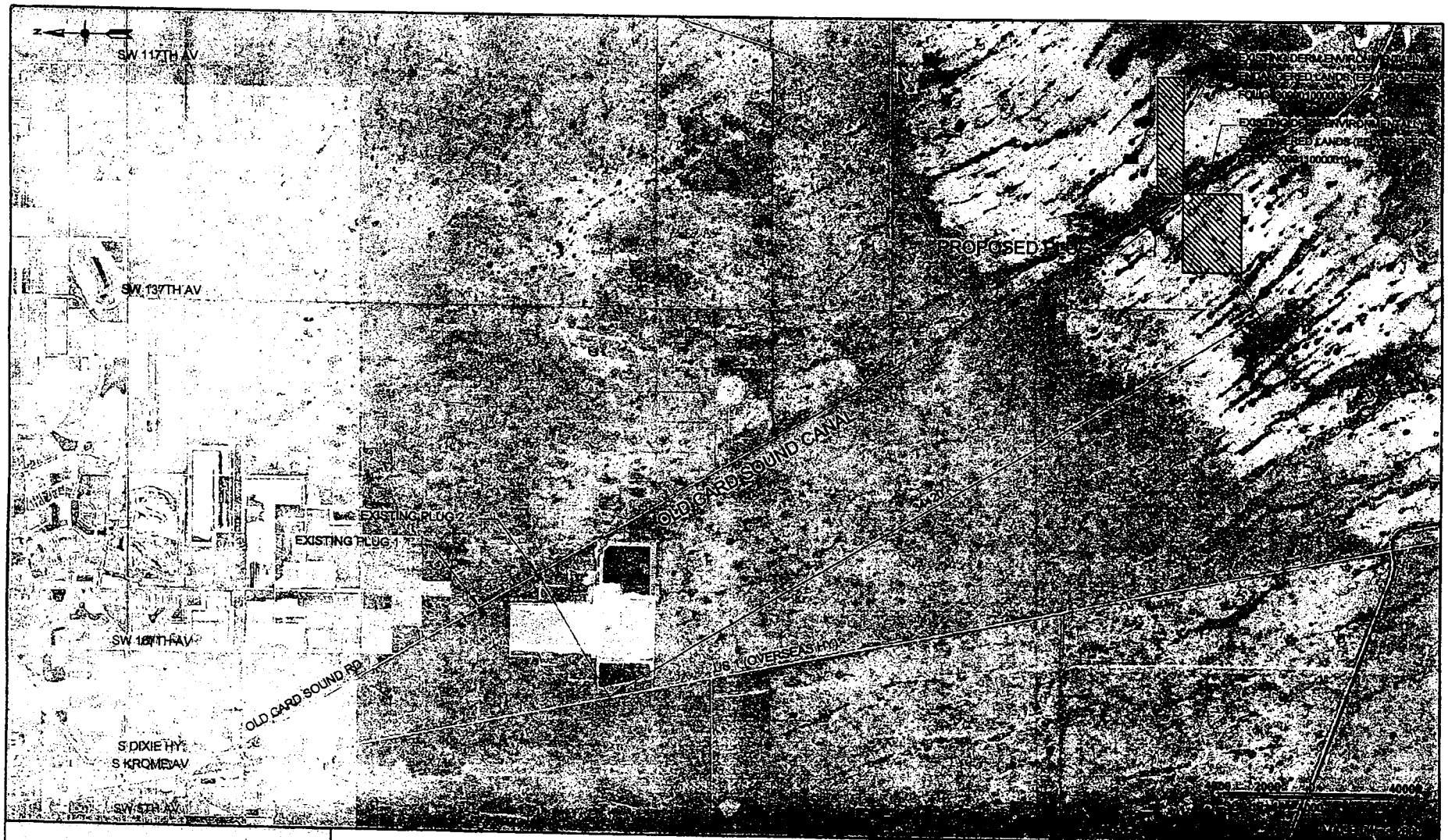
INDEX OF SHEETS

1- COVER
2- SITE PLAN
3- NOTES
4- PLAN VIEW
5- CROSS SECTIONS
6- PROFILE, BOULDERS & FILTER CLOTH DETAILS

MIAMI-DADE COUNTY

JUAN A. CURIEL
State of Florida
Professional Engineer
License No. 63890

MIAMI-DADE COUNTY DERM WATER MANAGEMENT DIVISION	OLD CARD SOUND CANAL PROPOSED PLUG COVER
701 NW 1st Court, 5th Floor MIAMI, FLORIDA 33136	JOB: OCSCP DATE: 06-02-09 BY: J.C./A.J./M.M. SHEET:



ALL CROSS SECTIONS, CALCULATIONS OF ESTIMATED QUANTITIES HEREIN ARE BASED ON TOPOGRAPHIC SURVEYS SUPERVISED BY THE DERM WATER MANAGEMENT DIVISION. ALL PROPOSED ALTERNATIVES ARE NOT ANTICIPATED TO BE EFFECTIVE IN DIMINISHING THE EFFECTS OF SALT INTRUSION IN THE IMMEDIATE AREA.

MAY 13 2010

DERM Coastal Resources Section
Natural Resources Restoration & Restoration
Division, Miami

MIAMI-DADE COUNTY DERM WATER MANAGEMENT DIVISION	OLD CARD SOUND CANAL PROPOSED PLUG SITE PLAN	
701 NW 1st Court, 5th Floor MIAMI, FLORIDA 33136	JOB: OCSCP	DATE: 06-02-09
	BY: J.C./A.J./M.M.	SHEET: 2 OF 6

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE PLANS AND PROJECT DESCRIPTION APPROVED BY FEDERAL, STATE AND LOCAL REGULATORY PERMITING AGENCIES HAVING JURISDICTION. THE CONTRACTOR WHO PERFORMS THE WORK SHALL PLACE THE PERMIT PLACARDS ON THE JOB SITE AND SHALL COMPLY WITH THE TERMS OF THE PERMITS AS PERTAINING TO PERFORMANCE OF THE WORK.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH CURRENT SITE CONDITIONS AND SHALL REPORT ANY DISCREPANCIES FROM THESE DRAWINGS TO THE ENGINEER PRIOR TO BEGINNING WORK.
3. THE PLANE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED ON THE STATE PLANE COORDINATE SYSTEM FLORIDA EAST ZONE 0901 NORTH AMERICAN DATUM 1983/1990 (NAD83/90) ADJUSTMENT AND ALL CONTOURS AND ELEVATIONS ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).
4. HORIZONTAL AND VERTICAL CONTROL FOR CONSTRUCTION OF THIS PROJECT SHALL BE BASED ON OFFICIAL SURVEY MONUMENTS AS FOUND IN MIAMI-DADE COUNTY.
5. HEAVY EQUIPMENT ACCESS SHALL BE DETERMINED THROUGH COORDINATION BETWEEN THE FLORIDA DEPARTMENT OF TRANSPORT AND MIAMI-DADE COUNTY, WITH PRIOR APPROVAL BY ENGINEER, AND ACCORDING TO APPLICABLE PERMITS.

PERMIT NOTES

1. IT IS THE INTENT OF THESE PLANS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE PLANS AND APPLICABLE CODES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. IT IS THE INTENT OF THESE PLANS AND THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH THE CONDITIONS WITHIN ALL ENVIRONMENTAL PERMITS ISSUED FOR THIS PROJECT. THE PERMITS ARE HEREBY MADE PART OF THE CONTRACT DOCUMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH AND GOVERN HIMSELF BY ALL PROVISIONS OF THESE PERMITS.
3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A RIGHT OF WAY PERMIT FROM THE FLORIDA DEPARTMENT OF TRANSPORT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

TURBIDITY CONTROL PLAN

THE CONTRACTOR SHALL UTILIZE THE PLACEMENT OF TURBIDITY BARRIERS (TURBIDITY BOOMS) TO PREVENT TURBIDITY FROM MIGRATING INTO THE ADJACENT WETLANDS AS WELL AS UPSTREAM/DOWNSTREAM WATERS.

THE AREA SHALL HAVE ADEQUATE CONTROLS SUCH AS TURBIDITY BARRIERS, AND COFFERDAMS, ETC. TO PREVENT TURBIDITY FROM MIGRATING TO OTHER SECTIONS OF THE CANAL AND WETLANDS. TO PREVENT TURBIDITY FROM MIGRATING INTO THE ADJACENT WETLANDS, THE CONTRACTOR SHALL PLACE TURBIDITY BARRIERS ALONG THE ADJACENT MANGROVE LINE, EXTENDING THROUGHOUT THE ENTIRE LENGTH OF THE PROPOSED PLUG AND FIFTY (50) FEET PAST THE ENDS OF THE PROPOSED PLUG IN BOTH DIRECTIONS.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MONITOR AND CONTROL THE TURBIDITY DURING CONSTRUCTION OPERATIONS. TURBIDITY BARRIERS (BOOMS) SHALL COMPLETELY ENCLOSE AND REACH THE FULL DEPTH OF THE CONTAINMENT AREA, AND ALSO SATISFY THE FOLLOWING REQUEREMENTS:

A. TURBIDITY CONTROL PLAN MUST BE PERFORMED IN ACCORDANCE TO CHAPTER 62-302, FAC. ALL TURBIDITY WILL BE MEASURE IN NEPHELOMETRIC TURBIDITY UNITS (NTU). THE LIMIT SHALL NOT EXCEED 29 NTUS MEASURED AT FIFTY (50) FEET FROM THE WORKPLACE.

B. SHOULD IT EXCEED THE ACCEPTABLE LIMIT, THE CONTRACTOR SHALL NOTIFY THE MIAMI-DADE DEPARTMENT OF ENVIROMENTAL RESOURCES MANAGEMENT (DERM) OF THE PROBLEM. NO WORK IS ALLOWED TO CONTINUE UNTIL THE LIMIT (29 NTUs – 50 FEET UPSTREAM AND 50 FEET DOWNSTREAM ABOVE BACKGROUND LEVELS), AND/OR THE DEFICIENCY ASSOCIATED WITH THE TURBIDITY CONTROL DEVISE IS RECTIFIED.

PLANTING NOTES

RED MANGROVE SPECIES WILL BE PLANTED (SEPARATION OF THREE FEET ON CENTER) ON TOP OF THE PROPOSED EARTHEN PLUG. THE PLANTS SHALL HAVE THE FOLLOWING CHARACTERISTICS:

1. 12-18 INCHES IN HEIGHT
2. AT LEAST ONE (1) YEAR OLD
3. 4" MINIMUN SEEDLING CONE REQUIREMENT
4. A LEAF REQUIREMENT OF 4 TO 6 LEAVES PER PLANT

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CONSTRUCTION NOTES

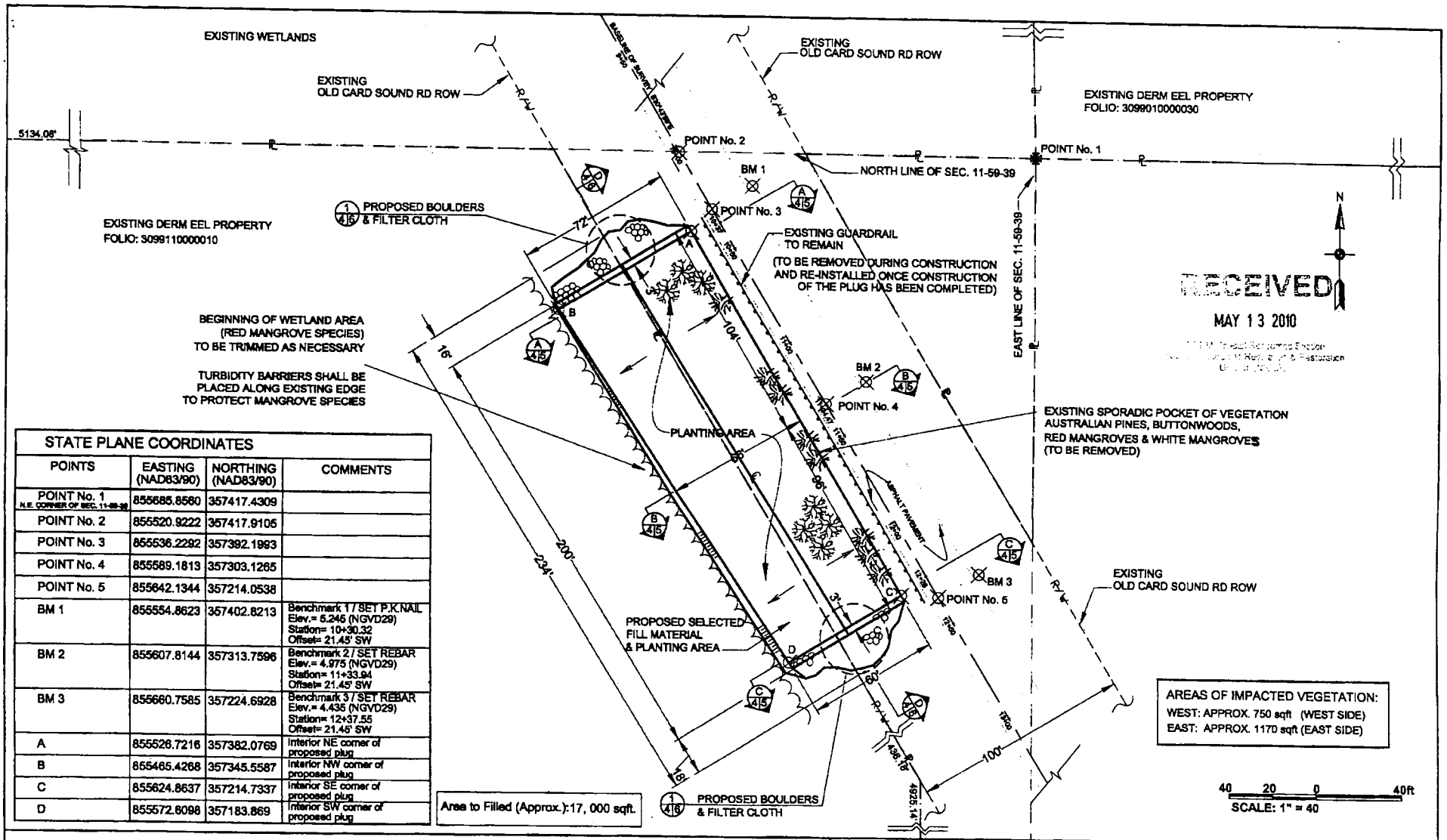
1. EXISTING CANAL BOTTOM AND BERM PROFILES SHOWN HEREIN REFLECT THE EXISTING CONDITIONS SURVEYED BY JBM DATA SYSTEM, LLC. ON NOVEMBER 24 TO 26, 2008.
2. VERTICAL TOLERANCE FOR SELECTED FILL MATERIAL (75% LAWN SAND AND 25% WEED FREE TOPSOIL) IS +/- 0.5 FEET. ONLY ACTUAL QUANTITIES, WITHIN APPROVED TOLERANCES, WILL BE CONSIDERED FOR PAYMENT PURPOSES.
3. BOULDER STONES SHALL BE FROM QUARRIES INSPECTED AND APPROVED BY THE ENGINEER. THE ENGINEER WILL REQUIRE TESTING OF THE STONE PRIOR TO ACCEPTANCE FOR PLACEMENT. ANY BOULDER THAT DOES NOT MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TOE WITH BOULDER SHALL BE ADDED IF IT IS REQUIRED AFTER CLEARING AND EXCAVATION CONDITIONS HAVE BEEN CONFIRMED.
4. BOULDER STONE SHOULD BE DURABLE, SOUND, AND FREE OF DETRIMENTAL CRACKS (BOTH NATURAL AND QUARRY-INDUCED), SEAMS, AND OTHER DEFECTS THAT TEND TO INCREASE DETERIORATION FROM NATURAL CAUSES OR WHICH CAUSE BREAKAGE DURING HANDLING OR PLACEMENT.
5. EXTERNAL ARMOUR ROCK, THAT IS INTENDED TO PREVENT EROSION ACTION OF SURFACE WATER FLOW VELOCITY, SHALL BE PLACED AND ARRANGED TO FORM A COMPACT LAYER CONFORMING TO THE CROSS-SECTION LINES, +/- 0.5 FEET. THESE ROCKS SHALL BE PLACED IN A MANNER THAT NO SEGREGATION OCCURS AND PROPERLY INTERLOCKING IS OBTAINED. THESE BOULDERS SHALL BE LOWERED TO REST IN ORDER TO PREVENT ROLLING OR SLIDING. PLACING THE STONE BY DUMPING WILL NOT BE ALLOWED.
6. CORE BACKFILL, SHALL BE A SAND-GRAVEL COMPACTED MATERIAL WITHOUT PARTICLES FINER THAN U.S. STANDARD SIEVE NO. 70 AND NOT COARSER THAN 0.5 FT DIAMETER.
7. FILTER CLOTH OR PROTECTIVE REVERSE FILTER SHOULD BE USED BETWEEN CORE MATERIAL AND BOULDER STONES TO PREVENT INTERNAL MECHANICAL EROSION OF FINER MATERIAL.
8. CORE BACKFILL MATERIAL SHALL BE FREE OF CONTAMINANTS. THIS MATERIAL SHALL MEET THE CLEAN FILL CRITERIA DEFINITION PURSUANT TO CHAPTER 24-5 OF THE CODE OF MIAMI-DADE COUNTY AND THE CONTRACTOR SHALL PROVIDE DOCUMENTATION REGARDING THE SOURCE OF THE MATERIAL.
9. CONTRACTOR SHALL PROVIDE THE ENGINEER OR AUTHORIZED COUNTY REPRESENTATIVE THE OPTIMUM MOISTURE CONTENT AND THE STANDARD PROCTOR MAXIMUM DENSITY FOR THE PROPOSED CORE BACKFILL MATERIAL.
10. CORE BACKFILL MATERIAL SHALL BE COMPACTED ACCORDING TO SECTION 120-9 OF THE 2007 FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, "COMPACTION REQUIREMENTS." ITS ACCEPTANCE SHALL CONFORM TO SECTION 120-10 OF THE 2007 FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, "ACCEPTANCE PROGRAM."

JUAN A. CURIEL
State of Florida
Professional Engineer
License No. 63890

MIAMI-DADE COUNTY DERM
WATER MANAGEMENT DIVISION
701 NW 1st Court, 5th Floor
MIAMI, FLORIDA 33136

OLD CARD SOUND CANAL
PROPOSED PLUG
NOTES

JOB: OCSCP | DATE: 06-02-09
BY: J.C./A.J./M.M. | SHEET: 3 OF 6



STATE PLANE COORDINATES			
POINTS	EASTING (NAD83/90)	NORTHING (NAD83/90)	COMMENTS
POINT No. 1 N.E. CORNER OF SEC. 11-59-39	855685.8580	357417.4309	
POINT No. 2	855520.9222	357417.9105	
POINT No. 3	855536.2292	357392.1993	
POINT No. 4	855589.1813	357303.1265	
POINT No. 5	855642.1344	357214.0538	
BM 1	855554.8623	357402.8213	Benchmark 1 / SET P.K.NAIL Elev.= 5.245 (NGVD29) Station= 10+30.32 Offset= 21.45' SW
BM 2	855607.8144	357313.7596	Benchmark 2 / SET REBAR Elev.= 4.975 (NGVD29) Station= 11+33.94 Offset= 21.45' SW
BM 3	855660.7585	357224.6928	Benchmark 3 / SET REBAR Elev.= 4.435 (NGVD29) Station= 12+37.55 Offset= 21.45' SW
A	855526.7216	357382.0769	Interior NE corner of proposed plug
B	855465.4268	357345.5587	Interior NW corner of proposed plug
C	855624.8637	357214.7337	Interior SE corner of proposed plug
D	855572.6098	357183.869	Interior SW corner of proposed plug

NOTES:

1.- ALL ELEVATIONS SHOWN ARE BASED ON NGVD 29

2.- HORIZONTAL DATUM PLANE: NAD83/90

JUAN A. CURIEL
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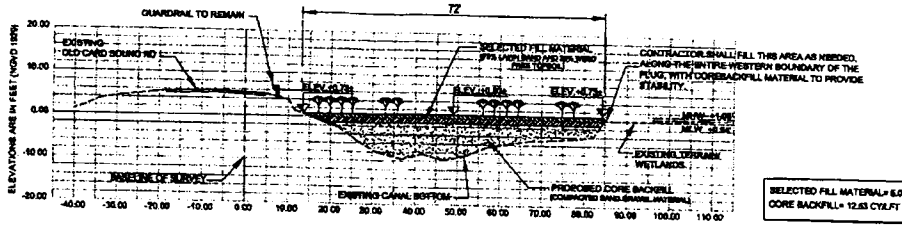
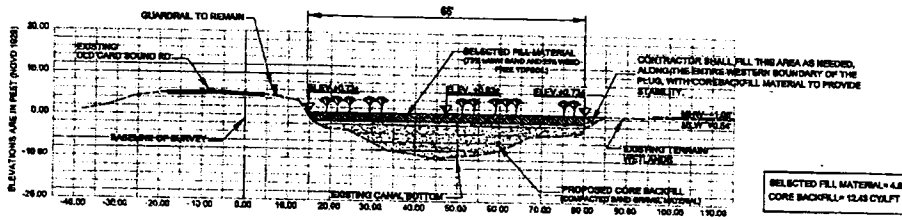
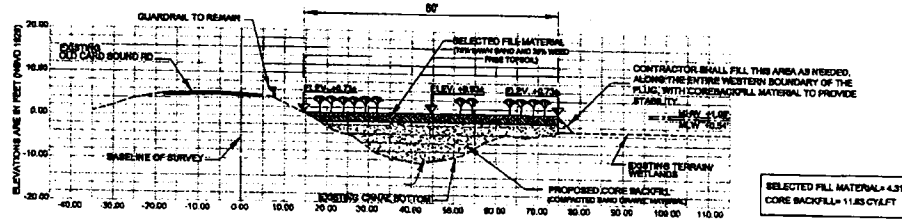
MIAMI-DADE COUNTY DERM WATER MANAGEMENT DIVISION	OLD CARD SOUND CANAL PROPOSED PLUG PLAN VIEW	
701 NW 1st Court, 5th Floor MIAMI, FLORIDA 33136	JOB: OCSCP	DATE: 06-02-09
	BY: J.C./A.J./M.M.	SHEET: 4 OF 6



A 4|5 CROSS SECTION STATION 10+37
SCALE: N.T.S.



B 4|5 CROSS SECTION STATION 11+34.47
SCALE: N.T.S.



C 4|5 CROSS SECTION STATION 12+26
SCALE: N.T.S.

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NOTES:

1.- ALL ELEVATIONS SHOWN ARE BASED ON NGVD 29
2.- HORIZONTAL DATUM PLANE: NAD83/90

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MIAMI-DADE COUNTY DERM
WATER MANAGEMENT
DIVISION
701 NW 1st Court, 5th Floor
MIAMI, FLORIDA 33136

OLD CARD SOUND CANAL
PROPOSED PLUG
CROSS SECTIONS

JOB: OCSCP | DATE: 06-02-09
BY: J.C./A.J./M.M. | SHEET: 5 OF 6

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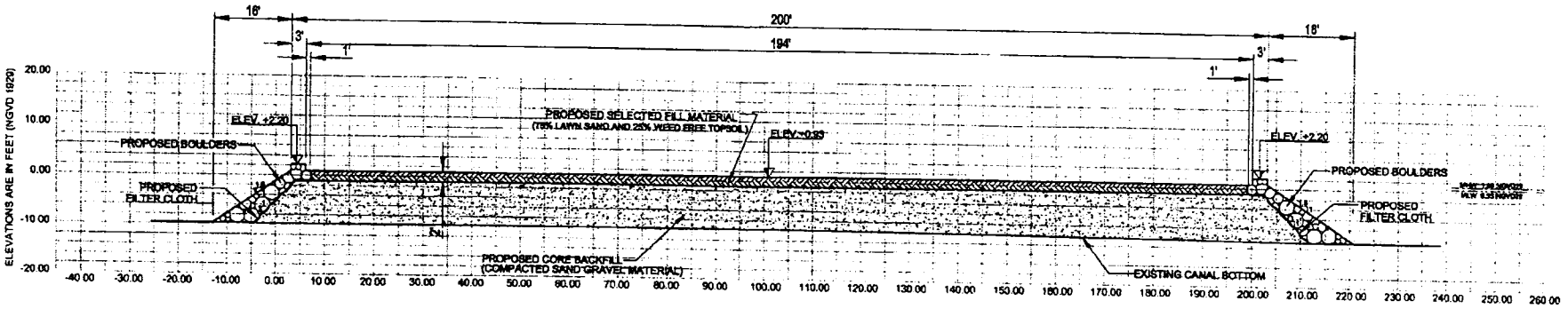
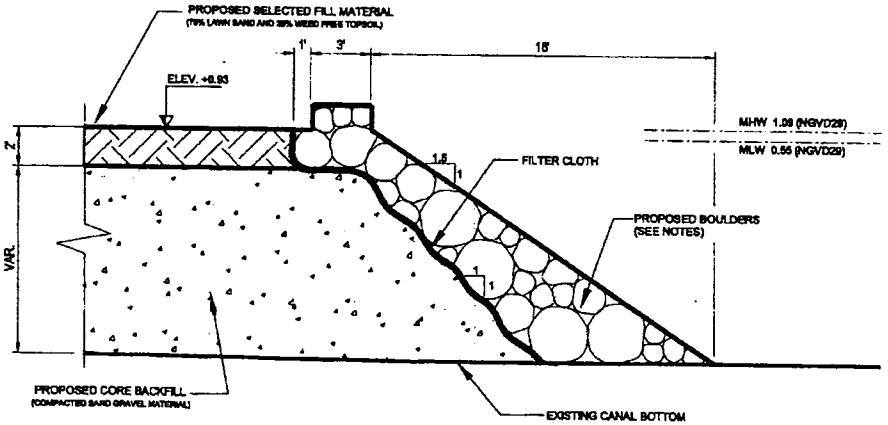


D / 4|6 PROFILE
SCALE: N.T.S.



1 / 4|6 PROPOSED BOULDERS & FILTER CLOTH - DETAIL
SCALE: N.T.S.

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MAY 13 2010
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Natural Resources Regulation & Restoration
Division (NRRRD)

NOTES:

1.- RIPRAP SHALL CONSIST OF FLORIDA LIMEROCK BOULDERS RANGING IN SIZE FROM 12" TO 36" IN DIAMETER WITH AN AVERAGE BULK SPECIFIC GRAVITY OF 2.0 AND NOT LESS THAN 1.9 FOR ANY INDIVIDUAL BOULDER.
2.- MINIMUM THICKNESS OF RIPRAP LAYER SHALL BE 2.2 TIMES THE MAX. STONE DIAMETER BUT NOT LESS THAN 6".
3.- FILTER CLOTH SHALL BE GEOLON N70 OR EQUIVALENT PERVIOUS GEOTEXTILE SHALL PROVIDE AN EQUIVALENT OPENING SIZE (EOS) NO FINER THAT U.S. STANDARD SIEVE No. 70 AND NO COARSER THAN U.S. STANDARD SIEVE No. 50.

NOTES:

1.- ALL ELEVATIONS SHOWN ARE BASED ON NGVD 29
2.- HORIZONTAL DATUM PLANE: NAD83/90

JUAN A. CURIEL
State of Florida
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MIAMI-DADE COUNTY DERM
WATER MANAGEMENT
DIVISION
701 NW 1st Court, 5th Floor
MIAMI, FLORIDA 33136

OLD CARD SOUND CANAL
PROPOSED PLUG
PROFILE, BOULDERS & FILTER CLOTH DETAILS

JOB: OCSCP	DATE: 06-02-09
BY: J.C./A.J./M.M.	SHEET: 6 OF 6

Attachment C

Zoning Memorandum

Memorandum

MIAMI-DADE COUNTY

Date: June 28, 2010

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

From: Nicole Fresard, Biologist II
Coastal Resources Section
Environmental Resources Management

Subject: Class I Permit Application by Miami-Dade County to Authorize the Filling of Tidal Waters and Halophytic Wetlands for the Construction of an Earthen Plug in the Card Sound Road Canal, Miami-Dade County, Florida

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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 D

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

South Broadcasting System Inc
1000 Ponce De Leon Blvd
Coral Gables, Fl, 33134-3353

General Charter Corp
8751 W Broward Blvd # 209
Plantation, Fl, 33324-

Miami Dade County DERM - EEL
701 NW 1 Court Ste 400
Mimi, Fl, 33136

American Tel & Tel Co AT&T interstate
PO BOX 1329
Morristown, NJ, 07660

Attachment E

Project Report

PROJECT REPORT
CLASS I PERMIT APPLICATION NO. 2009-CLI-PER-00319

Class I Permit Application by Miami-Dade County to Authorize the Filling of Tidal Waters and Halophytic Wetlands for the Construction of an Earthen Plug in the Card Sound Road Canal, Miami-Dade County, Florida.

Date: June 15, 2010

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 (Code), Florida. The following is a summary of the proposed project with respect to each applicable evaluation factor:

1. **Potential Adverse Environmental Impact** – The potential for any adverse environmental impacts from the construction of the earthen plug is minimal. A biological assessment conducted by DERM biologists revealed no significant benthic resources in the area of the proposed work. Red and white mangrove trees, as well as buttonwood trees were documented along the northeast and southwest banks of the canal in the location of the proposed work. As such, the proposed project will impact 1,920 square feet of vegetation. However, the impacts are associated with an environmental restoration project, and will be offset by the reduction of saltwater intrusion into the freshwater aquifer upstream, and the re-establishment of historic hydrologic patterns to significantly enhance the quality of the surrounding wetlands. In addition, once the earthen plug has been constructed, the applicant will plant a minimum of 1,500 red mangrove seedlings in the 12,000 square feet area of open water that will be filled to wetland elevation. This will result in a net increase of more than 10,000 square feet of wetland habitat. The area will be managed to ensure that the coverage of appropriate vegetative species is maintained in perpetuity. It is expected that the enhancement of the native floral communities will increase wildlife utilization within and adjacent to the project area. Improved hydrology should also lead to higher productivity of small organisms at the base of the food chain.

   The proposed project is not located within an area designated as essential manatee habitat for the West Indian Manatee (*Trichechus manatus*) by the Miami-Dade County Manatee Protection Plan (MDCMPP). However, manatees have been observed in the area. Therefore, the Class I permit will require that all standard manatee construction permit conditions shall be followed during all in-water construction operations. Additionally, the Class I permit will have conditions to minimize turbidity and to protect rare, threatened, and endangered species.

2. **Potential Cumulative Adverse Environmental Impact** – The proposed project is not reasonably expected to result in potential cumulative adverse environmental impacts. The project consists of the construction of an earthen plug for environmental restoration purposes. Any impacts associated with the project will be offset by the reduction of saltwater intrusion into the freshwater aquifer upstream, and the re-establishment of historic hydrologic patterns to significantly enhance the quality of the surrounding wetlands.

3. **Hydrology** – The proposed project will positively affect hydrology. The project will result in the reduction of saltwater intrusion into the freshwater aquifer upstream, and the re-establishment of historic hydrologic patterns to significantly enhance the quality of the surrounding wetlands. The proposed project is not reasonably expected to adversely affect surface water drainage or retention of stormwater.

4. **Water Quality** – The proposed project may temporarily affect surface water quality during the installation of the earthen plug. However, these impacts will be minimized by the implementation of proper turbidity control devices.

5. **Wellfields** – Not applicable.

6. **Water Supply** – Not applicable.

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

8. **Aesthetics** – The proposed project is not reasonably expected to have negative aesthetic impacts. The project is designed to be aesthetically compatible with the surrounding area. However, during the construction process, there may be temporary aesthetic impacts related to the presence of machinery and equipment associated with construction activities.

9. **Navigation** – The potential for navigational impacts from the construction of the earthen plug is minimal. The northern end of the canal does not connect with any natural waterways, and the only docking facilities on the canal are located towards the southeast end of the canal where it connects with Card Sound.

10. **Public Health** - The proposed project is not reasonably expected to adversely affect 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 will have a positive effect on marine and wildlife habitats. A biological assessment conducted by DERM biologists revealed no significant benthic resources in the area of the proposed work. Red and white mangrove trees, as well as buttonwood trees were documented along the northeast and southwest banks of the canal in the location of the proposed work. As such, the proposed project will impact 1,920 square feet of vegetation. However, the impacts are associated with an environmental restoration project, and will be offset by the reduction of saltwater intrusion into the freshwater aquifer upstream, and the re-establishment of historic hydrologic patterns to significantly enhance the quality of the surrounding wetlands. In addition, once the earthen plug has been constructed, the applicant will plant a minimum of 1,500 red mangrove seedlings in the 12,000 square feet of open water that will be filled to wetland elevation. This will result in a net increase of more than 10,000 square feet of wetland habitat. The area will be managed to ensure that the coverage of appropriate vegetative species is maintained in perpetuity. It is expected that the enhancement of the native floral communities will increase wildlife utilization within and adjacent to the project area. Improved hydrology should also lead to higher productivity of small organisms at the base of the food chain.

    The proposed project is not located within an area designated as essential manatee habitat for the West Indian Manatee by the MDCMPP. However, manatees have been observed in the area. Therefore, the Class I permit will require that all standard manatee construction permit conditions shall be followed during all in-water construction operations. Additionally, the Class I permit will have conditions to minimize turbidity and to protect rare, threatened, and endangered species.

15. **Wetland Soils Suitable for Habitat** – The proposed project will result in minimal filling of wetland soils. However, the impacts are associated with an environmental restoration project, and will be offset by the reduction of saltwater intrusion into the freshwater aquifer upstream, and the re-establishment of historic hydrologic patterns to significantly enhance the quality of the surrounding wetlands. In addition, once the earthen plug has been constructed, the applicant will plant a minimum of 1,500 red mangrove seedlings in the 12,000 square feet of open water that will be filled to wetland elevation. This will result in a net increase of more than 10,000 square feet of wetland habitat. The area will be managed to ensure that the coverage of appropriate vegetative species is maintained in perpetuity.

16. **Floral Values** – A biological assessment conducted by DERM biologists revealed no significant benthic resources in the area of the proposed work. Red and white mangrove trees, as well as buttonwood trees were documented along the northeast and southwest banks of the canal in the location of the proposed work. As such, the proposed project will impact 1,920 square feet of vegetation. However, the impacts are associated with an environmental restoration project, and will be offset by the reduction of saltwater intrusion into the freshwater aquifer upstream, and the re-establishment of historic hydrologic patterns to significantly enhance the quality of the surrounding wetlands. In addition, once the earthen plug has been constructed, the applicant will

plant a minimum of 1,500 red mangrove seedlings in the 12,000 square feet of open water that will be filled to wetland elevation. This will result in a net increase of more than 10,000 square feet of wetland habitat. The area will be managed to ensure that the coverage of appropriate vegetative species is maintained in perpetuity. It is expected that the enhancement of the native floral communities will increase wildlife utilization within and adjacent to the project area. Improved hydrology should also lead to higher productivity of small organisms at the base of the food chain.

17. **Fauna Values** – The proposed project may affect faunal values during construction. However, these impacts are temporary in nature and will be minimized by the implementation of proper turbidity control devices. Marine epifauna (animals living in the sediment surface or on the surface of other plants or animals) and infauna (animals living within submerged sediments) will be permanently impacted from the plug installation. However, the impacts are associated with an environmental restoration project, and will be offset by the reduction of saltwater intrusion into the freshwater aquifer upstream, and the re-establishment of historic hydrologic patterns to significantly enhance the quality of the surrounding wetlands. In addition, once the earthen plug has been constructed, the applicant will plant a minimum of 1,500 red mangrove seedlings in the 12,000 square feet of open water that will be filled to wetland elevation. This will result in a net increase of more than 10,000 square feet of wetland habitat. The area will be managed to ensure that the coverage of appropriate vegetative species is maintained in perpetuity. It is expected that the enhancement of the native floral communities will increase wildlife utilization within the bank boundaries. Improved hydrology should also lead to higher productivity of small organisms at the base of the food chain.

    The proposed project is not located within an area designated as essential manatee habitat for the West Indian Manatee by the MDCMPP. However, manatees have been observed in the area. Therefore, the Class I permit will require that all standard manatee construction permit conditions shall be followed during all in-water construction operations. Additionally, the Class I permit will have conditions to minimize turbidity and to protect rare, threatened, and endangered species.

18. **Rare, Threatened and Endangered Species** – The proposed project is not reasonably expected to adversely affect rare, threatened and endangered species. The proposed project is not located within an area designated as essential manatee habitat for the West Indian Manatee by the MDCMPP. However, manatees have been observed in the area. Therefore, the Class I permit will require that all standard manatee construction permit conditions shall be followed during all in-water construction operations. Additionally, the Class I permit will have conditions to minimize turbidity and to protect rare, threatened, and endangered species.

19. **Natural Flood Damage Protection** - The proposed project is not reasonably expected to adversely affect surface water drainage or retention of stormwater.

20. **Wetland Values** – The proposed project will impact wetlands. However, the impacts are associated with an environmental restoration project, and will be offset by the reduction of saltwater intrusion into the freshwater aquifer upstream, and the re-establishment of historic hydrologic patterns to significantly enhance the quality of the surrounding wetlands. In addition, once the earthen plug has been constructed, the applicant will plant a minimum of 1,500 red mangrove seedlings in the 12,000 square feet of open water that will be filled to wetland elevation. This will result in a net increase of more than 10,000 square feet of wetland habitat. The area will be managed to ensure that the coverage of appropriate vegetative species is maintained in perpetuity.

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 does not conflict with the recreation element of the Miami-Dade County Comprehensive Development Master Plan.

23. **Other Environmental Values Affecting the Public Interest** - The proposed project is not reasonably expected to adversely affect environmental values affecting the public interest. The proposed work will occur on the upland areas and submerged lands owned by the Miami-Dade County Department of Environmental Resources Management Environmentally Endangered Lands Program and is expected to enhance public lands.

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:

    a) Miami-Dade County Public Works Manual
    b) Chapter 33B of the Code of Miami-Dade County

25. **Comprehensive Environmental Impact Statement (CEIS)** – In the opinion of the Director, the proposed project will result in only minimal adverse environmental impacts and is not reasonably expected to result in cumulative adverse environmental impacts. Therefore, a CEIS was not required by DERM to evaluate the 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) Chapter 24 of the Code of Miami-Dade County
    b) United States Clean Water Act (US Army Corps of Engineers permit is required)
    c) South Florida Water Management District (permit is required)

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. 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.

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, aquifer recharge potential or natural surface water drainage. The proposed project will reduce saltwater intrusion into the freshwater aquifer upstream.

Objective 5/Policies 5A, 5B, 5F - Flood protection and cut and fill criteria. – The proposed project does not compromise flood protection, and is consistent with all relevant criteria related to cut and fill activities.

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 filling for the purposes of development.

Objective 7/Policy 7A - No net loss of high quality, relatively unstressed wetlands. - The proposed will result in minor impacts to high quality wetlands. However, the impacts are associated with an environmental restoration project, and will be offset by the reduction of saltwater intrusion into the freshwater aquifer upstream, and the re-establishment of historic hydrologic patterns to significantly enhance the quality of the surrounding wetlands. In addition, once the earthen plug has been constructed, the applicant will plant a minimum of 1,500 red mangrove seedlings in the 12,000 square feet of open water that will be filled to wetland elevation. This will result in a net increase of more than 10,000 square feet of wetland habitat. The area will be managed to ensure that the coverage of appropriate vegetative species is maintained in perpetuity.

Objective 9/Policies 9A, 9B, 9C – Protection of habitat critical to Federal or State-designated threatened or endangered species. - The proposed project is not located within an area designated as essential manatee habitat for the West Indian Manatee by the MDCMPP. However, manatees have been observed in the area. Therefore, the Class I permit will require that all standard manatee construction permit conditions shall be followed during all in-water construction operations. Additionally, the Class I permit will have conditions to minimize turbidity and to protect rare, threatened, and endangered species.

COASTAL MANAGEMENT ELEMENT VII:

Objective 1/Policy 1A - Tidally connected mangroves in mangrove protection areas. – The project site has been designated by the CDMP of Miami-Dade County as a Mangrove Protection Area (MPA). However, the proposed project is required for natural system restoration and enhancement, and requires only the minimum necessary alteration and filling of the existing mangroves. The impacts will be offset by the reduction of saltwater intrusion into the freshwater aquifer upstream, and the re-establishment of historic hydrologic patterns to significantly enhance the quality of the surrounding wetlands. In addition, once the earthen plug has been constructed, the applicant will plant a minimum of 1,500 red mangrove seedlings in the 12,000 square feet of open water that will be filled to wetland elevation. This will result in a net increase of more than 10,000 square feet of wetland habitat. The area will be managed to ensure that the coverage of appropriate vegetative species is maintained in perpetuity.

Objective 1/ Policy 1B - Natural surface flow into and through coastal wetlands. – The proposed project will enhance natural surface flow into and through existing 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 will serve to plug the canal, which currently acts as a conduit to drain freshwater and exacerbates saltwater intrusion. The proposed project will decrease saltwater intrusion into the freshwater aquifer upstream and improve the hydrology and overall health and productivity of the surrounding mangrove wetlands. Additionally, the applicant will plant a minimum of 1,500 red mangrove seedlings in the 12,000 square feet of open water that will be filled to wetland elevation. This will result in a net increase of more than 10,000 square feet of wetland habitat. The area will be managed to ensure that the coverage of appropriate vegetative species is maintained in perpetuity.

Objective 1/Policy 1E - Mitigation for the degradation and destruction of coastal wetlands. Monitoring and maintenance of mitigation areas. – The project consists of the construction of an earthen plug for environmental restoration project. Any impacts associated with the project will be offset by the reduction of saltwater intrusion into the freshwater aquifer upstream, and the re-establishment of historic hydrologic patterns to significantly enhance the quality of the surrounding wetlands. In addition, once the earthen plug has been constructed, the applicant will plant a minimum of 1,500 red mangrove seedlings in the 12,000 square feet of open water that will be filled to wetland elevation. This will result in a net increase of more than 10,000 square feet of wetland habitat. The area will be managed to ensure that the coverage of appropriate vegetative species is maintained in perpetuity.

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 project involves filling of tidal waters; however, a biological assessment conducted by DERM biologists revealed no significant benthic resources in the area of the proposed work. The project consists of the construction of an earthen plug for environmental restoration project.

Objective 2/Policies 2A, 2B - Beach restoration and renourishment objectives. - The proposed project does not involve beach restoration or renourishment.

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 4/Policy 4A, 4C, 4E, 4F – Protection of endangered or threatened animal species. - The proposed work is not reasonably expected to adversely affect endangered or threatened species. A seagrass survey conducted by DERM biologists along the Card Sound Road Canal revealed no significant benthic resources in the area of the proposed work.

The area may have the potential to be utilized by *Crocodylus acutus* (American Crocodiles) and *Mycteria americana* (Wood Storks); however, the impacts that may occur as a result of construction of the plug are minimal. It is expected that the enhancement of the native floral communities will increase wildlife utilization within and adjacent to the project area. Improved hydrology should also lead to higher productivity of small organisms at the base of the food chain.

The proposed project is not located within an area designated as essential manatee habitat for the West Indian Manatee by the MDCMPP. However, manatees have been observed in the area. Therefore, the Class I permit will require that all standard manatee construction permit conditions shall be followed during all in-water construction operations. Additionally, the Class I permit will have conditions to minimize turbidity and to protect rare, threatened, and endangered species.

Objective 5/Policy 5B - Existing and new areas for water-dependent uses. - The proposed project does not involve the use of new areas for water-dependent uses.

Objective 5/Policy 5D - Consistency with Chapter 33D, Miami-Dade County Code (shoreline access, environmental compatibility of shoreline development) - The proposed project site is not located within the review boundaries of the Shoreline Development Review Committee. Therefore, 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 not located within Biscayne Bay.

30. **Conformance with the Miami-Dade County Manatee Protection Plan** - Protection of endangered or threatened animal species. – The proposed project is not located within an area designated as essential manatee habitat for the West Indian Manatee by the MDCMPP. However, manatees have been observed in the area. Therefore, the Class I permit will require that all standard manatee construction permit conditions shall be followed during all in-water construction operations. Additionally, the Class I permit will have conditions to minimize turbidity and to protect rare, threatened, and endangered species.

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 project consists of the construction of an earthen plug for environmental restoration project. Any impacts associated with the project will be offset by the reduction of saltwater intrusion into the freshwater aquifer upstream, and the re-establishment of historic hydrologic patterns to significantly enhance the quality of the surrounding wetlands. In addition, once the earthen plug has been constructed, the applicant will plant a minimum of 1,500 red mangrove seedlings in the 12,000 square feet of open water that will be filled to wetland elevation. This will result in a net increase of more than 10,000 square feet of wetland habitat. The area will be managed to ensure that the coverage of appropriate vegetative species is maintained in perpetuity.

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:

- An alteration of physical conditions as may be necessary to enhance the quality or utility of adjacent waters.
- Minimum dredging and filling as is necessary to enhance the biological, chemical or physical characteristics of adjacent waters.

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 creation of a boat slip.

24-48.3 (4) Clean Fill in Wetlands – The earthen plug will consist of backfill material, a two foot layer of planting material, and limerock boulders placed at both ends. All of the fill 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.

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