



**SOUTH FLORIDA WATER MANAGEMENT DISTRICT
 ENVIRONMENTAL RESOURCE
 STANDARD GENERAL PERMIT NO. 11-02993-P
 DATE ISSUED: March 9, 2009**

Form #0941
08/95

PERMITTEE: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 3900 COMMONWEALTH BLVD.
 TALLAHASSEE, FL 32399

PROJECT DESCRIPTION: This application is a request for an Environmental Resource Permit authorizing an environmental restoration project covering a 10.80-acre area known as Shell Island Restoration under Shell Island Road in Collier County.

PROJECT LOCATION: COLLIER COUNTY, SEC 15,16,17, 21, 22 TWP 51S RGE 26E

PERMIT DURATION: See Special Condition No:1. See attached Rule 40E-4.321, Florida Administrative Code.

This is to notify you of the District's agency action concerning Notice of Intent for Permit Application No. 090209-1, dated February 9, 2009. This action is taken pursuant to Rule 40E-1.603 and Chapter 40E-40, Florida Administrative Code (F.A.C.).

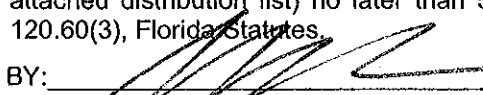
Based on the information provided, District rules have been adhered to and an Environmental Resource General Permit is in effect for this project subject to:

1. Not receiving a filed request for a Chapter 120, Florida Statutes, administrative hearing.
2. the attached 19 General Conditions (See Pages : 2 - 4 of 6),
3. the attached 18 Special Conditions (See Pages : 5 - 6 of 6) and
4. the attached 3 Exhibit(s)

Should you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights," we will assume that you concur with the District's action.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a "Notice of Rights" has been mailed to the Permittee (and the persons listed in the attached distribution list) no later than 5:00 p.m. on this 9th day of March, 2009, in accordance with Section 120.60(3), Florida Statutes.

BY: 
 Ricardo A. Valera, P.E.
 Director, LWC Regulatory Division
 Collier County Service Center

Certified mail number 7008 1140 0001 4113 9275

NOTICE OF RIGHTS

As required by Sections 120.569(1), and 120.60(3), Fla. Stat., following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a District decision which does or may determine their substantial interests shall file a petition for hearing with the District Clerk within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: 1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or 2) within 14 days of service of an Administrative Order pursuant to Subsection 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of either written notice through mail, or electronic mail, or posting that the District has or intends to take final agency action, or publication of notice that the District has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

Filing Instructions

The Petition must be filed with the Office of the District Clerk of the SFWMD. Filings with the District Clerk may be made by mail, hand-delivery or facsimile. **Filings by e-mail will not be accepted.** Any person wishing to receive a clerked copy with the date and time stamped must provide an additional copy. A petition for administrative hearing is deemed filed upon receipt during normal business hours by the District Clerk at SFWMD headquarters in West Palm Beach, Florida. Any document received by the office of the SFWMD Clerk after 5:00 p.m. shall be filed as of 8:00 a.m. on the next regular business day. Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the SFWMD Clerk, P.O. Box 24680, West Palm Beach, Florida 33416.
- Filings by hand-delivery must be delivered to the Office of the SFWMD Clerk. **Delivery of a petition to the SFWMD's security desk does not constitute filing. To ensure proper filing, it will be necessary to request the SFWMD's security officer to contact the Clerk's office.** An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by facsimile must be transmitted to the SFWMD Clerk's Office at (561) 682-6010. Pursuant to Subsections 28-106.104(7), (8) and (9), Fla. Admin. Code, a party who files a document by facsimile represents that the original physically signed document will be retained by that party for the duration of that proceeding and of any subsequent appeal or subsequent proceeding in that cause. Any party who elects to file any document by facsimile shall be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed with the clerk as a result. The filing date for a document filed by facsimile shall be the date the SFWMD Clerk receives the complete document.

Initiation of an Administrative Hearing

Pursuant to Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 and 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, District file number or any other SFWMD identification number, if known.
2. The name, address and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose the extension. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

If the District's Governing Board takes action with substantially different impacts on water resources from the notice of intended agency decision, the persons who may be substantially affected shall have an additional point of entry pursuant to Rule 28-106.111, Fla. Admin. Code, unless otherwise provided by law.

Mediation

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401-.405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Sections 120.60(3) and 120.68, Fla. Stat., a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal pursuant to Florida Rule of Appellate Procedure 9.110 in the Fourth District Court of Appeal or in the appellate district where a party resides and filing a second copy of the notice with the SFWMD Clerk within 30 days of rendering of the final SFWMD action.

GENERAL CONDITIONS

1. All activities authorized by this permit shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit and Part IV, Chapter 373, F.S.
2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.
3. Activities approved by this permit shall be conducted in a manner which does not cause violations of State water quality standards. The permittee shall implement best management practices for erosion and pollution control to prevent violation of State water quality standards. Temporary erosion control shall be implemented prior to and during construction, and permanent control measures shall be completed within 7 days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. All practices shall be in accordance with the guidelines and specifications described in Chapter 6 of the Florida Land Development Manual; A Guide to Sound Land and Water Management (Department of Environmental Regulation, 1988), incorporated by reference in Rule 40E-4.091, F.A.C. unless a project-specific erosion and sediment control plan is approved as part of the permit. Thereafter the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.
4. The permittee shall notify the District of the anticipated construction start date within 30 days of the date that this permit is issued. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District an Environmental Resource Permit Construction Commencement Notice Form Number 0960 indicating the actual start date and the expected construction completion date.
5. When the duration of construction will exceed one year, the permittee shall submit construction status reports to the District on an annual basis utilizing an annual status report form. Status report forms shall be submitted the following June of each year.
6. Within 30 days after completion of construction of the permitted activity, the permittee shall submit a written statement of completion and certification by a professional engineer or other individual authorized by law, utilizing the supplied Environmental Resource/Surface Water Management Permit Construction Completion/Certification Form Number 0881A, or Environmental Resource/Surface Water Management Permit Construction Completion Certification - For Projects Permitted prior to October 3, 1995 Form No. 0881B, incorporated by reference in Rule 40E-1.659, F.A.C. The statement of completion and certification shall be based on onsite observation of construction or review of as-built drawings for the purpose of determining if the work was completed in compliance with permitted plans and specifications. This submittal shall serve to notify the District that the system is ready for inspection. Additionally, if deviation from the approved drawings are discovered during the certification process, the certification must be accompanied by a copy of the approved permit drawings with deviations noted. Both the original and revised specifications must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawings. All surveyed dimensions and elevations shall be certified by a registered surveyor.
7. The operation phase of this permit shall not become effective: until the permittee has complied with the requirements of condition (6) above, and submitted a request for conversion of Environmental Resource Permit from Construction Phase to Operation Phase, Form No. 0920; the District determines the system to be in compliance with the permitted plans and specifications; and the entity approved by the District in accordance with Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit

GENERAL CONDITIONS

Applications within the South Florida Water Management District, accepts responsibility for operation and maintenance of the system. The permit shall not be transferred to such approved operation and maintenance entity until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall initiate transfer of the permit to the approved responsible operating entity if different from the permittee. Until the permit is transferred pursuant to Section 40E-1.6107, F.A.C., the permittee shall be liable for compliance with the terms of the permit.

8. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the initiation of the permitted use of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of the phase or portion of the system to a local government or other responsible entity.
9. For those systems that will be operated or maintained by an entity that will require an easement or deed restriction in order to enable that entity to operate or maintain the system in conformance with this permit, such easement or deed restriction must be recorded in the public records and submitted to the District along with any other final operation and maintenance documents required by Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit applications within the South Florida Water Management District, prior to lot or units sales or prior to the completion of the system, whichever comes first. Other documents concerning the establishment and authority of the operating entity must be filed with the Secretary of State, county or municipal entities. Final operation and maintenance documents must be received by the District when maintenance and operation of the system is accepted by the local government entity. Failure to submit the appropriate final documents will result in the permittee remaining liable for carrying out maintenance and operation of the permitted system and any other permit conditions.
10. Should any other regulatory agency require changes to the permitted system, the permittee shall notify the District in writing of the changes prior to implementation so that a determination can be made whether a permit modification is required.
11. This permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any activity approved by this permit. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40E-4 or Chapter 40E-40, F.A.C..
12. The permittee is hereby advised that Section 253.77, F.S. states that a person may not commence any excavation, construction, or other activity involving the use of sovereign or other lands of the State, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.
13. The permittee must obtain a Water Use permit prior to construction dewatering, unless the work qualifies for a general permit pursuant to Subsection 40E-20.302(3), F.A.C., also known as the "No Notice" Rule.
14. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any system authorized by the permit.
15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit

GENERAL CONDITIONS

application, including plans or other supporting documentation, shall not be considered binding, unless a specific condition of this permit or a formal determination under Section 373.421(2), F.S., provides otherwise.

16. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of a permitted system or the real property on which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rules 40E-1.6105 and 40E-1.6107, F.A.C.. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations prior to the sale, conveyance or other transfer of the system.
17. Upon reasonable notice to the permittee, District authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with the plans and specifications approved by the permit.
18. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the appropriate District service center.
19. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.

SPECIAL CONDITIONS

1. The construction phase of this permit shall expire on March 9, 2014.
2. Operation of the surface water management system shall be the responsibility of PERMITTEE.
3. The permittee shall be responsible for the correction of any erosion, shoaling or water quality problems that result from the construction or operation of the surface water management system.
4. Measures shall be taken during construction to insure that sedimentation and/or turbidity violations do not occur in the receiving water.
5. The District reserves the right to require that additional water quality treatment methods be incorporated into the drainage system if such measures are shown to be necessary.
6. Facilities other than those stated herein shall not be constructed without an approved modification of this permit.
7. A stable, permanent and accessible elevation reference shall be established on or within one hundred (100) feet of all permitted discharge structures no later than the submission of the certification report. The location of the elevation reference must be noted on or with the certification report.
8. The permittee shall provide routine maintenance of all of the components of the surface water management system in order to remove all trapped sediments/debris. All materials shall be properly disposed of as required by law. Failure to properly maintain the system may result in adverse flooding conditions.
9. This permit is issued based on the applicant's submitted information which reasonably demonstrates that adverse water resource related impacts will not be caused by the completed permit activity. Should any adverse impacts caused by the completed surface water management system occur, the District will require the permittee to provide appropriate mitigation to the District or other impacted party. The District will require the permittee to modify the surface water management system, if necessary, to eliminate the cause of the adverse impacts.
10. The permittee acknowledges, that pursuant to Rule 40E-4.101(2), F.A.C., a notice of Environmental Resource or Surface Water Management Permit may be recorded in the county public records. Pursuant to the specific language of the rule, this notice shall not be considered an encumbrance upon the property.
11. A mitigation program for Shell Island Road shall be implemented in accordance with Exhibit No. 3.2. The permittee shall enhance 1.5 acres of wetland with mangrove plantings and enhance 1.5 acres of wetlands with exotic vegetation removal.
12. A monitoring program shall be implemented in accordance with Exhibit No. 3.2. The monitoring program shall extend for a period of 5 years with annual reports submitted to District staff. At the end of the first monitoring period the mitigation area shall contain an 80% survival of planted vegetation. The 80% survival rate shall be maintained throughout the remainder of the monitoring program, with replanting as necessary. If native wetland, transitional, and upland species do not achieve an 80% coverage within the initial two years of the monitoring program, native species shall be planted in accordance with the maintenance program. At the end of the 5 year monitoring program the entire mitigation area shall contain an 80% survival of planted vegetation and an 80% coverage of desirable obligate and facultative wetland species.
13. Activities associated with the implementation of the mitigation, monitoring and maintenance plan(s) shall be completed in accordance with the work schedule attached as Exhibit No. 3.3. Any deviation from these time frames will require prior approval from the District's Environmental Resource Compliance staff. Such requests must be made in writing and shall include (1) reason for the change, (2) proposed start/finish

SPECIAL CONDITIONS

and/or completion dates; and (3) progress report on the status of the project development or mitigation effort.

14. A maintenance program shall be implemented in accordance with Exhibit No. 3.2 for the enhanced wetland areas on a regular basis to ensure the integrity and viability of those areas as permitted. Maintenance shall be conducted in perpetuity to ensure that the conservation area is maintained free from Category 1 exotic vegetation (as defined by the Florida Exotic Pest Plant Council at the time of permit issuance) immediately following a maintenance activity. Coverage of exotic and nuisance plant species shall not exceed 5% of total cover between maintenance activities. In addition, the permittee shall manage the conservation areas such that exotic/nuisance plant species do not dominate any one section of those areas.
15. If prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee, should contact the Florida Department of State, Division of Historical Resources, Review and Compliance Section at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes. The project activities are required to be monitored during construction to ensure no impacts to existing historical and archaeological sites within Rookery Bay.
16. Endangered species, threatened species and/or species of special concern have been observed onsite and/or the project contains suitable habitat for these species. It shall be the permittee's responsibility to coordinate with the Florida Fish and Wildlife Conservation Commission and/or the U.S. Fish and Wildlife Service for appropriate guidance, recommendations and/or necessary permits to avoid impacts to listed species.
17. The permittee and all designated contractors shall adhere to all project and mitigation construction details and methodology indicated on the enclosed permit Exhibits and described herein.
18. All contractors must be provided with a copy of the staff report and permit conditions prior to the commencement of construction. The permittee is responsible for ensuring that all contractors adhere to the project construction details and methods indicated on the attached permit Exhibits and described herein.

Last Date For Agency Action: 10-APR-2009

GENERAL ENVIRONMENTAL RESOURCE PERMIT STAFF REPORT

Project Name: Shell Island Restoration
Permit No.: 11-02993-P
Application No.: 090209-1
Application Type: Environmental Resource (New General Permit)
Location: Collier County, S15,16,17, 21, 22/T51S/R26E
Permittee : Florida Department Of Environmental Protection
Operating Entity : Permittee
Project Area: 10.80 acres
Project Land Use: Environmental Restoration
Drainage Basin: WEST COLLIER
Receiving Body: Shell Island Road
Special Drainage District: NA
Total Acres Wetland Onsite: 3.90
Total Acres Wetland Preserved Onsite: 3.54
Total Acres Impacted Onsite : .36
Total Acres Presv/Mit Compensation Onsite: 3.54
Conservation Easement To District : No
Sovereign Submerged Lands: No

PROJECT PURPOSE:

This application is a request for an Environmental Resource Permit authorizing an environmental restoration project covering a 10.80-acre area known as Shell Island Restoration under Shell Island Road in Collier County. Three acres of the proposed project consists of mitigation parcels for unavoidable wetland impacts.

PROJECT EVALUATION:**PROJECT SITE DESCRIPTION:**

The site is located along the existing Shell Island Road which is located west of Collier Boulevard (CR-951), south of US-41 where it intersects CR-951 within Rookery Bay National Estuarine Research Reserve (RBNERR) in Collier County. A location map is attached as Exhibit 1.0.

During 1960's the installation of a limerock road through Shell Island severed the hydrologic exchange from one side of the road to the other within the estuarine and marsh habitats. This road not only altered the tidal exchange, but also altered the volume, timing, and quality of freshwater entering the marsh and estuarine ecosystems along Shell Island. In addition, one side of the road has a borrow ditch that was created when the road was constructed. This ditch holds fresh water and has significant detritus buildup which also contributes considerably to the altered hydrologic condition and has allowed for the invasion of exotic vegetation.

During the 1990's culverts were installed at five (5) locations under the Shell Island Road to restore the hydrology, however, they do not currently function properly.

The objective of the proposed project is to reinstate the hydrologic connectivity on Shell Island to allow for natural exchange of tides and freshwater through the estuary and marsh systems. Shell Island Road is surrounded by a variety of wetland and upland habitat including mangrove forest, saltwater and freshwater marsh, lakes, and coastal scrub. A FLUCCS habitat map is attached as Exhibit 3.0.

The proposed hydrologic restoration will directly impact 0.36 acres of wetlands and secondarily impact 0.54 acres of wetlands.

PROPOSED PROJECT:

The applicant proposes to install thirteen (13) culverts (4-double and 5-single) at nine (9) locations under the existing Shell Island Road to restore hydrology and natural flowway under the road. Currently, a total of 7 culverts (2-double and 3-single) exist at five locations within the road. Out of the proposed 13 culverts, 6 culverts (2-double and 2-single) will replace the existing culverts at four locations, and the remaining 7 culverts (2-double and 3-single) will be placed at five new locations. As part of the project, the applicant also proposes filling of approximately 1.5 miles length (6,000 SF) of existing borrow ditch located along the road to prevent pooling of water along the side of the road and to re-establish flow patterns. The site details are attached as Exhibit 2.0.

No adverse water quality and quantity impacts are anticipated as a result of the proposed project.

WATER QUALITY :

No adverse water quality impacts are anticipated as a result of the proposed project.

WETLANDS:

The mangrove wetlands alongside Shell Island road have varying levels of Brazilian pepper infestation, red mangrove, black mangrove, buttonwood, and giant leather fern. The wetlands have been hydrologically altered by the presence of the road and associated ditch.

Wetland Impacts:

The proposed project will directly impact 0.36 acres of wetlands and secondarily impact 0.54 acres of wetlands. Secondary impacts were assessed based on the proposed filling of the roadside ditch which

will result in partial covering of prop roots of mangrove and other vegetation. The direct impacts are due to installation of the culverts and filling of the ditch. The proposed impacts are necessary in order to fulfill the purpose of the project which is to restore a more natural hydrologic connection between the wetlands alongside Shell Island Road. Since the ditch is currently altering the flow, filling is necessary to restore the hydrological connection. A wetland impact map is attached as Exhibit 3.1.

Mitigation Proposal:

The applicant is proposing mitigation on parcels within Rookery Bay National Estuarine Research Reserve. The first parcel is 1.5 acres within the 'Bathey Property' in the Reserve which is located south west of the Treviso Bay development. This area was associated with mitigation for the Army Corps of Engineer permit for the Cedar Hammock development. No plantings were required as a part of the mitigation. The 1.5 acre area will be enhanced by planting red mangrove seedlings and propagules.

The second parcel is along Henderson Creek and has 60% infestation of Brazilian pepper. Rookery Bay proposes to remove the Brazilian pepper which will enhance the vegetation along the Creek as well as improve the hydrologic connection between the wetlands and the Creek. See Exhibit 3.2 for a general location map of both parcels and the areas proposed to be enhanced. The proposed mitigation results in a minor amount of excess mitigation credit (0.04) which may be used towards future Rookery Bay projects.

Monitoring/Maintenance:

A maintenance and monitoring plan is attached as Exhibit 3.2. The two mitigation parcels will be monitored for a period of five years with annual monitoring reports submitted to the District. The work schedule for the maintenance and monitoring activities is attached as Exhibit 3.3. Approximately 1.5 acres of wetlands will be planted with mangrove seedlings and propagules. Depending upon site specific conditions, the mangroves will be planted on 3-15 foot centers during the rainy season. Additionally, approximately 1.5 acres will be enhanced by removal of Brazilian pepper by hand. All stumps treated with appropriate herbicide. There will be no mechanical clearing by heavy machinery.

Wetland Inventory :

CONSTRUCTION MOD -Shell Island Road Restoration

Site Id	Site Type	Pre-Development				Post-Development							
		Pre Fluc cs	AA Type	Acreage (Acres)	Current Wo Pres	With Project	Time Lag (Yrs)	Risk Factor	Pres. Adj. Factor	Post Fluc cs	Adj Delta	Functional Gain / Loss	
W1	ON	612	Direct	.36	.50	.00							
W2	ON	612	Secondary	.54	.53	.53						-.500	-.180
W3	ON	612	Enhancement	1.50	.70	.83	11 - 15	1.50				.059	.089
W4	ON	612	Enhancement	1.50	.63	.80	6 - 10	1.50				.091	.136
Total:				3.90									.05

<u>Fluc cs Code</u>	<u>Description</u>
612	Mangrove Swamps

Wildlife Issues:

The project site does contain preferred habitat for wetland-dependent endangered or threatened wildlife species or species of special concern. The proposed hydrologic restoration is not anticipated to impact listed species, including known gopher tortoise burrows close to Shell Island Road. This permit does not relieve the applicant from complying with all applicable rules and any other agencies' requirements if, in the future, endangered/threatened species or species of special concern are discovered on the site.

CERTIFICATION AND MAINTENANCE OF THE WATER MANAGEMENT SYSTEM:

It is suggested that the permittee retain the services of a Professional Engineer registered in the State of Florida for periodic observation of construction of the surface water management (SWM) system. This will facilitate the completion of construction completion certification Form #0881 which is required pursuant to Section 10 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, and Rule 40E-4.361(2), Florida Administrative Code (F.A.C.).

Pursuant to Chapter 40E-4 F.A.C., this permit may not be converted from the construction phase to the operation phase until certification of the SWM system is submitted to and accepted by this District. Rule 40E-4.321(7) F.A.C. states that failure to complete construction of the SWM system and obtain operation phase approval from the District within the permit duration shall require a new permit authorization unless a permit extension is granted.

For SWM systems permitted with an operating entity who is different from the permittee, it should be noted that until the permit is transferred to the operating entity pursuant to Rule 40E-1.6107, F.A.C., the permittee is liable for compliance with the terms of this permit.

The permittee is advised that the efficiency of a SWM system will normally decrease over time unless the system is periodically maintained. A significant reduction in flow capacity can usually be attributed to partial blockages of the conveyance system. Once flow capacity is compromised, flooding of the project may result. Maintenance of the SWM system is required to protect the public health, safety and the natural resources of the state. Therefore, the permittee must have periodic inspections of the SWM system performed to ensure performance for flood protection and water quality purposes. If deficiencies are found, it is the responsibility of the permittee to correct these deficiencies in a timely manner.

RELATED CONCERNS:

Water Use Permit Status:

The applicant has indicated that irrigation is not necessary for this project.

The applicant has indicated that dewatering is not required for construction of this project.

This permit does not release the permittee from obtaining all necessary Water Use authorization(s) prior to the commencement of activities which will require such authorization, including construction dewatering and irrigation, unless the work qualifies for a No-Notice Short-Term Dewatering permit pursuant to Chapter 40E-20.302(3) or is exempt pursuant to Section 40E-2.051, FAC.

CERP:

The proposed project is not located within or adjacent to a Comprehensive Everglades Restoration Project component.

Potable Water Supplier:

Utilities are not required for the proposed project.

Waste Water System/Supplier:

Utilities are not required for the proposed project.

Right-Of-Way Permit Status:

A District Right-of-Way Permit is not required for this project.

DRI Status:

This project is not a DRI.

Historical/Archeological Resources:

The District has received correspondence from the Florida Department of State, Division of Historical Resources indicating that provided no work is adjacent to the existing historical site (cemetery), and the work is monitored by a certified archaeological monitor, that the agency has no concerns. This permit does not release the permittee from compliance with any other agencies' requirements in the event that historical and/or archaeological resources are found on the site.

DCA/CZM Consistency Review:

The District has not received a finding of inconsistency from the Florida Department of Environmental Protection or other commenting agencies regarding the provisions of the federal Coastal Zone Management Plan.

Third Party Interest:

No third party has contacted the District with concerns about this application.

Enforcement:

There has been no enforcement activity associated with this application.

STAFF REVIEW:

DIVISION APPROVAL:

NATURAL RESOURCE MANAGEMENT:

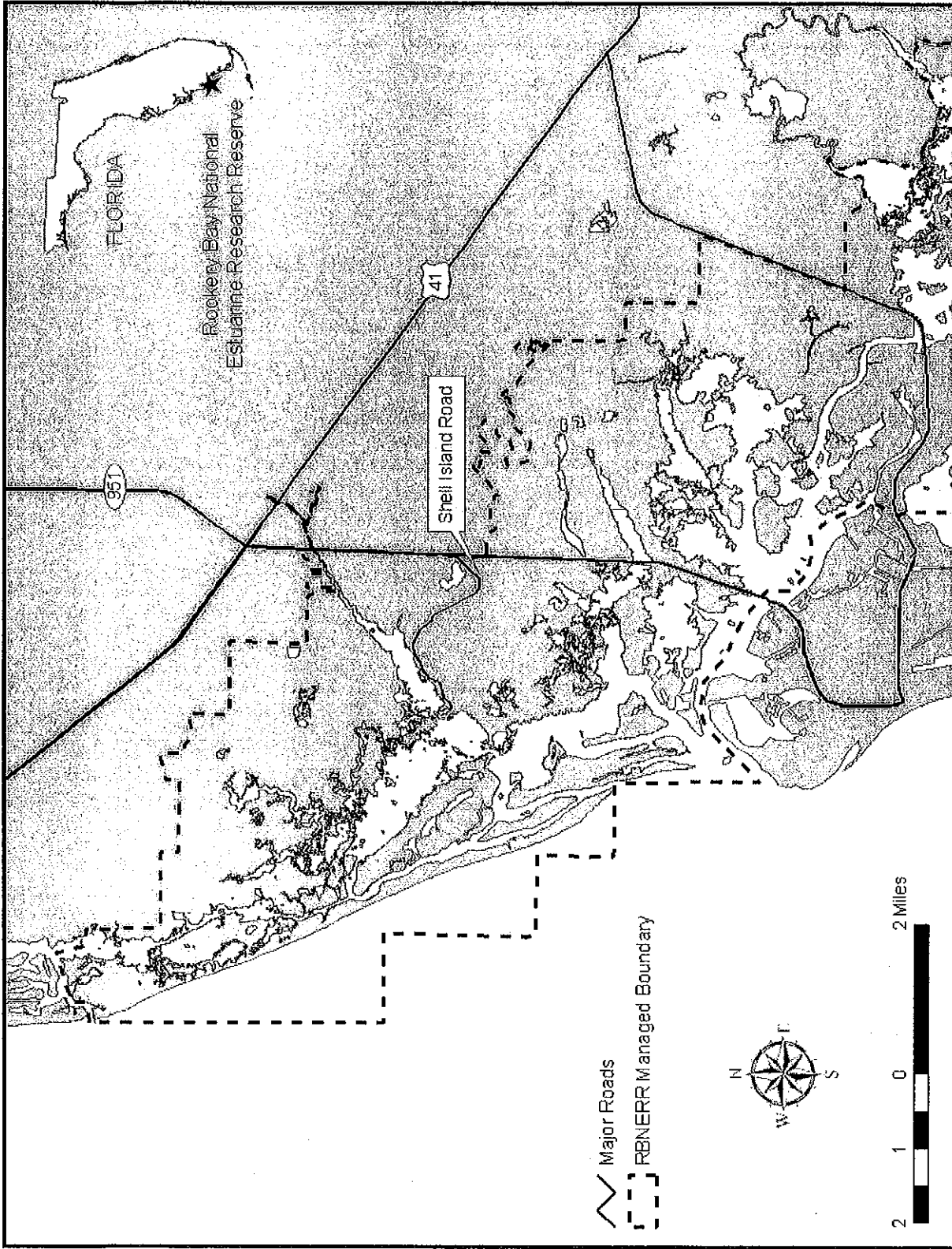
Laura Layman
Laura Layman

DATE: 3/9/09

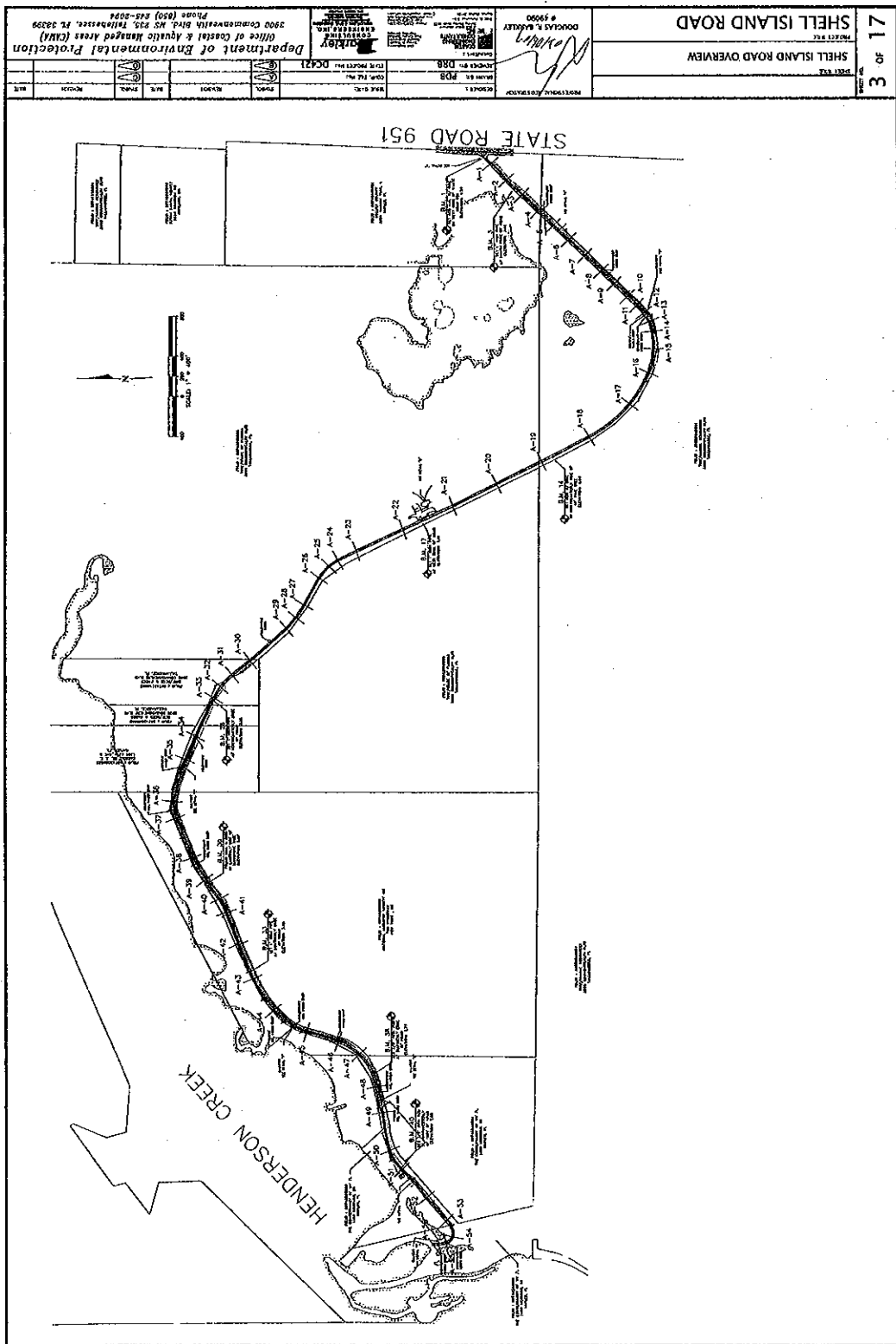
SURFACE WATER MANAGEMENT:

for *Carmen Quia*
William Foley, P.E.

DATE: 3/9/09



Map Produced By Rookery Bay NERR
For Illustrative Purposes Only



Department of Environmental Protection
 Office of Coastal & Aquatic Managed Areas (CMA)
 3900 Commonwealth Blvd., MS. 525, Tallahassee, FL 32309
 Phone (904) 488-8394

PROJECT: SHELL ISLAND ROAD OVERVIEW
 SHEET NO. 3 OF 17
 DATE: 12/15/09
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 PROJECT NO. 09000

SHELL ISLAND ROAD
 SHELL ISLAND ROAD OVERVIEW
 SHEET NO. 3 OF 17

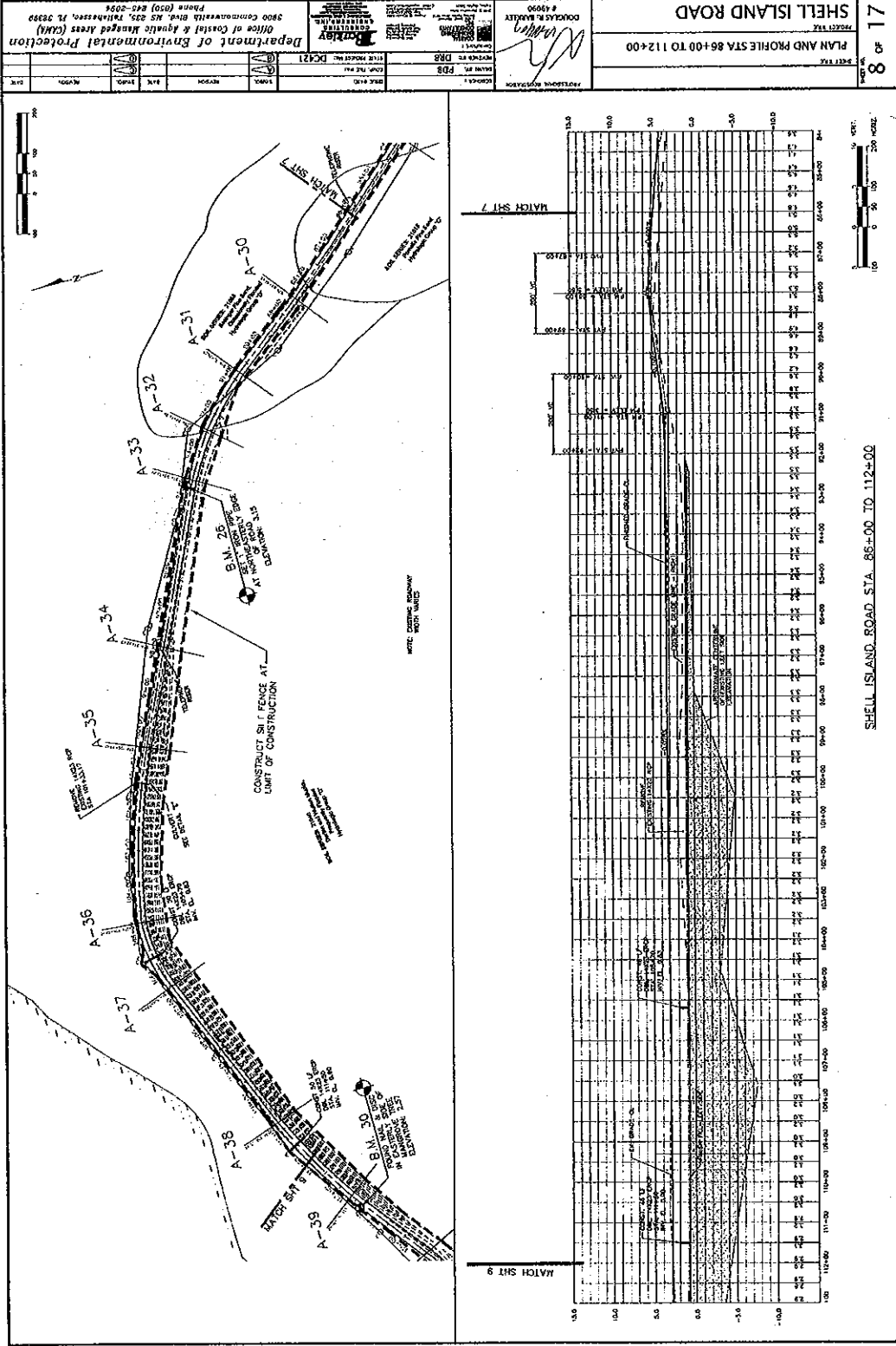


Exhibit 2.0
 Application 090209-1
 9 of 18

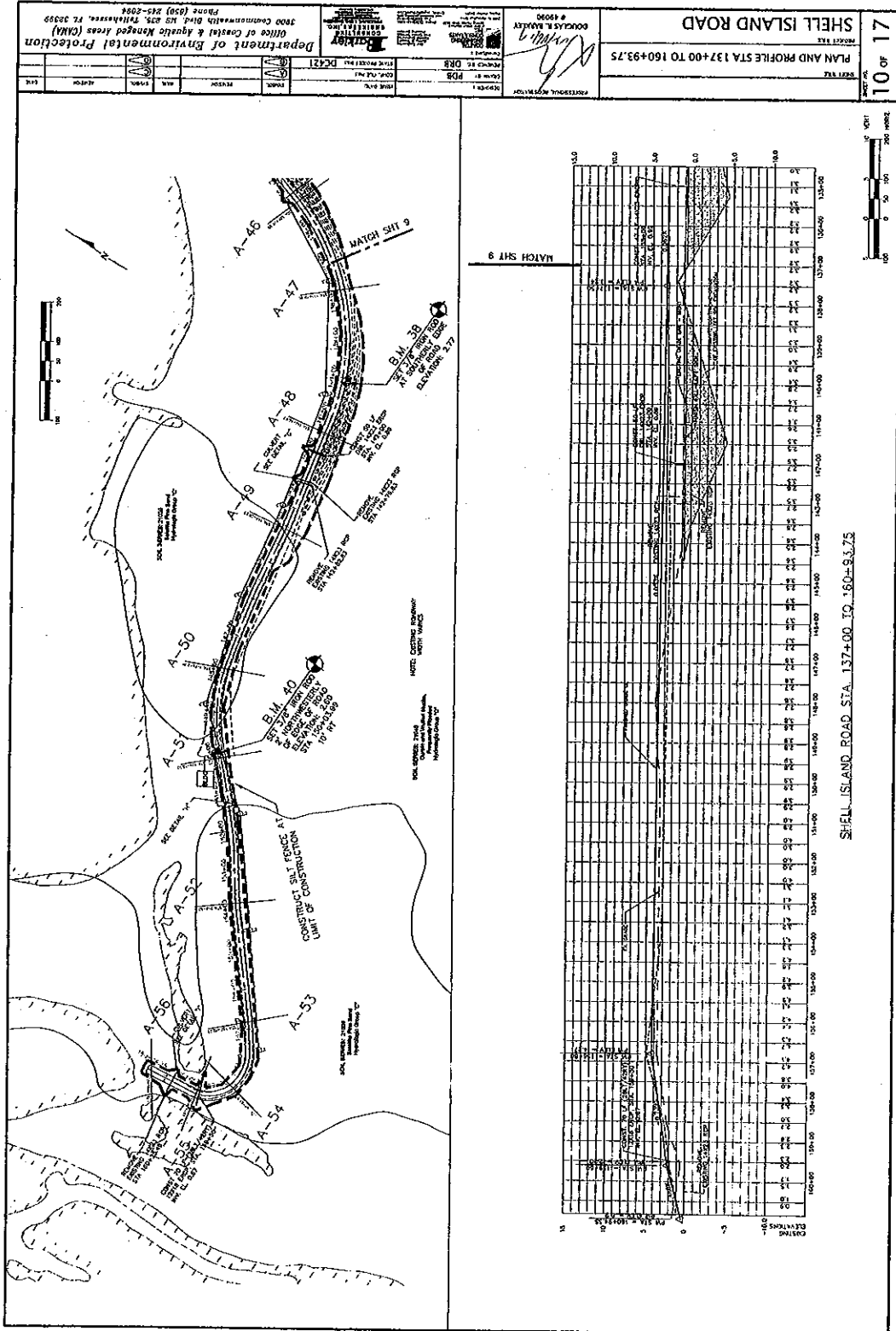
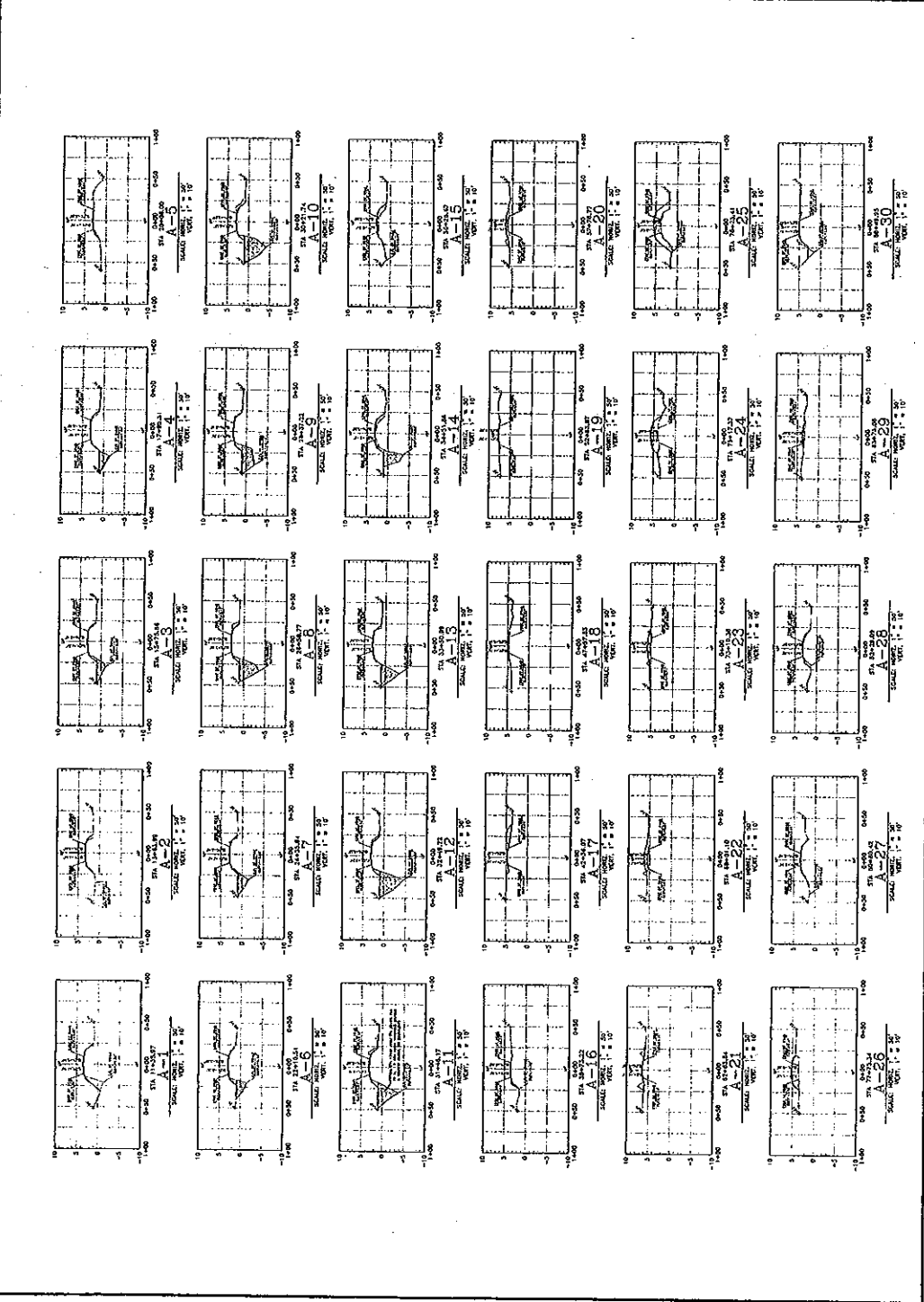
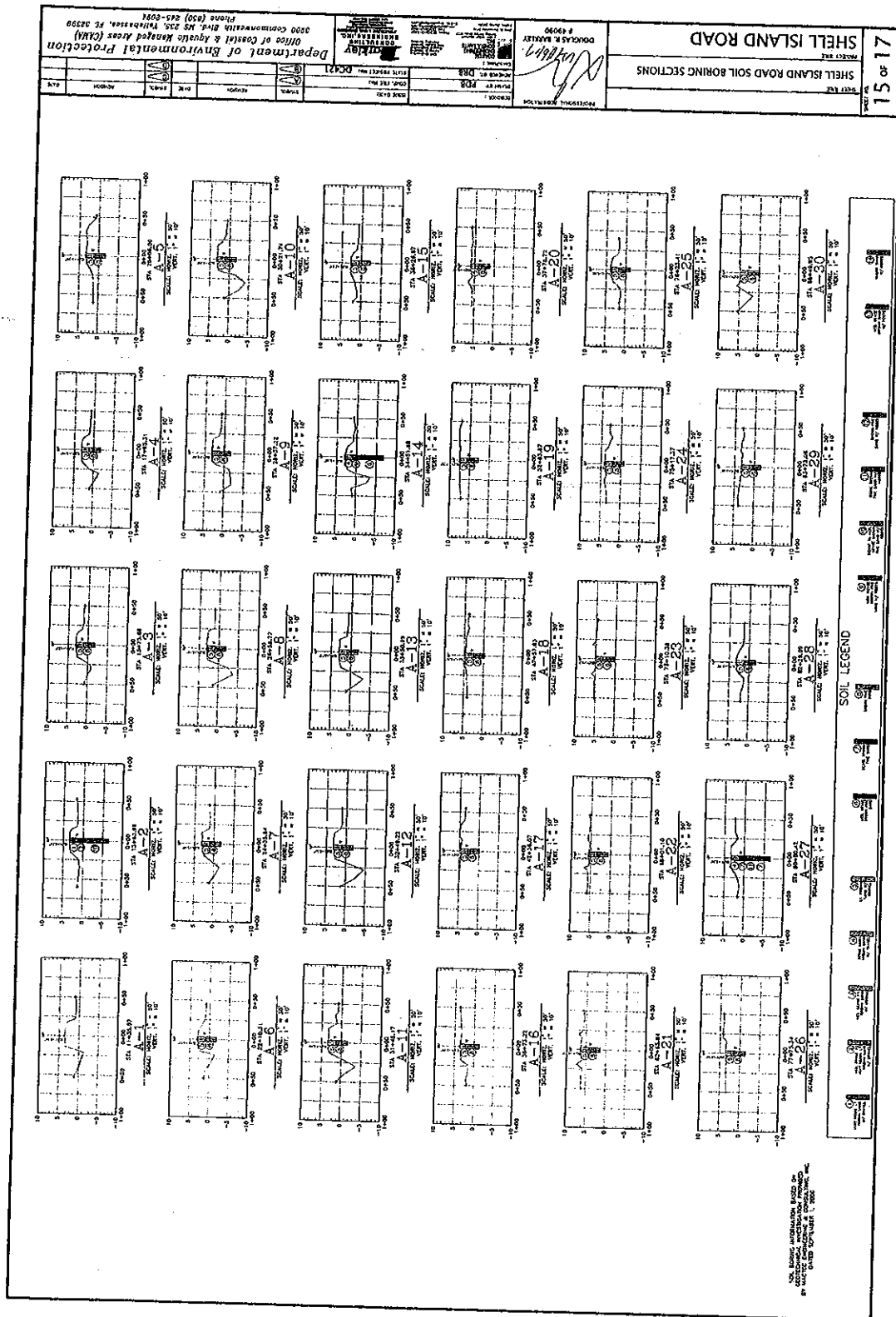
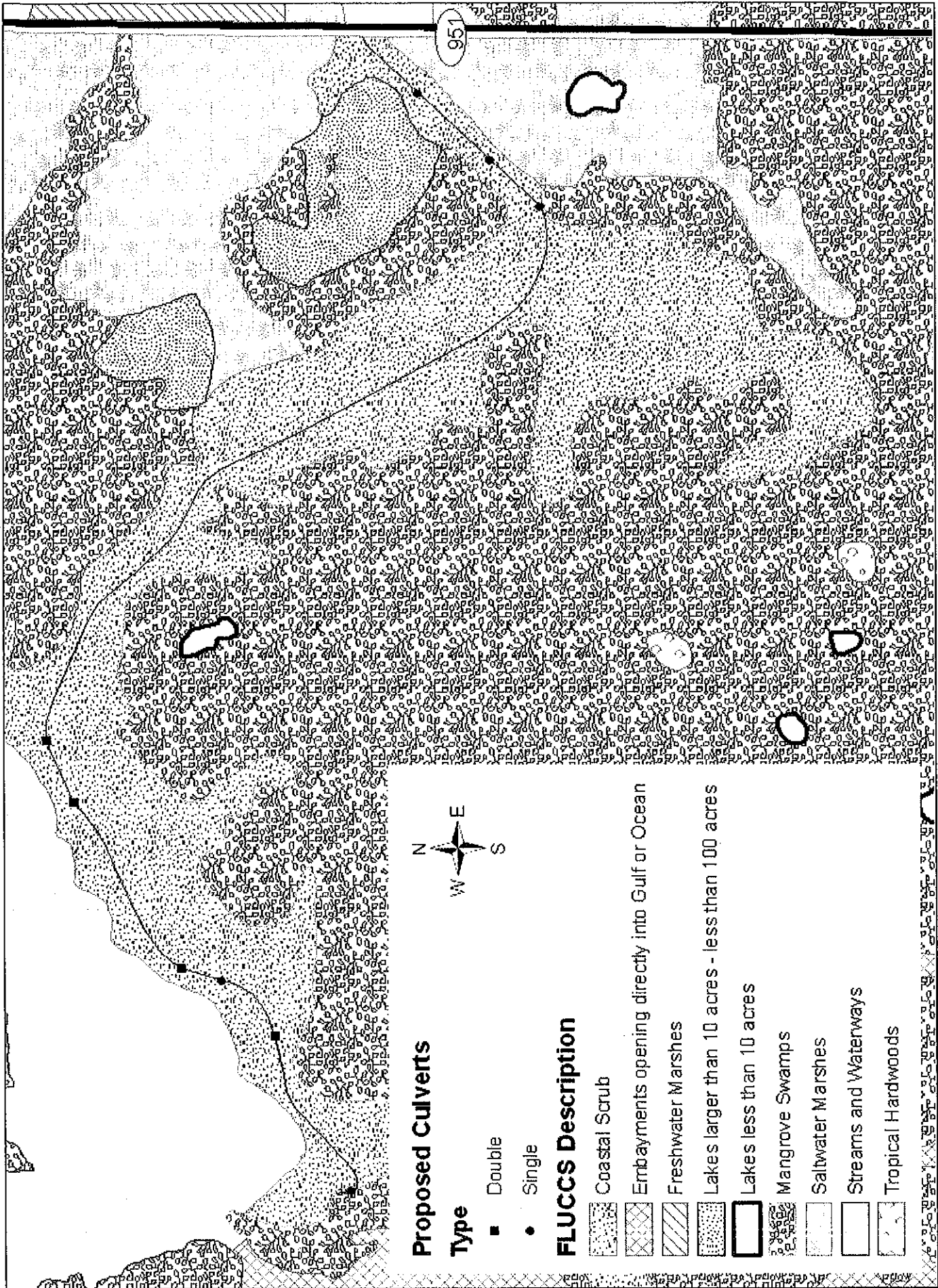


Exhibit 2.0
 Application 090209-1
 11 of 18

SHELL ISLAND ROAD CROSS SECTIONS SHELL ISLAND ROAD PROJECT NAME		SHELL ISLAND ROAD SHEET NO.	
DOUGLAS E. BARKLEY PROFESSIONAL REGISTRATION NO. 45950 CIVIL ENGINEER		SHEET NO. 12 OF 17	
DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF COSTAL & AQUATIC RESOURCES (CAAR) 3900 COMMERCIAL BLVD., 4TH FLOOR, MIAMI BEACH, FL 33598 PHONE (305) 845-8384		DATE PLOTTED: 08/21/88 SCALE: VERT. 1" = 10' HORIZ. 1" = 10'	







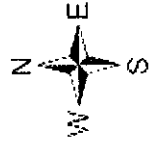
Proposed Culverts

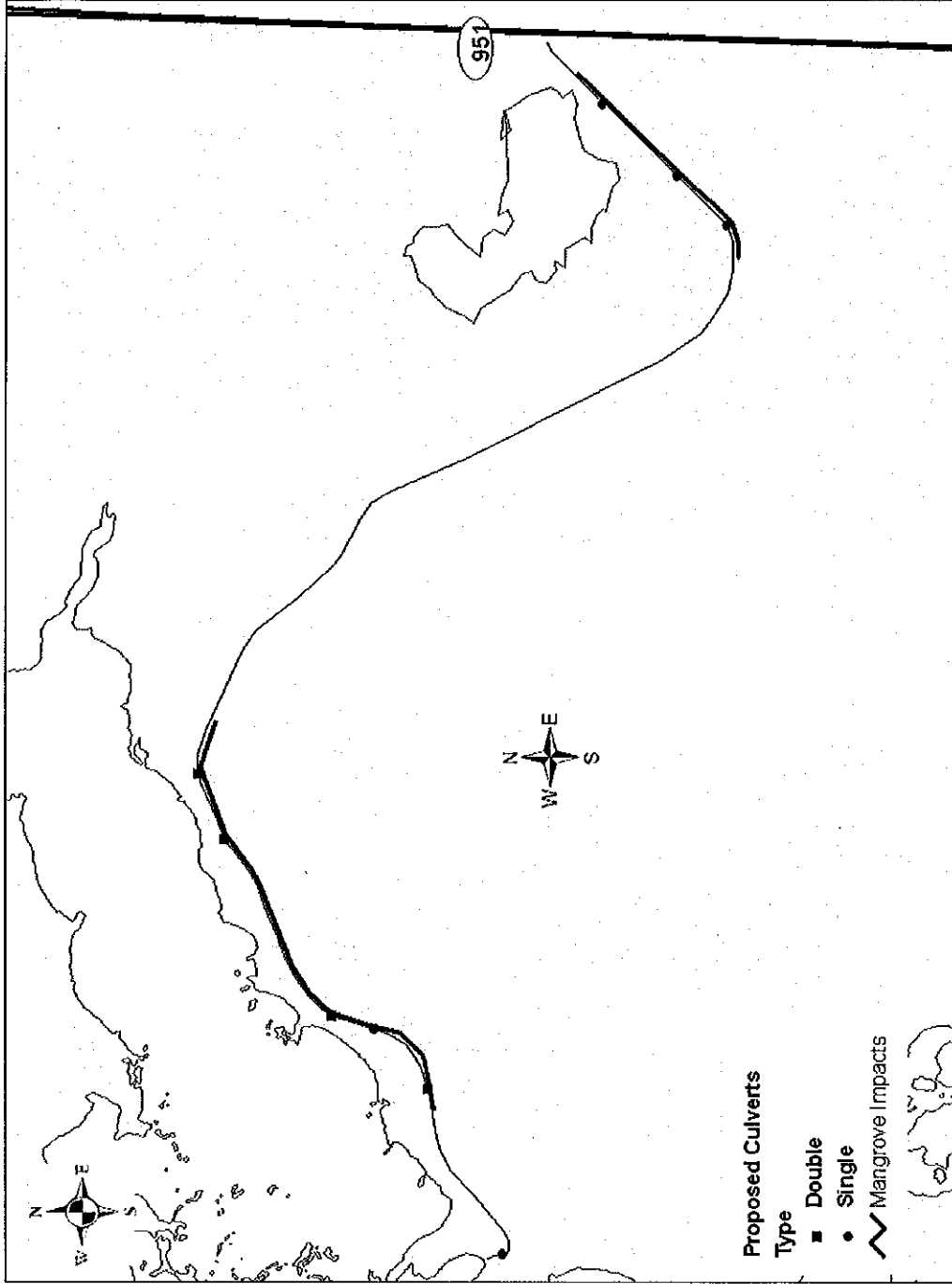
Type

- Double
- Single

FLUCCS Description

- Coastal Scrub
- Embayments opening directly into Gulf or Ocean
- Freshwater Marshes
- Lakes larger than 10 acres - less than 100 acres
- Lakes less than 10 acres
- Mangrove Swamps
- Saltwater Marshes
- Streams and Waterways
- Tropical Hardwoods



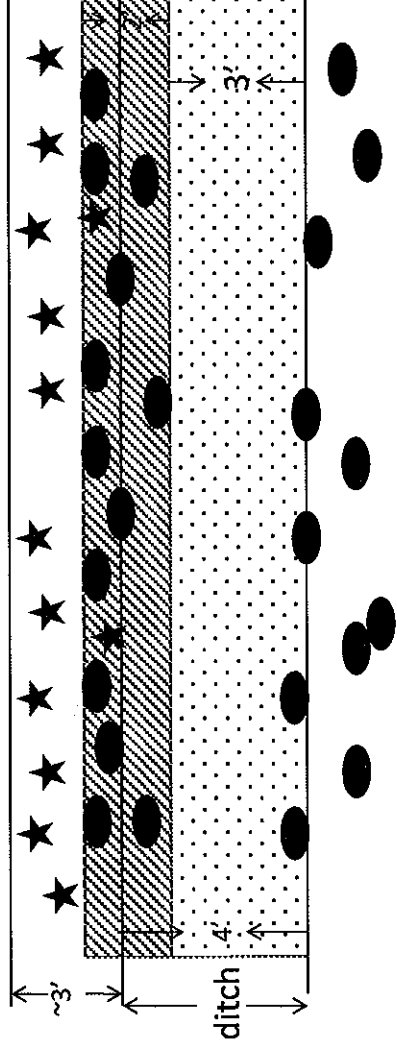


2007 Imagery Provided By Collier County Property Appraiser
 Map Produced By Rocky Bay NERR
 For Illustrative Purposes Only

Shell Island Restoration Typ. Mangrove Impacts



Shell Island Road



- ▨ - Primary impact area (0.36 acres)
- ▤ - Secondary impact area (0.54 acres)
- ★ - misc. Vegetation, not mangrove
- - Mangroves

Not to scale

Shell Island Restoration Invasive, Exotic Removal Mitigation Plan
Applicant: Florida Department of Environmental Protection
Application No.: 090209-1

As mitigation for the primary impacts to 0.36 acres of mangroves at the project site, off-site mitigation will be performed through the removal of 1.5 acres of invasive, exotic vegetation, primarily Brazilian Pepper (*Schinus terebinthifolius*) in a mangrove ecosystem along Henderson Creek. The mitigation work will be performed within the Rookery Bay National Estuarine Research Reserve, Section 9, Township 51 S, Range 26 E. All work will be performed by hand or chainsaw. No heavy machinery will be used. Seedlings will be treated in place, and larger trees, 5-6 in d.b.h. and larger, will be treated using the cut stump treatment. The area will be re-treated as new growth appears.

The Monitoring Program shall include Baseline, Time Zero, and Semi-Annual Monitoring.

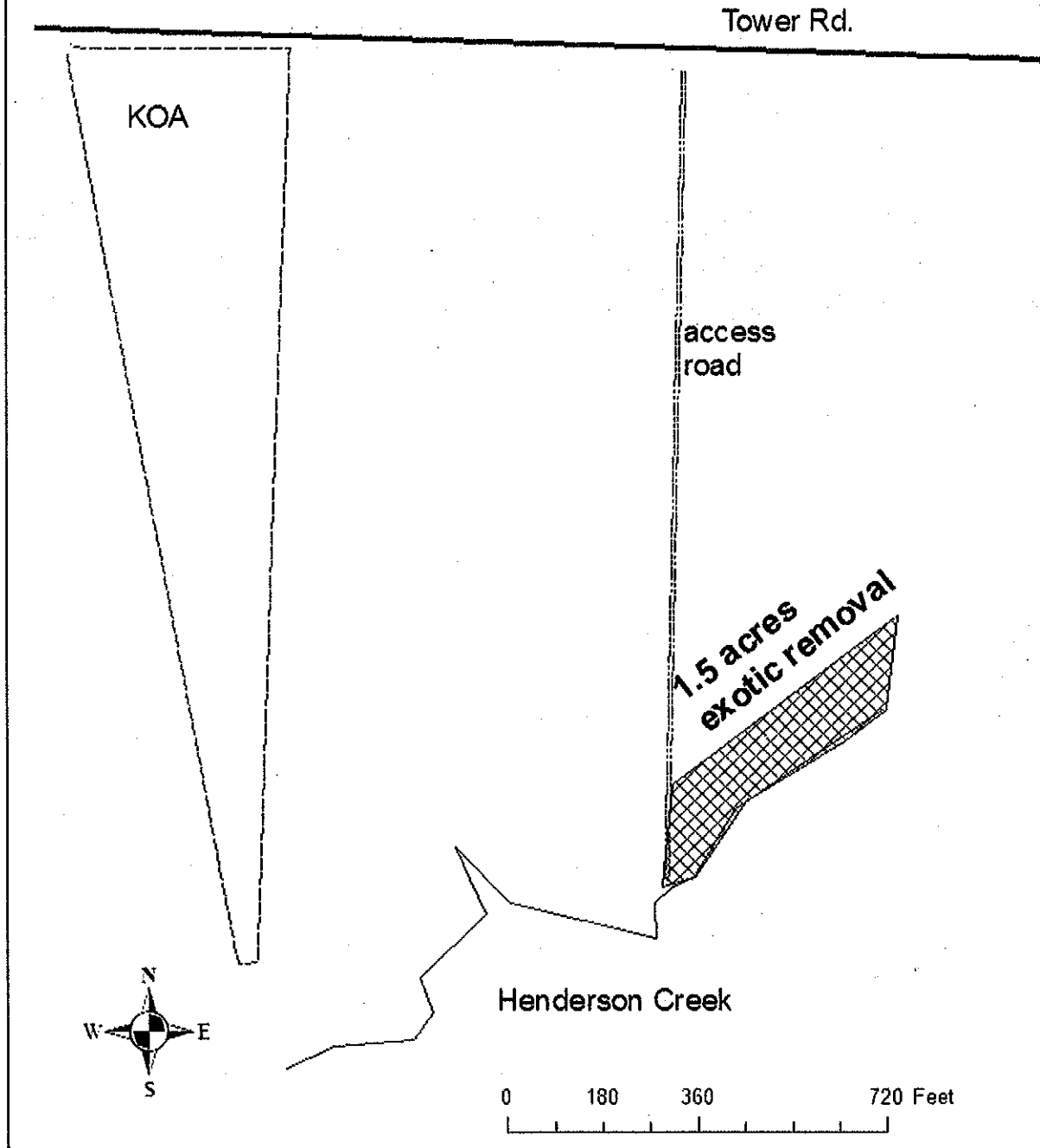
- Baseline monitoring will be performed prior to removal;
- Time Zero Monitoring will be performed within two (2) weeks of removal; and
- Bi-annual monitoring will be performed for a period of five (5) years of removal.

Permanent sampling transects will be established within the mitigation site and photo points will be established as well. Random sample plots will be taken from along the transects. Quantitative sampling and relative abundance will be noted at each plot. Each monitoring inspection will include the species and number of each plant located within the sample plot. Wildlife utilization observations within the monitoring area will be recorded during each inspection.

Monitoring Reports shall be generated and submitted to the South Florida Water Management District no more than thirty (30) days after the completion of each monitoring inspection. Reports shall include: date of inspection, vegetative species abundance, and wildlife observations.

The project shall be deemed to be successful after 85% of the mitigation area is vegetated by native wetland species such as red, black, or white mangrove (*Rhizophora mangle*, *Avicennia germinans*, or *Laguncularia racemosa*), buttonwood, (*Conocarpus erectus*), or saltmarsh species such as saltwort (*Batis maritima*) or glasswort (*Salicornia* spp.)

Shell Island Restoration Invasive Exotic Removal Area Application No. 090209-1



Shell Island Restoration Mangrove Planting Mitigation Plan
Applicant: Florida Department of Environmental Protection
Application No.: 090209-1

As mitigation for the primary impacts to 0.36 acres of mangroves at the project site, off-site mitigation will be performed through the planting of 1.5 acres of mangroves. The mitigation work will be performed at the "Bathey site" located within the Rookery Bay National Estuarine Research Reserve, Section 31, Township 50 S, Range 26 E and Sections 5 and 6, Township 51 S, Range 26 E.

Mitigation will be performed through the planting of 1.5 acres of red mangrove (*Rhizophora mangle*) propagules and seedlings on 15 foot centers in an area approximately 26 ft in width by 2500 ft in length (see attached drawing) on 3-15 foot center depending on site conditions. Planting of pre-potted seedlings will be performed in the rainy season (June-September) and propagules will be collected and planted during periods peak rates or production (August). The mitigation work will be performed within a previously permitted mitigation area (USACOE #1998-01232(IP-MN), but the work will not overlap that which was required under the above referenced permit.

The Monitoring Program shall include Baseline, Time Zero, and Semi-Annual Monitoring.

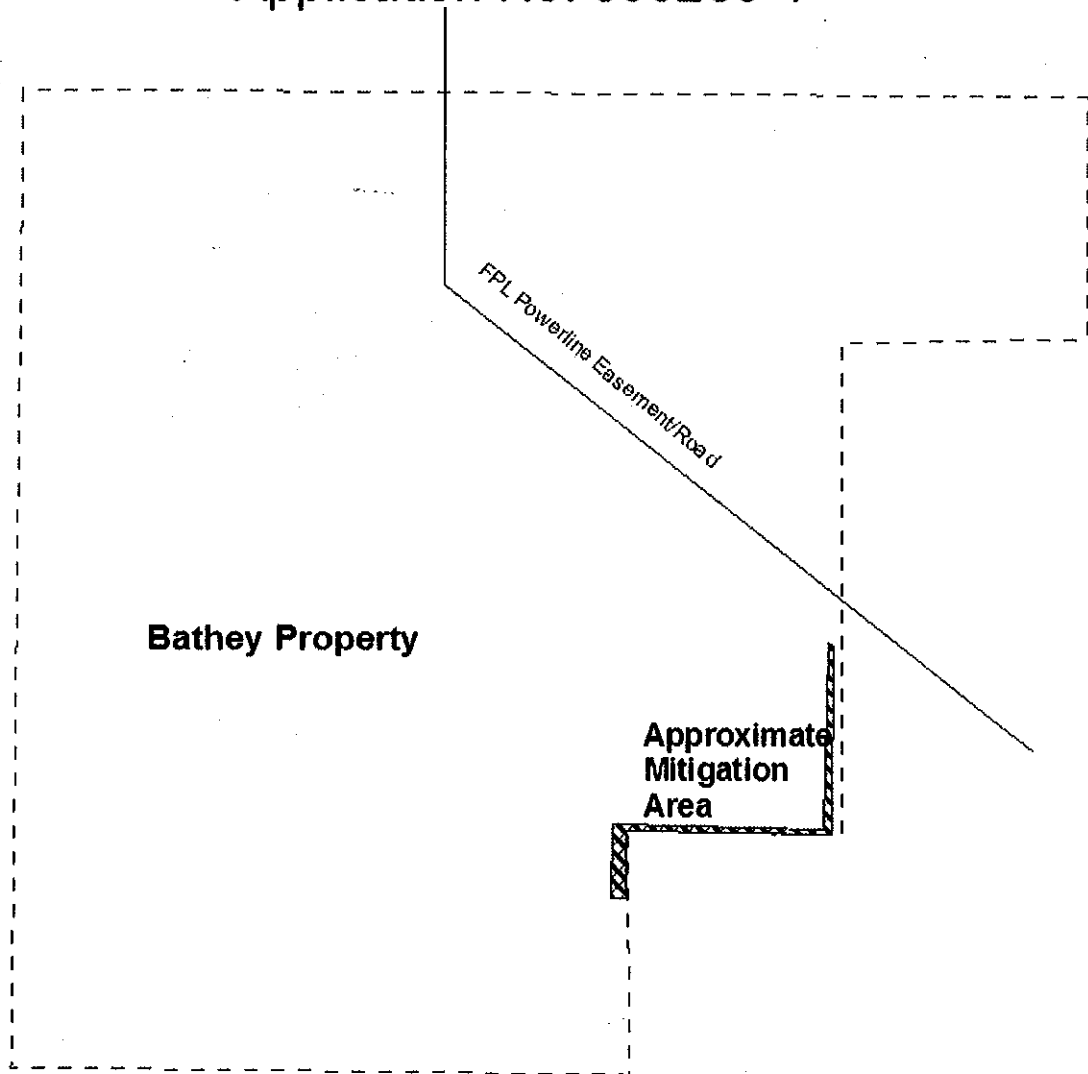
- Baseline monitoring will be performed prior to planting;
- Time Zero Monitoring will be performed within two (2) weeks of planting.; and
- Bi-annual monitoring will be performed for a period of five (5) years after planting.

Permanent sampling transects will be established within the mitigation site and photo points will be established as well. Random sample plots will be taken from along the transects. Quantitative sampling and relative abundance will be noted at each plot. Each monitoring inspection will include the species and number of each plant located within the sample plot. Wildlife utilization observations within the monitoring area will be recorded during each inspection.

Monitoring Reports shall be generated and submitted to the South Florida Water Management District no more than thirty (30) days after the completion of each monitoring inspection. Reports shall include: date of inspection, vegetative species abundance, and wildlife observations.

The project shall be deemed to be successful after 85% of the mitigation area is vegetated by red, black, or white mangrove (*Rhizophora mangle*, *Avicennia germinans*, or *Laguncularia racemosa*), buttonwood, (*Conocarpus erectus*), or saltmarsh species such as saltwort (*Batis maritima*) or glasswort (*Salicornia* spp.)

Shell Island Restoration
Mangrove Planting Mitigation Area
Application No. 090209-1



0 440 880 1,760 Feet

**South Florida Water Management District
Work Schedule Requirements**

Application No : 090209-1

Page 1 of 1

Mitigation Plan ID: SHELL ISLAND

Activity

Due Date

SUBMIT BASELINE MONITORING REPORT	31-MAY-09
EXOTIC VEGETATION REMOVAL HENDERSON CREEK PARCEL	30-SEP-09
COMPLETE PLANTING MITIGATION AREA BATHEY PARCEL	30-SEP-09
SUBMIT TIME ZERO MONITORING REPORT	31-OCT-09
SUBMIT FIRST MONITORING REPORT	31-DEC-09
SUBMIT SECOND MONITORING REPORT	31-DEC-10
SUBMIT THIRD MONITORING REPORT	31-DEC-11
SUBMIT FOURTH MONITORING REPORT	31-DEC-12
SUBMIT FIFTH MONITORING REPORT	31-DEC-13

Exhibit No :

Exhibit 3.3
Application 090209-1
1 of 1

STAFF REPORT DISTRIBUTION LIST

SHELL ISLAND RESTORATION

Application No: 090209-1

Permit No: 11-02993-P

INTERNAL DISTRIBUTION

- X Karyn Allman - 4270
- X Rina Dalal - 4270
- X William Foley, P.E. - 4270
- X Laura Layman - 4270
- X C. Tears - 6862
- X ERC Engineering - 6861
- X ERC Environmental - 6861
- X Fort Myers Backup File - 6861
- X Permit File

EXTERNAL DISTRIBUTION

- X Permittee - Florida Department Of Environmental Protection, Office Of Coastal And Managed Areas
- X Agent - Rookery Bay National Estuarine
- X Owner - C/O Florida Department Of Environmental Protection, Office Of Coastal And Managed Areas

GOVERNMENT AGENCIES

- X City Engineer, City of Naples
- X Collier County - Agricultural Agent
- X Collier County Compliance Services
- X Collier County Engineer Engineering Review Services
- X Div of Recreation and Park - District 4 - FDEP
- X FDEP Division of Recreation and Park
- X FDEP Lucy Blair
- X Florida Department of Comm Affairs Mr. D. Ray Eubanks
- X S.W.F.R.P.C. Jim Beaver
- X Stan Chrzanowski - Collier County

OTHER INTERESTED PARTIES

- X Audubon of Florida - Charles Lee

STAFF REPORT DISTRIBUTION LIST

ADDRESSES

Rookery Bay National Estuarine
300 Tower Rd
Naples FL 34113

C/O Florida Department Of Environmental Protection,
Office Of Coastal And Managed Areas
3900 Commonwealth Blvd.
Tallahassee FL 32399

City Engineer, City of Naples
735 Eighth St South
Naples
Naples FL 34102

Collier County Compliance Services
2800 N. Horseshoes Dr
Naples FL 33942

Div of Recreation and Park - District 4 - FDEP
1843 South Tamiami Trail
Osprey FL 34229

FDEP Lucy Blair
2295 Victoria Avenue
Fort Myers FL 33901

S.W.F.R.P.C. Jim Beever
1926 Victoria Ave.
Ft. Myers FL 33917

Audubon of Florida - Charles Lee
1101 Audubon Way
Maitland FL 32751

Florida Department Of Environmental Protection, Office Of
Coastal And Managed Areas
3900 Commonwealth Blvd.
Tallahassee FL 32399

Collier County - Agricultural Agent
14700 Immokalee Road
Naples FL 34120-1468

Collier County Engineer Engineering Review Services
3301 Tamiami Trail
Naples FL 34112

FDEP Division of Recreation and Park
1843 S. Tamiami Trail
Osprey FL 34229

Florida Department of Comm Affairs Mr. D. Ray Eubanks
2555 Shumard Oak Blvd
Tallahassee FL 32399-2100

Stan Chrzanowski - Collier County
2800 N. Horseshoe Drive
Naples FL 34104