



**SOUTH FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
STANDARD GENERAL PERMIT NO. 36-03165-P-02
DATE ISSUED: October 7, 2011**

Form #0941
08/95

PERMITTEE: LEE COUNTY BOARD OF COUNTY
COMMISSIONERS
1500 MONROE STREET
FORT MYERS, FL 33901

PROJECT DESCRIPTION: This application is a request for an Environmental Resource Permit Modification to authorize construction and operation of a surface water management system to serve a 53.40 acre surface water and water quality improvement project known as Fichter's Creek Restoration with discharge into Fichter's Creek.

PROJECT LOCATION: LEE COUNTY, SEC 18 TWP 43S RGE 27E

PERMIT DURATION: See Special Condition No:1. Pursuant to 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. 090504-3, dated May 4, 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 7),
3. the attached 20 Special Conditions (See Pages : 5 - 7 of 7) 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 7th day of October, 2011, in accordance with Section 120.60(3), Florida Statutes.

BY: _____

Ricardo A. Valera, P.E.
Regulatory Administrator
Lower West Coast Service Center

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 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 October 7, 2016.
2. Operation of the surface water management system shall be the responsibility of LEE COUNTY BOARD OF COUNTY COMMISSIONERS.

3. Discharge Facilities:

Structure: CS1

1-3" dia. CIRCULAR ORIFICE with invert at elev. 12.5' NAVD 88.
106 LF of 24" dia. REINFORCED CONCRETE PIPE culvert.
1-4.3' W X 5.8' L drop inlet with crest at elev. 17.6' NAVD 88.
Receiving body : Fichter's Creek.
Control elev : 12.5 feet NAVD 88.

Structure: CS2

1-3" dia. CIRCULAR ORIFICE with invert at elev. 15.2' NAVD 88.
97 LF of 24" dia. REINFORCED CONCRETE PIPE culvert.
1-4.3' W X 5.8' L drop inlet with crest at elev. 17.6' NAVD 88.
Receiving body : Fichter's Creek.
Control elev : 15.2 feet NAVD 88.

Structure: CS3

1-3" dia. CIRCULAR ORIFICE with invert at elev. 16.7' NAVD 88.
194 LF of 24" dia. REINFORCED CONCRETE PIPE culvert.
1-4' W X 4.4' L drop inlet with crest at elev. 17.6' NAVD 88.
Receiving body : Filter Marsh.
Control elev : 16.7 feet NAVD 88.

Structure: CS4

1-2' W X .5' H RECTANGULAR NOTCH with invert at elev. 9' NAVD 88.
2-36" dia. REINFORCED CONCRETE PIPE culverts each 87' long.
1-4.3' W X 9' L drop inlet with crest at elev. 10.5' NAVD 88.
Receiving body : Existing ditch.
Control elev : 9.0 feet NAVD 88.

4. 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.
5. Measures shall be taken during construction to insure that sedimentation and/or turbidity violations do not occur in the receiving water.
6. 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.
7. Lake side slopes shall be no steeper than 4:1 (horizontal:vertical) to a depth of two feet below the control elevation. Side slopes shall be nurtured or planted from 2 feet below to 1 foot above control elevation to insure vegetative growth, unless shown on the plans.
8. Facilities other than those stated herein shall not be constructed without an approved modification of this permit.

SPECIAL CONDITIONS

9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
15. A mitigation program for Ficher's Creek Restoration shall be implemented in accordance with Exhibit No. 3.5. The permittee shall enhance 13.01 acres of wetlands and restore 2.37 acres of other surface waters within the Caloosahatchee Regional Park, Fichter's Creek Management Unit.
16. The District reserves the right to require remedial measures to be taken by the permittee if monitoring or other information demonstrates that adverse impacts to onsite or offsite wetlands, upland conservation areas or buffers, or other surface waters have occurred due to project related activities.
17. A monitoring program shall be implemented in accordance with Exhibit No. 3.5. 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

SPECIAL CONDITIONS

wetland species.

18. A maintenance program shall be implemented in accordance with Exhibit No. 3.5 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.
19. Prior to the commencement of construction, the permittee shall conduct a pre-construction meeting with field representatives, contractors and District staff. The purpose of the meeting will be to discuss construction methods and sequencing, including type and location of turbidity and erosion controls to be implemented during construction, mobilization and staging of contractor equipment, phasing of construction, methods of vegetation clearing, construction dewatering if required, coordination with other entities on adjacent construction projects, and endangered species protection with the permittee and contractors. The permittee shall contact District Environmental Resource Compliance staff from the Lower West Coast Service Center at 239-338-2929 to schedule the pre-construction meeting.
20. 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. 3.8. 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 and/or completion dates; and (3) progress report on the status of the project development or mitigation effort.

Last Date For Agency Action: October 10, 2011

GENERAL ENVIRONMENTAL RESOURCE PERMIT STAFF REPORT

Project Name: Fichter's Creek Restoration

Permit No.: 36-03165-P-02

Application No.: 090504-3 **Associated File:** 090505-3 WU Concurrent

Application Type: Environmental Resource (General Permit Modification)

Location: Lee County, S18/T43S/R27E

Permittee : Lee County Board Of County Commissioners

Operating Entity : Lee County Board Of County Commissioners

Project Area: 53.40 acres

Project Land Use: Environmental Restoration

Drainage Basin: WEST CALOOSAHATCHEE

Sub Basin: C-43

Receiving Body: Fichter's Creek

Class: CLASS III

Special Drainage District: NA

Total Acres Wetland Onsite: 13.66

Total Acres Wetland Preserved Onsite: 13.01

Total Acres Impacted Onsite : .47

Total Acres Presv/Mit Compensation Onsite: 15.38

Conservation Easement To District : No

Sovereign Submerged Lands: No

PROJECT PURPOSE:

This application is a request for an Environmental Resource Permit Modification to authorize construction and operation of a surface water management system to serve a 53.40 acre surface water and water quality improvement project known as Fichter's Creek Restoration with discharge into Fichter's Creek.

PROJECT EVALUATION:**PROJECT SITE DESCRIPTION:**

The 53.40-acre project site is part of the 768-acre parcel known as Caloosahatchee Regional Park (Permit No. 36-03165-P), which is located north of the Caloosahatchee River, approximately 2 miles west of Alva, in north Lee County, Florida. This park is owned by the State of Florida, but is managed by Lee County for the public. The project site is located east of Fichter's Creek Lane and bisected by North River Road (CR 78). A location map is attached as Exhibit 1.0.

There are no permitted surface water management facilities within the project site. The project site receives stormwater runoff from the upstream portions of Fichter's Creek and Hall Creek. Fichter's Creek is a natural system flowing from shared headwaters within the Babcock property in Charlotte County which had been impacted by agricultural development over time. Historically, water has proceeded from the headwaters, known as Saddler's Hammock, through Fichter's Creek, Cypress Creek and Hall Creek to the Caloosahatchee River (see Exhibit 1.1). Various alterations have occurred to this natural drainage system over time. During a dredging project for the Caloosahatchee River in the 1960s, fill was placed on what is now Caloosahatchee Regional Park and a ditch was constructed that directed runoff from the filled park areas to the river. The north end of the ditch was connected to the creek and allows runoff to be diverted from the creek. Farming within the Babcock property also diverts and channels the overland flow from the headwaters. There are currently breaches on the existing berms on the north and west sides of the project site, an existing maintenance access along the east side of the ditch, a creek crossing at the Fichter's Creek Lane bridge consisting of (3) 36-inch Reinforced Concrete Pipes (RCP), outdated culverts by North River Road and along the northern boundary of the proposed project area, and bicycle and equestrian trails scattered throughout the site. The surrounding areas adjacent to the current bridge have flooded during significant storm events in the past.

The site contains 29.89 acres of recreational area (made up of bicycle and equestrian trails), 1.00 acre of mixed upland pine, 2.83 acres of ditches, 1.37 acres of stream and lakes swamps with between 1 and 24% exotic coverage, 0.91 acres of drained cypress swamp with between 25 and 49% exotic coverage, 12.29 acres of mixed wetland forest with greater than 75% exotic coverage, 0.40 acres of disturbed land, 3.92 acres of berms, 0.37 acres of roadways, and 0.43 acres of trails. There are a total of 13.66 acres of jurisdictional wetlands on-site as well as 2.83 acres of other surface waters (OSW). The wetlands on-site are associated with and include Fichter's Creek. A FLUCCS map is attached as Exhibit 3.0.

PROJECT BACKGROUND:

In January 1997, Permit No. 36-03165-P, Application No. 960925-2 authorized construction and operation of a surface water management system to serve a 3.62-acre county park within the 768.0-acre parcel known as Caloosahatchee Regional Park (CRP). CRP is bisected by North River Road creating two basins, the north basin (280.0 acres) and south basin (488.0 acres). The permitted facilities were located within the south basin. The proposed project reviewed under this Application No. 090504-3 is located in both basins, 46.47 acres in the north basin and 6.93 acres in the south basin.

PROPOSED PROJECT:

The applicant proposes improvements to the creek system on a 53.4-acre parcel at and adjacent to the Caloosahatchee Regional Park to provide hydrologic restoration through water quality treatment and flood protection within the Fichter's Creek Watershed. The restoration work will provide ecological restoration and improved water quality through regulated hydroperiods, removal of exotics, and installation of native plants which provide treatment within the created filter marsh. The proposed stormwater management improvements consist of the creation of a filter marsh, construction of ponds, improvements to Fichter's Creek, and the associated piping installation.

The existing manmade ditch located between Fichter's Creek Lane and the park will be re-graded to create a filter marsh, including the replacement of the existing 36-inch culvert in the manmade ditch at North River Road with control structure (CS4) and double 36-inch RCPs under North River Road and construction of a meandering swale connection to divert part of the flow from the existing manmade ditch where it ties into the Caloosahatchee River. The filter marsh will be bisected by a proposed 10-foot wide maintenance access, which will require the installation of double 80-linear feet of 48-inch interconnected RCP pipes. There is a proposed 50-linear feet of 24-inch RCP to connect the filter marsh with the existing ditch west of the filter marsh including a flap gate on west inside face of structure to FI-7 to prevent water from flowing from the filter marsh to the parcels located on the west side of the berm during peak stages in the filter marsh. The existing outdated metal and concrete pipes at North River Road will be replaced with RCPs and new Type "C" structures will be constructed to convey runoff to the ditch.

Three dry detention (DD) ponds and a shallow wet detention pond (aquascape) will be constructed, which will be separated by existing bicycle trails. DD1 will be interconnected to DD2 and to the Aquascape through RCPs. The Aquascape will have a bottom elevation of 2-feet below the proposed control elevation of 12.5 ft North American Vertical Datum of 1988 (NAVD) and will discharge to the north into Fichter's Creek through CS1 and to the west into the filter marsh through CS3. DD3 will discharge north into Fichter's Creek through CS-2. These control structures will be located where existing outdated pipes currently exist to limit impacts to the onsite vegetation.

The applicant proposes re-grading and filling of existing breaches of the existing berm on the northern and western sides of the project site, and replacing the existing triple 36-inch RCP creek crossing at Fichter's Creek Lane Bridge with a 6-ft by 10-ft box culvert and concrete spillway.

These modifications will result in increased storage in the creek north of the Caloosahatchee Regional Park while providing increased water quality treatment on the park property and reducing flooding of developed areas. Plan view of the proposed improvements, cross sections and details are included as Exhibit 2.0. No adverse impacts to off-site properties will occur as a result of the proposed project.

LAND USE:

OPEN WATER includes the existing creek area. OTHER land use corresponds to the bottom area of the proposed Filter Marsh.

Construction:

Project:

Total Project

Berm	1.30	acres
Dry Detention Bottom	6.20	acres
Lake	3.20	acres
Open Water	7.20	acres
Other	.60	acres
Pavement	.30	acres
Pervious	34.60	acres
Total:	53.40	

WATER QUANTITY :

Discharge Rate :

The proposed Aquascape will discharge to the north into Fichter Creek through CS1 and to the west into the filter marsh through CS3. Dry detention DD3 will discharge north into Fichter Creek through CS-2. No adverse discharge impacts are anticipated as a result of the proposed project.

Control Elevation :

Basin	Area (Acres)	Ctrl Elev (ft, NAVD 88)	WSWT Ctrl Elev (ft, NAVD 88)	Method Of Determination
Site	53.40	12.5	12.50	Wetland Indicator Elevation

Receiving Body :

Basin	Str.#	Receiving Body
Site	CS1	Fichter's Creek
Site	CS2	Fichter's Creek
Site	CS3	Filter Marsh
Site	CS4	Existing ditch

Discharge Structures: Note: The units for all the elevation values of structures are (ft, NAVD 88)

Bleeders:

Basin	Str#	Count	Type	Width	Height	Length	Dia.	Invert Angle	Invert Elev.
Site	CS1	1	Circular Orifice				3"		12.5
Site	CS2	1	Circular Orifice				3"		15.2
Site	CS3	1	Circular Orifice				3"		16.7
Site	CS4	1	Rectangular Notch	2'	.5'				9

Culverts:

Basin	Str#	Count	Type	Width	Length	Dia.
Site	CS1	1	Reinforced Concrete Pipe		106'	24"
Site	CS2	1	Reinforced Concrete Pipe		97'	24"
Site	CS3	1	Reinforced Concrete Pipe		194'	24"
Site	CS4	2	Reinforced Concrete Pipe		87'	36"

Inlets:

Basin	Str#	Count	Type	Width	Length	Dia.	Crest Elev.
Site	CS1	1	Fdot Mod E Drop Inlet	4.3'	5.8'		17.6
Site	CS2	1	Fdot Mod E Drop Inlet	4.3'	5.8'		17.6
Site	CS3	1	Fdot Mod C Drop Inlet	4'	4.4'		17.6
Site	CS4	1	Fdot Mod H Drop Inlet	4.3'	9'		10.5

WATER QUALITY :

The proposed system will be increasing the onsite residence time as a water quality improvement of the aquascape and filter marsh basins and will also contribute to downstream flood control. As shown on the table below, the proposed surface water management system will provide a total volume of 34.25 ac-ft.

Basin	Treatment Method	Vol Req.d (ac-ft)	Vol Prov'd
Site	Treatment Wet Detention	14.21	14.21

Basin	Treatment Method		Vol Req.d (ac-ft)	Vol Prov'd
Site	Treatment	Dry Detention	20.04	20.04

WETLANDS:

The on-site wetlands total 13.66 acres and consist of 12.29 acres of mixed wetland forest with greater than 75% exotic coverage and 1.37 acres of stream and lake swamps with between 1 and 24% exotic coverage. The mixed wetland forest habitat is dominated by Brazilian pepper, but also includes laurel oak, slash pine, red maple, and cabbage palm, Carolina willow, and scattered swamp fern as ground cover. The stream and lake swamps habitat includes Fichter's Creek and is dominated by cypress, with slash pine and cabbage palm, and Brazilian pepper and Carolina willow along the edge. The ground cover is dominated by swamp fern with pickerelweed and arrowhead.

The site also contains 2.83 acres of man-made ditches (OSW). The ditches are open, but contain a sub-canopy of Brazilian pepper and Carolina willow, and primrose-willow, cattails, and para grass as ground cover. A Wetland Identification Map is attached as Exhibit 3.1.

Wetland Impacts:

The applicant proposes to directly impact 0.47 acres of wetlands, which are located in the northeastern portion of the property. The direct impacts include 0.39 acres (0.06 acres of wetland fill and 0.33 acres of wetland excavation) of the 12.29 acre total of mixed wetland forest with greater than 75% exotic coverage, and 0.08 acres (0.06 acres of wetland fill and 0.02 acres of wetland excavation) of the 1.37 acre total of streams and lakes swamps with between 1 and 24% exotic coverage. There will be a total of 0.18 acres of temporary wetland impacts associated with the restoration project. The temporary impacts consist of the vegetation clearing of both 0.09 acres of mixed wetland forest and 0.09 acres of streams and lakes swamps to allow for equipment access into the construction areas. These impacts are considered temporary in nature because the applicant proposes to re-plant the effected area immediately after restoration work is completed. The applicant also proposes to impact of 0.38 acres (0.06 acres of OSW fill and 0.32 acres of OSW excavation) of OSW. There are no secondary impacts associated with the proposed project. A Wetland Impact Map is attached as Exhibit 3.2.

Mitigation Proposal:

The applicant has proposed on-site mitigation to offset the project's 0.47 acres of direct wetland impacts. A functional loss of 0.26 units was determined via the Uniform Mitigation Assessment Method (UMAM). The applicant has proposed the enhancement of the remaining 11.81 acres of mixed wetland forest habitat, the enhancement of the remaining 1.20 acres of streams and lake swamps habitat, and the restoration of 2.37 acres of ditches and bypass swales (OSW) to offset the direct wetland impacts. A functional gain of 1.31 UMAM functional units was calculated for the proposed mitigation, leaving an excess of 1.05 UMAM functional units. Please see the Restoration Plan Map attached as Exhibit 3.3. Due to the ownership of the property by the State of Florida, neither a conservation easement nor a Memorandum of Understanding (MOU) will be required for the preserved wetlands located within the proposed project. Instead, the permit issued under this application will be included as a part of the Caloosahatchee Regional Park Resource Management Plan to provide assurances that the preserved/enhanced areas will remain preserved in perpetuity, and to clearly define the wetland mitigation areas within the park property. Please see the site specific information from Caloosahatchee Regional Park Resource Management Plan attached as Exhibit 3.4 or visit <http://www.leeparks.org/pdf/CRP-Land-Stewardship-Plan-Copy-for-Public-Hearing.pdf> for the complete document. Pursuant to the Caloosahatchee Regional Park Resource Management Plan, the portions of the mountain bike and equestrian trails that constitute the southern/eastern boundary of the Fichter's Creek stewardship unit will be maintained for the protection of natural resources and the safety of the public.

Within the enhancement area of 11.81 acres of mixed wetland forest with greater than 75% exotic coverage, mechanical clearing of exotic vegetation will be allowed with District staff's pre-approval. Upon initial exotic vegetation removal, native trees will be planted. Please see Table 1 of the Restoration, Maintenance, and Monitoring Plan attached as Exhibit 3.5. If after two years the overall coverage of native tree, sub-canopy, and groundcover species does not meet the 80% native coverage requirement, supplemental plantings may be required. The supplemental plantings will be consistent with native species identified previously in the area.

Within the area of 1.20 acres of streams and lake swamps with 1 to 24% exotic coverage, enhancement will be achieved through selective exotic removal.

The applicant has proposed restoration within 2.37 acres of ditches and bypass swales within the manmade ditch between Fichter's Creek Lane and the park property. Once the proposed culverts and control structure have been installed and the ditch re-graded, this area will be planted with native species. Please see Table 4 of the Restoration, Maintenance, and Monitoring Plan attached as Exhibit 3.5 for details of the planting zones, and the Western Ditch Planting Plan map attached as Exhibit 3.6 for a visual representation.

In addition to the required mitigation, the applicant proposes additional restoration work as part of the project. A total of 4.04 acres of lake/aquascape restoration will include the planting of native species within three zones. Please see Table 2 of the Restoration, Maintenance, and Monitoring Plan attached as Exhibit 3.5 for details of the planting zones, and the Aquascape Planting Plan map attached as Exhibit 3.7 for a visual representation. Upland enhancement include the re-planting of native tree along 1.16 acres of berm after exotic vegetation removal and incorporating an area of 0.91 acres containing drained cypress habitat into the on-site detention area. Please see Table 3 of the Restoration, Maintenance, and Monitoring Plan attached as Exhibit 3.5 for details. The area will be treated for exotics, but no supplemental plantings are proposed. Finally, the applicant proposes re-planting the 0.18 acres of temporary impacted wetlands. This involves replanting 0.09 acres within the mixed wetland forest with greater than 75% exotic coverage habitat and 0.09 acres within the streams and lake swamps with 1 to 24% exotic coverage habitat. Please see Table 5 of the Restoration, Maintenance, and Monitoring Plan attached as Exhibit 3.5 for details about the supplemental plantings for this area. The proposed wetland mitigation activities are consistent with the overall management plan for the park.

Monitoring/Maintenance:

Maintenance Plan of Mitigation Areas:

A maintenance program shall be implemented for the mitigation areas on a regular basis to ensure the integrity and viability of mitigation activities. This is achieved by establishing a scheduled program to maintain the restoration area free of exotic plants (as defined by the latest exotic plant list published by the Florida Exotic Pest Plant Council). Please see the Restoration, Maintenance, and Monitoring Plan attached as Exhibit 3.5.

Monitoring of Mitigation Areas:

Monitoring of the mitigation areas will commence upon issuance of this permit and project construction, pursuant to the Restoration, Maintenance, and Monitoring Plan attached as Exhibit 3.5 and the work schedule identified in Exhibit 3.8.

The objective of monitoring is to evaluate the success of the restoration and maintenance efforts, activities conducted to date, and any remedial activities that are necessary to ensure the success of the restoration activities. Please see the Monitoring Map, attached as Exhibit 3.9, for the proposed locations of transects and photopoints which will be utilized during the monitoring events.

observed onsite. However, outside of the restoration limits, there is a potential for Audubon's crested caracara (caracara) to utilize the property for nesting and foraging. Please see the 985 foot radius caracara nesting season buffer depicted on Exhibit 3.10. The proposed stormwater and water quality improvements and the wetland mitigation plan will improve the habitat value of the site and the creek for wetland-dependent species. 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 water will not be required for the project. The applicant has indicated that dewatering is required for construction of this project. Dewatering application no. 090504-3 has been submitted and is being reviewed concurrently. 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.

CERP:

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

Potable Water Supplier:

Not applicable.

Waste Water System/Supplier:

Not applicable.

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:

No information has been received that indicates the presence of archaeological or historical resources or that the proposed activities could cause adverse impacts to archaeological or historical resources. 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 issuance of this permit constitutes a finding of consistency with the Florida Coastal Management Program.

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

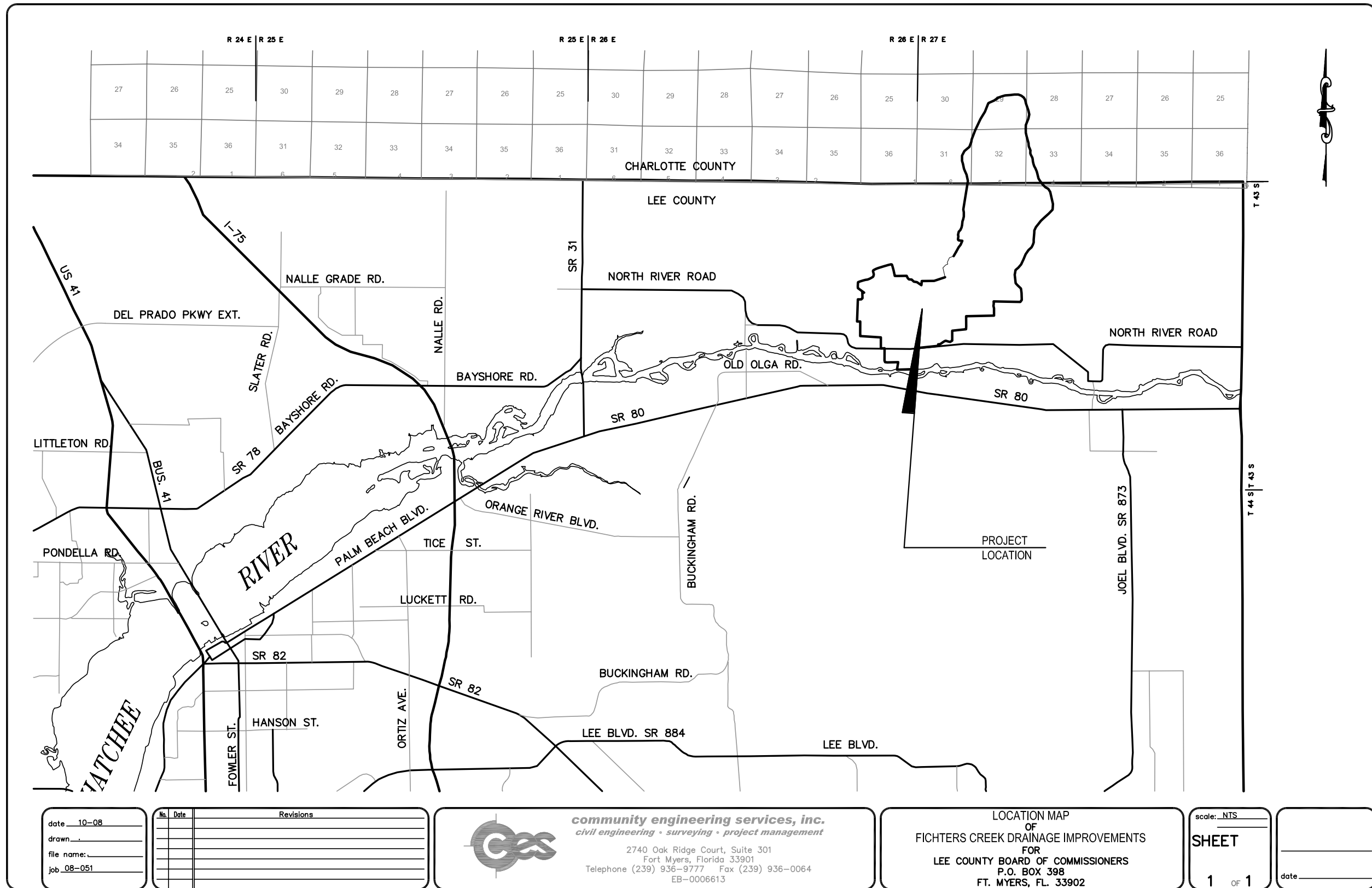
DATE: 10/4/11 _____

SURFACE WATER MANAGEMENT:



Daniel F. Waters, P.E.

DATE: 10/6/11 _____



date 10-08
 drawn _____
 file name: _____
 job 08-051

No.	Date	Revisions

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civil engineering • surveying • project management
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 Fort Myers, Florida 33901
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 EB-0006613

LOCATION MAP
 OF
 FIGHTERS CREEK DRAINAGE IMPROVEMENTS
 FOR
 LEE COUNTY BOARD OF COMMISSIONERS
 P.O. BOX 398
 FT. MYERS, FL. 33902

scale: NTS
SHEET
 1 OF 1

date _____

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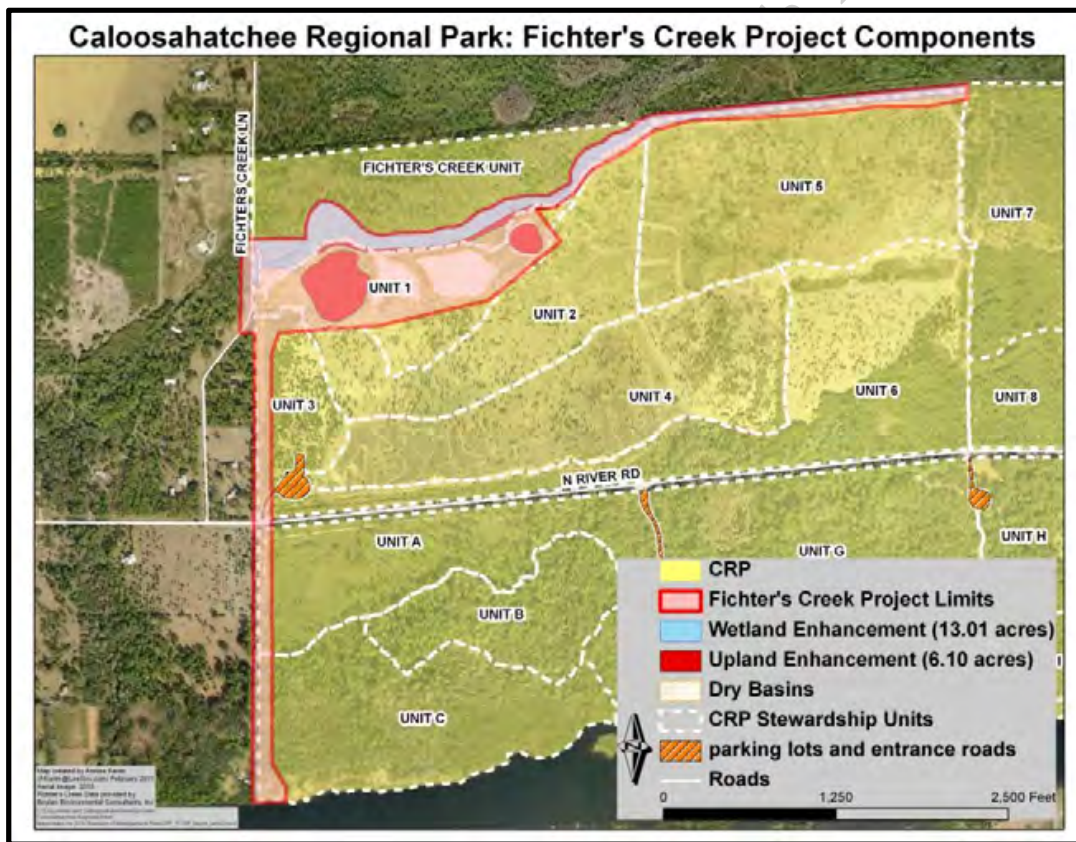


Figure 24: Fichter's Creek Project Limits, Wetland Enhancement Area and Upland Enhancement Area.

COMPONENTS OF CONTRACT PLANS

DRAINAGE PLANS
PLANTING PLANS
STRUCTURAL PLANS

INDEX OF PLANS

SHEETS NO.	SHEET DESCRIPTION
1.	COVER SHEET
2.	GENERAL NOTES AND LEGEND
3-4A.	AERIAL BASIN MAPS
5.	SUMMARY OF QUANTITIES
5A.	EXISTING CONDITIONS PLAN
6.	DRAINAGE KEY SHEET
7.	MASTER PARK SITE PLAN
8-12.	DRAINAGE AREA PLANS
13-14.	PLAN AND PROFILE
15-19.	CROSS SECTIONS
20-26.	DRAINAGE DETAILS
27.	BOX CULVERT SITE PLAN
28.	EROSION CONTROL KEY SHEET
29-32.	EROSION CONTROL SITE PLANS
33.	EROSION CONTROL DETAILS
33A.	CLEARING PLAN

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SUNSHINE STATE ONE CALL OF FLORIDA, INC.

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FLORIDA POWER AND LIGHT
P.O. BOX 40
FORT MYERS, FL 33902

TELEPHONE
EMBARQ
2820 CARGO STREET
FORT MYERS, FL 33916

FIRE
ALVA FIRE DEPARTMENT
2660 STYLES RD.
ALVA, FL 33920

LEE COUNTY COMMISSIONERS

DISTRICT 1	BOB JANES
DISTRICT 2	BRIAN BIGELOW
DISTRICT 3	RAY JUDAH
DISTRICT 4	TAMMY HALL
DISTRICT 5	FRANK MANN

LEE COUNTY STAFF

KAREN HAWES
INTERIM COUNTY MANAGER

JIM LAVENDER
PUBLIC WORKS DIRECTOR

ROLAND OTTOLINI, PE
DIRECTOR OF NATURAL RESOURCES



GOVERNING STANDARDS AND SPECIFICATIONS:
1. FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS DATED 2006,
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION DATED 2007, LATEST EDITION,
AS AMENDED BY CONTRACT DOCUMENTS

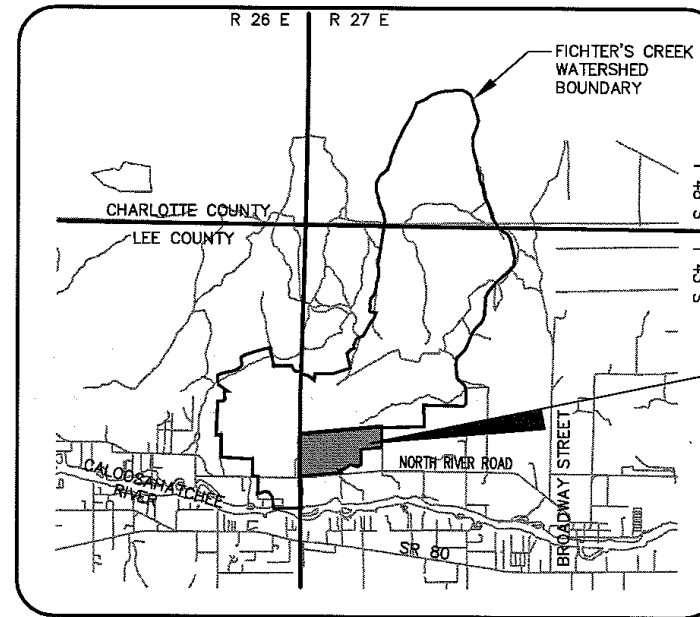
LEE COUNTY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF NATURAL RESOURCES

CONTRACT PLANS

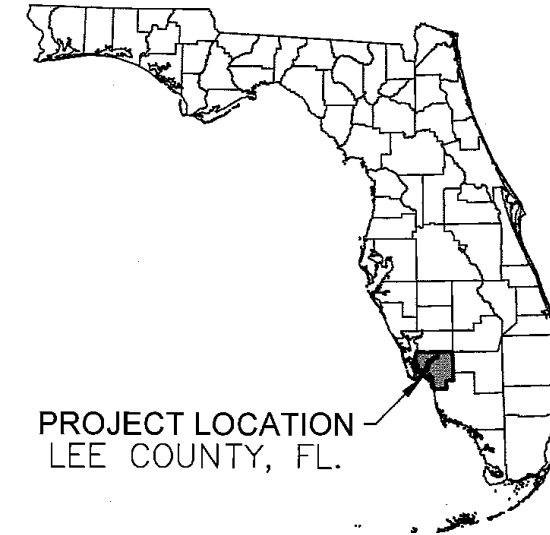
PLANS OF PROPOSED

FICHTER'S CREEK RESTORATION

COUNTY CONTRACT NO.: 4279
SOLICITATION NO.: CN-08-03



LEE COUNTY NATURAL RESOURCES: TILDON COPELAND, PROJECT MANAGER



PROJECT LOCATION
LEE COUNTY, FL.

PLAN PREPARED FOR:
**LEE COUNTY BOARD OF
COUNTY COMMISSIONERS**
1500 MONROE STREET
FORT MYERS, FL 33901

COUNTY PERMIT APPROVAL USE ONLY:



PROJECT LOCATION
CALOOSAHATCHEE
REGIONAL PARK NORTH

THIS IS TO CERTIFY THAT THESE PLANS AND THE ASSOCIATED
CONSTRUCTION PROJECT ARE IN SUBSTANTIAL COMPLIANCE WITH
THE LEE COUNTY LAND DEVELOPMENT CODE WITH THE EXCEPTION
OF THE FOLLOWING DEVIATIONS WHICH HAVE BEEN APPROVED BY
THE DIRECTOR OF PUBLIC WORKS.

LIST OF DEVIATIONS: NONE

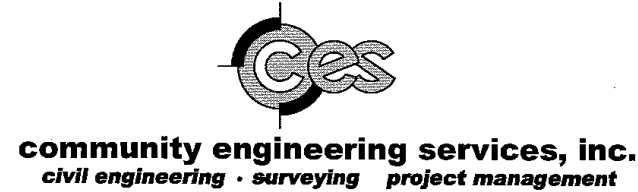
DEVELOPMENT ORDER APPROVED:
LEE COUNTY PUBLIC WORKS ADMINISTRATION

JIM LAVENDER
DIRECTOR OF PUBLIC WORKS

COMMUNITY ENGINEERING SERVICES, INC.

Mark D. McCleary
FL PE # 44052

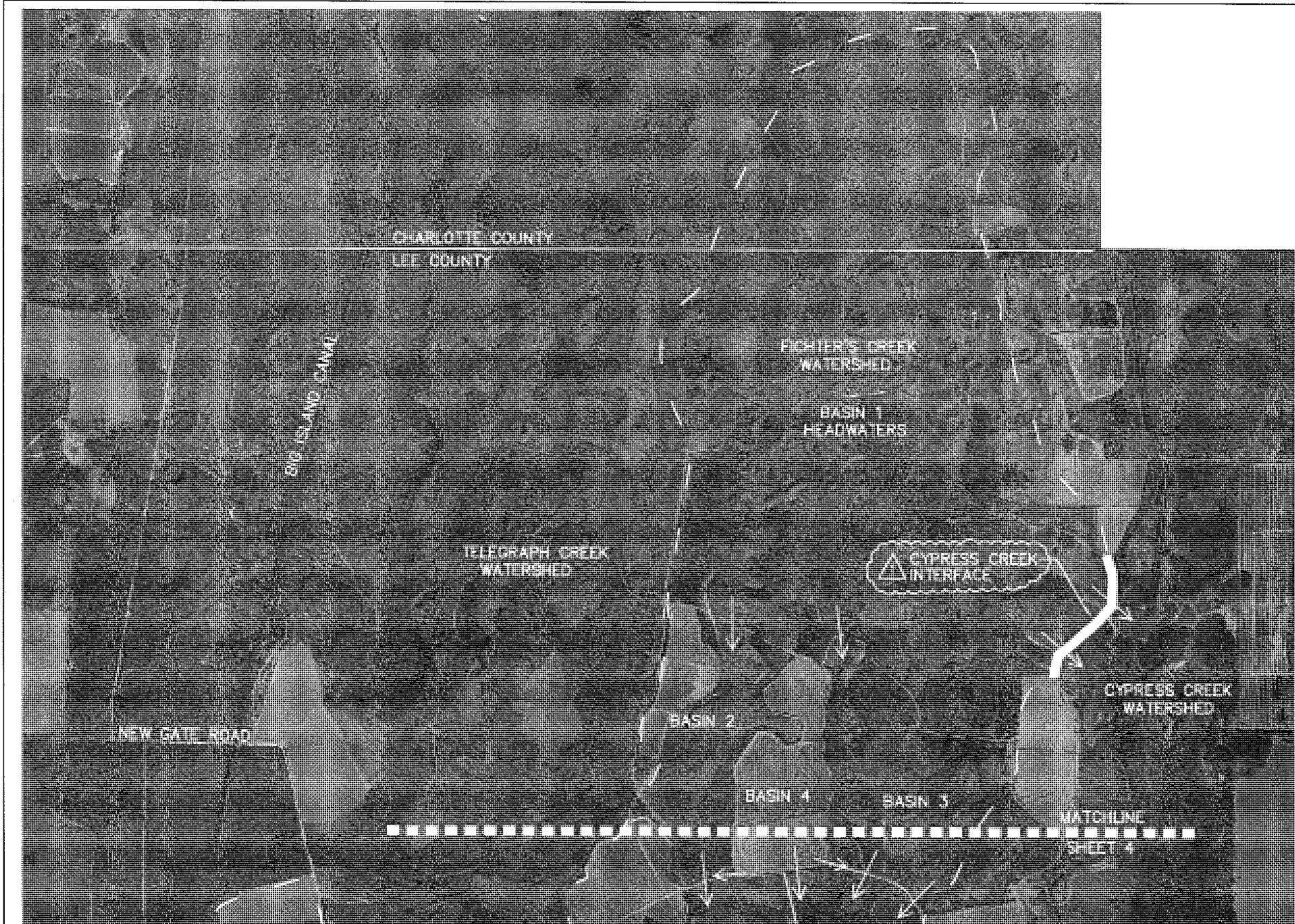
SIGNATURE DATE



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NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

FISCAL YEAR	SHEET NO.
09	1



SCALE 1"=2000'

LEGEND
 TYPICAL DRAINAGE FLOW
 WATERSHED BOUNDARY

8-11	REVISIONS PER SFWMD COMMENTS	
REV.	DATE	DESCRIPTION

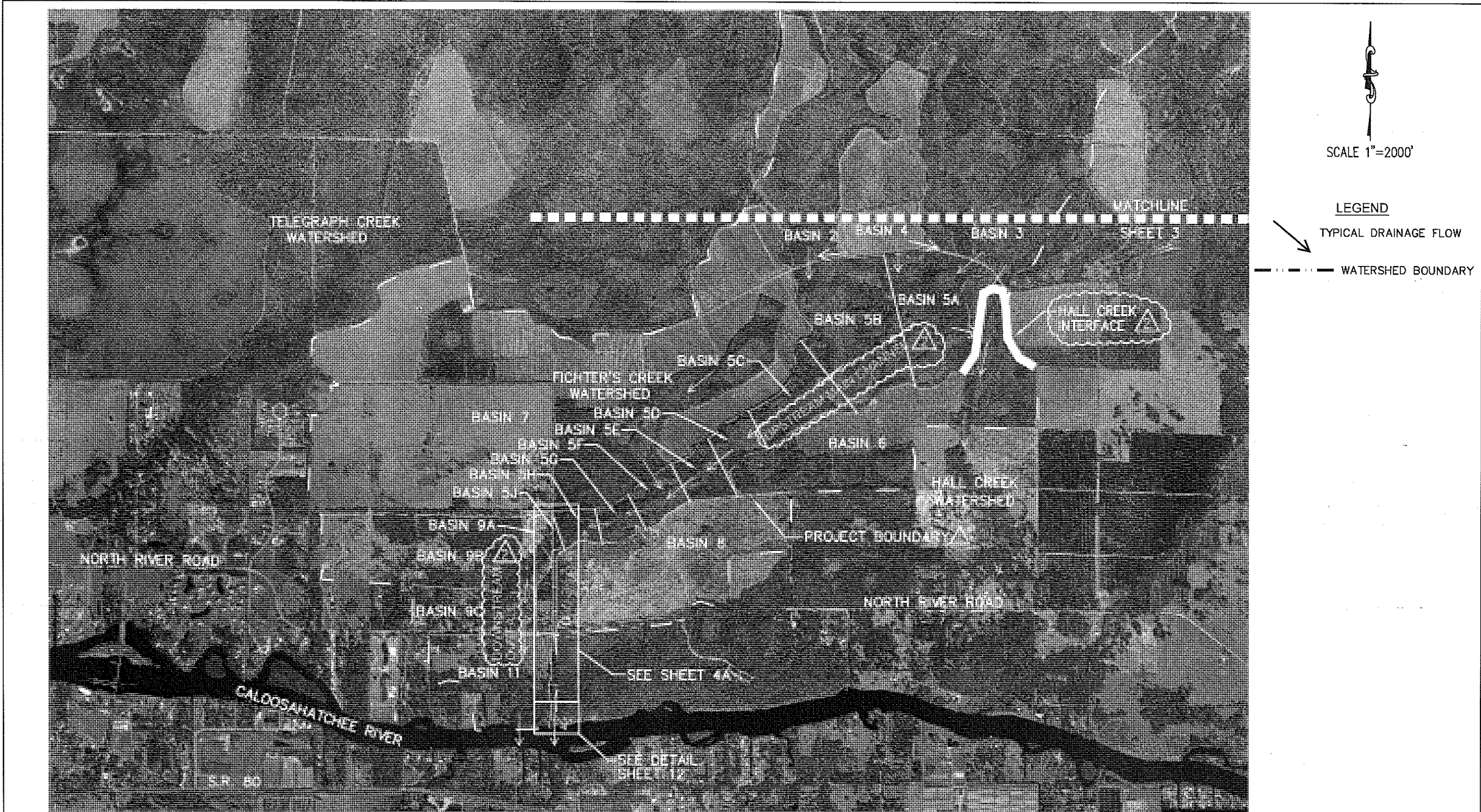


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FICHTER'S CREEK RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
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 FORT MYERS, FL 33901

AERIAL BASIN MAP

SHEET NO.
 3



6-09	REVISIONS PER SFWMD COMMENTS	
REV.	DATE	DESCRIPTION



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FICHTER'S CREEK
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 FORT MYERS, FL. 33901

AERIAL BASIN MAP

SHEET NO.
 4



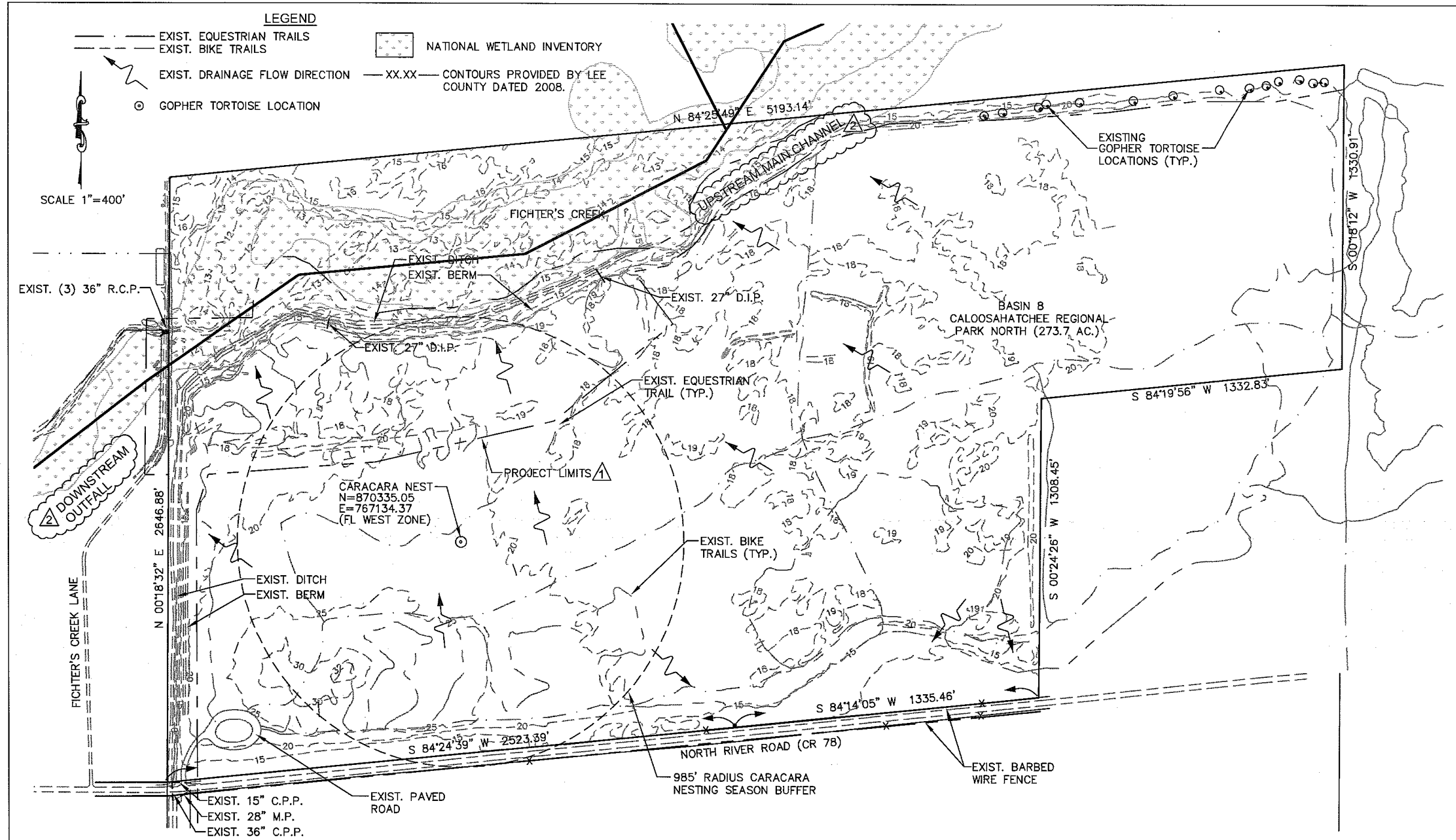
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AERIAL BASIN MAP

SHEET
 NO.
 4A



REV.	DATE	DESCRIPTION	BY
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8-11		REVISIONS PER SFWMD COMMENTS	

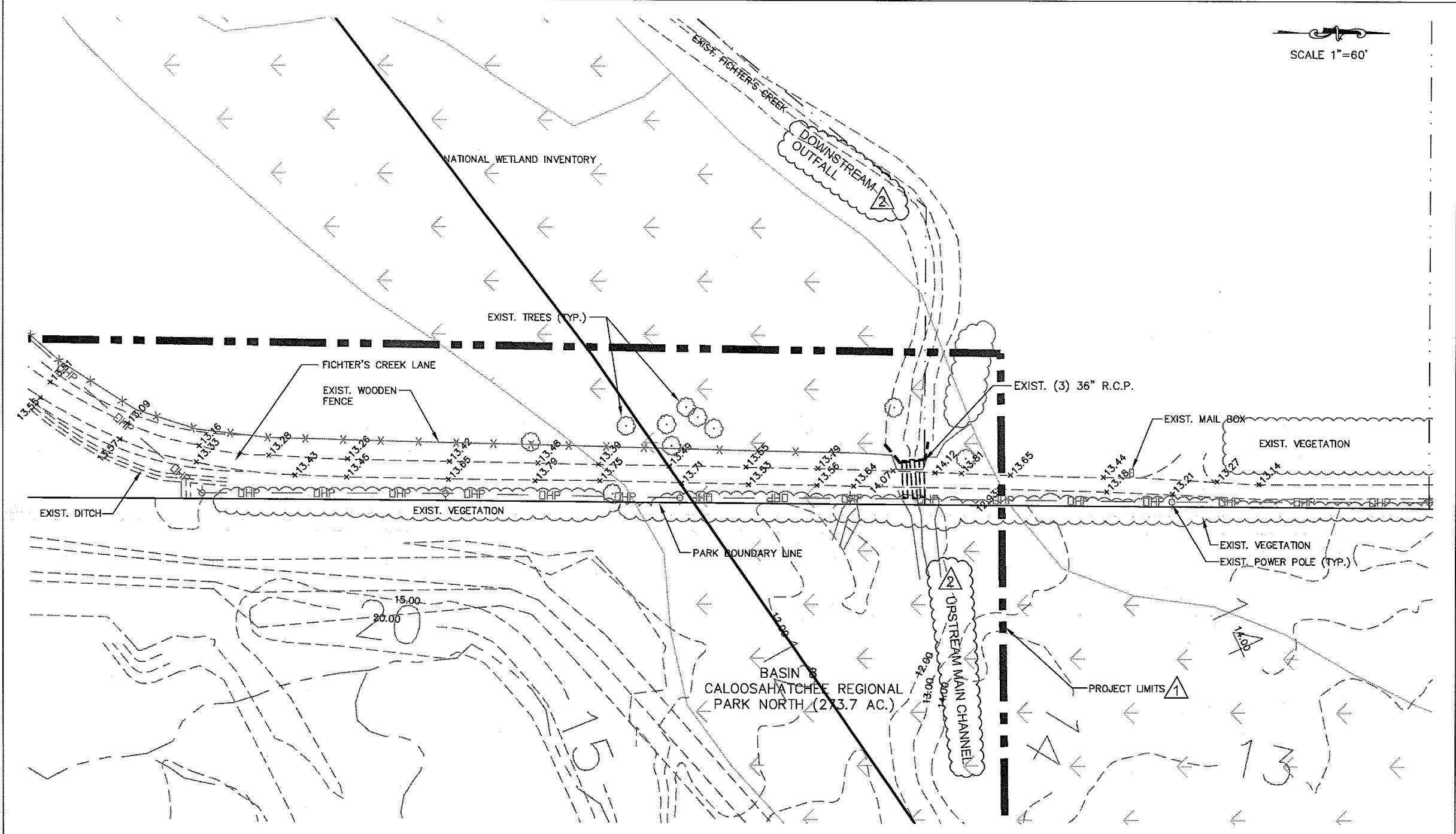


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FICHTER'S CREEK
 RESTORATION
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EXISTING CONDITIONS PLAN

SHEET NO.
 5A



SCALE 1"=60'

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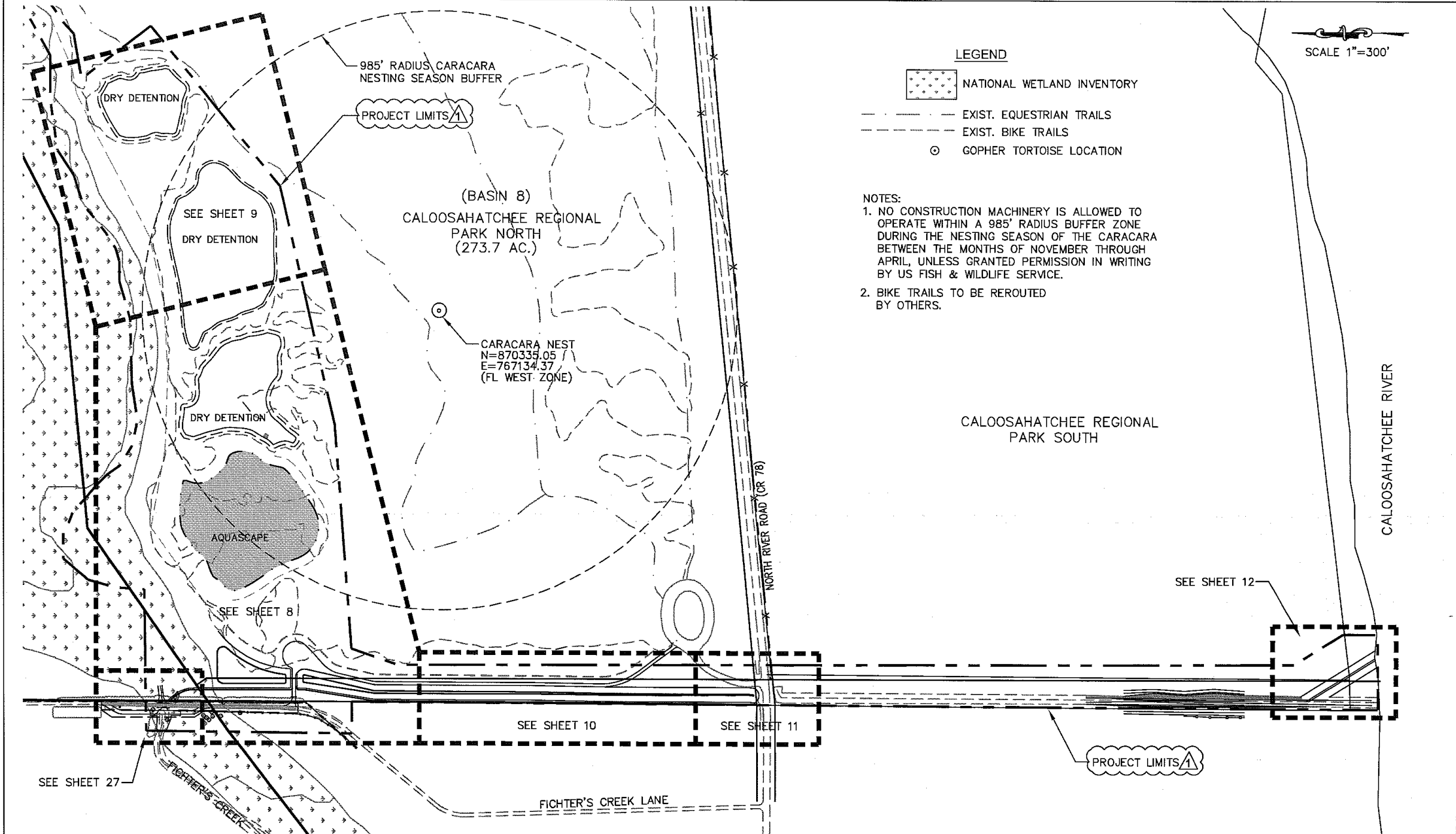


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FICHTER'S CREEK RESTORATION
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 FOR
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EXISTING CONDITIONS PLAN

SHEET NO.
 5B



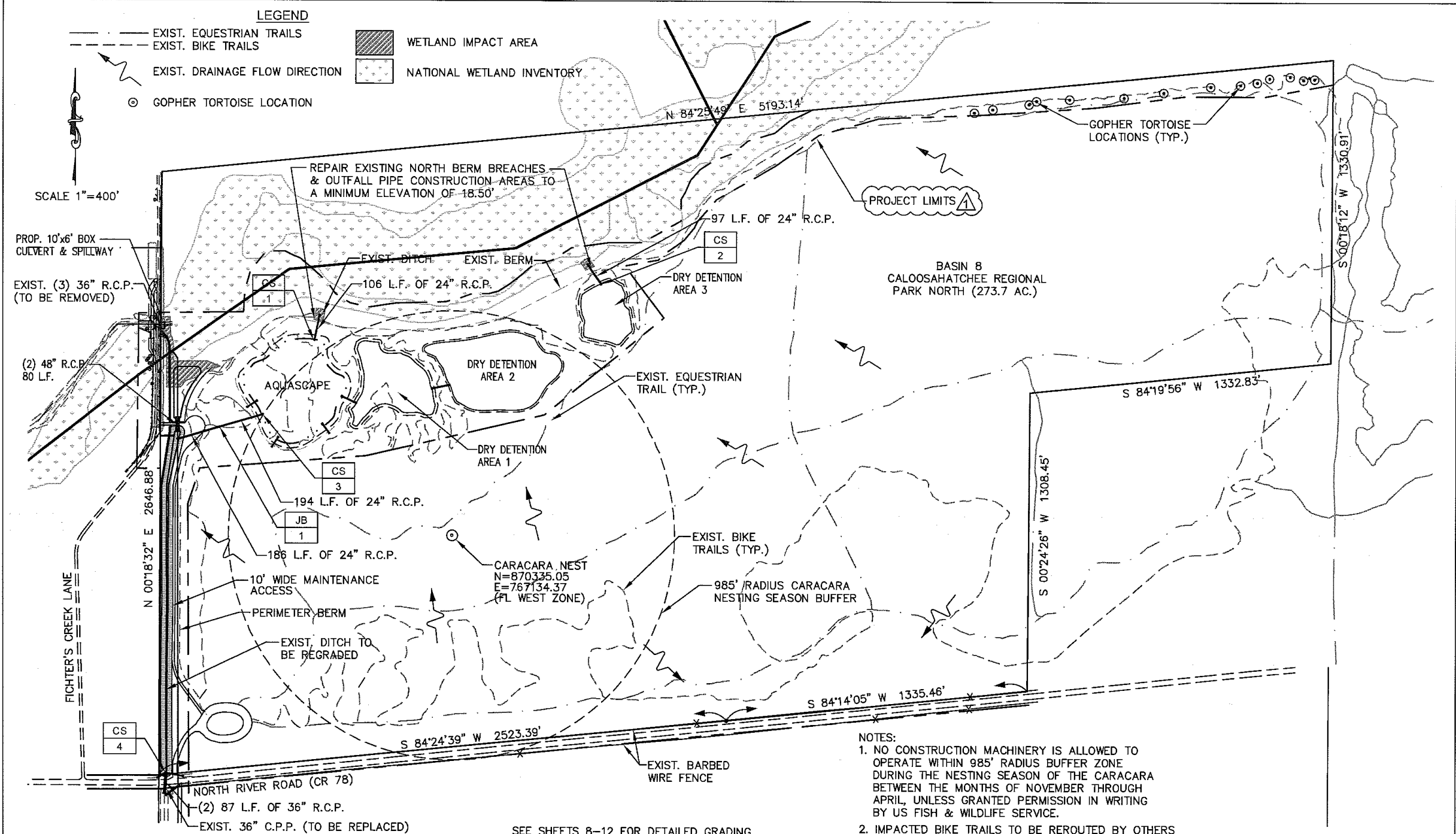
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FICHTER'S CREEK RESTORATION
 CN-08-03
 FOR
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 FORT MYERS, FL. 33901

DRAINAGE KEY SHEET	SHEET NO. 6
--------------------	----------------



LEGEND

--- EXIST. EQUESTRIAN TRAILS
 --- EXIST. BIKE TRAILS
 --- EXIST. DRAINAGE FLOW DIRECTION
 ⊙ GOPHER TORTOISE LOCATION

▨ WETLAND IMPACT AREA
 ▤ NATIONAL WETLAND INVENTORY

SCALE 1"=400'

NOTES:

1. NO CONSTRUCTION MACHINERY IS ALLOWED TO OPERATE WITHIN 985' RADIUS BUFFER ZONE DURING THE NESTING SEASON OF THE CARACARA BETWEEN THE MONTHS OF NOVEMBER THROUGH APRIL, UNLESS GRANTED PERMISSION IN WRITING BY US FISH & WILDLIFE SERVICE.
2. IMPACTED BIKE TRAILS TO BE REROUTED BY OTHERS

SEE SHEETS 8-12 FOR DETAILED GRADING

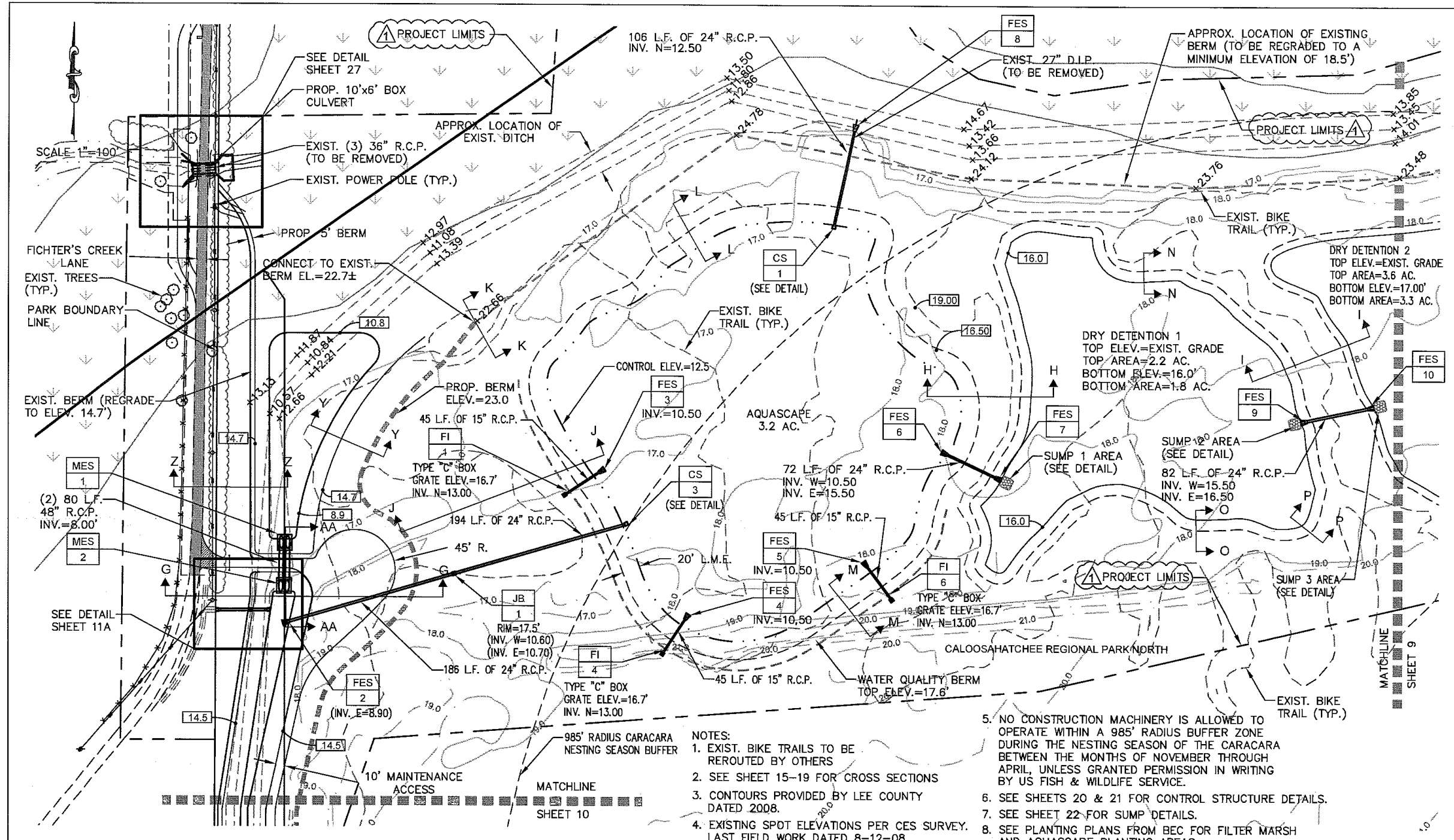
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6-09		REVISIONS PER SFWMD COMMENTS	



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FICHTER'S CREEK RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
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MASTER PARK SITE PLAN	SHEET NO. 7
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- NOTES:
- EXIST. BIKE TRAILS TO BE REROUTED BY OTHERS
 - SEE SHEET 15-19 FOR CROSS SECTIONS
 - CONTOURS PROVIDED BY LEE COUNTY DATED 2008.
 - EXISTING SPOT ELEVATIONS PER CES SURVEY. LAST FIELD WORK DATED 8-12-08.
 - NO CONSTRUCTION MACHINERY IS ALLOWED TO OPERATE WITHIN A 985' RADIUS BUFFER ZONE DURING THE NESTING SEASON OF THE CARACARA BETWEEN THE MONTHS OF NOVEMBER THROUGH APRIL, UNLESS GRANTED PERMISSION IN WRITING BY US FISH & WILDLIFE SERVICE.
 - SEE SHEETS 20 & 21 FOR CONTROL STRUCTURE DETAILS.
 - SEE SHEET 22 FOR SUMP DETAILS.
 - SEE PLANTING PLANS FROM BEC FOR FILTER MARSH AND AQUASCAPE PLANTING AREAS

REV.	DATE	DESCRIPTION	BY
6-09		REVISIONS PER SFWMD COMMENTS	

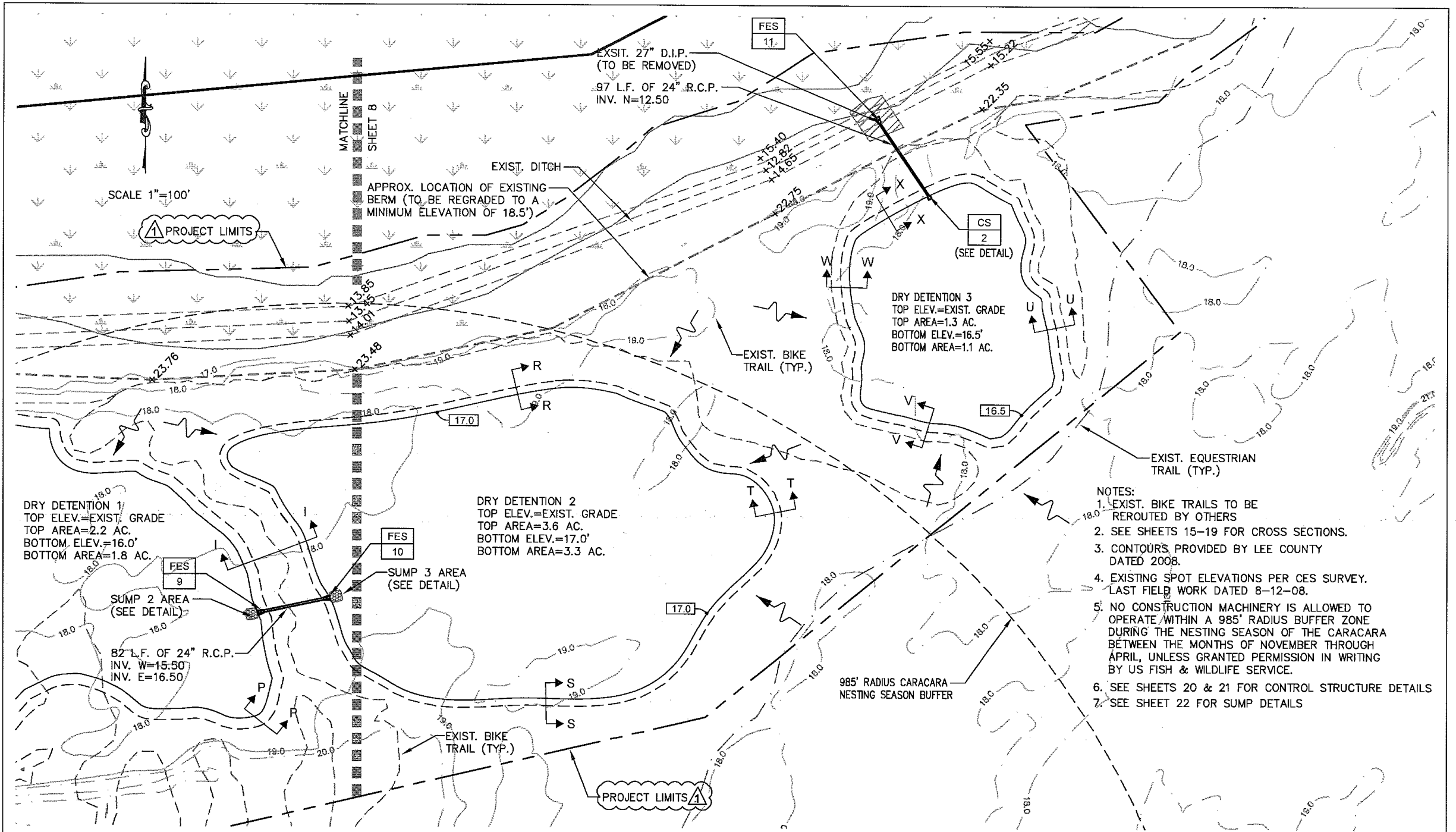


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FICHTER'S CREEK RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL 33901

DRAINAGE AREA PLAN 1

SHEET NO.
8



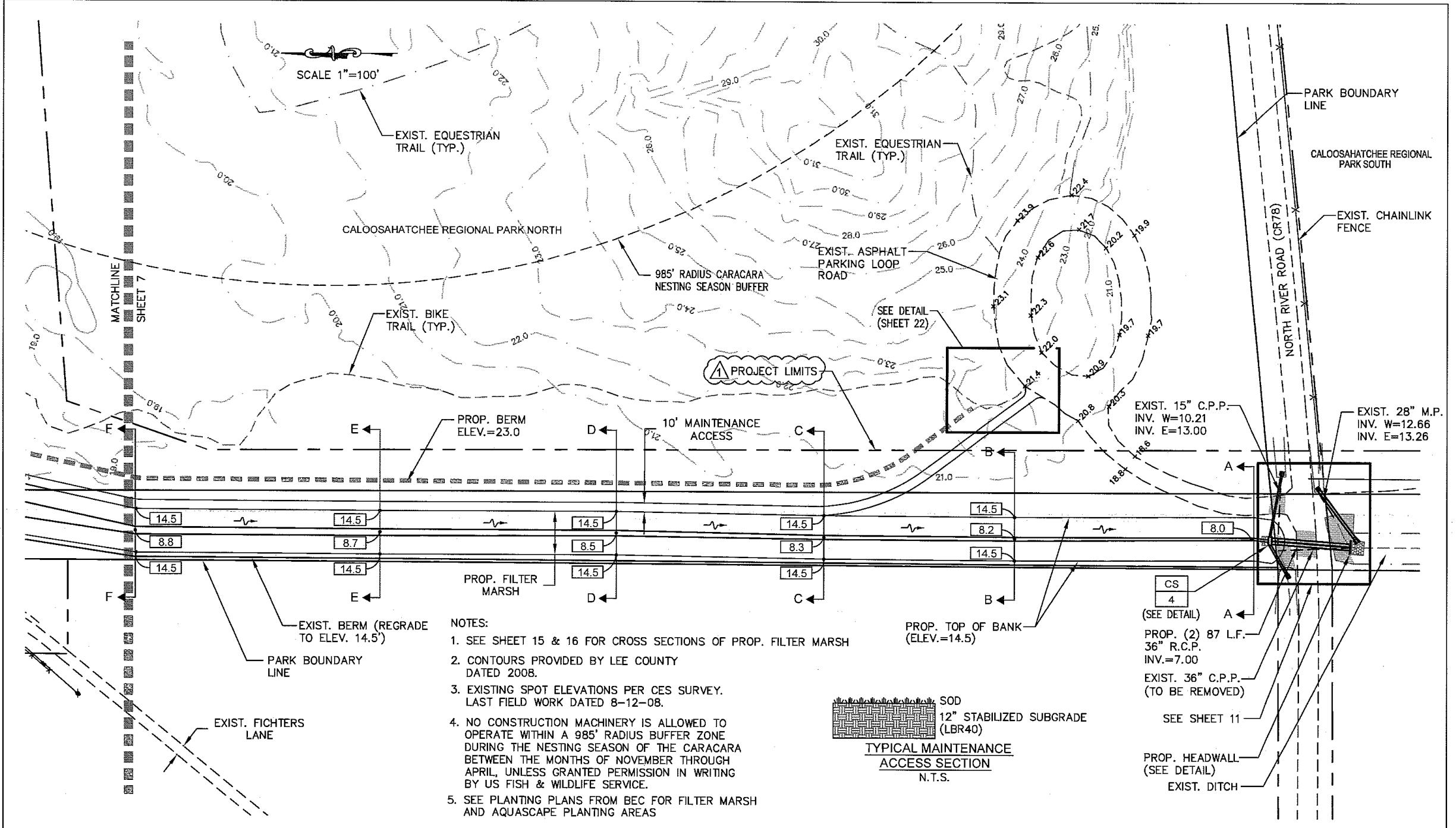
6-09	REVISIONS PER SFWMD COMMENTS		
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FICHTER'S CREEK RESTORATION
CN-08-03
FOR
LEE CO. BOARD OF COUNTY COMMISSIONERS
1500 MONROE STREET
FORT MYERS, FL. 33901

DRAINAGE AREA PLAN 2	SHEET NO. 9
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- NOTES:
1. SEE SHEET 15 & 16 FOR CROSS SECTIONS OF PROP. FILTER MARSH
 2. CONTOURS PROVIDED BY LEE COUNTY DATED 2008.
 3. EXISTING SPOT ELEVATIONS PER CES SURVEY. LAST FIELD WORK DATED 8-12-08.
 4. NO CONSTRUCTION MACHINERY IS ALLOWED TO OPERATE WITHIN A 985' RADIUS BUFFER ZONE DURING THE NESTING SEASON OF THE CARACARA BETWEEN THE MONTHS OF NOVEMBER THROUGH APRIL, UNLESS GRANTED PERMISSION IN WRITING BY US FISH & WILDLIFE SERVICE.
 5. SEE PLANTING PLANS FROM BEC FOR FILTER MARSH AND AQUASCAPE PLANTING AREAS

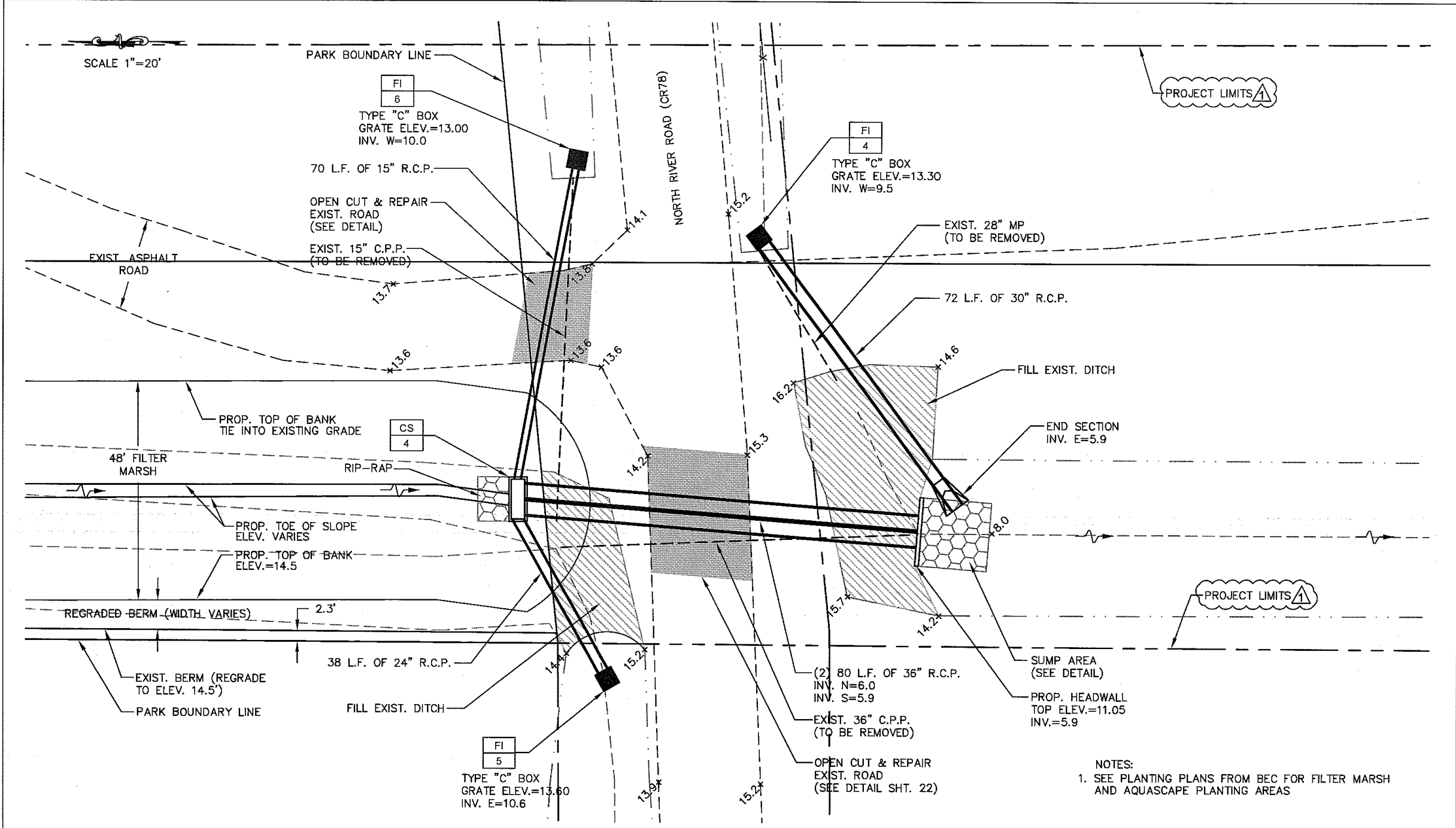
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REV.	DATE	DESCRIPTION	BY



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civil engineering • surveying • project management
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 Fort Myers, Florida 33901
 Telephone (239) 936-9777 Fax (239) 936-0064
 EB-0006613 LB-6572

FICHTER'S CREEK RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

DRAINAGE AREA PLAN 3	SHEET NO. 10
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▲	6-09	REVISIONS PER SFWMD COMMENTS	
REV.	DATE	DESCRIPTION	BY

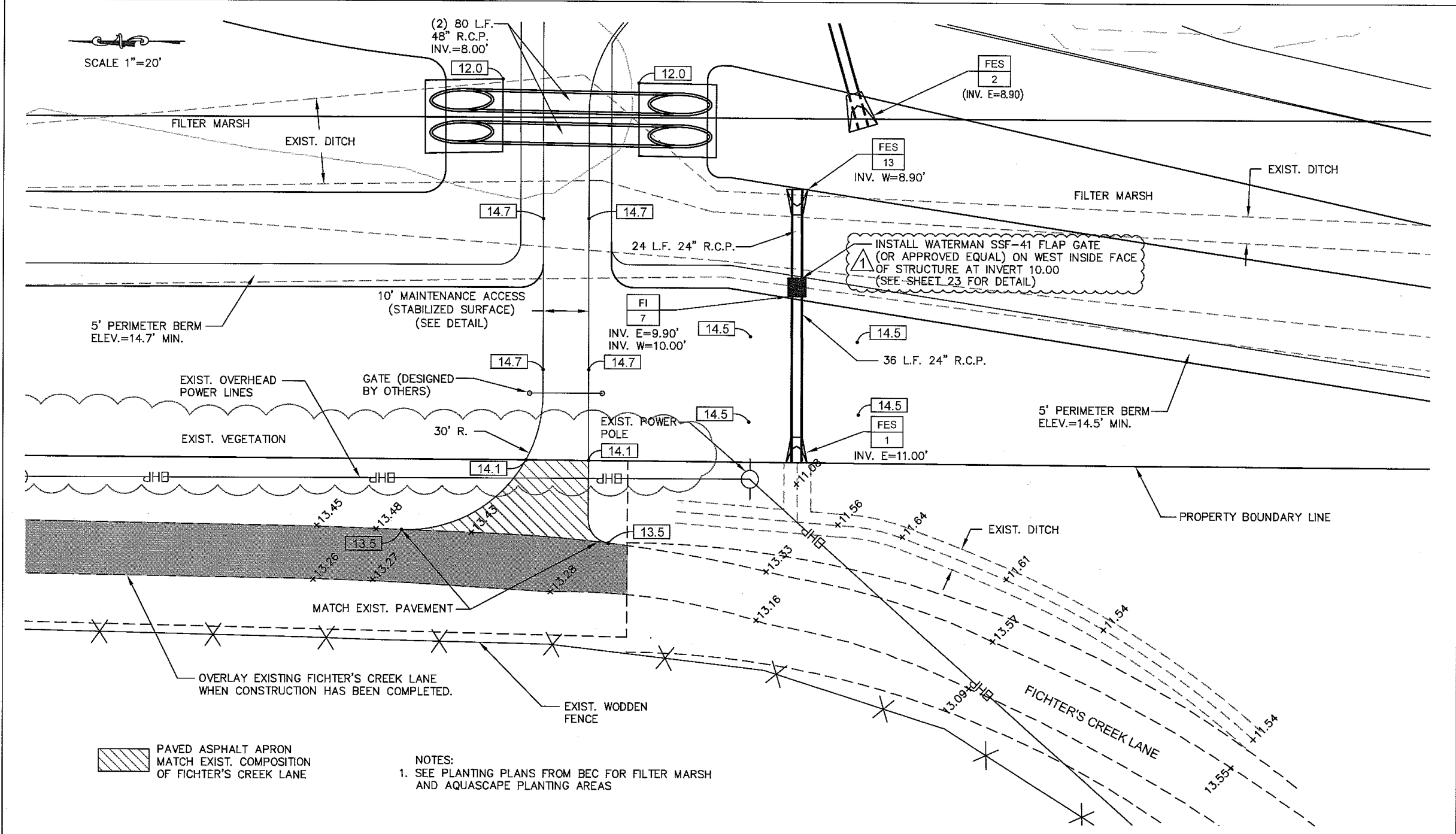



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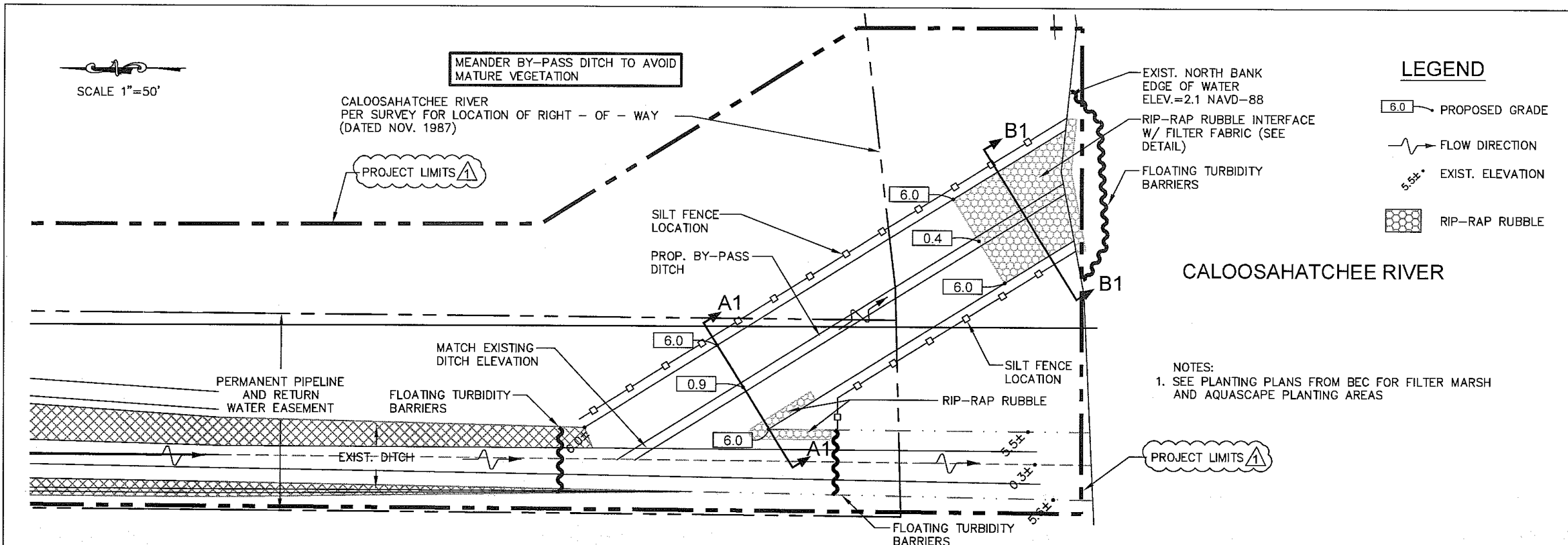
FICHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

DRAINAGE AREA PLAN 4	SHEET NO. 11
----------------------	-----------------

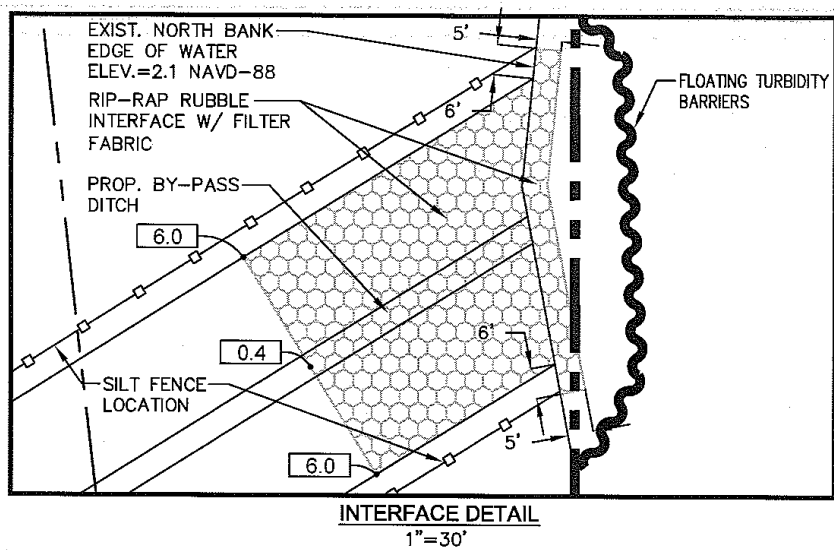
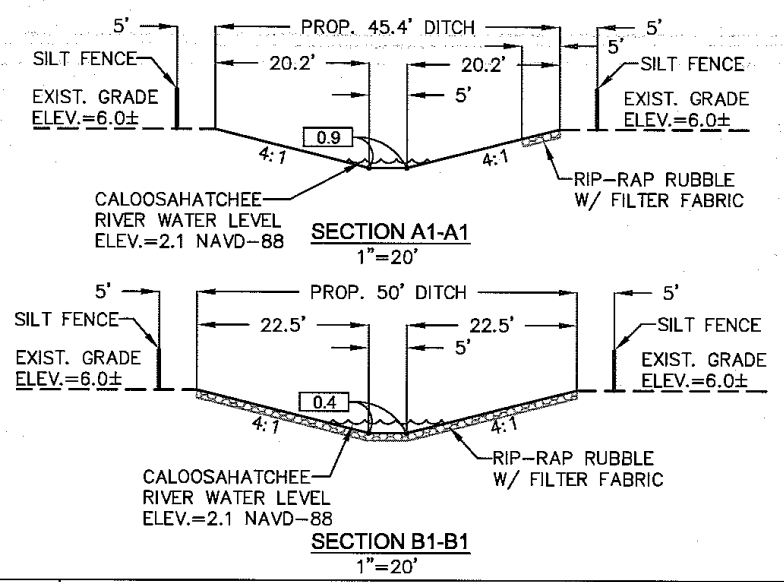
NOTES:
 1. SEE PLANTING PLANS FROM BEC FOR FILTER MARSH AND AQUASCAPE PLANTING AREAS



REV.	DATE	DESCRIPTION	BY	 community engineering services, inc. <i>civil engineering • surveying • project management</i> 2740 Oak Ridge Court, Suite 301 Fort Myers, Florida 33901 Telephone (239) 936-9777 Fax (239) 936-0064 EB-0006613 LB-6572	FICHTER'S CREEK RESTORATION CN-08-03 FOR LEE CO. BOARD OF COUNTY COMMISSIONERS 1500 MONROE STREET FORT MYERS, FL. 33901	DRAINAGE AREA PLAN 5	SHEET NO.
9-11 REVISIONS PER SFWMD COMMENTS							11A



- LEGEND**
- 6.0 PROPOSED GRADE
 - FLOW DIRECTION
 - EXIST. ELEVATION
 - RIP-RAP RUBBLE



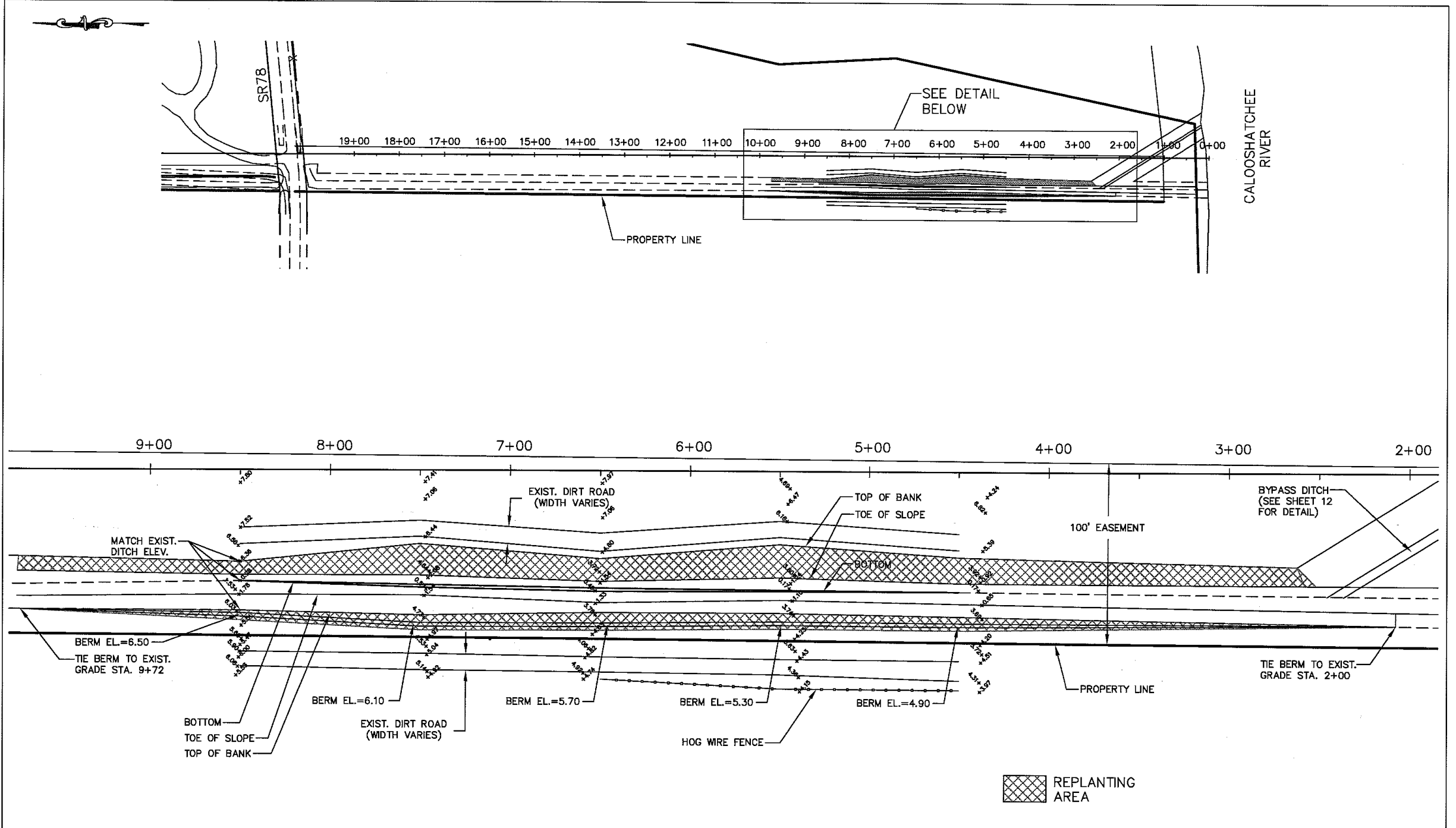
6-09	REVISIONS PER SFWMD COMMENTS		
REV.	DATE	DESCRIPTION	BY



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FICHTER'S CREEK RESTORATION
CN-08-03
FOR
LEE CO. BOARD OF COUNTY COMMISSIONERS
1500 MONROE STREET
FORT MYERS, FL. 33901

DRAINAGE AREA PLAN 6	SHEET NO. 12
----------------------	-----------------



REV.	DATE	DESCRIPTION	BY

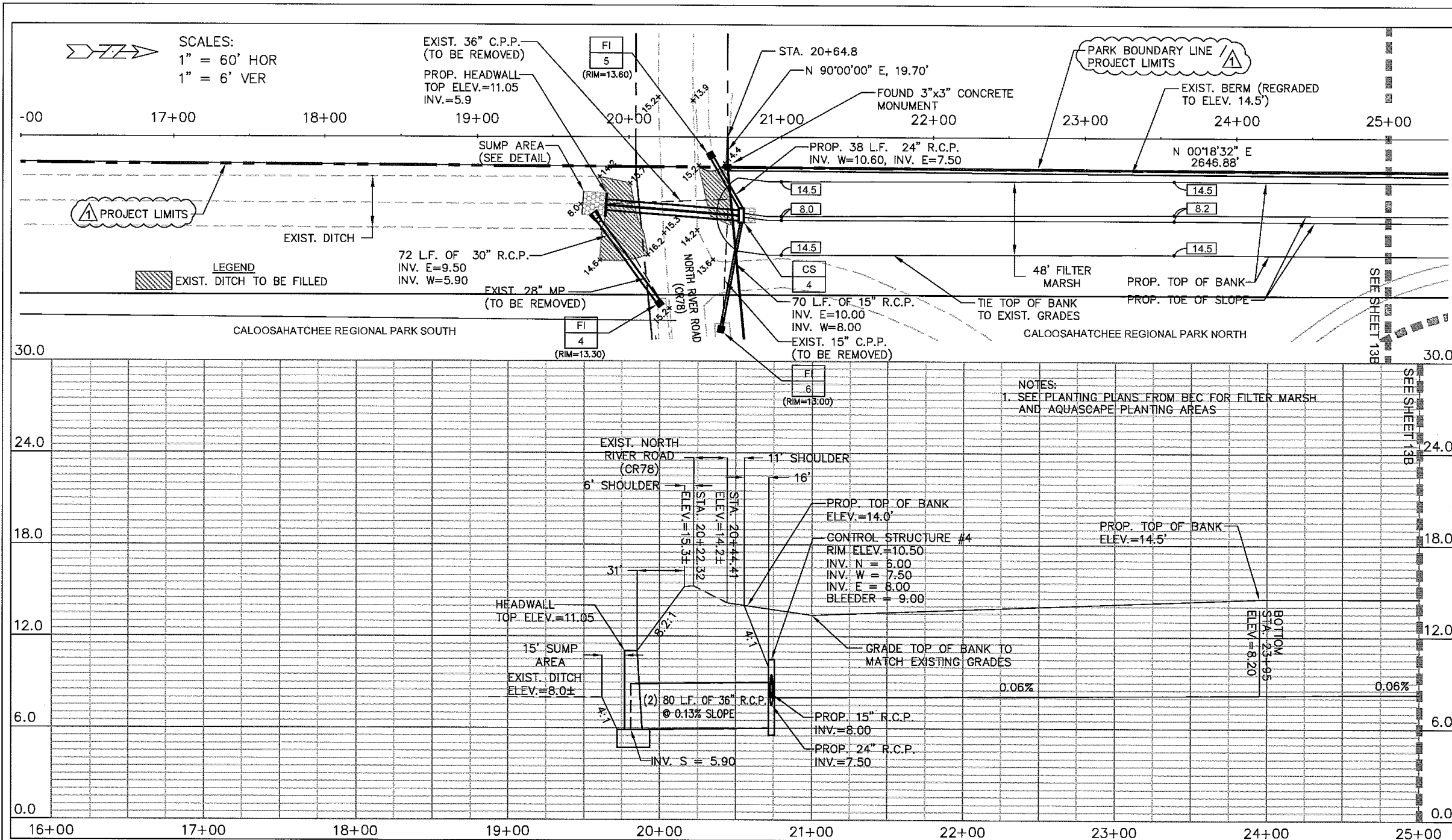


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FICHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

EXISTING DITCH
 RESTORATION PLAN

SHEET
 NO.
 12A



REV.	DATE	DESCRIPTION	BY
6-09		REVISIONS PER SFWMD COMMENTS	

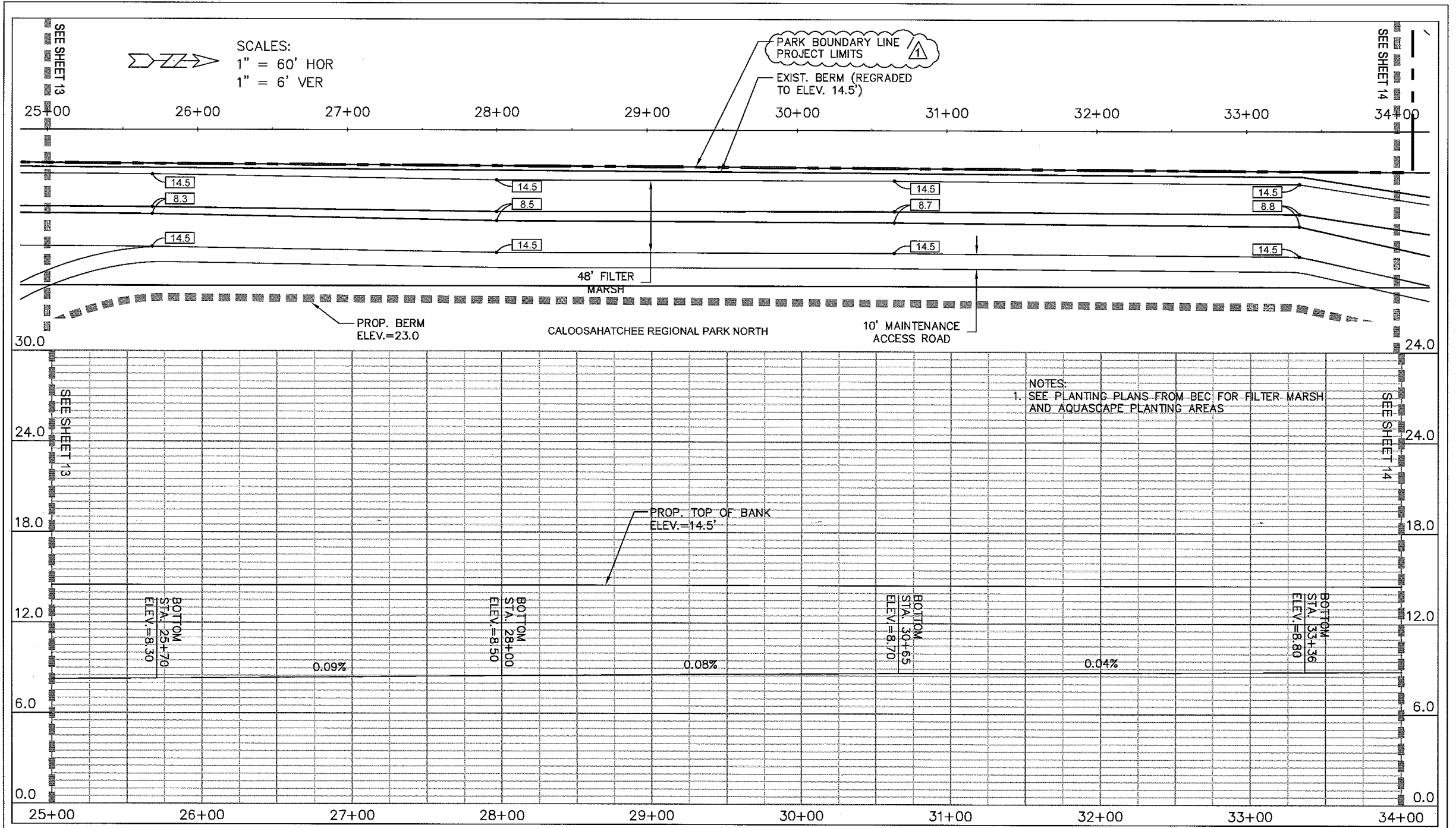


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FICHTER'S CREEK RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

FILTER MARSH PLAN AND PROFILE
 STA. 19+00 TO STA. 25+00

SHEET NO.
 13



6-09	REVISIONS PER SFWMD COMMENTS		
REV.	DATE	DESCRIPTION	BY

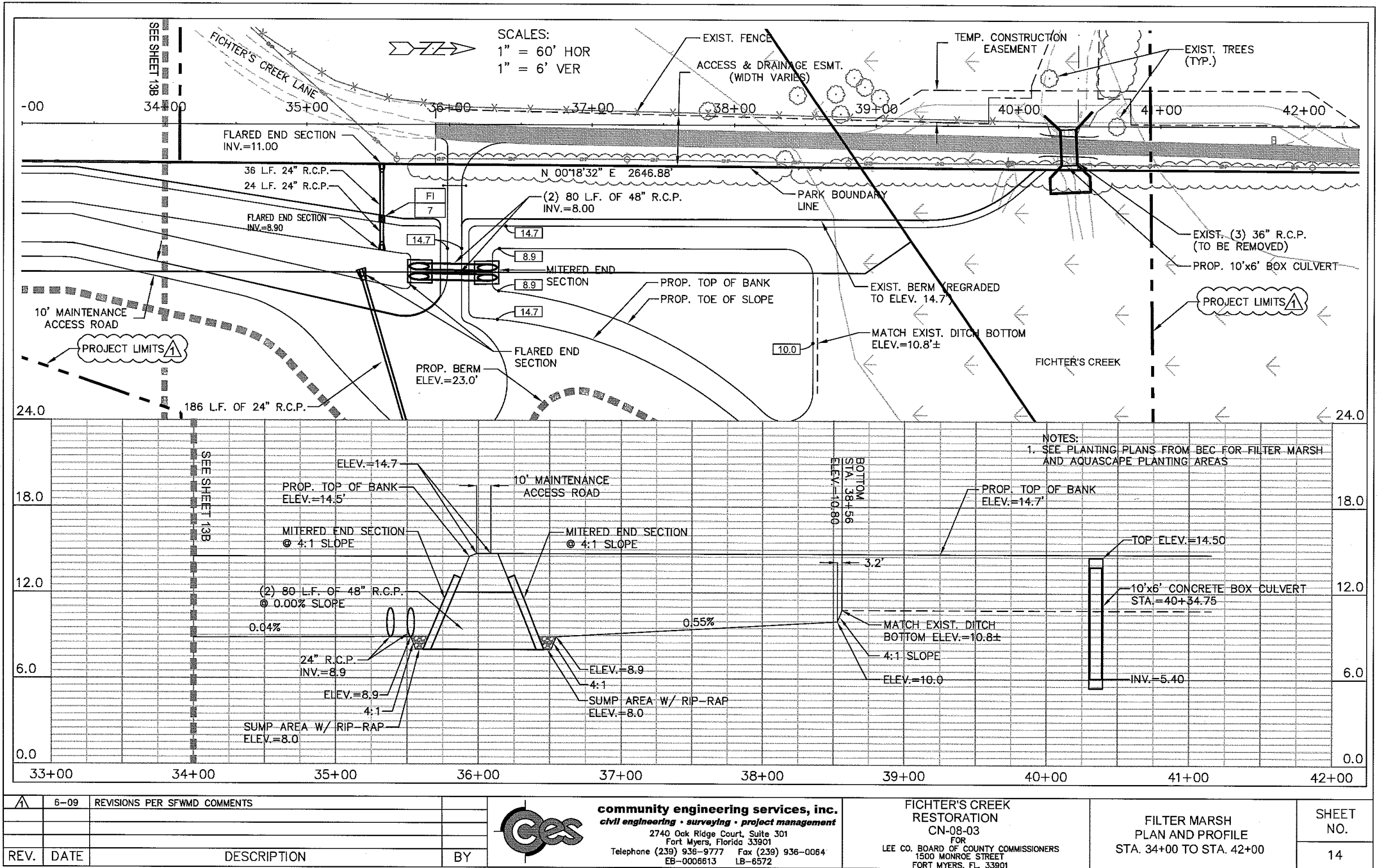


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FICHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

FILTER MARSH
 PLAN AND PROFILE
 STA. 25+00 TO STA. 34+00

SHEET
 NO.
 13B



REV.	DATE	DESCRIPTION	BY
6-09		REVISIONS PER SFWMD COMMENTS	

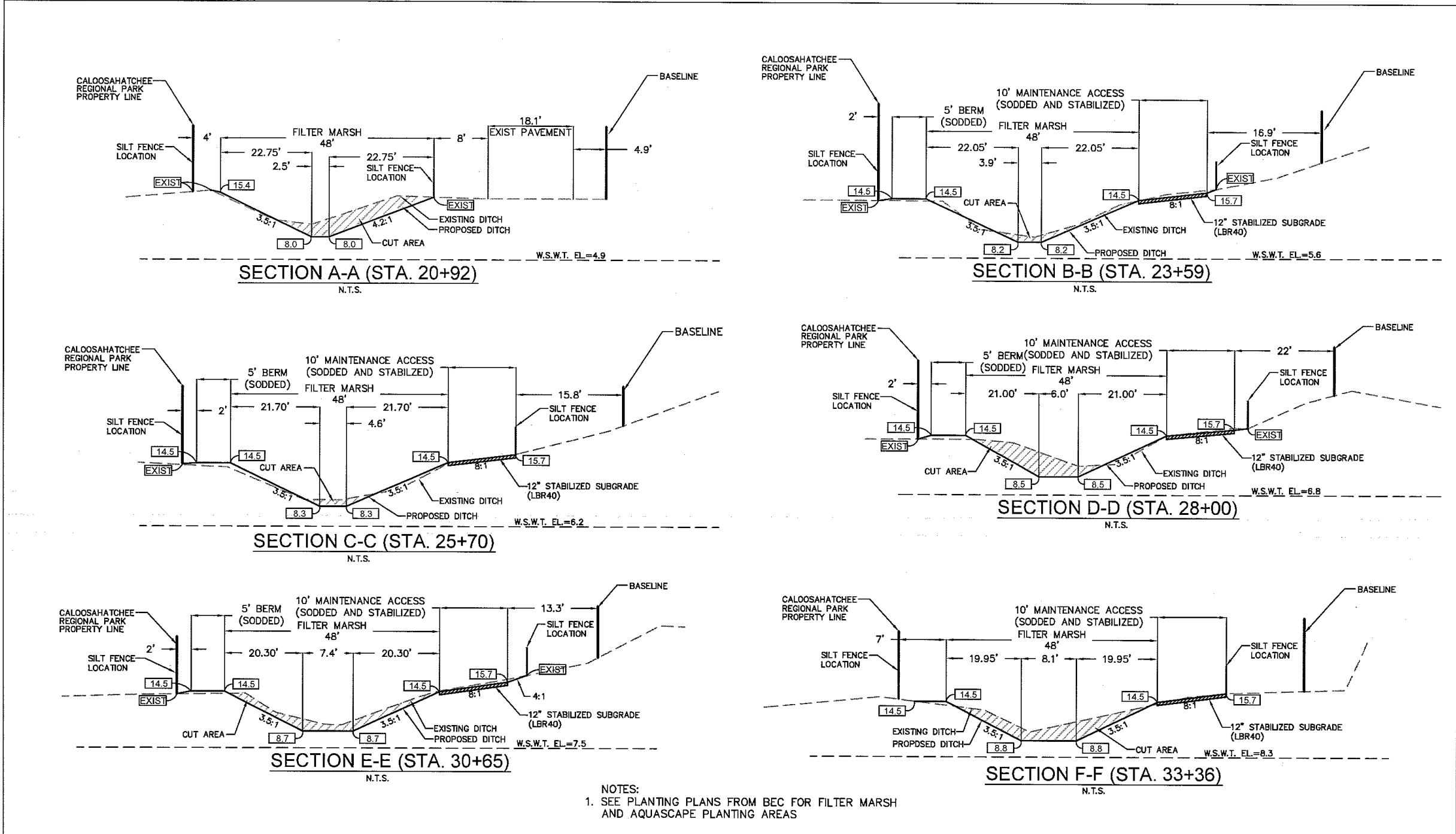


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FIGHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

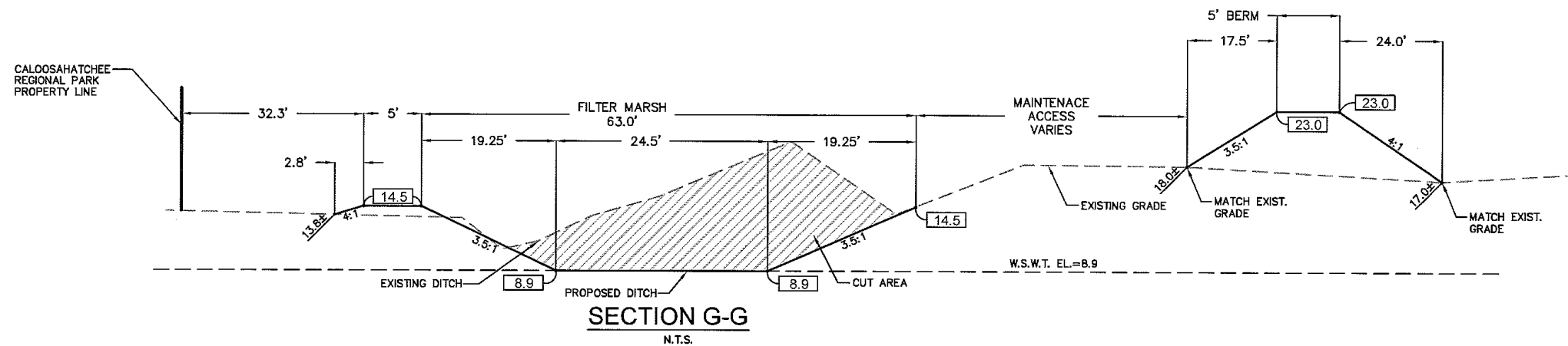
FILTER MARSH
 PLAN AND PROFILE
 STA. 34+00 TO STA. 42+00

SHEET
 NO.
 14

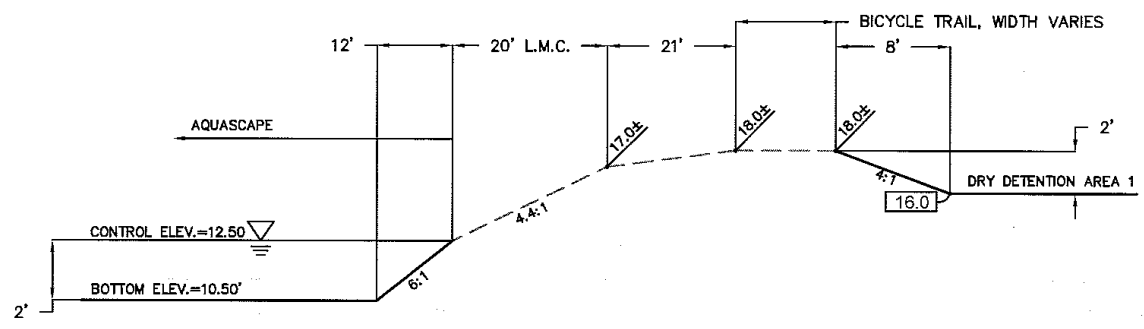


NOTES:
 1. SEE PLANTING PLANS FROM BEC FOR FILTER MARSH AND AQUASCAPE PLANTING AREAS

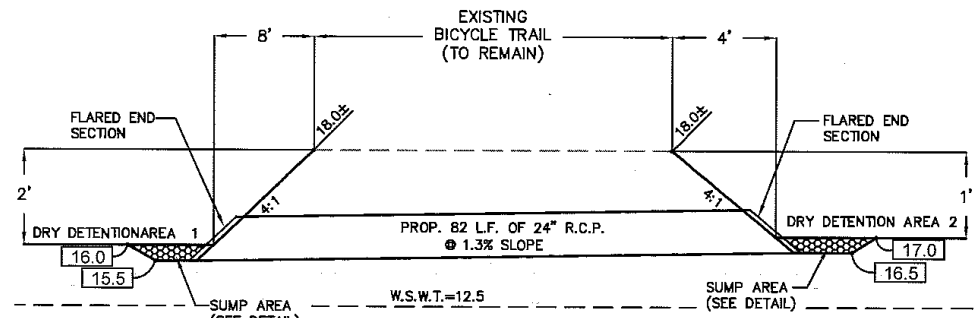
					community engineering services, inc. <i>civil engineering • surveying • project management</i> 2740 Oak Ridge Court, Suite 301 Fort Myers, Florida 33901 Telephone (239) 936-9777 Fax (239) 936-0664 EB-0006613 LB-6572	FICHTER'S CREEK RESTORATION CN-08-03 FOR LEE CO. BOARD OF COUNTY COMMISSIONERS 1500 MONROE STREET FORT MYERS, FL. 33901	CROSS SECTIONS	SHEET NO.
REV.	DATE	DESCRIPTION	BY					15



SECTION G-G
N.T.S.



SECTION H-H
N.T.S.



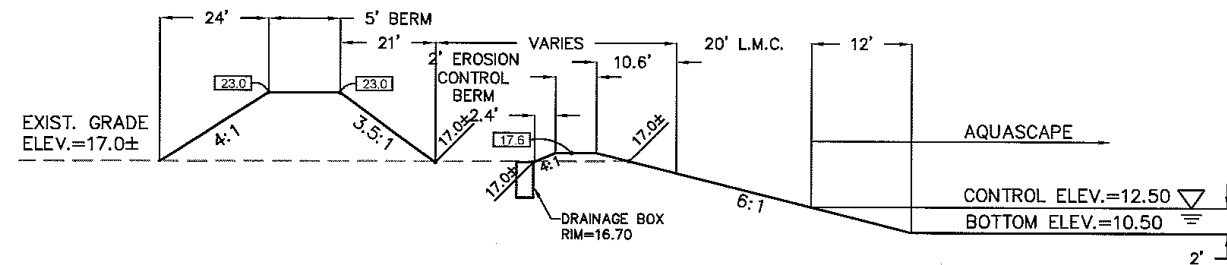
SECTION I-I
N.T.S.

CUT TABLE FOR PROPOSED SWALE

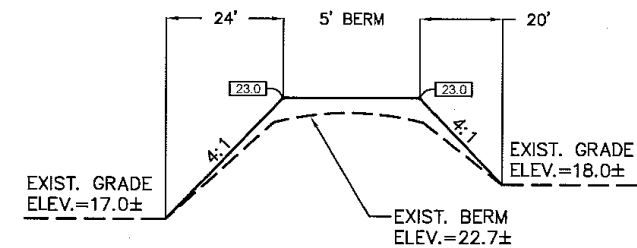
FROM STA.	TO STA.	AREA S.F.	AREA S.F.	AREA C.Y.
20+92	23+59	58	40	598
23+59	25+70	40	53	363
25+70	28+00	53	80	566
28+00	30+65	80	40	589
30+65	33+37	40	37	388
33+37	35+68	37	310	1,484
TOTAL				3,988

NOTES:
1. SEE PLANTING PLANS FROM BEC FOR FILTER MARSH AND AQUASCAPE PLANTING AREAS

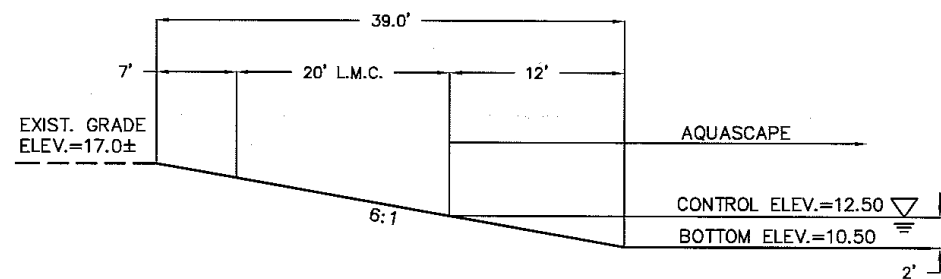
				 community engineering services, inc. <i>civil engineering • surveying • project management</i> 2740 Oak Ridge Court, Suite 301 Fort Myers, Florida 33901 Telephone (239) 936-9777 Fax (239) 936-0064 EB-0006613 LB-6572	FICHTER'S CREEK RESTORATION CN-08-03 FOR LEE CO. BOARD OF COUNTY COMMISSIONERS 1500 MONROE STREET FORT MYERS, FL 33901	CROSS SECTIONS	SHEET NO.
REV.	DATE	DESCRIPTION	BY				16



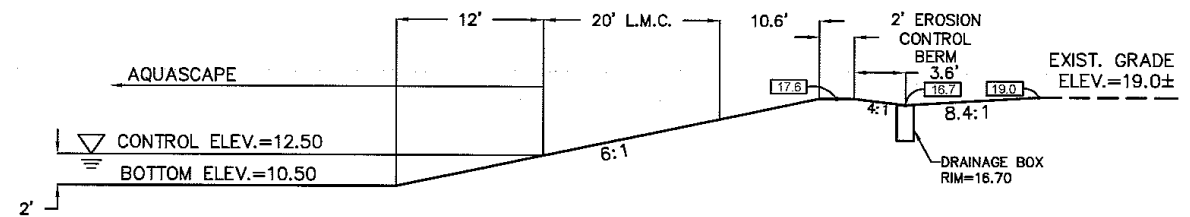
SECTION J-J
N.T.S.



SECTION K-K
N.T.S.




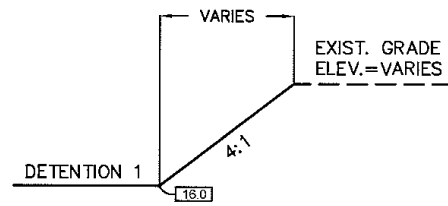
SECTION L-L
N.T.S.



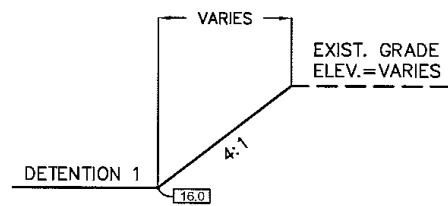
SECTION M-M
N.T.S.

- NOTES:
1. SEE PLANTING PLANS FROM BEC FOR FILTER MARSH AND AQUASCAPE PLANTING AREAS

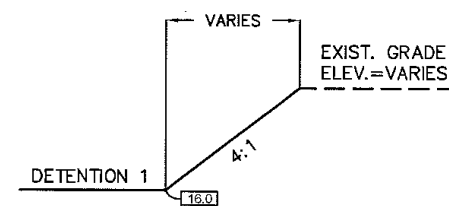
REV.	DATE	DESCRIPTION	BY	 community engineering services, inc. <i>civil engineering • surveying • project management</i> 2740 Oak Ridge Court, Suite 301 Fort Myers, Florida 33901 Telephone (239) 936-9777 Fax (239) 936-0064 EB-0006613 LB-6572	FICHTER'S CREEK RESTORATION CN-08-03 FOR LEE CO. BOARD OF COUNTY COMMISSIONERS 1500 MONROE STREET FORT MYERS, FL. 33901	CROSS SECTIONS	SHEET NO.



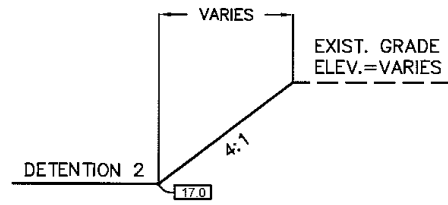
SECTION N-N
N.T.S.



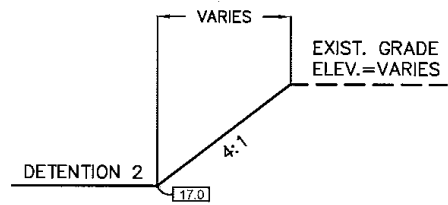
SECTION O-O
N.T.S.



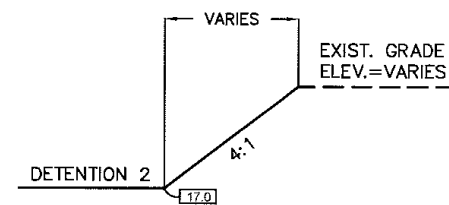
SECTION P-P
N.T.S.



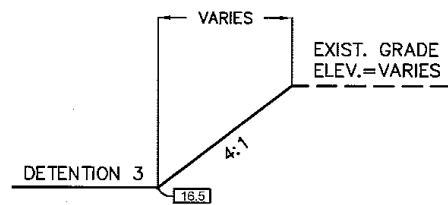
SECTION R-R
N.T.S.



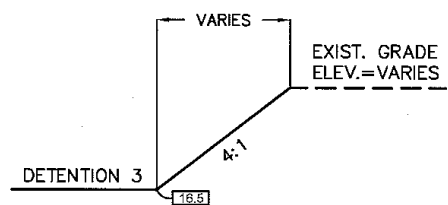
SECTION S-S
N.T.S.



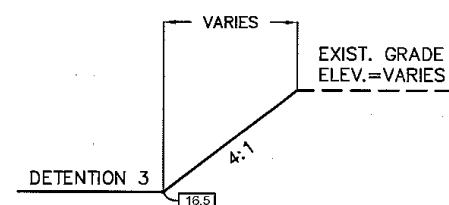
SECTION T-T
N.T.S.



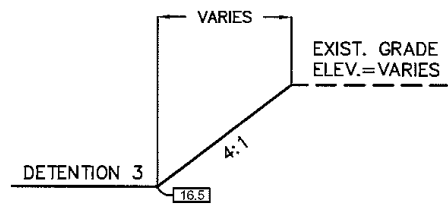
SECTION U-U
N.T.S.



SECTION V-V
N.T.S.



SECTION W-W
N.T.S.



SECTION X-X
N.T.S.

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REV.	DATE	DESCRIPTION	BY

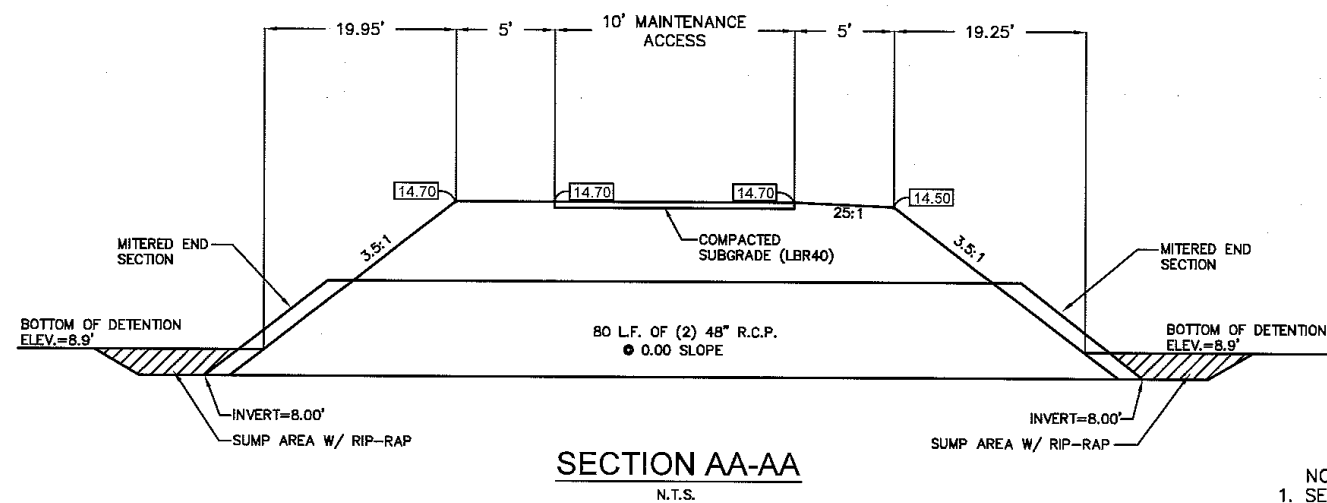
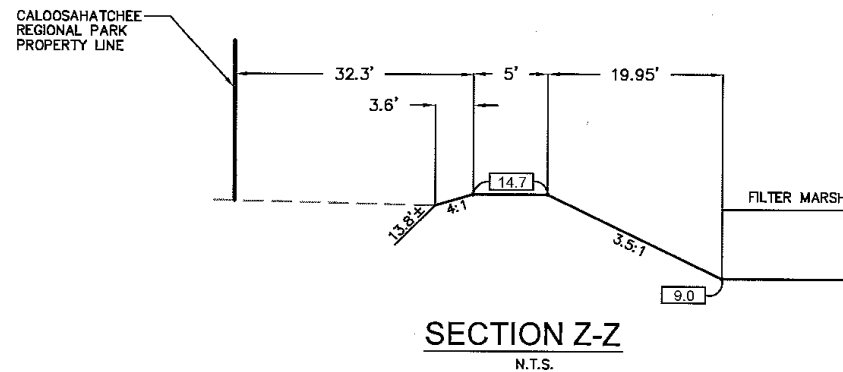
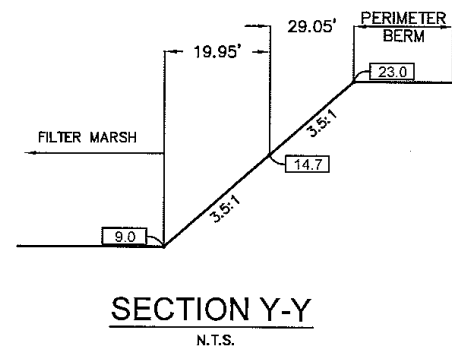


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FICHTER'S CREEK RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

CROSS SECTIONS

SHEET NO.
 18



NOTES:
1. SEE PLANTING PLANS FROM BEC FOR FILTER MARSH AND AQUASCAPE PLANTING AREAS

REV.	DATE	DESCRIPTION	BY

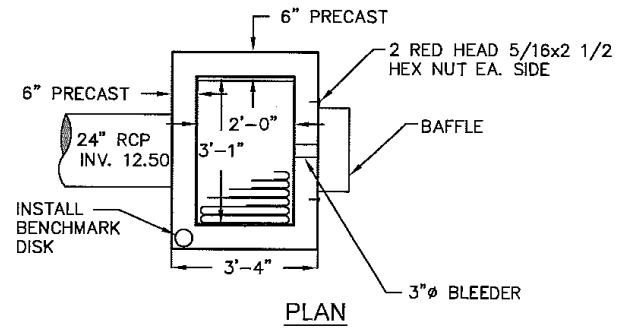
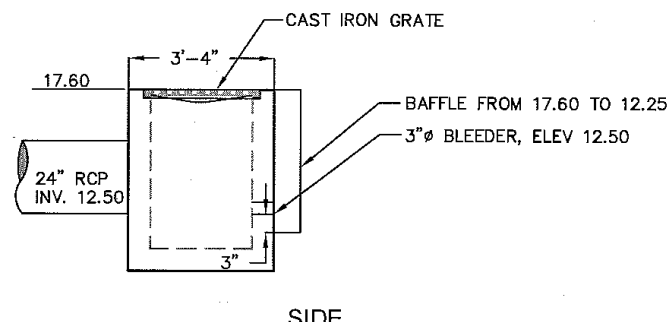
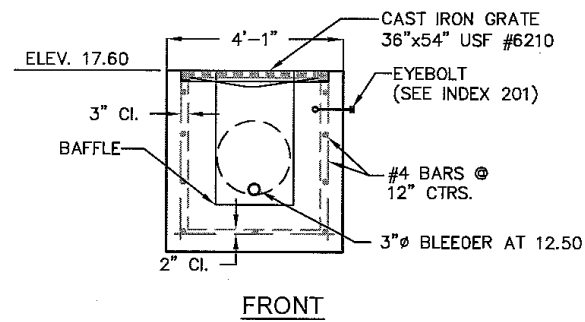


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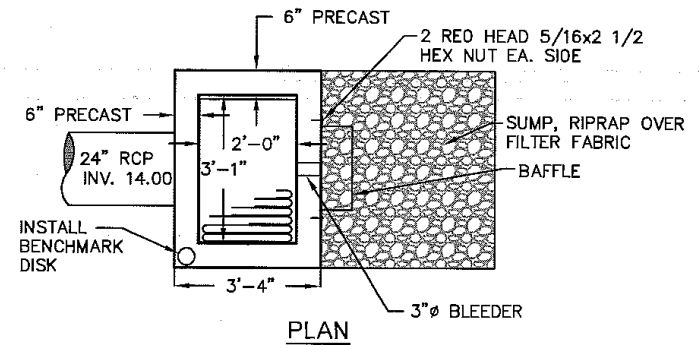
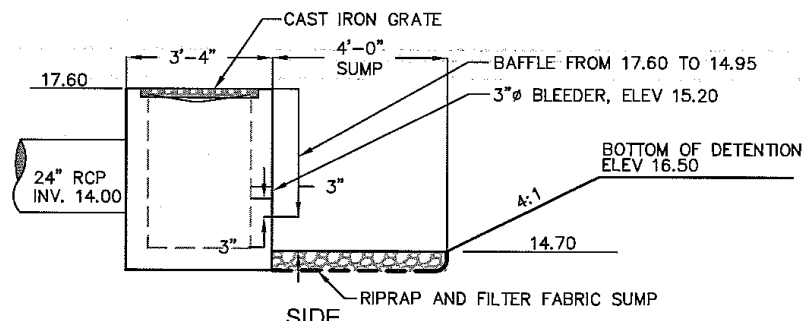
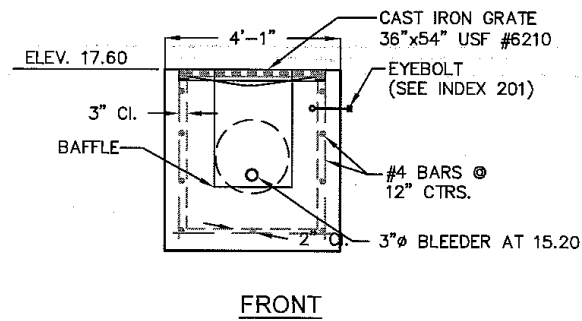
FICHTER'S CREEK
RESTORATION
CN-08-03
FOR
LEE CO. BOARD OF COUNTY COMMISSIONERS
1500 MONROE STREET
FORT MYERS, FL. 33901

CROSS SECTIONS

SHEET NO.
19



CONTROL STRUCTURE 1 (AKA DETENTION 1)
(MODIFIED TYPE "E" BOX)
(AQUASCAPE DRAINING NORTH)
 N.T.S.



CONTROL STRUCTURE 2 (AKA DETENTION 2)
(MODIFIED TYPE "E" BOX)
(DRY DETENTION DRAINING NORTH)
 N.T.S.

REV.	DATE	DESCRIPTION	BY

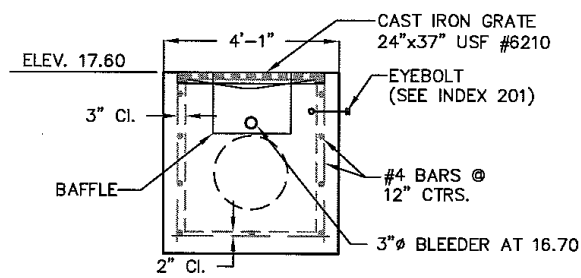


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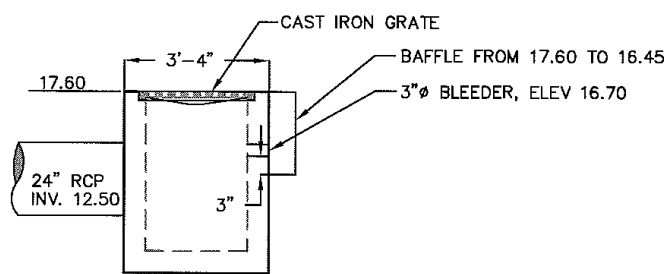
FICHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

DRAINAGE DETAILS

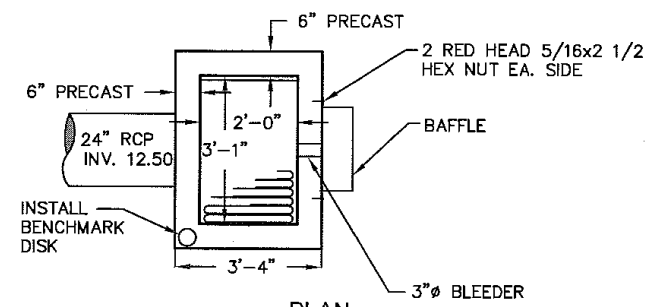
SHEET
 NO.
 20



FRONT



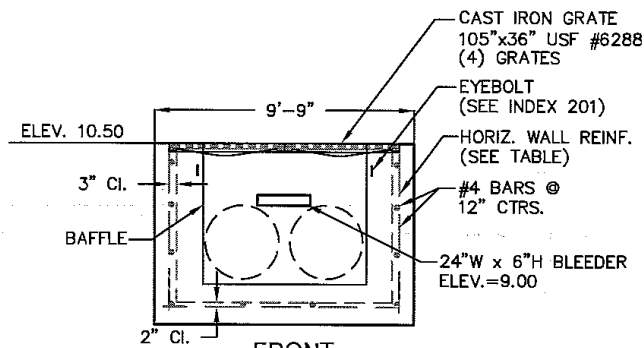
SIDE



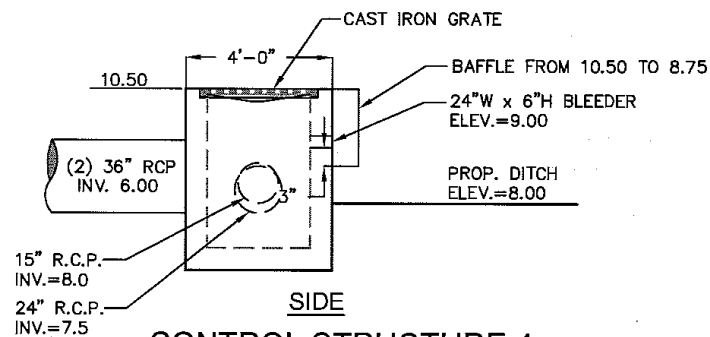
PLAN

CONTROL STRUCTURE 3 (AKA DETENTION 3)
(MODIFIED TYPE "C" BOX)
(AQUASCAPE DRAINING WEST)

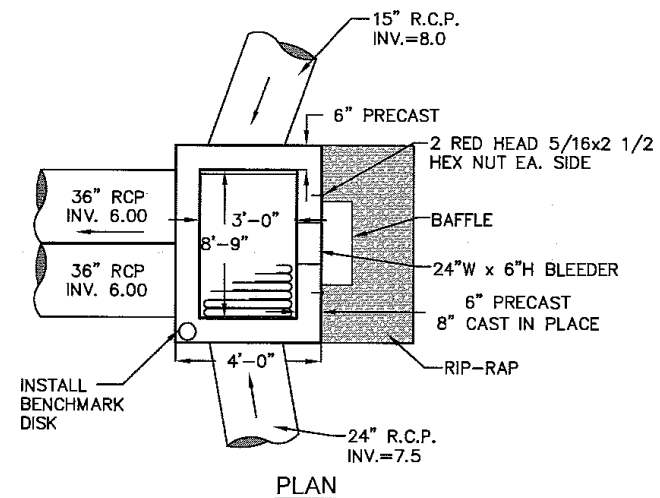
N.T.S.



FRONT



SIDE



PLAN

CONTROL STRUCTURE 4
(MODIFIED TYPE "H" BOX)
(SR78 CONTROL)

N.T.S.

REV.	DATE	DESCRIPTION	BY

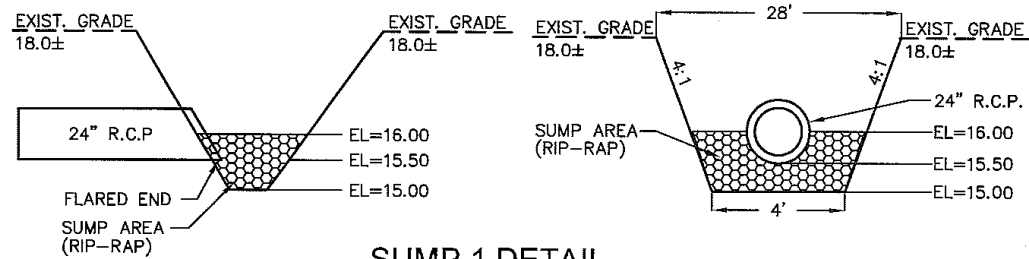


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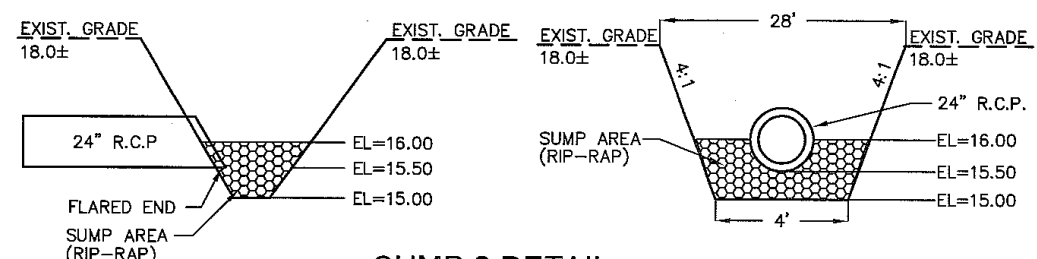
FICHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

DRAINAGE DETAILS

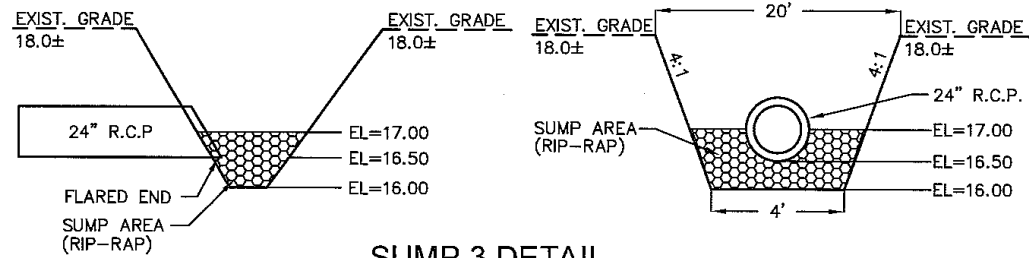
SHEET
 NO.
 21



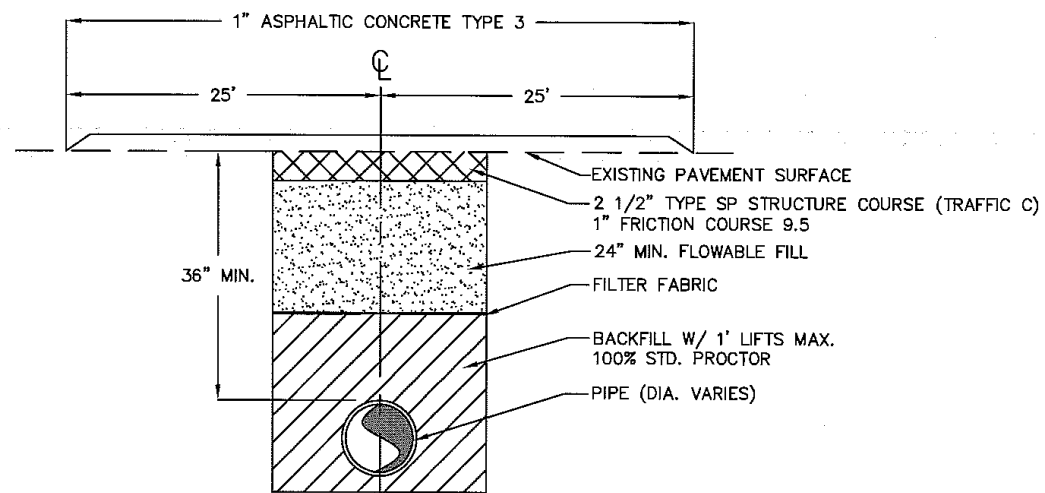
SUMP 1 DETAIL
N.T.S.



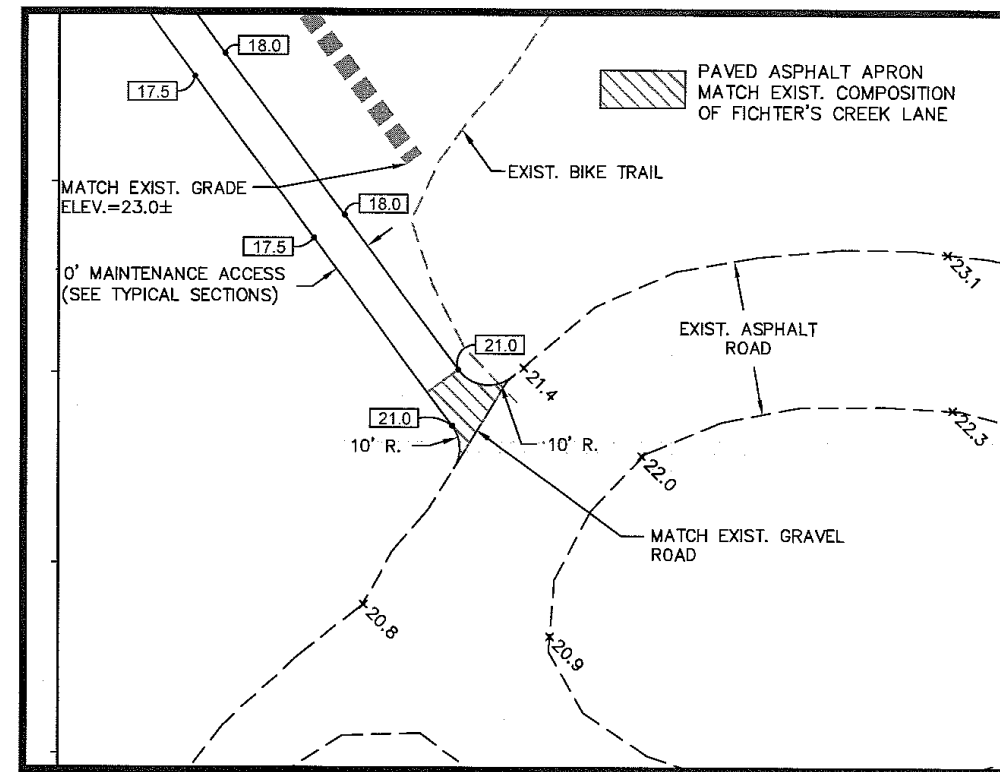
SUMP 2 DETAIL
N.T.S.



SUMP 3 DETAIL
N.T.S.



PAVEMENT RESTORATION DETAIL
NORTH RIVER ROAD (CR-78)
N.T.S.



MAINTENANCE ACCESS TIE-IN DETAIL
SCALE 1"=40'

REV.	DATE	DESCRIPTION	BY

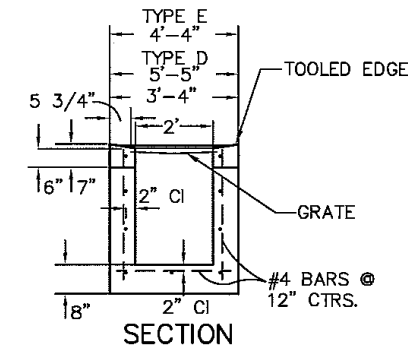
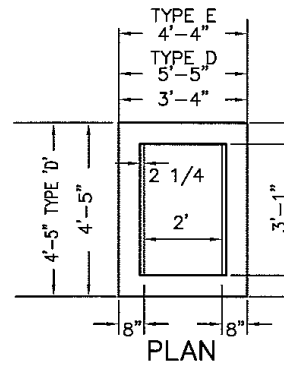


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FICHTER'S CREEK
RESTORATION
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DRAINAGE DETAILS

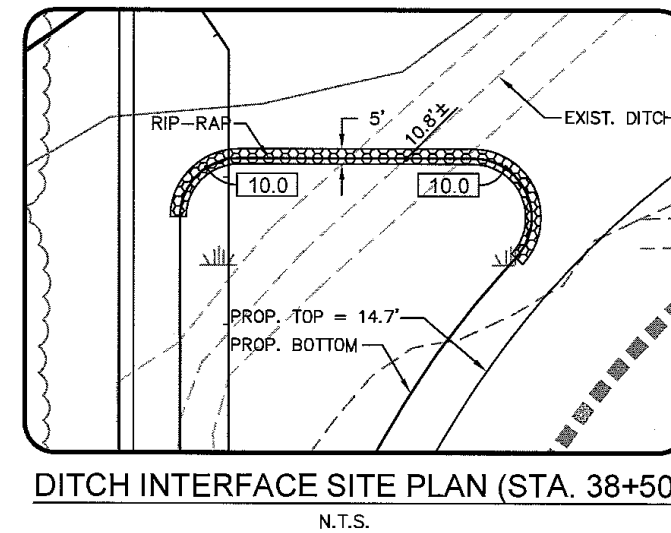
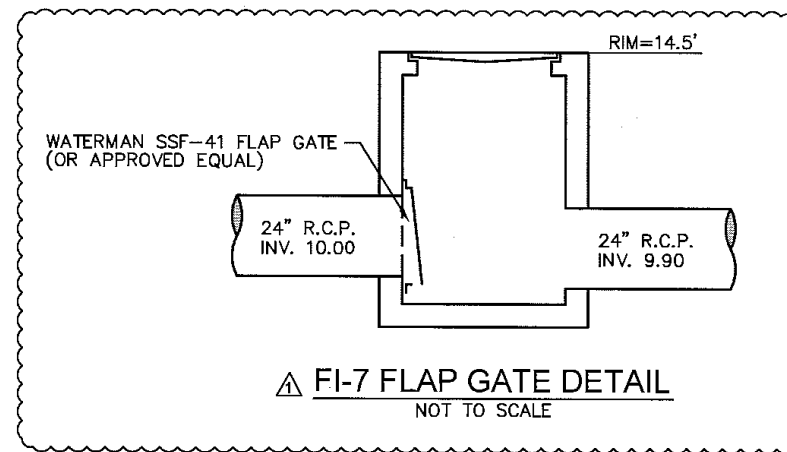
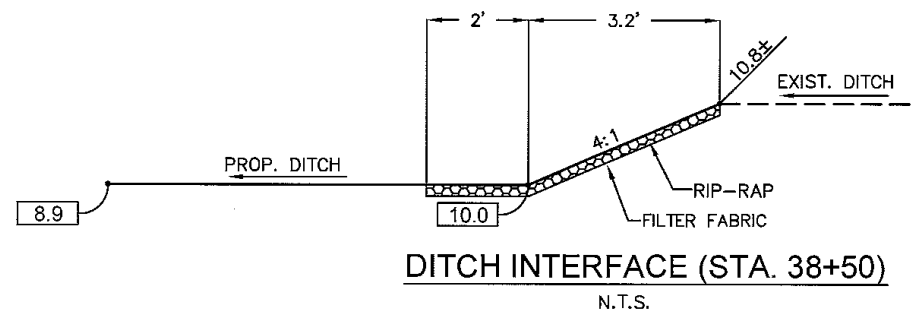
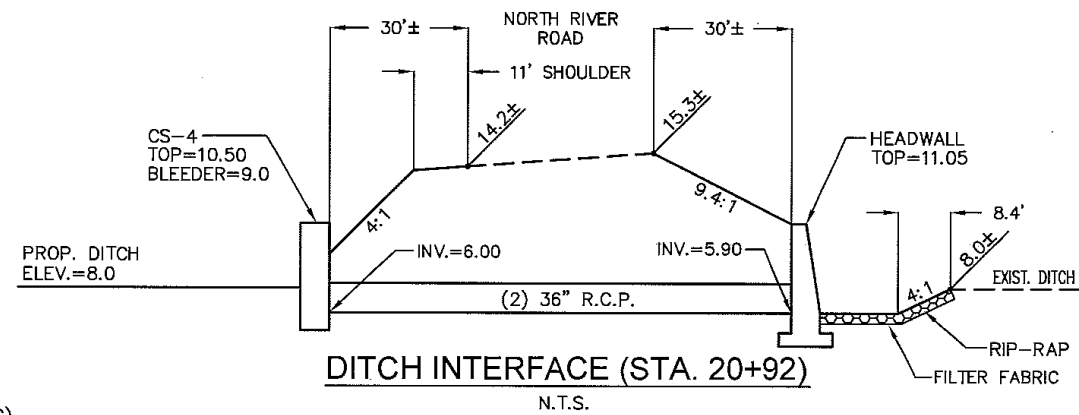
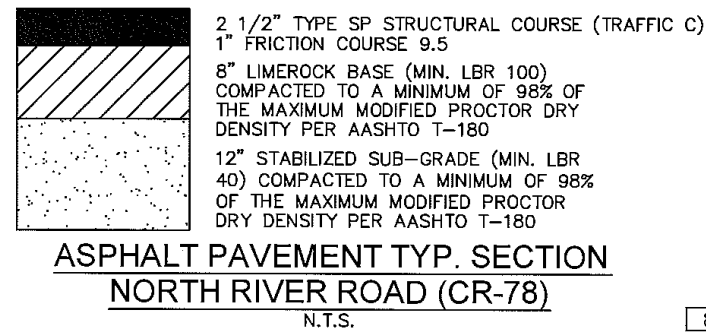
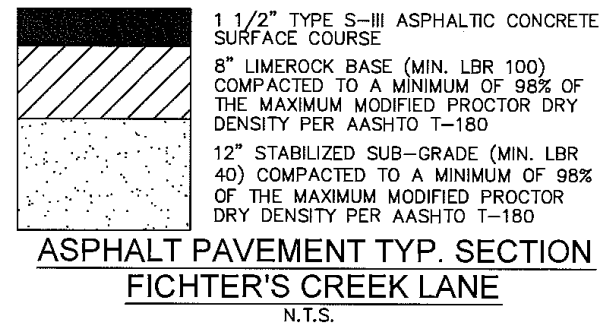
SHEET
NO.
22



FIELD INLETS TO USE USF 6210
FRAME AND GRATE OR APPROVED EQUAL

- 2'-0" WALL - 18" PIPE
- 3'-1" WALL - 24" PIPE
- 4'-1" WALL - 36" PIPE (TYPE 'D')
- 3'-0" WALL - 24" PIPE (TYPE 'E')
- 4'-6" WALL - 42" PIPE (TYPE 'E')
- 7'-8" WALL - 60" PIPE (TYPE 'H')

FIELD INLET
NOT TO SCALE
FDOT INDEX #232



REV.	DATE	DESCRIPTION	BY
9-11		REVISIONS PER SFWMD COMMENTS	

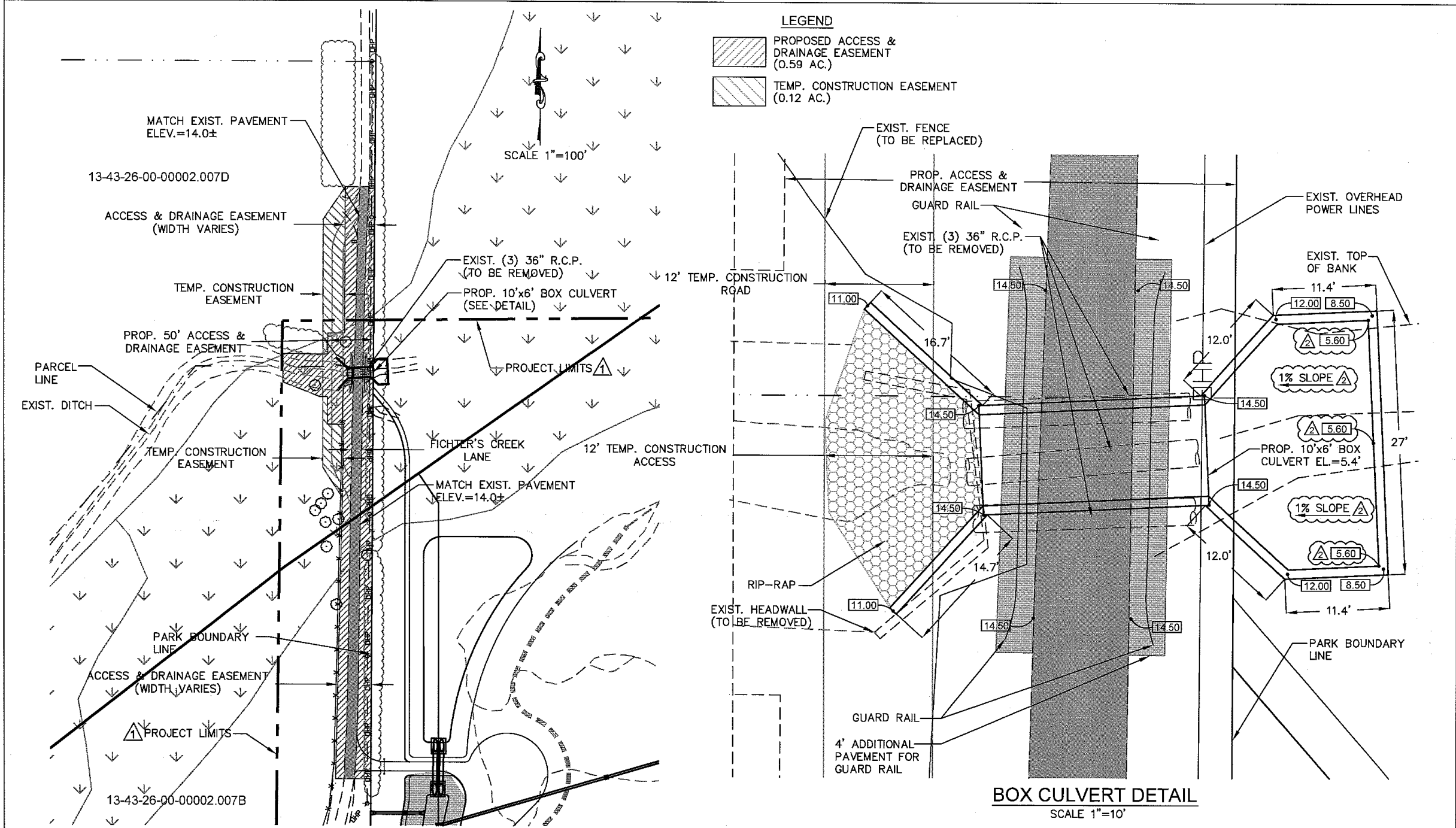


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EB-0006613 LB-6572

FICHTER'S CREEK
RESTORATION
CN-08-03
FOR
LEE CO. BOARD OF COUNTY COMMISSIONERS
1500 MONROE STREET
FORT MYERS, FL. 33901

DRAINAGE DETAILS

SHEET
NO.
23



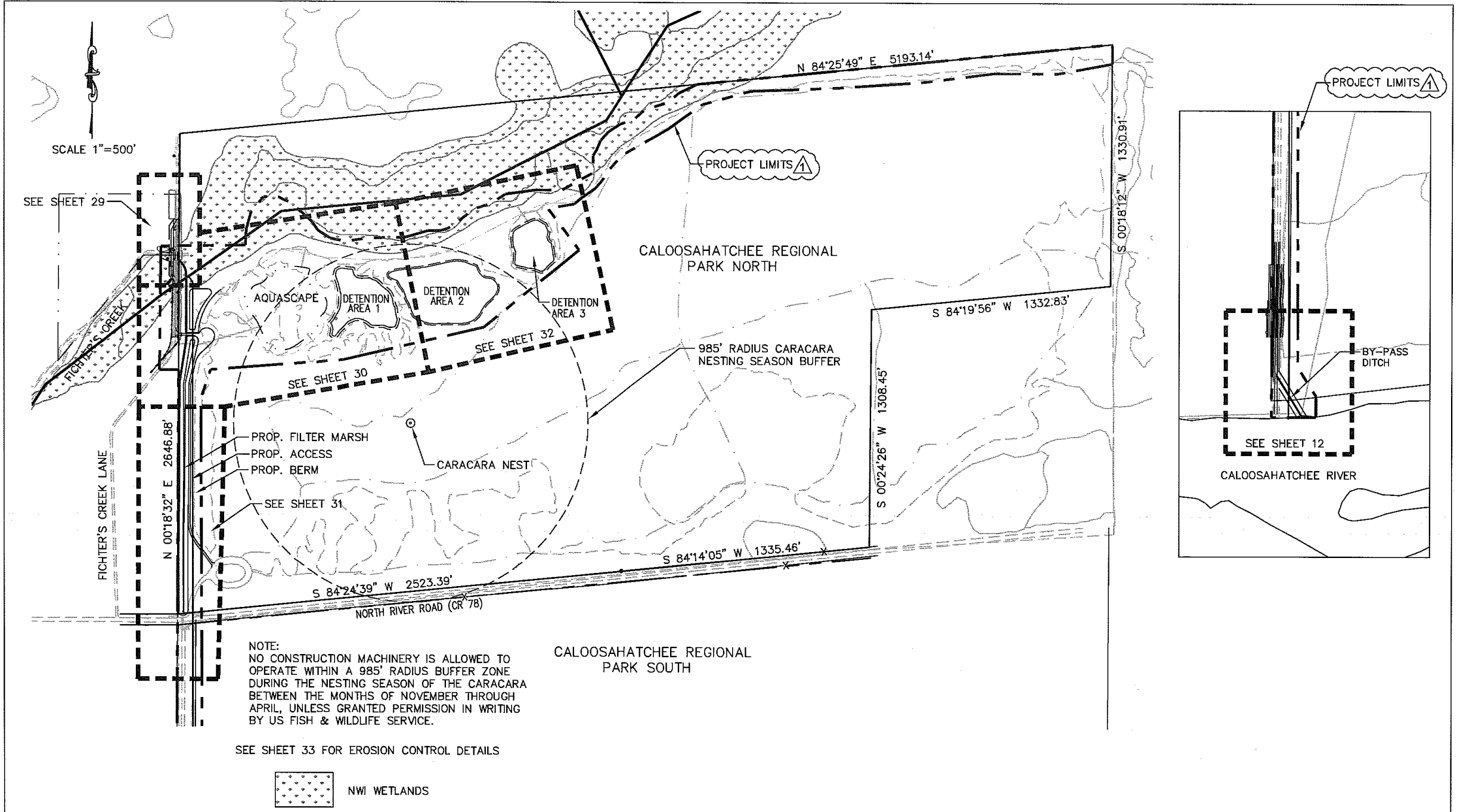
▲	6-09	REVISIONS PER SFWMD COMMENTS	
▲	9-11	REVISIONS PER SFWMD COMMENTS	
REV.	DATE	DESCRIPTION	BY



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FICHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

BOX CULVERT DETAIL	SHEET NO.
	27



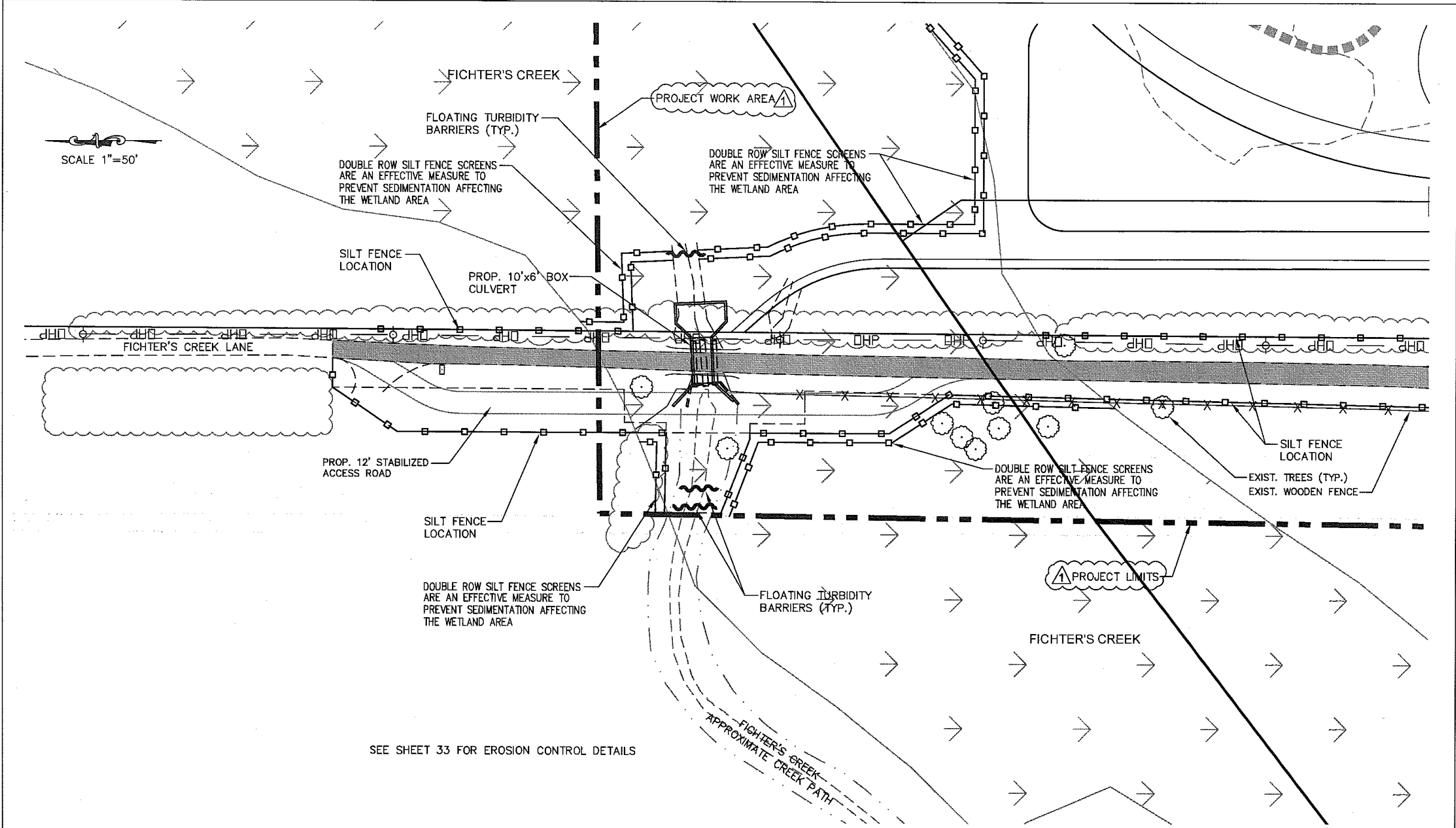
REV.	DATE	DESCRIPTION	BY
6-09		REVISIONS PER SFWMD COMMENTS	



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FIGHTERS CREEK RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

EROSION CONTROL KEY SHEET	SHEET NO.
	28



6-09	REVISIONS PER SFWMD COMMENTS		
REV.	DATE	DESCRIPTION	BY

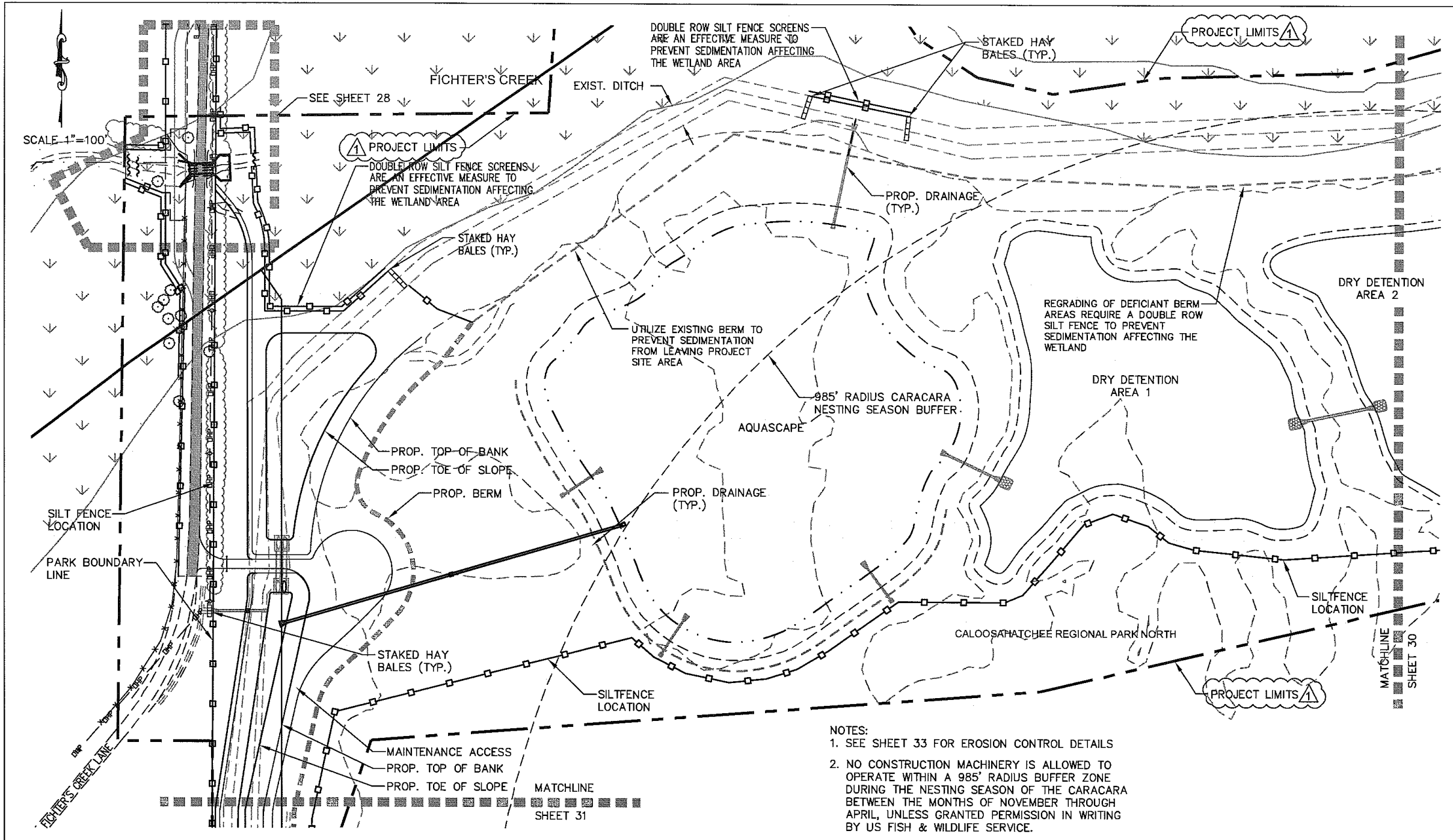


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FICHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

EROSION CONTROL PLAN

SHEET NO.
 29



NOTES:
 1. SEE SHEET 33 FOR EROSION CONTROL DETAILS
 2. NO CONSTRUCTION MACHINERY IS ALLOWED TO OPERATE WITHIN A 985' RADIUS BUFFER ZONE DURING THE NESTING SEASON OF THE CARACARA BETWEEN THE MONTHS OF NOVEMBER THROUGH APRIL, UNLESS GRANTED PERMISSION IN WRITING BY US FISH & WILDLIFE SERVICE.

REV.	DATE	DESCRIPTION	BY
6-09		REVISIONS PER SFWMD COMMENTS	

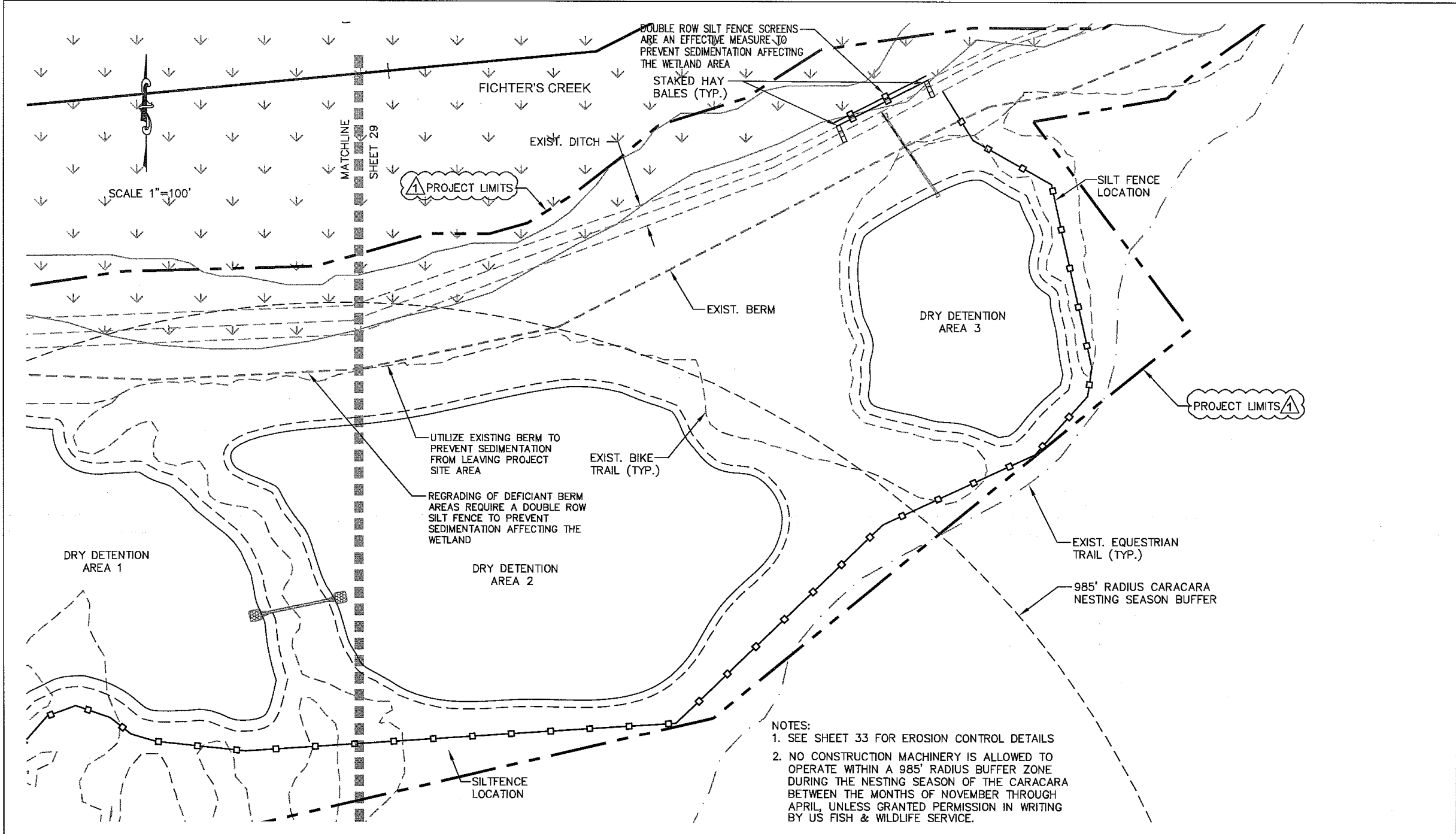


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FICHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

EROSION CONTROL PLAN

SHEET NO.
 30



NOTES:
 1. SEE SHEET 33 FOR EROSION CONTROL DETAILS
 2. NO CONSTRUCTION MACHINERY IS ALLOWED TO OPERATE WITHIN A 985' RADIUS BUFFER ZONE DURING THE NESTING SEASON OF THE CARACARA BETWEEN THE MONTHS OF NOVEMBER THROUGH APRIL, UNLESS GRANTED PERMISSION IN WRITING BY US FISH & WILDLIFE SERVICE.

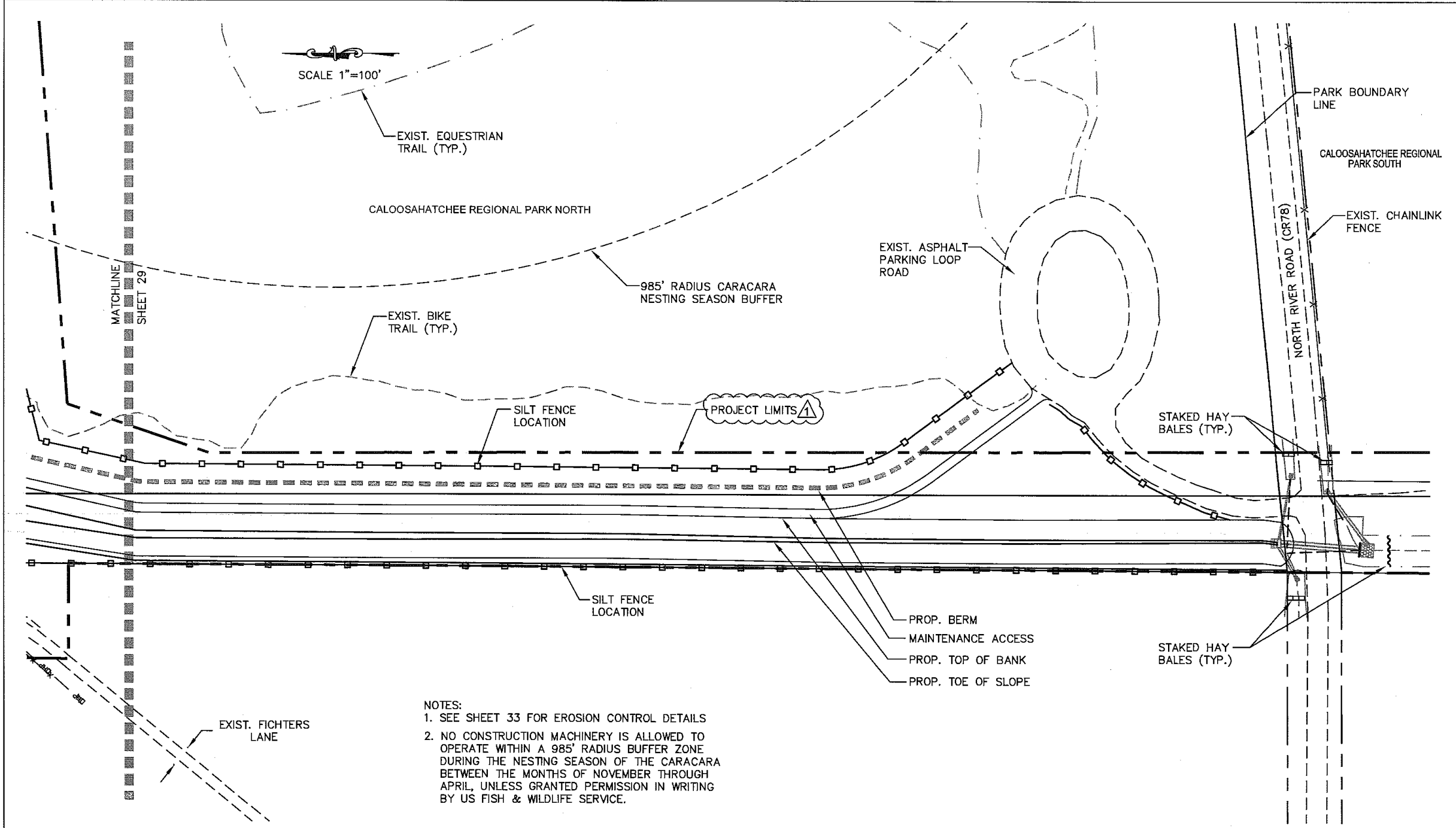
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REV.	DATE	DESCRIPTION	BY	

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FICHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

EROSION CONTROL PLAN

SHEET NO.
31



- NOTES:
1. SEE SHEET 33 FOR EROSION CONTROL DETAILS
 2. NO CONSTRUCTION MACHINERY IS ALLOWED TO OPERATE WITHIN A 985' RADIUS BUFFER ZONE DURING THE NESTING SEASON OF THE CARACARA BETWEEN THE MONTHS OF NOVEMBER THROUGH APRIL, UNLESS GRANTED PERMISSION IN WRITING BY US FISH & WILDLIFE SERVICE.

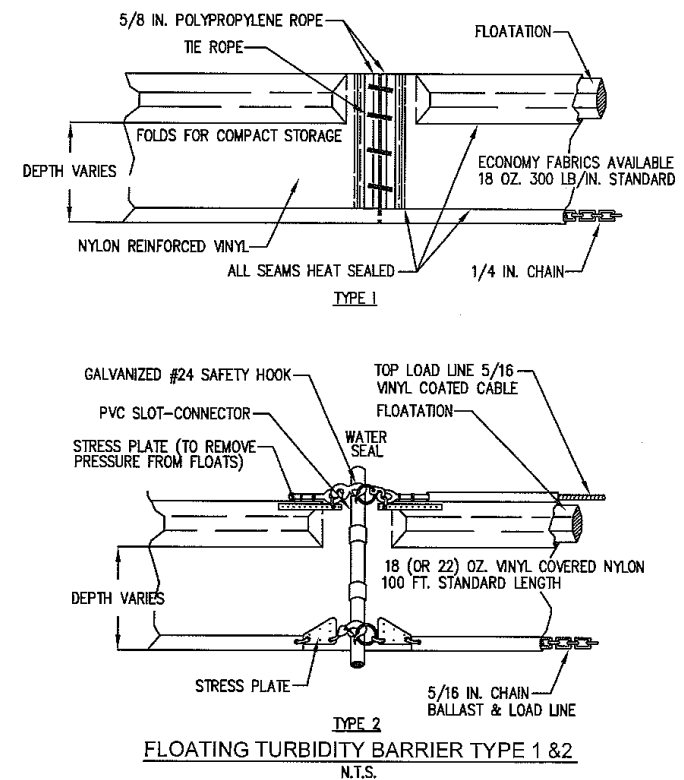
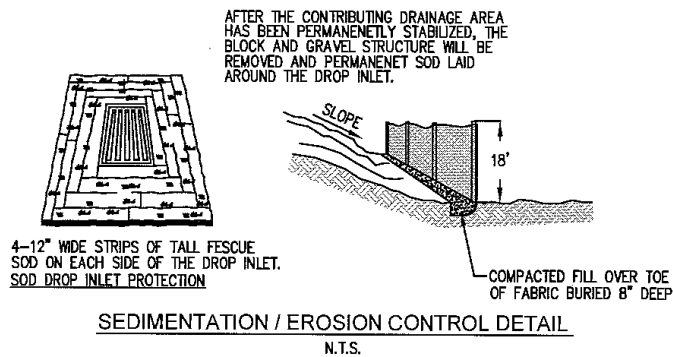
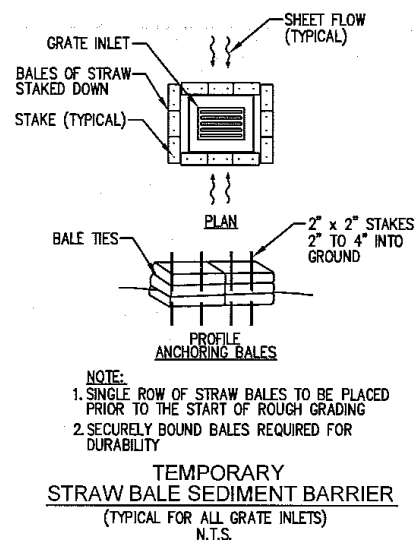
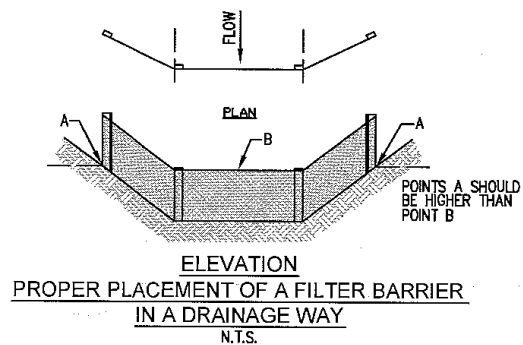
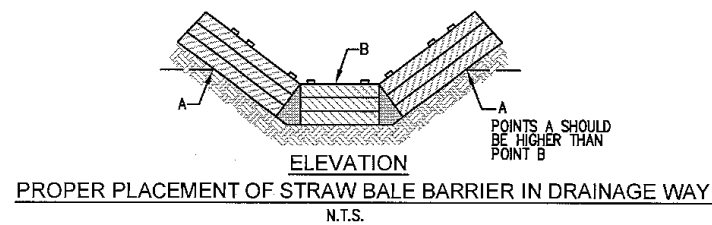
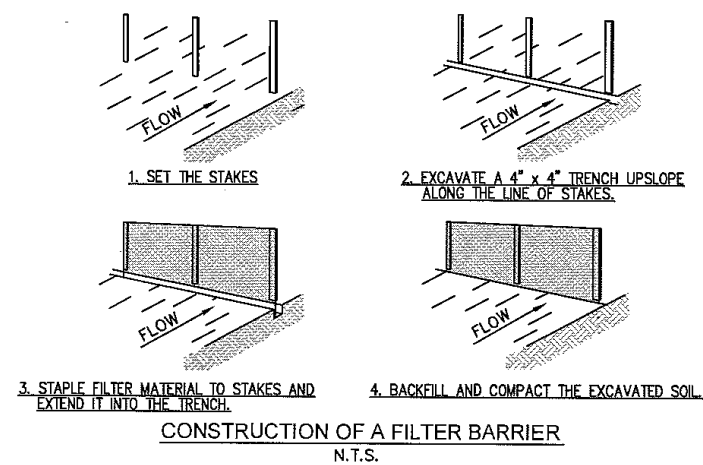
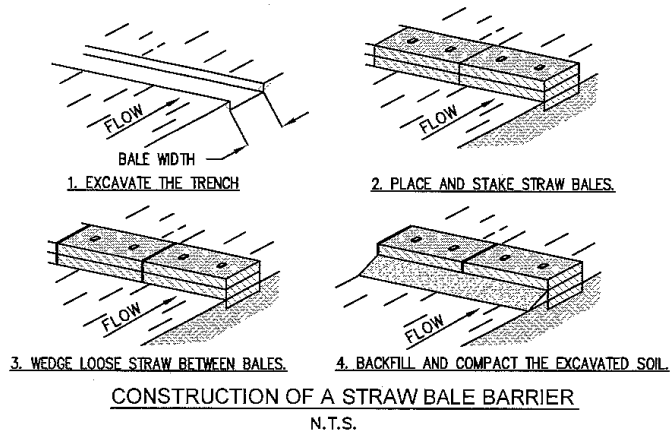
REV.	DATE	DESCRIPTION	BY
6-09		REVISIONS PER SFWMD COMMENTS	



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FICHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
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EROSION CONTROL PLAN	SHEET NO. 32
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GENERAL NOTES:
PRIOR TO COMMENCEMENT OF CONSTRUCTION APPROPRIATE EROSION CONTROL DEVICES SHALL BE INSTALLED TO CONTROL AND REDUCE SOIL EROSION AND SEDIMENT TRANSPORT TO OFF-SITE AREAS. THE CONTRACTOR SHALL MAINTAIN THESE DEVICES THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEVICES SHALL REMAIN IN PLACE UNTIL THE SURROUNDING AREAS ARE ESTABLISHED. THE FOLLOWING MINIMUM REQUIREMENTS ARE RECOMMENDED: (REFERENCE FLORIDA DEVELOPMENT MANUAL, FDER, PPS 6-301 TO 6-500).

- A) BMP 1.01 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
- B) BMP 1.05 STRAW BALE BARRIER
- C) BMP 1.06 SILT FENCE
- D) BMP 1.08 STORM INLET DRAIN PROTECTION

THESE BEST MANAGEMENT PRACTICES (BMP) ARE TYPICAL OF REQUIREMENTS FOR SOIL EROSION CONTROL PER DIVISION 3.7 OF THE LEE COUNTY LAND DEVELOPMENT CODE. THEY MAY NOT CONSTITUTE COMPLETE REQUIREMENTS FOR COMPLIANCE WITH REGULATORY AGENCIES AND SPECIFIC PERMIT CONDITIONS.

REV.	DATE	DESCRIPTION	BY

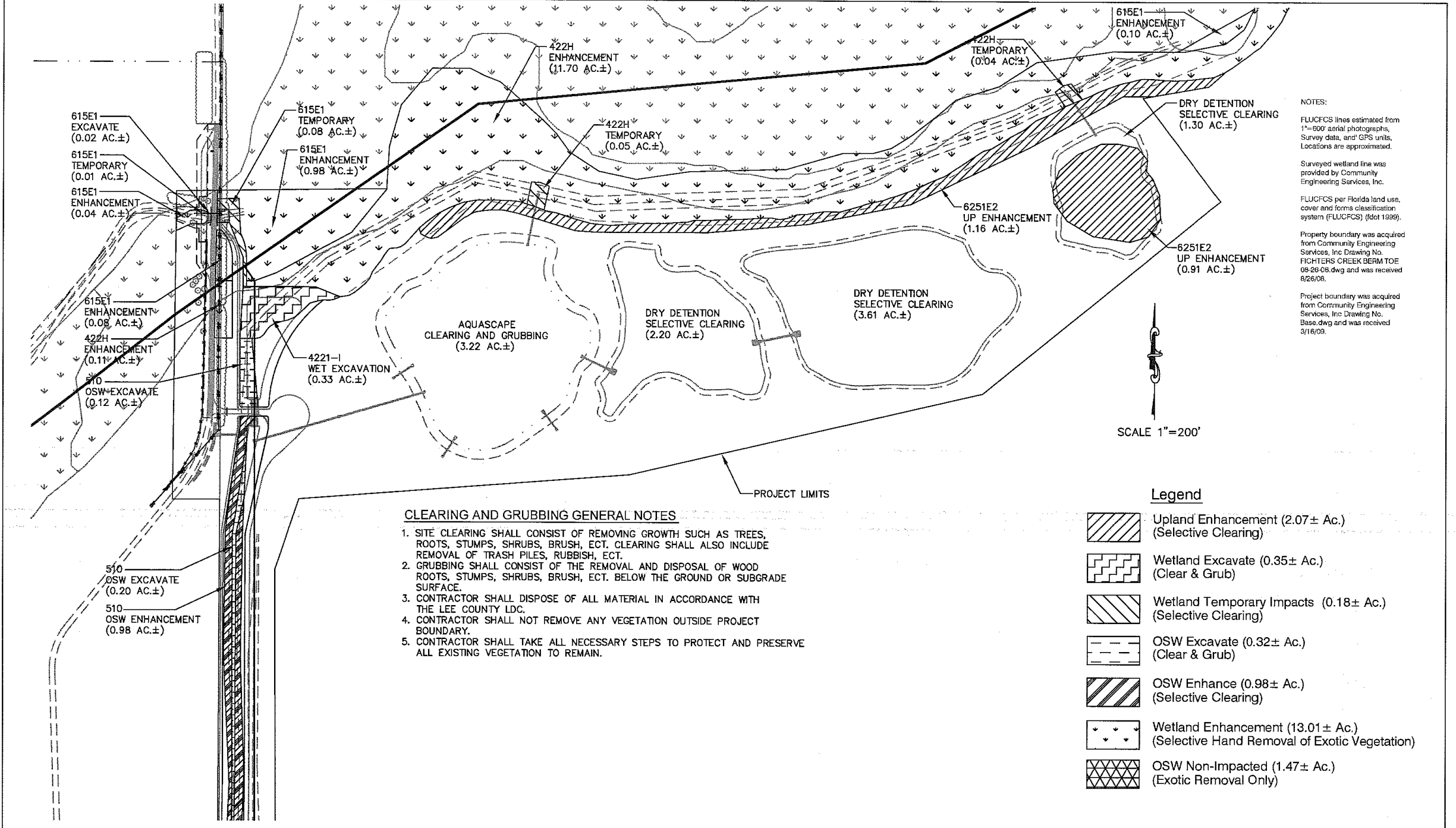


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FICTHERS CREEK
RESTORATION
CN-08-03
FOR
LEE CO. BOARD OF COUNTY COMMISSIONERS
1500 MONROE STREET
FORT MYERS, FL. 33901

EROSION CONTROL DETAILS

SHEET NO.
33



NOTES:
 FLUCFCS lines estimated from 1"=600' aerial photographs, Survey data, and GPS units. Locations are approximated.
 Surveyed wetland line was provided by Community Engineering Services, Inc.
 FLUCFCS per Florida land use, cover and forms classification system (FLUCFCS) (fdot 1999).
 Property boundary was acquired from Community Engineering Services, Inc. Drawing No. FIGHTERS CREEK BERM TOE 08-26-08.dwg and was received 8/26/08.
 Project boundary was acquired from Community Engineering Services, Inc. Drawing No. Base.dwg and was received 3/16/09.

- CLEARING AND GRUBBING GENERAL NOTES**
1. SITE CLEARING SHALL CONSIST OF REMOVING GROWTH SUCH AS TREES, ROOTS, STUMPS, SHRUBS, BRUSH, ECT. CLEARING SHALL ALSO INCLUDE REMOVAL OF TRASH PILES, RUBBISH, ECT.
 2. GRUBBING SHALL CONSIST OF THE REMOVAL AND DISPOSAL OF WOOD ROOTS, STUMPS, SHRUBS, BRUSH, ECT. BELOW THE GROUND OR SUBGRADE SURFACE.
 3. CONTRACTOR SHALL DISPOSE OF ALL MATERIAL IN ACCORDANCE WITH THE LEE COUNTY LDC.
 4. CONTRACTOR SHALL NOT REMOVE ANY VEGETATION OUTSIDE PROJECT BOUNDARY.
 5. CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO PROTECT AND PRESERVE ALL EXISTING VEGETATION TO REMAIN.

Legend

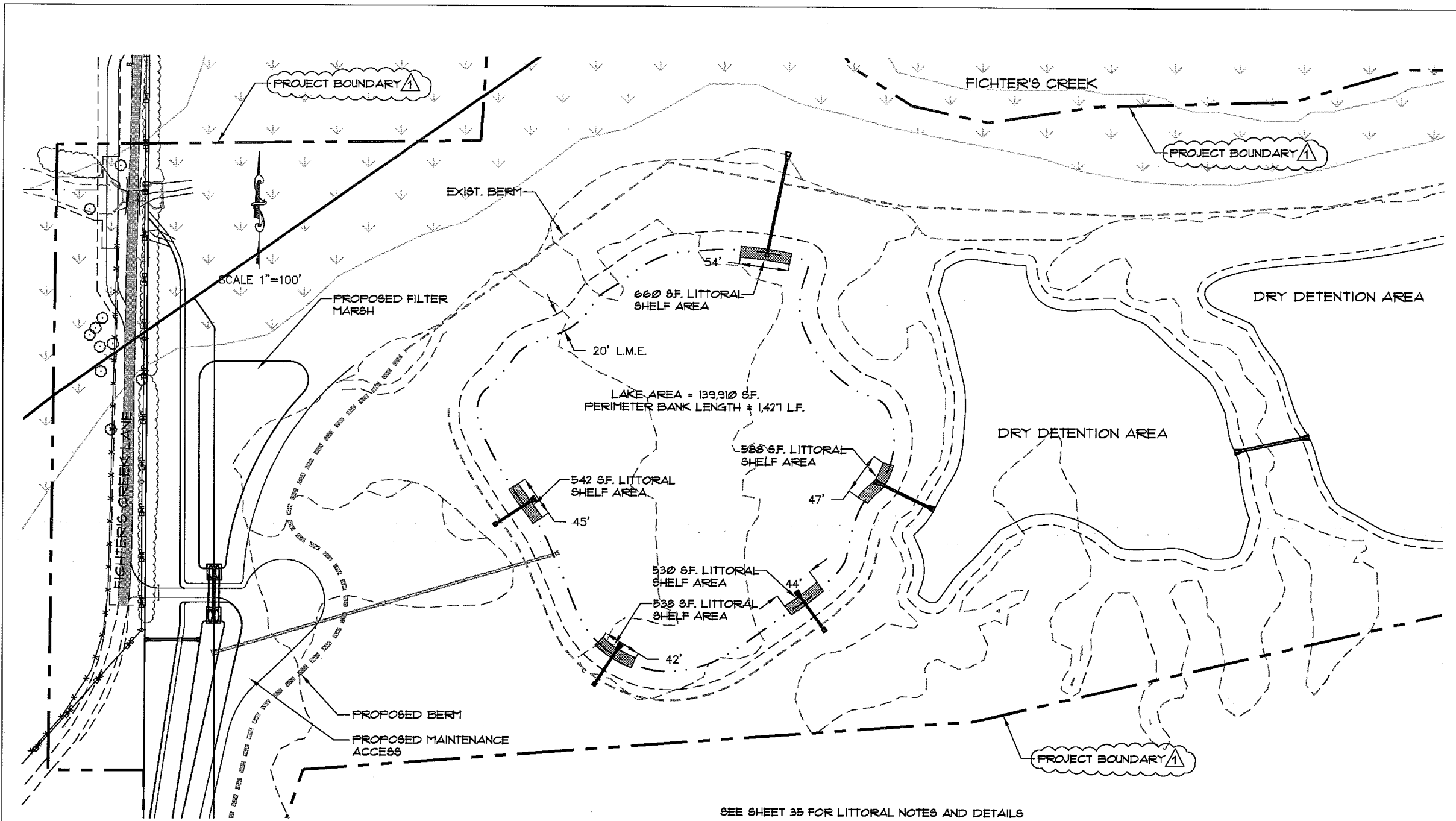
	Upland Enhancement (2.07± Ac.) (Selective Clearing)
	Wetland Excavate (0.35± Ac.) (Clear & Grub)
	Wetland Temporary Impacts (0.18± Ac.) (Selective Clearing)
	OSW Excavate (0.32± Ac.) (Clear & Grub)
	OSW Enhance (0.98± Ac.) (Selective Clearing)
	Wetland Enhancement (13.01± Ac.) (Selective Hand Removal of Exotic Vegetation)
	OSW Non-Impacted (1.47± Ac.) (Exotic Removal Only)

REV.	DATE	DESCRIPTION	BY

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FIGHTER'S CREEK RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

CLEARING PLAN	SHEET NO. 33A
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SEE SHEET 35 FOR LITTORAL NOTES AND DETAILS

REV.	DATE	DESCRIPTION	BY
6-03		REVISIONS PER SFUMD COMMENTS	

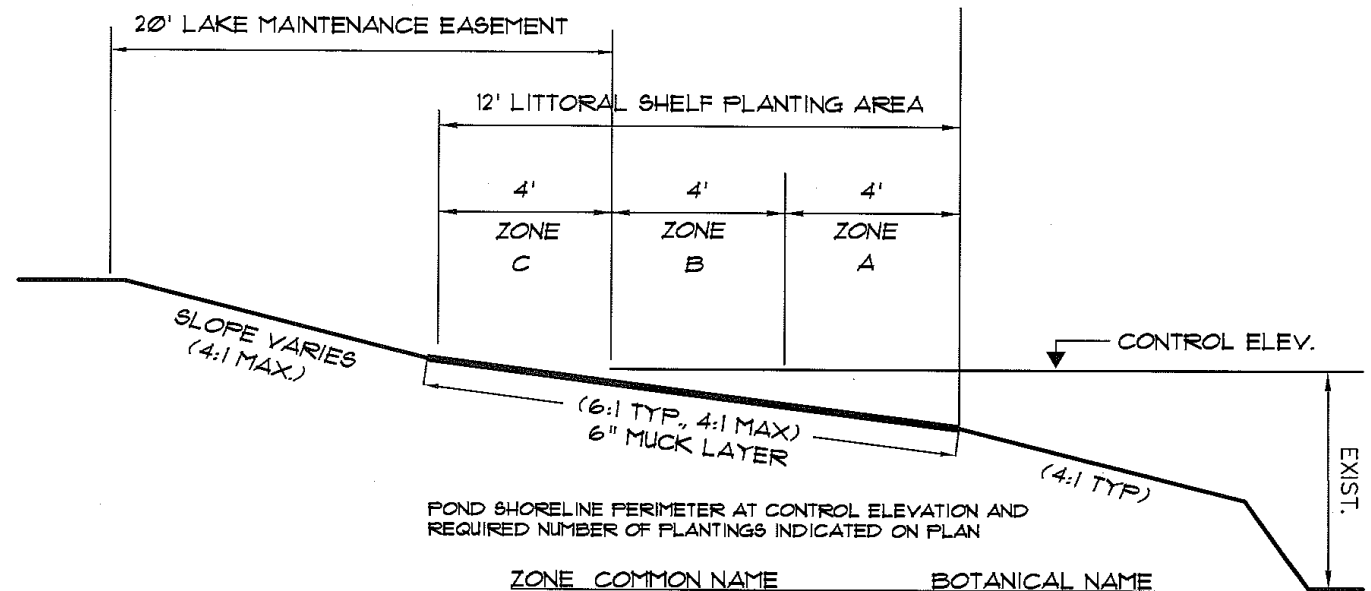
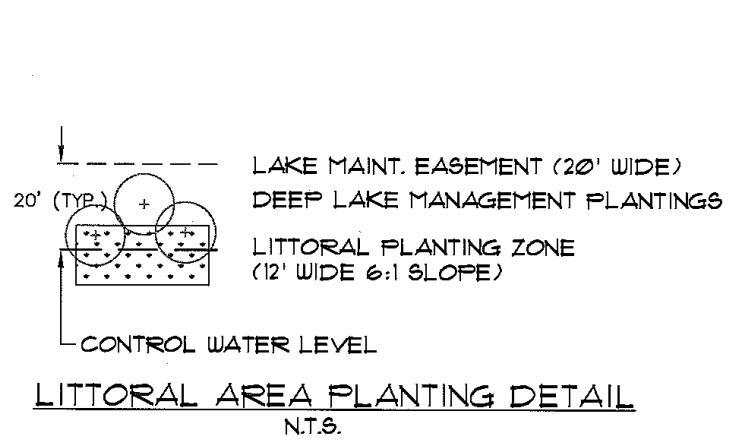


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FICHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
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 1500 MONROE STREET
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LITTORAL PLAN

SHEET NO.
 34



LITTORAL AREA LANDSCAPING NOTES:

1. THE MINIMUM REQUIRED NUMBER OF NATIVE WETLAND HERBACEOUS PLANTS SHALL BE ONE PLANT PER LINEAR FOOT OF LAKE SHORELINE AS MEASURED AT THE CONTROL ELEVATION WATER LEVEL. NATIVE WETLAND TREES AND SHRUBS MAY BE SUBSTITUTED FOR UP TO 25 PERCENT OF THE TOTAL NUMBER OF HERBACEOUS PLANTS REQUIRED. ONE TREE OR TWO SHRUBS MAY BE SUBSTITUTED FOR TEN HERBACEOUS PLANTS.
2. PLANTS SHALL BE INSTALLED IN CLUSTERS AROUND THE LAKE PERIMETER. PLACEMENT OF CLUSTERS AT THE INLET AND OUTFALL AREAS IS STRONGLY ENCOURAGED. CLUSTERS SHALL BE A MINIMUM OF 25 PLANTS WITHIN A 50 SQUARE FOOT AREA.
3. AT LEAST FOUR SPECIES SHALL BE PLANTED. MINIMUM REQUIRED HERBACEOUS PLANT SIZE SHALL BE TWO-INCH CONTAINER. TREES AND SHRUBS MUST MEET THE MINIMUM STANDARDS IN THE LDC SECTION 10-418.
4. SURVIVAL OF PLANT MATERIALS. A MINIMUM OF 80 PERCENT SURVIVABILITY OF PLANTING IS REQUIRED FOR HERBACEOUS WETLAND PLANTS. WETLAND TREES AND SHRUBS MUST BE MAINTAINED PER LDC SECTION 10-418(c).
5. REQUIRED WETLAND PLANTING SHALL COMPLY WITH LDC SECTION 10-418.

TOTAL LINEAR FEET OF SHORELINE = 1,421 LF.
 1 PLANT / 1 LF. = 1,421 WETLAND PLANTS REQUIRED
 1,423 WETLAND PLANTS PROVIDED

25 PLANTS / 50 SF. AREA = 2,854 SF. PLANTING AREA REQUIRED
 2,858 SF. PLANTING AREA PROVIDED

POND SHORELINE PERIMETER AT CONTROL ELEVATION AND REQUIRED NUMBER OF PLANTINGS INDICATED ON PLAN

ZONE	COMMON NAME	BOTANICAL NAME
A	FRAGRANT WATER LILY	NYMPHAEA ODORATA
B	PICKERELWEED	PONTERDERIA CORDATA
B	ARROW HEAD	SAGITTARIA SPP.
C	CORDGRASS	SPARTINA BAKERII

LITTORAL PLANTING ZONES
N.T.S.

REV.	DATE	DESCRIPTION	BY

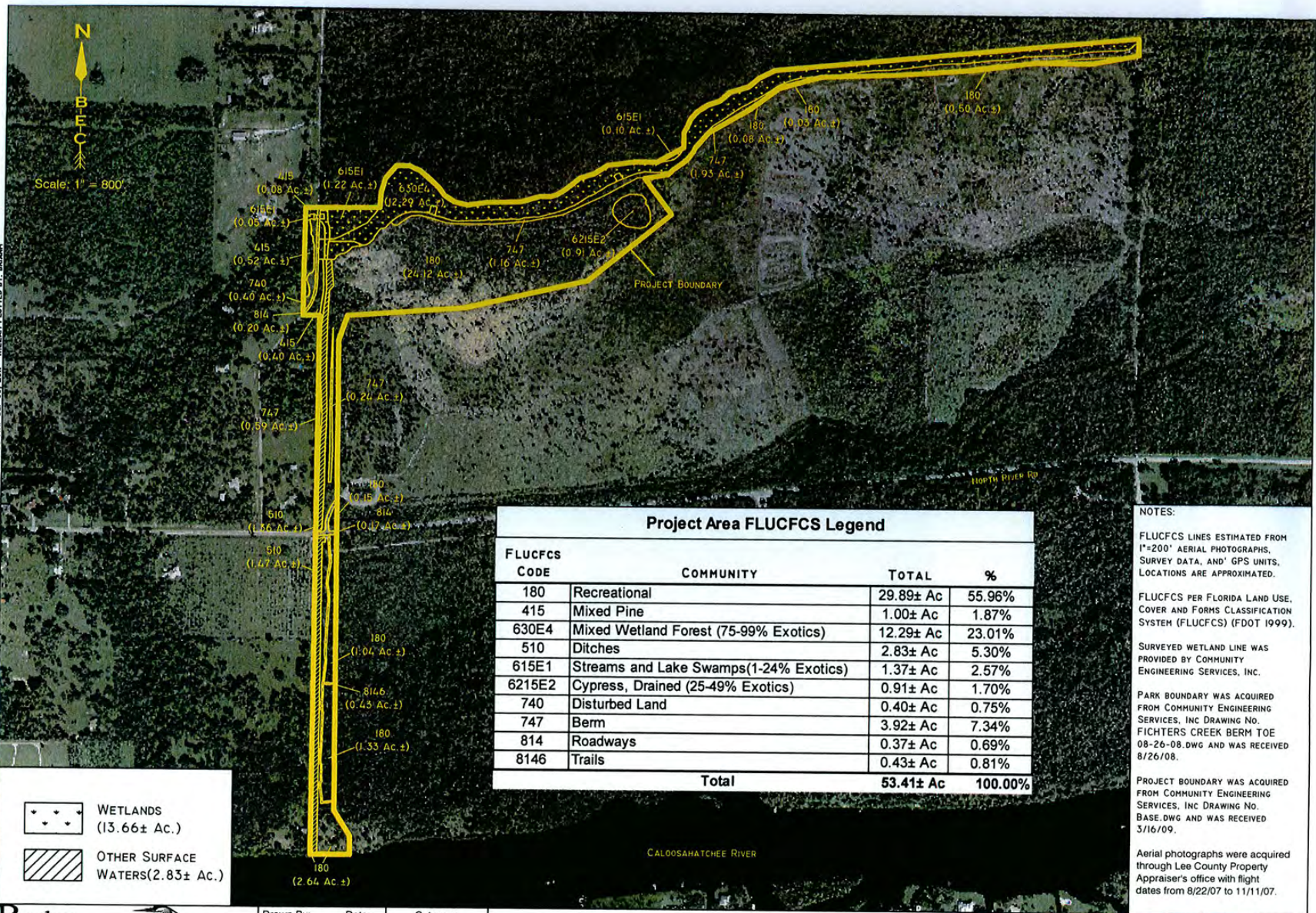


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FICHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
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 1500 MONROE STREET
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LITTORAL PLAN

SHEET NO.
35



X:\BEC\2007\2007-77 FICHTER'S CREEK RESTORATION WITH PROJECT FLUCFCS.DWG TAB: 8.5 X II AERIAL FLUCFCS MAP SEP 08, 2011 - 11:22AM PLOTTED BY: BRIAN

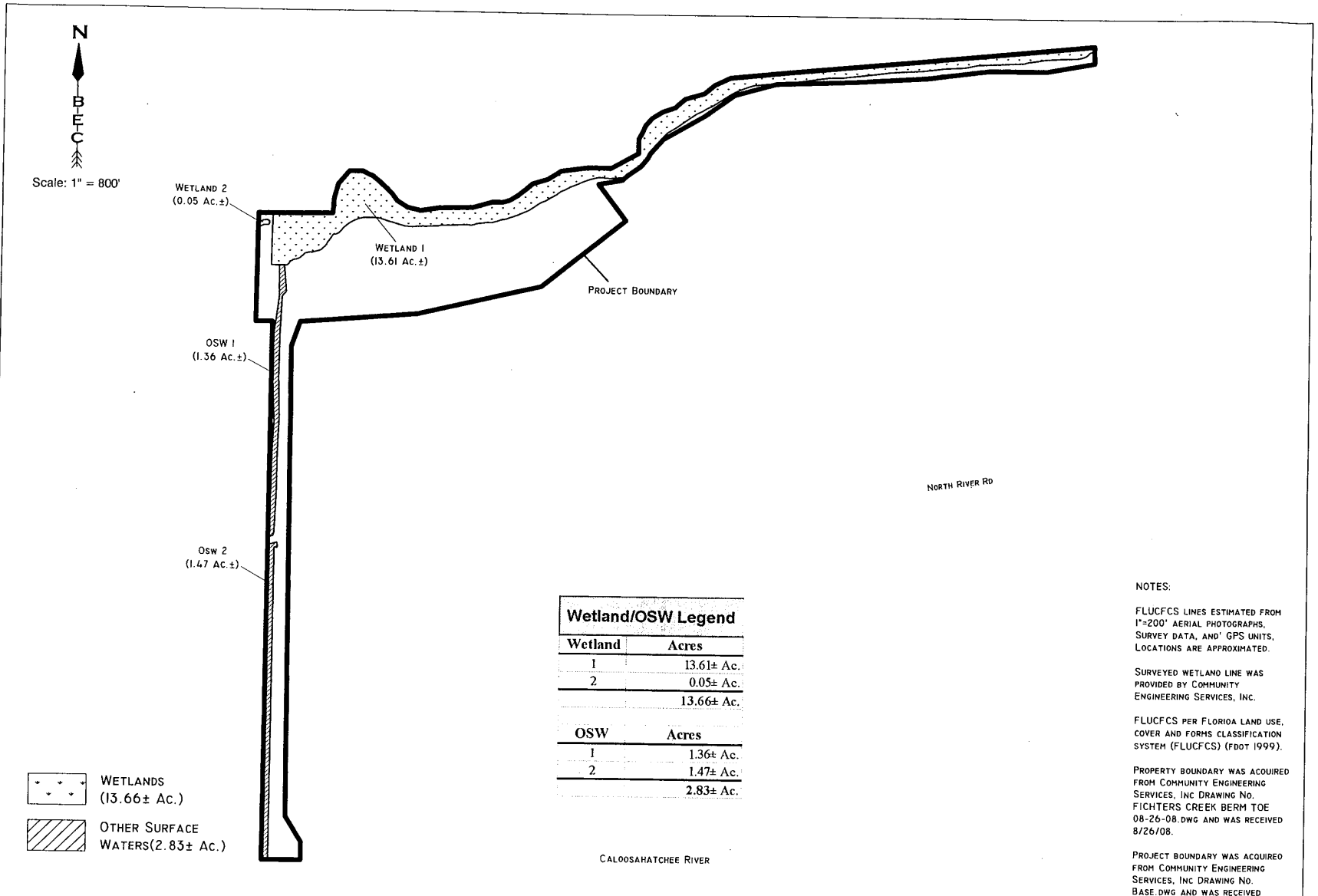
Boylan Environmental Consultants, Inc.
 Wetland & Wildlife Surveys, Environmental Permitting & Impact Assessments
 11000 Metro Parkway, Suite 4, Ft. Myers, FL 33966 (239) 418-0671

Drawn By:	Date:	Category:
B.K.M.	3/12/09	FLUCFCS
Job Number:	Scale:	
2007-77	1" = 800'	
S/T/R	County	
18/43S/27E	Lee	

Fichter's Creek Restoration

Aerial FLUCFCS Map

Revisions	Date:	Page
		Exhibit



NOTES:

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS, SURVEY DATA, AND GPS UNITS. LOCATIONS ARE APPROXIMATED.

SURVEYED WETLAND LINE WAS PROVIDED BY COMMUNITY ENGINEERING SERVICES, INC.

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).

PROPERTY BOUNDARY WAS ACQUIRED FROM COMMUNITY ENGINEERING SERVICES, INC DRAWING NO. FIGHTERS CREEK BERM TOE 08-26-08.DWG AND WAS RECEIVED 8/26/08.

PROJECT BOUNDARY WAS ACQUIRED FROM COMMUNITY ENGINEERING SERVICES, INC DRAWING NO. BASE.DWG AND WAS RECEIVED 3/16/09.

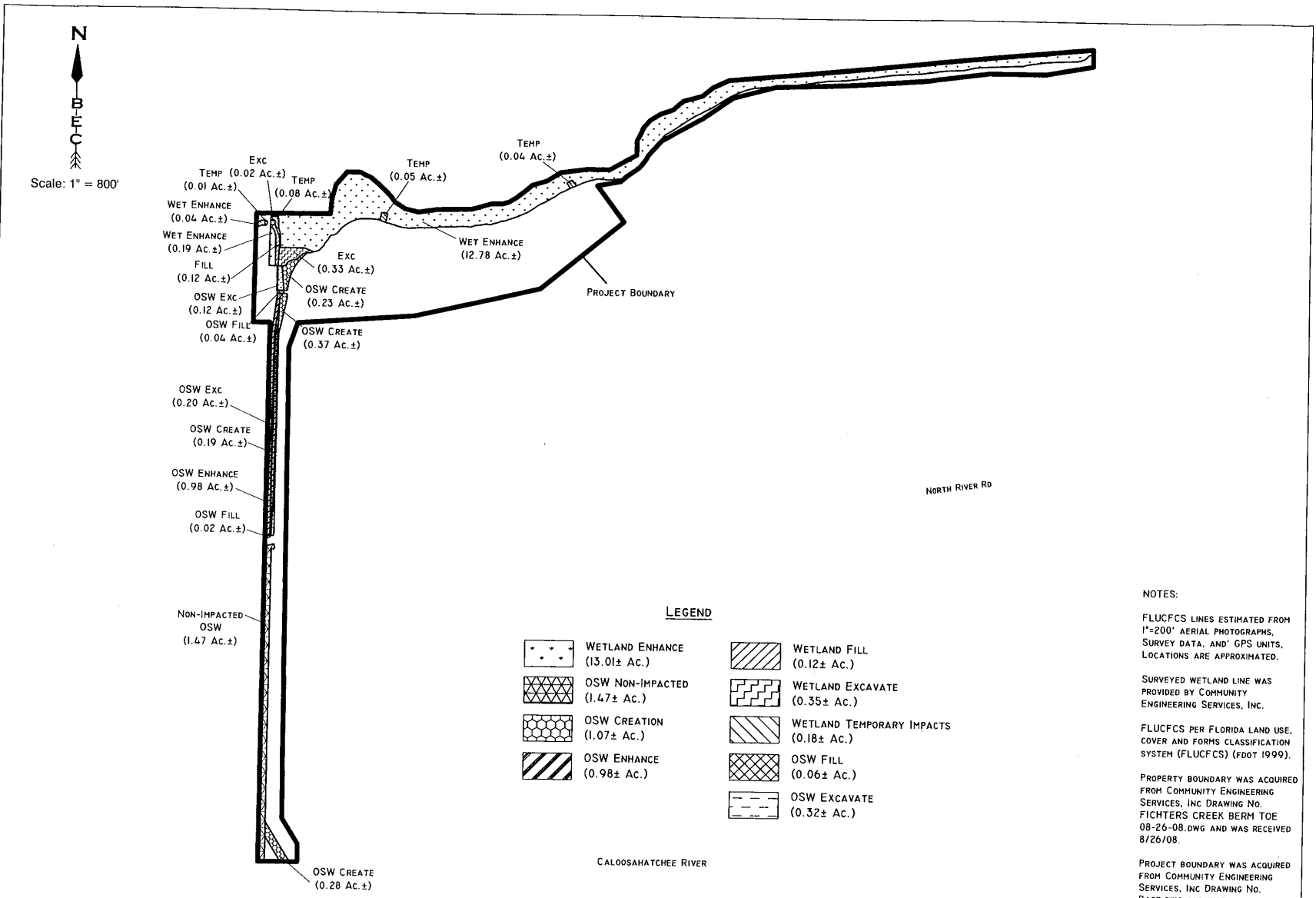
X:\BEC\2007\2007-77 FIGHTERS CREEK\2009\AERIAL WITH PROJECT FLUCFCS.DWG TAB: WETLAND ID MAP SEP 08, 2011 - 10:58AM PLOTTED BY: BRANN

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 Wetland & Wildlife Surveys, Environmental Permitting, & Impact Assessments
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Drawn By:	Date:	Category
B.K.M.	3/25/09	Wetlands
Job Number		Scale:
2007-77		1" = 800'
S/T/R		County
18/43S/27E		Lee

Fichter's Creek Restoration
 Wetland Identification Map

Revisions	Date:	Page
		Exhibit



X:\BEC\2007\2007-77 FIGHTERS CREEK\2009\AERIAL WITH PROJECT\FLUCFCS.DWG TAB: 8.5 x II IMPACT MAP SEP 08, 2011 - 10:58 AM PLOTTED BY: BRIAN H

LEGEND

- WETLAND ENHANCE (13.01± Ac.)
- OSW NON-IMPACTED (1.47± Ac.)
- OSW CREATION (1.07± Ac.)
- OSW ENHANCE (0.98± Ac.)
- WETLAND FILL (0.12± Ac.)
- WETLAND EXCAVATE (0.35± Ac.)
- WETLAND TEMPORARY IMPACTS (0.18± Ac.)
- OSW FILL (0.06± Ac.)
- OSW EXCAVATE (0.32± Ac.)

NOTES:

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS, SURVEY DATA, AND GPS UNITS. LOCATIONS ARE APPROXIMATED.

SURVEYED WETLAND LINE WAS PROVIDED BY COMMUNITY ENGINEERING SERVICES, INC.

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).

PROPERTY BOUNDARY WAS ACQUIRED FROM COMMUNITY ENGINEERING SERVICES, INC DRAWING NO. FIGHTERS CREEK BERM TOE 08-26-08.DWG AND WAS RECEIVED 8/26/08.

PROJECT BOUNDARY WAS ACQUIRED FROM COMMUNITY ENGINEERING SERVICES, INC DRAWING NO. BASE.DWG AND WAS RECEIVED 3/16/09.

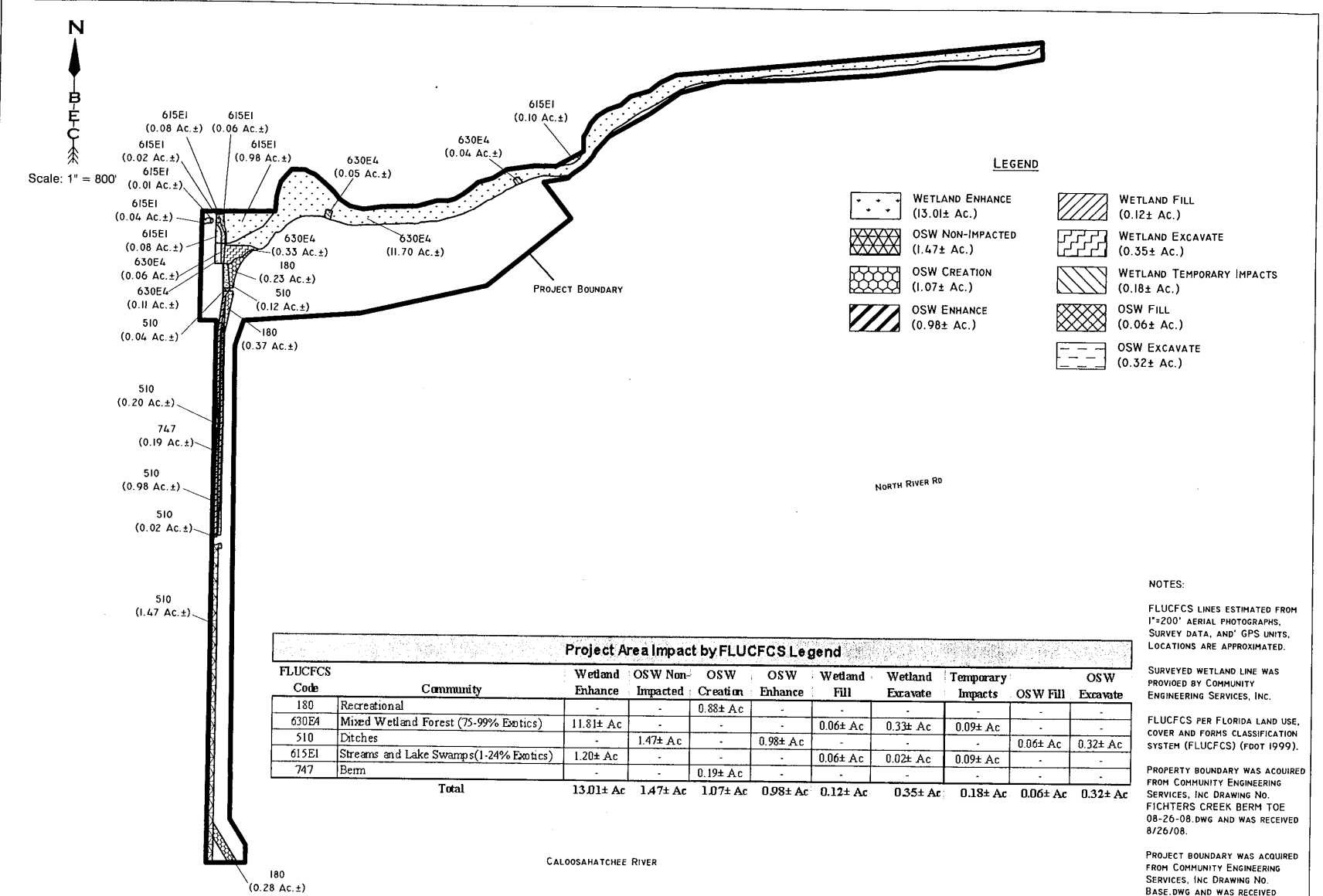
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Drawn By:	Date:	Category
B.K.M.	3/24/09	Impacts
Job Number	Scale:	
2007-77	1" = 800'	
S/T/R	County	
18/43S/27E	Lee	

Fichter's Creek Restoration
Impact Map

Revisions	Date:	Page
		Exhibit

X:\BEC\2007\2007-77 FIGHTERS CREEK\AERIAL WITH PROJECT FLUCFCS.DWG TAB: 8.5 x II IMPACT BY FLUCFCS SEP 08, 2011 - 11:03AM PLOTTED BY: BRIAN



Project Area Impact by FLUCFCS Legend										
FLUCFCS Code	Community	Wetland Enhance	OSW Non-Impacted	OSW Creation	OSW Enhance	Wetland Fill	Wetland Excavate	Temporary Impacts	OSW Fill	OSW Excavate
180	Recreational	-	-	0.88± Ac	-	-	-	-	-	-
630E4	Mixed Wetland Forest (75-99% Exotics)	11.81± Ac	-	-	-	0.06± Ac	0.33± Ac	0.09± Ac	-	-
510	Ditches	-	1.47± Ac	-	0.98± Ac	-	-	0.06± Ac	0.32± Ac	-
615EI	Streams and Lake Swamps (1-24% Exotics)	1.20± Ac	-	-	-	0.06± Ac	0.02± Ac	0.09± Ac	-	-
747	Berm	-	-	0.19± Ac	-	-	-	-	-	-
Total		13.01± Ac	1.47± Ac	1.07± Ac	0.98± Ac	0.12± Ac	0.35± Ac	0.18± Ac	0.06± Ac	0.32± Ac

NOTES:

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS, SURVEY DATA, AND GPS UNITS. LOCATIONS ARE APPROXIMATED.

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PROJECT BOUNDARY WAS ACQUIRED FROM COMMUNITY ENGINEERING SERVICES, INC. DRAWING NO. BASE.DWG AND WAS RECEIVED 3/16/09.

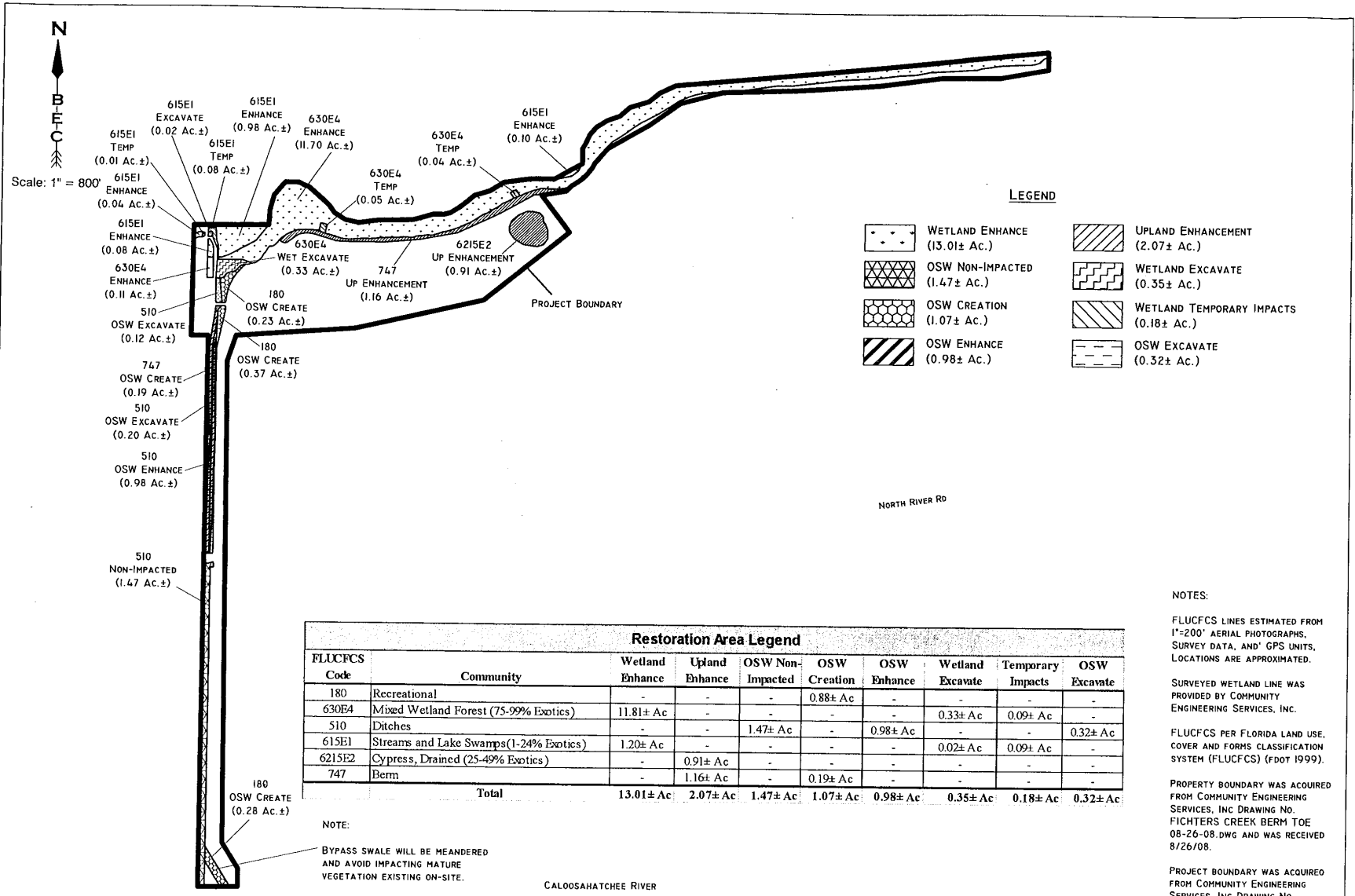
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Drawn By:	Date:	Category
B.K.M.	3/18/09	Impacts
Job Number		Scale:
2007-77		1" = 800'
S/T/R		County
18/43S/27E		Lee

Fichter's Creek Restoration

Impact Map by FLUCFCS

Revisions	Date:	Page
		Exhibit



X:\BEC\2007\2007-77 FIGHTERS CREEK\2009\AERIAL WITH PROJECT FLUCFCS.DWG TAB RESTORATION SEP 08 2011 11:15AM PLOTTED BY: BRIANM

Restoration Area Legend									
FLUCFCS Code	Community	Wetland Enhance	Upland Enhance	OSW Non-Impacted	OSW Creation	OSW Enhance	Wetland Excavate	Temporary Impacts	OSW Excavate
180	Recreational	-	-	-	0.88± Ac	-	-	-	-
630E4	Mixed Wetland Forest (75-99% Exotics)	11.81± Ac	-	-	-	-	0.33± Ac	0.09± Ac	-
510	Ditches	-	-	1.47± Ac	-	0.98± Ac	-	-	0.32± Ac
615E1	Streams and Lake Swamps (1-24% Exotics)	1.20± Ac	-	-	-	-	0.02± Ac	0.09± Ac	-
6215E2	Cypress, Drained (25-49% Exotics)	-	0.91± Ac	-	-	-	-	-	-
747	Berm	-	1.16± Ac	-	0.19± Ac	-	-	-	-
Total		13.01± Ac	2.07± Ac	1.47± Ac	1.07± Ac	0.98± Ac	0.35± Ac	0.18± Ac	0.32± Ac

NOTE:
BYPASS SWALE WILL BE MEANDERED AND AVOID IMPACTING MATURE VEGETATION EXISTING ON-SITE.

NOTES:
FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS, SURVEY DATA, AND GPS UNITS. LOCATIONS ARE APPROXIMATED.
SURVEYED WETLAND LINE WAS PROVIDED BY COMMUNITY ENGINEERING SERVICES, INC.
FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).
PROPERTY BOUNDARY WAS ACQUIRED FROM COMMUNITY ENGINEERING SERVICES, INC DRAWING NO. FIGHTERS CREEK BERM TOE 08-26-08.DWG AND WAS RECEIVED 8/26/08.
PROJECT BOUNDARY WAS ACQUIRED FROM COMMUNITY ENGINEERING SERVICES, INC DRAWING NO. BASE.DWG AND WAS RECEIVED 3/16/09.

Boylan Environmental Consultants, Inc.
Wetland & Wildlife Surveys, Environmental Permitting, & Impact Assessments
11000 Metro Parkway, Suite 4, Ft. Myers, FL 33966 (239) 418-0671

Drawn By:	Date:	Category:
B.K.M.	3/25/09	Restoration
Job Number:	Scale:	
2007-77	1" = 800'	
S/T/R	County:	
18/43S/27E	Lee	

Fichter's Creek Restoration Restoration Plan Map

Revisions	Date:	Page

VI. MANAGEMENT ACTION PLAN

CRP will continue to be managed under the “single use” concept as provided in Section 253.034 [2(b)] F.S. The BoCC (via LCPR) is the lead managing agency and as such will be responsible for the stewardship and operation of CRP through the life of the lease. LCPR staff consults with the Division of Archives, History and Records Management staff before taking actions that may adversely affect archaeological or historic resources. Safeguarding and enhancing the environmental integrity and biological diversity of the site will be the guiding principle for its operation and management.

Desired outcomes of the management of CRP include providing resource-based recreational public access, preserving and protecting natural resources, protecting cultural and historical resources, restoring/ reclaiming habitat, protecting threatened and endangered species and controlling the spread of nonnative plants and animals.

A. Land Management Review

To date, the state has not conducted a land management review of CRP nor has one been scheduled (W. Howell, personal communication October 21, 2010).

The following paragraphs constitute a review of goals set for the management of CRP within the previous resource management plan (LCPR 2001) and the degree to which they have been met. The *italicized text* identifies the content from the previous plan (LCPR 2001). Refer to the “Goals and Strategies (Short-term/ Long-term)” section for planned stewardship goals for the upcoming ten-year period.

Hydroperiod

Goal: Restore and maintain the site hydrology as much as possible given the major topographic changes that have occurred.

Objective (restoration): Install weirs, ditch blocks or other structures to counteract drainage impacts that have occurred on the site.

Objective (monitoring): Establish a monitoring program for wetlands to determine their hydroperiod before and after restoration activities. Monitoring of aquatic indicator animal species is also recommended.

Performance Standard: The hydrology of on-site wetlands supports vegetation and wildlife similar to that of similar areas that have had minimal disturbance.

Monitoring will be conducted to determine the hydroperiod of the wetland communities. The hydroperiods for both the isolated and connected wetlands will be compared to known optimum hydroperiods for similar ecosystem to determine their health. Restoration efforts (control structures and filling ditches) will be pursued to restore the hydroperiods if necessary. Fill was placed in the internal ditches that drained the area south of C.R. 78 in late 1999. Hopefully, this action will help increase the hydroperiod of the wetlands near the river.

The installation of a weir on the north side of CRP is still in the planning process. A monitoring program for wetlands to determine their hydroperiod on the south side of CRP will be established. Qualitatively, the wetlands on the south side of the park appear to be holding water

for longer periods and the species composition within the Mixed Wetland Hardwoods appears consistent with those on other sites.

Prescribed Burning

Goal: Reestablish a fire regime conducive to maintenance of pyric plant communities.

Objective: Partition the site into management units and prepare a burn plan for each unit. Schedule burns at intervals appropriate for the particular plant community.

Performance Standard: Pyric communities experience fire at intervals recognized by Florida Natural Areas Inventory or other organizations as appropriate.

CRP has been divided into eighteen stewardship units to better organize and achieve management goals. These stewardship units are described in detail in the "Stewardship Unit Description" section of this document. To date, two prescribed fires have been conducted on the site and the "Projected Timetable for Implementation" section outlines which units are scheduled to be burned within the next ten-year cycle. In general, a fire regime will be reestablished for ~374 acres of the site.

Exotic Species Control

Goal: Control all invasive plants and animals to at least a maintenance level.

Objective (plants): Prepare a treatment methodology and schedule by management unit that includes control measures for exotic plants.

Performance Standard (exotic plants): Bring all populations of exotic plants to at least a control level in each management unit.

Objective (wild hogs): Establish a control program for wild hogs that is safe, humane and complies with all regulations regarding disease concerns.

Performance Standards (wild hogs): Wild hogs are brought to a population level that limits their impact from rooting on groundcover vegetation and trails.

The control of all invasive plants to a maintenance level (< 5%) has not yet been established. Exotic control has been conducted throughout the last ten-year period but the extent of the invasives present on the site, especially the north side, is vast. The treatment of exotic plants is on-going. A grant was obtained from the Natural Resources Conservation Service's Wildlife Habitat Incentive Program (WHIP) to address issues on the north side of the park. These funds were used to mechanically remove Brazilian pepper and to treat exotic grasses such as Guineagrass and cogongrass. Additionally, monies were used to plant a variety of native species such as live oak, dahoon holly wax myrtle, gallberry and a variety of grasses.

Lee County currently funds a hog trapper to remove feral hogs from county parks and preserves including CRP. Currently, this is the only method of control for this invasive, exotic species.

B. Stewardship Unit Descriptions

CRP has been divided into eighteen units to better organize and achieve stewardship goals (Table 11). Acreages were calculated within ArcMap 9.2. Due to rounding values up or down, these numbers are close approximations. Parking lots and entrance roads are not included within any stewardship unit. Figure 22 delineates the stewardship units that were created based on existing trails, roads, ditches, berms, stewardship needs and plant communities. Figure 23 shows these units superimposed on the eleven plant communities found within CRP (refer to “Natural Plant Community” section for descriptions of these land cover types). Many of the easements associated with CRP (discussed in the “Legal Obligations and Constraints” section of this document) cross the boundary lines of the delineated stewardship units. A map showing the spatial relationship of the stewardship units and easements is provided in Appendix G.

Prescribed burns may not exactly match the stewardship units shown. Burns will be conducted within pyric communities based on abiotic and biotic conditions present in addition to the availability of the appropriate equipment, staffing level and funding.

Table 11: Stewardship Unit Names and Associated Acreages.

North Side Unit Name	Acres*	♦	South Side Unit Name	Acres*
Fichter's Creek Unit	41.86	♦	Unit A	45.27
Unit 1	28.63	♦	Unit B	25.56
Unit 2	39.01	♦	Unit C	51.11
Unit 3	14.59	♦	Unit D	29.79
Unit 4	57.68	♦	Unit E	2.90
Unit 5	63.15	♦	Unit F	29.62
Unit 6	63.39	♦	Unit G	57.00
Unit 7	102.25	♦	Unit H	32.07
Unit 8	58.47	♦	Unit I	12.76

** Due to rounding values up or down, these numbers are close approximations.
Entrance roads and parking lots are not included in these units.*

Caloosahatchee Regional Park: Stewardship Units

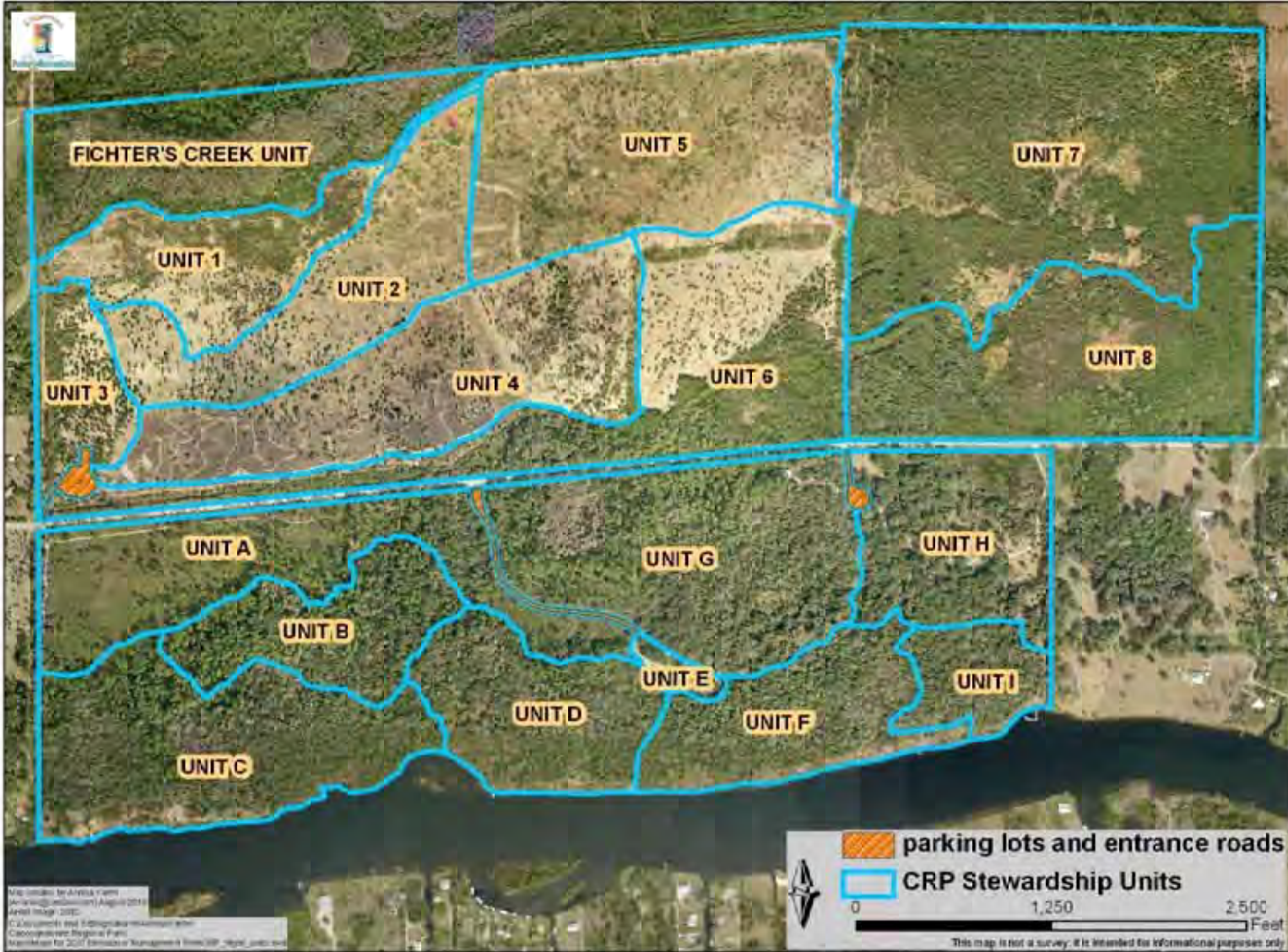


Figure 22: Stewardship Units within CRP.

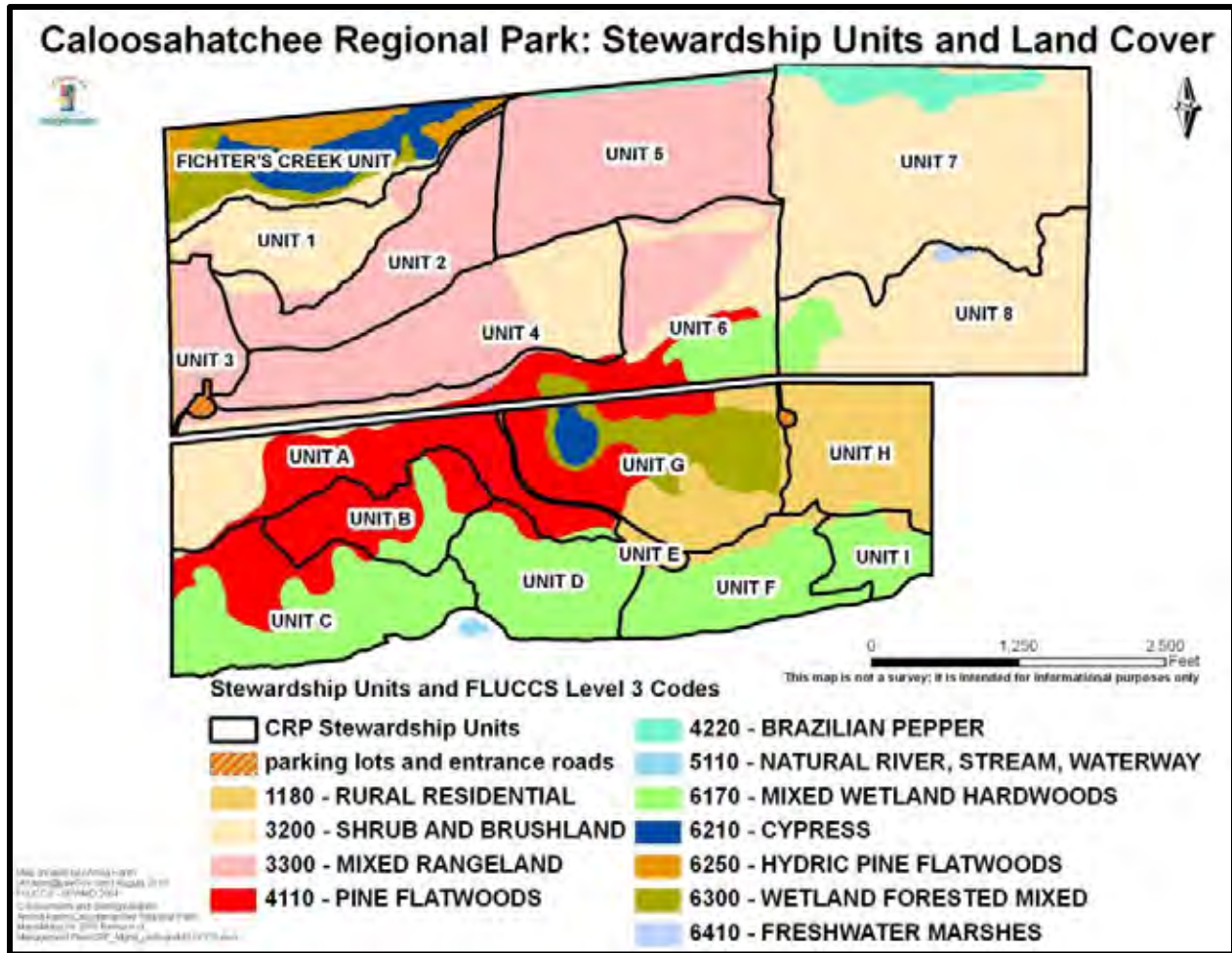


Figure 23: Stewardship Units and Land Cover Types within CRP.

Stewardship activities on all of these units will focus on the control of invasive, exotic plants and animals, prescribed fires where appropriate and restoration (planting of native flora) when needed. The protection of listed plants and animals and the habitats in which they live will be the guiding principle of these activities. The following paragraphs describe each stewardship unit at CRP.

- Fichter's Creek Unit (approximately 41.86 acres):** The Fichter's Creek stewardship unit is located on the extreme northwest corner of the site and bounded on the west and north by the park's boundary lines. Portions of the mountain bike and equestrian trails constitute the southern/ eastern boundary of the unit; otherwise, this unit contains no public access trails. As the name suggests, Fichter's Creek and the associated wetlands are located within this unit. The creek runs from a northeast to southwest direction through the unit. The Fichter's Creek stewardship unit is comprised of primarily of wetlands (FLUCCS 6210, 6250 and 6300). A small area of uplands (FLUCCS 3200) exists on the southern portion of this unit. Wabasso Sand, Pineda Fine Sand (depressional), Copeland Sandy Loam (depressional) and Boca Fine Sands underlie this portion of the site.

As a requirement of LCDNR obtaining the required permits from the SFWMD (Application Number 090504-3; Permit Number: 36-03165-P) to go forward with the Fichter's Creek Restoration Project, the following conditions will be placed on the Fichter's Creek Stewardship Unit for the remainder of the lease period (Appendix A; Lease No. 3698) between TIITF and Lee County.

Lee County agrees not to undertake or authorize any activity on or use of the Fichter's Creek stewardship unit that is inconsistent with the following language. Without limiting the generality of the foregoing, the following activities and uses are expressly prohibited within this unit:

- (a) Constructing or placing buildings, roads, signs, billboards or other advertising, utilities or other structures on or above the ground.
- (b) Dumping or placing soil or other substance or material as landfill or dumping or placing of trash, waste or unsightly or offensive materials.
- (c) Removing, trimming, or destroying native trees, shrubs or other vegetation within the stewardship unit. All nonnative species, including those identified by FLEPPC, are exempt from this requirement.
- (d) Excavating, dredging or removing loam, peat, gravel, soil, rock or other material substances in such a manner as to affect the surface.
- (e) Surface use, except for purposes that permit the land or water area to remain predominantly in its natural condition.
- (f) Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation or fish and wildlife habitat preservation.
- (g) Acts or uses detrimental to such retention of land or water areas.
- (h) Acts or uses detrimental to the preservation of the structural integrity or physical appearance of sites or properties of historical, architectural, archaeological or cultural significance.

The portions of the mountain bike and equestrian trails that constitute the southern/eastern boundary of the Fichter's Creek stewardship unit will be maintained for the protection natural resources and the safety of the public. Nonnative trees, shrubs and other vegetation will be treated and/ or removed dependent on funding and staffing availability. Native trees will be pruned to the standards of the American National Standards Institute (ANSI) and as specified within the LCPR Operations Manual. While trail maintenance may be necessary from time to time, these activities and the trail itself will not impact the wetlands (FLUCCS 6210, 6250 and 6300) within the unit.

- Unit 1 (approximately 28.63 acres): The Unit 1 stewardship unit is located on the northwest corner of CRP and is bounded on the north by the Fichter's Creek stewardship unit. A majority of the southern/ eastern boundary of Unit 1 is an equestrian trail; the remainder of the southern boundary is a mowed line. The western boundary of Unit 1 is the western boundary of CRP. This stewardship unit is comprised of rangelands (FLUCCS 3200 and 3300) and Caloosa Fine Sand (dredge spoil) underlies this portion of CRP. In addition to the equestrian trails that form the boundaries of this stewardship unit, a portion of the site's mountain bike trails are within this unit.

The dry prairie (FLUCCS 3200) portion of this stewardship unit will be impacted by the Fichter's Creek Restoration Project. A goal of this project is to restore the appropriate hydroperiod and water quality within Fichter's Creek to maintain a functioning ecosystem. Additional benefits include alleviating risks of the flooding of neighboring properties in the vicinity of Fichter's Creek. An approximately 3.2 acre lake and three dry detention areas totaling approximately 7.1 acres associated with this endeavor are projected to be created within the Unit 1 stewardship unit. To aid in the establishment of the native flora that may be planted during the Fichter's Creek Restoration Project, this unit will not be burned until FY 2015/2016. Figure 24 shows the approximate locations of the components of the Fichter's Creek Project and Appendix J provides greater detail about the project.

As of the drafting of this Land Stewardship Plan, LCDNR was in the process of acquiring all required permits and coordinating with adjacent landowners to gain necessary authorization to move forward with this project.

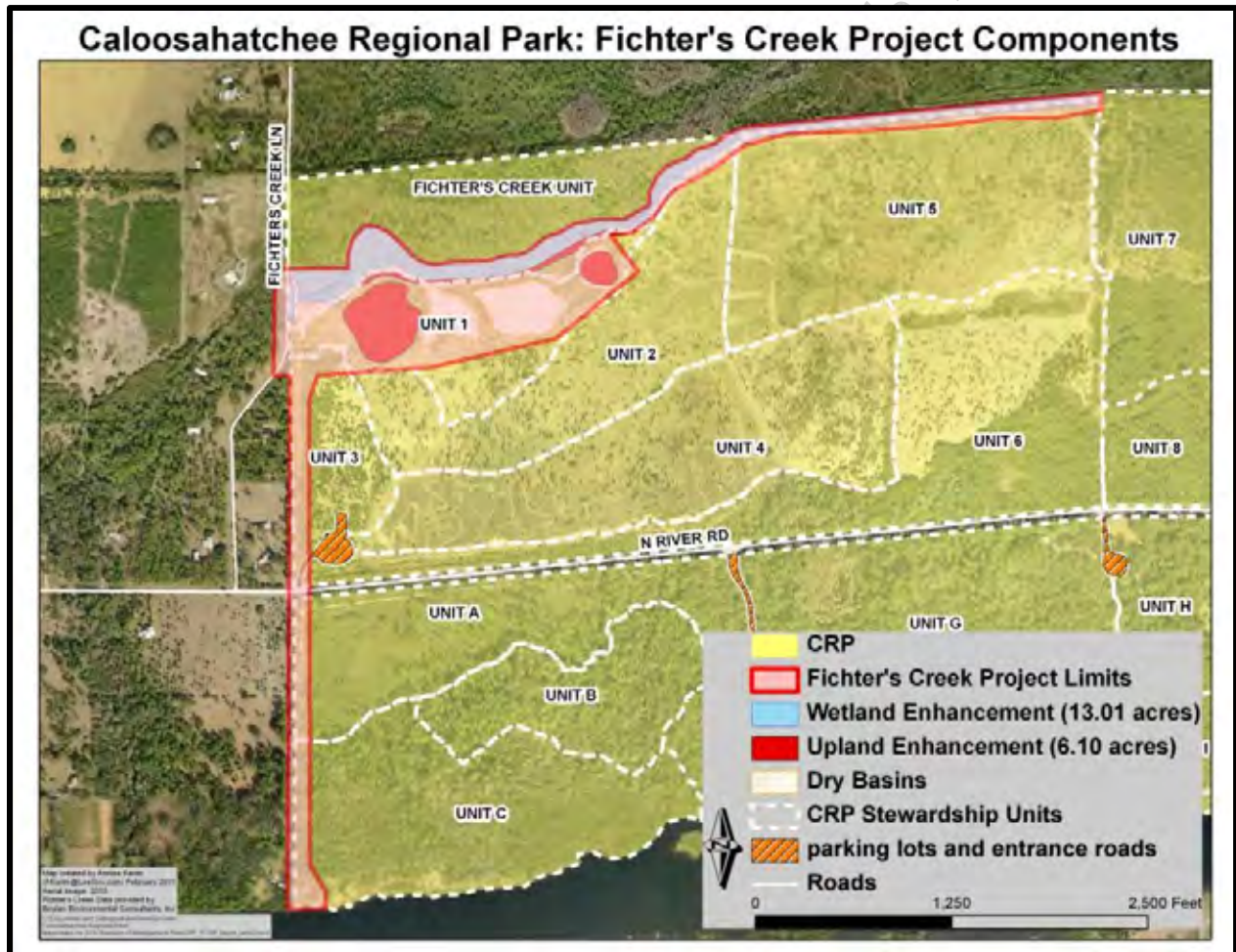


Figure 24: Fichter's Creek Project Limits, Wetland Enhancement Area and Upland Enhancement Area.

Fichter's Creek Restoration
Section 18, Township 43 South, Range 27 East
Lee County, Florida

Restoration, Maintenance, and Monitoring Plan

South Florida Water Management District
Application No.: *090504-3*

U.S. Army Corps of Engineers
Application No.: *SAJ-2009-01712 (NW-CJE)*

September 2009
Revised August 2010
Revised July 2011

INTRODUCTION

Restoration work for the Fichter's Creek Restoration project will occur within and immediately adjacent to the Caloosahatchee Regional Park site. The Park site is located within Section 18, Township 43, South; and Range 27, East; in Lee County. More specifically, the park site is located north of North River Road and east of Fichter's Creek Lane. A Project Location Map (Exhibit A).

The proposed project is for the restoration and storm water management of Fichter's Creek, within and adjacent to Caloosahatchee Regional Park. The restoration and storm water management of Fichter's Creek will include:

- Elevating a portion of Fichter's Creek Lane and replacing the existing Fichter's Creek Lane Bridge where it crosses the Creek with a 6'x10' box culvert and concrete spillway.
- Construction of a lake/aquascape and dry detention ponds, including control structures, within the Caloosahatchee Regional Park.
- Replacement of existing dilapidated outfall pipes along the northern portion of the Park.
- Regrading the existing manmade ditch to create a filter marsh, replacing the existing 36" culvert in the manmade ditch at North River Road (C.R. 78) with a water control structure and double 36" culvert pipes under C.R. 78.
- Regrading the berm between the proposed filter marsh and Fichter's Creek Lane to the west and filling existing breaches.
- Creating a meandering swale connection, to divert part of the flow from the existing manmade ditch, where it ties into the Caloosahatchee River.
- Reconstruction of existing berms to block breaches between the Park, the Creek and the filter marsh.

The purpose of the project is to provide hydrologic restoration through water quality treatment and flood protection. Currently, there is reason for health and safety concerns for the areas within and immediately adjacent to the proposed restoration work. Furthermore, the restoration work should provide ecological restoration and improved water quality through regulated hydro-periods, removal of exotics, and installation of native plants which provide treatment within the created filter marsh.

RESTORATION PLAN

The restoration areas will correspond to the habitats depicted on the Restoration Plan Map (Exhibit B), also described below. The areas to be restored are currently owned by the State and managed by Lee County Parks and Recreation. Perpetual maintenance of the restoration areas is therefore evident, by the issuance of an Environmental Resource Permit.

A. Initial Site Preparation

The location of the detention and lake areas and the limits of mechanical removal will be staked, survey located, and a point map will be prepared. An updated protected species survey will be conducted within the restoration area, four weeks prior to restoration work. This survey will ensure the protection of any listed species inhabiting these areas.

B. Hydrologic Restoration Work

The following work will be conducted as part of the restoration plan:

- **Lake and Dry Detention**
 - Construction of a lake and dry detention ponds, including control structures, within the Caloosahatchee Regional Park.
 - Replace the dillapidated outfall pipes currently in this area, within existing berms.
 - Providing hydrologic connection between Creek and lake/detention areas.
 - Hydrate the drained cypress habitat contained within the detention area.
 - Rework existing berms to block breaches between the Park and the Creek and ditch; berms will not be removed as part of this project, as they are an amenity to the Park.
 - Plant the lake/aquascape area with native species according to the Aquascape Planting Plan (Exhibit C).
- **Western Ditch**
 - Regrade the existing manmade ditch according to site plan and cross-section elevations, to create a filter marsh.
 - Replace the existing single 36" culvert in the manmade ditch at North River Road with a water control structure and double 36" culvert pipes under C.R.78.
 - Regrade the berm between the ditch and Fichter's Creek Lane to the west and fill existing breaches.
 - Place rip-rap within the ditch, adjacent to the replaced pipes on the south side of C.R. 78.
 - Plant this area with native species according to the Western Ditch Planting Plan (Exhibit D).
- **Fichter's Creek Lane Bridge**
 - Elevate a portion of Fichter's Creek Lane and replace the existing Fichter's Creek Lane Bridge where it crosses the Creek with a 6'x10' box culvert and concrete spillway.
 - Replant area following culvert installation, with native species as necessary to promote natural recruitment.
- **Bypass Swale**
 - Create a meandering swale connection, to divert part of the flow from the existing manmade ditch, where it ties into the Caloosahatchee River.
 - Swale will meander to avoid impacts to existing native mature vegetation.

C. Ecological Restoration Work

Exotics will be killed in a manner consistent with current exotic removal practices, while ensuring that native plants are left unharmed and the soil is left as undisturbed as possible. It is recommended that any use of herbicides be applied by a licensed herbicide applicator, utilizing approved methods, and best management practices. Exotic debris will be removed from the proposed enhancement areas; no stacking, tee-peeing, log cabin, or girdling methods will be utilized, unless otherwise approved by South Florida Water Management District (SFWMD) staff.

- Stream Swamp (<25% Exotics) (FLUCFCS 615E1) (1.20± acres)
This area is the actual creek that will be enhanced through selective exotic removal.
- Wetland Forested Mixed (>75% Exotics) (FLUCFCS 630E4) (11.90± acres)
This area is dominated by Brazilian pepper (*Schinus terebinthifolius*), but does contain scattered native trees including cabbage palms, red-maple, laurel oak, and slash pine.

Due to the nature of this restoration project, mechanical removal will be permitted; however, coordination with SFWMD staff must be made prior to any clearing. The areas to be mechanically cleared will be staked and any native trees will be flagged. Mechanical clearing will only occur within the hydric Brazilian pepper wetland, as approved. Overall native tree, sub-canopy, and groundcover coverage shall meet the 80% native coverage requirement at the end of two years, or additional plantings will be provided. If plantings are necessary, the installed plants will be consistent with native species currently found in the surrounding habitat onsite. Table 1 provides a list of species identified previously in this area, which may be utilized for supplemental planting as appropriate. An estimated total number of plantings have also been provided in the table below.

TABLE 1. WETLAND FORESTED MIXED WETLAND PLANTINGS, SPECIES, SIZE, AND SPACING

Common Name	Scientific Name	Minimum Size or Better	Spacing	Notes
Trees*				
Laurel Oak	<i>Quercus laurifolia</i>	8' tall	12-15' on center	Spacing will consider the location of existing native vegetation, approximately 12-15' spacing to allow for natural recruitment and long term growth. Trees to be planted within the wetland can be transplanted from the Park site as practicable.
Slash Pine	<i>Pinus elliottii</i>	8' tall	12-15' on center	
Cypress	<i>Taxodium distichum</i>	8' tall	12-15' on center	
Cabbage Palm	<i>Sabal palmetto</i>	8' tall	12-15' on center	
Red Maple	<i>Acer rubrum</i>	8' tall	12-15' on center	
Dahoon Holly	<i>Ilex cassine</i>	8' tall	12-15' on center	
Sweet Bay Magnolia	<i>Magnolia virginiana</i>	8' tall	12-15' on center	
Red Mulberry	<i>Morus rubra</i>	8' tall	12-15' on center	
Pop Ash	<i>Fraxinus caroliniana</i>	8' tall	12-15' on center	
Pond Apple	<i>Anona glabra</i>	8' tall	12-15' on center	
Total estimated trees based on planting area of 11.81± acres :				~3,600

*Species type and number may vary depending on availability. For additional tree species, see the Caloosahatchee Regional Park Management Plan.

- Lake/Aquascape (4.04 ± acres)
Once the aquascape area has been prepared; this area will be planted with native species. The Aquascape Planting Plan depicts in more detail the location of the planting zones within the 4.04± acres of created aquascape (Exhibit C).
 - Zone A will be planted between elevation 10.5' NAVD and 11.5' NAVD.
 - Zone B will be planted between elevation 11.5' NAVD and 12.50' NAVD.
 - Zone C will be planted between elevation 12.5' NAVD and 13.50' NAVD.
 - Above elevation 13.50' NAVD to the top-of-bank, approximately 16.50' NAVD, bahia sod (*Paspalum notatum*) will be installed and includes approximately 27,379 ft².

The plantings will be clustered to promote their establishment and survival. Table 2 identifies the plant species to be utilized in Zone A, B, and C, also included as part of Exhibit C.

TABLE 2. AQUASCAPE PLANTINGS BY ZONE

Zone A Plantings				
Elevation of 10.5' NAVD to 11.5' NAVD				
Common Name	Scientific Name	Size	Spacing	Quantity
Arrowhead	<i>Sagittaria lancifolia</i>	2" liners or bare root.	3' center	2,087
Coastal Spikerush	<i>Eleocharis cellulosa</i>	2" liners or bare root.	3' center	2,087
Fireflag	<i>Thalia geniculata</i>	2" liners or bare root.	3' center	2,087
Giant Bulrush	<i>Scirpus californicus</i>	2" liners or bare root.	3' center	2,087
Maidencane	<i>Panicum hemotomon</i>	2" liners or bare root.	3' center	2,087
Pickerelweed	<i>Pontederia cordata</i>	2" liners or bare root.	3' center	2,087
Spikerush	<i>Eleocharis interstincta</i>	2" liners or bare root.	3' center	2,087
Total estimated plants based on planting area of 131,463ft²:				14,609

*Zone B Plantings				
Elevation of 11.5' NAVD to 12.5' NAVD				
Common Name	Scientific Name	Size	Spacing	Quantity
Maidencane	<i>Panicum hemitomom</i>	2" liners or bare root.	3' center	156
Pickerelweed	<i>Pontederia cordata</i>	2" liners or bare root.	3' center	156
Spikerush	<i>Eleocharis interstincta</i>	2" liners or bare root.	3' center	156
Muhly Grass	<i>Muhlenbergia expansa</i>	2" liners or bare root.	3' center	156
Fakahatchee Grass	<i>Tripsacum dactyloides</i>	2" liners or bare root.	3' center	156
Sand Cord Grass	<i>Spartina bakeri</i>	2" liners or bare root.	3' center	156
Total estimated plants based on planting area of 8,447ft²:				936

Zone C Plantings				
Elevation of 12.5' NAVD to 13.50' NAVD				
Common Name	Scientific Name	Size	Spacing	Quantity
Muhly Grass	<i>Muhlenbergia expansa</i>	2" liners or bare root.	3' center	321
Fakahatchee Grass	<i>Tripsacum dactyloides</i>	2" liners or bare root.	3' center	321
Sand Cord Grass	<i>Spartina bakeri</i>	2" liners or bare root.	3' center	321
Total estimated plants based on planting area of 8,674ft²:				963

*Plants within Zone B will be located based on elevation and species preference for water depth. The planting zones are preliminary and may be modified based on field conditions.

- **Berms (FLUCFCS 747) (1.16± acres)**
Exotics along the berm in the northern portion of the park will be removed by hand to ensure the berm remains intact. Gopher tortoises (*Gopherus polyphemus*) were previously identified within this portion of the property. A buffer meeting FWC guidelines will be provided around all gopher tortoise burrows to ensure equipment does not impact these areas. Access and staging areas will be limited to ensure preservation of existing native plants and gopher tortoise burrows. Following the exotic removal along the berm, native trees will be planted, outside of the gopher tortoise buffer areas. If practicable, trees removed as part of the restoration work will be transplanted to the berm. However, if this is not feasible, supplemental tree plantings will be installed according to Table 3. The exact number of tree plantings is unknown at this time; however, it is estimated to be 100 trees. Since this community contains foraging habitat for Gopher tortoise, the requirement for 80% coverage of native species at all strata would not necessarily be appropriate. Therefore, the vegetation will be evaluated after two years of natural recruitment to determine the native species coverage and planting requirements of each stratum.

TABLE 3. BERM PLANTINGS, SPECIES, SIZE, AND SPACING

Common Name	Scientific Name	Minimum Size or Better	Spacing	Notes
Trees*				Spacing will be based on location of existing native vegetation, approximately 12-15' spacing to allow for natural recruitment and long term growth. Trees to be planted within berm can be transplanted from the Park site as practicable.
Live Oak	<i>Quercus virginiana</i>	8' tall	12-15' on center	
Laurel Oak	<i>Quercus laurifolia</i>	8' tall	12-15' on center	
Slash Pine	<i>Pinus elliotii</i>	8' tall	12-15' on center	
Cabbage Palm	<i>Sabal palmetto</i>	8' tall	12-15' on center	
Gumbo Limbo	<i>Bursera simaruba</i>	8' tall	12-15' on center	
Stopper(s)	<i>Eugenia</i> spp.	8' tall	12-15' on center	
Chapman's Oak	<i>Quercus chapmanii</i>	8' tall	12-15' on center	
Persimmon	<i>Diospyros virginiana</i>	8' tall	12-15' on center	
American elm	<i>Ulmus americana</i>	8' tall	12-15' on center	
Pop Ash	<i>Fraxinus caroliniana</i>	8' tall	12-15' on center	
Total estimated trees:				

- **Cypress, Drained (FLUCFCS 6215 E2) (0.91± acres)**
The habitat identified as Cypress, Drained, will be incorporated into the on-site detention area. This area currently is dominated in the groundcover by invasive exotic species, such as cogon grass (*Imperata cylindrical*) and guinea grass (*Panicum maximum*); with

various other non-native species making up the remaining cover. During the initial establishment of the detention area, these species will be treated with an approved herbicide, in order to promote the establishment of native species in this stratum. Subsequent hand spraying will occur as necessary to ensure exotic coverage remains at less than thirty percent coverage. As part of the hydrologic restoration proposed on-site, this area will be incorporated into the detention area providing water treatment and attenuation in a drained portion of the site. No supplemental plantings are proposed.

- Ditch (FLUCFCS 510) and Bypass Swale (2.37 ± acres)
Once the culverts and control structure have been installed, and the ditch re-graded, this area will be planted with native species. The Western Ditch Planting Plan depicts in more detail the location of the planting zones within the 2.09± acres of created filter marsh (Exhibit D).
 - Zone A will be planted between elevation 8.0' NAVD and 10.5' NAVD.
 - Zone B will be planted between elevation 10.5' NAVD and 11.5' NAVD.
 - Zone C will be planted between elevation 11.5' NAVD and 12.75' NAVD.
 - Above elevation 12.75' NAVD to the top-of-bank, approximately 14.75' NAVD, bahia sod (*Paspalum notatum*) will be installed and includes approximately 18,879 ft².

The plantings will be clustered to promote their establishment and survival. Plantings will be installed in combination with perforated biodegradable erosion control fabric. The fabric used for this application, will be consistent with the fabric utilized for other successful Lee County restoration projects. Table 4 identifies the plant species to be utilized in Zone A, B, and C, also included as part of Exhibit D.

TABLE 4. WESTERN DITCH PLANTINGS BY ZONE

Zone A Plantings				
Elevation of 8.0' NAVD to 10.5' NAVD				
Common Name	Scientific Name	Size	Spacing	Quantity
Arrowhead	<i>Sagittaria lancifolia</i>	2" liners or bare root.	1' center	2,722
Coastal Spikerush	<i>Eleocharis cellulosa</i>	2" liners or bare root.	1' center	2,722
Fireflag	<i>Thalia geniculata</i>	2" liners or bare root.	1' center	2,722
Giant Bulrush	<i>Scirpus californicus</i>	2" liners or bare root.	1' center	2,722
Jointed Spikerush	<i>Eleocharis interstincta</i>	2" liners or bare root.	1' center	2,722
Maidencane	<i>Panicum hemitomon</i>	2" liners or bare root.	1' center	2,722
Total estimated plants based on planting area of 32,663 ft²:				16,332

Zone B Plantings				
Elevation of 10.5' NAVD to 11.5' NAVD				
Common Name	Scientific Name	Size	Spacing	Quantity
Arrowhead	<i>Sagittaria lancifolia</i>	2" liners or bare root.	1' center	1,766
Pickerelweed	<i>Pontederia cordata</i>	2" liners or bare root.	1' center	1,766
Spikerush	<i>Eleocharis interstincta</i>	2" liners or bare root.	1' center	1,766
Total estimated plants based on planting area of 10,596 ft²:				5,298

Zone C Plantings				
Elevation of 11.5' NAVD to 12.75' NAVD				
Common Name	Scientific Name	Size	Spacing	Quantity
Muhly Grass	<i>Muhlenbergia expansa</i>	2" liners or bare root.	1' center	2,225
Fakahatchee Grass	<i>Tripsacum dactyloides</i>	2" liners or bare root.	1' center	2,225
Sand Cord Grass	<i>Spartina bakeri</i>	2" liners or bare root.	1' center	2,225
Total estimated plants based on planting area of 13,350 ft²:				6,675

The planting zones are preliminary and may be modified based on field conditions. Erosion control fabric will be installed in combination with plantings.

The bypass swale on the southern end of the ditch will meander and avoid impacts to existing mature vegetation. This area will be planted with the same or similar species utilized in Zone A of the Western Ditch Planting Plan. Erosion control fabric will also be installed in this location, in combination with the plantings to ensure the establishment.

- **Temporary Impact Areas (0.09± Acres)**

Approximately 0.09± acres of Streams and Lake Swamps will be temporarily impacted as a result of the proposed restoration work. An additional, 0.09± acres of temporary impacts are proposed within the Brazilian pepper wetland, which currently has a planting plan. Due to the existing mature vegetation adjacent to the work areas (FLUCFCS 615E1), trimming may be necessary to allow for equipment access and installation. As a result, supplemental plantings may be necessary following the completion of the restoration work in these areas. Plantings will meet minimum shrub or tree size requirements and will be planted to enhance the trimmed areas. The exact number of plants will be determined subsequent to the hydrologic restoration work. Spacing will mimic that of the existing native vegetation, which likely include tree spacing approximately 12 to 15 feet apart, while shrubs will be spaced approximately 3 to 6 feet apart. The following table includes potential supplemental plant species for this area and species will be chosen based on hydrology of the area to be planted. Native tree, shrub, and groundcover species cover will meet 80% coverage at the end of two years, or additional plantings will be installed. If plantings are necessary, the species planted will mimic the native species which already exist on-site.

TABLE 5. TEMPORARY IMPACTS SUPPLEMENTAL PLANTINGS (FLUCFCS 615E1)

Common Name	Scientific Name	Minimum Size or Better	Notes
Trees*			Spacing will be based on location of existing native vegetation, approximately 12-15' spacing to allow for natural recruitment and long term growth. Trees to be planted within the wetland can be transplanted from the Park site as practicable.
Laurel Oak	<i>Quercus laurifolia</i>	8' tall	
Slash Pine	<i>Pinus elliottii</i>	8' tall	
Cypress	<i>Taxodium distichum</i>	8' tall	
Cabbage Palm	<i>Sabal palmetto</i>	8' tall	
Red Maple	<i>Acer rubrum</i>	8' tall	
Dahoon Holly	<i>Ilex cassine</i>	8' tall	
Sweet Bay Magnolia	<i>Magnolia virginiana</i>	8' tall	
Gumbo Limbo	<i>Bursera simaruba</i>	8' tall	
Stopper(s)	<i>Eugenia spp.</i>	8' tall	
Chapman's Oak	<i>Quercus chapmanii</i>	8' tall	
Persimmon	<i>Diospyros virginiana</i>	8' tall	
American elm	<i>Ulmus americana</i>	8' tall	
Total estimated trees:			15
Shrubs*			Spacing will be based on location of existing native vegetation, approximately 3-6' spacing to allow for natural recruitment and long term growth. Shrubs will be installed as necessary.
Saltbush	<i>Baccharis halimifolia</i>	1 gallon	
Cordgrass	<i>Spartina bakeri</i>	1 gallon	
Fakahatchee Grass	<i>Tripsacum dactyloides</i>	1 gallon	
Wax Myrtle	<i>Merica cerifera</i>	1 gallon	
Total estimated shrubs:			20

*Substitutes to the above plant lists may occur after review and approval by SFWMD staff. All planted material will be watered as necessary, to ensure survivability.

MAINTENANCE PLAN

The intent of this plan is to provide assurance that the designated restoration areas are maintained free of exotic plants in perpetuity. This is achieved by establishing a scheduled program to maintain the restoration area free of exotic plants (as defined by the latest exotic plant list published by the Florida Exotic Pest Plant Council). The exotic and nuisance species should constitute no more than five percent of total cover at all times. In addition, at the end of the first annual monitoring period, the restoration areas shall contain an 80% survival of planted vegetation. The 80% survival rate shall be maintained throughout the remainder of the monitoring program. At the end of the five years of monitoring, the mitigation areas shall contain an 80% survival of planted vegetation, with 80% coverage of desirable obligate and facultative wetland species.

MONITORING PLAN

The objective of the monitoring will be to determine the health of the designated restoration areas in terms of vegetation composition. Monitoring will include a baseline, time-zero and

annual monitoring for five years. A report will be prepared and submitted to the SFWMD and Corps documenting the following parameters:

- Restoration area condition documented through panoramic photographs
- Vegetation composition and percent coverage along a transect
- Percent cover of nuisance and exotic plant species
- Wildlife observations
- Water level observations and rainfall data

The report will evaluate the success of the restoration and maintenance efforts, activities conducted to date, and any remedial activities that are necessary to ensure the success of the restoration areas. The attached Monitoring Map identifies the location of the proposed transects and photopoints, which will be utilized during the above monitoring events (Exhibit E). An approximate monitoring and maintenance schedule is provided in Table 6, below.

Table 6. Approximate Monitoring and Maintenance Schedule

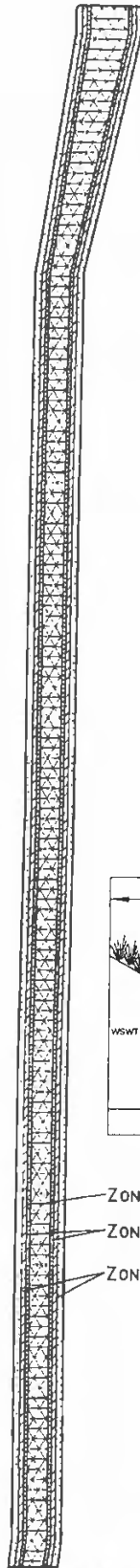
Completion Date	Activity
September 2011	Baseline Monitoring report
February 2012	Initial Exotic Removal
March 2012	Time Zero Monitoring Report
February 2013	Maintenance Activity
March 2013	First Annual Monitoring Report
February 2014	Maintenance Activity
March 2014	Second Annual Monitoring Report
February 2015	Maintenance Activity
March 2015	Third Annual Monitoring Report
February 2016	Maintenance Activity
March 2016	Fourth Annual Monitoring Report
February 2017	Maintenance Activity
March 2017	Fifth Annual Monitoring Report

**Adjustments to the above schedule can be made with SFWMD approval.*

Please see the approved work schedule attached as Exhibit 3.8.



Scale 1" = 100'



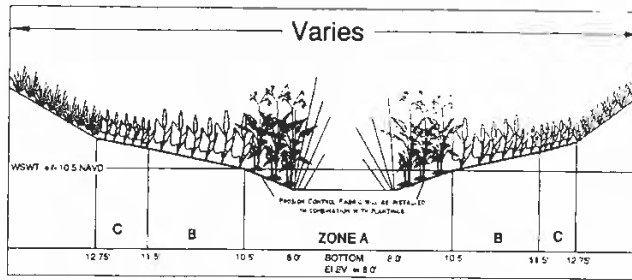
Zone A Plantings				
Elevation of 10.0' NAVD to 10.8' NAVD				
Common Name	Scientific Name	Size	Spacing	Quantity
Arrowweed	<i>Sagittaria latifolia</i>	2" liners or bare root	1' center	2,722
Common Spikerush	<i>Eleocharis cylindrica</i>	2" liners or bare root	1' center	2,722
Parrot	<i>Phalaris geniculata</i>	2" liners or bare root	1' center	2,722
Giant Bulrush	<i>Scirpus californicus</i>	2" liners or bare root	1' center	2,722
Jointed Spikerush	<i>Eleocharis interstincta</i>	2" liners or bare root	1' center	2,722
Mudcrucur	<i>Panicum hamiltonianum</i>	2" liners or bare root	1' center	2,722
Total estimated plants based on planting area of 32,663 sq ft				16,212

Zone B Plantings				
Elevation of 10.5' NAVD to 11.5' NAVD				
Common Name	Scientific Name	Size	Spacing	Quantity
Arrowweed	<i>Sagittaria latifolia</i>	2" liners or bare root	1' center	1,766
Pickweed	<i>Pontederica cordata</i>	2" liners or bare root	1' center	1,766
Spikerush	<i>Eleocharis interstincta</i>	2" liners or bare root	1' center	1,766
Total estimated plants based on planting area of 10,596 sq ft				5,298

Zone C Plantings				
Elevation of 11.5' NAVD to 12.75' NAVD				
Common Name	Scientific Name	Size	Spacing	Quantity
Mud Grass	<i>Vallisneria spiralis</i>	2" liners or bare root	1' center	2,224
Fakahatchee Grass	<i>Tripsacum daniellii</i>	2" liners or bare root	1' center	2,225
Sand Cord Grass	<i>Spartina bakeri</i>	2" liners or bare root	1' center	2,224
Total estimated plants based on planting area of 13,350 sq ft				6,674

The area between elevation 12.75' and 14.75' NAVD, will be planted with Bahua sod (*Paspalum notatum*), approximately 18,879 sq ft

The planting areas are preliminary and may change based on field conditions. Erosion control fabric will be installed in combination with plantings.



TYPICAL PLANTING AREA
NTS

ZONE A
ZONE B
ZONE C

LEGEND

- ZONE "A" PLANTINGS(32,663± Sq Ft)
- ZONE "B" PLANTINGS(10,596± Sq Ft)
- ZONE "C" PLANTINGS(13,350± Sq Ft)
- BAHUA SOD PLANTING

18/03/2008 09:57:77 Project: C:\Users\jboy\Documents\Projects\2008\2008-07-11\F\JUL 08 2008 8:11 am Planting by Christine

Drawn By: BKM Date: 4/8/09
 Job Number: 2008-77
 Scale: 1" = 100'
 County: Lee
 11000 Major Parkway, Suite 470, Ft. Lee, VA 22041 (570) 414-4471
 18/43S/27E

Category: Planting
 Scale: 1" = 100'
 County: Lee

Fichter's Creek Restoration
Western Ditch Planting Plan

Page	Sheet

South Florida Water Management District

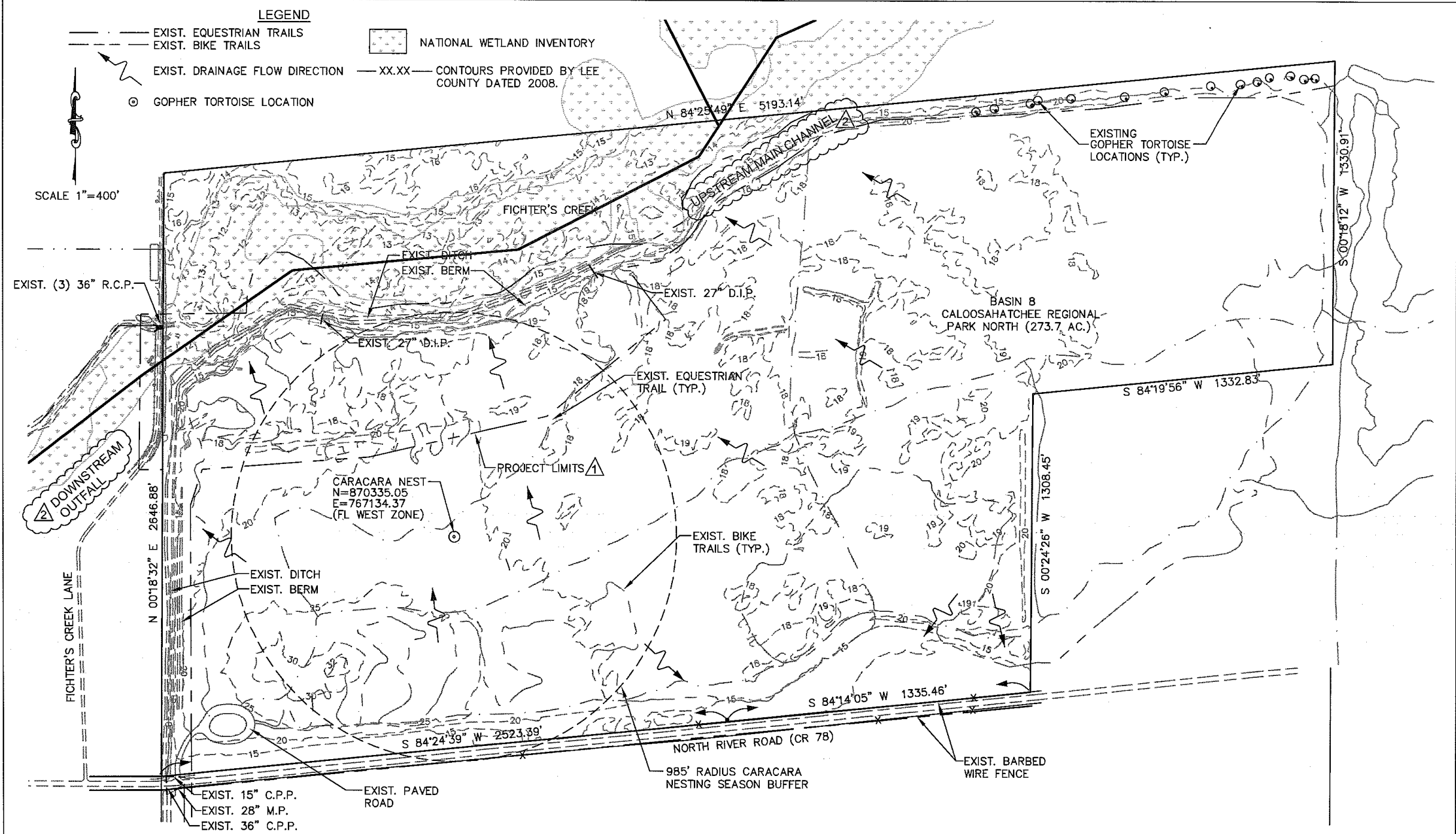
Work Schedule Requirements

Application No : 090504-3

Page 1 of 1

Mitigation Plan ID: FICHTER'S CREEK

Activity	Due Date
SUBMIT BASELINE MONITORING REPORT	01-NOV-11
EXOTIC VEGETATION REMOVAL	01-FEB-12
SUBMIT TIME ZERO MONITORING REPORT	01-MAR-12
SUBMIT FIRST MONITORING REPORT	01-MAR-13
SUBMIT SECOND MONITORING REPORT	01-MAR-14
SUBMIT THIRD MONITORING REPORT	01-MAR-15
SUBMIT FOURTH MONITORING REPORT	01-MAR-16
SUBMIT FIFTH MONITORING REPORT	01-MAR-17



REV.	DATE	DESCRIPTION	BY
6-09		REVISIONS PER SFWMD COMMENTS	
8-11		REVISIONS PER SFWMD COMMENTS	



community engineering services, inc.
civil engineering • surveying • project management
 2740 Oak Ridge Court, Suite 301
 Fort Myers, Florida 33901
 Telephone (239) 936-9777 Fax (239) 936-0064
 EB-0006613 LB-6572

FICHTER'S CREEK
 RESTORATION
 CN-08-03
 FOR
 LEE CO. BOARD OF COUNTY COMMISSIONERS
 1500 MONROE STREET
 FORT MYERS, FL. 33901

EXISTING CONDITIONS PLAN

SHEET NO.
 5A

DATE PLOTTED: 01/24/12 11:45 AM PROJECT: FICHTER'S CREEK RESTORATION PLAN NO. 08-03 SHEET NO. 5A

STAFF REPORT DISTRIBUTION LIST

FIGHTERS CREEK RESTORATION

Application No: 090504-3

Permit No: 36-03165-P

INTERNAL DISTRIBUTION

- X Carmen Quan, P.E.
- X Justin M.Hojnacki
- X Laura Layman
- X Daniel F. Waters, P.E.
- X ERC Engineering
- X ERC Environmental
- X Fort Myers Backup File
- X Permit File

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- X Agent - Community Engineering Services Inc
- X Env Consultant - Boylan Environmental Consultants Inc
- X Owner - Department Of Environmental Protection

GOVERNMENT AGENCIES

- X Div of Recreation and Park - District 4 - FDEP

OTHER INTERESTED PARTIES

- X Audubon of Florida - Charles Lee

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Maitland FL 32751
chlee2@earthlink.net

From: [Kennedy, Christina](#)
To: [Hubbard, Jennifer](#)
Subject: 36-03165-P-02, Fitchers Creek Restoration update
Date: Wednesday, September 27, 2023 3:57:49 PM
Attachments: [FitchersCreek_ImpactMaps_36-03165-P-02_09182023.pdf](#)

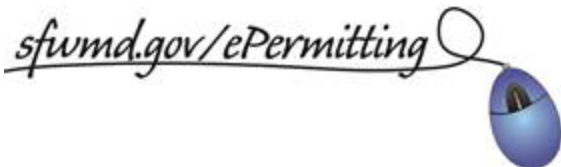
Caution: This email originated from an external source. Be cautious of attachments and links, and do not provide login information. Report suspicious activity to the Service Desk: servicedesk@leegov.com or 533-HELP.

Hello Jennifer,

I was reviewing the permit again for Fitchers Creek and it does not appear that the far east area we looked at where the berm was covered in guinea grass falls within the mitigation area. However the entire wetland (13.01 acres) that borders that berm is part of the mitigation and should be receiving on-going routine maintenance and it needs maintenance for vines especially, as well as any other exotic species. The wetland area that encompasses the required mitigation is shown on the attached map indicated by the little bush symbol but also looks like polka dots since the resolution is so bad. The other area for required mitigation is the restored/enhanced OSW or western ditch. This information was pulled from special condition 15 of the permit.

Have you been able to schedule another exotic treatment, based on what I've found I think that as long as you can get the vines in the wetland treated the project can be placed back into compliance.

Christina Kennedy
Environmental Analyst
Environmental Compliance
Fort Myers Service Center
South Florida Water Management District
239-338-2929 ext. 7717



NOTE:

While the District supports that it is commonplace and convenient to collaborate via email during the pre-application/application process, Permit Applications and Responses to a Request for Additional Information (RAI) submitted via email are not an official submittal (Section 4.4 of Environmental Resource Permit Applicant's Handbook Volume I). For timely and efficient processing of permit applications and RAI responses, please submit online using ePermitting (link above).

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