August 10, 2010 103-89513

Mr. Mike Halpin, Administrator
Florida Department of Environmental Protection
Siting Coordination Office
Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
MS #48
Tallahassee, FL 32399-3000

DEPARTMENT OF
ENVIRONMENTAL PROTECTION
AUG 11 2010
SITING COORDINATION

RE: RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
ORLANDO UTILITIES COMMISSION
POST-CERTIFICATION AMENDMENT TO STANTON ENERGY CENTER
SITE CERTIFICATION PA 81-14
LANDFILL GAS PIPELINE PROJECT

Dear Mr. Halpin:

This correspondence provides the additional information requested by the Florida Department of Environmental Protection (DEP, FDEP, or the Department) concerning the April 16, 2010 request from Golder Associates Inc. on behalf of the Orlando Utilities Commission (OUC) for an amendment to the Stanton Energy Center's (SEC's) Site Certification Application (PA-81-14). The amendment is for the addition of a second landfill gas pipeline that will supply landfill gas from the Orange County Landfill to SEC Units 1 and 2. The additional information is presented in the same sequence as in the request for additional information dated May 17, 2010, with a restatement of each comment followed by our response in bold.

1. It is unclear in your submittal, what (if any) impacts to wetlands there may be due to this project. Please provide all information necessary for a complete Environmental Resource Permit application including the engineering drawings and supporting documentation necessary to demonstrate that any temporary or permanent impacts to wetlands will be avoided or mitigated for. The drawings and documentation shall be signed, sealed and dated by a professional engineer registered in the State of Florida. Refer to Chapter 62-343.900(1)(Section E and C). Also clearly delineate the location of the existing wetlands and surface waters within the corridor on aerial photographs and flag the wetland jurisdictional line for field verification. Include the types of wetlands and surface waters using FLUCCS codes. Refer to Chapter 62-343.900(1)(Section E)(Part III) Florida Administrative Code (F.A.C.).

Response: The proposed landfill gas pipeline has been designed to avoid/minimize impacts to wetlands to the greatest extent practicable, and will comply with the criteria of FDEP General Permit 62-341.453 for Installation, Maintenance, Repair, and Removal of Underground Cable, Conduit, or Pipeline, as well as the U.S. Army Corps of Engineers (USACE) Nationwide Permit 12, Utility Line Activities. A complete environmental resource permit application is provided as Attachment 1.

2. As part of the review for this project, District staff reviewed records of compliance with existing Conditions related to the Environmental Resource Program (ERP). The OUC Conditions of Certification contain several ERP related requirements (i.e. Condition V A.4 and Condition (s) VII G, H, N, O, P). Provide a status of construction completion of the activities authorized to date. At this time the Central District ERP staff has no record of any post-construction documentation submitted that relates to this authorization.

Golder Associates Inc.
5100 W. Lemon Street, Suite 208
Tampa, FL 33609 USA
Tel: (813) 287-1717 Fax: (813) 287-1716 www.golder.com

Response: Each of the referenced Conditions of Certification is included below, with a status of compliance information, including construction completion and any post-construction documentation submitted to the Central District ERP staff:

> Condition V A.4
> Final drainage plans illustrating all stormwater treatment facilities and conveyances for construction phases and ultimate operations for the entire Curtis H. Stanton Energy Center site shall be submitted to the DEP Central District Manager, the Orange County Pollution Control Department, and the SJRWMD or SFWMD as applicable for review and approval prior to construction of any such conveyance or facility. The Department shall indicate its approval or disapproval within 60 days of the submittal. Analysis report of the produced ground samples shall be submitted 30 days before surface water discharge begins.

Compliance Information: Conceptual drainage plans illustrating the stormwater management, treatment facilities, and conveyances for construction phases and ultimate operations for the entire Curtis H. Stanton Energy Center site were submitted to the FDEP Central District during the application process in the May 1981 and subsequent modifications. Effluent from any dewatering activity were kept on site; thus, no surface water discharge took place.

> Condition VII G - Proposed transmission line from the SEC to the Mud Lake transmission line, rail car siding facility, and alternate access road to the SEC
> Construction of the transmission line, rail car siding facility and alternate access road will result in the filling of 5.67 ac. of the herbaceous wetlands and the permanent clearing of 13.19 ac. of forested wetlands. The licensee shall provide mitigation to offset the wetland loss and habitat degradation resulting from the construction of this project. Prior to construction, the licensee shall propose a mitigation plan and shall provide the following information to the DEP Central District Office to allow the Department to review the proposed mitigation plan:
>
> 1. detailed description of each wetland impact area;
> 2. acreage of the type and quality of wetland being impacted at each site;
> 3. narrative, drawings and aerial photographs showing and explaining the proposed mitigation;
>   a. detailed description of the existing conditions at the mitigation area;
>   b. acreage of the proposed mitigation by mitigation and wetland type;
> 4. documentation providing reasonable assurance that the proposed mitigation will be successful.
>
> If the mitigation submittal is deemed by the Department to provide insufficient information for review, additional information requested by the Department shall be submitted. Upon receiving complete information, the Department will assess the mitigation plan within 90 days. If the Department, upon review of the proposed mitigation, determines that the proposed mitigation is inadequate to offset the wetland loss and habitat degradation from this project, the licensee shall propose additional mitigation.

Compliance Information: The rail car siding facility project was approved but was later cancelled by the OUC. It was never constructed. The Mud Lake transmission line and alternate access road construction were permitted as part of the Unit 2 Supplemental Site Certification Application in the early 1990s. The OUC submitted a joint application for works in the waters of Florida (DER Form 17-312.900(1)) for each project to the USACE, the Florida Department of Environmental Regulation (DER) (now known as the Florida Department of Environmental Protection), the Florida Department of Natural Resources (DNR), the South Florida Water Management District (SFWMD), and the St. Johns River Water Management District (SJRWMD).

To compensate for the unavoidable impacts of the transmission line and the access road construction, individual mitigation plans were required in accordance with the Conditions of Certification. The individual plans were approved by the FDEP and SJRWMD in September 1991,

and by SFWMD in December 1991. Following approval of the individual plans, a Joint Agency Mitigation and Management Plan (JAMMP) was developed to combine both mitigation efforts. The JAMMP received conditional approval by the agencies on June 9, 1993, and in December 1993, the first annual monitoring report was submitted to the agencies; the associated documentation is provided as Item #1 of Attachment 2.

Condition VII H - Combined Cycle Unit A Transmission Line

Within 90 days after receiving certification, the Licensee shall meet with the DEP Central District Office and Orange County to discuss alternative routes for the on-site transmission line from Unit A to the Stanton Energy Center Substation with the intent to minimize impacts on the cypress dome in Wetland 3.

1. Once the final route has been established for the transmission line the applicant/licensee shall proposed mitigation to offset the proposed wetland impacts.

2. Prior to construction of work authorized by this certification, the licensee shall provide written notification of the date of commencement of construction to the Central District Office of the Florida Department of Environmental Protection, 3319 Maguire Boulevard, Suite 232, Orlando, FL 32803-3767.

3. Turbidity controls shall be utilized around the entire work area. The turbidity controls shall be maintained throughout the duration of the project, and shall be effective in preventing soil from the fill pad from eroding into the adjacent wetlands and conservation easement.

4. Within 30 days of completion of work authorized by this certification, the licensee shall provide written notification of the date of completion of construction to the Central District Office of the Florida Department of Environmental Protection, 3319 Maguire Boulevard, Suite 232, Orlando, FL 32803-3767.

5. The limits of construction within the wetlands shall be delineated by a continuous plastic flagging tape and with a turbidity barrier/control. The licensee shall bear the responsibility of notifying all construction workers that the flagging and barriers represent the limits of all construction activities. The licensee shall bear the responsibility of keeping all construction workers and equipment out of the wetland or surface water areas, which has not been permitted for impacts.

6. There shall be no storage or stockpiling of tools or materials within the wetlands.

7. If any damage occurs to wetlands or surface waters as a result of any construction activities, the licensee shall be required to restore the wetland area(s) or surface waters by regrading the damaged areas back to the natural preconstruction elevations and planting vegetation of the size, densities and species that exist in the adjacent areas pursuant to a consent order. The restoration shall be completed within 30 days of completion of the construction and shall be done to the satisfaction of the Department.

8. All material used as fill shall be clean material and shall not be contaminated with vegetation, garbage, trash, tires, hazardous, toxic waste or other materials that are not suitable for road construction within waters of the State as so determined by the Department.

9. The fill and associated side slopes (for example for the key-hole pads) that will be placed in wetlands on the property shall be stabilized with sod immediately (within 48 hours) following completion of the placement and compaction of the fill material.

Compliance Information: Documentation of the completion date for the transmission line between Combined Cycle Unit A and the SEC Substation is still being verified. Based on conversations with the FDEP Siting Office and the Central District, an additional 90 days has been allotted to provide this documentation.

Written notification of commencement of construction was submitted to the FDEP Central District on May 14, 2006. The final route was designed to avoid and minimize wetlands to the greatest extent practicable. Mitigation to offset 0.4 acre of unavoidable wetland impacts was achieved through a 30.448-acre deeded conservation area at the northwestern boundary of the SEC property granted to Orange County. This mitigation area also offset impacts associated with the gas pipeline constructed during the same period.

Condition VII N - Combined Cycle Unit B

1. At least ninety days prior to the commencement of construction, provide all information necessary for a complete Environmental Resource Permit application including the engineering drawings and supporting documentation necessary to demonstrate that the stormwater runoff from the proposed project will be treated and attenuated in accordance with Rules 40C-4, 40C-41 and 40C-42, F.A.C. The drawings and documentation shall be signed, sealed and dated by a professional engineer registered in the State of Florida.

2. Prior to the commencement of construction, the Department shall conduct a timely review of the submitted information and request the correction of any errors and omissions and any additional information necessary to complete the application. This shall be done in accordance with timeframes established in Chapter 120.60, F.S. and Rule 62-4.055,F.A.C.

3. The Department shall notify the licensee in writing that the application is complete upon review of all requested information and the correction of any errors or omissions. Construction shall not begin until the Department has provided such written notification.

Compliance Information: Information necessary for a complete Environmental Resource Permit application for the Combined Cycle Unit B Project was submitted to the FDEP Siting Coordination Office and the Central District on May 2, 2006. A response to a request for additional information was submitted on July 20, 2007.

Condition VII O - Magnolia Ranch Substation Mitigation

1. To offset and mitigate for the wetland impacts, the licensee shall purchase 2.6 forested wetland mitigation bank credits from the TM-Econ Mitigation Bank (4-095-84310-1erp). Prior to any construction or impacts authorized by these conditions, the licensee shall provide the Department with documentation that 2.6 credits have been deducted from the credit ledger of the TM-Econ Mitigation Bank (4-09584310-1erp).

2. The licensee shall restore the entire impact and work areas to original ground contours and elevations, with the allowance of native vegetation recruitment.

3. All species listed in the attached 2005 List of Florida's Most Invasive Species shall be eradicated from the impact and work areas.

4. The licensee shall eradicate the exotics/nuisance species for five consecutive years following the anniversary date of the initial eradication. Status surveys shall take place at least annually. A copy of the survey results shall be provided to the Department and submitted with the monitoring report required in Specific Condition Number 8. Any newly germinated seedlings will either be hand pulled and removed from the wetlands and deposited on a Department approved upland site, or when the seedlings are less than one (1) foot in height may be subject to herbicide

treatments. The herbicide treatments shall be applied at a time when the treatments will have minimal impact to nontarget plants.

5. The removal of the exotics/nuisance species shall be conducted in a manner, which will have the least impact on the wetland. Mechanical equipment is prohibited within the wetland areas for exotic/nuisance removal. No aerial spraying of chemicals is authorized. No chemicals shall be applied to any desirable species, threatened or endangered species.

6. If eradication takes place in standing water, the herbicide Arsenal will be used in accordance with EPA label requirements. If the eradication will take place while the area is dry, Garlon 4 and a suitable adjuvant (no diesel fuel) will be used for basal bark treatment, or Garlon 3A and a suitable adjuvant will be used for cut-stump treatments in accordance with label requirements.

7. Wetland Restoration Success Criteria:
Wetland restoration described above in item 2 shall be deemed successful when the following conditions are met:

a. Nuisance/Exotics occupy less than 5 percent of the total cover on the parcel (as listed in the 2005 List of Florida's Most Invasive Species);
b. Percent cover by non-nuisance, non-exotic (desirable) wetland species shall be 95 percent or greater within the remaining wetlands on the parcel. Percent cover shall be reported for the aggregate of those wetland species, relative to the total area, bare ground and water. A list of the wetland species included in the aggregate shall be included. Wetland species shall be those listed in Florida Administrative Code (F.A.C.) Rule 62-340;
c. Wetland species shall be reproducing naturally in the ground, shrub and canopy stratum;
d. The vegetation monitoring data for the wetland areas of the enhancement shows that not less than 95 percent of the vegetation cover comprises of Rule 62-340, F.A.C. listed species.

The final success determination shall not be made less than three years from the completion of implementation of the initial enhancement measures and when the above mentioned criteria have been continuously met for a period of at least one growing season, without intervention in the form of removal of undesirable vegetation.

8. Monitoring Reports Required:
The licensee shall furnish to the Central District annual status reports which describe in detail the following:

a. status of construction (with a description of the extent of work completed since previous report or since conditions were issued);
b. problems encountered and solutions undertaken;
c. anticipated work for the following year;
d. panoramic photographs taken from the same permanent stations (at least 4 stations to be approved by the Department);
e. status of nuisance eradication on the parcel;
f. status of enhancement on the parcel;
g. herbicide listing and date of application;
h. percentage survival, density and cover trees and herbaceous species using acceptable methods. These methods are described in Daubemmire (1968), Oosting (1956), and Mueller-Dombois and Ellenberg 1974).

The first monitoring report shall be submitted within 6 months of certification issuance and prior to construction commencement. The remaining monitoring reports shall be submitted annually on the anniversary date of the permit, for five years after completion of construction and all enhancement work. If work authorized in this permit does not start immediately, the Licensee

shall submit to the Department a site status letter as notification that "No Work" has occurred. The site status letter is due within 6 months after certification issuance and any additional site status letters shall be submitted on the anniversary date of the certification.

The monitoring reports should include a cover page with the following information:

a. licensee name;
b. case number (PA81-14);
c. who performed the assessment;
d. signed and attested; "To the best of the undersigned's knowledge, this report represents a true, accurate and representative description of the site conditions present at the time of the monitoring."

Compliance Information: A copy of the TM-Econ Mitigation Bank Ledger showing that 2.66 credits were deducted from the credit ledger of the TM-Econ Mitigation Bank (4-09584310-1erp) on June 25, 2008 is provided as Item #2 of Attachment 2. The required Magnolia Ranch Substation wetland monitoring reports were submitted to the FDEP Central District on December 22, 2008 (Year One Monitoring Report) and January 18, 2010 (Year Two Monitoring Report). The cover letters associated with each of these reports are provided as Item #3 of Attachment 2. Subsequent annual reports will be submitted in January until final success determination, in accordance with the Conditions of Certification.

Condition VII P - North Substation and Transmission Line

1. The proposed wetland impacts for the Stanton North Substation and Transmission line are as follows:
.42 acres of impact (clearing and fill) within isolated wetlands less than ½ acre in size
.41 acres of impact (fill) within forested connected wetlands
.85 acres of impact (clearing) within forested connected wetlands
Prior to any construction activities, the applicant shall submit revised wetland impact drawings 35-S-100 thru 35-S-104 indicating the acreage of the proposed impacts.

2. To offset and mitigate for the wetland impacts, the applicant shall purchase 1.2 forested wetland mitigation bank credits from the TM-Econ Mitigation Bank (4-095-84310-1erp). Prior to any construction or impacts authorized by these conditions, the licensee shall provide the Department with documentation that 1.2 credits have been deducted from the credit ledger of the TM-Econ Mitigation Bank (4-095-84310-1erp).

3. The applicant shall restore the entire impact and work areas to original ground contours and elevations, with the allowance of native vegetation recruitment.

4. All species listed in the 2005 List of Florida's Most Invasive Species (attached as Appendix 7) shall be eradicated from the impact and work areas.

5. The licensee shall eradicate the exotics/nuisance species for five consecutive years following the anniversary date of the initial eradication. Status surveys shall take place at least annually. A copy of the survey results shall be provided to the Department and submitted with the monitoring report required in Specific Condition Number 8. Any newly germinated seedlings will either be hand pulled and removed from the wetlands and deposited on a Department approved upland site, or when the seedlings are less than one (1) foot in height may be subject to herbicide treatments. The herbicide treatments shall be applied at a time when the treatments will have minimal impact to non-target plants.

6. The removal of the exotics/nuisance species shall be conducted in a manner, which will have the least impact on the wetland. Mechanical equipment is prohibited within the wetland areas for

exotic/nuisance removal. No aerial spraying of chemicals is authorized. No chemicals shall be applied to any desirable species, threatened or endangered species.

7. If eradication takes place in standing water, the herbicide Arsenal will be used in accordance with EPA label requirements. If the eradication will take place while the area is dry, Garlon 4 and a suitable adjuvant (no diesel fuel) will be used for basal bark treatment, or Garlon 3A and a suitable adjuvant will be used for cut-stump treatments in accordance with label requirements.

8. Wetland Restoration Success Criteria:
Wetland restoration described above in item 2 shall be deemed successful when the following conditions are met:

a. Nuisance/Exotics occupy less than 5 percent of the total cover on the parcel (as listed in the 2005 List of Florida's Most Invasive Species – Appendix 7) ;
b. Percent cover by non-nuisance, non-exotic (desirable) wetland species shall be 95 percent or greater within the remaining wetlands on the parcel. Percent cover shall be reported for the aggregate of those wetland species, relative to the total area, bare ground and water. A list of the wetland species included in the aggregate shall be included. Wetland species shall be those listed in Florida Administrative Code (F.A.C.) Rule 62-340;
c. Wetland species shall be reproducing naturally in the ground, shrub and canopy stratum;
d. The vegetation monitoring data for the wetland areas of the enhancement shows that not less than 95 percent of the vegetation cover comprises of Rule 62-340, F.A.C. listed species.

The final success determination shall not be made less than three years from the completion of implementation of the initial enhancement measures and when the above mentioned criteria have been continuously met for a period of at least one growing season, without intervention in the form of removal of undesirable vegetation.

9. Monitoring Reports Required:
The licensee shall furnish to the Central District annual status reports which describe in detail the following:

a. status of construction (with a description of the extent of work completed since previous report or since certification was issued);
b. problems encountered and solutions undertaken;
c. anticipated work for the following year;
d. panoramic photographs taken from the same permanent stations (at least 4 stations to be approved by the Department);
e. status of nuisance eradication on the parcel;
f. status of enhancement on the parcel;
g. herbicide listing and date of application;
h. percentage survival, density and cover trees and herbaceous species using acceptable methods. These methods are described in Daubemmire (1968), Oosting (1956), and Mueller-Dombois and Ellenberg 1974).

The first monitoring report shall be submitted within 6 months of certification issuance and prior to construction commencement. The remaining monitoring reports shall be submitted annually on the anniversary date of the certification, for five years after completion of construction and all enhancement work. If work authorized in this certification does not start immediately, the Licensee shall submit to the Department a site status letter as notification that "No Work" has occurred. The site status letter is due within 6 months after certification issuance and any additional site status letters shall be submitted on the anniversary date of the certification.

The monitoring reports should include a cover page with the following information:

a. licensee name;

b. case number (PA81-14);
c. who performed the assessment;
d. signed and attested: "To the best of the undersigned's knowledge, this report represents a true, accurate and representative description of the site conditions present at the time of the monitoring."

Other information may be included by the licensee at their discretion.

Compliance Information: A copy of the TM-Econ Mitigation Bank Ledger showing that 1.2 credits were deducted from the credit ledger of the TM-Econ Mitigation Bank (4-09584310-1erp) on June 25, 2008 is provided as Item #2 of Attachment 2. The required North Substation and Transmission Line wetland monitoring reports were submitted to the FDEP Central District on September 19, 2008 (Pre-construction Monitoring Report) and February 4, 2010 (Year One Monitoring Report). The cover letters associated with each of these reports are provided as Item #4 of Attachment 2. Subsequent annual reports will be submitted in February until final success determination, in accordance with the Conditions of Certification.

If you should have any questions regarding this letter and attachments, please do not hesitate to contact us.

Sincerely,

GOLDER ASSOCIATES INC.

Kerri J. Kitchen
Senior Planner, Project Manager

Heather Todd Ahrens
Senior Ecologist

Richard A. Zwolak, AICP
Power Sector Leader, Principal, and
Director of Environmental Planning

cc: Carolyn Shine, FDEP Central District
Lisa Prather, FDEP Central District
David Baez, OUC
Sam Griffin, OUC
Eva Raez, OUC

Attachments: Attachment 1, ERP Application
Attachment 2, Associated Documentation

KJK/HTA/RAZ/lcr

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ATTACHMENT 1
JOINT APPLICATION FOR ENVIRONMENTAL RESOURCE PERMIT

Environmental Resource Permit Application Section A

Environmental Resource Permit Application Section B

Environmental Resource Permit Table 1—Project Impact Summary

Appendix A—Adjacent Property Owner Information

Appendix B—Site Location Information

Appendix C—Construction Plans

Appendix D—U.S. Army Corps of Engineers Wetland Data Sheets and U.S. Army Corps of Engineers Jurisdictional Determination Forms

SECTION A

FOR AGENCY USE ONLY	
ACOE Application #	DEP/WMD Application #
Date Application Received	Date Application Received
Proposed Project Lat.	Fee Received $
Proposed Project Long.	Fee Receipt #

PART 1:

Are any of the activities described in this application proposed to occur in, on, or over wetlands or other surface waters?
☒ yes ☐ no

Is this application being filed by or on behalf of a government entity or drainage district? ☒yes ☐no

PART 2:

A. Type of Environmental Resource Permit Requested (check at least one). See Attachment 2 for thresholds and descriptions.

- ☒ Noticed General - include information requested in Section B.
- ☐ Standard General (Single Family Dwelling) - include information requested in Sections C and D.
- ☐ Standard General (all other Standard General projects) - include information requested in Sections C and E.
- ☐ Individual (Single Family Dwelling) - include information requested in Sections C and D.
- ☐ Individual (all other Individual projects) - include information requested in Sections C and E.
- ☐ Conceptual - include information requested in Sections C and E.
- ☐ Mitigation Bank Permit (construction) - include information requested in Sections C and F. (If the proposed mitigation bank involves the construction of a surface water management system requiring another permit defined above, check the appropriate box and submit the information requested by the applicable section.)
- ☐ Mitigation Bank (conceptual) - include information requested in Sections C and F.

B. Type of activity for which you are applying (check at least one)

- ☒ Construction or operation of a new system, other than a solid waste facility, including dredging or filling in, on or over wetlands and other surface waters.
- ☐ Construction, expansion or modification of a solid waste facility.
- ☐ Alteration or operation of an existing system which was not previously permitted by a WMD or DEP.
- ☐ Modification of a system previously permitted by a WMD or DEP.

  Provide previous permit numbers:___

  - ☐ Alteration of a system
  - ☐ Abandonment of a system
  - ☐ Removal of a system
  - ☐ Extension of permit duration
  - ☐ Construction of additional phases of a system

C. Are you requesting authorization to use Sovereign Submerged Lands?
☐yes ☒no
(See Section G and Attachment 5 for more information before answering this question.)

D. For activities in, on,or over wetlands or other surface waters, check type of federal dredge and fill permit requested:
☐Individual ☐Programmatic General ☐General
☒Nationwide ☐Not Applicable

E. Are you claiming to qualify for an exemption? ☐yes ☒no
If yes, provide rule number if known. ___

PART 3: **A. OWNER(S) OF LAND**	**B. ENTITY TO RECEIVE PERMIT (IF OTHER THAN OWNER)**
Name Orlando Utilities Commission (OUC) and the Orange County Board of County Commissioners	Name Samuel J. Griffin, PE Manager, Project Development & Support Power Resources
Title and Company OUC- Stanton Energy Center	Title and Company Orlando Utilities Commission
Address 5100 Alafaya Trail	Address Stanton Energy Center, 5100 Alafaya Trail
City, State, Zip Orlando, FL 32831	City, State, Zip Orlando, FL 32831
Telephone and Fax (phone) 407-649-3942/ F: 407-244-8794	Telephone and Fax T: 407-649-3942/ F: 407-244-8794
C. AGENT AUTHORIZED TO SECURE PERMIT	**D. CONSULTANT (IF DIFFERENT FROM AGENT)**
Name	Name Heather Ahrens
Title and Company	Title and Company Senior Ecologist, Golder Associates Inc.
Address	Address 5100 W. Lemon Street, Suite 208
City, State, Zip	City, State, Zip Tampa, FL 33609
Telephone and Fax	Telephone and Fax T: 813-287-1717/ F: 813-287-1716

PART 4: (Please provide metric equivalent for federally funded projects):

A. Name of Project, including phase if applicable: Stanton Energy Center Second Landfill Gas Pipeline

B. Is this application for part of a multi-phase project?
☐yes ☒no

C. Total applicant-owned area contiguous to the project?
OUC Stanton Energy Center: 3,280 ac (1,327 ha.); Orange County Landfill: 6,268.2 ac. (2,537 ha.)

D. Total area served by the system: N/A ac.; ___ ha.

E. Impervious area for which a permit is sought: 0 ac.; ___ ha.

F. Volume of water that the system is capable of impounding:
0 ac. ft.; 0 m

G. What is the total area of work in, on, or over wetlands or other surface waters?
0.34 ac.; 0.14 ha.; 14,810 sq. ft.; 1,376 sq. m

H. Total volume of material to be dredged: 13,363.6 yd; 10,217.2 m – temporary trench excavation

I. Number of new boat slips proposed: 0 wet slips; 0 dry slips

PART 5:

Project location (use additional sheets if needed):
County(ies) Orange

Section(s) 10, 11, 13 – 16, 21 and 22	Township 23 South	Range 31 East
Section(s)	Township	Range
Section(s)	Township	Range

Land Grant name, if applicable:

Tax Parcel Identification Number:

Street Address Road or other location:

City, Zip Code, if applicable:
Orlando, FL 32831

PART 6: Describe in general terms the proposed project, system, or activity.

Installation of an approximately 5.7-mile landfill gas pipeline between the existing OUC Stanton Energy Center and the Orange County Landfill. The project will involve temporary impact to 0.32 acre of non-forested wetlands during trench excavation and 0.019 acre of permanent fill impact for pipeline installation. All areas of temporary wetland impact will be restored to original topographic grade using native wetland soils and allowed to revegetate through natural recruitment from the seed bank. The pipeline will be installed within a temporary construction area with a maximum width of 30 feet (ft). The project boundary includes a 0.9-acre construction laydown area on the OUC Stanton Energy Center Site and a 0.2-acre construction laydown area on the Orange County Landfill property, both of which are located within previously cleared uplands.

PART 7:

A. If there have been any pre-application meetings, including on-site meetings, with regulatory staff, please list the date(s), location(s), and names of key staff and project representatives.

On behalf of OUC, Golder Associates Inc. (Golder) submitted a request for an amendment to OUC's Site Certification for construction of a second landfill gas pipeline between the Orange County Landfill and the Stanton Energy Center. The Florida Department of Environmental Protection (FDEP) Central District sent a request for additional information (RAI) letter dated May 17, 2010 requesting the submittal of an environmental resource permit (ERP) application. This ERP application has been furnished as a result of that request.

B. Please identify by number any MSSW/Wetland Resource/ERP/ACOE Permits pending, issued or denied for projects at the location, and any related enforcement actions.

Agency	Date	No.\Type of Application	Action Taken
FDEP	7/23/09	FL0681661-001 Water-Industrial Wastewater Group 1, Surface Water Discharge Permit	Processing Status
FDEP	1/28/03	48-177603-002 Orange County Landfill Cell 9 ERP (Construct)	Active
FDEP	1/28/03	48-177603-001 Orange County Landfill Cells 9-12 Conceptual ERP	Active

C. Note: The following information is required for projects proposed to occur in, on or over wetlands that need a federal dredge and fill permit or an authorization to use state owned submerged lands. Please provide the names, addresses and zip codes of property owners whose property directly adjoin the project (excluding application) and/or (for proprietary authorizations) is located within a 500 ft. radius of the applicant's land. Please attach a plan view showing the owner's names and adjoining property lines. Attach additional sheets if necessary.

1. Orange County Board of County Commissioners
C/O James (Jim) W. Flynt Jr., P.E.
Senior Engineer
Orange County Utilities Department
Solid Waste Division
5901 Young Pine Rd.
Orlando, FL 32829-7428

2. Orlando Utilities Commission
C/O Samuel J. Griffin, PE
Manager, Project Development & Support
Power Resources
Stanton Energy Center
5100 Alafaya Trail
Orlando, FL 32831

3. **See Appendix A, Adjacent Property Owner Information**

4.

5.

6.

7.

8.

PART 8:

A. By signing this application form, I am applying, or I am applying on behalf of the applicant, for the permit and any proprietary authorizations identified above, according to the supporting data and other incidental information filed with this application. I am familiar with the information contained in this application and represent that such information is true, complete and accurate. I understand this is an application and not a permit, and that work prior to approval is a violation. I understand that this application and any permit issued or proprietary authorization issued pursuant thereto, does not relive me of any obligation for obtaining any other required federal, state, water management district or local permit prior to commencement of construction. I agree, or I agree on behalf of the applicant, to operate and maintain the permitted system unless the permitting agency authorizes transfer of the permit to a responsible operation entity. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

Samuel J. Griffin
Typed/Printed Name of Applicant (If no Agent is used) or Agent (If one is so authorized below)

Signature of Applicant/Agent — Date: 8/5/2010
Principal, Orlando Utilities Commission
(Corporate Title if applicable)

AN AGENT MAY SIGN ABOVE ONLY IF THE APPLICANT COMPLETES THE FOLLOWING:

B. I hereby designate and authorize the agent listed above to act on my behalf, or on behalf of my corporation, as the agent in the processing of this application for the permit and/or proprietary authorization indicated above; and to furnish, on request, supplemental information in support of the application. In addition, I authorize the above-listed agent to bind me, or my corporation, to perform any requirements which may be necessary to procure the permit or authorization indicated above. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

Typed/Printed Name of Applicant	Signature of Applicant	Date

(Corporate Title if applicable)

Please note: The applicant's original signature (not a copy) is required above.

PERSON AUTHORIZING ACCESS TO THE PROPERTY MUST COMPLETE THE FOLLOWING:

C. I either own the property described in this application or I have legal authority to allow access to the property, and I consent, after receiving prior notification, to any site visit on the property by agents or personnel from the Department of Environmental Protection, the Water Management District and the U.S. Army Corps of Engineers necessary for the review and inspection of the proposed project specified in this application. I authorize these agents or personnel to enter the property as many times as may be necessary to make such review and inspection. Further, I agree to provide entry to the project site for such agents or personnel to monitor permitted work if a permit is granted.

Samuel J. Griffin		8/5/2010
Typed/Printed Name of Applicant	Signature of Applicant	Date

Principal, Orlando Utilities Commission
(Corporate Title if applicable)

SECTION B

INFORMATION FOR NOTICED
GENERAL ENVIRONMENTAL RESOURCE PERMITS

INSTRUCTIONS: To qualify for a Noticed General Permit (NGP) for specific activities, the project must strictly comply with all of the terms, conditions, requirements, limitations and restrictions applicable to the desired NGP. A summary of the types of NGP's available is contained in Attachment 2. Carefully review the rule section of the NGP for which you are applying to ensure that your project meets the requirements of that NGP. Please complete Section A and submit it along with the information required in this Section (on 81/2" x 11" paper).

1. Indicate the project boundaries on a USGS quad map, reduced or enlarged as necessary to legibly show the entire project. If not apparent from the quad map, provide a location map (in sufficient detail to allow a person unfamiliar with the site to find it), containing a north arrow and a graphic scale and showing the boundary of the proposed activity and Section(s), Township(s), and Range(s).

See Appendix B, Site Location Information; Figure 1, Location Map; and Figure 5, USGS Topographic Map.

The proposed pipeline will be installed within a 30-ft-wide (maximum) temporary construction area from the OUC Stanton Energy Center to the Orange County Landfill blower flare station located approximately 680 ft east of the entrance to Landfill Cells 9-12. Starting at the OUC Stanton Energy Center, the pipeline will proceed west immediately adjacent to the north side of Adkinson Street, north adjacent to the west side of Stebbins Street, then west immediately adjacent to the south side of Pope Street within the OUC Stanton Energy Center site, then turn north onto the Orange County Landfill property following an unnamed haul road that continues along the perimeter of the existing landfill, turning westward along the northern landfill boundary and southward along the western landfill boundary until it meets Young Pine Road, where the pipeline will continue westward then southward along the landfill service entrance, avoiding nearly all surrounding wetlands and areas under existing conservation easements to the east and west of the blower flare station near the landfill.

2. A legible site plan showing the following features:

a) property boundaries and dimensions
b) name and location of any adjoining public streets or roads
c) location and dimensions of all existing structures
d) label all impervious and pervious area and indicate their size (area)
e) the direction of drainage relative to the proposed improvements (using arrows)
f) locations of all proposed works
g) permanent and temporary erosion, sedimentation and turbidity controls
h) boundaries of wetlands and other surface waters, identifying open water areas
i) boundary area and volume of all temporary and permanent earthwork, including pre and post construction grades

See Appendix C, Construction Plans.

3. Description of wetland or aquatic habitat.

The proposed OUC Stanton Energy Center landfill gas pipeline is located almost entirely within the cleared rights-of-way adjacent to existing paved and unpaved roads, avoiding and minimizing wetland impacts to the greatest extent practicable. Additional avoidance/minimization efforts include narrowing of the pipeline project boundary in areas with adjacent wetlands. As a result of the project's avoidance and minimization efforts, temporary wetland impacts are limited to 0.32 acre of low-quality ditches (Florida Land Use, Cover and Forms Classification System [FLUCFCS] 511), disturbed wet prairie (FLUCFCS 643), and shrub wetlands (FLUCFCS 618). In addition, a 0.019-acre area of permanent fill is proposed in shrub wetlands, Wetland E. The proposed fill will provide the required cover over the gas pipeline and will be above the existing grade. Areas of temporary impact will be restored through replacement of native wetland topsoil to original grade to allow natural regeneration of wetland vegetation, in accordance with the criteria of Noticed General Permit 62-341.453, General Permit for Installation, Maintenance, Repair, and Removal of Underground Cable, Conduit, or Pipeline. Best management practices will be followed to minimize turbidity and to prevent fill from entering adjacent wetlands.

See Table 1, Project Impact Summary, for details of wetland acreage, acreage to remain undisturbed, and acreage of temporary and permanent impacts within each wetland. Wetland boundaries are identified in the construction plans provided in Appendix C. U.S. Army Corps of Engineers (USACE) wetland datasheets and Rapanos

jurisdictional determination forms are provided in Appendix D. Maps illustrating the location and extent of wetlands are provided in Appendix B, Figure 7.

A summary of wetland habitats within the project boundary is provided below:

Wet Prairie (FLUCFCS code 643)—Wetland A is classified as wet prairie, characterized by hydric soils and wetland vegetation, but typically not containing standing water throughout the year or only slightly inundated. The area that includes Wetland A was permitted as part of the 312-acre Solid Waste Storage Area during the Site Certification of Units I, II, III, and IV of the Stanton Energy Center in 1983. It was historically cleared of pine flatwoods during the construction of Unit I in 1983. An expansive buffer preserve was created north of the Stanton Energy Center to compensate for these impacts. Wetland A is dominated by scattered wax myrtles (*Myrica cerifera*), fingergrass (*Eustachys petraea*), blue maidencane (*Amphicarpum muhlenbergianum*), bighead rush (*Juncus megacephalus*), Tracy's beaksedge (*Rhynchospora tracyi*), grassleaf rush (*Juncus marginatus*), marsh pink (*Sabatia grandiflora*), saltbush (*Baccharis halimifolia*), dog fennel (*Eupatorium capillifolium*), broomsedge (*Andropogon virginicus*), and flatsedge (*Cyperus* sp.). A shallow ditch exists within Wetland A, outside the pipeline project boundary, running east/west parallel to the existing Pope Street haul road and connecting via a double concrete culvert to wetlands north of Pope Street.

Shrub Wetland (FLUCFCS code 618)—Wetland E is classified as a shrub wetland and occurs within and adjacent to the project boundary in a portion of the Orange County Landfill property, south of Young Pine Road. The wetland is dominated by a variety of shrub species, including Carolina willow (*Salix caroliniana*), elderberry (*Sambucus nigra*), and buttonbush (*Cephalanthus occidentalis*), with subdominant herbaceous species such as Peruvian primrose willow (*Ludwigia peruviana*) and cattail (*Typha latifolia*), and occasional small red maple (*Acer rubrum*).

Ditches (FLUCFCS code 511)—Ditches 1, 2, 6, 9, and 10 occur within the proposed landfill gas pipeline project boundary. A rim ditch (Ditch 10) surrounds the perimeter of the Orange County Landfill. Ditch 9, located along the south side of Young Pine Road, connects directly to a large north/south-oriented regional wetland system known as Bay Branch and will not be impacted. The proposed gas pipeline will be constructed over the top of this open water ditch. Several smaller and narrower ditches (Ditches 1, 2, and 6) are part of the existing stormwater management system of the OUC Stanton Energy Center. Ditches 1 and 2 drain into larger stormwater management reservoirs of the Stanton Energy Center, and Ditch 6 drains north into wetlands within the existing buffer preserve of the Stanton Energy Center. The southern portion of Wetland E on the Orange County Landfill site also consists of a shallow ditch. These ditches typically contain sparse to moderate coverage of low-growing native and exotic species, and are commonly disturbed by maintenance mowing events. Some ditches (Ditches 9 and 10) are deeper and contain a larger percentage of open water than the smaller ditches within the project area. Common species of vegetation within the ditches include bahia grass (*Paspalum notatum*), frog fruit (*Phyla nodiflora*), water hyssop (*Bacopa monnieri)*, sedges (*Cyperus* spp.), red ludwigia (*Ludwigia repens*), torpedo grass (*Panicum repens*), cattail, Baldwin's spikerush (*Eleocharis baldwinii*), marsh pennywort (*Hydrocotyle umbellata*), Peruvian primrose willow, water hyacinth (*Eichhornia crassipes*), water lettuce (*Pistia stratiotes*), Brazilian pepper (*Schinus terebinthifolius*), dog fennel, and saltbush.

Reservoirs Less Than 10 Acres (FLUCFCS code 534)—The outfall structure of a stormwater management pond (Reservoir 7) within the Orange County Landfill crosses the proposed gas pipeline project boundary. The pipeline is proposed to be constructed over the top of this structure, resulting in no impacts to the pond or its outfall.

<u>Additional Environmental Conditions</u>

Land use/land cover classification within the pipeline route utilizing the FLUCFCS is provided in Appendix B, Site Location Information, Figure 2. Soil series are illustrated in Appendix B, Site Location Information, Figure 3. The 100-year floodplain is shown in Appendix B, Site Location Information, Figure 4. Listed species observed within the pipeline project area during field surveys conducted June 7–9, 2010 and identified within the vicinity according to the Florida Natural Areas Inventory (FNAI) are identified in Appendix B, Site Location Information, Figure 6.

A total of four potentially occupied gopher tortoise burrows, and one abandoned burrow measuring less than 5 inches wide, were identified within the project boundary or within 25 ft of the project boundary during threatened and endangered species field surveys. Several other gopher tortoise burrows and one individual tortoise were observed along the perimeter of the landfill, greater than 25 ft beyond the project boundaries. The project will comply with the Florida Fish and Wildlife Conservation Commission (FFWCC) requirements to maintain a minimum setback of 25 ft around all gopher tortoise burrows to the greatest extent practicable. Where impacts to gopher tortoise burrows are unavoidable, a gopher tortoise permit application (10 or Fewer Burrows On-Site Relocation Permit) will be submitted to the FFWCC. Once the FFWCC permit has been received by OUC, affected

gopher tortoise burrows will be excavated and tortoises released into adjacent suitable gopher tortoise habitat prior to commencement of construction activities, in accordance with FFWCC permit conditions.

American alligators (*Alligator mississippiensis*) were observed in the rim ditch surrounding the landfill. The U.S. Fish and Wildlife Service (USFWS) classifies the American alligator as threatened due to its similarity in appearance to the endangered American crocodile (*Crocodylus acutus*), and the FFWCC classifies the American alligator as a species of special concern. Temporary impacts associated with pipeline installation will not adversely impact the American alligator. Construction workers will take precautions to avoid contact with alligators.

Adult and juvenile bald eagles (*Haliaeetus leucocephalus*) were observed outside the project boundary at Orange County Landfill Cells 9-12. According to the FFWCC Bald Eagle Nest Locator database, nest #OR062 is located at 28°29.79 latitude, 81°12.08 longitude, approximately 334 ft north of the edge of the temporary construction area project boundary. It was last recorded as active by the FFWCC in 2008. The bald eagle is no longer a listed species but is still protected by the FFWCC and USFWS under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. According to the FFWCC Bald Eagle Management Plan, linear facilities are considered a Category "A" project, which is allowable without a permit when located more than 330 ft from a nest, there are similar developed areas in the vicinity, there is a visual buffer between the nest and the activity, and site work between 330 and 660 ft from the nest is conducted outside of the nesting season (1 October to 15 May). The existing tree canopy between the project boundary and the nest provides this buffer, and the installation of the pipeline within the 330 ft to 660 ft buffer is anticipated to occur outside of the nesting season. If construction within this buffer area becomes necessary during nesting season, the applicant will need to follow the guidelines as set forth in the FFWCC Bald Eagle Management Guidelines or obtain the required permit(s). The project is not anticipated to result in any adverse impacts to the bald eagle.

The red-cockaded woodpecker (*Picoides borealis*) is classified by the USFWS as endangered and by the FFWCC as threatened. No red-cockaded woodpecker individuals or cavity trees were located within or immediately adjacent to the project area. The pipeline installation will not impact any forested areas, nor is construction proposed to occur during the woodpecker's April through June nesting season. According to the June 2009 Progress Report on Red-cockaded Woodpeckers and Southern Bald Eagles for the Curtis H. Stanton Energy Center (Delotelle & Guthrie, Inc.), the closest red-cockaded woodpecker recruitment clusters and cavity trees are located approximately 0.7 mile south of the eastern limits of the proposed landfill gas pipeline project boundary.

Additional species observed outside the project boundary during Golder's threatened and endangered species field survey include state threatened Florida sandhill cranes (*Grus canadensis pratensis*), observed foraging in fields at the Stanton Energy Center site; and state and federally endangered wood storks (*Mycteria americana*) and state threatened least terns (*Sterna antillarum*) at Orange County Landfill Cells 9-12 (see Appendix B, Site Location Information, Figure 6). No nests of these species were observed within or adjacent to the project boundary. One potential Sherman's fox squirrel (*Sciurus niger shermanii*, state species of special concern) nest was observed approximately 200 ft east of the project boundary on the other side of a 30-ft-wide, water-filled ditch. No impacts to these species are anticipated as a result of the installation of the pipeline.

One plant species, the hooded pitcherplant (*Sarracenia minor*), listed as threatened by the Florida Department of Agriculture and Consumer Services, was observed within the existing wetland conservation easement on the Orange County Landfill property, outside the project boundary and east of the landfill gas management area and blower flare station. The hooded pitcherplant is commonly found throughout central and northern Florida. Silt screen will be installed along the perimeter of the construction area to protect wetlands and listed species from turbidity and encroachment of fill. Therefore, the installation of the pipeline is not expected to result in any impacts to listed plant species.

According to the FNAI, an occurrence of the Florida scrub jay (*Aphelocoma coerulescens*) was documented approximately 1,200 ft southeast of the project boundary on the developed Stanton Energy Center. This occurrence was recorded in 1987, and scrub jay habitat does not presently exist in this location. The FNAI data also includes an occurrence of the eastern indigo snake (*Drymarchon corais couperi*) located approximately 160 ft north of the Orange County Landfill in 1980. Eastern indigo snakes are known commensals of gopher tortoise burrows. No scrub jays or eastern indigo snakes were observed within or adjacent to the project boundary during Golder's listed species survey; however, since Golder observed gopher tortoise burrows within and adjacent to the project boundary, there is a potential for the eastern indigo snake to occur within or adjacent to the project area. The project will comply with the USFWS Standard Protection Measures for the Eastern Indigo Snake (2004). Silt screen will be installed along the perimeter of the construction area to keep them from entering the project area. The installation of the pipeline is not expected to result in any adverse impacts to threatened or endangered species.

4. Construction methods and schedule.

Existing paved and unpaved roads will be utilized for construction access. No new access roads will be constructed for the pipeline project. Trench and fill techniques will be used for installation of the pipeline to avoid any permanent impacts to wetlands.

Construction equipment that is anticipated to be used during the project is as follows: an excavator, a loader, forklifts, six 18 fusion machine, a walk-behind compactor, a skid steer loader, and a small bulldozer. The equipment and materials required for this project will be delivered by truck. No barges will be required for this project.

Construction techniques will generally conform to the following methods:

The initial work will include the installation of erosion and sediment control measures as shown on the enclosed drawings (Appendix C). Once construction is complete and soils are stabilized and vegetation has been established, the erosion and sediment control measures shall be removed and may be reused if in good working condition.

The pipeline will be installed using a traditional open trench method. Construction through wetlands will be reduced and limited to adjacent upland areas as much as possible. Soils are expected to be dry and stable enough to support equipment without additional timber mat/riprap equipment support. Placement of temporary fill material may be required in wet areas to support construction equipment. During excavation activities in wetlands, the wetland topsoil will be segregated from subsoil in the trench line area and stored in separate piles while the trench is open.

The pipe sections (stringers) will be welded together above grade and then placed into the trench. Once the pipe is placed in the trench, the trench will be backfilled and the top 2 ft of fill over the pipe will be compacted with a vibratory compactor. The remainder of the trench backfill material will be compacted with the track of the excavator. Sod or grass seed will be placed over completed areas. For the backfilling activity in wetland areas, the segregated soils mentioned above will be placed in the trench in the reverse order of which they were excavated, with topsoil being the final cover material. The preconstruction surface contours will be restored.

Note that trench breakers will be placed in the trench at the base of slopes near the wetland boundaries prior to backfilling to prevent draining of the wetland along the trench line. No upland soil or fill material will be imported into the wetland. The wetland will be seeded with annual ryegrass to quickly establish a short-lived vegetative cover, allowing the wetland's native seed and rhizomes (contained in the topsoil) to reestablish dominance over time. No lime, fertilizer, or mulch will be applied in wetlands.

Any excess material resulting from excavation will be removed from the wetland areas and transported to the construction staging areas for proper disposal.

5. Additional information that would show that you qualify for the general permit, addressing all the parameters, thresholds and conditions required in the general permit. Errors and omissions will be identified within 30 days by the processing agency.

The project will require 0.32 acre of temporary wetland impacts and 0.019 acre of permanent fill during pipeline installation, will not require any clearing of forested wetlands, will not divert or impound any surface waters, will be constructed within a temporary construction corridor with a width no greater than 30 ft, and will not involve construction of access roads. The pipeline installation qualifies for the Noticed General Permit for Installation, Maintenance, Repair, and Removal of Underground Cable, Conduit, or Pipeline (Section 62-341.453, Florida Administrative Code). The project also qualifies for USACE Nationwide Permit 12, Utility Line Activities. The permit conditions and project qualifications are listed below:

62-341.453 General Permit for Installation, Maintenance, Repair, and Removal of Underground Cable, Conduit, or Pipeline.

(1) A general permit is hereby granted for the installation, maintenance, repair, and removal of underground cable, conduit, or pipeline that transmit electricity, communication signals, potable water, raw water, reclaimed water, domestic wastewater, propane gas or natural gas.

(2) This general permit is subject to the following special conditions:

(a) the maximum width of the disturbed corridor in wetlands shall not exceed 30 feet and the maximum width of the excavated trench shall not exceed eight feet, with temporary spoil storage banks not to exceed ten feet in width;

(b) the total area of wetland disturbance shall not exceed 0.5 acres of forested wetlands per ten miles of cable, conduit, or pipeline;
(c) for a trench with a top width greater than three feet in herbaceous wetlands, the upper layer of the soil horizon shall initially be scraped and segregated into a spoil bank that is separated from the spoil bank resulting from the excavation of the trench for the utility line. The upper layer of the soil horizon shall be replaced as the last step of restored grades to facilitate natural revegetation;
(d) maintenance trimming or removal of trees in wetlands will be conducted only within the impacted areas authorized under this general permit and only as necessary to perform repairs on the cable, conduit, or pipeline;
(e) this general permit does not authorize construction in surface waters other than wetlands;
(f) there shall be no net placement of permanent fill resulting from the activities authorized by this general permit;
(g) there shall be no dredging or filling in wetlands to access the work areas authorized by this general permit, except for temporary mats. All temporary mats shall be removed within thirty days after completion of the installation of the line within the wetland portion of the project;
(h) the works authorized by this general permit shall not impede the flow of water in wetlands or other surface waters, except for a maximum period of 30 days during construction, provided that the impeded flow does not cause flooding and shall not adversely affect the wetlands or other surface waters;
(i) temporary spoil banks shall contain breaches that prevent impoundment or restriction of surface water flows;
(j) this general permit does not authorize the installation of conduit for draining wetlands or other surface waters;
(k) pre-construction ground elevations and the contours of all disturbed soils, including vehicle ruts in wetlands and other surface waters, shall be restored within 30 days of completion of line installation. Restored grades shall be stabilized within 72 hours following completion of elevation and contour restoration to minimize erosion;
(l) vehicle usage in wetlands and other surface waters shall be conducted so as to minimize tire rutting and erosion impacts;
(m) for purposes of this general permit, vehicular access in wetlands and other surface waters shall be limited to existing roads, trails, rights-of-way or easements, and to other previously disturbed corridors where they exist;
(n) this general permit shall not apply in Outstanding Florida Waters, Outstanding National Resource Waters, Aquatic Preserves, or Class I waters; and
(o) during the initial clearing event and when conducting subsequent normal maintenance activities, the permittee shall eradicate all Brazilian pepper (Schinus terebinthifolius), Australian pine (Casuarina spp.), and punk tree (Melaleuca quinquinerva) from the wetland portions of the utility right of way.

<u>ACOE Nationwide Permit 12. Utility Line Activities.</u>
Activities required for the construction, maintenance and repair of utility lines and associated facilities in waters of the US as follows:
(i) Utility lines: The construction, maintenance, or repair of utility lines, including outfall and intake structures and the associated excavation, backfill, or bedding for the utility lines, in all waters of the US, provided there is no change in preconstruction contours. A ''utility line'' is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication (see Note 1, below). Material resulting from trench excavation may be temporarily sidecast (up to three months) into waters of the US, provided that the material is not placed in such a manner that it is dispersed by currents or other forces. The District Engineer may extend the period of temporary side casting not to exceed a total of 180 days, where appropriate. In wetlands, the top 6" to 12" of the trench should normally be backfilled with topsoil from the trench. Furthermore, the trench cannot be constructed in such a manner as to drain waters of the US (e.g., backfilling with extensive gravel layers, creating a French drain effect). For example, utility line trenches can be backfilled with clay blocks to ensure that the trench does not drain the waters of the US through which the utility line is installed. Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

(ii) Utility line substations: The construction, maintenance, or expansion of a substation facility associated with a power line or utility line in non-tidal waters of the US, excluding non-tidal wetlands adjacent to tidal waters, provided the activity does not result in the loss of greater than 1/2-acre of non-tidal waters of the US.

(iii) Foundations for overhead utility line towers, poles, and anchors: The construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the US, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

(iv) Access roads: The construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the US, excluding non-tidal wetlands adjacent to tidal waters, provided the discharges do not cause the loss of greater than 1/2 -acre of non-tidal waters of the US. Access roads shall be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes the adverse effects on waters of the US and as near as possible to preconstruction contours and elevations (e.g. at grade corduroy roads or geotextile/gravel roads). Access roads constructed above preconstruction contours and elevations in waters of the US must be properly bridged or culverted to maintain surface flows.

The term ''utility line'' does not include activities which drain a water of the US, such as drainage tile, or French drains; however, it does apply to pipes conveying drainage from another area.

For the purposes of this NWP, the loss of waters of the US includes the filled area plus waters of the US that are adversely affected by flooding, excavation, or drainage as a result of the project. Activities authorized by paragraph (i) through (iv) may not exceed a total of 1/2-acre loss of waters of the US. Waters of the US temporarily affected by filling, flooding, excavation, or drainage, where the project area is restored to preconstruction contours and elevation, is not included in the calculation of permanent loss of waters of the US. This includes temporary construction mats (e.g., timber, steel, geotextile) used during construction and removed upon completion of the work. Where certain functions and values of waters of the US are permanently adversely affected, such as the conversion of a forested wetland to a herbaceous wetland in the permanently maintained utility line right-of-way, mitigation will be required to reduce the adverse effects of the project to the minimal level.

6. Provide the rule section number of the NGP for which you are applying.

62-341.453 General Permit for Installation, Maintenance, Repair, and Removal of Underground Cable, Conduit, or Pipeline

7. The construction plans and supporting calculations must be signed, sealed, and dated by an appropriate registered professional as required by the relevant statutory provisions when the design of the system requires the services of an appropriate registered professional

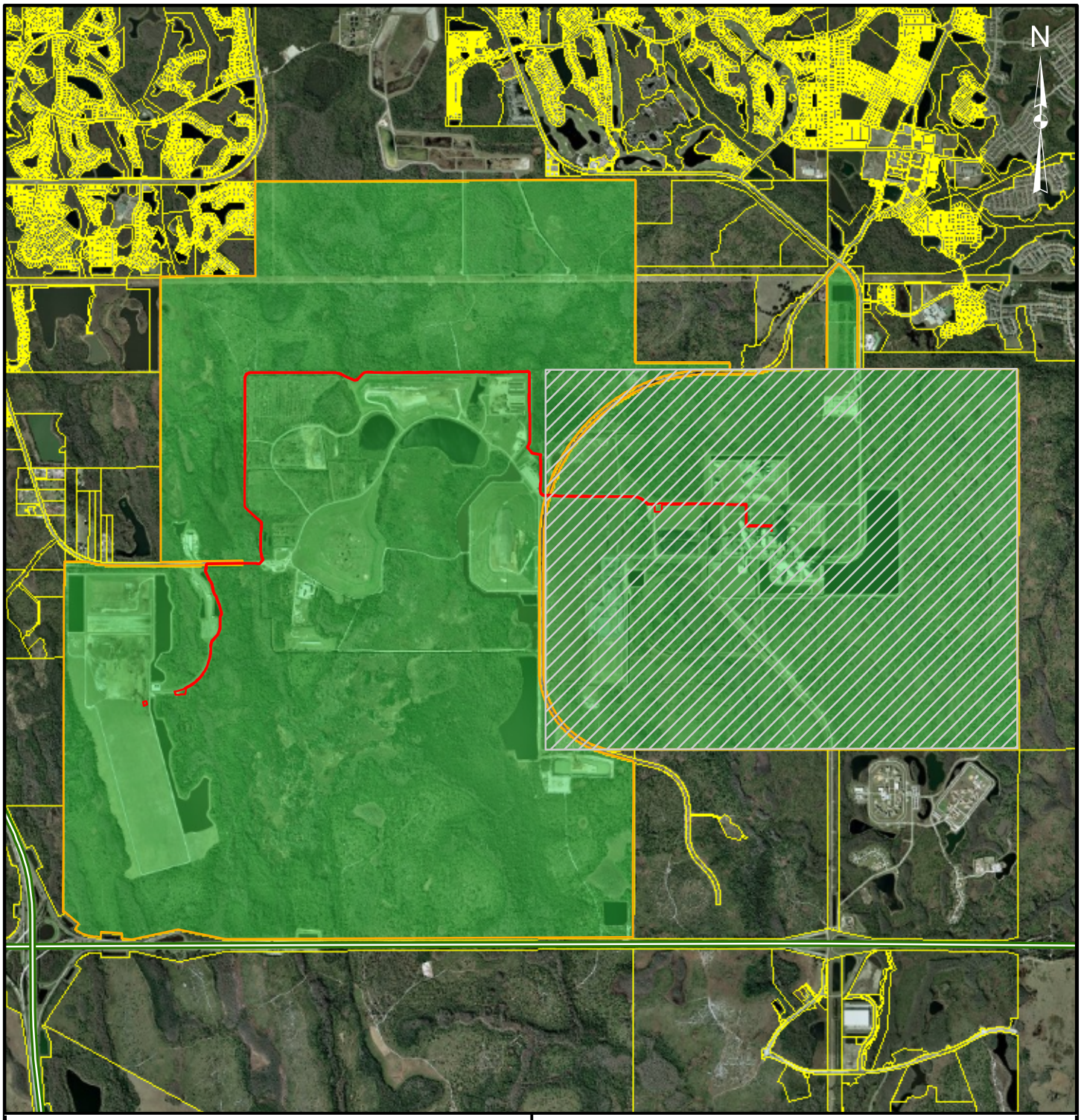
See Appendix C, Construction Plans.

TABLE 1
Project Impact Summary

WL & SW ID	WL & SW TYPE (FLUCFCS)	WL & SW SIZE (ac.) ON SITE	WL & SW ACRES NOT IMPACTED	PERMANENT IMPACTS TO WL & SW	IMPACT CODE	TEMPORARY IMPACTS TO WL & SW	IMPACT CODE	MITIGATION ID
				IMPACT SIZE (acres)		IMPACT SIZE (acres)		
WL A	**643**	**0.138**	**0.00**	**0.00**		**0.138**	**Trench excavation**	**In situ restoration—previously permitted and mitigated as Solid Waste Disposal Area in 1983**
WL E	**511 / 618**	**0.188**	**0.009**	**0.019**	**F**	**0.160**	**Trench excavation**	**In situ restoration**
Ditch 1	**511**	**0.008**	**0.00**	**0.00**		**0.008**	**Trench excavation**	**In situ restoration**
Ditch 2	**511**	**0.003**	**0.00**	**0.00**		**0.003**	**Trench excavation**	**In situ restoration**
Ditch 6	**511**	**0.008**	**0.00**	**0.00**		**0.008**	**Trench excavation**	**In situ restoration**
Reservoir 7 (Stormwater Pond)	**534**	**0.022**	**0.022**	**0.00**		**0.00**	**N/A—pipe constructed over top of outfall area**	**N/A**
Ditch 9	**511**	**0.039**	**0.039**	**0.00**		**0.00**	**N/A—pipe constructed over top of ditch**	**N/A**
Ditch 10	**511**	**0.003**	**0.00**	**0.00**		**0.003**	**Trench excavation**	**In situ restoration**
TOTAL		**0.409**	**0.07**	**0.019**		**0.32**		

WL = Wetland; **SW** = Surface water; **ID** = Identification number, letter, etc.
Wetland Type: Use an established wetland classification system and, in the comments section below, indicate which classification system is being used.
Impact Code (Type): D = dredge; F = fill; H = change hydrology; S = shading; C = clearing; O = other. Indicate the final impact if more than one impact type is proposed in a given area. For example, show F only for an area that will first be de-mucked and then backfilled.

APPENDIX A
ADJACENT PROPERTY OWNER INFORMATION



LEGEND

- Project Boundary
- Certified Boundary
- Parcels Containing Project Boundary
- Toll Road
- Other Parcels

NOTE

See Table A-1 for parcel information.

REFERENCES

1. Project Boundary: Golder Associates Inc., 2010
2. Parcel Boundaries: Orange County Property Appraiser, 2008 with Golder edits, 2010
3. Certified Boundary: ECT, 2005
4. Aerial: Florida Department of Transportation, 2008

4,000 0 4,000 Feet

REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

ADJACENT PROPERTY OWNERS

Golder Associates
Tampa, Florida

PROJECT No.		103-89513	FILE No. 103-89513C018	
DESIGN	JG	7/27/2010	SCALE: AS SHOWN	REV. 0
GIS	JG	8/3/2010	APPENDIX A	
CHECK	HA	8/3/2010		
REVIEW	KB	8/3/2010		

Map Document: F:\PROJECTS\2010 PROJ\103-89513 OUC Stanton Regulatory Review\C- ERP Support\GIS\MXD\103-89513C018 Adjacent Parcels Appendix A.mxd / Modified 8/3/2010 4:57:47 PM / Plotted 8/4/2010 1:58:58 PM by JDGodin

TABLE A-1
PARCELS CONTAINING PROJECT BOUNDARY

PARCEL ID	NAME	ADDRESS	CITY	STATE	ZIP CODE	ACREAGE
312324000000002	FLORIDA MUNICIPAL POWER AGENCY	8553 COMMODITY CIR	ORLANDO	FL	32819	4.02
322319000000001	CITY OF ORLANDO &	PO BOX 3193	ORLANDO	FL	32802	650.85
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312313000000004	CITY OF ORLANDO &	PO BOX 3193	ORLANDO	FL	32802	20.21
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312314000000009	CITY OF ORLANDO	400 S ORANGE AVE	ORLANDO	FL	32801	1.14
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312314000000016	CITY OF ORLANDO	400 S ORANGE AVE	ORLANDO	FL	32801	1.92
312314000000018	CITY OF ORLANDO	400 S ORANGE AVE	ORLANDO	FL	32801	6.5
312314000000017	CITY OF ORLANDO	400 S ORANGE AVE	ORLANDO	FL	32801	0.31
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312314000000021	CITY OF ORLANDO	400 S ORANGE AVE	ORLANDO	FL	32801	2.28
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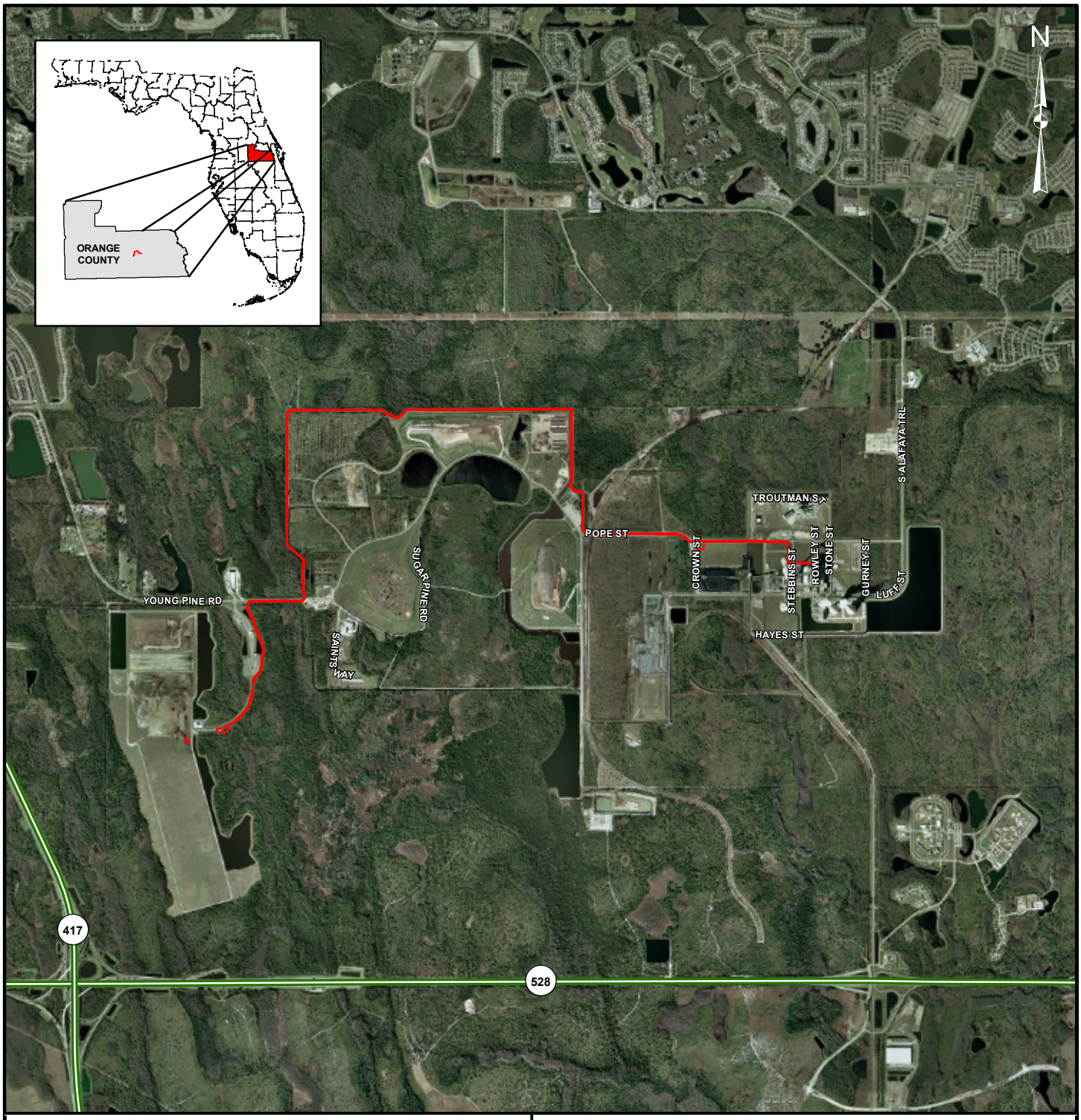
312314000000004	CITY OF ORLANDO	400 S ORANGE AVE	ORLANDO	FL	32801	0
312323000000008	CITY OF ORLANDO	400 S ORANGE AVE	ORLANDO	FL	32801	3.79
312323000000001	CITY OF ORLANDO	400 S ORANGE AVE	ORLANDO	FL	32801	12.98
312323000000032	CITY OF ORLANDO	400 S ORANGE AVE	ORLANDO	FL	32801	2.52
312323000000034	CITY OF ORLANDO	400 S ORANGE AVE	ORLANDO	FL	32801	1.26

PARCEL ID	NAME	ADDRESS	CITY	STATE	ZIP CODE	ACREAGE
312323000000006	CITY OF ORLANDO	400 S ORANGE AVE	ORLANDO	FL	32801	21.91
312323000000014	CITY OF ORLANDO	400 S ORANGE AVE	ORLANDO	FL	32801	130.47
322307000000001	CITY OF ORLANDO &	PO BOX 3193	ORLANDO	FL	32802	705.12
312322000000001	ORANGE COUNTY BCC ORANGE COUNTY LANDFILL C/O REAL ESTATE MNGT DEPT	PO BOX 1393	ORLANDO	FL	32802	6268.21

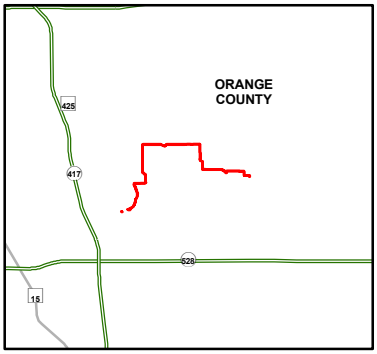
APPENDIX B
SITE LOCATION INFORMATION



LEGEND

- Project Boundary
- Toll Road
- County Road

REGIONAL MAP



REFERENCES

1. Project Boundary: Golder Associates Inc., 2010
2. Roads: Florida Department of Transportation, 2010
3. County Boundaries: Florida Geographic Data Library, 2008
4. Aerial: Florida Department of Transportation, 2008

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REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

LOCATION MAP

Golder Associates
Tampa, Florida

PROJECT No.		103-89513	FILE No. 103-89513C010	
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GIS	JG	7/27/2010	FIGURE 1	
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REVIEW	KB	7/27/2010		

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LEGEND

- Project Boundary
- Match Line
- Land Use

NOTE

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427	Live Oak
434	Hardwood - Conifer Mixed
511	Ditch
534	Reservoirs less than 10 acres which are dominant features
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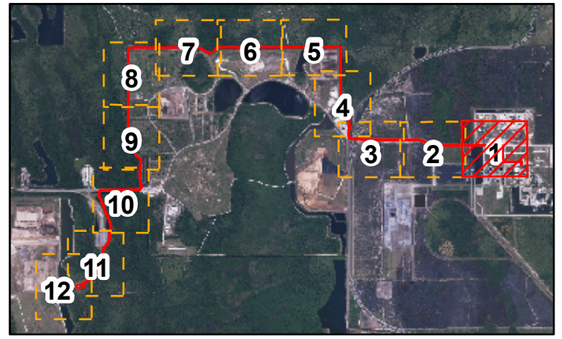
621	Cypress
625	Hydric Pine Flatwoods
630	Wetland Forested Mixed
641	Freshwater Marshes
643	Wet Prairies
646	Treeless Hydric Savanna
743	Spoil Areas
814	Roads and Highways
830	Utilities
831	Electric Power Facilities
835	Solid Waste Disposal

REFERENCES

1. Project Boundary: Golder Associates Inc., 2010
2. Land Use: Golder Associates Inc., 2010
3. Aerial: Florida Department of Transportation, 2008

INDEX MAP



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REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

LAND USE/LAND COVER

Golder Associates

PROJECT No.		103-89513	FILE No. 103-89513C009	
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GIS	JG	7/27/2010	FIGURE 2	
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REVIEW	KB	7/27/2010		

LEGEND

- Project Boundary
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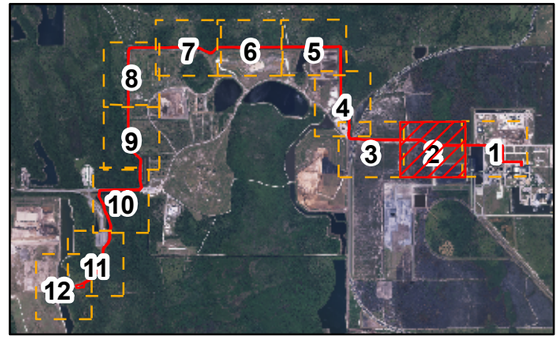
INDEX MAP



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PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

LAND USE/LAND COVER

Golder Associates

PROJECT No.		103-89513	FILE No. 103-89513C009	
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LEGEND

- Project Boundary
- Match Line
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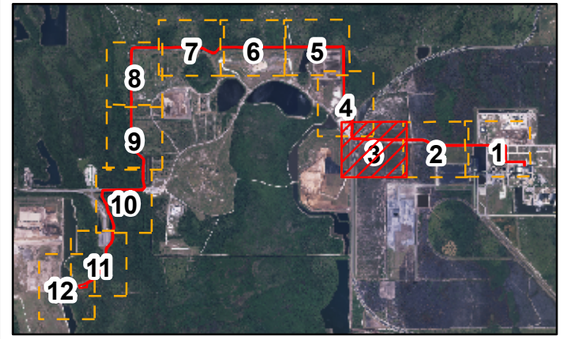

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REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

LAND USE/LAND COVER

Golder Associates

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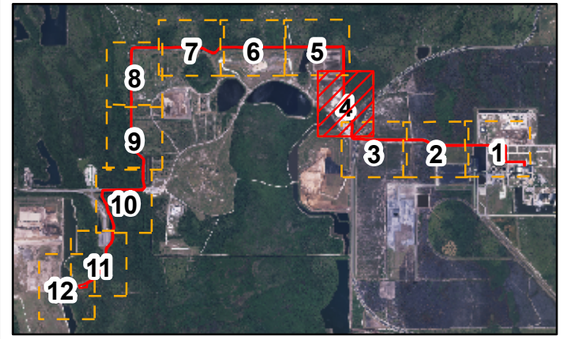

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PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

LAND USE/LAND COVER

Golder Associates

PROJECT No.		103-89513	FILE No. 103-89513C009	
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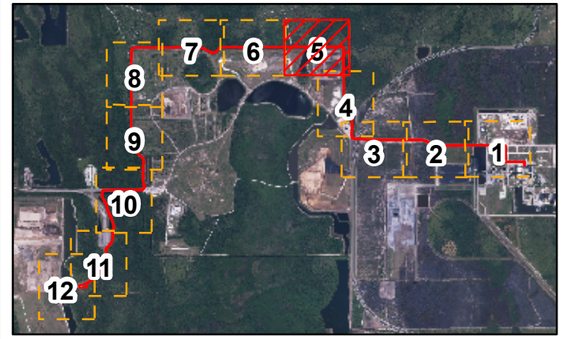

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PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

LAND USE/LAND COVER

Golder Associates

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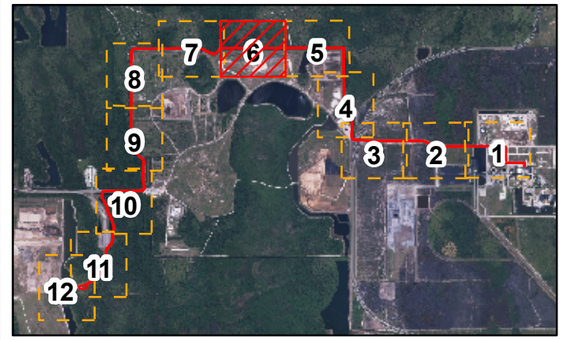

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PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

LAND USE/LAND COVER

Golder Associates

PROJECT No.		103-89513	FILE No. 103-89513C009	
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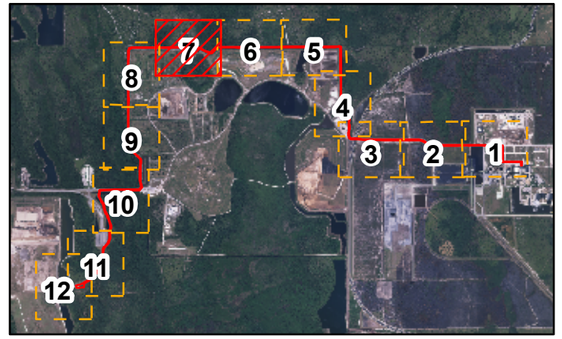

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PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

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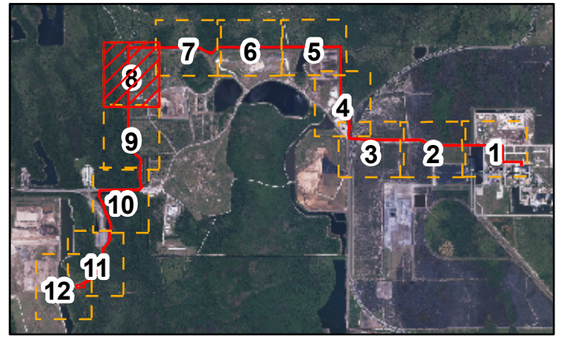
INDEX MAP



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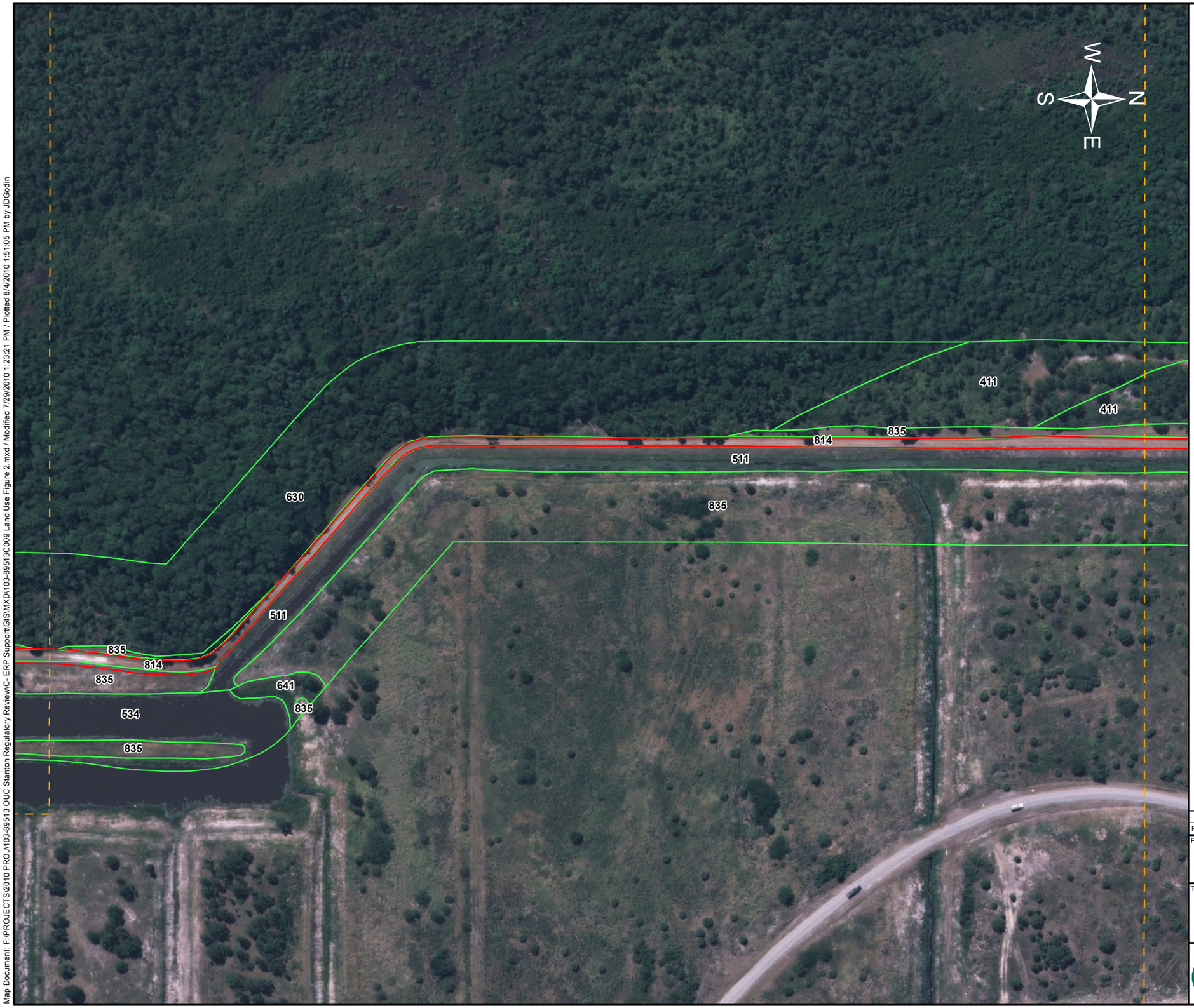

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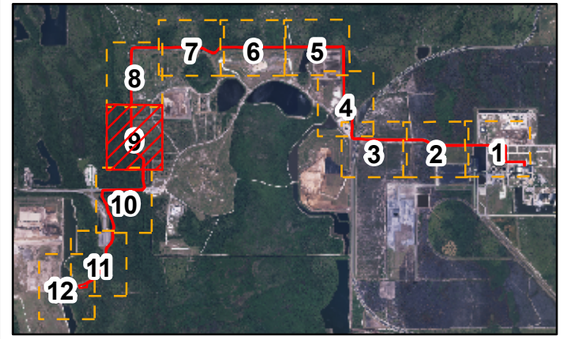

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LAND USE/LAND COVER

Golder Associates

PROJECT No.		103-89513	FILE No. 103-89513C009	
DESIGN	JG	7/27/2010	SCALE: AS SHOWN	REV. 0
GIS	JG	7/27/2010	FIGURE 2	
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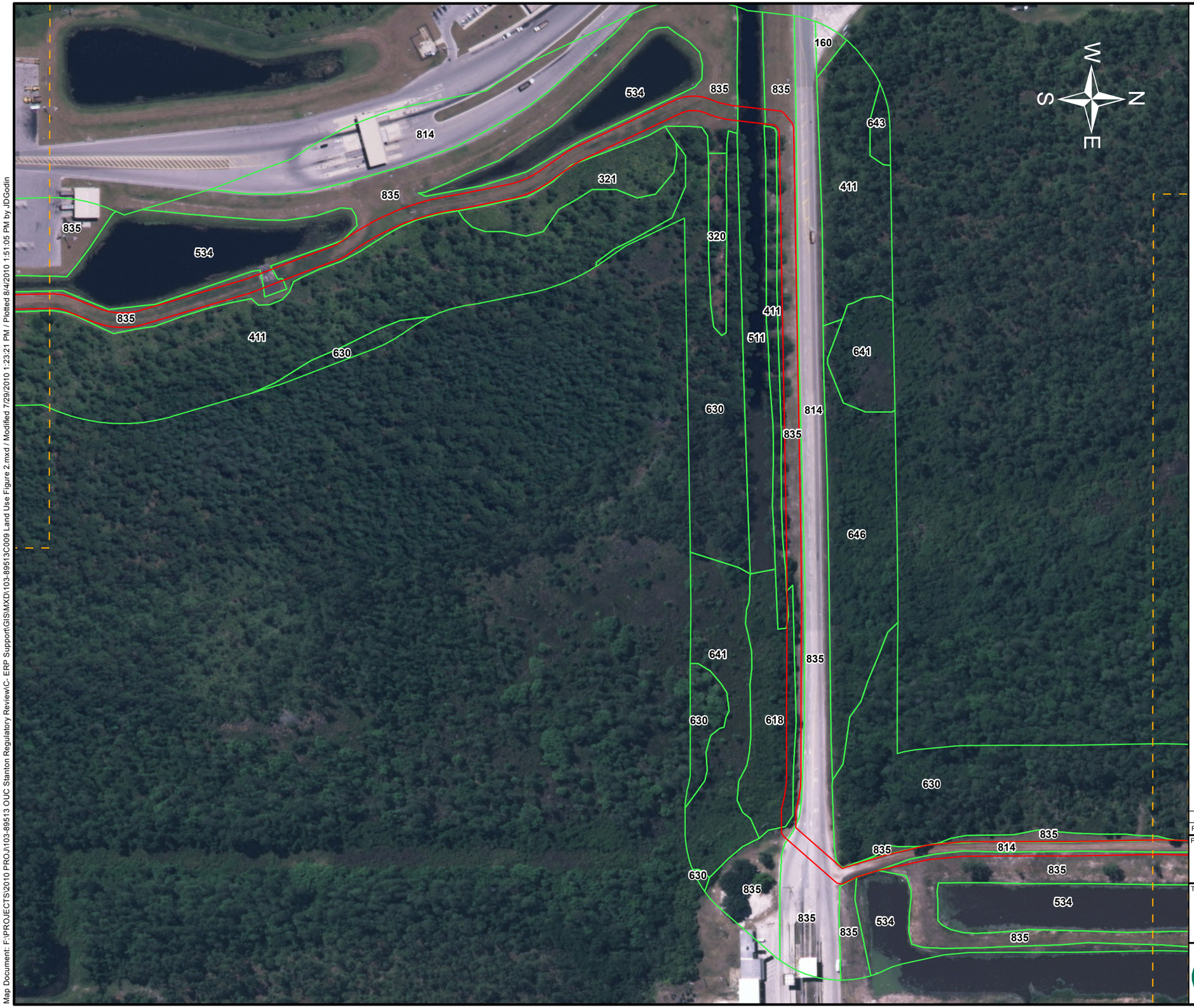
REVIEW	KB	7/27/2010		

Map Document: F:\PROJECTS\2010 PROJ\103-89513 OUC Stanton Regulatory Review\C- ERP Support\GIS\MXD\103-89513C009 Land Use Figure 2.mxd / Modified 7/29/2010 1:23:21 PM / Plotted 8/4/2010 1:51:05 PM by JDGodin



LEGEND

- Project Boundary
- Match Line
- Land Use

NOTE

1. St. Johns River Water Management District Florida Land Use, Cover and Forms Classification System (FLUCFCS) was used outside the project boundary, while Golder FLUCFCS was used inside the project boundary.

LAND USE CODE	LAND USE DESCRIPTION
160	Extractive
320	Shrub and Brushland
321	Palmetto Prairies
411	Pine Flatwoods
427	Live Oak
434	Hardwood - Conifer Mixed
511	Ditch
534	Reservoirs less than 10 acres which are dominant features
618	Shrub Wetland
621	Cypress
625	Hydric Pine Flatwoods
630	Wetland Forested Mixed
641	Freshwater Marshes
643	Wet Prairies
646	Treeless Hydric Savanna
743	Spoil Areas
814	Roads and Highways
830	Utilities
831	Electric Power Facilities
835	Solid Waste Disposal

REFERENCES

1. Project Boundary: Golder Associates Inc., 2010
2. Land Use: Golder Associates Inc., 2010
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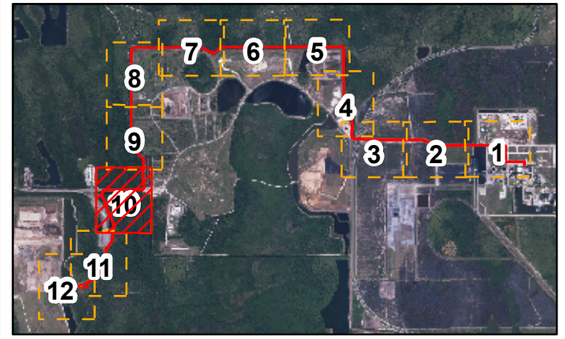
INDEX MAP



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REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

LAND USE/LAND COVER

Golder Associates

PROJECT No.		103-89513	FILE No. 103-89513C009	
DESIGN	JG	7/27/2010	SCALE: AS SHOWN	REV. 0
GIS	JG	7/27/2010	FIGURE 2 10 OF 12	
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REVIEW	KB	7/27/2010		

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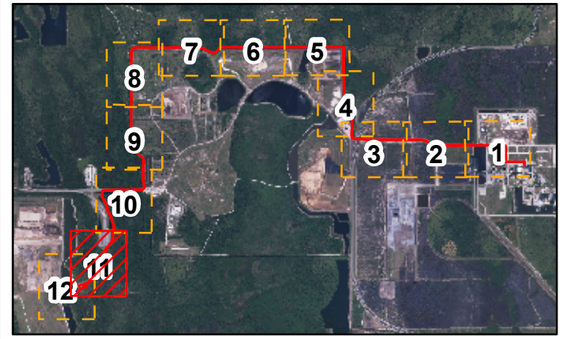

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PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

LAND USE/LAND COVER

Golder Associates

PROJECT No.		103-89513	FILE No. 103-89513C009	
DESIGN	JG	7/27/2010	SCALE: AS SHOWN	REV. 0
GIS	JG	7/27/2010	FIGURE 2 11 OF 12	
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REVIEW	KB	7/27/2010		

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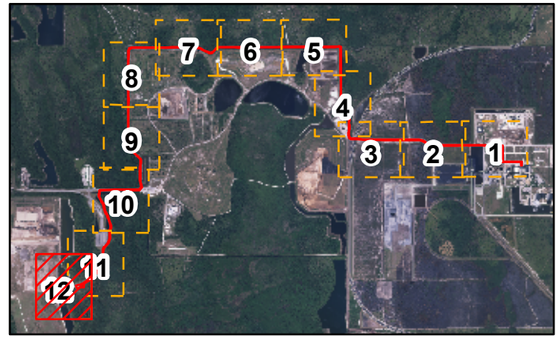

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PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

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PROJECT No.		103-89513	FILE No. 103-89513C009	
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GIS	JG	7/27/2010	FIGURE 2	
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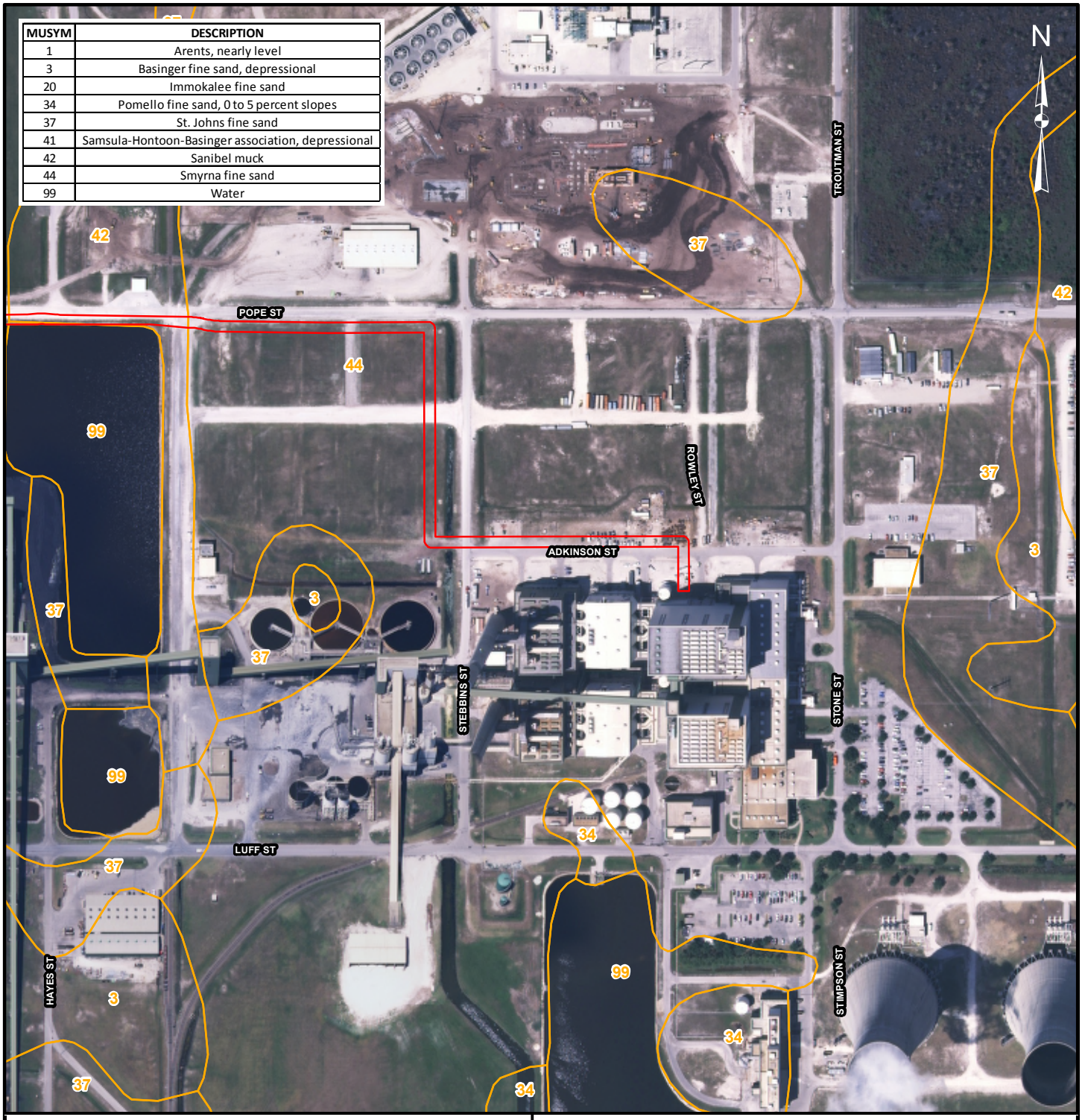
37	St. Johns fine sand
41	Samsula-Hontoon-Basinger association, depressional
42	Sanibel muck
44	Smyrna fine sand
99	Water



LEGEND

Project Boundary

Soils

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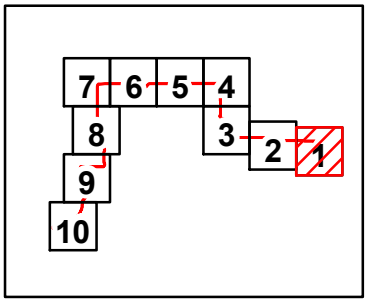

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400 0 400 Feet

REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

SOILS

Golder Associates
Tampa, Florida

PROJECT No.		103-89513	FILE No. 103-89513C011	
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GIS	JG	7/27/2010	FIGURE 3	
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Map Document: F:\PROJECTS\2010 PROJ\103-89513 OUC Stanton Regulatory Review\C- ERP Support\GIS\MXD\103-89513C011 Soils Figure 3.mxd / Modified 7/27/2010 1:44:35 PM / Plotted 8/4/2010 1:51:42 PM by JDGodin

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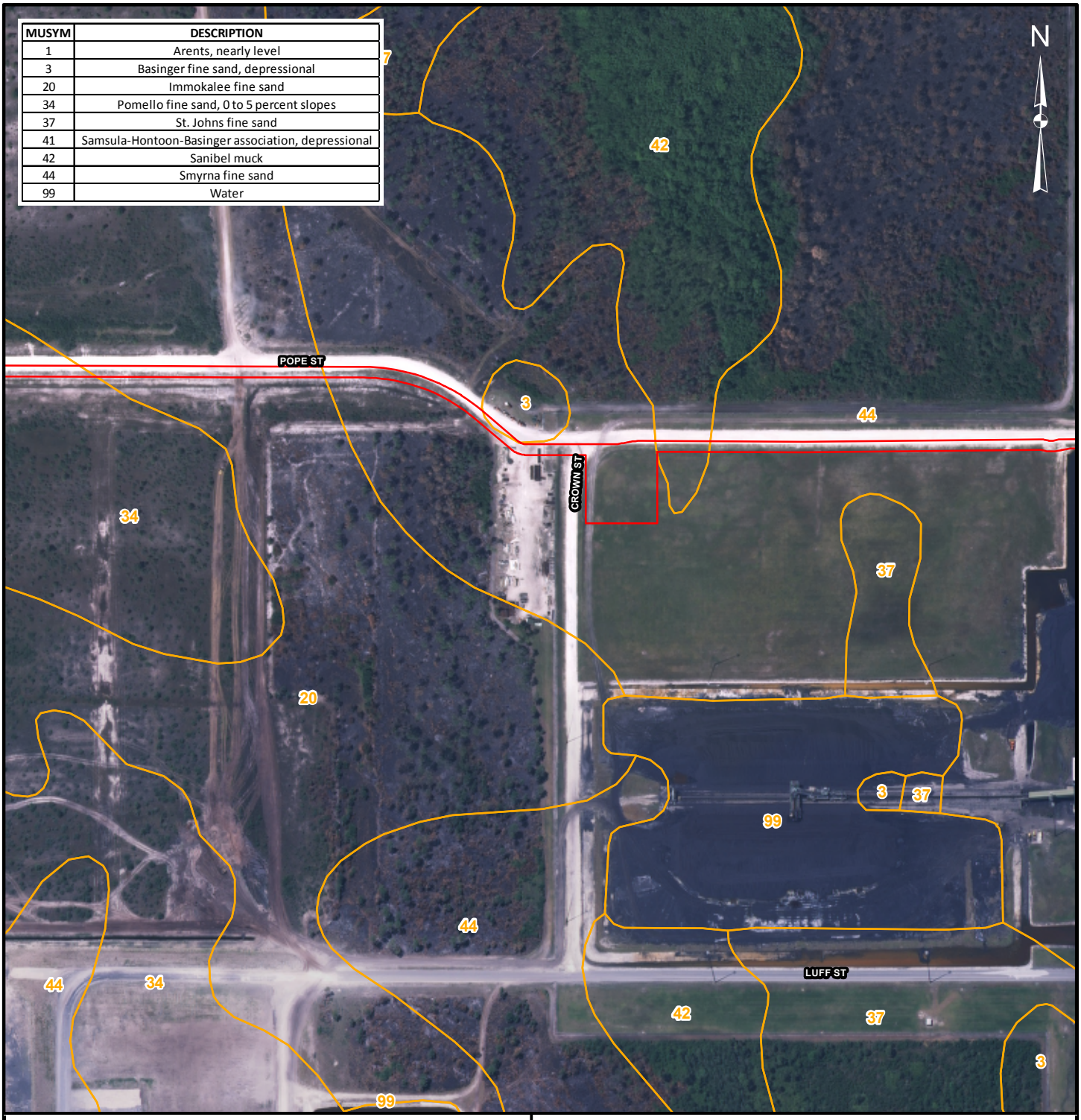

LEGEND

Project Boundary

Soils

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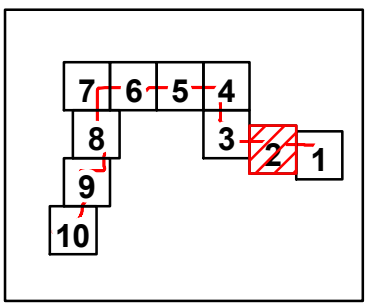

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OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

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SOILS

Golder Associates
Tampa, Florida

PROJECT No.		103-89513	FILE No. 103-89513C011
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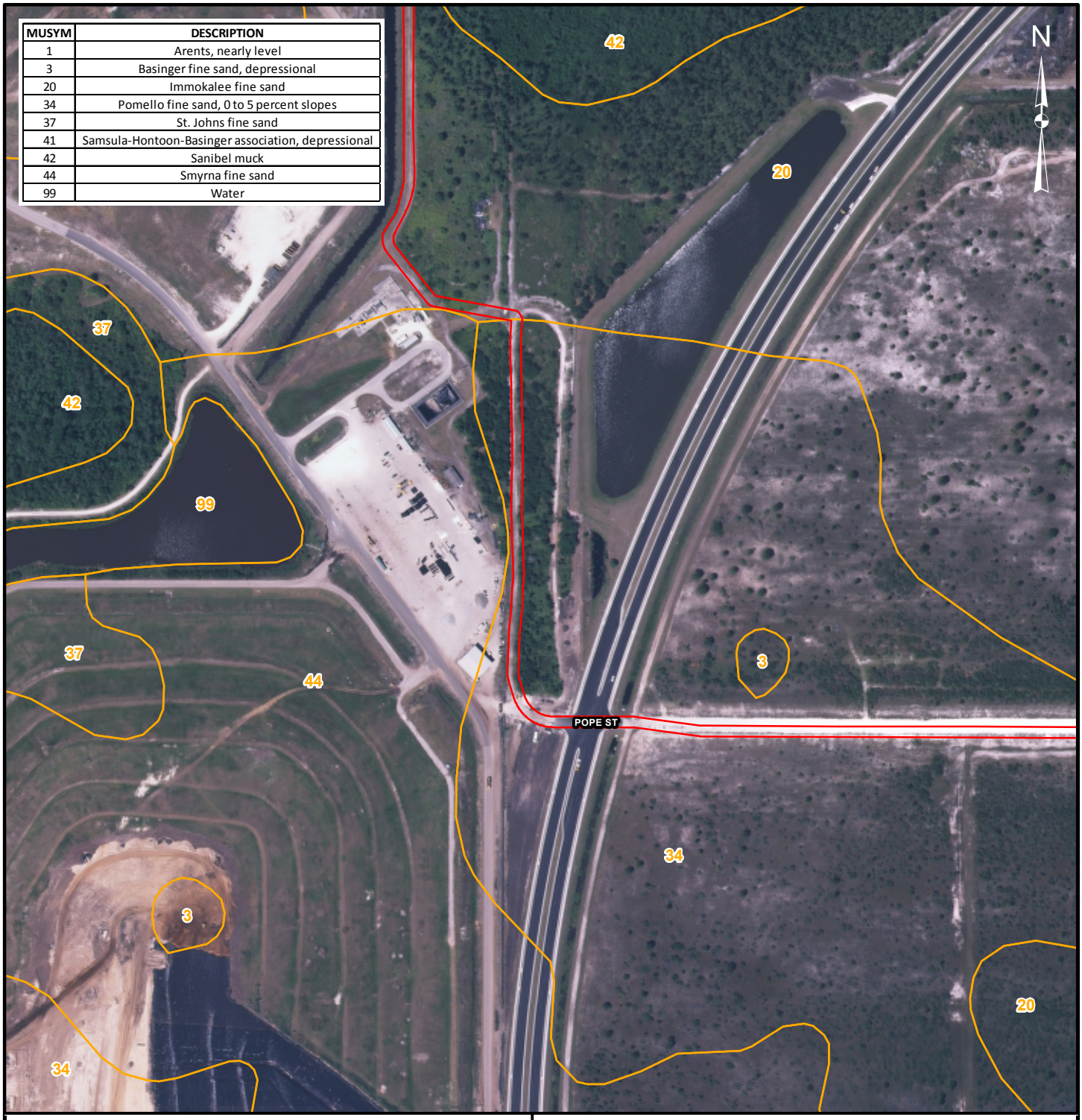

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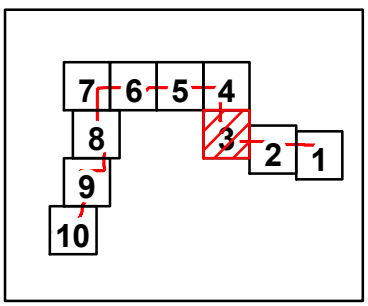
LEGEND

- Project Boundary
- Soils

MAP INDEX



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OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

SOILS

Golder Associates
Tampa, Florida

PROJECT No.		103-89513	FILE No. 103-89513C011	
DESIGN	JG	7/27/2010	SCALE: AS SHOWN	REV. 0
GIS	JG	7/27/2010	FIGURE 3	
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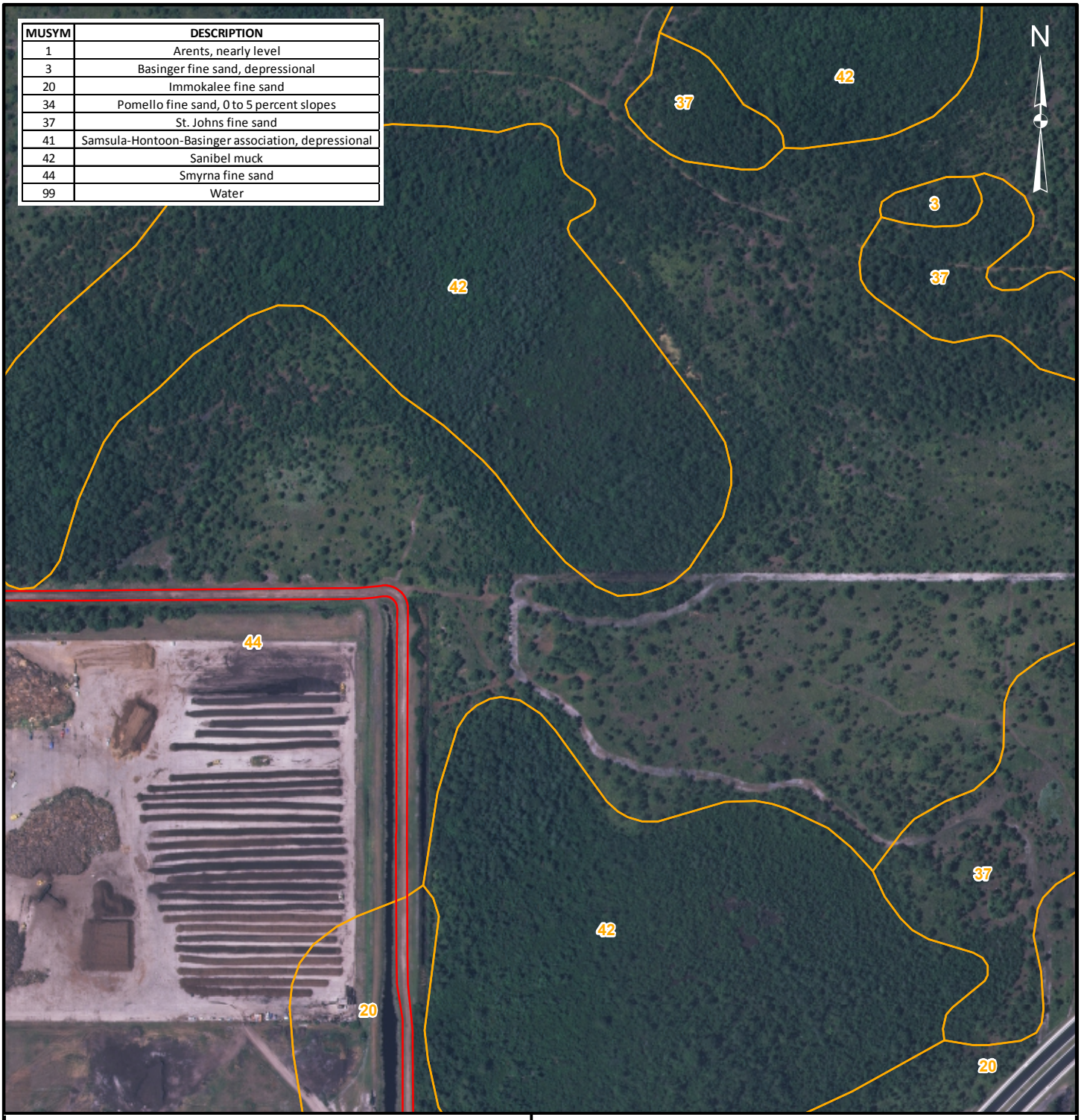

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Project Boundary

Soils

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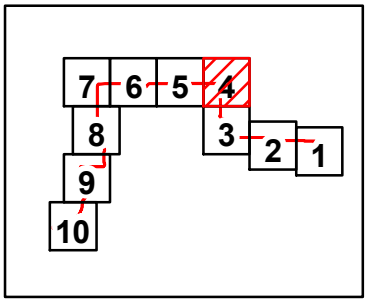

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PROJECT

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SECOND LANDFILL GAS PIPELINE

TITLE

SOILS

Golder Associates
Tampa, Florida

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GIS	JG	7/27/2010	FIGURE 3	
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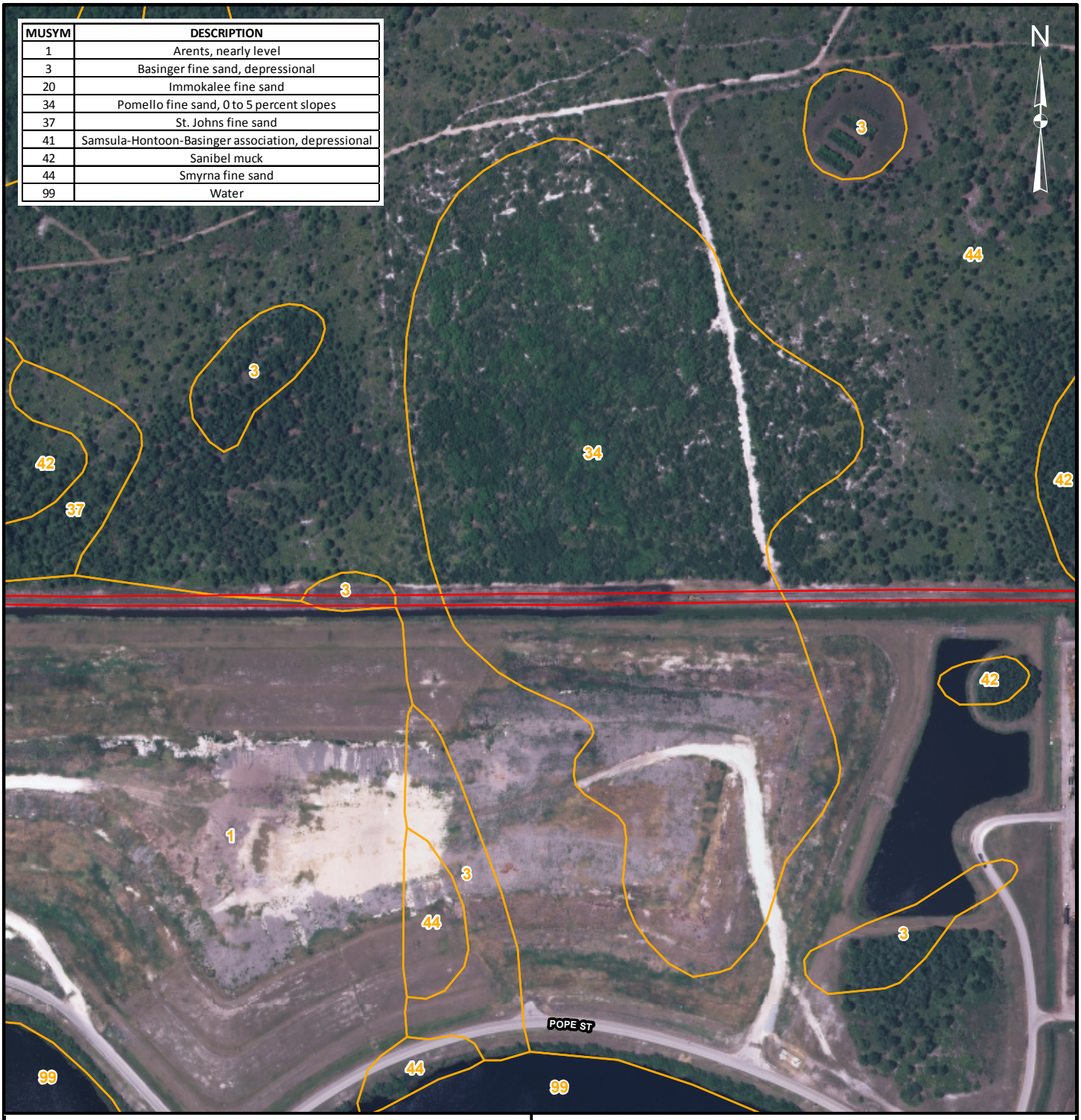

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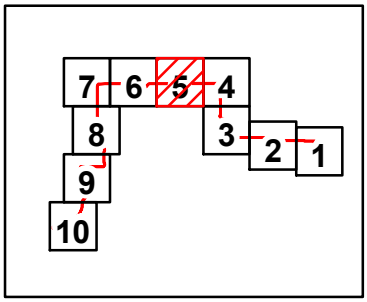

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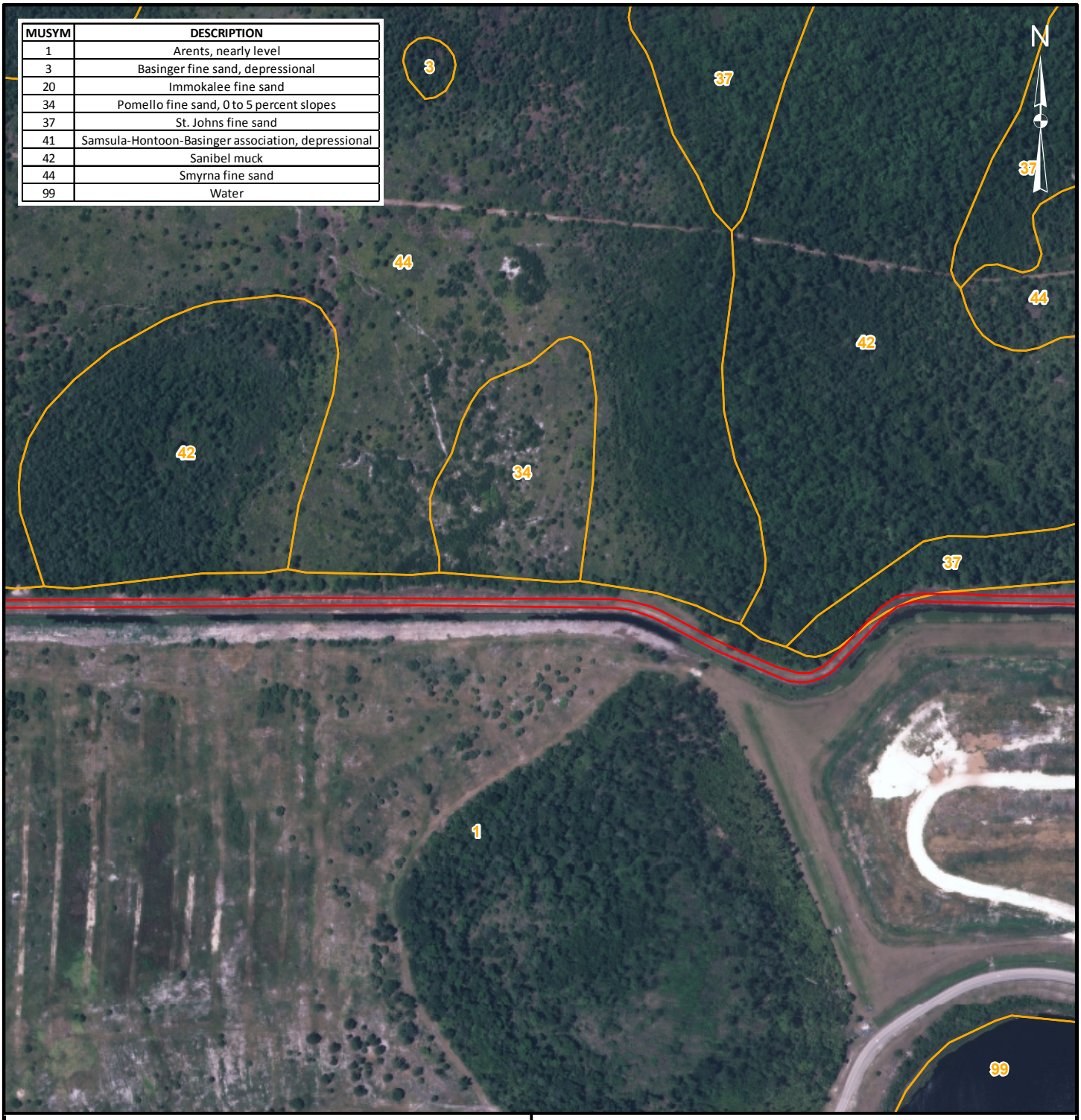

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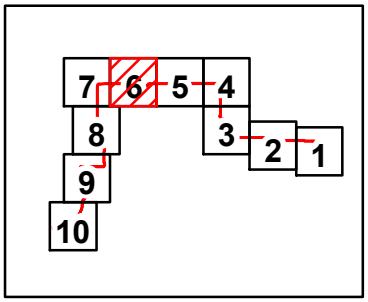

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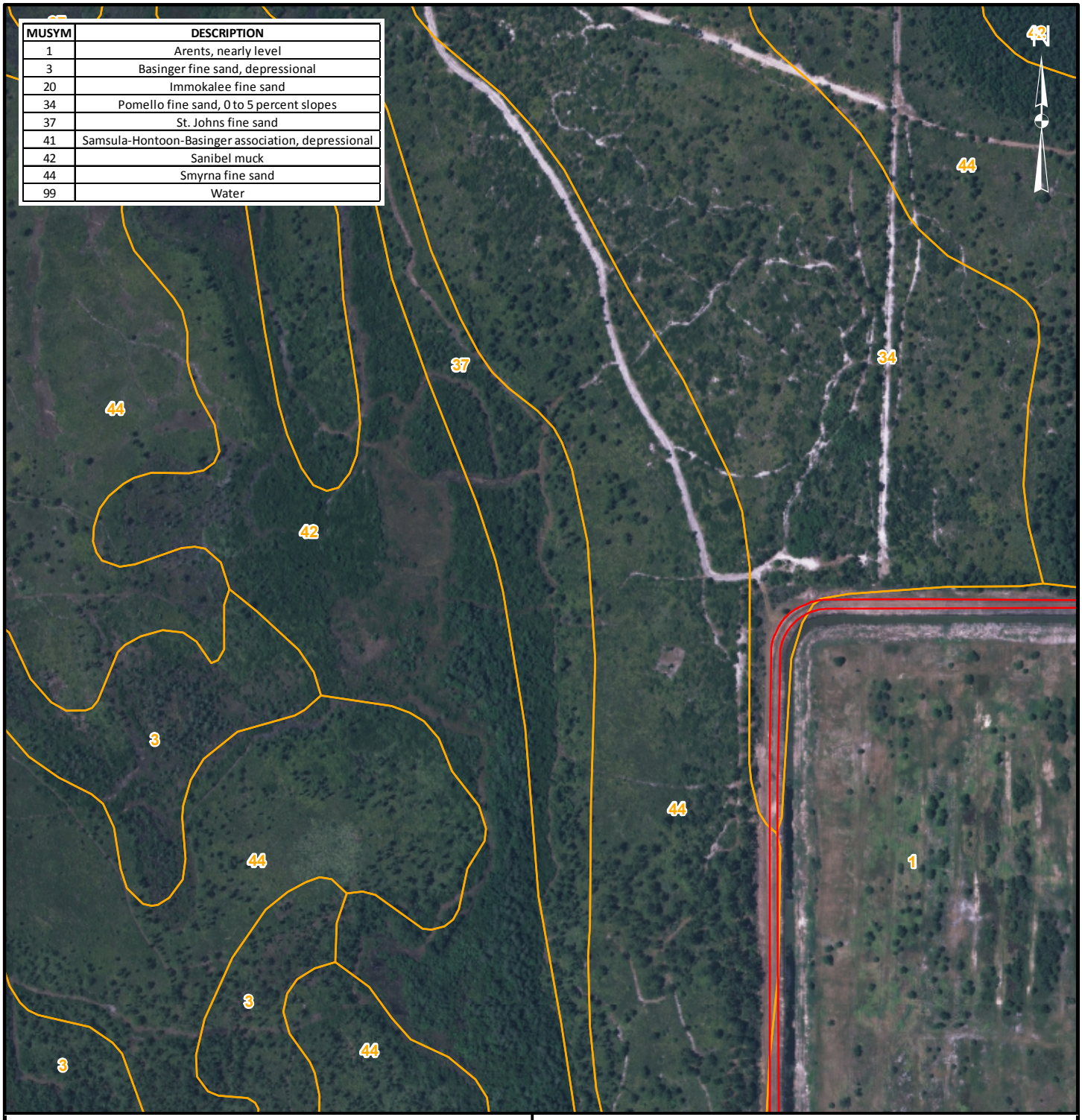

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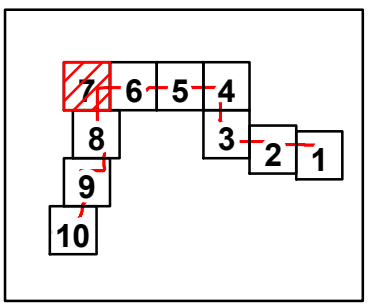

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SOILS

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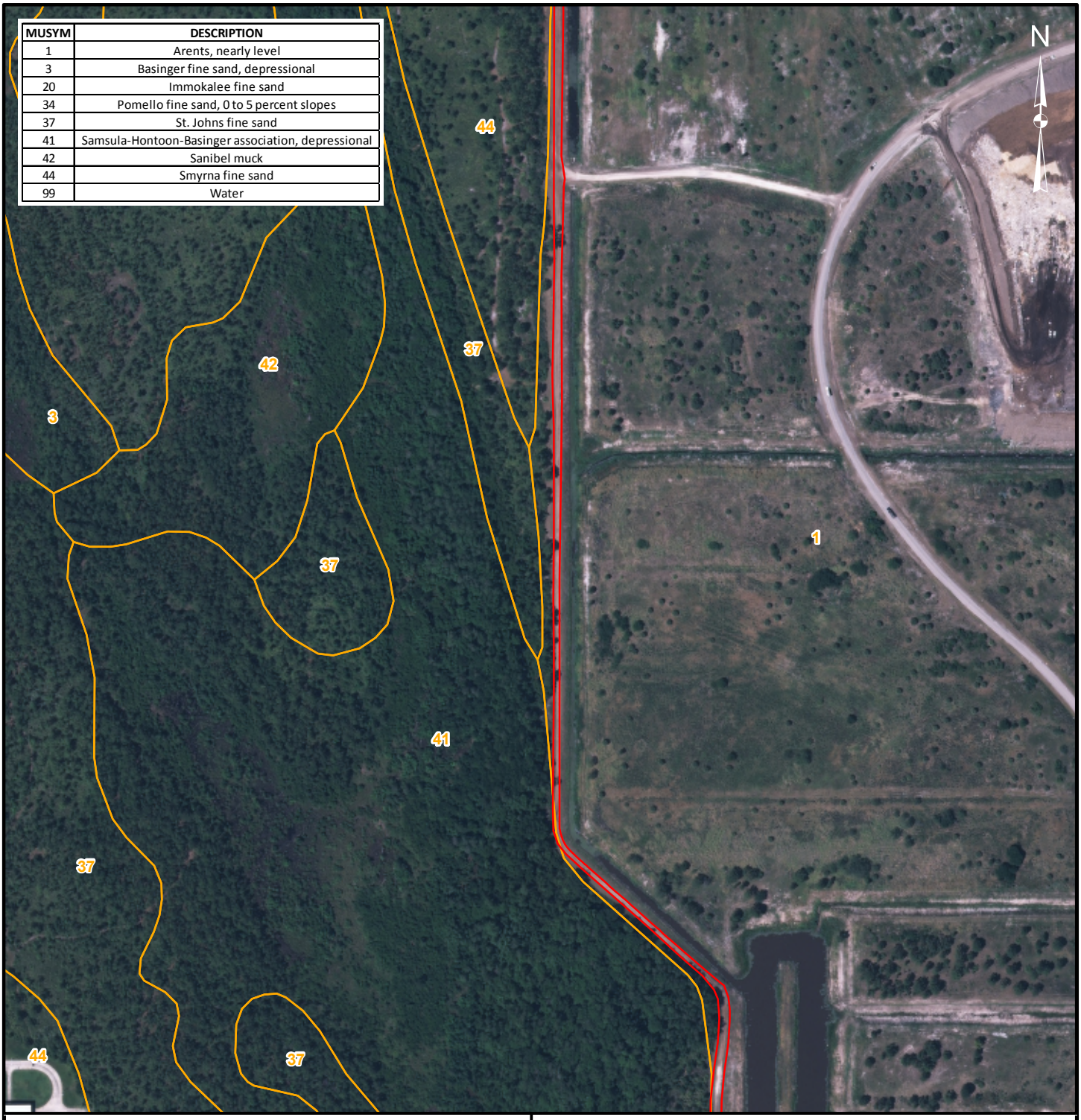

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Project Boundary

Soils

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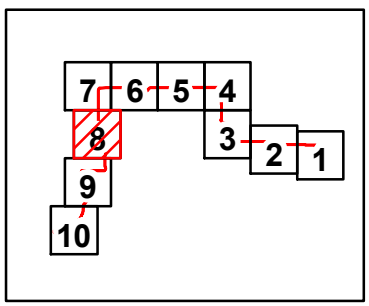

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SECOND LANDFILL GAS PIPELINE

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CHECK	HA	7/27/2010	8 OF 10	
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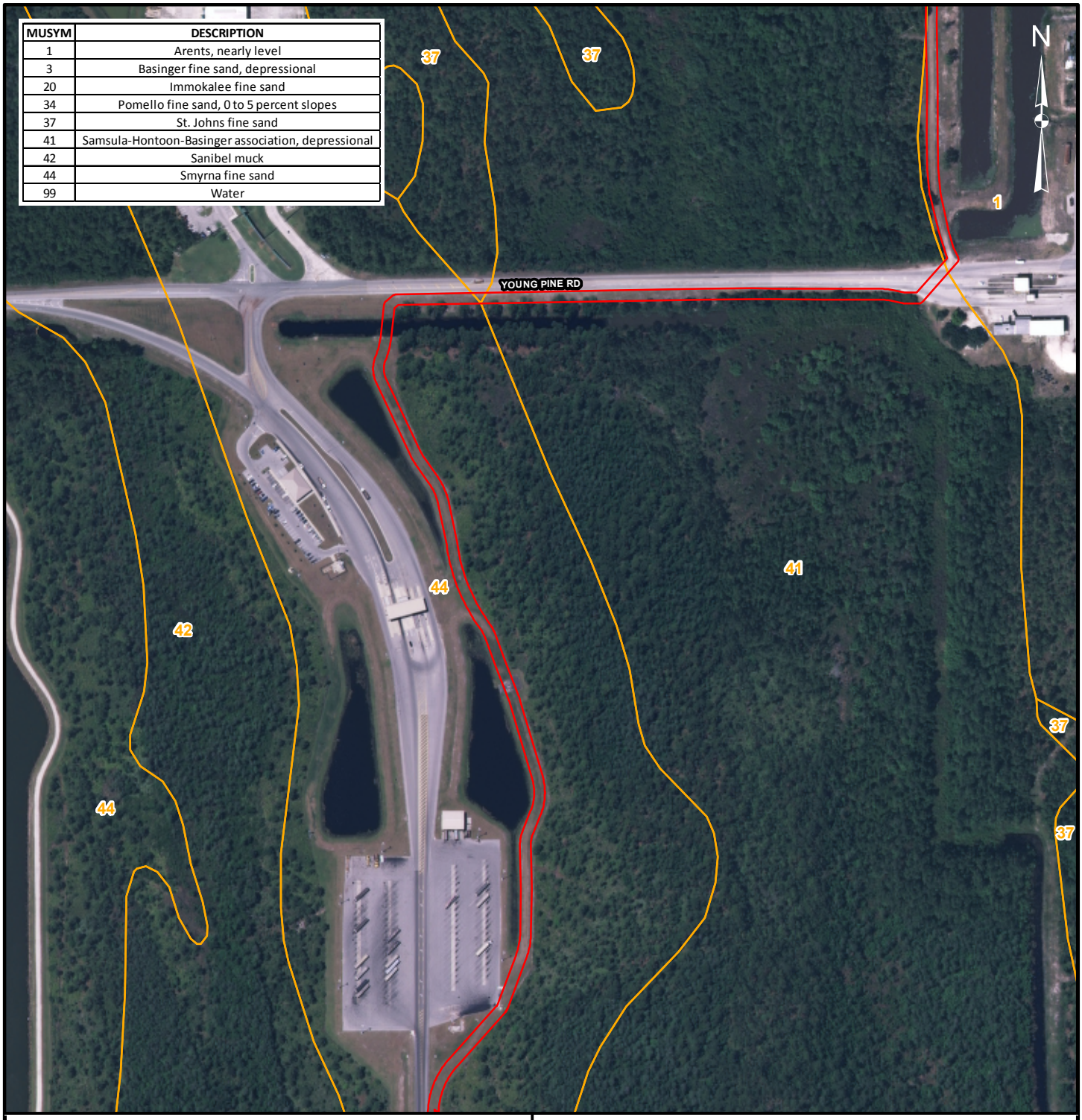
Map Document: F:\PROJECTS\2010 PROJ\103-89513 OUC Stanton Regulatory Review\C- ERP Support\GIS\MXD\103-89513C011 Soils Figure 3.mxd / Modified 7/27/2010 1:44:35 PM / Plotted 8/4/2010 1:51:42 PM by JDGodin

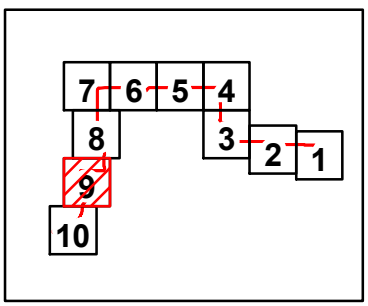
MUSYM	DESCRIPTION
1	Arents, nearly level
3	Basinger fine sand, depressional
20	Immokalee fine sand
34	Pomello fine sand, 0 to 5 percent slopes
37	St. Johns fine sand
41	Samsula-Hontoon-Basinger association, depressional
42	Sanibel muck
44	Smyrna fine sand
99	Water



LEGEND

- Project Boundary
- Soils

MAP INDEX



REFERENCES

1. Project Boundary: Golder Associates Inc., 2010
2. Soils: U.S. Department of Agriculture, Natural Resources Conservation Service, 2010
3. Aerial: Florida Department of Transportation, 2008

400 0 400
Feet

REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

SOILS

Golder Associates
Tampa, Florida

PROJECT No.		103-89513	FILE No. 103-89513C011	
DESIGN	JG	7/27/2010	SCALE: AS SHOWN	REV. 0
GIS	JG	7/27/2010	FIGURE 3	
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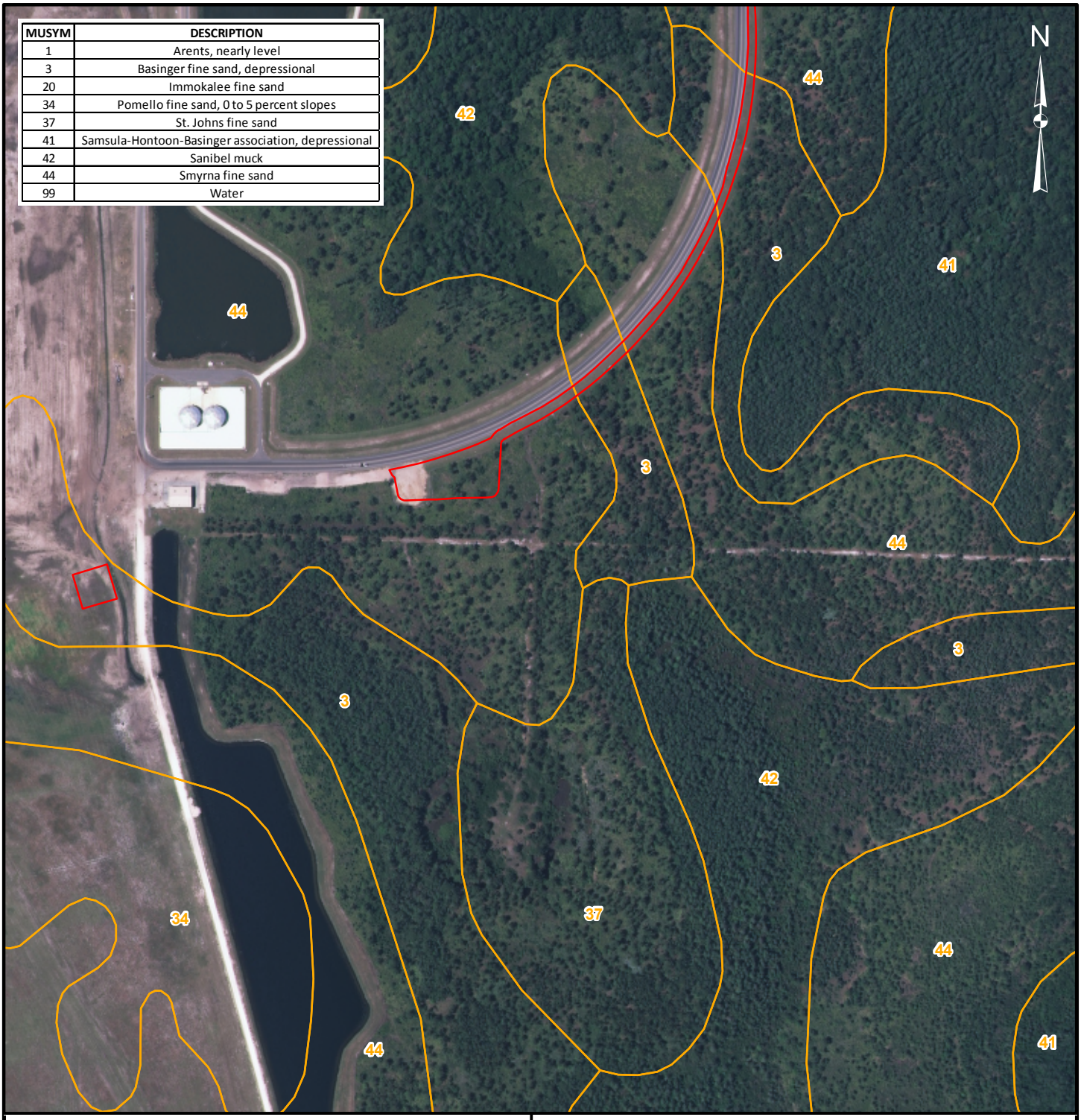
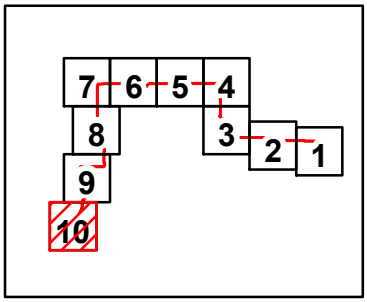


LEGEND

Project Boundary

Soils

MAP INDEX



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400 0 400 Feet

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OUC STANTON ENERGY CENTER
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TITLE

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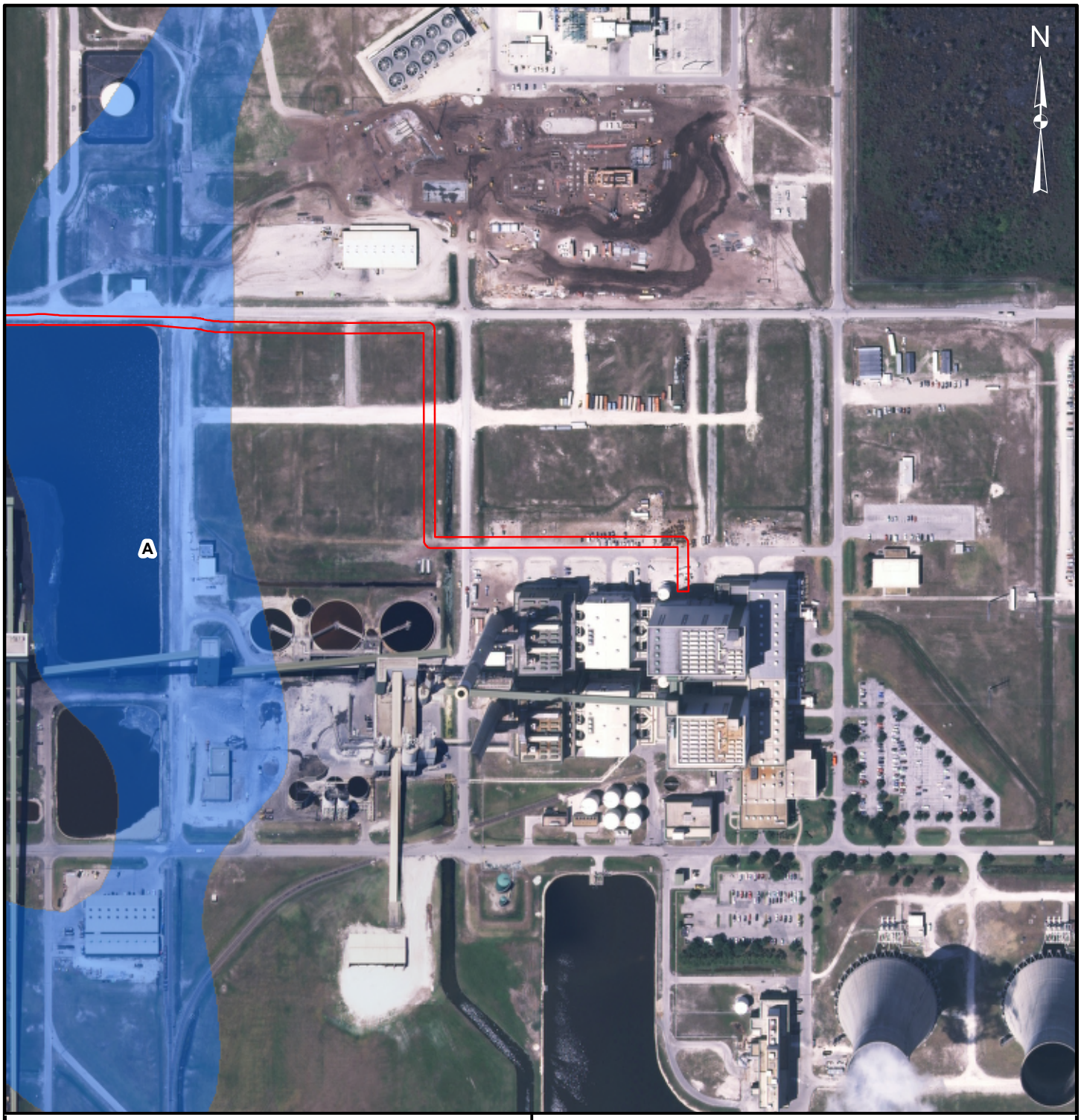

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- Project Boundary
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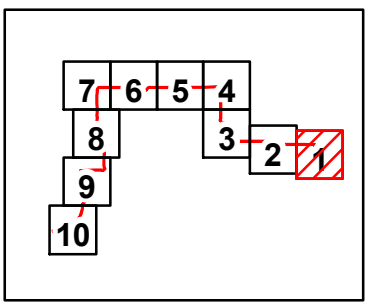
MAP INDEX



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400 0 400
Feet

REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

100-YEAR FLOODPLAIN

Golder Associates
Tampa, Florida

PROJECT No.		103-89513	FILE No. 103-89513C012	
DESIGN	JG	7/27/2010	SCALE: AS SHOWN	REV. 0
GIS	JG	7/27/2010	FIGURE 4	
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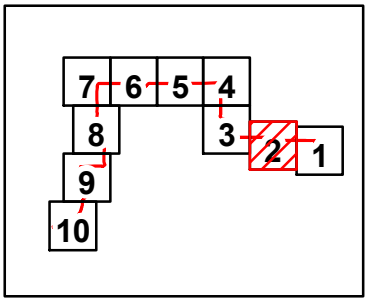

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400 0 400
Feet

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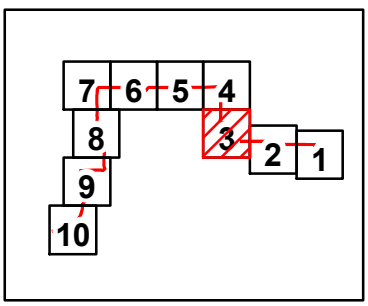

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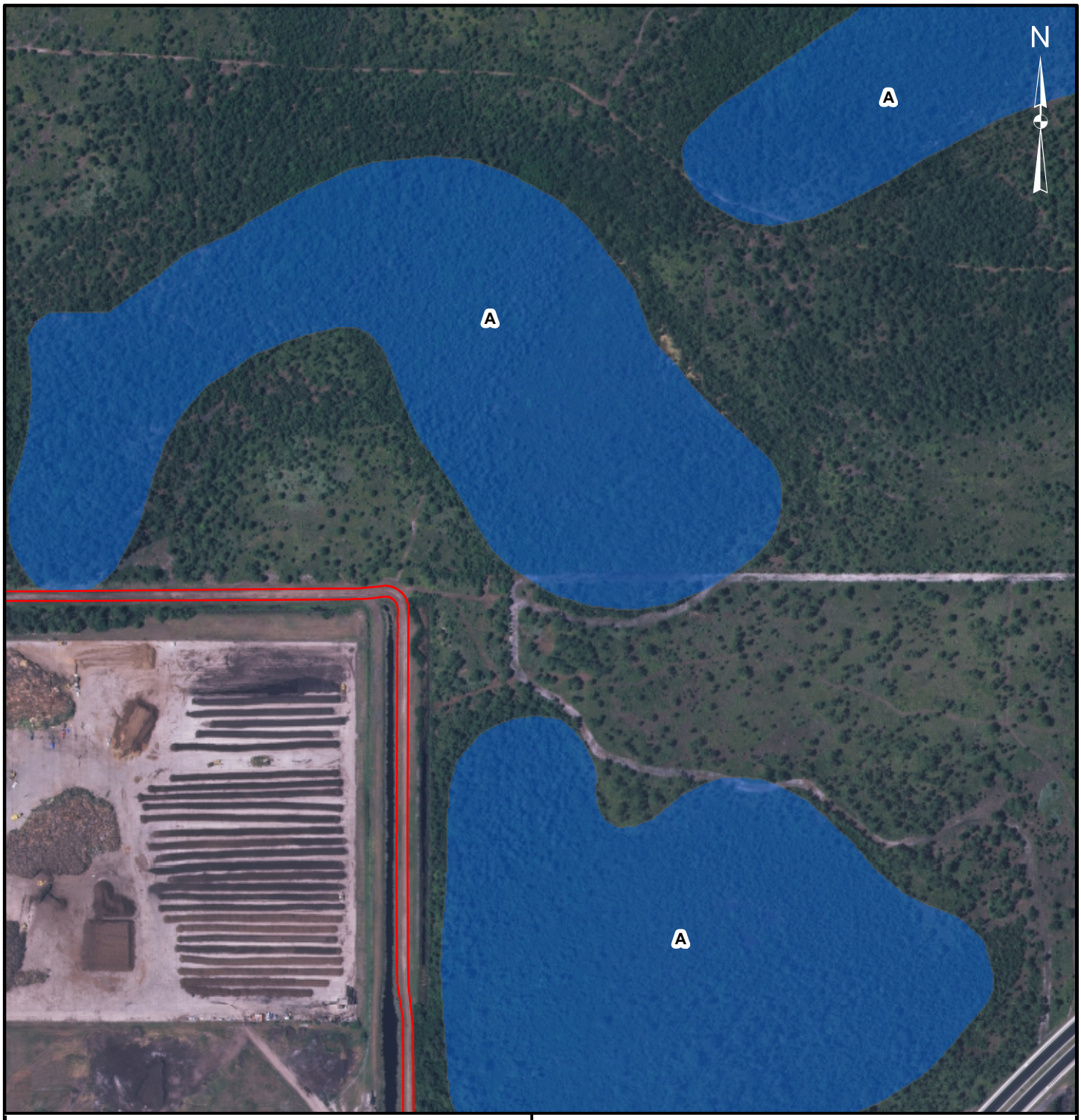

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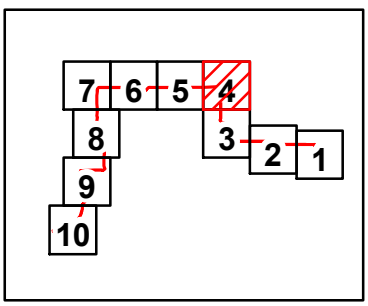

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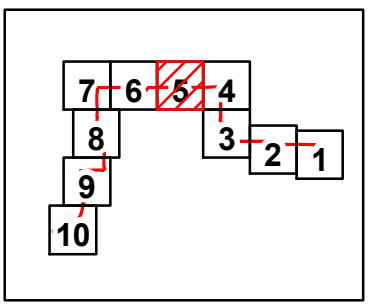

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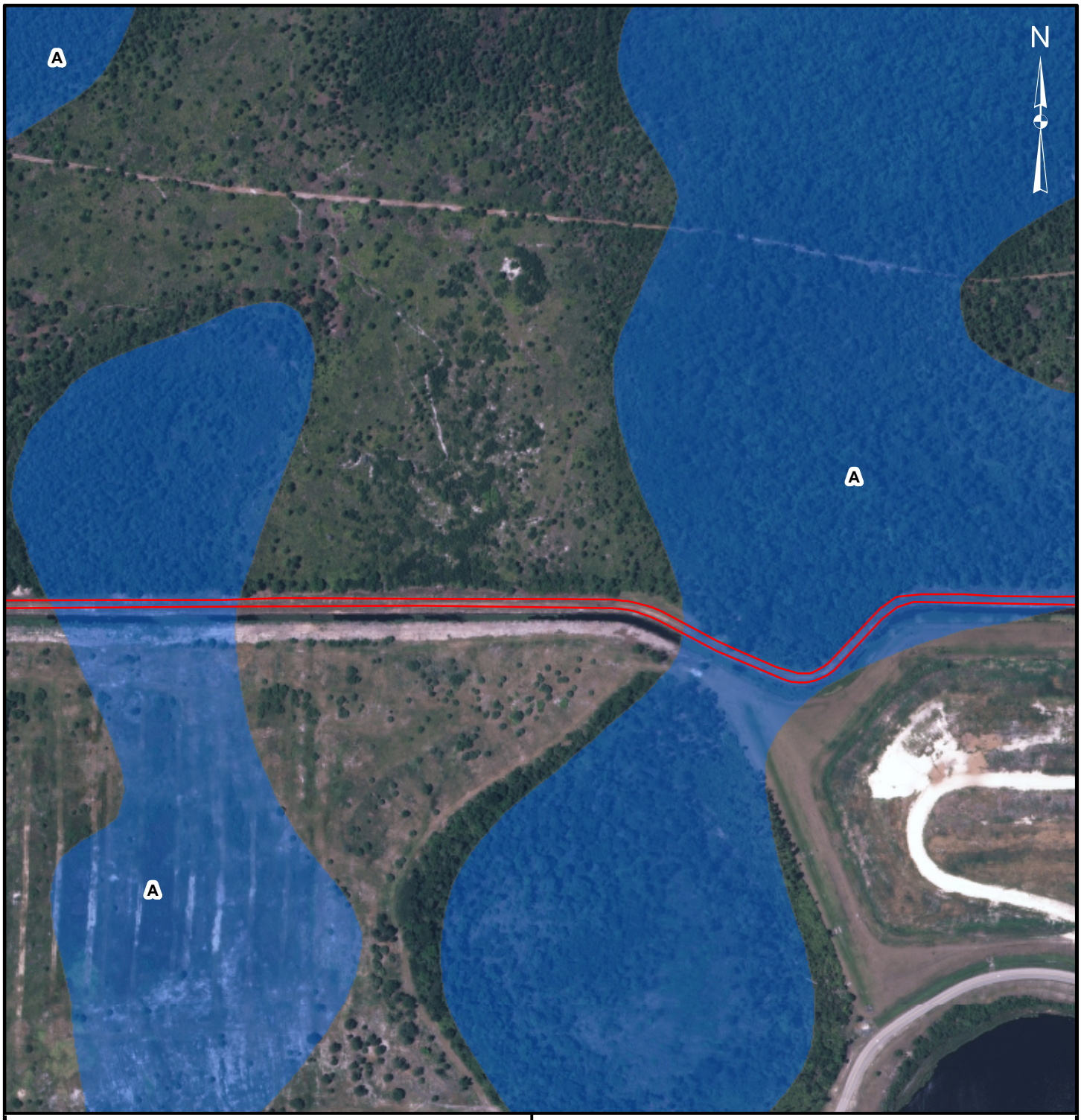

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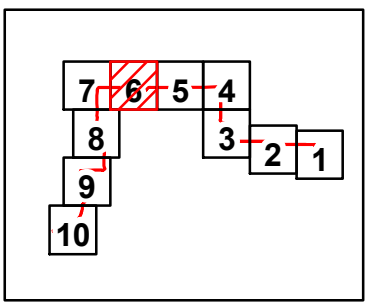

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Feet

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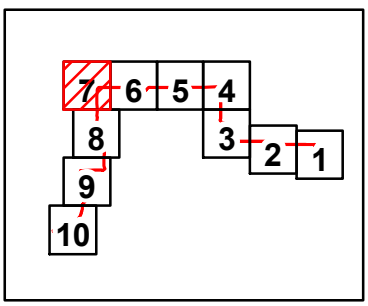

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Feet

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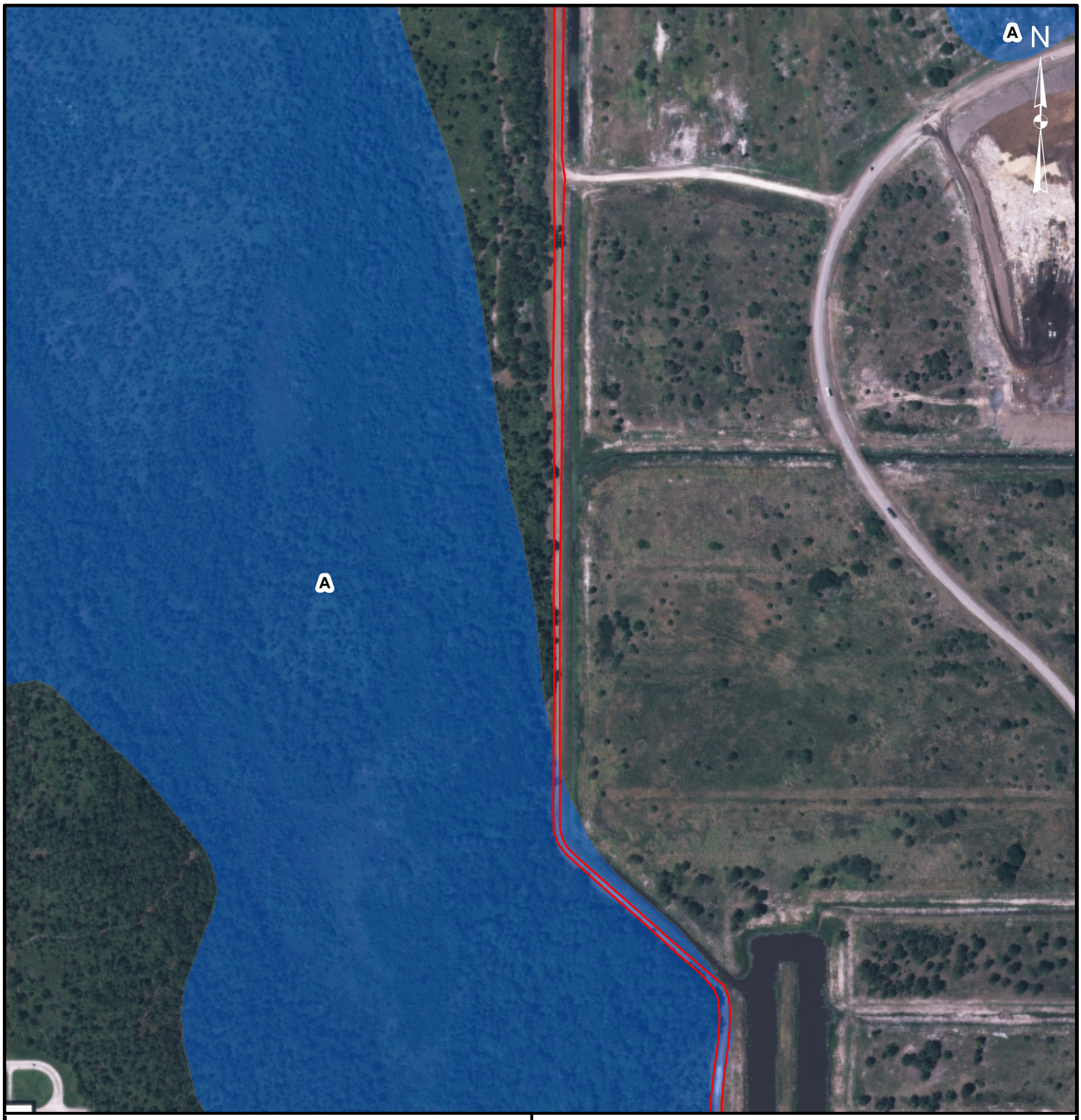

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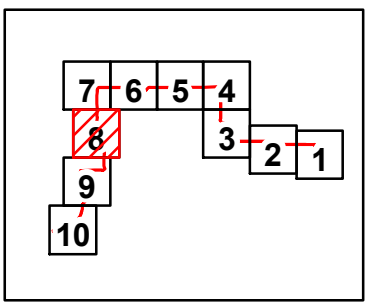

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400 0 400 Feet

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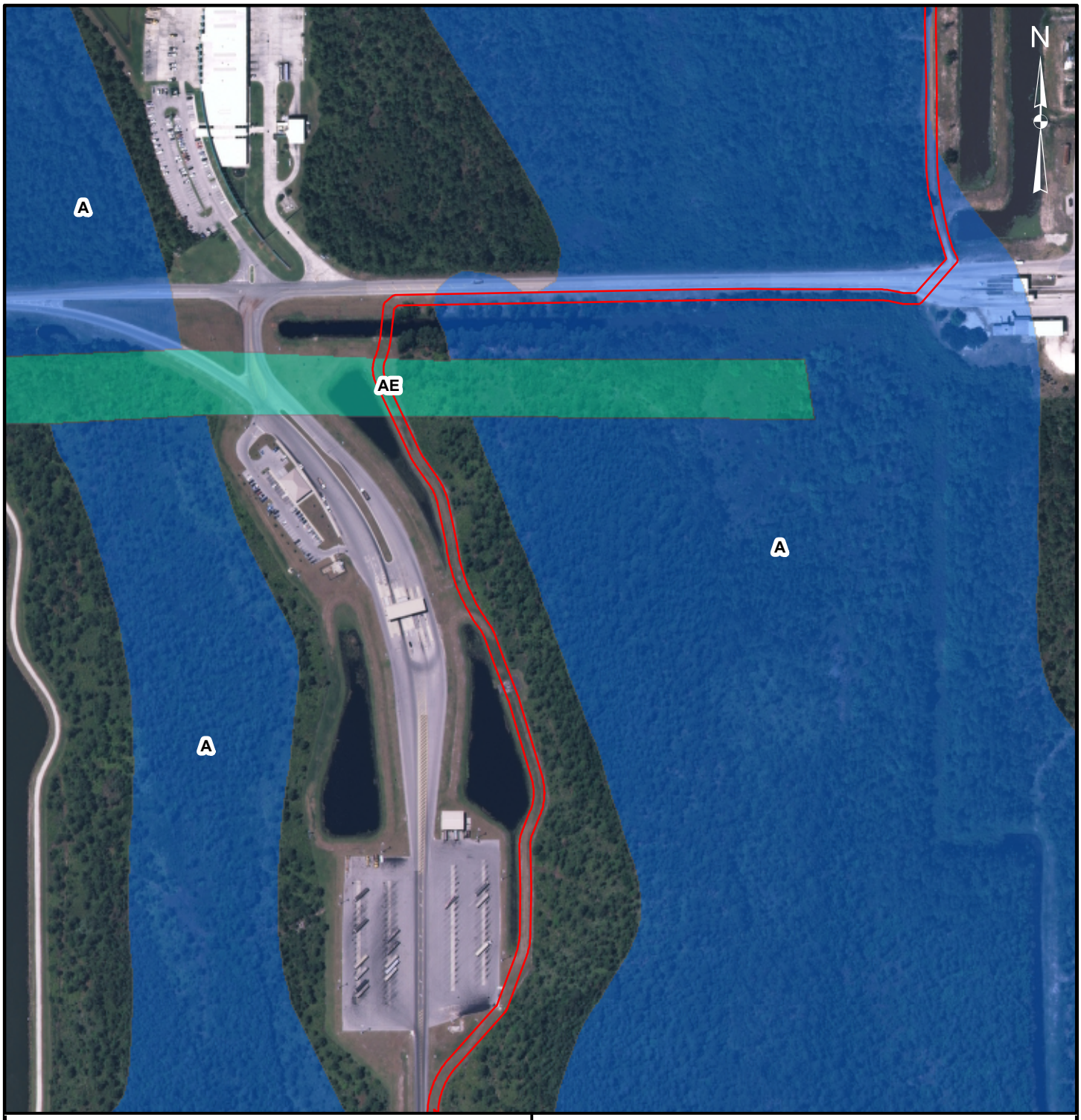

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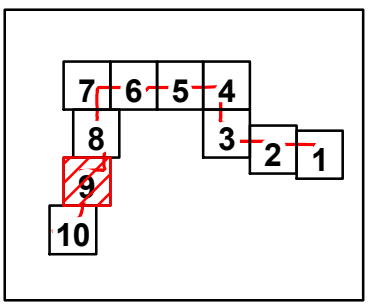

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400 0 400 Feet

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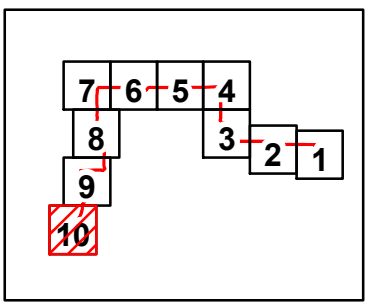

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400 0 400 Feet

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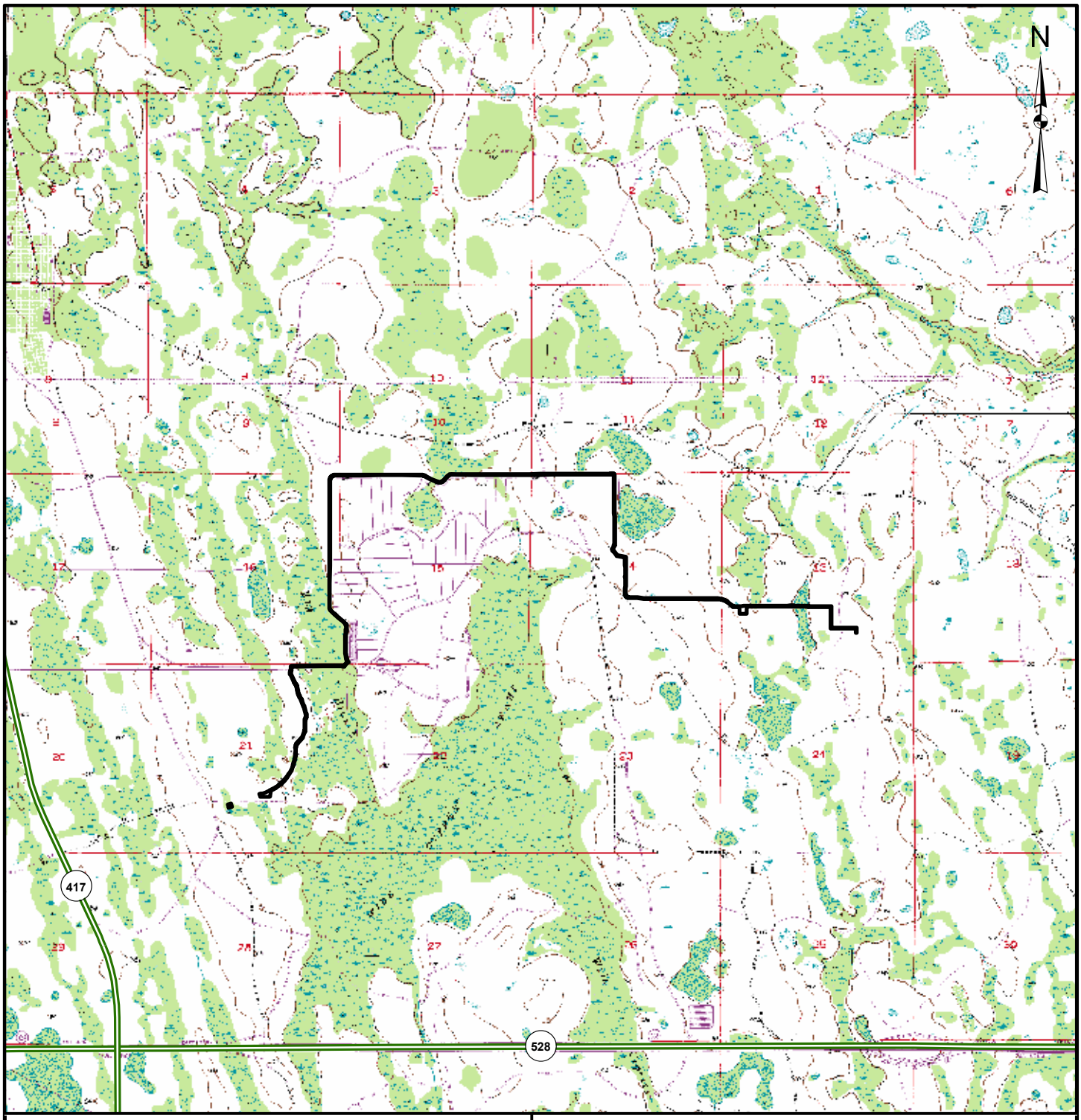

LEGEND

- Approximate Project Boundary
- Toll Road

4,000 0 4,000 Feet

REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

USGS TOPOGRAPHIC MAP

REFERENCES

1. Approximate Project Boundary: Golder Associates Inc., 2010
2. Roads: Florida Department of Transportation, 2010
3. U.S. Geological Survey (USGS) Topographic Map: Oviedo SW, 1980 & Narcoossee, 1980

Golder Associates
Tampa, Florida

PROJECT No.		103-89513	FILE No. 103-89513C013	
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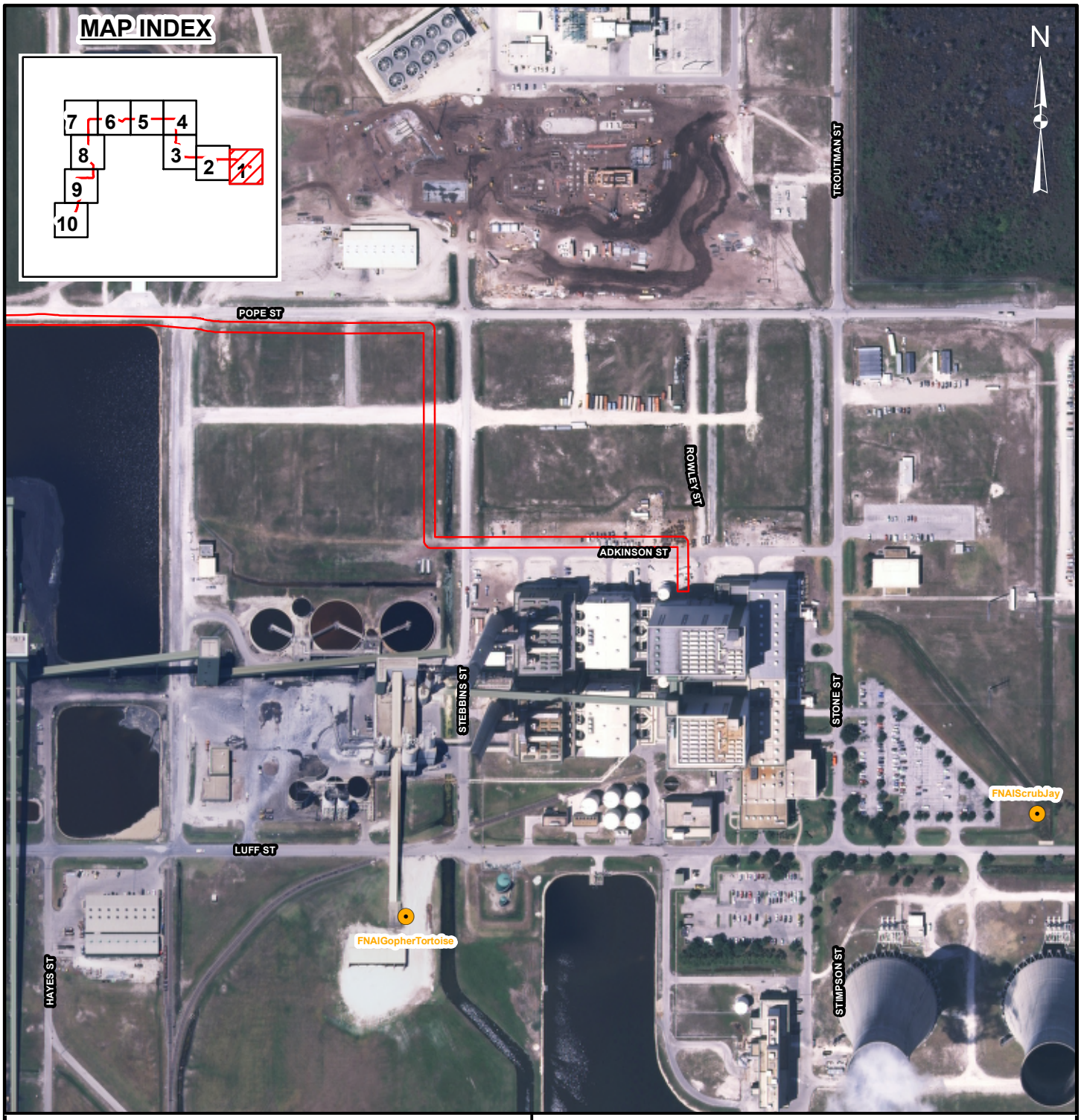

LEGEND

- Project Boundary
- FNAI Elemental Occurrence
- FFWCC Eagle Nest
- Gopher Tortoise Individual
- Hooded Pitcher Plant
- Potential Fox Squirrel Nest
- Active Gopher Tortoise Burrow
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400 0 400 Feet

REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

OUC STANTON ENERGY CENTER
SECOND LANDFILL GAS PIPELINE

TITLE

LISTED SPECIES OCCURRENCE MAP

Golder Associates
Tampa, Florida

PROJECT No.		103-89513	FILE No. 103-89513C014
DESIGN	JG	7/27/2010	SCALE: AS SHOWN REV. 0
GIS	JG	7/27/2010	FIGURE 6
CHECK	HA	7/27/2010	1 OF 10
REVIEW	KB	7/27/2010	

Map Document: F:\PROJECTS\2010 PROJ\103-89513 OUC Stanton Regulatory Review\C- ERP Support\GIS\MXD\103-89513C014 Species Occurrences Figure 6.mxd / Modified 7/27/2010 2:37:20 PM / Plotted 8/4/2010 1:56:03 PM by JDGodin

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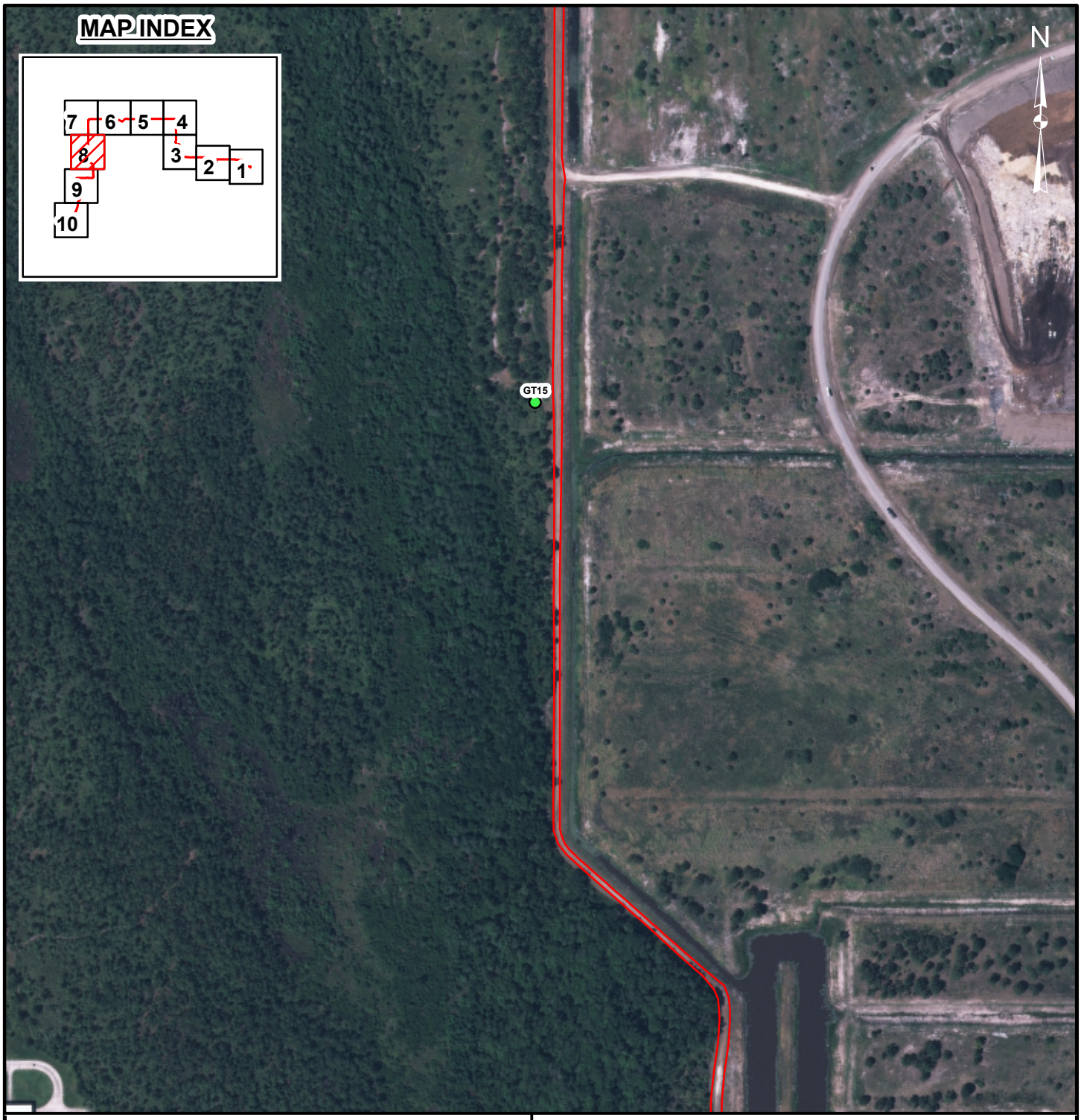

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LEGEND

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- Temporary Impact
- Delineation Line

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PROJECT

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SECOND LANDFILL GAS PIPELINE

TITLE

WETLAND IMPACTS

Golder Associates
Tampa, Florida

PROJECT No.		103-89513	FILE No. 103-89513C015	
DESIGN	JG	7/27/2010	SCALE: AS SHOWN	REV. 0
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LEGEND

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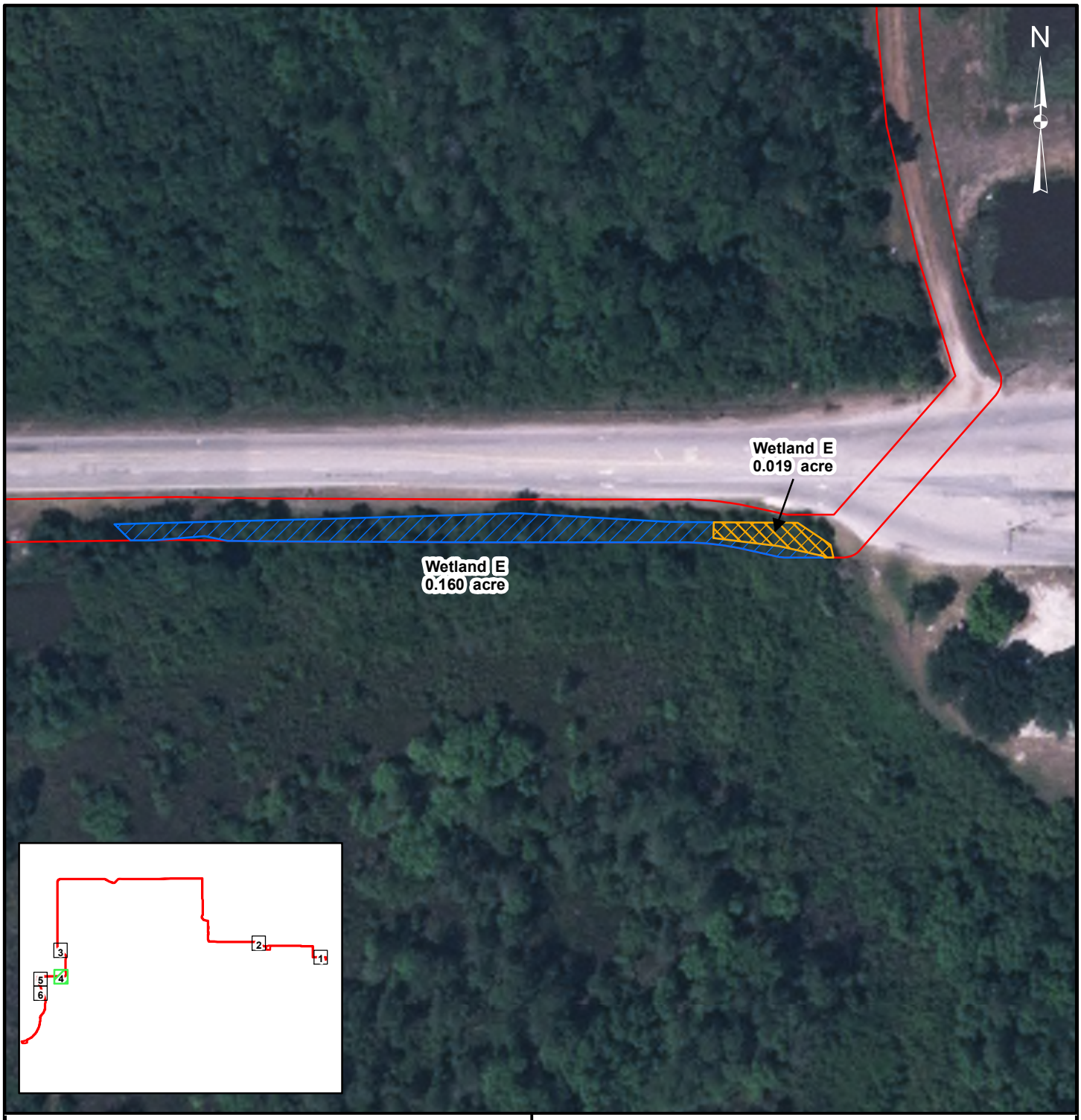

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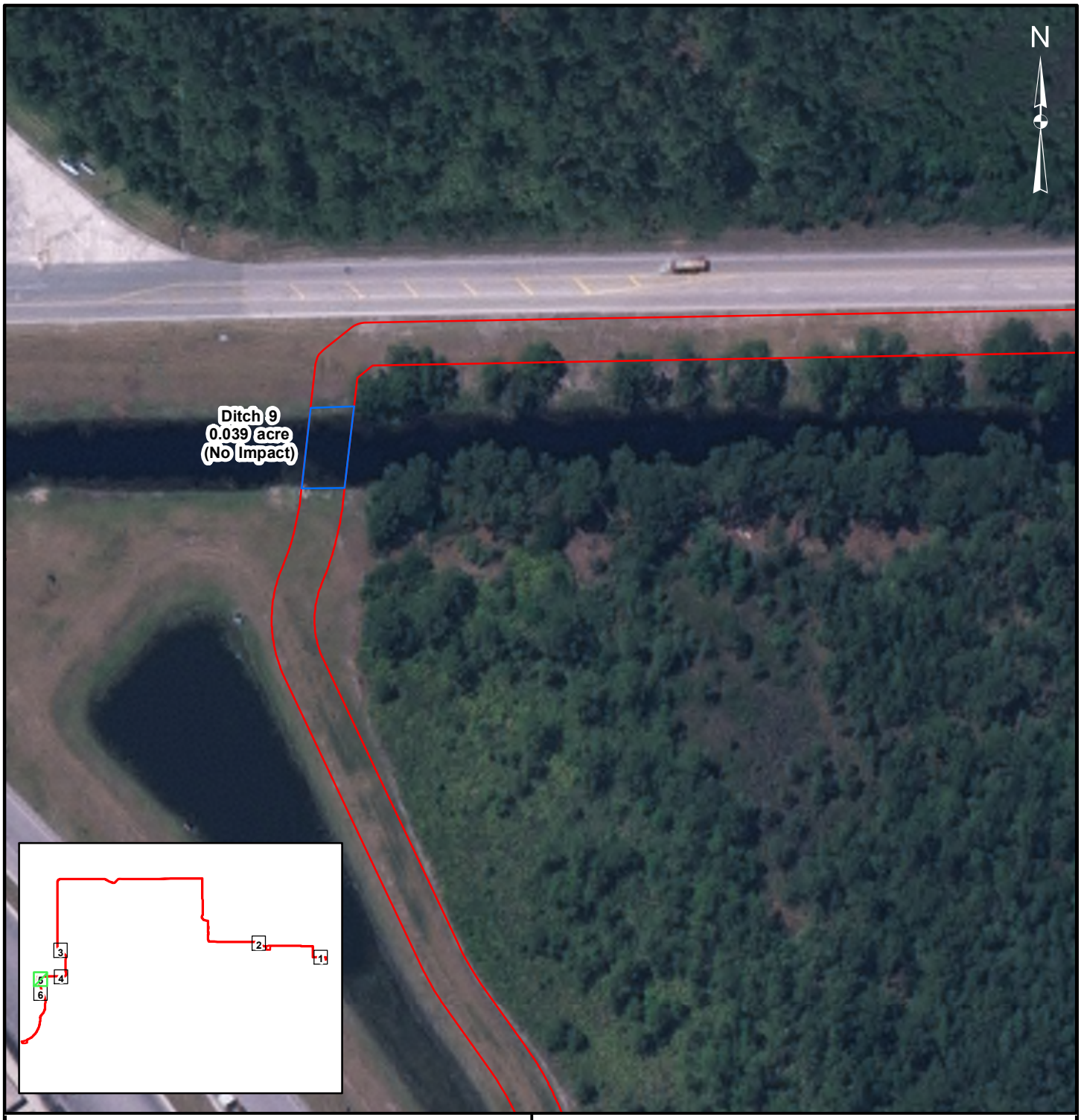

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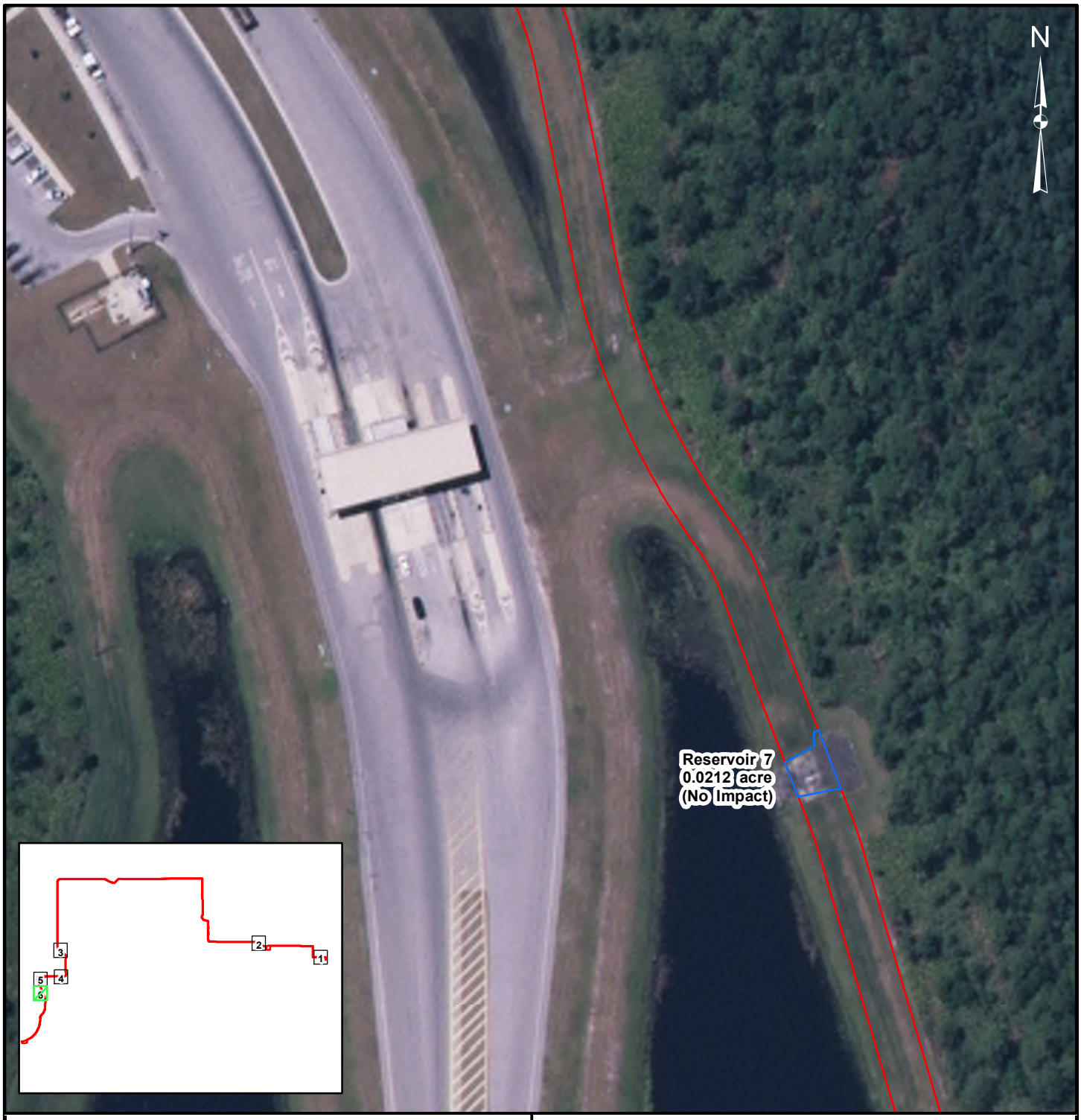

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APPENDIX C
CONSTRUCTION PLANS

LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM
SOUTHERN EXPANSION SITE
ORANGE COUNTY LANDFILL
ORLANDO, FLORIDA

PREPARED FOR
ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FLORIDA 32831

MARCH 30, 2010

REVISION NO.	SHEET	DATE	DESCRIPTION	BY
1	C28	04/22/10	FGT CROSSING PROFILE MOD.	DHP
2	C33	04/22/10	FGT CROSSING DETAIL MOD.	DHP
3	C28	04/28/10	FGT CROSSING NOTE MOD.	DHP
4	C29	06/03/10	FDEP RAI NO. 1 RESPONSE	LEK
4	C32	06/03/10	FDEP RAI NO. 1 RESPONSE	LEK
4	C33	06/03/10	FDEP RAI NO. 1 RESPONSE	LEK
5	C1	06/15/10	CONTRACTOR LAYDOWN AREA	LEK
5	C28	06/15/10	CONTRACTOR LAYDOWN AREA	LEK
6	C4-C35	07/02/10	PROFILE, DETAILS EDITS	DHP
7	C2-C32	08/03/10	EROSION CONTROLS	LEK

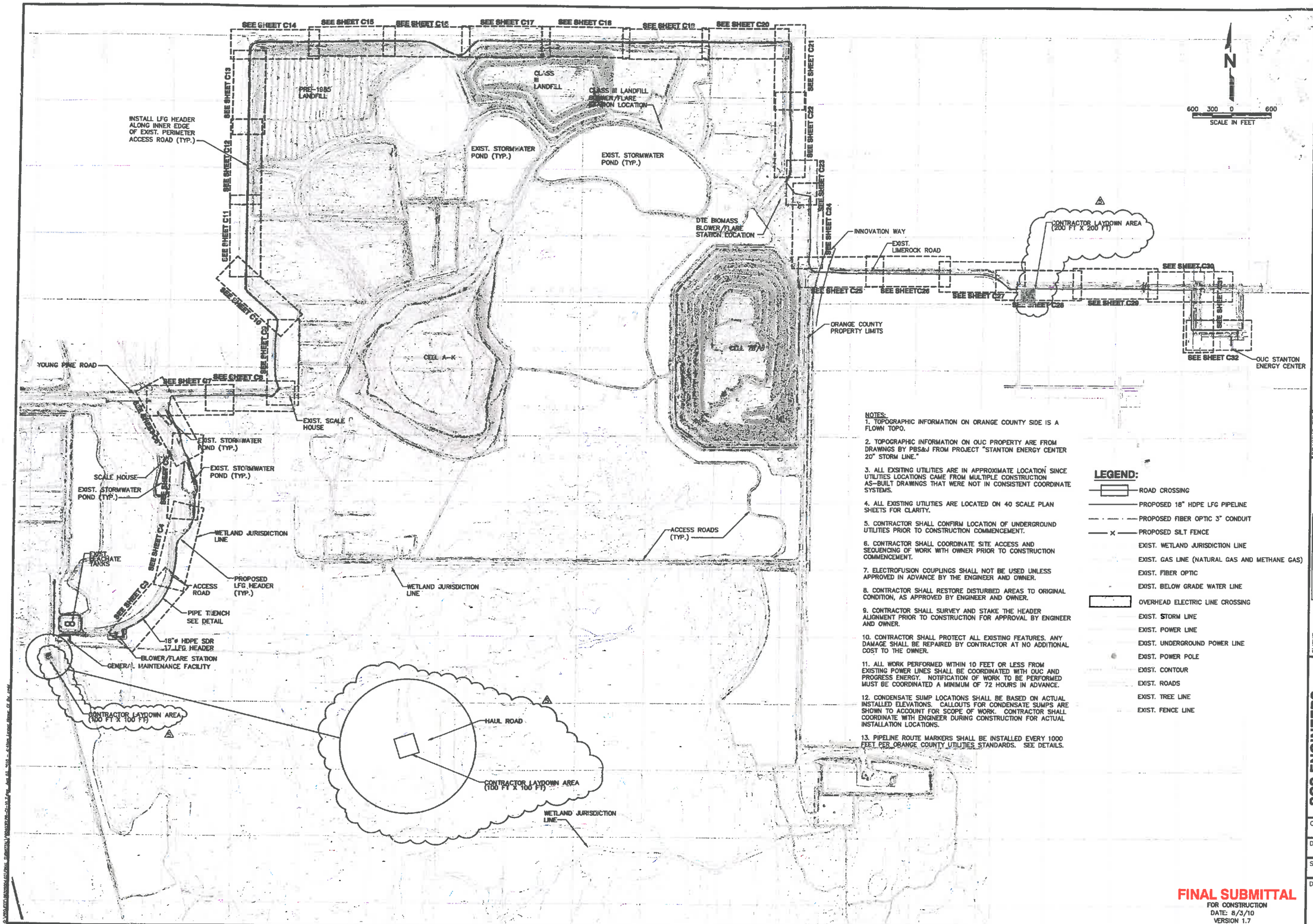
SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100
TAMPA, FLORIDA 33610
PH (813) 621-0080 FAX NO. (813) 623-6757
WWW.SCSENGINEERS.COM
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

DRAWING NO.		DRAWING TITLE
C0	-	TITLE SHEET
C1	-	OVERALL SITE PLAN
C2	-	SITE PLAN BLOWER/FLARE STATION
C3	-	PLAN AND PROFILE - 1
C4	-	PLAN AND PROFILE - 2
C5	-	PLAN AND PROFILE - 3
C6	-	PLAN AND PROFILE - 4
C7	-	PLAN AND PROFILE - 5
C8	-	PLAN AND PROFILE - 6
C9	-	PLAN AND PROFILE - 7
C10	-	PLAN AND PROFILE - 8
C11	-	PLAN AND PROFILE - 9
C12	-	PLAN AND PROFILE - 10
C13	-	PLAN AND PROFILE - 11
C14	-	PLAN AND PROFILE - 12
C15	-	PLAN AND PROFILE - 13
C16	-	PLAN AND PROFILE - 14
C17	-	PLAN AND PROFILE - 15
C18	-	PLAN AND PROFILE - 16
C19	-	PLAN AND PROFILE - 17
C20	-	PLAN AND PROFILE - 18
C21	-	PLAN AND PROFILE - 19
C22	-	PLAN AND PROFILE - 20
C23	-	PLAN AND PROFILE - 21
C24	-	PLAN AND PROFILE - 22
C25	-	PLAN AND PROFILE - 23
C26	-	PLAN AND PROFILE - 24
C27	-	PLAN AND PROFILE - 25
C28	-	PLAN AND PROFILE - 26
C29	-	PLAN AND PROFILE - 27
C30	-	PLAN AND PROFILE - 28
C31	-	PLAN AND PROFILE - 29
C32	-	PLAN AND PROFILE - 30
C33	-	DETAILS - 1
C34	-	DETAILS - 2
C35	-	DETAILS - 3

DAVID H. PENOYER, P.E.
FL P.E. No. 56065 8/3/10

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

C:\FGT\FGT\work\406-41\01\civil_406-41TIA\406-41TIA_C0.dgn 8/3/2010 2:8pm by: 2226.A



NOTES:

1. TOPOGRAPHIC INFORMATION ON ORANGE COUNTY SIDE IS A FLOWN TOPO.
2. TOPOGRAPHIC INFORMATION ON OUC PROPERTY ARE FROM DRAWINGS BY PBS&J FROM PROJECT "STANTON ENERGY CENTER 20" STORM LINE."
3. ALL EXISTING UTILITIES ARE IN APPROXIMATE LOCATION SINCE UTILITIES LOCATIONS CAME FROM MULTIPLE CONSTRUCTION AS-BUILT DRAWINGS THAT WERE NOT IN CONSISTENT COORDINATE SYSTEMS.
4. ALL EXISTING UTILITIES ARE LOCATED ON 40 SCALE PLAN SHEETS FOR CLARITY.
5. CONTRACTOR SHALL CONFIRM LOCATION OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION COMMENCEMENT.
6. CONTRACTOR SHALL COORDINATE SITE ACCESS AND SEQUENCING OF WORK WITH OWNER PRIOR TO CONSTRUCTION COMMENCEMENT.
7. ELECTROFUSION COUPLINGS SHALL NOT BE USED UNLESS APPROVED IN ADVANCE BY THE ENGINEER AND OWNER.
8. CONTRACTOR SHALL RESTORE DISTURBED AREAS TO ORIGINAL CONDITION, AS APPROVED BY ENGINEER AND OWNER.
9. CONTRACTOR SHALL SURVEY AND STAKE THE HEADER ALIGNMENT PRIOR TO CONSTRUCTION FOR APPROVAL BY ENGINEER AND OWNER.
10. CONTRACTOR SHALL PROTECT ALL EXISTING FEATURES. ANY DAMAGE SHALL BE REPAIRED BY CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
11. ALL WORK PERFORMED WITHIN 10 FEET OR LESS FROM EXISTING POWER LINES SHALL BE COORDINATED WITH OUC AND PROGRESS ENERGY. NOTIFICATION OF WORK TO BE PERFORMED MUST BE COORDINATED A MINIMUM OF 72 HOURS IN ADVANCE.
12. CONDENSATE SUMP LOCATIONS SHALL BE BASED ON ACTUAL INSTALLED ELEVATIONS. CALLOUTS FOR CONDENSATE SUMPS ARE SHOWN TO ACCOUNT FOR SCOPE OF WORK. CONTRACTOR SHALL COORDINATE WITH ENGINEER DURING CONSTRUCTION FOR ACTUAL INSTALLATION LOCATIONS.
13. PIPELINE ROUTE MARKERS SHALL BE INSTALLED EVERY 1000 FEET PER ORANGE COUNTY UTILITIES STANDARDS. SEE DETAILS.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SILT FENCE
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	6/15/10	CONTRACTOR LAYDOWN AREAS	LEK
2	7/2/10	PROFILES	DHP

DAVID H. PENOYER, P.E.
LICENSE NO. 39085
8/3/10

DRAWING TITLE: OVERALL SITE PLAN

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 110, TAMPA, FL 33610
PHONE: (813) 621-0080 FAX: (813) 621-0511
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000000

PROJ. NO.	DWN. BY:	CHK. BY:	APP. BY:
06209004.03	JLS	JNV	DHP
DSN. BY: JLS/JNV			

CADD FILE: PLPR[1]V1.1.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO.: C1

N

20 0 20
SCALE IN FEET

RCP CROSSING TYPE "A" 4 C2C34
SEE DETAIL

DOUBLE SILT FENCE

PIPE TRENCH 3 C2C35
SEE DETAIL

3" SCH. 40 PVC CONDUIT FOR FIBER OPTIC LINE IN SAME TRENCH WITH LFG PIPELINE

PROPOSED 18" HDPE LFG PIPELINE

PROPOSED 18" HDPE TIE TO LFG TREATMENT SYSTEM

SILT FENCE TYPE C 2 C2C35
SEE DETAIL

LFG HEADER FROM LANDFILL

FUTURE FLARE LOCATION

LFG FLARE

SINGLE SILT FENCE (TYP.)

PROPOSED LFG TREATMENT AND COMPRESSION STATION

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- OVERHEAD ELECTRIC LINE CROSSING
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- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
4	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENDER, P.E.
LICENSE NO. 56665

DRAWING TITLE
SITE PLAN
BLOWER/FLARE STATION

PROJECT TITLE
LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM
SOUTHERN EXPANSION SITE

CLIENT
ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 882-8707
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000662

PROJ. NO.: 01209004.03
DSN. BY: JLS/ANV
DWN. BY: JLS
CHK. BY: JNV
QA/QC BY: DHP
APP. BY: DHP

CADD FILE: PLPR[1]V1.1.DWG
DATE: 3/30/2010
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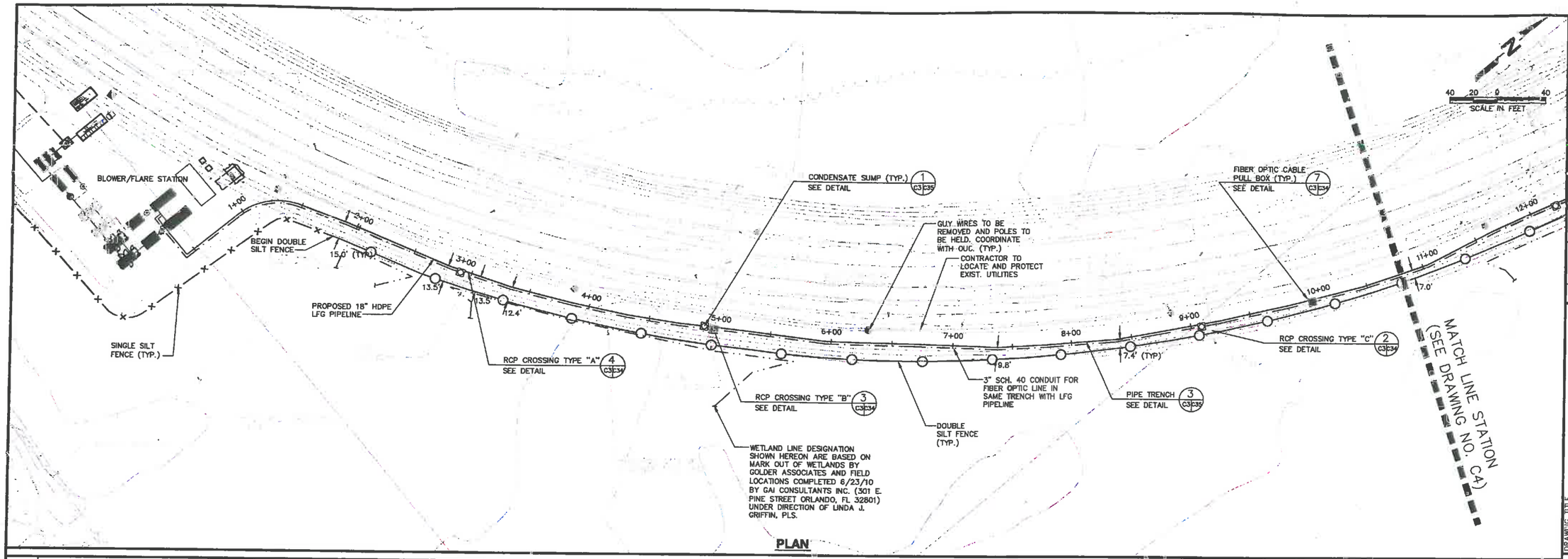
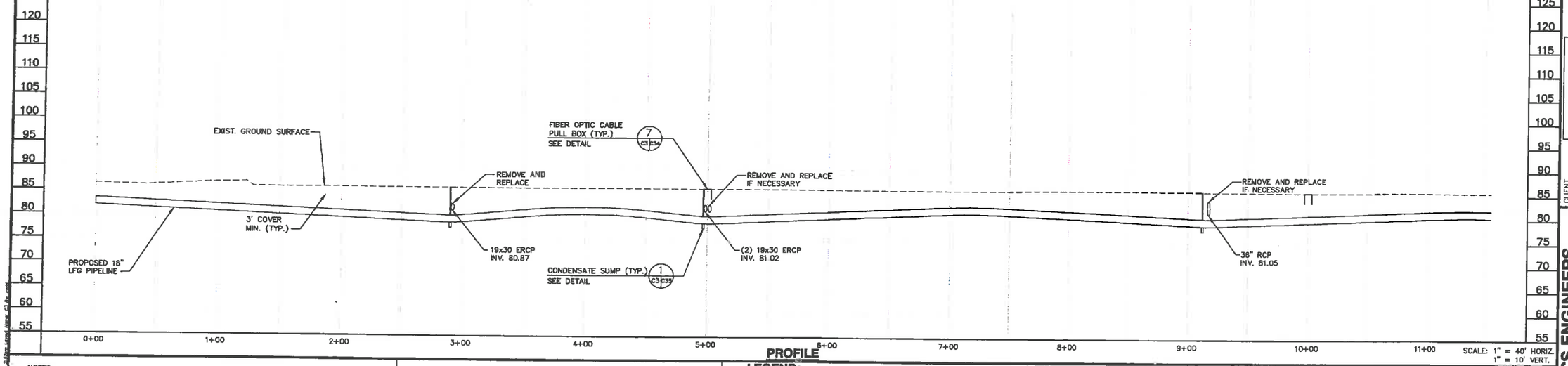


PLAN



PROFILE

SCALE: 1" = 40' HORIZ.
1" = 10' VERT.

NOTES:
1. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

DAVID H. PENOYER, P.E.
LICENSE NO. 56065

REV	DATE	DESCRIPTION	BY
1	8/3/10	EROSION CONTROLS	LEK

DRAWING TITLE: PLAN AND PROFILE - 1

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

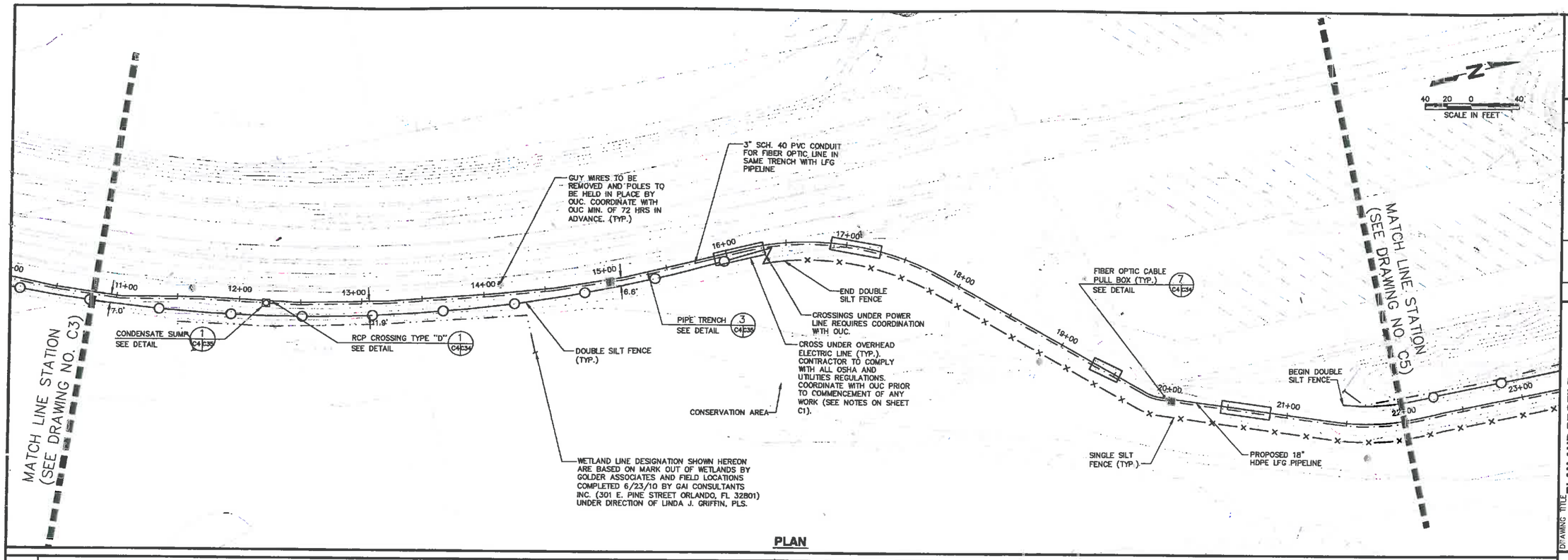
CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

OUC The Reliable One

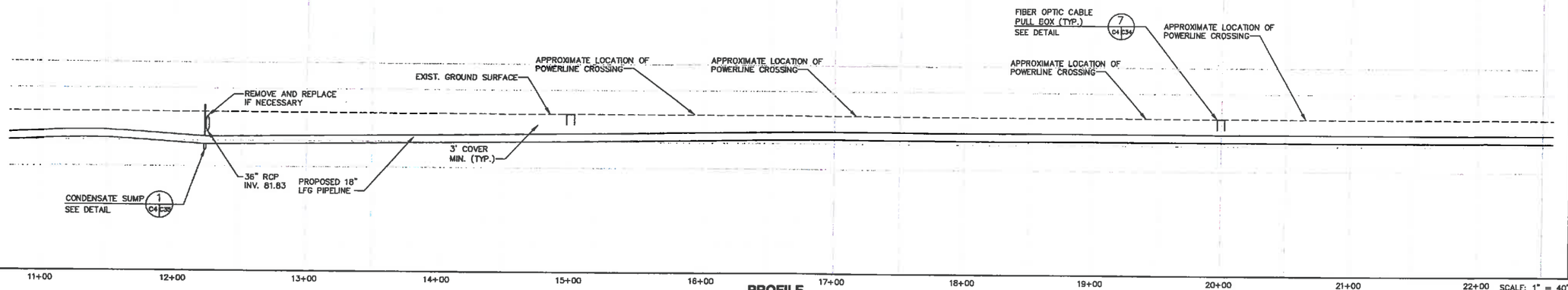
SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 885-0787
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

C.O.A. BY: DHP
CHK. BY: JLS
DWN. BY: JNV
PROJ. NO. 01258004.03
DSN. BY: JLS/JNV

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C3



PLAN



PROFILE

NOTES:
1. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
2	7/2/10	PROFILES	DHP
3	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENOYER, P.E.
LICENSE NO. 56065
8/5/10

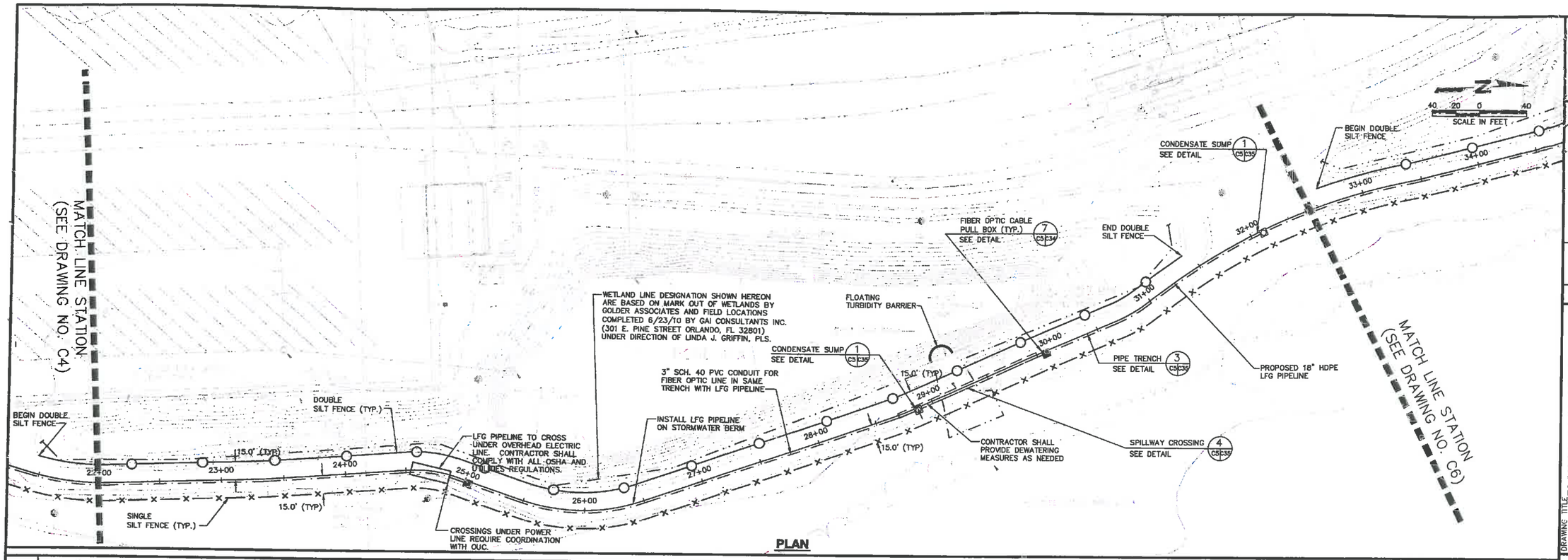
DRAWING TITLE: PLAN AND PROFILE - 2

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

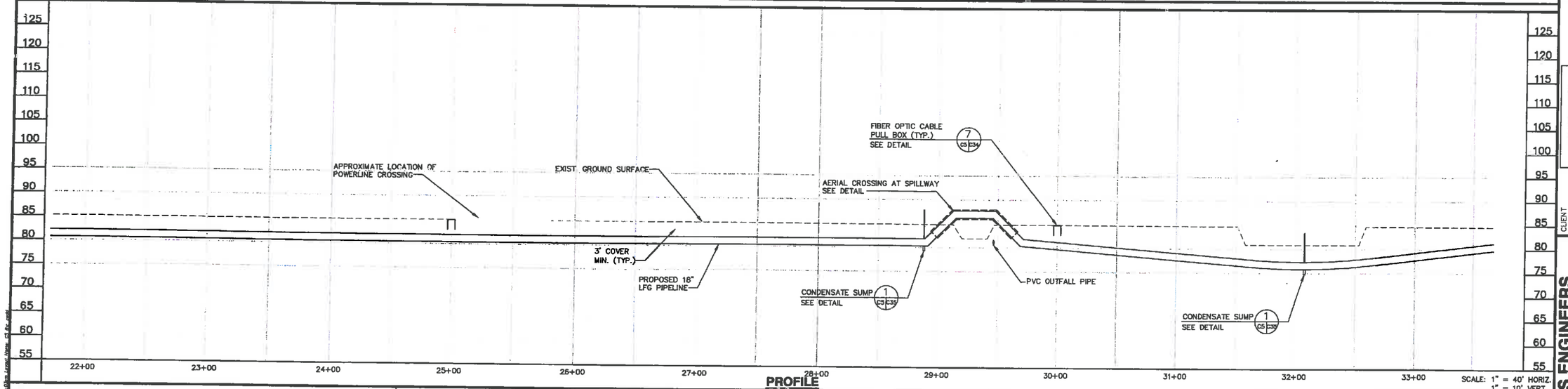
CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
(813) 884-7168 FAX (813) 885-7049
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892
PROJ. NO. 06209004.033
DSN. BY: JLS/JNV
DRN. BY: JLS
CHK. BY: JNV
1/2 & 1" BY: DHP
ARP 18": DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C4



PLAN



PROFILE

NOTES:
1. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
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- EXIST. FIBER OPTIC
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- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
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- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DMP
2	8/3/10	EROSION CONTROLS	LEK

DAVID M. PENOYER, P.E.
LICENSE NO. 56065
8/3/10

DRAWING TITLE: PLAN AND PROFILE - 3

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831
OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 885-4787
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJECT NO. 06209204.03
DSGN. BY: JLS
CHK. BY: JNV
DRWN. BY: DMP
CHK. BY: JNV
F/A REV. BY:

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C5

WETLAND LINE DESIGNATION SHOWN HEREON ARE BASED ON MARK OUT OF WETLANDS BY GOLDER ASSOCIATES AND FIELD LOCATIONS COMPLETED 6/23/10 BY GAI CONSULTANTS INC. (301 E. PINE STREET ORLANDO, FL 32801) UNDER DIRECTION OF LINDA J. GRIFFIN, PLS.

POWER POLE W/GUY WIRE (TYP.) TO BE PROTECTED FROM DAMAGE

END OF DOUBLE SILT FENCE

BEGIN DOUBLE SILT FENCE

3" SCH. 40 PVC CONDUIT FOR FIBER OPTIC LINE IN SAME TRENCH WITH LFG PIPELINE

FIBER OPTIC CABLE PULL BOX (TYP.) SEE DETAIL 7 C6-C34

DOUBLE SILT FENCE (TYP.)

PROPOSED 18" HDPE LFG PIPELINE

INSTALL LFG PIPELINE ON POND BERM

SINGLE SILT FENCE

PIPE TRENCH SEE DETAIL 3 C6-C35

SILT FENCE TYPE C SEE DETAIL 2 C6-C35

FIELD BEND LFG PIPELINE

END DOUBLE SILT FENCE

CONDENSATE SUMP SEE DETAIL 1 C6-C35

END OF DOUBLE SILT FENCE

FLOATING TURBIDITY BARRIER

DITCH CROSSING SEE DETAIL 4 C6-C33

BEGINNING OF DOUBLE SILT FENCE

END OF DOUBLE SILT FENCE

SINGLE SILT FENCE (TYP.)

BEGINNING OF DOUBLE SILT FENCE

MATCH LINE STATION (SEE DRAWING NO. C5)

MATCH LINE STATION (SEE DRAWING NO. C7)

31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00 40+00

15.0' (TYP)

10+00

40 20 0 40
SCALE IN FEET

PLAN

FIBER OPTIC CABLE PULL BOX (TYP.) SEE DETAIL 7 C6-C34

EXIST. GROUND SURFACE

AERIAL CROSSING AT DITCH ENCASED IN STEEL PIPE SEE DETAIL

MAINTAIN 5' SEPARATION BETWEEN DITCH WATER ELEVATION AND PIPELINE CASING

3' COVER MIN. (TYP.)

PROPOSED 18" LFG PIPELINE

CONDENSATE SUMP SEE DETAIL 1 C6-C35

APPROXIMATE BOTTOM OF DITCH

125 120 115 110 105 100 95 90 85 80 75 70 65 60 55

33+00 34+00 35+00 36+00 37+00 38+00 39+00 40+00 41+00 42+00

SCALE: 1" = 40' HORIZ.
1" = 10' VERT.

PROFILE

NOTES:
1. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
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- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENOYER, P.E. LICENSE NO. 56065

DRAWING TITLE: **PLAN AND PROFILE - 4**

PROJECT TITLE: **LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE**

CLIENT: OUC The Reliable One
ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 MACAY BLVD., SUITE 100, TAMPA, FL 33610
(813) 621-0690 FAX (813) 289-1908
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 06209004.03
DSN. BY: JLS
CHK. BY: JNV
DWN. BY: DHP
CHK. BY: DHP
PRINT DATE: JLS/JNV

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C6

EXIST. UTILITIES POLE W/ GUY WIRE (TYP.) TO BE PROTECTED FROM DAMAGE. CONTRACTOR TO CONFIRM LOCATION OF GUY WIRES IN FIELD.

EXIST. FIBER OPTIC LINE (APPROX. LOCATION). CONTRACTOR TO FIELD LOCATE AND PROTECT FIBER OPTIC LINE FROM DAMAGE.

3" SCH. 40 PVC CONDUIT FOR FIBER OPTIC LINE IN SAME TRENCH WITH LFG PIPELINE

MAINTAIN MIN. 6' SEPARATION BETWEEN FIBER OPTIC LINE AND LFG PIPELINE

FIELD BEND LFG PIPELINE

41+00 42+00 44+00 45+00 46+00 47+00 48+00 49+00

END OF DOUBLE SILT FENCE

FLOATING TURBIDITY BARRIER

END OF DOUBLE SILT FENCE

DITCH CROSSING (4 C7 E34) SEE DETAIL

15.0' (TYP)

SINGLE SILT FENCE

PROPOSED 18" HDPE LFG PIPELINE

PIPE TRENCH (3 C7 E34) SEE DETAIL

MATCH LINE STATION (SEE DRAWING NO. C6)

40+00

END DOUBLE SILT FENCE

FLOATING TURBIDITY BARRIER

END DOUBLE SILT FENCE

15.0' (TYP)

15.0' (TYP)

FIBER OPTIC CABLE PULL BOX (TYP.) (7 C7 E34) SEE DETAIL

39+60

CONDENSATE SUMP DETAIL (1 C7 E34) SEE DETAIL

SINGLE SILT FENCE (TYP.)

38+00

WETLAND LINE DESIGNATION SHOWN HEREON ARE BASED ON MARK OUT OF WETLANDS BY GOLDER ASSOCIATES AND FIELD LOCATIONS COMPLETED 6/23/10 BY GAI CONSULTANTS INC. (301 E. PINE STREET ORLANDO, FL 32801) UNDER DIRECTION OF LINDA J. GRIFFIN, PLS.

MATCH LINE STATION (SEE DRAWING NO. C8)

N

40 20 0 40
SCALE IN FEET

PLAN

FIBER OPTIC CABLE PULL BOX (TYP.) (7 C7 E34) SEE DETAIL

EXIST. GROUND SURFACE

MAINTAIN 5' SEPARATION BETWEEN DITCH WATER ELEVATION AND PIPELINE CASING

3' COVER MIN. (TYP.)

PROPOSED 18" LFG PIPELINE

125 120 115 110 105 100 95 90 85 80 75 70 65 60 55

41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00 49+00

SCALE: 1" = 40' HORIZ.
1" = 10' VERT.

PROFILE

NOTES:
1. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
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- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

8/31/10
DAVID H. PENDYKE, P.E.
LICENSE NO. 36065

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

DRAWING TITLE: **PLAN AND PROFILE - 5**

PROJECT TITLE: **LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE**

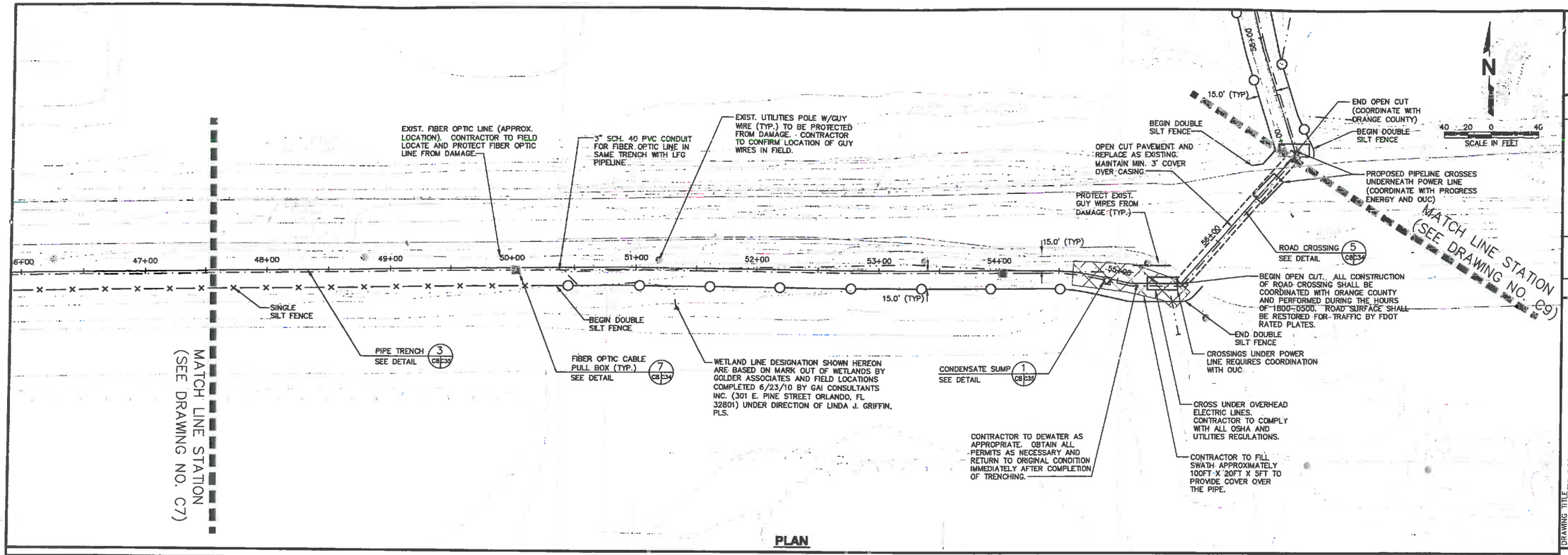
CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 885-4797
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000662

PROJECT NO. 05209004.03
DSN. BY: JLS/JNV
DRN. BY: JLS
CHK. BY: JNV
D/A RVW BY: DHP
JEFF B. DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. **C7**



NOTES:
1. CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN PRIOR TO SCHEDULING ROAD CROSSING AT YOUNG PINE ROAD.
2. APPROVED M.O.T. PLAN SHALL BE FOLLOWED AT ALL TIMES.
3. ROAD CROSSING WORK SHALL BE PERFORMED AFTER HOURS SO AS TO NOT AFFECT SITE TRAFFIC. CONTRACTOR SHALL PROVIDE APPROPRIATE LIGHTING AND OTHER SAFETY EQUIPMENT TO FACILITATE NIGHTTIME WORK. FAILURE TO HAVE ADEQUATE LIGHTING SHALL BE CAUSE FOR OUC TO HALT WORK. ANY RESULTANT DELAYS SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
4. CONTRACTOR SHALL INSTALL AND SECURE STEEL PLATES OVER ANY ROADWAY SECTION THAT CANNOT BE BACKFILLED BY THE END OF THE NIGHT'S WORK.
5. BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR.
6. EXCAVATED SOILS MAY BE REUSED FOR TRENCH BACKFILL UPON APPROVAL BY THE ENGINEER.
7. ASPHALT ROAD SHALL BE PATCHED USING LIKE MATERIAL.
8. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LSK

DAVID H. PENOYER, P.E.
LICENSE NO. 59065

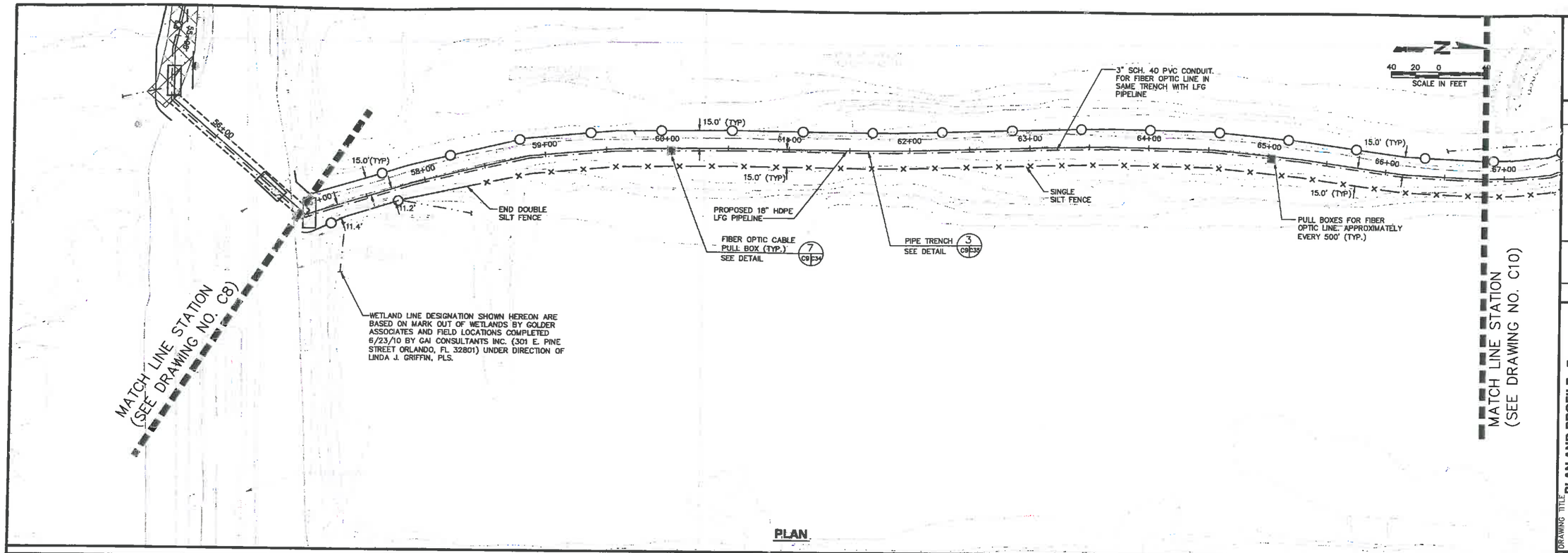
DRAWING TITLE: PLAN AND PROFILE - 6

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

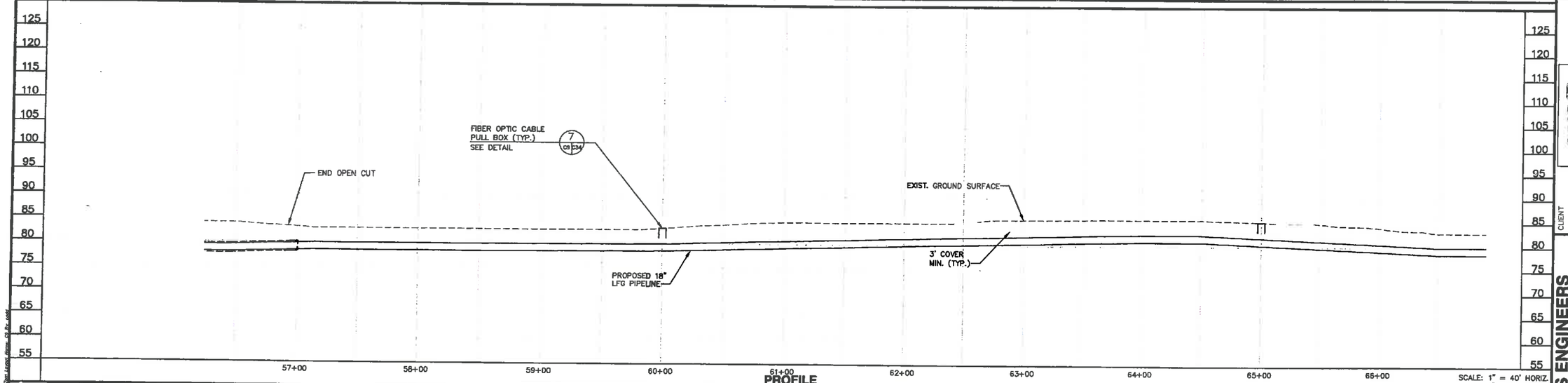
CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831
OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 885-4757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000692
PROJECT NO. 01004.03
DSN. BY: JLS/JNV
DWN. BY: JLS
CHK. BY: JNV
APP. BY: DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C8



PLAN



PROFILE

NOTES:
1. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

DAVID K. PENOYER, P.E. LICENSE NO. 58665

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DKP
2	8/3/10	EROSION CONTROLS	LEK

DRAWING TITLE: PLAN AND PROFILE - 7

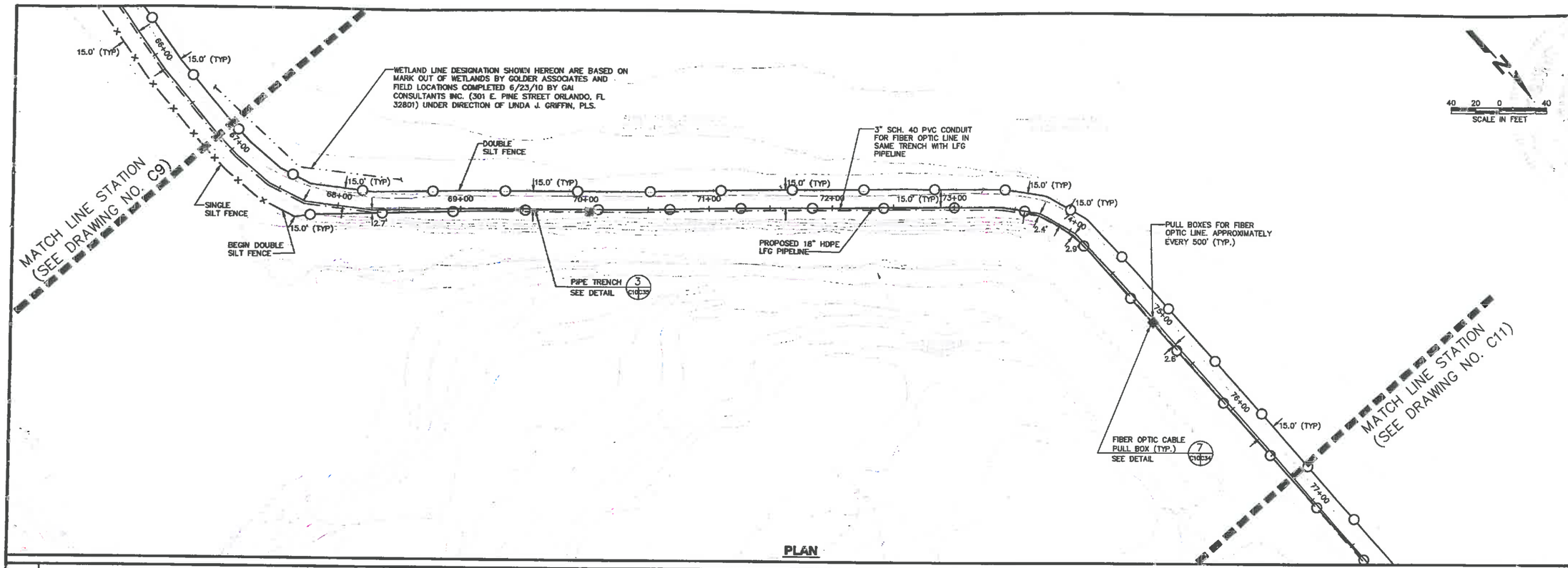
PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831
OUC The Reliable One

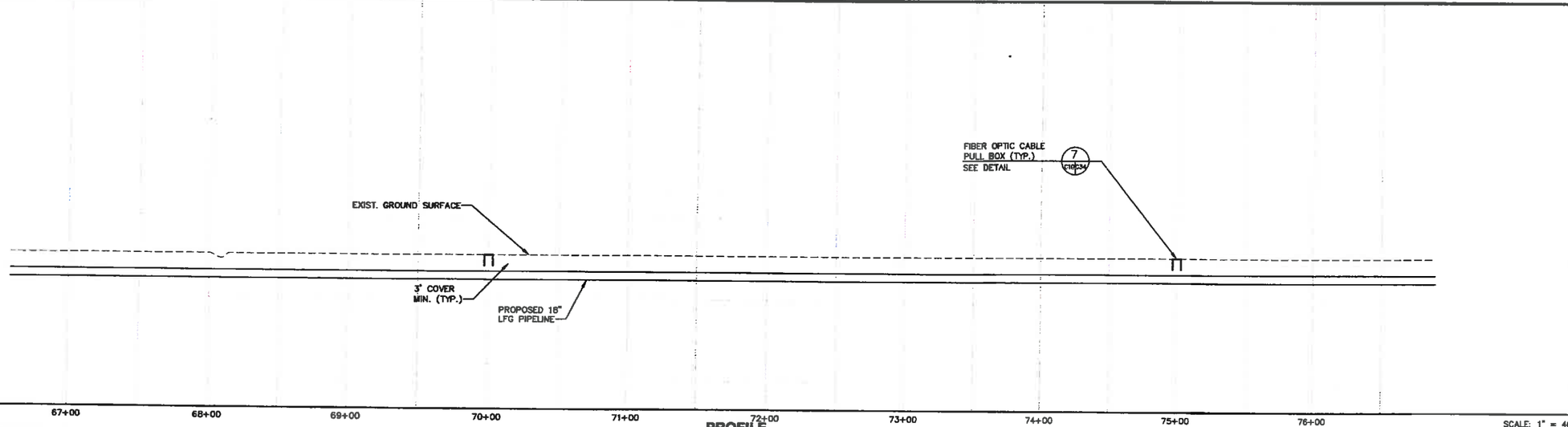
SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 882-8797
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJECT NO: 06209004.03
DSGN. BY: JLS
DRK. BY: JNV
CHK. BY: JLS/JNV
QA REVIEW: DKP
APP. BY: DKP

CAD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C9



PLAN



PROFILE

SCALE: 1" = 40' HORIZ.
1" = 10' VERT.

NOTES:
1. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
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- CONDENSATE SUMP
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- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
2	7/2/10	PROFILES	DHP
1	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENOYER, P.E.
LICENSE NO. 56065

DRAWING TITLE: PLAN AND PROFILE - 8

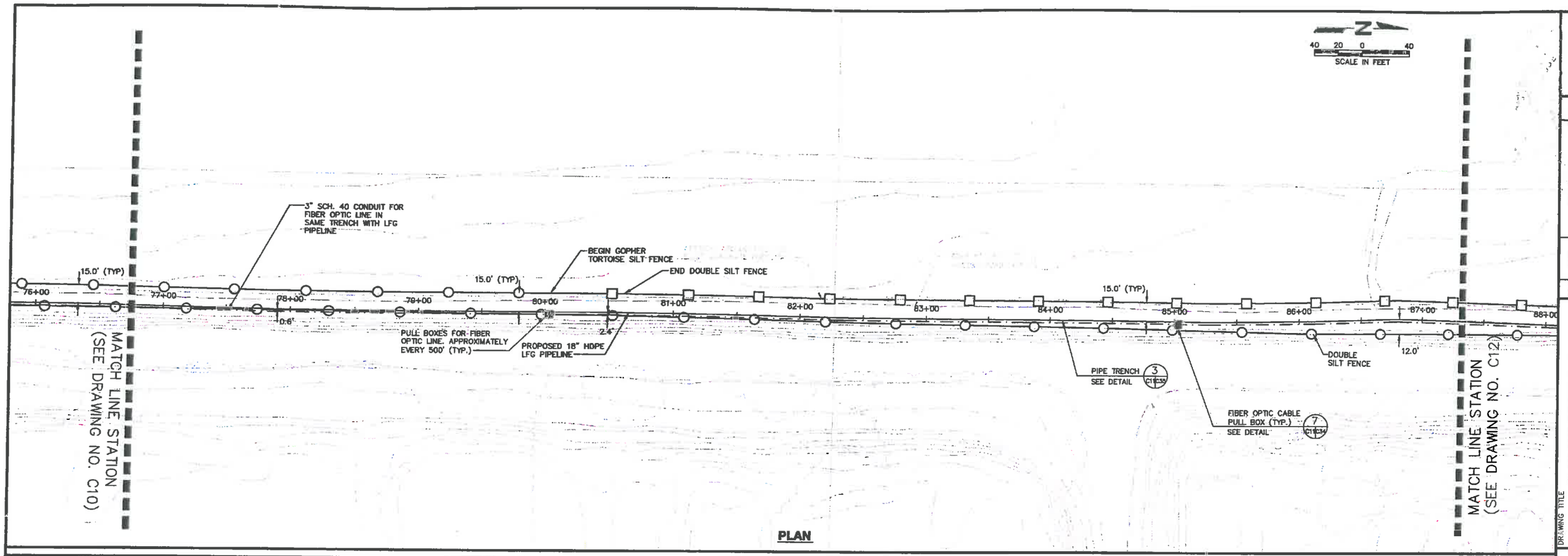
PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

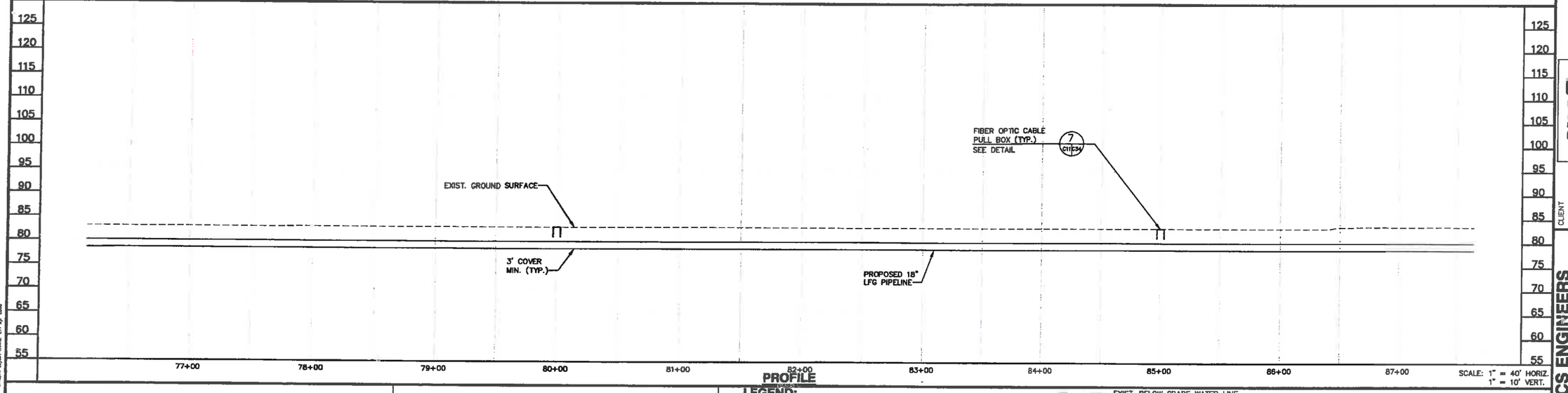
CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831
OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-6787
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO: 01201004.03
TASK NO: 4.5
DWN. BY: DHP
CHK. BY: JNV
QA/A REVIEW BY: DHP
APP. BY: DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C10





NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
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- CONDENSATE SUMP
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- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
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- FIBER OPTIC PULL BOX
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- EXIST. STORM LINE
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- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENDEL, P.E.
LICENSE NO. 59695
8/3/10

DRAWING TITLE: PLAN AND PROFILE - 9
PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831
OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 SOUTH MACDILL AVENUE, SUITE 150, TAMPA, FL 33611
813 837-4500 FAX 813 837-4501
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000696
PROJ. NO. 06209004.03
DSN. BY: JLS
CHK. BY: JNV
D/A PKG BY: DHP
APP. BY: DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C11

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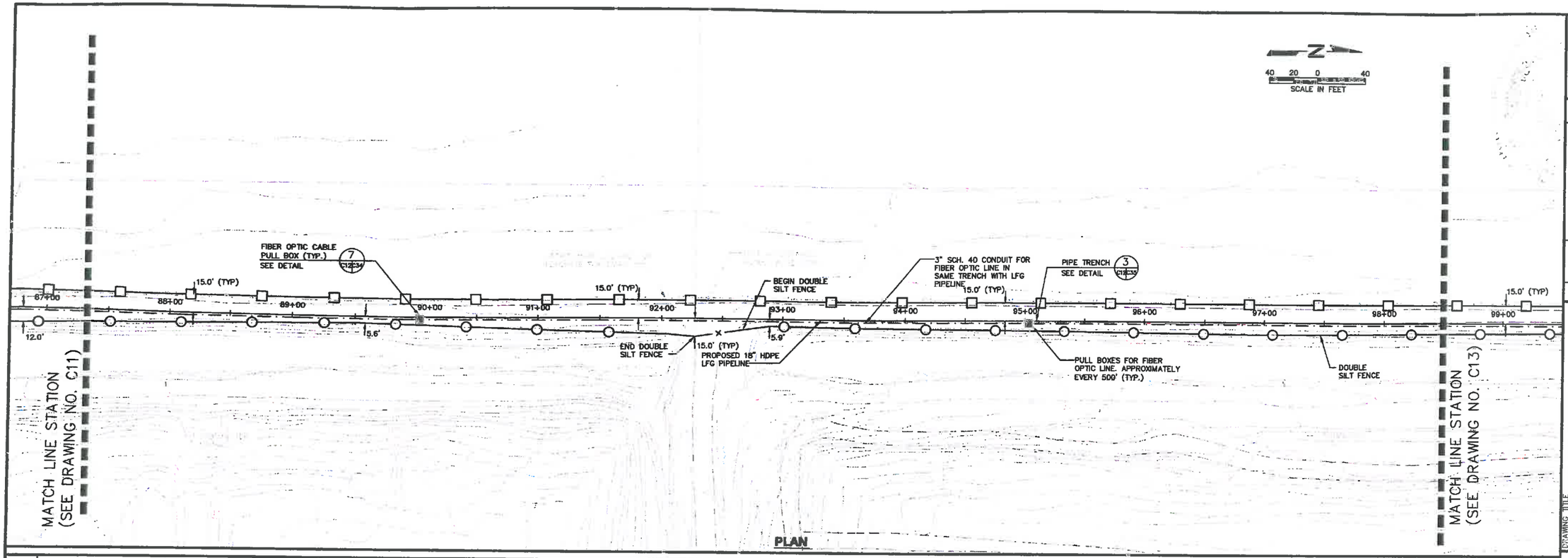

NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
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- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

8/3/10
DAVID H. PENOYER, P.E.
LICENSE NO. 56065

DRAWING TITLE: PLAN AND PROFILE - 10

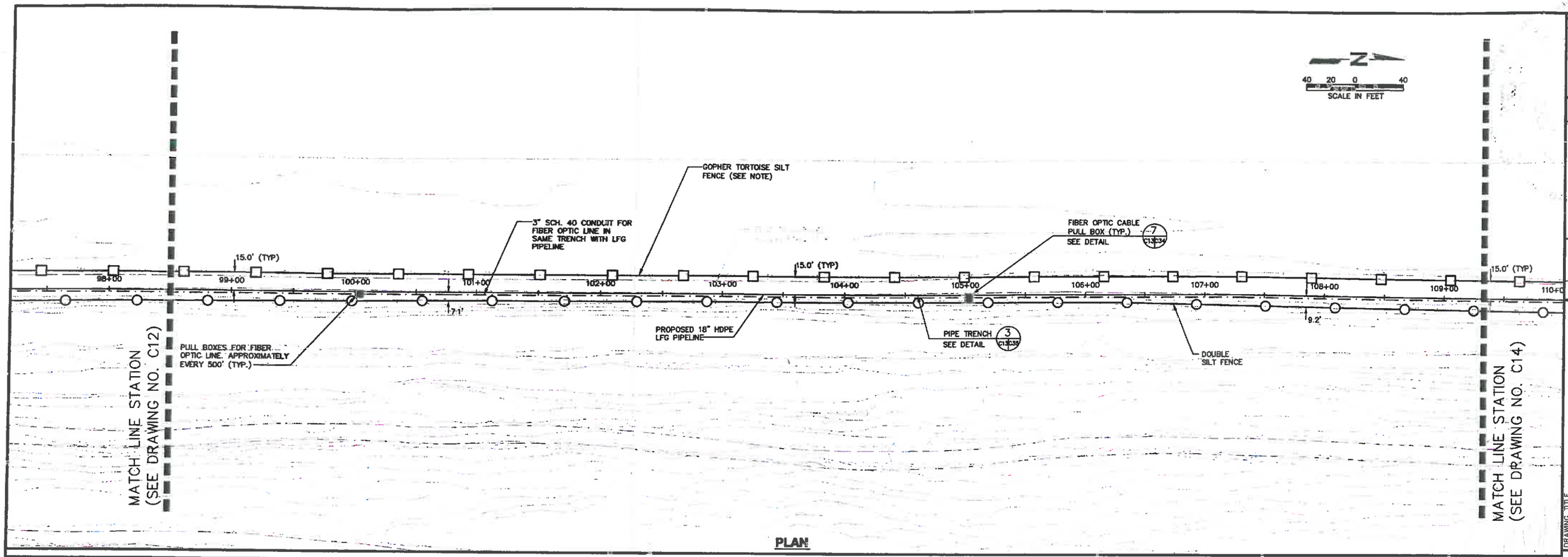
PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 150, TAMPA, FL 33610
813 961-0999 FAX 813 885-5787
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 01208004.03
DRN. BY: JLS
CHK. BY: JNV
DATE: 7/2/10 - D/A RVW BY: DHP
DATE: 8/3/10 - DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C12



NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
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- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENOYER, P.E.
LICENSE NO. 36065
8/3/10

DRAWING TITLE: PLAN AND PROFILE - 11

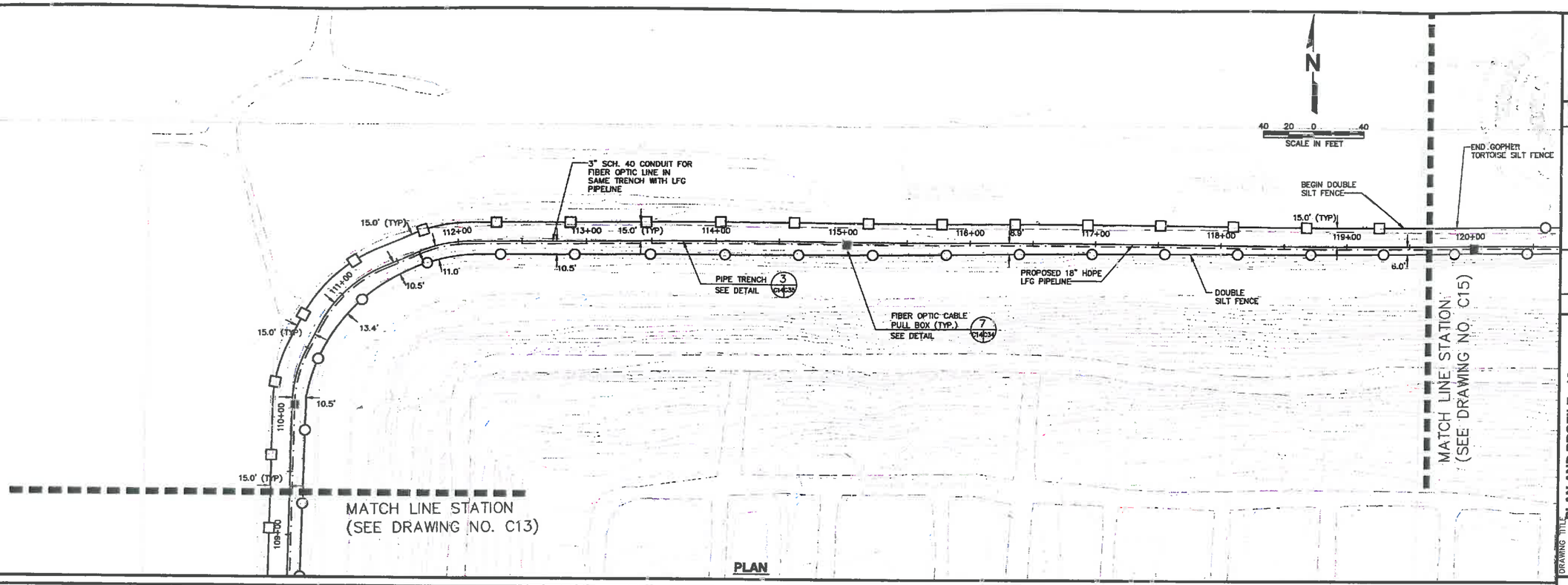
PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

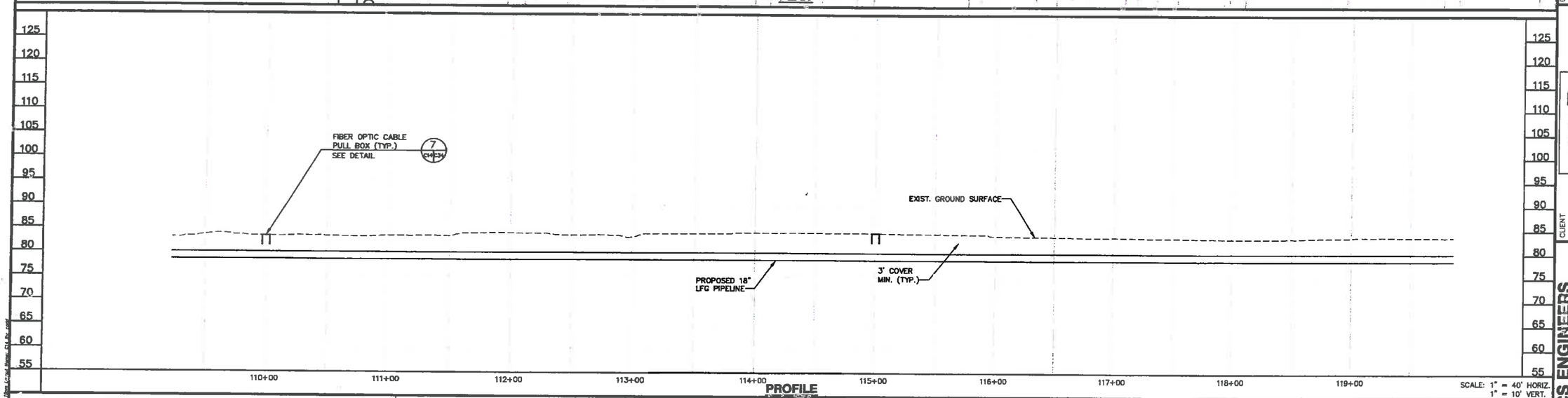
CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD, SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 855-4797
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000662

PROJ. NO. 01219004.03
TASK NO. 0003
DWN. BY: JLS
CHK. BY: JNV
Q/A BY: DHP
APP. BY: DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C13





NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
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- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

DAVID H. PENOYER, P.E.
LICENSE NO. 50065
8/5/10

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

DRAWING TITLE: PLAN AND PROFILE - 12

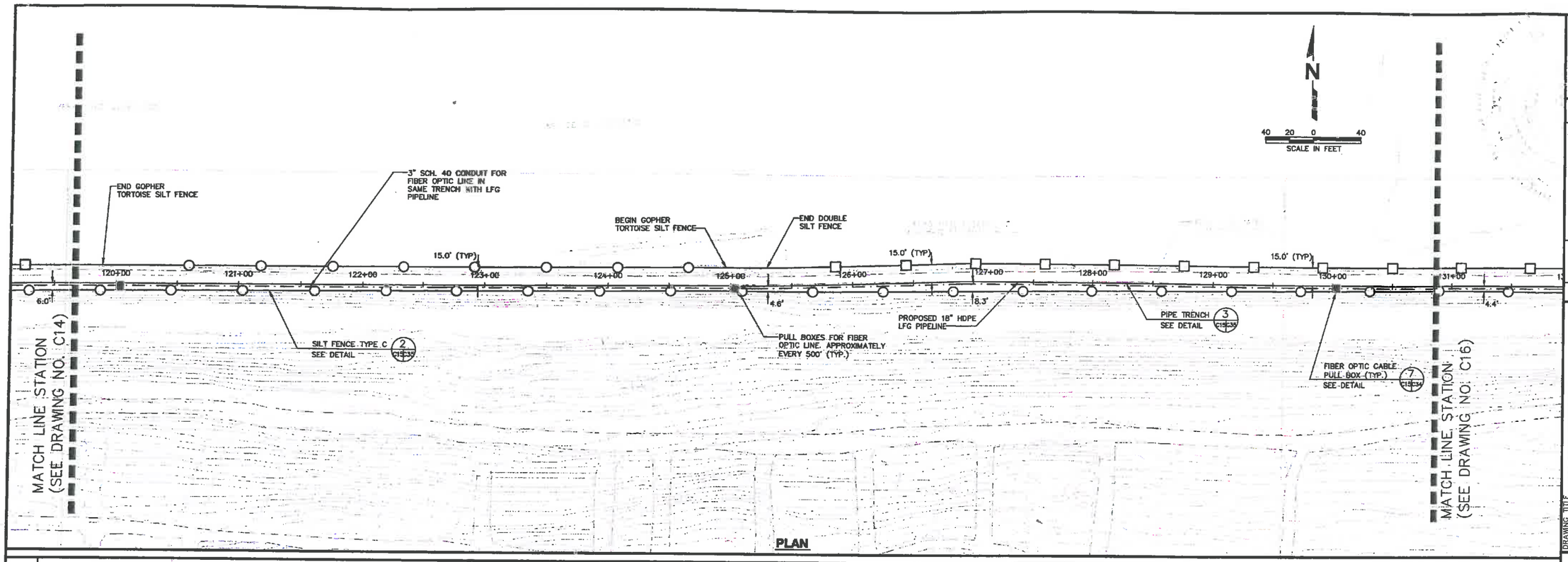
PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

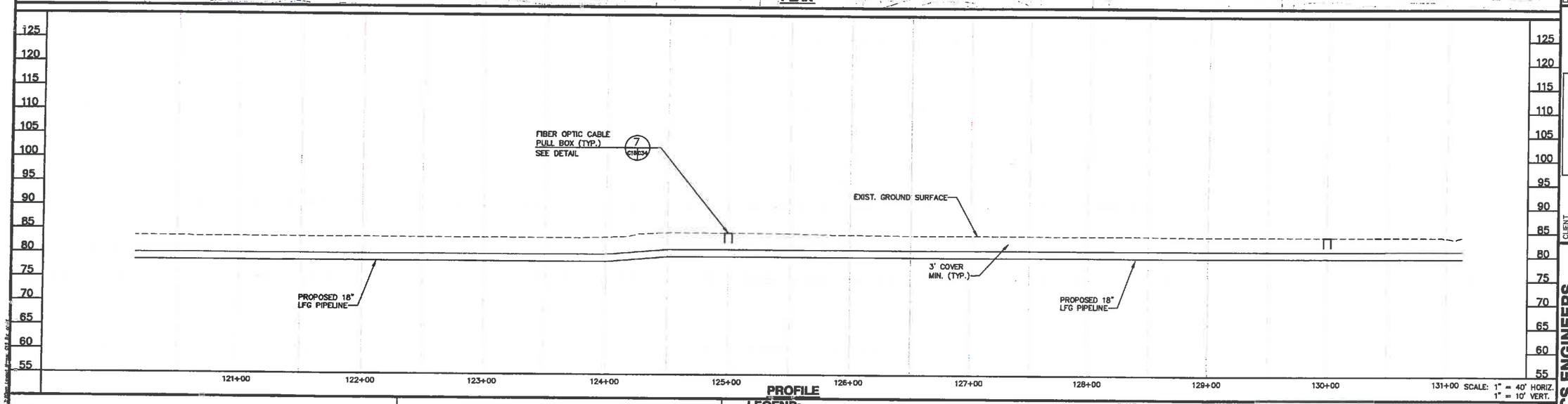
CLIENT: OUC The Reliable One
ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000298

PROJ. NO. 09209004.03
DSN. BY: JLS
CHK. BY: JNV
APP. BY: DHP
QA REVIEW: DHP
DATE: JLS/JNV

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C14





NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
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- PROPOSED DOUBLE SILT FENCE
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- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENOYER, P.E.
LICENSE NO. 56065

DRAWING TITLE: PLAN AND PROFILE - 13

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

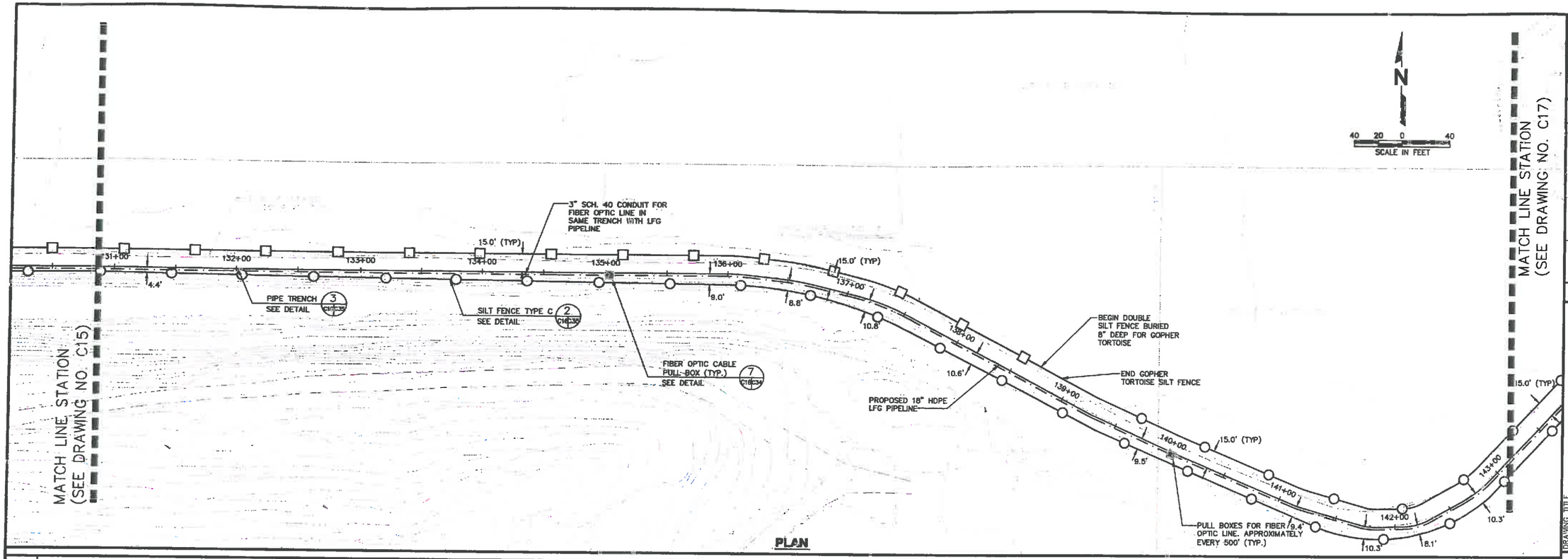
CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO: 01204.03
DSGN. BY: JLS
CHK. BY: JNV
QA. BY: DHP
APP. BY: DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C15



NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
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- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

8/3/10
DAVID H. PENOTER, P.E.
LICENSE NO. 56065

DRAWING TITLE: **PLAN AND PROFILE - 14**

PROJECT TITLE: **LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE**

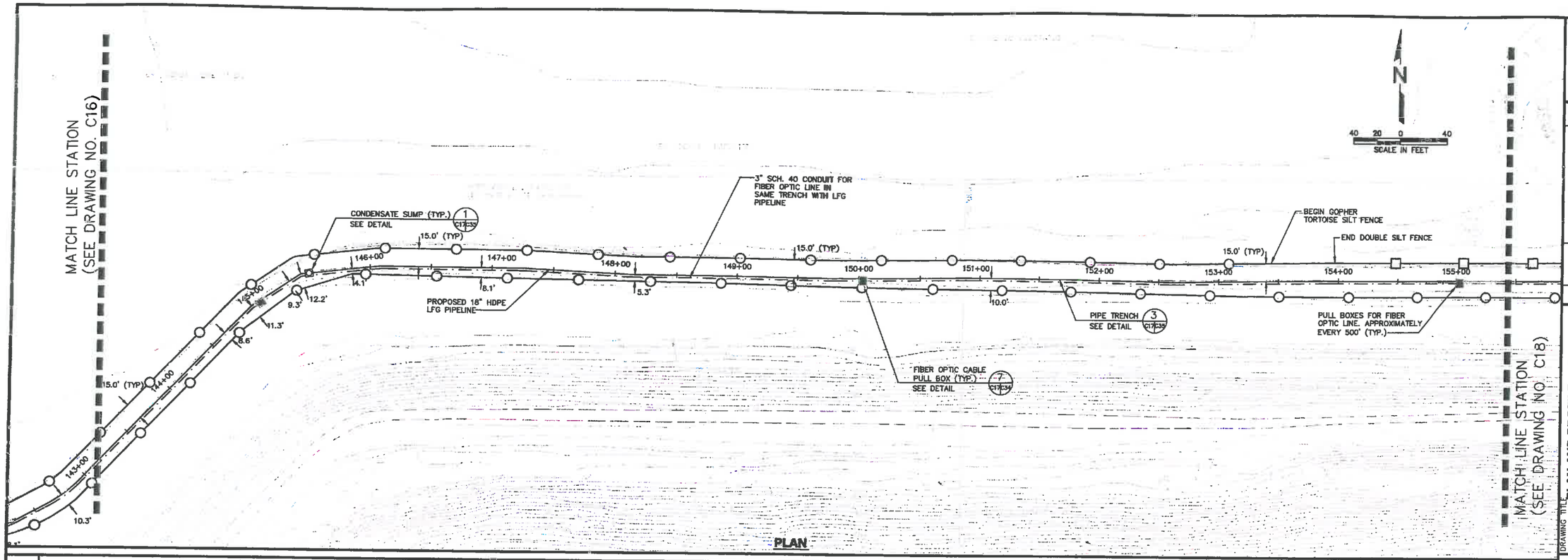
CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

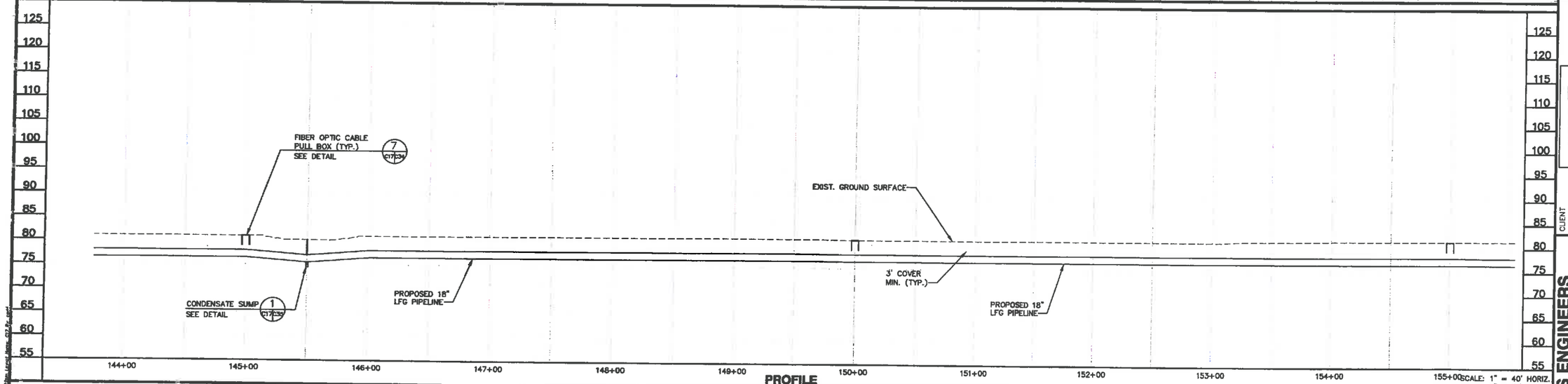
OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 885-0777
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000692

PROJ. NO.	DWN. BY:	CHK. BY:	QA/QC BY:	APP. BY:
01209004.03	ALS	JNV	DHP	DHP
TASK 0100	JLS/JNV			

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C16





NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 6-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENOYER, P.E.
LICENSE NO. 56065
8/5/10

DRAWING TITLE: PLAN AND PROFILE - 15

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

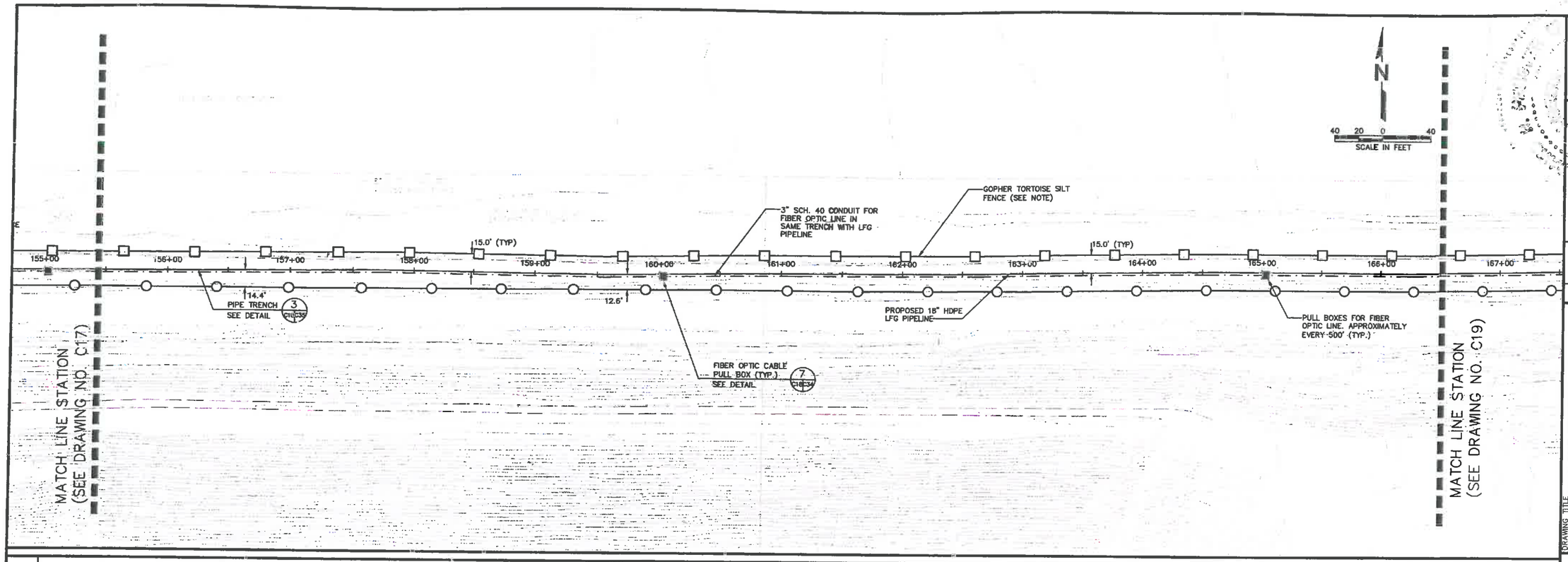
CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

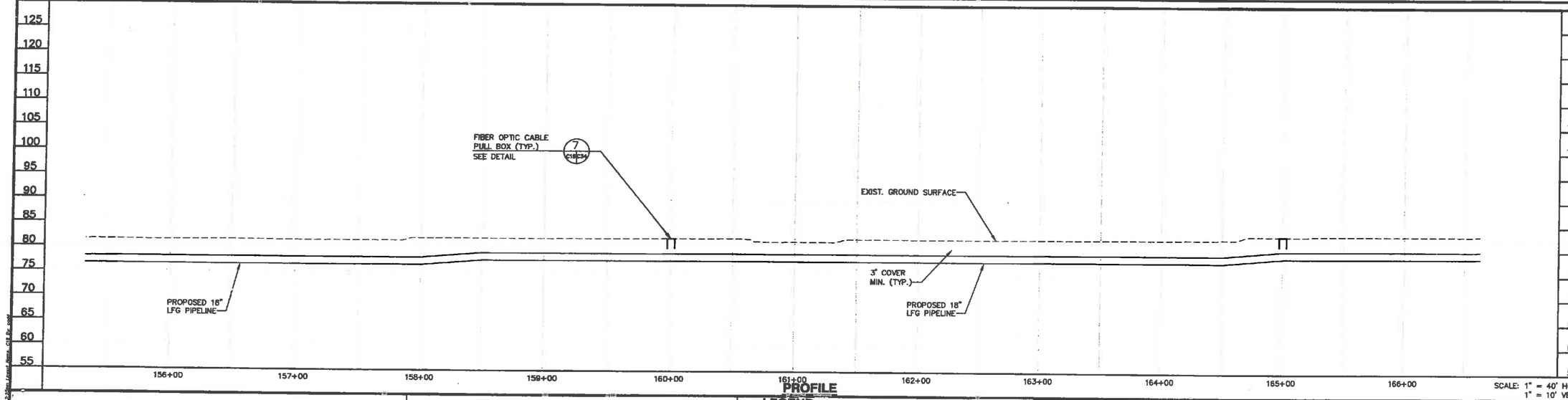
OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 882-0787
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJECT NO.	01209004.03
DSN. BY:	JLS/JNV
DRN. BY:	JLS
CHK. BY:	JNV
QA/QC BY:	DHP
APP. BY:	DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C17





PROFILE

NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENOYER, P.E.
LICENSE NO. 56065

DRAWING TITLE: PLAN AND PROFILE - 16

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

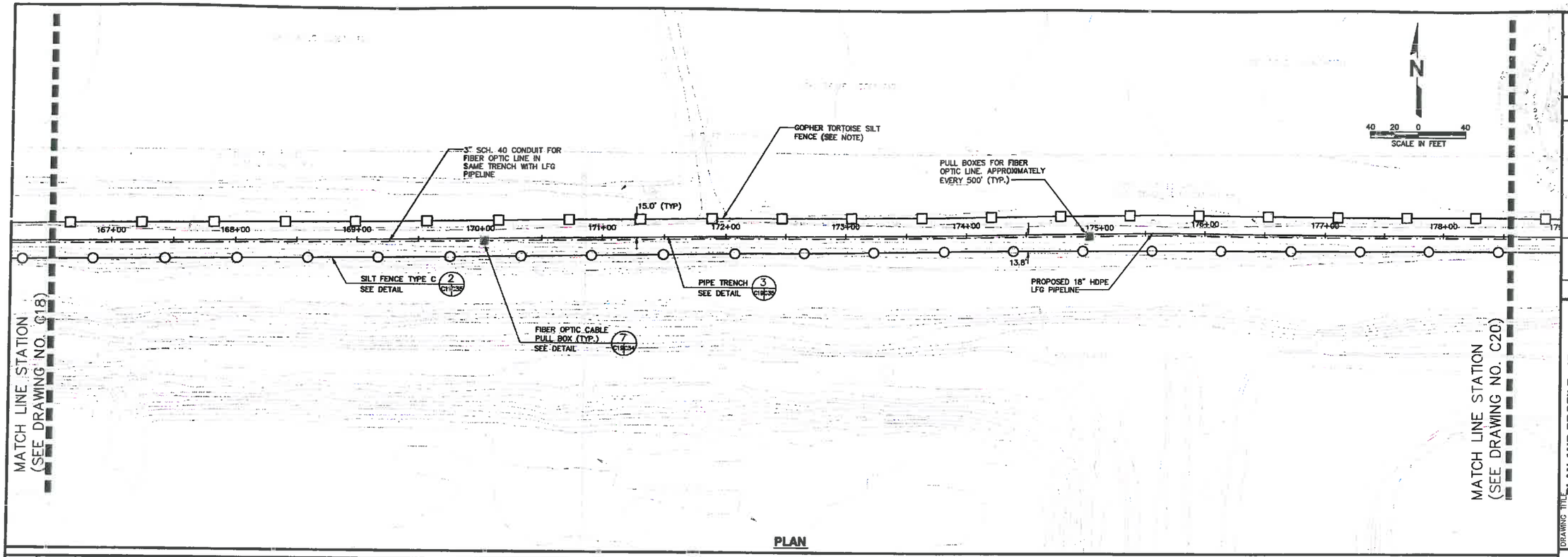
CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

OUC The Reliable One

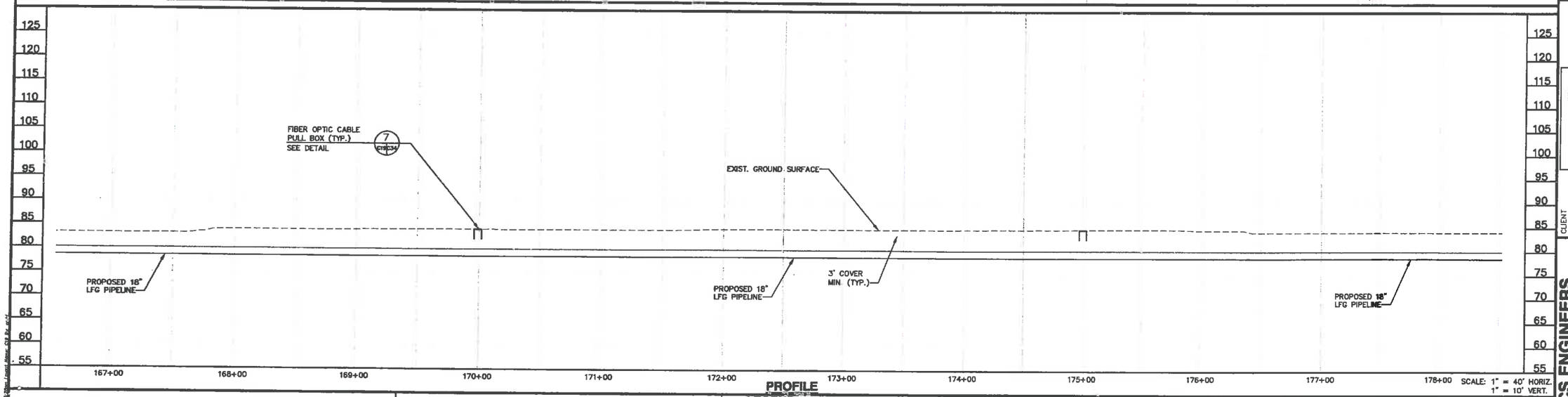
SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4901 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 882-4787
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00001788

PROJ. NO. 01004.03
DSN. BY: JLS/JNV
DWN. BY: JLS
CHK. BY: JNV
QA/QC BY: DHP
APP. BY: DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C18



PLAN



PROFILE

NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

DAVID H. FENOVER, P.E. LICENSE NO. 56665
8/3/10

DRAWING TITLE: PLAN AND PROFILE - 17

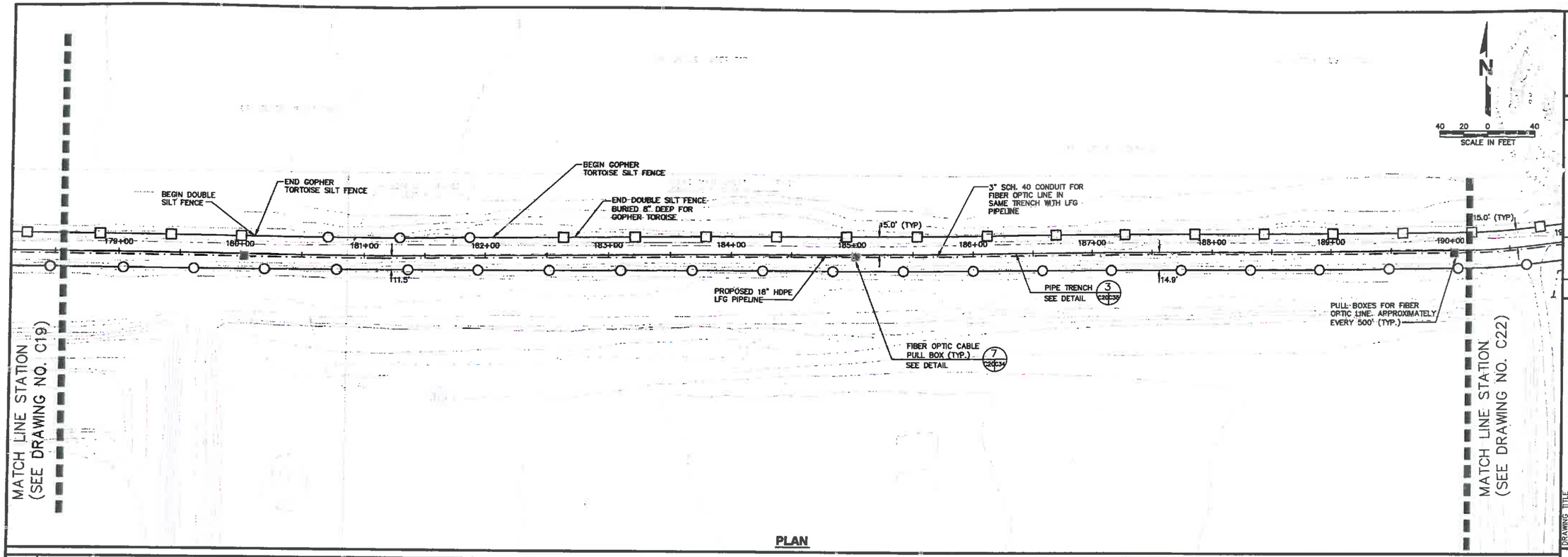
PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

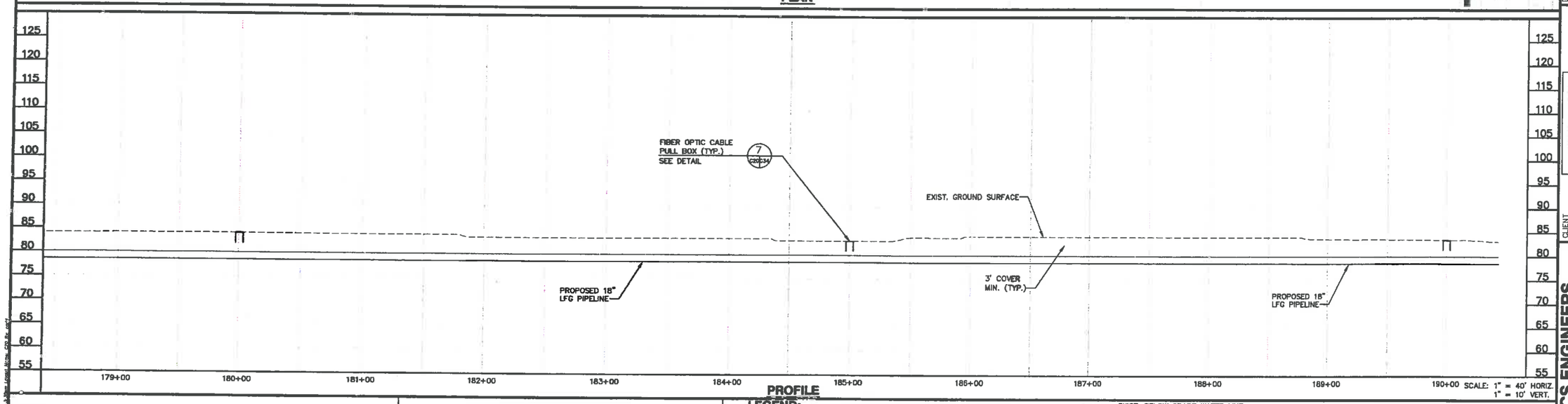
SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 855-4787
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000666

PROJ. NO. 01207819.03
DSN. BY: JLS
DWN. BY: JLS
CHK. BY: JNV
O/A APVD BY: DHP
APP. BY: DHP
JLS/JNV

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C19



PLAN



PROFILE

NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/23/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENDYER, P.E.
LICENSE NO. 56065
8/5/10

DRAWING TITLE: PLAN AND PROFILE - 18

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

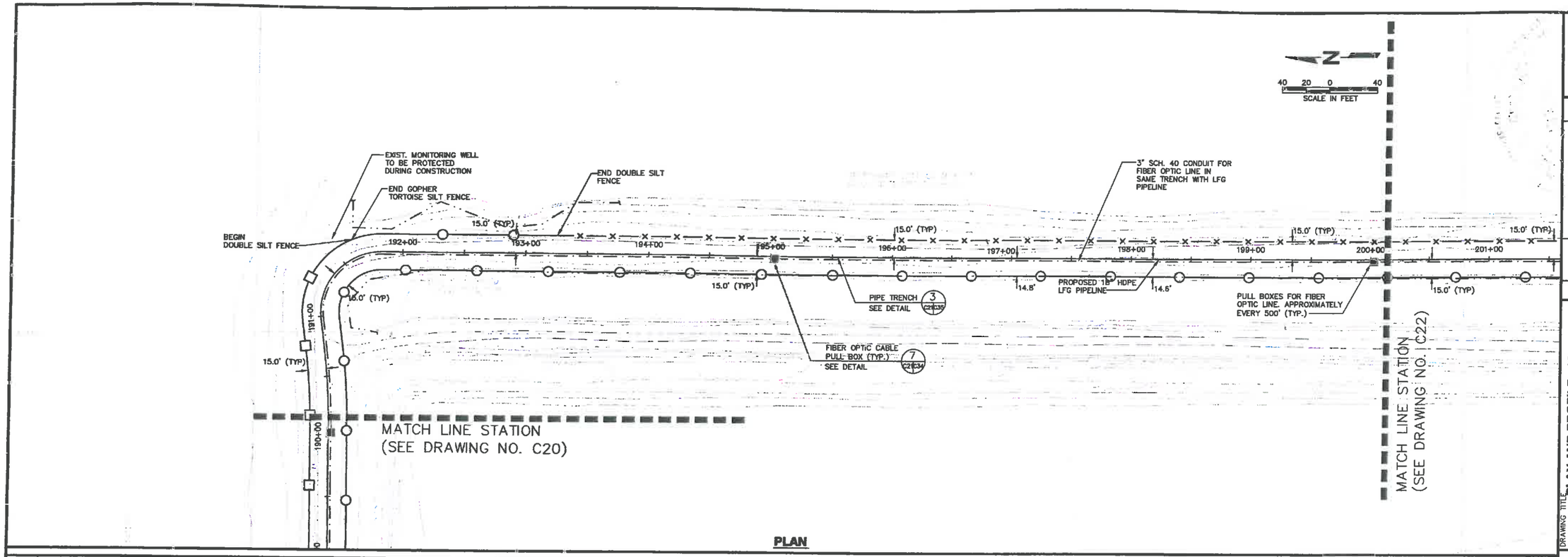
CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

OUC The Reliable One

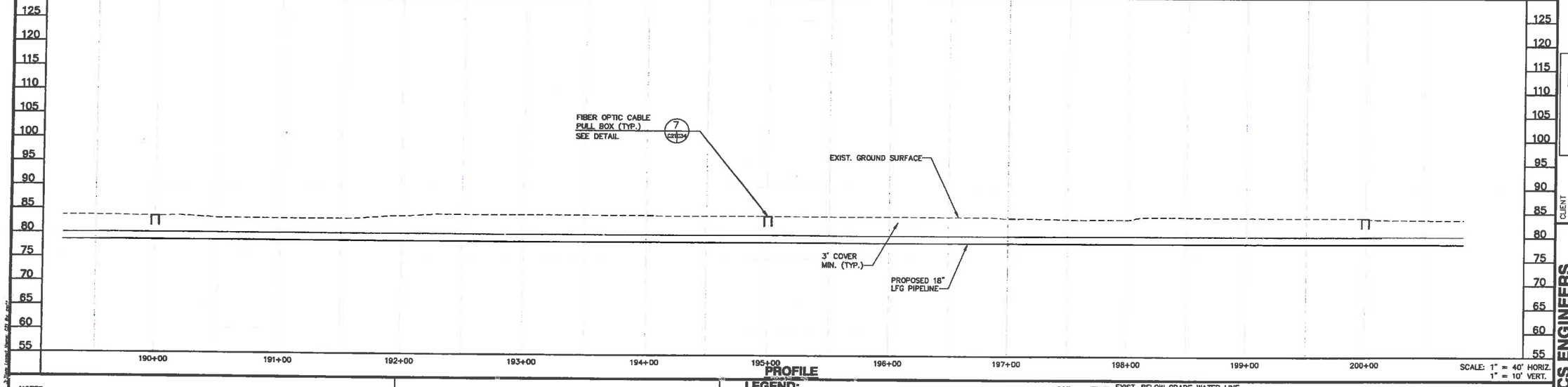
SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 885-4787
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000666

PROJ. NO. 01204004.03
DSN. BY: JLS/JNV
DWN. BY: JLS
CHK. BY: JNV
APP. BY: DHP
G/A DWG BY: DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C20



PLAN



PROFILE

SCALE: 1" = 40' HORIZ.
1" = 10' VERT.

NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

DAVID H. PEROTTI, P.E.
LICENSE NO. 55065
8/3/10

REV	DATE	DESCRIPTION	BY
A	7/2/10	PROFILES	DHP
B	8/3/10	EROSION CONTROLS	LEK

DRAWING TITLE: PLAN AND PROFILE - 19

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-6787
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000284

PROJ. NO.	DWN. BY:	CHK. BY:	QA/QC BY:	APP. BY:
01255004.03	JLS	JNV	DHP	DHP

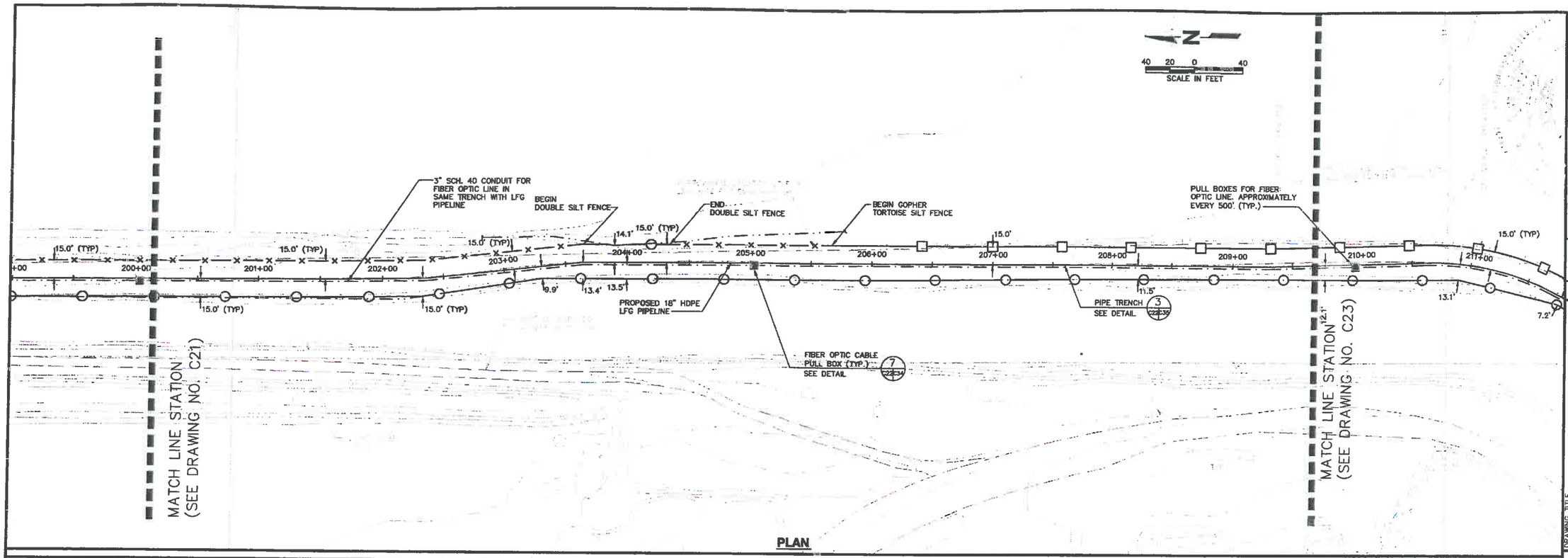
DSGN BY: JLS/JNV

CADD FILE: PLPR[1]V1.7.DWG

DATE: 3/30/2010

SCALE: AS SHOWN

DRAWING NO. C21



NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
2	7/2/10	PROFILES	DHP
3	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENROD, P.E. LICENSE NO. 56085
8/3/10

DRAWING TITLE: PLAN AND PROFILE - 20

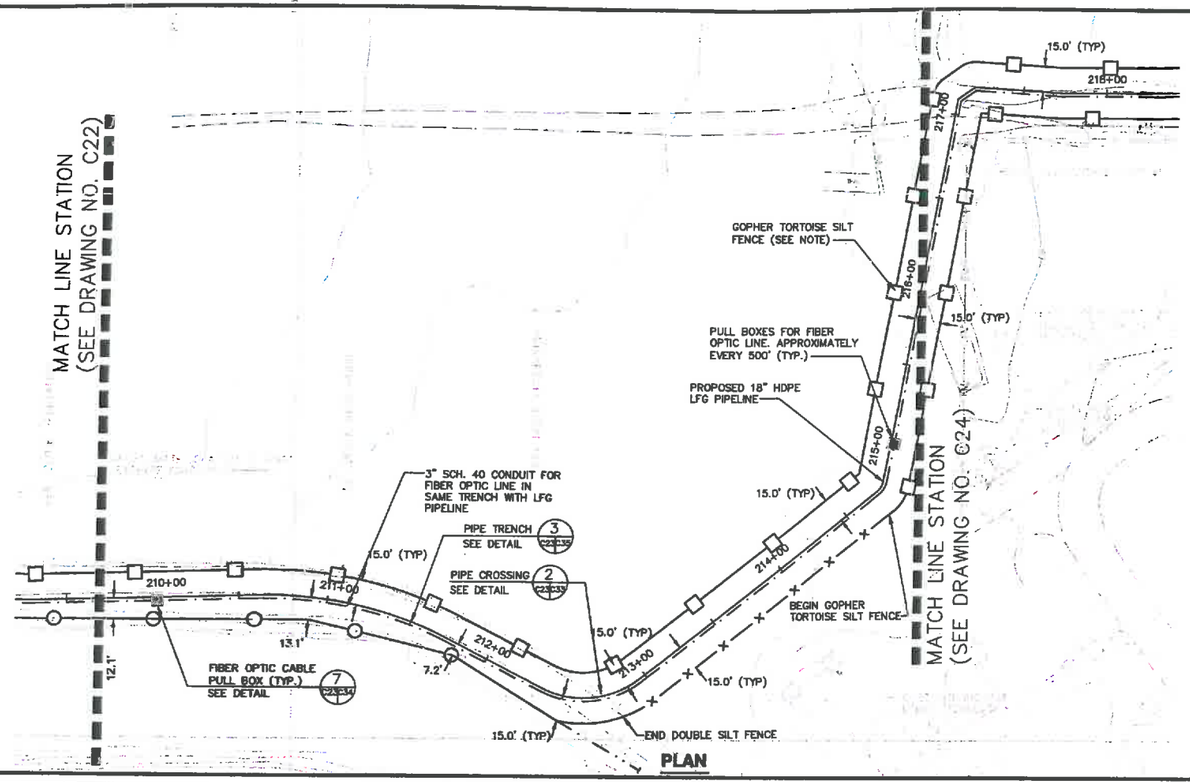
PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

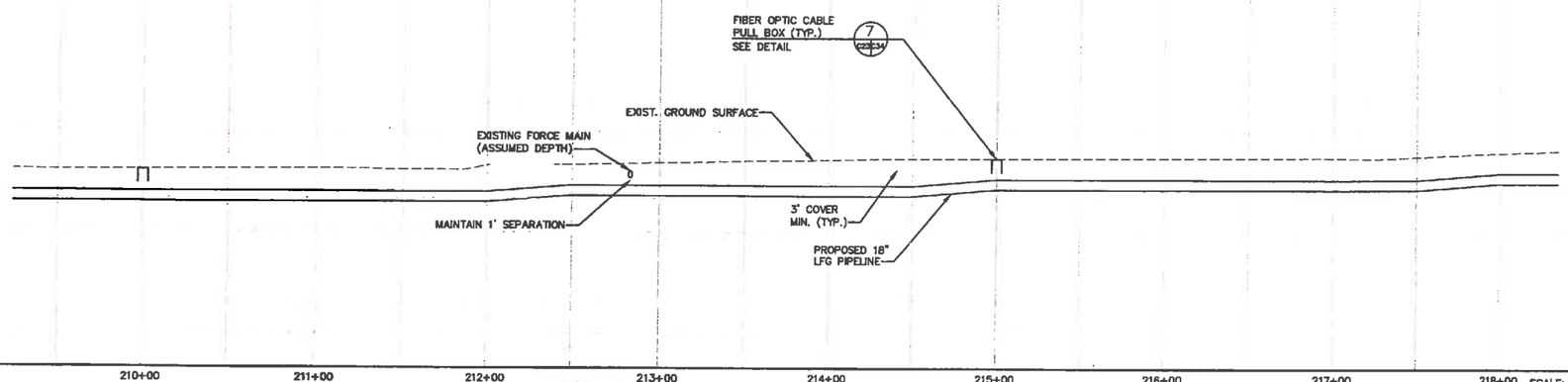
CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831
OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO.	DRWN. BY:	CHK. BY:	D/A RVW BY:	APP. BY:
09004.03	JLS	JNV	DHP	DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C22





NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LPK

8/5/10
DAVID H. PENNYER, P.E.
LICENSE NO. 36065

DRAWING TITLE: PLAN AND PROFILE - 21

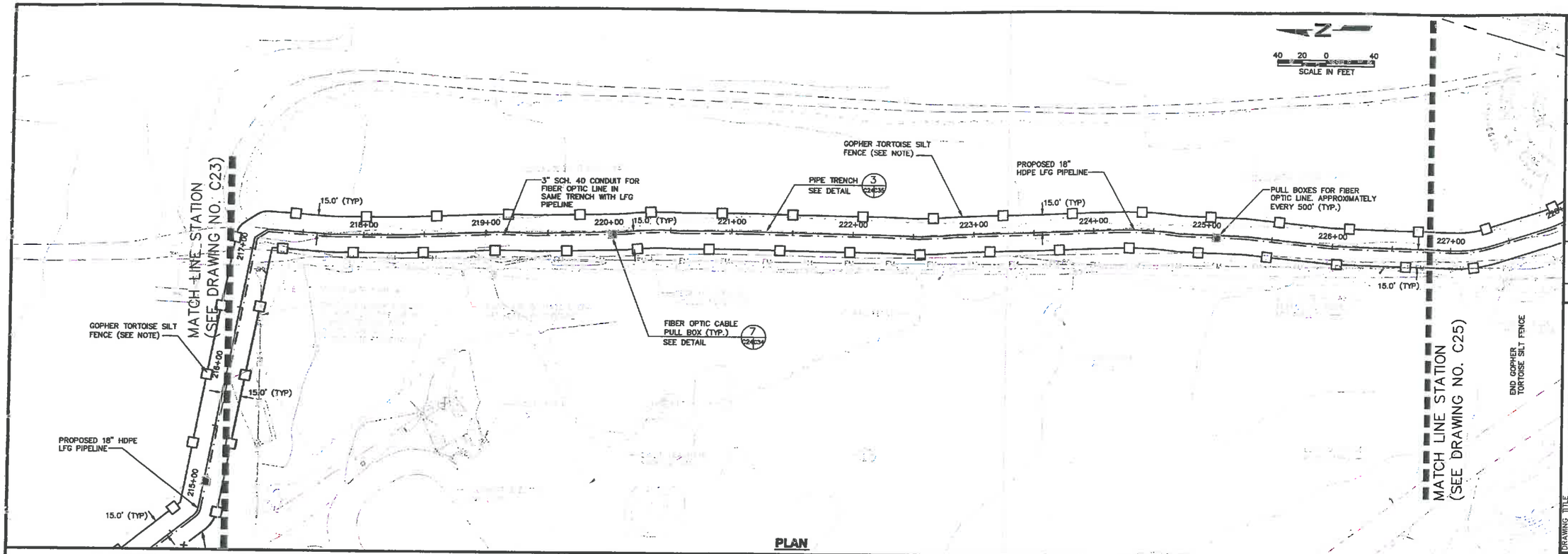
PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: OUC The Reliable One
ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

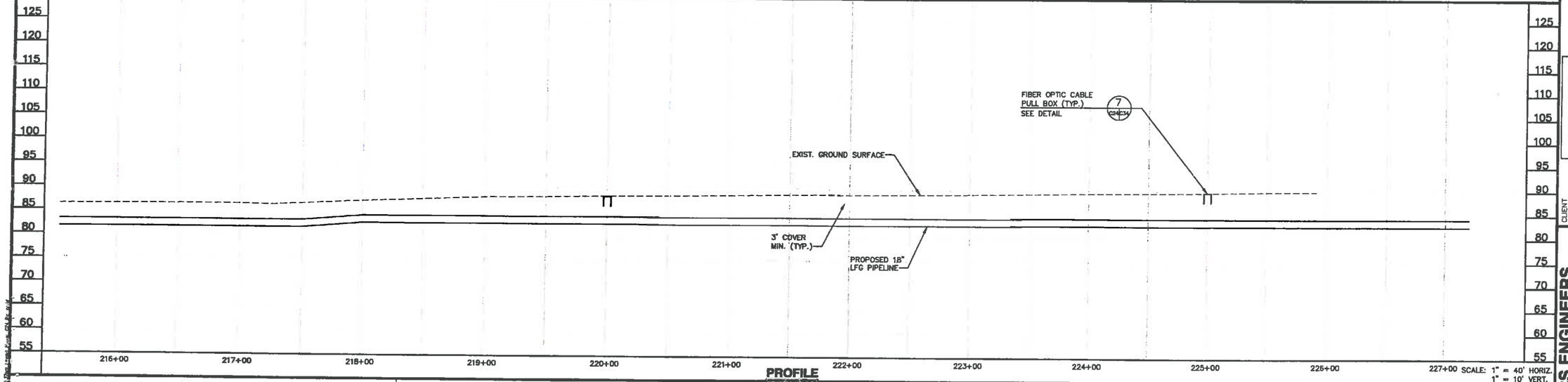
SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 150, TAMPA, FL 33610
813 621-0080 FAX 813 623-6787
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000666

PROJ. NO: 09004.03
DSN. BY: JLS/JNV
DWN. BY: JLS
CHK. BY: JNV
Q/A RVW BY: DHP
APP. BY: DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C23



PLAN



PROFILE

NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

DAVID H. PENOTEK, P.E.
LICENSE NO. 56083
8/5/10

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

DRAWING TITLE: PLAN AND PROFILE - 22

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

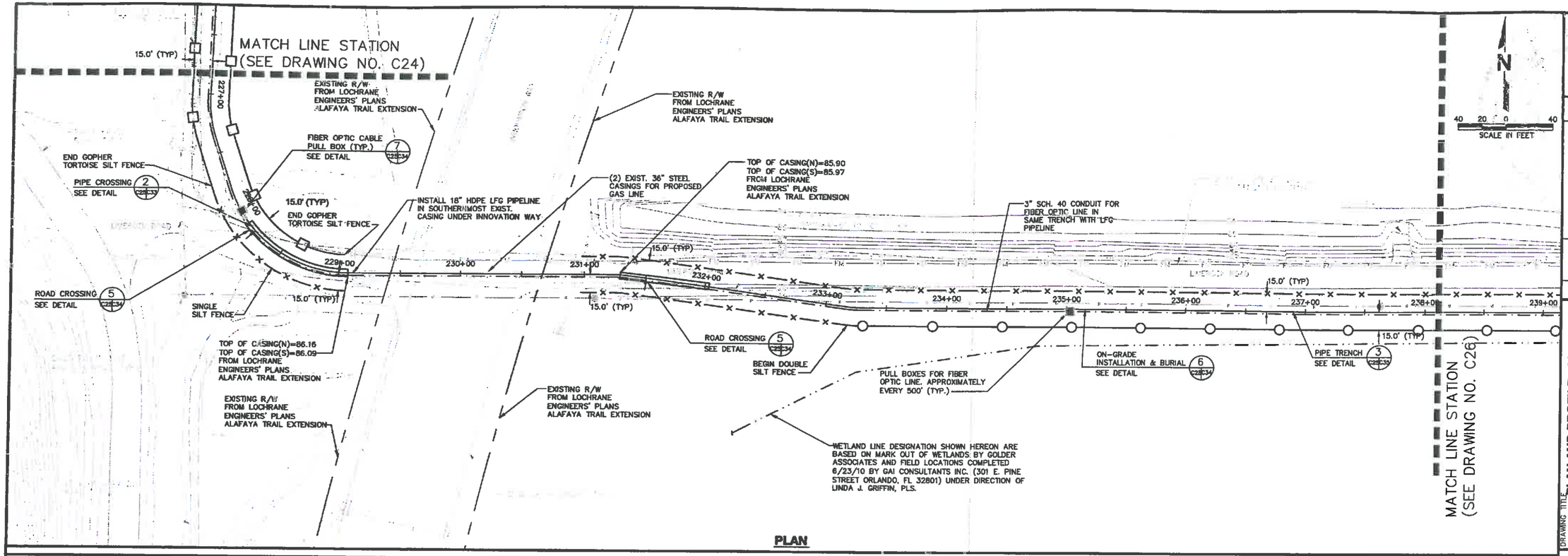
CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

OUC The Reliable One

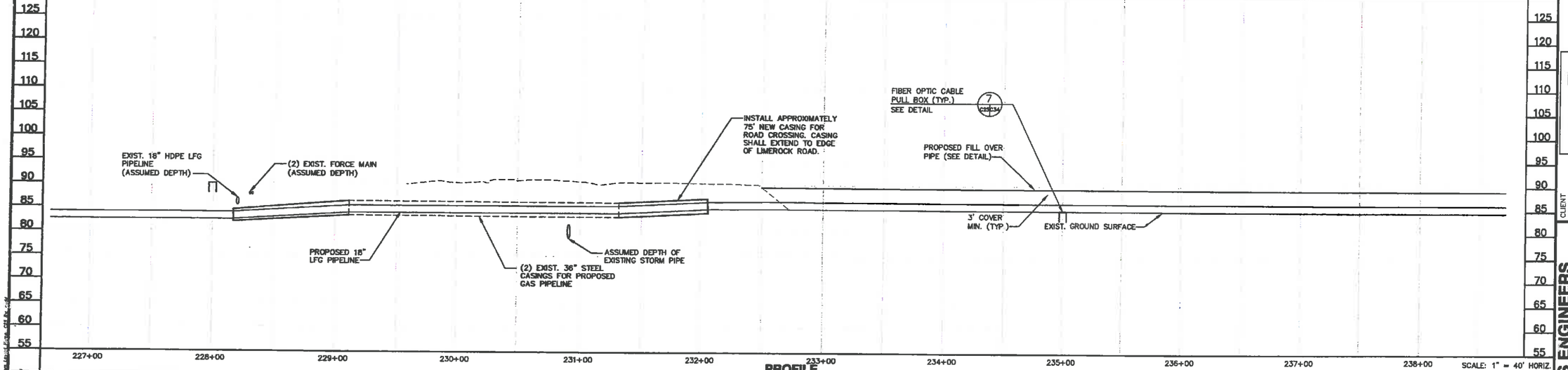
SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 885-4997
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJECT NO. 09209004.03
DSR. BY: JES/JNV
CHK. BY: JNV
DRW. BY: MLS
O/A REVIEW BY: DHP
APPR. BY: DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C24



PLAN



PROFILE

NOTES:
1. GOPHER TORTOISE SILT FENCE SHALL BE BURIED A MINIMUM OF 8-INCHES DEEP TO PROHIBIT GOPHER TORTOISE MIGRATION INTO PROJECT AREA.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
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- EXIST. STORM LINE
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- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

8/5/10

DAVID H. PENOYER, P.E.
LICENSE NO. 56065

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LER

DRAWING TITLE: PLAN AND PROFILE - 23

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0690 FAX 813 623-1707
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000000

PROJ. NO.	01211801.03.004.03
DWN. BY:	JLS
CHK. BY:	JNV
QA/QC BY:	JLS/JNV
APP. BY:	DHP
QA APVD BY:	DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C25

MATCH LINE STATION
(SEE DRAWING NO. C25)

MATCH LINE STATION
(SEE DRAWING NO. C27)

N

40 20 0 40
SCALE IN FEET

FIBER OPTIC CABLE PULL BOX (TYP.) SEE DETAIL 7 C26&C34

3" SCH. 40 CONDUIT FOR FIBER OPTIC LINE IN SAME TRENCH WITH LFG PIPELINE

PULL BOXES FOR FIBER OPTIC LINE APPROXIMATELY EVERY 500' (TYP.)

15.0' (TYP)

237+00 238+00 239+00 240+00 241+00 242+00 243+00 244+00 245+00 246+00 247+00 248+00 249+00

CONTRACTOR TO FIELD VERIFY LOCATION OF EXIST. STORMWATER FORCEMAIN AND PROTECT FROM DAMAGE DURING CONSTRUCTION

PROPOSED 18" HDPE LFG PIPELINE TO BE INSTALLED ALONG EDGE OF LIMEROCK ROAD. CONTRACTOR SHALL PROTECT EXIST. ABOVE AND BELOW GROUND UTILITIES.

PIPE TRENCH SEE DETAIL 3 C26&C35

ON-GRADE INSTALLATION & BURIAL SEE DETAIL 6 C26&C34

WETLAND LINE DESIGNATION SHOWN HEREON ARE BASED ON MARK OUT OF WETLANDS BY GOLDER ASSOCIATES AND FIELD LOCATIONS COMPLETED 6/23/10 BY GAI CONSULTANTS INC. (301 E. PINE STREET ORLANDO, FL 32801) UNDER DIRECTION OF LINDA J. GRIFFIN, PLS.

EXIST. POWER POLE (TYP). CONTRACTOR SHALL FIELD VERIFY LOCATION OF GUY WIRES AND PROTECT POLE, OVERHEAD ELECTRIC LINE, AND GUY WIRES FROM DAMAGE. COORDINATE WITH OUC PRIOR TO COMMENCEMENT OF ANY WORK (SEE NOTES).

PLAN

FIBER OPTIC CABLE PULL BOX (TYP.) SEE DETAIL 7 C26&C34

PROPOSED FILL OVER PIPE (SEE DETAIL)

APPROXIMATE ELEVATION OF EDGE OF ROAD

3' COVER MIN. (TYP.)

PROPOSED 18" LFG PIPELINE

EXIST GROUND SURFACE

CONTRACTOR SHALL TRENCH PIPE IF NECESSARY TO PROVIDE REQUIRED COVER OVER PIPE AND MAINTAIN POSITIVE DRAINAGE FROM ROAD.

NOTE: PROPOSED LFG PIPELINE TO BE BURIED A MINIMUM OF 3' BELOW FINISHED GRADE. IF PROPOSED GRADE OVER THE PIPELINE IN THE FILL CONDITION REACHES EDGE OF ROAD ELEVATION, THEN PIPELINE SHALL BE TRENCHED TO MAINTAIN POSITIVE STORMWATER DRAINAGE OFF ROAD. CONTRACTOR TO FIELD VERIFY ELEVATIONS.

125 120 115 110 105 100 95 90 85 80 75 70 65 60 55

238+00 239+00 240+00 241+00 242+00 243+00 244+00 245+00 246+00 247+00 248+00

SCALE: 1" = 40' HORIZ.
1" = 10' VERT.

PROFILE

NOTES:
1. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENOYER, P.E.
LICENSE NO. 56065

DRAWING TITLE: PLAN AND PROFILE - 24

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: OUC The Reliable One
ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 160, TAMPA, FL 33610
813 881-0900 FAX 813 882-9707
FLCA-004 CERTIFICATE OF AUTHORIZATION NO. 00000662

PROJ. NO. 01208004.03
DSN. BY: JLS
CHK. BY: JNV
C/A RVW. BY: DHP
APP. BY: DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C26

J:\2004\01\08\03\04.03\01\04\03\PLPR[1]V1.7.dwg — Aug 01, 2010 — by Tim Lynch, Jr.(tlynch) — CAD Ref: none

MATCH LINE STATION
(SEE DRAWING NO. C26)

MATCH LINE STATION
(SEE DRAWING NO. C28)

248+00 249+00 250+00 251+00 252+00 253+00 254+00 255+00 256+00 257+00 258+00 259+00 260+00 261+00

15.0' (TYP)

PULL BOXES FOR FIBER OPTIC LINE. APPROXIMATELY EVERY 500' (TYP.)

3" SCH. 40 CONDUIT FOR FIBER OPTIC LINE IN SAME TRENCH WITH LFG PIPELINE

EXIST. POWER POLE (TYP). CONTRACTOR SHALL FIELD VERIFY LOCATION OF GUY WIRES AND PROTECT POLE, OVERHEAD ELECTRIC LINE, AND GUY WIRES FROM DAMAGE. COORDINATE WITH OUC PRIOR TO COMMENCEMENT OF ANY WORK (SEE NOTES).

STORMWATER RCP CROSSING (8) SEE DETAIL

CONTRACTOR TO FIELD VERIFY LOCATION OF EXIST. STORMWATER FORCEMAIN AND PROTECT FROM DAMAGE DURING CONSTRUCTION

PROPOSED 18" HDPE LFG PIPELINE TO BE INSTALLED ALONG EDGE OF LIMEROCK ROAD. CONTRACTOR SHALL PROTECT EXIST. ABOVE AND BELOW GROUND UTILITIES.

PIPE TRENCH (3) SEE DETAIL

ON-GRADE INSTALLATION & BURIAL (6) SEE DETAIL

FIBER OPTIC CABLE PULL BOX (TYP.) (7) SEE DETAIL

CROSS UNDER OVERHEAD ELECTRIC LINE. COORDINATE WITH OUC PRIOR TO COMMENCEMENT OF ANY WORK (SEE NOTES).

INSTALL APPROXIMATELY 60' OF CONCRETE K-RAIL BARRIER TO PROTECT LFG PIPELINE AT ABOVE GRADE STORMWATER RCP CROSSING

CROSS UNDER OVERHEAD ELECTRIC LINE. COORDINATE WITH OUC PRIOR TO COMMENCEMENT OF ANY WORK (SEE NOTES).

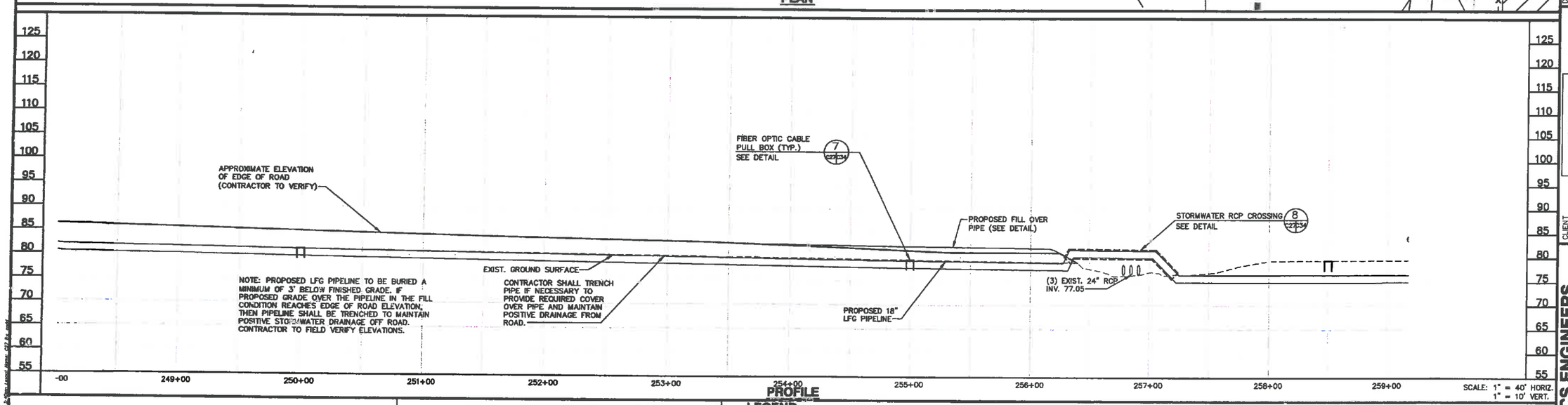
END DOUBLE SILT FENCE

WETLAND LINE DESIGNATION SHOWN HEREON ARE BASED ON MARK OUT OF WETLANDS BY GOLDER ASSOCIATES AND FIELD LOCATIONS COMPLETED 6/23/10 BY GAI CONSULTANTS INC. (301 E. PINE STREET ORLANDO, FL 32801) UNDER DIRECTION OF LINDA J. GRIFFIN, PLS.

N

40 20 0 40
SCALE IN FEET

PLAN



PROFILE

SCALE: 1" = 40' HORIZ.
1" = 10' VERT.

NOTES:
1. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/23/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

DAVID H. PEMOYER, P.E.
LICENSE NO. 39065
8/3/10

PROJECT TITLE
LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

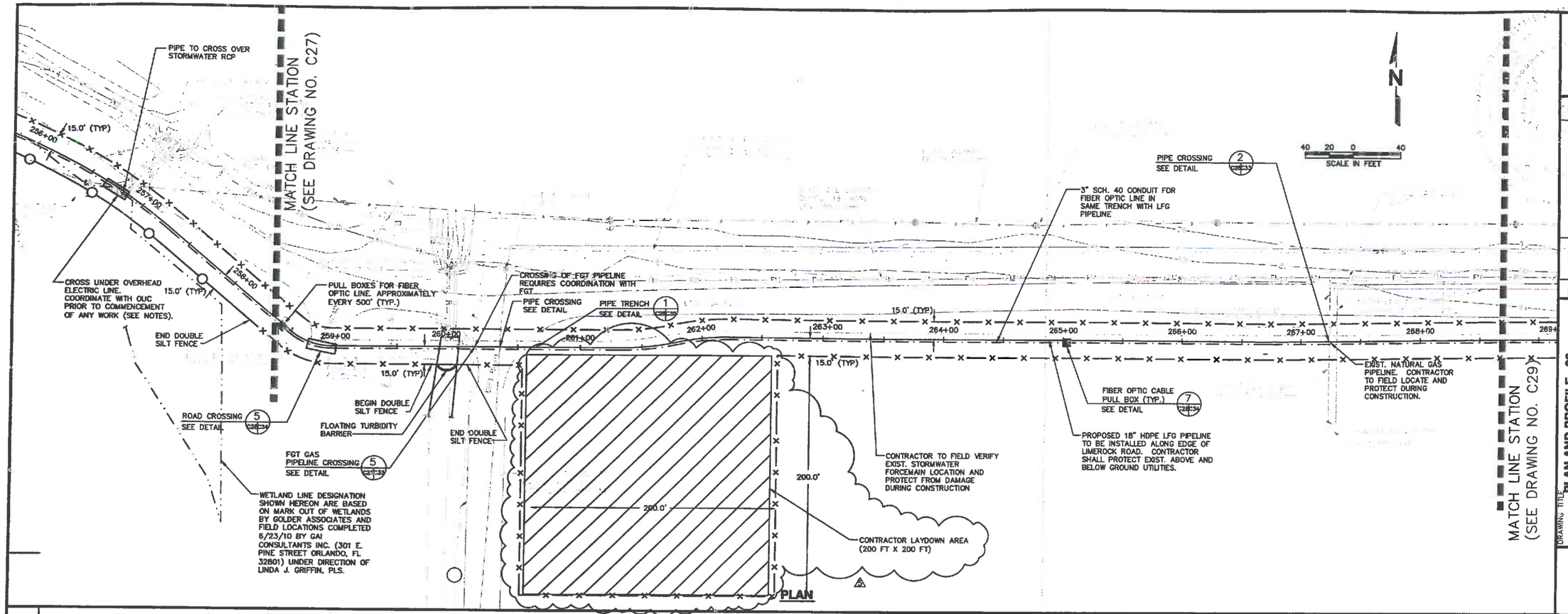
DRAWING TITLE
PLAN AND PROFILE - 25

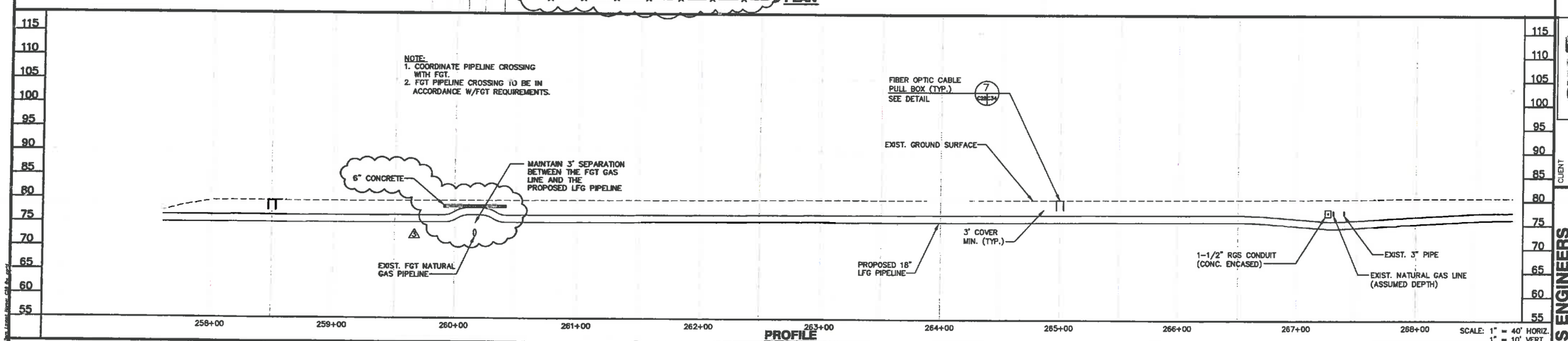
CLIENT
ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831
OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-6707
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004758

PROJ. NO.
01204.03
DSN. BY: JLS
DWN. BY: JLS
CHK. BY: JNV
APP. BY: DHP
C/A R'W BY:
JLS/JNV

CADD FILE:
PLPR[1]V1.7.DWG
DATE:
3/30/2010
SCALE:
AS SHOWN
DRAWING NO.
C27





PROFILE

NOTES:
1. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
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- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	4/22/10	FGT CROSSING PROFILE MOD.	DHP
2	4/28/10	FGT CROSSING NOTE MOD.	DHP
3	6/15/10	CONTRACTOR LAYDOWN AREA	LEK
4	7/2/10	PROFILES	DHP
5	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENOYER, P.E. LICENSE NO. 56065
8/5/10

DRAWING TITLE: PLAN AND PROFILE - 26

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: OUC The Reliable One
ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD, SUITE 100, TAMPA, FL 33610
813 885-7566 FAX 813 885-7572
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000668
PROJ. NO. 06209004.03
DSN. BY: JLS
CHK. BY: JMV
QA/QC BY: DHP
APP. BY: DHP
DSK: JLS/JMV

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C28

MATCH LINE STATION (SEE DRAWING NO. C28)

MATCH LINE STATION (SEE DRAWING NO. C30)

N

SCALE IN FEET: 40 20 0 40

3" SCH. 40 CONDUIT FOR FIBER OPTIC LINE IN SAME TRENCH WITH LFG PIPELINE

FIBER OPTIC CABLE PULL BOX (TYP.) SEE DETAIL 7 C28-C34

PROPOSED 18" HDPE LFG PIPELINE TO BE INSTALLED ALONG EDGE OF LIMEWORK ROAD. CONTRACTOR SHALL PROTECT EXIST. ABOVE AND BELOW GROUND UTILITIES.

BEGIN DOUBLE SILT FENCE

PULL BOXES FOR FIBER OPTIC LINE. APPROXIMATELY EVERY 500' (TYP.)

PIPE CROSSING SEE DETAIL 2 C28-C33

PIPE TRENCH SEE DETAIL 3 C28-C34

RAIL LINE CROSSING SEE DETAIL 9 C28-C33

WETLAND LINE DESIGNATION SHOWN HEREON ARE BASED ON MARK OUT OF WETLANDS BY GOLDER ASSOCIATES AND FIELD LOCATIONS COMPLETED 6/23/10 BY GAI CONSULTANTS INC. (301 E. PINE STREET ORLANDO, FL 32801) UNDER DIRECTION OF LINDA J. GRIFFIN, PLS.

END DOUBLE SILT FENCE

OUC TO REMOVE TRACKS AND BALLAST. CONTRACTOR TO BACKFILL TO 95% PROCTOR AND REPLACE SOIL TO PRE-CONSTRUCTION CONDITIONS. OUC TO REINSTALL TRACKS AND BALLAST.

EXIST. RAIL LINES TO BE PROTECTED FROM DAMAGE

269+00 270+00 271+00 272+00 273+00 274+00 275+00 276+00 277+00 278+00 279+00 280+00 281+00

15.0' (TYP) 11.1' 8.3'

PLAN

125 120 115 110 105 100 95 90 85 80 75 70 65 60 55

FIBER OPTIC CABLE PULL BOX (TYP.) SEE DETAIL 7 C28-C34

EXIST. GROUND SURFACE

3' COVER MIN. (TYP.)

EXIST. 6" PERFORATED PIPE

PROPOSED 18" LFG PIPELINE

4" HDPE

EXIST. 2" PVC

APPROXIMATE LOCATION OF EXISTING RAIL TRACKS (SEE PLAN VIEW)

RAIL LINE CROSSING SEE DETAIL 9 C28-C33

EXIST. 2" PVC (ASSUMED DEPTH)

EXIST. 3" PIPE (ASSUMED DEPTH)

EXIST. 2" PVC (ASSUMED DEPTH)

EXIST. 1-1/2" RGS CONDUIT (ASSUMED DEPTH)

269+00 270+00 271+00 272+00 273+00 274+00 275+00 276+00 277+00 278+00 279+00 280+00

SCALE: 1" = 40' HORIZ. 1" = 10' VERT.

PROFILE

NOTES:
1. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
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- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	6/3/10	FDEP RAI NO. 1 RESPONSE	LEK
2	7/2/10	PROFILES	DHP
3	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENOYER, P.E. LICENSE NO. 56065

DRAWING TITLE: PLAN AND PROFILE - 27

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0170 FAX 813 885-4787
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

JOB NO.	DRN. BY:	CHK. BY:	QA/QC BY:	APP. BY:
09204.03	JLS	JNV	DHP	DHP

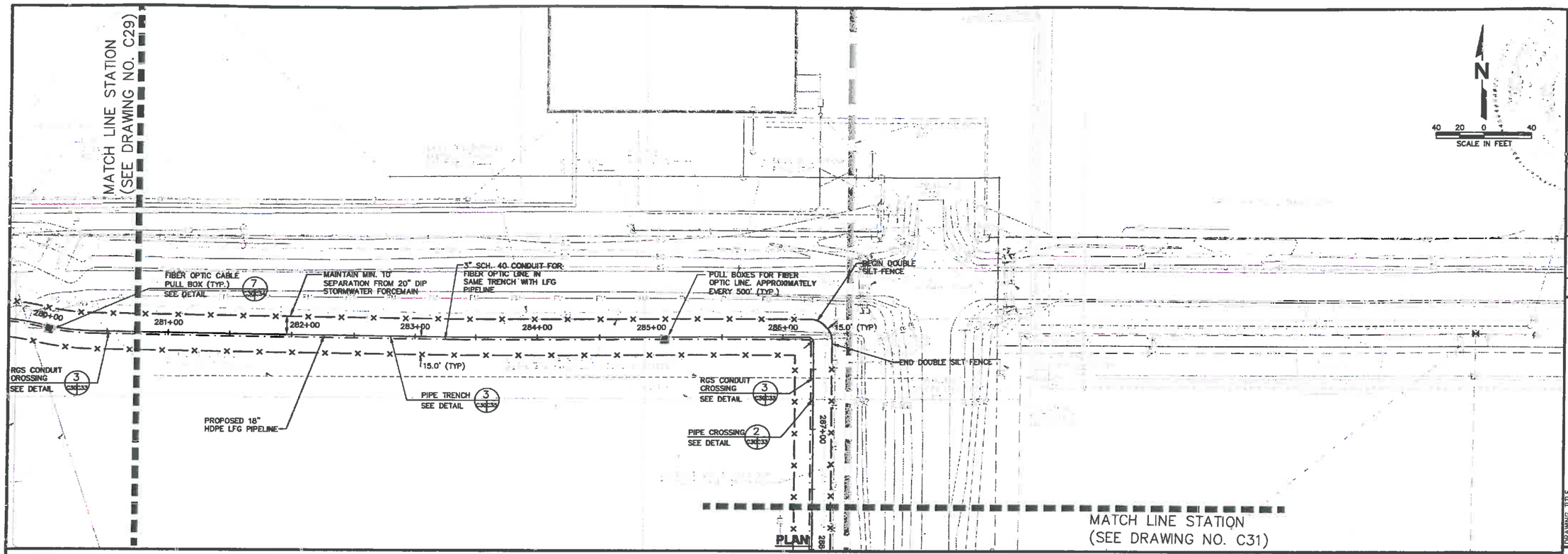
DSN. BY: JLS/JNV

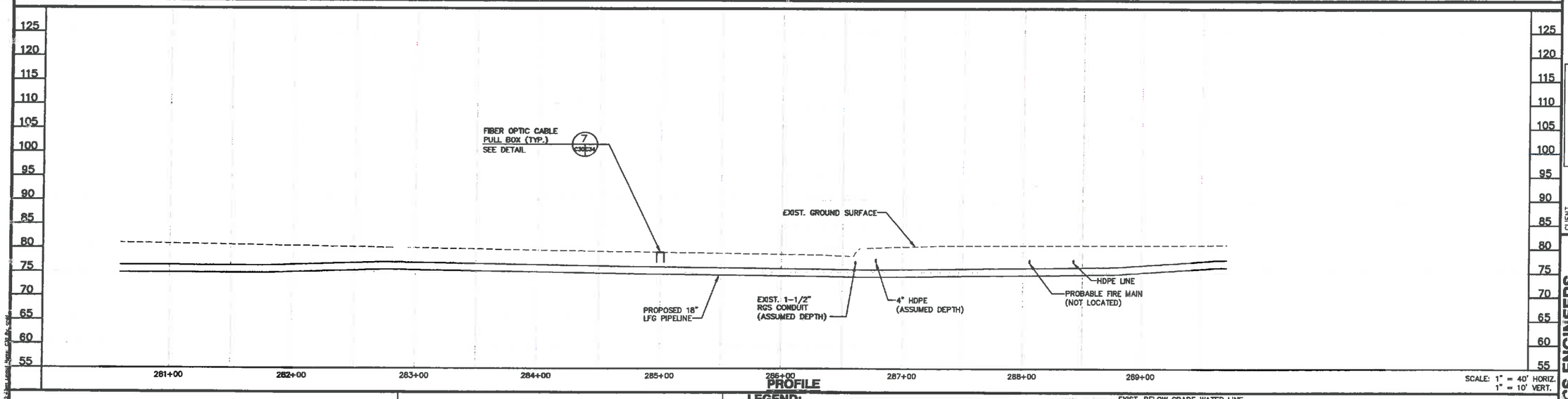
CADD FILE: PLPR[1]V1.7.DWG

DATE: 3/30/2010

SCALE: AS SHOWN

DRAWING NO. C29





NOTES:
1. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
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- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DHP
2	8/3/10	EROSION CONTROLS	LEK

8/3/10
DAVID H. PENOYER, P.E.
LICENSE NO. 56685

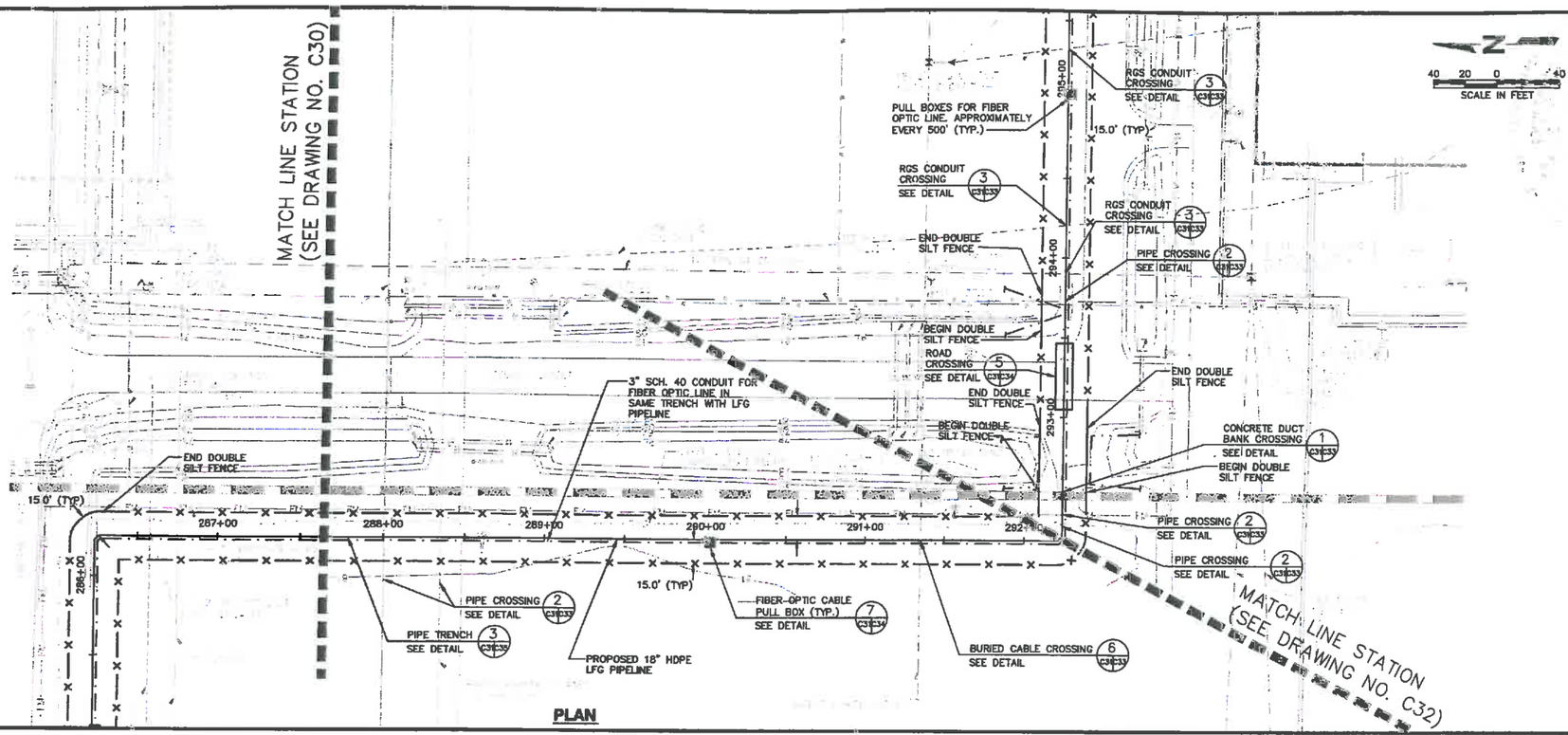
DRAWING TITLE: PLAN AND PROFILE - 28

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831
OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 150, TAMPA, FL 33610
813 621-0080 FAX 813 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892
PROJ. NO. 09205004.03
TASK NO. JLS/JNV
D/A REV BY: DHP
DWN. BY: JLS
CHK. BY: JNV
APP. BY: DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C30



NOTES:
1. HAND/SOFT DIGGING SHALL BE PERFORMED NEAR EXISTING UTILITIES.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DMP
2	8/3/10	EROSION CONTROLS	LEK

DAVID H. PENOYER, P.E.
LICENSE NO. 56085
9/5/10

DRAWING TITLE: PLAN AND PROFILE - 29

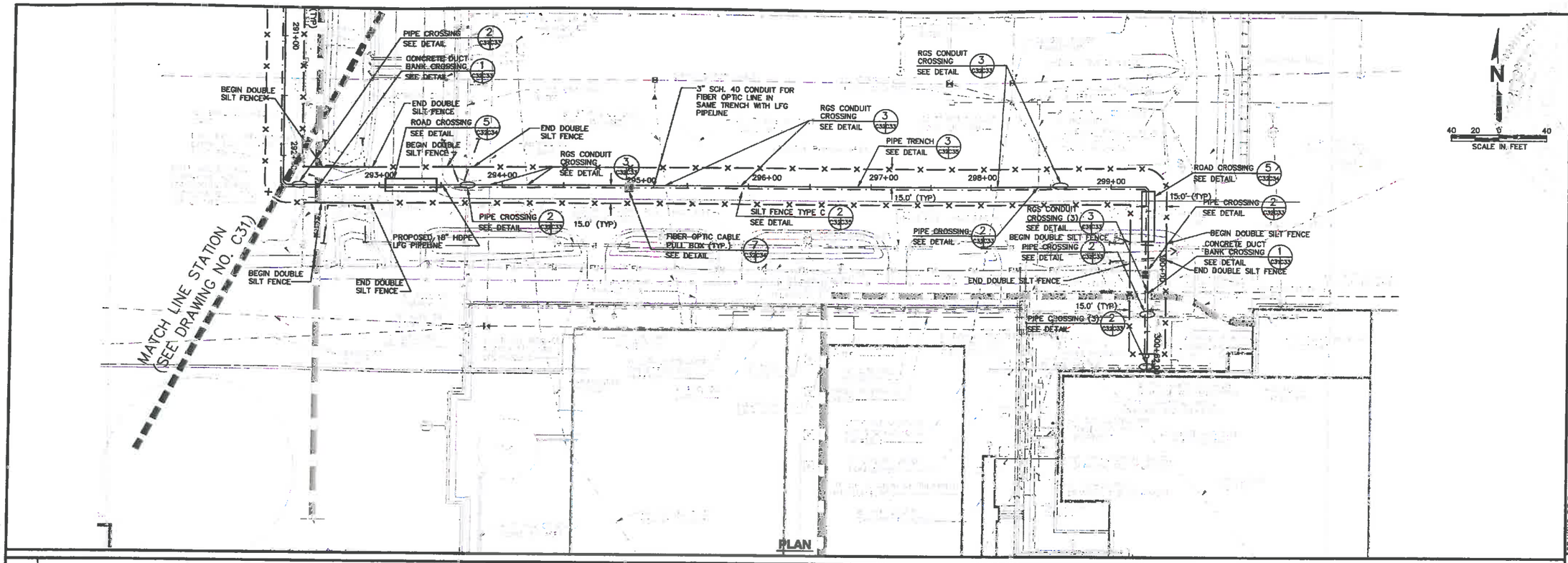
PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

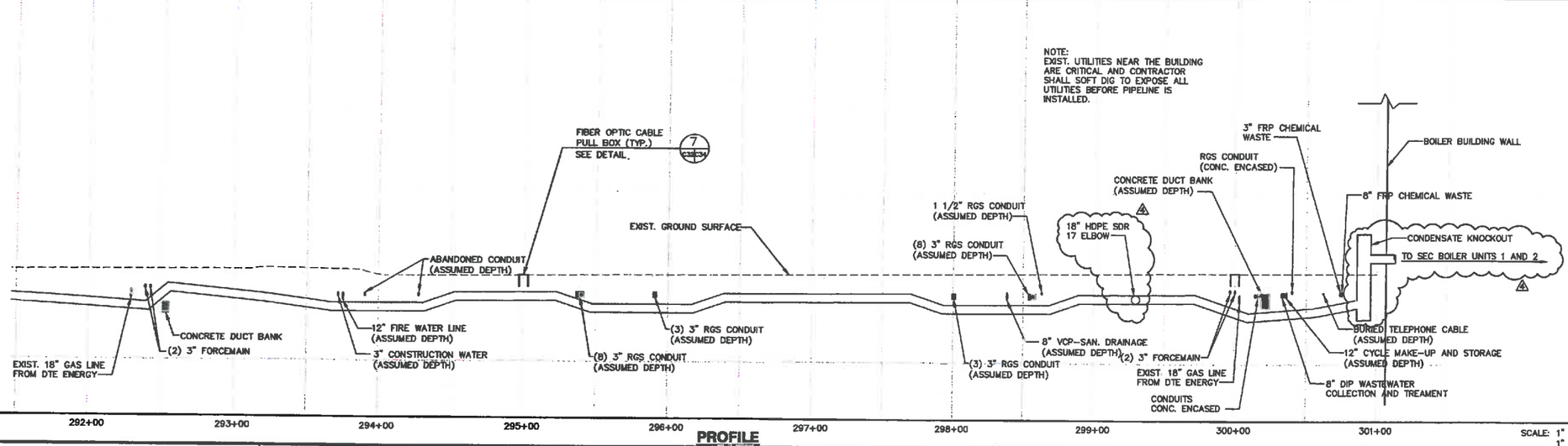
CLIENT: OUC The Reliable One
ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

SCS ENGINEERS
DITARIS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 NORTHWEST 23RD AVENUE, SUITE 315, TAMPA, FL 33610
813 621-0080 FAX 813 621-0373
FLORIDA CERTIFICATE OF AUTHORIZATION #3, 00000828

PROJ. NO. 06209004.03
TSK 4.5/JNV
QA/A PVK BY: DHP
DWN. BY: ALS
CHK. BY: JNV
APP. BY: DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO. C31





NOTES:
1. HAND/SOFT DIGGING SHALL BE PERFORMED NEAR EXISTING UTILITIES.
2. CONTRACTOR TO PERFORM UTILITIES SURVEY PRIOR TO INSTALLATION OF EROSION CONTROL AND PIPELINE.

LEGEND:

- ROAD CROSSING
- PROPOSED 18" HDPE LFG PIPELINE
- PROPOSED FIBER OPTIC 3" CONDUIT
- PROPOSED SINGLE SILT FENCE
- PROPOSED DOUBLE SILT FENCE
- PROPOSED SINGLE GOPHER TORTOISE SILT FENCE
- SURVEYED WETLAND LIMITS
- CONDENSATE SUMP
- EXIST. WETLAND JURISDICTION LINE
- EXIST. GAS LINE (NATURAL GAS AND METHANE GAS)
- EXIST. FIBER OPTIC
- EXIST. BELOW GRADE WATER LINE
- FIBER OPTIC PULL BOX
- OVERHEAD ELECTRIC LINE CROSSING
- EXIST. STORM LINE
- EXIST. POWER LINE
- EXIST. UNDERGROUND POWER LINE
- EXIST. POWER POLE
- EXIST. CONTOUR
- EXIST. ROADS
- EXIST. TREE LINE
- EXIST. FENCE LINE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	6/3/10	FDEP RAI NO. 1 RESPONSE	LEK
2	7/2/10	PROFILES	DHP
3	8/3/10	EROSION CONTROLS	LEK

8/3/10
LAWD H. PENOYER, P.E.
LICENSE NO. 56065

DRAWING TITLE: PLAN AND PROFILE - 30

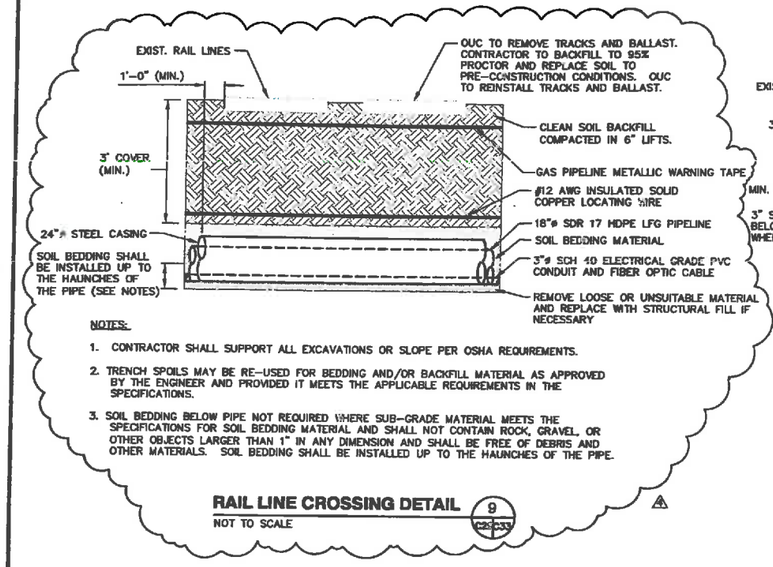
PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

SCS ENGINEERS
8TEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 150, TAMPA, FL 33610
813 621-0090 FAX 813 623-0787
FLORIDA CERTIFICATE OF AUTHORIZATION NO. EC0000892

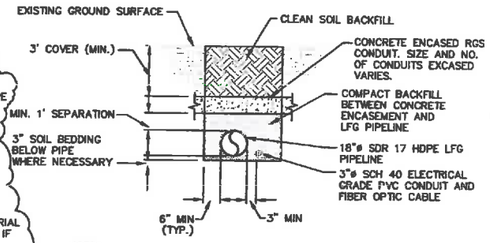
PROJ. NO.	DESIGN BY:	D/A RVW BY:
05209004.03	JLS	DHP
TASK NO.	CHK. BY:	APP. BY:
04	JNV	DHP

CADD FILE: PLPR[1]V1.7.DWG
DATE: 3/30/2010
SCALE: AS SHOWN
DRAWING NO.: C32



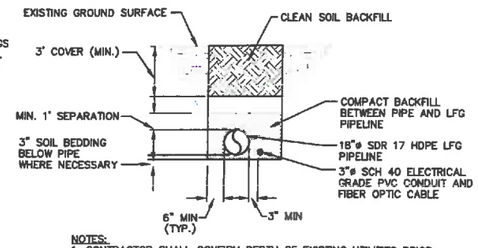
NOTES:
1. CONTRACTOR SHALL SUPPORT ALL EXCAVATIONS OR SLOPE PER OSHA REQUIREMENTS.
2. TRENCH SPOILS MAY BE RE-USED FOR BEDDING AND/OR BACKFILL MATERIAL AS APPROVED BY THE ENGINEER AND PROVIDED IT MEETS THE APPLICABLE REQUIREMENTS IN THE SPECIFICATIONS.
3. SOIL BEDDING BELOW PIPE NOT REQUIRED WHERE SUB-GRADE MATERIAL MEETS THE SPECIFICATIONS FOR SOIL BEDDING MATERIAL AND SHALL NOT CONTAIN ROCK, GRAVEL, OR OTHER OBJECTS LARGER THAN 1" IN ANY DIMENSION AND SHALL BE FREE OF DEBRIS AND OTHER MATERIALS. SOIL BEDDING SHALL BE INSTALLED UP TO THE HAUNCHES OF THE PIPE.

RAIL LINE CROSSING DETAIL 9 (C22:C33)
NOT TO SCALE



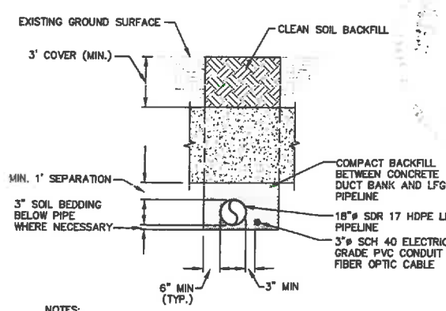
NOTES:
1. EXISTING CONDITIONS OBTAINED FROM PLANS PREPARED BY BLACK & VEATCH DATED 2/5/09.
2. CONTRACTOR SHALL PROTECT EXISTING FEATURES FROM DAMAGE DURING EXCAVATION.
3. CONTRACTOR SHALL TAKE NECESSARY STEPS TO DEWATER AND PROVIDE A FIRM, DRY TRENCH FOR PIPE PLACEMENT.

RGS CONDUIT (CONC. ENCASED) CROSSING DETAIL 3 (C22:C33)
NOT TO SCALE



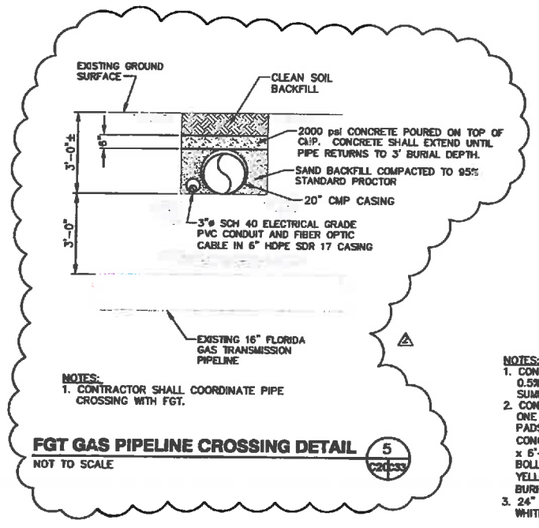
NOTES:
1. CONTRACTOR SHALL CONFIRM DEPTH OF EXISTING UTILITIES PRIOR TO TRENCH EXCAVATION.
2. THIS DETAIL PERTAINS TO CROSSING OF EXISTING PIPES OF VARIOUS SIZES, MATERIALS AND USES, WHICH INCLUDE BUT ARE NOT LIMITED TO:
   A. 12" FIRE WATER LINE
   B. 8" DIP WASTEWATER COLLECTION AND TREATMENT LINE
   C. 12" CYCLE MAKE-UP AND STORAGE LINE
   D. 8" VCP-SANITARY DRAINAGE AND TREATMENT LINE
   E. 18" HDPE LFG PIPELINE FROM DTE BIOMASS ENERGY PLANT
3. CONTRACTOR SHALL TAKE NECESSARY STEPS TO DEWATER AND PROVIDE A FIRM, DRY TRENCH FOR PIPE PLACEMENT.

PIPE CROSSING DETAIL 2 (-)
NOT TO SCALE



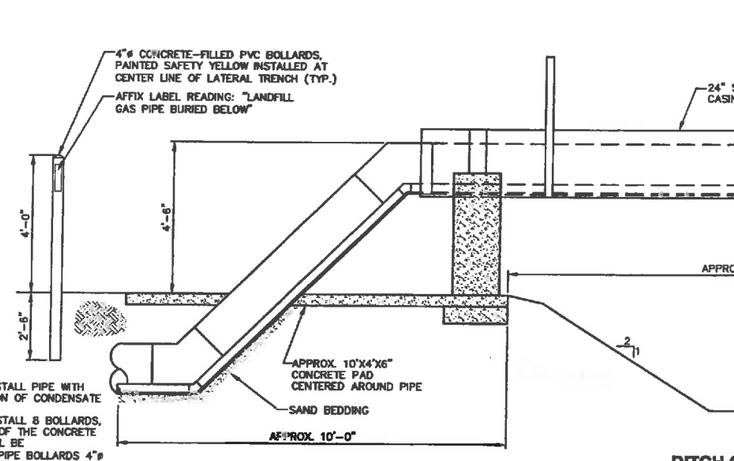
NOTES:
1. CONTRACTOR SHALL CONFIRM DEPTH OF EXISTING DUCT BANKS PRIOR TO CONSTRUCTION.
2. DUCT BANK SIZES ARE EXPECTED TO VARY FROM 4'-0"x2'-6" TO 5'-4"x4'-6".
3. CONTRACTOR SHALL TAKE NECESSARY STEPS TO DEWATER AND PROVIDE A FIRM, DRY TRENCH FOR PIPE PLACEMENT.

CONCRETE DUCT BANK CROSSING DETAIL 1 (C22:C33)
NOT TO SCALE



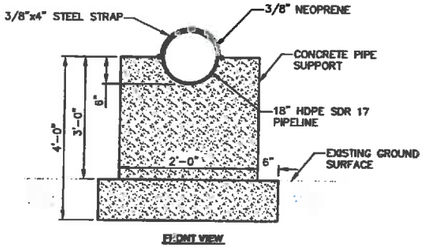
NOTES:
1. CONTRACTOR SHALL COORDINATE PIPE CROSSING WITH FGT.

FGT GAS PIPELINE CROSSING DETAIL 5 (C22:C33)
NOT TO SCALE



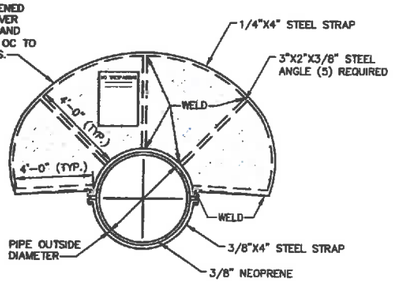
NOTES:
1. CONTRACTOR SHALL INSTALL PIPE WITH 0.5% SLOPE IN DIRECTION OF CONDENSATE SUMP.
2. CONTRACTOR SHALL INSTALL 8 BOLLARDS, ONE AT EACH CORNER OF THE CONCRETE PADS. BOLLARDS SHALL BE CONCRETE-FILLED PVC PIPE BOLLARDS 4"ø x 6'-6" TALL WITH 4'-0" ABOVE GROUND. BOLLARDS SHALL BE PAINTED SAFETY YELLOW AND LABELED "LANDFILL GAS PIPES BURIED BELOW."
3. 24" STEEL CASING SHALL BE PAINTED WHITE.

DITCH CROSSING DETAIL 4 (08.C7 / C33)
NOT TO SCALE



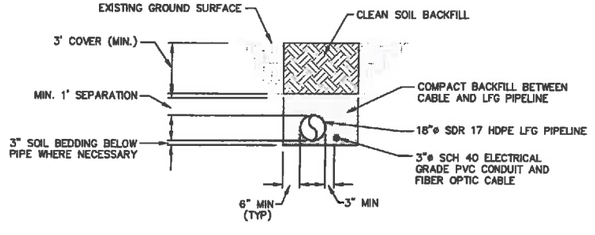
NOTES:
PIPELINE SHALL BE SECURED TO FOOTER WITH STEEL STRAP. STRAP SHALL BE BOLTED IN FOUR PLACES TO THE FOOTER.

PIPE SUPPORT DETAIL 8 (C33:C33)
NOT TO SCALE



NOTES:
1. ENTIRE GUARD ASSEMBLY TO BE DIPPED GALVANIZED AFTER FABRICATION, PAINTING IS NOT PERMITTED.
2. CENTER ANGLES ON 4" STEEL STRAP.

ACCESS BARRIER DETAIL 7 (C33:C33)
NOT TO SCALE



NOTES:
1. CONTRACTOR SHALL CONFIRM DEPTH OF EXISTING CABLES PRIOR TO CONSTRUCTION.
2. THIS DETAIL APPLIES TO CROSSINGS OF TELEPHONE AND OTHER DIRECT BURIED CABLE.

BURIED CABLE CROSSING DETAIL 6 (C22:C33)
NOT TO SCALE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	4/22/10	FGT CROSSING DETAIL MOD.	DHP
2	6/3/10	PDEP RAI NO. 1 RESPONSE	LEK
3	7/2/10	CONSTRUCTION NOTES	DHP

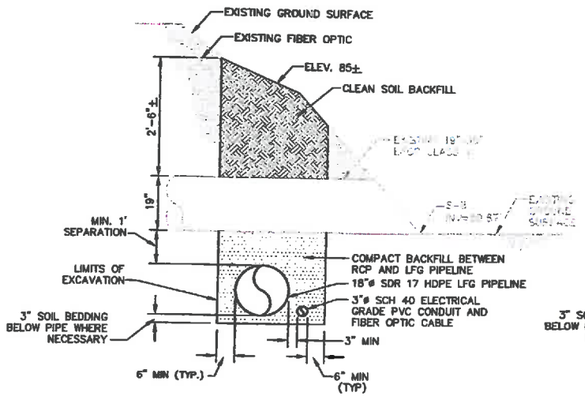
8/5/10
DAVID H. PENOYER, P.E.
LICENSE NO. 56065

DRAWING TITLE: DETAILS - 1
PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

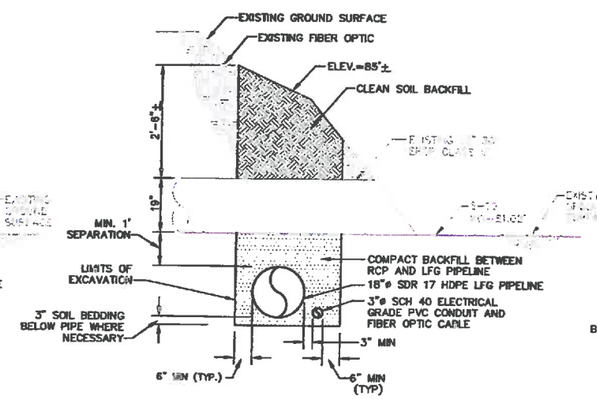
CLIENT: OUC The Reliable One
ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 160, TAMPA, FL 33610
813 621-0690 FAX 813 885-8757
PROJECT NO. 06209004.03
DSN. BY: JLS
DRWN. BY: JLS
CHK. BY: JMV
APP. BY: DHP

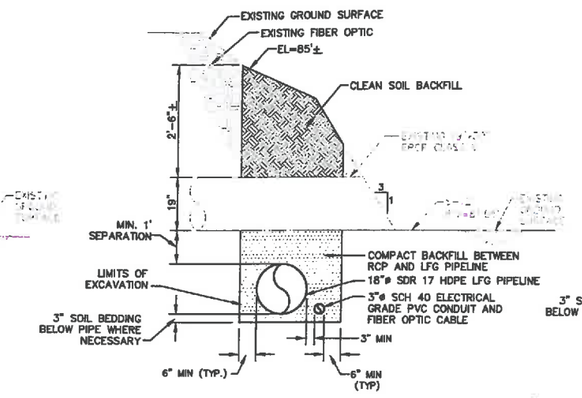
CADD FILE: 0904030TL.DWG
DATE: MARCH 30, 2010
SCALE: AS SHOWN
DRAWING NO. C33



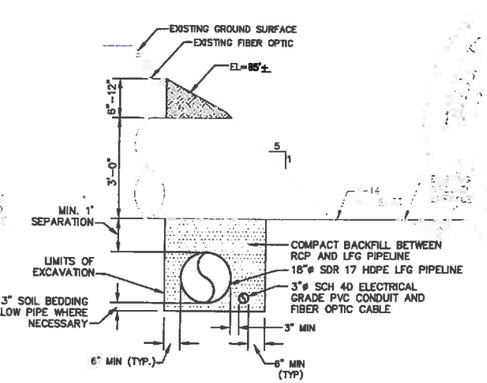
RCP CROSSING TYPE "A" (4 / C34)
HORIZ. SCALE: 1"=10'
VERT. SCALE: 1"=2'
C2,C3



RCP CROSSING TYPE "B" (3 / C34)
HORIZ. SCALE: 1"=10'
VERT. SCALE: 1"=2'



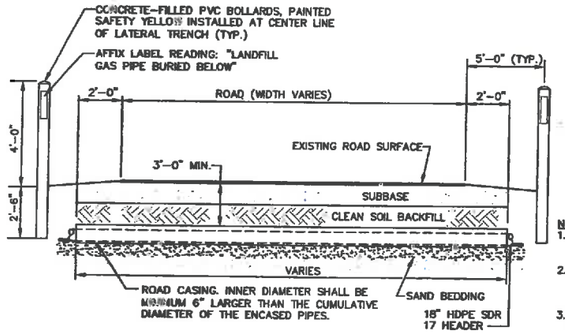
RCP CROSSING TYPE "C" (2 / C34)
HORIZ. SCALE: 1"=10'
VERT. SCALE: 1"=2'



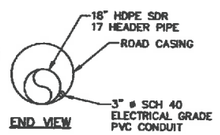
RCP CROSSING TYPE "D" (1 / C34)
HORIZ. SCALE: 1"=10'
VERT. SCALE: 1"=2'

RCP CROSSING NOTES:

1. CONDENSATE SUMPS SHALL BE INSTALLED PRIOR TO EACH RCP CROSSING.
2. CONTRACTOR SHALL SUPPORT ALL EXCAVATIONS OR SLOPE PER OSHA REQUIREMENTS.
3. TRENCH SPOILS MAY BE RE-USED FOR BEDDING AND/OR BACKFILL MATERIAL PROVIDED IT MEETS THE APPLICABLE REQUIREMENTS IN THE SPECIFICATIONS.
4. PIPE SHALL BE INSTALLED WITH MINIMUM OF 12" OF CLEARANCE FROM ANY UNDERGROUND STRUCTURE NOT ASSOCIATED WITH THE PIPELINE.
5. COMPACT BACKFILL IN 6" LIFTS.
6. PLACE AND COMPACT BACKFILL MATERIALS BETWEEN PIPELINE AND RCP, TAKING CARE TO ELIMINATE VOIDS.
7. SOIL BEDDING BELOW PIPE NOT REQUIRED WHERE SUB-GRADE MATERIAL MEETS THE SPECIFICATIONS FOR SOIL BEDDING MATERIAL AND SHALL NOT CONTAIN ROCK OR GRAVEL LARGER THAN ONE (1) INCH IN ANY DIMENSION AND SHALL BE FREE OF DEBRIS AND MATERIALS CAPABLE OF DAMAGING PIPE.



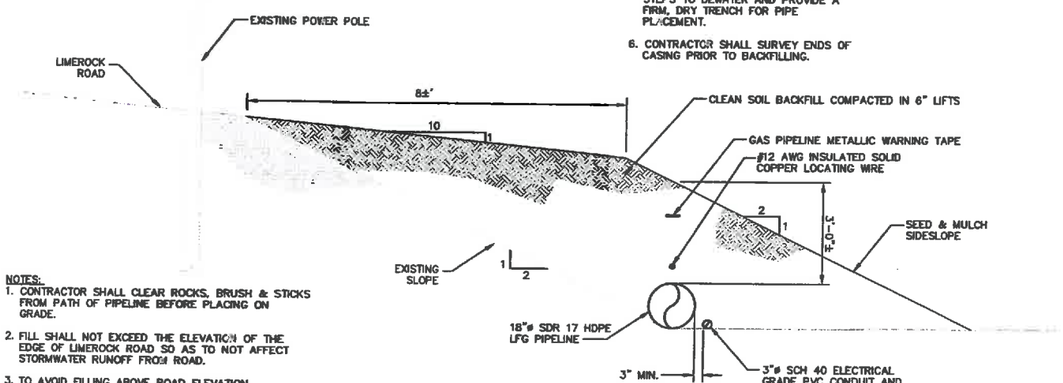
ROAD CROSSING DETAIL (5 / C34)
NOT TO SCALE
C25,C28,C31,C32



NOTES:
1. CONTRACTOR SHALL RESTORE ROAD TO MATCH ORIGINAL CONDITIONS.
2. COMPACT BACKFILL IN 6" LOOSE LIFTS TO 95% STANDARD PROCTOR, AS APPROVED BY THE ENGINEER.
3. ROAD CASING SHALL BE RCP ON ORANGE COUNTY PROPERTY AND CMP ON OUC PROPERTY.
4. CONTRACTOR SHALL INSTALL 2 BOLLARDS, ONE AT EACH END OF THE CMP CASING. BOLLARDS SHALL BE CONCRETE-FILLED PVC PIPE BOLLARDS 6"ø x 6'-6" TALL WITH 4'-0" ABOVE GROUND. BOLLARDS SHALL BE PAINTED SAFETY YELLOW AND LABELED "LANDFILL GAS PIPES BURIED BELOW".
5. CONTRACTOR SHALL TAKE NECESSARY STEPS TO DEWATER AND PROVIDE A FIRM, DRY TRENCH FOR PIPE PLACEMENT.
6. CONTRACTOR SHALL SURVEY ENDS OF CASING PRIOR TO BACKFILLING.

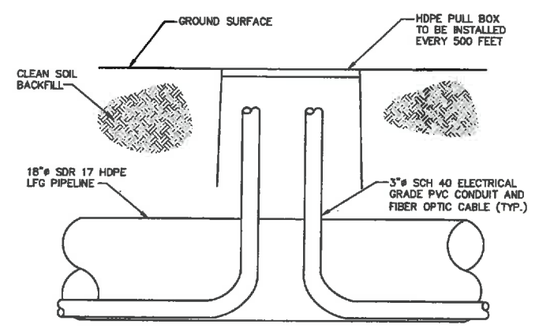
NOTES:
1. CONTRACTOR SHALL INSTALL PIPE WITH 0.5% SLOPE IN DIRECTION OF CONDENSATE SUMP.
2. 24" STEEL CASING SHALL BE PAINTED WHITE.
3. CONTRACTOR SHALL INSTALL APPROXIMATELY 60' OF CONCRETE BARRIER ALONG EDGE OF LIMEROCK ROAD TO PROTECT STORMWATER RCP CROSSING.

STORMWATER RCP CROSSING DETAIL (8 / C33,C34)
NOT TO SCALE



NOTES:
1. CONTRACTOR SHALL CLEAR ROCKS, BRUSH & STICKS FROM PATH OF PIPELINE BEFORE PLACING ON GRADE.
2. FILL SHALL NOT EXCEED THE ELEVATION OF THE EDGE OF LIMEROCK ROAD SO AS TO NOT AFFECT STORMWATER RUNOFF FROM ROAD.
3. TO AVOID FILLING ABOVE ROAD ELEVATION, CONTRACTOR SHALL TRENCH WHERE NECESSARY TO PROVIDE 3' MIN. COVER OVER PIPELINE.
4. CONTRACTOR SHALL TAKE NECESSARY STEPS TO DEWATER AND PROVIDE A FIRM, DRY SURFACE FOR PIPE PLACEMENT.

ON-GRADE INSTALLATION & BURIAL DETAIL (6 / C34)
NOT TO SCALE



NOTES:
1. PULL BOX SHALL BE 2'-0"x2'-0".
2. PULL BOX SHALL BE 20,000 PSI POLYMER CONCRETE OR APPROVED EQUAL. BOLTS AND BOLT DOWN COVERS SHALL BE STAINLESS STEEL.

FIBER OPTIC CABLE PULL BOX DETAIL (7 / C34)
NOT TO SCALE

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

DAVID H. PERDYER, P.E.
LICENSE NO. 59065
8/3/10

REV	DATE	DESCRIPTION	BY
4	7/2/10	PROFILES	DHP

DRAWING TITLE: DETAILS - 2

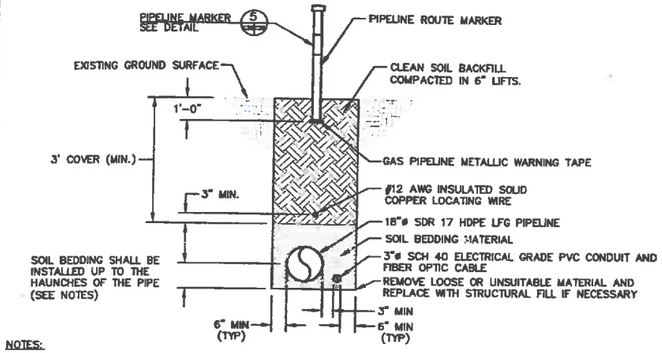
PROJECT TITLE:
LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM
SOUTHERN EXPANSION SITE

CLIENT:
ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831
OUC The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
PHONE: (813) 621-0080 FAX: (813) 882-9710
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000696

PROJ. NO. 05229004.03 | DSN: BTF | DRN: JLS | CHK: BTF, JNV | 0.7 X FULL SIZE | 24" BY: DHP

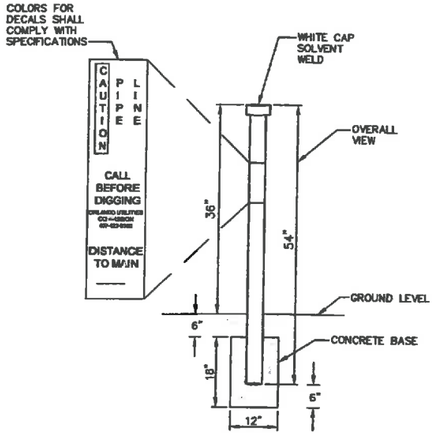
CADD FILE: 0904030TL.DWG
DATE: MARCH 30, 2010
SCALE: AS SHOWN
DRAWING NO. C34



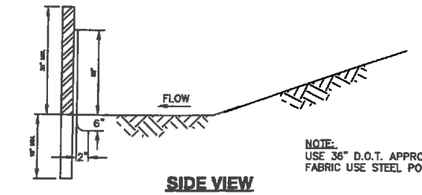
NOTES:

1. CONTRACTOR SHALL SUPPORT ALL EXCAVATIONS OR SLOPE PER OSHA REQUIREMENTS.
2. TRENCH SPOILS MAY BE RE-USED FOR BEDDING AND/OR BACKFILL MATERIAL AS APPROVED BY THE ENGINEER AND PROVIDED IT MEETS THE APPLICABLE REQUIREMENTS IN THE SPECIFICATIONS.
3. PIPE SHALL BE INSTALLED WITH MINIMUM OF 12" OF CLEARANCE FROM ANY UNDERGROUND STRUCTURE NOT ASSOCIATED WITH THE PIPELINE.
4. SOIL BEDDING BELOW PIPE NOT REQUIRED WHERE SUB-GRADE MATERIAL MEETS THE SPECIFICATIONS FOR SOIL BEDDING MATERIAL AND SHALL NOT CONTAIN ROCK, GRAVEL, OR OTHER OBJECTS LARGER THAN 1" IN ANY DIMENSION AND SHALL BE FREE OF DEBRIS AND OTHER MATERIALS. SOIL BEDDING SHALL BE INSTALLED UP TO THE HAUNCHES OF THE PIPE.
5. PIPELINE ROUTE MARKERS SHALL BE INSTALLED EVERY 1000 FEET PER ORANGE COUNTY UTILITY STANDARDS. (SEE PIPELINE MARKER DETAIL).

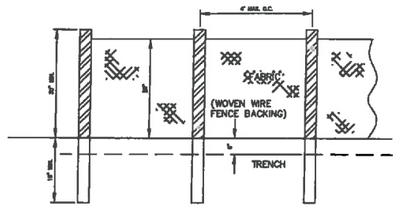
PIPE TRENCH DETAIL 3 C2-C32 — NOT TO SCALE



PIPELINE MARKER DETAIL 5 C2-C35 — NOT TO SCALE



NOTE: USE 36" D.O.T. APPROVED FABRIC USE STEEL POST.



TYPE C FABRIC (36")

USE: WHERE FILL SLOPES EXCEED A VERTICAL HEIGHT OF 20 FEET AND THE SLOPE GRADIENT IS STEEPER THAN 3:1.

NOTE: FILTER FABRIC MAY ALSO BE ATTACHED TO THE POST BY WIRE, CORD, AND POCKETS.

POST SIZE

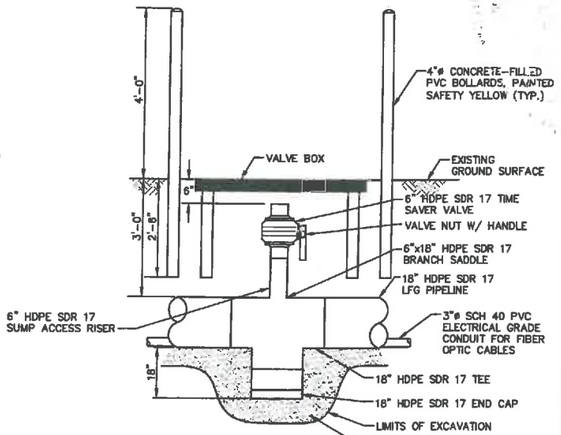
MIN. LENGTH	TYPE OF POST	SIZE OF POST
4'	STEEL	1.3 LB./FT. MIN.

FENCE

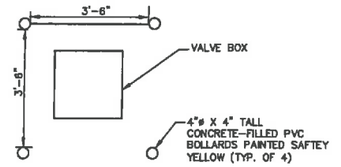
TENSILE STRESGTH (LBS. MIN.) (1) (ASTM D-4632)	ELONGATION (%MAX.) (ASTM D-4632)	AOS (APPARENT OPENING SIZE) (MAX. SIEVE SIZE) (ASTM D-4751)	FLOW RATE (GAL/MIN./SQ. FT.) (GDT-87)	ULTRAVIOLET STABILITY (2) (ASTM D-4632 AFTER 300 HOURS WEATHERING IN ACCORDANCE WITH ASTM D-4355)	BURSTING STRESGTH (PSI MIN.) (ASTM D-3786 DIAPHRAGM BURSTING STRENGTH TESTER)	MIN. FABRIC WIDTH (INCHES)
WARP-280 FILL-180	40	#30	70	80	175	36

(1) MIN. ROLL AVERAGE OF FIVE SPECIMENS.
(2) PERCENT OF REQUIRED INITIAL MIN. TENSILE STRENGTH.

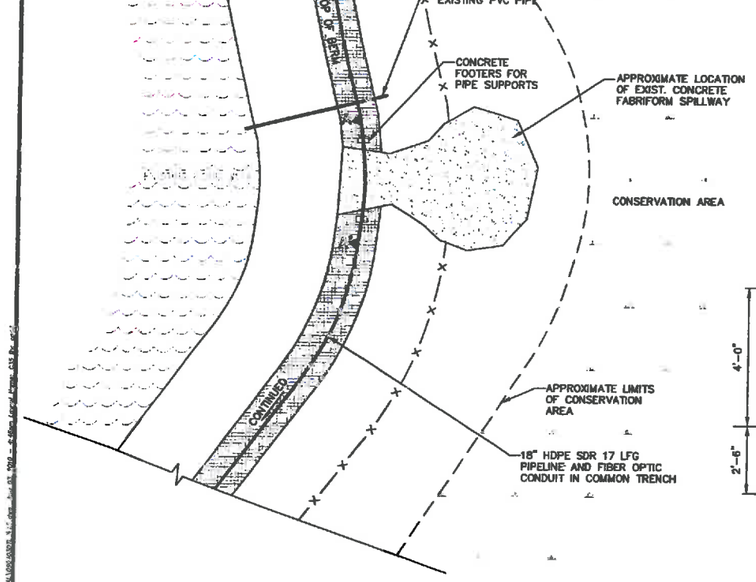
SILT FENCE TYPE C 2 C2-C35 — NOT TO SCALE



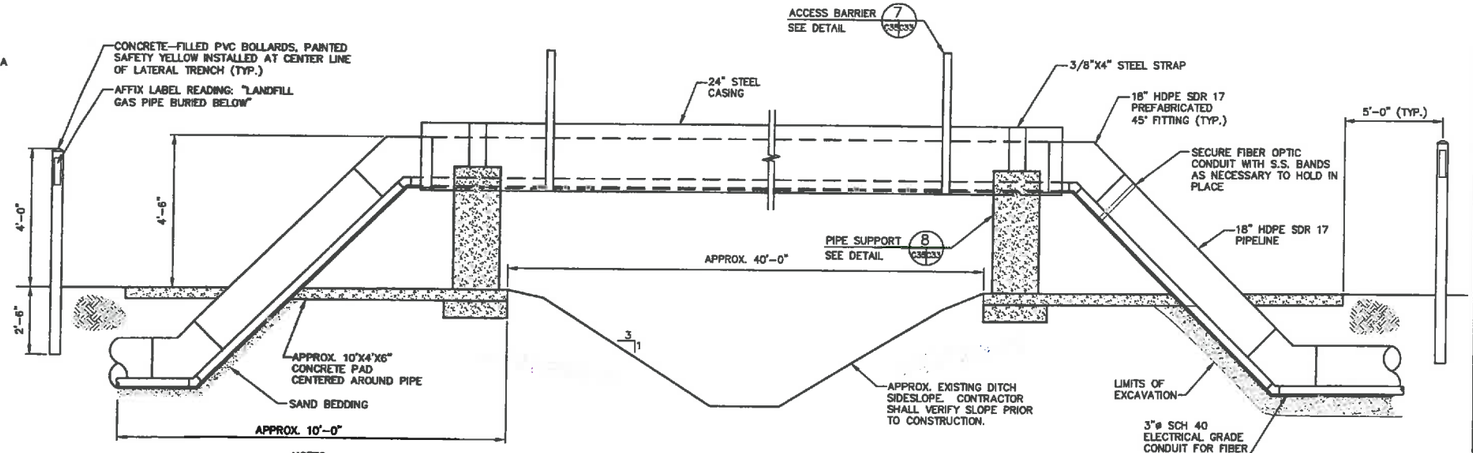
CONSENDATE SUMP DETAIL 1 C2-C35 — NOT TO SCALE



PLAN VIEW



SPILLWAY CROSSING 4 C2-C35 — NOT TO SCALE



NOTES:
1. CONTRACTOR SHALL INSTALL PIPE WITH 0.5% SLOPE IN DIRECTION OF CONDENSATE SUMP.
2. CONTRACTOR SHALL INSTALL 8 BOLLARDS, ONE AT EACH CORNER OF THE CONCRETE PADS. BOLLARDS SHALL BE CONCRETE-FILLED PVC PIPE BOLLARDS 4"ø X 6'-6" TALL WITH 4'-0" ABOVE GROUND. BOLLARDS SHALL BE PAINTED SAFETY YELLOW AND LABELED "LANDFILL GAS PIPES BURIED BELOW."
3. 24" STEEL CASING SHALL BE PAINTED WHITE.

SECTION A-A'

FINAL SUBMITTAL
FOR CONSTRUCTION
DATE: 8/3/10
VERSION 1.7

REV	DATE	DESCRIPTION	BY
1	7/2/10	PROFILES	DMP

DAVID H. PENNYER, P.E.
LICENSE NO. 59065
8/5/10

DRAWING TITLE: DETAILS - 3

PROJECT TITLE: LANDFILL GAS TREATMENT AND CONVEYANCE SYSTEM SOUTHERN EXPANSION SITE

CLIENT: ORLANDO UTILITIES COMMISSION
5100 SOUTH ALAFAYA TRAIL
ORLANDO, FL 32831

Orlando Utilities Commission — The Reliable One

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
1641 PARK CLASS BLVD., SUITE 100, TAMPA, FL 33619
813-621-4400 FAX 813-621-2137
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00000660

PROJ. NO. 06209004.03
DSN. BY: ALS/ANV
DWN. BY: ALS
CHK. BY: JNV
QA'A RVW BY: APP. BY: DHP

CADD FILE: 090403DTL.DWG
DATE: MARCH 30, 2010
SCALE: AS SHOWN
DRAWING NO. C35

APPENDIX D
U.S. ARMY CORPS OF ENGINEERS WETLAND DATASHEETS
U.S. ARMY CORPS OF ENGINEERS JURISDICTIONAL DETERMINATION FORMS

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site:OUC Stanton Energy Center Second Landfill Gas Pipeline City/County: Orange Sampling Date: 06/07/10

Applicant/Owner: Orlando Utilities Commission State: FL Sampling Point: Wetland A

Investigator(s): Justin Styer and Heather Ahrens Section, Township, Range: 21, 23S, 31E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.491206 Long: -81.187060 Datum: WGS84

Soil Map Unit Name: 44- Smyrna fine sand NWI classification: none- (stormwater pond)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are circumstances normal? Yes ✓ No _____

Are Vegetation no, Soil no or Hydrology no naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)	____ Water-Stained Leaves (B9)	____ Surface Soil Cracks (B6)
_____ High Water Table (A2)	____ Aquatic Fauna (B13)	____ Sparsely Vegetated Concave Surface (B8)
_____ Saturation (A3)	____ Marl Deposits (B15) **(LRR U)**	____ Drainage Patterns (B10)
_____ Water Marks (B1)	____ Hydrogen Sulfide Odor (C1)	____ Moss Trim Lines (B16)
_____ Sediment Deposits (B2)	____ Oxidized Rhizospheres on Living Roots (C3)	____ Dry-Season Water Table (C2)
_____ Drift Deposits (B3)	____ Presence of Reduced Iron (C4)	____ Crayfish Burrows (C8)
✓ Algal Mat or Crust (B4)	____ Recent Iron Reduction in Tilled Soils (C6)	X Saturation Visible on Aerial Imagery (C9)
_____ Iron Deposits (B5)	____ Thin Muck Surface (C7)	____ Geomorphic Position (D2)
_____ Inundation Visible on Aerial Imagery (B7)	____ Other (Explain in Remarks)	____ Shallow Aquitard (D3)
		✓ FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches):
Water Table Present?	Yes X	No _____	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches):

Wetland Hydrology Present? **Yes** ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrologic indicators satisfy Corps wetland hydrology requirements. Assessment area is a disturbed wet prairie that has already been impacted and m

VEGETATION - Use scientific names of plants Sampling Point: Wetland A

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:____)			
1. Sabal palmetto			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1. Myrica cerifera			FAC
2. Baccharis halimifolia			FAC
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size:_____)			
1. Typha spp.	10	yes	OBL
2. Phyla nodiflora	10	yes	FACW
3. Juncus megacephalus	10	yes	OBL
4. Dichromena colorata	10	yes	OBL
5. Pluchea rosea	10	yes	OBL
6. Andropogon virginicus	10	yes	NL
7. Eleocharis baldwinii	10	yes	FACW
8. Sabatia spp.	10	yes	OBL
9. Imperata cylindrica	10	yes	NL
10.			
11.			
12.			
	90	= Total Cover	
Woody Vine Stratum (Plot size:____)		50%=10	20%=4
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 9 (A)

Total Number of Dominant Species Across All Strata: 11 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 81.82 (A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x1=
FACW species		x2=
FAC species		x3=
FACU species		x4=
UPL species		x5=
Column Totals:	(A)	(B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ✓ **No** _____.

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/soil: Orange- Smyrna Fine Sand

SOIL Sampling Point: Wetland A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7"	10 YR 2/1							black fine sand
7-12"	10YR 3/1							dark grey fine sand
12-24"	10YR 5/1							grey fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histol (A1)
- ___Histic Epidon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___Organic Bodies (A6) **(LRR P, T, U)**
- ___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
- _X_Muck Presence (A8) **(LRR U)**
- ____1 cm Muck (A9) **(LRR P,T)**
- ___Depleted Below Dark Surface (A11)
- _X_Thick Dark Surface (A12)
- ___Coast Prairie Redox (A16) **(MLRA 150A)**
- ___Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___Sandy Gleyed Matrix (S4)
- ___Sandy Redox (S5)
- ___Stripped Matrix (S6)
- _X_Dark Surface (S7) **(LRR P, S, T, U)**
- ___Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___Thin Dark Surface (S9) **(LRR S, T, U)**
- ___Loamy Mucky Mineral (F1) **(LRR O)**
- ___Loamy Gleyed Matrix (F2)
- ___Depleted Matrix (F3)
- ___Redox Dark Surface (F6)
- ___Depleted Dark Surface (F7)
- ___Redox Depressions (F8)
- ___Marl (F10) **(LRR U)**
- ___Depleted Orchric (F11) **(MLRA 151)**
- ___Iron-Manganese Masses (F12) **(LRR O, P,T)**
- ___Umbric Surface (F13) **(LRR P, T, U)**
- ___Delta Orchric (F17) **(MLRA 151)**
- ___Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

- ___1 cm Muck (a9) **(LRR O)**
- ___2 cm Muck (A10) **(LRR S)**
- ___Reduced Vertic (F18) **(outside MLRA 150A, B)**
- ___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ___Red Parent Material (TF2)
- ___Very Shallow Dark Surface (TF12) **(LRR T, U)**
- ___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___✓___ **No** _____.

Remarks: Hydric soil indicators are present in soil profile.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: OUC Stanton Energy Center Second Landfill Gas Pipeline Project City/County: Orange Sampling Date: 06/07/10

Applicant/Owner: Orlando Utilities Commission State: FL Sampling Point: Wetland E

Investigator(s): Justin Styer and Heather Ahrens Section, Township, Range: 20 and 21, 23S, 31E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.491206 Long: -81.187060 Datum: WGS84

Soil Map Unit Name: 41- Samsula-Hontoon-Basinger association, depressional NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation yes Soil yes or Hydrology yes significantly disturbed? Are circumstances normal? Yes ✓ No

Are Vegetation no Soil no or Hydrology no naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

✓ Surface Water (A1)	Water-Stained Leaves (B9)	
High Water Table (A2)	Aquatic Fauna (B13)	
Saturation (A3)	Marl Deposits (B15) **(LRR U)**	
✓ Water Marks (B1)	Hydrogen Sulfide Odor (C1)	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	
Drift Deposits (B3)	Presence of Reduced Iron (C4)	
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	
Iron Deposits (B5)	Thin Muck Surface (C7)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- ✓ FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches):
Water Table Present?	Yes X	No _____	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches):

Wetland Hydrology Present? **Yes** ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrologic indicators satisfy Corps wetland hydrology requirements.

Sampling Point: Wetland E

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:____)			
1. Acer rubrum	5	yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	5	= Total Cover	
Shrub Stratum (Plot size:_____)			
1. Sambucus canadensis	30	yes	FACW
2. Salix caroliniana	20	yes	OBL
3. Acer rubrum	5	no	FAC
4.			
5.			
6.			
7.			
	55	= Total Cover	
Herb Stratum (Plot size:_____)		50%=27.5	20%=11
1. Cephalanthus occidentalis	10	yes	OBL
2. Eupatorium capillifolium	10	yes	FACU
3. Woodwardia aereolata	10	yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30	= Total Cover	
Woody Vine Stratum (Plot size:____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.71 (A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x1=
FACW species		x2=
FAC species		x3=
FACU species		x4=
UPL species		x5=
Column Totals:	(A)	(B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ✓ **No** _____.

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/soil: Orange- Samsula-Hontoon-Basinger association

SOIL Sampling Point: Wetland E

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8"	10 YR 2/1							Muck
8-34"	5 YR 2/2							dark reddish-brown muck

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histol (A1)
___Histic Epidon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
_X_Muck Presence (A8) **(LRR U)**
____1 cm Muck (A9) **(LRR P,T)**
___Depleted Below Dark Surface (A11)
_X_Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
_X_Dark Surface (S7) **(LRR P, S, T, U)**

___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Surface (S9) **(LRR S, T, U)**
___Loamy Mucky Mineral (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Orchric (F11) **(MLRA 151)**
___Iron-Manganese Masses (F12) **(LRR O, P,T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Orchric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

___1 cm Muck (a9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A, B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12) **(LRR T, U)**
___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___✓___ **No** _____.

Remarks: Hydric soil indicators are present in soil profile.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site:OUC Stanton Energy Center Second Landfill Gas Pipeline City/County: Orange Sampling Date: 06/07/10

Applicant/Owner: Orlando Utilities Commission State: FL Sampling Point: Ditch 1

Investigator(s): Justin Styer and Heather Ahrens Section, Township, Range: 21, 23S, 31E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.491206 Long: -81.187060 Datum: WGS84

Soil Map Unit Name: 44- Smyrna fine sand NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are circumstances normal? Yes ✓ No _____

Are Vegetation no, Soil no or Hydrology no naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

✓ Surface Water (A1)	____ Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required)
____ High Water Table (A2)	____ Aquatic Fauna (B13)	____ Surface Soil Cracks (B6)
____ Saturation (A3)	____ Marl Deposits (B15) **(LRR U)**	____ Sparsely Vegetated Concave Surface (B8)
____ Water Marks (B1)	____ Hydrogen Sulfide Odor (C1)	____ Drainage Patterns (B10)
____ Sediment Deposits (B2)	____ Oxidized Rhizospheres on Living Roots (C3)	____ Moss Trim Lines (B16)
____ Drift Deposits (B3)	____ Presence of Reduced Iron (C4)	____ Dry-Season Water Table (C2)
✓ Algal Mat or Crust (B4)	____ Recent Iron Reduction in Tilled Soils (C6)	____ Crayfish Burrows (C8)
____ Iron Deposits (B5)	____ Thin Muck Surface (C7)	____ Saturation Visible on Aerial Imagery (C9)
____ Inundation Visible on Aerial Imagery (B7)	____ Other (Explain in Remarks)	____ Geomorphic Position (D2)
		____ Shallow Aquitard (D3)
		✓ FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches):
Water Table Present?	Yes X	No _____	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches):

Wetland Hydrology Present? **Yes** ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrologic indicators satisfy Corps wetland hydrology requirements. Assessment area is a stormwater management ditch on the Stanton Energy Cent

VEGETATION - Use scientific names of plants Sampling Point: Ditch 1

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size:_____)			
1. Eleusine indica	10	yes	FACU
2. Typha spp.	2	no	OBL
3. Alternanthera philoxeroides	3	yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	15	= Total Cover	
Woody Vine Stratum (Plot size:____)		50%=10	20%=4
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x1=
FACW species		x2=
FAC species		x3=
FACU species		x4=
UPL species		x5=
Column Totals:	(A)	(B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ✓ **No** .

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/soil: Orange- Smyrna Fine Sand

SOIL Sampling Point: Ditch 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7"	10 YR 2/1							black fine sand
7-12"	10YR 3/1							dark grey fine sand
12-24"	10YR 5/1							grey fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histol (A1)
___Histic Epidon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
___Muck Presence (A8) **(LRR U)**
____1 cm Muck (A9) **(LRR P,T)**
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
__x__Dark Surface (S7) **(LRR P, S, T, U)**

___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Surface (S9) **(LRR S, T, U)**
___Loamy Mucky Mineral (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Orchric (F11) **(MLRA 151)**
___Iron-Manganese Masses (F12) **(LRR O, P,T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Orchric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

____1 cm Muck (a9) **(LRR O)**
____2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A, B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12) **(LRR T, U)**
___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___✓___ **No** _____.

Remarks: Hydric soil indicators are present in soil profile.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site:OUC Stanton Energy Center Second Landfill Gas Pipeline City/County: Orange Sampling Date: 06/07/10

Applicant/Owner: Orlando Utilities Commission State: FL Sampling Point: Ditch 2

Investigator(s): Justin Styer and Heather Ahrens Section, Township, Range: 21, 23S, 31E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.491206 Long: -81.187060 Datum: WGS84

Soil Map Unit Name: 44- Smyrna fine sand NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are circumstances normal? Yes ✓ No _____

Are Vegetation no, Soil no or Hydrology no naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

✓ Surface Water (A1)	____ Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required)
____ High Water Table (A2)	____ Aquatic Fauna (B13)	____ Surface Soil Cracks (B6)
____ Saturation (A3)	____ Marl Deposits (B15) **(LRR U)**	____ Sparsely Vegetated Concave Surface (B8)
____ Water Marks (B1)	____ Hydrogen Sulfide Odor (C1)	____ Drainage Patterns (B10)
____ Sediment Deposits (B2)	____ Oxidized Rhizospheres on Living Roots (C3)	____ Moss Trim Lines (B16)
____ Drift Deposits (B3)	____ Presence of Reduced Iron (C4)	____ Dry-Season Water Table (C2)
____ Algal Mat or Crust (B4)	____ Recent Iron Reduction in Tilled Soils (C6)	____ Crayfish Burrows (C8)
____ Iron Deposits (B5)	____ Thin Muck Surface (C7)	X Saturation Visible on Aerial Imagery (C9)
____ Inundation Visible on Aerial Imagery (B7)	____ Other (Explain in Remarks)	____ Geomorphic Position (D2)
		____ Shallow Aquitard (D3)
		✓ FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches):
Water Table Present?	Yes X	No _____	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches):

Wetland Hydrology Present? **Yes** ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrologic indicators satisfy Corps wetland hydrology requirements. Assessment area is a stormwater management ditch on the Stanton Energy Cent

VEGETATION - Use scientific names of plants Sampling Point: Ditch 2

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size:_____)			
1. Phyla nodiflora	10	yes	FACW
2. Eleocharis baldwinii	10	yes	FACW
3. Paspalum sp.	10	yes	OBL
4. Setaria geniculata	10	yes	OBL
5. Hydrocotyle umbellata	10	yes	OBL
6. Centella asiatica	10	yes	FACW
7. Dichromena colorata	10	yes	FACW
8. Eustachys petracea	10	yes	FACU
9. Bacopa monnieri	10	yes	OBL
10. Cyperus haspan	10	yes	OBL
11.			
12.			
	100	= Total Cover	
Woody Vine Stratum (Plot size:____)		50%=10	20%=4
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 9 (A)

Total Number of Dominant Species Across All Strata: 10 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 90.00 (A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x1=
FACW species		x2=
FAC species		x3=
FACU species		x4=
UPL species		x5=
Column Totals:	(A)	(B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ✓ **No** _____.

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/soil: Orange- Smyrna Fine Sand

SOIL Sampling Point: Ditch 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7"	10 YR 2/1							black fine sand
7-12"	10YR 3/1							dark grey fine sand
12-24"	10YR 5/1							grey fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histol (A1)
___Histic Epidon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
_X_Muck Presence (A8) **(LRR U)**
____1 cm Muck (A9) **(LRR P,T)**
___Depleted Below Dark Surface (A11)
_X_Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
_X_Dark Surface (S7) **(LRR P, S, T, U)**

___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Surface (S9) **(LRR S, T, U)**
___Loamy Mucky Mineral (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Orchric (F11) **(MLRA 151)**
___Iron-Manganese Masses (F12) **(LRR O, P,T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Orchric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

___1 cm Muck (a9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A, B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12) **(LRR T, U)**
___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___✓___ **No** _____.

Remarks: Hydric soil indicators are present in soil profile.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site:OUC Stanton Energy Center Second Landfill Gas Pipeline City/County: Orange Sampling Date: 06/07/10

Applicant/Owner: Orlando Utilities Commission State: FL Sampling Point: Ditch 6

Investigator(s): Justin Styer and Heather Ahrens Section, Township, Range: 21, 23S, 31E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.491206 Long: -81.187060 Datum: WGS84

Soil Map Unit Name: 44- Smyrna fine sand NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are circumstances normal? Yes ✓ No _____

Are Vegetation no, Soil no or Hydrology no naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

✓ Surface Water (A1)	____Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required)
____ High Water Table (A2)	____Aquatic Fauna (B13)	____Surface Soil Cracks (B6)
____ Saturation (A3)	____Marl Deposits (B15) **(LRR U)**	____Sparsely Vegetated Concave Surface (B8)
____ Water Marks (B1)	____Hydrogen Sulfide Odor (C1)	____Drainage Patterns (B10)
____ Sediment Deposits (B2)	____Oxidized Rhizospheres on Living Roots (C3)	____Moss Trim Lines (B16)
____ Drift Deposits (B3)	____Presence of Reduced Iron (C4)	____Dry-Season Water Table (C2)
____ Algal Mat or Crust (B4)	____Recent Iron Reduction in Tilled Soils (C6)	____Crayfish Burrows (C8)
____ Iron Deposits (B5)	____Thin Muck Surface (C7)	___X___Saturation Visible on Aerial Imagery (C9)
____ Inundation Visible on Aerial Imagery (B7)	____Other (Explain in Remarks)	____Geomorphic Position (D2)
		____Shallow Aquitard (D3)
		___✓___FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches):
Water Table Present?	Yes X	No _____	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches):

Wetland Hydrology Present? **Yes ✓** **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrologic indicators satisfy Corps wetland hydrology requirements. Assessment area is a stormwater management ditch on the Stanton Energy Cent

VEGETATION - Use scientific names of plants

Sampling Point: Ditch 6

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size:_____)			
1. Dichromena colorata	10	no	FACW
2. Phyla nodiflora	15	yes	FACW
3. Pluchea rosea	5	no	FACW
4. Juncus megacephalus	15	yes	OBL
5. Ptilimnium capillaceum	15	yes	OBL
6. Cyperus haspan	15	yes	OBL
7. Equisetum hyemale	3	no	FAC
8.			
9.			
10.			
11.			
12.			
	78	= Total Cover	
Woody Vine Stratum (Plot size:____)		50% = 39	
1.		20% = 15.6	
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x1=
FACW species		x2=
FAC species		x3=
FACU species		x4=
UPL species		x5=
Column Totals:	(A)	(B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ✓ **No** _____.

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/soil: Orange- Smyrna Fine Sand

SOIL Sampling Point: Ditch 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7"	10 YR 2/1							black fine sand
7-12"	10YR 3/1							dark grey fine sand
12-24"	10YR 5/1							grey fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histol (A1)
___Histic Epidon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
_X_Muck Presence (A8) **(LRR U)**
____1 cm Muck (A9) **(LRR P,T)**
___Depleted Below Dark Surface (A11)
_X_Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
_X_Dark Surface (S7) **(LRR P, S, T, U)**

___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Surface (S9) **(LRR S, T, U)**
___Loamy Mucky Mineral (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Orchric (F11) **(MLRA 151)**
___Iron-Manganese Masses (F12) **(LRR O, P,T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Orchric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

___1 cm Muck (a9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A, B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12) **(LRR T, U)**
___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___✓___ **No** _____.

Remarks: Hydric soil indicators are present in soil profile.

Project/Site:OUC Stanton Energy Center Second Landfill Gas Pipeline City/County: Orange Sampling Date: 06/07/10

Applicant/Owner: Orlando Utilities Commission State: FL Sampling Point: Reservoir 7

Investigator(s): Justin Styer and Heather Ahrens Section, Township, Range: 21, 23S, 31E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.491206 Long: -81.187060 Datum: WGS84

Soil Map Unit Name: 44- Smyrna fine sand NWI classification: none- (stormwater pond)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are circumstances normal? Yes ✓ No _____

Are Vegetation no, Soil no or Hydrology no naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

✓ Surface Water (A1)	Water-Stained Leaves (B9)	
High Water Table (A2)	Aquatic Fauna (B13)	
✓ Saturation (A3)	Marl Deposits (B15) **(LRR U)**	
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	
Drift Deposits (B3)	Presence of Reduced Iron (C4)	
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	
Iron Deposits (B5)	Thin Muck Surface (C7)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- ✓ FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches):
Water Table Present?	Yes X	No _____	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches):

Wetland Hydrology Present? **Yes** ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrologic indicators satisfy Corps wetland hydrology requirements. Assessment area is a stormwater management pond on the Orange County Land

VEGETATION - Use scientific names of plants Sampling Point: Reservoir 7- stormwater pond

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size:_____)			
1. Typha spp.	15	yes	OBL
2. Phyla nodiflora	15	yes	FACW
3. Hydrocotyle umbellata	15	yes	OBL
4. Bacopa monnieri	15	yes	OBL
5. Ludwigia repens	15	yes	OBL
6. Paspalum notatum	15	yes	NL
7.			
8.			
9.			
10.			
11.			
12.			
	90	= Total Cover	
Woody Vine Stratum (Plot size:____)		50%=10	20%=4
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83.33 (A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species	x1=	
FACW species	x2=	
FAC species	x3=	
FACU species	x4=	
UPL species	x5=	
Column Totals:	(A)	(B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ✓ **No** _____.

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/soil: Orange- Smyrna Fine Sand

SOIL Sampling Point: Reservoir 7- stormwater pond

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7"	10 YR 2/1							black fine sand
7-12"	10YR 3/1							dark grey fine sand
12-24"	10YR 5/1							grey fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histol (A1)
___Histic Epidon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
_X_Muck Presence (A8) **(LRR U)**
____1 cm Muck (A9) **(LRR P,T)**
___Depleted Below Dark Surface (A11)
_X_Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
_X_Dark Surface (S7) **(LRR P, S, T, U)**

___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Surface (S9) **(LRR S, T, U)**
___Loamy Mucky Mineral (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Orchric (F11) **(MLRA 151)**
___Iron-Manganese Masses (F12) **(LRR O, P,T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Orchric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

___1 cm Muck (a9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A, B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12) **(LRR T, U)**
___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___✓___ **No** _____.

Remarks: Hydric soil indicators are present in soil profile.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site:OUC Stanton Energy Center Second Landfill Gas Pipeline City/County: Orange Sampling Date: 06/07/10

Applicant/Owner: Orlando Utilities Commission State: FL Sampling Point: Ditch 9

Investigator(s): Justin Styer and Heather Ahrens Section, Township, Range: 21, 23S, 31E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.491206 Long: -81.187060 Datum: WGS84

Soil Map Unit Name: 44- Smyrna fine sand NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are circumstances normal? Yes ✓ No _____

Are Vegetation no, Soil no or Hydrology no naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

✓ Surface Water (A1)	Water-Stained Leaves (B9)	
High Water Table (A2)	Aquatic Fauna (B13)	
Saturation (A3)	Marl Deposits (B15) **(LRR U)**	
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	
Drift Deposits (B3)	Presence of Reduced Iron (C4)	
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	
Iron Deposits (B5)	Thin Muck Surface (C7)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- ✓ FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches):
Water Table Present?	Yes X	No _____	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches):

Wetland Hydrology Present? **Yes** ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrologic indicators satisfy Corps wetland hydrology requirements. Assessment area is a ditch directly connected to a USACE jurisdictional wetland.

VEGETATION - Use scientific names of plants Sampling Point: Ditch 9

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size:_____)			
1. Nymphaea odorata	4	yes	OBL
2. Typha spp.	10	yes	OBL
3. Eichhornia sp.	5	yes	OBL
4. Juncus effusus	1	no	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	20	= Total Cover	
Woody Vine Stratum (Plot size:____)		50%=10	20%=4
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x1=
FACW species		x2=
FAC species		x3=
FACU species		x4=
UPL species		x5=
Column Totals:	(A)	(B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ✓ **No** _____.

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/soil: Orange- Samsula-Hontoon-Basinger association

SOIL Sampling Point: Ditch 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7"	10 YR 2/1							black fine sand
7-12"	10YR 3/1							dark grey fine sand
12-24"	10YR 5/1							grey fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histol (A1)
___Histic Epidon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
_X_Muck Presence (A8) **(LRR U)**
____1 cm Muck (A9) **(LRR P,T)**
___Depleted Below Dark Surface (A11)
_X_Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
_X_Dark Surface (S7) **(LRR P, S, T, U)**

___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Surface (S9) **(LRR S, T, U)**
___Loamy Mucky Mineral (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Orchric (F11) **(MLRA 151)**
___Iron-Manganese Masses (F12) **(LRR O, P,T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Orchric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

___1 cm Muck (a9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A, B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12) **(LRR T, U)**
___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___✓___ **No** _____.

Remarks: Hydric soil indicators are present in soil profile.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site:OUC Stanton Energy Center Second Landfill Gas Pipeline City/County: Orange Sampling Date: 06/07/10

Applicant/Owner: Orlando Utilities Commission State: FL Sampling Point: Ditch 10

Investigator(s): Justin Styer and Heather Ahrens Section, Township, Range: 21, 23S, 31E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.491206 Long: -81.187060 Datum: WGS84

Soil Map Unit Name: 1-Arents, nearly level NWI classification: none- (stormwater pond)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are circumstances normal? Yes ✓ No _____

Are Vegetation no, Soil no or Hydrology no naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

✓ Surface Water (A1)	Water-Stained Leaves (B9)	
High Water Table (A2)	Aquatic Fauna (B13)	
✓ Saturation (A3)	Marl Deposits (B15) **(LRR U)**	
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	
Drift Deposits (B3)	Presence of Reduced Iron (C4)	
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	
Iron Deposits (B5)	Thin Muck Surface (C7)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	

Secondary Indicators (minimum of two required)

Surface Soil Cracks (B6)	
Sparsely Vegetated Concave Surface (B8)	
Drainage Patterns (B10)	
Moss Trim Lines (B16)	
Dry-Season Water Table (C2)	
Crayfish Burrows (C8)	
X Saturation Visible on Aerial Imagery (C9)	
Geomorphic Position (D2)	
Shallow Aquitard (D3)	
✓ FAC Neutral Test (D5)	

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches):
Water Table Present?	Yes X	No _____	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches):

Wetland Hydrology Present? **Yes** ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrologic indicators satisfy Corps wetland hydrology requirements. Assessment area is a rim ditch surrounding the Orange County Landfill property.

VEGETATION - Use scientific names of plants

Sampling Point: Ditch 10

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size:_____)			
1. Typha spp.	10	yes	OBL
2. Phyla nodiflora	10	yes	FACW
3. Hydrocotyle umbellata	10	yes	OBL
4. Bacopa monnieri	10	yes	OBL
5. Ludwigia repens	10	yes	OBL
6. Paspalum notatum	10	yes	NL
7. Eupatorium capillifolium	10	yes	FACU
8. Ambrosia spp.	10	yes	FAC
9. Eichhornia sp.	10	yes	OBL
10. Ludwigia peruviana	10	yes	OBL
11.			
12.			
	100	= Total Cover	
Woody Vine Stratum (Plot size:____)		50%=10	20%=4
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 8 (A)

Total Number of Dominant Species Across All Strata: 10 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80.00 (A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x1=
FACW species		x2=
FAC species		x3=
FACU species		x4=
UPL species		x5=
Column Totals:	(A)	(B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ✓ **No** _____.

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/soil: Orange- Smyrna Fine Sand

SOIL Sampling Point: Ditch 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7"	10 YR 2/1							black fine sand
7-12"	10YR 3/1							dark grey fine sand
12-24"	10YR 5/1							grey fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histol (A1)
___Histic Epidon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
_X_Muck Presence (A8) **(LRR U)**
____1 cm Muck (A9) **(LRR P,T)**
___Depleted Below Dark Surface (A11)
_X_Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
_X_Dark Surface (S7) **(LRR P, S, T, U)**

___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Surface (S9) **(LRR S, T, U)**
___Loamy Mucky Mineral (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Orchric (F11) **(MLRA 151)**
___Iron-Manganese Masses (F12) **(LRR O, P,T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Orchric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

___1 cm Muck (a9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A, B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12) **(LRR T, U)**
___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___✓___ **No** _____.

Remarks: Hydric soil indicators are present in soil profile.

Project: **OUC Stanton Energy Center Second Landfill Gas Pipeline Project**
Assessment Area: **Wetlands A and E, Ditches 1, 2, 6, 9, 10 and stormwater pond 7**

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: **FL** County/parish/borough: **Orange** City: **Orlando**
Center coordinates of site (lat/long in degree decimal format): Lat. **28.491206°** **N**, Long. **81.187060°** **W**.
Universal Transverse Mercator:
Name of nearest waterbody: **Little Econlockhatchee River**
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Ajay-East Tohopekaliga Canal (for Wetland E and Ditch 9) and Econlockhatchee River for Wetland A and Ditch 6**
Name of watershed or Hydrologic Unit Code (HUC): **Middle St. Johns River Watershed and Ajay-East Tohopekaliga Canal Subbasin and Econlockhatchee River Subbasin/03080101/03120003**
☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: **06/18/10**
☒ Field Determination. Date(s): **06/07/10**

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** *"navigable waters of the U.S."* within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **are and are not** *"waters of the U.S."* within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☒ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs **(OUC Stanton Energy Center Stormwater Management Ditches 6 and 9)**
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☒ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs **(Wetlands A and E)**
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☒ Isolated (interstate or intrastate) waters, including isolated wetlands **(Stormwater Management Ditches 1, 2, and 10 and stormwater management pond 7)**

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or **0.024** acres (**Stormwater Management Ditches 1, 2, 6, 9, 10 and Stormwater Pond 7)**.
      Wetlands: **0.326** acres **(Wetlands A and E)**

   c. **Limits (boundaries) of jurisdiction** based on: **1987 Delineation Manual and Interim Regional Supplement 2008**
      Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

Project: **OUC Stanton Energy Center Second Landfill Gas Pipeline Project**
Assessment Area: **Wetlands A and E, Ditches 1, 2, 6, 9, 10 and Stormwater Pond 7**

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **Ditches 1 and 2 (Stormwater management) of the Stanton Energy Center, Ditch 10 (Stormwater management rim ditch) on the Orange County Landfill and Reservoir 7 (stormwater treatment pond) on the Orange County Landfill.**

[3] Supporting documentation is presented in Section III.F.

Project: **OUC Stanton Energy Center Second Landfill Gas Pipeline Project**
Assessment Area: **Wetlands A and E, Ditches 1, 2, 6, 9, 10 and Stormwater Pond 7**

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: **acres**
Drainage area: **acres**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☐ Tributary flows through **3** tributaries before entering TNW.

Project waters are river miles from TNW.
Project waters are river miles from RPW.
Project waters are aerial (straight) miles from TNW.
Project waters are aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: **N/A**.

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW[5]:
Tributary stream order, if known

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes:.

Primary tributary substrate composition (check all that apply):

☐ Silts	☐ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☒ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:.
Presence of run/riffle/pool complexes. Explain:.
Tributary geometry:
Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Perennial flow**
Estimate average number of flow events in review area/year:
Describe flow regime: .
Other information on duration and volume: .

Surface flow is:. Characteristics: .

Subsurface flow:. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .

[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
[6] A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7] Ibid.

Identify specific pollutants, if known: .

(iv) Biological Characteristics. Channel supports (check all that apply):
- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ Wetland fringe. Characteristics:
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:
Properties:
Wetland size: acres
Wetland type. Explain:
Wetland quality. Explain:.
Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:
Flow is:. Explain: .

Surface flow is**:**
Characteristics: .

Subsurface flow:. Explain findings: .
- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:
- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain:
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW
Project wetlands are river miles from TNW.
Project waters are aerial (straight) miles from TNW.
Flow is from:
Estimate approximate location of wetland as within the floodplain.

(ii) Chemical Characteristics:
Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:
Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):
- ☐ Riparian buffer. Characteristics (type, average width):
- ☐ Vegetation type/percent cover. Explain:.
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)
All wetland(s) being considered in the cumulative analysis: **Pick List**
Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Project: **OUC Stanton Energy Center Second Landfill Gas Pipeline Project**
Assessment Area: **Wetlands A and E, Ditches 1, 2, 6, 9, 10 and Stormwater Pond 7**

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs. (Ditch #6)**
   - ☒ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

   Provide estimates for jurisdictional waters in the review area (check all that apply):
   - ☒ Tributary waters: **0.047 acre ditches 6 and 9**.
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters: .

3. Non-RPWs[8] that flow directly or indirectly into TNWs.

☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. (Wetlands A and E)

☒ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

☒ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **Based on review of aerial photography and field observations, Wetland A directly abuts an RPW ditch that drains directly into an RPW wetland system that flows directly or indirectly into a TNW and Wetland E directly abuts an RPW wetland system that flows directly or indirectly into a TNW.**

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: **0.326** acre.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **8.12** acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.[9]

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

---

[8] See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☒ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. **0.008 acre (Stormwater Management Ditch 1)**
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☒ Other non-wetland waters: **0.028 acre (Stormwater Management Ditches 2, 10 and Reservoir 7 -stormwater pond)**. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☒ U.S. Geological Survey Hydrologic Atlas: .
☒ USGS NHD data.
☒ USGS 8 and 12 digit HUC maps.
☐ U.S. Geological Survey map(s). Cite scale & quad name: .
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): **ESRI, 2009**.
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify): **St. Johns River Water Management District land use data, 2006, Florida Department of Environmental Protection drainage basin data, 1999, USGS National Hydrograph Data**

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

ATTACHMENT 2
DOCUMENTATION OF COMPLIANCE WITH CONDITIONS OF CERTIFICATION

Item 1

1993 Annual Mitigation Areas Monitoring Report

Orlando Utilities Commission
Stanton Energy Center Unit 2
Joint Agency Mitigation and Monitoring Plan

1993 Annual Report

Prepared By:

Black & Veatch

December 1993

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Appendix A: Conditions of Approval and Final Success Criteria
Appendix B: Revised Transect Drawings
Appendix C: Vegetation Monitoring Data
Appendix D: Hydrology Data
Appendix E: Mitigation Site Panoramic Photographs

Figure

Figure 1: Sitework - Mitigation Site Overall Plan

1.0 Introduction

Orlando Utilities Commission (OUC) received approval for the Supplemental Site Certification Application for the Unit 2 addition to the Curtis H. Stanton Energy Center (SEC), as provided for under the Florida Electric Power Plant Siting Act, in December 1991.

Stanton Energy Center Unit 2 is located on previously disturbed land immediately north of Stanton Unit 1. Construction associated with Unit 2 includes a 14 mile 230 kV transmission line segment and a one mile alternate site access road. Both facilities will be constructed in the existing OUC railroad corridor.

To compensate for unavoidable impacts of transmission line and access road construction, the Conditions of Certification required individual mitigation plans to be presented by OUC and its consultants to the state wetland regulatory agencies. These agencies are the Florida Department of Environmental Protection (FDEP), St. Johns River Water Management District (SJRWMD) and South Florida Water Management District (SFWMD). The individual mitigation plans were approved by FDEP and SJRWMD (September 1991) and by SFWMD (December 1991).

Following approval of the individual mitigation plans, a Joint Agency Mitigation and Monitoring Plan (JAMMP) was prepared to combine the individual mitigation plans into a single report (Black & Veatch and DeLotelle and Guthrie, Inc., 1992). Conditional Approval of the JAMMP was received on June 9, 1993.

This report is submitted to comply with Stanton Energy Center Unit 2 Conditions of Certification that require submittal of an Annual Report to regulatory agencies. This document includes a complete description of all mitigation activities in 1993. It includes a record of all revisions to the mitigation success criteria that have occurred through consultation with the regulatory agencies, as well as an update on the progress of completing the mitigation and monitoring plans.

2.0 Mitigation and Monitoring Plan

To mitigate for Stanton Energy Center Unit 2 impacts due to alternate access road and transmission line construction, the following mitigation sites were selected for compensatory changes:

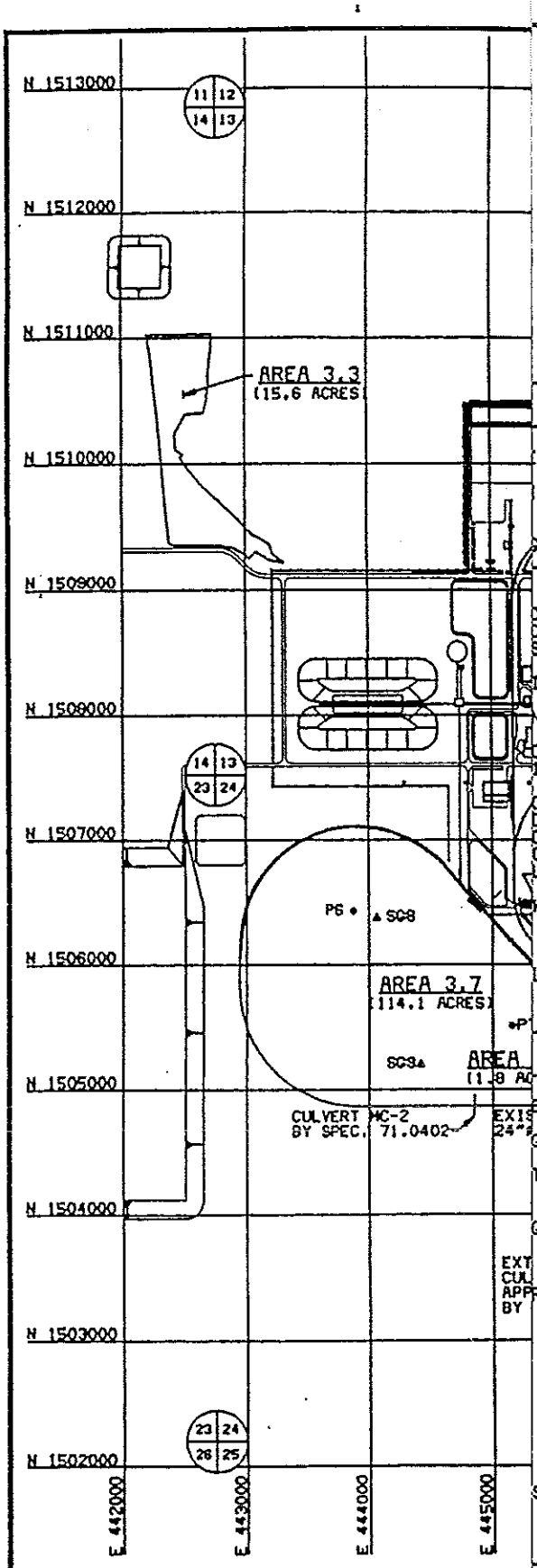
- Railroad North (Area 3.1)
- Railroad South (Area 3.2)
- RCW-West (Area 3.3)
- Transmission Line North (Area 3.4)
- East Prairies (Area 3.5)
- RCD (Area 3.6)
- The Railroad Loop (Area 3.7)
- South Florida Wetland Creation (Area 3.8)

Figure 1 (Drawing Number 16805-DS-0165) shows the location of each mitigation site at the Stanton Energy Center (with the exception of Area 3.8 which will be off-site).

This section addresses general mitigation issues of significance that have occurred over the past year. Section 3.0 describes work completed on each mitigation site.

2.1 Conditional Approval of the JAMMP

The Joint Agency Mitigation and Monitoring Plan was initially submitted to the joint regulatory agencies in November 1992. After incorporation of a series of changes resulting from agency reviews, the JAMMP was approved by the state regulatory agencies. Notification of Conditional Approval was provided in a June 9, 1993 letter from Mr. Hamilton Oven (FDEP) to Mr. Greg DeMuth (OUC). Attached to that letter were letters from SJRWMD and FDEP providing conditional approval. To allow this annual report to serve as a comprehensive record of all progress and changes in the mitigation and monitoring plan during 1993, the JAMMP approval conditions are included in Appendix A. Table 3.3-1 of the JAMMP summarized success criteria for each mitigation area. This table was revised per consultation with regulatory agencies during the JAMMP review and acceptance process. Consequently Table 3.3-1 is also included in Appendix A.



GENERAL NOTES

HORANDUM OF AGREEMENT FOR CONSTRUCTION DETAILS.

TIGATION MONITORING PLAN FOR SITE DESCRIPTIONS.

AREAS OUTLINED BY TOPOGRAPHIC DATA PROVIDED BY
LETON ASSOCIATES, INC. 520 SOUTH MAGNOLIA AVE.
LORIDA 32801.

CONSTRUCTION BY SPEC. 16805.71.0402 SHALL CONSIST
EMENT OF FILL IN EXISTING DITCHES IN AREAS 3.5 AND 3.6,
MAINTENANCE, BERM REMOVAL, THE JACK AND BORING
S IN AREAS 3.2 AND 3.7 AND PLACEMENT OF CULVERT MC-3.

NG BY CONTRACT "LATER".

NS 1 THRU 7 SEE DRAWINGS 16805-DS-0174A & B.

CTS 11,14,26,27,12B & 28 SEE DRAWINGS
174C,D,E,F,G & H.

C DATA FOR SECTIONS 1-7 AND TRANSECTS 11,12B,14,26,27
DED BY:
D & GENTRY, INC.
OBINSON STREET
L. 32802

NG 16805-DS-174 FOR DITCHES AND BERMS TO BE FILLED

SYSTEM FOR DATA POINTS BASED ON STATE PLANE COORDINATE
LEVATIONS BASED ON THE DATUM OF MEAN SEA LEVEL AS
BY THE NATIONAL GEODETIC VERTICAL DATUM (NGVD).

LEGEND

ETER

GAUGE

TO BE FILLED

GLEAF PINE SEEDLINGS

PRESS SEEDLINGS

- 15' CYPRESS TREES

- 15' LONGLEAF PINE TREES

SH PINE TREE PLANTINGS

NO	DATE	REVISIONS AND RECORD
2	05-14-93	REVISED PER FDER COMM
1	04-05-93	REVISED PER FDER COMM
0	02-22-93	INITIAL ISSUE

PROJECT	DRAWING NUMBER	REV
16805-DS-0165		2
CODE	Figure 1	
AREA		

03580SAILOR ACAD 10 c10a
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04/06/93 10:56:33

In accordance with the conditions of approval, vegetation monitoring transects were surveyed and drawings were submitted. In the course of preparing drawings, an error in transect numbering and an omission were discovered. Drawings for all transects, including revised drawings for transects affected as noted above, are included in Appendix B.

2.2 Modifications to the JAMMP

Since the submittal of the JAMMP, certain aspects of the mitigation plan have required change. These changes were prompted by schedule, existing conditions, and product selection, as enumerated below:

- The JAMMP specified that in Areas 3.1, 3.2, 3.3, 3.5, and 3.6 containerized seedlings will be planted. Limited availability of containerized seedlings requires a change to planting bare root seedlings. However, the minimum planting densities and success criteria have not changed.
- Planting of longleaf pine (*Pinus palustris*) trees in Area 3.4 has been rescheduled to take place after the construction of adjacent transmission line structures. This is anticipated to occur in early 1995.
- The JAMMP specified that the first mitigation planting would be pond cypress (*Taxodium ascendens*) seedlings in Areas 3.1 and 3.2 in March and April 1993. Because the mitigation plan was approved after the planting dates had passed, the initial planting was changed to slash pine (*Pinus elliottii*) trees in the railroad corridor in Area 3.2. This initial planting has been completed. All remaining plantings in Areas 3.1, 3.2, 3.3, 3.5, and 3.6 are currently scheduled to take place between November 1993 and February 1994.
- To insure planting success in Area 3.2, pond cypress saplings (2 to 3 feet tall) will be planted in areas which have the greatest water depth. It is estimated that 1.0 acre of saplings will be planted. The remaining 8.0 acres will be planted with pond cypress seedlings as originally planned.
- To match existing elevations, the placement of culvert MC-1 was modified slightly from the construction drawings. The new placement will accomplish the objectives of the mitigation plan by restoring a connection between wetland systems. As-built drawings will be prepared after the completion of all mitigation construction, and will show the relocation of the culvert.

The baseline vegetation data was previously presented to the regulatory agencies with the JAMMP, and also in a July 30, 1993 submittal. This data is repeated in Appendix C to reflect revised success criteria as agreed upon by the agencies. The appendix includes baseline data from September 1992 (Areas 3.5 and 3.6E) and April 1993 (Area 3.6W). In the previous submittals, hydrophytic vegetation was defined according to Florida Administrative Code 17-301.400. The revised success criteria, as approved by the regulatory agencies, define hydrophytic vegetation according to U.S. Fish and Wildlife Service wetland indicator status (Reed, 1988). The approved success criteria define hydrophytic vegetation as those plant species with a USFWS status of OBL, FACW+, FACW, and FACW-. The baseline data presented in Appendix C have not been changed in terms of species present in each plot; the summaries (i.e., number, cover, and percent of wetland species per plot) have been changed to reflect the new success criteria.

2.3 Stanton Energy Center Site Burn

Pine flatwoods communities on the Stanton Energy Center site provide habitat for the Red-Cockaded Woodpecker (*Picoides borealis*), a federally listed endangered and state listed threatened species. OUC has instituted a Red-Cockaded Woodpecker Management Plan that includes periodic prescribed burns of the flatwoods (DeLotelle and Guthrie, Inc. and Black & Veatch, 1993). Burns are conducted between July and September to avoid disruption of the Red-Cockaded Woodpecker nesting period (May through June), and occur at 3-4 year intervals. The most recent burn took place in September 1993, in accordance with the ongoing management plan.

Because the flatwoods integrate with wet prairies and cypress domes, a fire in the flatwoods may penetrate and burn into wetland communities, depending on site and seasonal weather conditions. Consequently, wetland enhancement mitigation areas are also subject to the burn.

2.4 Vegetation Monitoring

Annual monitoring of all plots in wetland enhancement areas took place in September 1993, after the site burn. Fire breaks were not created around the wetlands, thereby avoiding unnecessary disturbance. However, because of soil and litter moisture and humidity, the fire did not burn through the cypress domes. The fire typically burned upland areas and transitional areas surrounding wetlands. These

areas include the pine flatwoods zone, the upper *Rhynchospora-Aristida* zone, and the lower *Rhynchospora-Aristida* zone which, on most transects, correspond to plots 1, 2, and 3, respectively. The *Eriocaulon* zone and cypress dome/open water-*Rhynchospora* zone, containing plots 4 and 5, were generally not burned. All plots were examined and those that were not burned were surveyed for plant species present and cover. The results are presented in Appendix C.

2.5 Hydrologic Monitoring

Water levels as indicated by staff gauges and piezometers in the mitigation areas have been recorded monthly since the installation of the measuring devices. The data is presented in Appendix D.

In an effort to prevent fire damage to piezometers during the site burn, a limited brush clearing from the immediate vicinity of piezometers was attempted. However, several piezometers, which are constructed with PVC pipe, were still damaged during the site burn. The damaged piezometers have been replaced to the original elevation.

2.6 Mitigation Site Photographs

A low altitude infrared aerial photograph was taken in October 1993 of the Stanton Energy Center in accordance with requirements of the JAMMP. One copy (1" = 300') of this photograph is being transmitted to the FDEP in conjunction with this report. A 1" = 2000' copy of this photograph is provided in Appendix E.

Panoramic ground-level photographs were taken at all previously established permanent photo locations as part of annual monitoring. Those photos are also included in Appendix E.

3.0 Site-specific Mitigation and Monitoring Update

This section describes each mitigation site, identifies the associated mitigation plan, and describes progress towards completing the associated tasks.

3.1 Railroad North

3.1.1 Mitigation Plan

The following mitigation activities are planned for this site:

- Longleaf pine seedling planting throughout upland areas and in the RHPZ surrounding the existing cypress dome. Two year old seedlings will be spaced on 6 foot to 20 foot centers with a minimum average density of 500 seedlings per acre. The total area to be planted is 11.1 acres.
- Longleaf pine tree planting between the east and west railroad tracks and between the east tracks and the access road. Trees will be planted in this 0.28 acre site on an average spacing of 8 feet.
- Pond cypress seedling planting in disturbed wetlands. Seedlings will be planted in this 2.2 acre site on an average 8 foot spacing for a minimum average density of 400 seedlings per acre.

3.1.2 Mitigation Site Status

The upland portion of this mitigation site was only partially burned during the September 1993 SEC site burn. To prepare the site for longleaf pine seedling planting, the area will be reburned. All planting in this area will take place between November 1993 and February 1994.

3.2 Railroad South

3.2.1 Mitigation Plan

The following mitigation activities are planned for this site:

- Longleaf pine seedling planting throughout the upland RHPZ that borders the existing cypress dome and the wetland. Two year old seedlings will be spaced on 6 foot to 20 foot centers with a minimum average density of 500 seedlings per acre. The total area to be planted is 11.7 acres.

- Slash pine tree planting between the railroad berms. Trees will be planted in this 0.2 acre site on an average spacing of 8 feet.
- Pond cypress tree planting between the railroad berms. Trees will be planted in this 0.2 acre site on an average spacing of 8 feet.
- Slash pine tree planting along the wetland border at the base of the railroad berm. A single row of trees will be planted on 6 foot centers. The row will be 663 feet long requiring 110 trees.
- Pond cypress seedling planting in the herbaceous wetland west of the railroad. Seedlings will be planted in this 8.0 acre site on an average 8 foot spacing for a minimum average density of 400 seedlings per acre.
- Pond cypress sapling planting in the herbaceous wetland west of the railroad. Saplings will be planted in a 1.0 acre area surrounding staff gauge 5A, on an average 8 foot spacing, for a minimum average density of 400 seedlings per acre.
- A culvert (MC-1) will be installed under the railroad and access road to connect wetland systems on both sides of these corridors. Although the western end of the culvert is in Area 3.2, this activity is part of Area 3.6W mitigation.

3.2.2 Mitigation Site Status

Upland portions of this mitigation site were burned during the September 1993 SEC site burn, with the exception of swale areas in the railroad and access road corridor. Planting has been initiated in this area with the placement of slash pine trees in the railroad swale. The area planted was approximately 0.2 acre. The remaining planting will take place between November 1993 and February 1994.

Culvert MC-1 was placed under the railroad and access road beds.

3.3 RCW-West

3.3.1 Mitigation Plan

The mitigation activity for this site consists of planting longleaf pine seedlings. Seedlings will be planted on 6 foot to 20 foot centers, with a minimum average density of 300 seedlings per acre. The area to be planted is 15.6 acres.

3.3.2 Mitigation Site Status

Temporary storage material was removed from this area, although some litter remains. A borrow pit (approximately 100 foot by 50 foot) exists in this mitigation area. The pit should be filled prior to planting. The site was burned during the September 1993 SEC site burn.

3.4 Transmission Line North

3.4.1 Mitigation Plan

The mitigation activity for this site consists of planting longleaf pine trees in four 100 foot by 150 foot blocks. The blocks surround each of four transmission line structures to be placed in upland communities. Trees will be planted on 8 foot centers. The total planting area is 1.4 acres.

3.4.2 Mitigation Site Status

The planting in this area has been delayed until after construction of the transmission line structures. Planting is not anticipated to occur until February 1995.

3.5 East Prairies

3.5.1 Mitigation Plan

The following mitigation activities are planned for this site:

- Longleaf pine seedling planting throughout the upland RHPZ that borders wetlands. Two year old seedlings will be spaced on 6 foot to 20 foot centers with a minimum average density of 500 seedlings per acre. The total area to be planted is 30.7 acres.
- Enhancement of existing cypress domes through restoration of natural drainage patterns. Certain ditches and fire lanes will be filled to restore a sheet flow drainage of the wetland system. This is expected to increase the hydroperiod and support a transition to more hydrophytic vegetation on the wetland periphery.

3.5.2 Mitigation Site Status

This area was burned during the September 1993 SEC site burn. The fire did not burn through wetlands, but only the periphery, as described in Section 2.4.

Subsequent to the submittal of the JAMMP, all transects were marked with iron posts at the ends and labelled with aluminum tags. Individual plots were permanently marked with an iron rod in one corner, which corresponds to the corner labelled in the corresponding transect drawing.

An additional transect (Transect 28) was added at the southern end of the mitigation site near Staff Gauge 1 and Piezometer 1. Baseline vegetation data was collected on this transect in March 1993.

Monitoring at all transects was conducted in September, after the site burn. Vegetation data is presented in Appendix C.

During the site burn, vehicular traffic was required through the mitigation site near Transects 10 and 11. Access in this area extended from Piezometer 2, east into the border of the wetland system, and then south. On Transect 11, plots 2 and 3 were driven through and the soil was compacted.

Mitigation construction was begun with the filling of ditches. Ditch 3.5-1 was partially filled during the summer. In an effort to minimize damage to the mitigation area, heavy rains forced construction to be suspended before the entire length of the ditch could be filled. Fill in the northern part of the ditch and a silt fence were partially washed out after torrential rains. Immediately after this occurrence, the silt fence was restored. As soon as site conditions allowed, the ditch filling was completed. It is expected that completely filling the ditch will restore sheet flow drainage, and lessen the chance of future erosion. Additionally, erosion control fabric will be placed at the end of the ditch fill area to insure stability of the fill. Ditches 3.5-2 and 3.5-3 were completely filled before the heavy rains and did not erode as evidenced by Ditch 3.5-1.

3.6 RCD

3.6.1 Mitigation Plan

This mitigation site has two areas of compensatory changes RCD-East (Area 3.6E) and RCD-West (Area 3.6W).

3.6.1.1 RCD-East. The following mitigation activities are planned for this site:

- Pond cypress seedling planting in an herbaceous wetland. Seedlings will be planted in this 5.0 acre site on an average 8 foot spacing for a minimum average density of 400 seedlings per acre

- Enhancement of existing cypress domes through restoration of natural drainage patterns. Certain ditches and fire lanes will be filled to restore a sheet flow drainage of the wetland system. This is expected to increase the hydroperiod and support a transition to more hydrophytic vegetation on the wetland periphery.

3.6.1.2 RCD-West. The following mitigation activities are planned on this site:

- Longleaf pine seedling planting throughout a disturbed upland area and RHPZ. Two year old seedlings will be spaced on 6 foot to 20 foot centers with a minimum average density of 500 seedlings per acre. The total area to be planted is 3.4 acres.
- Enhancement of existing wetlands through restoration of natural drainage patterns. A culvert will be placed under the railroad and alternate access road to reconnect the wetlands west of the corridor with the wetland system on the east side.

3.6.2 Mitigation Site Status

3.6.2.1 RCD-East. This area was burned during the September 1993 SEC site burn. The fire did not burn through wetlands, but only the periphery, as described in Section 2.4.

During the process of surveying transects and preparing drawings, an error was made in numbering some of the transects in this mitigation area. Revised numbers were placed on several transects. The quantity and location of transects did not change. The revised numbers are recorded on the aluminum tags on the posts at the end of the transects. Revised drawings of these transects are included in Appendix B.

Monitoring at all transects was conducted in September, after the site burn. Vegetation data is presented in Appendix C. The data presented in the appendix corresponds with the revised numbers.

All transects were marked with tagged iron posts and individual plots were marked with an iron rod in a corner.

3.6.2.2 RCD-West. This area was burned during the site burn. The fire did not burn through wetlands, but only the periphery, as described in Section 2.4.

During review and consultation with regulatory agencies, following submittal of the JAMMP, it was decided that vegetation transects should be established in this mitigation area. Fourteen transects (Transects 26-27 and 29-40) were laid out with plots along them similar to the transects in Areas 3.5 and 3.6E. The transects run through plant community gradients from pine flatwoods to wetlands. These transects were permanently marked with iron rods and plot corner posts as described above. Baseline data was collected in March 1993.

Monitoring at all transects was conducted in September 1993, after the site burn. Vegetation data is presented in Appendix C.

During the site burn, vehicular traffic was required through the mitigation site near Transect 40. A north-south route was taken through the wetlands. Vegetation was flattened just east of the cypress dome at the west end of the mitigation site.

3.7 Railroad Loop

3.7.1 Mitigation Plan

The mitigation activity for this site will be to place two culverts (MC-2) under the railroad berm to restore seasonal water level fluctuations. Construction of the railroad loop, as part of the initial plant site improvements with Unit 1, altered drainage patterns causing increased ponding and saturation. Placement of these two culverts on the south side of the loop will allow drainage, thus resembling pre-construction hydrologic conditions. An adjustable-crest weir structure will also be installed to control water flow out of the loop.

3.7.2 Mitigation Site Status

The culverts were placed under the railroad berm. Wet site conditions are currently delaying the construction of the weir. This construction will be completed when site conditions permit.

3.8 South Florida Wetland Creation

To compensate for impacts to South Florida Water Management District jurisdictional wetlands, wetland creation sites have been identified. The original creation sites proposed during the 1991 OUC SEC Supplemental Site Certification process were eliminated by construction of the Southern Connector highway. OUC subsequently identified alternate creation sites. Notification of those sites was made

in May, 1993. In accordance with the Supplemental Conditions of Certification, OUC will provide details of wetland creation and monitoring prior to transmission line construction in SFWMD jurisdictional wetlands. This construction is expected to begin in 1996.

4.0 Bibliography

Black & Veatch and DeLotelle and Guthrie, Inc., *Orlando Utilities Commission, Stanton Energy Center, Joint Agency Mitigation and Monitoring Plan and Report 1: Baseline Data*, Orlando Utilities Commission, Orlando, 1992.

DeLotelle and Guthrie, Inc. and Black & Veatch, *The Curtis H. Stanton Energy Center Unit 2 Red Cockaded Woodpeckers Habitat Management Plan*, Orlando Utilities Commission, Orlando, 1993.

Kartesz, J. T. and R. Kartesz, *A Synonymized Checklist of the Vascular Flora of the United States, Canada, and Greenland*, The University of North Carolina Press, Chapel Hill, 1980.

Reed., P. B., Jr., *National List of Plant Species that Occur in Wetlands: Southeast (Region 2)*, United States Fish and Wildlife Service Biological Report 88(26.2), 1988.

Wunderlin, R. P., *Guide to the Vascular Plants of Central Florida*, University of Florida, Gainesville, 1982.

Appendix A: Conditions of Approval and Final Success Criteria

OUC received Conditional Approval for the Joint Agency Mitigation and Monitoring Plan (JAMMP) on June 9, 1993. This appendix lists the conditions of approval, provides responses to requests for clarification, and indicates the final mitigation success criteria.

St. John's River Water Management District

A May 27, 1993 letter from Cammie Dewey (SJRWMD) to Hamilton Oven (FDEP) contained several requests for clarification about the alternate access road construction. The questions and responses are listed below.

- Question: *"it appears that the actual area of dredge and fill impacts for construction of the Transmission Line 'keyholes' have almost doubled from what was authorized during certification:"*

  Response: The 'keyholes', although shown on the drawings, have been removed from the permitting of the access road. They will be permitted along with the transmission line at a later date.

- Question: *"depict the bridge structure bottom elevation and wetland bottom elevation:"*

  Response: Drawing S3215, S3216, and S3217 depict the details for construction of the bridge. Elevation at the crown of the bridge is 81 feet 0 inches. An 8 inch concrete slab will rest on the 3 feet 0 inches deep precast beams. The bottom elevation of the beam at the crown of the bridge will be 77 feet 4 inches. The profile drawings for the existing railroad trestle No.1 immediately adjacent to the bridge indicates a bottom of wetland elevation of 71 feet 0 inches. The 100 year flood elevation at the railroad trestle and bridge is elevation 75 feet 0 inches.

- Question: *"the swales served by structures AAR-5 and AAR-7 do not appear to have the required two feet of retention storage:"*

  Response: Due to the slope of the existing railroad and access road, the high point of swale AAR-5 varies from elevation 83 feet 0 inches on the

north to elevation 82 feet 0 inches on the south end. The bottom of swale elevation is constant at elevation 80 feet 6 inches. The average depth in the swale is 2 feet 0 inches and the stand pipe for structure AAR-5 is set at two feet above the bottom of swale elevation. Sufficient depth exists at the high point on the south to allow for an additional 1 feet 0 inches to the subgrade elevation of both the railroad and access road.

A similar situation exists at structure AAR-7. The high point elevations range from 80 feet 3 inches on the north to 78 feet 0 inches on the south, with a constant bottom elevation of 76 feet 6 inches. Again, the stand pipe is located 2 feet 0 inches above the bottom of the swale elevation.

- Question: *"the southernmost three swales do not appear to have the required two feet of retention storage: and,"*

  Response: Sections 4, 5, and 6 on drawing S3220 relate to the southernmost three swales. Section 4 indicates that from the bottom of swale elevation of 73 feet 6 inches to the Plan elevation "A" of 78 feet 6 inches a depth of 5 feet 0 inches exists.

  Section 5 indicates a depth of 3 feet 0 inches from the bottom of swale to the road and railroad subgrade elevation. Section 6 indicates a depth of 2 feet 0 inches from the bottom of swale to the road and railroad subgrade elevation.

- Question: *"indicate the High Point at the southernmost swale."*

  Response: The high point elevation for this swale should be 76 feet 6 inches.

Florida Department of Environmental Protection

In a June 9, 1993, letter from Trudie Bell to Buck Oven, the FDEP approved the mitigation plan with these conditions:

1. *OUC shall submit the detailed surveys of the remaining vegetation transects to the SJRWMD, SFWMD and the Department no later than July 30. The format*

shall be the format used for the submission of the initial surveys which incorporates the locations of the vegetation monitoring plots.

2. *The presence or absence of non-native and nuisance species is an indicator of the success of the hydrologic enhancement. Control of these species by herbicide use or hand removal could bias the vegetation monitoring results. Therefore OUC shall notify the SJRWMD, DER Central District office and the Bureau of Wetland Resource Management of any proposed vegetation control or removal events in mitigation areas 3.5 and 3.6 at least thirty days prior to the proposed event to allow the regulatory agencies the opportunity to perform a site inspection to review the problem and the proposed remedial action. If the regulatory agencies object to the proposed action, the objection shall be stated in writing to OUC within 30 days of being notified. In no objection is received within 30 days of the original notification date, OUC may assume that the regulatory agencies do not object to the proposed action.*

   In addition, OUC shall include a detailed description of each vegetation control or removal event in the annual mitigation report. The description shall be accompanied by photos of the vegetation prior to removal and shall include the species removed, the acreage affected, the probable cause of the problem and a discussion of whether this is expected to be a recurring problem.

3. *The data collection for the vegetative monitoring program shall occur during the months of August or September of each year to allow identification to the species level for a minimum of five years. The reports shall include the water level data collected for that year and shall be submitted pursuant to the conditions of certification.*

4. *The mitigation monitoring shall proceed in accordance with the Joint Agency Mitigation Monitoring Plan, as revised by the reviewing agencies, and the mitigation area drawings received by the Department on May 14, 1993, which show the transect, staff gauge and piezometer locations.*

5. *The success criteria for the on-site mitigation areas shall be those on Table 3.3-1 received by the Department on June 1, 1993, and attached to this document.*

Table 3.3-1 was originally submitted in the JAMMP. Below is the revised table with complete success criteria for each mitigation area.

Table 3.3-1
Success Criteria for Wetland and Upland Mitigation Sites*
Orlando Utilities Commission, Stanton Energy Center Unit 2, Orlando, Florida, May 28, 1993

		Success Criteria*				
Mitigation Site		Year 1	Year 2	Year 3	Year 4	Year 5
3.1 Railroad North						
Cypress Seedling Planting (400 seedlings per acre; 10"-12" in 4" cones)	Success	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Ultimate Success Criteria ·400 wetland trees/acre above the herbaceous stratum, and/or tree cover >33%, with no area greater than 1 acre having <20% cover. ·80% of cover in herbaceous & subcanopy strata shall be USFWS listed as Facultative wet or obligate.*** ·Cover by nuisance, non-wetland and exotic species is less than 10%.** ·The area is jurisdictional. ·Mitigation was completed as approved.
	Remedy	Replant with 10" - 12" potted cypress seedlings to reach 33% total cover. Herbicide or hand clear nuisance, exotic plants to <10% cover	Replant with 10" - 12" potted cypress seedlings to reach 33% total cover. Herbicide or hand clear nuisance, exotic plants to <10% cover	Replant with 3' tall seedlings to reach 33% total cover. Herbicide or hand clear nuisance, exotic plants to <10% cover	Replant with 3' tall seedlings to reach 33% total cover. Herbicide or hand clear nuisance, exotic plants to <10% cover	Reassess site and mitigation methods; continue monitoring.
Longleaf Pine Seedling Planting (500 seedlings per acre; 2 year old containerized)	Success	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Ultimate Success Criterion: Average density 300 seedlings/acre
	Remedy	Replant as necessary, using two year old potted seedlings.	Replant as necessary, using two year old potted seedlings.	Replant as necessary, using two year old potted seedlings.	Replant as necessary, using two year old potted seedlings.	Reassess site and mitigation methods; continue monitoring.

Success Criteria*						
Mitigation Site		Year 1	Year 2	Year 3	Year 4	Year 5
Longleaf Pine Tree Planting (10' - 15' tall; average 8' centers)	Success	100% survival	100% survival	100% survival	100% survival	Same # of pines as originally planted
	Remedy	Replace each dead tree with 10' - 15' tree	Replace each dead tree with 10' - 15' tree	Replace each dead tree with 10' - 15' tree	Replace each dead tree with 10' - 15' tree	Reassess site; plant a different species of pine. Continue monitoring.
3.2 Railroad South						
Cypress Seedlings (400 seedlings/acre 10" - 12" in 4: cones)	Success	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Ultimate Success Criteria ·400 wetland trees/acre above the herbaceous stratum, and/or tree cover >33%, with no area greater than 1 acre having <20% cover. ·80% of cover in herbaceous & subcanopy strata shall be USFWS listed as Facultative wet or obligate.*** ·Cover by nuisance, non-wetland and exotic species is less than 10%** ·The area is jurisdictional. ·Mitigation was completed as approved.
	Remedy	Replant with 10" - 12" potted cypress seedlings to reach 33% of total cover. Herbicide or hand clear nuisance, exotic plants to <10% cover	Replant with 10" - 12" potted cypress seedlings to reach 33% of total cover. Herbicide or hand clear nuisance, exotic plants to <10% cover	Replant with 10" - 12" potted cypress seedlings to reach 33% of total cover. Herbicide or hand clear nuisance, exotic plants to <10% cover	Replant with 10" - 12" potted cypress seedlings. Herbicide or hand clear nuisance, exotic plants to <10% cover	Reassess site and mitigation methods; continue monitoring.
Longleaf Pine Seedlings (500 seedlings per acre; 2 year old containerized)	Success	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Ultimate Success Criterion: Average density 300 seedlings/acre
	Remedy	Replant as necessary, using two year old potted seedlings.	Replant as necessary, using two year old potted seedlings.	Replant as necessary, using two year old potted seedlings.	Replant as necessary, using two year old potted seedlings.	Reassess site and mitigation methods; continue monitoring.

Success Criteria*						
Mitigation Site		Year 1	Year 2	Year 3	Year 4	Year 5
Slash Pine Trees (10' - 15' trees at average 8' centers)	Success	100% survival	100% survival	100% survival	100% survival	Reassess site and mitigation method
	Remedy	Replace each dead tree with a 10' - 15' tall tree.	Replace each dead tree with a 10' - 15' tall tree.	Replace each dead tree with a 10' - 15' tall tree.	Replace each dead tree with a 10' - 15' tall tree.	Reassess site and mitigation methods; continue monitoring.
Cypress Trees (10' - 15' trees at average 8' centers)	Success	95% survival	95% survival	95% survival	95% survival	Ultimate success criterion is 95% survival, 5 years after last planting.
	Remedy	Replace each dead tree with a 10' - 15' tall tree	Replace each dead tree with a 10' - 15' tall tree	Replace each dead tree with a 10' - 15' tall tree	Replace each dead tree with a 10' - 15' tall tree	Reassess site and mitigation method; continue monitoring.
3.3 RCW-West						
Longleaf Pine Seedlings (300 seedlings per acre; 2 year old containerized)	Success	≥80% survival from planting (240/acre)	≥80% survival from planting (240/acre)	≥85% survival from Year 2 (200/acre)	≥85% survival from Year 3 (175/acre)	≥85% survival from Year 4 (Average density 150/acre)
	Remedy	Replant to reach 80% survival, using two year old potted seedlings.	Replant to reach 80% survival, using two year old potted seedlings.	Replant to reach 80% survival, using two year old potted seedlings.	Replant to reach 80% survival, using two year old potted seedlings.	Reassess site and mitigation methods; continuing monitoring.
3.4 Transmission Line North						
Longleaf Pine Trees (10' - 15' tall; average 8' centers)	Success	100% survival	100% survival	100% survival	100% survival	100% survival
	Remedy	Replant each dead tree with a 10' - 15' tall tree.	Replant each dead tree with a 10' - 15' tall tree.	Replant each dead tree with a 10' - 15' tall tree.	Replant each dead tree with a 10' - 15' tall tree.	Reassess site and mitigation methods; continue monitoring.

Success Criteria*						
Mitigation Site		Year 1	Year 2	Year 3	Year 4	Year 5
3.5 East Prairies						
Herbaceous Wetlands	Success	Trending toward Ultimate Success Criteria (Refer to Year 5). ·Encroachment by woody vegetation other than cypress is controlled. ·Herbaceous wetlands show an increasing trend in the % frequency of occurrence of wetland species (USFWS obligate, FAC-wet) in ≥ 95% of plots 2, 3, 4. ·In existing wetlands, the % frequency of occurrence of upland (i.e., not on the USFWS obligate and FAC-W lists), exotic and nuisance species show a decreasing trend. · The relative % frequency of occurrence of exotic and nuisance species (including Myrica cerifera) is less than 10%.	Trending toward Ultimate Success Criteria (Refer to Year 5). ·Encroachment by woody vegetation other than cypress is controlled. ·Herbaceous wetlands show an increasing trend in the % frequency of occurrence of wetland species (USFWS obligate, FAC-wet) in ≥ 95% of plots 2, 3, 4. ·In existing wetlands, the % frequency of occurrence of upland (i.e., not on the USFWS obligate and FAC-W lists), exotic and nuisance species show a decreasing trend. · The relative % frequency of occurrence of exotic and nuisance species (including Myrica cerifera) is less than 10%.	Trending toward Ultimate Success Criteria (Refer to Year 5). ·Encroachment by woody vegetation other than cypress is controlled. ·Herbaceous wetlands show an increasing trend in the % frequency of occurrence of wetland species (USFWS obligate, FAC-wet) in ≥ 95% of plots 2, 3, 4. ·In existing wetlands, the % frequency of occurrence of upland (i.e., not on the USFWS obligate and FAC-W lists), exotic and nuisance species show a decreasing trend. · The relative % frequency of occurrence of exotic and nuisance species (including Myrica cerifera) is less than 10%.	Trending toward Ultimate Success Criteria (Refer to Year 5). ·Encroachment by woody vegetation other than cypress is controlled. ·Herbaceous wetlands show an increasing trend in the % frequency of occurrence of wetland species (USFWS obligate, FAC-wet) in ≥ 95% of plots 2, 3, 4. ·In existing wetlands, the % frequency of occurrence of upland (i.e., not on the USFWS obligate and FAC-W lists), exotic and nuisance species show a decreasing trend. · The relative % frequency of occurrence of exotic and nuisance species (including Myrica cerifera) is less than 10%.	Ultimate Success Criteria* ·Encroachment by woody vegetation other than cypress is controlled. ·Wetland species in all strata are reproducing naturally either by fruiting or vegetative spread. **** ·Vegetation boundaries have shifted outward and upward along the elevational gradient, based upon visual observation. ·Herbaceous wetlands show an increased % frequency of occurrence of wetland species (USFWS obligate, FAC-wet) in ≥ 95% of plots 2, 3, 4. ·After a minimum of 5 years, jurisdictional area has increased in size. ·The relative % frequency of occurrence of exotic and nuisance species (including Myrica cerifera) is less than 10%. ·The relative frequency of occurrence of non-listed or upland species (USFWS FAC-U and obligate upland) after five years is less than the percent frequency occurence value of the baseline data. ·A success determination shall not occur sooner than 5 years after the completion of the dredge and fill in the enhancement areas.
	Remedy	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy; remove encroaching woody vegetation.	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy; remove encroaching woody vegetation.	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy; remove encroaching woody vegetation.	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy; remove encroaching woody vegetation.	Reassess site and mitigation methods, continue monitoring.

Success Criteria*						
Mitigation Site		Year 1	Year 2	Year 3	Year 4	Year 5
Cypress Domes (hydrologic enhancement)	Success	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Ultimate Success Criteria: ·Wetland canopy trees are not dying at an accelerated rate due to the altered hydroperiod, as indicated by annual aerial photography and groundtruthing. ·Wetland species in all strata are reproducing naturally either by fruiting or vegetative spread.*** ·Cover of nuisance non-wetland and exotic species is less than 10%.** ·The mitigation was performed as approved, and increased the hydroperiod in the wetland, as evidenced by attainment of the success criteria.
	Remedy	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy.	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy.	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy.	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy.	Reassess site and mitigation methods, continue monitoring.
Longleaf Pine Seedlings (500 seedlings per acre; 2 year old containerized)	Success	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Ultimate Success Criterion: Average density 300 seedlings/acre
	Remedy	Replant as necessary, using two year old potted seedlings.	Replant as necessary, using two year old potted seedlings.	Replant as necessary, using two year old potted seedlings.	Replant as necessary, using two year old potted seedlings.	Reassess site and mitigation methods; continue monitoring.

Success Criteria*						
Mitigation Site		Year 1	Year 2	Year 3	Year 4	Year 5
3.6 RCD East and West						
Herbaceous Wetlands (hydrologic enhancement)	Success	Trending toward Ultimate Success Criteria (Refer to Year 5). ·Encroachment by woody vegetation other than cypress is controlled. ·Herbaceous wetlands show an increasing trend in the % frequency of occurrence of wetland species (USFWS obligate, FAC-wet) in ≥ 95% of plots 2, 3, 4. ·In existing wetlands, the % frequency of occurrence of upland (i.e., not on the USFWS obligate and FAC-W lists), exotic and nuisance species show a decreasing trend. · The relative % frequency of occurrence of exotic and nuisance species (including Myrica cerifera) is less than 10%.	Trending toward Ultimate Success Criteria (Refer to Year 5). ·Encroachment by woody vegetation other than cypress is controlled. ·Herbaceous wetlands show an increasing trend in the % frequency of occurrence of wetland species (USFWS obligate, FAC-wet) in ≥ 95% of plots 2, 3, 4. ·In existing wetlands, the % frequency of occurrence of upland (i.e., not on the USFWS obligate and FAC-W lists), exotic and nuisance species show a decreasing trend. · The relative % frequency of occurrence of exotic and nuisance species (including Myrica cerifera) is less than 10%.	Trending toward Ultimate Success Criteria (Refer to Year 5). ·Encroachment by woody vegetation other than cypress is controlled. ·Herbaceous wetlands show an increasing trend in the % frequency of occurrence of wetland species (USFWS obligate, FAC-wet) in ≥ 95% of plots 2, 3, 4. ·In existing wetlands, the % frequency of occurrence of upland (i.e., not on the USFWS obligate and FAC-W lists), exotic and nuisance species show a decreasing trend. · The relative % frequency of occurrence of exotic and nuisance species (including Myrica cerifera) is less than 10%.	Trending toward Ultimate Success Criteria (Refer to Year 5). ·Encroachment by woody vegetation other than cypress is controlled. ·Herbaceous wetlands show an increasing trend in the % frequency of occurrence of wetland species (USFWS obligate, FAC-wet) in ≥ 95% of plots 2, 3, 4. ·In existing wetlands, the % frequency of occurrence of upland (i.e., not on the USFWS obligate and FAC-W lists), exotic and nuisance species show a decreasing trend. · The relative % frequency of occurrence of exotic and nuisance species (including Myrica cerifera) is less than 10%.	Ultimate Success Criteria* ·Encroachment by woody vegetation other than cypress is controlled. ·Wetland species in all strata are reproducing naturally either by fruiting or vegetative spread. **** ·Vegetation boundaries have shifted outward and upward along the elevational gradient, based upon visual observation. ·Herbaceous wetlands show an increased % frequency of occurrence of wetland species (USFWS obligate, FAC-wet) in ≥ 95% of plots 2, 3, 4. ·After a minimum of 5 years, jurisdictional area has increased in size. ·The relative % frequency of occurrence of exotic and nuisance species (including Myrica cerifera) is less than 10%. ·The relative frequency of occurrence of non-listed or upland species (USFWS FAC-U and obligate upland) after five years is less than the percent frequency occurence value of the baseline data. ·A success determination shall not occur sooner than 5 years after the completion of the dredge and fill in the enhancement areas.
	Remedy	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy; remove encroaching woody vegetation.	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy; remove encroaching woody vegetation.	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy; remove encroaching woody vegetation.	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy; remove encroaching woody vegetation.	Reassess site and mitigation methods ; continue monitoring.

Success Criteria*						
Mitigation Site		Year 1	Year 2	Year 3	Year 4	Year 5
Cypress Domes enhancement	Success	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Ultimate Success Criteria: ·Wetland canopy trees are not dying at an accelerated rate due to the altered hydroperiod, as indicated by annual aerial photography and groundtruthing. ·Wetland species in all strata are reproducing naturally either by fruiting or vegetative spread.*** ·Cover of nuisance non-wetland and exotic species is less than 10%.** ·The mitigation was performed as approved, and increased the hydroperiod in the wetland, as evidenced by attainment of the success criteria.
	Remedy	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy.	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy.	Apply herbicide or hand-clear nuisance/exotic species to <10% canopy.	Apply herbicide or hand-clear nuisance/ exotic species to <10% canopy.	Reassess enhancement techniques; apply herbicide on hand-clear nuisance/exotic species to <10% canopy; continue monitoring.
Longleaf Pine Seedlings (500 seedlings per acre; 2 year old containerized) (RCD-West)	Success	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Trending toward ultimate goal; seedling succeeding based upon the growth parameter of height.	Ultimate Success Criterion: Average density 300 seedlings/acre
	Remedy	Replant as necessary, using two year old potted seedlings.	Replant as necessary, using two year old potted seedlings.	Replant as necessary, using two year old potted seedlings.	Replant as necessary, using two year old potted seedlings.	Reassess site and mitigation methods; continue monitoring.

Success Criteria*						
Mitigation Site		Year 1	Year 2	Year 3	Year 4	Year 5
Cypress Seedlings (400 seedlings per acre; 10" - 12" in 4' cones) (RCD-East)	Success	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Trending toward Ultimate Success Criteria (Refer to Year 5).	Ultimate Success Criteria ·400 wetland trees/acre above the herbaceous stratum, and/or tree cover >33%, with no area greater than 1 acre having <20% cover. ·80% of cover in herbaceous & subcanopy strata shall be USFWS listed as Facultative wet or obligate.*** ·Cover by nuisance, non-wetland and exotic species is less than 10%** ·The area is jurisdictional. ·Mitigation was completed as approved.
	Remedy	Replant with 10" - 12" potted cypress seedlings to reach 33% total cover. Herbicide or hand clear nuisance/exotic species to <10% cover.	Replant with 10" - 12" potted cypress seedlings to reach 33% total cover. Herbicide or hand clear nuisance/exotic species to <10% cover.	Replant with 3' tall seedlings to reach 33% total cover. Herbicide or hand clear nuisance/exotic species to <10% cover.	Replant with 3' tall seedlings to reach 33% total cover. Herbicide or hand clear nuisance/exotic species to <10% cover.	Reassess site and mitigation methods; continue monitoring.
3.7 Railroad Loop						
Staff Gauge #8	Success	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly reading).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly reading).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly reading).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly reading).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly reading).
	Remedy	Adjust weir	Adjust weir	Adjust weir	Adjust weir	Reassess enhancement and success; continue monitoring.

Success Criteria*						
Mitigation Site		Year 1	Year 2	Year 3	Year 4	Year 5
Staff Gauge #9	Success	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly reading).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly reading).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly reading).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly reading).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly reading).
	Remedy	Adjust weir	Adjust weir	Adjust weir	Adjust weir	Reassess enhancement and success; continue monitoring.
Piezometer #6	Success	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly readings).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly readings).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly readings).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly readings).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly readings).
	Remedy	Adjust weir	Adjust weir	Adjust weir	Adjust weir	Reassess enhancement and success; continue monitoring.
Piezometer #7	Success	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly readings).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly readings).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly readings).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly readings).	Return of a more natural seasonally fluctuating hydroperiod, as indicated by seasonal water level fluctuation at staff gauges and piezometers (monthly readings).
	Remedy	Adjust weir	Adjust weir	Adjust weir	Adjust weir	Reassess enhancement and success, adjust weir; continue monitoring.

*Each mitigation site will be monitored until it has achieved success. If success is not attained in Year 5, monitoring will continue and site will be reassessed. When success is attained, no further mitigation monitoring will occur, and the mitigation site will then be managed as part of the overall Stanton Energy Center management plan.

**To ensure that undesirable species do not overrun a mitigation area. "Nuisance/wetland species" are defined as Typha latifolia and Ludwigia peruviana.

***Source of wetland categories for plant species is Reed, P.B., Jr., 1988. Wetland Plants of the State of Florida 1988. (A subset of Southeast (Region 2). U.S. Fish Wildl. Serv. Biol. Rep. 88 (26.2).)

****Vegetation reproduction by fruiting will be assumed based upon the presence of fruit on the plants.

Appendix B: Transect Drawings

During the process of surveying transects and preparing drawings, errors were made in numbering some of the transects and labelling the drawings. In Area 3.6E, several transects were renumbered. Table B1 lists the changes. All transect drawings are included in this appendix to make this report a complete record of all mitigation activities in 1993. Any drawing that was revised reflects that with a December 1993 date of issue. The transect drawings are listed in Table B2.

Table B1. Summary of Transect Number Revisions in RCD-East (Area 3.6E).

1992 (Original) Designation	1993 (Revised) Designation
13	14
14	15
15	16
16	17
17	18
18	19
19	20
20	21
21	22
22	23A
23	23B

Table B2. Transect Drawing List

Site	Transect	Issue Date	Drawing Number	Revision
3.5	1	07/28/93	16805-DS-0213	0
3.5	2	07/28/93	16805-DS-0212	0
3.5	3	07/28/93	16805-DS-0211	0
3.5	4	07/28/93	16805-DS-0210	0
3.5	5	07/28/93	16805-DS-0209A	0
3.5	5	07/28/93	16805-DS-0209B	0
3.5	6	07/28/93	16805-DS-0208	0
3.5	7	07/28/93	16805-DS-0207	0
3.5	8	07/28/93	16805-DS-0206	0
3.5	9	07/28/93	16805-DS-0205	0
3.5	10	07/28/93	16805-DS-0204	0
3.5	11	05/14/93	16805-DS-0174C	1
3.5	12A	07/28/93	16805-DS-0202	0
3.5	12B	05/14/93	16805-DS-0174G	1
3.5	12	07/28/93	16805-DS-0203	0
3.6E	14	05/14/93	16805-DS-0174D, Sh 1	1
3.6E	14	05/14/93	16805-DS-0174D, Sh 2	1
3.6E	15	07/28/93	16805-DS-0201	0
3.6E	16	07/28/93	16805-DS-0200	0
3.6E	17	07/28/93	16805-DS-0199	0

Site	Transect	Issue Date	Drawing Number	Revision
3.6E	18	07/28/93	16805-DS-0198	0
3.6E	19	07/28/93	16805-DS-0197	0
3.6E	20	07/28/93	16805-DS-0196	0
3.6E	21	07/28/93	16805-DS-0195	0
3.6E	22	07/28/93	16805-DS-0194	0
3.6E	23A	07/28/93	16805-DS-0193	0
3.6E	23B	07/28/93	16805-DS-0214	0
3.6E	24	07/28/93	16805-DS-0192	0
3.6E	25	07/28/93	16805-DS-0191	0
3.6W	26	05/14/93	16805-DS-0174E	1
3.6W	27	05/14/93	16805-DS-0174F	1
3.5	28	05/14/93	16805-DS-0174H	1
3.6W	29	07/28/93	16805-DS-0215	0
3.6E/W	30	07/28/93	16805-DS-0190	0
3.6E/W	31	07/28/93	16805-DS-0189	0
3.6E/W	32	07/28/93	16805-DS-0188	0
3.6E/W	33	07/28/93	16805-DS-0187	0
3.6E/W	34	07/28/93	16805-DS-0186	0
3.6E/W	35	07/28/93	16805-DS-0185A	0
3.6E/W	35	07/28/93	16805-DS-0185B	0
3.6E/W	36	07/28/93	16805-DS-0184	0
3.6E/W	37	07/28/93	16805-DS-0183	0

Ok - see p3-4

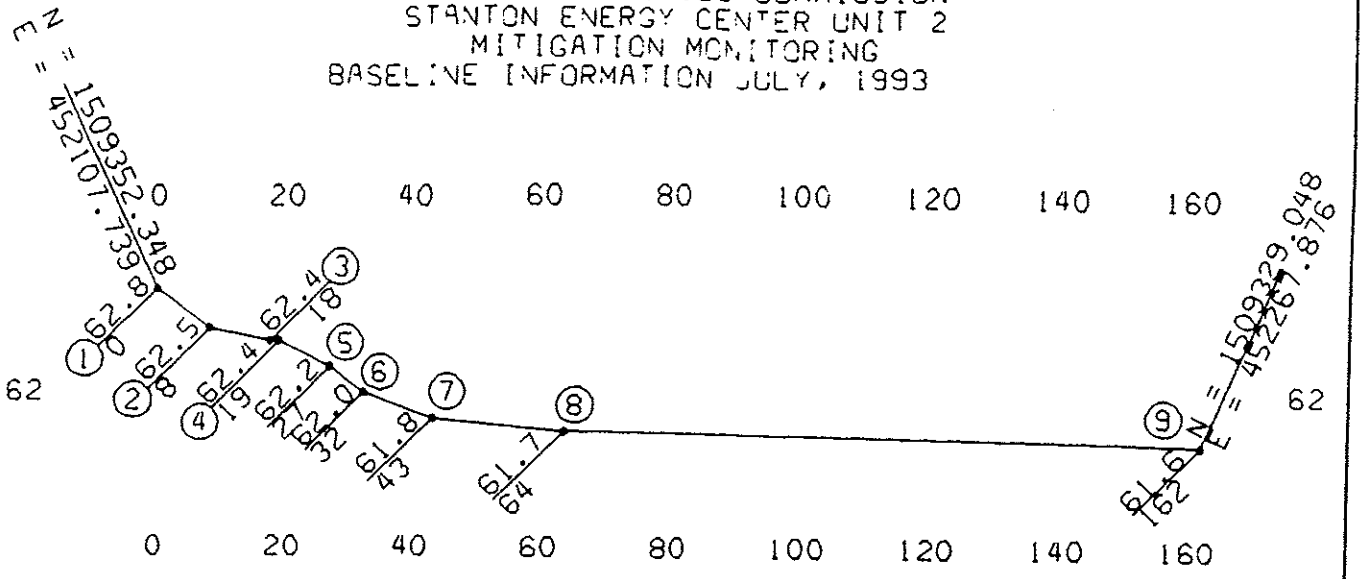
all of most ½ of 3.6

But there is no 3.6E & 3.6W dissimation

Site	Transect	Issue Date	Drawing Number	Revision
3.6 EW	38	12/01/93	16805-DS-0182	0
3.6 NW	39	12/01/93	16805-DS-0181A	0
3.6 NW	39	12/01/93	16805-DS-0181B	0
3.6 NW	40	12/01/93	16805-DS-0180A	0
3.6 NW	40	12/01/93	16805-DS-0180B	0

Appendix C: Vegetation Monitoring Data

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 1
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.5

1	BEGIN TRANSECT 1, NE COR PLOT 1 (PINE FLATWOOD ZONE)
2	PINE FLATWOOD ZONE-UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
3	NE COR PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE) AND WETLAND BOUNDARY
4	UPPER RHYNCHOSPORA-ARISTIDA ZONE-LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
5	PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
6	LOWER RHYNCHOSPORA-ARISTIDA ZONE-ERIOCAULON ZONE BOUNDARY
7	NE COR PLOT 4 (ERIOCAULON ZONE)
8	ERIOCAULON ZONE-CYPRESS DOME-RHYNCHOSPORA OPEN WATER ZONE BOUNDARY
9	EAST END TRANSECT 1 AND NW COR PLOT 5 (CYPRESS DOME-RHYNCHOSPORA OPEN
	WATER ZONE)

NOTE:
SECTION LOOKING WEST.

LEGEND
GROUND LEVEL
68.3 / 62 — INDICATES NGVD ELEVATION (FT); INDICATES DISTANCE IN FEET ALONG SECTION FROM START

BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805-DS-0213 | DRAWING NUMBER | REV 0

ELEVATION TRANSECTS

CODE

AREA

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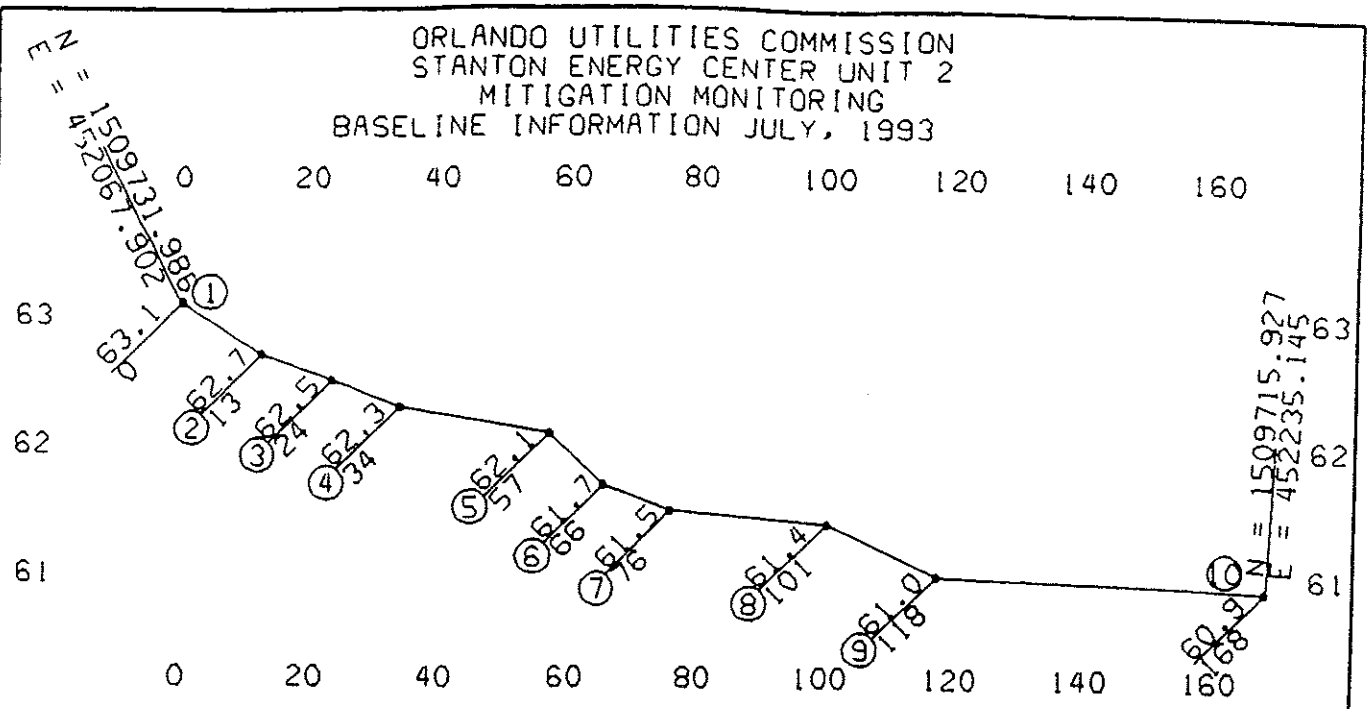
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 2
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.5

1	BEGIN T-2 AND SE COR PLOT 1 (PINE FLATWOOD ZONE)
2	WETLAND BOUNDARY AND PINE FLATWOOD ZONE-UPPER RHYNCHOSPORA-ARISTIDA ZONE
	BOUNDARY
3	NE COR PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
4	UPPER RHYNCHOSPORA-ARISTIDA ZONE-LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
5	NE COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
6	LOWER RHYNCHOSPORA-ARISTIDA ZONE-ERIOCAULON ZONE BOUNDARY
7	SE COR PLOT 4 (ERIOCAULON ZONE)
8	RHYNCHOSPORA OPEN WATER ZONE-CYPRESS DOME ZONE/ERIOCAULON ZONE BOUNDARY
	ERIOCAULON ZONE/CYPRESS DOME-RHYNCHOSPORA OPEN WATER ZONE BOUNDARY
9	PLOT 5 NE COR (CYPRESS DOME ZONE-RHYNCHSOSPORA OPEN WATER ZONE)
10	EAST END T-2

NOTE:
SECTION LOOKING WEST.

LEGEND
GROUND LEVEL
59.3 — INDICATES NGVD ELEVATION (FT)
52 — INDICATES DISTANCE IN FEET ALONG SECTION FROM START

BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0212
REV: 0

ELEVATION TRANSECTS

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AREA

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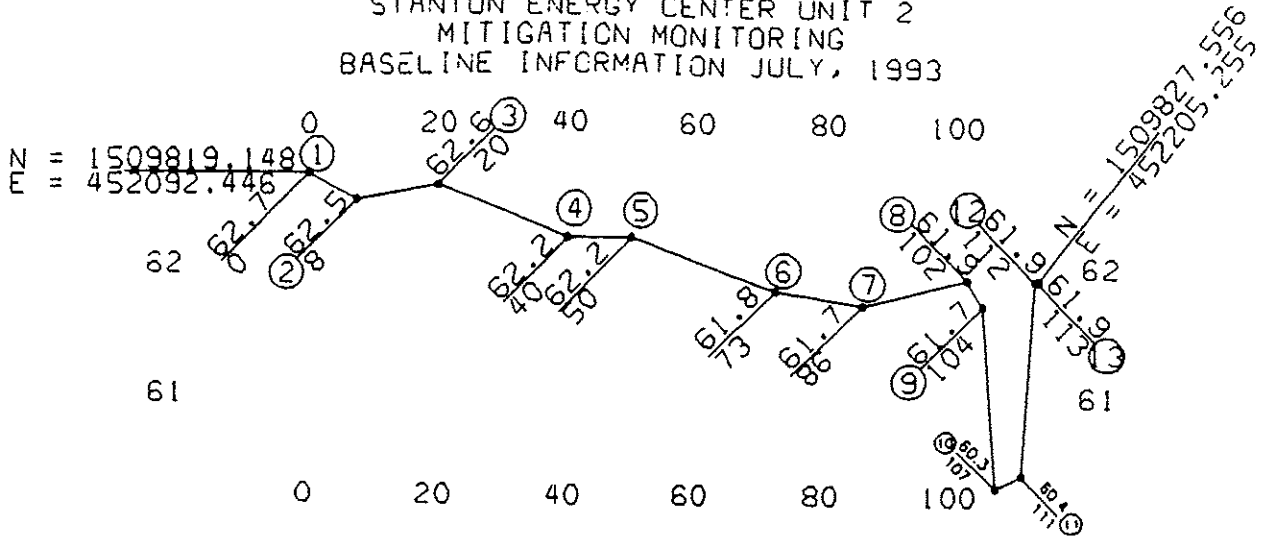
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 3
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.5

1	BEGIN T-3 AND NE COR PLOT 1 (PINE FLATWOOD ZONE)
2	WETLAND BOUNDARY AND PINE FLATWOOD ZONE-UPPER RHYNCHOSPORA-ARISTIDA ZONE
	BOUNDARY
3	NE COR PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
4	UPPER RHYNCHOSPORA-ARISTIDA ZONE-LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
5	NE COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
6	LOWER RHYNCHOSPORA-ARISTIDA ZONE-ERIOCAULON ZONE BOUNDARY
7	NE COR PLOT 4 (ERIOCAULON ZONE)
8	FORMER END POINT TRANSECT (1992)
9	TOP OF DITCH AND ERIOCAULON ZONE-RHYCHNOSPORA OPEN WATER ZONE BOUNDARY
10	DITCH BOTTOM
11	DITCH BOTTOM
12	DITCH TOP
13	NEW EAST END T-3 NE COR PLOT 5 (RHYNCHOSPORA OPEN WATER ZONE)

NOTE:
SECTION LOOKING WEST.

LEGEND
GROUND LEVEL
69.3 — INDICATES NGVD ELEVATION (FT)
62 — INDICATES DISTANCE IN FEET ALONG SECTION FROM START

BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805-DS-0211 | DRAWING NUMBER | REV 0

ELEVATION TRANSECTS

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AREA

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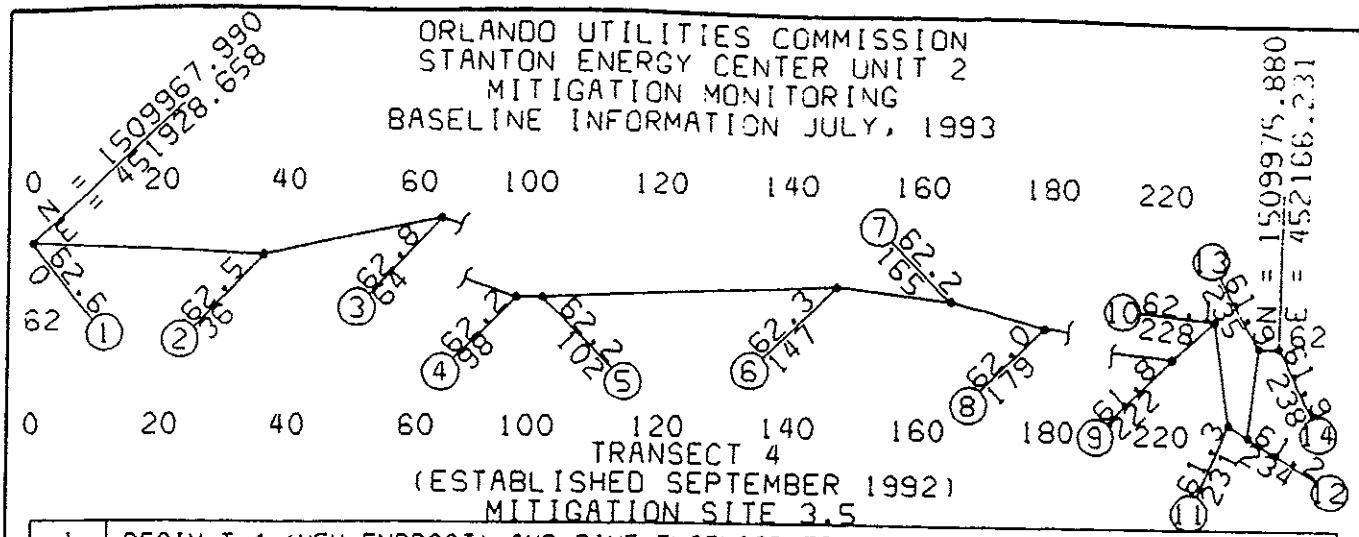
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



1	BEGIN T-4 (NEW ENDPOST) AND PINE FLATWOOD ZONE/UPPER RHYNCHOSPORA-ARISTIDA
	ZONE BOUNDARY AND WETLAND BOUNDARY
2	UPPER RHYNCHOSPORA-ARISTIDA ZONE-PINE FLATWOOD ZONE BOUNDARY (BEGIN SMALL
	UPLAND INCLUSIONS) DRY TO EAST
3	SW COR PLOT 1 (PINE FLATWOOD ZONE) AND FORMER TRANSECT ENDPOST
4	GROUND SHOT
5	PINE FLATWOOD ZONE-UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY (END SMALL
	UPLAND INCLUSION, WET TO EAST)
6	SE COR PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
7	UPPER RHYNCHOSPORA-ARISTIDA ZONE-LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
8	NE COR PLOT 3A (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
9	PLOT 3B (FORMER 4) LOWER RHYNCHOSPORA-ARISTIDA ZONE NE COR
10	DITCH TOP AND LOWER RHYNCHOSPORA-ARISTIDA ZONE-ERIOCAULON ZONE BOUNDARY
11	DITCH BOTTOM
12	DITCH BOTTOM
13	DITCH TOP AND ERIOCAULON ZONE-LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
14	E END T-4

NOTE:
- PLOT 3B (LOWER RHYNCHOSPORA - ARISTIDA ZONE) IN AREA TYPICALLY DEFINED AS ERIOCAULON ZONE. CURRENT CONDITIONS RESTRICT ERIOCAULON ZONE TO DITCH.
- PLOT 4 (ERIOCAULON ZONE) IS LOCATED 55' NORTH OF TRANSECT 4, IN DITCH. SEE SURVEYORS NOTE.
- NO RHYNCHOSPORA - OPEN WATER ZONE, NO PLOT 5

NOTE:
SECTION LOOKING EAST.

LEGEND

INDICATES NGVD ELEVATION (FT)
INDICATES DISTANCE IN FEET ALONG SECTION FROM START

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805 DRAWING NUMBER -DS-0210 REV 0

ELEVATION TRANSECTS

CODE

AREA

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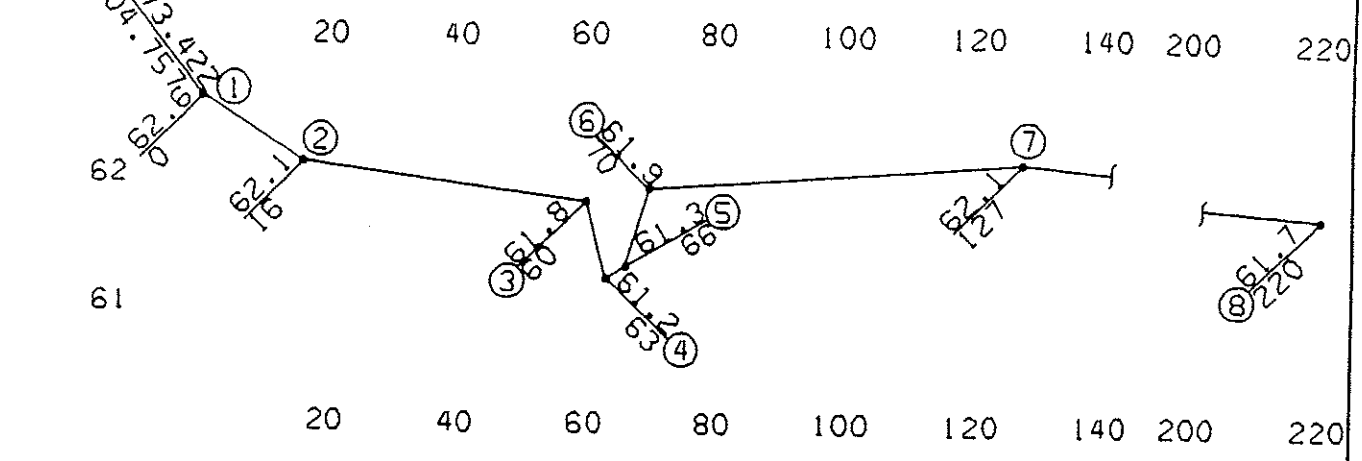
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 5
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.5

1	BEGIN T-5 AND NE COR PLOT 1 (PINE FLATWOOD ZONE)
2	WETLAND BOUNDARY AND PINE FLATWOOD ZONE, UPPER RHYCHNOSPORA-ARISTIDA ZONE
	BOUNDARY
3	TOP OF DITCH
4	BOTTOM OF DITCH
5	BOTTOM OF DITCH
6	TOP OF DITCH
7	WETLAND BOUNDARY, UPPER RHYNCHOSPORA - ARISTIDA ZONE - PINE FLATWOOD ZONE
	BOUNDARY (BEGIN UPLAND INCLUSION)
8	PINE FLATWOOD ZONE/LOWER SERENOA-ILEX ZONE BOUNDARY/WETLAND BOUNDARY (END
	UPLAND INCLUSION)

NOTE:
- DITCH FILL AREA
- SMALL UPLAND INCLUSION AT THIS TRANSECT
- LOWER SERENOA - ILEX ZONE REPLACES UPPER RHYNCHOSPORA - ARISTIDA ZONE FOR PLOT 2
- PLOT 3 IS 1.5M x 2.7M DUE TO NARROW VEGETATION ZONE

NOTE:
SECTION LOOKING WEST.

LEGEND
GROUND LEVEL — 69.3 / 62 — INDICATES NGVD ELEVATION (FT) / INDICATES DISTANCE IN FEET ALONG SECTION FROM START

BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0209A
REV: 0

ELEVATION TRANSECTS

CODE
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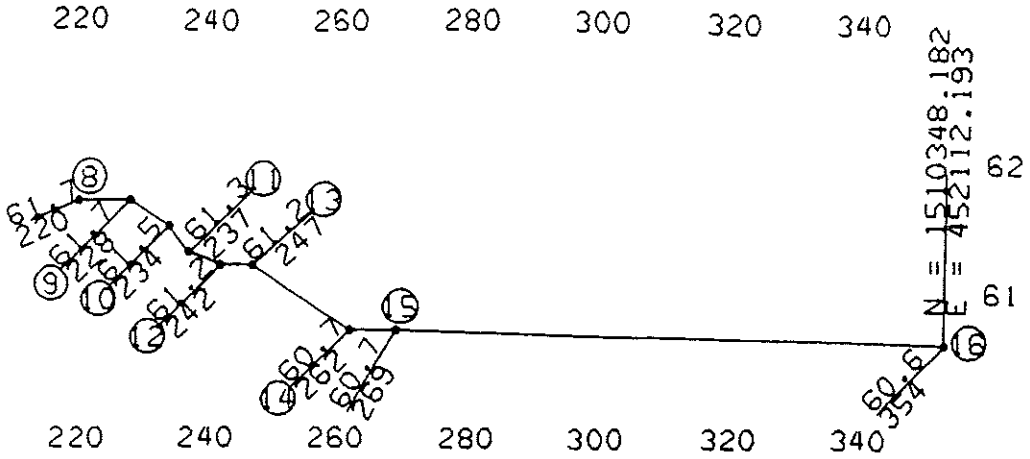
07/28/93 08:17:30

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



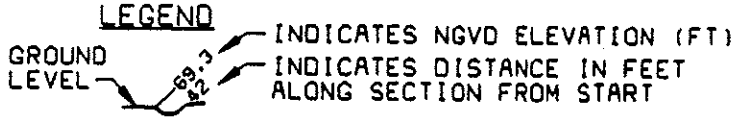
TRANSECT 5
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.5

9	GROUND SHOT - NO INFO
10	NE COR PLOT 2 (LOWER SERENOA-ILEX ZONE)
11	LOWER SERENOA-ILEX ZONE-LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
12	NE COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
13	LOWER RHYNCHOSPORA-ARISTIDA ZONE-ERIOCAULON ZONE BOUNDARY
14	NE COR PLOT 4 (ERIOCAULON ZONE)
15	ERIOCAULON ZONE-RHYNCHOSPORA OPEN WATER ZONE BOUNDARY
16	END T-5 (NE COR PLOT 5 RHYNCHOSPORA OPEN WATER ZONE)

NOTE:
- DITCH FILL AREA
- SMALL UPLAND INCLUSION AT THIS TRANSECT
- LOWER SERENOA - ILEX ZONE REPLACES UPPER RHYNCHOSPORA - ARISTIDA ZONE FOR PLOT 2
- PLOT 3 IS 1.5M X 2.7M DUE TO NARROW VEGETATION ZONE

NOTE:
SECTION LOOKING WEST.

LEGEND



BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805-DS-0209B | DRAWING NUMBER | REV 0

ELEVATION TRANSECTS

CODE

AREA

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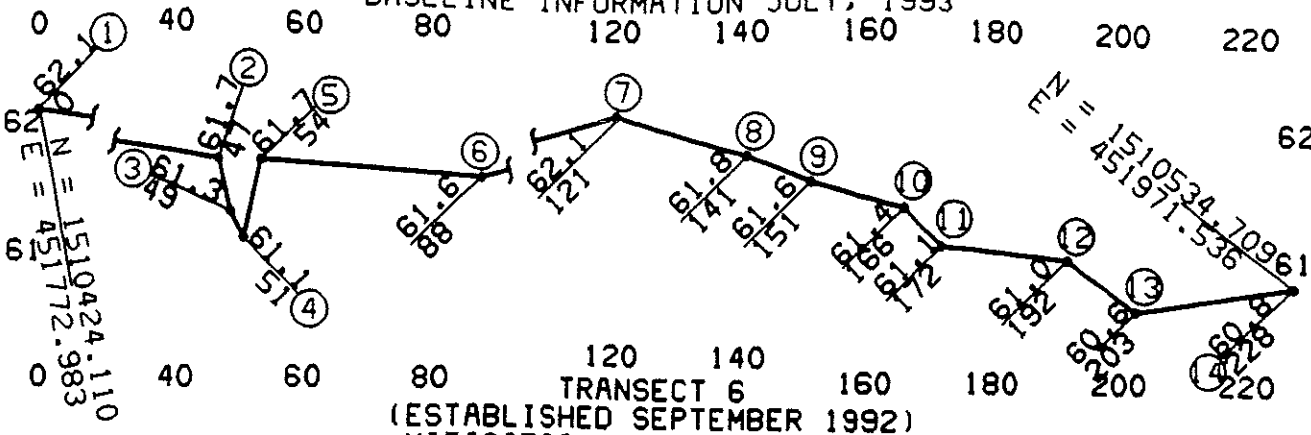
A01SL002 A2 1=30
7-28-93 8:54 A

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



1	WETLAND BOUNDARY AND PINE FLATWOOD ZONE-UPPER RHYNCHOSPORA-ARISTIDA ZONE
	BOUNDARY, BEGIN TRANSECT 6
2	TOP OF DITCH
3	BOTTOM OF DITCH
4	BOTTOM OF DITCH
5	TOP OF DITCH
6	UPPER RHYNCHOSPORA-ARISTIDA ZONE/PINE FLATWOOD ZONE BOUNDARY, BEGIN UPLAND
	INCLUSION
7	NE COR PLOT 1 (PINE FLATWOOD ZONE)
8	PINE FLATWOOD ZONE-UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY AND END
	UPLAND INCLUSION AND NW PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
9	UPPER RHYNCHOSPORA-ARISTIDA ZONE-LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
10	NE COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
11	LOWER RHYNCHOSPORA-ARISTIDA ZONE-ERIOCAULON ZONE BOUNDARY AND NW COR PLOT
	4 (ERIOCAULON ZONE)
12	ERIOCAULON ZONE/CYPRESS DOME-RHYNCHOSPORA OPEN WATER ZONE BOUNDARY
13	NE COR PLOT 5 (CYPRESS DOME-RHYNCHOSPORA OPEN WATER ZONE)
14	END TRANSECT 6

NOTE:
- SMALL UPLAND INCLUSION IN THIS TRANSECT

NOTE:
SECTION LOOKING NORTH.

LEGEND
GROUND LEVEL
69.3 — INDICATES NGVD ELEVATION (FT)
42 — INDICATES DISTANCE IN FEET ALONG SECTION FROM START

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER	REV
16805-DS-0208	0

ELEVATION TRANSECTS

CODE	
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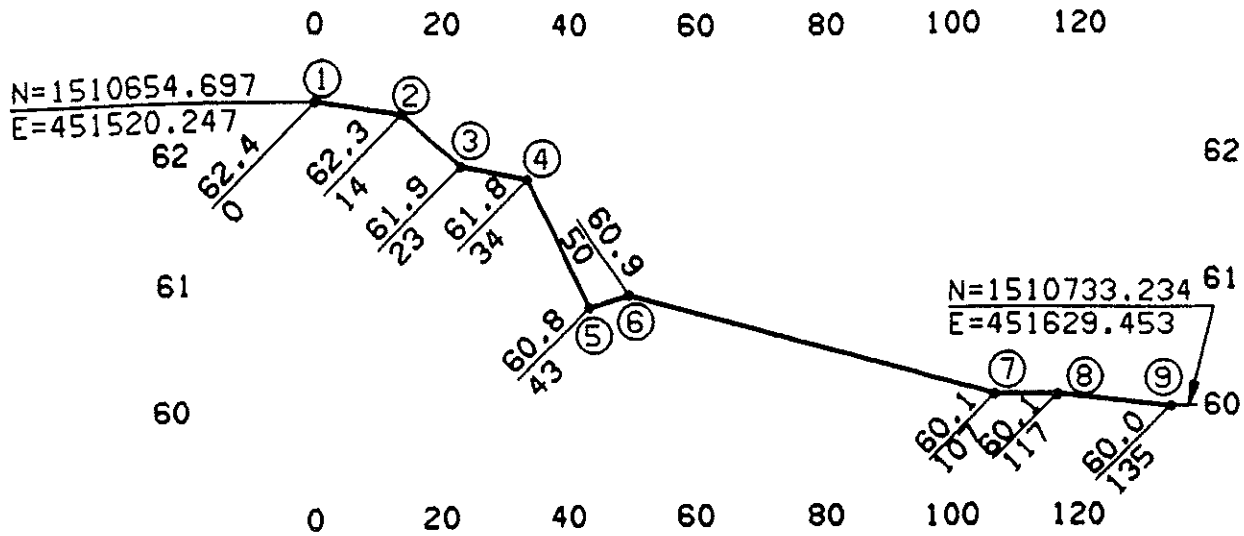
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 7
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.5

1	BEGIN TRANSECT 7 & NE COR PLOT 1 (PINE FLATWOODS ZONE)
2	WETLAND BOUNDARY & PINE FLATWOODS ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
3	NE COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
4	NE COR PLOT 3A (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
5	UPPER RHYNCHOSPORA - ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
6	NE COR PLOT 3B (ERIOCAULON ZONE)
7	NE COR PLOT 4 (ERIOCAULON ZONE)
8	ERIOCAULON ZONE / CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE BOUNDARY
9	END TRANSECT 7 NE COR PLOT 5 (CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE

NOTE: NO LOWER RHYNCHOSPORA - ARISTIDA ZONE

LEGEND

NOTE:
SECTION LOOKING EAST.

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805 DRAWING NUMBER DS-0207 REV 0

ELEVATION TRANSECTS

CODE

AREA

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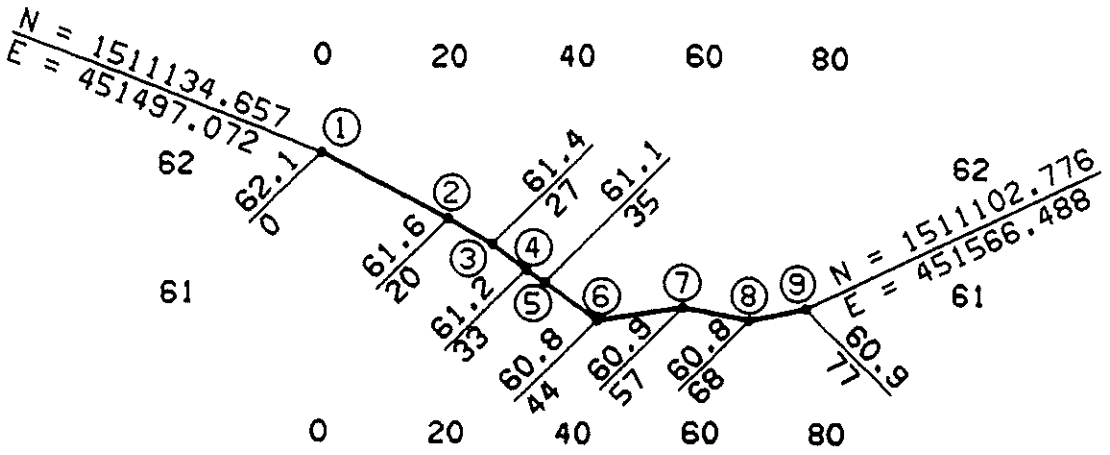
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 8
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.5

1	WEST END TRANSECT 8 NE COR PLOT 1 (PINE FLATWOODS ZONE) PINE FLATWOODS ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY, WETLAND BOUNDARY
2	NE COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
3	UPPER RHYNCHOSPORA - ARISTIDA ZONE/LOWER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
4	NE COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
5	LOWER RHYNCHOSPORA - ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
6	NE COR PLOT 4 (ERIOCAULON ZONE)
7	ERIOCAULON ZONE/CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE BOUNDARY
8	NE COR PLOT 5 (CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE
9	END TRANSECT 8

NOTE: DITCH FILL AREA

LEGEND

NOTE:
SECTION LOOKING EAST.

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0206
REV: 0

ELEVATION TRANSECTS

CODE
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ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
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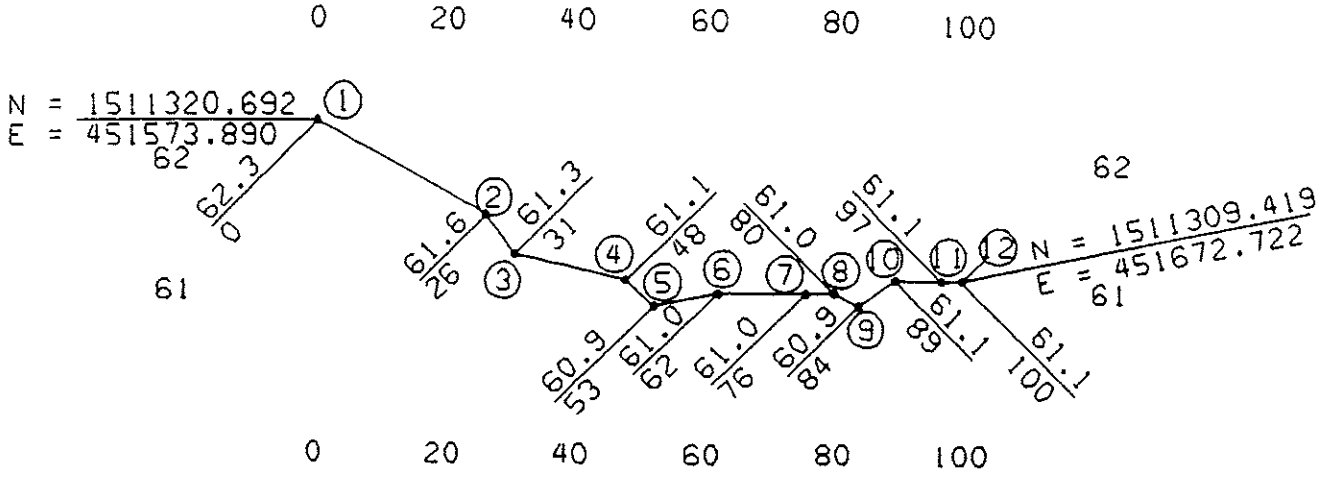

TRANSECT 9
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.5

1	BEGIN TRANSECT 9 NE COR PLOT 1 (PINE FLATWOODS ZONE) & WETLAND BOUNDARY & PINE FLATWOODS ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
2	NE COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE) & UPPER RHYNCHOSPORA - ARISTIDA ZONE/LOWER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
3	NE COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
4	LOWER RHYNCHOSPORA - ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
5	NE COR PLOT 4 (ERIOCAULON ZONE)
6	ERIOCAULON ZONE/CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE BOUNDARY
7	NE COR PLOT 5 (CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE
8	GROUND IN CYPRESS AREA, NO PLOT
9	GROUND IN CYPRESS AREA, NO PLOT
10	GROUND IN CYPRESS AREA, NO PLOT
11	GROUND IN CYPRESS AREA, NO PLOT
12	END TRANSECT 9

NOTE: DITCH FILL AREA

NOTE:
SECTION LOOKING EAST.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805-DS-0205 | DRAWING NUMBER | REV 0

ELEVATION TRANSECTS

CODE

AREA

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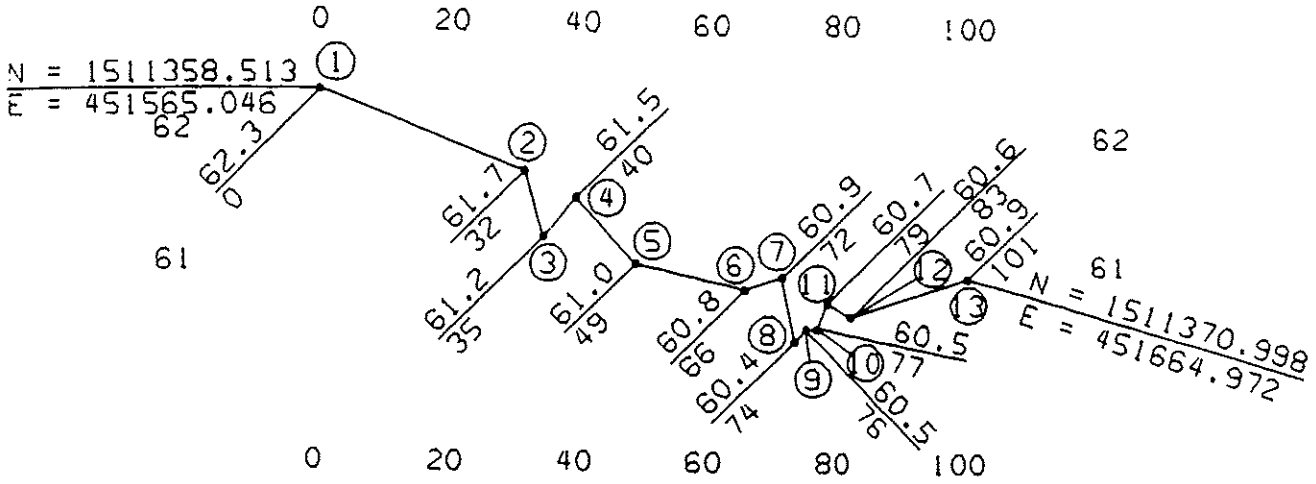
07/21/93 11:30:36

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 10
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.5

1	BEGIN TRANSECT 10 & PINE FLATWOODS ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY & WETLAND BOUNDARY & NE CORN PLOT 1
2	NE COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
3	UPPER RHYNCHOSPORA - ARISTIDA ZONE/LOWER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
4	NE COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
5	LOWER RHYNCHOSPORA - ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
6	NE COR PLOT 4 (ERIOCAULON ZONE)
7	TOP OF DITCH & ERIOCAULON ZONE/RHYNCHOSPORA - OPEN WATER ZONE BOUNDARY
8	BOTTOM DITCH
9	NW COR PLOT 5 (RHYNCHOSPORA - OPEN WATER ZONE)
10	BOTTOM OF DITCH
11	TOP OF DITCH
12	NE COR PLOT 5 (RHYNCHOSPORA - OPEN WATER ZONE)
13	EAST END TRANSECT 10

NOTE: DITCH FILL AREA

NOTE:
SECTION LOOKING EAST.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT	DRAWING NUMBER	REV
16805-DS-0204		0

ELEVATION TRANSECTS

CODE	
AREA	

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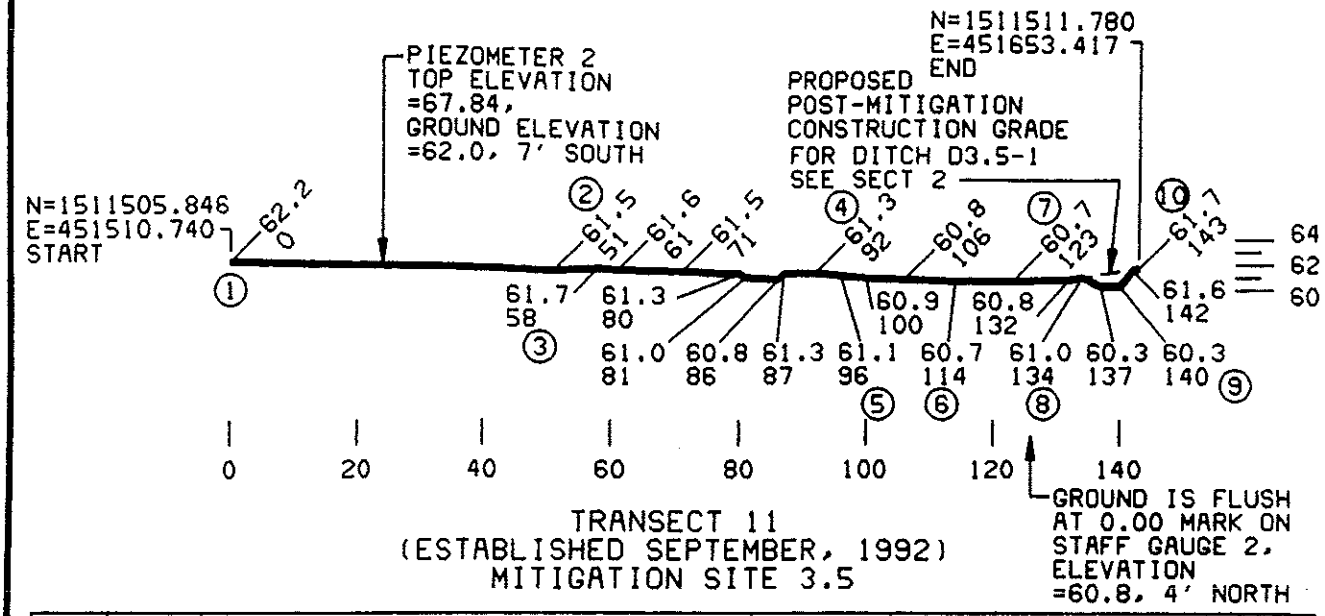
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION APRIL, 1993

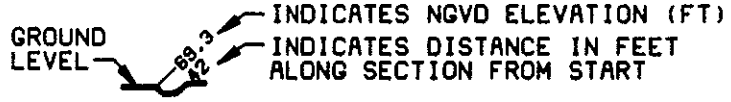


TRANSECT 11
(ESTABLISHED SEPTEMBER, 1992)
MITIGATION SITE 3.5

1	PLOT 1 NW CORNER (PINE FLATWOOD ZONE)
2	BEGIN TRANSECT 11
3	PLOT 2 NW CORNER (UPPER RHYNCHOSPORA-ARISTIDA ZONE) PINE FLATWOOD ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY WETLAND BOUNDARY
4	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
5	PLOT 3 NW CORNER (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
6	LOWER RHYNCHOSPORA-ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
7	PLOT 4 NW CORNER (ERIOCAULON ZONE)
8	ERIOCAULON ZONE/RHYNCHOSPORA-OPEN WATER ZONE BOUNDARY BEGIN DITCH. PLOT 5 NW CORNER (RHYNCHOSPORA-OPEN WATER ZONE)
9	BASE OF DITCH. RHYNCHOSPORA-OPEN WATER ZONE/ERIOCAULON ZONE BOUNDARY
10	END TRANSECT 11

NOTE:
ALL SECTIONS LOOKING NORTH.

LEGEND



BLACK & VEATCH

ENGINEER	DRAWN MRR
CHECKED	DATE

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1	05-14-93	REVISED PER FDER COMMENTS				
0	04-05-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805 DRAWING NUMBER DS-0174C REV 1

ELEVATION TRANSECTS AT
PIEZOMETERS AND STAFF GAUGES

CODE
AREA

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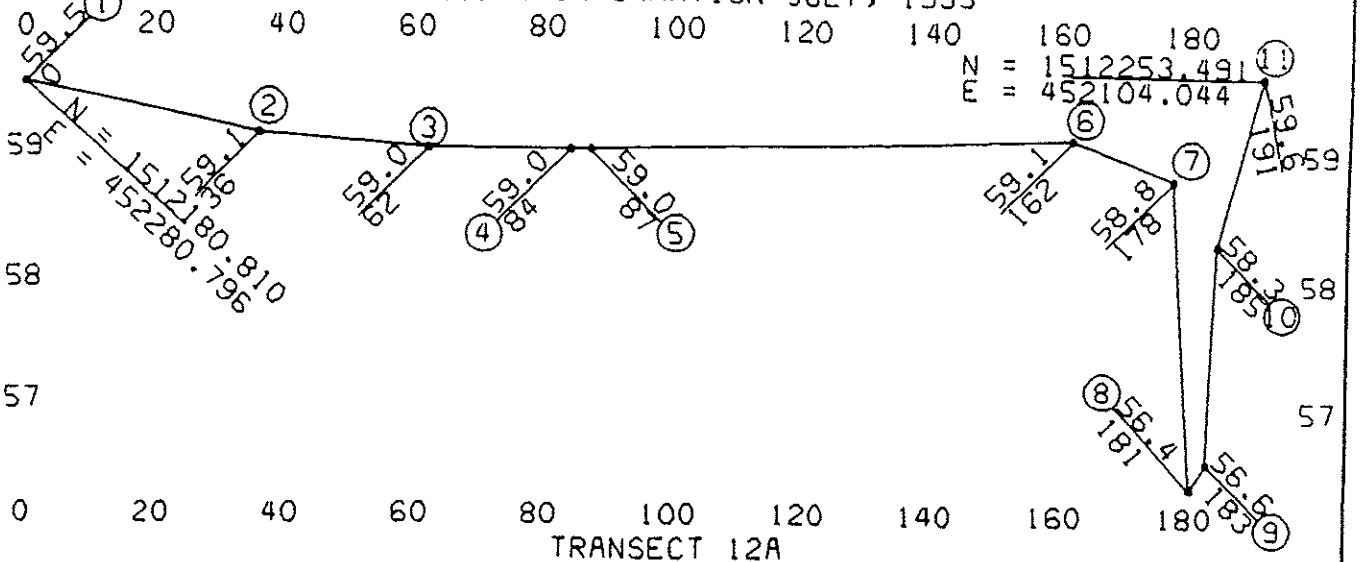
A01SL002 A2 1=30
5-13-93 9:05 A

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 12A
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.5

1	BEGIN TRANSECT 12A, GROUND AT REBAR, NE COR PLOT 1 (PINE FLATWOOD ZONE)
2	WETLAND BOUNDARY, PINE FLATWOOD ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE
	BOUNDARY
3	NE COR PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
4	UPPER RHYNCHOSPORA-ARISTIDA ZONE-LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
5	NE COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
6	NE COR PLOT 3B (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
7	NE COR PLOT 4 (ERIOCAULON ZONE) AND TOP OF DITCH AND LOWER RHYNCHOSPORA-
	ARISTIDA ZONE-ERIOCAULON ZONE BOUNDARY
8	DITCH BOTTOM
9	DITCH BOTTOM
10	TOP OF DITCH AND ERIOCAULON ZONE BOUNDARY
11	REBAR WEST END T12A, WETLAND BOUNDARY

NOTE:
- DRAWING VIEW IS SOUTH. 0 POINT ON T-12A IS ON EAST END OF TRANSECT
- PLOT 3B (LOWER RHYNCHOSPORA-ARISTIDA ZONE) IS LOCATED WHERE ERIOCAULON ZONE IS EXPECTED AFTER ENHANCHMENT
- DITCH FILL AREA

NOTE:
SECTION LOOKING EAST.

LEGEND
GROUND LEVEL
69.3 62 — INDICATES NGVD ELEVATION (FT)
INDICATES DISTANCE IN FEET ALONG SECTION FROM START

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

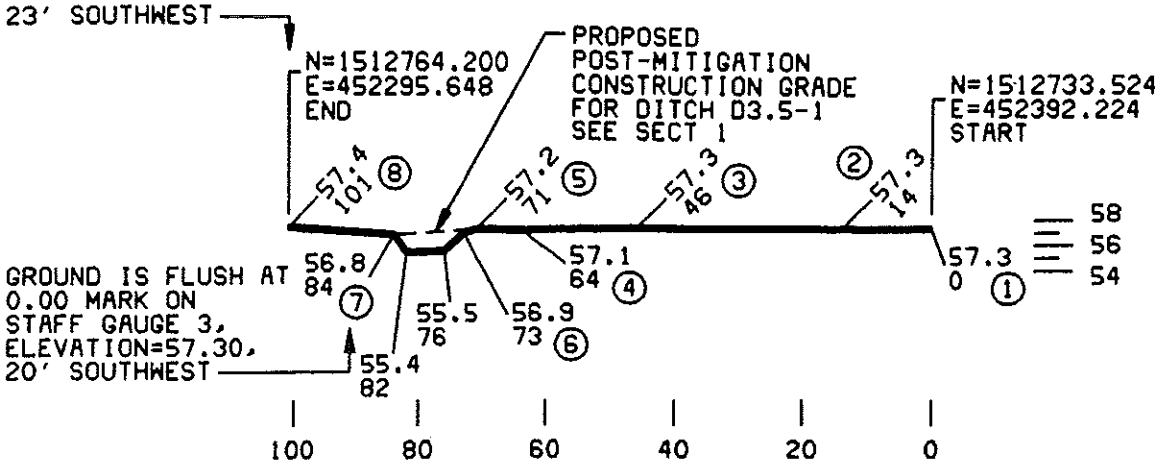
PROJECT	DRAWING NUMBER	REV
16805-DS-0202		0

ELEVATION TRANSECTS

CODE	
AREA	

035BOSAIL ACAD 12_c1
A01SL002 1=30
7-28-93 7:25 A

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION APRIL, 1993



TRANSECT 12B
(ESTABLISHED SEPTEMBER, 1992)
MITIGATION SITE 3.5

1	BEGIN TRANSECT 12B
2	PLOT 1 NW CORNER (PINE FLATWOOD ZONE)
3	PLOT 2 NW CORNER (PINE FLATWOOD ZONE); PINE FLATWOOD ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
4	PLOT 3 NW CORNER (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
5	PLOT 4 NW CORNER (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
6	DITCH TOP ELEVATION; UPPER RHYNCHOSPORA-ARISTIDA ZONE/ RHYNCHOSPORA-OPEN WATER ZONE BOUNDARY
7	DITCH TOP ELEVATION; RHYNCHOSPORA-OPEN WATER ZONE BOUNDARY; PLOT 5 NW CORNER (PHYNCHOSPORA-OPEN WATER ZONE)
8	END TRANSECT 12B

NOTE:
ALL SECTIONS LOOKING NORTH.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN MRR
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
1	05-14-93	REVISED PER FDER COMMENTS				
0	04-05-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805 DRAWING NUMBER DS-0174G REV 1

ELEVATION TRANSECTS AT
PIEZOMETERS AND STAFF GAUGES

CODE

AREA

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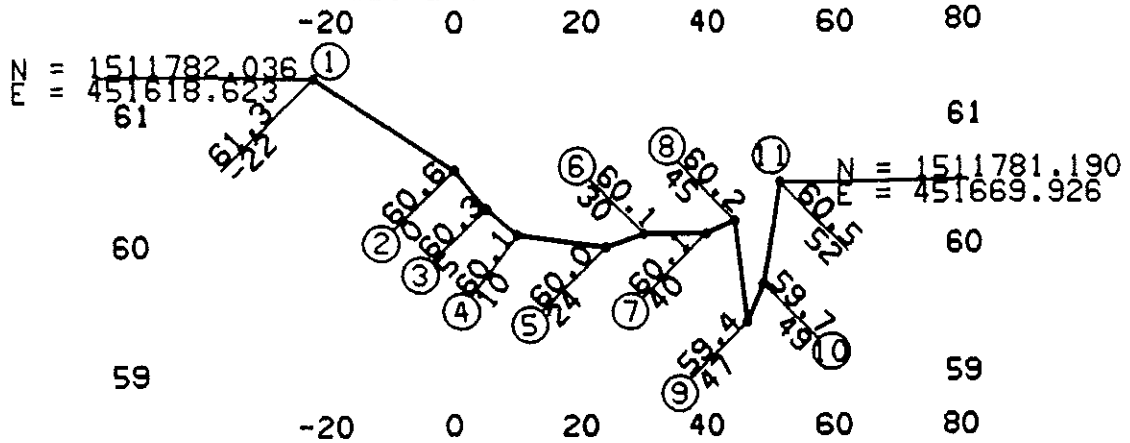
A01SL002 A2 1=30
5-13-93 9:35 A

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 12
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.5

1	FORMER REBAR T12 WEST END, NE COR PLOT 1 (PINE FLATWOOD ZONE)
2	BEGIN TRANSECT 12 AND WETLAND BOUNDARY AND PINE FLATWOOD ZONE-UPPER
	RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
3	LOWER RHYNCHOSPORA-ARISTIDA ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
	AND NE COR PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
4	NE COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
5	LOWER RHYNCHOSPORA-ARISTIDA ZONE-ERIOCAULON ZONE BOUNDARY
6	NE COR PLOT 4 (ERIOCAULON ZONE)
7	ELEVATION SHOT, NO PLOT
8	ERIOCAULON ZONE/RHYNCHOSPORA OPEN WATER ZONE BOUNDARY AND TOP OF DITCH
9	BOTTOM OF DITCH
10	NE COR PLOT 5 (RHYNCHOSPORA OPEN WATER ZONE) AND BOTTOM OF DITCH
11	EAST END TRANSECT 12 AND TOP OF DITCH

NOTE:
- DITCH FILL AREA

NOTE:
SECTION LOOKING NORTH.

LEGEND
GROUND LEVEL
59.3 — INDICATES NGVD ELEVATION (FT)
42 — INDICATES DISTANCE IN FEET ALONG SECTION FROM START

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805-DS-0203 DRAWING NUMBER — REV 0

ELEVATION TRANSECTS

CODE
AREA

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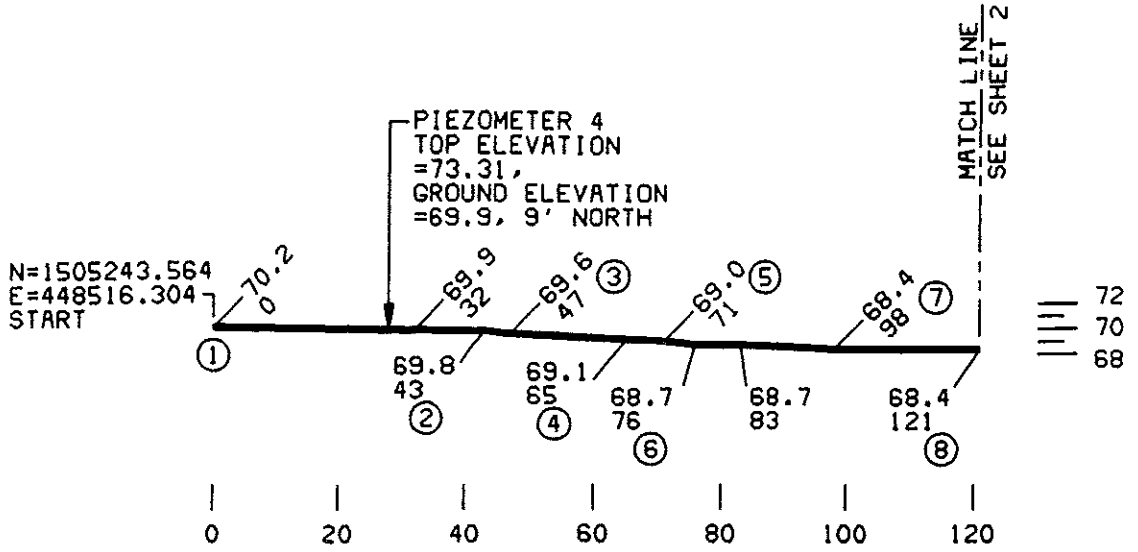
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION APRIL, 1993



TRANSECT 14
(ESTABLISHED SEPTEMBER, 1992)
MITIGATION SITE 3.6

1	PLOT 1 NW CORNER (PINE FLATWOOD ZONE)
2	BEGIN TRANSECT 14
3	PINE FLATWOOD ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
4	PLOT 2 NW Corner (Upper Rhynchospora-Aristida Zone)
5	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
6	PLOT 3 NW CORNER (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
7	LOWER RHYNCHOSPORA-ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
8	PLOT 4 NW CORNER (ERIOCAULON ZONE)

NOTE:
ALL SECTIONS LOOKING NORTH.

LEGEND

BLACK & VEATCH

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
2	09-07-94			CD		
1	05-14-93	REVISED PER FDER COMMENTS				
0	04-05-93	INITIAL ISSUE				

ENGINEER | DRAWN MRR | CHECKED | DATE

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0174D
REV: 1

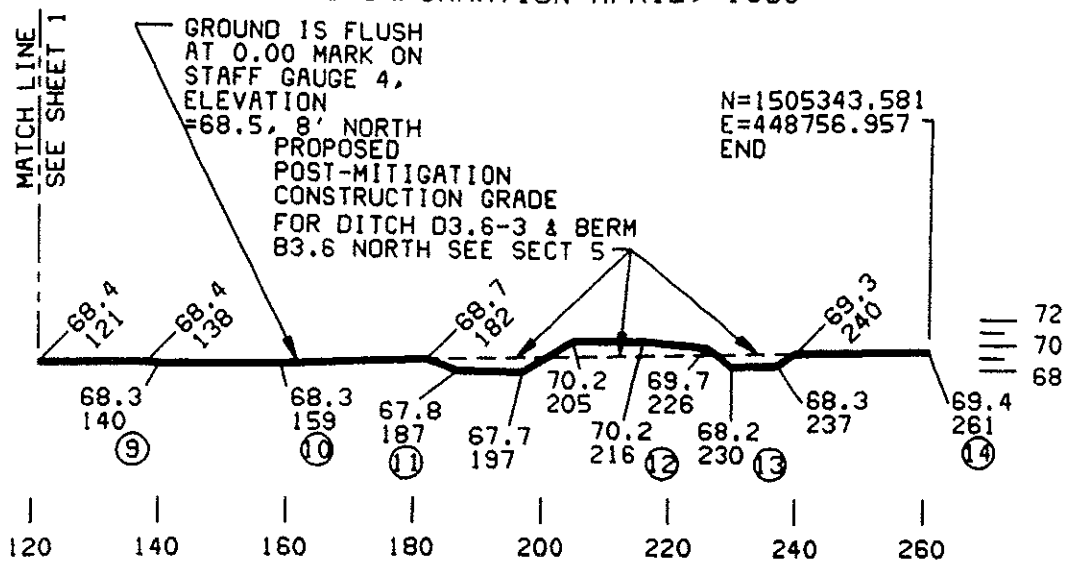
ELEVATION TRANSECTS AT
PIEZOMETERS AND STAFF GAUGES

CODE
AREA

SHEET 1 OF 2

035805 OR ACAD 10 c10a
A01SL002 A2 1=30
5-13-93 9:10 A

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION APRIL, 1993

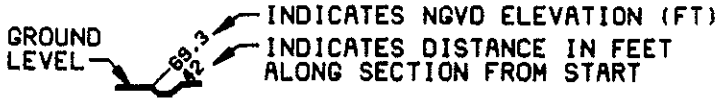


TRANSECT 14
(ESTABLISHED SEPTEMBER, 1992)
MITIGATION SITE 3.6

9	ERIOCAULON ZONE/RHYNCHOSPORA-OPEN WATER ZONE BOUNDARY
10	PLOT 5 NW CORNER (RHYNCHOSPORA-OPEN WATER ZONE)
11	BASE OF DITCH
12	TRAM BED
13	BASE OF DITCH
14	WETLAND BOUNDARY AND END TRANSECT 14

NOTE:
ALL SECTIONS LOOKING NORTH.

LEGEND



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CHECKED	DATE

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1	05-14-93	REVISED PER FDER COMMENTS				
0	04-05-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805-DS-0174D | DRAWING NUMBER | REV 1

ELEVATION TRANSECTS AT
PIEZOMETERS AND STAFF GAUGES

CODE
AREA

SHEET 2 OF 2

03580 OR ACAD 10 c10a
A01SL002 A2 1=30
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ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
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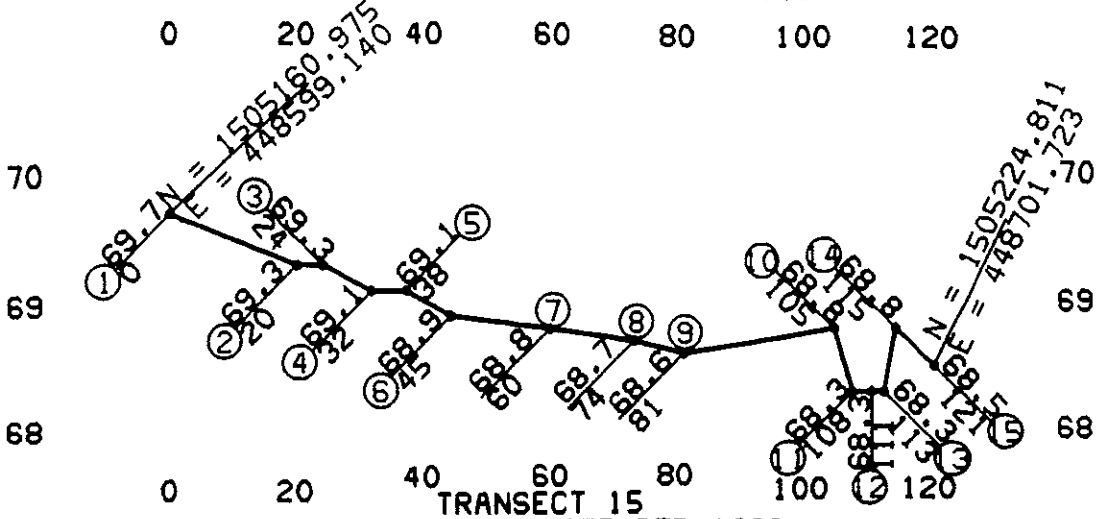

TRANSECT 15
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.6 - EAST

1	BEGIN TRANSECT 15 AND NE COR PLOT 1 (PINE FLATWOOD ZONE)
2	PINE FLATWOOD ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY AND NW COR
	PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
3	SURVEYED POINT
4	WETLAND BOUNDARY
5	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
6	NE COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
7	GROUND SHOT (ELEVATION SHOT, NO PLOT)
8	LOWER RHYNCHOSPORA-ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
9	NE COR PLOT 4 (ERIOCAULON ZONE)
10	DITCH TOP AND ERIOCAULON ZONE/RHYNCHOSPORA OPEN WATER ZONE BOUNDARY
11	BOTTOM OF DITCH
12	NE COR PLOT 5 (RHYNCHOSPORA OPEN WATER ZONE)
13	DITCH BOTTOM
14	TOP OF DITCH
15	EAST END TRANSECT 15

NOTE:
SECTION LOOKING NORTH.

LEGEND
GROUND LEVEL — 69.3 / 42
INDICATES NGVD ELEVATION (FT)
INDICATES DISTANCE IN FEET ALONG SECTION FROM START

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805 DRAWING NUMBER DS-0201 REV 0

ELEVATION TRANSECTS

CODE

AREA

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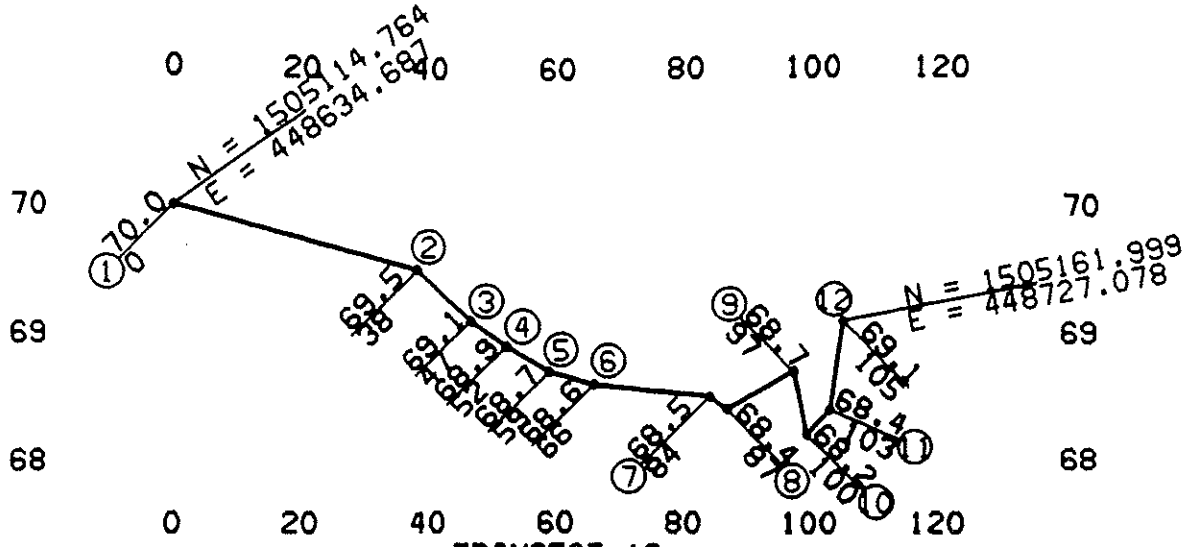
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 16
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.6 - EAST

1	BEGIN TRANSECT 16 AND NE COR PLOT 1 (PINE FLATWOOD ZONE)
2	WETLAND BOUNDARY AND PINE FLATWOOD ZONE/UPPER RHYNCHSPORA-ARISTIDA ZONE BOUNDARY
3	NE COR PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
4	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
5	NE COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
6	LOWER RHYNCHOSPORA-ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
7	NE COR PLOT 4 (ERIOCAULON ZONE)
8	RHYNCHOSPORA OPEN WATER ZONE/ERIOCAULON ZONE BOUNDARY
9	TOP OF DITCH
10	BOTTOM OF DITCH
11	BOTTOM OF DITCH
12	TOP OF DITCH, NE COR PLOT 5 (RHYNCHOSPORA OPEN WATER ZONE), EAST END OF
	TRANSECT 16

NOTE:
SECTION LOOKING NORTH.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0200
REV: 0

ELEVATION TRANSECTS

CODE
AREA

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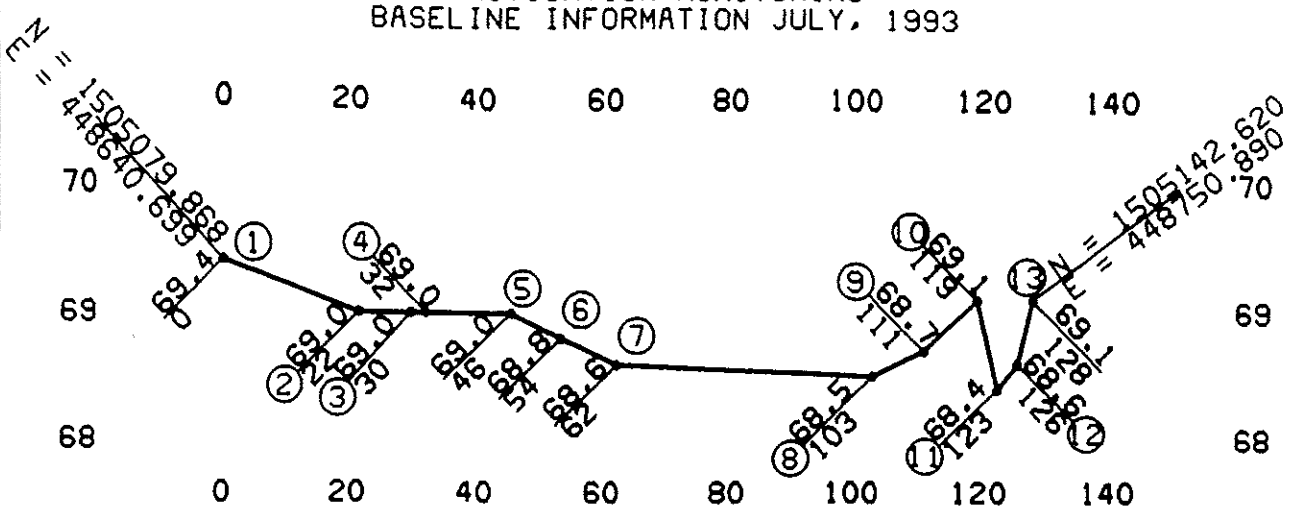
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 17
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.6 - EAST

1	NE COR PLOT 1 (PINE FLATWOOD ZONE) AND BEGIN T-17
2	PINE FLATWOOD ZONE-UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY AND WETLAND BOUNDARY
3	NE COR PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
4	UPPER RHYNCHOSPORA-ARISTIDA ZONE-LOWER RHYNCHSOPOR-ARISTIDA ZONE BOUNDARY
5	NE COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
6	LOWER RHYNCHOSPORA-ARISTIDA ZONE/ERIOCAULON ZONE
7	NE COR PLOT 4 (ERIOCAULON ZONE)
8	ERIOCAULON ZONE/RHYNCHOSPORA OPEN WATER ZONE BOUNDARY
9	NE COR PLOT 5 (RHYNCHOSPORA OPEN WATER ZONE)
10	TOP OF DITCH
11	BOTTOM OF DITCH
12	BOTTOM OF DITCH
13	EAST END TRANSECT 17 AND TOP OF DITCH

NOTE:
SECTION LOOKING NORTH.

LEGEND

GROUND LEVEL — 69.3 / 42 — INDICATES NGVD ELEVATION (FT); INDICATES DISTANCE IN FEET ALONG SECTION FROM START

BLACK & VEATCH

ENGINEER	DRAWN JHS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER	REV
16805-DS-0199	0

ELEVATION TRANSECTS

CODE

AREA

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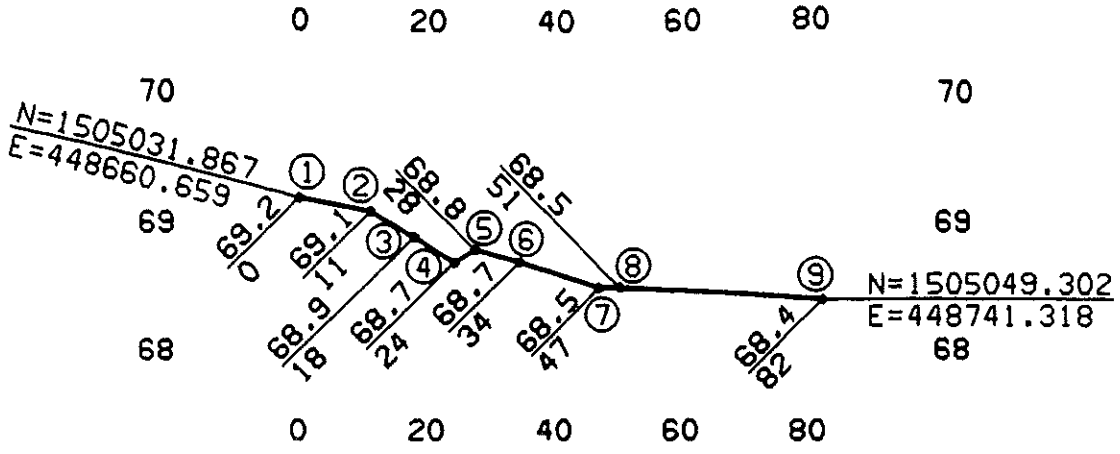
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 18
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.6 - EAST

1	BEGIN TRANSECT 18 & NE COR PLOT 1 (PINE FLATWOODS ZONE)
2	PINE FLATWOOD ZONE-UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
3	WETLAND BOUNDARY AND NE COR PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE) AND UPPER RHYNCHOSPORA - ARISTIDA ZONE/LOWER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
4	NE COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
5	LOWER RHYNCHOSPORA - ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
6	SURVEYED POINT
7	NE COR PLOT 4 (ERIOCAULON ZONE)
8	ERIOCAULON ZONE/CYPRESS DOME-RHYNCHOSPORA OPEN WATER ZONE BOUNDARY
9	EAST END T-18 AND NW COR PLOT 5 (CYPRESS DOME-RHYNCHOSPORA OPEN WATER ZONE)

NOTE:
SECTION LOOKING NORTH.

LEGEND

INDICATES NGVD ELEVATION (FT)
INDICATES DISTANCE IN FEET ALONG SECTION FROM START

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805-DS-0198 | DRAWING NUMBER | REV 0

ELEVATION TRANSECTS

CODE
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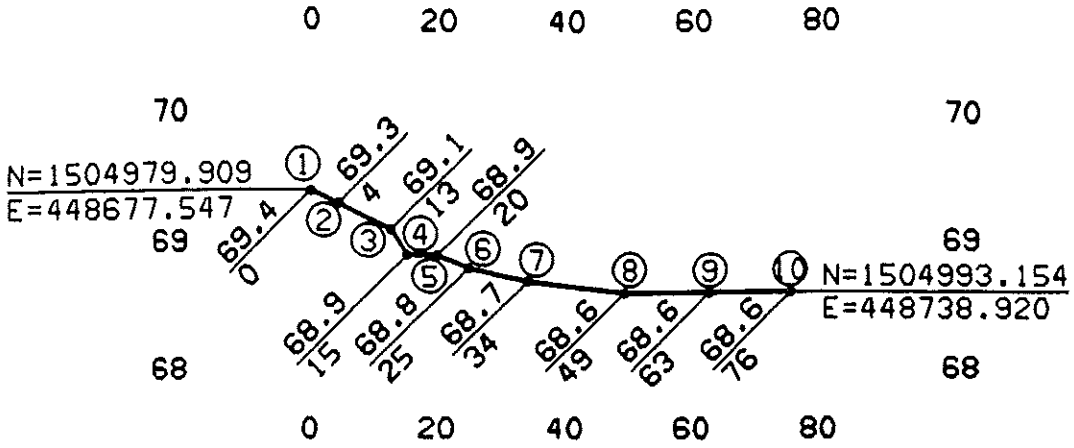
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993

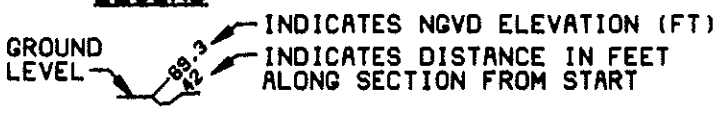


TRANSECT 19
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.6 - EAST

1	BEGIN TRANSECT 19 & NE COR PLOT 1 (PINE FLATWOODS ZONE)
2	WETLAND BOUNDARY, PINE FLATWOODS ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
3	NE COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
4	UPPER RHYNCHOSPORA - ARISTIDA ZONE/LOWER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
5	NE COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
6	LOWER RHYNCHOSPORA - ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
7	NE COR PLOT 4 (ERIOCAULON ZONE)
8	ERIOCAULON ZONE/CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE BOUNDARY
9	END TRANSECT 19
10	NE COR PLOT 5 (CYPRESS DOME-RHYNCHOSPORA - OPEN WATER ZONE)

NOTE:
SECTION LOOKING NORTH.

LEGEND



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ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0197
REV: 0

ELEVATION TRANSECTS

CODE
AREA

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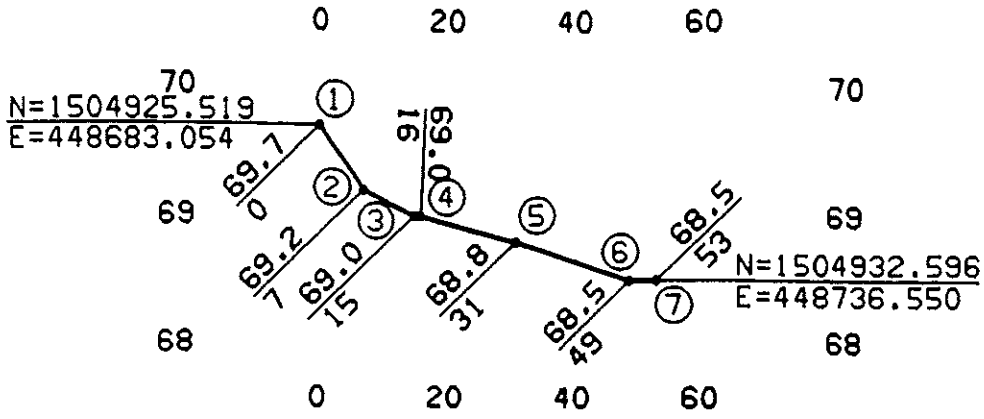
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 20
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.6 - EAST

1	BEGIN TRANSECT 20, NE COR PLOT 1 (PINE FLATWOOD ZONE), UPPER RHYNCHOSPORA-
	ARISTIDA ZONE/PINE FLATWOODS ZONE BOUNDARY AND WETLAND BOUNDARY
2	NE COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE), UPPER RHYNCHOSPORS-
	ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
3	NE COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
4	LOWER RHYNCHOSPORA - ARISTIDA ZONE /ERIOCAULON ZONE BOUNDARY
5	NE COR PLOT 4 (ERIOCAULON ZONE)
6	ERIOCAULON ZONE/CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE BOUNDARY
7	NW COR PLOT 5 (CYPRESS DOME-RHYNCHOSPORA-OPEN WATER ZONE) AND END TRANSECT
	19

NOTE:
SECTION LOOKING NORTH.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805-DS-0196 | DRAWING NUMBER | REV 0

ELEVATION TRANSECTS

CODE
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ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
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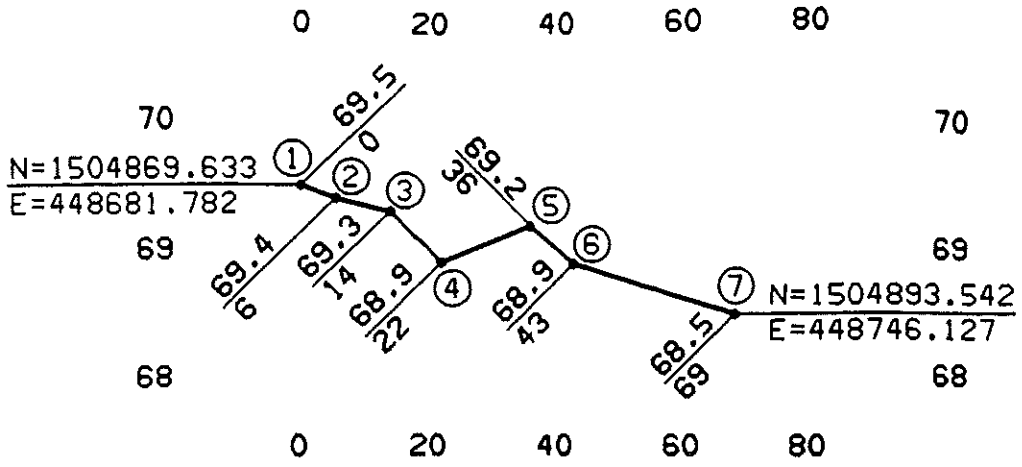
BASELINE INFORMATION JULY, 1993



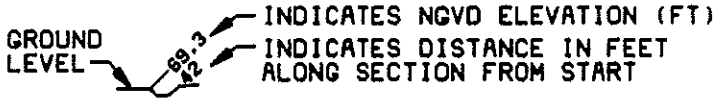
TRANSECT 21
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.6 - EAST

1	BEGIN TRANSECT 21, NE COR PLOT 1 (PINE FLATWOODS ZONE) PINE FLATWOODS ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY, WETLAND BOUNDARY
2	NE COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
3	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER ARISTIDA-RHYNCHOSPORA ZONE BOUNDARY
4	NE COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
5	NE COR PLOT 3B (LOWER RHYNCHOSPORA - ARISTIDA ZONE)*
6	LOWER RHYNCHOSPORA - ARISTIDA ZONE/CYPRESS DOME - RHYCHOSPORA - OPEN WATER ZONE BOUNDARY
7	NW COR PLOT 5 (CYPRESS DOME-RHYNCHOSPORA-OPEN WATER ZONE), END TRANSECT 21

NOTE: PLOT 3B IS IN LOWER RHYNCHOSPORA - ARISTIDA ZONE AT TIME OF BASELINE DATA. NO ERIOCAULON ZONE, THEREFORE NO PLOT 4.

NOTE:
SECTION LOOKING NORTH.

LEGEND



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ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805 DRAWING NUMBER DS-0195 REV 0

ELEVATION TRANSECTS

CODE

AREA

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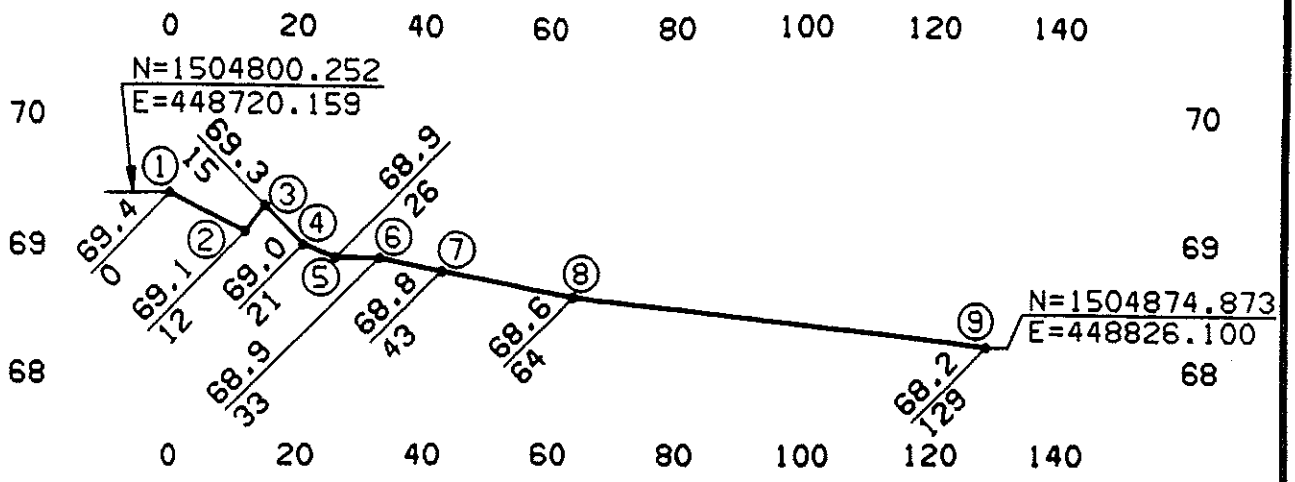
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 22
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.6 - EAST

1	BEGIN TRANSECT 22, NE COR PLOT 1 (PINE FLATWOODS ZONE), WETLAND BOUNDARY, UPPER RHYNCHOSPORA - ARISTIDA ZONE/PINE FLATWOODS ZONE BOUNDARY
2	NE COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
3	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
4	NE COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
5	LOWER RHYNCHOSPORA - ARISTIDA ZONE/ERIOCAULON ZONE BOUNDRY
6	NE COR PLOT 4 (ERIOCAULON ZONE)
7	ERIOCAULON ZONE/CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE BOUNDARY
8	NE COR PLOT 5 (CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE)
9	END TRANSECT 22

NOTE:
SECTION LOOKING NORTH.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0194
REV: 0

ELEVATION TRANSECTS

CODE
AREA

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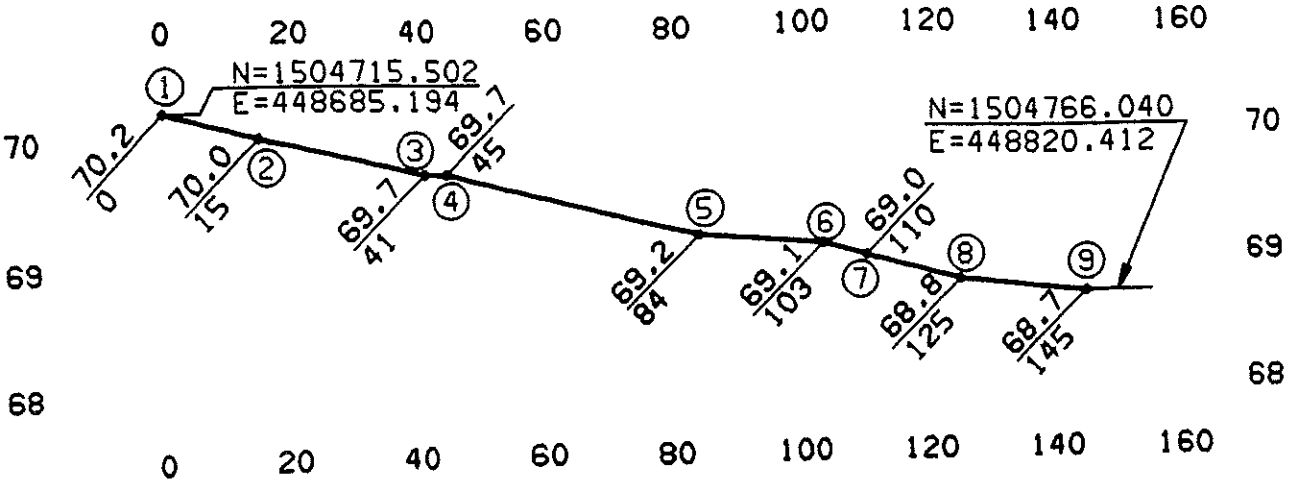
A01SL002 A2 1=30
8-30-93 2:15 P

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993

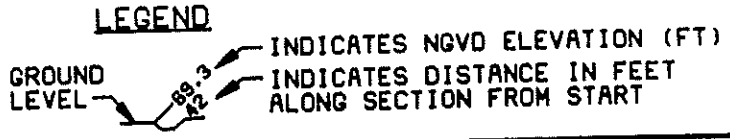


TRANSECT 23A
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.6 - EAST

1	BEGIN TRANSECT 23A, WETLAND BOUNDARY, PINE FLATWOODS ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY, NE COR PLOT 1 (PINE FLATWOODS ZONE)
2	NE COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
3	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
4	NE COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
5	GROUND SHOT (ELEVATIONAL CHANGE - NO PLOT)
6	LOWER RHYNCHOSPORA - ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
7	NE COR PLOT 4 (ERIOCAULON ZONE)
8	ERIOCAULON ZONE/CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE BOUNDARY
9	EAST END TRANSECT 23A, NE COR PLOT 5 (CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE)

NOTE:
SECTION LOOKING NORTHWEST.

LEGEND



BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805-DS-0193
DRAWING NUMBER
REV 0

ELEVATION TRANSECTS

CODE
AREA

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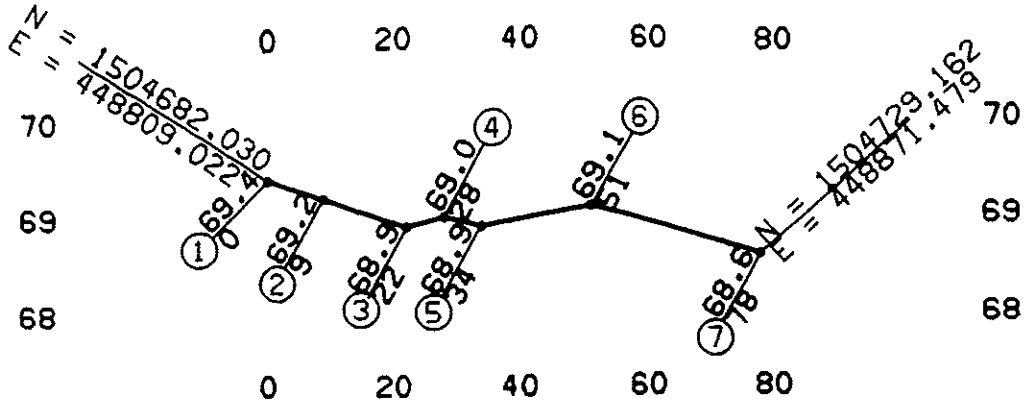
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 23B
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.6 - EAST

1	BEGIN TRANSECT 23B, SE COR PLOT 1 (PINE FLATWOOD ZONE), WETLAND BOUNDARY
	AND FMC FLATWOOD ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
2	SE COR PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
3	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
4	LOWER RHYNCHOSPORA-ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY & NE COR PLOT 3
	(LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY)
5	NE COR PLOT 4 (ERIOCAULON ZONE)
6	ERIOCAULON ZONE/CYPRESS DOME-RHYNCHOSPORA-OPEN WATER ZONE
7	END TRANSECT 23B & NE COR PLOT 5 (CYPRESS DOME-RHYCHOSPORA-OPEN WATER ZONE)

NOTE:
SECTION LOOKING NORTH.

LEGEND
GROUND LEVEL — 69.3 / 42 — INDICATES NGVD ELEVATION (FT); INDICATES DISTANCE IN FEET ALONG SECTION FROM START

BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0214
REV: 0

ELEVATION TRANSECTS

CODE
AREA

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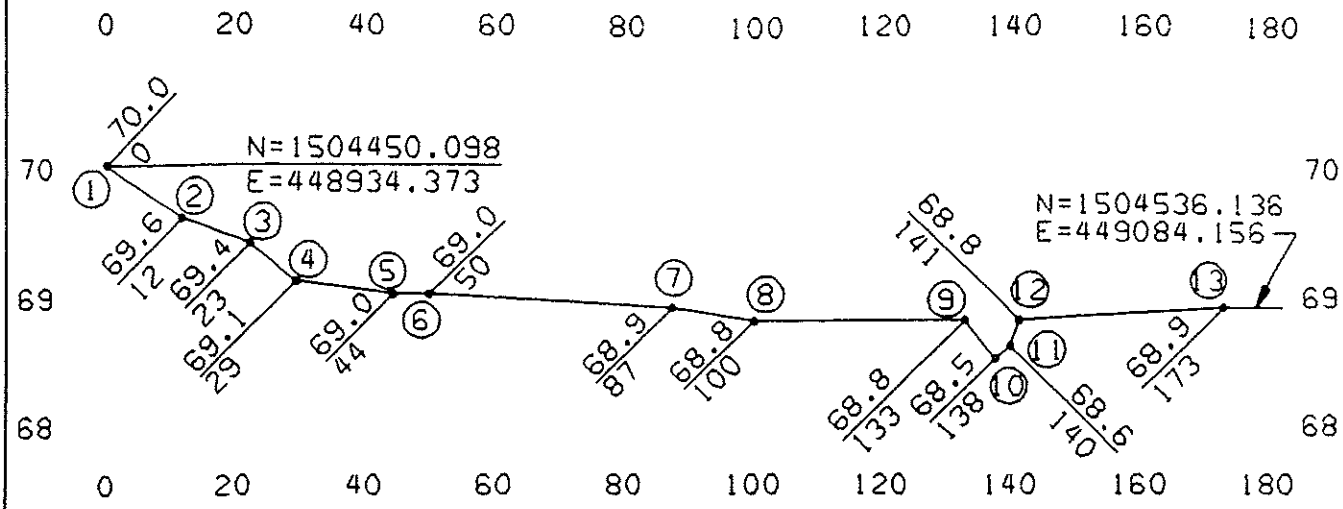
A01SL002 A2 1=30
8-27-93 1:35 P

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 24
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.6 - EAST

1	SE COR PLOT 1 (PINE FLATWOODS ZONE)
2	WETLAND BOUNDARY
3	PINE FLATWOODS ZONE - UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY)
4	NE COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
5	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
6	NE COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
7	ERIOCAULON ZONE/LOWER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
8	NE COR PLOT 4 (ERIOCAULON ZONE)
9	TOP DITCH
10	DITCH BOTTOM AND RHYNCHOSPORA - OPEN WATER ZONE/ERIOCAULON ZONE BOUNDARY
11	DITCH BOTTOM
12	NE COR PLOT 5 (RHYNCHOSPORA - OPEN WATER ZONE) AND RHYNCHOSPORA - OPEN WATER ZONE/ERIOCAULON ZONE BOUNDARY, TOP DITCH
13	PERMANENT PHOTO LOCATION (END TRANSECT 24)

NOTE:
SECTION LOOKING WEST.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

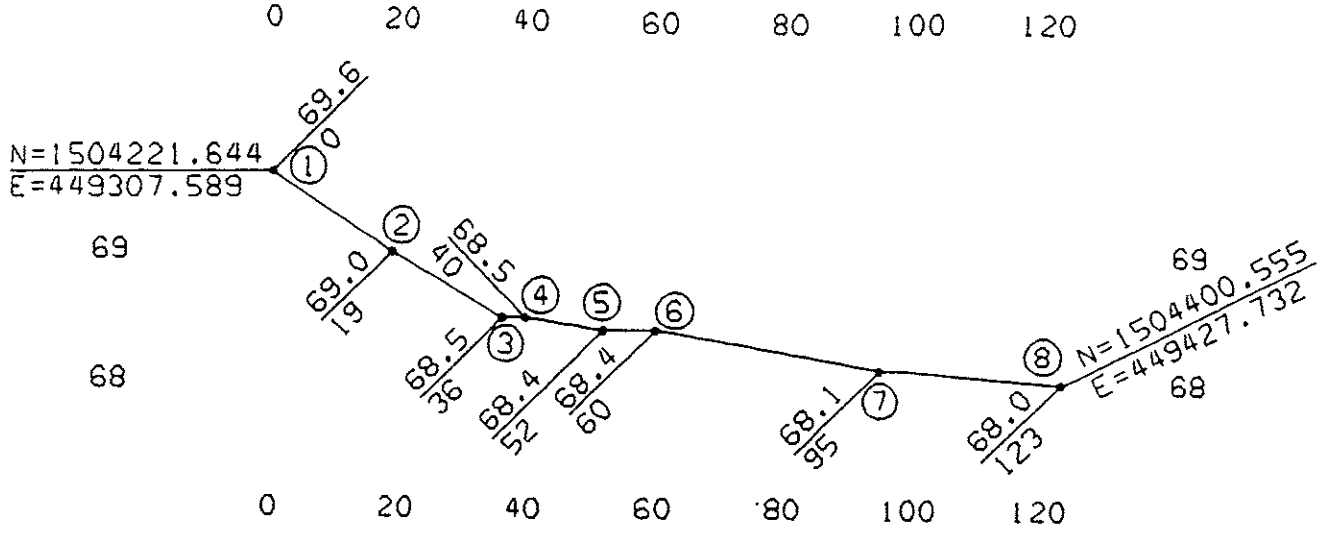
PROJECT 16805-DS-0192
DRAWING NUMBER
REV 0

ELEVATION TRANSECTS

CODE
AREA

07213SHIR ACAD 12_c1
A01SL002 A2 1=30
07/21/93 11:30:36

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993

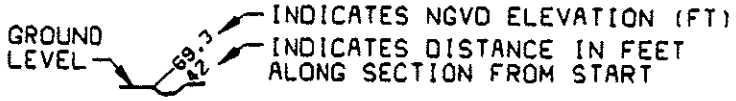


TRANSECT 25
(ESTABLISHED SEPTEMBER 1992)
MITIGATION SITE 3.6 - EAST

1	BEGIN TRANSECT 25, NE COR PLOT 1 (PINE FLATWOODS ZONE), PINE FLATWOODS ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY, SW COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE), WETLAND BOUNDARY
2	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
3	NE CORNER PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
4	LOWER RHYNCHOSPORA - ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
5	NW COR PLOT 4 (ERIOCAULON ZONE)
6	ERIOCAULON ZONE/CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE BOUNDARY
7	SE COR PLOT 5 (CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE)
8	EAST END T-25

NOTE:
SECTION LOOKING NORTHWEST.

LEGEND



BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0191
REV: 0

ELEVATION TRANSECTS

CODE
AREA

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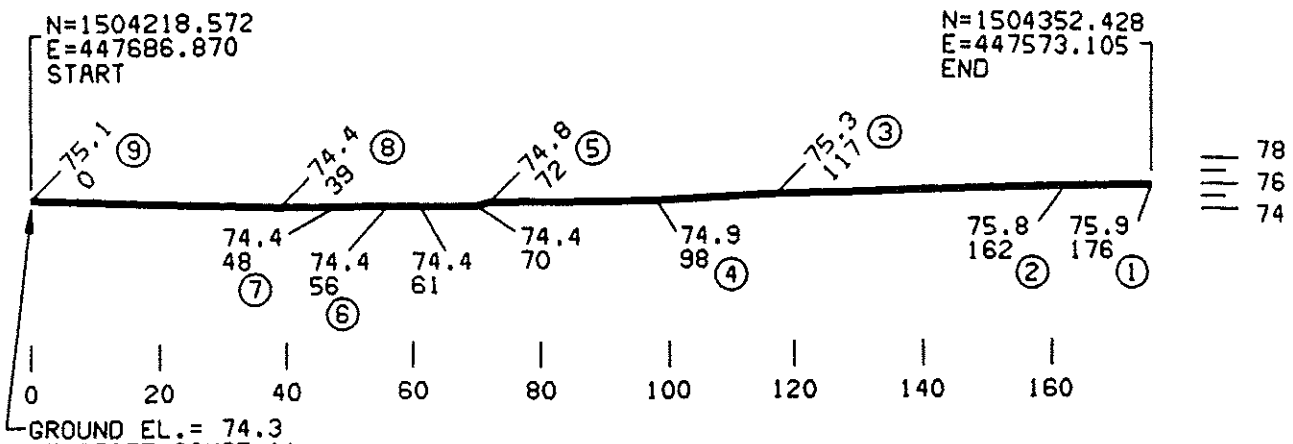
A01SL002 1=30
7-27-93 8:25 A

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION APRIL, 1993



GROUND EL.= 74.3
AT STAFF GAUGE 11
0.00 MARK IS 0.4 FT.
ABOVE GROUND, 2' MARK
AT ELEVATION=76.72
LOCATED 166' SOUTHWEST

TRANSECT 26
(ESTABLISHED MARCH, 1993)
MITIGATION SITE 3.6-WEST

1	BEGIN TRANSECT 26, PINE FLATWOOD ZONE/TALL SERENOA ZONE BOUNDARY, WETLAND BOUNDARY. PLOT 1 SW CORNER (PINE FLATWOOD ZONE)
2	PLOT 2 NW CORNER (TALL SERENOA ZONE)
3	TALL SERENOA ZONE/SERENOA-ILEX ZONE BOUNDARY
4	PLOT 3 NW CORNER (SERENOA-ILEX ZONE)
5	SERENOA-ILEX ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY, PLOT 4 NW CORNER (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
6	LOWER RHYNCHOSPORA-ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
7	PLOT 5 NW CORNER (ERIOCAULON ZONE)
8	ERIOCAULON ZONE BOUNDARY
9	END TRANSECT 26

NOTE:
THIS SECTION LOOKING WEST.

LEGEND

BLACK & VEATCH

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
1	05-14-93	REVISED PER FDER COMMENTS				
0	04-05-93	INITIAL ISSUE				

ENGINEER | DRAWN MRR | CHECKED | DATE

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

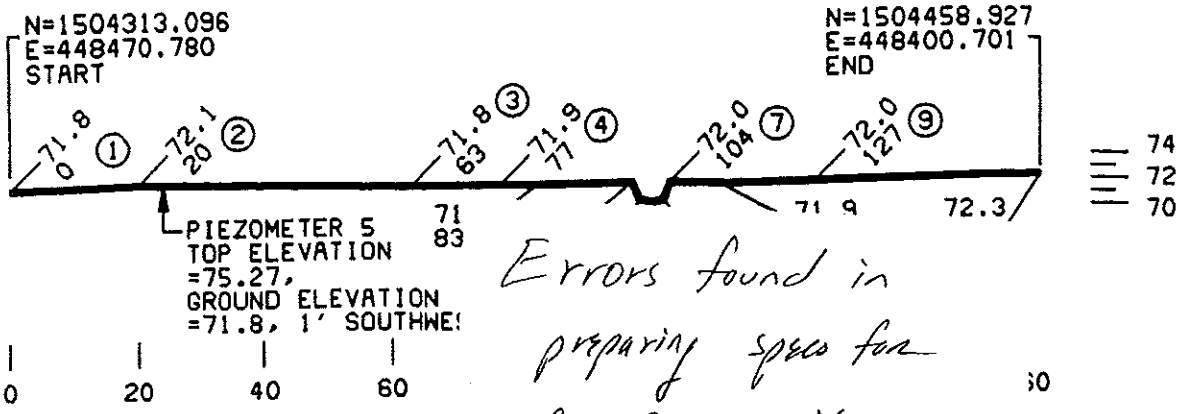
PROJECT 16805 DRAWING NUMBER DS-0174E REV 1

ELEVATION TRANSECTS AT
PIEZOMETERS AND STAFF GAUGES

CODE
AREA

035805AYLOR ACAD 10 c10a
A01SL002 A2 1=30
5-13-93 9:23 A

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION APRIL, 1993



Errors found in preparing specs for 94-96 monitoring. Replacement sheet is on next page.
C. Doud
9/94

NOTE:

CURRENT VEGETATION ZONES DO NOT INCLUDE ERIOCAULON ZONE.

(ESTABLIS
MITIGATI

1	BEGIN TRANSECT 27
2	PINE FLATWOOD ZONE/UPPER RHYN WETLAND BOUNDARY
3	PLOT 2A NW CORNER (UPPER RHYI
4	PLOT 2B NW CORNER (UPPER RHYI
5	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
6	TOP OF DITCH. LOWER RHYNCHOSPORA-ARISTIDA ZONE/RHYNCHOSPORA-OPEN WATER ZONE BOUNDARY
7	TOP OF DITCH. PLOT 5 NW CORNER RHYNCHOSPORA-OPEN WATER ZONE/ LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
8	PLOT 3 NW CORNER (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
9	WETLAND BOUNDARY
10	END TRANSECT 27

NOTE:
ALL SECTIONS LOOKING NORTH.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN MRR
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
1	05-14-93	REVISED PER FDER COMMENTS				
0	04-05-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805-DS-0174F | DRAWING NUMBER | REV 1

ELEVATION TRANSECTS AT PIEZOMETERS AND STAFF GAUGES

CODE
AREA

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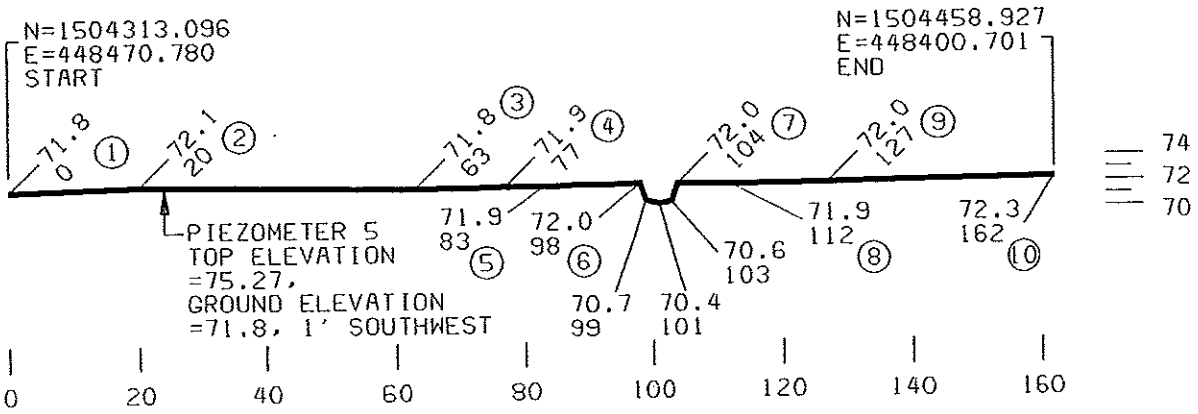
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION APRIL, 1993



NOTE:

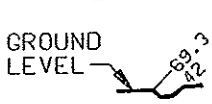
CURRENT VEGETATION ZONES DO NOT INCLUDE ERIOCAULON ZONE.

TRANSECT 27
(ESTABLISHED MARCH, 1993)
MITIGATION SITE 3.6-WEST

1	BEGIN TRANSECT 27
2	PINE FLATWOOD ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY, WETLAND BOUNDARY
3	PLOT 2A NW CORNER (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
4	PLOT 2B NW CORNER (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
5	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
6	TOP OF DITCH, LOWER RHYNCHOSPORA-ARISTIDA ZONE/RHYNCHOSPORA-OPEN WATER ZONE BOUNDARY
7	TOP OF DITCH, PLOT 5 NW CORNER RHYNCHOSPORA-OPEN WATER ZONE/ LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
8	PLOT 3 NW CORNER (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
9	WETLAND BOUNDARY
10	END TRANSECT 27, NW CORNER PLOT 1 (PINE FLATWOOD ZONE)

NOTE:
ALL SECTIONS LOOKING NORTH.

LEGEND



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CHECKED	DATE

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ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805-DS-0174F | DRAWING NUMBER | REV 2

ELEVATION TRANSECTS AT PIEZOMETERS AND STAFF GAUGES

CODE

AREA

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A01SL002 1=30
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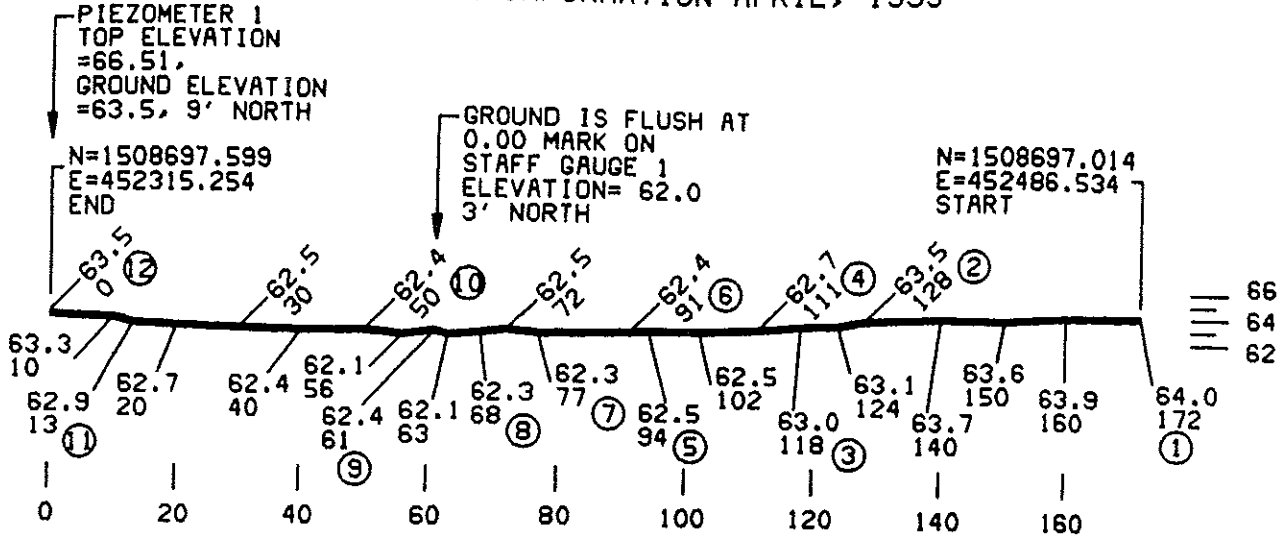
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION APRIL, 1993

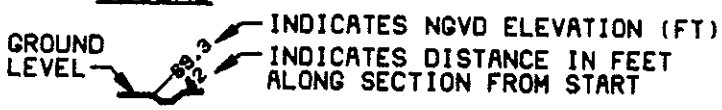


TRANSECT 28
(ESTABLISHED MARCH, 1993)
MITIGATION SITE 3.5

1	BEGIN TRANSECT 28, PLOT 1 NW CORNER (PINE FLATWOOD)
2	PINE FLATWOOD ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY, WETLANDS BOUNDARY
3	PLOT 2 NW CORNER (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
4	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
5	PLOT 3 NW CORNER (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
6	LOWER RHYNCHOSPORA-ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
7	PLOT 4 NW CORNER (ERIOCAULON ZONE)
8	DITCH TOP, ERIOCAULON ZONE/RHYNCHOSPORA-OPEN WATER ZONE BOUNDARY
9	PLOT 5 NW CORNER (RHYNCHOSPORA-OPEN WATER ZONE), RHYNCHOSPORA-OPEN WATER BOUNDARY
10	DITCH TOP
11	WETLAND BOUNDARY
12	END TRANSECT 28

NOTE:
ALL SECTIONS LOOKING NORTH.

LEGEND



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ENGINEER	DRAWN MRR
CHECKED	DATE

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0	04-05-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT	DRAWING NUMBER	REV
16805	DS-0174H	1

ELEVATION TRANSECTS AT
PIEZOMETERS AND STAFF GAUGES

CODE	
AREA	

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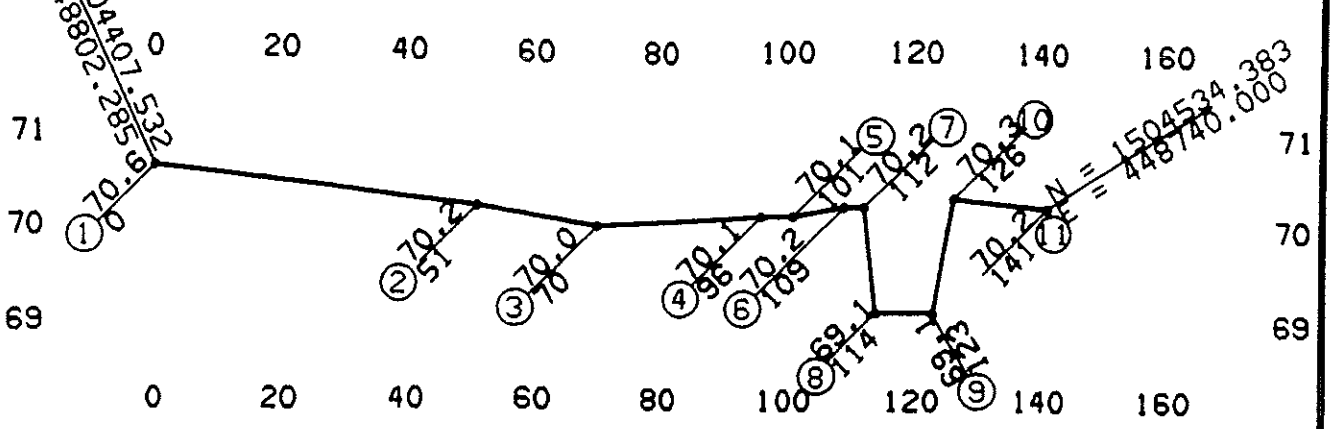
A01SL002 A2 1=30
5-13-93 9:41 A

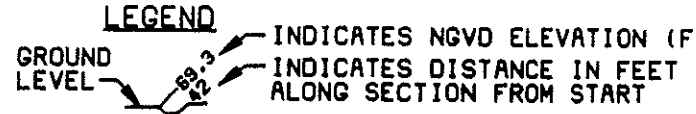
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 29
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	BEGIN TRANSECT 29 & NE COR PLOT 1 (PINE FLATWOOD ZONE)
2	WETLAND BOUNDARY & PINE FLATWOOD ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE
	BOUNDARY
3	NW COR PLOT 2A (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
4	NW COR PLOT 2B (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
5	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
6	NE COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
7	LOWER RHYNCHOSPORA-ARISTIDA ZONE/RHYNCHOSPORA-OPEN WATER ZONE BOUNDARY &
	TOP DITCH
8	BOTTOM DITCH
9	NW COR PLOT 5 (RHYNCHOSPORA-OPEN WATER ZONE), RHYNCHOSPORA-OPEN WATER ZONE
	/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY, BOTTOM DITCH
10	TOP DITCH
11	END TRANSECT 29 & WETLAND BOUNDARY

NOTE:
- SECTION LOOKING WEST.
- NO ERIOCAULON ZONE THEREFORE NO PLOT 4
- TRANSECT 29 RUNS SOUTH TO NORTH



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ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

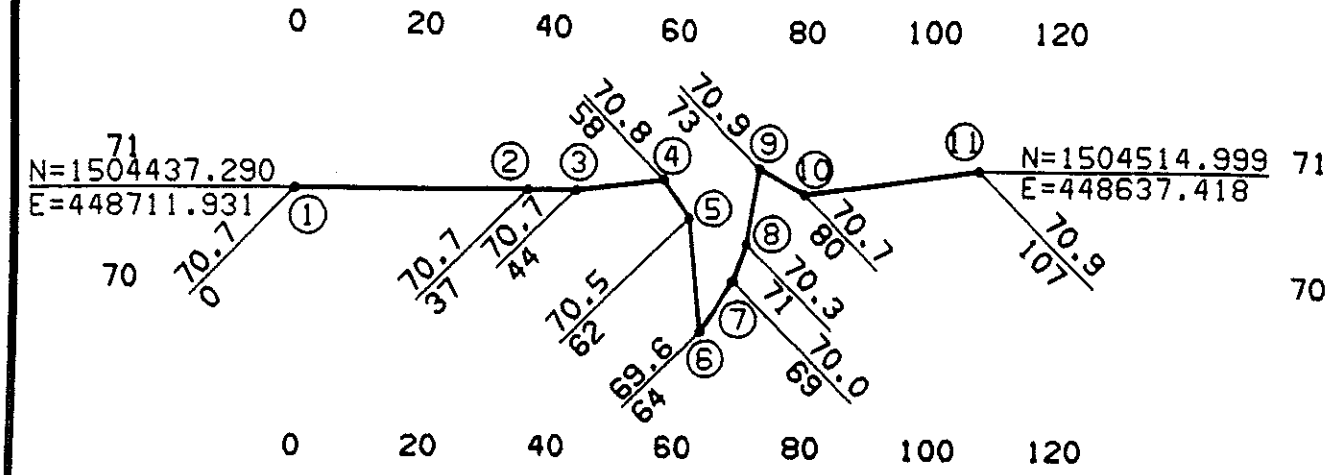
PROJECT DRAWING NUMBER	REV
16805-DS-0215	0

ELEVATION TRANSECTS

CODE	
AREA	

03580\mILOR ACAD 10 c10a
A01SL002 A2 1=30
8-27-93 2:51 P

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 30
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	BEGIN TRANSECT 30, NW COR PLOT 1 (PINE FLATWOOD ZONE)
2	UPPER RHYNCHOSPORA - ARISTIDA ZONE/PINE FLATWOOD ZONE BOUNDARY AND WETLAND BOUNDARY
3	NW COR PLOT 2A (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
4	NW COR PLOT 2B (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
5	UPPER RHYNCHOSPORA - ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY, TOP DITCH
6	BOTTOM OF DITCH
7	NW COR PLOT 4 (ERIOCAULON ZONE)
8	BOTTOM DITCH
9	TOP DITCH AND ERIOCAULON ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
10	NW COR PLOT 2C (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
11	WETLAND BOUNDARY, END TRANSECT 30

NOTE: TRANSECT HAS ONLY THREE PLANT COMMUNITIES
TRANSECT 30 RUNS SOUTH TO NORTH

NOTE:
SECTION LOOKING EAST.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN JWS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	07-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805 DRAWING NUMBER DS-0190 REV 0

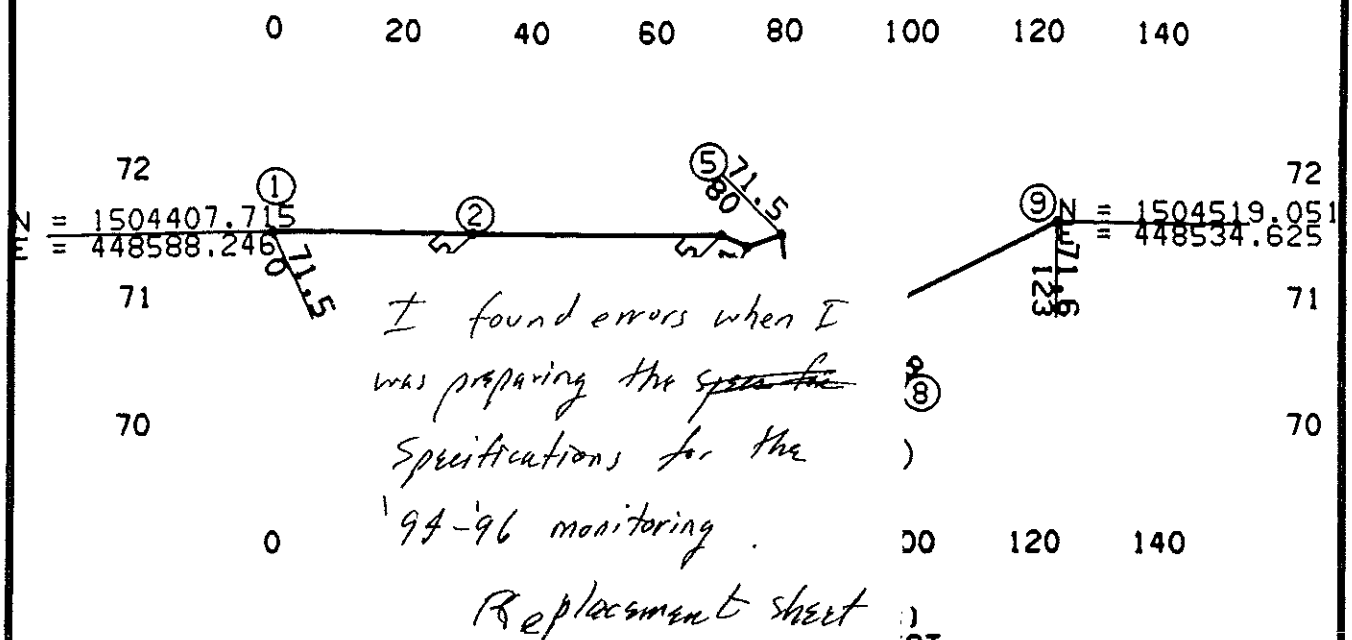
ELEVATION TRANSECTS

CODE

AREA

035805 ACAD 12_c1
A01SL002 A2 1=30
8-30-93 1:47 P

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



I found errors when I was preparing the ~~specific~~ Specifications for the '94-'96 monitoring. Replacement sheet is on next page.

C. David 9/94

1	PINE FLATWOC ... DA ZONE BOUNDARY, WETLAND BOUNDARY, NW
2	NW COR PLOT ... IE)
3	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
4	NW COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
5	TOP DITCH
6	BOTTOM DITCH ERIOCAULON ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
7	NW COR PLOT 4 (ERIOCAULON ZONE) AND ERIOCAULON ZONE/LOWER RHYNCHOSPORA - ARISTIDA ZONE AND BOTTOM DITCH
8	TOP DITCH
9	WETLAND BOUNDARY AND END TRANSECT 31

NOTE:
TRANSECT 31 RUNS SOUTH TO NORTH
SECTION LOOKING WEST.

Note:
No Rhynchospora - Open water zone, therefore no Plot 5.

LEGEND

GROUND LEVEL — 89.3 / 42 — 89.3 INDICATES NGVD ELEVATION (FT); 42 INDICATES DISTANCE IN FEET ALONG SECTION FROM START

BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
1	9-07-94			CD		
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0189
REV: 0

ELEVATION TRANSECTS

CODE
AREA

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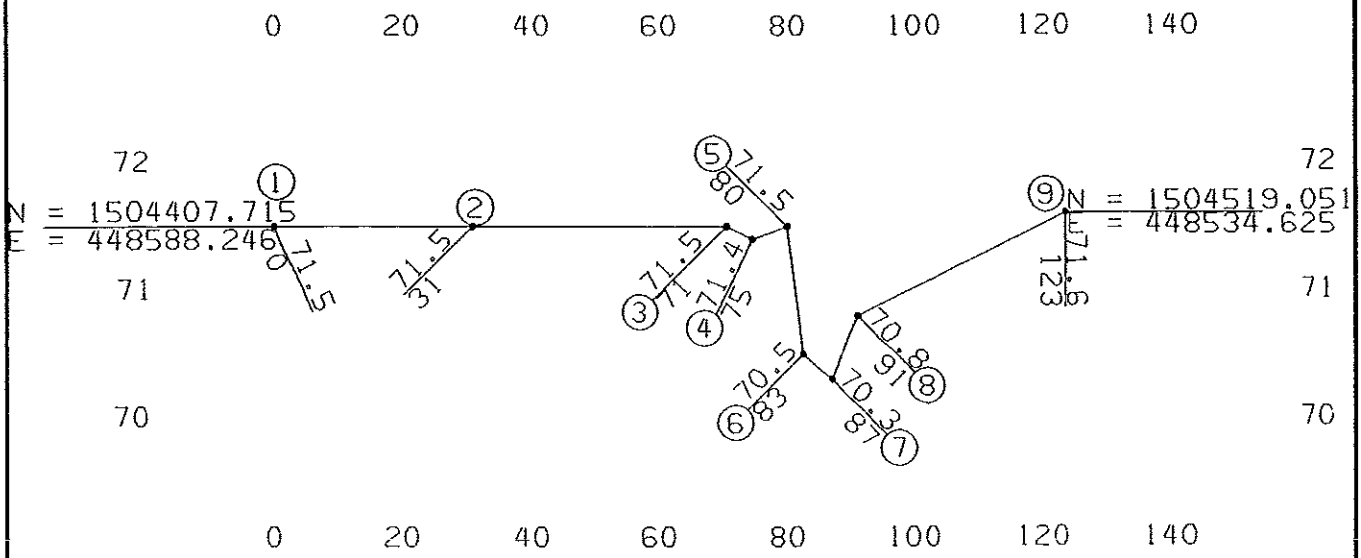
A01SL002 A2 1=30
8-30-93 1:44 P

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993

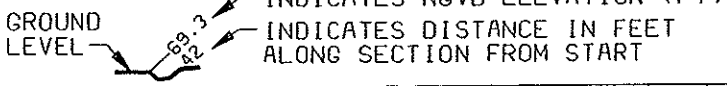


TRANSECT 31
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	PINE FLATWOODS ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY, WETLAND
	BOUNDARY, NW COR PLOT 1 AND BEGIN TRANSECT 31
2	NW COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
3	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
4	NW COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
5	TOP DITCH
6	BOTTOM DITCH ERIOCAULON ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
7	NW COR PLOT 4 (ERIOCAULON ZONE) AND ERIOCAULON ZONE/LOWER RHYNCHOSPORA -
	ARISTIDA ZONE AND BOTTOM DITCH
8	TOP DITCH
9	WETLAND BOUNDARY AND END TRANSECT 31

NOTE:
- TRANSECT 31 RUNS SOUTH TO NORTH
- SECTION LOOKING WEST.
- NO RHYNCHOSPORA - OPEN WATER ZONE, THEREFORE NO PLOT 5

LEGEND



BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
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0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0189
REV: 1

ELEVATION TRANSECTS

CODE
AREA

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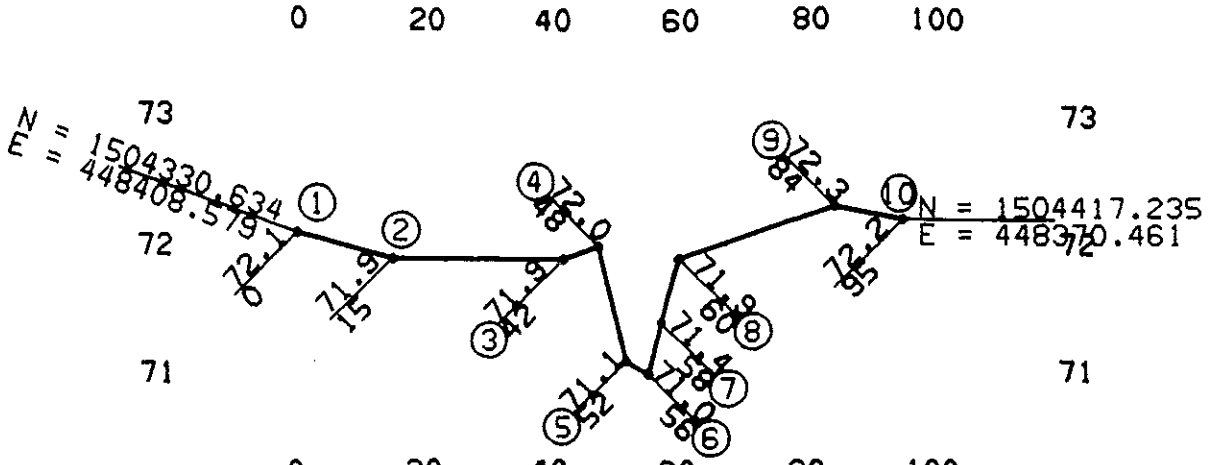
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 32
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	NW COR PLOT 1 (PINE FLATWOODS ZONE)
2	PINE FLATWOODS ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY AND
	WETLAND BOUNDARY
3	NW COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
4	UPPER RHYNCHOSPORA - ARISTIDA ZONE/ERIOCAULON ZONE
5	BOTTOM DITCH
6	BOTTOM DITCH, NW COR PLOT 4 (ERIOCAULON ZONE), ERIOCAULON ZONE/LOWER
	RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
7	TOP DITCH
8	NW COR PLOT 3 (LOWER RHYNCHOSPORA ARISTIDA ZONE)
8	WETLAND BOUNDARY
10	END TRANSECT 32

NOTE:
- TRANSECT 32 RUNS SOUTH TO NORTH
- PLANT COMUNITY SHIFTS WILL BE MONITORED SOUTH OF DITCH
- NO RHYNCHOSPORA - OPEN WATER ZONE, THEREFORE NO PLOT 5

NOTE:
SECTION LOOKING WEST.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805 DRAWING NUMBER DS-0188 REV 0

ELEVATION TRANSECTS

CODE

AREA

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A01SL002 A2 1=30
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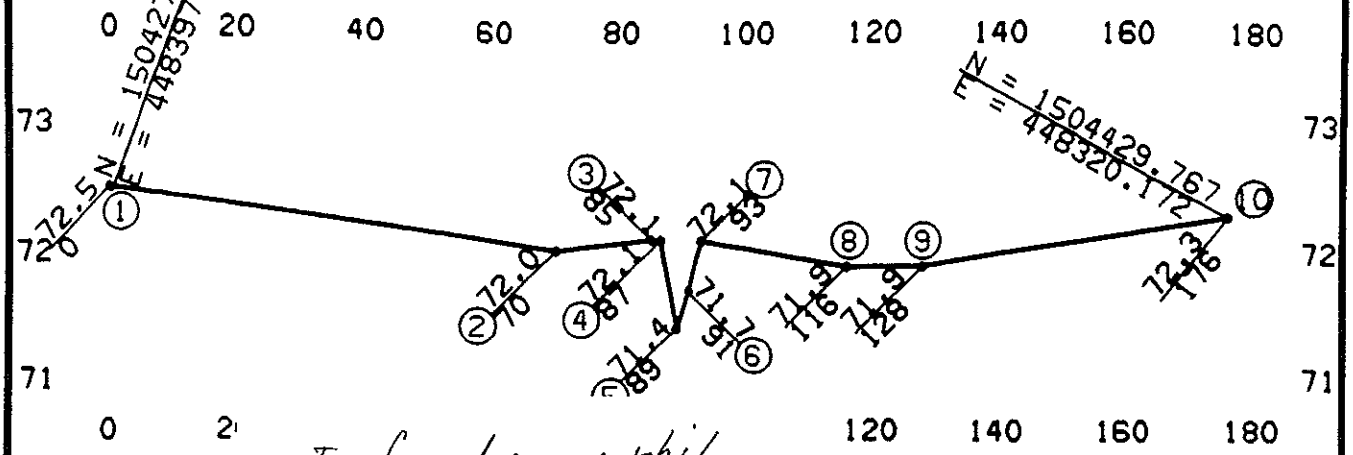
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



I found errors while preparing the specs for '94-'96 monitoring. Replacement sheet is next page.
C. Doud 9/94

1	BEGIM — TWOOD ZONE), PINE FLATWOOD ZONE/
	UPPER — AND WETLAND BOUNDARY
2	UPPER — NCHOSPORA-ARISTIDA ZONE BOUNDARY
3	NW COR — DA ZONE)
4	TOP DI
5	BOTTOM — DA ZONE/ERIOCAULON ZONE BOUNDARY
6	BOTTOM
7	TOP DI — AND ERIOCAULON ZONE/LOWER
	RHYNCH
8	LOWER — NCHOSPORA-ARISTIDA ZONE BOUNDARY
8	NW COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
10	WETLAND BOUNDARY AND UPPER RHYNCHOSPORA - ARISTIDA ZONE/PINE FLATWOOD ZONE
	BOUNDARY AND END TRANSECT 33

1993)
- WEST

NOTE:
- TRANSECT 33 RUNS SOUTH TO NORTH
- PLANT COMUNITY SHIFTS WILL BE MEASURED SOUTH OF DITCH
- NO RHYNCHOSPORA - OPEN WATER ZONE, THEREFORE NO PLOT 5

NOTE:
SECTION LOOKING WEST.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
1	9-07-94			CD		
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0187
REV: 0

ELEVATION TRANSECTS

CODE
AREA

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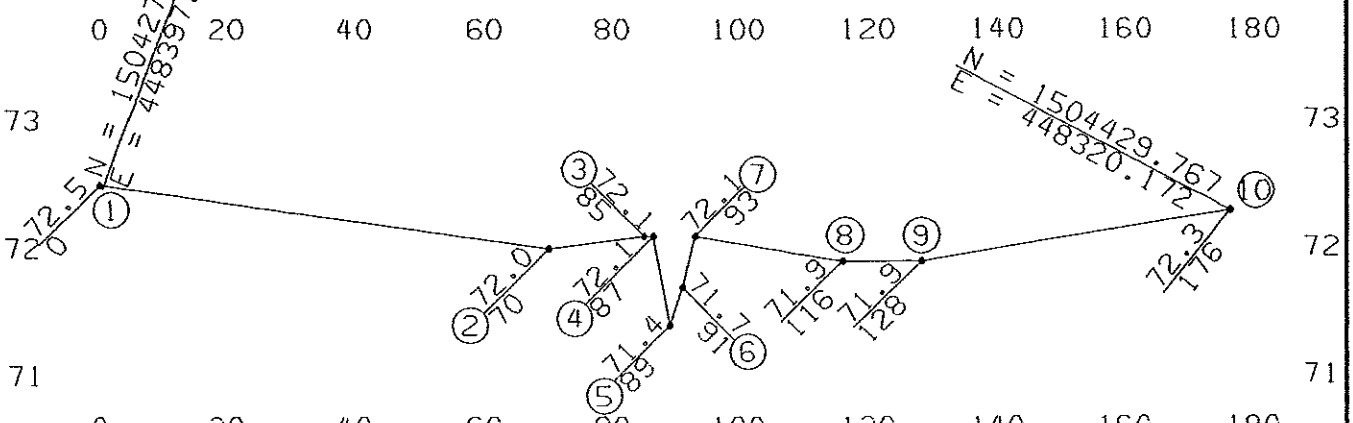
A01SL002 A2 1=30
8-30-93 1:10 P

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



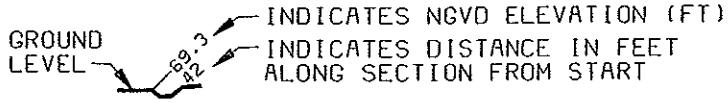
TRANSECT 33
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	BEGIM TRANSECT 33, NE COR PLOT 1 (PINE FLATWOOD ZONE), PINE FLATWOOD ZONE/
	UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY AND WETLAND BOUNDARY
2	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
3	NW COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
4	TOP DITCH
5	BOTTOM DITCH AND LOWER RHYNCHOSPORA-ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
6	BOTTOM DITCH
7	TOP DITCH, NW COR PLOT 4 (ERIOCAULON ZONE) AND ERIOCAULON ZONE/LOWER
	RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
8	LOWER RHYNCHOSPORA-ARISTIDA ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
8	NW COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
10	WETLAND BOUNDARY AND UPPER RHYNCHOSPORA - ARISTIDA ZONE/PINE FLATWOOD ZONE
	BOUNDARY AND END TRANSECT 33

NOTE:
- TRANSECT 33 RUNS SOUTH TO NORTH
- PLANT COMUNITY SHIFTS WILL BE MEASURED SOUTH OF DITCH
- NO RHYNCHOSPORA - OPEN WATER ZONE, THEREFORE NO PLOT 5

NOTE:
SECTION LOOKING WEST.

LEGEND



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ENGINEER	DRAWN GAS
CHECKED	DATE

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1	9-7-94	GENERAL REVISIONS				
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

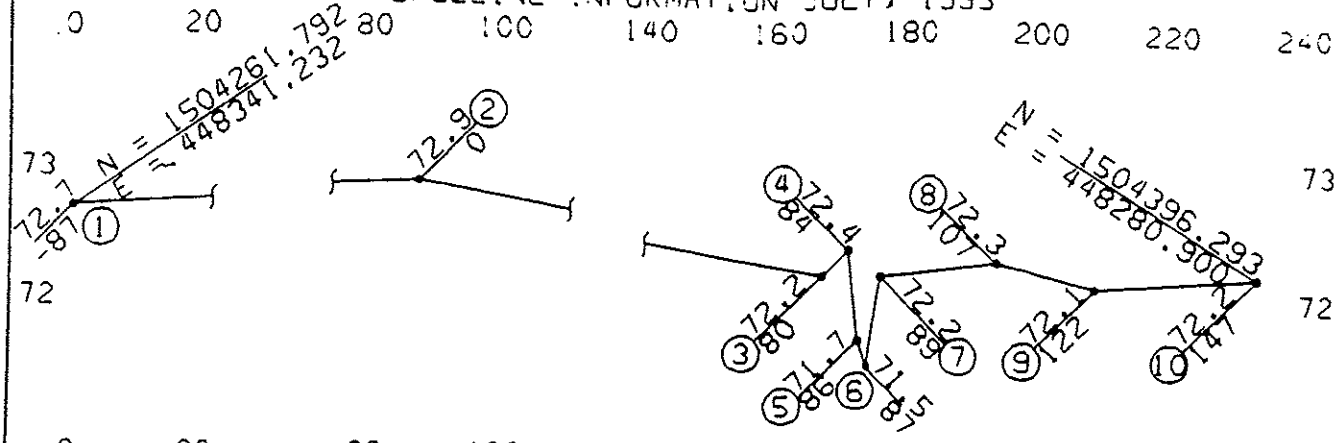
PROJECT	DRAWING NUMBER	REV
16805	DS-0187	1

ELEVATION TRANSECTS

CODE	
AREA	

03580SAILOR ACAD 10 c10a
A01SL002 A2 30
8-30-93 1:10

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 34
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	NW COR PLOT 1
2	BEGIN TRANSECT 34, GROUND SHOT AT IRON BAR
3	NW COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
4	TOP DITCH, LOWER RHYNCHOSPORA - ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
5	BOTTOM DITCH
6	BOTTOM DITCH
7	TOP DITCH, NW COR PLOT 4 (ERIOCAULON ZONE), ERIOCAULON ZONE/LOWER
	RHYCHOSPORA - ARISTIDA ZONE BOUNDARY
8	LOWER RHYNCHOSPORA-ARISTIDA ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
8	NW COR PLOT 2 (UPPER RHYNCHOSPORA ARISTIDA ZONE)
10	UPPER RHYNCHOSPORA-ARISTIDA ZONE/PINE FLATWOODS ZONE BOUNDARY WETLAND,
	BOUNDARY, END TRANSECT 34

NOTE:
- THIS TRANSECT BEGINS ON SOUTH END
- PLOT 1 IS LOCATED 87' SOUTH OF TRANSECT END
- PLANT COMMUNITY SHIFTS WILL BE MEASURED NORTH OF DITCH
- NO RHYNCHOSPORA-OPEN WATER ZONE, THEREFORE NO PLOT 5

NOTE:
SECTION LOOKING EAST.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLN
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0186
REV: 0

ELEVATION TRANSECTS

CODE
AREA

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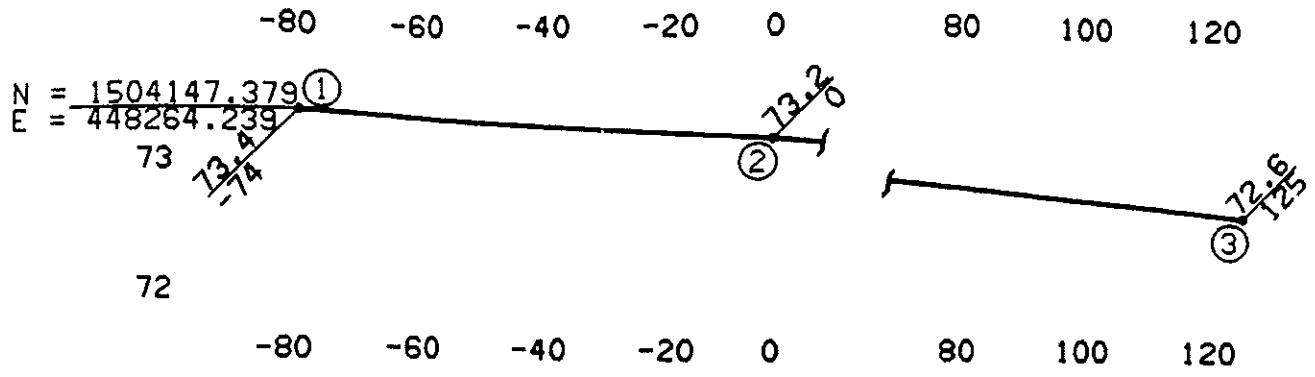
A01SL002 A2 1=30
7-27-93 4:30 P

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 35
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	NW COR PLOT 1 (PINE FLATWOODS ZONE), PINE FLATWOODS ZONE/UPPER RHYNCHOSPORA
	ARISTIDA ZONE BOUNDARY AND WETLAND BOUNDARY
2	BEGIN TRANSECT 35
3	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
4	TOP DITCH, LOWER RHYNCHOSPORA-ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
5	BOTTOM DITCH
6	BOTTOM DITCH
7	NW COR PLOT 4 (ERIOCAULON ZONE) AND ERIOCAULON ZONE/LOWER RHYNCHOSPORA-
	ARISTIDA ZONE BOUNDARY, TOP DITCH
8	NE COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
9	LOWER RHYNCHOSPORA-ARISTIDA ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
10	NW COR PLOT 2 (UPPER RHYNCHOSPORA ARISTIDA ZONE)
11	UPPER RHYNCHOSPORA ARISTIDA ZONE-PINE FLATWOODS ZONE, WETLAND BOUNDARY
	AND END TRANSECT 35

NOTE:
- TRANSECT 35 RUNS SOUTH TO NORTH
- PLOT 1 LOCATED 74 FT SOUTH OF BEGINNING OF TRANSECT 35
- NO RHYNCHOSPORA-OPEN WATER ZONE; THEREFORE NO PLOT 5
- PLANT COMMUNITY SHIFTS WILL BE MONITORED NORTH OF DITCH

NOTE:
ALL SECTIONS LOOKING WEST.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT	DRAWING NUMBER	REV
16805-DS-0185A		0

ELEVATION TRANSECTS

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AREA	

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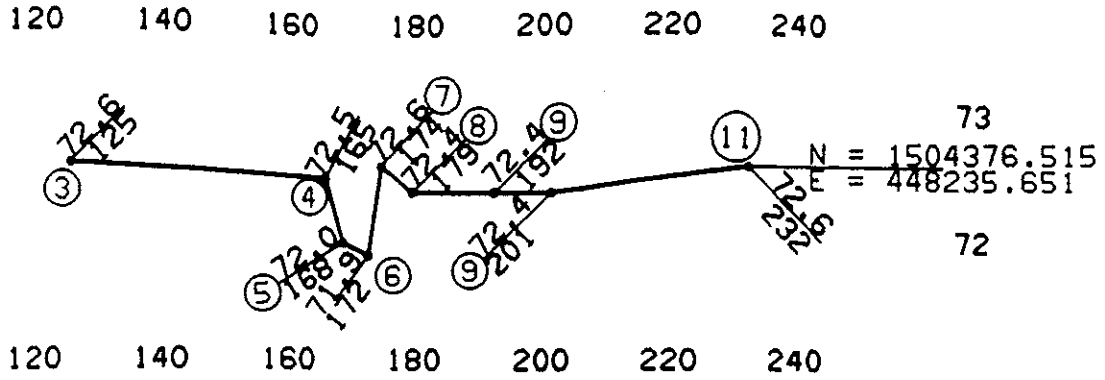
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 35
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	NW COR PLOT 1 (PINE FLATWOODS ZONE), PINE FLATWOODS ZONE/UPPER RHYNCHOSPORA
	ARISTIDA ZONE BOUNDARY AND WETLAND BOUNDARY
2	BEGIN TRANSECT 35
3	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
4	TOP DITCH, LOWER RHYNCHOSPORA-ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
5	BOTTOM DITCH
6	BOTTOM DITCH
7	NW COR PLOT 4 (ERIOCAULON ZONE) AND ERIOCAULON ZONE/LOWER RHYNCHOSPORA-
	ARISTIDA ZONE BOUNDARY, TOP DITCH
8	NE COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
9	LOWER RHYNCHOSPORA-ARISTIDA ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
10	NW COR PLOT 2 (UPPER RHYNCHOSPORA ARISTIDA ZONE)
11	UPPER RHYNCHOSPORA ARISTIDA ZONE-PINE FLATWOODS ZONE, WETLAND BOUNDARY
	AND END TRANSECT 35

NOTE:
- TRANSECT 35 RUNS SOUTH TO NORTH
- PLOT 1 LOCATED 74 FT SOUTH OF BEGINNING OF TRANSECT 35
- NO RHYNCHOSPORA-OPEN WATER ZONE, THEREFORE NO PLOT 5
- PLANT COMMUNITY SHIFTS WILL BE MONITORED NORTH OF DITCH

NOTE:
ALL SECTIONS LOOKING WEST.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT	DRAWING NUMBER	REV
16805	DS-0185B	0

ELEVATION TRANSECTS

CODE

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ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
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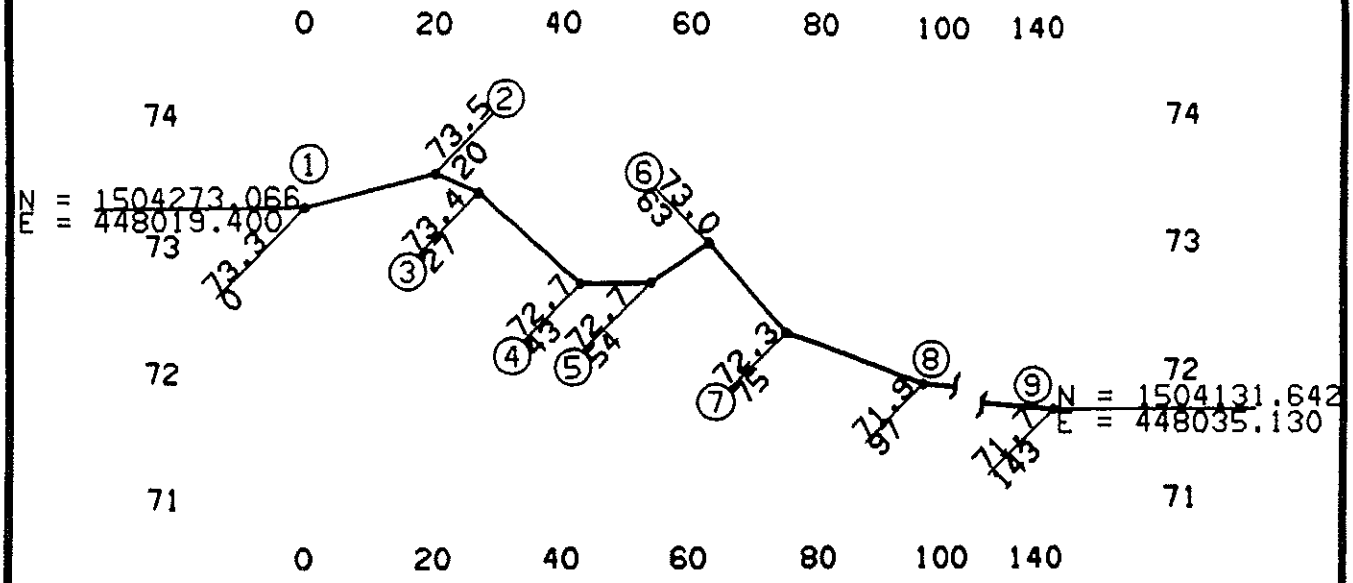
BASELINE INFORMATION JULY, 1993

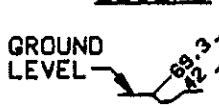


TRANSECT 36
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	BEGIN TRANSECT 36, SW COR PLOT 1 (PINE FLATWOODS ZONE)
2	PINE FLATWOODS ZONE/UPPER RHYNCHOSPORA-ARISTIDA ZONE AND WETLAND BOUNDARY
3	NW COR PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
4	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
5	NW COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
6	LOWER RHYNCHOSPORA-ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
7	NW COR PLOT 4 (ERIOCAULON ZONE)
8	ERIOCAULON ZONE/CYPRESS DOME-RHYNCHOSPORA-OPEN WATER ZONE BOUNDARY
9	NE COR PLOT 5 (CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE BOUNDARY) END TRANSECT 36

NOTE:
ALL SECTIONS LOOKING EAST.

LEGEND



BLACK & VEATCH

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CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT	DRAWING NUMBER	REV
16805-DS-0184		0

ELEVATION TRANSECTS

CODE	
AREA	

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A01SL002 A2 1=30
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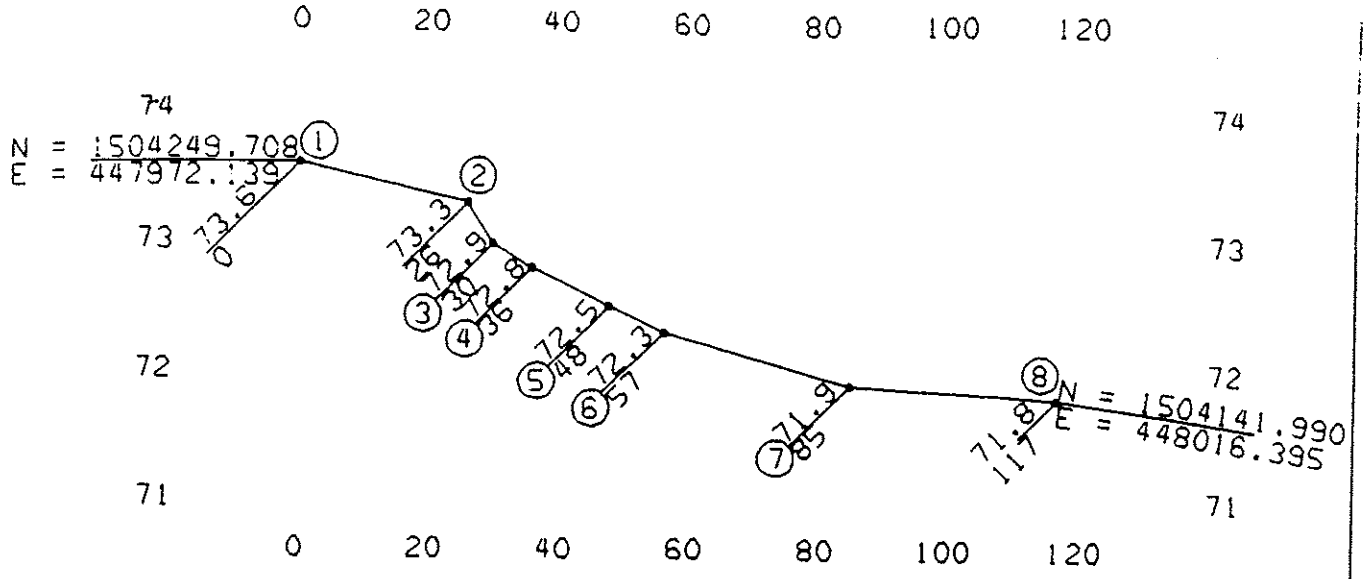
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 37
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	BEGIN TRANSECT 37, GROUND AT IRON BAR, SW COR PLOT 1 (PINE FLATWOODS ZONE)
2	UPPER RHYNCHOSPORA-ARISTIDA ZONE/PINE FLATWOOD ZONE BOUNDARY, AND WETLAND
	BOUNDARY
3	NW COR PLOT 2 (UPPER RHYNCHOSPORA-ARISTIDA ZONE)
4	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
	AND NW COR PLOT 3 (LOWER RHYNCHOSPORA-ARISTIDA ZONE)
5	LOWER RHYNCHOSPORA-ARISTIDA ZONE/ERIOCAULON ZONE BOUNDARY
6	NW COR PLOT 4 (ERIOCAULON ZONE)
7	ERIOCAULON ZONE/CYPRESS DOME - RHYNCHOSPORA OPEN WATER ZONE BOUNDARY
8	NE COR PLOT 5 (CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE)

NOTE:
SECTION LOOKING EAST.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	7-28-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT 16805-OS-0183 | DRAWING NUMBER | REV 0

ELEVATION TRANSECTS

CODE

AREA

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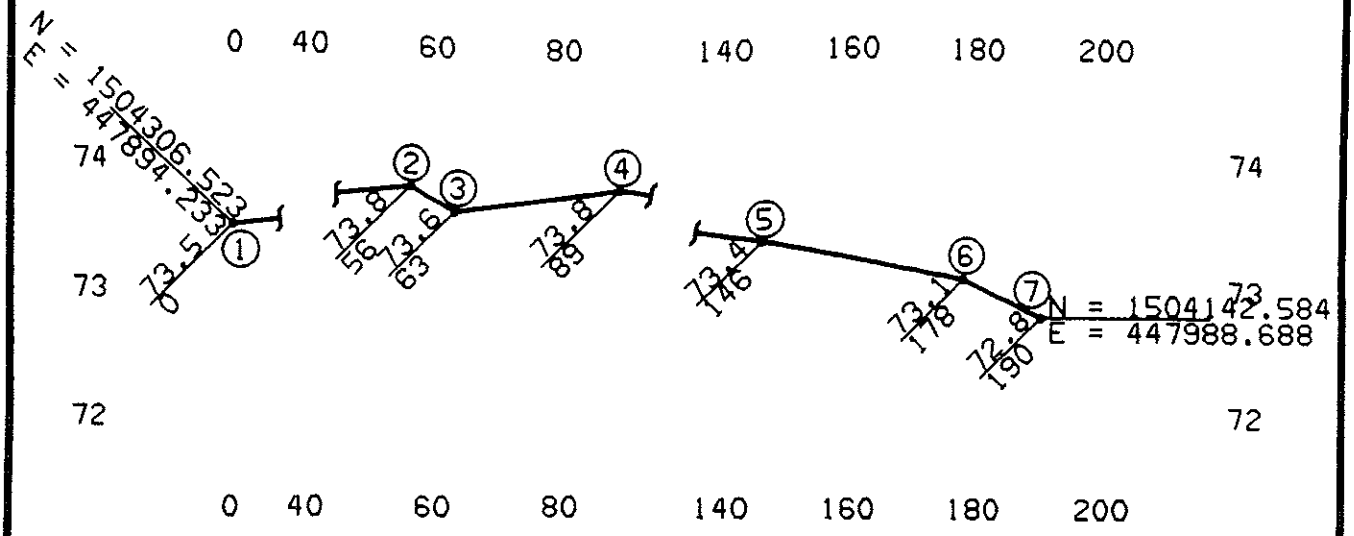
07/22/93 15:19:07

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993

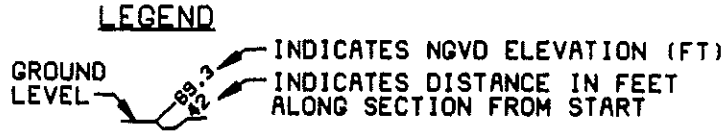


TRANSECT 38
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	BEGIN TRANSECT 38, WETLAND BOUNDARY, SW COR PLOT 1 (PINE FLATWOOD ZONE)
	PINE FLATWOOD ZONE/UPPER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
2	NW COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
3	UPPER RHYNCHOSPORA-ARISTIDA ZONE/LOWER RHYNCHOSPORA-ARISTIDA ZONE BOUNDARY
4	NW COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
5	NW COR PLOT 4, (ERIOCAULON ZONE), LOWER RHYNCHOSPORA - ARISTIDA ZONE/
	ERIOCAULON ZONE BOUNDARY
6	ERIOCAULON ZONE/CYPRESS DOME-RHYNCHOSPORA-OPEN WATER ZONE BOUNDARY
7	NE COR PLOT 5 (CYPRESS DOME - RHYNCHOSPORA - OPEN WATER ZONE)

NOTE:
ALL SECTIONS LOOKING EAST.

LEGEND



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CHECKED	DATE

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0	12-1-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER	REV
16805-DS-0182	0

ELEVATION TRANSECTS

CODE	
AREA	

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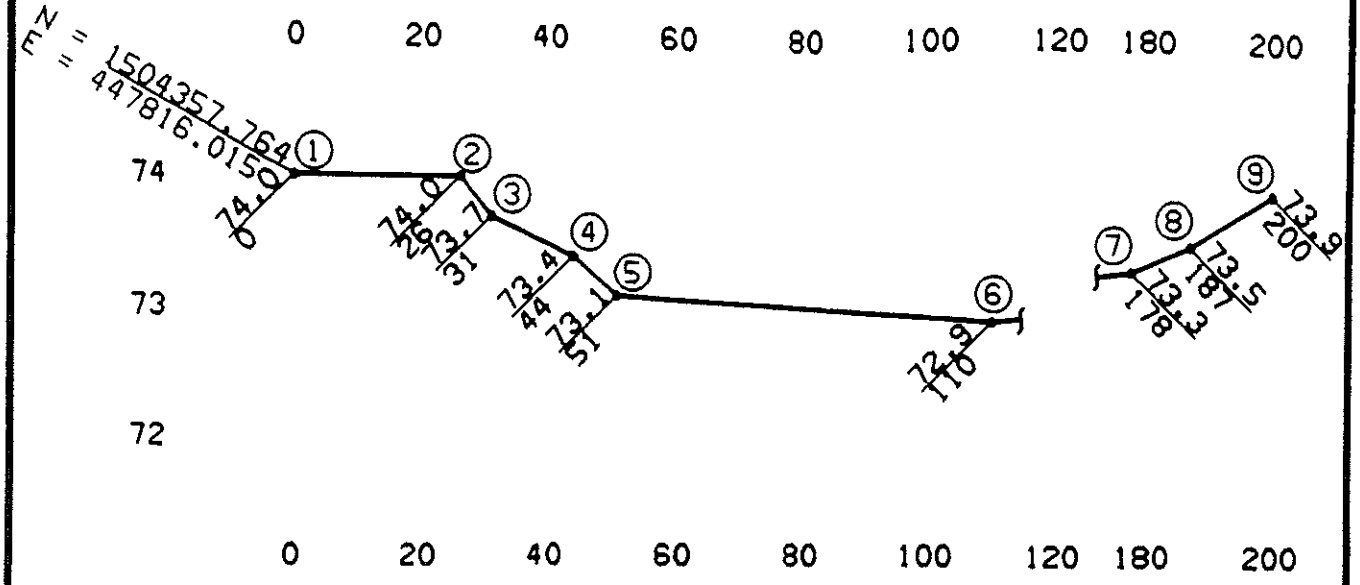
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



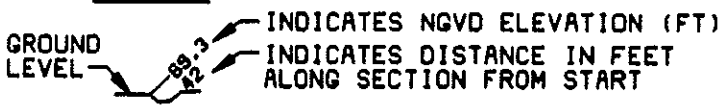
TRANSECT 39
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	BEGIN TRANSECT 39, SE COR PLOT 1 (PINE FLATWOODS)
2	WETLAND BOUNDARY, LOWER RHYNCHOSPORA-ARISTIDA/PINE FLATWOOD ZONE BOUNDARY
3	NW COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
4	ERIOCAULON ZONE / LOWER RHYNCHOSPORA ARISTIDA ZONE BOUNDARY
5	NW COR PLOT 4A (ERIOCAULON ZONE)
6	NW COR PLOT 4B (ERIOCAULON ZONE)
7	ERIOCAULON ZONE / LOWER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
8	LOWER RHYNCHOSPORA - ARISTIDA ZONE / UPPER RHYNCHOSPORA ZONE BOUNDARY
9	NW COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
10	GROUND AT IRON BAR, WETLAND BOUNDARY, END TRANSECT 39

NOTE: IN THIS TRANSECT
- NO RHYNCHOSPORA - OPEN WATER ZONE
- PLOTS 4 AND 5 ARE IN ERIOCAULON ZONE

NOTE:
SECTION LOOKING EAST.

LEGEND



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CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	12-1-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0181A
REV: 0

ELEVATION TRANSECTS

CODE
AREA

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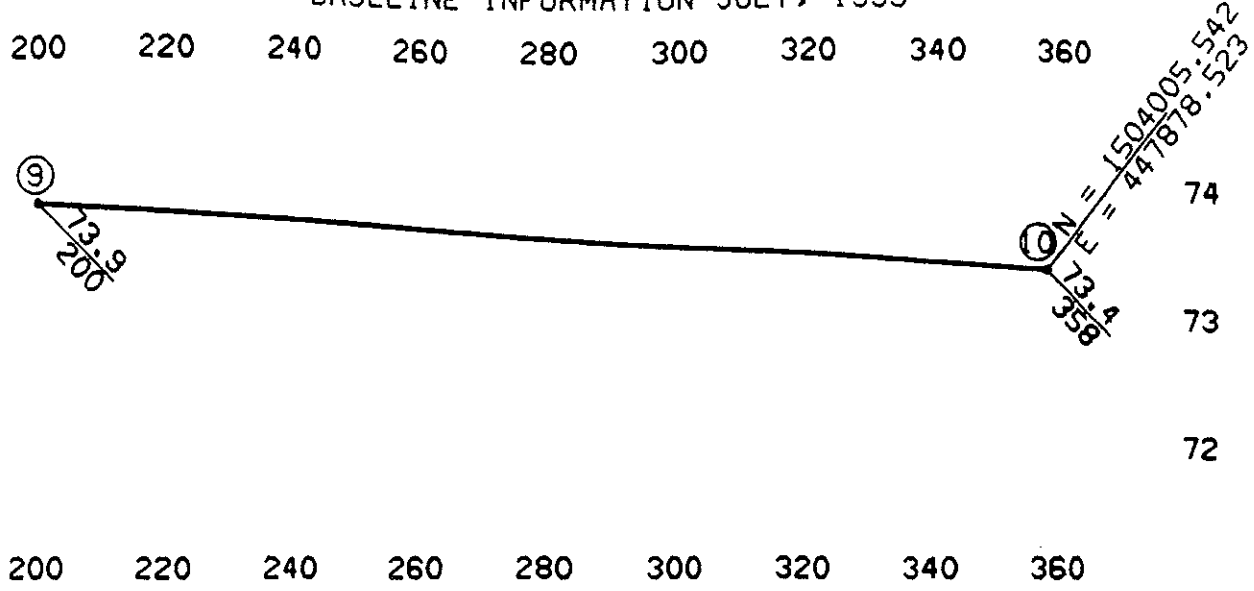
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



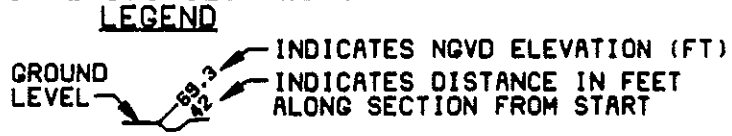
TRANSECT 39
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	BEGIN TRANSECT 39, SE COR PLOT 1 (PINE FLATWOODS)
2	WETLAND BOUNDARY, LOWER RHYNCHOSPORA-ARISTIDA/PINE FLATWOOD ZONE BOUNDARY
3	NW COR PLOT 3 (LOWER RHYNCHOSPORA - ARISTIDA ZONE)
4	ERIOCAULON ZONE / LOWER RHYNCHOSPORA ARISTIDA ZONE BOUNDARY
5	NW COR PLOT 4A (ERIOCAULON ZONE)
6	NW COR PLOT 4B (ERIOCAULON ZONE)
7	ERIOCAULON ZONE / LOWER RHYNCHOSPORA - ARISTIDA ZONE BOUNDARY
8	LOWER RHYNCHOSPORA - ARISTIDA ZONE / UPPER RHYNCHOSPORA ZONE BOUNDARY
9	NW COR PLOT 2 (UPPER RHYNCHOSPORA - ARISTIDA ZONE)
10	GROUND AT IRON BAR, WETLAND BOUNDARY, END TRANSECT 39

NOTE: IN THIS TRANSECT
- NO RHYNCHOSPORA - OPEN WATER ZONE
- PLOTS 4 AND 5 ARE IN ERIOCAULON ZONE

NOTE:
SECTION LOOKING EAST.

LEGEND



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ENGINEER	DRAWN GAS
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	12-1-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0181B
REV: 0

ELEVATION TRANSECTS

CODE
AREA

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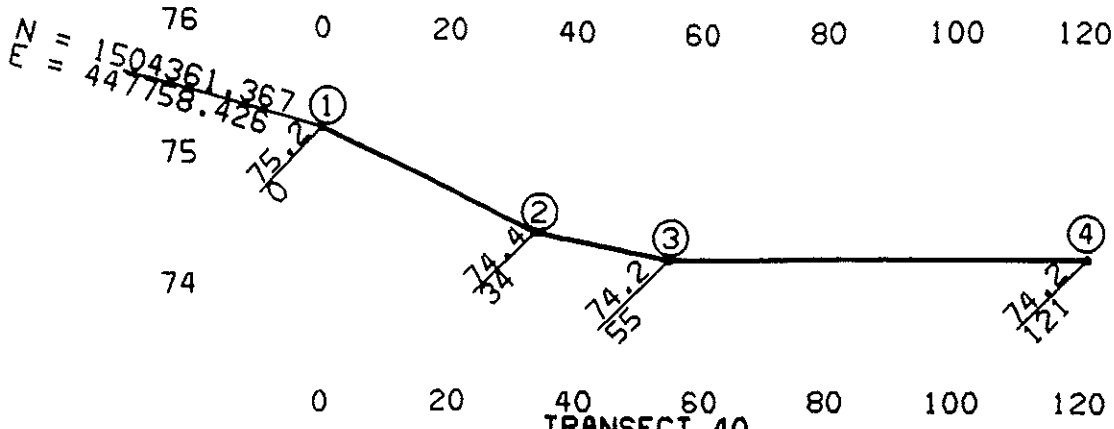
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



TRANSECT 40
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	BEGIN TRANSECT 40, WETLAND BOUNDARY, SE COR PLOT 1 (PINE FLATWOOD ZONE),
	PINE FLATWOOD ZONE/SERENOA ZONE BOUNDARY
2	NW COR PLOT 2 (SERENOA ZONE)
3	NW COR PLOT 3 (UPPER SERENOA - ILEX ZONE) SERENOA ZONE/UPPER SERENOA-ILEX
	ZONE BOUNDARY
4	NW COR PLOT 4 (LOWER SERENOA - ILEX ZONE) UPPER SERENOA-ILEX ZONE/LOWER
	SERENOA-ILEX ZONE BOUNDARY
5	SERENOA ZONE/UPPER SERENOA - ILEX ZONE BOUNDARY
6	GROUND AT IRON BAR END TRANSECT 40

NOTE: IN THIS TRANSECT
- SERENOA ZONE HAS REPLACED TYPICAL UPPER RHYNCHOSPORA - ARISTIDA ZONE
- UPPER SERENOA - ILEX ZONE HAS REPLACED LOWER RHYNCHOSPORA - ARISTIDA ZONE
- LOWER SERENOA - ILEX ZONE HAS REPLACED ERIOCAULON ZONE
- RHYNCHOSPORA - OPEN WATER ZONE DOES NOT OCCUR
- NO PLOT 5

NOTE:
ALL SECTIONS LOOKING EAST.

LEGEND

BLACK & VEATCH

ENGINEER	DRAWN MJJ
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	12-1-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 16805-DS-0180A
REV: 0

ELEVATION TRANSECTS

CODE
AREA

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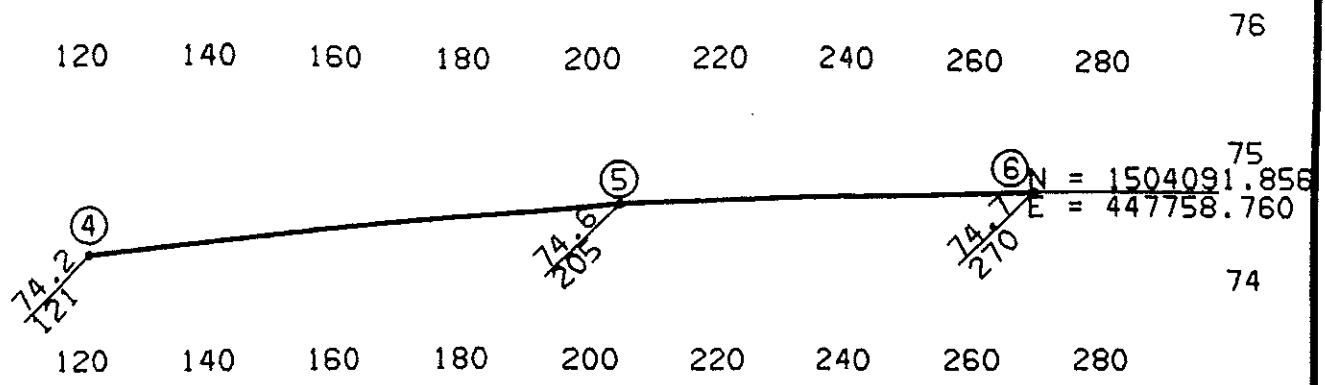
11/30/93 08:06:59

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER UNIT 2
MITIGATION MONITORING
BASELINE INFORMATION JULY, 1993



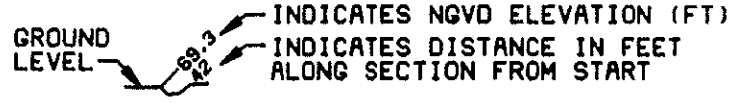
TRANSECT 40
(ESTABLISHED APRIL 1993)
MITIGATION SITE 3.6 - WEST

1	BEGIN TRANSECT 40, WETLAND BOUNDARY, SE COR PLOT 1 (PINE FLATWOOD ZONE),
	PINE FLATWOOD ZONE/SERENOA ZONE BOUNDARY
2	NW COR PLOT 2 (SERENOA ZONE)
3	NW COR PLOT 3 (UPPER SERENOA - ILEX ZONE) SERENOA ZONE/UPPER SERENOA-ILEX
	ZONE BOUNDARY
4	NW COR PLOT 4 (LOWER SERENOA - ILEX ZONE) UPPER SERENOA-ILEX ZONE/LOWER
	SERENOA-ILEX ZONE BOUNDARY
5	SERENOA ZONE/UPPER SERENOA - ILEX ZONE BOUNDARY
6	GROUND AT IRON BAR END TRANSECT 40

NOTE: IN THIS TRANSECT
- SERENOA ZONE HAS REPLACED TYPICAL UPPER RHYNCHOSPORA - ARISTIDA ZONE
- UPPER SERENOA - ILEX ZONE HAS REPLACED LOWER RHYNCHOSPORA - ARISTIDA ZONE
- LOWER SERENOA - ILEX ZONE HAS REPLACED ERIOCAULON ZONE
- RHYNCHOSPORA - OPEN WATER ZONE DOES NOT OCCUR
- NO PLOT 5

NOTE:
ALL SECTIONS LOOKING EAST.

LEGEND



BLACK & VEATCH

ENGINEER	DRAWN MJJ
CHECKED	DATE

NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLM
0	12-1-93	INITIAL ISSUE				

ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER - UNIT 2

PROJECT DRAWING NUMBER: 15805-DS-0180B
REV: 0

ELEVATION TRANSECTS

CODE
AREA

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AQ1SL002 A2 1=30
11/30/93 08:09:35

Vegetation Monitoring Data Methods

Plots were surveyed to determine every plant species present. Percent cover of each species was estimated. Relative percent cover was determined by dividing each species' percent cover by the sum of all species' cover and multiplying by 100. Summaries for each plot list the number, percent and percent relative cover of both wetland and upland species.

Wetland plant species are defined as those plant species with a USFWS wetland indicator status of OBL, FACW+, FACW, and FACW- (Reed, 1988). Species with a USFWS wetland indicator status of FACU+, FACU, FACU-, UPL, and NL (not listed) are considered upland species. These definitions were not used in previous submittals of baseline data. They were adopted per consultation with the FDEP.

Baseline data is presented with summaries based on the revised definition of wetland and upland species from September 1992 (Areas 3.5 and 3.6E) and March 1993 (Area 3.6W). The data has not been changed in terms of species present in each plot; only the summaries have been changed. Table C1 reports plant species observed at the Stanton Energy Center. Tables C2, C3, and C4 report monitoring data from September 1992, March 1993, and September 1993, respectively.

For those plots with revised transect numbers (see Section 3.6.2.1 and Appendix B), the revised numbers are given. Transects found in each mitigation site are listed below:

Site	Transects
3.5	1-12, 12A, 12B, 28
3.6E	14-25
3.6W	26-27, 29-40

Appendix C Table C1: Stanton Energy Center
List of Plant Species

Appendix C Table C1 - Stanton Energy Center List of Plant Species.

Species[1]	Authority	Common Name[2]	FDEP Status[3]	USFWS Status[4]
Agalinus linifolia	(Nutt.) Britton	Flax-leaf false foxglove	UPL	FACW
Agalinus sp.			UPL	
Ageratina jucunda	(Greene) Clewell & Wooten		UPL	NL
Ageratum sp.			UPL	
Aletris lutea	Small	Yellow colic-root	TRN	FACW+
Andropogon sp			UPL	
Andropogon virginicus	L.	Broomsedge	UPL	FAC-
Aristida affinis	(Schultes) Kunth	Long-leaf three awn	UPL	OBL
Aristida spiciformis	Ell.	Bottlebrush three-awn	UPL	FAC
Aristida stricta	Michx.	Wiregrass	UPL	FAC-
Aristida tenuispica	Hitch.	Hillsborough three-awn	UPL	FAC
Aster reticulatus	Pursh.	White-top aster	UPL	FACW
Baccharis halimmifolia	L.	Groundsel tree	UPL	FAC
Bacopa caroliniana	(Walt.) Robins	Blue hyssop	SUB	OBL
Blechnum serrulatum	L.C. Rich	Toothed mid-sorus fern	SUB	FACW+
Calopogon sp.			UPL	
Carex verrucosa	Muhl.	Warty sedge	TRN	OBL
Carphephorus corymbosus	(Nutt.) Torr. & Gray	Coastal plain chaffseed	UPL	FACU
Carphephorus odoratissimus	(J.F. Gmel.) Herbert	Vanilla plant	UPL	FACW
Cassia chamaecrista	L.	Partridge-pea	UPL	NL
Centella asiatica	(L.) Urban	Coinwort	TRN	FACW
Chaptalia tomentosa	Vent.	Pineland daisy	UPL	FACW
Cirsium horridulum	Michx.	Thistle	UPL	FAC+
Cladium jamaicense	Crantz	Sawgrass	SUB	OBL
Coreopsis leavenworthii	Torr. & Gray	Leavenworth's tickseed	UPL	FACW
Cyperus cf. tetragonus	Ell.		UPL	FAC+
Cyperus polystachyos	Rottb.	Many-spike flatsedge	UPL	FACW
Cyperus retrorsus	Chapm.	Retrorse flatsedge	UPL	FACU+
Cyperus sp.				
Dichanthelium commutatum	(Schult.) Gould	Cypress witchgrass	UPL	FAC
Dichanthelium sp.				
Dichromena colorata	(L.) Hitchc.	White-tops	TRN	FACW
Dichromena latifolia	Baldw.	Star rush	TRN	FACW+
Diodia virginiana	L.	Buttonweed	TRN	FACW
Drosera sp.			UPL	
Elephantopus elatus	Bertol.	Florida elephant's foot	UPL	NL
Eragrostis refracta	(Muhl.) Scribn.	Coastal lovegrass	UPL	FACW
Eragrostis sp.			UPL	
Eragrostis spectabilis	(Pursh.) Steud.	Purple lovegrass	UPL	FACU
Erianthus giganteus	(Walt.) Muhl.	Plumegrass	UPL	FACW
Eriocaulon decangulare	L.	Pipewort	UPL	OBL
Eryngium yuccifolium	Michx.	Button snakeroot	UPL	FAC
Eupatorium capillifolium	(Lam.) Small	Dog fennel	UPL	FACU
Eupatorium mohrii	Greene		UPL	NL
Euthamia minor	(Michx.) Greene		UPL	FAC

[1]Scientific names follow the momenclature of Kattesz and Kartesz (1980). Synonyms are as follows:

Carphephorus odoratissimus (J.F. Gmel.) Herbert = Trilisa odoratissima (Walter ex. J.F. Gmel.) Cass.; Euthamia minor (Michx.) Greene = Euthamia tenuifolia (Pursh) Greene; Hypericum hypericoides (L.) Crantz= Ascyrum hypericoides L.; Mitreola petriolata (J.F. Gmel.) Torr. & Gray = Cynonoctonum mitreola (L.) Britt.; Taxodium ascendens Brongn. = Taxodium distichum (L.) L.C. Rich.

[2]Common names are from Wunderlin (1982) or Reed (1988). If neither source lists a common name, none is given.

[3]Wetland indicator status as listed in Florida Administrative Code ch. 17-3.

[4]Wetland indicator status as listed in Reed (1988).

Appendix C Table C1 - Stanton Energy Center List of Plant Species.

Species[1]	Authority	Common Name[2]	FDEP Status[3]	USFWS Status[4]
Flaveria linearis	Lag.	Yellow-top flaveria	TRN	FACW
Fuirena breviseta	(Cov.) Cov.	Umbrellagrass	UPL	OBL
Fuirena pumila	(Torr.) Spreng.	Umbrellagrass	UPL	OBL
Fuirena scirpoidea	Michx.	Southern umbrella sedge	SUB	OBL
Gratiola ramosa	Walt.	Branching hedgehyssop	TRN	FACW
Hydrocotyle umbellata	L.	Marsh pennywort	TRN	OBL
Hypericum cistifolium	Lam.	Roundpod St. John's wort	UPL	FACW
Hypericum fasciculatum	Lam.	Sandweed	TRN	FACW+
Hypericum hypericoides	(L.) Crantz	St. Andrew's Cross	UPL	FAC
Hypericum myrtifolium	Lam.	St. John's wort	TRN	FACW
Hypericum reductum	P. Adams	Atlantic St. John's wort	UPL	FACU
Hypericum sp.				
Hypericum tetrapetalum	Lam.	St. John's wort	UPL	FACW
Hyptis alata	(Raf.) Shinners	Musky mint	UPL	OBL
Ilex glabra	(L.) Gray	Inkberry	UPL	FACW
Iva microcephala	Nutt.	Piedmont sumpweed	SUB	FACW
Juncus effusus	L.	Softrush	SUB	FACW+
Juncus elliottii	Chapm.	Bog rush	SUB	OBL
Juncus scirpoides	Lam.	Needle-pod rush	SUB	FACW+
Lachnocaulon anceps	(Walt.) Morong.	Bog buttons	TRN	OBL
Lacnanthes caroliniana	(Lam.) Dandy	Bloodroot	TRN	OBL
Liatris spicata	(L.) Willd.	Spiked gayfeather	UPL	FACU
Liatris tenuifolia	Nutt.		UPL	NL
Lilium catesbaei	Walt.	Catesby's lily	UPL	FAC+
Linum sp.			UPL	
Ludwigia lanceolata	Ell.	Lance-leaf seedbox	SUB	OBL
Ludwigia linearis	Walt.	Narrow-leaf seedbox	SUB	OBL
Ludwigia linifolia	Poir.	Southeastern seedbox	SUB	OBL
Ludwigia microcarpa	Michx.	Small-fruit seedbox	SUB	OBL
Ludwigia octovalvis	(Jacq.) Raven	Mexican seedbox	SUB	OBL
Ludwigia sp.				
Ludwigia suffruticosa	Walt.	Shrubby seedbox	SUB	OBL
Lycopodium carolinianum	L.	Slender clubmoss	UPL	OBL
Lycopus rubellus	Moench.	Water hoarhound	TRN	OBL
Lyonia ferruginea	(Walt.) Nutt.	Rusty lyonia	UPL	FAC-
Lyonia lucida	(Lam.) K. Koch	Fetterbush	TRN	FACW
Magnolia virginiana	L.	Sweet bay	SUB	FACW+
Mikania scandens	(L.) Willd.	Climbing hempweed	SUB	FACW+
Mitreola petiolata	(J.F. Gmel) Torr. & Gray	Miterwort	UPL	FACW+
Muhlenbergia capillaris	(Lam.) Trin.	Hairgrass	SUB	FACU
Myrica cerifera	L.	Wax myrtle	TRN	FAC+
Nyssa sylvatica	Marsh	Swamp black gum	SUB	OBL
Osmunda cinnamomea	L	Cinnamon fern	SUB	FACW+
Osmunda regalis	L.	Royal fern	SUB	OBL
Oxypolis filiformis	(Walt.) Brit.	Water dropwort	SUB	FACW+
Panicum hemitomon	Schult.	Maidencane	SUB	OBL
Panicum maximum	Jacq.	Guineagrass	UPL	FAC-
Panicum rigidulum	Bosc. ex Nees.	Redtop panicum	SUB	FACW
Panicum sp.				
Panicum verrucosum	Muhl.	Warty panicum	UPL	FACW

[1]Scientific names follow the momenclature of Kattesz and Kartesz (1980). Synonyms are as follows:

Carphephorus odoratissimus (J.F. Gmel.) Herbert = Trilisa odoratissima (Walter ex. J.F. Gmel.) Cass.; Euthamia minor (Michx.) Greene = Euthamia tenuifolia (Pursh) Greene; Hypericum hypericoides (L.) Crantz= Ascyrum hypericoides L.; Mitreola petriolata (J.F. Gmel.) Torr. & Gray = Cynonoctonum mitreola (L.) Britt.; Taxodium ascendens Brongn. = Taxodium distichum (L.) L.C. Rich.

[2]Common names are from Wunderlin (1982) or Reed (1988). If neither source lists a common name, none is given.

[3]Wetland indicator status as listed in Florida Administrative Code ch. 17-3.

[4]Wetland indicator status as listed in Reed (1988).

Appendix C Table C1 - Stanton Energy Center List of Plant Species.

Species[1]	Authority	Common Name[2]	FDER Status[3]	USFWS Status[4]
Paspalum notatum	Flugge.	Bahiagrass	UPL	FACU+
Paspalum praecox	Walt.	Early paspalum	UPL	OBL
Persea borbonia	(L.) Spreng.	Redbay	TRN	FACW
Phoebanthus grandiflora	(Torr. & Gray) Blake		UPL	NL
Pinguicula lutea	Walt.	Yellow Butterwort	NL	FACW+
Pinus elliotti	Engelm.	Slash pine	UPL	FACW
Pinus palustris	Mill.	Longleaf pine	UPL	FACU+
Pinus serotina	Michx.	Pond pine	TRN	FACW+
Pluchea rosea	Godfrey	Rosy camphor-weed	SUB	FACW
Polygala grandiflora	Walt.		UPL	NL
Polygala ramosa	Ell.	Low pinebarren milkwort	UPL	OBL
Polygala rugellii	Shuttlew. ex Chapm.	Yellow bachelors' button	UPL	FACW
Polygala sp.				
Polygonum hydropiperoides	Michx.	Mild water-pepper	SUB	OBL
Pontederia cordata	L.	Pickerelweed	SUB	OBL
Proserpinaca pectinata	Lam.	Mermaid weed	SUB	OBL
Pteridium aquilinum	(L.) Kuhn.	Bracken fern	UPL	FACU
Pterocaulon virgatum	(L.) DC	Black snakeroot	UPL	FAC-
Quercus nigra	L.	Water oak	TRN	FAC
Quercus pumila	Walt.	Running oak	UPL	NL
Rhexia mariana	L.	Pale meadow beauty	TRN	FACW+
Rhexia nuttallii	James.	Nuttall's meadow-beauty	TRN	FACW+
Rhexia sp.				
Rhynchospora breviseta	(Gale) Channell	Piedmont beakrush	UPL	OBL
Rhynchospora cephalantha	Gray	Clustered beakrush	UPL	OBL
Rhynchospora chapmanii	M.A. Curtiss	Chapman's beakrush	UPL	OBL
Rhynchospora ciliaris	(Michx.) Mohr.	Ciliate beakrush	UPL	OBL
Rhynchospora divergens	Chapm. ex M.A. Curtiss	Spreading beakrush	SUB	OBL
Rhynchospora fascicularis	(Michx.) Vahl.	Fasciculate beakrush	UPL	FACW+
Rhynchospora inundata	(Oakes) Fern.	Horned beakerush	SUB	OBL
Rhynchospora megalocarpa	Gray		UPL	NL
Rhynchospora microcarpa	Baldw. ex Gray	Southern beakrush	SUB	FACW+
Rhynchospora microcephala	Britt. ex Small	Capitate beakrush	UPL	OBL
Rhynchospora sp.				
Rotala sp.				
Rubus sp.			UPL	
Sabatia brevifolia	Raf.	Short-leaf rose gentian	UPL	FACW
Sacciolepis indica	(L.) Chase	India cupscale	UPL	FAC
Sarracenia minor	Walt.	Hooded pitcherplant	UPL	OBL
Schizachyrium hirtiflorum	Nees.		UPL	NL
Scleria baldwiniana	(Torr.) Steud.	Baldwin's nutrush	UPL	FACW+
Scleria hirtella	Sw.	River-swamp nutrush	UPL	FACW-
Scleria reticularis	Michx.	Netted nutrush	UPL	OBL
Scleria sp.				
Scleria triglomerata	Michx.	Tall nutgrass	UPL	FACU+
Scleria verticillata	Muhl. ex Willd.	Low nutrush	UPL	OBL
Scutellaria sp.			UPL	
Serenoa repens	(Bartr.) Small	Saw palmetto	UPL	FACU

[1]Scientific names follow the momenclature of Kattesz and Kartesz (1980). Synonyms are as follows:

Carphephorus odoratissimus (J.F. Gmel.) Herbert = Trilisa odoratissima (Walter ex. J.F. Gmel.) Cass.; Euthamia minor (Michx.) Greene = Euthamia tenuifolia (Pursh) Greene; Hypericum hypericoides (L.) Crantz= Ascyrum hypericoides L.; Mitreola petriolata (J.F. Gmel.) Torr. & Gray = Cynonoctonum mitreola (L.) Britt.; Taxodium ascendens Brongn. = Taxodium distichum (L.) L.C. Rich.

[2]Common names are from Wunderlin (1982) or Reed (1988). If neither source lists a common name, none is given.

[3]Wetland indicator status as listed in Florida Administrative Code ch. 17-3.

[4]Wetland indicator status as listed in Reed (1988).

Appendix C Table C1 - Stanton Energy Center List of Plant Species.

Species[1]	Authority	Common Name[2]	FDEP Status[3]	USFWS Status[4]
Sesbania vesicaria	(Jacq.) Ell.	Bladderpod	UPL	FAC+
Setaria geniculata	(Lam.) Beauv.	Knotroot foxtail	UPL	FAC
Sisyrhynchium sp.				
Sisyrinchium atlanticum	Bickn.	Blue-eyed grass	UPL	FACW-
Smilax smallii	Morong.	Jackson-vine	UPL	FACU
Smilax sp.				
Solidago elliottii	Torr. & Gray	Elliott's goldenrod	UPL	OBL
Sorghastrum secundum	(Ell.) Nash.	Lopsided Indiangrass	UPL	FACU-
Spartina bakeri	Merr.	Sand cordgrass	TRN	FACW+
Sphagnum sp.			SUB	
Stillingia sylvatica	Garden ex L.	Queen's Delight	NL	NL
Taxodium ascendens	Brongn.	Pond cypress	SUB	OBL
Triadenum virginicum	(L.) Raf.	Marsh St. John's-wort	SUB	OBL
Typha latifolia	L.	Common cattail	SUB	OBL
Utricularia sp.			SUB	
Vaccinium sp.			UPL	
Viola septemloba	Le Conte	Southern coast violet	NL	FAC+
Woodwardia virginica	(L.) Smith	Virginia chain fern	SUB	OBL
Xyris ambigua	Beyr. ex Kunth	Yellow-eyed grass	SUB	OBL
Xyris caroliniana	Walt.	Yellow-eyed grass	UPL	FACW+
Xyris elliottii	Chapm.	Yellow-eyed grass	SUB	OBL
Xyris fimbriata	Ell.	Yellow-eyed grass	SUB	OBL
Xyris flabelliformis	Chapm.	Yellow-eyed grass	SUB	OBL
Xyris sp.				

[1]Scientific names follow the nomenclature of Kattesz and Kartesz (1980). Synonyms are as follows:

Carphephorus odoratissimus (J.F. Gmel.) Herbert = Trilisa odoratissima (Walter ex. J.F. Gmel.) Cass.; Euthamia minor (Michx.) Greene = Euthamia tenuifolia (Pursh) Greene; Hypericum hypericoides (L.) Crantz= Ascyrum hypericoides L.; Mitreola petriolata (J.F. Gmel.) Torr. & Gray = Cynonoctonum mitreola (L.) Britt.; Taxodium ascendens Brongn. = Taxodium distichum (L.) L.C. Rich.

[2]Common names are from Wunderlin (1982) or Reed (1988). If neither source lists a common name, none is given.

[3]Wetland indicator status as listed in Florida Administrative Code ch. 17-3.

[4]Wetland indicator status as listed in Reed (1988).

NOTE:
- VEGETATION CLASSIFICATION FOLLOWED OLD FDEP WETLAND TRANSITION UPLAND CHANGED IN 1994.

THIS WAS ~~EQUAL~~

SHOULD BE RECLASSIFIED IN FINAL REPORT!

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

% of species that are upland
WETLAND
1 out of 5 is upland
2 out of 5 are wetland

PLOT	T1P1	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	30.0
		Ilex glabra	FACW	20.0
		Myrica cerifera	FAC+	3.0
		Rhynchospora fascicularis	FACW+	20.0
		Serenoa repens	FACU	28.0

TOTAL 101%

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	28.0
WETLAND SPECIES	2	40.0	40.0

PLOT	T1P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Ageratina jucunda	NL	1.0
		Andropogon virginicus	FAC-	6.0
		Aristida stricta	FAC-	50.0
		Eriocaulon decangulare	OBL	1.0
		Flaveria linearis	FACW	1.0
		Hypericum cistifolium	FACW	1.0
		Ilex glabra	FACW	6.0
		Lyonia lucida	FACW	1.0
		Panicum sp.		6.0
		Pluchea rosea	FACW	1.0
		Pterocaulon virgatum	FAC-	1.0
		Rhexia mariana	FACW+	1.0
		Rhynchospora fascicularis	FACW+	13.0
		Sarracenia minor	OBL	1.0
		Serenoa repens	FACU	13.0
		Xyris elliottii	OBL	1.0

> 104%

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	12.5	14.0
WETLAND SPECIES	10	62.5	27.0

Yes of species that are upland or wetland

16 total species
2/16 = 12.5%

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T1P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	39.0
Centella asiatica	FACW	1.0
Euthamia minor	FAC	1.0
Fuirena scirpoidea	OBL	7.0
Hypericum cistifolium	FACW	1.0
Pinus palustris	FACU+	1.0
Rhexia mariana	FACW+	1.0
Sarracenia minor	OBL	7.0
Scleria reticularis	OBL	1.0
Scleria triglomerata	FACU+	39.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	20.0	40.0
WETLAND SPECIES	6	60.0	18.0

PLOT T1P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Aristida stricta	FAC-	12.0
Carphephorus odoratissimus	FACW	1.0
Centella asiatica	FACW	1.0
Eriocaulon decangulare	OBL	6.0
Flaveria linearis	FACW	1.0
Hypericum reductum	FACU	1.0
Ludwigia lanceolata	OBL	1.0
Myrica cerifera	FAC+	1.0
Oxypolis filiformis	FACW+	6.0
Pluchea rosea	FACW	1.0
Proserpinaca pectinata	OBL	1.0
Rhexia nuttallii	FACW+	1.0
Rhynchospora cephalantha	OBL	6.0
Xyris fimbriata	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	6.7	1.0
WETLAND SPECIES	11	73.3	26.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T1P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Carex glaucescens	OBL	11.0
Eragrostis sp.		5.0
Ludwigia lanceolata	OBL	1.0
Proserpinaca pectinata	OBL	1.0
Rhynchospora fascicularis	FACW+	12.0
Utricularia sp.		1.0
Woodwardia virginica	OBL	1.0
Xyris fimbriata	OBL	5.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	6	75.0	31.0

PLOT T2P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	50.0
Lyonia lucida	FACW	6.0
Myrica cerifera	FAC+	19.0
Quercus pumila	NL	6.0
Serenoa repens	FACU	16.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	40.0	22.0
WETLAND SPECIES	1	20.0	6.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T2P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Ageratina jucunda	NL	2.0
Andropogon virginicus	FAC-	18.0
Aristida stricta	FAC-	26.0
Ilex glabra	FACW	2.0
Myrica cerifera	FAC+	9.0
Pluchea rosea	FACW	2.0
Pterocaulon virgatum	FAC-	2.0
Quercus pumila	NL	2.0
Rhynchospora ciliaris	OBL	26.0
Sarracenia minor	OBL	9.0
Sorghastrum secundum	FACU-	2.0
Xyris ambigua	OBL	2.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	25.0	6.0
WETLAND SPECIES	5	41.7	41.0

PLOT T2P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	8.0
Centella asiatica	FACW	2.0
Flaveria linearis	FACW	2.0
Fuirena scirpoidea	OBL	2.0
Hypericum cistifolium	FACW	2.0
Hypericum tetrapetalum	FACW	2.0
Lachnocaulon anceps	OBL	8.0
Liatris spicata	FACU	2.0
Myrica cerifera	FAC+	2.0
Oxypolis filiformis	FACW+	2.0
Pluchea rosea	FACW	1.0
Polygala sp.		1.0
Rhexia nuttallii	FACW+	2.0
Rhynchospora ciliaris	OBL	63.0
Sarracenia minor	OBL	2.0
Scleria reticularis	OBL	2.0
Xyris ambigua	OBL	2.0
Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	5.6	2.0
WETLAND SPECIES	14	77.8	93.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T2P4

SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida affinis	OBL	37.0
Eriocaulon decangulare	OBL	1.0
Flaveria linearis	FACW	1.0
Hypericum tetrapetalum	FACW	1.0
Oxypolis filiformis	FACW+	10.0
Rhynchospora cephalantha	OBL	5.0
Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	100.0	56.0

PLOT T2P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Hypericum sp.		1.0
Oxypolis filiformis	FACW+	1.0
Panicum hemitomon	OBL	26.0
Rhynchospora fascicularis	FACW+	1.0
Taxodium distichum	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	4	80.0	29.0

PLOT T3P1

SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	38.0
Ilex glabra	FACW	13.0
Pinus palustris	FACU+	9.0
Quercus pumila	NL	27.0
Rhynchospora fascicularis	FACW+	4.0
Rhynchospora megalocarpa	NL	4.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	50.0	40.0
WETLAND SPECIES	2	33.3	17.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T3P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	70.0
Centella asiatica	FACW	1.0
Fuirena scirpoidea	OBL	1.0
Hypericum cistifolium	FACW	1.0
Panicum sp.		1.0
Pinus palustris	FACU+	1.0
Rhexia nuttallii	FACW+	1.0
Rhynchospora ciliaris	OBL	1.0
Sarracenia minor	OBL	1.0
Serenoa repens	FACU	14.0
Sorghastrum secundum	FACU-	1.0
Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	25.0	16.0
WETLAND SPECIES	7	58.3	7.0

PLOT T3P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Aristida stricta	FAC-	27.0
Eriocaulon decangulare	OBL	1.0
Flaveria linearis	FACW	1.0
Fuirena scirpoidea	OBL	27.0
Hypericum cistifolium	FACW	1.0
Panicum sp.		1.0
Rhexia nuttallii	FACW+	1.0
Rhynchospora breviseta	OBL	1.0
Rhynchospora divergens	OBL	1.0
Rhynchospora fascicularis	FACW+	27.0
Sarracenia minor	OBL	1.0
Sorghastrum secundum	FACU-	1.0
Xyris elliottii	OBL	1.0
Xyris fimbriata	OBL	7.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	6.7	1.0
WETLAND SPECIES	11	73.3	69.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T3P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida affinis	OBL	20.0
Eriocaulon decangulare	OBL	1.0
Hypericum cistifolium	FACW	1.0
Panicum sp.		1.0
Rhynchospora inundata	OBL	25.0
Xyris ambigua	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	5	83.3	48.0

PLOT T3P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Aristida affinis	OBL	1.0
Carphephorus odoratissimus	FACW	1.0
Eriocaulon decangulare	OBL	1.0
Flaveria linearis	FACW	1.0
Fuirena scirpoidea	OBL	1.0
Mitreola petiolata	FACW+	1.0
Oxypolis filiformis	FACW+	1.0
Panicum sp.		1.0
Proserpinaca pectinata	OBL	1.0
Rhynchospora fascicularis	FACW+	1.0
Scleria reticularis	OBL	1.0
Taxodium distichum	OBL	10.0
unknown herb		1.0
Xyris elliottii	OBL	1.0
Xyris fimbriata	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	13	81.3	22.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T4P1

SPECIES	USFWS STATUS	PERCENT COVERAGE
Ageratina jucunda	NL	1.0
Aristida spiciformis	FAC	11.0
Aristida stricta	FAC-	13.0
Myrica cerifera	FAC+	26.0
Quercus pumila	NL	11.0
Rhynchospora fascicularis	FACW+	11.0
Serenoa repens	FACU	26.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	42.9	38.0
WETLAND SPECIES	1	14.3	11.0

PLOT T4P2

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	7.0
Aristida stricta	FAC-	34.0
Euthamia minor	FAC	7.0
Lycopus rubellus	OBL	1.0
Pterocaulon virgatum	FAC-	1.0
Quercus pumila	NL	1.0
Rhexia nuttallii	FACW+	1.0
Rhynchospora fascicularis	FACW+	14.0
Sabatia brevifolia	FACW	1.0
Serenoa repens	FACU	27.0
Sorghastrum secundum	FACU-	1.0
unknown herb		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	25.0	29.0
WETLAND SPECIES	4	33.3	17.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T4P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Ageratina jucunda	NL	1.0
Andropogon virginicus	FAC-	7.0
Centella asiatica	FACW	1.0
Eryngium yuccifolium	FAC	1.0
Euthamia minor	FAC	7.0
Hypericum cistifolium	FACW	1.0
Myrica cerifera	FAC+	1.0
Panicum sp.		1.0
Rhexia mariana	FACW+	1.0
Rhynchospora fascicularis	FACW+	73.0
unknown herb		1.0
Xyris flabelliformis	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	8.3	1.0
WETLAND SPECIES	5	41.7	77.0

PLOT T4P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Centella asiatica	FACW	1.0
Euthamia minor	FAC	1.0
Flaveria linearis	FACW	1.0
Hypericum cistifolium	FACW	5.0
Hypericum tetrapetalum	FACW	5.0
Ilex glabra	FACW	16.0
Panicum sp.		1.0
Pluchea rosea	FACW	1.0
Rhynchospora fascicularis	FACW+	16.0
Rhynchospora inundata	OBL	52.0
Sarracenia minor	OBL	1.0
Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	83.3	99.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T4P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	2.0
Aristida affinis	OBL	2.0
Eragrostis sp.		1.0
Eriocaulon decangulare	OBL	33.0
Hypericum sp.		8.0
Myrica cerifera	FAC+	8.0
Oxypolis filiformis	FACW+	2.0
Paspalum praecox	OBL	8.0
Pluchea rosea	FACW	2.0
Proserpinaca pectinata	OBL	2.0
Rhynchospora inundata	OBL	25.0
Sacciolepis indica	FAC	1.0
Sarracenia minor	OBL	2.0
Scleria reticularis	OBL	2.0
Xyris elliottii	OBL	1.0
Xyris fimbriata	OBL	2.0

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	11	68.8	81.0

PLOT T6P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	6.0
Aristida stricta	FAC-	21.0
Ilex glabra	FACW	33.0
Lyonia lucida	FACW	12.0
Serenoa repens	FACU	18.0

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	18.0
WETLAND SPECIES	2	40.0	45.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT	T6P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	16.0
		Fuirena scirpoidea	OBL	1.0
		Ilex glabra	FACW	10.0
		Lachnocaulon anceps	OBL	1.0
		Lyonia lucida	FACW	1.0
		Panicum sp.		1.0
		Pluchea rosea	FACW	1.0
		Pteridium aquilinum	FACU	1.0
		Rhexia nuttallii	FACW+	1.0
		Rhynchospora fascicularis	FACW+	42.0
		Sabatia brevifolia	FACW	1.0
		unknown herb		21.0
		unknown legume		1.0
		Xyris ambigua	OBL	1.0

WETLAND SPECIES 59%
1 UPLAND " 1%
TOTAL " 99%

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	7.1	1.0
WETLAND SPECIES	9	64.3	59.0
Total	14		

$\frac{1}{14} = 7.1\%$

$\frac{9}{14} = 64.3\%$

PLOT	T6P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	13.0
		Calopogon sp.		1.0
		Centella asiatica	FACW	1.0
		Eriocaulon decangulare	OBL	1.0
		Hypericum cistifolium	FACW	1.0
		Hypericum sp.		1.0
		Rhexia mariana	FACW+	1.0
		Rhynchospora cephalantha	OBL	1.0
		Rhynchospora fascicularis	FACW+	51.0
		Rhynchospora inundata	OBL	6.0
		Sarracenia minor	OBL	1.0
		Serenoa repens	FACU	13.0
		unknown legume		6.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	7.7	13.0
WETLAND SPECIES	8	61.5	63.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T6P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida affinis	OBL	1.0
Blechnum serrulatum	FACW+	1.0
Eriocaulon decangulare	OBL	30.0
Hypericum fasciculatum	FACW+	5.0
Lilium catesbaei	FAC+	1.0
Panicum rigidulum	FACW	1.0
Rhynchospora inundata	OBL	30.0
Rhynchospora microcephala	OBL	1.0
Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	8	88.9	70.0

PLOT T6P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida affinis	OBL	1.0
Blechnum serrulatum	FACW+	5.0
Eriocaulon decangulare	OBL	10.0
Hypericum cistifolium	FACW	1.0
Panicum sp.		1.0
Rhexia mariana	FACW+	1.0
Rhynchospora cephalantha	OBL	1.0
Rhynchospora inundata	OBL	26.0
Rhynchospora microcephala	OBL	1.0
Taxodium distichum	OBL	21.0
Xyris fimbriata	OBL	5.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	90.9	72.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T8P1

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	5.0
Aristida stricta	FAC-	13.0
Ilex glabra	FACW	33.0
Lyonia lucida	FACW	13.0
Serenoa repens	FACU	35.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	35.0
WETLAND SPECIES	2	40.0	46.0

PLOT T8P2

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Aster reticulatus	FACW	14.0
Euthamia minor	FAC	1.0
Hypericum cistifolium	FACW	1.0
Ilex glabra	FACW	7.0
Lycopodium carolinianum	OBL	1.0
Mitreola petiolata	FACW+	1.0
Panicum sp.		1.0
Pluchea rosea	FACW	1.0
Rhexia nuttallii	FACW+	1.0
Rhynchospora chapmanii	OBL	1.0
Rhynchospora fascicularis	FACW+	1.0
Serenoa repens	FACU	56.0
Sphagnum sp.		1.0
unknown legume		1.0
Woodwardia virginica	OBL	7.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	6.3	56.0
WETLAND SPECIES	10	62.5	35.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T8P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	13.0
Aristida stricta	FAC-	53.0
Eriocaulon decangulare	OBL	7.0
Euthamia minor	FAC	1.0
Lycopus rubellus	OBL	1.0
Lyonia lucida	FACW	7.0
Panicum rigidulum	FACW	6.0
Panicum verrucosum	FACW	1.0
Pluchea rosea	FACW	1.0
Rhynchospora cephalantha	OBL	7.0
Woodwardia virginica	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	8	72.7	31.0

PLOT T8P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Blechnum serrulatum	FACW+	1.0
Eriocaulon decangulare	OBL	6.0
Euthamia minor	FAC	1.0
Ludwigia octovalvis	OBL	1.0
Panicum rigidulum	FACW	37.0
Proserpinaca pectinata	OBL	1.0
Rhynchospora cephalantha	OBL	6.0
Sarracenia minor	OBL	6.0
Smilax smallii	FACU	1.0
Sphagnum sp.		18.0
Triadenum virginicum	OBL	1.0
Woodwardia virginica	OBL	6.0
Xyris fimbriata	OBL	12.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	7.1	1.0
WETLAND SPECIES	10	71.4	77.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T8P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Blechnum serrulatum	FACW+	11.0
Lycopus rubellus	OBL	1.0
Panicum hemitomon	OBL	6.0
Paspalum praecox	OBL	1.0
Pluchea rosea	FACW	1.0
Pontederia cordata	OBL	11.0
Rhynchospora cephalantha	OBL	11.0
Sphagnum sp.		34.0
Triadenum virginicum	OBL	1.0
Woodwardia virginica	OBL	11.0
Xyris fimbriata	OBL	11.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	90.9	65.0

PLOT T9P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	3.0
Aristida stricta	FAC-	32.0
Aster reticulatus	FACW	5.0
Lyonia lucida	FACW	16.0
Quercus pumila	NL	3.0
Serenoa repens	FACU	41.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	33.3	44.0
WETLAND SPECIES	2	33.3	21.0

PLOT T9P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Aristida stricta	FAC-	28.0
Aster reticulatus	FACW	9.0
Ilex glabra	FACW	9.0
Serenoa repens	FACU	51.0
Vaccinium sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	16.7	51.0
WETLAND SPECIES	2	33.3	18.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T9P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	11.0
Aster reticulatus	FACW	1.0
Ilex glabra	FACW	37.0
Lachnocaulon anceps	OBL	1.0
Polygala ramosa	OBL	1.0
Rhexia mariana	FACW+	1.0
Serenoa repens	FACU	47.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	14.3	47.0
WETLAND SPECIES	5	71.4	41.0

PLOT T9P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Eriocaulon decangulare	OBL	1.0
Euthamia minor	FAC	1.0
Hydrocotyle umbellata	OBL	1.0
Hypericum cistifolium	FACW	1.0
Hypericum sp.		13.0
Ludwigia octovalvis	OBL	1.0
Panicum rigidulum	FACW	40.0
Pluchea rosea	FACW	1.0
Rhynchospora cephalantha	OBL	19.0
Rhynchospora fascicularis	FACW+	6.0
Rhynchospora inundata	OBL	13.0
Xyris fimbriata	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	76.9	84.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T9P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Blechnum serrulatum	FACW+	11.0
Myrica cerifera	FAC+	1.0
Rhynchospora cephalantha	OBL	11.0
Rhynchospora fascicularis	FACW+	11.0
Smilax smallii	FACU	1.0
Taxodium distichum	OBL	1.0
Woodwardia virginica	OBL	11.0
Xyris fimbriata	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	11.1	1.0
WETLAND SPECIES	6	66.7	46.0

PLOT T10P1

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	3.0
Aristida stricta	FAC-	38.0
Lyonia lucida	FACW	5.0
Quercus pumila	NL	5.0
Serenoa repens	FACU	33.0
Sorghastrum secundum	FACU-	3.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	50.0	41.0
WETLAND SPECIES	1	16.7	5.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T10P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	10.0
Aristida stricta	FAC-	20.0
Aster reticulatus	FACW	10.0
Rhynchospora fascicularis	FACW+	10.0
Serenoa repens	FACU	30.0
unknown herb		20.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	16.7	30.0
WETLAND SPECIES	2	33.3	20.0

PLOT T10P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	50.0
Aster reticulatus	FACW	6.0
Euthamia minor	FAC	1.0
Hypericum cistifolium	FACW	1.0
Rhexia nuttallii	FACW+	1.0
Rhynchospora breviseta	OBL	1.0
Rhynchospora fascicularis	FACW+	31.0
Rhynchospora inundata	OBL	6.0
Sarracenia minor	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	77.8	47.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T10P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	7.0
Flaveria linearis	FACW	1.0
Hydrocotyle umbellata	OBL	1.0
Hypericum sp.		13.0
Ludwigia octovalvis	OBL	1.0
Rhynchospora cephalantha	OBL	53.0
Rhynchospora inundata	OBL	7.0
Rhynchospora microcarpa	FACW+	1.0
Sarracenia minor	OBL	1.0
Taxodium distichum	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	8	80.0	66.0

PLOT T10P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	16.0
Diodia virginiana	FACW	1.0
Eriocaulon decangulare	OBL	4.0
Hypericum tetrapetalum	FACW	4.0
Lycopus rubellus	OBL	1.0
Nyssa sylvatica	OBL	4.0
Panicum sp.		1.0
Paspalum praecox	OBL	1.0
Rhynchospora cephalantha	OBL	24.0
Rhynchospora inundata	OBL	24.0
Xyris sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	8	72.7	63.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T11P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	24.0
Aster reticulatus	FACW	3.0
Ilex glabra	FACW	5.0
Lyonia lucida	FACW	32.0
Quercus pumila	NL	8.0
Serenoa repens	FACU	26.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	33.3	34.0
WETLAND SPECIES	3	50.0	40.0

PLOT T11P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	13.0
Aristida spiciformis	FAC	1.0
Aristida stricta	FAC-	50.0
Drosera sp.		1.0
Euthamia minor	FAC	1.0
Hypericum cistifolium	FACW	1.0
Hypericum reductum	FACU	1.0
Pterocaulon virgatum	FAC-	1.0
Rhynchospora fascicularis	FACW+	13.0
Sarracenia minor	OBL	1.0
Serenoa repens	FACU	13.0
Sorghastrum secundum	FACU-	1.0
unknown legume		1.0
Vaccinium sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	21.4	15.0
WETLAND SPECIES	3	21.4	15.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T11P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	6.0
Aristida stricta	FAC-	72.0
Euthamia minor	FAC	1.0
Fuirena scirpoidea	OBL	1.0
Hypericum cistifolium	FACW	1.0
Rhexia mariana	FACW+	1.0
Rhexia nuttallii	FACW+	1.0
Rhynchospora inundata	OBL	1.0
Sarracenia minor	OBL	1.0
Serenoa repens	FACU	12.0
unknown legume		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	9.1	12.0
WETLAND SPECIES	6	54.5	6.0

PLOT T11P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	5.0
Euthamia minor	FAC	29.0
Hypericum tetrapetalum	FACW	1.0
Ludwigia octovalvis	OBL	1.0
Panicum rigidulum	FACW	1.0
Paspalum praecox	OBL	1.0
Rhynchospora cephalantha	OBL	24.0
Rhynchospora inundata	OBL	19.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	6	75.0	47.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT	T11P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Diodia virginiana	FACW	9.0
		Eriocaulon decangulare	OBL	9.0
		Euthamia minor	FAC	28.0
		Hypericum tetrapetalum	FACW	1.0
		Paspalum praecox	OBL	1.0
		Rhynchospora inundata	OBL	14.0
		Sacciolepis indica	FAC	1.0
		Xyris fimbriata	OBL	19.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	6	75.0	53.0

PLOT	T12AP1	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	10.0
		Ilex glabra	FACW	23.0
		Quercus pumila	NL	10.0
		Serenoa repens	FACU	28.0
		Sorghastrum secundum	FACU-	5.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	60.0	43.0
WETLAND SPECIES	1	20.0	23.0

PLOT	T12AP2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	13.0
		Aristida spiciformis	FAC	7.0
		Aristida stricta	FAC-	20.0
		Carphephorus odoratissimus	FACW	26.0
		Euthamia minor	FAC	7.0
		Hypericum sp.		1.0
		Rhynchospora fascicularis	FACW+	13.0
		Sorghastrum secundum	FACU-	13.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	12.5	13.0
WETLAND SPECIES	2	25.0	39.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT	T12AP3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Ageratina jucunda	NL	1.0
		Andropogon virginicus	FAC-	15.0
		Aristida spiciformis	FAC	8.0
		Aristida stricta	FAC-	46.0
		Euthamia minor	FAC	8.0
		Hypericum sp.		1.0
		Lachnocaulon anceps	OBL	1.0
		Pterocaulon virgatum	FAC-	1.0
		Rhynchospora fascicularis	FACW+	15.0
		Vaccinium sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	10.0	1.0
WETLAND SPECIES	2	20.0	16.0

PLOT	T12AP4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	5.0
		Aristida stricta	FAC-	10.0
		Aster reticulatus	FACW	5.0
		Carphephorus odoratissimus	FACW	5.0
		Drosera sp.		1.0
		Hypericum cistifolium	FACW	1.0
		Hypericum sp.		1.0
		Lyonia lucida	FACW	1.0
		Polygala sp.		1.0
		Pterocaulon virgatum	FAC-	1.0
		Quercus pumila	NL	10.0
		Rhynchospora fascicularis	FACW+	5.0
		Serenoa repens	FACU	42.0
		Sorghastrum secundum	FACU-	5.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	21.4	57.0
WETLAND SPECIES	5	35.7	17.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT	T12AP5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aletris lutea	FACW+	1.0
		Aristida spiciformis	FAC	1.0
		Aster reticulatus	FACW	1.0
		Carphephorus odoratissimus	FACW	1.0
		Centella asiatica	FACW	1.0
		Eriocaulon decangulare	OBL	1.0
		Hypericum fasciculatum	FACW+	1.0
		Lycopodium carolinianum	OBL	1.0
		Lyonia lucida	FACW	1.0
		Oxypolis filiformis	FACW+	26.0
		Panicum rigidulum	FACW	1.0
		Paspalum praecox	OBL	1.0
		Pterocaulon virgatum	FAC-	1.0
		Rhexia nuttallii	FACW+	1.0
		Rhynchospora fascicularis	FACW+	1.0
		unknown herb		1.0
		Woodwardia virginica	OBL	1.0
		Xyris ambigua	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	15	83.3	40.0

PLOT	T12AP6	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida spiciformis	FAC	9.0
		Aristida stricta	FAC-	33.0
		Carphephorus odoratissimus	FACW	9.0
		Drosera sp.		1.0
		Quercus pumila	NL	19.0
		Rhynchospora fascicularis	FACW+	9.0
		Serenoa repens	FACU	9.0
		Sorghastrum secundum	FACU-	9.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	37.5	37.0
WETLAND SPECIES	2	25.0	18.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T12AP7 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp. 1		1.0
Andropogon virginicus	FAC-	6.0
Aristida spiciformis	FAC	6.0
Aristida stricta	FAC-	24.0
Euthamia minor	FAC	1.0
Lachnocaulon anceps	OBL	1.0
Myrica cerifera	FAC+	6.0
Quercus pumila	NL	42.0
Serenoa repens	FACU	12.0
Sorghastrum secundum	FACU-	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	30.0	55.0
WETLAND SPECIES	1	10.0	1.0

PLOT T12BP1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	31.0
Quercus pumila	NL	33.0
Serenoa repens	FACU	17.0
Sorghastrum secundum	FACU-	6.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	75.0	56.0
WETLAND SPECIES	0	0.0	0.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T12BP2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp. 1		1.0
Andropogon virginicus	FAC-	6.0
Aristida spiciformis	FAC	6.0
Aristida stricta	FAC-	6.0
Euthamia minor	FAC	6.0
Fuirena scirpoidea	OBL	6.0
Hypericum reductum	FACU	1.0
Lachnocaulon anceps	OBL	1.0
Myrica cerifera	FAC+	24.0
Pterocaulon virgatum	FAC-	1.0
Quercus pumila	NL	32.0
Serenoa repens	FACU	6.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	25.0	39.0
WETLAND SPECIES	2	16.7	7.0

PLOT T12BP3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Ageratina jucunda	NL	1.0
Aristida stricta	FAC-	15.0
Carphephorus odoratissimus	FACW	23.0
Euthamia minor	FAC	8.0
Fuirena scirpoidea	OBL	1.0
Hypericum tetrapetalum	FACW	1.0
OPEN GROUND		15.0
Pinus palustris	FACU+	1.0
Pterocaulon virgatum	FAC-	1.0
Rhynchospora fascicularis	FACW+	23.0
unknown grass		1.0
Xyris ambigua	OBL	8.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	18.2	2.0
WETLAND SPECIES	5	45.5	56.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T12BP4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Ageratina jucunda	NL	5.0
Andropogon sp. 1		10.0
Aristida spiciformis	FAC	5.0
Aristida stricta	FAC-	20.0
Carphephorus odoratissimus	FACW	30.0
Hypericum sp.		1.0
Rhexia nuttallii	FACW+	1.0
Rhynchospora fascicularis	FACW+	15.0
Xyris ambigua	OBL	15.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	11.1	5.0
WETLAND SPECIES	4	44.4	61.0

PLOT T12BP5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Aster reticulatus	FACW	1.0
Bacopa caroliniana	OBL	49.0
Eriocaulon decangulare	OBL	1.0
Euthamia minor	FAC	4.0
Flaveria linearis	FACW	1.0
Hypericum cistifolium	FACW	8.0
Hypericum sp.		1.0
Linum sp.		1.0
Lyonia lucida	FACW	1.0
Myrica cerifera	FAC+	1.0
Oxypolis filiformis	FACW+	1.0
Panicum hemitomon	OBL	8.0
Pinus palustris	FACU+	1.0
Pterocaulon virgatum	FAC-	1.0
Quercus pumila	NL	4.0
Rhexia nuttallii	FACW+	1.0
Rhynchospora fascicularis	FACW+	12.0
Xyris ambigua	OBL	4.0
Xyris fimbriata	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	10.0	5.0
WETLAND SPECIES	12	60.0	88.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT	T12P1	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	40.0
		Lyonia lucida	FACW	16.0
		Myrica cerifera	FAC+	9.0
		Quercus pumila	NL	7.0
		Serenoa repens	FACU	11.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	40.0	18.0
WETLAND SPECIES	1	20.0	16.0

PLOT	T12P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	7.0
		Aristida stricta	FAC-	46.0
		Eragrostis sp.		1.0
		Hypericum cistifolium	FACW	1.0
		Hypericum tetrapetalum	FACW	1.0
		Ilex glabra	FACW	26.0
		Rhexia nuttallii	FACW+	1.0
		Rhynchospora fascicularis	FACW+	1.0
		Rhynchospora inundata	OBL	7.0
		Serenoa repens	FACU	7.0
		Xyris sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	9.1	7.0
WETLAND SPECIES	6	54.5	37.0

PLOT	T12P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	12.0
		Aristida stricta	FAC-	24.0
		Aster reticulatus	FACW	1.0
		Euthamia minor	FAC	6.0
		Hypericum cistifolium	FACW	1.0
		Ilex glabra	FACW	30.0
		Rhynchospora fascicularis	FACW+	1.0
		Rhynchospora inundata	OBL	24.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	5	62.5	57.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T12P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Eragrostis sp.		1.0
Euthamia minor	FAC	19.0
Hypericum tetrapetalum	FACW	6.0
Paspalum praecox	OBL	1.0
Rhynchospora cephalantha	OBL	13.0
Rhynchospora fascicularis	FACW+	25.0
Rhynchospora inundata	OBL	19.0
Sacciolepis indica	FAC	1.0
Xyris ambigua	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	6	66.7	65.0

PLOT T12P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	13.0
Cyperus sp.		1.0
Eriocaulon decangulare	OBL	6.0
Euthamia minor	FAC	1.0
Hypericum tetrapetalum	FACW	1.0
Ludwigia suffruticosa	OBL	1.0
Oxypolis filiformis	FACW+	1.0
Panicum sp.		1.0
Paspalum praecox	OBL	1.0
Rhynchospora cephalantha	OBL	1.0
Rhynchospora fascicularis	FACW+	1.0
Rhynchospora inundata	OBL	6.0
Sacciolepis indica	FAC	1.0
Triadenum virginicum	OBL	1.0
Xyris fimbriata	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	66.7	20.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T14P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	21.0
Aster reticulatus	FACW	4.0
Ilex glabra	FACW	11.0
Rhynchospora fascicularis	FACW+	32.0
Serenoa repens	FACU	29.0
Sorghastrum secundum	FACU-	4.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	33.3	33.0
WETLAND SPECIES	3	50.0	47.0

PLOT T14P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp.		1.0
Andropogon virginicus	FAC-	1.0
Aristida stricta	FAC-	7.0
Aster reticulatus	FACW	7.0
Carphephorus odoratissimus	FACW	7.0
Fuirena scirpoidea	OBL	1.0
Hypericum cistifolium	FACW	1.0
Linum sp.		1.0
Myrica cerifera	FAC+	27.0
Paspalum praecox	OBL	1.0
Rhexia mariana	FACW+	1.0
Rhynchospora fascicularis	FACW+	27.0
Sarracenia minor	OBL	1.0
Serenoa repens	FACU	14.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	7.1	14.0
WETLAND SPECIES	8	57.1	46.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT	T14P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	1.0
		Aristida stricta	FAC-	25.0
		Carphephorus odoratissimus	FACW	1.0
		Flaveria linearis	FACW	1.0
		Fuirena scirpoidea	OBL	1.0
		Hypericum cistifolium	FACW	6.0
		Hypericum fasciculatum	FACW+	1.0
		Ilex glabra	FACW	19.0
		Linum sp.		1.0
		Paspalum praecox	OBL	1.0
		Pluchea rosea	FACW	1.0
		Rhynchospora fascicularis	FACW+	38.0
		Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	76.9	70.0

PLOT	T14P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Diodia virginiana	FACW	1.0
		Eriocaulon decangulare	OBL	11.0
		Hypericum fasciculatum	FACW+	45.0
		Hypericum tetrapetalum	FACW	7.0
		Ludwigia suffruticosa	OBL	1.0
		Mikania scandens	FACW+	1.0
		Proserpinaca pectinata	OBL	7.0
		Rhynchospora cephalantha	OBL	20.0
		Rhynchospora fascicularis	FACW+	7.0
		Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	100.0	101.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T14P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Bacopa caroliniana	OBL	42.0
Eragrostis sp.		1.0
Fuirena scirpoidea	OBL	1.0
Hypericum fasciculatum	FACW+	1.0
Hyptis alata	OBL	1.0
Juncus scirpoides	FACW+	24.0
Ludwigia octovalvis	OBL	1.0
Lycopus rubellus	OBL	1.0
Mikania scandens	FACW+	1.0
Myrica cerifera	FAC+	12.0
Panicum rigidulum	FACW	1.0
Proserpinaca pectinata	OBL	6.0
Rhynchospora inundata	OBL	6.0
Xyris ambigua	OBL	1.0
Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	13	86.7	87.0

PLOT T15P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	2.0
Aristida stricta	FAC-	28.0
Ilex glabra	FACW	44.0
Rhynchospora fascicularis	FACW+	3.0
Serenoa repens	FACU	22.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	22.0
WETLAND SPECIES	2	40.0	47.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT	T15P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	59.0
		Aster reticulatus	FACW	11.0
		Drosera sp.		1.0
		Fuirena scirpoidea	OBL	1.0
		Rhynchospora fascicularis	FACW+	5.0
		Sabatia brevifolia	FACW	1.0
		Serenoa repens	FACU	22.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	14.3	22.0
WETLAND SPECIES	4	57.1	18.0

PLOT	T15P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	79.0
		Aster reticulatus	FACW	5.0
		Fuirena scirpoidea	OBL	1.0
		Hypericum cistifolium	FACW	1.0
		Linum sp.		1.0
		Myrica cerifera	FAC+	1.0
		Panicum sp.		1.0
		Rhynchospora fascicularis	FACW+	11.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	4	50.0	18.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT	T15P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp. 1		6.0
		Aristida stricta	FAC-	29.0
		Centella asiatica	FACW	1.0
		Dichromena sp.		1.0
		Eragrostis sp.		6.0
		Fuirena pumila	OBL	1.0
		Hypericum fasciculatum	FACW+	12.0
		Hypericum tetrapetalum	FACW	1.0
		Ludwigia octovalvis	OBL	1.0
		Mikania scandens	FACW+	1.0
		Myrica cerifera	FAC+	6.0
		Paspalum praecox	OBL	1.0
		Pluchea rosea	FACW	1.0
		Proserpinaca pectinata	OBL	1.0
		Rhynchospora cephalantha	OBL	12.0
		Scleria reticularis	OBL	6.0
		Setaria geniculata	FAC	1.0
		Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	12	66.7	39.0

PLOT	T15P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Bacopa caroliniana	OBL	1.0
		Coreopsis leavenworthii	FACW	1.0
		Eragrostis sp.		1.0
		Eriocaulon decangulare	OBL	1.0
		Fuirena pumila	OBL	1.0
		Hypericum fasciculatum	FACW+	1.0
		Hypericum tetrapetalum	FACW	1.0
		Juncus scirpoides	FACW+	1.0
		Ludwigia octovalvis	OBL	1.0
		Lycopus rubellus	OBL	1.0
		Mikania scandens	FACW+	1.0
		Myrica cerifera	FAC+	52.0
		Paspalum praecox	OBL	1.0
		Rhynchospora cephalantha	OBL	10.0
		Rhynchospora inundata	OBL	1.0
		Sacciolepis indica	FAC	1.0
		Typha latifolia	OBL	1.0
		unknown grass		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	14	77.8	23.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T16P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	69.0
Ilex glabra	FACW	9.0
Myrica cerifera	FAC+	3.0
Serenoa repens	FACU	14.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	25.0	14.0
WETLAND SPECIES	1	25.0	9.0

PLOT T16P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Aristida stricta	FAC-	47.0
Aster reticulatus	FACW	1.0
Carphephorus odoratissimus	FACW	6.0
Centella asiatica	FACW	1.0
Chaptalia tomentosa	FACW	6.0
Euthamia minor	FAC	1.0
Flaveria linearis	FACW	1.0
Fuirena scirpoidea	OBL	1.0
Hypericum cistifolium	FACW	1.0
Hypericum tetrapetalum	FACW	1.0
Ilex glabra	FACW	6.0
Lachnocaulon anceps	OBL	1.0
Linum sp.		1.0
Mitreola petiolata	FACW+	1.0
Polygala sp.		1.0
Rhexia nuttallii	FACW+	1.0
Scleria hirtella	FACW-	1.0
Serenoa repens	FACU	6.0
unknown grass		6.0
unknown grass		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	4.8	6.0
WETLAND SPECIES	13	61.9	28.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T16P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Aristida stricta	FAC-	54.0
Carphephorus odoratissimus	FACW	6.0
Centella asiatica	FACW	1.0
Chaptalia tomentosa	FACW	1.0
Coreopsis leavenworthii	FACW	1.0
Eriocaulon decangulare	OBL	1.0
Flaveria linearis	FACW	1.0
Fuirena scirpoidea	OBL	6.0
Hypericum cistifolium	FACW	12.0
Iva microcephala	FACW	1.0
Mitreola petiolata	FACW+	1.0
Pluchea rosea	FACW	1.0
Polygala sp.		1.0
Scleria hirtella	FACW-	1.0
Scleria reticularis	OBL	1.0
unknown grass		6.0
Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	14	77.8	35.0

PLOT T16P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Centella asiatica	FACW	1.0
Dichromena sp.		1.0
Fuirena pumila	OBL	1.0
Hypericum cistifolium	FACW	8.0
Mikania scandens	FACW+	8.0
Myrica cerifera	FAC+	8.0
Oxypolis filiformis	FACW+	2.0
Panicum rigidulum	FACW	16.0
Paspalum praecox	OBL	1.0
Rhynchospora cephalantha	OBL	8.0
Rhynchospora fascicularis	FACW+	1.0
Scleria reticularis	OBL	8.0
Taxodium distichum	OBL	8.0
unknown grass		33.0
Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	12	80.0	63.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T16P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Bacopa caroliniana	OBL	6.0
Centella asiatica	FACW	1.0
Cyperus sp.		5.0
Eragrostis sp.		6.0
Fuirena pumila	OBL	1.0
Hyptis alata	OBL	1.0
Juncus scirpoides	FACW+	20.0
Lycopus rubellus	OBL	1.0
Mikania scandens	FACW+	6.0
Myrica cerifera	FAC+	6.0
Panicum sp.		11.0
Paspalum praecox	OBL	1.0
Pluchea rosea	FACW	1.0
Rhynchospora cephalantha	OBL	1.0
Rhynchospora fascicularis	FACW+	1.0
Xyris ambigua	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	12	75.0	41.0

PLOT T17P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	7.0
Aristida stricta	FAC-	40.0
Ilex glabra	FACW	27.0
Rhynchospora fascicularis	FACW+	7.0
Serenoa repens	FACU	17.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	17.0
WETLAND SPECIES	2	40.0	34.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT	T17P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aletris lutea	FACW+	1.0
		Andropogon virginicus	FAC-	14.0
		Aristida stricta	FAC-	56.0
		Carphephorus odoratissimus	FACW	1.0
		Chaptalia tomentosa	FACW	1.0
		Fuirena scirpoidea	OBL	1.0
		Hypericum cistifolium	FACW	1.0
		Myrica cerifera	FAC+	14.0
		Phoebanthus grandiflora	NL	1.0
		Rhexia nuttallii	FACW+	1.0
		Rhynchospora fascicularis	FACW+	1.0
		Rhynchospora sp.		1.0
		Scleria reticularis	OBL	1.0
		unknown grass		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	7.1	1.0
WETLAND SPECIES	8	57.1	8.0

PLOT	T17P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	6.0
		Aristida stricta	FAC-	36.0
		Carphephorus odoratissimus	FACW	6.0
		Centella asiatica	FACW	1.0
		Chaptalia tomentosa	FACW	6.0
		Fuirena pumila	OBL	1.0
		Fuirena scirpoidea	OBL	1.0
		Hypericum cistifolium	FACW	6.0
		Linum sp.		1.0
		Myrica cerifera	FAC+	1.0
		Panicum sp.		1.0
		Pluchea rosea	FACW	1.0
		Rhexia nuttallii	FACW+	1.0
		Rhynchospora sp.		24.0
		Sarracenia minor	OBL	1.0
		Scleria reticularis	OBL	1.0
		Setaria geniculata	FAC	1.0
		unknown grass		1.0
		Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	11	57.9	26.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T17P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Centella asiatica	FACW	1.0
Dichromena sp.		1.0
Eragrostis sp.		1.0
Eriocaulon decangulare	OBL	30.0
Hypericum fasciculatum	FACW+	15.0
Hypericum tetrapetalum	FACW	1.0
Lycopus rubellus	OBL	1.0
Myrica cerifera	FAC+	20.0
Oxypolis filiformis	FACW+	1.0
Pluchea rosea	FACW	5.0
Proserpinaca pectinata	OBL	1.0
Rhynchospora cephalantha	OBL	10.0
Scleria reticularis	OBL	1.0
unknown grass		5.0
Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	11	68.8	67.0

PLOT T17P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Bacopa caroliniana	OBL	1.0
Centella asiatica	FACW	1.0
Diodia virginiana	FACW	1.0
Eriocaulon decangulare	OBL	14.0
Hypericum fasciculatum	FACW+	7.0
Ludwigia octovalvis	OBL	1.0
Myrica cerifera	FAC+	1.0
Proserpinaca pectinata	OBL	7.0
Rhynchospora cephalantha	OBL	14.0
Rhynchospora fascicularis	FACW+	1.0
Rhynchospora inundata	OBL	41.0
Scleria reticularis	OBL	1.0
unknown grass		7.0
Xyris ambigua	OBL	1.0
Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	13	86.7	91.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T18P1

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	5.0
Aristida stricta	FAC-	74.0
Ilex glabra	FACW	3.0
Rhynchospora fascicularis	FACW+	5.0
Serenoa repens	FACU	8.0
Sorghastrum secundum	FACU-	3.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	33.3	11.0
WETLAND SPECIES	2	33.3	8.0

PLOT T18P2

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	6.0
Aristida stricta	FAC-	39.0
Aster reticulatus	FACW	11.0
Hypericum cistifolium	FACW	1.0
Ilex glabra	FACW	33.0
Phoebanthus grandiflora	NL	1.0
Rhexia mariana	FACW+	1.0
Rhynchospora sp.		6.0
Rubus sp.		1.0
Serenoa repens	FACU	6.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	20.0	7.0
WETLAND SPECIES	4	40.0	46.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT	T18P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	78.0
		Carphephorus odoratissimus	FACW	1.0
		Eriocaulon decangulare	OBL	6.0
		Hypericum cistifolium	FACW	1.0
		Hypericum fasciculatum	FACW+	1.0
		Mikania scandens	FACW+	1.0
		Paspalum praecox	OBL	1.0
		Phoebanthus grandiflora	NL	1.0
		Pluchea rosea	FACW	1.0
		Rhynchospora fascicularis	FACW+	1.0
		Rhynchospora sp.		6.0
		Scleria reticularis	OBL	1.0
		Xyris ambigua	OBL	1.0

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	7.7	1.0
WETLAND SPECIES	10	76.9	15.0

PLOT	T18P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	1.0
		Aristida spiciformis	FAC	15.0
		Dichromena sp.		1.0
		Flaveria linearis	FACW	1.0
		Hypericum cistifolium	FACW	1.0
		Hypericum fasciculatum	FACW+	22.0
		Hypericum tetrapetalum	FACW	1.0
		Lycopus rubellus	OBL	1.0
		Myrica cerifera	FAC+	1.0
		Panicum sp.		1.0
		Rhynchospora cephalantha	OBL	22.0
		Rhynchospora fascicularis	FACW+	1.0
		Scleria reticularis	OBL	7.0
		Taxodium distichum	OBL	7.0

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	9	64.3	63.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T18P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Agalinus linifolia	FACW	1.0
Eriocaulon decangulare	OBL	14.0
Hypericum cistifolium	FACW	1.0
Hypericum fasciculatum	FACW+	1.0
Lycopus rubellus	OBL	7.0
Mikania scandens	FACW+	1.0
Osmunda cinnamomea	FACW+	1.0
Panicum rigidulum	FACW	27.0
Rhynchospora cephalantha	OBL	14.0
Rhynchospora fascicularis	FACW+	14.0
Taxodium distichum	OBL	1.0
Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	12	100.0	83.0

PLOT T19P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	9.0
Aster reticulatus	FACW	1.0
Ilex glabra	FACW	9.0
Lyonia lucida	FACW	4.0
Serenoa repens	FACU	78.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	78.0
WETLAND SPECIES	3	60.0	14.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT	T19P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Ageratina jucunda	NL	1.0
		Aristida stricta	FAC-	82.0
		Aster reticulatus	FACW	5.0
		Fuirena scirpoidea	OBL	1.0
		Hypericum cistifolium	FACW	1.0
		Ilex glabra	FACW	5.0
		Phoebanthus grandiflora	NL	1.0
		Rhynchospora fascicularis	FACW+	1.0
		Sabatia brevifolia	FACW	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	22.2	2.0
WETLAND SPECIES	6	66.7	14.0

PLOT	T19P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	6.0
		Aristida stricta	FAC-	47.0
		Aster reticulatus	FACW	1.0
		Centella asiatica	FACW	1.0
		Eriocaulon decangulare	OBL	1.0
		Euthamia minor	FAC	1.0
		Fuirena pumila	OBL	6.0
		Hypericum cistifolium	FACW	6.0
		Iva microcephala	FACW	1.0
		Myrica cerifera	FAC+	6.0
		Paspalum praecox	OBL	1.0
		Pluchea rosea	FACW	1.0
		Rhexia mariana	FACW+	1.0
		Sarracenia minor	OBL	1.0
		Scleria reticularis	OBL	6.0
		unknown grass		1.0
		Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	12	70.6	27.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T19P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Centella asiatica	FACW	2.0
Dichromena sp.		2.0
Eriocaulon decangulare	OBL	26.0
Euthamia minor	FAC	2.0
Fuirena pumila	OBL	2.0
Hypericum cistifolium	FACW	2.0
Hypericum fasciculatum	FACW+	9.0
Mikania scandens	FACW+	2.0
Myrica cerifera	FAC+	9.0
Pluchea rosea	FACW	2.0
Proserpinaca pectinata	OBL	2.0
Rhynchospora fascicularis	FACW+	9.0
Scleria reticularis	OBL	2.0
Scleria triglomerata	FACU+	2.0
Xyris ambigua	OBL	2.0
Xyris elliottii	OBL	2.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	6.3	2.0
WETLAND SPECIES	12	75.0	62.0

PLOT T19P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Blechnum serrulatum	FACW+	11.0
Hypericum cistifolium	FACW	1.0
Hypericum fasciculatum	FACW+	1.0
Lycopus rubellus	OBL	11.0
Osmunda cinnamomea	FACW+	1.0
Panicum rigidulum	FACW	27.0
Rhynchospora cephalantha	OBL	5.0
Rhynchospora fascicularis	FACW+	5.0
Xyris fimbriata	OBL	5.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	9	100.0	67.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T20P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	19.0
Ilex glabra	FACW	19.0
Lyonia lucida	FACW	5.0
Myrica cerifera	FAC+	5.0
Rhynchospora fascicularis	FACW+	5.0
Serenoa repens	FACU	48.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	16.7	48.0
WETLAND SPECIES	3	50.0	29.0

PLOT T20P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	12.0
Aristida spiciformis	FAC	12.0
Aster reticulatus	FACW	1.0
Fuirena scirpoidea	OBL	1.0
Hypericum cistifolium	FACW	1.0
OPEN GROUND		12.0
Rhynchospora sp.		42.0
Sarracenia minor	OBL	1.0
Serenoa repens	FACU	21.0
unknown herb		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	11.1	21.0
WETLAND SPECIES	4	44.4	4.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T20P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp. 1		5.0
Andropogon virginicus	FAC-	5.0
Aristida stricta	FAC-	32.0
Aster reticulatus	FACW	1.0
Flaveria linearis	FACW	1.0
Fuirena pumila	OBL	1.0
Hydrocotyle umbellata	OBL	1.0
Hypericum cistifolium	FACW	1.0
Myrica cerifera	FAC+	11.0
Panicum rigidulum	FACW	1.0
Panicum sp.		1.0
Rhynchospora sp.		1.0
Sarracenia minor	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	53.8	7.0

PLOT T20P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Ageratum sp.		1.0
Andropogon virginicus	FAC-	1.0
Aristida stricta	FAC-	5.0
Blechnum serrulatum	FACW+	5.0
Centella asiatica	FACW	1.0
Dichromena sp.		1.0
Eriocaulon decangulare	OBL	1.0
Eupatorium capillifolium	FACU	1.0
Euthamia minor	FAC	1.0
Hypericum cistifolium	FACW	40.0
Hypericum fasciculatum	FACW+	5.0
Mikania scandens	FACW+	1.0
Myrica cerifera	FAC+	20.0
Osmunda regalis	OBL	1.0
Panicum sp.		1.0
Spartina bakeri	FACW+	5.0
Taxodium distichum	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	5.9	1.0
WETLAND SPECIES	9	52.9	60.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T20P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Blechnum serrulatum	FACW+	11.0
Eriocaulon decangulare	OBL	11.0
Lycopus rubellus	OBL	11.0
Panicum rigidulum	FACW	22.0
Pluchea rosea	FACW	1.0
Rhynchospora cephalantha	OBL	11.0
Rhynchospora fascicularis	FACW+	6.0
Taxodium distichum	OBL	6.0
Xyris fimbriata	OBL	6.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	9	100.0	85.0

PLOT T21P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	36.0
Myrica cerifera	FAC+	9.0
Rhynchospora fascicularis	FACW+	18.0
Serenoa repens	FACU	36.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	25.0	36.0
WETLAND SPECIES	1	25.0	18.0

PLOT T21P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Aristida stricta	FAC-	90.0
Hypericum cistifolium	FACW	1.0
Linum sp.		1.0
Rhexia nuttallii	FACW+	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	2	40.0	2.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T21P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	5.0
Cassia chamaecrista	NL	1.0
Hydrocotyle umbellata	OBL	1.0
Hypericum cistifolium	FACW	5.0
Mikania scandens	FACW+	5.0
Mitreola petiolata	FACW+	1.0
Rhexia mariana	FACW+	1.0
Rhynchospora cephalantha	OBL	1.0
Sabatia brevifolia	FACW	1.0
Scleria reticularis	OBL	1.0
Scutellaria sp.		1.0
Sisyrinchium atlanticum	FACW-	5.0
Spartina bakeri	FACW+	73.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	7.7	1.0
WETLAND SPECIES	10	76.9	94.0

PLOT T21P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Ageratum sp.		1.0
Andropogon virginicus	FAC-	6.0
Blechnum serrulatum	FACW+	1.0
Centella asiatica	FACW	1.0
Eragrostis sp.		1.0
Eriocaulon decangulare	OBL	12.0
Euthamia minor	FAC	1.0
Fuirena pumila	OBL	1.0
Hydrocotyle umbellata	OBL	1.0
Hypericum cistifolium	FACW	12.0
Hypericum fasciculatum	FACW+	1.0
Mikania scandens	FACW+	1.0
Myrica cerifera	FAC+	12.0
Rhynchospora sp.		12.0
Spartina bakeri	FACW+	24.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	9	60.0	54.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T21P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Blechnum serrulatum	FACW+	12.0
Hypericum cistifolium	FACW	1.0
Lycopus rubellus	OBL	6.0
Myrica cerifera	FAC+	6.0
Panicum rigidulum	FACW	12.0
Pluchea rosea	FACW	1.0
Rhynchospora cephalantha	OBL	12.0
Rhynchospora fascicularis	FACW+	1.0
Taxodium distichum	OBL	1.0
Xyris fimbriata	OBL	12.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	9	90.0	58.0

PLOT T22P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	16.0
Ilex glabra	FACW	21.0
Myrica cerifera	FAC+	5.0
Serenoa repens	FACU	53.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	25.0	53.0
WETLAND SPECIES	1	25.0	21.0

PLOT T22P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Aristida stricta	FAC-	83.0
Aster reticulatus	FACW	1.0
Hypericum sp.		1.0
Ilex glabra	FACW	10.0
Myrica cerifera	FAC+	1.0
Rhexia nuttallii	FACW+	1.0
Scleria reticularis	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	4	50.0	13.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T22P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	12.0
Aristida stricta	FAC-	62.0
Aster reticulatus	FACW	1.0
Cirsium horridulum	FAC+	1.0
Eriocaulon decangulare	OBL	1.0
Hydrocotyle umbellata	OBL	1.0
Linum sp.		1.0
Mitreola petiolata	FACW+	1.0
Pluchea rosea	FACW	1.0
Scleria reticularis	OBL	1.0
Sisyrinchium atlanticum	FACW-	1.0
unknown herb		1.0
Xyris ambigua	OBL	1.0

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	8	61.5	8.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T22P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Ageratum sp.		1.0
Andropogon sp. 2		5.0
Andropogon virginicus	FAC-	1.0
Aristida spiciformis	FAC	1.0
Centella asiatica	FACW	1.0
Chaptalia tomentosa	FACW	1.0
Coreopsis leavenworthii	FACW	1.0
Dichromena sp.		1.0
Diodia virginiana	FACW	1.0
Eragrostis sp.		1.0
Eriocaulon decangulare	OBL	5.0
Eupatorium capillifolium	FACU	1.0
Euthamia minor	FAC	1.0
Fuirena pumila	OBL	1.0
Fuirena scirpoidea	OBL	5.0
Hydrocotyle umbellata	OBL	1.0
Hypericum fasciculatum	FACW+	1.0
Hyptis alata	OBL	1.0
Mitreola petiolata	FACW+	1.0
Panicum sp.		1.0
Phoebanthus grandiflora	NL	1.0
Pluchea rosea	FACW	1.0
Rhynchospora breviseta	OBL	5.0
Scleria reticularis	OBL	1.0
Scleria verticillata	OBL	1.0
Scutellaria sp.		1.0
Setaria geniculata	FAC	1.0
Sisyrinchium atlanticum	FACW-	1.0
Spartina bakeri	FACW+	36.0
Taxodium distichum	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	6.7	2.0
WETLAND SPECIES	18	60.0	65.0

PLOT T22P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Hypericum cistifolium	FACW	1.0
Hypericum sp.		1.0
Lycopus rubellus	OBL	1.0
Mikania scandens	FACW+	1.0
Myrica cerifera	FAC+	7.0
Osmunda cinnamomea	FACW+	1.0
Panicum rigidulum	FACW	7.0
Rhynchospora cephalantha	OBL	13.0
unknown herb		27.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	6	66.7	24.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T23AP1	SPECIES	USFWS STATUS	PERCENT COVERAGE
	Aristida stricta	FAC-	23.0
	Ilex glabra	FACW	23.0
	Myrica cerifera	FAC+	11.0
	Rhynchospora fascicularis	FACW+	9.0
	Serenoa repens	FACU	34.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	34.0
WETLAND SPECIES	2	40.0	32.0

PLOT T23AP2	SPECIES	USFWS STATUS	PERCENT COVERAGE
	Andropogon virginicus	FAC-	1.0
	Aristida stricta	FAC-	50.0
	Hypericum cistifolium	FACW	1.0
	Ilex glabra	FACW	10.0
	Lachnocaulon anceps	OBL	1.0
	Mitreola petiolata	FACW+	1.0
	Myrica cerifera	FAC+	35.0
	Panicum sp.		1.0
	Rhynchospora sp.		1.0
	Xyris ambigua	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	5	50.0	14.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT	T23AP3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	11.0
		Aristida stricta	FAC-	1.0
		Drosera sp.		1.0
		Fuirena pumila	OBL	1.0
		Lachnocaulon anceps	OBL	1.0
		Mitreola petiolata	FACW+	1.0
		Myrica cerifera	FAC+	11.0
		Pluchea rosea	FACW	1.0
		Scleria reticularis	OBL	1.0
		unknown grass		68.0
		unknown herb		1.0

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	5	45.5	5.0

PLOT	T23AP4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	6.0
		Centella asiatica	FACW	1.0
		Cirsium horridulum	FAC+	1.0
		Dichromena sp.		1.0
		Fuirena pumila	OBL	1.0
		Myrica cerifera	FAC+	6.0
		Osmunda cinnamomea	FACW+	1.0
		Oxypolis filiformis	FACW+	1.0
		Pluchea rosea	FACW	1.0
		Rhynchospora fascicularis	FACW+	1.0
		Scleria verticillata	OBL	1.0
		Sisyrinchium atlanticum	FACW-	1.0
		Spartina bakeri	FACW+	75.0

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	9	69.2	83.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T23AP5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Eragrostis sp.		27.0
Fuirena pumila	OBL	1.0
Hypericum sp.		1.0
Lycopus rubellus	OBL	7.0
Osmunda cinnamomea	FACW+	1.0
Panicum sp.		7.0
Pluchea rosea	FACW	13.0
Rhynchospora fascicularis	FACW+	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	5	55.6	23.0

PLOT T23BP1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	6.0
Ilex glabra	FACW	11.0
Myrica cerifera	FAC+	6.0
Serenoa repens	FACU	76.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	25.0	76.0
WETLAND SPECIES	1	25.0	11.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T23BP2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	9.0
Centella asiatica	FACW	5.0
Cirsium horridulum	FAC+	1.0
Diodia virginiana	FACW	1.0
Fuirena pumila	OBL	1.0
Hypericum sp.		9.0
Iva microcephala	FACW	1.0
Mitreola petiolata	FACW+	1.0
Myrica cerifera	FAC+	18.0
Pluchea rosea	FACW	1.0
Rubus sp.		1.0
Scleria reticularis	OBL	1.0
Serenoa repens	FACU	18.0
Sisyrinchium atlanticum	FACW-	1.0
Solidago elliottii	OBL	1.0
Spartina bakeri	FACW+	9.0
unknown grass		1.0
Xyris ambigua	OBL	1.0
Xyris elliottii	OBL	22.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	5.3	18.0
WETLAND SPECIES	12	63.2	45.0

PLOT T23BP3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp. 1		7.0
Centella asiatica	FACW	1.0
Cirsium horridulum	FAC+	1.0
Coreopsis leavenworthii	FACW	1.0
Dichromena sp.		1.0
Hypericum fasciculatum	FACW+	1.0
Iva microcephala	FACW	1.0
Myrica cerifera	FAC+	15.0
Oxypolis filiformis	FACW+	1.0
Pluchea rosea	FACW	1.0
Spartina bakeri	FACW+	37.0
unknown herb		29.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	58.3	43.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T23BP4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Centella asiatica	FACW	1.0
Fuirena pumila	OBL	1.0
Iva microcephala	FACW	1.0
Lycopus rubellus	OBL	1.0
Myrica cerifera	FAC+	38.0
Pluchea rosea	FACW	1.0
Rhynchospora fascicularis	FACW+	11.0
Rhynchospora inundata	OBL	1.0
Scleria verticillata	OBL	1.0
Spartina bakeri	FACW+	22.0
unknown herb		11.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	9	81.8	40.0

PLOT T23BP5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Eriocaulon decangulare	OBL	8.0
Lycopus rubellus	OBL	1.0
Myrica cerifera	FAC+	15.0
Pluchea rosea	FACW	1.0
Rhynchospora fascicularis	FACW+	1.0
Rhynchospora inundata	OBL	15.0
Taxodium distichum	OBL	1.0
unknown grass		8.0
Woodwardia virginica	OBL	1.0
Xyris fimbriata	OBL	15.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	8	80.0	43.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T24P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	20.0
Ilex glabra	FACW	39.0
Myrica cerifera	FAC+	5.0
Rhynchospora fascicularis	FACW+	10.0
Serenoa repens	FACU	24.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	24.0
WETLAND SPECIES	2	40.0	49.0

PLOT T24P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Agalinus sp.		1.0
Aristida stricta	FAC-	29.0
Eriocaulon decangulare	OBL	1.0
Hypericum cistifolium	FACW	1.0
Hypericum tetrapetalum	FACW	1.0
Iva microcephala	FACW	36.0
Mitreola petiolata	FACW+	1.0
Myrica cerifera	FAC+	7.0
Paspalum praecox	OBL	1.0
Phoebanthus grandiflora	NL	1.0
Rhexia mariana	FACW+	1.0
Rhynchospora sp.		15.0
Scutellaria sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	7.7	1.0
WETLAND SPECIES	7	53.8	42.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T24P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Agalinus sp.		1.0
Andropogon virginicus	FAC-	1.0
Coreopsis leavenworthii	FACW	1.0
Fuirena pumila	OBL	31.0
Ilex glabra	FACW	1.0
Iva microcephala	FACW	1.0
Linum sp.		1.0
Mitreola petiolata	FACW+	1.0
Phoebanthus grandiflora	NL	1.0
Polygala sp.		1.0
Rhynchospora sp.		46.0
unknown herb		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	8.3	1.0
WETLAND SPECIES	5	41.7	35.0

PLOT T24P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	8.0
Centella asiatica	FACW	1.0
Cirsium horridulum	FAC+	1.0
Coreopsis leavenworthii	FACW	1.0
Dichromena sp.		1.0
Eragrostis sp.		23.0
Fuirena pumila	OBL	1.0
Hypericum fasciculatum	FACW+	1.0
Hyptis alata	OBL	1.0
Iva microcephala	FACW	1.0
Linum sp.		1.0
Mitreola petiolata	FACW+	1.0
Myrica cerifera	FAC+	1.0
Oxypolis filiformis	FACW+	1.0
Pluchea rosea	FACW	1.0
Xyris elliottii	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	62.5	10.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T24P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Agalinus sp.		1.0
Andropogon virginicus	FAC-	1.0
Centella asiatica	FACW	1.0
Eriocaulon decangulare	OBL	13.0
Flaveria linearis	FACW	1.0
Fuirena pumila	OBL	1.0
Hypericum fasciculatum	FACW+	1.0
Hyptis alata	OBL	1.0
Iva microcephala	FACW	1.0
Linum sp.		1.0
Mitreola petiolata	FACW+	1.0
Myrica cerifera	FAC+	7.0
Oxypolis filiformis	FACW+	1.0
Pluchea rosea	FACW	1.0
Proserpinaca pectinata	OBL	1.0
Rhynchospora fascicularis	FACW+	20.0
Scleria triglomerata	FACU+	1.0
Stillingia sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	5.6	1.0
WETLAND SPECIES	12	66.7	43.0

PLOT T25P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida spiciformis	FAC	6.0
Aristida stricta	FAC-	28.0
Quercus pumila	NL	6.0
Rhynchospora fascicularis	FACW+	20.0
Serenoa repens	FACU	33.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	40.0	39.0
WETLAND SPECIES	1	20.0	20.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T25P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Agalinus sp.		1.0
Ageratina jucunda	NL	1.0
Andropogon sp. 1		5.0
Andropogon virginicus	FAC-	1.0
Aristida stricta	FAC-	43.0
Aster reticulatus	FACW	1.0
Myrica cerifera	FAC+	1.0
Phoebanthus grandiflora	NL	1.0
Rhexia nuttallii	FACW+	1.0
Rhynchospora fascicularis	FACW+	43.0
unknown legume		1.0
Xyris ambigua	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	16.7	2.0
WETLAND SPECIES	4	33.3	46.0

PLOT T25P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Aristida stricta	FAC-	34.0
Eriocaulon decangulare	OBL	7.0
Fuirena pumila	OBL	1.0
Hypericum cistifolium	FACW	1.0
Proserpinaca pectinata	OBL	14.0
Rhynchospora sp.		14.0
Scleria reticularis	OBL	1.0
Xyris ambigua	OBL	3.0
Xyris elliottii	OBL	3.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	70.0	30.0

Appendix C Table C2: Fall 1992
Vegetation Monitoring Baseline Data

PLOT T25P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Blechnum serrulatum	FACW+	7.0
Dichromena sp.		7.0
Eragrostis sp.		1.0
Eriocaulon decangulare	OBL	7.0
Euthamia minor	FAC	1.0
Hypericum cistifolium	FACW	1.0
Hypericum fasciculatum	FACW+	22.0
Lycopus rubellus	OBL	1.0
Oxypolis filiformis	FACW+	1.0
Proserpinaca pectinata	OBL	1.0
Scleria reticularis	OBL	1.0
Taxodium distichum	OBL	1.0
unknown grass		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	9	69.2	42.0

PLOT T25P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp. 2		1.0
Baccharis halimnifolia	FAC	1.0
Blechnum serrulatum	FACW+	6.0
Hypericum fasciculatum	FACW+	1.0
Lycopus rubellus	OBL	6.0
Osmunda cinnamomea	FACW+	1.0
Oxypolis filiformis	FACW+	1.0
Panicum hemitomon	OBL	1.0
Rhynchospora fascicularis	FACW+	1.0
Scleria triglomerata	FACU+	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	10.0	1.0
WETLAND SPECIES	7	70.0	17.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T7P1	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	20.0
		Ilex glabra	FACW	26.0
		Lyonia lucida	FACW	23.0
		Rhynchospora sp.		14.0
		Serenoa repens	FACU	17.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	17.0
WETLAND SPECIES	2	40.0	49.0

PLOT	T7P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	32.0
		Aristida spiciformis	FAC	1.0
		Aster reticulatus	FACW	19.0
		Calopogon sp.		1.0
		Drosera sp.		1.0
		Hypericum sp.		1.0
		Ilex glabra	FACW	6.0
		Lyonia lucida	FACW	3.0
		Panicum sp.		1.0
		Pinguicula sp.		3.0
		Rhexia sp.		1.0
		Rhynchospora sp.		13.0
		Sarracenia minor	OBL	1.0
		Serenoa repens	FACU	13.0
		unknown legume		1.0
		Vaccinium sp. (large)		1.0
		Vaccinium sp. (small)		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	5.9	13.0
WETLAND SPECIES	4	23.5	29.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T7P3

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	5.0
Aster reticulatus	FACW	5.0
Osmunda cinnamomea	FACW+	1.0
Sarracenia minor	OBL	1.0
Serenoa repens	FACU	83.0
Sphagnum sp.		5.0
unknown legume		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	14.3	83.0
WETLAND SPECIES	3	42.9	7.0

PLOT T7P4

SPECIES	USFWS STATUS	PERCENT COVERAGE
Cladium jamaicensis	OBL	82.0
Lyonia lucida	FACW	16.0
Osmunda cinnamomea	FACW+	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	3	100.0	99.0

PLOT T7P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Cladium jamaicensis	OBL	37.0
Myrica cerifera	FAC+	30.0
Pontederia cordata	OBL	30.0
unknown fern		1.0
Utricularia sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	2	40.0	67.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T26P1	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	10.0
		Lyonia ferrugenia	FAC-	1.0
		Lyonia lucida	FACW	10.0
		Serenoa repens	FACU	75.0
		Vaccinium sp. (large)		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	75.0
WETLAND SPECIES	1	20.0	10.0

PLOT	T26P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	12.0
		Chaptalia tomentosa	FACW	1.0
		Lyonia ferrugenia	FAC-	8.0
		Lyonia lucida	FACW	1.0
		Myrica cerifera	FAC+	4.0
		Panicum sp.		1.0
		Pinguicula lutea	FACW+	1.0
		Pteridium aquilinum	FACU	1.0
		Serenoa repens	FACU	59.0
		Smilax sp.		1.0
		unknown legume		1.0
		Vaccinium sp. (large)		12.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	16.7	60.0
WETLAND SPECIES	3	25.0	3.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T26P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	1.0
		Aster sp.		1.0
		Ilex glabra	FACW	41.0
		Lyonia lucida	FACW	7.0
		Myrica cerifera	FAC+	7.0
		Pinus serotina	FACW+	1.0
		Quercus pumila	NL	1.0
		Serenoa repens	FACU	34.0
		Vaccinium sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	22.2	35.0
WETLAND SPECIES	3	33.3	49.0

PLOT	T26P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	15.0
		Aristida stricta	FAC-	75.0
		Aster reticulatus	FACW	2.0
		Hypericum fasciculatum	FACW+	2.0
		Hypericum tetrapetalum	FACW	2.0
		Lycopus rubellus	OBL	2.0
		Proserpinaca pectinata	OBL	2.0
		Rhynchospora sp.		2.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	5	62.5	10.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T26P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Eriocaulon decangulare	OBL	17.0
Hypericum sp.		2.0
Hypericum sp. 2		2.0
Lycopus rubellus	OBL	8.0
Mikania scandens	FACW+	2.0
Proserpinaca pectinata	OBL	2.0
Rhynchospora sp.		42.0
unknown grass		17.0
unknown grass 2		8.0
Woodwardia virginica	OBL	2.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	5	50.0	31.0

PLOT T27P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	32.0
Baccharis halimnifolia	FAC	1.0
Myrica cerifera	FAC+	1.0
Rubus sp.		1.0
Serenoa repens	FACU	65.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	65.0
WETLAND SPECIES	0	0.0	0.0

PLOT T27P2A SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	1.0
Aristida stricta	FAC-	95.0
Hypericum sp.		1.0
Hypericum tetrapetalum	FACW	1.0
Panicum sp.		1.0
Quercus pumila	NL	1.0
Rhexia sp.		1.0
Sisyrinchium sp.		1.0
Viola septemloba	FAC+	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	11.1	1.0
WETLAND SPECIES	1	11.1	1.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T27P2B	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	10.0
		Aristida stricta	FAC-	95.0
		Euthamia minor	FAC	1.0
		Hypericum sp.		1.0
		Hypericum tetrapetalum	FACW	2.0
		Quercus pumila	NL	4.0
		Rhexia sp.		1.0
		Rhynchospora sp.		5.0
		Scleria hirtella	FACW-	2.0
		Sisyrinchium sp.		1.0
		Stillingia sylvatica	NL	1.0
		Viola septemloba	FAC+	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	16.7	5.0
WETLAND SPECIES	2	16.7	4.0

PLOT	T27P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	10.0
		Aristida stricta	FAC-	85.0
		Euthamia minor	FAC	0.4
		Hypericum sp.		0.4
		Hypericum sp. 2		0.4
		Hypericum tetrapetalum	FACW	0.4
		Mikania scandens	FACW+	2.0
		Rhexia sp.		0.4
		Rhynchospora sp.		0.4
		Viola septemloba	FAC+	0.4

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	2	20.0	2.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T27P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Bacopa caroliniana	OBL	65.0
		Centella asiatica	FACW	0.5
		Eriocaulon decangulare	OBL	0.5
		Hypericum sp.		0.5
		Juncus effusus	FACW+	20.0
		Mikania scandens	FACW+	2.0
		Osmunda cinnamomea	FACW+	0.5
		Panicum sp.		0.5
		Proserpinaca pectinata	OBL	10.0
		Rhynchospora sp.		0.5
		Rotala sp.		0.5

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	63.6	97.0

PLOT	T28P1	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	41.0
		Lyonia ferrugenia	FAC-	8.3
		Lyonia lucida	FACW	0.8
		Myrica cerifera	FAC+	8.3
		Serenoa repens	FACU	41.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	41.0
WETLAND SPECIES	1	20.0	0.0

PLOT	T28P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp.		1.0
		Aristida stricta	FAC-	94.0
		Aster reticulatus	FACW	1.0
		Centella asiatica	FACW	1.0
		Hypericum sp.		1.0
		Rhynchospora sp.		1.0
		Sarracenia minor	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	3	42.9	3.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T28P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	89.0
		Fuirena scirpoidea	OBL	1.8
		Hypericum sp.		1.8
		Proserpinaca pectinata	OBL	1.8
		Scleria sp.		1.8
		Sisyrinchium sp.		1.8
		Xyris sp.		1.8

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	2	28.6	2.0

PLOT	T28P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	46.0
		Eriocaulon decangulare	OBL	4.6
		Hypericum sp.		0.9
		Proserpinaca pectinata	OBL	0.9
		Scleria sp.		0.9
		unknown grass		0.9

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	2	33.3	4.0

PLOT	T28P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida sp.		28.0
		Eriocaulon decangulare	OBL	4.3
		Fuirena scirpoidea	OBL	43.0
		Ludwigia sp.		4.3
		Oxypolis filiformis	FACW+	4.3
		Proserpinaca pectinata	OBL	4.3
		unknown Asteraceae		4.3
		unknown grass		4.3
		unknown herb		4.3
		Xyris sp.		4.3

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	4	40.0	55.0

Appendix C Table C3: Spring 1993
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PLOT	T29P1	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Ilex decidua	FACW-	2.0
		Lyonia ferrugenia	FAC-	1.0
		Myrica cerifera	FAC+	6.0
		Rhynchospora sp.		18.0
		Serenoa repens	FACU	70.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	70.0
WETLAND SPECIES	1	20.0	2.0

PLOT	T29P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp.		4.0
		Aristida stricta	FAC-	25.0
		Dichanthelium sp.		2.0
		Dichanthelium sp. 2		1.0
		Dichromena sp.		1.0
		Fuirena scirpoidea	OBL	1.0
		Hypericum fasciculatum	FACW+	1.0
		Myrica cerifera	FAC+	1.0
		Rhynchospora sp.		59.0
		Scleria sp.		1.0
		Sphagnum sp.		4.0
		Xyris sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	2	16.7	2.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T29P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp.		4.0
		Aristida stricta	FAC-	16.0
		Balduina angustifolia	NL	1.0
		Erigeron vernus	OBL	1.0
		Hypericum cistifolium	FACW	4.0
		Myrica cerifera	FAC+	1.0
		Pogonia ophioglossoides	OBL	1.0
		Rhynchospora sp.		60.0
		Rhynchospora sp. 2		4.0
		Sphagnum sp.		8.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	10.0	1.0
WETLAND SPECIES	3	30.0	6.0

PLOT	T29P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp.		4.0
		Aristida stricta	FAC-	21.0
		Balduina angustifolia	NL	1.0
		Brickellia eupatoroides	NL	1.0
		Cirsium horridulum	FAC+	1.0
		Dichanthelium sp.		1.0
		Euthamia minor	FAC	1.0
		Fuirena scirpoidea	OBL	1.0
		Hypericum cistifolium	FACW	4.0
		Hypericum reductum	FACU	1.0
		Myrica cerifera	FAC+	11.0
		Rhynchospora sp.		42.0
		Scleria sp.		14.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	23.1	3.0
WETLAND SPECIES	2	15.4	5.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T29P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Bacopa caroliniana	OBL	40.0
Carex sp.		12.0
Cyperus sp.		1.0
Dichanthelium sp.		1.0
Dichanthelium sp. 2		1.0
Eriocaulon decangulare	OBL	1.0
Fuirena scirpoidea	OBL	2.0
Gratiola sp.		1.0
Juncus effusus	FACW+	4.0
Juncus marginatus	OBL	1.0
Panicum hemitomon	OBL	32.0
Proserpinaca pectinata	OBL	8.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	58.3	88.0

PLOT T30P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	10.0
Myrica cerifera	FAC+	3.0
Rhynchospora sp.		10.0
Serenoa repens	FACU	77.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	25.0	77.0
WETLAND SPECIES	0	0.0	0.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T30P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp.		5.0
		Aristida stricta	FAC-	40.0
		Balduina angustifolia	NL	1.0
		Centella asiatica	FACW	1.0
		Dichanthelium sp.		1.0
		Dichanthelium sp. 2		1.0
		Fuirena scirpoidea	OBL	3.0
		Hypericum fasciculatum	FACW+	1.0
		Myrica cerifera	FAC+	10.0
		Rhynchospora sp.		30.0
		Scleria sp.		1.0
		Sphagnum sp.		1.0
		Viola septemloba	FAC+	1.0
		Xyris caroliniana	FACW+	2.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	7.1	1.0
WETLAND SPECIES	4	28.6	7.0

PLOT	T30P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp.		10.0
		Aristida stricta	FAC-	20.0
		Balduina angustifolia	NL	1.0
		Dichanthelium sp.		5.0
		Fuirena scirpoidea	OBL	1.0
		Hypericum fasciculatum	FACW+	1.0
		Myrica cerifera	FAC+	3.0
		Rhynchospora sp.		5.0
		Rhynchospora sp. 2		51.0
		Sphagnum sp.		1.0
		Viola septemloba	FAC+	1.0
		Xyris caroliniana	FACW+	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	8.3	1.0
WETLAND SPECIES	3	25.0	3.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T30P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp.		5.0
Aristida stricta	FAC-	53.0
Balduina angustifolia	NL	1.0
Chaptalia tomentosa	FACW	1.0
Dichanthelium sp.		1.0
Fuirena scirpoidea	OBL	1.0
Hypericum fasciculatum	FACW+	1.0
Lyonia ferrugenia	FAC-	5.0
Myrica cerifera	FAC+	5.0
Rhexia sp.		1.0
Rhynchospora sp.		27.0
Rhynchospora sp. 2		1.0
Sphagnum sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	7.7	1.0
WETLAND SPECIES	3	23.1	3.0

PLOT T30P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp.		6.0
Bacopa caroliniana	OBL	6.0
Balduina angustifolia	NL	6.0
Carex sp.		1.0
Centella asiatica	FACW	6.0
Dichanthelium sp.		6.0
Eriocaulon decangulare	OBL	1.0
Eryngium aquaticum	OBL	1.0
Fuirena scirpoidea	OBL	1.0
Hypericum reductum	FACU	1.0
Juncus marginatus	OBL	1.0
Panicum hemitomon	OBL	24.0
Pluchea rosea	FACW	1.0
Proserpinaca pectinata	OBL	6.0
Rhynchospora sp.		6.0
Scleria sp.		24.0
Sisyrinchium sp.		1.0
Xyris sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	11.1	7.0
WETLAND SPECIES	9	50.0	47.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T31P1	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Myrica cerifera	FAC+	5.0
		Serenoa repens	FACU	95.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	50.0	95.0
WETLAND SPECIES	0	0.0	0.0

PLOT	T31P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp.		9.0
		Aristida stricta	FAC-	46.0
		Centella asiatica	FACW	5.0
		Dichanthelium sp.		1.0
		Dichanthelium sp. 2		1.0
		Myrica cerifera	FAC+	1.0
		Rhynchospora sp.		32.0
		Scleria sp.		1.0
		Scleria sp. 2		1.0
		unknown legume		1.0
		Viola septemloba	FAC+	1.0
		Xyris caroliniana	FACW+	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	2	16.7	6.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T31P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp.		15.0
Aristida stricta	FAC-	35.0
Balduina angustifolia	NL	5.0
Dichanthelium sp.		1.0
Fuirena scirpoidea	OBL	1.0
Hypericum fasciculatum	FACW+	1.0
Juncus scirpoides	FACW+	1.0
Phoebanthus grandiflora	NL	1.0
Pluchea rosea	FACW	1.0
Rhynchospora sp.		10.0
Rhynchospora sp. 2		25.0
Scleria sp.		1.0
Sphagnum sp.		1.0
unknown legume		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	14.3	6.0
WETLAND SPECIES	4	28.6	4.0

PLOT T31P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Bacopa caroliniana	OBL	6.0
Balduina angustifolia	NL	1.0
Calopogon sp.		1.0
Carex sp.		1.0
Centella asiatica	FACW	6.0
Coreopsis leavenworthii	FACW	13.0
Eriocaulon decangulare	OBL	4.0
Fuirena scirpoidea	OBL	1.0
Hypericum cistifolium	FACW	1.0
Hypericum reductum	FACU	1.0
Juncus marginatus	OBL	6.0
Myrica cerifera	FAC+	4.0
Panicum hemitomon	OBL	25.0
Pluchea rosea	FACW	6.0
Proserpinaca pectinata	OBL	4.0
Rhynchospora sp.		19.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	12.5	2.0
WETLAND SPECIES	10	62.5	72.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T32P1	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Myrica cerifera	FAC+	5.0
		Serenoa repens	FACU	79.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	50.0	79.0
WETLAND SPECIES	0	0.0	0.0

PLOT	T32P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp.		4.0
		Aristida stricta	FAC-	30.0
		Balduina angustifolia	NL	4.0
		Centella asiatica	FACW	4.0
		Dichanthelium sp.		4.0
		Euthamia minor	FAC	1.0
		Hypericum cistifolium	FACW	4.0
		Ilex decidua	FACW-	2.0
		Rhynchospora sp.		23.0
		Rhynchospora sp. 2		8.0
		Rubus sp.		1.0
		Scleria sp. 2		11.0
		Scleria triglomerata	FACU+	4.0
		Scutellaria integrifolia	FAC	1.0
		Viola septemloba	FAC+	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	13.3	8.0
WETLAND SPECIES	3	20.0	10.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T32P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	29.0
		Balduina angustifolia	NL	3.0
		Cyperus sp.		3.0
		Dichanthelium sp.		5.0
		Eriocaulon decangulare	OBL	1.0
		Eryngium aquaticum	OBL	1.0
		Euthamia minor	FAC	3.0
		Fuirena scirpoidea	OBL	1.0
		Hypericum fasciculatum	FACW+	1.0
		Lyonia lucida	FACW	1.0
		Pluchea rosea	FACW	1.0
		Pterocaulon virgatum	FAC-	1.0
		Rhynchospora sp.		24.0
		Rhynchospora sp. 2		19.0
		Rubus sp.		1.0
		Scleria sp.		5.0
		Scutellaria integrifolia	FAC	1.0
		Xyris caroliniana	FACW+	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	5.6	3.0
WETLAND SPECIES	7	38.9	7.0

PLOT	T32P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp.		4.0
		Bacopa caroliniana	OBL	30.0
		Balduina angustifolia	NL	9.0
		Centella asiatica	FACW	13.0
		Coreopsis leavenworthii	FACW	1.0
		Dichanthelium sp.		4.0
		Eriocaulon decangulare	OBL	1.0
		Fuirena scirpoidea	OBL	3.0
		Hypericum cistifolium	FACW	1.0
		Juncus marginatus	OBL	4.0
		Myrica cerifera	FAC+	4.0
		Pluchea rosea	FACW	1.0
		Proserpinaca pectinata	OBL	9.0
		Rhynchospora sp.		17.0
		Sisyrinchium sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	6.7	9.0
WETLAND SPECIES	9	60.0	63.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T33P1	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	45.0
		Myrica cerifera	FAC+	9.0
		Serenoa repens	FACU	45.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	33.3	45.0
WETLAND SPECIES	0	0.0	0.0

PLOT	T33P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp.		6.0
		Aristida stricta	FAC-	76.0
		Balduina angustifolia	NL	1.0
		Cirsium horridulum	FAC+	1.0
		Dichanthelium sp.		1.0
		Eryngium yuccifolium	FAC	1.0
		Hypericum fasciculatum	FACW+	1.0
		Pluchea rosea	FACW	1.0
		Scleria sp.		6.0
		Scutellaria integrifolia	FAC	1.0
		Setaria geniculata	FAC	1.0
		Sisyrinchium sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	8.3	1.0
WETLAND SPECIES	2	16.7	2.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T33P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp.		4.0
Aristida stricta	FAC-	9.0
Balduina angustifolia	NL	9.0
Centella asiatica	FACW	4.0
Chaptalia tomentosa	FACW	1.0
Fuirena scirpoidea	OBL	4.0
Hypericum cistifolium	FACW	1.0
Juncus marginatus	OBL	4.0
Panicum sp.		13.0
Rhynchospora sp.		4.0
Rhynchospora sp. 2		22.0
Scleria sp.		22.0
Scutellaria integrifolia	FAC	1.0
Sisyrinchium sp.		1.0
Viola lanceolata	OBL	1.0
Xyris sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	6.3	9.0
WETLAND SPECIES	6	37.5	15.0

PLOT T33P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp.		6.0
Bacopa caroliniana	OBL	19.0
Balduina angustifolia	NL	6.0
Centella asiatica	FACW	19.0
Dichanthelium sp.		13.0
Dichromena latifolia	FACW+	1.0
Eriocaulon decangulare	OBL	1.0
Euthamia minor	FAC	1.0
Fuirena scirpoidea	OBL	13.0
Hypericum cistifolium	FACW	1.0
Panicum hemitomon	OBL	6.0
Pluchea rosea	FACW	1.0
Pterocaulon virgatum	FAC-	1.0
Sarracenia minor	OBL	1.0
Scleria sp.		6.0
Xyris caroliniana	FACW+	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	6.3	6.0
WETLAND SPECIES	10	62.5	63.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T34P1

SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	50.0
Myrica cerifera	FAC+	5.0
Pinus elliotti	FACW	5.0
Serenoa repens	FACU	40.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	25.0	40.0
WETLAND SPECIES	1	25.0	5.0

PLOT T34P2

SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	79.0
Dichanthelium sp.		1.0
Euthamia minor	FAC	1.0
Hypericum cistifolium	FACW	1.0
Pluchea rosea	FACW	1.0
Rhynchospora sp.		10.0
Scleria sp.		1.0
Scutellaria integrifolia	FAC	1.0
Sphagnum sp.		5.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	2	22.2	2.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T34P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp.		11.0
		Aristida stricta	FAC-	11.0
		Balduina angustifolia	NL	1.0
		Centella asiatica	FACW	11.0
		Chaptalia tomentosa	FACW	1.0
		Dichanthelium sp.		11.0
		Eriocaulon decangulare	OBL	1.0
		Euthamia minor	FAC	1.0
		Fuirena scirpoidea	OBL	11.0
		Hypericum cistifolium	FACW	6.0
		Rhexia sp.		1.0
		Rhynchospora sp.		40.0
		Scleria sp.		11.0
		Scutellaria integrifolia	FAC	1.0
		Senecio glabellus	FACW+	1.0
		Viola septemloba	FAC+	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	6.3	1.0
WETLAND SPECIES	6	37.5	31.0

PLOT	T34P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Balduina angustifolia	NL	1.0
		Centella asiatica	FACW	11.0
		Eriocaulon decangulare	OBL	38.0
		Eryngium aquaticum	OBL	1.0
		Fuirena scirpoidea	OBL	5.0
		Gratiola sp.		1.0
		Hypericum cistifolium	FACW	1.0
		Hypericum reductum	FACU	1.0
		Panicum sp.		11.0
		Proserpinaca pectinata	OBL	11.0
		Rhynchospora sp.		16.0
		Setaria geniculata	FAC	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	16.7	2.0
WETLAND SPECIES	6	50.0	67.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T35P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	49.0
Ilex glabra	FACW	4.0
Lyonia ferrugenia	FAC-	4.0
Myrica cerifera	FAC+	5.0
Serenoa repens	FACU	39.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	39.0
WETLAND SPECIES	1	20.0	4.0

PLOT T35P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	77.0
Balduina angustifolia	NL	1.0
Eriocaulon decangulare	OBL	1.0
Euthamia minor	FAC	1.0
Myrica cerifera	FAC+	1.0
Rhynchospora sp.		3.0
Rhynchospora sp. 2		1.0
Scleria sp.		14.0
Scutellaria integrifolia	FAC	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	11.1	1.0
WETLAND SPECIES	1	11.1	1.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T35P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	32.0
Aster reticulatus	FACW	1.0
Balduina angustifolia	NL	1.0
Dichanthelium sp.		5.0
Euthamia minor	FAC	1.0
Fuirena scirpoidea	OBL	1.0
Myrica cerifera	FAC+	1.0
Pluchea rosea	FACW	2.0
Rhynchospora sp.		26.0
Scleria sp.		26.0
Scutellaria integrifolia	FAC	1.0
Sisyrinchium sp.		1.0
Xyris sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	7.7	1.0
WETLAND SPECIES	3	23.1	4.0

PLOT T35P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Bacopa caroliniana	OBL	24.0
Balduina angustifolia	NL	1.0
Centella asiatica	FACW	14.0
Dichanthelium sp.		14.0
Fuirena scirpoidea	OBL	5.0
Hypericum reductum	FACU	3.0
Panicum hemitomon	OBL	10.0
Paspalum sp.		5.0
Pluchea rosea	FACW	1.0
Proserpinaca pectinata	OBL	10.0
Rhynchospora sp.		14.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	18.2	4.0
WETLAND SPECIES	6	54.5	64.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T36P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	85.0
Lyonia lucida	FACW	1.0
Myrica cerifera	FAC+	2.0
Pinus palustris	FACU+	1.0
Serenoa repens	FACU	10.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	40.0	11.0
WETLAND SPECIES	1	20.0	1.0

PLOT T36P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp.		1.0
Aristida stricta	FAC-	81.0
Aster reticulatus	FACW	3.0
Dichanthelium sp.		1.0
Fuirena scirpoidea	OBL	1.0
Ilex glabra	FACW	3.0
Rhexia sp.		1.0
Rhynchospora sp.		5.0
Scleria sp.		1.0
Serenoa repens	FACU	3.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	10.0	3.0
WETLAND SPECIES	3	30.0	7.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T36P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aster reticulatus	FACW	1.0
		Balduina angustifolia	NL	1.0
		Centella asiatica	FACW	1.0
		Erigeron vernus	OBL	1.0
		Eriocaulon decangulare	OBL	1.0
		Hypericum reductum	FACU	1.0
		Myrica cerifera	FAC+	11.0
		Rhynchospora sp.		28.0
		Rhynchospora sp. 2		17.0
		Rubus sp.		1.0
		Serenoa repens	FACU	34.0
		Sphagnum sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	3	25.0	36.0
WETLAND SPECIES	4	33.3	4.0

PLOT	T36P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Bacopa caroliniana	OBL	8.0
		Centella asiatica	FACW	2.0
		Eriocaulon decangulare	OBL	23.0
		Fuirena scirpoidea	OBL	2.0
		Gratiola sp.		2.0
		Pluchea rosea	FACW	8.0
		Proserpinaca pectinata	OBL	1.0
		Rhynchospora sp.		15.0
		Rhynchospora sp. 2		23.0
		Scleria triglomerata	FACU+	23.0
		Woodwardia virginica	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	9.1	23.0
WETLAND SPECIES	7	63.6	45.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T36P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Bacopa caroliniana	OBL	16.0
		Eriocaulon decangulare	OBL	5.0
		Panicum hemitomon	OBL	11.0
		Pontederia cordata	OBL	5.0
		Taxodium distichum	OBL	53.0
		Utricularia inflata	OBL	5.0
		Utricularia purpurea	OBL	5.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	100.0	100.0

PLOT	T37P1	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp.		5.0
		Aristida stricta	FAC-	83.0
		Ilex glabra	FACW	1.0
		Myrica cerifera	FAC+	2.0
		Serenoa repens	FACU	9.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	9.0
WETLAND SPECIES	1	20.0	1.0

PLOT	T37P2	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon sp.		6.0
		Aristida stricta	FAC-	38.0
		Aster reticulatus	FACW	13.0
		Balduina angustifolia	NL	1.0
		Centella asiatica	FACW	1.0
		Dichanthelium sp.		1.0
		Juncus marginatus	OBL	6.0
		Myrica cerifera	FAC+	6.0
		Rhynchospora sp.		19.0
		Scleria sp.		6.0
		Xyris sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	9.1	1.0
WETLAND SPECIES	3	27.3	20.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT	T37P3	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida stricta	FAC-	10.0
		Aster reticulatus	FACW	3.0
		Dichanthelium commutatum	FAC	1.0
		Hypericum tetrapetalum	FACW	1.0
		Myrica cerifera	FAC+	5.0
		Pluchea rosea	FACW	1.0
		Rhynchospora sp.		72.0
		Rubus sp.		1.0
		Serenoa repens	FACU	5.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	11.1	5.0
WETLAND SPECIES	3	33.3	5.0

PLOT	T37P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Bacopa caroliniana	OBL	2.0
		Eriocaulon decangulare	OBL	10.0
		Hydrocotyle umbellata	OBL	2.0
		Hypericum reductum	FACU	2.0
		Pluchea rosea	FACW	6.0
		Proserpinaca pectinata	OBL	2.0
		Rhynchospora sp.		67.0
		Rhynchospora sp. 2		10.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	12.5	2.0
WETLAND SPECIES	5	62.5	22.0

PLOT	T37P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Bacopa caroliniana	OBL	29.0
		Panicum hemitomon	OBL	29.0
		Pontederia cordata	OBL	6.0
		Taxodium distichum	OBL	29.0
		Utricularia purpurea	OBL	6.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	5	100.0	99.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T38P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	76.0
Aster reticulatus	FACW	4.0
Euthamia minor	FAC	2.0
Ilex glabra	FACW	2.0
Pinus elliotti	FACW	17.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	3	60.0	23.0

PLOT T38P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	66.0
Aster reticulatus	FACW	1.0
Dichanthelium sp.		1.0
Hypericum tetrapetalum	FACW	1.0
Lyonia ferrugenia	FAC-	1.0
Myrica cerifera	FAC+	1.0
Pinguicula caerulea	OBL	1.0
Rhynchospora sp.		24.0
Rhynchospora sp. 2		3.0
Scleria sp.		1.0
Spiranthes sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	3	27.3	3.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T38P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	24.0
Aster reticulatus	FACW	2.0
Dichanthelium sp.		1.0
Euthamia minor	FAC	1.0
Hypericum tetrapetalum	FACW	1.0
Ilex glabra	FACW	1.0
Lyonia ferrugenia	FAC-	1.0
Myrica cerifera	FAC+	12.0
Pteridium aquilinum	FACU	1.0
Rhynchospora sp.		48.0
Serenoa repens	FACU	6.0
Xyris sp.		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	16.7	7.0
WETLAND SPECIES	3	25.0	4.0

PLOT T38P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Bacopa caroliniana	OBL	42.0
Eriocaulon decangulare	OBL	6.0
Hydrocotyle umbellata	OBL	6.0
Pluchea rosea	FACW	1.0
Proserpinaca pectinata	OBL	12.0
Rhynchospora sp.		1.0
Spartina bakeri	FACW+	30.0
Woodwardia virginica	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	87.5	98.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T38P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Bacopa caroliniana	OBL	24.0
Panicum hemitomon	OBL	48.0
Pluchea rosea	FACW	2.0
Pontederia cordata	OBL	12.0
Rhynchospora sp.		2.0
Utricularia sp.		12.0

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	4	66.7	86.0

PLOT T39P1 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp.		3.0
Aristida stricta	FAC-	73.0
Aster reticulatus	FACW	1.0
Ilex glabra	FACW	5.0
Myrica cerifera	FAC+	1.0
Pinus elliotti	FACW	3.0
Pogonia ophioglossoides	OBL	1.0
Serenoa repens	FACU	14.0

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	12.5	14.0
WETLAND SPECIES	4	50.0	10.0

PLOT T39P2 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	60.0
Aster reticulatus	FACW	2.0
Dichanthelium sp.		1.0
Lyonia ferrugenia	FAC-	1.0
Myrica cerifera	FAC+	3.0
Osmunda cinnamomea	FACW+	1.0
Pteridium aquilinum	FACU	1.0
Rhexia sp.		1.0
Serenoa repens	FACU	30.0

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	2	22.2	31.0
WETLAND SPECIES	2	22.2	3.0

Appendix C Table C3: Spring 1993
Vegetation Monitoring Baseline Data

PLOT T39P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp.		5.0
Aster reticulatus	FACW	1.0
Dichanthelium sp.		1.0
Fuirena scirpoidea	OBL	3.0
Myrica cerifera	FAC+	1.0
Pogonia ophioglossoides	OBL	1.0
Rhynchospora sp.		69.0
Rhynchospora sp. 2		5.0
Sarracenia minor	OBL	1.0
Scleria sp.		11.0
unknown herb		1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	4	36.4	6.0

PLOT T39P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Dichanthelium sp.		1.0
Eriocaulon decangulare	OBL	48.0
Fuirena scirpoidea	OBL	7.0
Pluchea rosea	FACW	1.0
Proserpinaca pectinata	OBL	7.0
Rhynchospora sp.		34.0
Woodwardia virginica	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	5	71.4	64.0

Appendix C Table C3: Spring 1993
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PLOT T39P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Bacopa caroliniana	OBL	6.0
Dichanthelium sp.		1.0
Eriocaulon decangulare	OBL	49.0
Panicum hemitomon	OBL	25.0
Proserpinaca pectinata	OBL	6.0
Rhynchospora sp.		12.0
Woodwardia virginica	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	5	71.4	87.0

PLOT T40P1

SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	55.0
Ilex glabra	FACW	4.0
Lyonia lucida	FACW	4.0
Pinus elliotti	FACW	8.0
Serenoa repens	FACU	27.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	27.0
WETLAND SPECIES	3	60.0	16.0

PLOT T40P2

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon sp.		5.0
Aristida stricta	FAC-	78.0
Aster reticulatus	FACW	3.0
Ilex glabra	FACW	1.0
Lyonia lucida	FACW	1.0
Myrica cerifera	FAC+	1.0
Rhynchospora sp.		10.0
Scleria sp.		1.0
Scutellaria integrifolia	FAC	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	3	33.3	5.0

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PLOT T40P3 SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida stricta	FAC-	2.0
Aster reticulatus	FACW	1.0
Baccharis halimnifolia	FAC	1.0
Lyonia lucida	FACW	1.0
Osmunda cinnamomea	FACW+	1.0
Proserpinaca pectinata	OBL	2.0
Rubus sp.		15.0
Serenoa repens	FACU	77.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	12.5	77.0
WETLAND SPECIES	4	50.0	5.0

PLOT T40P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Hypericum tetrapetalum	FACW	1.0
Myrica cerifera	FAC+	14.0
Osmunda cinnamomea	FACW+	9.0
Serenoa repens	FACU	66.0
Sphagnum sp.		9.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	20.0	66.0
WETLAND SPECIES	2	40.0	10.0

Appendix C Table C4: Fall 1993
Vegetation Monitoring Baseline Data

Appendix C Table C4: Fall 1993
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PLOT T1P1 PLOT BURNED; NO DATA

PLOT T1P2 PLOT BURNED; NO DATA

PLOT T1P3 PLOT BURNED; NO DATA

PLOT T1P4

SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida affinis	OBL	50.0
Carphephorus corymbosus	FACU	1.0
Centella asiatica	FACW	1.0
Eriocaulon decangulare	OBL	10.0
Fuirena breviseta	OBL	1.0
Hypericum fasciculatum	FACW+	10.0
Ludwigia linifolia	OBL	1.0
Oxypolis filiformis	FACW+	1.0
Pluchea rosea	FACW	1.0
Rhynchospora cephalantha	OBL	20.0
Scleria baldwiniana	FACW+	5.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	9.9	1.0
WETLAND SPECIES	10	90.9	100.0

PLOT T1P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Lycopus rubellus	OBL	1.0
Panicum maximum	FAC-	44.2
Pluchea rosea	FACW	1.0
Rhynchospora cephalantha	OBL	8.5
Rhynchospora microcarpa	FACW+	8.8
Woodwardia virginica	OBL	8.8
Xyris fimbriata	OBL	1.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	6	85.7	27.0

PLOT T2P1 PLOT BURNED; NO DATA

PLOT T2P2 PLOT BURNED; NO DATA

PLOT T2P3 PLOT BURNED; NO DATA

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PLOT T2P4

SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida affinis	OBL	11.5
Dichromena latifolia	FACW+	2.2
Eriocaulon decangulare	OBL	5.7
Hypericum cistifolium	FACW	1.1
Hypericum fasciculatum	FACW+	23.0
Oxypolis filiformis	FACW+	1.1
Panicum maximum	FAC-	2.2
Pluchea rosea	FACW	2.2
Rhexia sp.		1.1
Rhynchospora cephalantha	OBL	11.5
Rhynchospora inundata	OBL	1.1
Scleria triglomerata	FACU+	34.5
Xyris sp.		2.2

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	8.3	34.0
WETLAND SPECIES	9	75.0	57.5

PLOT T2P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Panicum maximum	FAC-	37.5
Rhynchospora microcarpa	FACW+	37.5
Utricularia sp.		25.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	33.3	37.5
WETLAND SPECIES	1	33.3	37.5

PLOT T3P1 PLOT BURNED; NO DATA

PLOT T3P2 PLOT BURNED; NO DATA

PLOT T3P3 PLOT BURNED; NO DATA

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Vegetation Monitoring Baseline Data

PLOT T3P4

SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida affinis	OBL	69.8
Carphephorus corymbosus	FACU	1.2
Centella asiatica	FACW	1.2
Dichanthelium sp.		1.2
Hypericum myrtifolium	FACW	1.2
Pluchea rosea	FACW	1.2
Xyris ambigua	OBL	1.2
Rhynchospora inundata	OBL	23.3

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	12.5	1.2
WETLAND SPECIES	6	75.0	97.9

PLOT T3P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida affinis	OBL	37.9
Centella asiatica	FACW	1.5
Dichanthelium sp.		1.5
Diodia virginiana	FACW	1.5
Eriocaulon decangulare	OBL	30.3
Flaveria linearis	FACW	1.5
Gratiola ramosa	FACW	7.6
Oxypolis filiformis	FACW+	1.5
unknown herb		1.5
Xyris fimbriata	OBL	15.2

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	8	80.0	97.0

PLOT T4P1 PLOT BURNED; NO DATA

PLOT T4P2 PLOT BURNED; NO DATA

PLOT T4P3 PLOT BURNED; NO DATA

PLOT T4P4 PLOT BURNED; NO DATA

PLOT T4P5 PLOT BURNED; NO DATA

PLOT T5P1 PLOT BURNED; NO DATA

PLOT T5P2 PLOT BURNED; NO DATA

PLOT T5P3 PLOT BURNED; NO DATA

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PLOT	T6P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida affinis	OBL	13.2
		Blechnum serrulatum	FACW+	1.3
		Eriocaulon decangulare	OBL	19.7
		Hypericum fasciculatum	FACW+	39.5
		Panicum hemitomon	OBL	2.6
		Panicum maximum	FAC-	1.3
		Rhynchospora cephalantha	OBL	6.6
		Rhynchospora sp.		6.6
		Scleria triglomerata	FACU+	6.6
		Sphagnum sp.		1.3
		Taxodium distichum	OBL	1.3

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	9.1	6.0
WETLAND SPECIES	7	63.6	68.0

PLOT	T6P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida affinis	OBL	1.1
		Andropogon sp.		1.1
		Blechnum serrulatum	FACW+	1.1
		Eriocaulon decangulare	OBL	26.3
		Hypericum fasciculatum	FACW+	5.3
		Panicum maximum	FAC-	2.1
		Rhynchospora cephalantha	OBL	5.3
		Scleria triglomerata	FACU+	10.5
		Sphagnum sp.		31.6
		Taxodium ascendens	OBL	15.8

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	10.0	10.0
WETLAND SPECIES	6	60.0	53.1

PLOT T7P1 PLOT BURNED; NO DATA

PLOT T7P2 PLOT BURNED; NO DATA

PLOT T7P3A PLOT BURNED; NO DATA

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Vegetation Monitoring Baseline Data

PLOT	T7P3B	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Cladium jamaicense	OBL	35.7
		Erianthus giganteus	FACW	0.9
		Eriocaulon decangulare	OBL	4.5
		Gratiola ramosa	FACW	4.5
		Hypericum fasciculatum	FACW+	17.9
		Lycopus rubellus	OBL	0.9
		Lyonia lucida	FACW	0.9
		Myrica cerifera	FAC+	0.9
		Panicum maximum	FAC-	4.5
		Paspalum praecox	OBL	0.9
		Proserpinaca pectinata	OBL	0.9
		Rhynchospora cephalantha	OBL	8.9
		Rhynchospora microcarpa	FACW+	4.5
		Smilax sp.		0.9
		Woodwardia virginica	OBL	8.9
		Xyris fimbriata	OBL	4.5

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	13	81.3	85.4

PLOT	T7P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Cladium jamaicense	OBL	44.1
		Lyonia lucida	FACW	14.7
		Myrica cerifera	FAC+	1.5
		Pontederia cordata	OBL	36.8
		Smilax sp.		1.5
		Woodwardia virginica	OBL	1.5

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	4	66.7	95.0

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PLOT	T7P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Cladium jamaicense	OBL	21.4
		Lyonia lucida	FACW	28.6
		Myrica cerifera	FAC+	7.1
		Pontederia cordata	OBL	14.3
		Utricularia sp.		28.6

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	3	60.0	63.0

PLOT T8P1 PLOT BURNED; NO DATA

PLOT T8P2 PLOT BURNED; NO DATA

PLOT T8P3 PLOT BURNED; NO DATA

PLOT	T8P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	18.3
		Blechnum serrulatum	FACW+	0.9
		Eriocaulon decangulare	OBL	18.3
		Euthamia minor	FAC	0.9
		Hypericum cistifolium	FACW	0.9
		Lycopus rubellus	OBL	0.9
		Panicum hemitomon	OBL	0.9
		Panicum maximum	FAC-	9.2
		Pluchea rosea	FACW	0.9
		Rhynchospora cephalantha	OBL	9.2
		Smilax sp.		0.9
		Sphagnum sp.		36.7
		Taxodium distichum	OBL	0.9
		Woodwardia virginica	OBL	0.9

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	9	64.3	27.0

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PLOT	T8P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	0.5
		Blechnum serrulatum	FACW+	24.6
		Carex verrucosa	OBL	0.5
		Ludwigia lanceolata	OBL	0.5
		Lycopus rubellus	OBL	0.5
		Panicum hemitomon	OBL	0.5
		Pluchea rosea	FACW	0.5
		Polygonum hydropiperoides	OBL	0.5
		Pontederia cordata	OBL	2.5
		Rhynchospora cephalantha	OBL	4.9
		Sphagnum sp.		44.3
		Woodwardia virginica	OBL	19.7
		Xyris fimbriata	OBL	0.5

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	11	84.6	49.0

PLOT T9P1 PLOT BURNED; NO DATA

PLOT T9P2 PLOT BURNED; NO DATA

PLOT T9P3 PLOT BURNED; NO DATA

PLOT	T9P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	6.9
		Diodia virginiana	FACW	0.7
		Eriocaulon decangulare	OBL	13.9
		Hydrocotyle umbellata	OBL	0.7
		Hypericum cistifolium	FACW	0.7
		Hypericum myrtifolium	FACW	3.5
		Lycopus rubellus	OBL	3.5
		Panicum maximum	FAC-	20.8
		Rhynchospora cephalantha	OBL	6.9
		Rhynchospora microcarpa	FACW+	3.5
		Sphagnum sp.		20.8
		Triadenum virginicum	OBL	3.5
		unknown herb		0.7
		Xyris fimbriata	OBL	13.9

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	71.4	44.0

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PLOT T9P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	0.5
Blechnum serrulatum	FACW+	10.8
Carex verrucosa	OBL	10.8
Dichanthelium sp.		0.5
Myrica cerifera	FAC+	10.8
Panicum rigidulum	FACW	0.5
Pluchea rosea	FACW	0.5
Quercus pumila	NL	0.5
Rhynchospora microcarpa	FACW+	2.7
Sphagnum sp.		48.6
Woodwardia virginica	OBL	10.8
Xyris fimbriata	OBL	2.7

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	10.0	0.5
WETLAND SPECIES	6	58.3	34.5

PLOT T10P1 PLOT BURNED; NO DATA

PLOT T10P2 PLOT BURNED; NO DATA

PLOT T10P3 PLOT BURNED; NO DATA

PLOT T10P4

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	20.0
Centella asiatica	FACW	0.8
Eriocaulon decangulare	OBL	24.0
Euthamia minor	FAC	0.8
Hypericum myrtifolium	FACW	4.0
Paspalum praecox	OBL	0.8
Pluchea rosea	FACW	4.0
Pontederia cordata	OBL	0.8
Rhynchospora cephalantha	OBL	8.0
Rhynchospora microcarpa	FACW+	8.0
Sphagnum sp.		20.0
Taxodium distichum	OBL	4.0
Unknown herb		0.8
Xyris fimbriata	OBL	0.8

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	71.4	52.8

Appendix C Table C4: Fall 1993
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PLOT T10P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	20.8
Centella asiatica	FACW	0.8
Eriocaulon decangulare	OBL	16.7
Hypericum cistifolium	FACW	0.8
Hypericum fasciculatum	FACW+	0.8
Lycopus rubellus	OBL	0.8
Lyonia lucida	FACW	4.2
Pluchea rosea	FACW	0.8
Rhynchospora cephalantha	OBL	20.8
Rhynchospora microcarpa	FACW+	25.0
Xyris fimbriata	OBL	8.3

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	90.9	73.0

PLOT T11P1 PLOT BURNED; NO DATA

PLOT T11P2 PLOT BURNED; NO DATA

PLOT T11P3 PLOT BURNED; NO DATA

PLOT T11P4

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	5.8
Dichanthelium sp.		1.2
Eupatorium mohrii	NL	1.2
Euthamia minor	FAC	11.6
Fuirena scirpoidea	OBL	1.2
Hypericum myrtifolium	FACW	1.2
Myrica cerifera	FAC+	1.2
Panicum rigidulum	FACW	5.8
Rhynchospora cephalantha	OBL	58.1
Rhynchospora inundata	OBL	11.6
Xyris ambigua	OBL	1.2

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	9.1	1.0
WETLAND SPECIES	6	54.5	79.1

PLOT T11P5 BARE DUE TO DITCH FILLING

PLOT T12AP1 PLOT BURNED; NO DATA

PLOT T12AP2 PLOT BURNED; NO DATA

PLOT T12AP3 PLOT BURNED; NO DATA

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PLOT T12AP4 PLOT BURNED; NO DATA

PLOT T12AP5 BARE DUE TO DITCH FILLING

PLOT T12BP1 PLOT BURNED; NO DATA

PLOT T12BP2 PLOT BURNED; NO DATA

PLOT T12BP3 PLOT BURNED; NO DATA

PLOT T12BP4 PLOT BURNED; NO DATA

PLOT T12BP5 BARE DUE TO DITCH FILLING

PLOT T12P4

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	8.9
Dichanthelium sp.		0.9
Eupatorium mohrii	NL	0.9
Euthamia minor	FAC	13.4
Hypericum myrtifolium	FACW	0.9
Panicum rigidulum	FACW	0.9
Pluchea rosea	FACW	0.9
Rhynchospora cephalantha	OBL	35.7
Rhynchospora microcarpa	FACW+	35.7
unknown herb		0.9
Xyris ambigua	OBL	0.9

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	9.1	0.9
WETLAND SPECIES	5	54.5	70.9

PLOT T14P1 PLOT BURNED; NO DATA

PLOT T14P2 PLOT BURNED; NO DATA

PLOT T14P3 PLOT BURNED; NO DATA

Appendix C Table C4: Fall 1993
Vegetation Monitoring Baseline Data

PLOT T14P4

SPECIES	USFWS STATUS	PERCENT COVERAGE
Bacopa caroliniana	OBL	0.7
Eriocaulon decangulare	OBL	28.0
Euthamia minor	FAC	0.7
Hypericum fasciculatum	FACW+	42.0
Hypericum myrtifolium	FACW	0.7
Ludwigia octovalvis	OBL	1.4
Ludwigia sp.		0.7
Mikania scandens	FACW+	0.7
Panicum maximum	FAC-	0.7
Panicum rigidulum	FACW	1.4
Proserpinaca pectinata	OBL	0.7
Rhynchospora cephalantha	OBL	14.0
Rhynchospora microcarpa	FACW+	7.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	76.9	96.6

PLOT T14P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Bacopa caroliniana	OBL	7.5
Eriocaulon decangulare	OBL	14.9
Fuirena scirpoidea	OBL	0.7
Hypericum fasciculatum	FACW+	3.7
Mikania scandens	FACW+	0.7
Myrica cerifera	FAC+	0.7
Panicum maximum	FAC-	7.5
Panicum rigidulum	FACW	3.7
Pluchea rosea	FACW	0.7
Proserpinaca pectinata	OBL	7.5
Rhynchospora cephalantha	OBL	29.9
Rhynchospora inundata	OBL	22.4

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	83.3	85.7

PLOT T15P1 PLOT BURNED; NO DATA

PLOT T15P2 PLOT BURNED; NO DATA

PLOT T15P3 PLOT BURNED; NO DATA

PLOT T15P4 PLOT BURNED; NO DATA

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PLOT	T15P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Bacopa caroliniana	OBL	18.5
		Eriocaulon decangulare	OBL	4.6
		Juncus scirpoides	FACW+	18.5
		Lycopus rubellus	OBL	0.9
		Mikania scandens	FACW+	0.9
		Panicum hemitomon	OBL	4.6
		Proserpinaca pectinata	OBL	0.9
		Rhynchospora microcarpa	FACW+	4.6
		Typha latifolia	OBL	9.3

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	9	100.0	57.0

PLOT T16P1 PLOT BURNED; NO DATA

PLOT T16P2 PLOT BURNED; NO DATA

PLOT T16P3 PLOT BURNED; NO DATA

PLOT	T16P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Centella asiatica	FACW	0.8
		Fuirena breviseta	OBL	0.8
		Hypericum fasciculatum	FACW+	7.6
		Mikania scandens	FACW+	0.8
		Myrica cerifera	FAC+	7.6
		Panicum maximum	FAC-	72.5
		Paspalum praecox	OBL	0.8
		Proserpinaca pectinata	OBL	0.8
		Rhynchospora cephalantha	OBL	7.6
		Setaria geniculata	FAC	0.8

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	70.0	19.2

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PLOT T16P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	0.9
Bacopa caroliniana	OBL	0.9
Centella asiatica	FACW	0.9
Fuirena pumila	OBL	0.9
Hyptis alata	OBL	0.9
Juncus scirpoides	FACW+	46.3
Lycopus rubellus	OBL	0.9
Myrica cerifera	FAC+	4.6
Panicum maximum	FAC-	0.9
Paspalum praecox	OBL	4.6
Proserpinaca pectinata	OBL	0.9
Rhynchospora cephalantha	OBL	4.6
Rhynchospora microcarpa	FACW+	0.9
Scleria baldwiniana	FACW+	0.9
Setaria geniculata	FAC	27.8
Unknown Cyperaceae		0.9
unknown herb		1.8

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	11	64.7	63.6

PLOT T17P1 PLOT BURNED; NO DATA

PLOT T17P2 PLOT BURNED; NO DATA

PLOT T17P3 PLOT BURNED; NO DATA

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PLOT	T17P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida affinis	OBL	2.0
		Centella asiatica	FACW	2.0
		Dichromena latifolia	FACW+	1.0
		Eriocaulon decangulare	OBL	5.1
		Fuirena scirpoidea	OBL	1.0
		Fuirena scirpoidea	OBL	1.0
		Hypericum fasciculatum	FACW+	35.4
		Hypericum hypericoides	FAC	5.1
		Hypericum myrtifolium	FACW	5.1
		Hyptis alata	OBL	1.0
		Panicum maximum	FAC-	10.2
		Paspalum praecox	OBL	10.2
		Pluchea rosea	FACW	1.0
		Proserpinaca pectinata	OBL	1.0
		Rhynchospora cephalantha	OBL	10.2
		Rhynchospora microcarpa	FACW+	5.1
		Scleria triglomerata	FACU+	2.0
		Taxodium distichum	OBL	1.0
		Xyris fimbriata	OBL	2.0

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	5.6	2.0
WETLAND SPECIES	16	88.9	12.2

PLOT	T17P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Bacopa caroliniana	OBL	5.1
		Centella asiatica	FACW	2.0
		Eriocaulon decangulare	OBL	10.1
		Fuirena scirpoidea	OBL	1.0
		Hypericum fasciculatum	FACW+	15.2
		Myrica cerifera	FAC+	5.1
		Paspalum praecox	OBL	5.1
		Pluchea rosea	FACW	1.0
		Rhynchospora cephalantha	OBL	30.3
		Rhynchospora inundata	OBL	20.2
		Rhynchospora sp.		5.1

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	9	81.8	89.1

PLOT T18P1 PLOT BURNED; NO DATA

PLOT T18P2 PLOT BURNED; NO DATA

PLOT T18P3 PLOT BURNED; NO DATA

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PLOT	T18P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Aristida affinis	OBL	6.7
		Eriocaulon decangulare	OBL	6.7
		Fuirena breviseta	OBL	0.7
		Hypericum fasciculatum	FACW+	13.4
		Hyptis alata	OBL	3.4
		Lycopus rubellus	OBL	0.7
		Myrica cerifera	FAC+	6.7
		Panicum maximum	FAC-	16.8
		Panicum rigidulum	FACW	3.4
		Pluchea rosea	FACW	0.7
		Rhynchospora cephalantha	OBL	33.6
		Rhynchospora microcarpa	FACW+	3.4
		Taxodium distichum	OBL	3.4
		unknown herb		0.7

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	11	78.6	72.8

PLOT	T18P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Agalinus linifolia	FACW	0.9
		Eriocaulon decangulare	OBL	13.9
		Fuirena breviseta	OBL	0.9
		Hypericum fasciculatum	FACW+	4.6
		Lycopus rubellus	OBL	0.9
		Myrica cerifera	FAC+	4.6
		Panicum maximum	FAC-	23.1
		Panicum rigidulum	FACW	9.3
		Paspalum praecox	OBL	0.9
		Rhynchospora cephalantha	OBL	23.1
		Rhynchospora microcarpa	FACW+	0.9
		Rubus sp.		0.9
		Scleria baldwiniana	FACW+	0.9
		unknown herb		0.9
		Woodwardia virginica	OBL	13.9

PLOT SUMMARY	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	11	73.3	69.2

PLOT T19P1 PLOT BURNED; NO DATA

PLOT T19P2 PLOT BURNED; NO DATA

PLOT T19P3 PLOT BURNED; NO DATA

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PLOT T19P4 SPECIES	USFWS STATUS	PERCENT COVERAGE
Centella asiatica	FACW	1.1
Eriocaulon decangulare	OBL	22.0
Fuirena scirpoidea	OBL	1.1
Hydrocotyle umbellata	OBL	1.1
Hypericum fasciculatum	FACW+	16.5
Hyptis alata	OBL	2.2
Lycopus rubellus	OBL	1.1
Panicum maximum	FAC-	22.0
Paspalum praecox	OBL	16.5
Pluchea rosea	FACW	1.1
Rhynchospora cephalantha	OBL	5.5
Scleria sp.		1.1
Scleria triglomerata	FACU+	5.5
unknown herb		1.1
Unknown Poaceae 1		2.2

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	6.3	5.0
WETLAND SPECIES	10	63.5	66.5

PLOT T19P5 SPECIES	USFWS STATUS	PERCENT COVERAGE
Blechnum serrulatum	FACW+	2.2
Fuirena breviseta	OBL	1.1
Hypericum fasciculatum	FACW+	5.4
Lycopus rubellus	OBL	5.4
Myrica cerifera	FAC+	26.9
Panicum maximum	FAC-	21.5
Rhynchospora cephalantha	OBL	21.5
Rhynchospora microcarpa	FACW+	10.8
Woodwardia virginica	OBL	5.4

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	77.7	49.1

PLOT T20P1 PLOT BURNED; NO DATA

PLOT T20P2 PLOT BURNED; NO DATA

PLOT T20P3 PLOT BURNED; NO DATA

PLOT T20P4 PLOT BURNED; NO DATA

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PLOT	T20P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	0.8
		Blechnum serrulatum	FACW+	20.8
		Eriocaulon decangulare	OBL	12.5
		Hypericum hypericoides	FAC	0.8
		Lycopus rubellus	OBL	8.3
		Myrica cerifera	FAC+	0.8
		Panicum hemitomon	OBL	4.2
		Panicum maximum	FAC-	12.5
		Rhynchospora cephalantha	OBL	16.7
		Rhynchospora microcarpa	FACW+	8.3
		Rubus sp.		0.8
		Taxodium distichum	OBL	4.2
		Woodwardia virginica	OBL	0.8
		Xyris fimbriata	OBL	8.3

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	9	64.3	80.0

PLOT T21P1 PLOT BURNED; NO DATA

PLOT T21P2 PLOT BURNED; NO DATA

PLOT T21P3 PLOT BURNED; NO DATA

PLOT T21P4 PLOT BURNED; NO DATA

PLOT	T21P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Blechnum serrulatum	FACW+	12.7
		Hypericum fasciculatum	FACW+	1.3
		Lycopus rubellus	OBL	6.3
		Mikania scandens	FACW+	1.3
		Myrica cerifera	FAC+	19.0
		Panicum maximum	FAC-	12.7
		Rhynchospora cephalantha	OBL	38.0
		Rhynchospora microcarpa	FACW+	6.3
		Woodwardia virginica	OBL	2.5

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	77.7	66.0

PLOT T22P1 PLOT BURNED; NO DATA

PLOT T22P2 PLOT BURNED; NO DATA

PLOT T22P3 PLOT BURNED; NO DATA

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PLOT	T22P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	3.6
		Eriocaulon decangulare	OBL	3.6
		Euthamia minor	FAC	0.7
		Hydrocotyle umbellata	OBL	0.7
		Hypericum fasciculatum	FACW+	0.7
		Hypericum hypericoides	FAC	3.6
		Polygala grandiflora	NL	0.7
		Scleria verticillata	OBL	0.7
		Setaria geniculata	FAC	0.7
		Spartina bakeri	FACW+	58.4
		Taxodium distichum	OBL	3.6
		Unknown Asteraceae		21.9
		unknown herb		1.4

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	7.7	0.7
WETLAND SPECIES	6	46.1	64.0

PLOT	T22P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Blechnum serrulatum	FACW+	4.0
		Eriocaulon decangulare	OBL	31.7
		Fuirena breviseta	OBL	0.8
		Hypericum hypericoides	FAC	2.4
		Lycopus rubellus	OBL	7.9
		Myrica cerifera	FAC+	15.9
		Panicum hemitomon	OBL	4.0
		Panicum maximum	FAC-	19.8
		Panicum verrucosum	FACW	0.8
		Rhynchospora cephalantha	OBL	7.9
		Rhynchospora microcarpa	FACW+	4.0
		Woodwardia virginica	OBL	0.8

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	75.0	58.6

PLOT T23AP1 PLOT BURNED; NO DATA

PLOT T23AP2 PLOT BURNED; NO DATA

PLOT T23AP3 PLOT BURNED; NO DATA

PLOT T23AP4 PLOT BURNED; NO DATA

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PLOT T23AP5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	6.5
Hyptis alata	OBL	1.3
Lycopus rubellus	OBL	39.0
Myrica cerifera	FAC+	13.0
Panicum hemitomon	OBL	13.0
Pluchea rosea	FACW	19.5
Rhynchospora sp.		1.3
Woodwardia virginica	OBL	6.5

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	5	62.5	78.0

PLOT T23BP1 PLOT BURNED; NO DATA

PLOT T23BP2 PLOT BURNED; NO DATA

PLOT T23BP3 PLOT BURNED; NO DATA

PLOT T23BP4 PLOT BURNED; NO DATA

PLOT T23BP5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	0.9
Eriocaulon decangulare	OBL	4.5
Euthamia minor	FAC	0.9
Lycopus rubellus	OBL	54.1
Mikania scandens	FACW+	0.9
Myrica cerifera	FAC+	0.9
Panicum rigidulum	FACW	9.0
Pluchea rosea	FACW	0.9
Rhynchospora inundata	OBL	4.5
Rhynchospora microcarpa	FACW+	18.0
Rubus sp.		4.5
Unknown herb		0.9

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	58.3	89.0

PLOT T24P1 PLOT BURNED; NO DATA

PLOT T24P2 PLOT BURNED; NO DATA

PLOT T24P3 PLOT BURNED; NO DATA

PLOT T24P4 PLOT BURNED; NO DATA

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PLOT T24P5 PLOT BURNED; NO DATA

PLOT T25P1 PLOT BURNED; NO DATA

PLOT T25P2 PLOT BURNED; NO DATA

PLOT T25P3 PLOT BURNED; NO DATA

PLOT	T25P4	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Andropogon virginicus	FAC-	0.8
		Blechnum serrulatum	FACW+	4.0
		Centella asiatica	FACW	4.0
		Dichanthelium sp.		4.0
		Dichromena latifolia	FACW+	0.8
		Eriocaulon decangulare	OBL	8.0
		Flaveria linearis	FACW	0.8
		Hypericum fasciculatum	FACW+	60.0
		Hypericum hypericoides	FAC	0.8
		Hyptis alata	OBL	4.0
		Lycopus rubellus	OBL	4.0
		Proserpinaca pectinata	OBL	0.8
		Rhynchospora cephalantha	OBL	4.0
		Rhynchospora microcarpa	FACW+	4.0
		Xyris sp.		0.8

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	11	73.3	92.0

PLOT	T25P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Bacopa caroliniana	OBL	6.0
		Blechnum serrulatum	FACW+	12.0
		Cladium jamaicense	OBL	1.2
		Eriocaulon decangulare	OBL	1.2
		Hydrocotyle umbellata	OBL	1.2
		Hypericum fasciculatum	FACW+	2.4
		Lycopus rubellus	OBL	36.1
		Mikania scandens	FACW+	1.2
		Myrica cerifera	FAC+	1.2
		Panicum hemitomon	OBL	6.0
		Pluchea rosea	FACW	1.2
		Rhynchospora sp.		30.1

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	10	83.3	67.0

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PLOT T26P1 PLOT BURNED; NO DATA

PLOT T26P2 PLOT BURNED; NO DATA

PLOT T26P3 PLOT BURNED; NO DATA

PLOT T26P4 PLOT BURNED; NO DATA

PLOT T26P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	0.7
Erianthus giganteus	FACW	14.1
Euthamia minor	FAC	0.7
Euthamia minor	FAC	7.0
Hypericum cistifolium	FACW	0.7
Lycopus rubellus	OBL	35.2
Mikania scandens	FACW+	0.7
Panicum hemitomon	OBL	0.7
Rhynchospora cephalantha	OBL	3.5
Rhynchospora microcarpa	FACW+	14.1
Serenoa repens	FACU	17.6
Woodwardia virginica	OBL	3.5
Unknown herb		0.7
Xyris fimbriata	OBL	0.7

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	1	8.3	17.0
WETLAND SPECIES	8	64.3	69.7

PLOT T27P1 PLOT BURNED; NO DATA

PLOT T27P2 PLOT BURNED; NO DATA

PLOT T27P3 PLOT BURNED; NO DATA

PLOT T27P4 PLOT BURNED; NO DATA

PLOT T27P5 PLOT BURNED; NO DATA

PLOT T28P1 PLOT BURNED; NO DATA

PLOT T28P2 PLOT BURNED; NO DATA

PLOT T28P3 PLOT BURNED; NO DATA

PLOT T28P4 PLOT BURNED; NO DATA

Appendix C Table C4: Fall 1993
Vegetation Monitoring Baseline Data

PLOT T28P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Aristida affinis	OBL	55.6
Dichanthelium sp.		11.1
Eriocaulon decangulare	OBL	22.2
Mitreola petiolata	FACW+	1.1
Oxypolis filiformis	FACW+	1.1
Proserpinaca pectinata	OBL	5.6
Rhynchospora cephalantha	OBL	1.1
Rhynchospora microcarpa	FACW+	1.1
Xyris fimbriata	OBL	1.1

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	8	88.9	88.9

PLOT T29P1 PLOT BURNED; NO DATA

PLOT T29P2A PLOT BURNED; NO DATA

PLOT T29P2B PLOT BURNED; NO DATA

PLOT T29P3 PLOT BURNED; NO DATA

PLOT T29P5 PLOT BURNED; NO DATA

PLOT T30P1 PLOT BURNED; NO DATA

PLOT T30P2A PLOT BURNED; NO DATA

PLOT T30P2B PLOT BURNED; NO DATA

PLOT T30P2C PLOT BURNED; NO DATA

PLOT T30P4 PLOT BURNED; NO DATA

PLOT T31P1 PLOT BURNED; NO DATA

PLOT T31P2 PLOT BURNED; NO DATA

PLOT T31P3 PLOT BURNED; NO DATA

PLOT T31P4 PLOT BURNED; NO DATA

PLOT T32P1 PLOT BURNED; NO DATA

PLOT T32P2 PLOT BURNED; NO DATA

PLOT T32P3 PLOT BURNED; NO DATA

PLOT T32P4 PLOT BURNED; NO DATA

PLOT T33P1 PLOT BURNED; NO DATA

PLOT T33P2 PLOT BURNED; NO DATA

PLOT T33P3 PLOT BURNED; NO DATA

Appendix C Table C4: Fall 1993
Vegetation Monitoring Baseline Data

PLOT T33P4 PLOT BURNED; NO DATA

PLOT T34P1 PLOT BURNED; NO DATA

PLOT T34P2 PLOT BURNED; NO DATA

PLOT T34P3 PLOT BURNED; NO DATA

PLOT T34P4 PLOT BURNED; NO DATA

PLOT T35P1 PLOT BURNED; NO DATA

PLOT T35P2 PLOT BURNED; NO DATA

PLOT T35P3 PLOT BURNED; NO DATA

PLOT T35P4 PLOT BURNED; NO DATA

PLOT T36P1 PLOT BURNED; NO DATA

PLOT T36P2 PLOT BURNED; NO DATA

PLOT T36P3 PLOT BURNED; NO DATA

PLOT T36P4 PLOT BURNED; NO DATA

PLOT T36P5

SPECIES	USFWS STATUS	PERCENT COVERAGE
Bacopa caroliniana	OBL	11.1
Panicum hemitomon	OBL	55.6
Pontederia cordata	OBL	22.2
Rhynchospora inundata	OBL	11.1

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	4	100.0	99.0

PLOT T37P1 PLOT BURNED; NO DATA

PLOT T37P2 PLOT BURNED; NO DATA

PLOT T37P3 PLOT BURNED; NO DATA

PLOT T37P4 PLOT BURNED; NO DATA

Appendix C Table C4: Fall 1993
Vegetation Monitoring Baseline Data

PLOT	T37P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Bacopa caroliniana	OBL	8.3
		Panicum hemitomon	OBL	41.7
		Pontederia cordata	OBL	8.3
		Rhynchospora inundata	OBL	41.7

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	4	100.0	98.0

PLOT T38P1 PLOT BURNED; NO DATA

PLOT T38P2 PLOT BURNED; NO DATA

PLOT T38P3 PLOT BURNED; NO DATA

PLOT T38P4 PLOT BURNED; NO DATA

PLOT	T38P5	SPECIES	USFWS STATUS	PERCENT COVERAGE
		Bacopa caroliniana	OBL	5.7
		Panicum hemitomon	OBL	86.2
		Pluchea rosea	FACW	1.1
		Rhynchospora inundata	OBL	1.1
		Taxodium distichum	OBL	5.7

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	5	100.0	98.0

PLOT T39P1 PLOT BURNED; NO DATA

PLOT T39P2 PLOT BURNED; NO DATA

PLOT T39P3 PLOT BURNED; NO DATA

PLOT T39P4A PLOT BURNED; NO DATA

Appendix C Table C4: Fall 1993
Vegetation Monitoring Baseline Data

PLOT T39P4B

SPECIES	USFWS STATUS	PERCENT COVERAGE
Andropogon virginicus	FAC-	6.4
Erianthus giganteus	FACW	25.6
Eriocaulon decangulare	OBL	25.6
Panicum hemitomon	OBL	1.3
Paspalum praecox	OBL	1.3
Rhynchospora microcarpa	FACW+	32.1
Woodwardia virginica	OBL	6.4
Xyris fimbriata	OBL	1.3

PLOT SUMMARY

	NUMBER	PERCENT	PERCENT RELATIVE COVER
UPLAND SPECIES	0	0.0	0.0
WETLAND SPECIES	7	87.5	91.3

PLOT T40P1 PLOT BURNED; NO DATA

PLOT T40P2 PLOT BURNED; NO DATA

PLOT T40P3 PLOT BURNED; NO DATA

PLOT T40P4 PLOT BURNED; NO DATA

Appendix D: Hydrology Data

Table D1. Piezometer Well and Staff Gauge Data Stanton Energy Center Unit 2 Wetlands Mitigation Monitoring, Orlando Utilities Commission, November, 1992 - December, 1993. *

Mitigation Site	Station ID**	Elevation		11/23/92	12/18/92	1/31/92 93	2/23/92 3	3/29/93	4/29/93	5/24/93
		Top	Ground							
Area 3.5 (South)	P1	65.54	63.49	63.16	61.67	63.22	63.03	63.04	61.96	60.35
	S1	65.12	61.96	62.57	62.49	62.78	62.80	62.80	62.36	Dry
Area 3.5 (Middle)	P2	67.87	62.03	61.31	60.91	61.46	61.29	60.21	60.25	60.17
	S2	63.81	60.78	60.82	Dry	60.92	60.88	60.94	Dry	Dry
Area 3.5 (North)	P3	61.43	57.51	55.92	55.45	56.08	55.83	55.74	54.99	Dry
	S3	60.20	57.30	Dry	Dry	Dry	Dry	Dry	Dry	Dry
Area 3.6 (East)	P4	73.39	69.99	69.57	68.81	69.28	69.46	69.20	68.09	66.62
	S4	71.46	68.47	69.01	68.77	69.03	69.17	69.08	Dry	Dry
Area 3.6 (West)	P5	75.28	71.87	71.39	70.76	71.67	71.68	71.58	70.02	68.41
	S11	77.27	74.27	Dry	Dry	74.28	74.33	74.31	Dry	Dry
Area 3.7 (North)	P6	81.89	78.77	78.83	78.62	78.89	78.70	78.83	77.93	77.63
	S8	80.74	77.71	78.49	78.36	78.61	78.55	78.57	78.28	Dry
Area 3.7 (South)	P7	83.43	79.08	78.93	78.22	78.84	78.73	78.56	77.70	76.64
	S9	80.55	77.58	78.64	78.52	78.76	78.70	78.79	78.49	Dry
Area 3.2 (North)	S7	80.63	77.60	77.86	Dry	78.25	78.01	78.26	Dry	Dry
Area 3.2 (Cypress dome)	S5	78.14	75.48	76.59	76.42	77.14	77.08	77.18	76.57	Dry
Area 3.2 (South)	S5A	76.88	73.84	74.74	74.68	74.97	74.97	74.98	Dry	Dry

* All Measurements are corrected to NVGD.

** P = Piezometer; S = Staff Gauge.

? 77.75 on page D-2 ?
in baseline report

Table D1. Piezometer Well and Staff Gauge Data Stanton Energy Center Unit 2 Wetlands Mitigation Monitoring, Orlando Utilities Commission, November, 1992 - December, 1993. *

Mitigation Site	Station ID**	Elevation		6/30/93	7/29/93	8/29/93	9/20/93	10/15/93	11/9/93	12/1/93
		Top	Ground							
Area 3.5 (South)	P1	65.54	63.49	61.71	60.88	61.28	62.8	62.17	62.56	61.79
	S1	65.12	61.96	Dry	Dry	Dry	62.68	--***	62.47	Dry
Area 3.5 (Middle)	P2	67.87	62.03	60.2	60.68	60.17	60.97	60.44	60.75	60.29
	S2	63.81	60.78	Dry	Dry	Dry	61.05	--***	60.80	Dry
Area 3.5 (North)	P3	61.43	57.71	54.39	54.91	54.9	55.97	55.67	56.06	55.31
	S3	60.20	57.30	Dry	Dry	Dry	Dry	Dry	Dry	Dry
Area 3.6 (East)	P4	73.39	69.99	67.43	67.02	66.65	68.57	68.56	68.76	68.17
	S4	71.46	68.47	Dry	Dry	Dry	68.77	--***	68.6	Dry
Area 3.6 (West)	P5	75.28	71.87	69.27	68.66	68.17	70.84	70.55	70.99	70.39
	S11	77.75	74.27	Dry	Dry	Dry	Dry	Dry	Dry	74.13
Area 3.7 (North)	P6	81.89	78.77	76.93	76.45	76.16	78.29	77.58	77.60	77.90
	S8	80.74	77.71	Dry	Dry	Dry	77.84	--***	78.32	77.95
Area 3.7 (South)	P7	83.43	79.08	77.03	77.09	77.09	77.58	77.56	78.27	77.75
	S9	80.55	77.58	Dry	Dry	Dry	77.98	--***	78.48	78.10
Area 3.2 (North)	S7	80.63	77.60	Dry	Dry	Dry	77.44	--***	77.70	Dry
Area 3.2 (Cypress dome)	S5	78.14	75.48	Dry	Dry	Dry	76.93	--***	76.83	76.46
Area 3.2 (South)	S5A	76.88	73.84	74.56	Dry	Dry	74.8	--***	74.71	74.55

* All Measurements are corrected to NVGD.

** P = Piezometer; S = Staff Gauge.

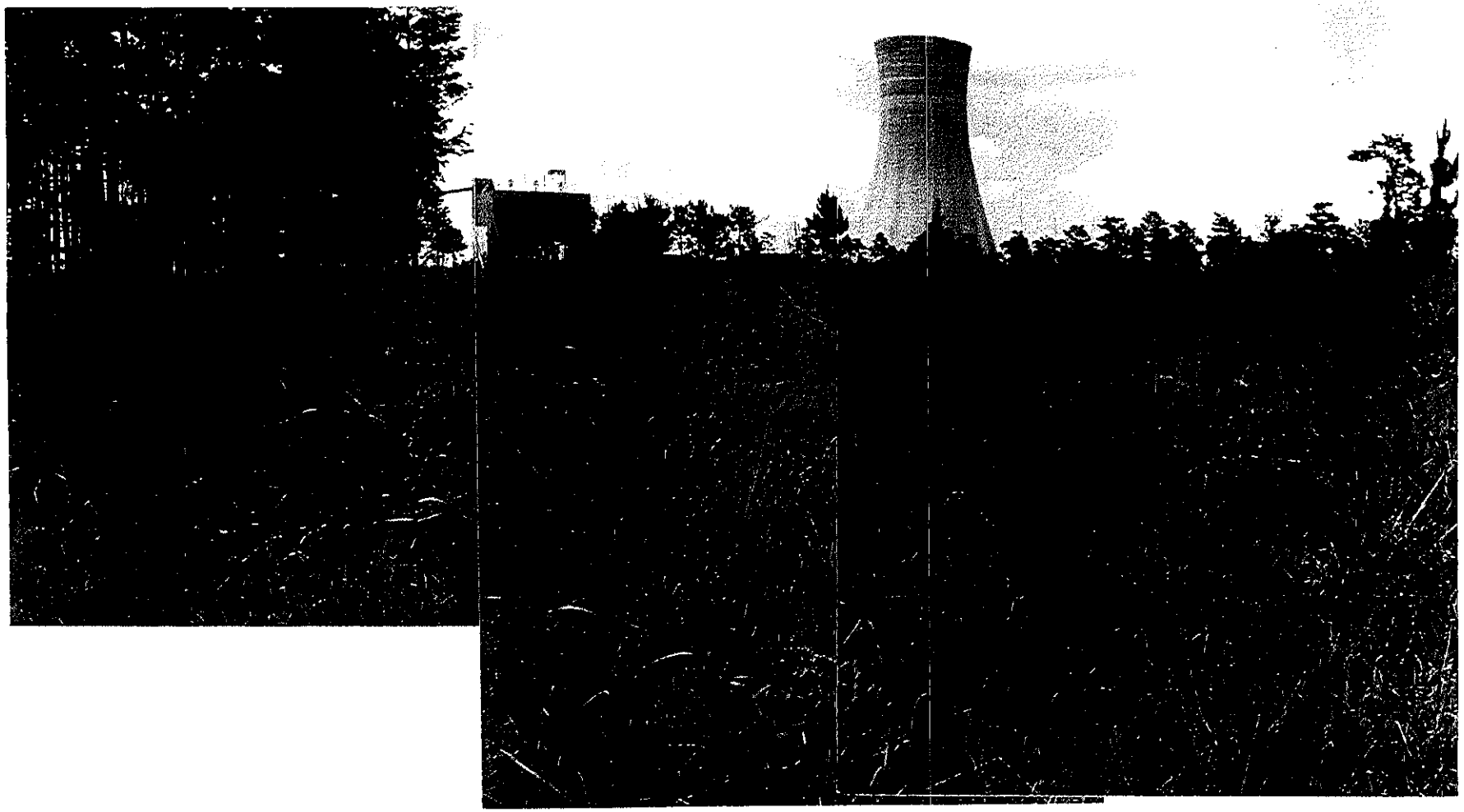
*** Staff gauge readings not available for October, 1993.

122393

Appendix E: Mitigation Site Panoramic Photographs

Appendix E. Figure 1 (part 1 of 2). Panoramic view of Railroad North Mitigation Site (Area 3.1), cypress planting area, September 1993. Photographs were taken one week after site burn.

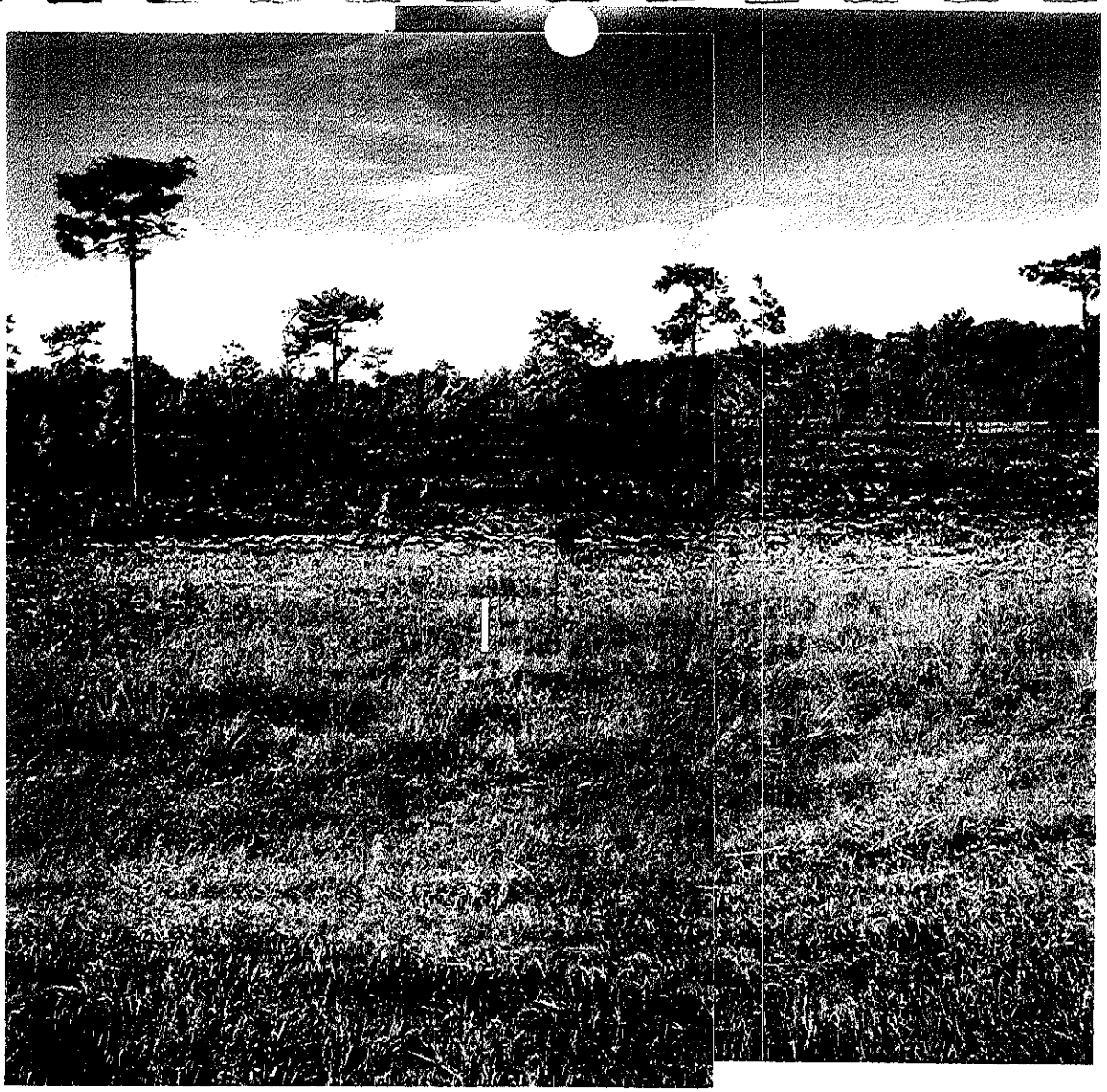
Appendix E. Figure 1 (part 2 of 2). Panoramic view of Railroad North Mitigation Site (Area 3.1), cypress planting area, September 1993. Photographs were taken one week after site burn.



Appendix E. Figure 2 (part 1 of 2). Panoramic view of Railroad North Mitigation Site (Area 3.1), longleaf pine planting area, June 1993.

Appendix E. Figure 2 (part 2 of 2). Panoramic view of Railroad North Mitigation Site (Area 3.1), longleaf pine planting area, June 1993.

Appendix E. Figure 3 (part 1 of 3). Panoramic view of Railroad South Mitigation Site (Area 3.2), near staff gauge 12, September 1993. Photographs were taken one week after site burn.

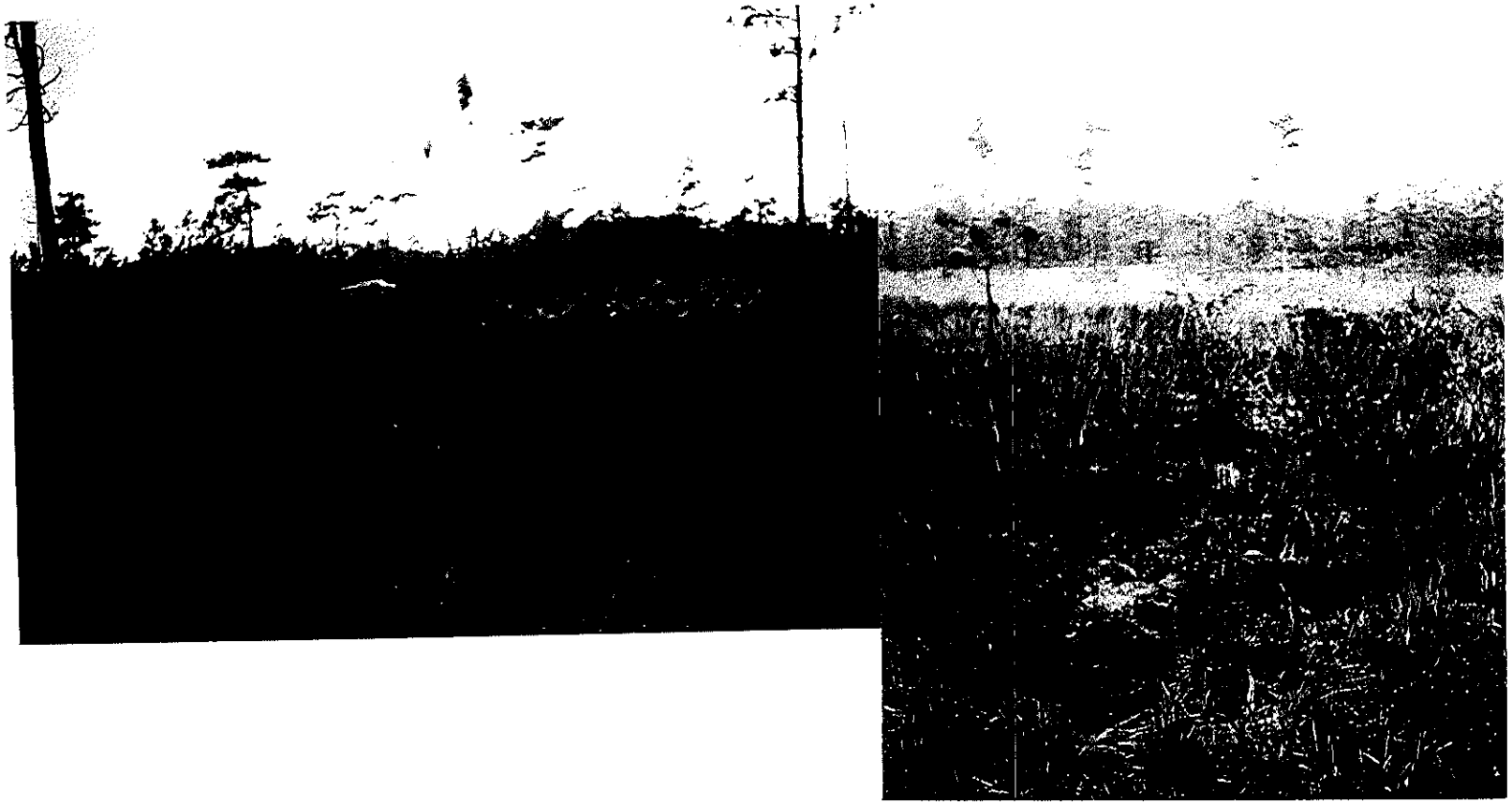


Appendix E. Figure 3 (part 2 of 3). Panoramic view of Railroad South Mitigation Site (Area 3.2), near staff gauge 12, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 3 (part 3 of 3). Panoramic view of Railroad South Mitigation Site (Area 3.2), near staff gauge 12, September 1993. Photographs were taken one week after site burn.

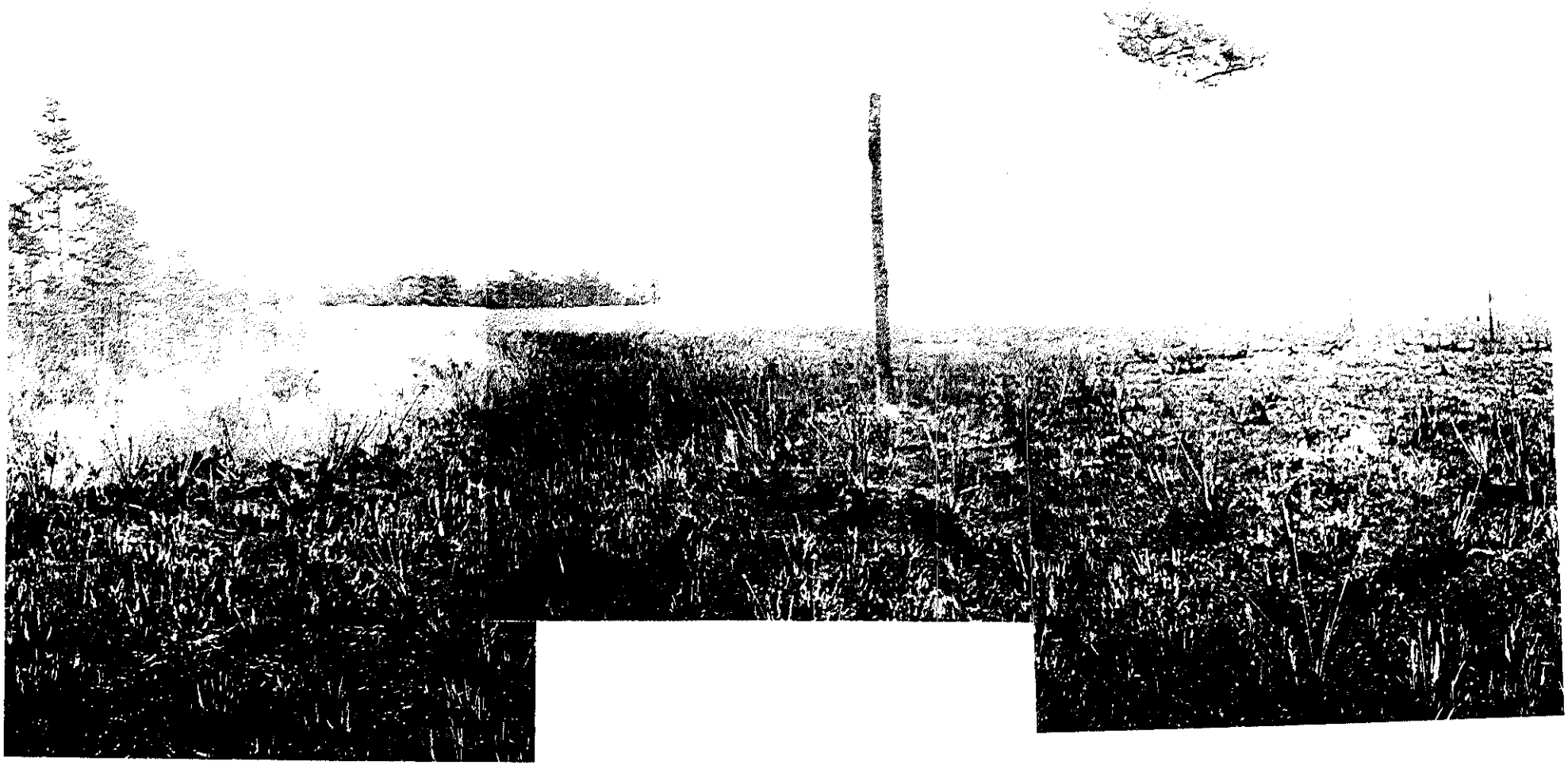
Appendix E. Figure 4 (part 1 of 2). Panoramic view of Railroad South Mitigation Site (Area 3.2), near staff gauge 5, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 4 (part 2 of 2). Panoramic view of Railroad South Mitigation Site (Area 3.2), near staff gauge 5, September 1993. Photographs were taken one week after site burn.



Appendix E. Figure 5 (part 1 of 3). Panoramic view of Railroad South Mitigation Site (Area 3.2), near staff gauge 5A, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 5 (part 2 of 3). Panoramic view of Railroad South Mitigation Site (Area 3.2), near staff gauge 5A, September 1993. Photographs were taken one week after site burn.

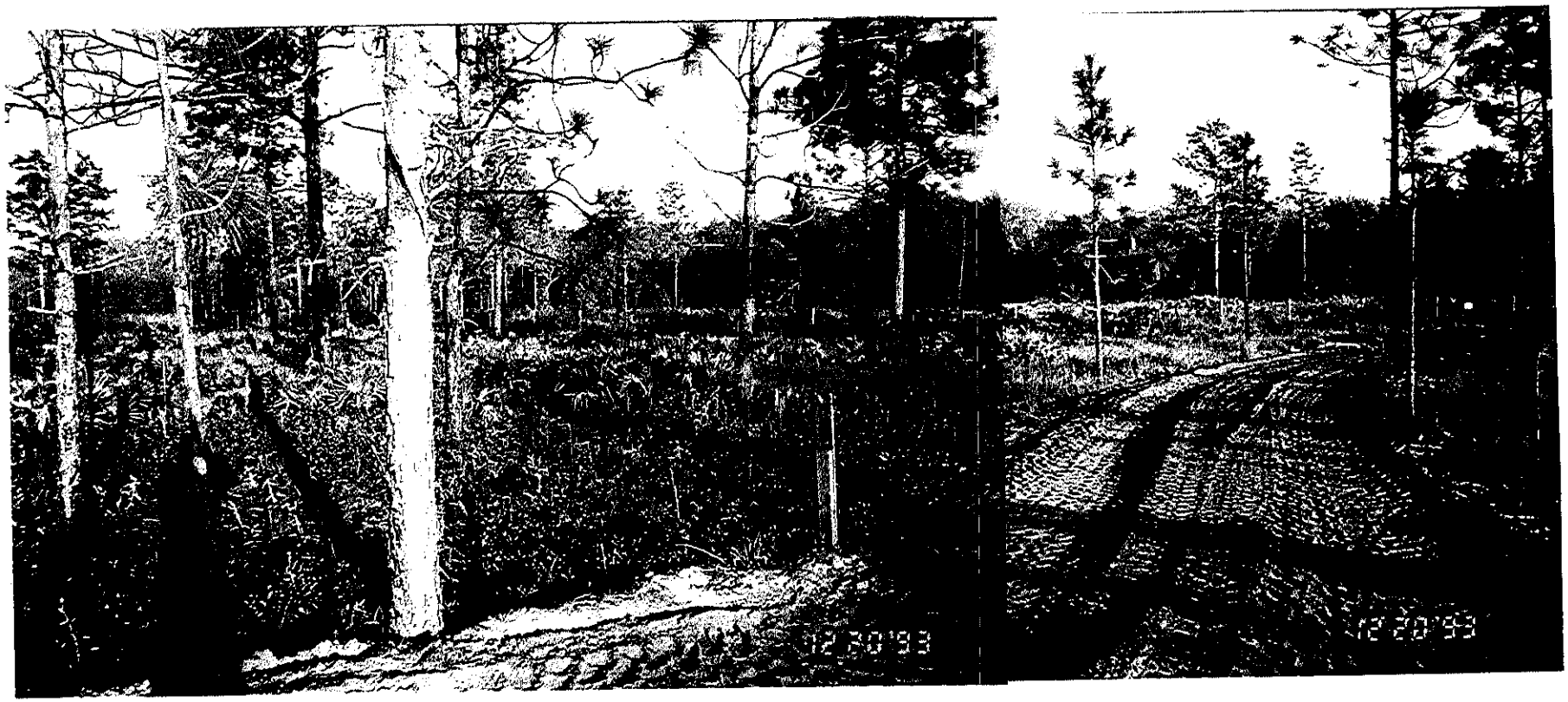


Appendix E. Figure 5 (part 3 of 3). Panoramic view of Railroad South Mitigation Site (Area 3.2), near staff gauge 5A, September 1993. Photographs were taken one week after site burn.

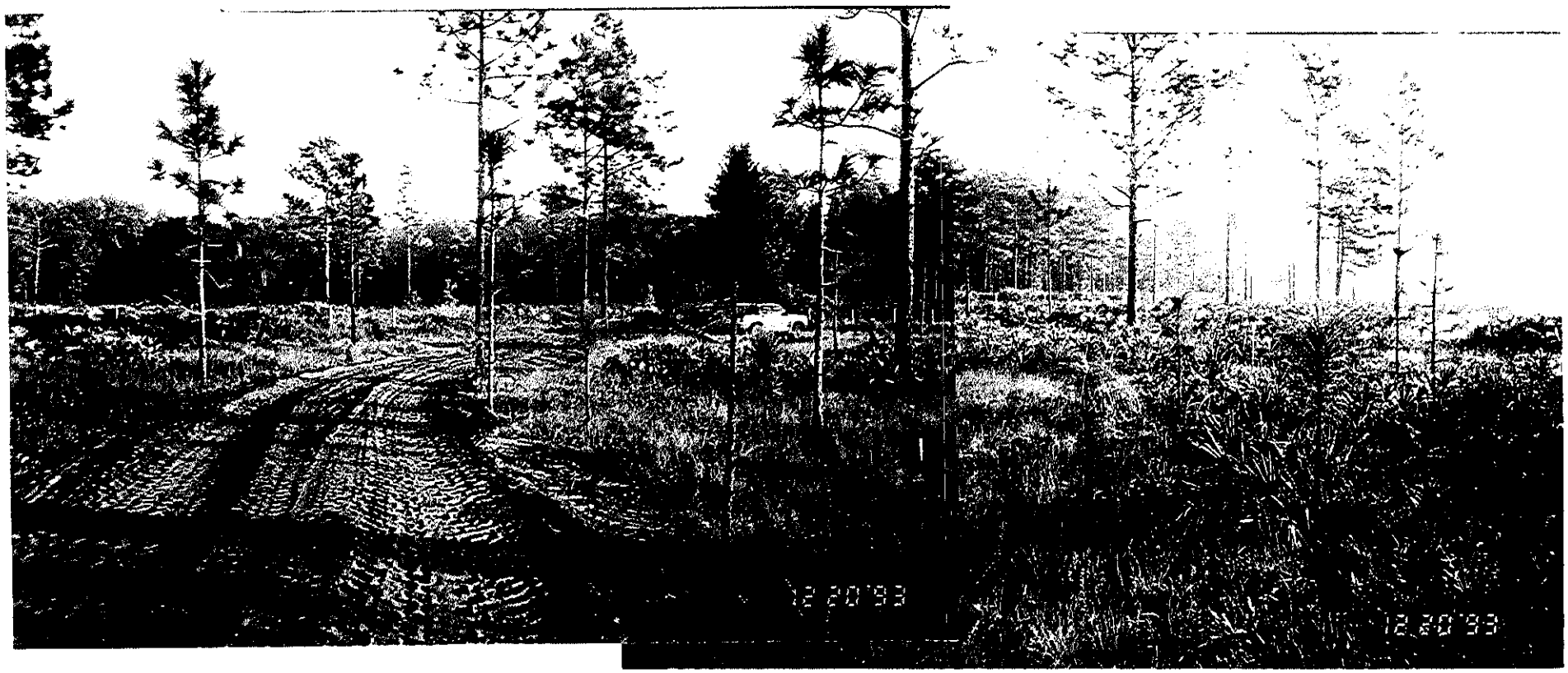
Appendix E. Figure 6. Panoramic view of RCW-West Mitigation Site (Area 3.3), from northwest corner of site, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 7 (part 1 of 2). Panoramic view of RCW-West Mitigation Site (Area 3.3), from southwest corner of site, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 7 (part 2 of 2). Panoramic view of RCW-West Mitigation Site (Area 3.3), from southwest corner of site, September 1993. Photographs were taken one week after site burn.



Appendix E. Figure 8 (part 1 of 2). Panoramic view of East Prairies Mitigation Site (Area 3.5), at Transect 12B, December 1993.



Appendix E. Figure 8 (part 2 of 2). Panoramic view of East Prairies Mitigation Site (Area 3.5), at Transect 12B, December 1993.

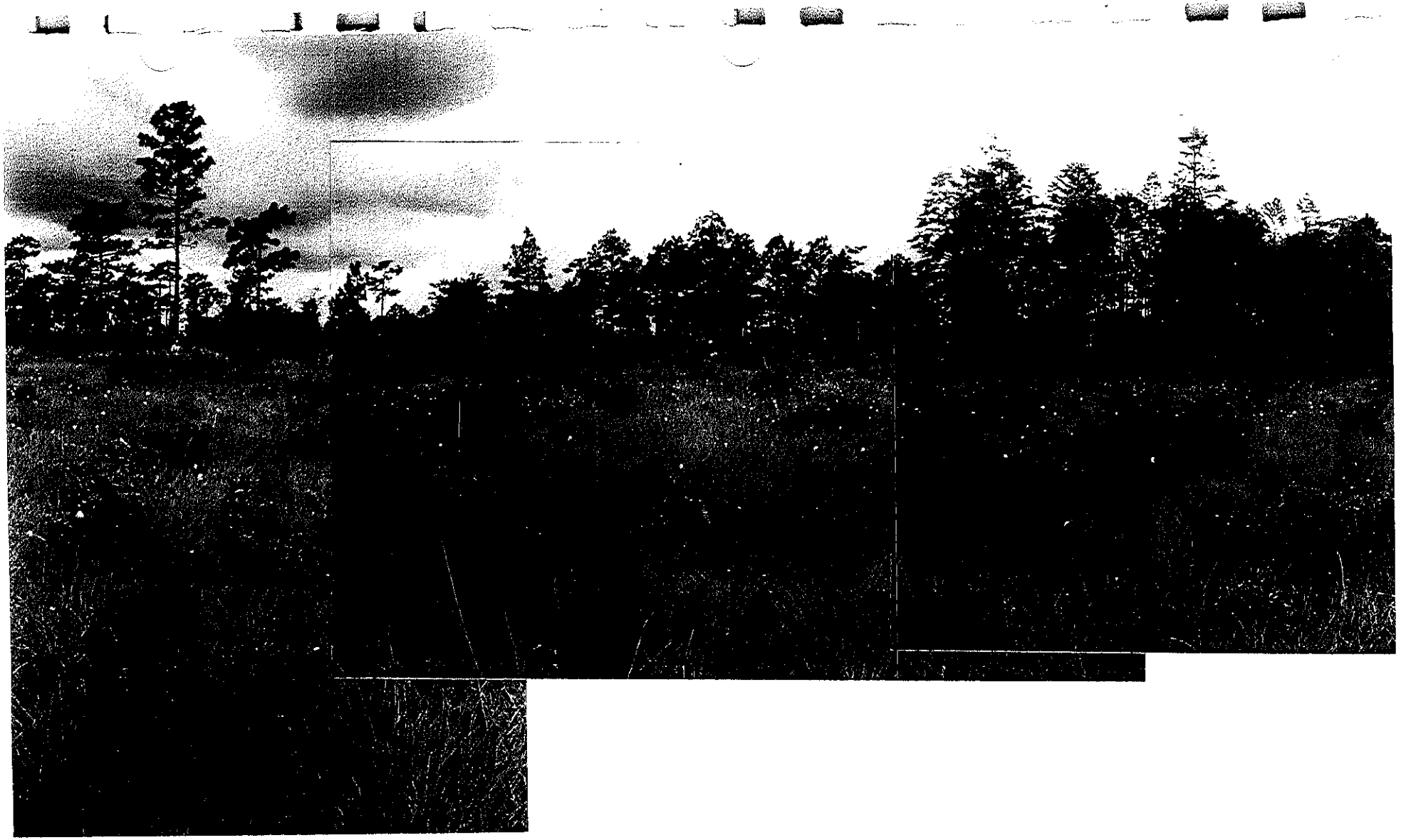
Appendix E. Figure 9 (part 1 of 3). Panoramic view of East Prairies Mitigation Site (Area 3.5), at Transect 5, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 9 (part 2 of 3). Panoramic view of East Prairies Mitigation Site (Area 3.5), at Transect 5, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 9 (part 3 of 3). Panoramic view of East Prairies Mitigation Site (Area 3.5), at Transect 5, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 10 (part 1 of 2). Panoramic view of RCD-East Mitigation Site (Area 3.6E), at Transect 15, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 10 (part 2 of 2). Panoramic view of RCD-East Mitigation Site (Area 3.6E), at Transect 15, September 1993. Photographs were taken one week after site burn.



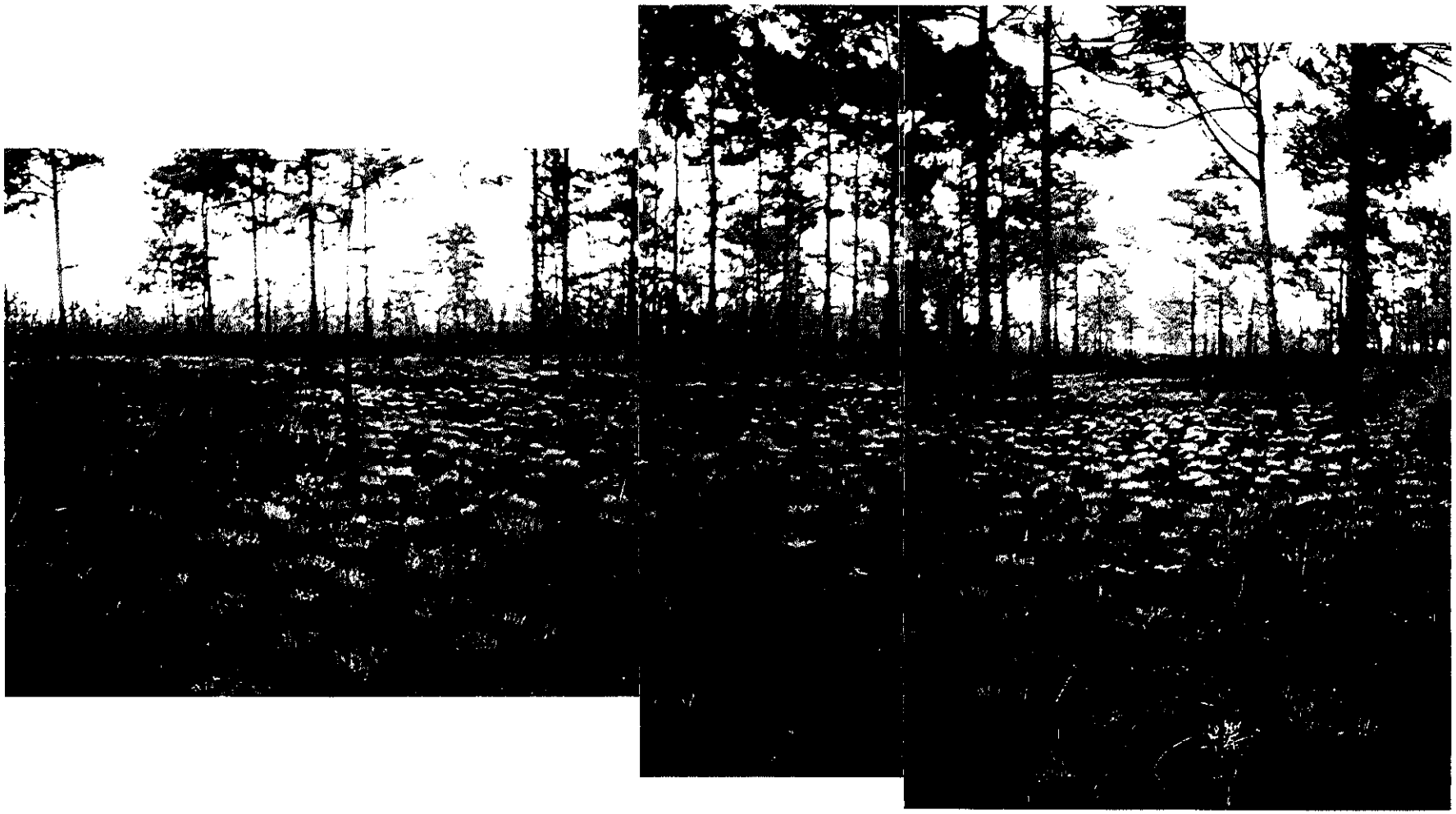
Appendix E. Figure 11 (part 1 of 4). Panoramic view of RCD-East Mitigation Site (Area 3.6E), at Transect 24, June 1993.

Appendix E. Figure 11 (part 2 of 4). Panoramic view of RCD-East Mitigation Site (Area 3.6E), at Transect 24, June 1993.

Appendix E. Figure 11 (part 3 of 4). Panoramic view of RCD-East Mitigation Site (Area 3.6E), at Transect 24, June 1993.

Appendix E. Figure 11 (part 4 of 4). Panoramic view of RCD-East Mitigation Site (Area 3.6E), at Transect 24, June 1993.

Appendix E. Figure 12 (part 1 of 3). Panoramic view of RCD-West Mitigation Site (Area 3.6W), near piezometer 5, September 1993. Photographs were taken one week after site burn.



Appendix E. Figure 12 (part 2 of 3). Panoramic view of RCD-West Mitigation Site (Area 3.6W), near piezometer 5, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 12 (part 3 of 3). Panoramic view of RCD-West Mitigation Site (Area 3.6W), near piezometer 5, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 13 (part 1 of 3). Panoramic view of the Loop Mitigation Site (Area 3.7), near piezometer 6, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 13 (part 2 of 3). Panoramic view of the Loop Mitigation Site (Area 3.7), near piezometer 6, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 13 (part 3 of 3). Panoramic view of the Loop Mitigation Site (Area 3.7), near piezometer 6, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 14 (part 1 of 3). Panoramic view of the Loop Mitigation Site (Area 3.7), near piezometer 7, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 14 (part 2 of 3). Panoramic view of the Loop Mitigation Site (Area 3.7), near piezometer 7, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 14 (part 3 of 3). Panoramic view of the Loop Mitigation Site (Area 3.7), near piezometer 7, September 1993. Photographs were taken one week after site burn.

Appendix E. Figure 15. Aerial infrared photograph of the Stanton Energy Center, October, 1993. The scale is approximately 1" = 2000'.

Item 2

Mitigation Bank Ledger and Unit A wetland impact deed for 30.448 acres

Mitigation Bank Ledger

Tuesday, July 13, 2010

Permit # 84310-3 **Bank Name:** TM Econ, Phases I-III, Holland Properties

Basin ID: 19 **Community Type:** General Wetlands **Current Balance:** 424.34 **Available Balance:** 316.84

Released/Purchased Credits

Transaction Date	Description	Credit Quantity	Debit Quantity	Balance
31-Jul-2007	UCF Basin 4-L Pond Modification (20026-66)		0.80	428.72
14-Aug-2007	Marbella (106069-1)		0.20	428.52
21-Aug-2007	Lake Underhill Center (20548-2)		8.30	420.22
30-Aug-2007	San Lorenzo Town Homes (93984-1)		2.79	417.43
05-Sep-2007	City of Orlando - East Regional Pipeline (DEP 48-192999-003)		0.20	417.23
19-Sep-2007	Florida Gas Transmission Harmony Pipeline (DEP 49-279614-001)		0.65	416.58
27-Sep-2007	3450 West Jefferson St. (Retlaw, Inc.) (OCEPD 06-078)		0.62	415.96
04-Oct-2007	Yucatan Cove ([1092])		Canceled	415.96
12-Oct-2007	Orlando Central Community (89553-2)		0.20	415.76
26-Oct-2007	Dan Nielsen Residence (OCEPD 06-077)		0.10	415.66
30-Oct-2007	Quinn Street - Jean-Pierre (DEP 48-275428-001)		0.10	415.56
14-Nov-2007	McGregor (OCEPD CAI 07-027)		0.20	415.36
14-Nov-2007	Lake Drawdy Reserve (OCEPD 03-048)		0.60	414.76
14-Nov-2007	The Shops at Alafaya Trail - Mass Grading Phase II (63277-5)		3.10	411.66
15-Nov-2007	Dallas Boulevard site (DEP 48-272002-002 / OCEPD 06-087)		0.31	411.35
07-Dec-2007	Sand Lake Development (90676-3)		1.80	409.55
10-Dec-2007	Narcoossee Road Improvements (110189-1)		4.16	405.39
18-Dec-2007	Arnold Celeste - Single Family Residence, Quinlan Street (DEP 48-273210-001)		0.25	405.14
18-Dec-2007	Kobe-Alafaya (100080-1)		0.58	404.56
26-Dec-2007	Mayflower Health Care Center (20899-5)		23.40	381.16
18-Jan-2008	Randal Park (SFWMD 060612-5)		14.71	366.45
24-Jan-2008	Oviedo Public Works Building (103149-1)		1.10	365.35
19-Feb-2008	Overton Street (OCEPD CAI 08-0024)		0.10	365.25
27-Feb-2008	Muscogee Industrial Park (OCEPD 07-059)		0.27	364.98
20-Mar-2008	WAMT Radio Towers (113657-1)		1.90	363.08
25-Mar-2008	Pineda Causeway Extension (97349-2)		9.10	353.98
02-Apr-2008	Faith Assembly of God Church-Phase I (Econ Tr. at Curry Ford Rd) (Ltr Mod) (94703-2)		6.40	347.58
04-Apr-2008	SPC Homes on Starry Street (OCEPD 05-087)		0.20	347.38
16-Apr-2008	Silvey Property (DEP 59-284691-001)		0.20	347.18
30-Apr-2008	Nona Park (SFWMD 070423-25)		3.00	344.18
12-May-2008	Semoran Plaza (20495-3)		3.50	340.68
20-Jun-2008	Timber Creek Relief High School (27625-4)		19.83	320.85
25-Jun-2008	OUC Lakeland Transmission Line (TBA [1122])		Canceled	320.85
25-Jun-2008	Stanton North Sub Station (OCEPD OGC 07-1723)		1.20	319.65
25-Jun-2008	Magnolia Ranch to Narcoossee (OCEPD OGC 06-2068)		2.66	316.99
04-Sep-2008	Vaughn Industrial Park (117698-1)		1.00	315.99
11-Sep-2008	Year 2 monitoring success for Phases 1, 2, 3	116.82		432.81
11-Sep-2008	Villagio at Waterford Lakes (117901-1)		12.10	420.71
29-Sep-2008	City of Orlando Reclaimed Waterline, Woodbury Rd. (DEP 48-092999-004)		1.60	419.11

INSTR 20030227614
OR BK 06882 PG 0102
MARTHA O. HAYNIE, COMPTROLLER
ORANGE COUNTY, FL
04/23/2003 02:55:13 PM
REC FEE 28.50

This instrument prepared by and should be returned to:
Tasha O. Buford
Young, van Assenderp, Vardoe & Anderson, P.A.
P.O. Box 1833
Tallahassee, FL 32302-1833
850/222-7206

RETURN TO: RICK PARKER
ORLANDO UTILITIES COMM.
P. O. BOX 3193
ORLANDO FL 32802

DEED OF CONSERVATION EASEMENT

THIS DEED OF CONSERVATION EASEMENT is given in perpetuity this 16th day of April 2003, by the ORLANDO UTILITIES COMMISSION (OUC) and the CITY OF ORLANDO ("Grantors") to ORANGE COUNTY, FLORIDA, and the STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, Orlando, Florida ("Grantees").

WITNESSETH

WHEREAS, the Grantors are the fee simple owners of lands which are the subject of this easement consisting of certain wetlands lying within the Curtis H. Stanton Energy Center and situate within Orange County, Florida, and more specifically described in the Legal Description attached hereto and incorporated wholly herein by reference as Exhibit "A" (the "Property");

WHEREAS, the Grantors, in consideration for the issuance of State of Florida Department of Environmental Protection Site Certification Order No. ~~PA 81-14~~SA2 and U.S. Army Corps of Engineers Permit No. 2001-03606(IP-EB) to OUC, Kissimmee Utility Authority, Florida Municipal Power Agency and Southern Company-Florida, L.L.C., on September 21, 2001 and October 3, 2001, respectively, are agreeable to granting and securing to the Grantees a perpetual Conservation Easement as defined in section 704.06, Fla. Stat., over the Property.

NOW, THEREFORE, in consideration for the issuance of State of Florida Department of Environmental Protection Site Certification Order No. ~~PA 81-14~~SA2 and U.S. Army Corps of Engineers Permit No. 2001-03606(IP-EB) and pursuant to the provisions of Section 704.06, Florida Statutes, Grantors hereby create, grant and establish a perpetual Conservation Easement for and in favor of the Grantees upon the Property which shall run with the land and be binding upon the Grantors, and shall remain in full force and effect forever.

The scope, nature, and character of this Conservation Easement shall be as follows:

1. Purpose. It is the purpose and intent of this Conservation Easement to assure that the subject lands will be retained and maintained forever predominantly in the natural vegetative and hydrological condition existing at the time of execution of this Conservation Easement.

City Council Meeting: 04-14-03
Item: #3 Documentary: 030414 H03

2. Access Rights. It is understood that the granting of this Conservation Easement entitles the Grantees and the U.S. Army Corps of Engineers or their authorized representatives to enter the above -described land in a reasonable manner and at reasonable times to assure compliance.

3. Activities Prohibited. Any activity on or use of the Property inconsistent with the purpose of this Conservation Easement is prohibited. In accordance with Section 704.06, Florida Statutes, and the terms of this Conservation Easement, the following activities are prohibited in or on the Property:

(a) Construction or placing of buildings, roads, signs, billboards or other advertising, utilities, or other structures on or above the ground;

(b) Dumping or placing of soil or other substance or material as landfill, or dumping or placing of trash, waste, or unsightly or offensive materials;

(a) Removal or destruction of trees, shrubs, or other vegetation, with exception of nuisance and exotic plant species as may be required by Grantees;

(b) Excavation, dredging, or removal of loam, peat, gravel, soil, rock, or other material substance in such manner as to affect the surface;

(c) Surface use except for purposes that permit the land or water area to remain in its existing condition;

(d) Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation;

(e) Acts or uses detrimental to such aforementioned retention and maintenance of land or water areas; and,

(f) Acts or uses which are detrimental to the preservation of any features or aspects of the Property having historical, archaeological or cultural significance.

4. Reservations of Grantors in Property. Grantors reserve all rights as owners of the Property, including the right to engage in uses of the Property, that are not prohibited herein and which are not inconsistent with the intent and purposes of this Conservation Easement.

5. No Public Access to Property. No right of access by the general public to any portion of the Property is conveyed by this Conservation Easement.

6. Maintenance of Property. To the extent allowable by law, the Grantors on behalf of themselves and their successors or assigns, hereby agree to bear all costs and liability relating to the operation and maintenance of the land subject to this Conservation Easement in the natural vegetative and hydrologic condition existing at the time of execution of the Conservation Easement, and Grantors

do hereby indemnify and hold harmless the Grantees from same. The Conservation Easement hereby granted and the obligation to retain and maintain the land forever predominately in the vegetative and hydrologic condition as herein specified shall run with the land and shall be binding upon the Grantors and their successors and assigns, and shall inure to the benefit of the Grantees and their successors and assigns. Neither this paragraph nor any other provision of this easement shall be construed as a limitation or waiver of the Grantors' sovereign immunity, except to the extent waived under Section 768.28, Florida Statutes.

7. Property Taxes and Assessments. Grantors shall pay any and all real property taxes and assessments levied by competent authority on the Property.

8. Enforcement of Easement, Costs thereof. The terms and conditions of this Conservation Easement may be enforced by the Grantees by injunctive relief and other appropriate available remedies. In any enforcement action in which Grantees prevail, Grantors shall bear the costs of restoring the land to the natural vegetative and hydrologic condition existing at the time of execution of this Conservation Easement. These remedies are in addition to any other remedy, fine or penalty which may be applicable under Chapter 403, Florida Statutes. Any forbearance on behalf of the Grantees to exercise their right in the event of the failure of Grantors to comply with the provisions of this Conservation Easement shall not be deemed or construed to be a waiver of the Grantee's rights thereunder in the event of any subsequent failure of the Grantors to comply.

9. Restrictions on Easement and Transfer. Grantees will hold this Conservation Easement exclusively for conservation purposes. Grantees will not assign their rights and obligations under this Conservation Easement except to another organization qualified to hold such interests under the applicable state laws.

10. Record Notice. The terms, conditions, restrictions and purpose of this Conservation Easement shall be inserted by Grantor in any subsequent deed or other legal instrument by which Grantor divests itself of any interest in the Property. Any future holder of the Grantor's interest in the Property shall be notified in writing by Grantor of this Conservation Easement.

11 Written Notice to Parties. All notices, consents, approvals or other communications hereunder shall be in writing and shall be deemed properly given if sent by United States certified mail, return receipt requested, addressed to the appropriate party or successor-in-interest.

12. Amendment. This Conservation Easement may be amended, altered, released or revoked only by written agreement between the parties hereto or their heirs, assigns and successors-in-interest, which shall be filed in the Official Records of Orange County.

13. Severability. If any provision of this Conservation Easement or the application thereof to any person or circumstances is found to be invalid, the remainder of the provisions of this Conservation Easement shall not be affected thereby, as long as the purpose of the Conservation Easement is preserved.

TO HAVE AND TO HOLD unto Grantees, their successors and assigns forever. The covenants, terms, conditions, restrictions and purpose imposed with this Conservation Easement shall not only be binding upon Grantors, but also their agents, heirs, successors and assigns, and shall continue as a servitude running in perpetuity with the Property.

Grantors hereby covenant with said Grantees that Grantors are lawfully seized of said Property in fee simple; that the Property is free and clear of all encumbrances; that Grantors have good right and lawful authority to convey this Conservation Easement; and that they hereby fully warrant and defend the title to the Conservation Easement hereby conveyed against good and lawful claims of all persons.

IN WITNESS WHEREOF, Grantors have hereto set Grantors' hand and seal on this 16th day of April 2003.

Signed, sealed and
delivered in our presence:

ORLANDO UTILITIES COMMISSION

By: Betty J. Perrow
WITNESS

By:
Its: GEN. MGR. & CEO
GRANTOR

ACKNOWLEDGMENT

STATE OF FLORIDA
COUNTY OF ORANGE

The foregoing Deed of Conservation Easement was acknowledged before me this 3 day of April 2003 by Robert C. Haven (name of officer or agent), of Orlando Utilities Commission, a FLbeida (State or place of incorporation) ~~corporation~~ statutory commission, on whose behalf he/she was authorized to execute the afore-described Conservation Easement.

Personally Known: ✓
Produced I.D.: ____
I.D. Produced: ____

Ruth E. Brown
Signature, Notary Public

Ruth E. Brown
Printed Name, Notary Public

My Commission Expires: 11/11/04

(SEAL)
State of Florida

Ruth E. Brown
MY COMMISSION EXPIRES
November 11, 2004
#CC979001
Bonded thru
Troy Fain-Insurance
NOTARY PUBLIC, STATE OF FLORIDA

Approved as to form and legality
OUC Legal Department

DATE: 3-27-03 By:

CITY OF ORLANDO

By: Rosemary Copple
WITNESS

By: Daisy W. Lynum
Its: Mayor Pro Tem
GRANTOR

ACKNOWLEDGMENT

STATE OF FLORIDA
COUNTY OF Orange

The foregoing Deed of Conservation Easement was acknowledged before me this 16th day of April 2003, by Daisy W. Lynum (name of officer or agent), of the City of Orlando, a Florida municipal (State or place of incorporation) corporation, on whose behalf he/she was authorized to execute the afore-described Conservation Easement.

Personally Known: ✓
Produced I.D.: ____
I.D. Produced: ____

Rosemary Copple
Signature, Notary Public
Rosemary Copple
Printed Name, Notary Public

(SEAL) Rosemary Copple
My Commission DD133245
Expires July 11, 2006

My Commission Expires: July 11, 2006

F:\USERS\CLERKS\KAREN\CONSERVEASEMENTDEED.092202.wpd

COPY

INSTR 20030227614
OR BK 06882 PG 0107
LAST PAGE

EXHIBIT "A"
for
DEED OF CONSERVATION EASEMENT

LEGAL DESCRIPTION:

A PORTION OF THE NORTHEAST 1/4 OF SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, ORANGE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF SAID SECTION 14; THENCE RUN S 00° 00' 00" E, ALONG THE WEST LINE OF SAID NORTHEAST 1/4, A DISTANCE OF 342.64 FEET FOR A POINT OF BEGINNING; THENCE RUN S 90° 00' 00" E, A DISTANCE OF 1.12 FEET; THENCE RUN S 77° 49' 47" E, A DISTANCE OF 149.32 FEET; THENCE RUN S 20° 10' 54" E, A DISTANCE OF 101.23 FEET; THENCE RUN S 25° 10' 49" E, A DISTANCE OF 121.51 FEET; THENCE RUN S 17° 23' 33" E, A DISTANCE OF 107.23 FEET; THENCE RUN S 50° 25' 34" E, A DISTANCE OF 60.96 FEET; THENCE RUN N 60° 35' 56" E, A DISTANCE OF 67.78 FEET; THENCE RUN N 69° 23' 04" E, A DISTANCE OF 61.43 FEET; THENCE RUN N 41° 40' 00" E, A DISTANCE OF 104.58 FEET; THENCE RUN N 81° 33' 04" E, A DISTANCE OF 117.39 FEET; THENCE RUN S 73° 52' 19" E, A DISTANCE OF 88.18 FEET; THENCE RUN N 78° 38' 07" E, A DISTANCE OF 110.10 FEET; THENCE RUN S 61° 36' 42" E, A DISTANCE OF 66.68 FEET; THENCE RUN S 49° 59' 37" E, A DISTANCE OF 103.48 FEET; THENCE RUN S 46° 55' 31" E, A DISTANCE OF 81.97 FEET; THENCE RUN S 33° 04' 06" E, A DISTANCE OF 56.01 FEET; THENCE RUN S 45° 59' 26" E, A DISTANCE OF 79.33 FEET; THENCE RUN S 29° 09' 22" E, A DISTANCE OF 84.75 FEET; THENCE RUN S 24° 53' 16" E, A DISTANCE OF 59.40 FEET; THENCE RUN S 58° 59' 05" E, A DISTANCE OF 135.79 FEET; THENCE RUN N 25° 34' 39" E, A DISTANCE OF 43.72 FEET; THENCE RUN N 23° 22' 25" W, A DISTANCE OF 81.34 FEET; THENCE RUN N 67° 43' 20" E, A DISTANCE OF 57.62 FEET; THENCE RUN S 42° 38' 31" E, A DISTANCE OF 63.80 FEET; THENCE RUN S 80° 10' 38" E, A DISTANCE OF 31.18 FEET; THENCE RUN N 35° 10' 43" E, A DISTANCE OF 45.15 FEET; THENCE RUN N 52° 05' 26" E, A DISTANCE OF 52.13 FEET; THENCE RUN N 33° 10' 38" E, A DISTANCE OF 53.09 FEET; THENCE RUN S 79° 28' 58" E, A DISTANCE OF 28.09 FEET; THENCE RUN S 06° 30' 42" E, A DISTANCE OF 44.18 FEET; THENCE RUN S 19° 07' 35" W, A DISTANCE OF 98.52 FEET; THENCE RUN S 02° 31' 07" W, A DISTANCE OF 84.11 FEET; THENCE RUN S 10° 27' 23" W, A DISTANCE OF 72.02 FEET; THENCE RUN S 29° 15' 05" W, A DISTANCE OF 97.82 FEET; THENCE RUN S 89° 45' 32" W, A DISTANCE OF 45.33 FEET; THENCE RUN S 39° 50' 19" W, A DISTANCE OF 45.86 FEET; THENCE RUN S 62° 41' 13" W, A DISTANCE OF 59.37 FEET; THENCE RUN S 30° 52' 10" E, A DISTANCE OF 37.70 FEET; THENCE RUN N 82° 04' 21" E, A DISTANCE OF 41.78 FEET; THENCE RUN S 48° 31' 00" E, A DISTANCE OF 51.80 FEET; THENCE RUN S 05° 00' 06" W, A DISTANCE OF 43.06 FEET; THENCE RUN S 58° 49' 56" W, A DISTANCE OF 52.28 FEET; THENCE RUN N 82° 30' 30" W, A DISTANCE OF 92.17 FEET; THENCE RUN S 71° 57' 53" W, A DISTANCE OF 36.10 FEET; THENCE RUN N 88° 38' 49" W, A DISTANCE OF 43.13 FEET; THENCE RUN S 30° 50' 51" W, A DISTANCE OF 113.78 FEET; THENCE RUN S 64° 33' 05" W, A DISTANCE OF 124.34 FEET; THENCE RUN S 82° 53' 07" W, A DISTANCE OF 31.28 FEET; THENCE RUN S 60° 53' 58" W, A DISTANCE OF 135.52 FEET; THENCE RUN S 63° 01' 47" W, A DISTANCE OF 35.94 FEET; THENCE RUN N 78° 31' 38" W, A DISTANCE OF 20.18 FEET; THENCE RUN S 82° 20' 57" W, A DISTANCE OF 150.89 FEET; THENCE RUN N 51° 50' 22" W, A DISTANCE OF 47.88 FEET; THENCE RUN S 86° 30' 00" W, A DISTANCE OF 47.75 FEET; THENCE RUN S 07° 38' 32" W, A DISTANCE OF 68.87 FEET; THENCE RUN S 32° 31' 00" W, A DISTANCE OF 55.89 FEET; THENCE RUN S 40° 47' 01" W, A DISTANCE OF 51.30 FEET; THENCE RUN S 88° 47' 59" W, A DISTANCE OF 43.09 FEET; THENCE RUN N 85° 48' 37" W, A DISTANCE OF 32.04 FEET; THENCE RUN N 32° 52' 26" W, A DISTANCE OF 84.77 FEET; THENCE RUN S 08° 24' 46" W, A DISTANCE OF 86.36 FEET; THENCE RUN S 77° 18' 39" W, A DISTANCE OF 30.28 FEET; THENCE RUN S 27° 11' 06" W, A DISTANCE OF 20.49 FEET; THENCE RUN S 67° 21' 38" W, A DISTANCE OF 28.36 FEET; THENCE RUN S 72° 29' 26" W, A DISTANCE OF 50.42 FEET; THENCE RUN N 62° 49' 31" W, A DISTANCE OF 170.39 FEET; THENCE RUN N 59° 17' 00" W, A DISTANCE OF 135.79 FEET; THENCE RUN S 00° 00' 00" W, A DISTANCE OF 3.80 FEET TO THE AFOREMENTIONED WEST LINE OF THE NORTHEAST 1/4 OF SECTION 14; THENCE RUN N 00° 00' 00" E, ALONG SAID WEST LINE, A DISTANCE OF 1364.86 FEET TO THE POINT OF BEGINNING.

CONTAINING 30.448 ACRES, MORE OR LESS.

Item 3

Magnolia Ranch Transmission Line ROW Wetland Monitoring Report

Golder Associates Inc.
6241 NW 23rd St
Suite 500
Gainesville, FL 32653
Telephone: (352) 336-5600
Fax: (352) 336-6603

December 22, 2008 083-87656

FDEP Central District Office
3319 Maguire Blvd, Suite 232
Orlando, Florida 32803-3767

Attention: Lisa Prather

RE: Orlando Utilities Commission Magnolia Ranch Transmission Line ROW Wetland Monitoring – Year One Report (FDEP File No. PA81-14K)

Dear Ms. Prather:

On behalf of Orlando Utilities Commission (OUC), Golder Associates Inc. respectfully submits three copies of the enclosed first annual wetland monitoring report for the OUC Magnolia Ranch Substation transmission line, as required in the OUC Stanton Energy Center *Supplemental Conditions of Certification*, dated July 24, 2008 (PA 81-14K).

In accordance with the Supplemental Conditions of Certification, the enclosed monitoring report documents conditions of herbaceous wetlands within the transmission line right-of-way following clearing of canopy species. The monitoring wetlands (Wetlands 19B-1 and 23-1) are naturally regenerating through recruitment of native vegetation, and are trending toward fulfillment of monitoring success criteria. Specific success criteria include:

- Nuisance/exotics occupy less than 5 percent of the total cover on the parcel,
- Percent cover by native vegetation is 95 percent or greater within the remaining wetlands on the parcel,
- Wetland species will be reproducing naturally in each stratum, and
- Vegetation monitoring data for wetland enhancement areas show no less than 95 percent of vegetation cover.

OUC will submit annual monitoring reports as required; the second annual monitoring report will be submitted in November 2009. Please do not hesitate to call me at (352) 336-5600 or email (kbullock@golder.com) if you have questions or need any additional information.

Sincerely,

GOLDER ASSOCIATES INC.

Karl A. Bullock
Senior Ecologist

cc: Lorraine Guise, OUC

January 18, 2010 083-87656

FDEP Central District Office
3319 Maguire Blvd, Suite 232
Orlando, Florida 32803-3767

Attention: Lisa Prather

RE: Orlando Utilities Commission Magnolia Ranch Transmission Line ROW Wetland Monitoring – Year Two Report (FDEP File No. PA81-14K)

Dear Ms. Prather:

On behalf of Orlando Utilities Commission (OUC), Golder Associates Inc. respectfully submits one hardcopy (enclosed) and electronic files (submitted via email) of the second annual wetland monitoring report for the OUC Magnolia Ranch Substation transmission line, as required in the OUC Stanton Energy Center *Supplemental Conditions of Certification*, dated July 24, 2008 (PA 81-14K).

In accordance with the Supplemental Conditions of Certification, the enclosed monitoring report documents the condition of herbaceous wetlands within the transmission line right-of-way following clearing of canopy species. The monitoring wetlands (Wetlands 19B-1 and 23-1) are naturally regenerating through recruitment of native vegetation, and are trending toward fulfillment of monitoring success criteria. Specific success criteria include:

- Nuisance/exotics occupy less than 5 percent of the total cover on the parcel,
- Percent cover by native vegetation is 95 percent or greater within the remaining wetlands on the parcel,
- Wetland species will be reproducing naturally in each stratum, and
- Vegetation monitoring data for wetland enhancement areas show no less than 95 percent of vegetation cover.

OUC will submit annual monitoring reports as required; the third annual monitoring report will be submitted in January 2011. Please do not hesitate to call me at (352) 336-5600 or email (kbullock@golder.com) if you have questions or need any additional information.

Sincerely,

GOLDER ASSOCIATES INC.

Karl A. Bullock
Senior Ecologist

cc: Charlie Doud, OUC

Item 4

North Substation Transmission Line ROW Wetland Monitoring Report

Golder Associates Inc.
6241 NW 23rd St
Suite 500
Gainesville, FL 32653
Telephone: (352) 336-5600
Fax: (352) 336-6603

September 19, 2008 083-87632

FDEP Central District Office
3319 Maguire Blvd, Suite 232
Orlando, Florida 32803-3767

Attention: Lisa Prather

RE: Orlando Utilities Commission North Substation Wetland Monitoring – Baseline Report
OGC No. 07-1723

Dear Ms. Prather:

On behalf of Orlando Utilities Commission (OUC), Golder Associates Inc. respectfully submits three copies of the enclosed baseline wetland monitoring report for the OUC Stanton North Substation transmission line, as required in the *Order Modifying Conditions of Certification*, dated February 6, 2008 (OGC No. 07-1723).

In accordance with the Conditions of Certification, the enclosed monitoring report documents pre-construction baseline conditions of forested wetlands within the transmission line right-of-way which will be cleared and allowed to naturally regenerate through recruitment of native vegetation. Specific success criteria include:

- Nuisance/exotics occupy less than 5 percent of the total cover on the parcel,
- Percent cover by native vegetation is 95 percent or greater within the remaining wetlands on the parcel,
- Wetland species will be reproducing naturally in each stratum, and
- Vegetation monitoring data for wetland enhancement areas show no less than 95 percent of vegetation cover.

OUC will submit annual monitoring reports as required; the first post-clearing monitoring report will be submitted in July 2009. Please do not hesitate to call me at (352) 336-5600 if you have questions or need any additional information.

Sincerely,

GOLDER ASSOCIATES INC.

Karl A. Bullock
Senior Ecologist

Enclosures

cc: Lorraine Guise, OUC

February 4, 2010 083-87632

FDEP Central District Office
3319 Maguire Blvd, Suite 232
Orlando, Florida 32803-3767

Attention: Lisa Prather

RE: Orlando Utilities Commission Stanton North Substation and Transmission Line ROW Wetland Monitoring – Year One Report (FDEP File No. PA81-14K, OGC No. 07-1723)

Dear Ms. Prather:

On behalf of Orlando Utilities Commission (OUC), Golder Associates Inc. respectfully submits one hard copy and electronic files (pdf) of the enclosed first annual post-construction wetland monitoring report for the OUC Stanton North Substation transmission line, as required in the as required in the *Order Modifying Conditions of Certification*, dated February 6, 2008 (OGC No. 07-1723).

In accordance with the Supplemental Conditions of Certification, the enclosed monitoring report documents the condition of herbaceous wetlands within the transmission line right-of-way following clearing of canopy species. The monitoring wetlands (Wetlands 4, 5, 7, and 9) are naturally regenerating through recruitment of native vegetation, and are trending toward fulfillment of monitoring success criteria. Specific success criteria include:

- Nuisance/exotics occupy less than 5 percent of the total cover on the parcel,
- Percent cover by native vegetation is 95 percent or greater within the remaining wetlands on the parcel,
- Wetland species will be reproducing naturally in each stratum, and
- Vegetation monitoring data for wetland enhancement areas show no less than 95 percent of vegetation cover.

OUC will submit annual monitoring reports as required; the second post-construction monitoring report will be submitted in February 2011. Please do not hesitate to call me at (352) 336-5600 or email (kbullock@golder.com) if you have questions or need any additional information.

Sincerely,

GOLDER ASSOCIATES INC.

Karl A. Bullock
Senior Ecologist

cc: Charlie Doud, OUC