



FLORIDA DEPARTMENT OF Environmental Protection

Southwest District Office
13051 North Telecom Parkway #101
Temple Terrace, Florida 33637-0926

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

March 12, 2020

Southwest Florida Water Management District
% Jennette Seachrist
2379 Broad Street
Brooksville, Florida 34604
Jennette.Seachrist@SWFWMD.State.FL.US

File No.: 29-0322543-002-EG, Hillsborough County

Dear Ms. Seachrist:

On March 9, 2020, we received your notice of intent to use a General Permit (GP), pursuant to Rule 62-330.485, Florida Administrative Code (F.A.C.) to perform upland and wetland habitat restoration and enhancement activities, by implementing a stormwater treatment system, removing nuisance/exotic vegetation, and planting desirable plant species. The project is located on two separate parcels of land lying west of 12th Avenue, Palm River, Sections 21 and 28, Township 29 South, Range 19 East, in Hillsborough County, as shown on the enclosed area map.

Your intent to use a general permit has been reviewed by Department staff for three types of authorizations: (1) regulatory authorization, (2) proprietary authorization (related to state-owned submerged lands), and (3) federal authorization. The authority for review and the outcomes of the reviews are listed below. Please read each section carefully.

Your project did not qualify for the federal review portion of this verification request. Specifically, the activity is not covered by the State Programmatic General Permit. **Additional authorization must be obtained prior to commencement of the proposed activity.** This letter does not relieve you from the responsibility of obtaining other federal, state, or local authorizations that may be required for the activity. Please refer to the specific section(s) dealing with that portion of the review below for advice on how to proceed.

If you change the project from what you submitted, the authorization(s) granted may no longer be valid at the time of commencement of the project. Please contact us prior to beginning your project if you wish to make any changes.

1. Regulatory Review – Verified

Based on the forms, drawings, and documents submitted with your notice, it appears that the project meets the requirements for the General Permit under Rule 62-330.485, F.A.C. Any activities performed under a general permit are subject to general conditions required in Rule 62-330.405, F.A.C. (attached), and the specific conditions of Rule 62-330.485, F.A.C. (attached). Any deviations from these conditions may subject the permittee to enforcement action and possible penalties.

Please be advised that the construction phase of the GP must be completed within five years from the date the notice to use the GP was received by the Department. If you wish to continue this GP beyond the expiration date, you must notify the Department at least 30 days before its expiration.

Authority for review- Part IV of Chapter 373, F.S., Title 62, F.A.C. and in accordance with the operating agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C.

2. Proprietary Review – Not Required

The activity does not appear to be located on sovereign submerged lands, and does not require further authorization under chapter 253 of the Florida Statutes, or chapters 18-20 or 18-21 of the Florida Administrative Code.

Please be advised that any use of sovereign submerged lands without specific prior authorization from the Board of Trustees will be considered a violation of Chapter 253, Florida Statutes and may subject the affected upland riparian property owners to legal action as well as potential fines for the prior unauthorized use of sovereign land.

Authority for review - Chapter 253, F.S., Chapter 18-21, F.A.C., and Section 62-330.075, F.A.C. as required.

3. Federal Review – SPGP Not Approved

Your proposed activity as outlined on your application and attached drawings **does not qualify** for Federal authorization pursuant to the State Programmatic General Permit and a **SEPARATE permit** or authorization **shall be required** from the Corps. You must apply separately to the Corps using their APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT, ENG FORM 4345, or alternative as allowed by their regulations. More information on Corps permitting may be found online in the Jacksonville District Regulatory Division Source Book at:
<https://www.saj.usace.army.mil/Missions/Regulatory/Source-Book>.

Authority for review - an agreement with the USACOE entitled “Coordination Agreement Between the U. S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection (or Duly Authorized Designee), State Programmatic General Permit”, Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act.

Additional Information

Please retain this letter. The activities may be inspected by authorized state personnel in the future to ensure compliance with appropriate statutes and administrative codes. If the activities are not in compliance, you may be subject to penalties under Chapter 373, F.S., and Chapter 18-14, F.A.C.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department’s action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-

106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62-110.106(10)(a).

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver will not apply to persons who have not received written notice of this action.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The

Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

FLAWAC Review

The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when this order is filed with the Clerk of the Department.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Sincerely,



Anthony Pidala
Environmental Consultant
Permitting and Waste Cleanup Program
Southwest District

Enclosures:

Ch. 62-330.485, F.A.C.

General Conditions for All General Permits, Ch. 62-330.405, F.A.C.

Attachments:

Project Drawings

cc:

ERP Permitting, Southwest District, sw_erp@dep.state.fl.us

U.S. Army Corps of Engineers, tampareg@usace.army.mil

Jackie Julien, Port Tampa Bay, jjulien@tampaport.com
Michael Palmer, Ardurra, MPalmer@Ardurra.com

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this determination, including all copies, was mailed before the close of business on March 12, 2020, to the above listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to 120.52(7),
Florida Statutes, with the designated Department Clerk,
receipt of which is hereby acknowledged.

Shonathuray Buie

Clerk

March 12, 2020

Date

62-330.485 General Permit to the Department and Water Management Districts for Environmental Restoration or Enhancement.

(1) A general permit is granted to the Department and Districts for the construction, alteration, operation, maintenance, removal and abandonment of projects to implement Department or District environmental restoration or enhancement projects.

(2) The environmental restoration or enhancement project must comply with any one of the following procedures:

(a) The project is part of a Surface Water Improvement and Management Plan developed pursuant to section 373.453, F.S.; or

(b) The project is approved by the District Governing Board or the Secretary of the Department after conducting at least one public meeting; or

(c) The project is wholly or partially funded through the Land Acquisition Trust Fund pursuant to Article X, Section 28 of the Florida Constitution, or through any successor trust fund.

(3) When the activity is to be conducted by the Department, the Department shall provide the notice and any processing fee required by rule 62-330.071, F.A.C., to the appropriate District.

(4) When the activity is to be conducted by a District, the District shall provide the notice and any required fee to the appropriate Department office.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.406(5), 373.4131, 373.414(9), 373.4145, 373.418, 403.805(1) FS. Law Implemented 373.118(1), 373.406(5), 373.413, 373.4131, 373.414(9), 373.4145, 373.416, 373.418, 373.426, 403.814(1) FS. History—New 10-3-95, Amended 10-1-07, Formerly 62-341.485, Amended 10-1-13, 6-1-18.

62-330.405 General Conditions for All General Permits.

The following general permit conditions are binding upon the permittee and are enforceable under chapter 373, F.S. These conditions do not apply to the general permit for stormwater management systems under section 403.814(12), F.S.

(1) The general permit is valid only for the specific activity indicated. Any deviation from the specified activity and the conditions for undertaking that activity shall constitute a violation of the permit and may subject the permittee to enforcement action and revocation of the permit under chapter 373, F.S.

(2) The general permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any construction, alteration, operation, maintenance, removal or abandonment authorized by this permit; and it does not authorize any violation of any other applicable federal, state, local, or special district laws (including, but not limited to, those governing the “take” of listed species).

(3) The general permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the general permit.

(4) The general permit does not relieve the permittee from liability and penalties when the permitted activity causes harm or injury to: human health or welfare; animal, plant or aquatic life; or property. It does not allow the permittee to cause pollution that violates state water quality standards.

(5) Section 253.77, F.S., provides that a person may not commence any excavation, construction, or other activity involving the use of state-owned or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required consent, lease, easement, or other form of authorization authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on state-owned lands.

(6) The authorization to conduct activities under a general permit may be modified, suspended or revoked in accordance with chapter 120, F.S., and section 373.429, F.S.

(7) The general permit is not transferable to a new third party. To be used by a different permittee, a new notice to use a general permit must be submitted in accordance with rule 62-330.402, F.A.C. Activities constructed in accordance with the terms and conditions of a general permit are automatically authorized to be operated and maintained by the permittee and subsequent owners in accordance with subsection 62-330.340(1), F.A.C. Any person holding the general permit, persons working under the general permit, and owners of land while work is conducted under the general permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to sale, conveyance, or other transfer of ownership or control of the permitted project, activity, or the real property at which the permitted project or activity is located.

(8) Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the permitted system to ensure conformity with the plans and specifications approved by the general permit.

(9) The permittee shall maintain any permitted project or activity in accordance with the plans submitted to the Agency and authorized in the general permit.

(10) A permittee's right to conduct a specific activity under the general permit is authorized for a duration of five years.

(11) Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be implemented and maintained immediately prior to, during, and after construction as needed to stabilize all disturbed areas, including other measures specified in the permit to prevent adverse impacts to the water resources and adjacent lands. Erosion and sediment control measures shall be installed and maintained in accordance with the *State of Florida Erosion and Sediment Control Designer and Reviewer Manual* (Florida Department of Environmental Protection and Florida Department of Transportation, June 2007), available at <https://www.flrules.org/Gateway/reference.asp?No=Ref-04227>, and the *Florida Stormwater Erosion and Sedimentation Control Inspector's Manual* (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), available at http://publicfiles.dep.state.fl.us/DEAR/Stormwater_Training_Docs/erosion-inspectors-manual.pdf.

(12) Unless otherwise specified in the general permit, temporary vehicular access within wetlands during construction shall be performed using vehicles generating minimum ground pressure to minimize rutting and other environmental impacts. Within forested wetlands, the permittee shall choose alignments that minimize the destruction of mature wetland trees to the greatest extent practicable. When needed to prevent rutting or soil compaction, access vehicles shall be operated on wooden, composite, metal, or other non-earthen construction mats. In all cases, access in wetlands shall comply with the following:

(a) Access within forested wetlands shall not include the cutting or clearing of any native wetland tree having a diameter four inches or greater at breast height;

(b) The maximum width of the construction access area shall be limited to 15 feet;

(c) All mats shall be removed as soon as practicable after equipment has completed passage through, or work has been completed, at any location along the alignment of the project, but in no case longer than seven days after equipment has completed work or passage through that location; and

(d) Areas disturbed for access shall be restored to natural grades immediately after the maintenance or repair is completed.

(13) Barges or other work vessels used to conduct in-water activities shall be operated in a manner that prevents unauthorized dredging, water quality violations, and damage to submerged aquatic communities.

(14) The construction, alteration, or use of the authorized project shall not adversely impede navigation or create a navigational hazard in the water body.

(15) Except where specifically authorized in the general permit, activities must not:

(a) Impound or obstruct existing water flow, cause adverse impacts to existing surface water storage and conveyance capabilities, or otherwise cause adverse water quantity or flooding impacts to receiving water and adjacent lands; or

(b) Cause an adverse impact to the maintenance of surface or ground water levels or surface water flows established pursuant to section 373.042, F.S., or a Works of the District established pursuant to section 373.086, F.S.

(16) If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, stone tools, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section (DHR), at (850)245-6333, as well as the appropriate permitting agency office. Project activities shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and the proper authorities notified in accordance with section 872.05, F.S.

(17) The activity must be capable, based on generally accepted engineering and scientific principles, of being performed and of functioning as proposed, and must comply with any applicable District special basin and geographic area criteria.

(18) The permittee shall comply with the following when performing work within waters accessible to federally- or state-listed aquatic species, such as manatees, marine turtles, smalltooth sawfish, and Gulf sturgeon:

(a) All vessels associated with the project shall operate at "Idle Speed/No Wake" at all times while in the work area and where the draft of the vessels provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

(b) All deployed siltation or turbidity barriers shall be properly secured, monitored, and maintained to prevent entanglement or entrapment of listed species.

(c) All in-water activities, including vessel operation, must be shut down if a listed species comes within 50 feet of the work area. Activities shall not resume until the animal(s) has moved beyond a 50-foot radius of the in-water work, or until 30 minutes elapses since the last sighting within 50 feet. Animals must not be herded away or harassed into leaving. All onsite project personnel are responsible for observing water-related activities for the presence of listed species.

(d) Any listed species that is killed or injured by work associated with activities performed shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1(888)404-3922 and ImperiledSpecies@myFWC.com.

(e) Whenever there is a spill or frac-out of drilling fluid into waters accessible to the above species during a directional drilling operation, the FWC shall be notified at ImperiledSpecies@myfwc.com with details of the event within 24 hours following detection of the spill or frac-out.

(19) The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any activity authorized by the general permit.

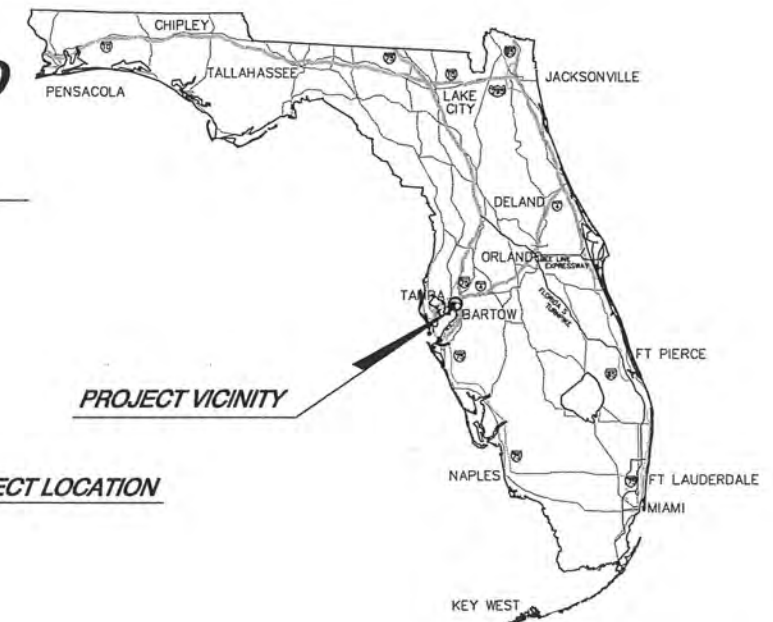
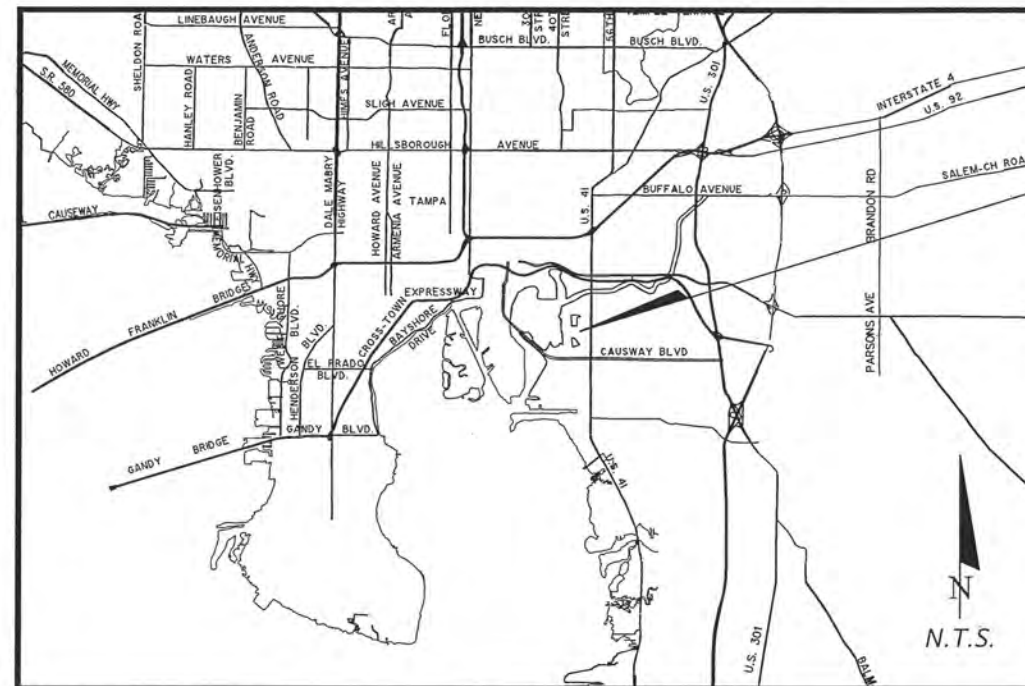
(20) The permittee shall immediately notify the Agency in writing of any submitted information that is discovered to be inaccurate.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.406(5), 373.4131, 373.414(9), 373.4145, 373.418, 403.805(1) FS. Law Implemented 373.044, 373.118(1), 373.129, 373.136, 373.406(5), 373.413, 373.4131, 373.414(9), 373.4145, 373.416, 373.422, 373.423, 373.429, 403.814(1) FS. History—New 10-3-95, Amended 10-1-07, Formerly 62-341.215, Amended 10-1-13, 6-1-18.

COMPONENTS OF CONTRACT PLANS SET
N/A

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
PALM RIVER RESTORATION (W367)
EAST MCKAY BAY STORMWATER AND
HABITAT RESTORATION SITES

HILLSBOROUGH COUNTY, FLORIDA
SECTIONS 21 & 28, TOWNSHIP 29S, RANGE 19E



INDEX OF CONSTRUCTION PLANS

SHEET NO. SHEET DESCRIPTION

- 1 COVER SHEET
- 2 NOTES AND LEGEND
- 3 CONSTRUCTION POLLUTION PREVENTION SHEET
- 4 KEY SHEET
- 5 EXISTING DRAINAGE BASIN MAP
- 6 PROPOSED DRAINAGE BASIN MAP
- 7-8 LIMITS OF CLEARING
- 9-16 PAVING, GRADING AND DRAINAGE PLAN (8)
- 17-23 PLANTING PLAN (7)
- 24 CONTROL NETWORK
- 25 PLANTING PLAN DETAILS
- 27-28 POND CROSS SECTIONS (2)
- 29 GRADING CROSS SECTIONS
- 30 DRAINAGE STRUCTURE CROSS SECTIONS
- 31-33 DRAINAGE STRUCTURE PLAN VIEW DETAIL SHEETS (3)
- 34-34.1 DRAINAGE STRUCTURE S200 STRUCTURAL DETAILS
- 35 DRAINAGE STRUCTURE S100 DETAIL SHEET
- 36 SPOIL MATERIAL HAUL ROUTE PLAN

PREPARED FOR:



**SOUTHWEST FLORIDA WATER
MANAGEMENT DISTRICT (SWMD)**
7601 U.S. HIGHWAY 301 NORTH
TAMPA, FLORIDA 33637
PHONE: (813) 985-7481



**FLORIDA DEPARTMENT OF
TRANSPORTATION - DIST. 7**
11201 N. MCKINLEY DRIVE
TAMPA, FLORIDA 33612
PHONE: (813) 975-6000

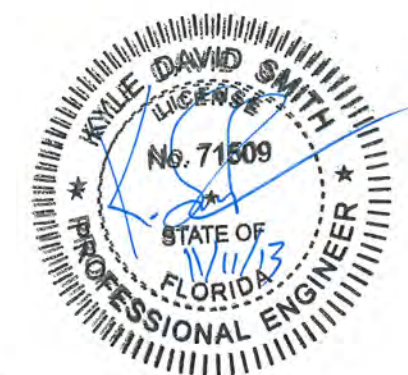
PLANS PREPARED BY:

King
ENGINEERING ASSOCIATES, INC.

4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

DRAINAGE PLANS
ENGINEER OF RECORD:

KYLE D. SMITH, P.E. #71509



GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
ROADWAY AND TRAFFIC DESIGN STANDARDS DATE
2013, AND STANDARD SPECIFICATIONS FOR
ROADWAY AND BRIDGE CONSTRUCTION DATED
2013 AS AMENDED BY CONTRACT DOCUMENTS.

ALL ELEVATIONS SHOWN ARE BASED ON THE NATIONAL
AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
PROJECT MANAGER: STEPHANIE POWERS

REVISIONS		
DATE	BY	DESCRIPTION

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

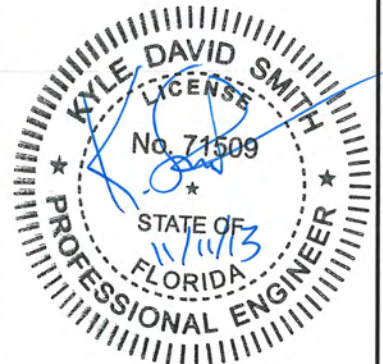
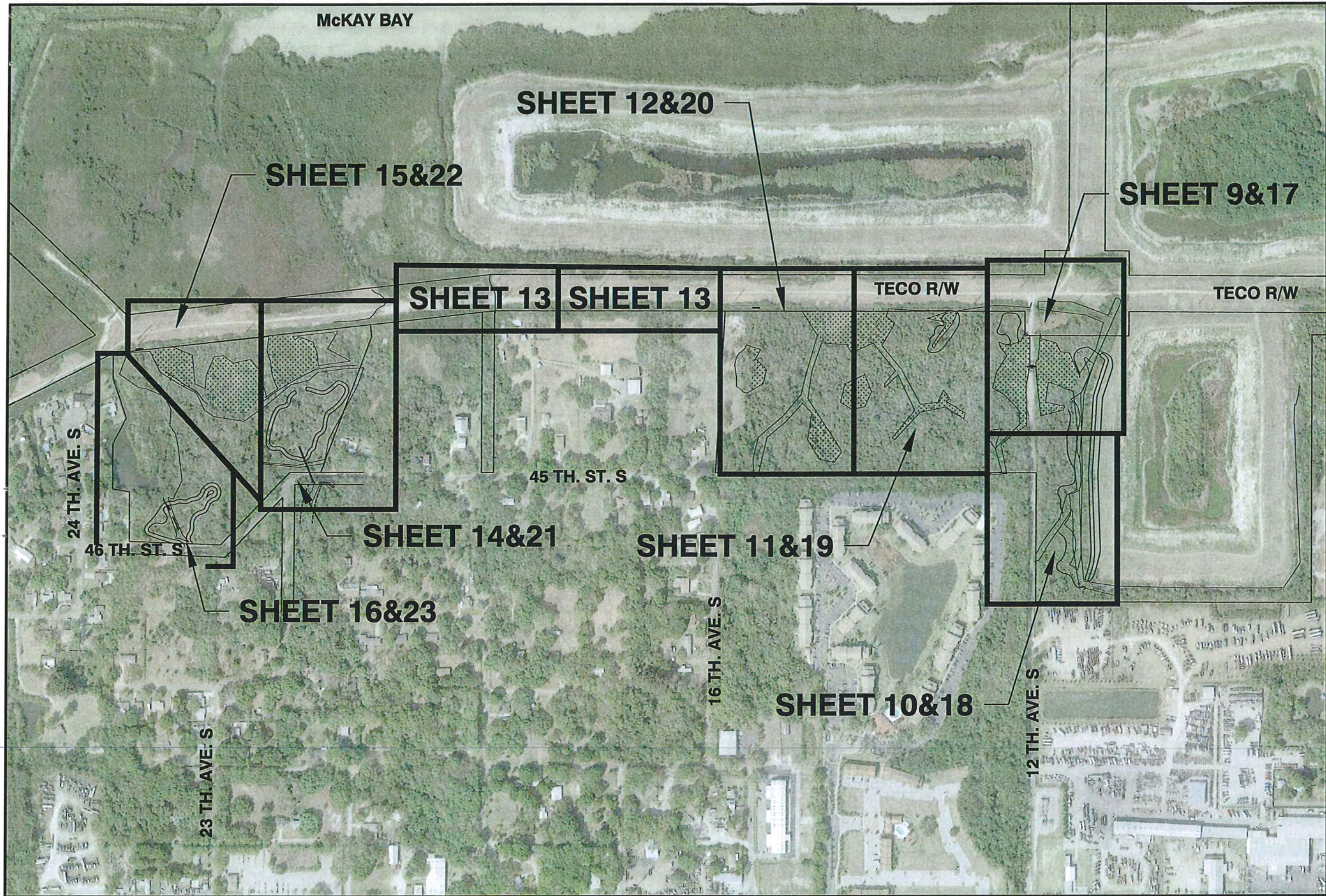
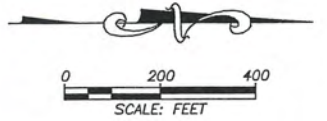
90% PLANS
11/08/2013

SHEET NO.

1

90% PLANS 11/08/2013

TIMING OF CONTROL MEASURES		
<p>AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, STAKED SILT BARRIERS, STABILIZED CONSTRUCTION ENTRANCES AND SEDIMENT BASINS WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 21 DAYS WILL BE STABILIZED WITH A HYDROSEED WITHIN 5 DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN THAT AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SOD. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE TRAPS AND THE STAKED SILT BARRIERS WILL BE REMOVED.</p>		
CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS		
<p>THE STORM WATER POLLUTION PREVENTION PLAN REFLECTS THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) REQUIREMENTS FOR STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL, AS ESTABLISHED BY THE FLORIDA ADMINISTRATIVE CODE, CHAPTER 62-4. THIS PLAN REFLECTS THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.</p>		
MAINTENANCE INSPECTION PROCEDURES		
EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES		
<p>THESE ARE THE INSPECTION AND MAINTENANCE PRACTICES THAT SHALL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROL.</p> <p>ALL CONTROL MEASURES IN DISTURBED AREAS WILL BE INSPECTED AT LEAST ONCE EACH WEEK AND WITHIN 24 HOURS OF THE END OF ANY STORM EVENT OF 0.25 INCHES OR GREATER BY A CONTRACTORS REPRESENTATIVE. (WHERE SITES HAVE BEEN FINALLY STABILIZED SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH.) ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE. SILT FENCE WILL BE INSPECTED REGULARLY FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND. THE SEDIMENT DESIGN CAPACITY OR AT THE END OF THE JOB. TEMPORARY AND PERMANENT GRASSING, SODDING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH. A MAINTENANCE INSPECTION REPORT SHALL BE MADE AFTER EACH INSPECTION BY THE CONTRACTOR AND INDIVIDUALS WHO WILL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES. FILLING OUT THE INSPECTION AND MAINTENANCE REPORT WILL BE BY THE CONTRACTOR. PERSONNEL SELECTED FOR MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ON-SITE IN GOOD WORKING ORDER.</p>		
NON-STORM WATER DISCHARGES		
<p>IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:</p> <p>WATER FROM FIRE FIGHTING ACTIVITIES, FIRE HYDRANT FLUSHING, WATER LINE FLUSHING, WATER USED TO SPRAY OFF LOOSE SOILS FROM VEHICLES, DUST CONTROL, PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED). ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.</p> <p>GROUNDWATER DEWATERING ACTIVITIES ARE NOT COVERED BY THIS PERMIT. THE CONTRACTOR MUST APPLY FOR COVERAGE UNDER THE GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUNDWATER FROM ANY NON-CONTAMINATED SITE ACTIVITY PURSUANT TO 62-621.300 (2), F.A.C.</p>		
INVENTORY FOR POLLUTION PREVENTION PLAN		
<p>THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED, BUT NOT LIMITED, TO BE PRESENT ON-SITE DURING CONSTRUCTION:</p> <table style="width: 100%; border: none;"> <tr> <td style="vertical-align: top; width: 50%;"> <p>CONCRETE PAINTS (ENAMEL AND LATEX) METAL STUDS SAND</p> </td> <td style="vertical-align: top; width: 50%;"> <p>PETROLEUM BASED PRODUCTS AND FUELS CLEANING SOLVENTS WOOD STONE</p> </td> </tr> </table>	<p>CONCRETE PAINTS (ENAMEL AND LATEX) METAL STUDS SAND</p>	<p>PETROLEUM BASED PRODUCTS AND FUELS CLEANING SOLVENTS WOOD STONE</p>
<p>CONCRETE PAINTS (ENAMEL AND LATEX) METAL STUDS SAND</p>	<p>PETROLEUM BASED PRODUCTS AND FUELS CLEANING SOLVENTS WOOD STONE</p>	
SPILL PREVENTION		
MATERIAL MANAGEMENT PRACTICES		
<p>THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.</p> <p>GOOD HOUSEKEEPING:</p> <p>THE FOLLOWING GOOD HOUSEKEEPING PRACTICES SHALL BE FOLLOWED ON-SITE DURING THE CONSTRUCTION PROJECT.</p> <p>AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER CONTAINED ENCLOSURE. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL MANUFACTURER'S LABELED CONTAINERS. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ON-SITE.</p> <p>HAZARDOUS PRODUCTS:</p> <p>THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.</p> <p>PRODUCTS SHALL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS OF PROPER DISPOSAL SHALL BE FOLLOWED.</p> <p>THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON-SITE:</p> <p>PETROLEUM PRODUCTS:</p> <p>ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ON-SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.</p> <p>PAINTS:</p> <p>ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.</p> <p>CONCRETE TRUCKS:</p> <p>CONTRACTOR SHALL DESIGNATE AN AREA FOR DISCHARGE OF SURPLUS CONCRETE OR DRUM WASH WATER AND SHALL INSTALL A CONTAINMENT BERM AROUND THIS AREA TO PREVENT RUNOFF TO THE REMAINDER OF THE SITE. HARD DEBRIS SHALL BE DISPOSED OF BY CONTRACTOR UPON COMPLETION OF THE PROJECT.</p>		



C:\WaterRes\5044\005\004\cad\KEY SHEET.dwg November 8, 2013 10:58 AM, KYLE SMITH, King Engineering Associate Inc.
© COPYRIGHT 2013 BY KING ENGINEERING ASSOCIATES, INC. DRAWINGS AND CONCEPTS ARE THE PROPERTY OF KING ENGINEERING ASSOCIATES, INC. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM KING ENGINEERING ASSOCIATES, INC. PERMISSION IS HEREBY GRANTED SPECIFICALLY TO GOVERNMENTAL AGENCIES TO REPRODUCE THIS DOCUMENT IN COMPLIANCE WITH F.S. CHAPTER 119.

DESIGNED	MDP
DRAWN	JLW
CHECKED	
G.C.	

King
ENGINEERING ASSOCIATES, INC.

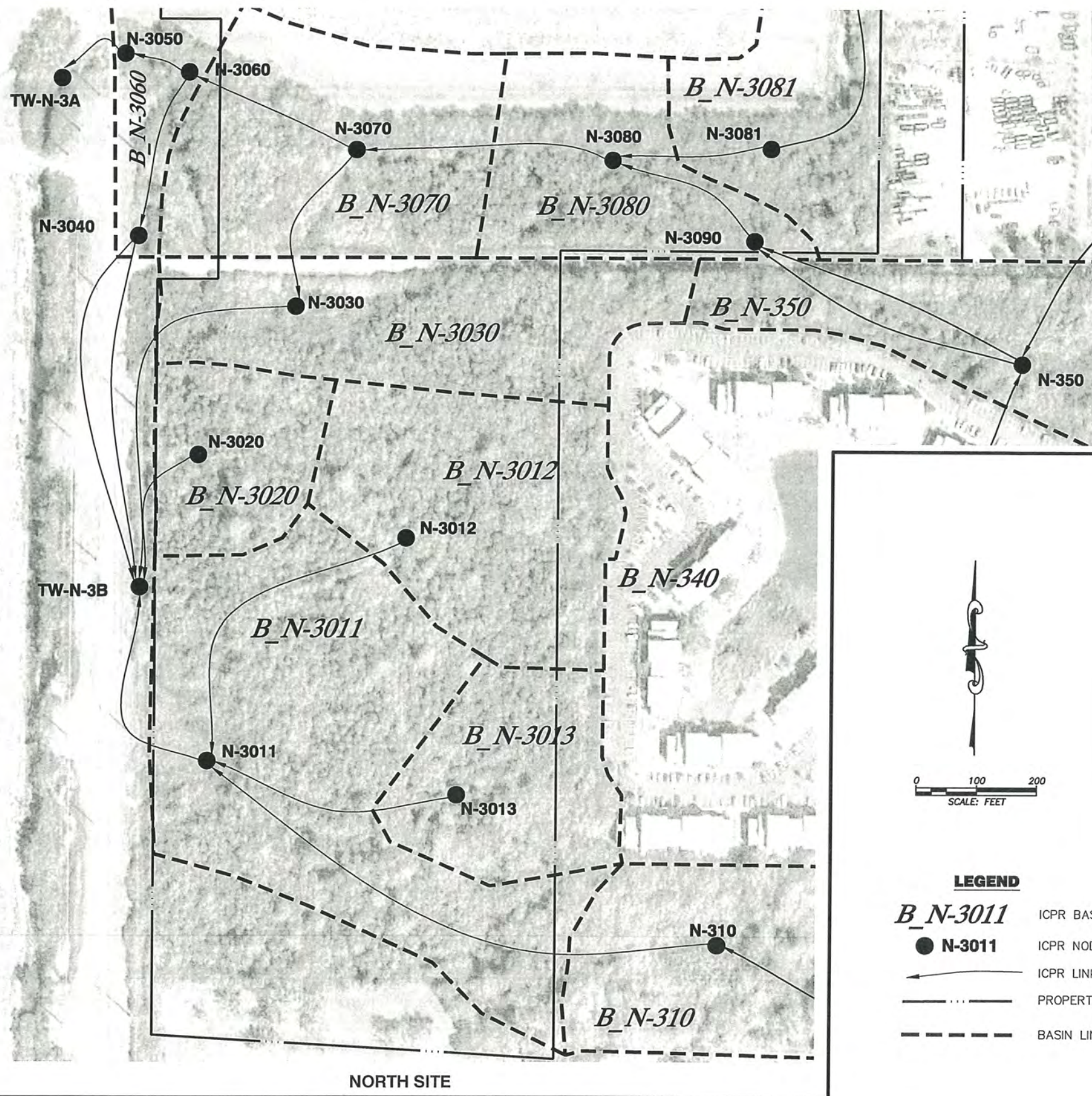
4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

KEY SHEET

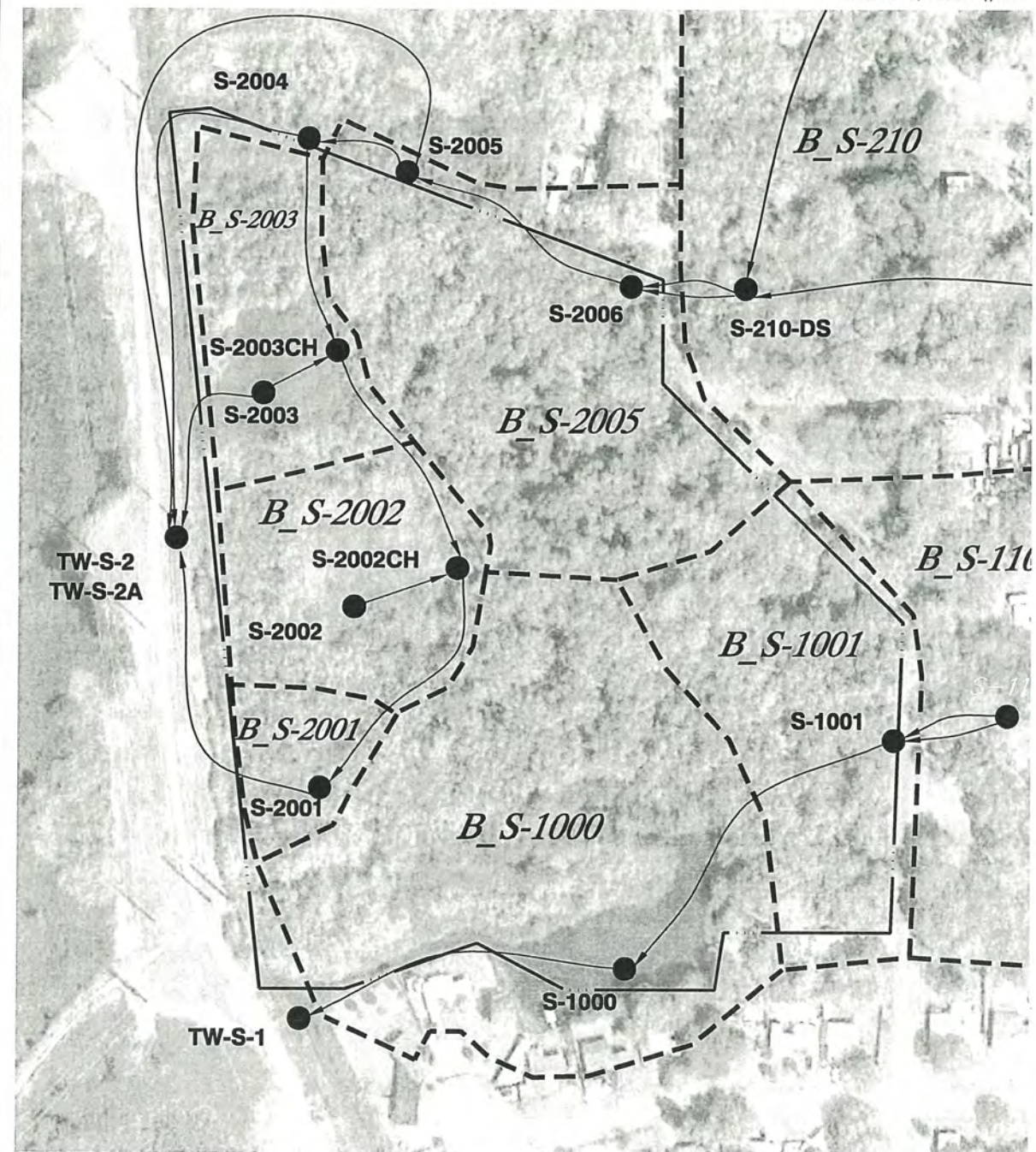
NO.	DATE	DESCRIPTION	APPROVED	JOB NO. 5044-005-004	SHEET NO. 4
				DATE 12/22/2010	
				SCALE AS SHOWN	
					90% PLANS 11/08/2013

C:\WaterRes\504\005\004\cad\dwg\N-EXDRGMP.dwg, November 8, 2013 10:59 AM, KYLE SMITH, King Engineering Associate Inc.
CONSENT IS HEREBY GRANTED FOR THE PRESENTATION OF THIS DOCUMENT TO ANY AND ALL AGENCIES AND THE PUBLIC FOR THE PURPOSE OF REVIEWING THE PROJECT AND PROVIDING COMMENTS TO THE PROJECT TEAM.

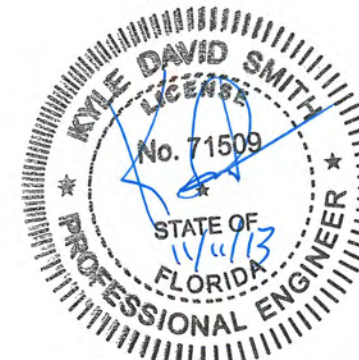


NORTH SITE

- LEGEND**
- B_N-3011* ICPR BASIN DESIGNATION
 - **N-3011** ICPR NODE DESIGNATION
 - ICPR LINK DESIGNATION
 - — — — — PROPERTY LINE
 - - - - - BASIN LINE



SOUTH SITE



King
ENGINEERING ASSOCIATES, INC.
4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

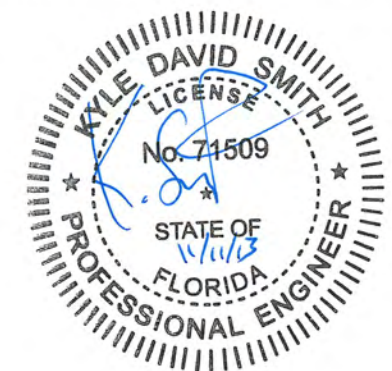
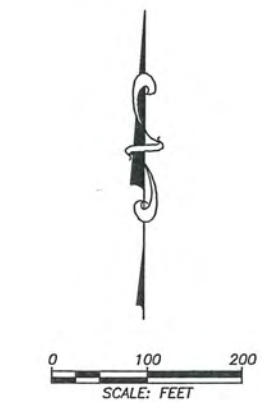
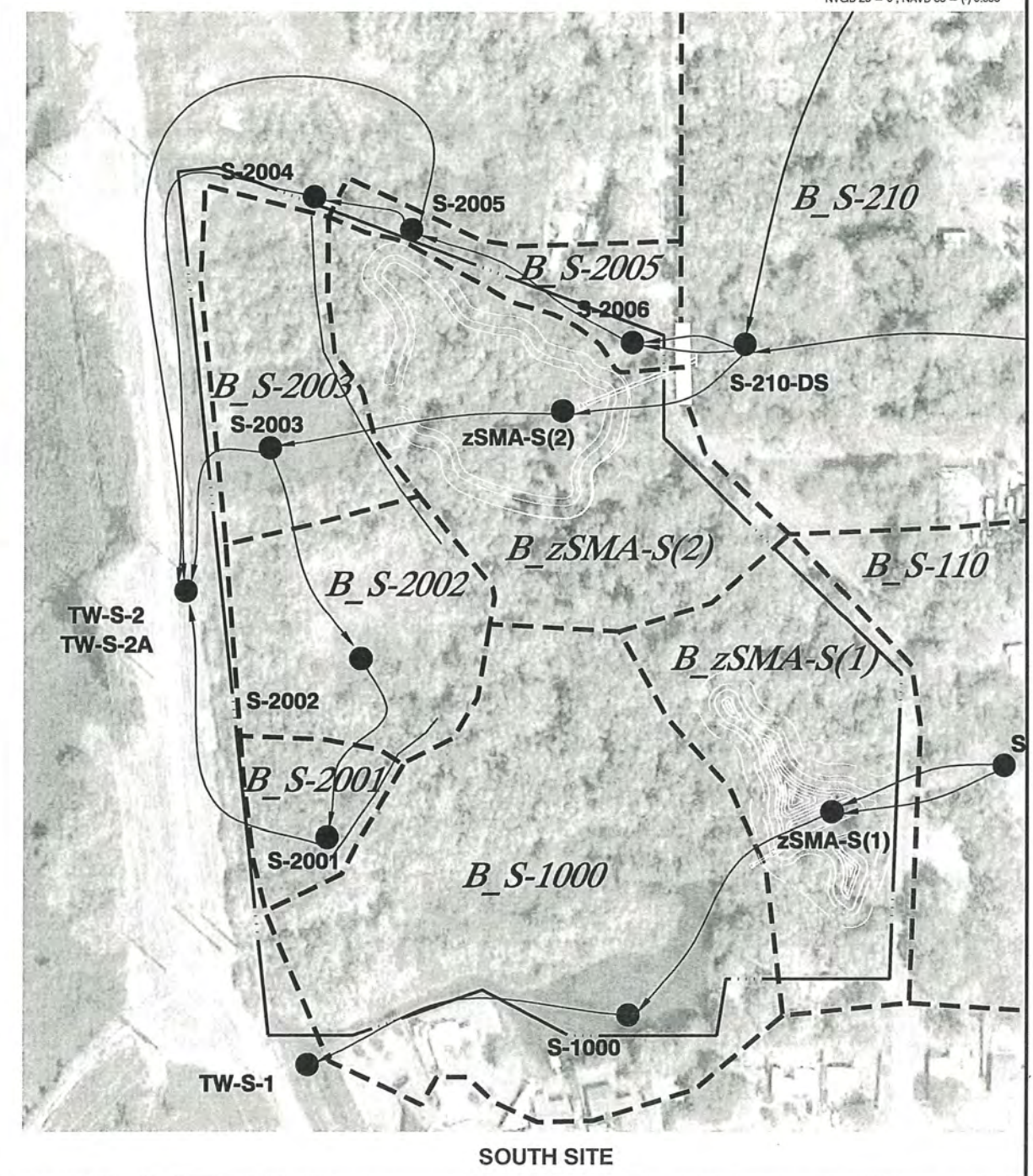
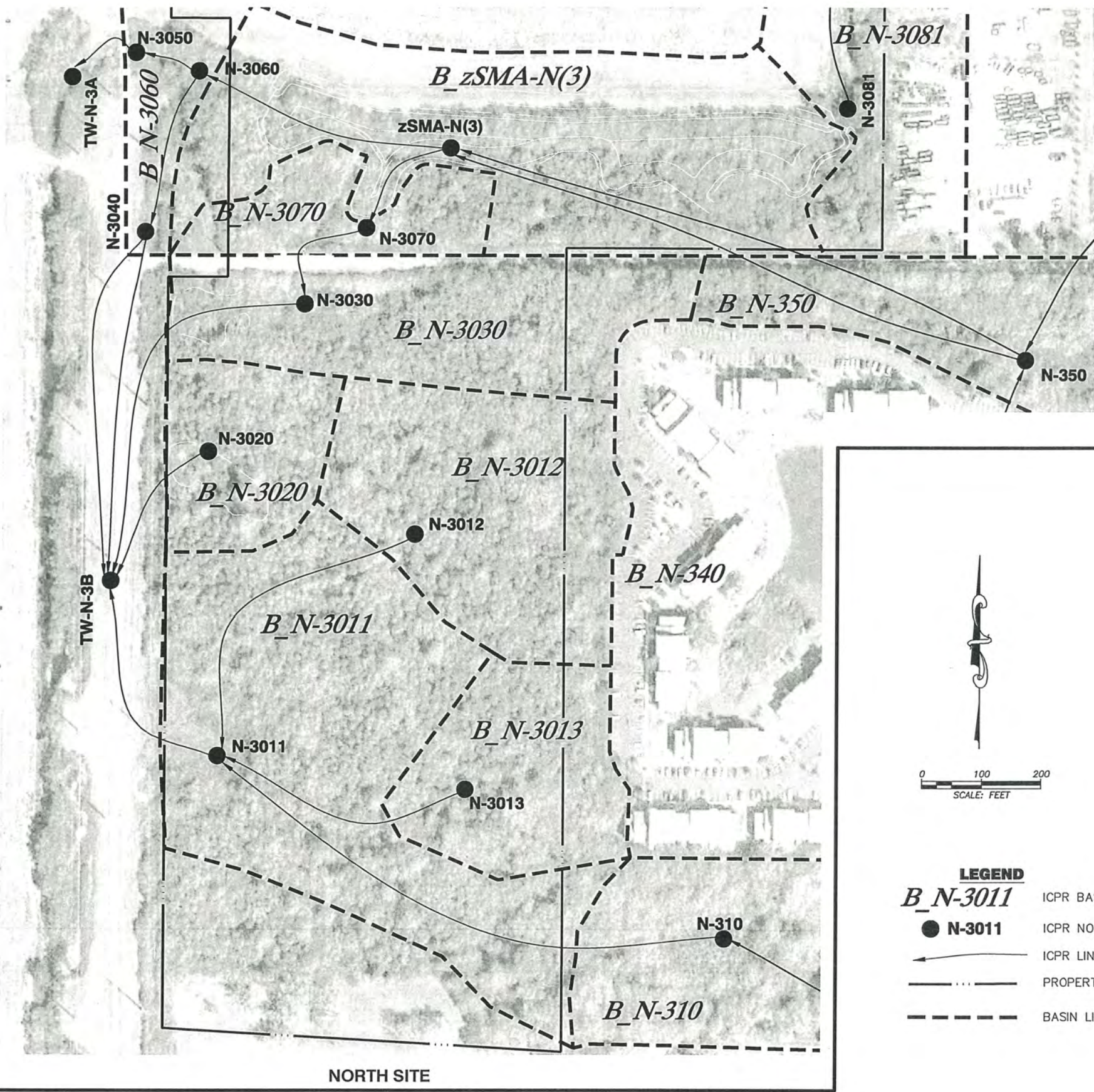
PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

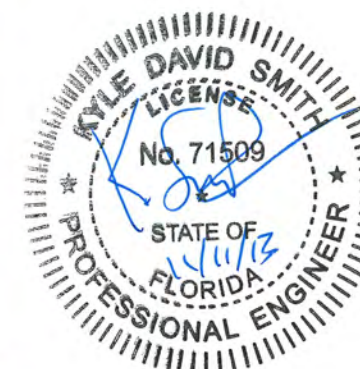
EXISTING DRAINAGE BASIN MAP

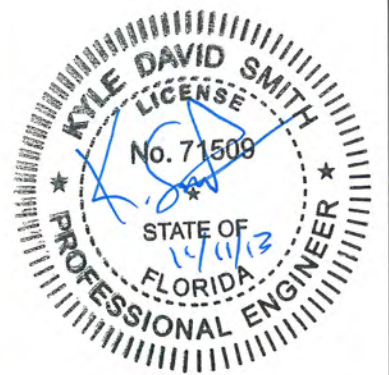
NO.	DATE	DESCRIPTION	APPROVED

DESIGNED	MDP	THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.
DRAWN	JLW	
CHECKED		
DATE		

JOB NO.	5044-005-004	SHEET NO.	5
DATE	12/22/2010		
SCALE	AS SHOWN		
90% PLANS	11/08/2013		





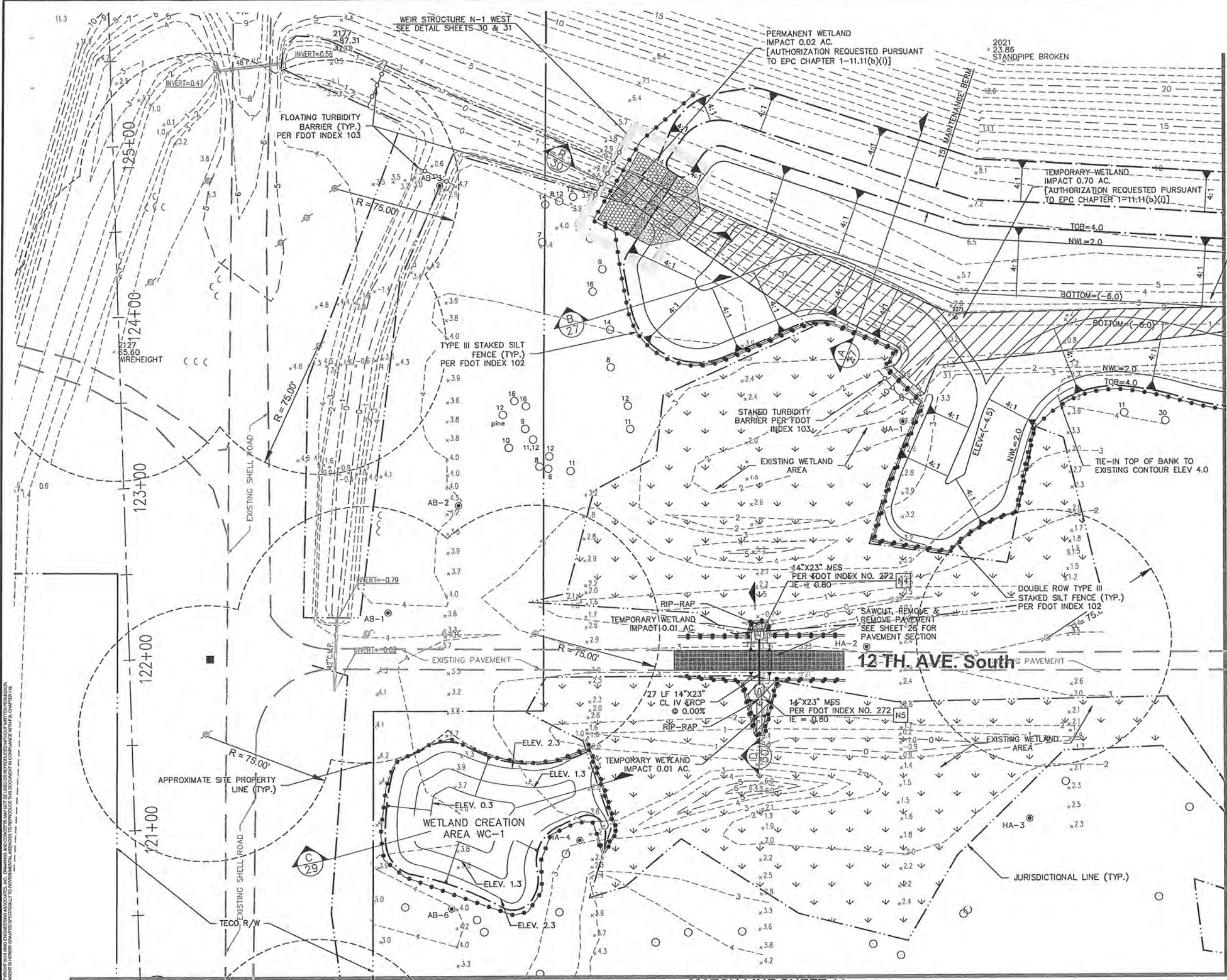


DESIGNED MDP	THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.
DRAWN JLW	
CHECKED G.C.	
DATE 10/1/01	

4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

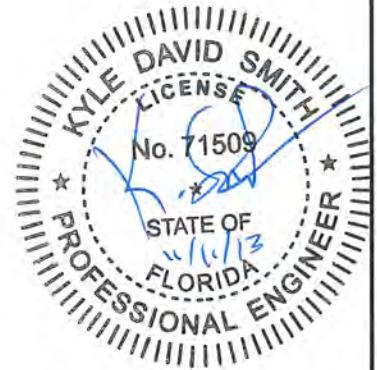
LIMITS OF CLEARING SOUTH SITE

			JOB NO.	SHEET NO. 8
			5044-005-004	
			DATE:	
			12/22/2010	
			SCALE	
			AS SHOWN	90% PLANS 11/08/2013
NO.	DATE	DESCRIPTION	AFFIDAVIT	



MATCH LINE SHEET 10

MATCH LINE SHEET 11



C:\WaterRes\4400504\4400504.dwg, November 8, 2013 11:00 AM, KYLE SMITH, King Engineering Associates Inc.

DESIGNED	MDP
DRAWN	JLW
CHECKED	
DATE	



4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

PAVING, GRADING AND DRAINAGE PLAN (1)

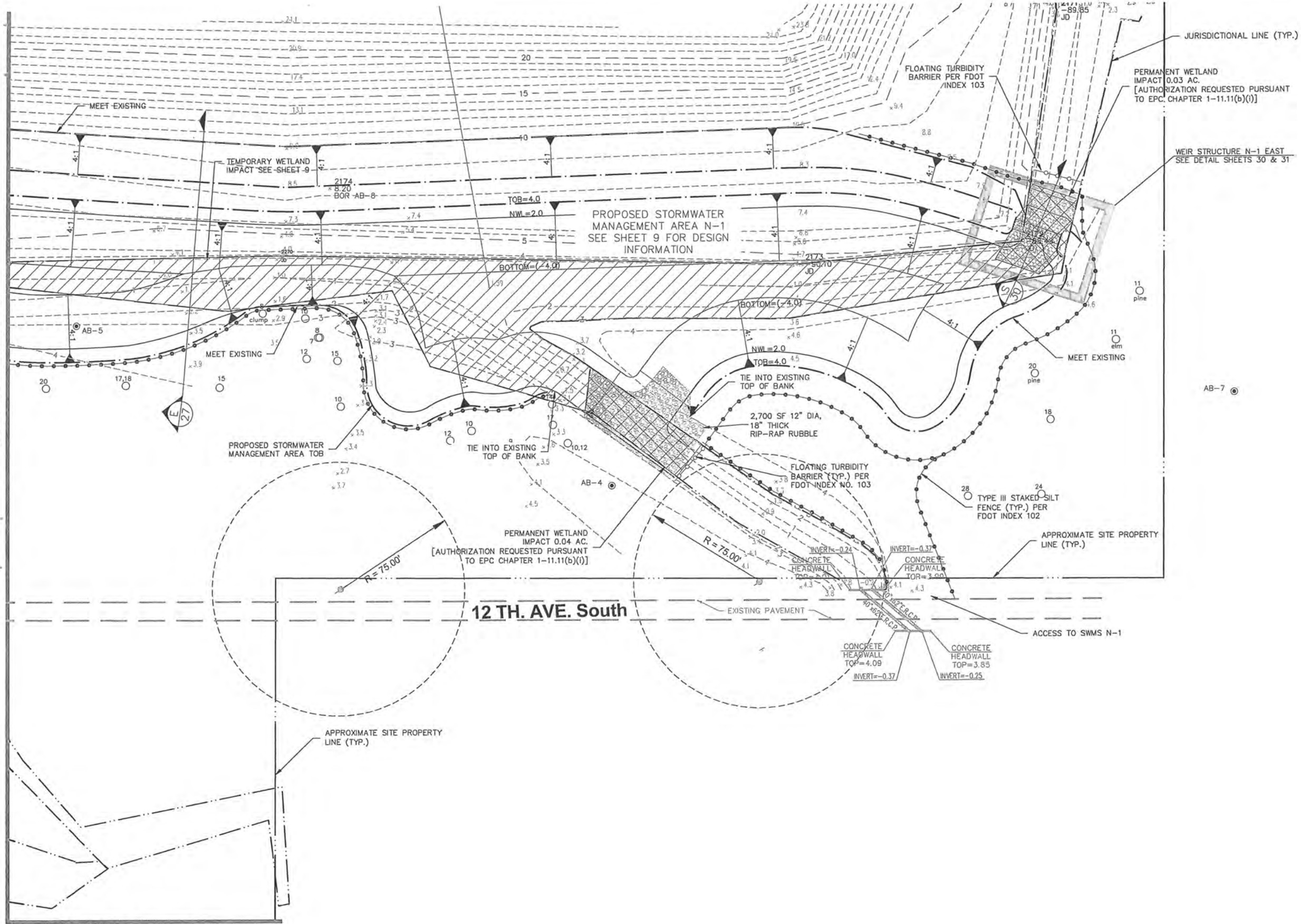
NO.	DATE	DESCRIPTION	APPROVED	JOB NO. 5044-005-004	SHEET NO. 9
				DATE 12/22/2010	
				SCALE AS SHOWN	
					90% PLANS 11/08/2013



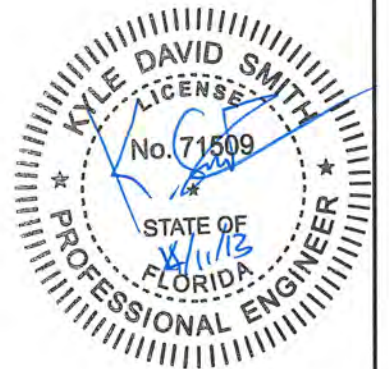
MATCH LINE SHEET 9

Q:\WaterRes\5044\005\004\cadd\paving\W367\DWG.dwg, November 8, 2013 11:00 AM, KYLE SMITH, King Engineering Associate Inc.

© COPYRIGHT 2013 KING ENGINEERING ASSOCIATES, INC. DRAWINGS AND CONCEPTS MAY NOT BE REPRODUCED WITHOUT WRITTEN PERMISSION. CONSENT IS HEREBY GRANTED TO SUBMITTAL AGENCIES TO REPRODUCE THIS DOCUMENT IN COMPLIANCE WITH FLA. STATUTE.



MATCH LINE SHEET 11



DESIGNED	MDP
DRAWN	JLW
CHECKED	
DATE	

King
ENGINEERING ASSOCIATES, INC.

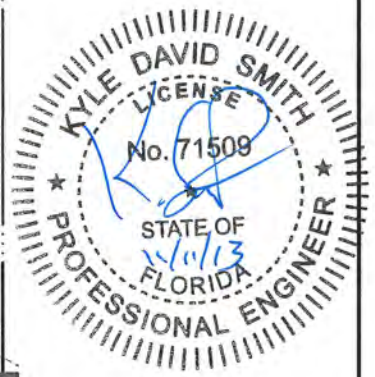
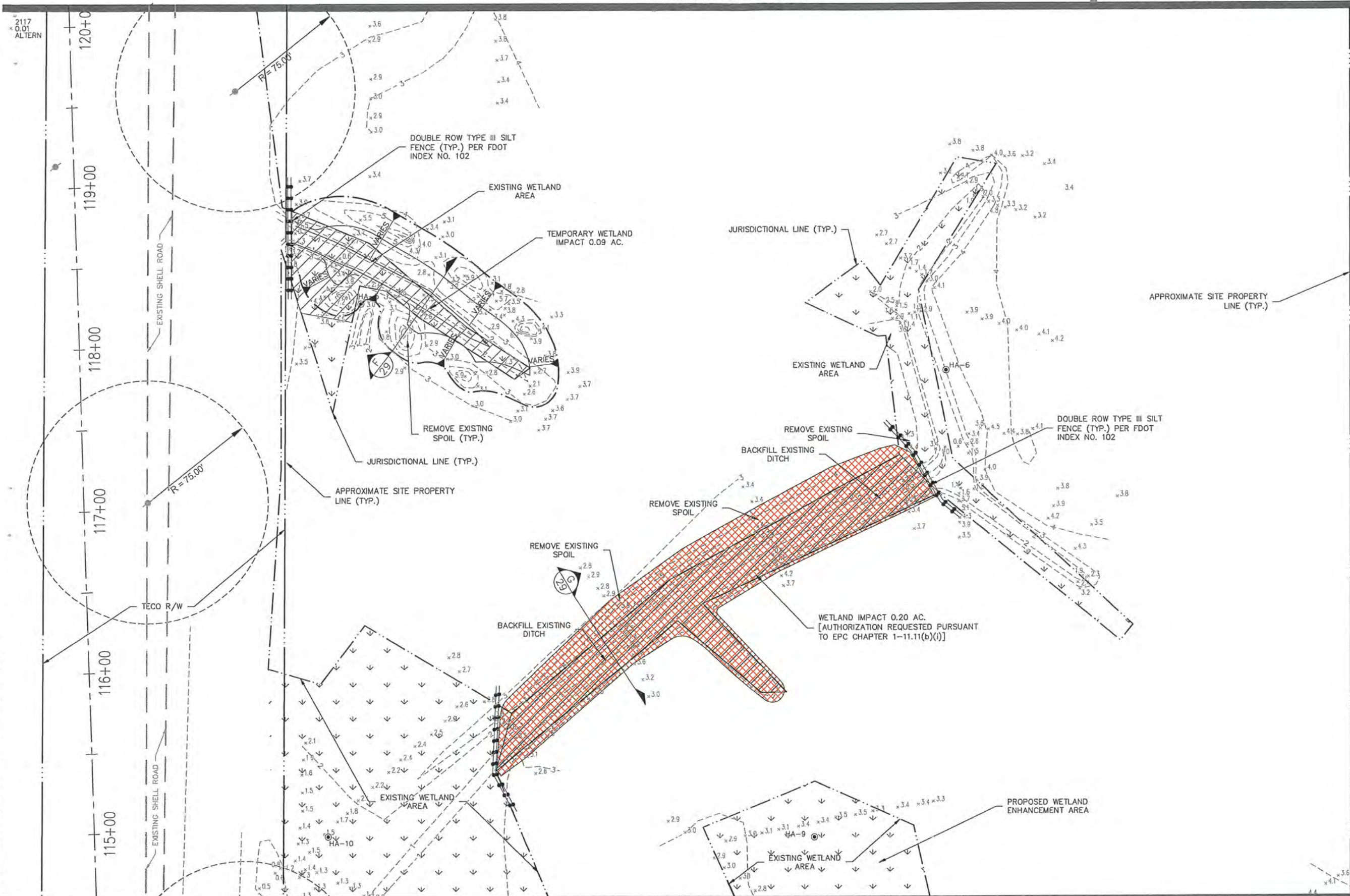
4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

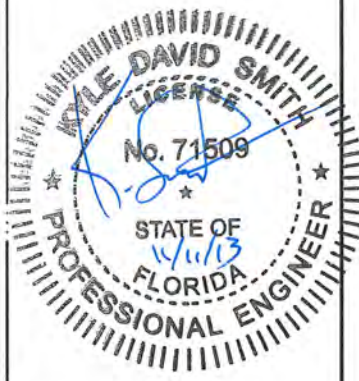
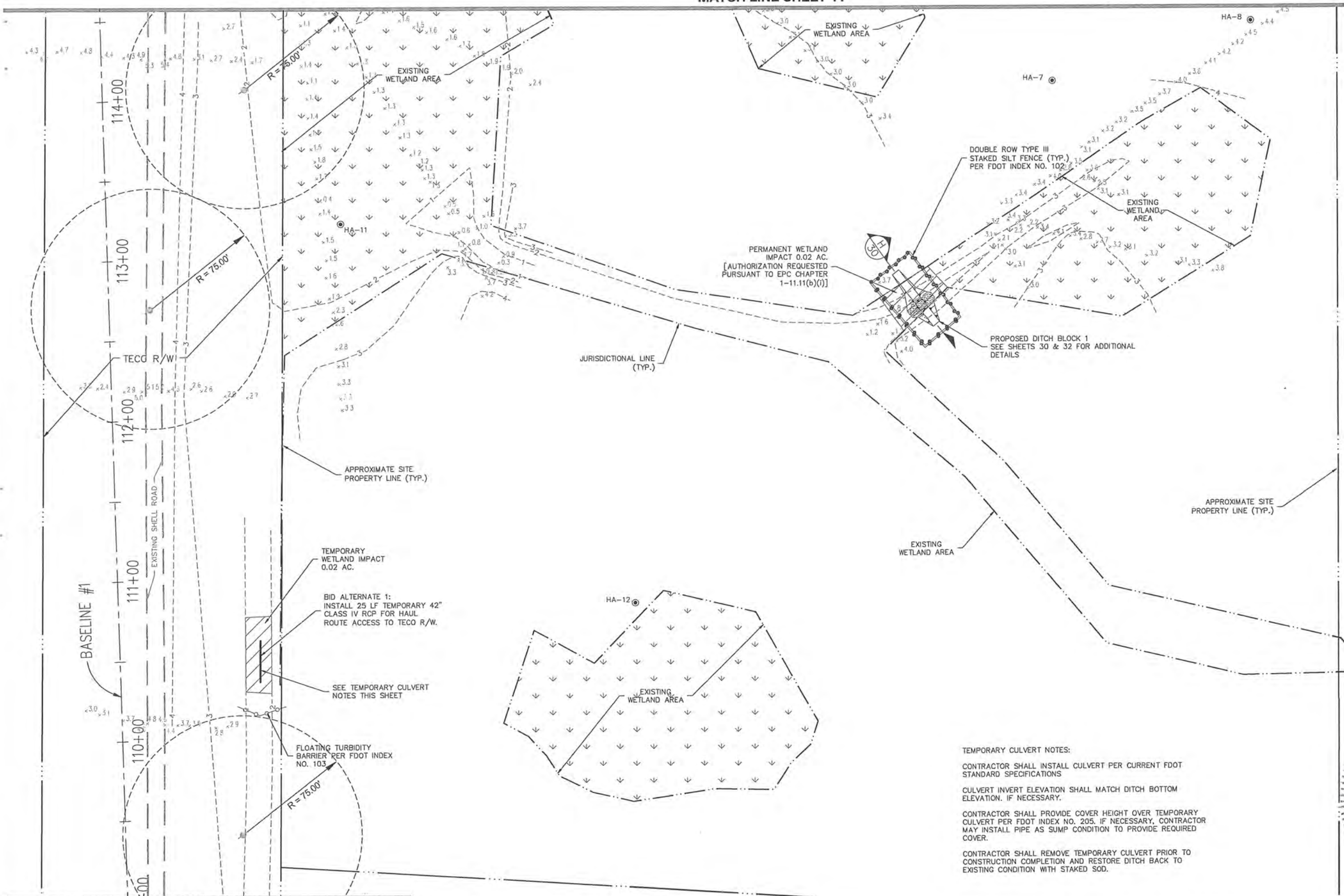
PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

PAVING, GRADING AND DRAINAGE PLAN (2)

NO.	DATE	DESCRIPTION	APPROVED BY	DATE

JOB NO.	5044-005-004
DATE	12/22/2010
SCALE	AS SHOWN
SHEET NO.	10
90% PLANS	11/08/2013





TEMPORARY CULVERT NOTES:
CONTRACTOR SHALL INSTALL CULVERT PER CURRENT FDOT STANDARD SPECIFICATIONS
CULVERT INVERT ELEVATION SHALL MATCH DITCH BOTTOM ELEVATION, IF NECESSARY.
CONTRACTOR SHALL PROVIDE COVER HEIGHT OVER TEMPORARY CULVERT PER FDOT INDEX NO. 205. IF NECESSARY, CONTRACTOR MAY INSTALL PIPE AS SUMP CONDITION TO PROVIDE REQUIRED COVER.
CONTRACTOR SHALL REMOVE TEMPORARY CULVERT PRIOR TO CONSTRUCTION COMPLETION AND RESTORE DITCH BACK TO EXISTING CONDITION WITH STAKED SOD.

MATCH LINE SHEET 13

C:\WaterRes\5044\100504\add\CDSP\N-PGD04.dwg, November 8, 2013 11:01 AM, KYLE SMITH, King Engineering Associate Inc.

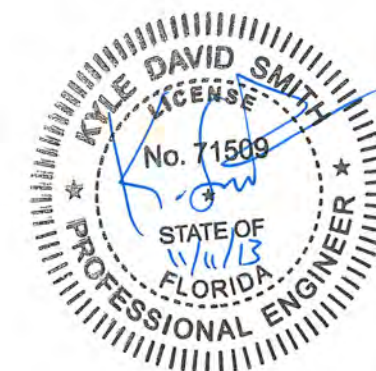
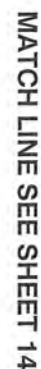
DESIGNED	MDP
DRAWN	JLW
CHECKED	
DATE	

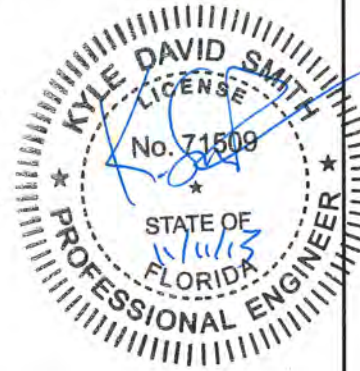
King
ENGINEERING ASSOCIATES, INC.
4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

PAVING, GRADING AND DRAINAGE PLAN (4)

NO.	DATE	DESCRIPTION	APPROVED	JOB NO. 5044-005-004	SHEET NO. 12
				DATE 12/22/2010	
				SCALE AS SHOWN	
				90% PLANS 11/08/2013	



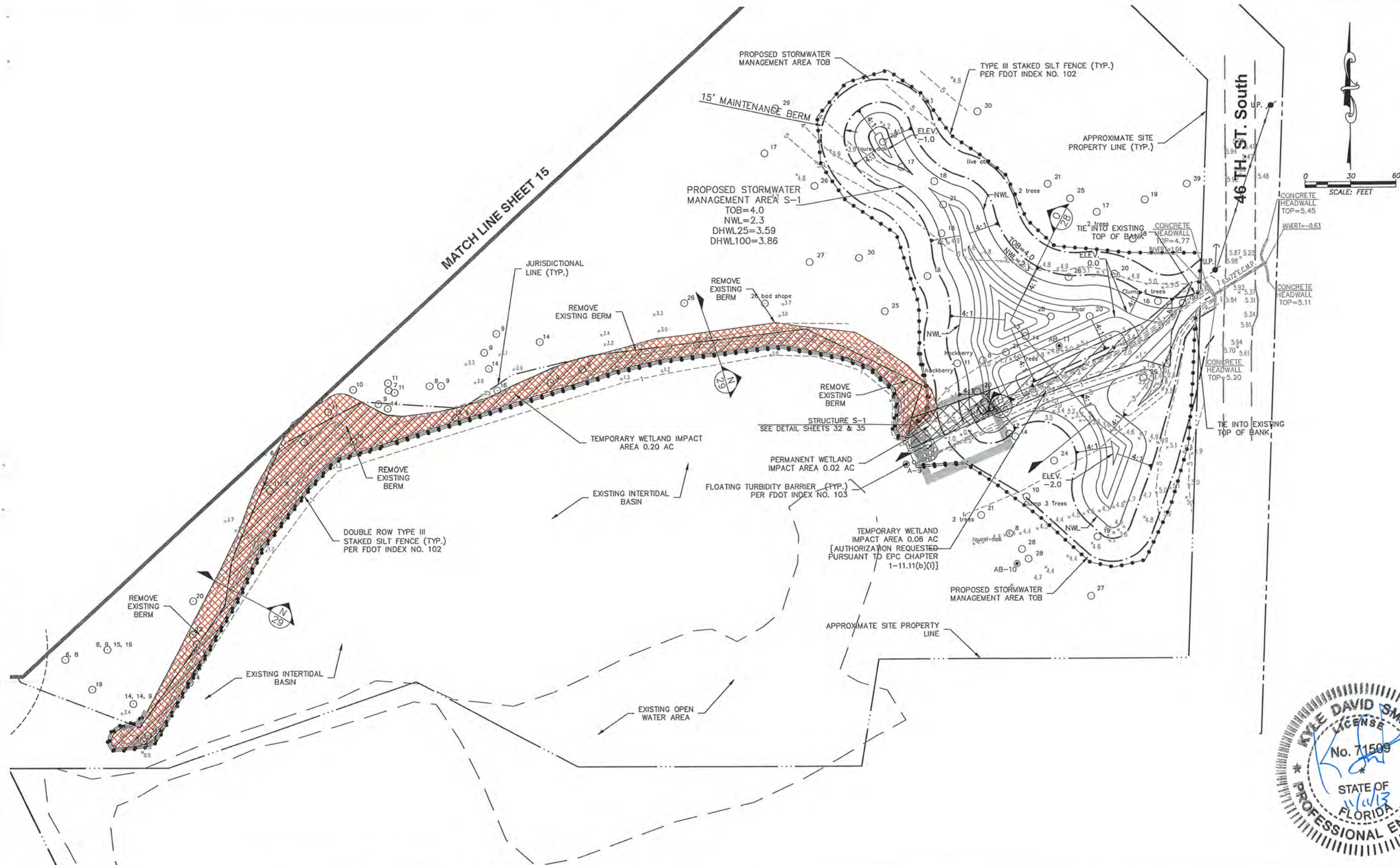




CONTRACTOR SHALL REMOVE TEMPORARY CULVERT PRIOR TO CONSTRUCTION COMPLETION AND RESTORE DITCH BACK TO EXISTING CONDITION WITH STAKED SOD.

A circular professional engineer seal for Kyle David Smith. The outer ring contains the text "KYLE DAVID SMITH" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside this ring, the word "LICENSE" is at the top and "STATE OF FLORIDA" is at the bottom, also separated by two stars. In the center, the license number "No. 71509" is printed. A blue ink signature is written across the center of the seal, overlapping the license number and the words "STATE OF FLORIDA".

				JOB NO.	SHEET NO. <div style="text-align: center; font-size: 2em;">15</div>
				5044-005-004	
				DATE	
				12/22/2010	
				SCALE	
				AS SHOWN	90% PLANS 11/08/2013
NO.	DATE	DESCRIPTION	APPROVE		



POND PLANTING ZONES

- DEPTH OF PLANTING ZONES IN LEGEND ARE
IN REFERENCE TO NWL OF STORM WATER
MANAGEMENT AREA
SEE SHEET 25 FOR ADDITIONAL INFORMATION

WCL-1 PLANTING ZONES

- ALL ELEVATIONS IN LEGEND ARE IN
REFERENCE NAVD 88 DATUM ELEVATION
SEE SHEET 25 FOR ADDITIONAL INFORMATION

MATCH LINE SHEET 18

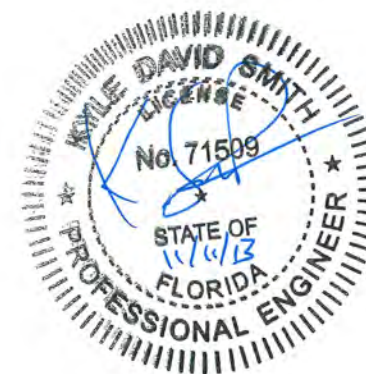
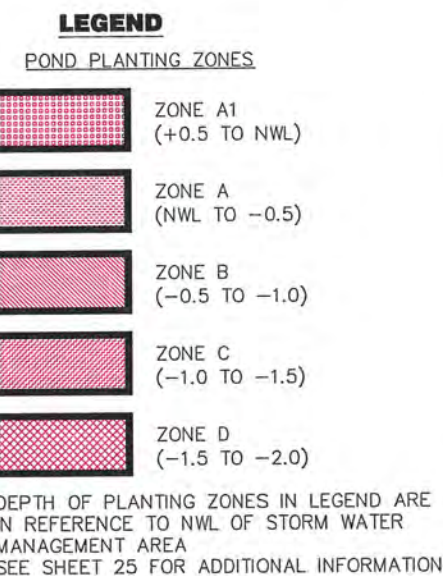
MATCH LINE SHEET 19

PLANTING PLAN (1)

King





4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

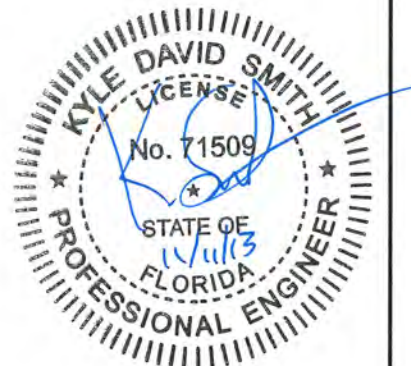


**LEGEND**

BERM REMOVAL PLANTING ZONES

-  ZONE B-1
> 2.1
-  ZONE B-2
(1.6 TO 2.1)
-  ZONE B-3
(1.1 TO 1.6)
-  ZONE B-4
(0.4 TO 1.1)

ALL ELEVATIONS IN LEGEND ARE IN
REFERENCE NAVD 88 DATUM ELEVATION
SEE SHEET 25 FOR ADDITIONAL INFORMATION



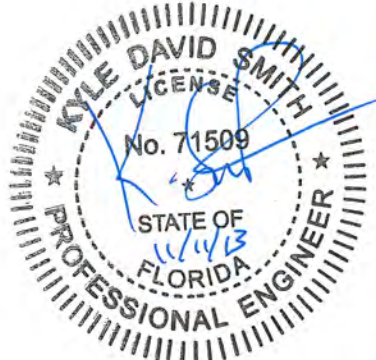
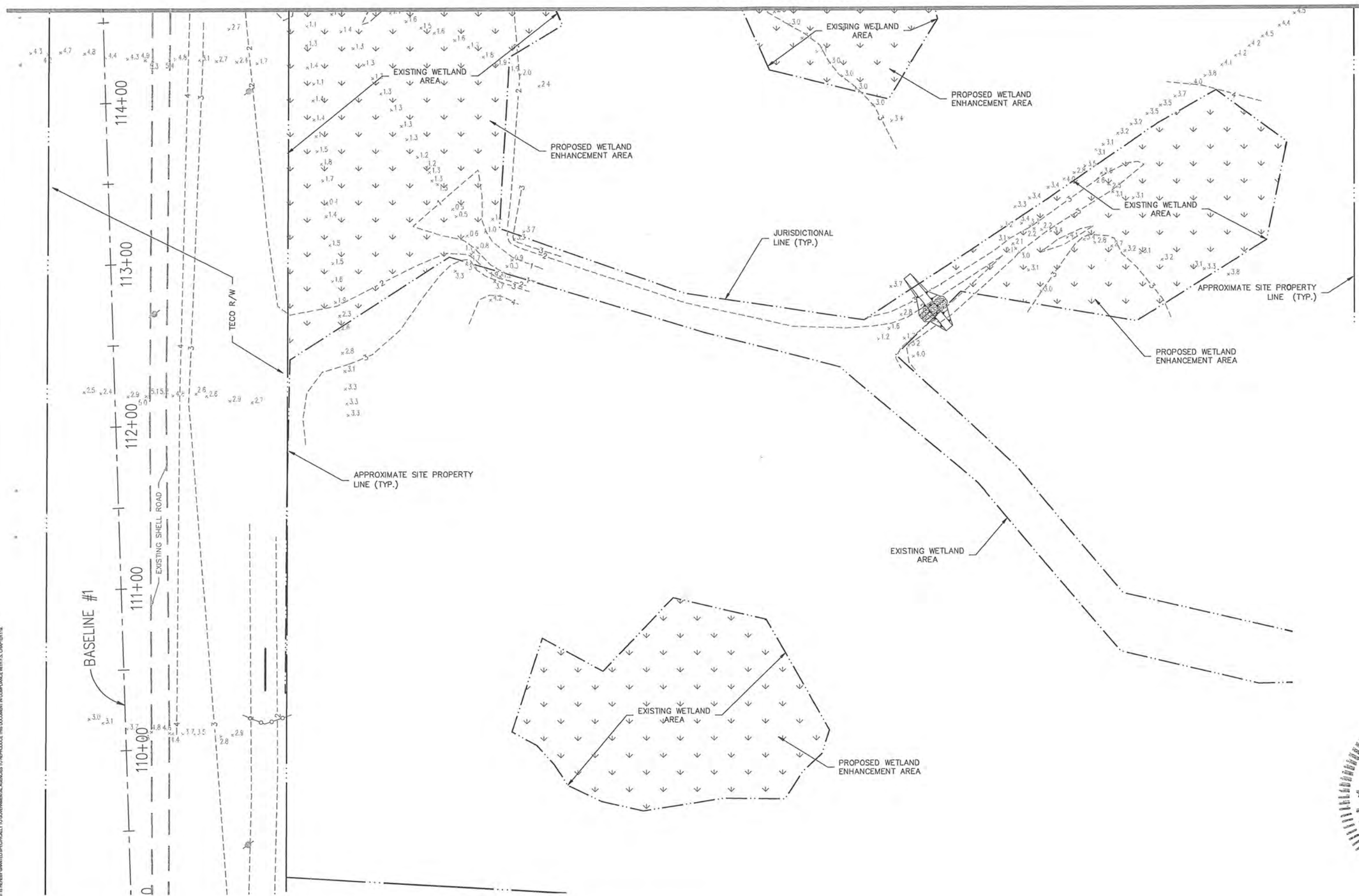
MATCH LINE SHEET 19

PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

PLANTING PLAN (3)

King
ENGINEERING ASSOCIATES, INC.

4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610



Q:\WaterRes\5044\005\004\cds\PLAN\PLANT04.dwg, November 8, 2013 11:03 AM, KYLE SMITH, King Engineering Associate Inc.
© COPYRIGHT 1988 BY KING ENGINEERING ASSOCIATES, INC. ALL RIGHTS RESERVED. NO PART OF THIS PUBLICATION MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM KING ENGINEERING ASSOCIATES, INC.

DESIGNED
MDP
DRAWN
JLW
CHECKED
JLW
DATE
11/11/13

King
ENGINEERING ASSOCIATES, INC.
4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT






PLANTING PLAN (4)

NO.	DATE	DESCRIPTION	APPROVED BY

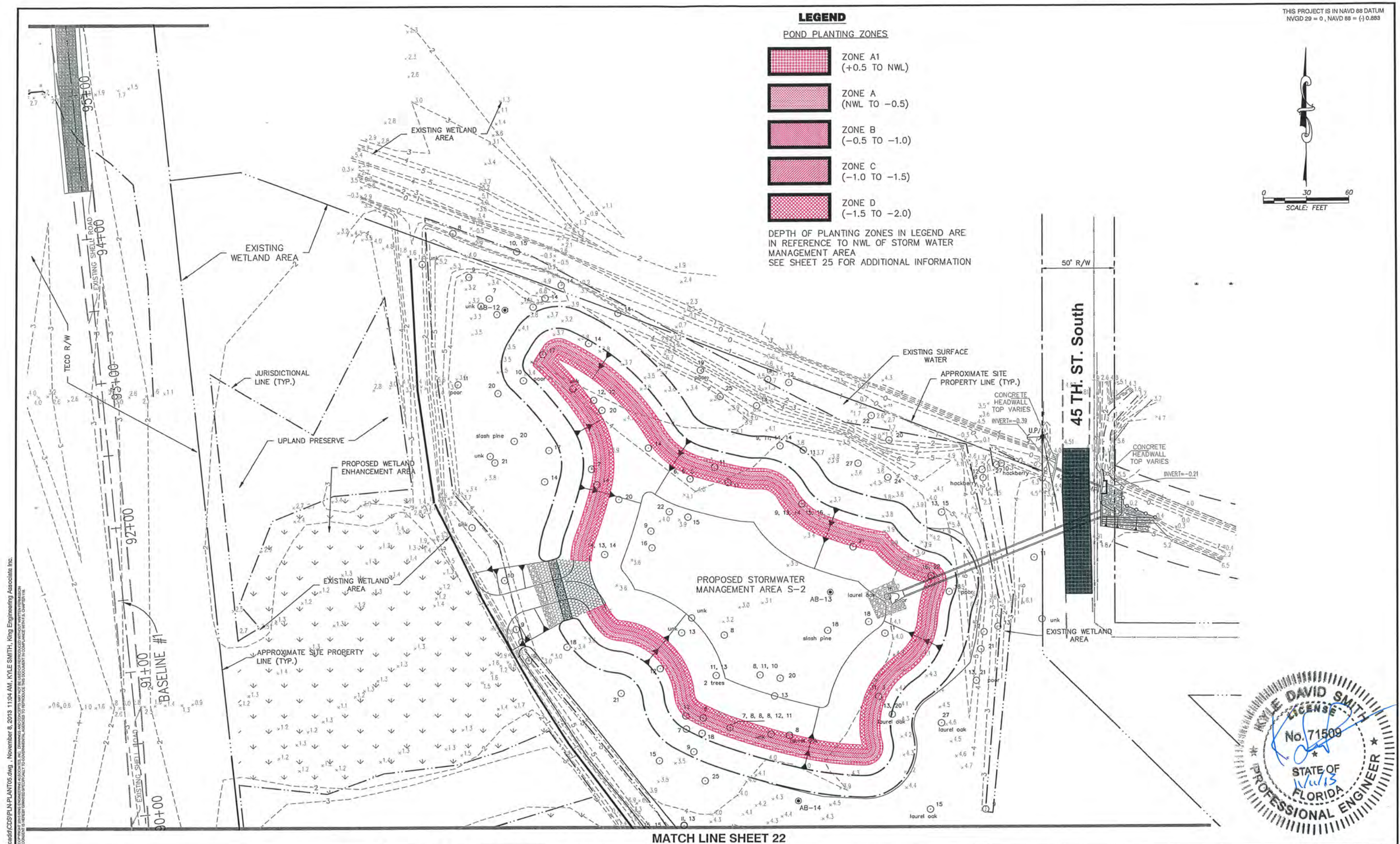
JOB NO.	5044-005-004	SHEET NO.	20
DATE	12/22/2010	SCALE	AS SHOWN
APPROVED BY		90% PLANS	11/08/2013

LEGEND

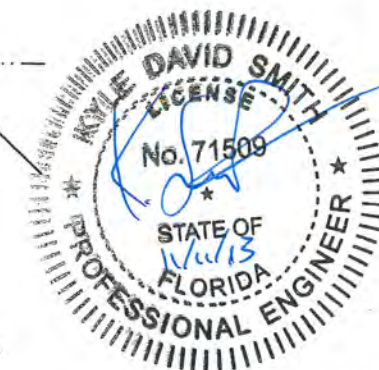
POND PLANTING ZONES

-  ZONE A1
(+0.5 TO NWL)
-  ZONE A
(NWL TO -0.5)
-  ZONE B
(-0.5 TO -1.0)
-  ZONE C
(-1.0 TO -1.5)
-  ZONE D
(-1.5 TO -2.0)

DEPTH OF PLANTING ZONES IN LEGEND ARE
 IN REFERENCE TO NWL OF STORM WATER
 MANAGEMENT AREA
 SEE SHEET 25 FOR ADDITIONAL INFORMATION



MATCH LINE SHEET 22



C:\WaterRes\5044\005\004\cds\PLN-PLANT05.dwg, November 8, 2013 11:04 AM, KYLE SMITH, King Engineering Associates Inc.

DESIGNED
 MDP
 DRAWN
 JLV
 CHECKED
 DC

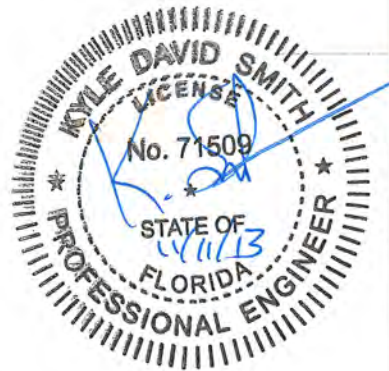
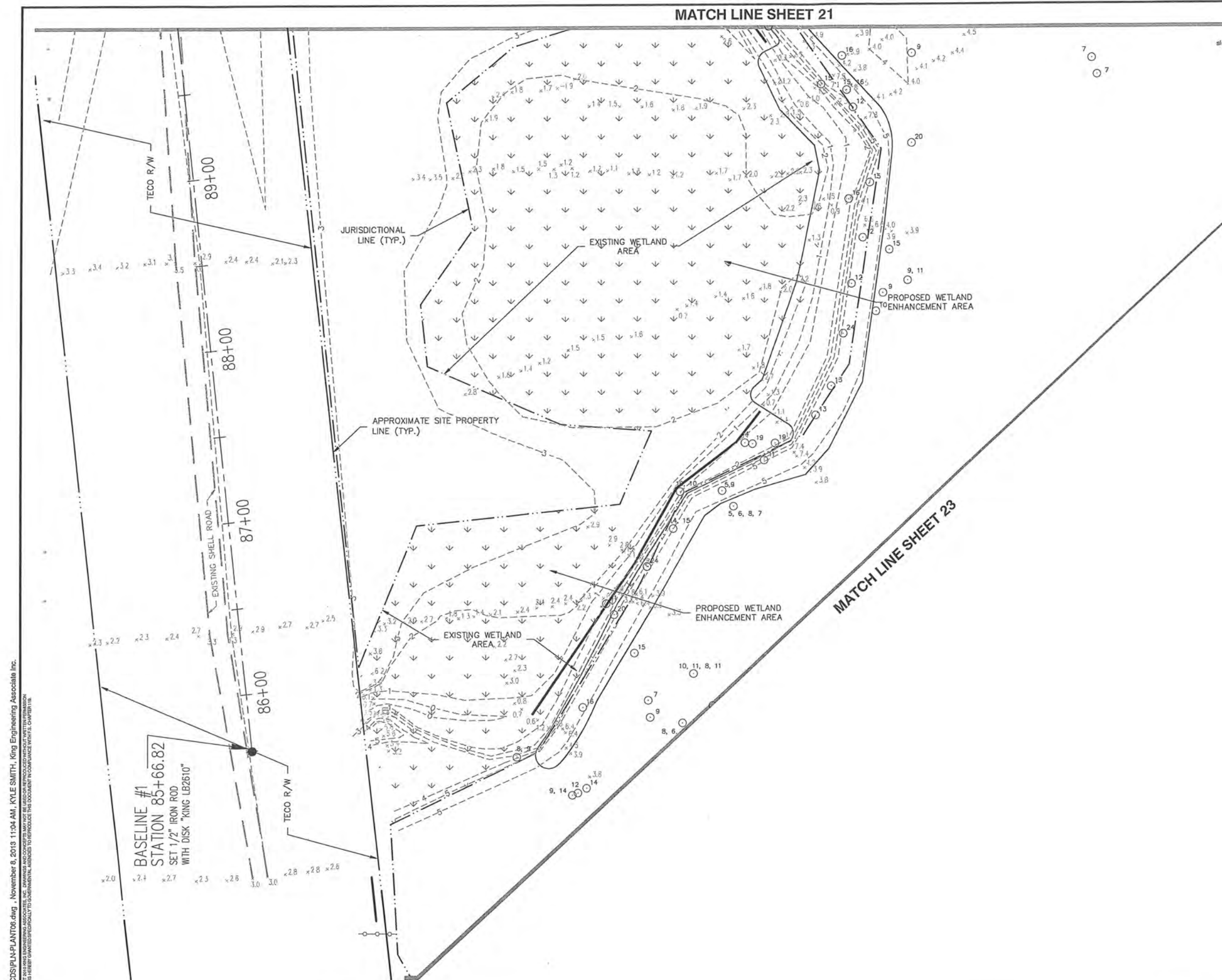
King
 ENGINEERING ASSOCIATES, INC.

4921 Memorial Highway
 One Memorial Center, Suite 300
 Tampa, Florida 33634
 Phone 813 880-8881
 Fax 813 880-8882
 www.kingengineering.com
 Engineering License #2610

PALM RIVER RESTORATION (W367)
 EAST Mc KAY BAY STORMWATER AND HABITAT
 RESTORATION SITES
 FOR
 SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

PLANTING PLAN (5)

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



C:\WaterRes\504-005\004\cadd\CD\PLAN\PLANT06.dwg, November 8, 2013 11:04 AM, KYLE SMITH, King Engineering Associate Inc.
 COPYRIGHT © 2013 KING ENGINEERING ASSOCIATES, INC. DRAWINGS AND CONCEPTS MAY NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM KING ENGINEERING ASSOCIATES, INC. ALL RIGHTS RESERVED.

DESIGNED
MDP
DRAWN
JLW
CHECKED
G.C.

King
ENGINEERING ASSOCIATES, INC.

4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

PLANTING PLAN (6)

NO.	DATE	DESCRIPTION	APPROVED	JOB NO. 5044-005-004	SHEET NO. 22
				DATE 12/22/2010	
				SCALE AS SHOWN	
					90% PLANS 11/08/2013

LEGEND

POND PLANTING ZONES

- ZONE A1
(+0.5 TO NWL)
- ZONE A
(NWL TO -0.5)
- ZONE B
(-0.5 TO -1.0)
- ZONE C
(-1.0 TO -1.5)
- ZONE D
(-1.5 TO -2.0)

DEPTH OF PLANTING ZONES IN LEGEND ARE
IN REFERENCE TO NWL OF STORM WATER
MANAGEMENT AREA
SEE SHEET 25 FOR ADDITIONAL INFORMATION

MATCH LINE SHEET 22

PROPOSED STORMWATER
MANAGEMENT AREA TOB

PROPOSED STORMWATER
MANAGEMENT AREA S-1

JURISDICTIONAL
LINE (TYP.)

EXISTING INTERTIDAL
BASIN

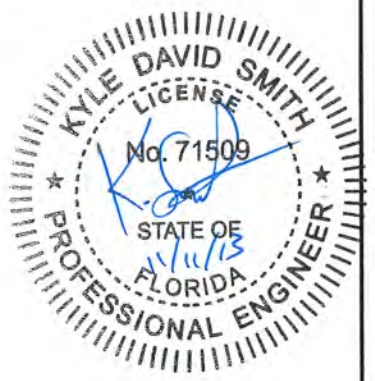
EXISTING OPEN
WATER AREA

RIGHT-OF-WAY (TYP.)

APPROXIMATE SITE PROPERTY
LINE (TYP.)

46 TH. ST. South

SCALE: FEET



C:\WaterRes\604-1005\004\cadd\PLN-PLANT07.dwg, November 8, 2013 11:04 AM, KYLE SMITH, King Engineering Associate Inc.
© COPYRIGHT 2013 KING ENGINEERING ASSOCIATES, INC. DRAWINGS AND CONCEPTS ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM KING ENGINEERING ASSOCIATES, INC. THIS DOCUMENT IS THE PROPERTY OF KING ENGINEERING ASSOCIATES, INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED ON THE DRAWING. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM KING ENGINEERING ASSOCIATES, INC.

DESIGNED
MDP
DRAWN
JLW
CHECKED
G.C.

King
ENGINEERING ASSOCIATES, INC.

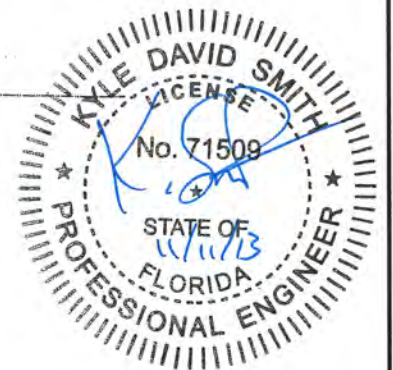
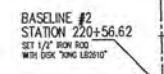
4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

PLANTING PLAN (7)

JOB NO.		5044-005-004	SHEET NO. 23
DATE		12/22/2010	
SCALE		AS SHOWN	
NO.	DATE	DESCRIPTION	APPROVED

90% PLANS
11/08/2013



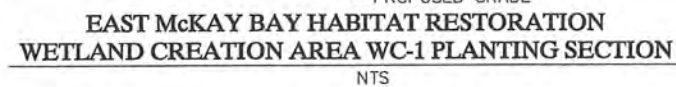




Diagram illustrating the cross-section of a trench and the overlaid pavement area above it. The diagram shows the trench width at the top (W) and bottom (12"), the depth (D), and the thickness of the trench walls (18"). The overlaid pavement area is shown above the trench, with dimensions for the surface replacement (W + 4') and the proposed asphalt restoration (2T (12" MIN.)). The diagram also indicates the proposed limerock base and the overlaid pavement area (100' OR 200') SEE BELOW.

Labels and dimensions in the diagram include:

- OVERLAYED PAVEMENT AREA (100' OR 200') SEE BELOW
- W + 4'
- SURFACE REPLACEMENT (SAW CUT)
- PROPOSED ASPHALT RESTORATION
- 2T (12" MIN.)
- 18"
- W
- TOP OF TRENCH WIDTH
- 12"
- D
- PROPOSED LIMEROCK BASE
- W=2D (MAX.)

POSTED SPEED MPH	OVERLAY CENTERED ON TRENCH
35 MPH OR LESS	100 FEET
> 35 MPH	200 FEET

THE BACKFILL AND BEDDING MATERIAL SHALL BE OF THE A-1, A-2, A-3 OR A-2-4 CLASSIFICATION AS PER AASHTO, UNLESS OTHERWISE APPROVED BY THE COUNTY ENGINEER.

THE BACKFILL SHALL BE COMPACTED IN 12" LAYERS WITH MECHANICAL TAMPERS TO THE FULL WIDTH OF THE TRENCH AND UP TO THE BOTTOM OF THE ROADWAY BASE. PARTICULAR ATTENTION MUST BE GIVEN TO THE ADEQUATE COMPACTION OF THE FILL BENEATH THE HAUNCHES OF THE PIPE. THE BACKFILL SHALL BE COMPACTED TO 98% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180-57. ONE DENSITY TEST SHALL BE TAKEN AT THE SPIRING LINE OF THE PIPE, AT ONE FOOT ABOVE THE CROWN OF THE PIPE, AND EVERY FOOT VERTICALLY THEREAFTER. A MINIMUM OF TWO COMPLETE SETS OF BACKFILL DENSITY TESTS ARE REQUIRED. FLOWABLE FILL IN ACCORDANCE WITH SECTION 121 OF THE F.O.D.T. STANDARD SPECIFICATIONS MAY BE SUBSTITUTED.

IF WELL POINTS ARE USED TO PROVIDE A DRY TRENCH FOR LAYING THE UTILITY, THEY SHALL REMAIN IN OPERATION UNTIL THE BACKFILL IS COMPLETE AND TESTED.


BASE, INSTALLED TO A THICKNESS OF TWO TIMES THE THICKNESS OF THE EXISTING BASE OR 12" WHICHEVER IS GREATER, SHALL BE INSTALLED IN 6" LIFTS. THE BASE SHALL BE COMPACTED TO 98% THE MAXIMUM DENSITY AS DETERMINED BY AASTHO T-180-57. A MINIMUM OF TWO DENSITY TESTS PER LIFT IS REQUIRED. NINE (9) INCHES OF SUPERPAVE ASPHALT INSTALLED IN THREE (3) INCH LIFTS MAY BE SUBSTITUTED.

THE SURFACE COURSE SHALL BE F.D.O.T. SUPERPAVE AC WITH A THICKNESS EQUAL TO THE EXISTING OR 1-3/4", WHICHEVER IS GREATER. PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.

THE PATCH AREA SHALL BE A SMOOTH PLANE SUCH THAT A STRAIGHT EDGE PLACED ACROSS THE PATH, PARALLEL TO TRAFFIC FLOW AND EXTENDING TO UNDISTURBED PAVEMENT SHALL SHOW NO MORE THAN 1/4" IRREGULARITY. ANY IRREGULARITIES SHALL BE CORRECTED IN SUBSTANTIAL COMPLIANCE WITH F.D.O.T. SPEC.

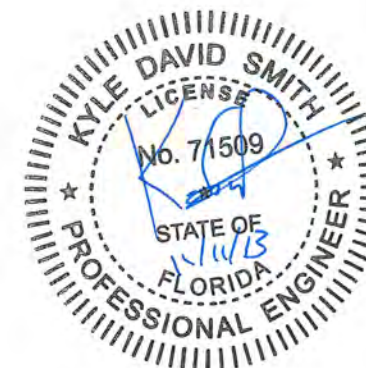
THE PATCH AREA SHALL BE CONFINED WITHIN A MINIMUM OF 100 FEET CENTERED ON THE TRENCH FOR ROADWAYS WITH 35 MPH OR LESS SPEED LIMIT OR 200 FEET FOR ROADWAYS WITH SPEED LIMITS GREATER THAN 35 MPH.

DISTURBED ROADWAYS CONSTRUCTED OF FULL DEPTH ASPHALT SHALL BE REPLACED IN KIND.

REVISIONS				PREPARED BY	 HILLSBOROUGH COUNTY	NAME		DATE	APPROVED BY	ROADWAY RESTORATION		PROJECT NO.	SHEET NO.
NO.	DATE	DESCRIPTION	APPROVED			DESIGNED BY					FIGURE 1		
						DRAWN BY							
						CHECKED BY							
						APPROVED BY							
									U.C. No.				

TPA/
HC-UAG MOD-2013.DOC

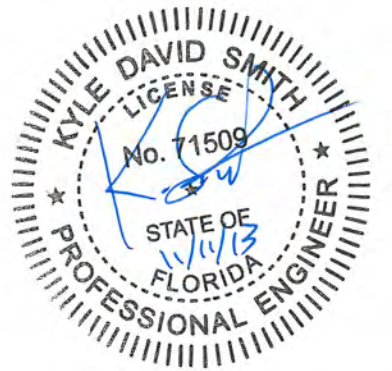
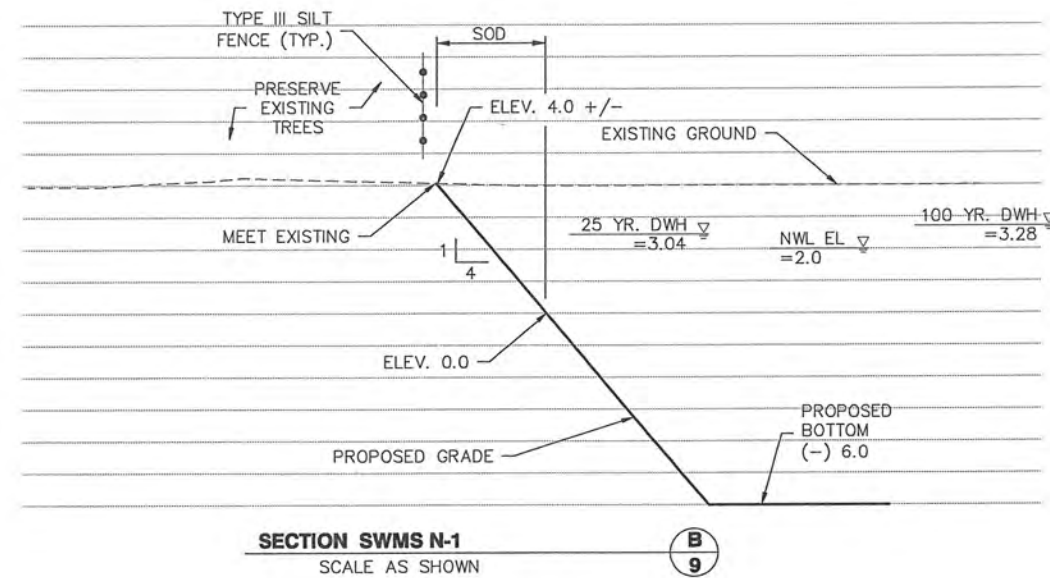
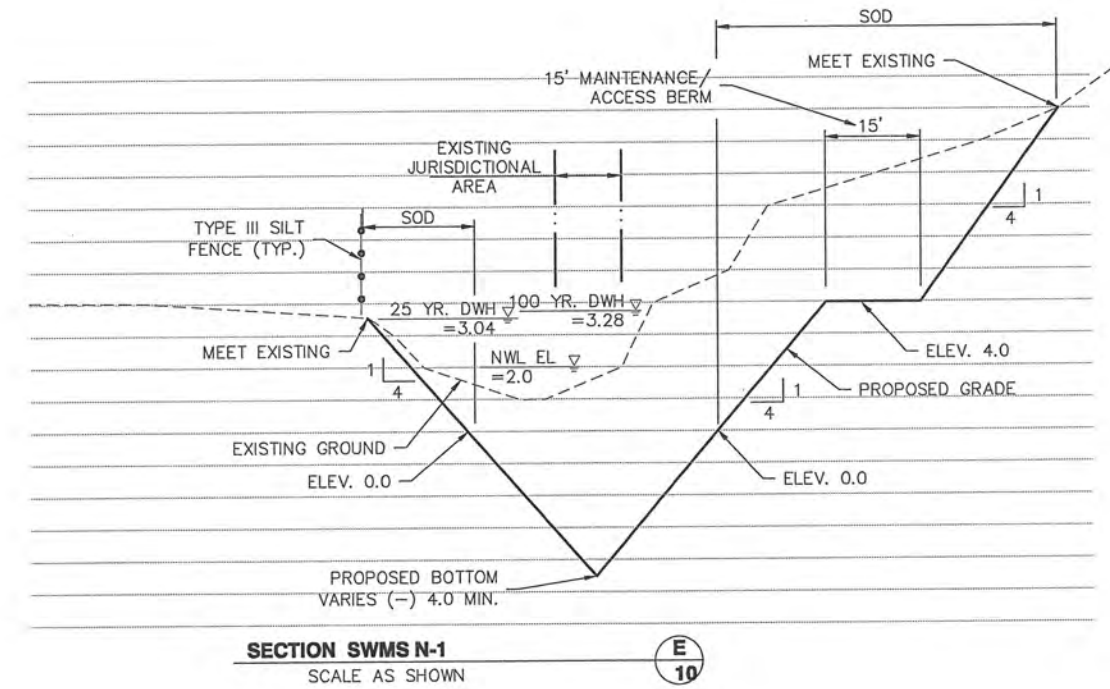
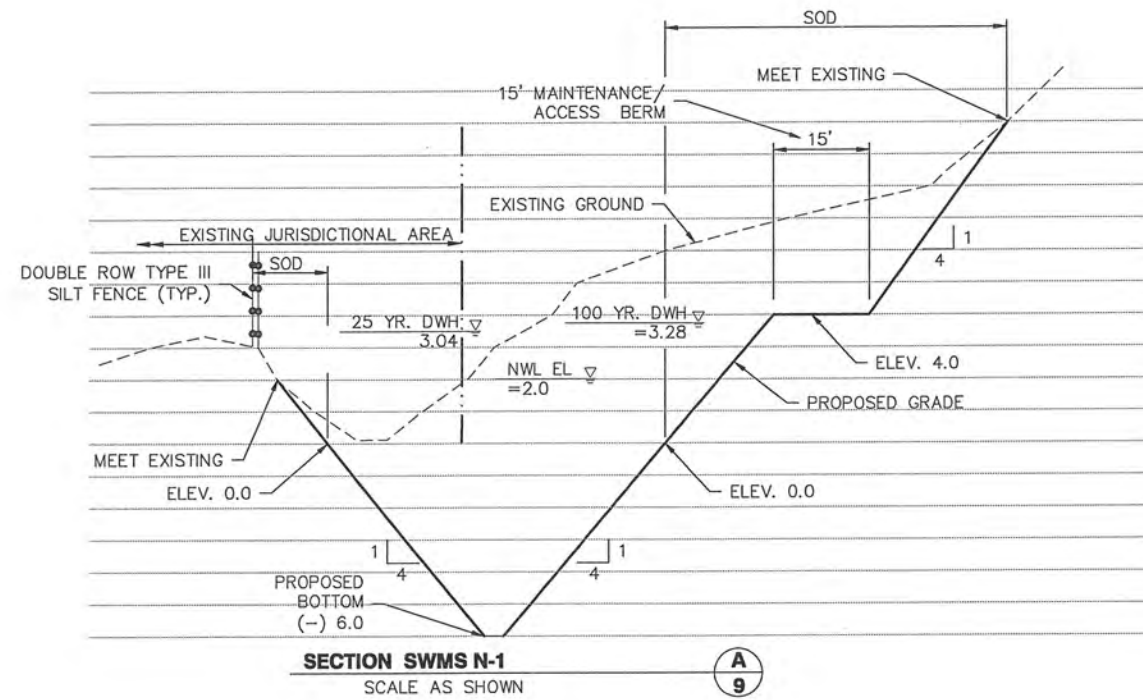
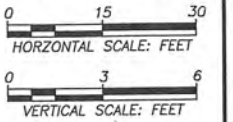
K-2



4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

TYPICAL SECTION



C:\WaterRes\5044\005-004\CD\DET-X\SECTION.dwg, November 8, 2013 11:08 AM, KYLE SMITH, King Engineering Associate Inc.

DESIGNED
MDP
DRAWN
JLW
CHECKED
O.C.

THE SIGNATURE OF THE QUALITY
CONTROL OFFICER IN THIS
SPACE INDICATES THAT ALL
REQUIRED PERMITS HAVE BEEN
OBTAINED AND THAT
CONSTRUCTION IS AUTHORIZED
TO COMMENCE.

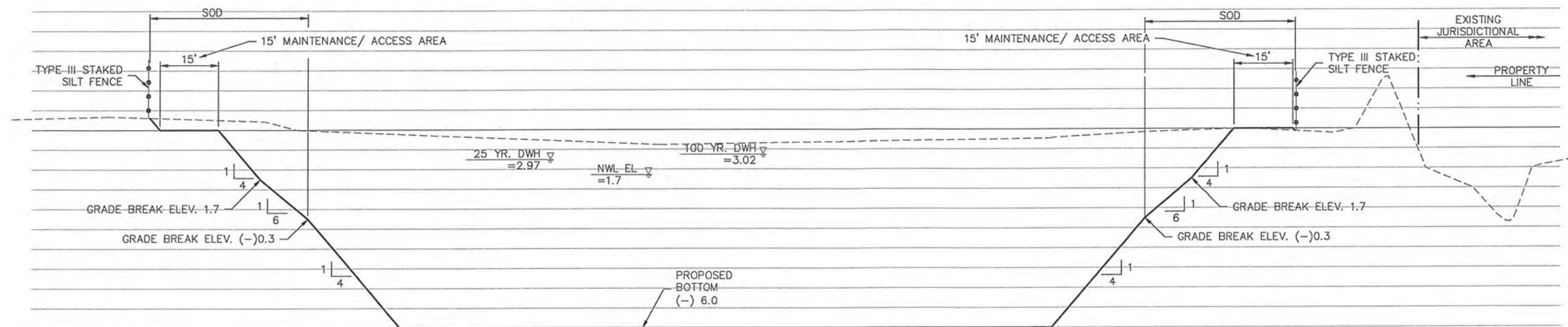
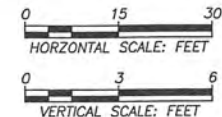
King
ENGINEERING ASSOCIATES, INC.

4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

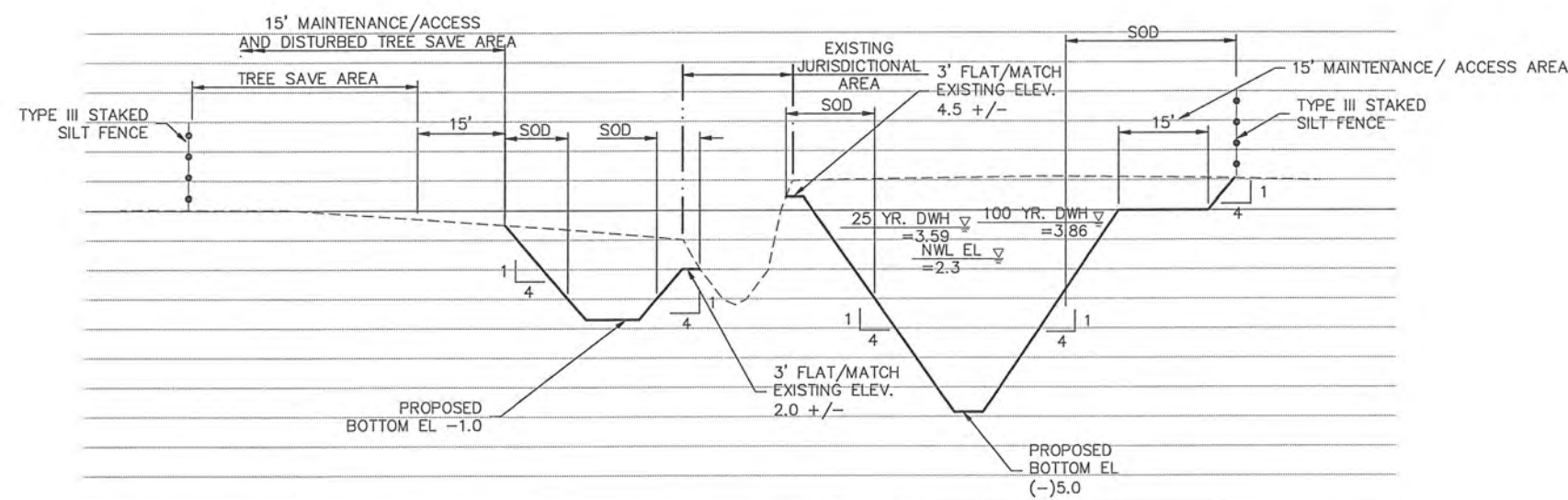
POND CROSS SECTIONS (1)

NO.	DATE	DESCRIPTION	APPROVED BY	JOB NO.	SHEET NO.
				5044-005-004	27
				DATE	12/22/2010
				SCALE	AS SHOWN
				90% PLANS	11/08/2013



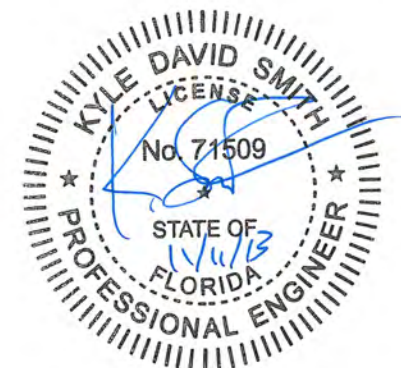
SECTION SWMS S-2

J
14



SECTION SWMS S-1

O
16



C:\WaterRes\5044\005\004\cad\CDS\DET\SECTION.dwg, November 8, 2013 11:38 AM, KYLE SMITH, King Engineering Associate Inc.

DESIGNED	MDP
DRAWN	JLW
CHECKED	
D.C.	

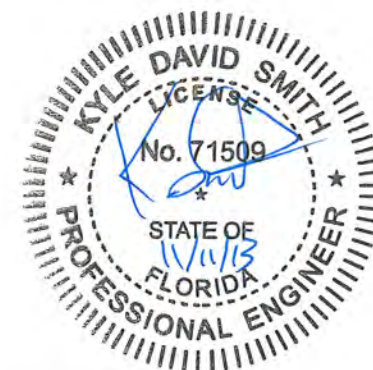
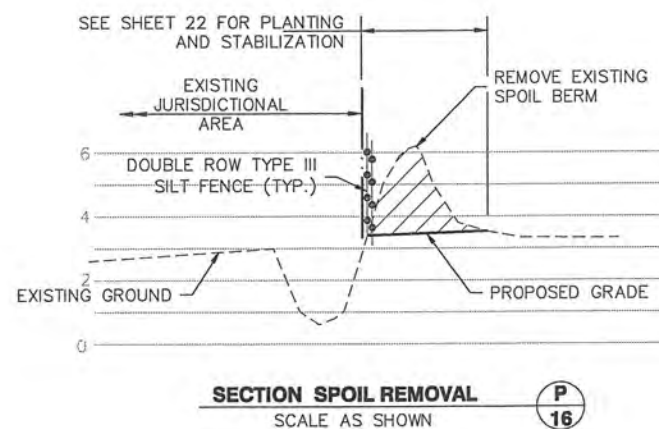
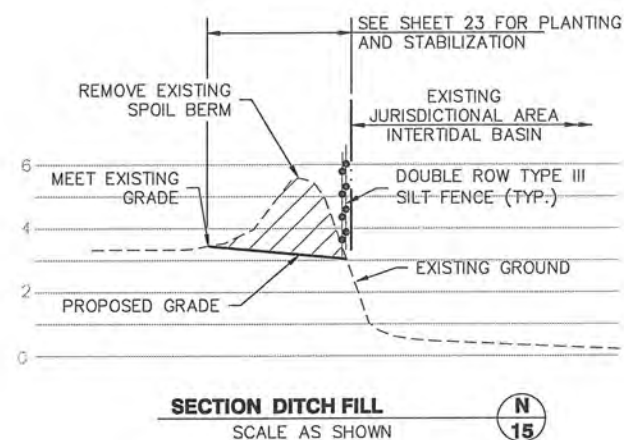
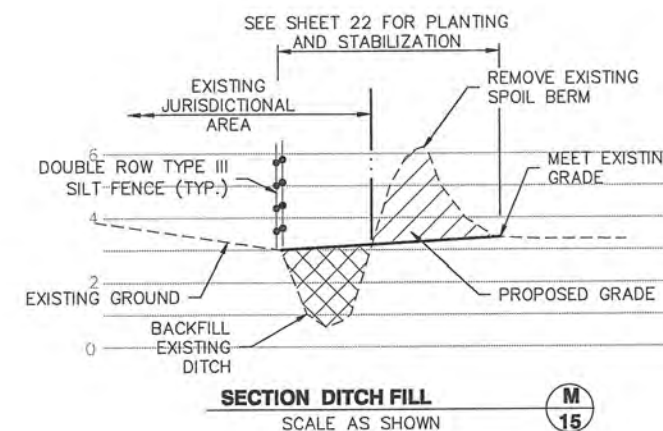
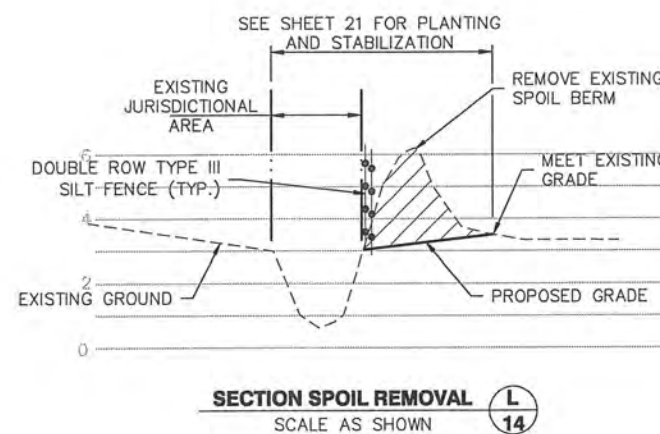
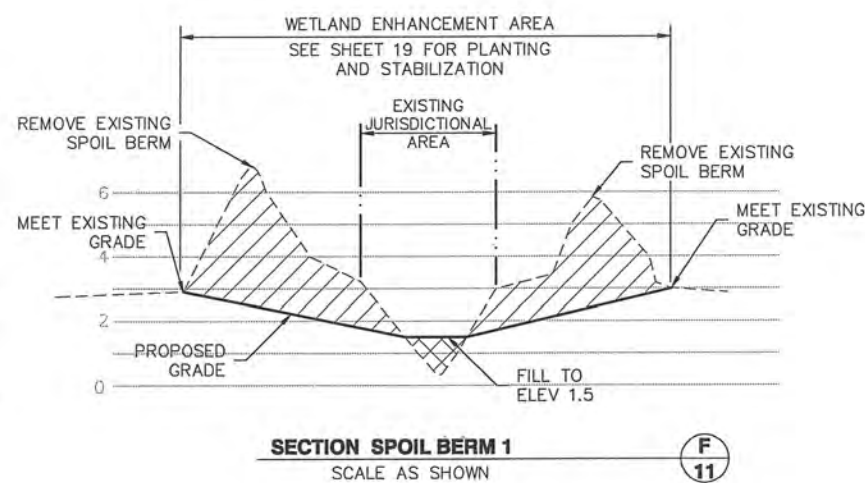
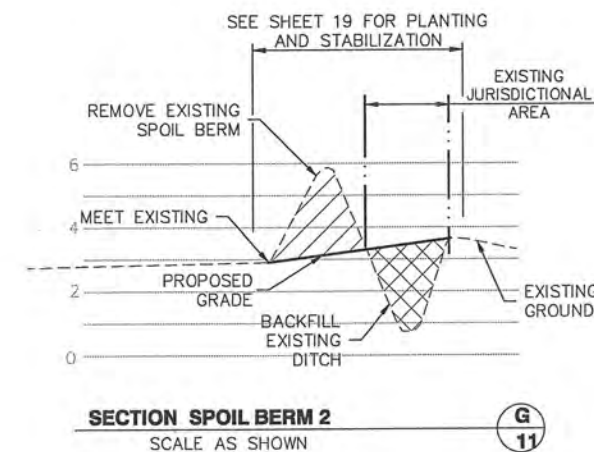
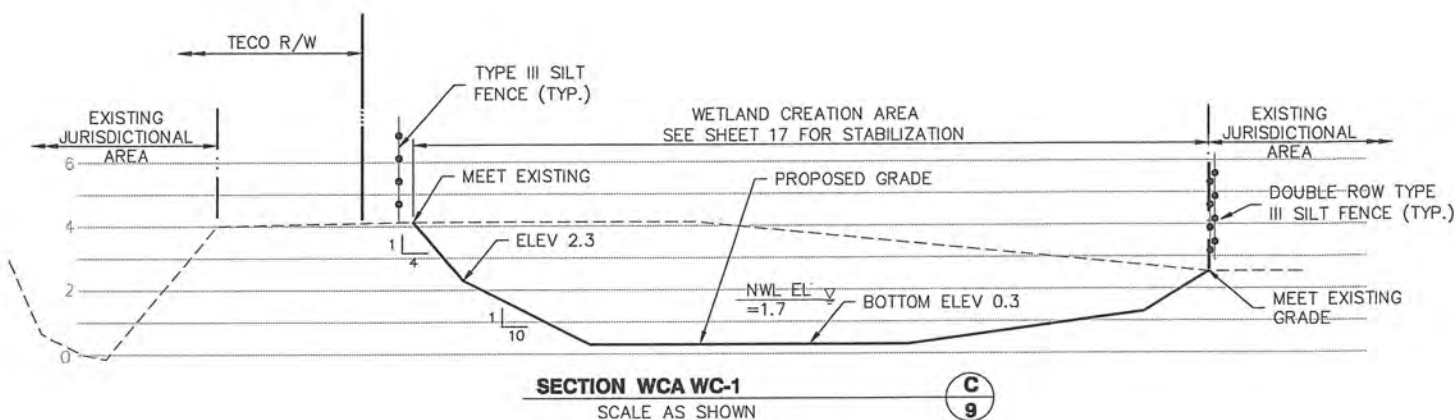
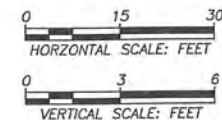
King
 ENGINEERING ASSOCIATES, INC.

4921 Memorial Highway
 One Memorial Center, Suite 300
 Tampa, Florida 33634
 Phone 813 880-8881
 Fax 813 880-8882
 www.kingengineering.com
 Engineering License #2610

PALM RIVER RESTORATION (W367)
 EAST Mc KAY BAY STORMWATER AND HABITAT
 RESTORATION SITES
 FOR
 SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

POND CROSS SECTIONS (2)

NO.	DATE	DESCRIPTION	APPROVED BY	JOB NO. 5044-005-004	SHEET NO. 28
				DATE 12/22/2010	
				SCALE AS SHOWN	
					90% PLANS 11/08/2013



Q:\WaterRes\504-1005\004\cadd\CDS\DET-X\SECTION.dwg November 8, 2013 11:06 AM, KYLE SMITH, King Engineering Associate Inc.

DESIGNED
 MDP
 DRAWN
 JLW
 CHECKED
 J.C.

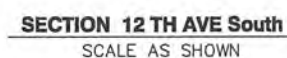
King
 ENGINEERING ASSOCIATES, INC.

4921 Memorial Highway
 One Memorial Center, Suite 300
 Tampa, Florida 33634
 Phone 813 880-8881
 Fax 813 880-8882
 www.kingengineering.com
 Engineering License #2610

PALM RIVER RESTORATION (W367)
 EAST Mc KAY BAY STORMWATER AND HABITAT
 RESTORATION SITES
 FOR
 SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

GRADING CROSS SECTIONS (1)

NO.	DATE	DESCRIPTION	APPROVED BY	JOB NO.	SHEET NO.
				5044-005-004	29
				DATE	12/22/2010
				SCALE	AS SHOWN
				90% PLANS	11/08/2013

[illegible]

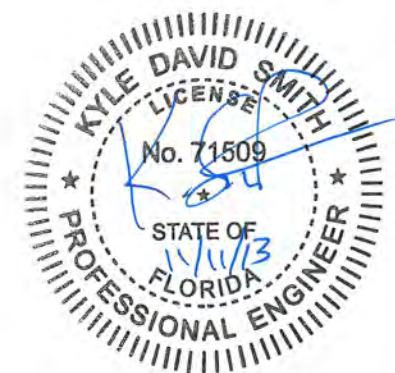
UTILITY RELOCATION NOTE:
CONTRACTOR TO FIELD VERIFY
HORIZONTAL AND VERTICAL LOCATION
OF EXISTING 6" DIP WM PRIOR TO
CONSTRUCTION AND NOTIFY ENGINEER
OF RECORD OF ANY POSSIBLE
CONFLICTS WITH PROPOSED DESIGN.

King

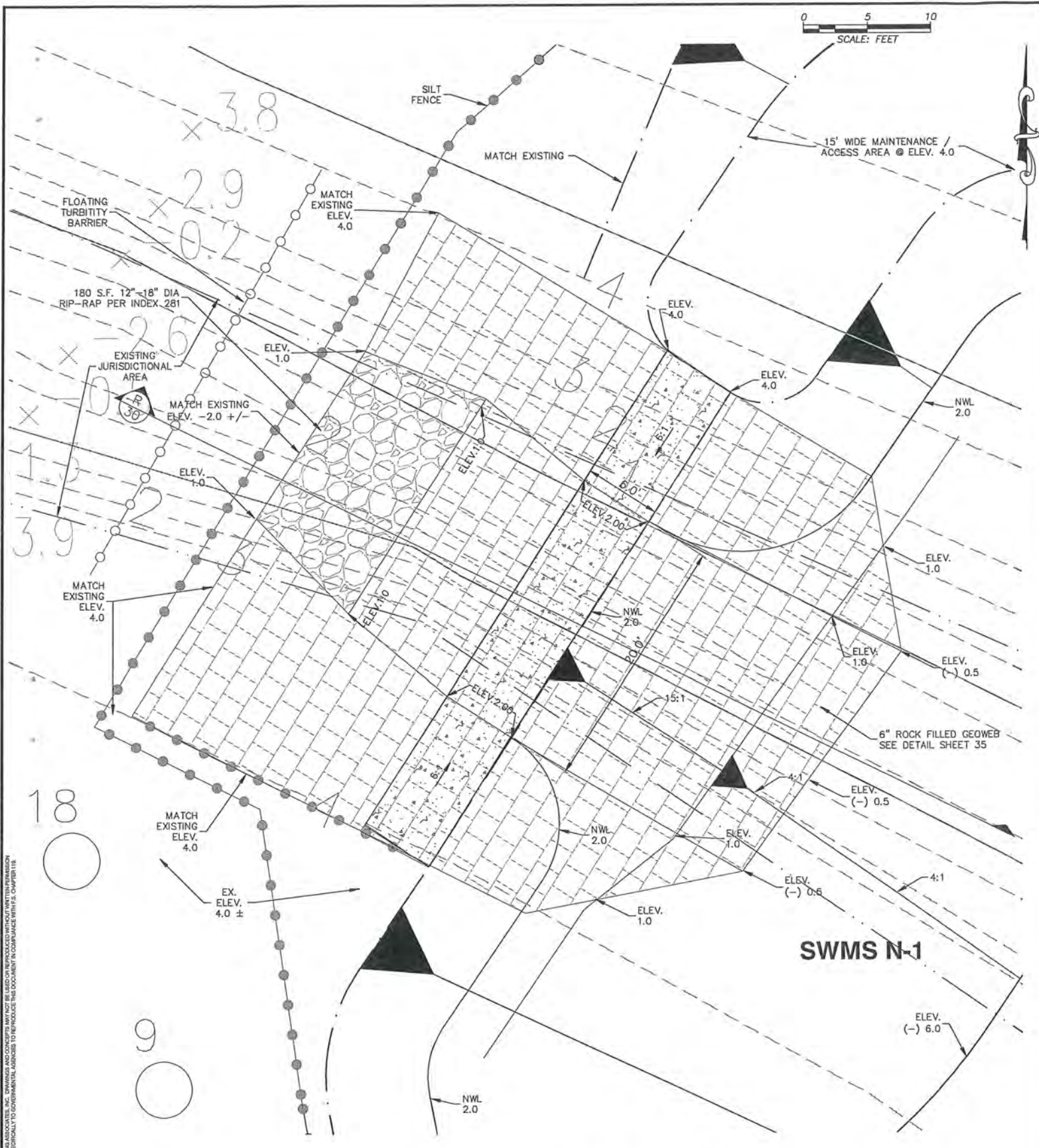
PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

DRAINAGE STRUCTURE CROSS SECTIONS (1)

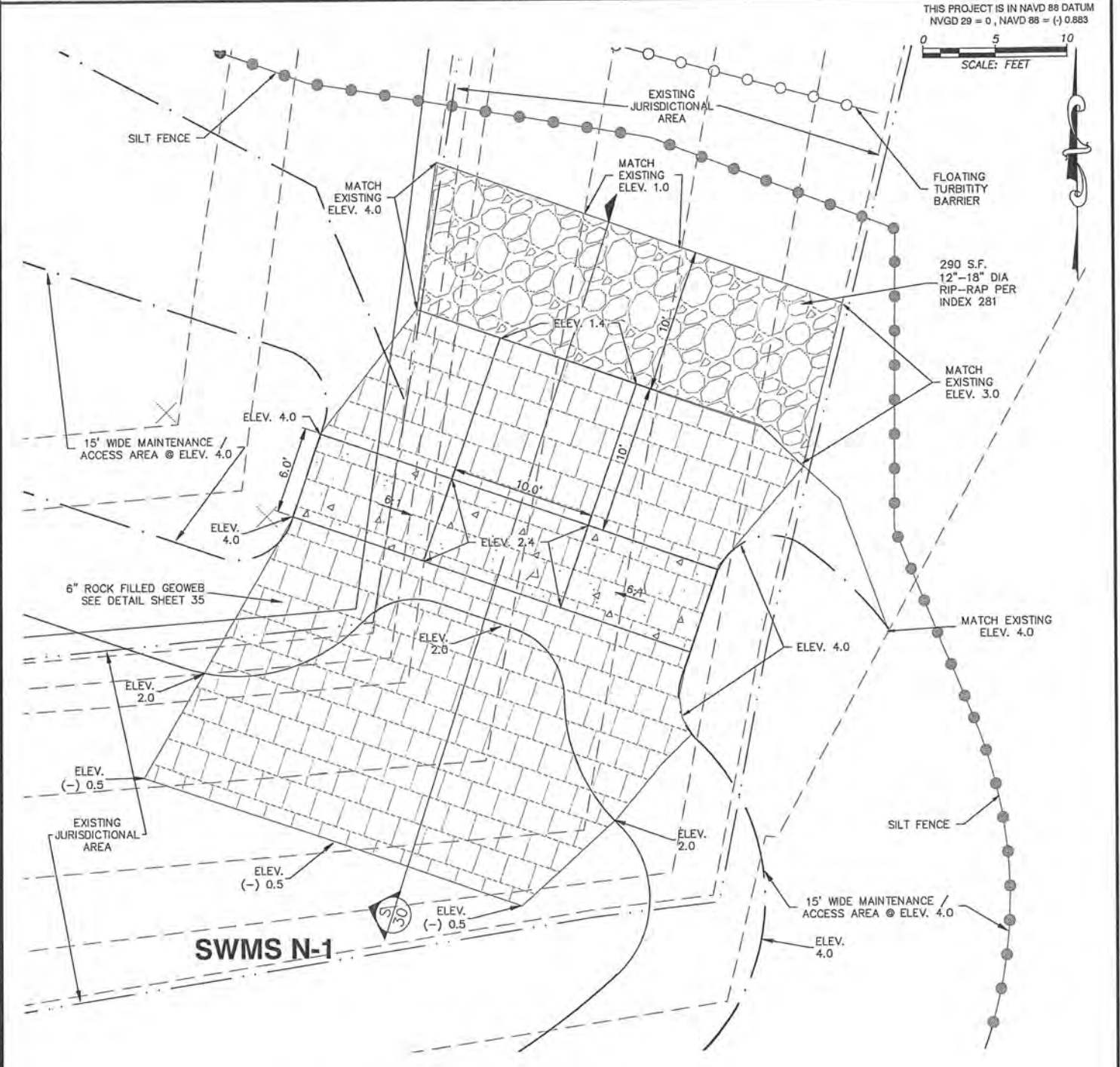
						JOB NO.		SHEET NO.	
						5044-005-004			
						DATE			
						12/22/2010		30	
						SCALE			
						AS SHOWN		90% PLANS	
NO.		DATE		DESCRIPTION		APPROBY		11/08/2013	



C:\Water\Rea\5044005\004\cadd\CDS\PLAN-DRG-POND-DET.dwg - November 8, 2013 11:07 AM, KYLE SMITH, King Engineering Associate Inc.
© COPYRIGHT 2013 KING ENGINEERING ASSOCIATES, INC. DRAWINGS AND CONCEPTS MAY NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM KING ENGINEERING ASSOCIATES, INC. THIS DOCUMENT IS THE PROPERTY OF KING ENGINEERING ASSOCIATES, INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN.



WEIR STRUCTURE N-1 WEST PLAN VIEW DETAIL FROM SHEET 9
SCALE AS SHOWN



WEIR STRUCTURE N-1 EAST PLAN VIEW DETAIL FROM SHEET 10
SCALE AS SHOWN



4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

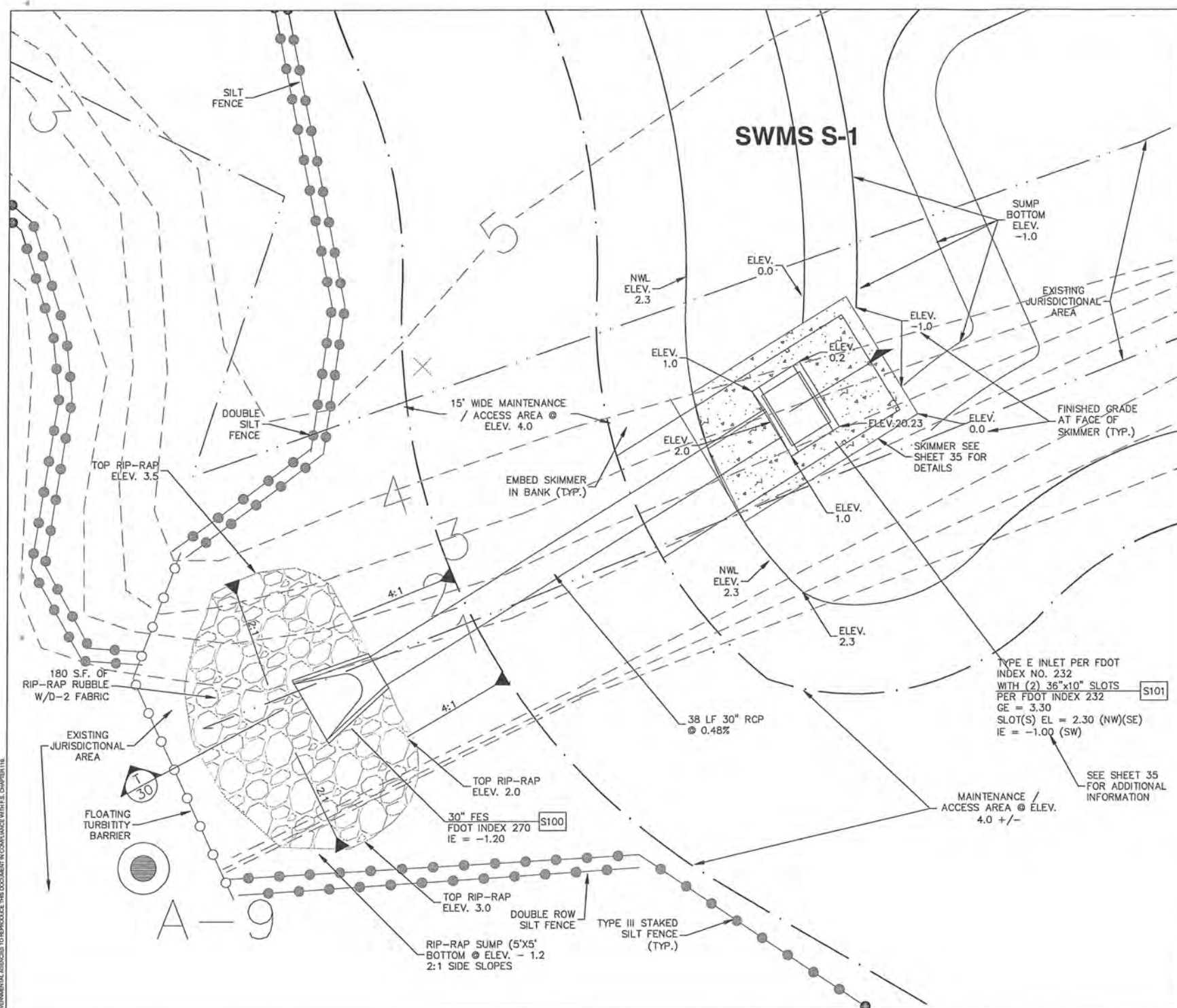
PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

DRAINAGE STRUCTURE PLAN VIEW DETAIL
SHEET (1)

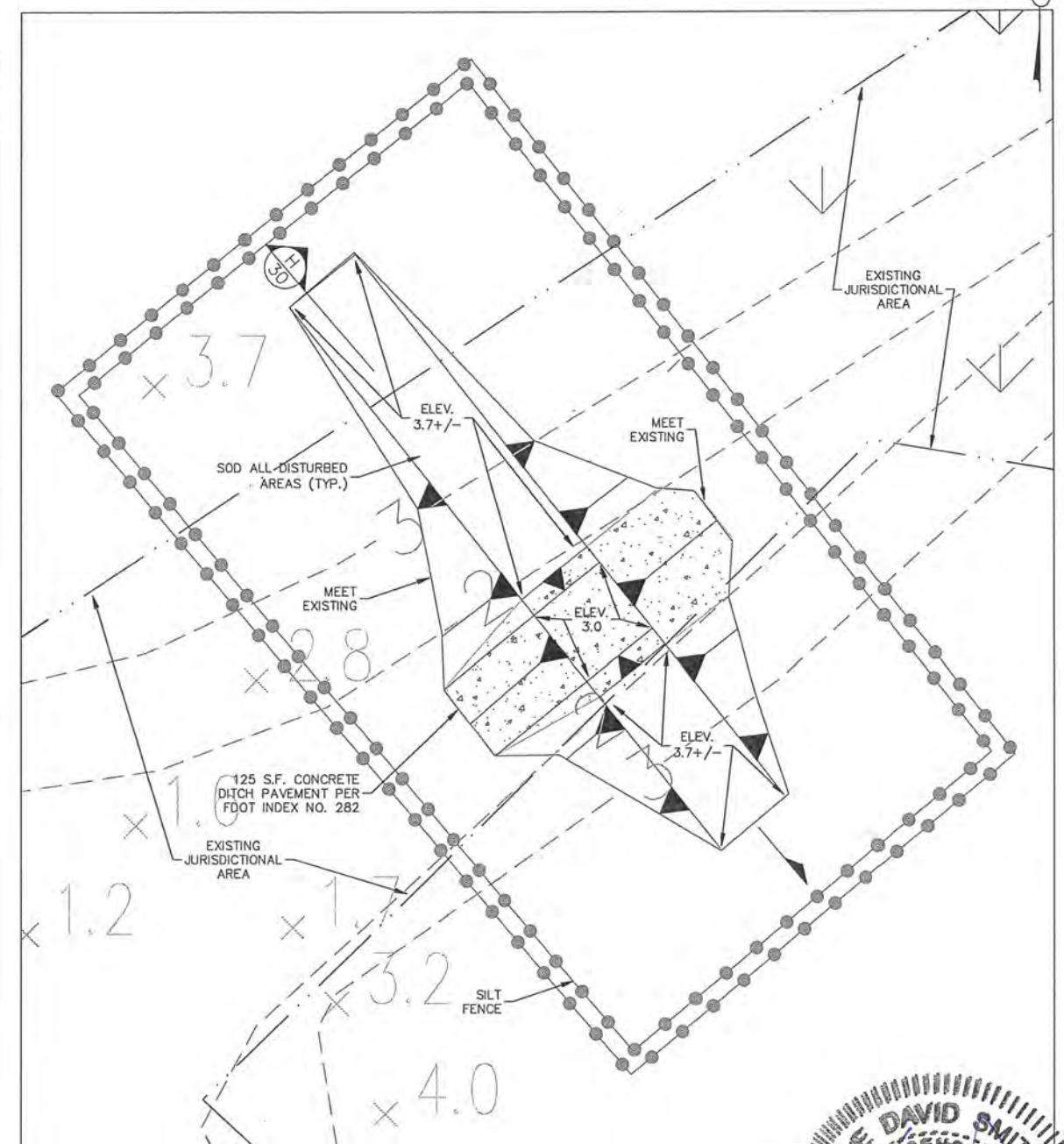
NO.	DATE	DESCRIPTION	APPROVED BY	NO.	DATE	DESCRIPTION

DESIGNED	MDP
DRAWN	JLW
CHECKED	
DATE	

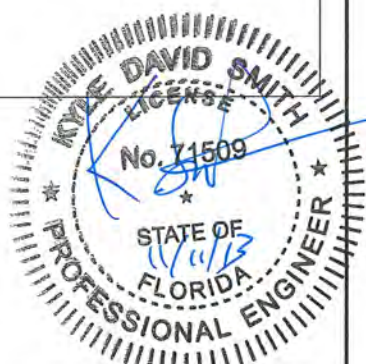
JOB NO.	5044-005-004
DATE	12/22/2010
SCALE	AS SHOWN
NO. OF SHEETS	31
DATE	11/08/2013



SWMS S-1 DRAINAGE STRUCTURE PLAN VIEW DETAIL
SCALE AS SHOWN



DITCH BLOCK 1 DETAIL
SCALE AS SHOWN



X:\PROJECTS\King Engineering\05-13\HC0205_FWC Southwest Region\DWG\34_NOTES.dwg November 11, 2013 6:27 PM, DUSTIN, King Engineering Associate Inc.

SHEET PILE INSTALLATION NOTES

SHEET PILING SUPPLIED FOR THE PROJECT SHALL MEET OR EXCEED ALL REQUIRED PHYSICAL CHARACTERISTICS AS DEFINED BELOW:

1.1.2.1 SHEET PILE MATERIAL

ALL SHEET PILING SHALL BE MANUFACTURED ENTIRELY FROM A RIGID, HIGH IMPACT, UV-INHIBITED, WEATHERABLE VINYL COMPOUND. ALL EXPOSED SURFACES OF THE SHEET PILING SHALL BE UV RESISTANT, AND COMPRISED OF VIRGIN MATERIAL WITH A MINIMUM ASTM D4216 CELL CLASSIFICATION OF 1-42443-33 TO ENSURE RELIABLE PERFORMANCE AND COLOR CONSISTENCY. IF MONO-EXTRUSION TECHNOLOGY IS USED, THE ENTIRE SHEET PILE MUST BE COMPRISED OF VIRGIN MATERIAL WITH A MINIMUM ASTM D4216 CELL CLASSIFICATION OF 1-42443-33.

1.1.2.2 SECTION MODULUS

THE SECTION MODULUS OF THE SHEET PILING SHALL BE NO LESS THAN 19.5 IN³ PER LINEAR FOOT OF WALL.

1.1.2.3 MOMENT OF INERTIA

THE MOMENT OF INERTIA OF THE SHEET PILING SHALL BE NO LESS THAN 78 IN⁴ PER LINEAR FOOT OF WALL.

1.1.2.4 THICKNESS

THE SHEET PILING MUST HAVE A MINIMUM THICKNESS OF 0.370 INCHES.

1.1.2.5 DEPTH

THE SHEET PILING MUST HAVE A MAXIMUM SECTION DEPTH OF 8 INCHES TO PREVENT WEB BUCKLING.

1.1.2.6 COVERAGE & INTERLOCKS

THE SHEET PILING MUST HAVE A MINIMUM WIDTH OF 12 INCHES PER SHEET.

1.1.2.7 LOCKING SYSTEM

ALL MALE INTERLOCKS MUST INCORPORATE I-BEAM LOCK REINFORCEMENT TO RESIST LOCK SEPARATION AND DECREASE SEEPAGE.

1.1.2.8 SURFACE FINISH/APPEARANCE

THE SHEET PILING MUST BE GRAY IN COLOR. COLOR SAMPLES TO BE APPROVED BY THE OWNER.

1.2.1.1 INSTALLATION

ALL SHEET PILING SHALL BE INSTALLED WITH A MINIMUM OF 8' EMBEDMENT. THE MAXIMUM AMOUNT OF DIVERGENCE BOTH HORIZONTALLY AND VERTICALLY SHALL BE (±)0.2FT FROM A STRING LINE HELD AT EACH END OF THE WALL AND PULLED TAUT.

CAST-IN-PLACE CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE ACI 318 (CURRENT)
2. DESIGN COMPRESSIVE STRENGTH OF CONCRETE SHALL BE A MINIMUM OF 4,000 PSI AT 28 DAYS AS MEASURED BY TESTING CYLINDER SPECIMENS PER ASTM C-39 (U.O.N.). CONTRACTOR SHALL SUBMIT CYLINDER TESTS TO ENGINEER OF RECORD FOR REVIEW. A MINIMUM OF (4) TESTS SHALL BE PROVIDED BY A LICENSED TESTING LABORATORY.
3. REINFORCING BARS: ASTM A 615 GRADE 60 DEFORMED NEW BILLET STEEL OF DOMESTIC MANUFACTURE, FABRICATED IN ACCORDANCE WITH THE C.R.S.I. MANUAL OF STANDARD PRACTICE.
4. PROVIDE PLASTIC TIPPED BAR SUPPORTS OF ADEQUATE STRENGTH AND SPACING TO SUPPORT THE WEIGHT OF REINFORCING BARS AND THE WEIGHT OF WORKERS. PLACE FIRST SUPPORT NO FARTHER THAN 12" FROM THE ENDS OF REINFORCING BARS.
5. FOLLOW ACI 318 (CURRENT) AND ACI 315 (CURRENT) FOR DETAILS OF AND SUPPORTS FOR REINFORCEMENT.
6. REINFORCING BARS ARE CONTINUOUS (U.O.N.). WHERE NECESSARY, TOP BARS SHALL BE SPLICED 40 BAR DIAMETERS AT CENTER OF SPAN. BOTTOM BARS SHALL BE SPLICED 12" OVER CENTERLINE OF SUPPORT. LAP ALL DOWELS IN VERTICAL REINFORCEMENT, 48 BAR DIAMETERS. SPLICES AND LAPS OTHER THAN THOSE INDICATED WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ENGINEER.
7. SPLICE REINFORCING ONLY WHERE SHOWN ON THE DRAWINGS. WHERE CONTINUOUS REINFORCING IS SPECIFIED, SUCH REINFORCING MAY BE SPLICED IN ACCORDANCE WITH CRSI PROVISIONS.
8. CORNER BARS IN WALLS, BEAMS AND TIE BEAMS ARE THE SAME SIZE AND SPACING AS THE HORIZONTAL REINFORCING STEEL.
9. ALL HOOKS ON VERTICAL STIRRUP LEGS MUST BE PLACED AROUND AT LEAST ONE LONGITUDINAL REINFORCING BAR.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONCRETE FORMWORK, BRACING, AND SHORING.
11. THE SLUMP JUST PRIOR TO PLACING SHALL BE 5" (±) 1" FOR ALL CONCRETE.

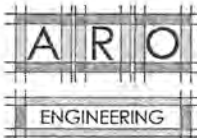
GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF THE QUANTITIES OF WORK REQUIRED TO COMPLETE THE CONSTRUCTION SHOWN ON THE PLANS. THE CONTRACTOR SHALL ALSO MAKE THEIR OWN ASSESSMENT OF THE SITE AND THE WORK REQUIRED PRIOR TO BIDDING AND ANY DISCREPANCIES, ERRORS OR OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER REPRESENTATIVE BEFORE THE BID DUE DATE.
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND UTILITIES OR OTHER OBJECTS PRIOR TO COMMENCING WORK AT THE SITE. ANY UTILITIES OR OTHER ITEMS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT NO COST TO THE OWNER.
3. ALL AREAS OR ITEMS OUTSIDE THE LIMITS OF CONSTRUCTION THAT ARE DAMAGED OR DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL OR BETTER CONDITION AT NO COST TO THE OWNER.
4. THE CONTRACTOR SHALL CHECK PLANS FOR CONFLICTS AND DISCREPANCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD OF ANY CONFLICT BEFORE PERFORMING ANY WORK IN THE AFFECTED AREA.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTION.
6. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO SHALL BE OF LATEST REVISIONS AND/OR LATEST EDITION UNLESS OTHERWISE NOTED.
7. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
8. REPAIR AND REPLACEMENT OF ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION OF EQUAL TO OR BETTER THAN EXISTING CONDITIONS UNLESS SPECIFICALLY EXEMPTED BY THE PLANS.
9. ALL DISTURBED AREAS WITH THE PROJECT NOT DESIGNATED FOR IMPROVEMENTS ARE TO BE RESTORED TO ORIGINAL CONDITION OR BETTER.
10. PEDESTRIAN BRIDGE RECORD DRAWINGS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A REGISTERED LAND SURVEYOR TO RECORD INFORMATION ON A SET OF THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. FOUR SETS OF THE FINAL RECORD DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER.
11. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFFSITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.
12. CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS.
13. BEST MANAGEMENT PRACTICES FOR EROSION AND TURBIDITY CONTROL, INCLUDING BUT NOT LIMITED TO THE USE OF STAKED HAY BALES, TURBIDITY BARRIERS, AND SILT SCREENS, SHALL BE USED AND MAINTAINED AS NECESSARY AT ALL TIMES DURING THE PROJECT. TURBIDITY CONTROL DEVICES SHALL BE MAINTAINED AND SHALL REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION TO ENSURE THAT TURBIDITY LEVELS OUTSIDE THE CONSTRUCTION AREA DO NOT EXCEED 28 NTUS ABOVE BACKGROUND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT TURBIDITY CONTROL DEVICES ARE INSPECTED DAILY AND MAINTAINED IN GOOD WORKING ORDER SO THAT THERE ARE NO VIOLATIONS OF STATE WATER QUALITY STANDARDS OUTSIDE OF THE TURBIDITY SCREENS.
14. REFERENCE IS MADE TO THE GEOTECH REPORT PREPARED BY ANDREYEV ENGINEERING, INC. DATED JUNE 17, 2013

SUBGRADE FILL NOTES:

1. SUB GRADE SHALL BE WELL-DRAINED AND OF UNIFORM BEARING STRENGTH.
2. SUB GRADE SHALL BE COMPACTED TO MINIMUM 98% PROCTOR DENSITY (ASTM D1557)
3. CONTRACTOR SHALL SUBMIT SOIL DENSITY TESTS TO ENGINEER OF RECORD FOR REVIEW PRIOR TO CONSTRUCTION. A MINIMUM OF (4) DENSITY TESTS SHALL BE PROVIDED (AT RANDOM) BY A LICENSED TESTING LABORATORY.
4. SUBGRADE FILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, AND SHALL CONSIST OF SAND FILL WITH BETWEEN 3 TO 12 PERCENT BY WEIGHT OF MATERIAL PASSING THE U.S. STANDARD No. 200 SIEVE SIZE.

THIS PROJECT IS IN NAVD 88 DATUM
NVD 29 = 0, NAVD 88 = (-) 0.683



CERTIFICATE NO. 28619
CIVIL - STRUCTURAL - COASTAL
300 3rd AVENUE N., SUITE 3 ST. PETERSBURG, FL 33701
PHONE 727.527.5500

PROJ. E: 05-13HC0205
DRAWN BY: DE
PLT. MGR: DS

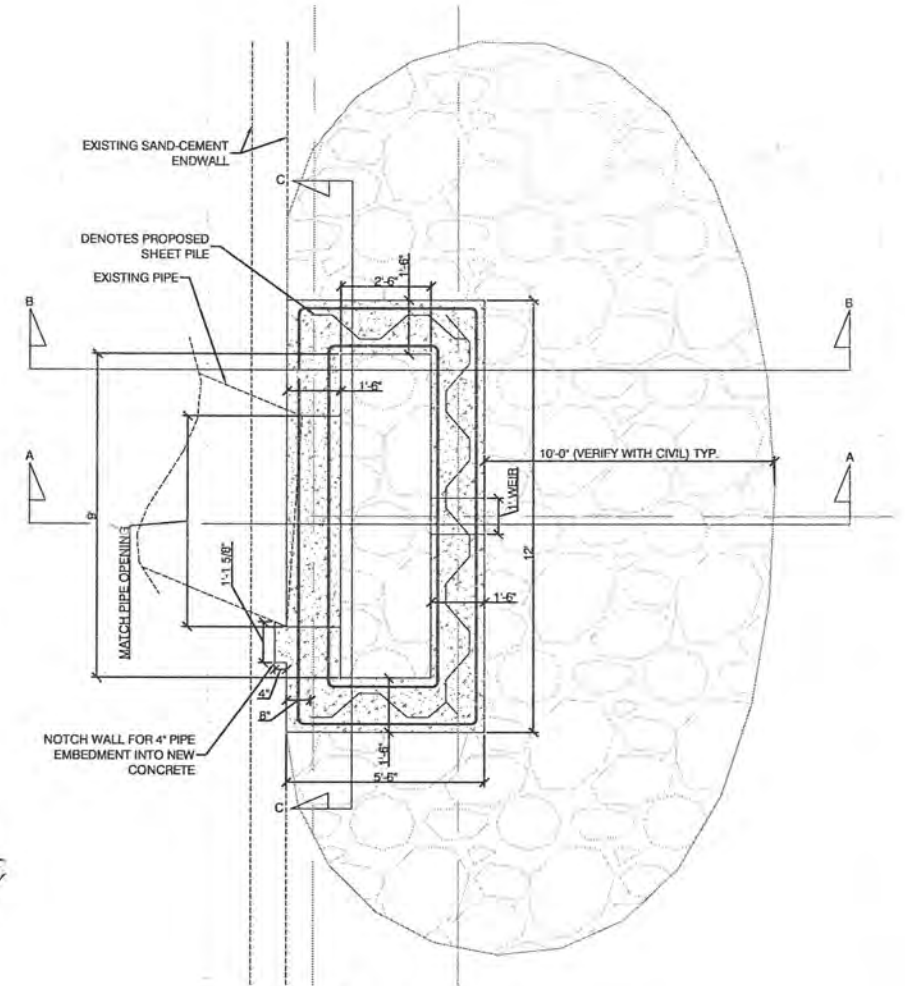
11/11/13
GORDON OBERGROUN, PE
PE NO. 64041

King
ENGINEERING ASSOCIATES, INC.

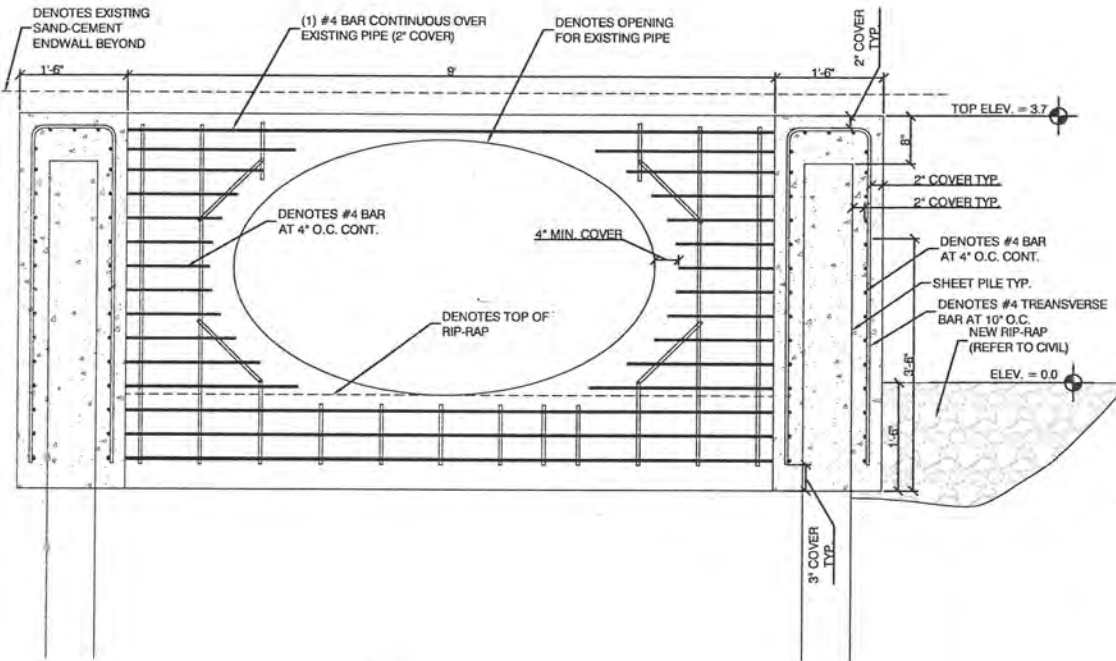
4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

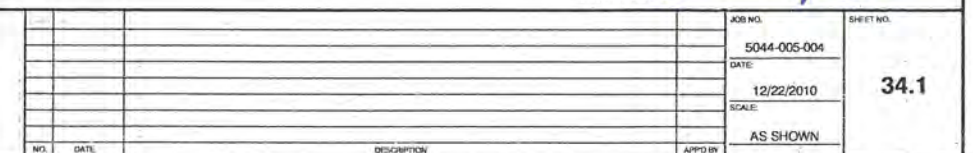
NO.	DATE	DESCRIPTION	APPROVED BY	JOB NO.	SHEET NO.
				5044-005-004	34
				DATE:	12/22/2010
				SCALE:	AS SHOWN

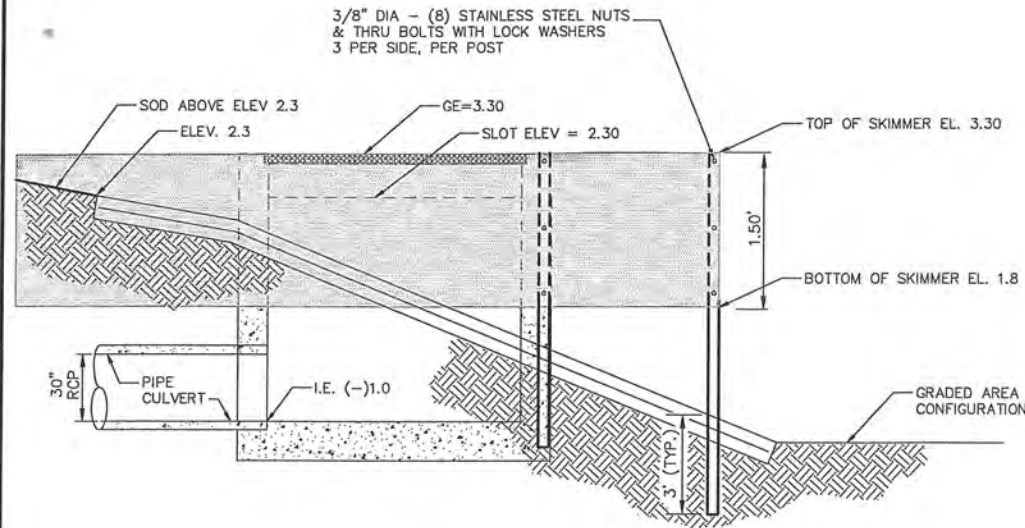


1 PLAN VIEW
34.1 N.T.S.

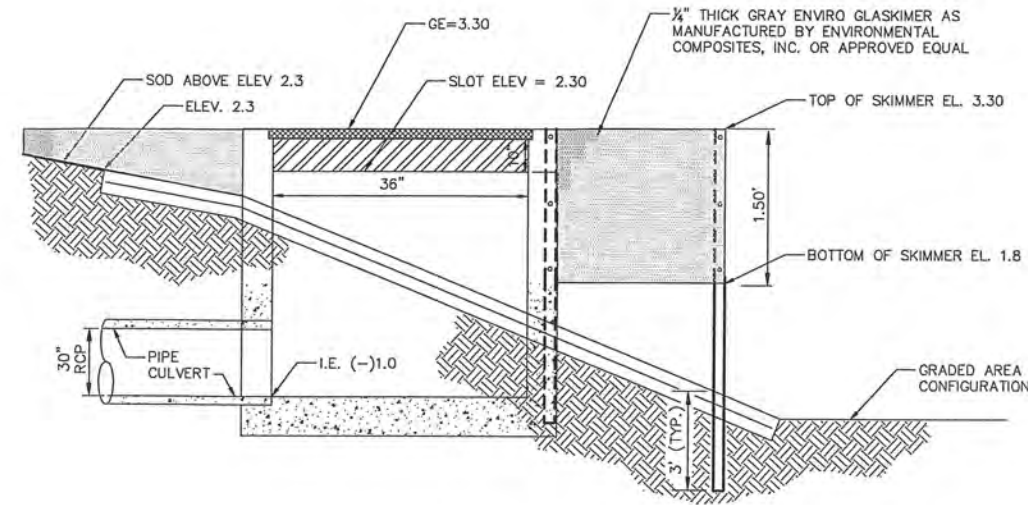


2 SECTION A-A
34.1 N.T.S.

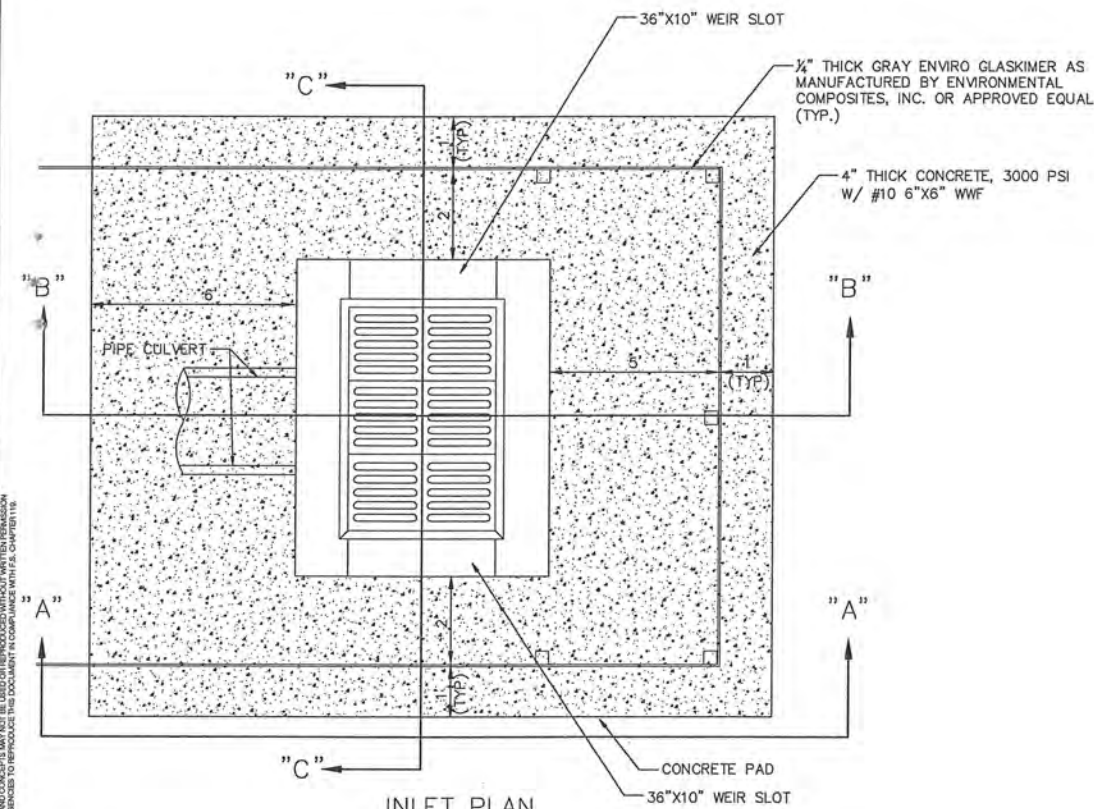




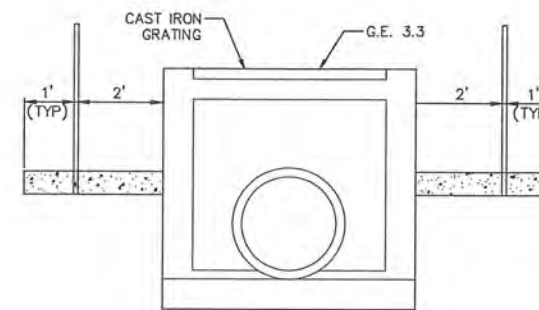
SECTION "A-A"



SECTION "B-B"



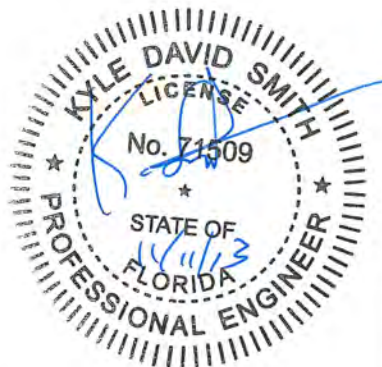
INLET PLAN



RIGHT SIDE VIEW "C-C"

NOTE:
ALL STRUCTURE DIMENSIONS ARE FOR PRE-CAST TYPE CONSTRUCTION.
SEE FDOT INDEX 200, 201 AND 232 FOR ADDITIONAL DETAILS.

CONTROL STRUCTURES STR#S100
FDOT TYPE E DBI
SCALE AS SHOWN



C:\WaterRes\5044\0504\padd\CSBDET-CONT-STB.dwg, November 8, 2013 11:07 AM, KYLE SMITH, King Engineering Associate Inc.
© 2013 King Engineering Associates, Inc. All rights reserved. No part of this document may be reproduced without written permission from King Engineering Associates, Inc. This document is the property of King Engineering Associates, Inc. and is loaned to you for your use only. It is not to be distributed, copied, or otherwise used for any other project without the written consent of King Engineering Associates, Inc.

DESIGNED	THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.
MDP	
CHECKED	
JLW	
BY	
QC	

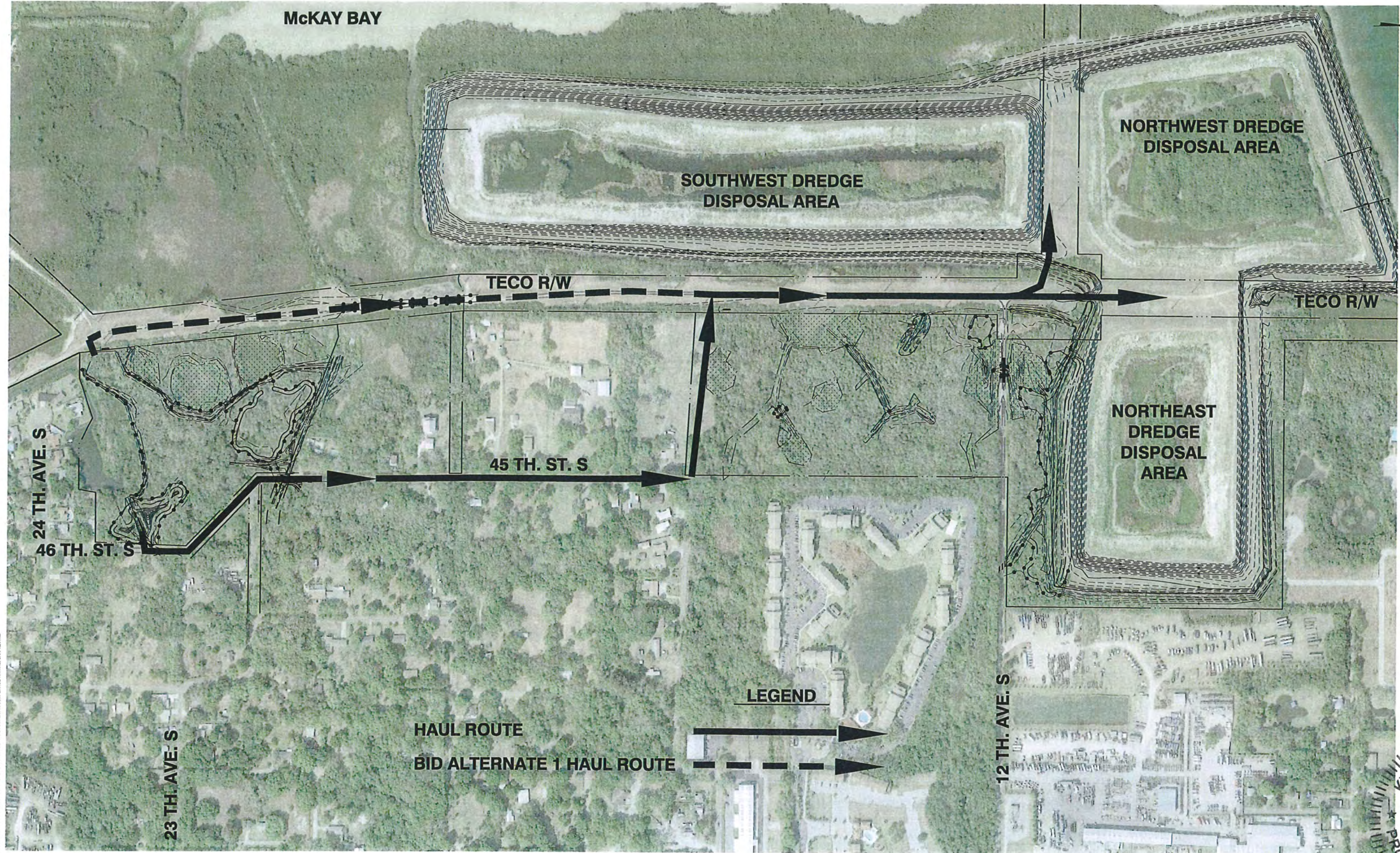
King
ENGINEERING ASSOCIATES, INC.

4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

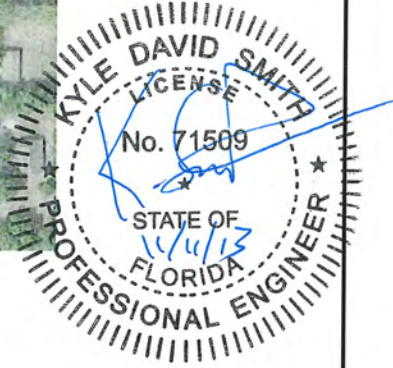
PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

DRAINAGE STRUCTURE S100 DETAIL SHEET

NO.	DATE	DESCRIPTION	APPROVED	JOB NO. 5044-005-004	SHEET NO. 35
				DATE 12/22/2010	
				SCALE AS SHOWN	90% PLANS 11/08/2013



NOTE:
CONTRACTOR TO PROVIDE SOIL TRACKING PREVENTION DEVICES PER
FDOT INDEX 106 AT ALL INGRESS/EGRESS POINTS INTO PUBLIC R/W



C:\WaterRes\5044-005-004\cadd\CD\PLN-HAUL_ROUTE.dwg, November 8, 2013 11:08 AM, KYLE SMITH, King Engineering Associate Inc.
© 2013 KING ENGINEERING ASSOCIATES, INC. ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM KING ENGINEERING ASSOCIATES, INC.

DESIGNED MDP	THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.
DRAWN JLW	
CHECKED	
O.C.	

King
ENGINEERING ASSOCIATES, INC.

4921 Memorial Highway
One Memorial Center, Suite 300
Tampa, Florida 33634
Phone 813 880-8881
Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

SPOIL DISPOSAL HAUL ROUTE PLAN

NO.	DATE	DESCRIPTION	APPROVED	JOB NO. 5044-005-004	SHEET NO. 36
				DATE 12/22/2010	
				SCALE AS SHOWN	90% PLANS 11/08/2013