

Cut along the outer border and affix this label to your sealed proposal envelope to identify it as a “Sealed Proposal”. Be sure to include the name of the company submitting the proposal where requested.

SEALED PROPOSAL • DO NOT OPEN

SEALED PROPOSAL NO.: 134-0310-NC(RM)

PROPOSAL TITLE : **Forest Lakes Boulevard
Reconstruction and Widening Improvements
Professional Engineering Services PID 001642A**


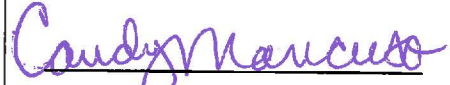
DUE DATE/TIME: **November 25, 2014 @ 3:00 P.M.**

SUBMITTED BY: _____
(Name of Company)

DELIVER TO: PURCHASING DEPARTMENT
Board of County Commissioners
Annex Building –6th Floor
400 South Fort Harrison Avenue
Clearwater, FL 33756

Please Note:

From time to time, addenda may be issued to this proposal. Any such addenda will be posted on the same Web site, <http://www.pinellascounty.org/purchase/CCNA.htm>, from which you obtained this proposal. Before submitting your proposal you should check our Web site to download any addenda that may have been issued. Please remember to sign and return Addenda Acknowledgement Form with completed proposal package if applicable.

SUBMIT TO:  PINELLAS COUNTY BOARD OF COUNTY COMMISSIONERS 400 S. FT. HARRISON AVENUE ANNEX BUILDING – 6TH FLOOR CLEARWATER, FL 33756		<h1 style="text-align: center;">REQUEST FOR QUALIFICATIONS PROPOSAL PROFESSIONAL SERVICES- NON-CONTINUING</h1> <p style="text-align: center;">AS GOVERNED BY FLORIDA STATUTE 287.055</p>	
ISSUE DATE: October 24, 2014		PROPOSAL SUBMITTALS RECEIVED AFTER SUBMITTAL DATE & TIME WILL NOT BE CONSIDERED	
TITLE: Forest Lakes Boulevard Reconstruction and Widening Improvements Professional Engineering Services PID 001642A		RFP NUMBER: 134-0310-NC(RM)	
SUBMITTAL DUE: November 25, 2014 3:00 P.M. AND MAY NOT BE WITHDRAWN FOR 120 DAYS FROM DATE LISTED ABOVE.		PRE-PROPOSAL DATE & LOCATION: NOT APPLICABLE	
DEADLINE FOR WRITTEN QUESTIONS: November 14, 2014 BY 3:00 P.M. SUBMIT QUESTIONS TO: Ruby M. McKenzie, CPPB, Operations Mgr AT rmmckenz@pinellascounty.org Phone: 727-464-3795 Fax: 727-464-3925			
<p style="text-align: center;"><u>THE MISSION OF PINELLAS COUNTY</u></p> <p>Pinellas County Government is committed to progressive public policy, superior public service, courteous public contact, judicious exercise of authority and sound management of public resources to meet the needs and concerns of our citizens today and tomorrow.</p>		 CANDY MANCUSO CPPO Interim Director of Purchasing	

PROPOSER MUST COMPLETE THE FOLLOWING

NO CHANGES REQUESTED BY A PROPOSER WILL BE CONSIDERED AFTER THE RFP OPENING DATE AS ADVERTISED. BY SIGNING THIS PROPOSAL FORM YOU ARE AGREEING TO ALL PROPOSAL TERMS AND CONDITIONS, INCLUDING ALL INSURANCE REQUIREMENTS.

PROPOSER (COMPANY NAME):		D/B/A	
Mailing Address		City, State Zip	
Company Email Address		Phone	Fax
Remit To Name (as Shown on Company Invoice)		Printed Contact Representative/Title/Email	

Proper Corporate Identity is needed when you submit your proposal, especially how your firm is registered with the Florida Division of Corporations. Please visit www.sunbiz.org for this information.

I HEREBY AGREE TO ABIDE BY ALL TERMS AND CONDITIONS OF THIS RFP & CERTIFY I AM AUTHORIZED TO SIGN THIS RFP FOR

AUTHORIZED SIGNATURE	PRINT NAME & TITLE
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RETURN THIS FORM WITH YOUR PROPOSAL

SECTION A - GENERAL CONDITIONS

1. SUBMISSION OF PROPOSAL:

- (a) Proposals will be opened immediately after the proposal submittal date and time (3:00 PM) by the Pinellas County Purchasing Department, 400 South Fort Harrison Avenue, Annex Building, 6th Floor, Clearwater, FL 33756. The public may attend the proposal opening, but may not immediately review any proposals submitted. The names of respondents only will be read aloud at the time of opening. Pursuant to Florida Statute, Section 119.071(1)(b)2, all proposals submitted shall be subject to review as public records 30 days from opening, or earlier if an intended decision is reached before the 30-day period expires. Late proposals will not be accepted.
- (b) Proposals and changes thereto shall be enclosed in sealed envelopes or packages, addressed to the Purchasing Department, Pinellas County. The name and address of the firms, the date and hour of the proposal submittal, and the title shall be placed on the outside of the envelope.
- (c) Proposals must follow the format of the RFP and structure their responses to follow the sequence of the RFP when submitting a proposal. County staff will evaluate the proposals received, based on responsiveness to the evaluation criteria and based on the information being provided in the required sequence.
- (d) Proposers must have experience in work of the same or similar nature, and must provide references that will satisfy the County. Proposer must furnish a reference list of at least four (4) customers for whom they have performed similar services and must provide information as specified in Section D.
- (e) Proposer is advised that exceptions to any of the terms contained in this RFP or the attached service agreement must be identified in its response to the RFP. Failure to do so may lead County to declare any such term non-negotiable. Proposer's desire to take exception to a non-negotiable term will not disqualify it from consideration for award.

2. WRITTEN REQUESTS FOR INTERPRETATIONS/CLARIFICATIONS:

No oral interpretations will be made to any firms as to the meaning of specifications or any other contract documents. All questions pertaining to the terms and conditions or scope of work of this proposal must be sent in writing (mail or fax) to the Purchasing Department and received no later than the deadline specified in RFP. Responses to questions may be handled as an addendum if the response would provide clarification to requirements of the proposal. All such addenda shall become part of the contract documents. The County will not be responsible for any other explanation or interpretation of the proposed RFP made or given prior to the award of the contract. The Purchasing Department will be unable to respond to questions received after the specified deadline.

3. RIGHTS OF PINELLAS COUNTY IN REQUEST FOR PROPOSAL PROCESS:

In addition to all other rights of the County under Florida law, the County specifically reserves the following:

- a) Pinellas County reserves the right to rank firms and negotiate with the highest-ranking firm. Negotiation with an individual proposer does not require negotiation with others.
- b) Pinellas County reserves the right to select the proposal that it believes will serve the best interest of Pinellas County.
- c) Pinellas County reserves the right to reject any or all Requests for Proposals. The respective constitutional officer, county administrator on behalf of the board of county commissioners or within his/her delegated financial approval authority, or director of purchasing, within his/her delegated financial approval authority shall have the authority when the public interest will be served thereby to reject all proposals or parts of proposals at any stage of the procurement process through the award of the contract.
- d) Pinellas County reserves the right to cancel the entire Request for Proposal.
- e) Pinellas County reserves the right to remedy or waive minor informalities or irregularities, or immaterial errors in the Request for Proposal or in proposals submitted.
- f) Pinellas County reserves the right to request any necessary clarifications or proposal data without changing the terms of the proposal.

SECTION A - GENERAL CONDITIONS

4. **COSTS INCURRED BY PROPOSERS:**

All expenses involved with the preparation and submission of proposals to the County, or any work performed in connection therewith, shall be borne solely by the Proposer(s). No payment will be made for any responses received, or for any other effort required of, or made by, the Proposer(s) prior to contract commencement.

5. **ORAL PRESENTATION:**

Based on the evaluation of the written proposals submitted, a minimum of three (3) highest ranked firms, (if at least three firms submitted and are deemed qualified to proceed) shall be shortlisted and may be invited to an oral presentation. The scores from the written evaluation phase will be carried forward (for shortlisted firms) and combined with scores from the oral presentation process for one total score potential of 2000 points (1,000 points from the written and 1,000 points from the oral). The firm with the highest combined score shall proceed with the contracting process.

6. **CONFLICT OF INTEREST:**

- a) The Proposer represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance or services required hereunder. The Proposer further represents that no person having any such interest shall be employed by him/her during the agreement term and any extensions. In addition, the Proposer shall not offer gifts or gratuities to County Employees as County Employees are not permitted to accept gifts or gratuities. By signing this proposal document, the Proposer acknowledges that no gifts or gratuities have been offered to County Employees or anyone else involved in this competitive proposal process.
- b) The Proposer shall promptly notify the County's representative, in writing, by certified mail, of all potential conflicts of interest for any prospective business association, interest, or other circumstance, which may influence or appear to influence the Contractor's judgment or quality of services being provided hereunder. Such written notification shall identify the prospective business association, interest or circumstance, the nature of work that the Proposer may undertake and request an opinion of the County as to whether the association, interest or circumstance would, in the opinion of the County, constitute a conflict of interest if entered into by the Proposer. The County agrees to notify the Proposer of its opinion, by certified mail, within thirty days of receipt of notification by the Proposer.
- c) It is essential to government procurement that the process be open, equitable and ethical. To this end, if potential unethical practices including but not limited to collusion, receipt or solicitation of gifts and conflicts of interest (direct/indirect) etc. are observed or perceived, please report such activity to:

Pinellas County Clerk of Circuit Court – Division of Inspector General

(727) 45FRAUD (453-7283)
Fax – 727-464-8386

7. **WITHDRAWAL OF PROPOSAL:**

A proposal may be withdrawn prior to the time set for the proposal submittal, based on a written request from an authorized representative of the firm; however, a proposal may not be withdrawn after the time set for the proposal submittal for a period of time as specified.

8. **LATE PROPOSAL OR MODIFICATIONS:**

Proposal and modifications received after the time set for the proposal submittal will not be considered; however, modifications in writing received prior to the time set for the proposal submittal will be accepted. **In addition, late proposals will not be accepted, will be rejected and will be returned for any reason. The time clock stamp located in Pinellas County Purchasing Department shall be the official time stamp.** This upholds the integrity of the proposal process.

9. **LOCAL, STATE, AND FEDERAL COMPLIANCE REQUIREMENTS:**

The laws of the State of Florida apply to any purchase made under this Request for Proposal. Proposers shall comply with all local, state, and federal directives, orders and laws as applicable to this proposal and subsequent contract(s) including but not limited to Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973, Equal Employment Opportunity (EEO), Minority Business Enterprise (MBE), and OSHA as applicable to this contract.

10. **RIGHT TO AUDIT:**

Pinellas County reserves the privilege of auditing a vendor's records as such records relate to purchases between Pinellas County and said vendor. Such audit privilege is provided for within the text of the Pinellas County Code §2-156 through §2-176(j). Records should be maintained for three years from the date of final payment.

SECTION A - GENERAL CONDITIONS

11. STATEMENT RELATIVE TO "PUBLIC ENTITY CRIMES":

The proposer is directed to the Florida Public Entity Crime Act, §287.133, Florida Statutes, and the County's requirement that the successful proposer comply with it in all respects prior to and during the term of this contract.

12. COUNTY INDEMNIFICATION:

If the CONSULTANT is an individual or entity licensed by the state of Florida who holds a current certificate of registration under Chapter 481, Florida Statutes, to practice architecture or landscape architecture, under Chapter 472, Florida Statutes, to practice land surveying and mapping, or under Chapter 471, Florida Statutes, to practice engineering, and who enters into a written agreement with the COUNTY relating to the planning, design, construction, administration, study, evaluation, consulting, or other professional and technical support services furnished in connection with any actual or proposed construction, improvement, alteration, repair, maintenance, operation, management, relocation, demolition, excavation, or other facility, land, air, water, or utility development or improvement, the CONSULTANT will indemnify and hold harmless the COUNTY, and its officers and employees, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the CONSULTANT and other persons employed or utilized by the CONSULTANT in the performance of the Agreement.

13. TERMINATION:

- a) Pinellas County reserves the right to terminate this contract without cause by giving thirty (30) days prior notice to the contractor in writing of the intention to terminate or with cause if at any time the contractor fails to fulfill or abide by any of the terms or conditions specified.
- b) Failure of the contractor to comply with any of the provisions of this Agreement shall be considered a material breach of Agreement and shall be cause for immediate termination of the Agreement at the discretion of Pinellas County.
- c) In the event sufficient budgeted funds are not available for a new fiscal period, the County shall notify the Proposer of such occurrence and Agreement shall terminate on the last day of current fiscal period without penalty or expense to the County.
- d) In addition to all other legal remedies available to Pinellas County, Pinellas County reserves the right to terminate and obtain from another source, any items which have not been delivered within the period of time stated in the proposal, or if no such time is stated, within a reasonable period of time from the date of order as determined by Pinellas County.

14. ASSIGNMENT/SUBCONTRACTING/CORPORATE ACQUISITIONS AND/OR MERGERS:

The Contractor shall perform this contract. No assignment or subcontracting shall be allowed without prior written consent of the County. If a proposer intends to subcontract a portion of this work, the proposer must disclose that intent in the proposal. In the event of a corporate acquisition and/or merger, the Contractor shall provide written notice to the County within thirty (30) business days of Contractor's notice of such action or upon the occurrence of said action, whichever occurs first. The right to terminate this contract, which shall not be unreasonably exercised by the County, shall include, but not be limited to, instances in which a corporate acquisition and/or merger represent a conflict of interest or are contrary to any local, state, or federal laws. Action by the County awarding a proposal to a firm that has disclosed its intent to assign or subcontract in its response to the RFP, without exception shall constitute approval for purpose of this Agreement.

15. LOBBYING:

Lobbying shall be prohibited on all county competitive selection processes and purchasing contract awards pursuant to this division, including, but not limited to, requests for proposals, requests for quotations, requests for qualifications, bids or the award of purchasing contracts of any type. The purpose of this prohibition is to protect the integrity of the procurement process by shielding it from undue influences prior to the contract award, or the competitive selection process is otherwise concluded. However, nothing herein shall prohibit a prospective bidder/proposer/protestor from contacting the purchasing department or the county attorney's office to address situations such as clarification and/or pose questions related to the procurement process.

Lobbying of evaluation committee members, county government employees, elected/appointed officials, or advisory board members regarding requests for proposals, requests for quotations, requests for qualifications, bids, or purchasing contracts, by the bidder/proposer, any member of the bidder's/proposer's staff, any agent or representative of the bidder/proposer, or any person employed by any legal entity affiliated with or representing a bidder/proposer/protestor, is strictly prohibited from the date of the advertisement, or on a date otherwise established by the board of county commissioners, until either an award is final, or the competitive selection process is otherwise concluded. Any lobbying activities in violation of this section by or on behalf of a bidder/proposer shall result in the disqualification or rejection of the proposal, quotation, statement of qualification, bid or contract.

SECTION A - GENERAL CONDITIONS

For purposes of this provision, lobbying shall mean influencing or attempting to influence action or non-action, and/or attempting to obtain the goodwill of persons specified herein relating to the selection, ranking, or contract award in connection with any request for proposal, request for quotation, request for qualification, bid or purchasing contract through direct or indirect oral or written communication. The final award of a purchasing contract shall be the effective date of the purchasing contract.

Any evaluation committee member, county government employee, elected/appointed official, or advisory board member who has been lobbied shall immediately report the lobbying activity to the director of purchasing.

16. PROTEST PROCEDURE:

As per Section 2-162 of County Code

(a) *Bid/Proposal protests.* Any prospective bidder or proposer, who is aggrieved by the contents of the bid or proposal package, or any bidder or proposer who is aggrieved in connection with the recommended award on a bid or proposal solicitation, may file a written protest to the director of purchasing as provided herein. This right to protest is strictly limited to those procurements of goods or services solicited through invitations to bid or requests for proposals, including solicitations pursuant to § 287.055, Florida Statutes, the "Consultants' Competitive Negotiation Act." No other actions or recommendations in connection with a solicitation can be protested, including: (i) requests for quotations or requests for qualifications; (ii) rejection of some, all or parts of bids or proposals; (iii) disqualification of bidders or proposers as non-responsive or nonresponsible; or (iv) recommended awards less than the mandatory bid or proposal amount. Protests failing to comply with the provisions of this section 2-162 shall not be reviewed.

(b) The purchasing department shall post the recommended award on the departmental website no less than five (5) full business days after the decision to recommend the award is made.

(c) *Requirements to Protest.*

(1) If the protest relates to the content of the bid/proposal package, a formal written protest must be filed no later than 5:00 p.m. on the fifth full business day after issuance of the bid/proposal package.

(2) If the protest relates to the recommended award of a bid or proposal, a formal written protest must be filed no later than 5:00 p.m., on the fifth full business day after posting of the award recommendation.

(3) The formal written protest shall identify the protesting party and the solicitation involved; include a statement of the grounds on which the protest is based; refer to the statutes, laws, ordinances or other legal authorities which the protesting party deems applicable to such grounds; and specifically request the relief to which the protesting party deems itself entitled by application of such authorities to such grounds.

(4) A formal written protest is considered filed with the county when the purchasing department receives it. Accordingly, a protest is not timely filed unless it is received within the time specified above by the purchasing department. Failure to file a formal written protest within the time period specified shall constitute a waiver of the right to protest and result in relinquishment of all rights to protest by the bidder/proposer.

(d) *Rights of interested parties.* Bidders or proposers, other than the protestor, which would be directly affected by the favorable resolution of a protest relating to a recommended award, shall have the right to provide written documentation related to the protested solicitation. Said interested parties shall be solely responsible for determining whether a protest has been filed. Any documentation submitted by an interested party must be filed with the director of purchasing no later than 5:00 p.m. on the fifth full business day after the purchasing department posts notification that a protest has been filed. Any interested party submitting documentation shall bear all costs, including legal representation, relating to the submission.

(e) *Sole remedy.* These procedures shall be the sole remedy for challenging an award of bid. Bidder/proposers are prohibited from attempts to influence, persuade, or promote a bid protest through any other channels or means. Such attempts shall be cause for suspension in accordance with 2-161(b) of this article.

(f) *Lobbying.* Protestors, and interested parties as defined subsection (d), and anyone acting on their behalf, are prohibited from attempts to influence, persuade, or promote a bid or proposal protest through any other channels or means, and contacting any Pinellas County official, employee, advisory board member, or representative to discuss any matter relating in any way to the solicitation being protested, other than the purchasing department's or county attorney's office employees. The prohibitions provided for herein shall begin with the filing of the protest and end upon the final disposition of the protest; provided however, at all times protestors shall be subject to the procurement lobbying prohibitions in section 2-189 of this code. Failure to adhere to the prohibitions herein shall result in the rejection of the protest without further consideration.

SECTION A - GENERAL CONDITIONS

- (g) *Time Limits.* The time limits in which protests must be filed as specified herein may be altered by specific provisions in the Bid/Request for Proposal.
- (h) *Authority to resolve.* The Director of Purchasing shall resolve the protest in a in accordance with the documentation and applicable legal authorities and shall issue a written decision to the protestor no later than 5:00 p.m. on the tenth full business day after the filing thereof.
- (i) *Review of Purchasing Director's decision.*
- (1) The protesting party may request a review of the Purchasing Director's decision to the County Administrator by delivering written request for review of the decision to the Director of Purchasing by 5:00 p.m. on the fifth full business day after the date of the written decision. The written notice shall include any materials, statements, arguments which the bidder/proposer deems relevant to the issues raised in the request to review the decision of the Purchasing Director.
- (2) The county administrator shall issue a decision in writing stating the reason for the action with a copy furnished to the protesting party no later than 5:00 p.m., on the seventh full business day after receipt of the request for review. The decision shall be final and conclusive as to the county unless a party commences action in a court of competent jurisdiction.
- (j) *Stay of Procurement During Protests.* There shall be no stay of procurement during protests.

17. INTEGRITY OF REQUEST FOR PROPOSAL (RFP) DOCUMENTS:

Proposers shall use the original RFP Form(s) provided by the Purchasing Department and enter information only in the spaces where a response is requested. Proposers may use an attachment as an *addendum* to the RFP Form(s) if sufficient space is not available on the original form for the proposer to enter a complete response. **Any modifications or alterations to the original RFP documents by the proposer, whether intentional or otherwise, will constitute grounds for rejection of a RFP.** Any such modifications or alterations a proposer wishes to propose must be clearly stated in the proposer's RFP response and presented in the form of an addendum to the original RFP documents.

18. SERVICES AGREEMENT:

A written agreement, in substantially the form attached, incorporating the Request for Proposal and the successful proposal will be prepared by the County, signed by the successful proposer and presented to the Board of County Commissioners, County Administrator or Director of Purchasing for approval and signature.

19. OWNERSHIP OF DOCUMENTS:

A. Drawings, specifications, designs, models, photographs, reports, surveys, calculations, and other data provided in connection with this RFP are and shall remain the property of the County whether the project for which they are made is executed or not. Such finished or unfinished documents, data, calculations, studies, surveys, specifications, drawings, maps, models, photographs and reports prepared by the Consultant shall be delivered by the Consultant to the County at the conclusion of the project or the termination of the Consultant's services.

B. When such documents are provided to other parties, the Consultant shall ensure return of the County's property.

20. INDEPENDENT CONTRACTOR STATUS AND COMPLIANCE WITH THE IMMIGRATION REFORM AND CONTROL ACT OF 1986:

Consultant acknowledges that it is functioning as an independent contractor in performing under the terms of this contract, and it is not acting as an employee of Pinellas County. The consultant acknowledges that it is responsible for complying with the provisions of the Immigration Reform and Control Act of 1986, located at 8 U.S.C. Section 1324, *et seq.*, and regulations relating thereto. Failure to comply with the above provisions of the contract shall be considered a material breach and shall be ground for immediate termination of the contract.

SECTION A - GENERAL CONDITIONS

21. **PROHIBITION AGAINST CONTINGENT FEE:**

The consultant warrants that he has not employed or retained any company or person, other than a bona fide employee working solely for the consultant to solicit or secure this contract and that he has not paid or agreed to pay any person, company, corporation, individual, or firm other than a bona fide employee working solely for the consultant, any fee, commission, percentage, gift or any other consideration, contingent upon or resulting from the award or making of this contract.

22. **TRUTH IN NEGOTIATIONS:**

The Consultant certifies to truth-in-negotiation and that wage rates and other factual unit costs supporting the compensation are accurate, complete and current at the time of contracting. Further, the original contract amount and any additions thereto shall be adjusted to exclude any significant sums where the County determines the contract price was increased due to inaccurate, incomplete or non-current wage rates and other factual unit costs. Such adjustments must be made within one (1) year following the end of the contract.

23. **JOINT VENTURES:**

All Proposers intending to submit a proposal as a Joint Venture are required to have filed proper documents with the Florida Department of State, the Division of Professions, Construction Industry Licensing Board and any other state or local licensing Agency prior to submitting the proposal (see Section 489.119 Florida statutes).

Joint Venture Firms must provide an affidavit attesting to the formulation of a joint venture and provide either proof of incorporation as a joint venture or a copy of the formal joint venture Agreement between all joint venture parties, indicating their respective roles, responsibilities and levels of participation for the project.

24. **PAYMENT/INVOICES:**

SUPPLIER shall submit invoices for payment due as provided herein with such documentation as required by Pinellas County and all payments shall be made in accordance with the requirements of Section 218.70 *et. seq.*, Florida Statutes, "The Local Government Prompt Payment Act." Invoices shall be submitted to the address below unless instructed otherwise on the purchase order, or if no purchase order, by the ordering department:

Finance Division Accounts Payable
Pinellas County Board of County Commissioners
P. O. Box 2438
Clearwater, FL 33757

Each invoice shall include, at a minimum, the Supplier's name, contact information and the standard purchase order number. In order to expedite payment, it is recommended the Supplier also include the information shown in below. The County may dispute any payments invoiced by SUPPLIER in accordance with the County's Dispute Resolution Process for Invoiced Payments, established in accordance with Section 218.76, Florida Statutes, and any such disputes shall be resolved in accordance with the County's Dispute Resolution Process.

INVOICE INFORMATION:

Supplier Information Company name, mailing address, phone number, contact name and email address as provided on the PO

Remit To Billing address to which you are requesting payment be sent

Invoice Date Creation date of the invoice

Invoice Number Company tracking number

Shipping Address Address where goods and/or services were delivered

Ordering Department Name of ordering department, including name and phone number of contact person

PO Number Standard purchase order number

Ship Date Date the goods/services were sent/provided

Quantity Quantity of goods or services billed

SECTION A - GENERAL CONDITIONS

Description	Description of services or goods delivered
Unit Price	Unit price for the quantity of goods/services delivered
Line Total	Amount due by line item
Invoice Total	Sum of all of the line totals for the invoice

Pinellas County offers a credit card payment process (ePayables) through Bank of America. Pinellas County does not charge vendors to participate in the program; however, there may be a charge by the company that processes your credit card transactions. For more information please visit Pinellas County purchasing website at www.pinellascounty.org/purchase.

25. TAXES:

The County is exempt from all state and federal sales, use, transportation and excise taxes. Taxes of any kind and character, payable on account of the work performed and materials furnished under the award, shall be paid by the proposer and deemed to have been included in the RFP. The Laws of the State of Florida provide that sales and use taxes are payable by the proposer upon the tangible personal property incorporated in the work and such taxes shall be paid by the proposer and be deemed to have been included in the RFP.

26. DISPUTE RESOLUTION FOR PINELLAS COUNTY BOARD OF COUNTY COMMISSIONERS IN MATTERS OF INVOICE PAYMENTS:

Payment of invoices for work performed for Pinellas County Board of County Commissioners (County) is made, by standard, in arrears in accordance with Section 218.70, et. seq., Florida Statutes, the Local Government Prompt Payment Act.

If a dispute should arise as a result of non-payment of a payment request or invoice the following Dispute Resolution process shall apply:

A. Pinellas County shall notify a vendor in writing within ten (10) days after receipt of an improper invoice, that the invoice is improper. The notice should indicate what steps the vendor should undertake to correct the invoice and resubmit a proper invoice to the County. The steps taken by the vendor shall be that of initially contacting the requesting department to validate their invoice and receive a sign off from that entity that would indicate that the invoice in question is in keeping with the terms and conditions of the agreement. Once sign off is obtained, the vendor should then resubmit the invoice as a "Corrected Invoice" to the requesting department which will initiate the payment timeline.

1 Requesting department for this purpose is defined as the County department for whom the work is performed.

2 Proper invoice for this purpose is defined as an invoice submitted for work performed that meets prior agreed upon terms or conditions to the satisfaction of Pinellas County.

B. Should a dispute result between the vendor and the County about payment of a payment request or an invoice then the vendor should submit their dissatisfaction in writing to the Requesting Department. Each Requesting Department shall assign a representative who shall act as a "Dispute Manager" to resolve the issue at departmental level.

C. The Dispute Manager shall first initiate procedures to investigate the dispute and document the steps taken to resolve the issue in accordance with section 218.76 Florida Statutes. Such procedures shall be commenced no later than forty-five (45) days after the date on which the payment request or invoice was received by Pinellas County, and shall not extend beyond sixty (60) days after the date on which the payment request or invoice was received by Pinellas County.

D. The Dispute Manager should investigate and ascertain that the work, for which the payment request or invoice has been submitted, was performed to Pinellas County's satisfaction and duly accepted by the Proper Authority. Proper Authority for this purpose is defined as the Pinellas County representative who is designated as the approving authority for the work performed in the contractual document. The Dispute Manager shall perform the required investigation and arrive at a solution before or at the sixty (60) days timeframe for resolution of the dispute, per section 218.76, Florida Statutes. The County Administrator or his or her designee shall be the final arbiter in resolving the issue before it becomes a legal matter. The County Administrator or his or her designee will issue their decision in writing.

SECTION A - GENERAL CONDITIONS

E. Pinellas County Dispute Resolution Procedures shall not be subject to Chapter 120 of the Florida Statutes. The procedures shall also, per section 218.76, Florida Statutes, not be intended as an administrative proceeding which would prohibit a court from ruling again on any action resulting from the dispute.

F. Should the dispute be resolved in the County's favor interest charges begin to accrue fifteen (15) days after the final decision made by the County. Should the dispute be resolved in the vendor's favor the County shall pay interest as of the original date the payment was due.

G. For any legal action to recover any fees due because of the application of sections 218.70 et. seq., Florida Statutes, an award shall be made to cover court costs and reasonable attorney fees, including those fees incurred as a result of an appeal, to the prevailing party. If it is found that the non-prevailing party held back any payment that was the reason for the dispute without having any reasonable lawful basis or fact to dispute the prevailing party's claim to those amounts.

27. INSURANCE:

Notice: The Contractor/Vendor must provide a certificate of insurance and endorsement in accordance with the insurance requirements listed below (Section C). Failure to provide the required insurance within a ten (10) day period following the determination or recommendation of the highest ranked firm may result in the County to vacate the original determination or recommendation and proceed with recommendation to the second highest ranked firm.

28. PUBLIC RECORDS/TRADE SECRETS:

Pinellas County Government is subject to the Florida Public Records law (Chapter 119, Florida Statutes), and all documents, materials, and data submitted to any solicitation as part of the response are governed by the disclosure, exemption and confidentiality provisions relating to public records in Florida Statutes. Except for materials that are "trade secrets" or "confidential" as defined by applicable Florida law, ownership of all documents, materials, and data submitted in response to the solicitation shall belong exclusively to the County.

To the extent that Proposer/Bidder/Quoter desires to maintain the confidentiality of materials that constitute trade secrets pursuant to Florida law, trade secret material submitted must be identified by some distinct method that the materials that constitute a trade secret, and Proposer/Bidder/Quoter shall provide an additional copy of the proposal/bid/quote that redacts all designated trade secrets. By submitting materials that are designated as trade secrets and signature of the Proposer/Bidder/Quoter Signature Page, Proposer/Bidder/Quoter acknowledges and agrees:

- (i) that after notice from the County that a public records request has been made for the materials designated as a trade secret, the Proposer/Bidder/Quoter shall be solely responsible for defending its determination that submitted material is a trade secret that is not subject to disclosure at its sole cost, which action shall be taken immediately, but no later than 10 calendar days from the date of notification or Proposer /Bidder/Quoter will be deemed to have waived the trade secret designation of the materials;
- (ii) that to the extent that the proposal/bid/quote with trade secret materials is evaluated, the County and its officials, employees, agents, and representatives in any way involved in processing, evaluating, negotiating contract terms, approving any contract based on the proposal/bid/quote, or engaging in any other activity relating to the competitive selection process are hereby granted full rights to access, view, consider, and discuss the materials designated as trade secrets through the final contract award;
- (iii) to indemnify and hold the County, and its officials, employees, agents and representatives harmless from any actions, damages (including attorney's fees and costs), or claims arising from or related to the designation of trade secrets by the Proposer/Bidder/Quoter, including actions or claims arising from the County's non-disclosure of the trade secret materials.
- (iv) that information and data it manages as part of the services may be public record in accordance with Chapter 119, Florida Statutes and Pinellas County public record policies. Proposer/Bidder/Quoter agrees prior to providing goods/services it will implement policies and procedures to maintain, produce, secure and retain public records in accordance with applicable laws, regulations, and County Policies, which are subject to approval by the County, including but limited to the Section 119.0701, Florida Statutes.

Notwithstanding any other provision in the solicitation, the classification as trade secret of the entire proposal/bid/quote document, line item and/or total proposal/bid/quote prices, the work, services, project, goods, and/or products to be provided by Proposer/Bidder/Quoter, or any information, data, or materials that may be part of or incorporated into a contract between the County and the Proposer/Bidder/Quoter is not acceptable to the County and will result in a determination that the proposal/bid/quote is nonresponsive; the classification as trade secret of any other portion of a proposal/bid/quote document may result in a determination that the proposal/bid/quote is nonresponsive.

SECTION B – SPECIAL CONDITIONS

Proposal Title: Forest Lakes Boulevard Reconstruction and Widening Improvements Professional Engineering Services PID 001642A
Proposal Number: 134-0310-NC(RM)

1. PURPOSE:

The purpose of this competitive process is to ensure Pinellas County compliance with Section 287.055 Florida Statutes known as the "Consultants' Competitive Negotiation Act" (CCNA). The CCNA establishes contracting procedures by which counties must select architects, professional engineers, landscape architects, and surveyors and mappers ("Professional Firms") for architectural, engineering, landscaping and mapping services ("Professional Services"). The CCNA process allows for professional firms to be chosen on quality of personnel, minority business enterprise consideration, past performance, willingness to meet time and budget requirements, location, workload, and volume of work previously awarded to each Professional Firm by the County.

2. PERIOD OF CONTRACT:

Services performed pursuant to this contract shall commence upon execution of the agreement and receipt of Notice to Proceed (NTP) and purchase order and continue as necessary to perform and complete all the work required. Duration of the contract shall be for the period of Four (4) years from the commencement date of the NTP unless otherwise indicated.

3. EVALUATION CRITERIA for Written Proposals:

Following is the criteria that will be used by the County to evaluate and score responsive and qualified written proposals. Proposers shall include sufficient information to allow the County to thoroughly evaluate and score their proposals. Each proposal submitted shall be evaluated and ranked by an evaluation committee. A minimum of three (3) highest ranked firms (if at least three firms submitted and are deemed qualified to proceed) shall be shortlisted and invited to an oral presentation. The scores from the short listed firms are carried forward. Final ranking recommendation is based on the combined scores obtained for a total potential 2000 points.

a. Ability of Firm and its Professional Personnel. Willingness and Ability to Meet Schedule and Budget Based on Current and Projected Workload. 450 Points

1. Reviews the level of qualifications and experience of the firm and project team and appropriateness of the organization of the project team.
2. Reviews the professional resources available to properly provide services as requested in the RFP document.
3. Reviews the project team to insure the team proposed contains all of the critical disciplines required.
4. Prime team proposed should have exceptional professional resources to properly provide services.
5. The project manager and proposed team should be uniquely qualified to provide the desired services.
6. Evaluates the workload commitments that will impact the firm's ability to complete services on schedule.
7. The submittal should demonstrate that the firm has adequate time available and personnel to compete services on schedule and additional backup staffing capability in the event of unforeseen circumstances.

b. Firm Experience with Projects of Similar Size and Past Performance 375 Points

1. Reviews the firms experience with projects of similar size, type and scope and the performance on those specific projects.
2. The prime firm must have adequate, recent (within the past five years) experience with projects of similar type as defined in the RFP document.
3. Experience pertaining to specific Pinellas County projects may also be considered. Pinellas County staff shall not however furnish references for such projects.
4. The scope of services provided should represent projects that are similar to those defined in the RFP document.
5. The overall performance of the firm relative to projects of similar size and scope should be evaluated.

c. Volume of Work Previously Awarded by the County 50 Points

Pre-populated by the Purchasing Department, the purpose of this criterion is to effect an equitable distribution of contracts. This criterion is evaluated based on all CCNA Non-Continuing contracts value awarded to a firm during the two (2) previous completed fiscal years through to current date. The points are worth 5 percent of the overall points available and are distributed as follows:

\$0 - \$200,000 – five (5%) percent of points available

\$200,001 - \$400,000 – four (4%) percent of points available

SECTION B – SPECIAL CONDITIONS

\$400,001 – 600,000 – three (3%) percent of points available

\$600,001- \$800,000 – two (2%) percent of points available

\$800,001 - \$1,000,000 – one (1%) percent of points available

Over \$1,000,000 – zero (0%) percent of points available

Based on a typical 1000 point evaluation scoring process, a firm deemed to be in the \$0-\$200,000 category threshold would be allotted 50 points etc.

d. **Minority Business Status**

50 Points

Provides points pre-populated by the Purchasing Department for minority business status as designated by the State of Florida. If the firm, or its sub contractors, is designated as a minority business by the State of Florida, five (5%) percent of the total evaluation points are awarded. If the firm does not have minority business status as per the State of Florida, zero (0%) percent of the points available are awarded.

e. **Location**

75 Points

Provides points pre-populated by the Purchasing Department. Evaluates the location of the project team relative to Pinellas County including the prime firm and project manager. If firm has an established office located in Pinellas, Manatee, Hillsborough or Pasco counties, 75 points are awarded. If not, no points will be awarded.

Total 1000 Points

4. **EVALUATION CRITERIA for Oral Presentations**

The scores from the written evaluation phase will be carried forward (for the shortlisted firms deemed qualified to proceed) and combined with scores from the oral presentation process for one total score potential of 2000 points. The firm with the highest combined score shall proceed with the contracting process.

a. **Understanding of Project /Firm Qualifications**

500 Points

1. Evaluation of the firm's understanding of the overall project including the scope of work which may include but is not limited to; studies performed that affect the project, key design elements and affect on the community involved..
2. Evaluation of the firm's qualifications and qualifications of the individuals proposed for the project including the project manager and staff of the firm to be assigned. Qualifications shall include but not be limited to experience with similar projects, management experience, firm experience etc.

b. **Ability to Provide Required Services Within the Schedule and Budget**

300 Points

Evaluation of the firm's overall approach including experience in scheduling projects, systems that will be used to keep track of the project schedule, cost control, quality assurance and quality control, issues and methods employed to avoid cost overruns and project delays.

c. **Managerial Methods used to Plan, Design and Administer the Project**

200 Points

Evaluation of the overall approach to the project proposed by the firm and the appropriateness of the methods proposed to plan, design and administer the project in relation to the scope of work and County requirements.

Total 1000 Points

SECTION B – SPECIAL CONDITIONS**5. TIME LINE:**

Following is a listing of actions and anticipated dates; the County reserves the right to change the dates, if necessary.

Date	
10/24/14	Advertising & Publishing RFP
11/14/14	Deadline for Questions/Clarifications
11/25/14	Proposals due in Purchasing by 3:00 p.m. Public ITB/RFP opening to follow immediately.
TBD	Evaluation of the RFP
TBD	Recommendation due to Purchasing from Department
TBD	Submit recommendation to Board for Award of Contract

6. INFORMATION PACKAGE:**Request for Letters of Interest for Professional Services As Governed by Florida Statute 287.055**

- 1) "Professional services" is defined as those services within the scope of the practice of architecture, professional engineering, landscape architecture, or registered surveying and mapping, as defined by the laws of the state, or those performed by any architect, professional engineer, landscape architect, or registered surveyor and mapper in connection with his or her professional employment or practice.
- 2) An award may not be issued without proof that your firm is registered with the Florida Division of Corporations, as per Florida Statute §607.1501 (<http://www.flsenate.gov/Laws/Statutes/2011/607.1501>).
- 3) A foreign corporation (foreign to the State of Florida) may not transact business in this state until it obtains a certificate of authority from the Department of State. Please visit www.sunbiz.org for this information on how to become registered.

7. SUBMITTAL REQUIREMENTS:

Please review this document carefully. Offers that are accepted by the county are binding contracts. All documents and submittals shall be received by the Purchasing Department on or before date and hour specified for receipt (see page #1). Late proposals will be returned unopened.

Submittal of current SF-330 (federal Standard Form), Part I and II, with all sections completed. SF-330 can be obtained from U. S. General Services Administration (GSA) website - <http://gsa.gov/forms>, then select Standard Form on the menu and go to the 330.

The submittals shall be in the format of Standard Forms (SF) 330. The submittal shall be limited to one hundred (100) pages, must be in format of a 3 ring loose leaf binder. The selection of the firms will be based on the information provided on the forms and in the additional sections.

A contractor may submit a response as a prime and also be a subcontractor to another firm.

Note: Standard Form (SF) 330 - Part II should be submitted for each firm and for each subcontractor.

Submittal requirements must be indexed and listed in the order described below:

A. Introduction Tab

- 1) Letter of Interest by corporate office or principal of the firm.
- 2) Specific Professional services to be offered (please delineate each service your firm offers).
- 3) Table of Contents.

B. Tab 1 - Standard Form (SF) 330 – Part I & II

SECTION B – SPECIAL CONDITIONS

Should be a Maximum of 50 pages and fully completed as required by the law governing Standard Form (SF) 330.

Note: Information submitted in Tab 2 through Tab 6 should be a maximum of 50 pages.

C. Tab 2 - Statements and Documentation

- 1) Proof of licenses/certifications
- 2) Provide proof of proper State of Florida business licensure and professional certifications/registration(s) in the State of Florida.
- 3) Provide proof of corporate registration to operate in the State of Florida by the Department of State, Division of Corporations. Information concerning certification with the Secretary of State can be obtained at: <http://ccfcorp.dos.state.fl.us/index.html>. Must be active status.
- 4) Provide Certificate of Florida Small and Minority Business issued by the Florida State Office of Diversity, Department of Management Services (if applicable). **If not applicable please provide a statement to that effect.**
- 5) State and provide address, phone number, contact, etc., if firm has an established office located in Pinellas, Manatee, Hillsborough or Pasco counties.

D. Tab 3 - Certificate(s) of Insurance.

Section C reflects the insurance requirements deemed necessary for this project by County Risk Management. It is not necessary to have this level of insurance in effect at the time of submission, but certificates indicating that the insurance is currently carried, or acknowledgment from the carrier indicating upgrade availability will speed the review process.

E. Tab 4 - Key Personnel Statement

Submit a statement that personnel listed in the submittal will be available for and shall be assigned to this project. Failure to produce the proposed key personnel may be grounds for dismissal.

- F. Tab 5-**
1. Acknowledgment of Addenda (if applicable).
 2. W-9 Request for Taxpayer Identification Number and Certification
 3. Section D Vendor References
 4. Page 1, Signature Page of the RFP

G. Tab 6 - Include any additional information to represent your firm for consideration.

Original letters shall be signed by an authorized representative of the firm. All information requested must be submitted. Failure to submit all information may delay evaluation of the proposal. Letters, which are substantially incomplete or lack key information, may be rejected by the County at its discretion.

Information submitted with your letter of interest should include documentation to demonstrate your firm's qualifications and abilities to perform as noted in the scope of services and also include information to allow for a clear understanding of past projects, especially in Florida, staff experience and abilities, and any additional information to present your firm for consideration.

An evaluation committee will review the information submitted. Once review is complete and the firm confirms the maximum ceiling for establishing a fee schedule, a recommendation to the Board of County Commissioners will be prepared. This contract will result in negotiated rates that will be fully loaded and will encompass all profit, markup, and local travel expenses. Award(s) resulting from this solicitation shall be subject to the provisions of Section 2-178, contracting for Designated Professional Services of the Ordinances of Pinellas County and Section 10 of the Purchasing Policies and Procedures of Pinellas County.

For questions and additional information, contact person indicated on page 1.

Letters of Interest will be evaluated using the criteria listed in Item 3 of this Section. Firms will be notified in writing if they have been selected in a reasonable time after submittal date.

All proposals shall be signed in ink by authorized principals of the firm.

Proposals are to be submitted in a sealed envelope. The face of the envelope shall indicate the RFP number, name, and address of the firm, and title of the proposal.

SECTION B – SPECIAL CONDITIONS

Proposals are to be submitted to Pinellas County Purchasing Department, 400 S. Ft. Harrison Avenue, Annex Bldg, 6th Floor, Clearwater, FL 33756 by the date and time indicated on the cover sheet.

Proposals shall be submitted in one (1) original paper document and EIGHT (8) electronic media copies CDs/DVDs or Travel Drives in PDF format. The preferred method is PDF conversion from the Proposer's source files (to minimize file size and maximize quality and accessibility) rather than scanning so that the County can open, print, read and save the pdf file you have created. To ensure consistency, the electronic copy should be ONE file document and in the same order as the paper original. If this is not possible, the electronic copy files should be in the same order as the paper copy, with a directory listing of the files.

Please note the evaluation committee will use the electronic media copies to review your submittal. Failure to include all information in the electronic media copies may have an impact on your evaluation scores.

Instructions for Providing Files in PDF Format to Pinellas County Government

- A. Why does Pinellas County Government want all the documents as PDF files?**
Answer- It's much more efficient to go paperless, and PDF is a universal file format that fits perfectly into government workflow processes.
- B. How do I convert my files to PDF format?**
Answer- If you have a program such as Adobe Acrobat, creating a PDF of any file is a simple print function. Rather than printing to a traditional printer, the file converts to a PDF format copy of your original. Any program (such as Word, PowerPoint, Excel, etc.) can be converted this way by simply selecting the print command and choosing PDF as the printer.
- C. Should I scan everything and save as PDF?**
Answer- Not unless you are scanning with OCR (optical character recognition). Scanning will create unnecessarily large files because a scan is just a picture of a page rather than actual page text. Furthermore, the result of scanning is that your pages will not look nearly as "clean" or professional as simply using the print to PDF method from the program from which the file originates. Additionally, since scan pages are pictures of text, not really text, they may not be considered accessible* under Federal ADA guidelines (*unless the scans are OCR.)
- D. My document is a compilation of multiple sources. Should I send multiple PDF files?**
Answer- You may, however merging pages/files is a very simple process within PDF.
- E. How do I get my PDF files to Pinellas County Government?**
Answer- They may be provided on any medium that is compatible with a standard PC. A CD is generally the simplest method. Please label the CD with a listing of contents. Provide the files to whoever your Pinellas County contact is for the project you are working on. For PDF technical support, contact webadmin@pinellascounty.org.

Tips & Best-Practice Recommendations

File names should clearly identify the file. Avoid cryptic or extremely long file names.
 File names should not include spaces or special characters (stick to letters, numbers and dashes.)
 For example **MyCompany-bid-3000-oct-2012.pdf**

Check the PDF files to make sure they are functional before you send them.

If the file is large and has a table of contents, adding links to the table of contents makes your files much more user friendly.

To maximize the usefulness and audit-ability of your files, it is recommended to add some identifier (AKA metadata) information to the PDF files. To do this is simple. After you have converted your file to PDF, use Acrobat, select File-Properties, and add the name of the author, subject, and any additional info you like to make the source of the document clearly traceable.

SECTION C – LIMITATION ON LIABILITY, INDEMNIFICATION, AND INSURANCE REQUIREMENTS

1. **LIMITATIONS ON LIABILITY.** By submitting a Proposal, the Proposer acknowledges and agrees that the services will be provided without any limitation on Proposer's liability. The County objects to and shall not be bound by any term or provision that purports to limit the Proposer's liability to any specified amount in the performance of the services. Proposer shall state any exceptions to this provision in its response, including specifying the proposed limits of liability in the stated exception to be included in the Services Agreement. Proposer is deemed to have accepted and agreed to provide the services without any limitation on Proposer's liability that Proposer does not take exception to in its response. Notwithstanding any exceptions by Proposer, the County reserves the right to declare its prohibition on any limitation on Proposer's liability as non-negotiable, to disqualify any Proposal that includes exceptions to this prohibition on any limitation on Proposer's liability, and to proceed with another responsive, responsible proposal, as determined by the County in its sole discretion.
2. **INDEMNIFICATION.** By submitting a Proposal, the Proposer acknowledges and agrees to be bound by and subject to the County's indemnification provisions as set out in the Services Agreement. The County objects to and shall not be bound by any term or provision that purports to modify or amend the Proposer's indemnification obligations in the Services Agreement, or requires the County to indemnify and/or hold the Proposer harmless in any way related to the services. Proposer shall state any exceptions to this provision in the response, including specifying the proposed revisions to the Services Agreement indemnification provisions, or the proposed indemnification from the County to the Proposer to be included in the Services Agreement. Proposer is deemed to have accepted and agreed to provide the services subject to the Services Agreement indemnification provisions that Proposer does not take exception to in its response. Notwithstanding any exceptions by Proposer, the County reserves the right to declare its indemnification requirements as non-negotiable, to disqualify any Proposal that includes exceptions to this paragraph, and to proceed with another responsive, responsible proposal, as determined by the County in its sole discretion.
3. **INSURANCE:**
 - a) Proposal submittals should include, the Proposers current Certificate(s) of Insurance in accordance with the insurance requirements listed below. If Proposer does not currently meet insurance requirements, proposer/bidder/quoter shall also include verification from their broker or agent that any required insurance not provided at that time of submittal will be in place within 10 days after award recommendation.
 - b) Within 10 days of **contract award** and prior to commencement of work, Proposer shall email certificate that is compliant with the insurance requirements to CertsOnly-Portland@ebix.com. If certificate received with proposal was a compliant certificate no further action may be necessary. It is imperative that proposer include the unique identifier, which will be supplied by the County's Purchasing Department. The Certificate(s) of Insurance shall be signed by authorized representatives of the insurance companies shown on the Certificate(s). **A copy of the endorsement(s) referenced in paragraph 3.(d) for Additional Insured shall be attached to the certificate(s) referenced in this paragraph.**
 - c) No work shall commence at any project site unless and until the required Certificate(s) of Insurance are received and approved by the County. Approval by the County of any Certificate(s) of Insurance does not constitute verification by the County that the insurance requirements have been satisfied or that the insurance policy shown on the Certificate(s) of Insurance is in compliance with the requirements of the Agreement. County reserves the right to require a certified copy of the entire insurance policy, including endorsement(s), at any time during the RFP and/or contract period.
 - d) All policies providing liability coverage(s), other than professional liability and workers compensation policies, obtained by the Proposer and any subcontractors to meet the requirements of the Agreement shall be endorsed to include Pinellas County Board of County Commissioners as an Additional Insured.
 - e) If any insurance provided pursuant to the Agreement expires prior to the completion of the Work, renewal Certificate(s) of Insurance and endorsement(s) shall be furnished by the Proposer to the County at least thirty (30) days prior to the expiration date.

SECTION C—LIMITATION ON LIABILITY, INDEMNIFICATION, AND INSURANCE REQUIREMENTS

- (1) Proposer shall also notify County within twenty-four (24) hours after receipt, of any notices of expiration, cancellation, nonrenewal or adverse material change in coverage received by said Proposer from its insurer. Notice shall be given by certified mail to: Pinellas County, c/o Ebix BPO, PO Box 257, Portland, MI, 48875-0257; be sure to include your organization's unique identifier, which will be provided upon notice of award. Nothing contained herein shall absolve Proposer of this requirement to provide notice.
 - (2) Should the Proposer, at any time, not maintain the insurance coverages required herein, the County may terminate the Agreement, or at its sole discretion may purchase such coverages necessary for the protection of the County and charge the Proposer for such purchase or offset the cost against amounts due to proposer for services completed. The County shall be under no obligation to purchase such insurance, nor shall it be responsible for the coverages purchased or the insurance company or companies used. The decision of the County to purchase such insurance shall in no way be construed to be a waiver of any of its rights under the Agreement.
- f) The County reserves the right, but not the duty, to review and request a copy of the Contractor's most recent annual report or audited financial statement when a self-insured retention (SIR) or deductible exceeds \$50,000.
 - g) If subcontracting is allowed under this RFP, the Prime Proposer shall obtain and maintain, at all times during its performance of the Agreement, insurance of the types and in the amounts set forth; and require any subcontractors to obtain and maintain, at all times during its performance of the Agreement, insurance limits as it may apply to the portion of the Work performed by the subcontractor; *but in no event will the insurance limits be less than \$500,000 for Workers' Compensation/Employers' Liability, and \$1,000,000 for General Liability and Auto Liability if required below.*
 - (1) All subcontracts between Proposer and its subcontractors shall be in writing and are subject to the County's prior written approval. Further, all subcontracts shall (1) require each subcontractor to be bound to Proposer to the same extent Proposer is bound to the County by the terms of the Contract Documents, as those terms may apply to the portion of the Work to be performed by the subcontractor; (2) provide for the assignment of the subcontracts from Proposer to the County at the election of Owner upon termination of the Contract; (3) provide that County will be an additional indemnified party of the subcontract; (4) provide that the County will be an additional insured on all insurance policies required to be provided by the subcontractor except workers compensation and professional liability; (5) provide waiver of subrogation in favor of the County and other insurance terms and/or conditions as outlined below; (6) assign all warranties directly to the County; and (7) identify the County as an intended third-party beneficiary of the subcontract. Proposer shall make available to each proposed subcontractor, prior to the execution of the subcontract, copies of the Contract Documents to which the subcontractor will be bound by this Section C and identify to the subcontractor any terms and conditions of the proposed subcontract which may be at variance with the Contract Documents.
 - h) Each insurance policy and/or certificate shall include the following terms and/or conditions:
 - (1) The Named Insured on the Certificate of Insurance and insurance policy must match the entity's name that responded to the solicitation and/or is signing the agreement with the County. If Proposer is a Joint Venture per Section A. titled Joint Venture of this RFP, Certificate of Insurance and Named Insured must show Joint Venture Legal Entity name and the Joint Venture must comply with the requirements of Section C with regard to limits, terms and conditions, including completed operations coverage.
 - (2) Companies issuing the insurance policy, or policies, shall have no recourse against County for payment of premiums or assessments for any deductibles which all are at the sole responsibility and risk of Contractor.
 - (3) The term "County" or "Pinellas County" shall include all Authorities, Boards, Bureaus, Commissions, Divisions, Departments and Constitutional offices of County and individual members, employees thereof in their official capacities, and/or while acting on behalf of Pinellas County.
 - (4) The policy clause "Other Insurance" shall not apply to any insurance coverage currently held by County or any such future coverage, or to County's Self-Insured Retentions of whatever nature.
 - (5) All policies shall be written on a primary, non-contributory basis.

SECTION C—LIMITATION ON LIABILITY, INDEMNIFICATION, AND INSURANCE REQUIREMENTS

- (6) Any Certificate(s) of Insurance evidencing coverage provided by a leasing company for either workers compensation or commercial general liability shall have a list of covered employees certified by the leasing company attached to the Certificate(s) of Insurance. The County shall have the right, but not the obligation to determine that the Proposer is only using employees named on such list to perform work for the County. Should employees not named be utilized by Proposer, the County, at its option may stop work without penalty to the County until proof of coverage or removal of the employee by the contractor occurs, or alternatively find the Proposer to be in default and take such other protective measures as necessary.
- (7) Insurance policies, other than Professional Liability, shall include waivers of subrogation in favor of Pinellas County from both the Proposer and subcontractor(s).
- i) The minimum insurance requirements and limits for this Agreement, which shall remain in effect throughout its duration and for two (2) years beyond final acceptance for projects with a Completed Operations exposure, are as follows:

(1) Workers' Compensation Insurance

Limit	Florida Statutory
Employers' Liability Limits	
Per Employee	\$ 500,000
Per Employee Disease	\$ 500,000
Policy Limit Disease	\$ 500,000

- (2) Commercial General Liability Insurance including, but not limited to, Independent Contractor, Contractual Liability Premises/Operations, Products/Completed Operations, and Personal Injury.

Limits

Combined Single Limit Per Occurrence	\$ 1,000,000
Products/Completed Operations Aggregate	\$ 1,000,000
Personal Injury and Advertising Injury	\$ 1,000,000
General Aggregate	\$ 2,000,000

- (3) Business Automobile or Trucker's/Garage Liability Insurance covering owned, hired, and non-owned vehicles. If the Proposer does not own any vehicles, then evidence of Hired and Non-owned coverage is sufficient. Coverage shall be on an "occurrence" basis, such insurance to include coverage for loading and unloading hazards, unless Proposer can show that this coverage exists under the Commercial General Liability policy.

Limit

Combined Single Limit Per Accident	\$ 1,000,000
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- (4) Professional Liability (Errors and Omissions) Insurance with at least minimum limits as follows. If "claims made" coverage is provided, "tail coverage" extending three (3) years beyond completion and acceptance of the project with proof of "tail coverage" to be submitted with the invoice for final payment. In lieu of "tail coverage", Proposer may submit annually to the County, for a three (3) year period, a current certificate of insurance providing "claims made" insurance with prior acts coverage in force with a retroactive date no later than commencement date of this contract.

Limits

Each Occurrence or Claim	\$ 2,000,000
General Aggregate	\$ 2,000,000

SECTION C-LIMITATION ON LIABILITY, INDEMNIFICATION, AND INSURANCE REQUIREMENTS

For acceptance of Professional Liability coverage included within another policy required herein, a statement notifying the certificate holder must be included on the certificate of insurance and the total amount of said coverage per occurrence must be greater than or equal to the amount of Professional Liability and other coverage combined.

SECTION D - VENDOR REFERENCES

Proposal Title: Forest Lakes Boulevard Reconstruction and Widening Improvements Professional Engineering Services PID 001642A
Proposal Number: 134-0310-NC(RM)

THE FOLLOWING INFORMATION IS REQUIRED IN ORDER THAT YOUR PROPOSAL MAY BE REVIEWED AND PROPERLY EVALUATED.

COMPANY NAME: _____

LENGTH OF TIME COMPANY HAS BEEN IN BUSINESS: _____

BUSINESS ADDRESS: _____

HOW LONG IN PRESENT LOCATION: _____

TELEPHONE NUMBER: _____ FAX NUMBER: _____

TOTAL NUMBER OF CURRENT EMPLOYEES: _____ FULL TIME _____ PART TIME

NUMBER OF EMPLOYEES YOU PLAN TO USE TO SERVICE THIS CONTRACT: _____

All references will be contacted by a County Designee via email, fax, mail or phone call to obtain answers to questions, as applicable before an evaluation decision is made.

EITHER LOCAL COMMERCIAL OR GOVERNMENTAL REFERENCE(S) (PINELLAS COUNTY GOVERNMENT REFERENCES WILL NOT BE ACCEPTED) THAT YOU HAVE PREVIOUSLY PERFORMED SIMILAR CONTRACT SERVICES FOR:

All fields below must be completed

<p>1 _____</p> <p>COMPANY NAME _____</p> <p>CITY, STATE _____</p> <p>CONTACT PERSON _____</p> <p>TELEPHONE _____</p> <p>FAX _____</p> <p>EMAIL ADDRESS _____</p>	<p>2 _____</p> <p>COMPANY NAME _____</p> <p>CITY, STATE _____</p> <p>CONTACT PERSON _____</p> <p>TELEPHONE _____</p> <p>FAX _____</p> <p>EMAIL ADDRESS _____</p>
<p>3 _____</p> <p>COMPANY NAME _____</p> <p>CITY, STATE _____</p> <p>CONTACT PERSON _____</p> <p>TELEPHONE _____</p> <p>FAX _____</p> <p>EMAIL ADDRESS _____</p>	<p>4 _____</p> <p>COMPANY NAME _____</p> <p>CITY, STATE _____</p> <p>CONTACT PERSON _____</p> <p>TELEPHONE _____</p> <p>FAX _____</p> <p>EMAIL ADDRESS _____</p>

SECTION E – SCOPE OF WORK

Proposal Title: Forest Lakes Boulevard Reconstruction and Widening Improvements Professional Engineering Services PID 001642A
Proposal Number: 134-0310-NC(RM)

A. OBJECTIVE:

On behalf of the Department of Environment and Infrastructure (DEI), the Pinellas County Board of County Commissioners is seeking proposals from interested and qualified professional engineering firms to develop plans, specifications, cost estimates, and perform all other professional engineering related services as may be required for the design and post-design construction services of Forest Lakes Boulevard from 50 feet west of Pine Avenue to the east property line of Harrod Properties, a distance of approximately 1.30 miles. It is the intent of the County to award this proposal to one firm.

B. BACKGROUND:

This project will be based on the "East-West Connector Road (Phase I) and (Phase II)" project final plans of April & May 2000, but will be further developed to consider the scope of work

C. SCOPE OF WORK:

The firm selected to perform this work will design; prepare plans; acquire permits; and provide all other engineering services for the reconstruction and widening of Forest Lakes Boulevard from a two-lane suburban typical section to a four-lane suburban typical section to include construction of an underdrain system along both sides of the roadway. The intersection of Pine Avenue at Forest Lakes Boulevard shall require mast arm design and signalization improvements. Communication conduit and pull boxes shall be designed for the full length of the project.

The reconstruction shall utilize a standard roadway typical section consisting of (2) 12-foot lanes and 5-foot shoulder/bike lane along each side. The full four-lane typical section will be carried to the Race Track Road intersection. The new third and fourth lanes and full depth shoulders will be constructed adjacent to the existing lanes. Once the new lanes are constructed, the two existing lanes will be reconstructed. Drainage improvements and swale adjustments are anticipated in order to accommodate the widening. No lighting analysis will be provided. Existing light poles will be relocated outside of the new clear zone by others.

The existing drainage pipe system and ponds were permitted for the 'ultimate' 6-lane typical section. It is not anticipated that a new stormwater system shall be required other than providing underdrain outfall pipes into existing manholes and inlets within the existing stormdrain system. This project will require a permit modification due to modification of the existing conveyance system.

The proposed underdrain shall be a minimum of 2.0 feet below the bottom of the base of Forest Lakes Boulevard and extend from east of Pine Avenue to east of Commerce Boulevard. The maximum underdrain length along this section will be 800 feet. Six-inch diameter FDOT Type 3 underdrain will handle the design flows for this underdrain system. Drainage Improvements required to mitigate the flooding shall be designed in accordance with Pinellas County Ordinances and Southwest Florida Water Management District (SWFWMD) regulations for differing storm events (i.e., ten-year, etc.). All required permits shall be obtained by the engineering consultant. Plans shall be prepared in accordance with AutoCAD® Civil 3D Pinellas County Requirements.

The County Surveying and Mapping Division shall provide all surveying services, including topographic, S.U.E., right-of-way, and centerline information in a County kit formatted AutoCAD® Civil 3D drawing. Additional services to be provided by the Consultant shall include geotechnical services, permitting services and utility coordination support.

SECTION E – SCOPE OF WORK

Additional information related to this project is provided in the following attachments and can be downloaded from the purchasing website at <http://www.pinellascounty.org/purchase/CCNA.htm>

- Attachment 1 Engineering Report Draft Pavement Evaluation
- Attachment 2 Engineering Report Underdrain Assessment
- Attachment 3 Existing Design Plans PH1 – April 2000
- Attachment 4 Existing Design Plans PH2 – May 2000
- Attachment 5 SWFWMD Existing Permit PH1 ERP – September 2000
- Attachment 6 SWFWMD Existing Permit PH2 ERP – June 2004

D. REQUIRED DELIVERABLES:

- Construction plans in AutoCAD® Civil 3D format using the current Pinellas County Kit. The plans shall be provided electronically, plus two (2) 11x17 paper prints signed and sealed by a Professional Engineer certified in the State of Florida.
- All technical specifications required for construction of project.
- Construction engineer's estimates using the current County pay item structure and unit costs.
- Additional services to be provided by the Consultant shall include geotechnical services, permitting services and utility coordination support.

E. ESTIMATED TIMELINE FOR DESIGN PHASE:

- 30% completion, 120 calendar days from NTP
- 60% completion 240 calendar days from NTP
- 100% completion 330 calendar days from NTP

F. BUDGETARY ESTIMATE: \$500,000.00 inclusive of all work**G. ADDITIONAL INFORMATION:**

The County Surveying and Mapping Division shall provide all surveying services, including topographic, S.U.E., right-of-way, and centerline information in a County kit formatted AutoCAD® Civil 3D drawing.

SECTION F –ELECTRONIC PAYMENT (ePayables)

Proposal Title: Forest Lakes Boulevard Reconstruction and Widening Improvements Professional Engineering Services PID 001642A
Proposal No.: 134-0130-NC(RM)

Electronic Payment (ePayables)

The Board of County Commissioners (County) is offering faster payments. The County would prefer to make payment using credit card.

Would your company accept to participate in the ePayables credit card program? Yes ☐ No ☐

For more information about ePayables credit card program please visit Purchasing Department website www.pinellascounty.org/purchase.

Company Name

Signature

Printed Signature

W-9 REQUEST FOR TAXPAYER ID NUMBER AND CERTIFICATIONSubstitute
Form**W-9****Request for Taxpayer
Identification Number and Certification**Give form to the
requester. Do not
send to the IRS.

Print or type See Specific Instructions on page 2.	Name (as shown on your income tax return)		
	Business name, if different from above		
	Check appropriate box: <input type="checkbox"/> Individual/Sole proprietor <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶	<input type="checkbox"/> Exempt payee	
	<input type="checkbox"/> Other (see instructions) ▶		
	Address (number, street, and apt. or suite no.)		Requester's name and address (optional)
City, state, and ZIP code			
List account number(s) here (optional)			

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number
or
Employer identification number

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined in the instructions).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

**Sign
Here**Signature of
U.S. person ▶

Date ▶

***Instructions to Form W-9 available upon request.**

Detach on the perforation

Section 119.071(5), Florida Statutes Notice:

Your Tax Identification Number (which for individuals is your social security number) is collected on Form W9 for use in filing information returns with the IRS as described more fully below. Collection of the tax identification number (or social security number as applicable) is mandatory pursuant to Section 6109 of the Internal Revenue Code (26 U.S.C § 6109).

Privacy Act Notice:

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons who must file information returns with the IRS to report interest, dividends, and certain other income paid to you, mortgage interest you paid, the acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA, or Archer MSA or HSA. The IRS uses the numbers for identification purposes and to help verify the accuracy of your tax return. The IRS may also provide this information to the Department of Justice for civil and criminal litigation, and to cities, states, the District of Columbia, and U.S. possessions to carry out their tax laws. We may also disclose this information to other countries under a tax treaty, to federal and state agencies to enforce federal nontax criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism.

You must provide your TIN whether or not you are required to file a tax return. Payers must generally withhold 28% of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to a payer. Certain penalties may also apply.

SECTION G – ADDENDA ACKNOWLEDGMENT FORM

Proposal Title: Forest Lakes Boulevard Reconstruction and Widening Improvements Professional Engineering Services PID 001642A
Proposal No: 134-0310-NC(RM)

PLEASE ACKNOWLEDGE RECEIPT OF ADDENDA FOR THIS ITB/RFP BY SIGNING AND DATING BELOW:

ADDENDA NO.**SIGNATURE/PRINTED NAME****DATE RECEIVED**

Note: Prior to submitting the response to this solicitation, it is the responsibility of the firm submitting a response to confirm if any addenda have been issued. If such document(s) has been issued, acknowledge receipt by signature and date in section above and return Addenda Acknowledgement Form with RFP. Failure to do so may result in being considered non-responsive or result in lowering the rating of a firm's proposal.

Information regarding Addenda issued is available on the Purchasing Department section of the County's CCNA website at, <http://www.pinellascounty.org/purchase/CCNA.htm>

SECTION H – NO SUBMITTAL STATEMENT

NOTE: If you do not intend to submit a proposal on this requirement, please return this form immediately. **Thank you.**

Pinellas County Purchasing Department
400 South Fort Harrison Avenue, 6th Floor
Clearwater, Florida 33756

We, the undersigned have declined to submit a proposal for RFP No. **134-0310-NC(RM) for Forest Lakes Boulevard Reconstruction and Widening Improvements Professional Engineering Services PID 001642A**

- ☐ Specifications too "tight", i.e., geared toward one brand or manufacturer only (explain below).
- ☐ Insufficient time to respond to the Request for Proposal.
- ☐ We do not offer this product or service.
- ☐ Our schedule would not permit us to perform.
- ☐ Unable to meet specifications.
- ☐ Unable to meet Bond requirement.
- ☐ Specifications unclear (explain below).
- ☐ Unable to Meet Insurance Requirements.
- ☐ Remove Us from Your "Notification List" Altogether
- ☐ Other (specify below).

REMARKS:

We understand that if the "No Proposal" letter is not executed and returned our name may be deleted from the Consultants Notification List of Pinellas County.

COMPANY NAME: _____

DATE: _____

SIGNATURE: _____

TYPED NAME OF ABOVE: _____

TELEPHONE: _____

FAX: _____

EMAIL: _____

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

PROFESSIONAL ENGINEERING SERVICES NON-CONTINUING SERVICES

SAMPLE AGREEMENT 134-0310-NC(RM)

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**SECTION 1
INTENT OF AGREEMENT**

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES FOR

THIS AGREEMENT, entered into on the ____ day of _____, 20____, between PINELLAS COUNTY, a political subdivision of the State of Florida, hereinafter referred to as the COUNTY, represented by its Board of County Commissioners, and, (Insert Company Name) with offices in (Insert City), Florida hereinafter referred to as the CONSULTANT.

WITNESSETH, That:

WHEREAS, Pinellas County, herein referred to as the COUNTY, requires **PROFESSIONAL ENGINEERING SERVICES** associated with support to develop plans and specifications and perform all other professional engineering services as may be required during the construction of (Insert brief description of project and location) Pinellas County, Florida

WHEREAS, the COUNTY desires the CONSULTANT provide PROFESSIONAL ENGINEERING SERVICES requisite to the development of the PROJECT; and

WHEREAS, the CONSULTANT has expressed the willingness and ability to provide the aforementioned Services; and

NOW THEREFORE, the COUNTY and the CONSULTANT, in consideration of the mutual covenants hereinafter set forth, agree as follows:

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

SECTION 2 SCOPE OF PROJECT

2.1 PROJECT DESCRIPTION AND PROFESSIONAL REQUIREMENTS

For the purposes of this Agreement the term PROJECT shall include all areas of proposed improvements, all areas that may reasonably be judged to have an impact on the PROJECT, and all PROJECT development phases and the services and activities attendant thereto. It is not the intent of this Agreement to identify the exact limits or details involved in providing satisfactorily completed PROJECT construction documents. The CONSULTANT shall provide the following professional services to prepare construction plans, specifications, and complete applications for and receive all federal, state, and local permits required for construction of the PROJECT. The PROJECT design shall be based on the following data:

(Insert all relevant information about requirements). All required permits shall be obtained by the engineering consultant. Plans shall be prepared in accordance with Civil 3D Pinellas County Requirements. Exhibit A, Scope of Services is attached.

a) Required Deliverables

- Civil 3D file (eTransmit) of construction plans and for each transmittal phase. The plans shall be provided electronically, plus two (2) paper prints signed and sealed by a Professional Engineer certified in the State of Florida.
- All technical specifications required for construction of project.

2.2 PROJECT PHASES

All project phases shall be completed on or before the milestone dates provided in the COUNTY approved PROJECT design schedule referenced in 2.3 E.

2.3 CONSULTING RESPONSIBILITIES

- A. It is the intention of the COUNTY that the CONSULTANT is held accountable for its work, including checking and review of plans, and that submittals are complete.
- B. The CONSULTANT shall be responsible for the accuracy of the work and shall promptly correct its errors and omissions without additional compensation. Acceptance of the work by the COUNTY will not relieve the CONSULTANT of the responsibility for subsequent correction of any errors and the clarification of any ambiguities.
- C. The CONSULTANT represents that it has secured or will secure, at its own expense, all personnel necessary to complete this Agreement; none of whom shall be employees of or have any contractual relationship with the COUNTY. Primary liaison with the COUNTY will be through the CONSULTANT'S Project Manager. All of the services required hereunder will be performed by the CONSULTANT or under the CONSULTANT'S supervision, and all personnel engaged in the work shall be fully qualified and shall be authorized or permitted under law to perform such services.
- D. The CONSULTANT shall endorse all reports, calculations, contract plans, and survey data. Services shall be prepared under the direction of an engineer registered in the State of Florida and qualified in the required discipline. Products or services performed or checked shall be signed and sealed by the CONSULTANT'S Florida registered engineer.
- E. The CONSULTANT shall be responsible for the preparation of a PROJECT design schedule, prepared in Microsoft Project 2013 or later, which shows a breakdown of all tasks to be

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performed, and their relationship in achieving the completion of each phase of work. A bar chart schedule showing overall PROJECT time frames should also be prepared. These schedules must be submitted for COUNTY approval within ten (10) days of the initial PROJECT Notice to Proceed. These schedules will be used to verify CONSULTANT performance in relationship to Fees claimed and to allow the COUNTY'S Project Manager to monitor the CONSULTANT'S efforts. The CONSULTANT shall be responsible for any updates to these schedules and for documenting in writing to the COUNTY any major deviations in the actual versus estimated PROJECT time frames.

- F. The CONSULTANT shall respond, in writing, to all review comments made by the COUNTY, and shall incorporate appropriate design adjustments into the PROJECT, in a timely manner, resulting from the review exchange.

2.4 GENERAL DESIGN CONDITIONS

2.4.1 The CONSULTANT shall coordinate and solicit appropriate input, with the knowledge of the COUNTY.

2.4.2 All design data, plans, and drawings shall be delivered Electronically and or on CD ROM formatted to .DXF or .DWG utilizing Civil 3D 2012 or later; as well as providing reproducible hard copies of plans and drawings. All specification and other documents shall be delivered electronically and or on a CD ROM, Microsoft Word & Excel format as required, as well as the reproducible hard copies.

2.4.3 One (1) original and nine (9) copies of all deliverables are required unless specific submittal requirements are specified elsewhere in this Agreement.

2.4.4 The CONSULTANT shall develop acceptable alternates to any and all design recommendations that may be declared unacceptable.

2.5 GOVERNING SPECIFICATIONS REGULATIONS AND PERTINENT DOCUMENTS

The PROJECT shall be designed by the CONSULTANT in accordance with applicable industry standards. The CONSULTANT shall be responsible for utilizing and maintaining current knowledge of any laws, ordinances, codes, rules, regulations, standards, guidelines, special conditions, specifications, or other mandates relevant to the PROJECT or the services to be performed.

SECTION 3 SERVICES TO BE FURNISHED BY THE CONSULTANT

3.1 SEE EXHIBIT A – SCOPE OF SERVICES.

3.2 BIDDING PHASE

The CONSULTANT shall prepare with the COUNTY'S assistance the necessary bidding information, bidding forms, the conditions of the contract, and the form of agreement between the COUNTY and the Contractor. The CONSULTANT also, shall bear the cost of two (2) complete sets of documents (plans and specifications), two (2) of which shall be signed and sealed by the CONSULTANT as original record sets for the PROJECT. Each sheet in the two (2) construction plans print sets shall be signed, sealed and dated. The title sheet only of the two (2) specifications sets shall be signed, sealed, and dated. Additionally, any required addenda shall be signed, sealed, and dated.

3.2.1 The CONSULTANT, following the COUNTY'S review of the Construction Documents and of the latest Statement of Probable Construction Cost, shall be available to assist the COUNTY in obtaining bids, and in preparing and awarding construction contracts for each bid package. The CONSULTANT shall assist conducting pre-bid conferences, and shall prepare a Bid Tabulation spreadsheet following receipt of bids.

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

3.2.2 If the Advertisement for bids has not commenced within sixty (60) days after the CONSULTANT submits the approved Construction Documents to the COUNTY, any fixed limit of Construction Cost established as a condition of this Agreement shall be adjusted to reflect any change in the general level of prices which may have occurred during that period of time in construction industry. The adjustment shall reflect changes between the date of submission of the Construction Documents to the COUNTY and the date on which the Advertisement for Bids occurred.

3.2.3 The CONSULTANT shall prepare any required addenda to construction plans and specifications on the PROJECT during the bidding phase affecting the CONSULTANT'S plans and specifications. The CONSULTANT shall also provide any addenda during the Construction Phase in sufficient quantity to distribute to all necessary parties as determined by the COUNTY. Addenda material shall be placed in envelopes by the CONSULTANT for mailing by the COUNTY. The CONSULTANT shall also furnish certified mail receipt material and prepare mailing labels. The COUNTY shall mail all addenda.

3.3 CONSTRUCTION PHASE

All contact and/or communication from the CONSULTANT to the Contractor shall be coordinated with the knowledge of the COUNTY.

A. Construction Consultation Services

1. Processing, review, approval and distribution of shop drawings, product data, samples and other submittals required by the Contract Documents.
2. Maintenance of master file of submittals with duplicate for COUNTY.
3. Construction Field Observation Services consisting of visits to the site as frequent as necessary, but not less than once every week, to become generally familiar with the progress and quality of the work and to determine in general if the work is proceeding in accordance with the Contract Documents and prepare related reports and communications. Provide written report of each visit. This field observation requirement shall include any subconsultants at appropriate construction points.
4. Review for comment or approval any and all proposal requests, supplemental drawings and information and change orders.
5. Review for correctness Contractors pay requests for the COUNTY.
6. Prepare, reproduce and distribute supplemental drawings, specifications and interpretations in response to requests for clarification by the Contractor or the COUNTY as required by construction exigencies. Response to any request must be received by the COUNTY within twenty-four (24) hours of request, or the next available working day when the request is prior to a weekend or holiday.
7. Review, upon notice by the Contractor that work is ready for final inspection and acceptance.
8. Notify the COUNTY of any deficiencies found in follow-up reviews.
9. Evaluate all testing results and make recommendations to the COUNTY.
10. Assist in the establishment by the COUNTY of programs of operation and maintenance of the physical plant and equipment.
11. Arrange for and coordinate instructions on operations and maintenance of equipment in conjunction with manufacturer's representatives.

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

12. Prepare an operation and maintenance manual for the COUNTY'S use.
13. The CONSULTANT shall visit the project as necessary, but at a minimum of three (3) month, six (6) month and upon construction completion in order to certify that the permit conditions have been met satisfactorily. This shall not relieve the CONSULTANT of other needed visits to the project should specific issues arise.
14. Assistance in the training of the facility operation and maintenance personnel in proper operations, schedules, procedures and maintenance inventory.
15. Prepare as-built record drawings, based on information furnished by the Contractors including significant changes in the work made during construction. The CONSULTANT will provide one (1) set of signed and sealed prints and one (1) CADD disk of the as-built record construction documents.
16. Transmit certified as-built record drawings and general data, appropriately identified, to the COUNTY within thirty (30) days following completion of construction.
17. Consult with, and recommend solutions to, the COUNTY during the duration of warranties in connection with inadequate performance of materials, systems, and equipment under warranty.
18. Review facilities or equipment prior to expiration of warranty period(s) to ascertain adequacy of performance, materials, systems and equipment.
19. Document noted defects or deficiencies and assist the COUNTY in preparing instructions to the Contractor for correction of noted defects.
20. The Contractor shall provide the CONSULTANT with all the required project close out material for CONSULTANT'S use in the warranty period services.
21. The Contractor shall have prime responsibility in the warranty period for all services herein. The CONSULTANT shall assist, consult, observe review and document as noted.

3.4 PROVISIONS RELATED TO ALL PHASES

3.4.1 The CONSULTANT will investigate and confirm in writing to the COUNTY, to the best of the CONSULTANT'S knowledge, conformance with all applicable local public and utility regulations.

3.4.2 The CONSULTANT will coordinate work designed by various disciplines.

3.4.4 The CONSULTANT shall submit to the COUNTY design notes and computations to document the design conclusions reached during the development of the construction plans.

- a. Five (5) copies of the design notes and computations shall be submitted to the COUNTY with the design development review plans. When the plans are submitted for final review, the design notes and computations corrected for any COUNTY comments shall be resubmitted. At the PROJECT completion, a final set of the design notes and computations, properly endorsed by the CONSULTANT, shall be submitted with the record set of plans and tracings.
- b. The design notes and calculations shall include, but not be limited to, the following data:
 - 1) Design criteria used for the PROJECT.

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

- 2) Roadway geometric calculations
- 3) Structural calculations.
- 4) Drainage calculations.
- 5) Traffic design calculations
- 6) Traffic control calculations
- 7) Calculations as required by provisions of the Florida Energy Conservation Manual (Department of General Services), latest revision.
- 8) Calculations showing probable cost comparisons of various alternatives considered.
- 9) Documentation of decisions reached resulting from meetings, telephone conversations or site visits.
- 10) Other PROJECT-related correspondences as appropriate.

3.4.5 Each set of plans for the PROJECT shall be accurate, legible, complete in design, suitable for bidding purposes and drawn to scales acceptable to the COUNTY. The completed plans shall be furnished on reproducible material and in a format, which is acceptable to the COUNTY.

3.4.6 The CONSULTANT shall make such reviews, visits, attend such meetings and conferences and make such contacts as are necessary for the proper preparation of plans and specifications for the PROJECT.

3.4.7 The COUNTY in no way obligates itself to check the CONSULTANT'S work and further is not responsible for maintaining project schedules.

3.4.8 Other CONSULTANT responsibilities shall be as listed below:

- a. Provide necessary sealed drawings to obtain building permits or any utility permit.
- b. Assist the COUNTY in Contractor claims and/or litigation.
- c. Review the Adequacy and completeness of documents submitted by the Contractor to protect the COUNTY against claims by suppliers or third parties.

3.4.9 The CONSULTANT must be familiar with the intent, thoroughness, safety factors and design assumptions of all structural calculations.

3.4.10 All work prepared and/or submitted shall be reviewed and checked by a CONSULTANT (Architect/Engineer) registered in Florida. All plans shall be signed and sealed by the Professional CONSULTANT in responsible charge.

3.5 PERMIT APPLICATIONS AND APPROVALS

3.5.1 The CONSULTANT shall prepare all permit applications, data and drawings required for submittal BY THE COUNTY for approval of local, state and federal agencies.

3.5.2 The CONSULTANT shall, at no additional cost to the COUNTY, make all reasonable and necessary construction plans revisions required to obtain the necessary permit approvals for construction of the PROJECT.

3.5.3 For the purpose of ensuring the timely approval of all permits necessary for the construction of the PROJECT, the CONSULTANT shall schedule the necessary contacts and liaison with all agencies having permit jurisdiction over the PROJECT, and shall furnish, on a timely basis, such plans, data and information as may be necessary to secure approval of the required permits.

3.6 COORDINATION WITH UTILITY SERVICES AND AFFECTED PUBLIC AGENCIES

3.6.1 The requirements of the various utility services shall be recognized and properly coordinated with the PROJECT design.

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

3.6.2 Drainage investigations and drainage design shall be coordinated with any city or drainage district that may be affected by or have an effect on the PROJECT.

SECTION 4 SERVICES TO BE FURNISHED BY THE COUNTY

4.1 The COUNTY shall provide the following for the CONSULTANT'S use and guidance:

- A. Copies of existing maps, existing aerial photographs, as-built construction plans and data pertinent to the PROJECT design, which the COUNTY may have in its possession.
- B. Reproducibles of the COUNTY Engineering Department Standard Drawings applicable to the PROJECT.
- C. Sample copies of the COUNTY standard contract documents and specifications.
- D. Preparation of legal (front-end) section of the specifications.

SECTION 5 PRESENTATIONS, PUBLIC MEETINGS AND TECHNICAL LIAISON

The following services shall be provided at no additional cost to the COUNTY:

5.1 Prior to the commencement of design activities, the COUNTY will conduct with the CONSULTANT a pre-design conference for the purpose of discussing issues relative to the PROJECT, plans preparation and submittal procedures and to convey to the CONSULTANT such items provided for under Section 4 as may be required and available at that time.

5.2 The CONSULTANT shall make presentations to the COUNTY'S Director of Environment and Infrastructure (DEI) or designee as often as reasonably requested and at any point in the PROJECT development should issues arise which make additional presentations other than those listed elsewhere in this Agreement, in the COUNTY'S best interest.

5.3 The CONSULTANT shall participate in Monthly PROJECT Conferences with COUNTY staff personnel. The meetings will be scheduled by the COUNTY at a location provided by the COUNTY.

5.4 The CONSULTANT shall attend, as technical advisor to the COUNTY all meetings or hearings conducted by permitting agencies or public bodies in connection with any permit required for the construction of the PROJECT, and shall prepare all presentation aids, documents and data required in connection with such meetings or hearings, and at the discretion of the COUNTY, shall either plead the COUNTY'S case or provide engineering and technical assistance to the COUNTY in its pleading of the case.

5.5 The CONSULTANT shall keep accurate minutes of all meetings and distribute copies to all attending. These meetings shall be set up through the COUNTY and appropriate COUNTY staff shall attend.

SECTION 6 PAYMENT GUIDELINES AND CATEGORY OF SERVICES

6.1 BASIC SERVICES

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

The services described and provided for under Sections 2, 3 and Exhibit A shall constitute the Basic Services to be performed by the CONSULTANT under this Agreement.

6.2 OPTIONAL SERVICES

Services noted in Exhibit A of this Agreement as "Optional" shall constitute the Optional Services to be performed by the CONSULTANT under this Agreement. Optional Services shall be rendered by the CONSULTANT only upon written authorization by the COUNTY's Executive Director of the Department of Environment and Infrastructure, or designee.

6.3 CONTINGENCY SERVICES

When authorized in writing by the COUNTY'S Director of Environment and Infrastructure (DEI) or designee, the CONSULTANT shall furnish services resulting from unforeseen circumstances not anticipated under Basic Services due to minor changes in the PROJECT scope.

Compensation for any Contingency Services assignments shall be negotiated between the COUNTY and the CONSULTANT at the time the need for services becomes known.

6.4 ADDITIONAL SERVICES

When executed by the County Administrator or Board of County Commissioners as an amendment to this Agreement, the CONSULTANT shall provide such additional services as may become necessary because of changes in the Scope of PROJECT. Additional Services shall be classified as any change beyond the Contingency Services upset limit for compensation.

6.5 INVOICING

The CONSULTANT may submit invoices for fees earned on a monthly basis. Such invoicing shall be supported by a Progress Report showing the actual tasks performed and their relationship to the percentage of fee claimed for each phase. Billings within each phase of work shall be for the percentage of work effort completed to date for that phase. The COUNTY shall make payments to the CONSULTANT for work performed in accordance with the Local Government Prompt Payment Act, Section 218.70 et. seq., F.S.

The following services shall be considered reimbursable services and may be filled in full upon their completion and acceptance. The CONSULTANT shall provide copies of supporting receipts/invoices/billing documentation. Self-performed reimbursable work shall be reimbursed at the firm's standard hourly rates for all related services. A breakdown of man hours and billing rates shall be provided with each invoice. An hourly rate sheet is attached (Exhibit B).

- A. Soil Analysis/Geotechnical Investigations.
- B. Contamination Assessments/Hazardous Material Analysis (if required).
- C. Aerial Photography (if required).
- D. Payment of Permit Fees (if required).
- E. Payment of the Public Information Meeting Advertisements, if required.
- F. Payment of the Court Reporter for public meetings, if required.
- G. Printing and Binding Services.

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

Should an invoiced amount for fees earned appear to exceed the work effort believed to be completed, the COUNTY may, prior to processing of the invoice for payment, require the CONSULTANT to submit satisfactory evidence to support the invoice.

All progress reports shall be mailed to the attention of the designated Project Manager, Department of Environment & Infrastructure, 14 S. Ft. Harrison Ave, Clearwater, FL 33756.

SUPPLIER shall submit invoices for payment due as provided herein with such documentation as required by Pinellas County and all payments shall be made in accordance with the requirements of Section 218.70 *et. seq.* Florida Statutes, "The Local Government Prompt Payment Act." Invoices shall be submitted to the address below unless instructed otherwise on the purchase order, or if no purchase order, by the ordering department:

Finance Division Accounts Payable
Pinellas County Board of County Commissioners
P. O. Box 2438
Clearwater, FL 33757

Each invoice shall include, at a minimum, the Supplier's name, contact information and the standard purchase order number. The County may dispute any payments invoiced by SUPPLIER in accordance with the County's Dispute Resolution Process for Invoiced Payments, established in accordance with Section 218.76, Florida Statutes, and any such disputes shall be resolved in accordance with the County's Dispute Resolution Process.

Fees for contingent or additional services authorized shall be invoiced separately, and shall be due and payable in full upon the presentation of satisfactory evidence that the corresponding services have been performed.

SECTION 7 COMPENSATION TO THE CONSULTANT

7.1 For the BASIC SERVICES provided for in this Agreement, as defined in Section 3.10, the COUNTY agrees to pay the CONSULTANT as follows:

A Lump Sum Fee of: for the Task 1 – General Task Phase of the PROJECT.

A Lump Sum Fee of: for the Task 2 - Phase of the PROJECT.

A Lump Sum Fee of: for the Task 3 –Phase of the PROJECT.

A Lump Sum Fee of: for the Task 4 –Phase of the PROJECT.

A Lump Sum Fee of: for the Task 5 –Phase of the PROJECT

A Lump Sum Fee of: for the Task 6 –Phase of the PROJECT

A Lump Sum Fee of: for the Task 7 –Phase of the PROJECT

The above fees shall constitute the total not to exceed amount of (\$) to the CONSULTANT for the performance of Basic Services. All man hours are billed per the established and agreed hourly rates. The hourly rates are fully loaded and include all labor, overhead, expenses and profit of any nature including travel within the Tampa Bay Metropolitan Statistical area. Travel outside of that area will be reimbursed in accordance with Section 112.061 F.S.

7.2 For the OPTIONAL SERVICES provided for in the Agreement, as defined in Exhibit A, the COUNTY agrees to pay the CONSULTANT as follows:

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

A Lump Sum Fee of: **(\$)** for the Task 8a of the PROJECT

7.3 For any CONTINGENCY SERVICES performed, the COUNTY agrees to pay the CONSULTANT, a negotiated fee based on the assignment, up to a maximum amount not to exceed **(\$)** for all assignments performed.

7.4 Total agreement amount **(\$)**.

7.5 For any ADDITIONAL SERVICES, the COUNTY agrees to pay the CONSULTANT a negotiated total fee based on the work to be performed as detailed by a written amendment to this Agreement.

7.6 In the event that this Agreement is terminated under the provisions of this contract the total and complete compensation due the CONSULTANT shall be as established by the COUNTY based on the COUNTY'S determination of the percentage of work effort completed to date of termination.

SECTION 8 PERFORMANCE SCHEDULE

Time is of the essence in this Agreement. The CONSULTANT shall plan and execute the performance of all services provided for in this Agreement in such manner as to ensure their proper and timely completion in accordance with the following schedule:

8.1 The services to be rendered by the CONSULTANT shall be commenced upon receipt from the COUNTY of written "NOTICE TO PROCEED."

8.2 All project phases shall be completed on or before the milestone dates provided in the COUNTY approved PROJECT design schedule referenced in 2.3 E.

8.3 The CONSULTANT shall not be held responsible for delays in the completion of the PROJECT design when the COUNTY causes such delays. The COUNTY reviews related to the above submittals shall not exceed twenty-one (21) days.

SECTION 9 AUTHORIZATION FOR CONTINGENT OR ADDITIONAL SERVICES

9.1 The CONTINGENCY services provided for under this Agreement shall be performed only upon prior written authorization from the Director of Environment and Infrastructure (DEI) or designee.

9.2 The ADDITIONAL services provided for under this Agreement shall be performed only upon approval of the County Administrator or Board of County Commissioners.

9.3 The CONSULTANT shall perform no services contemplated to merit compensation beyond that provided for in this Agreement unless such services, and compensation therefore, shall be provided for by appropriate written authorization or amendment(s) to this Agreement.

SECTION 10 FIRMS AND INDIVIDUALS PROVIDING SUBCONSULTING SERVICES

The COUNTY reserves the right to review the qualifications of any and all subconsultants, and to reject any subconsultant in a proper and timely manner, deemed not qualified to perform the services for which it shall have been engaged. Any subconsultant not listed as part of the prime consultants team at time of award must be approved by the Director of Purchasing prior to performing any service.

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

SECTION 11 SATISFACTORY PERFORMANCE

All services to be provided by the CONSULTANT under the provisions of this Agreement, including services to be provided by subcontractors, shall be performed to the reasonable satisfaction of the COUNTY'S Director of Environment and Infrastructure (DEI) or designee.

SECTION 12 RESOLUTION OF DISAGREEMENTS

12.1 The COUNTY shall reasonably decide all questions and disputes, of any nature whatsoever, that may arise in the execution and fulfillment of the services provided for under this Agreement.

12.2 The decision of the COUNTY upon all claims, questions, disputes and conflicts shall be final and conclusive, and shall be binding upon all parties to this Agreement, subject to judicial review.

SAMPLE

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

SECTION 13 CONSULTANT'S ACCOUNTING RECORDS

13.1 Records of expenses pertaining to all services performed shall be kept in accordance with generally accepted accounting principles and procedures.

13.2 The CONSULTANT'S records shall be open to inspection and subject to examination, audit, and/or reproduction during normal working hours by the COUNTY'S agent or authorized representative to the extent necessary to adequately permit evaluation and verification of any invoices, payments or claims submitted by the CONSULTANT or any of his payees pursuant to the execution of the Agreement. These records shall include, but not be limited to, accounting records, written policies and procedures, subcontractor files (including proposals of successful and unsuccessful bidders), original estimates, estimating worksheets, correspondence, change order files (including documentation covering negotiated settlements), and any other supporting evidence necessary to substantiate charges related to this Agreement. They shall also include, but not be limited to, those records necessary to evaluate and verify direct and indirect costs (including overhead allocations) as they may apply to costs associated with this Agreement. The COUNTY shall not audit payroll and expense records on task assignments paid by lump sum fee.

13.3 For the purpose of such audits, inspections, examinations and evaluations, the COUNTY'S agent or authorized representative shall have access to said records from the effective date of the Agreement, for the duration of work, and until three (3) years after the date of final payment by the COUNTY to the CONSULTANT pursuant to this Agreement.

13.4 The COUNTY'S agent or authorized representative shall have access to the CONSULTANT'S facilities and all necessary records in order to conduct audits in compliance with this Section. The COUNTY'S agent or authorized representative shall give the CONSULTANT reasonable advance notice of intended inspections, examinations, and/or audits.

SECTION 14 OWNERSHIP OF PROJECT DOCUMENTS

Upon completion or termination of this Agreement, all records, documents, tracings, plans, specifications, maps, evaluations, reports and other technical data, other than working papers, prepared or developed by the CONSULTANT under this Agreement shall be delivered to and become the property of the COUNTY. The CONSULTANT, at its own expense, may retain copies for its files and internal use. The COUNTY shall not reuse any design plans or specifications to construct another project at the same or a different location without the CONSULTANT'S specific written verification, adaptation or approval.

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

SECTION 15 INSURANCE COVERAGE AND INDEMNIFICATION

15.1 The Contractor must maintain insurance in at least the amounts required in the Request for Proposal throughout the term of this contract. The contractor must provide a Certificate of Insurance in accordance with Insurance Requirements of the Request for Proposal, evidencing such coverage prior to issuance of a purchase order or commencement of any work under this Contract. See Section C Insurance Requirements – Attached

15.2 If the CONSULTANT is an individual or entity licensed by the state of Florida who holds a current certificate of registration under Chapter 481, Florida Statutes, to practice architecture or landscape architecture, under Chapter 472, Florida Statutes, to practice land surveying and mapping, or under Chapter 471, Florida Statutes, to practice engineering, and who enters into a written agreement with the COUNTY relating to the planning, design, construction, administration, study, evaluation, consulting, or other professional and technical support services furnished in connection with any actual or proposed construction, improvement, alteration, repair, maintenance, operation, management, relocation, demolition, excavation, or other facility, land, air, water, or utility development or improvement, the CONSULTANT will indemnify and hold harmless the COUNTY, and its officers and employees, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the CONSULTANT and other persons employed or utilized by the CONSULTANT in the performance of the Agreement.

SECTION 16 EQUAL EMPLOYMENT OPPORTUNITY CLAUSE FOR CONTRACTS NOT SUBJECT TO EXECUTIVE ORDER 11246

In carrying out the contract, the CONSULTANT shall not discriminate against employee or applicant for employment because of race, color, religion, sex or national origin.

SECTION 17 INDEPENDENT CONTRACTOR STATUS AND COMPLIANCE WITH THE IMMIGRATION REFORM AND CONTROL ACT OF 1986

CONSULTANT acknowledges that it is functioning as an independent contractor in performing under the terms of this Agreement, and it is not acting as an employee of COUNTY. CONSULTANT acknowledges that it is responsible for complying with the provisions of the Immigration Reform and Control Act of 1986, located at 8 U.S.C. Section 1324, et seq., and regulations relating thereto. Failure to comply with the above provisions of this contract shall be considered a material breach and shall be grounds for immediate termination of the contract.

SECTION 18 PROHIBITION AGAINST CONTINGENT FEE

The CONSULTANT warrants that he has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT to solicit or secure this Agreement, and that he has not paid or agreed to pay any person, company, corporation, individual, or firm other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, gift or any other consideration, contingent upon or resulting from the award or making of this Agreement.

SECTION 19 TRUTH IN NEGOTIATIONS

By execution of this Agreement, the CONSULTANT certifies to truth-in-negotiations and that wage rates and other factual unit costs supporting the compensation are accurate, complete and current at the time of contracting. Further, the original contract amount and any additions thereto shall be adjusted to exclude any significant sums where the COUNTY determines the contract price was increased due to inaccurate, incomplete or non-current wage rates and other factual unit costs. Such adjustments must be made within one (1) year following the end of the contract.

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

SECTION 20 SUCCESSORS AND ASSIGNS

The CONSULTANT shall not assign, sublet, or transfer his interest in this Agreement without the written consent of the COUNTY.

SECTION 21 INTEREST ON JUDGMENTS

In the event of any disputes between the parties to this Agreement, including without limitation thereto, their assignees and/or assigns, arising out of or relating in any way to this Agreement, which results in litigation and a subsequent judgment, award or decree against either party, it is agreed that any entitlement to post judgment interest, to either party and/or their attorneys, shall be fixed by the proper court at the rate of five percent (5%), per annum, simple interest. Under no circumstances shall either party be entitled to pre-judgment interest. The parties expressly acknowledge and, to the extent allowed by law, hereby opt out of any provision of federal or state statute not in agreement with this paragraph.

SECTION 22 TERMINATION OF AGREEMENT

22.1 The COUNTY reserves the right to cancel this Agreement, without cause, by giving thirty (30) days prior written notice to the CONSULTANT of the intention to cancel. Failure of the CONSULTANT to fulfill or abide by any of the terms or conditions specified shall be considered a material breach of contract and shall be cause for immediate termination of the contract at the discretion of COUNTY. Alternatively, at the COUNTY'S discretion, the COUNTY may provide to CONSULTANT thirty (30) days to cure the breach. Where notice of breach and opportunity to cure is given, and CONSULTANT fails to cure the breach within the time provided for cure, COUNTY reserves the right to treat the notice of breach as notice of intent to cancel the Agreement for convenience.

22.2 If COUNTY terminates the Agreement for convenience, other than where the CONSULTANT breaches the Agreement, the CONSULTANT'S recovery against the COUNTY shall be limited to that portion of the CONSULTANT'S compensation earned through date of termination, together with any costs reasonably incurred by the CONSULTANT that are directly attributable to the termination. The CONSULTANT shall not be entitled to any further recovery against the COUNTY, including but not limited to anticipated fees or profit on work not required to be performed.

22.3 Upon termination, the CONSULTANT shall deliver to the COUNTY all original papers, records, documents, drawings, models, and other material set forth and described in this Agreement.

22.4 In the event that conditions arise, such as lack of available funds, which in the COUNTY'S opinion make it advisable and in the public interest to terminate this Agreement, it may do so upon written notice.

SECTION 23 AGREEMENT TERM

This Agreement will become effective on the date of execution first written above and shall remain in effect for Four (4) years from the commencement date on the Notice to Proceed unless terminated at an earlier date under other provisions of this Agreement, or unless extended for a longer term by amendment.

SECTION 24 CONFLICT OF INTEREST

24.1 By accepting award of this Contract, the CONSULTANT, which shall include its directors, officers and employees, represents that it presently has no interest in and shall acquire no interest in any business or activity which would conflict in any manner with the performance of services required hereunder, including as described in the CONSULTANT'S own professional ethical requirements. An

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

interest in a business or activity which shall be deemed a conflict includes but is not limited to direct financial interest in any of the material and equipment manufacturers suppliers, distributors, or contractors who will be eligible to supply material and equipment for the PROJECT for which the CONSULTANT is furnishing its services required hereunder.

24.2 If, in the sole discretion of the County Administrator or designee, a conflict of interest is deemed to exist or arise during the term of the contract, the County Administrator or designee may cancel this contract, effective upon the date so stated in the Written Notice of Cancellation, without penalty to the COUNTY.

SECTION 25 ENTIRE AGREEMENT

This Agreement represents, together with all Exhibits and Appendices, the entire written Agreement between the COUNTY and the CONSULTANT and may be amended only by written instrument signed by both the COUNTY and the CONSULTANT.

SECTION 26 PUBLIC ENTITY CRIMES

The CONSULTANT is directed to the Florida Public Entity Crimes Act, Section 287.133, Florida Statutes, specifically section 2(a), and the COUNTY'S requirement that the CONSULTANT comply with it in all respects prior to and during the term of the Contract.

SECTION 27 PUBLIC RECORDS

Contractor acknowledges that information and data it manages as part of the services may be public records in accordance with Chapter 119, Florida Statutes and Pinellas County public records policies. Contractor agrees that prior to providing services it will implement policies and procedures to maintain, produce, secure, and retain public records in accordance with applicable laws, regulations, and County policies, including but not limited to the Section 119.0701, Florida Statutes. Notwithstanding any other provision of this Agreement relating to compensation, the Contractor agrees to charge the County, and/or any third parties requesting public records only such fees allowed by Section 119.07, Florida Statutes, and County policy for locating and producing public records during the term of this Agreement.

PLEASE NOTE THERE ARE SOME TERMS ASSOCIATED WITH LAP PROJECTS IN THIS AGREEMENT THAT MAY NOT BE APPLICABLE. THEY WILL BE REMOVED WITH FINAL AGREEMENT

SECTION 28
GOVERNING LAW AND AGREEMENT EXECUTION

This Agreement shall be governed by the laws of the State of Florida.

IN WITNESS WHEREOF, the parties herein have executed this Agreement as of the day and year first written above.

PINELLAS COUNTY, by and through its
Board of County Commissioners

By: _____
Print Name: _____
Title: _____ Date: _____

By: _____
Name _____ Date: _____
Chairman _____

ATTEST:

ATTEST:

Ken Burke, clerk of the Circuit Court

By: _____
Print Name: _____
Title: _____ Date: _____

By: _____
Deputy Clerk _____ Date: _____

(CORPORATE SEAL)

APPROVAL AS TO FORM:

By: _____
Office of the County Attorney

November 20, 2014

TO: ALL INTERESTED PROPOSERS

REQUEST FOR PROPOSAL: Forest Lakes Boulevard Reconstruction and Widening Improvements
Professional Services, Engineering (PID 001642A)

PROPOSAL NUMBER: 134-0310-NC(RM)

PROPOSAL SUBMITTAL IS DUE: November 25, 2014 @ 3:00 P.M.

ADDENDUM NO. 1

Following is additional information, clarifications, questions and responses relative to referenced Request for Proposal (RFP):

QUESTIONS:

1. Based on this language in the scope "The proposed underdrain shall be a minimum of 2.0 feet below the bottom of the base of Forest Lakes Boulevard and extend from east of Pine Avenue to east of Commerce Boulevard. The maximum underdrain length along this section will be 800 feet" is the consultant to assume the County has determined how much underdrain to use and where or does the consultant evaluate the project limits and recommend where to use underdrain.

Answer: The design limits for this project are anticipated to be approximately 100 ft. west of the intersection of Pine Avenue North and Forest Lakes Boulevard to the Railroad Bridge west of the Race Track Road and Forest Lakes Boulevard Intersection. Underdrain/edgedrain shall be evaluated along the Eastbound and Westbound pavement shoulders and the median for the length of this project.

2. Are the latest bridge inspection reports available? The Underdrain Memorandum references a Preliminary Phase 2 Underdrain Design (see attached). Can this be provided?

Answer: Existing Railroad Bridge is not part of this project, bridge inspection reports will not be provided. Underdrain design was made for Phase 2 based on AS BUILT plans by King Engineering and Associates. These plans have already been provided.

3. The recommended remediation solution in the Pavement Evaluation Reports calls for edge drains not underdrains (see attached). Based on the scope of work provided in Section E, does the County have a preference of underdrain to edge drain?

Answer: The selected consultant shall evaluate and recommend the use and location of underdrain or edgedrain throughout the design process.

4. The scope states "existing light poles will be relocated outside of the new clear zone by others." When is the relocation by others to be done-before, during or after the construction of this project?

PLEASE ADDRESS REPLY TO:
400 South Ft. Harrison, Sixth Floor
Clearwater, Florida 33756
Phone: (727) 464-3311
FAX: (727) 464-3925
Website: www.pinellascounty.org/purchase



Answer: It is anticipated that TECO relocations will be coordinated before construction.

5. Please provide the USACE permit if available.

Answer: Provided, see Notice of Authorization of November 17, 2000 as attachment to this addendum.

6. Has the mitigation permitted by SWFWMD and USACE been deemed complete and successful?

Answer: Yes

7. What is the expected pavement design life of the facility?

Answer: The selected consultant shall submit Pavement Design Memorandum with alternatives. County criteria for design life of new pavement is generally 20 years.

8. Who will be the Project Manager for Pinellas County?

Answer: The designated County Project Manager is Mr. Tim Clark.

9. Are we to include a Project Approach, and if so in what section would it be preferred?

Answer: Please refer to the Request for Proposal, Section B, Page 10, # 3 (a-e) which details the criteria which will be used to evaluate the written proposal. Additionally Page 12, #7 provides information on submittal requirements and how the submittal should be indexed and listed.

10. On Page 13, 7C Tab 2 (2), it states "Provide proof of proper State of Florida business licensure and professional certifications/registration(s) in the State of Florida." Does this mean to include individual PE licenses as well as firm licenses/certifications or to include just the firm's licenses/certifications?

Answer: Please provide the firm's and the individual's licenses/certifications.

11. Are we allowed to use 11/17 paper in our submittal? If so, would 11X17 count as two pages?

Answer: 8 1/2 x 11 is the preferred paper size.

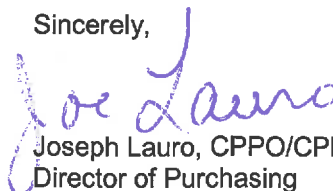
12. Do the required forms (Tab 5), proposal cover, and/or tabs (dividers) count toward the 100 page limit?

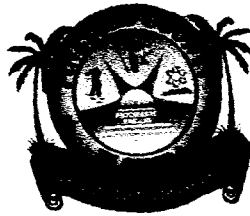
Answer: The Introduction Tab along with Tab 1 through Tab 6, items within the Introduction Tab, Table of Contents, and the tab dividers are not included in the page limit.

All other specifications, terms and conditions remain the same.

Please remember to acknowledge receipt of this Addendum in Section G, Page 24 under Addendum No.1 and return with completed proposal package.

Sincerely,

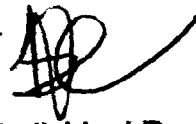

Joseph Lauro, CPPO/CPPB
Director of Purchasing



Lena

PUBLIC WORKS ENGINEERING SURFACE WATER DIVISION
Transmittal

TO: File

FROM: Nancy S. Castricone, E.I.
Permit Coordinator 

SUBJECT: Department of the Army Individual Permit
East-West Connector Road, Phases I & II
D.A. Permit No. 199402373
PID Nos. 921563 & 922365

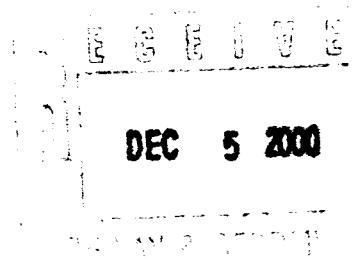
DISTR: Paul Giuliani, P.E., Division Engineer, Public Works Construction
Charles R. Norwood, P.L.S., Chief Land Surveyor
Robert L. Warren, Director, Highway Department
Jim Pleso, Project Manager, Transportation Engineering
Ivan J. Fernandez, P.E., Sr. Engineer, Transportation Engineering
Tom McGrew, P.E., King Engineering Associates, Inc.,
4921 Memorial Highway, Suite 300, Tampa, Florida 33634
Tim Neldner, Vice President, Biological Research Associates
3910 N. U.S. Highway 301, Suite 180, Tampa, Florida 33619

DATE: November 28, 2000

The original permit received from the Department of the Army for the above referenced project will be retained in the permit file for reference.

Enclosure

f:\users\wpdocs\engineer\surwater\nancy\e-wconnector.doc





**DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
TAMPA REGULATORY OFFICE
P.O. BOX 19247
TAMPA, FLORIDA 33686-9247
November 17, 2000**

Regulatory Division
West Permits Branch
Tampa Regulatory Office
199402373 (IP-ES)

Pinellas County Board of Commissioners
c/o Jan Herbst, Public Works Director
Public Works Department
440 Court Street
Clearwater, Florida 33756

Dear Ms. Herbst:

Enclosed is a Department of the Army (DA) permit and a Notice of Authorization for application number 199402373(IP-ES). The proposal included impacts to 4.81 acres of jurisdictional wetlands for construction of phases 1 and 2 of the East-West Connector Road, an extension of existing Linebaugh Avenue. The project is located north of Hillsborough Avenue from Race Track Road, west to Forest Lakes Boulevard in Sections 13 and 14, Township 28 South, Range 16 East, City of Oldsmar, Pinellas County, Florida.

You may begin the work authorized by this permit. The placard should be prominently displayed at the construction site. This permit does not relieve you of your responsibilities for any other Federal, State or local permit.

A map showing the field office addresses and telephone numbers is enclosed. In order to determine compliance with the permit, U.S. Army personnel or a contracted representative may inspect the project site at anytime. A copy of the enclosed permit and drawings in addition to the placard, must be available at the work site at all times. Please be aware that failure to comply with the permit limits or the conditions may result in enforcement actions to include civil penalties.

If, in the future, you choose to modify your permitted work, you must submit your modification request in writing and drawings showing the proposed changes must also be submitted.



This notice of authorization must be conspicuously displayed at the site of work

United States Army Corps of Engineers

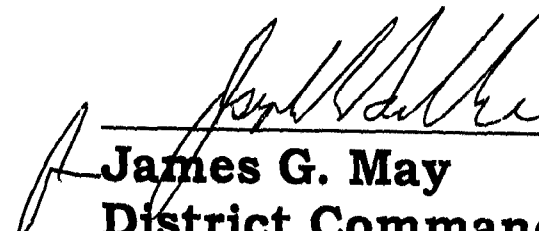
Has issued a permit to impact 4.81 acres of wetland to extend Linebaugh Avenue from Race Track Road to Hillsborough Avenue.
All work is located in Sections 13 and 14, Township 28 South, Range 16 East, Pinellas County, Florida.

The permit has been issued to Pinellas County BOCC on November 17, 2000, and will expire on October 30, 2005.

Address of Permittee: 440 Court Street, Clearwater, Florida 33756

Permit Number

199402373(IP-ES)

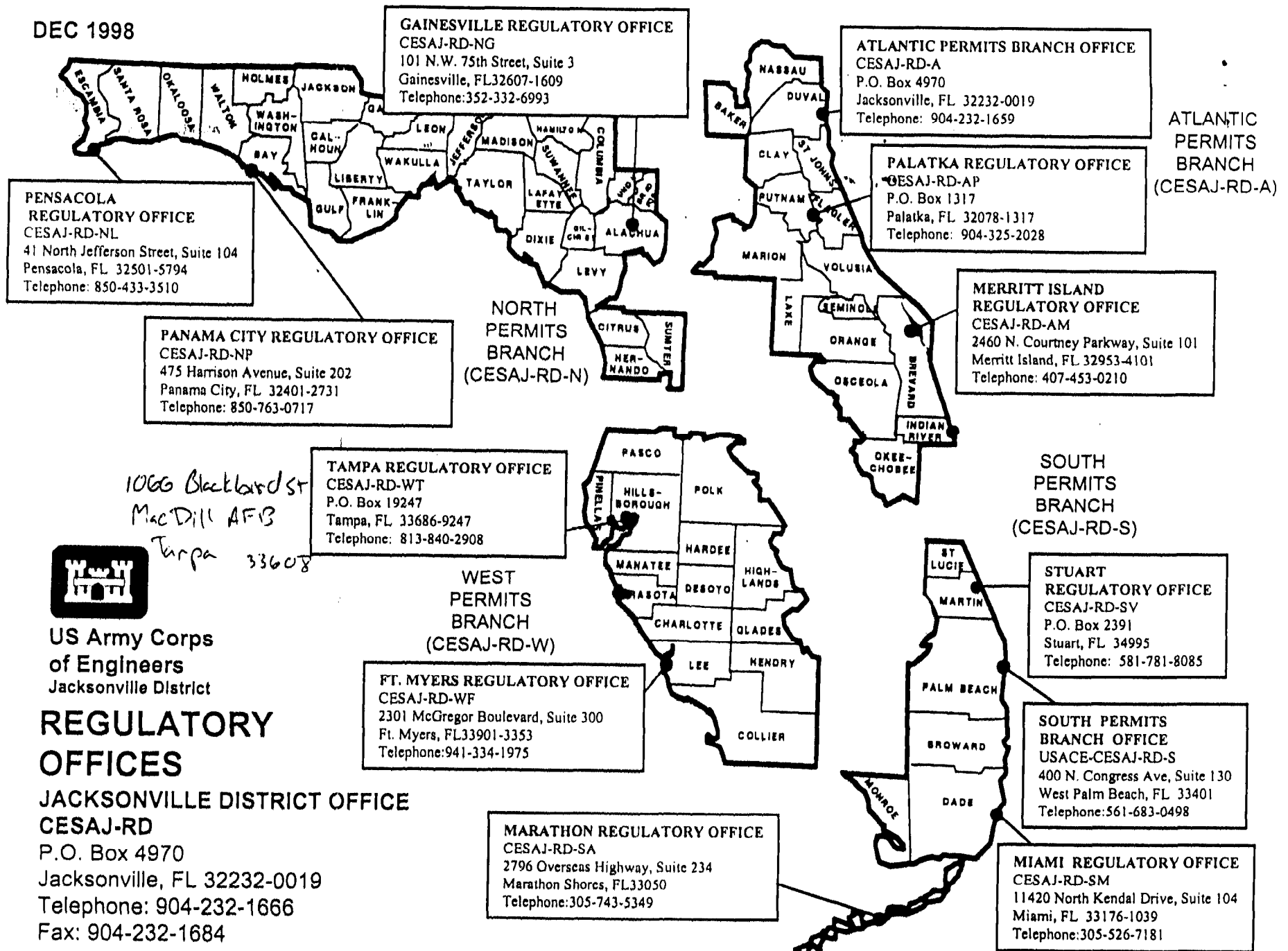

James G. May
District Commander
Colonel, U.S. Army

Jacksonville District Regulatory Web Page

www.saj.usace.army.mil/permit

**ERP Permit Applications
Jurisdictional Information
Permit Processing
Information
1987 Wetland Delineation
Manual
Corps Offices and contacts
Mitigation Bank
Information
Other Corps Publications**

DEC 1998



DEPARTMENT OF THE ARMY PERMIT

Permittee: Pinellas County Board of Commissioners
c/o Jan Herbst,
Public Works Department
440 Court Street
Clearwater, Florida 33756

Permit No. 199402373(IP-ES)

Issuing Office: U.S. Army Engineer District, Jacksonville

NOTE: The term "you" and its derivatives, as used in this permit, describes the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: To place approximately 200,000 cubic yards of clean fill material into 4.81 acres of jurisdictional wetlands for construction of phases 1 and 2 of the East-West Connector Road, an extension of existing Linebaugh Avenue, from it's current intersection with Race Track Road extending west to existing Forest Lakes Boulevard terminating at State Route 584. The purpose of the project is to provide the community of Oldsmar, and areas west, with an alternative hurricane evacuation route.

The work described above is as shown on the plan drawings numbered 199402373(IP-ES) in 18 sheets, dated October 16, 2000. These drawings can be found in Attachment A, which is attached to, and becomes part of, this permit.

Project Location: The project is located north of Hillsborough Avenue from Race Track Road, west to Forest Lakes Boulevard in Sections 13 and 14, Township 28 South, Range 16 East, City of Oldsmar, Pinellas County, Florida. The proposed restoration site is located approximately 2-miles from the proposed project site in Section 11, Township 28, Range 16 East, Pinellas County, Florida.

Permit Conditions:

General Conditions (please give special consideration to conditions 2 and 4):

1. The time limit for completing the work authorized ends on October 30, 2005. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature and mailing address of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. The applicant agrees to create 6.51 acres of forested wetland area and enhance approximately 11.48 acres of jurisdictional wetland area. The compensation areas are located immediately north of the project site in Brooker

Creek Preserve, in Section 11, Township 28, Range 16 East, Pinellas County, Florida. The compensation areas will be completed no later than September 30, 2002.

2. The compensation areas will be monitored to assure success. Monitoring reports will be submitted to the U.S. Army Corps of Engineers Regulatory Divisions Enforcement Branch, Jacksonville and the U.S. Army Corps of Engineers, Tampa Regulatory Field Office. All monitoring reports will include a copy of this permit instrument, driving directions to the project site, and a post-construction plan view drawing of the created areas with planting zones labeled. Reports will be prepared and submitted quarterly during the first year post-construction, semi-annually in years 2-3, annually in years 4-5 and will continue after the fifth year if success criteria had not been achieved. The first monitoring period will begin 6-months following completion of the construction of the compensation areas.

3. Monitoring reports will include the following success criteria:

a. Percent cover of viable non-nuisance/hydrophytic species located in each compensation areas. Minimum area cover of each compensation area will be maintained at 85% or higher prior to release.

b. Percent cover of nuisance and exotic species located in each compensation area should never exceed 10% total cover.

c. Piezometer or shallow ground water well data to indicate the presence of sufficient hydrology. Monitoring should be performed with frequency to indicate the presence of free-water within 12 inches of the ground surface for a minimum of 30 consecutive days within the growing season. This data should be accompanied by precipitation data collected on or very near the project site. Thirty-year normal precipitation rates for the local area should also be included.

d. Qualitative and quantitative vegetative monitoring utilizing permanent transects and fixed point panoramic photographs.

4. The permittee shall undertake required maintenance activities within the compensation areas as needed at any time between mitigation site construction and termination of monitoring. Maintenance shall include the manual removal of all nuisance species and exotic species, with sufficient frequency, so that their combined coverage at no time exceeds the success criteria outlined in a.-c. above.

PERMIT NUMBER: 199402373(IP-ES)

PERMITTEE: Pinellas County/East West Connector

PAGE 4 of 7

5. The applicant agrees to establish and maintain three wildlife crossings at stations shown on enclosed drawings. The crossings will be constructed of 48" RCP's which are filled from end to end with native soils at a depth no less than two inches and no greater than 10-inches. Depths of the soils within the RCP's will be maintained at the prescribed depths to allow for wildlife migration.

6. Within 60 days of completion of the work authorized and authorized mitigation, the attached "Self-Certification Statement of Compliance" must be completed and submitted to the U.S. Army Corps of Engineers. Mail the completed form to the Regulatory Division, Enforcement Branch, Post Office Box 4970, Jacksonville, Florida 32232-0019 and a copy to the Tampa Regulatory Office.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

() Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal projects.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

PERMIT NUMBER: 199402373(IP-ES)

PERMITTEE: Pinellas County/East West Connector

PAGE 5 of 7

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
 - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
 - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work.
 - e. Damage claims associated with any future modification, suspension, or revocation of this permit.
4. **Reliance on Applicant's Data:** The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. **Reevaluation of Permit Decision.** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
- a. You fail to comply with the terms and conditions of this permit.
 - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).
 - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

PERMIT NUMBER: 199402373(IP-ES)

PERMITTEE: Pinellas County/East West Connector

PAGE 6 of 7

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

PERMIT NUMBER: 199402373(IP-ES)
PERMITTEE: Pinellas County/East West Connector
PAGE 7 of 7

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

Jan R. Herbst 11/6/00
(PERMITTEE) (DATE)
Jan R. Herbst, Director of Engineering

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

James G. May 21 Nov 2000
(DISTRICT ENGINEER) (DATE)
James G. May
Colonel, U.S. Army

THIS PERMIT CONTAINS 2 ATTACHMENTS, TOTALING 39 PAGES

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE-SIGNATURE) (DATE)

(NAME-PRINTED)

(ADDRESS)

(CITY, STATE, AND ZIP CODE)

PERMIT NUMBER: 199402373(IP-ES)

PERMITTEE: Pinellas County/East West Connector

PAGE 8 of 7

**Attachments to Department of the Army
Permit Number 199402373(IP-ES)**

- A. PERMIT DRAWINGS and MITIGATION PROCEDURES: 19 pages, dated October 16, 2000**

- B. WATER QUALITY CERTIFICATION: Florida Department of Environmental Protection and/or the Southwest Florida Water Management District Environmental Resource Permit with Specific Conditions in accordance with General Condition number 5 on page 2 of this DA permit. The permit and conditions consist of 20 pages.**

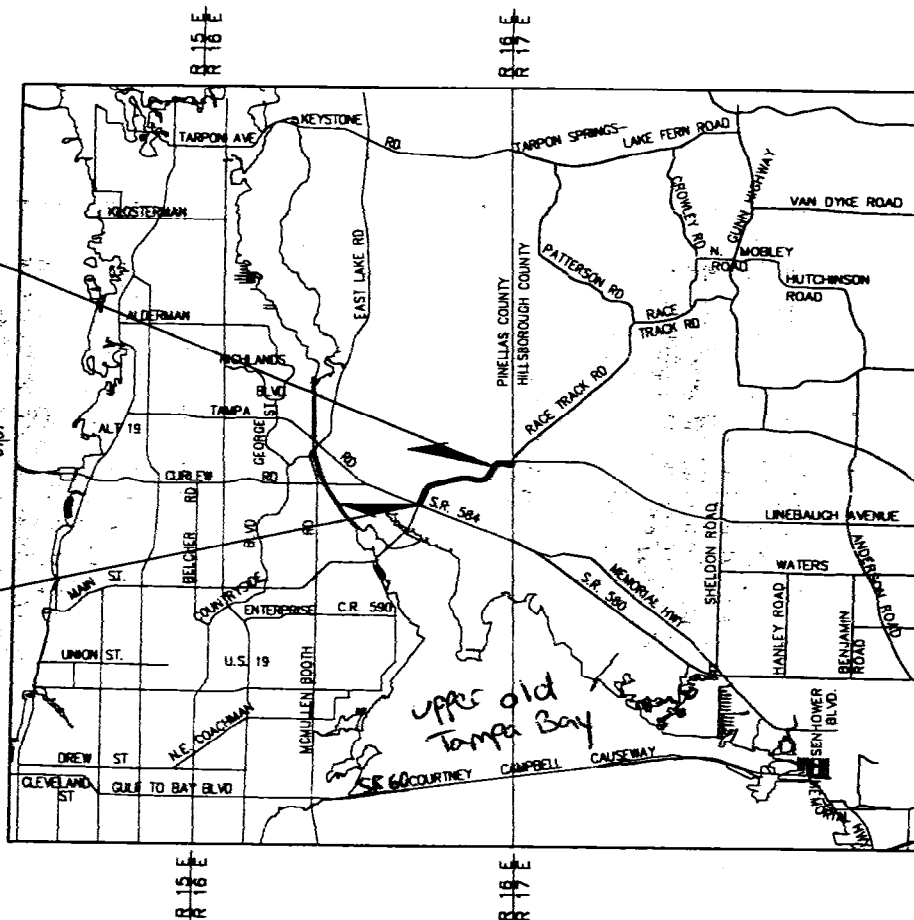
ATTACHMENT A:

**PERMIT DRAWINGS
AND
MITIGATION PROCEDURES**

END PROJECT
STA. 133+50

BEGIN PROJECT
STA. 30+00

Clearwater



Tampa

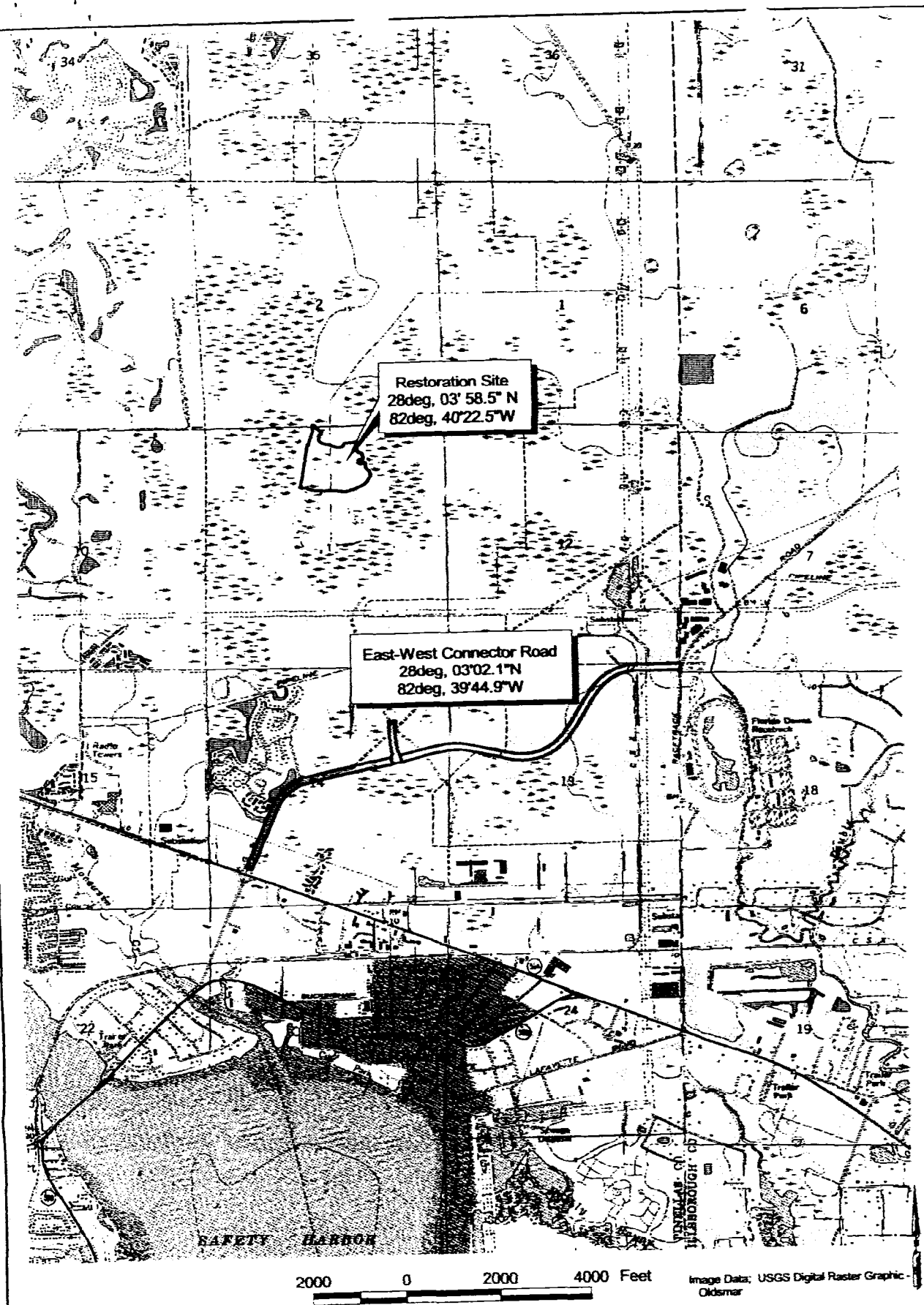
VICINITY MAP N.T.S.

DATE: 11-23-99

WETLAND IMPACT (FILL IMPACT)
EAST-WEST CONNECTOR ROAD
PHASE I
FROM TAMPA ROAD (S.R. 584) TO 1,300 FT.
WEST OF RACE TRACK ROAD

199402373 (IP-ES)
Pages 1 of 19 10/16/00

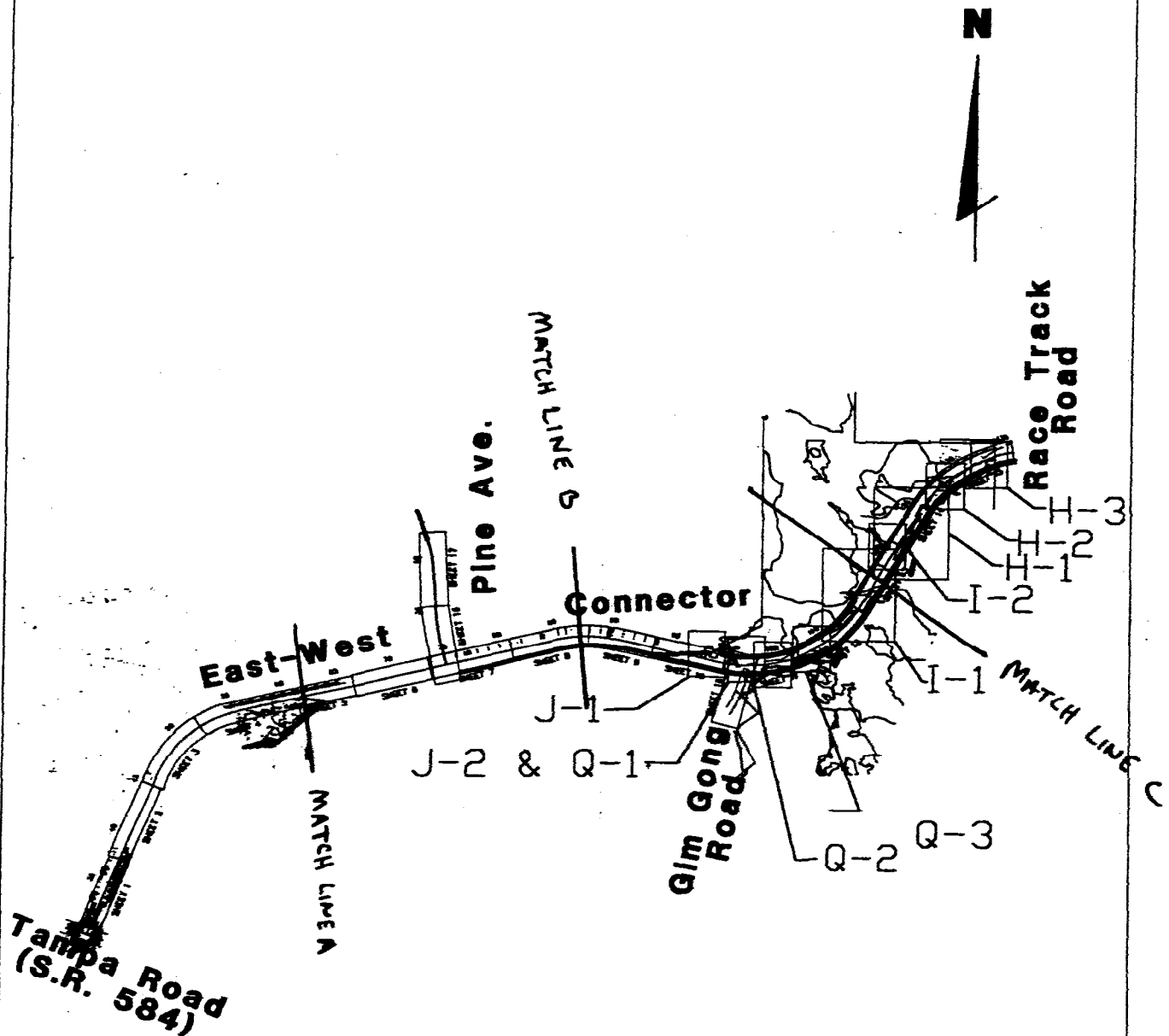
PHONE 813 • 880 • 8882
FAX



99402373 (IP-ES)
 pages 2 of 19 10/16/00

Pinellas County Department of Public Works
 Brooker Creek Preserve Restoration Site
 and East-West Connector Road
 USGS Quad Map

DESIGNED BY:	AAK	PROJECT #	0576-042-BP1
DRAWN BY:	AAK	DATE	23 February 2000
CHECKED BY:	TJN/JSG	REVISION DATE	



KEY MAP

N.T.S.

G:\BLOCKS\KINGBX11.DWG

DATE: 11-23-99

WETLAND IMPACT (FILL IMPACT)

**EAST-WEST CONNECTOR ROAD
PHASE I**

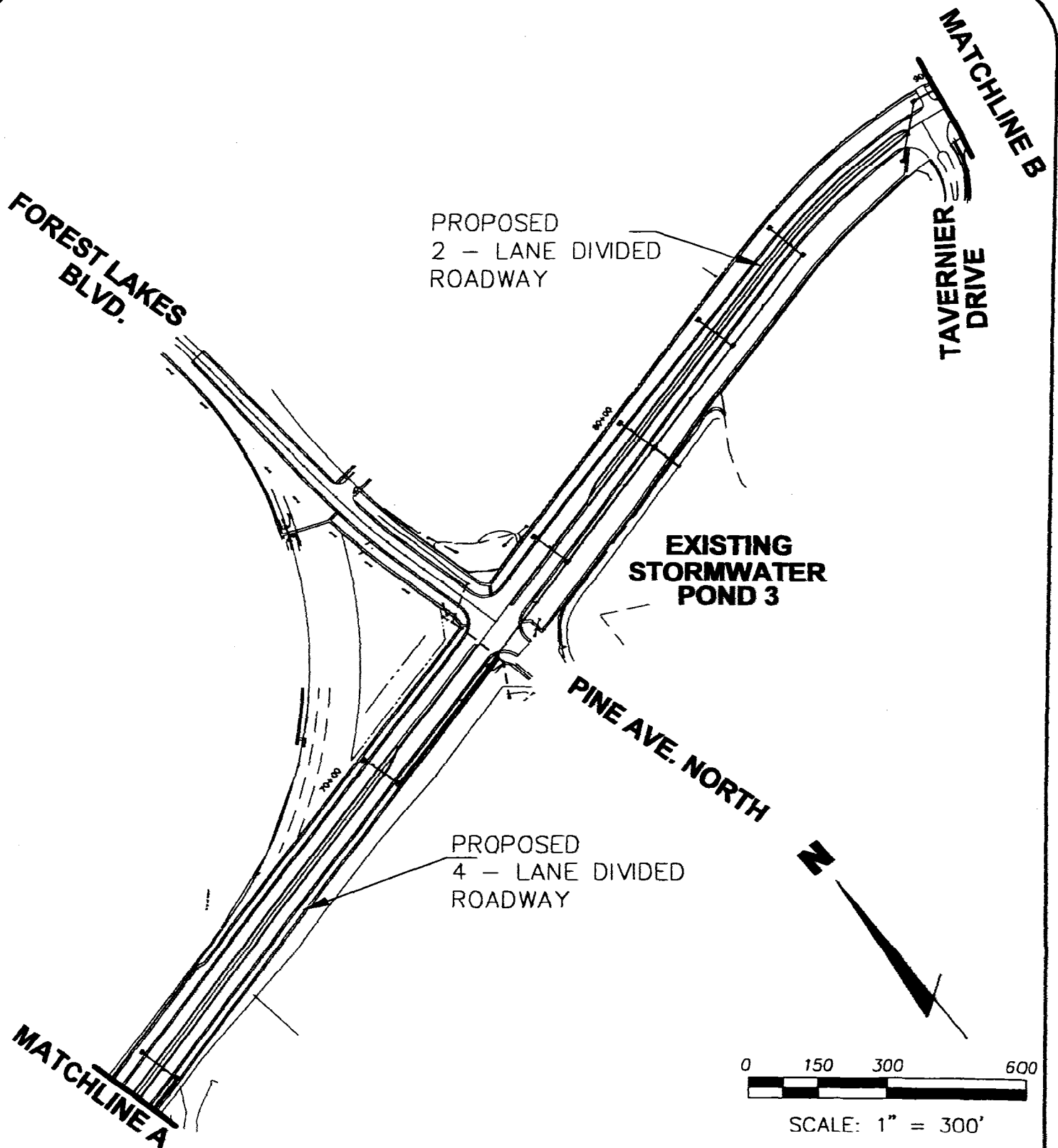
**FROM TAMPA ROAD (S.R. 584) TO 1,300 FT.
WEST OF RACE TRACK ROAD**

199402373 (IP-ES)

Pages 3 of 19 10/16/00

FAX 813-880-8882

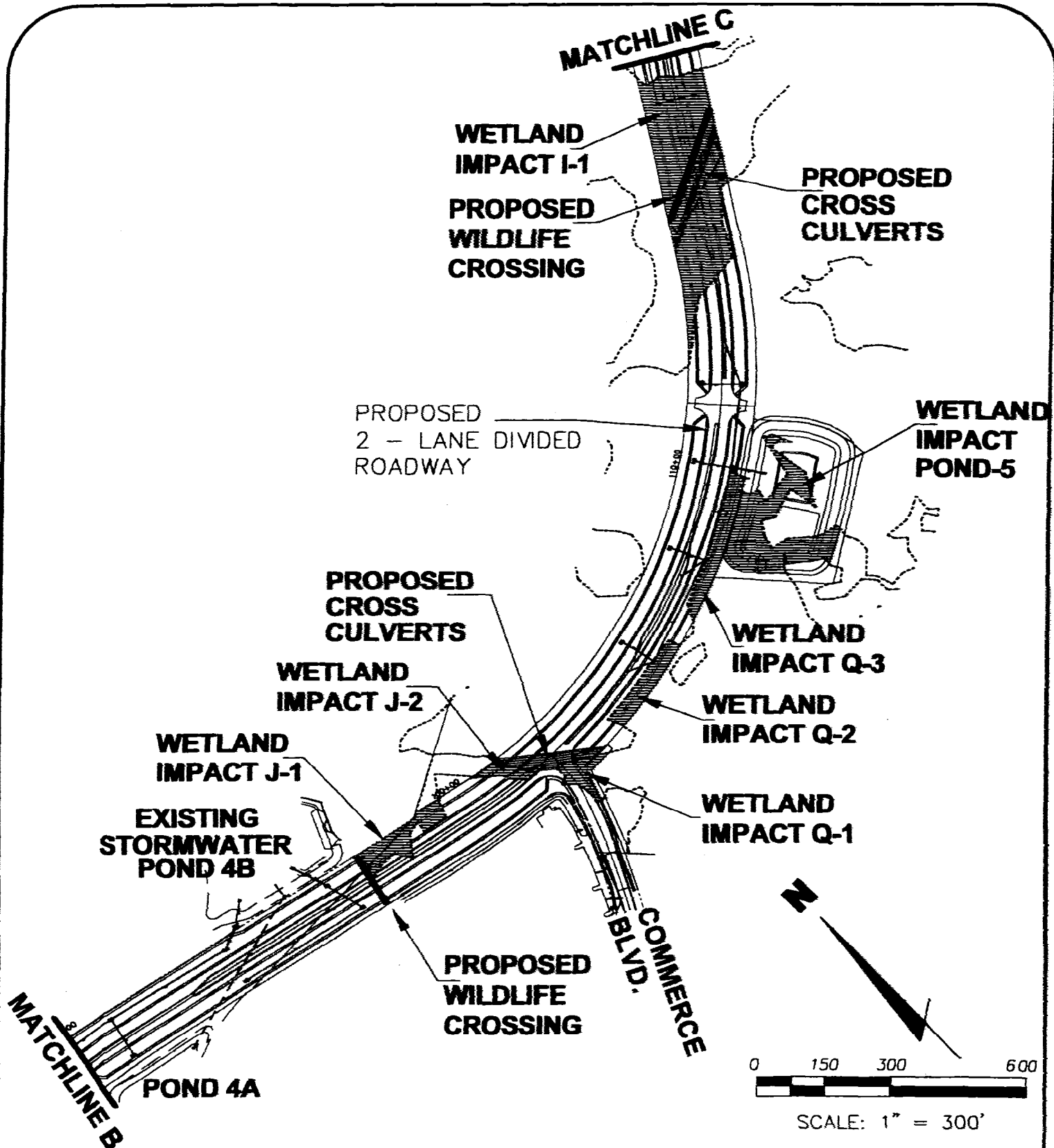
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PROPOSED EAST-WEST CONNECTOR ROAD OVERALL PLAN

199402373 (IP-ES)
Pages 5 of 19 10/16/00

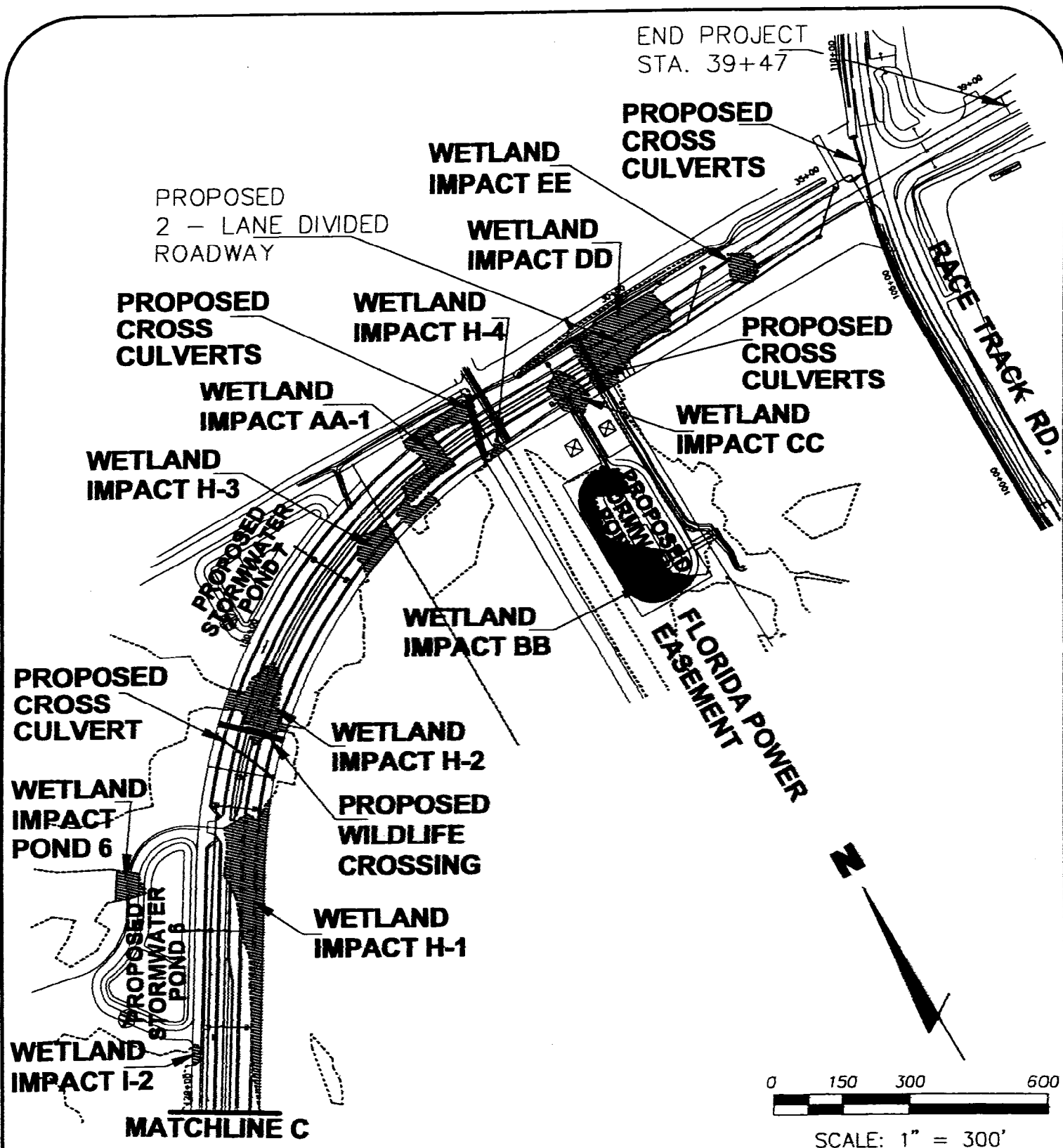
JOB NO. 2031-042-004
DATE: 4-27-00



PROPOSED EAST-WEST CONNECTOR ROAD OVERALL PLAN

199402373 (IP-ES)
 Pages 6 of 19 10/16/00

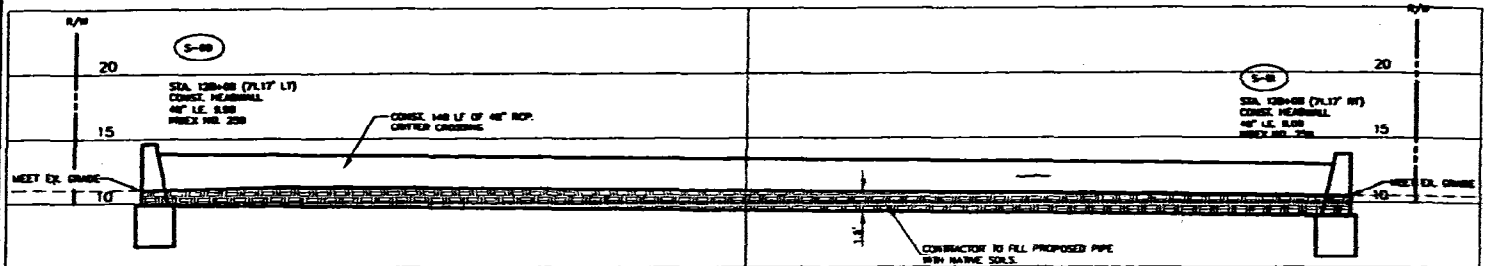
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DATE: 4-27-00



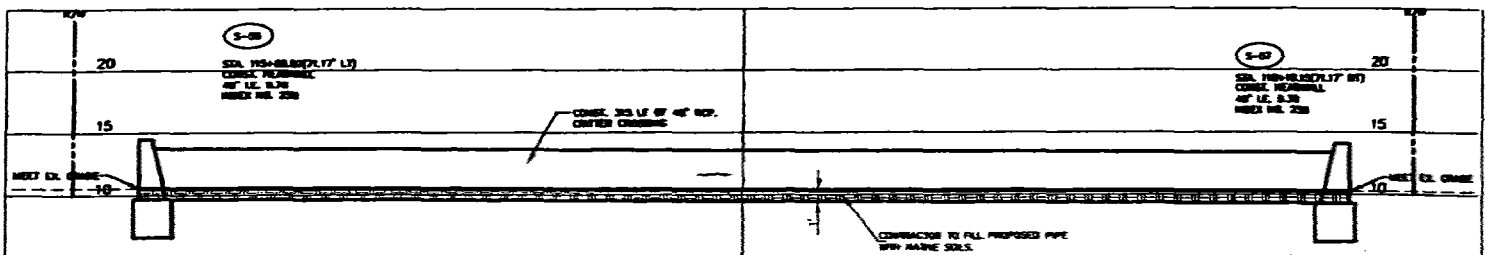
PROPOSED EAST-WEST CONNECTOR ROAD OVERALL PLAN

199402373 (IP-ES)
Pages 7 of 19 10/16/00

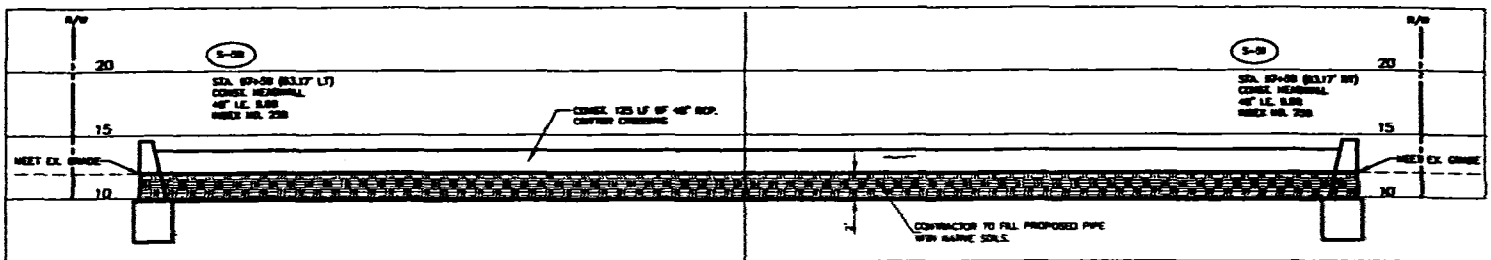
JOB NO. 2031-042-004
DATE: 4-27-00



WILDLIFE CROSSING
STA. 128+00
 N.T.S.

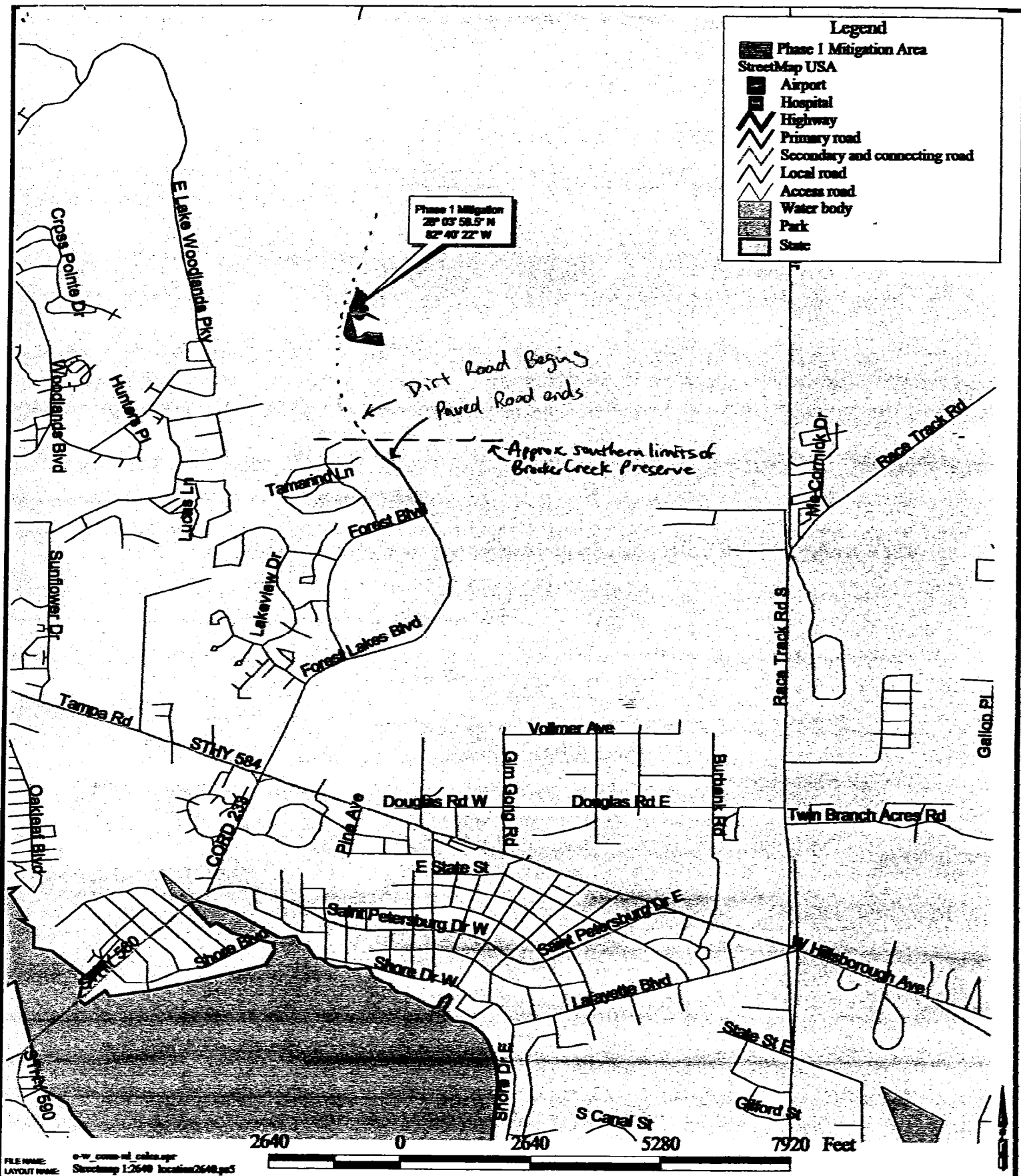


WILDLIFE CROSSING
STA. 117+00+/-
 N.T.S.



WILDLIFE CROSSING
STA. 97+50
 N.T.S.

PROPOSED EAST-WEST CONNECTOR ROAD WILDLIFE CROSSINGS





2640 0 2640 5280 Feet

1" = 1/2 Mile

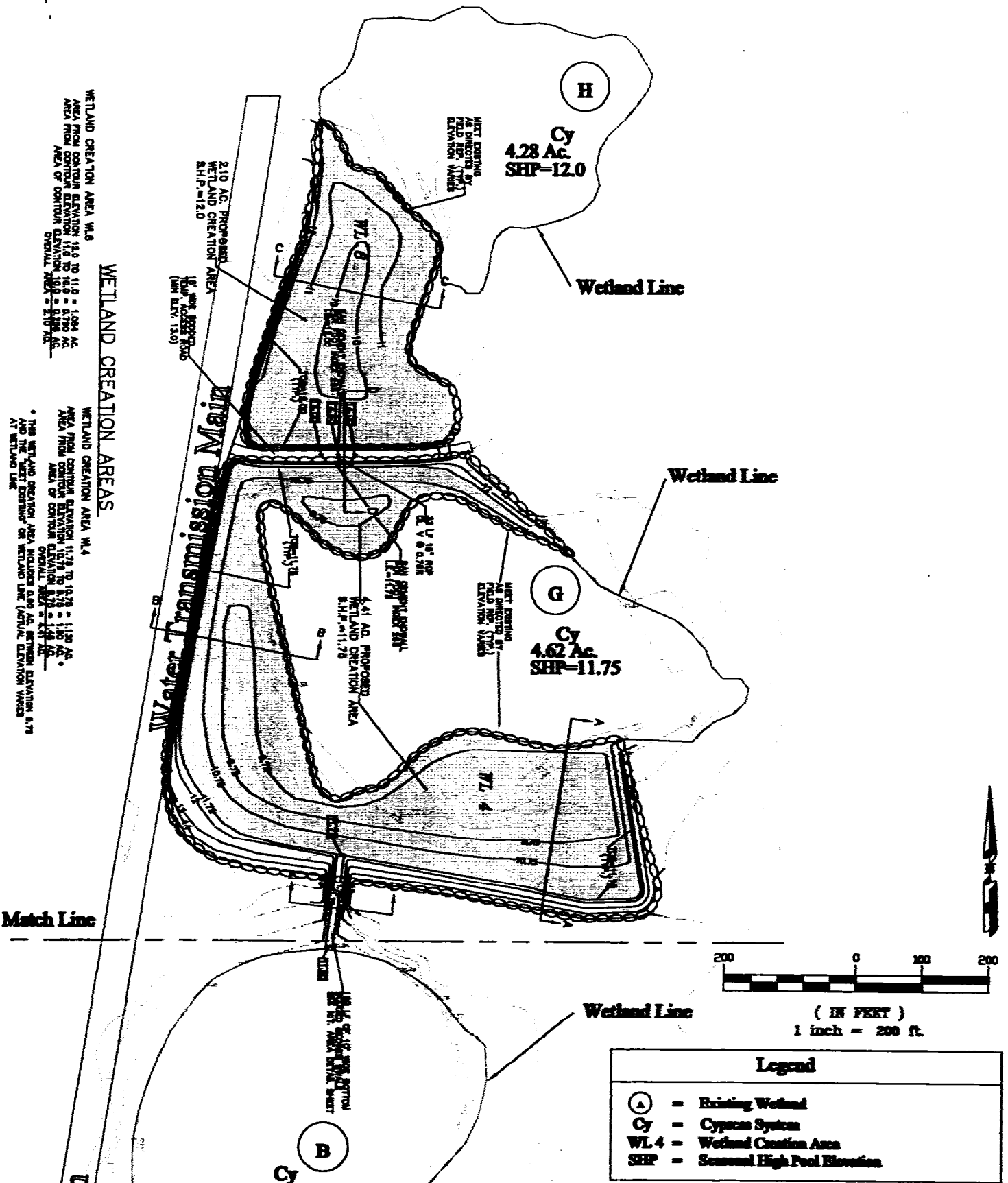
Image Data: DigiAir February 2000

LE NAME: e-w_conn-rd_calcs.apr
 (YOUR NAME: coe_aerial 1:2640 aerial2640 ps5

199402373 (IP-ES)
 Pages 10 of 19 10/16/00

Pinellas County
 E/W Connector Road
 Phase 1 Mitigation
 Aerial Map

DESIGNER	TLN	PROJECT #	0576-042-B75
DRAWN BY	DHL	DATE	6 October 2000
CHECKED BY		REVISION DATE	

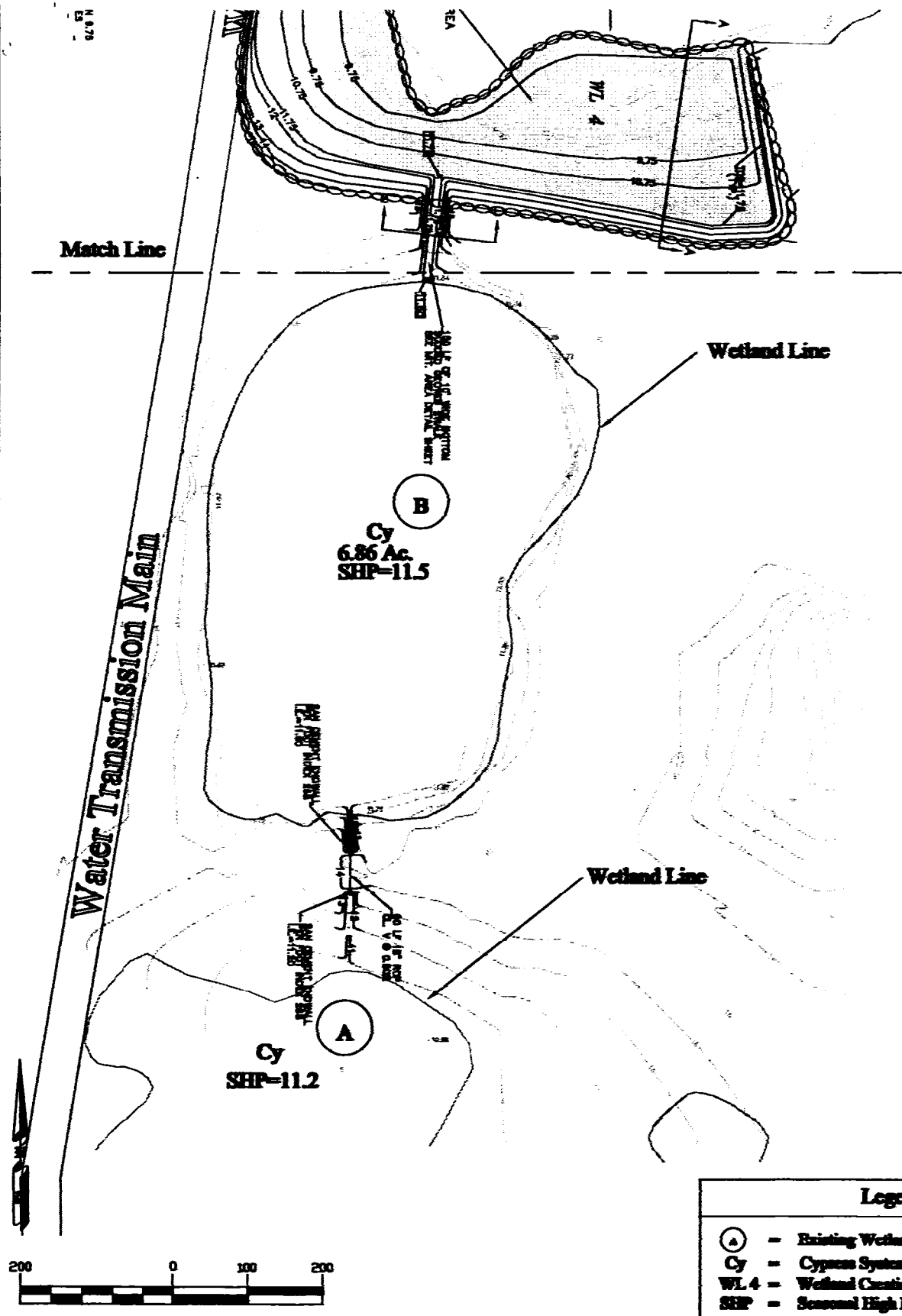


199402373 (IP-ES)
 Pages 11 of 19 10/16/00

Trampa, Florida 33618
 (813) 864-4500 Fax (813) 864-0440
 www.biologicalresearch.com

**Pinellas County
 E/W Connector Road
 Phase 1 Mitigation
 Plan View**

ECOLOGIST:	TLN	PROJECT #	0576-042-B75
DRAWN BY:	DHL	DATE:	6 October 2000
CHECKED BY:		SHEET NO:	M1
REVISION DATE:			



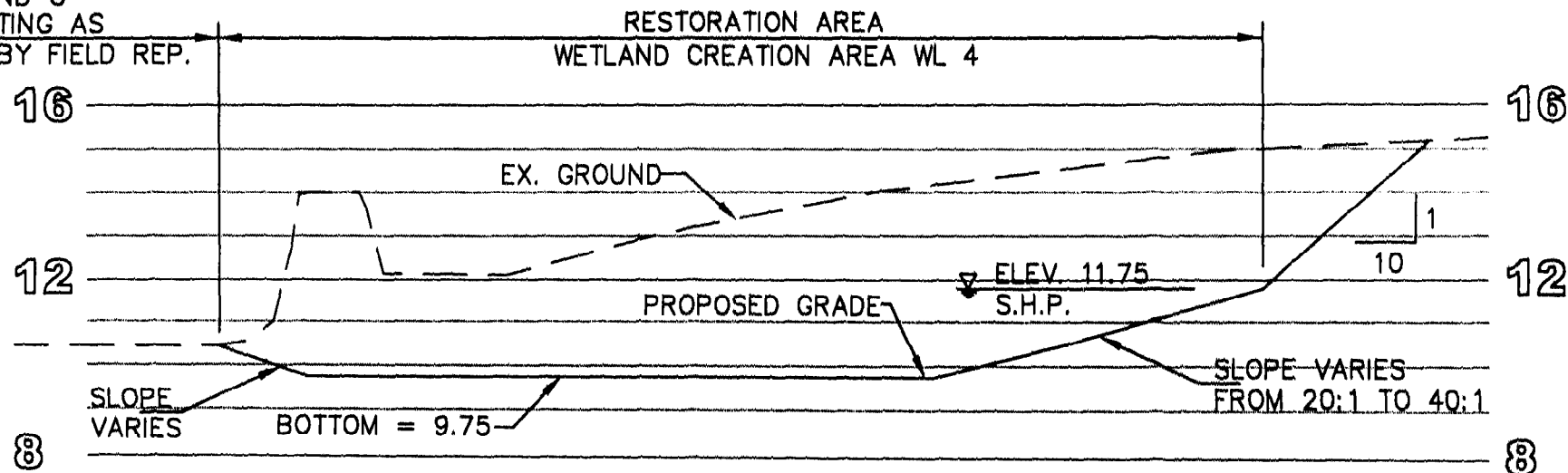
Legend	
(A)	- Existing Wetland
Cy	- Cypress System
WL 4	- Wetland Creation Area
SHP	- Seasonal High Pool Elevation

199402373 (IP-ES)
 Pages 12 of 14 10/16/00

Pinellas County
 E/W Connector Road
 Phase 1 Mitigation
 Plan View

ECOLOGIST: TLN	PROJECT # 0576-042-B75
DRAWN BY: DHL	DATE: 6 October 2000
CHECKED BY:	SHEET NO: M2
REVISION DATE:	

EX. WETLAND G
MEET EXISTING AS
DIRECTED BY FIELD REP.



SECTION A-A

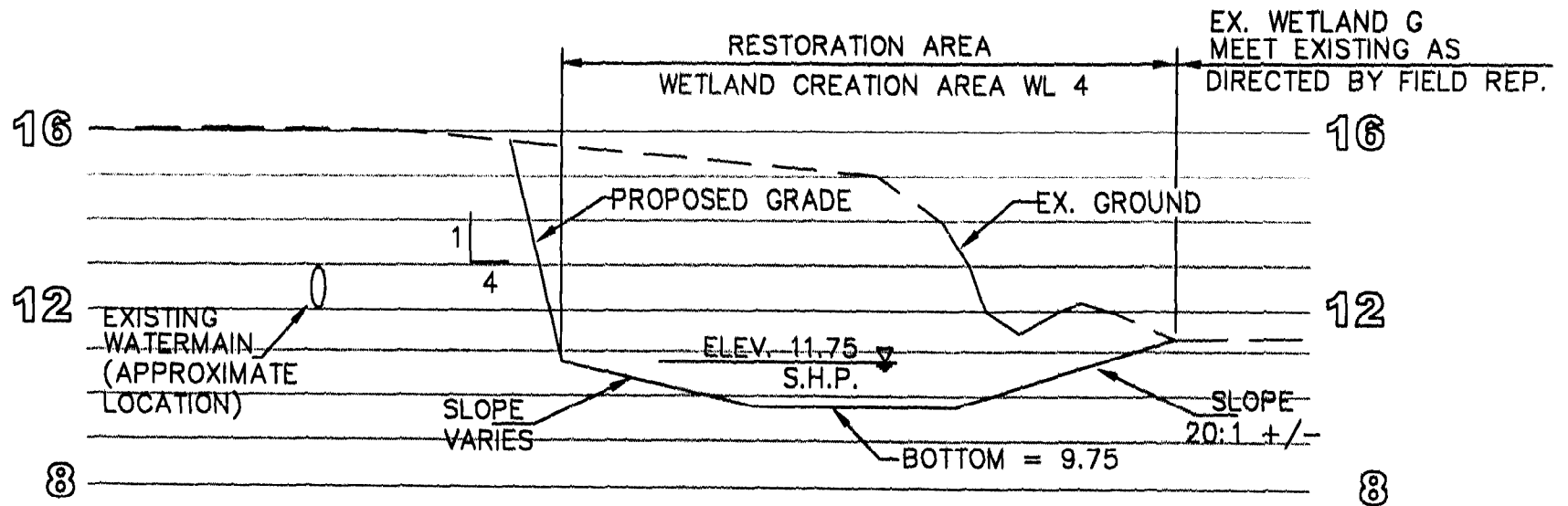
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1"=4' VERT.

199402373 (IP-ES)

Pages 13 of 19 10/16/00

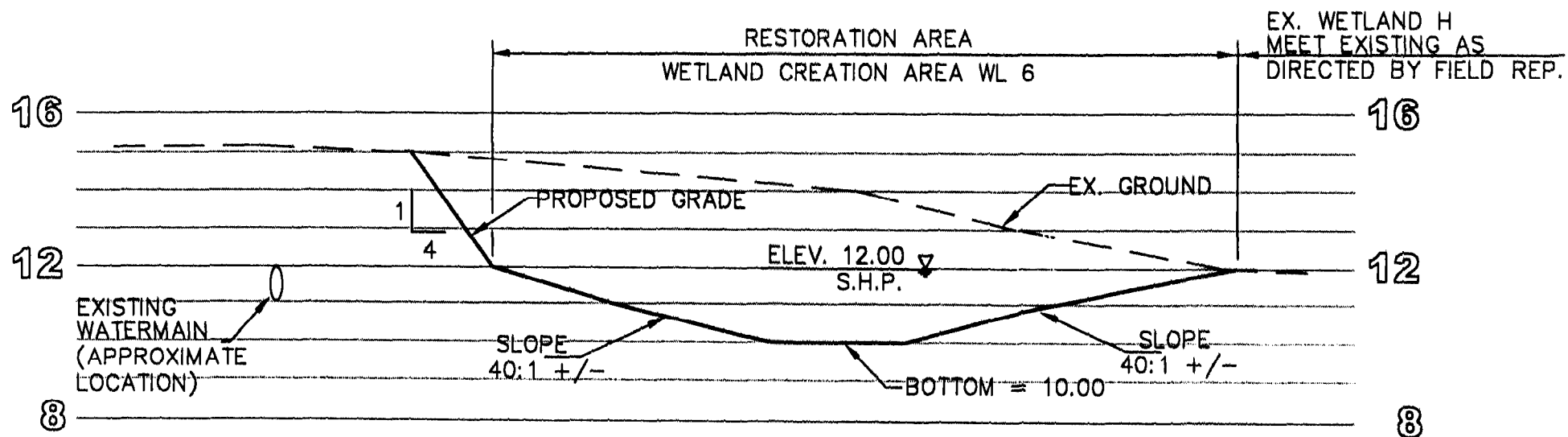
Pinellas County
E/W Connector Road
Phase 1 Area WL4
Cross Section A-A

ECOLOGIST: TLN	PROJECT #0576-042-B70
DRAWN BY: DHL	DATE: 5 October 2000
CHECKED BY:	SHEET NO: M3



SECTION B-B

SCALE: 1"=40' HORZ.
1"=4' VERT.



SECTION C-C

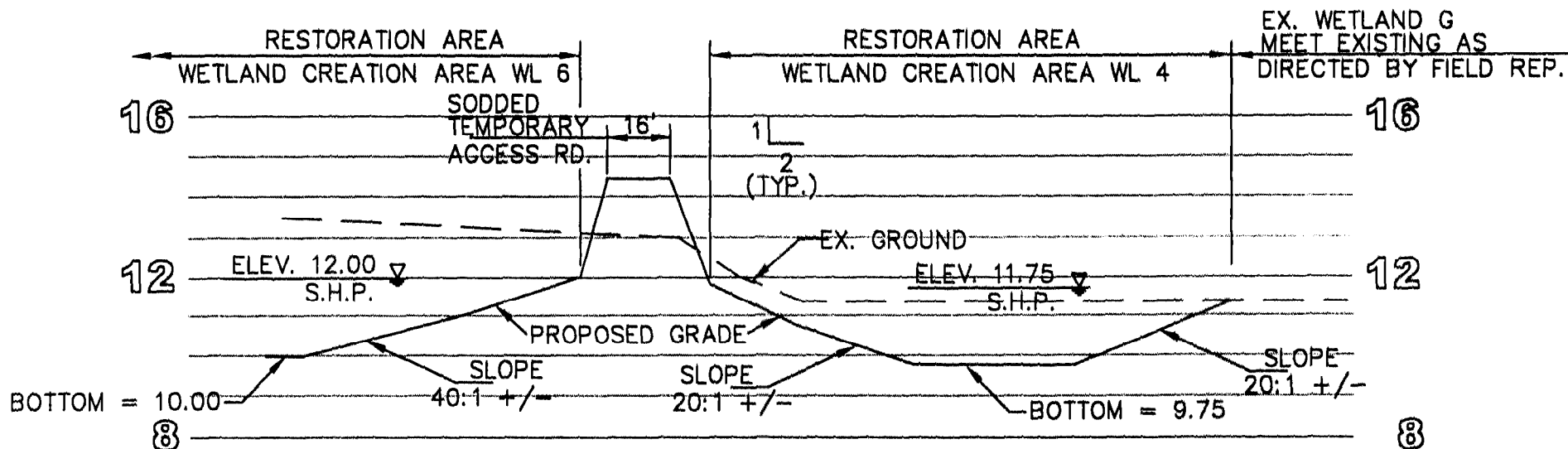
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1"=4' VERT.

199402373 (IP-ES)

Pages 15 of 19 10/16/00

Pinellas County
E/W Connector Road
Phase 1 Area WL6
Cross Section C-C

ECOLOGIST:	TLN	PROJECT #	0576-042-B70
DRAWN BY:	DHL	DATE:	5 October 2000
CHECKED BY:		SHEET NO:	M5



SECTION D-D

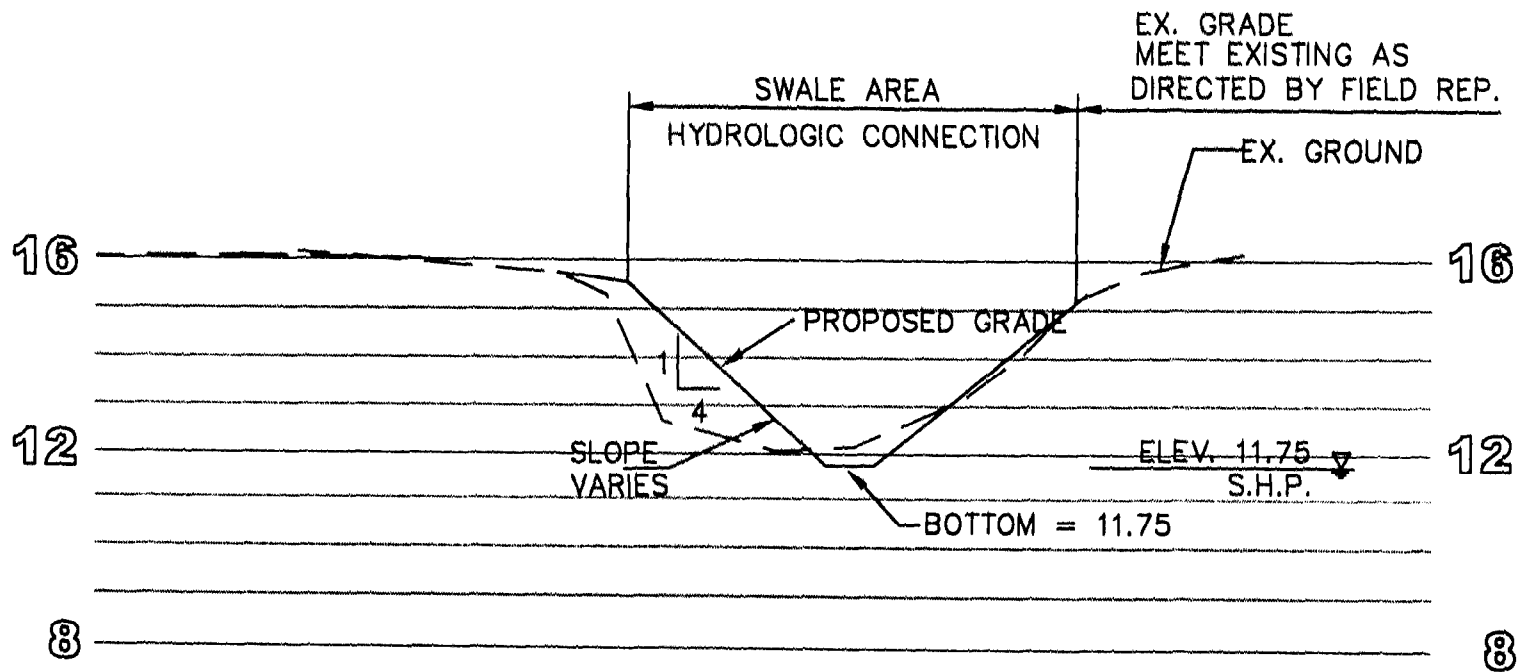
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1"=4' VERT.

199402373 (IP-ES)

Pages 16 of 19 10/16/00

Pinellas County
E/W Connector Road
Hydrologic Connection
Cross Section D-D

ECOLOGIST: TLN	PROJECT # 0576-042-B70
DRAWN BY: DHL	DATE: 5 October 2000
CHECKED BY:	SHEET NO: M6



SECTION E-E

SCALE: 1"=40' HORZ.
1"=4' VERT.

199402373 (IP-ES)

Pages 17 of 19 10/16/00

Pinellas County
E/W Connector Road
Hydrologic Connection
Cross Section E-E

ECOLOGIST: TLN

PROJECT #0576-042-B70

DRAWN BY: DHL

DATE: 5 October 2000

CHECKED BY:

SHEET NO: M7

BCP Restoration Site
Phase 1 Mitigation Plan
Planting Details

WL-6						
Zone	Scientific Name	Common Name	Area	Size	Spacing	Quantity
12.0 - 10.0	<i>Taxodium distichum</i>	bald cypress	1.84	3 gal	10	400
12.0 - 10.0	<i>Myrica sylvatica</i>	swamp black gum	1.84	3 gal	10	30
12.0 - 10.0	<i>Fraxinus caroliniana</i>	water ash	1.84	3 gal	10	185
12.0 - 10.0	<i>Magnolia virginiana</i>	sweet-bay	1.84	3 gal	10	185
12.0 - 10.0	<i>Cephalanthus occidentalis</i>	buttonbush	1.84	1 gal	5	3210
12.0 - 10.0	<i>Sagittaria lancifolia</i>	arrowhead	1.84	1 qt. - bareroot	3	8910
12.0 - 11.0	<i>Myrica cariflora</i>	wax myrtle	1.05	1 gal	10	230
12.0 - 11.0	<i>Lycium lucida</i>	fetterbush	1.05	1 gal	10	230
12.0 - 11.0	<i>Cladium jamaicense</i>	sawgrass	1.05	1 qt. - bareroot	6	320
12.0 - 11.0	<i>Juncus effusus</i>	soft rush	1.05	1 qt. - bareroot	6	320
12.0 - 11.0	<i>Spartina bahari</i>	cordgrass	1.05	1 qt. - bareroot	6	320
12.0 - 11.0	<i>Eleocharis interstincta</i>	knotted spike-rush	1.05	1 qt. - bareroot	6	320
12.0 - 11.0	<i>Quercus laurifolia</i>	laurel oak	1.05	3 gal	20	40
12.0 - 11.0	<i>Acer rubrum</i>	red maple	1.05	3 gal	20	40
12.0 - 11.0	<i>Ilex cassine</i>	dahoon holly	1.05	3 gal	20	40
10.0	<i>Panicum hemitomon</i>	maiden cane	0.26	1 qt. - bareroot	3	630
10.0	<i>Pontederia cordata</i>	pickerelweed	0.26	1 qt. - bareroot	3	630

WL-4						
11.75 - 9.75	<i>Taxodium distichum</i>	bald cypress	2.93	3 gal	10	640
11.75 - 9.75	<i>Myrica sylvatica</i>	swamp black gum	2.93	3 gal	10	70
11.75 - 9.75	<i>Fraxinus caroliniana</i>	water ash	2.93	3 gal	10	285
11.75 - 9.75	<i>Magnolia virginiana</i>	sweet-bay	2.93	3 gal	10	285
11.75 - 9.75	<i>Cephalanthus occidentalis</i>	buttonbush	2.93	1 gal	5	5105
11.75 - 9.75	<i>Sagittaria lancifolia</i>	arrowhead	2.93	1 qt. - bareroot	3	14180
11.75 - 10.75	<i>Myrica cariflora</i>	wax myrtle	1.13	1 gal	10	250
11.75 - 10.75	<i>Lycium lucida</i>	fetterbush	1.13	1 gal	10	250
11.75 - 10.75	<i>Cladium jamaicense</i>	sawgrass	1.13	1 qt. - bareroot	6	345
11.75 - 10.75	<i>Juncus effusus</i>	soft rush	1.13	1 qt. - bareroot	6	345
11.75 - 10.75	<i>Spartina bahari</i>	cordgrass	1.13	1 qt. - bareroot	6	345
11.75 - 10.75	<i>Eleocharis interstincta</i>	knotted spike-rush	1.13	1 qt. - bareroot	6	345
11.75 - 10.75	<i>Quercus laurifolia</i>	laurel oak	1.13	3 gal	20	40
11.75 - 10.75	<i>Acer rubrum</i>	red maple	1.13	3 gal	20	40
11.75 - 10.75	<i>Ilex cassine</i>	dahoon holly	1.13	3 gal	20	40
9.75	<i>Panicum hemitomon</i>	maiden cane	1.48	1 qt. - bareroot	3	3580
9.75	<i>Pontederia cordata</i>	pickerelweed	1.48	1 qt. - bareroot	3	3580

Swale - 11.75	<i>E. interstincta</i> & <i>C. jamaicense</i>	knotted spike-rush & sawgrass	1500 sf	1 qt. - bareroot	3	120 & 50
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H

Pinellas County
E/W Connector Road
Phase 1 Mitigation
Planting Schedule

ECOLOGIST:	TLN	PROJECT #	0576-042-B75
DRAWN BY:	DHL	DATE:	6 October 2000
CHECKED BY:		SHEET NO:	M9
REVISION DATE:			

199402373 (IP-ES)

Pages 11 of 19 10/16/00

**ATTACHMENT B:
ENVIRONMENTAL RESOURCE PERMIT
WITH SPECIFIC CONDITIONS**



An Equal
Opportunity
Employer

Southwest Florida Water Management District

Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
(813) 965-7481 or
1-800-836-0797 (FL only)
SUNCOM 578-2070

Bartow Service Office
170 Century Boulevard
Bartow, Florida 33830-7700
(863) 534-1448 or
1-800-492-7862 (FL only)
SUNCOM 572-6200

2379 Broad Street, Brooksville, Florida 34609-6899
(352) 796-7211 or 1-800-423-1476 (FL only)
SUNCOM 628-4150 TDD only 1-800-231-6103 (FL only)
World Wide Web: <http://www.swfwmd.state.fl.us>

Venice Service Office
115 Corporation Way
Venice, Florida 34292-3524
(941) 486-1212 or
1-800-320-3503 (FL only)
SUNCOM 526-6900

Lecanto Service Office
3600 West Sovereign Path
Suite 226
Lecanto, Florida 34461-8070
(352) 527-8131
SUNCOM 667-3271

Ronald C. Johnson
Chair, Lake Wales
Monroe "Al" Coughler
Vice Chair, Lecanto
Sally Thompson
Secretary, Tampa
Ronnie E. Duncan
Treasurer, Tarpon Springs
Thomas G. Delaney, II
Sarasota
Pamela L. Fontenot
Lake Placid
John P. Harlow, IV
Bradenton
Watson L. Haynes, II
St. Petersburg
John H. Beale, III
New Port Richey

E. D. "Sonny" Vergara
Executive Director
Gene A. Heath
Assistant Executive Director
William S. Miley
General Counsel

September 26, 2000

Jan R. Herbst, P.E.
Pinellas County Board of County Commissioners
440 Court Street
Clearwater, FL 33756

Subject: Final Agency Action Transmittal Letter
Permit No: 43002661.030
Project Name: East-West Connector Road, Phase I
County: Pinellas
Sec/Twp/Rge: 13 and 14/28S/16E

Dear Ms. Herbst:

The permit referenced above was approved by the District Governing Board subject to all terms and conditions set forth in the permit.

The enclosed approved construction plans are part of the permit, and construction must be in accordance with these plans.

If you have questions concerning the permit, please contact Robin L. McGill, P.E., at the Tampa Service Office, extension 2072. For assistance with environmental concerns, please contact Nancy B. Hartwig, extension 2047.

Sincerely,

Adeline Wood

Adeline Wood, Supervisor
Records and Data Department

AW:kr

Enclosures: Approved Permit w/Conditions
Statement of Completion
Notice of Authorization
cc/enc: File of Record 43002661.030
cc/Permit: Thomas Wm. McGrew, P.E., King Engineering Associates, Inc.
USACOE

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
INDIVIDUAL CONSTRUCTION
PERMIT NO. 43002661.030

EXPIRATION DATE: September 26, 2005

PERMIT ISSUE DATE: September 26, 2000

This permit, issued under the provisions of Chapter 373, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.), Rule 40D-4, authorizes the Permittee to perform the work outlined herein and shown by the application, approved drawing(s), plans, and other documents, attached hereto and kept on file at the Southwest Florida Water Management District (District). All construction, operation and maintenance of the surface water management system authorized by this permit shall occur in compliance with Florida Statutes and Administrative Code and the conditions of this permit.

PROJECT NAME: East-West Connector Road, Phase I

GRANTED TO: Pinellas County Board of County Commissioners
440 Court Street
Clearwater, FL 33756

ABSTRACT: This Individual permit is for the construction of 10,350 linear feet of two (2) and four (4) lane divided rural roadway and associated surface water management facilities from the intersection of Tampa Road (S.R. 584) and Forest Lakes Boulevard to 1,300 feet west of Race Track Road. In essence, this section known as East-West Connector Road Phase I, will serve as an extension of Linebaugh by connecting Race Track Road to Tampa Road. The East-West Connector Road is located in Sections 13 and 14, Township 28 South, Range 16 East in Pinellas County. This roadway improvement will be constructed within the Cypress Lakes D.R.I. and the Tampa Bay Park of Commerce Industrial Park. Water quality treatment and water quantity attenuation will be provided for in six (6) wet detention ponds located along the East-West Connector Road right-of-way. The proposed ponds are designed for the ultimate build-out of the East-West Connector Road, which calls for a six (6) lane divided roadway with a bicycle lane and sidewalk. The ponds will outfall to the nearby natural wetland conveyance systems.

OP. & MAINT. ENTITY: Pinellas County Board of County Commissioners

PROPERTY LOCATION: Pinellas County

SEC/TWP/RGE: 13 and 14/28S/16E

**TOTAL ACRES OWNED
OR UNDER CONTROL:** 53.10

PROJECT SIZE: 53.10 Acres

LAND USE: Road Project

DATE APPLICATION FILED: November 24, 1999

AMENDED DATE: August 1, 2000

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I. Water Quantity/Quality

POND NO.	AREA ACRES AT TOP OF BANK	TREATMENT TYPE
Pond 2	1.85	Wet detention
Pond 3	2.74	Wet detention
Pond 4	1.48	Wet detention
Pond 5	1.18	Wet detention
Pond 6	1.22	Wet detention
Pond 7	0.67	Wet detention
TOTAL	9.14	

Mixing Zone required: YES () NO (X)

Variance required: YES () NO (X)

II. 100-Year Floodplain

Encroachment (ac-ft)	Compensation (ac-ft)
0.00	0.00

III. Environmental Considerations

Wetland Information:				
WETLAND NO.	TOTAL AC.	NOT IMPACTED AC.	TEMPORARILY DISTURBED AC.	PERMANENTLY DESTROYED AC.
A	0.19	0.00	0.00	0.19
B	0.16	0.00	0.00	0.16
C	0.21	0.00	0.00	0.21
D	0.76	0.00	0.00	0.76
E	0.02	0.00	0.00	0.02
F	0.02	0.00	0.00	0.02
G	0.01	0.00	0.00	0.01
H	0.21	0.00	0.00	0.21
I	0.06	0.00	0.00	0.06
J	0.01	0.00	0.00	0.01
K	0.01	0.00	0.00	0.01
Pond 5	0.19	0.00	0.00	0.19
TOTAL	1.85	0.00	0.00	1.85

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Comments: The East/West Road Phase I project will impact 1.85 acres of forested and herbaceous wetlands. To mitigate for the impacts the Permittee is creating 6.51 acres of forested wetlands within the Brooker Creek Preserve. The excess mitigation (0.96 acre of wetland creation, and 11.48 acres of wetland enhancement) will be used to offset wetland impacts associated with the East-West Connector Road, Phase II project, which is being permitted simultaneously. The proposed mitigation is located on lands owned by the Southwest Florida Water Management District. The District's Land Management Department agreed to allow the Permittee to mitigate on District owned lands on the condition that the County submit a plan for the removal of fill material at the "clay disposal area" within one year of the date of issuance of this permit for approval by both Regulatory and Land Management.

Mitigation Information:					
AREA NO.	CREATED/RESTORED AC.	UPLAND PRESERVED AC.	ENHANCED WETLAND AC.	WETLANDS PRESERVED AC.	MISC. INT. AC.
BCP	6.51	0.00	11.48	0.00	0.00
TOTAL	6.51	0.00	11.48	0.00	0.00
NET CHANGE	+4.66	OTHER MITIGATION TOTAL			0.00

Watershed name: Tampa Bay Drainage

A Conservation Easement is not required.

SPECIFIC CONDITIONS

1. If the ownership of the project area covered by the subject permit is divided, with someone other than the Permittee becoming the owner of part of the project area, this permit shall terminate, pursuant to Section 40D-1.6105, F.A.C. In such situations, each land owner shall obtain a permit (which may be a modification of this permit) for the land owned by that person. This condition shall not apply to the division and sale of lots or units in residential subdivisions or condominiums.
2. The discharges from this system shall meet state water quality standards as set forth in Chapter 62-302 and Section 62-4.242, F.A.C., for class waters equivalent to the receiving waters.
3. Unless specified otherwise herein, two copies of all information and reports required by this permit shall be submitted to:

Tampa Regulation Department
 Southwest Florida Water Management District
 7601 U.S. Highway 301 North
 Tampa, FL 33637

The permit number, title of report or information and event (for recurring report or information submittal) shall be identified on all information and reports submitted.

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4. The Permittee shall retain the design engineer, or other professional engineer registered in Florida, to conduct on-site observations of construction and assist with the as-built certification requirements of this project. The Permittee shall inform the District in writing of the name, address and phone number of the professional engineer so employed. This information shall be submitted prior to construction.
5. Within 30 days after completion of construction of the permitted activity, the Permittee shall submit to the Tampa Service Office a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1, F.A.C., and signed, dated, and sealed as-built drawings. The as-built drawings shall identify any deviations from the approved construction drawings.
6. The District reserves the right, upon prior notice to the Permittee, to conduct on-site research to assess the pollutant removal efficiency of the surface water management system. The Permittee may be required to cooperate in this regard by allowing on-site access by District representatives, by allowing the installation and operation of testing and monitoring equipment, and by allowing other assistance measures as needed on site.
7. The operation and maintenance entity shall submit inspection reports in the form required by the District, in accordance with the following schedule.

For systems utilizing retention or wet detention, the inspections shall be performed two (2) years after operation is authorized and every two (2) years thereafter.
8. The removal of littoral shelf vegetation (including cattails) from wet detention ponds is prohibited unless otherwise approved by the District. Removal includes dredging, the application of herbicide, cutting, and the introduction of grass carp. Any questions regarding authorized activities within the wet detention ponds shall be addressed to the District's Surface Water Regulation Manager, Tampa Service Office.
9. The Permittee shall monitor and maintain the wetland mitigation area(s) until the criteria set forth in the Wetland Mitigation Success Criteria Condition(s) below are met.
10. The Permittee shall undertake required maintenance activities within the wetland mitigation area(s) as needed at any time between mitigation area construction and termination of monitoring, with the exception of the final year. Maintenance shall include the manual removal of all nuisance and exotic species, with sufficient frequency that their combined coverage at no time exceeds the Wetland Mitigation Success Criteria Condition(s) above. Herbicides shall not be used without the prior written approval of the District.
11. A Wetland Mitigation Completion Report shall be submitted to the District within 30 days of completing construction and planting of the wetland mitigation area(s). Upon District inspection and approval of the mitigation area(s), the monitoring program shall be initiated with the date of the District field inspection being the construction completion date of the mitigation area(s). Monitoring events shall occur between March 1 and November 30 of each year. An Annual Wetland Monitoring Report shall be submitted upon the anniversary date of District approval to initiate monitoring.

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Annual reports shall provide documentation that a sufficient number of maintenance inspection/activities were conducted to maintain the mitigation area(s) in compliance with the Wetland Mitigation Success Criteria Condition(s) above. Note that the performance of maintenance inspections and maintenance activities will normally need to be conducted more frequently than the collection of other monitoring data to maintain the mitigation area(s) in compliance with the Wetland Mitigation Success Criteria Condition(s) above.

Monitoring Data shall be collected semi-annually.

12. WETLAND MITIGATION SUCCESS CRITERIA MITIGATION AREAS WL-4 and WL-6

Mitigation is expected to offset adverse impacts to wetlands and other surface waters caused by regulated activities and to achieve viable, sustainable ecological and hydrological wetland functions. Wetlands constructed for mitigation purposes will be considered successful and will be released from monitoring and reporting requirements when the following criteria are met continuously for a period of at least one year without intervention in the form of irrigation or the addition or removal of vegetation.

- a. The mitigation area can be reasonably expected to develop into *Palustrine Forested Wetland* as determined by the USFWS Classification of Wetlands and Deepwater Habitats of the United States.
- b. Topography, water depth and water level fluctuation in the mitigation area are characteristic of the wetland/surface water type specified in criterion "a."
- c. The dominant and subdominant species of desirable wetland plants comprising each vegetation zone and stratum of the mitigation area shall be as follows:

ZONE	STRATUM	PERCENT COVER	DOMINANT SPECIES ¹	SUBDOMINANT SPECIES ²
1	Canopy	50	<i>Taxodium distichum</i>	<i>Fraxinus caroliniana</i> <i>Magnolia virginiana</i> <i>Acer rubrum</i> <i>Quercus laurifolia</i>
	Shrub	50	<i>Cephalanthus occidentalis</i>	<i>Myrica cerifera</i> <i>Lyonia lucida</i> <i>Ilex cassine</i>
	Herbaceous	85	<i>Sagittaria lancifolia</i>	<i>Cladium jamaicense</i> <i>Juncus effusus</i> <i>Spartina bakeri</i> <i>Eleocharis interstincta</i>
2	Herbaceous	85	<i>Panicum hemitomon</i> <i>Pontederia cordata</i>	
3	Shrub	50	<i>Myrica cerifera</i> <i>Ilex cassine</i>	

¹ Tree species must be greater than 12 feet in height and have been planted for greater than 5 years.

² Plant species providing the same function as those listed may also be considered in determining success.

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This criterion must be achieved within 5 years of mitigation area construction. The Permittee shall complete any activities necessary to ensure the successful achievement of the mitigation requirements by the deadline specified. Any request for an extension of the deadline specified shall be accompanied with an explanation and submitted as a permit letter modification to the District for evaluation.

- d. Species composition of recruiting wetland vegetation are indicative of the wetland type specified in criterion "a."
- e. Density of *Taxodium distichum*, *Fraxinus caroliniana*, *Magnolia virginiana*, *Acer rubrum*, and *Quercus laurifolia* surviving in the mitigation areas equals or exceeds 436/acre for trees greater than or equal to 12 feet in height.
- f. Coverage by nuisance or exotic species does not exceed 5 percent.
- g. The wetland mitigation areas can be determined to be a wetland or other surface water according to Chapter 62-340, F.A.C.

The mitigation area may be released from monitoring and reporting requirements and be deemed successful at any time during the monitoring period if the Permittee demonstrates that the conditions in the mitigation area have adequately replaced the wetland and surface water functions affected by the regulated activity and that the site conditions are sustainable.

13. The Permittee shall coordinate termination of monitoring for wetland mitigation area(s) with the District by:
- a. Notifying the District in writing when the Wetland Mitigation Success Criteria Condition(s) above have been initially achieved;
 - b. Upon District acknowledgment, suspending all maintenance activities including but not limited to irrigation and addition or removal of vegetation ;
 - c. After one year, submitting a monitoring report to the District.

The District will evaluate the wetland mitigation area(s) to determine if the Wetland Mitigation Success Criteria have been maintained, and will notify the Permittee in writing of the evaluation results. The District reserves the right to require that corrective action be performed by the Permittee if any of the wetland mitigation area(s) fail to maintain the success criteria.

14. The District reserves the right to require the Permittee to identify and perform corrective actions if the District issues a wetland mitigation deficiency determination.
15. The Permittee shall, within 90 days of initial wetland impact and prior to beneficial use of the site, complete all aspects of the mitigation plan, including the grading, mulching, and planting, in accordance with the design details in the final approved construction drawings and information submitted in support of the application .

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16. The construction of all wetland impacts and wetland mitigation shall be supervised by a qualified environmental scientist/specialist/consultant. The Permittee shall identify, in writing, the environmental professional retained for construction oversight prior to initial clearing and grading activities.
17. Wetland buffers shall remain in an undisturbed condition except for approved drainage facility construction/maintenance.
18. The following boundaries, as shown on the approved construction drawings, shall be clearly delineated on the site prior to initial clearing or grading activities:
 - (X) Wetland preservation
 - (X) Wetland buffers
 - (X) Limits of approved wetland impacts
 - (X) Construction access for (list mitigation area(s))

The delineation shall endure throughout the construction period and be readily discernible to construction and District personnel.

19. Wetlands A, B, C, D, E, F, G, H, I, J, K, and Pond 5 boundaries shown on the approved construction drawings shall be binding upon the Permittee and the District.
20. Within one year of the date of issuance of this permit, the Permittee shall submit a plan to the District for the removal of fill within the "clay disposal area" located on District owned lands within the Brooker Creek Preserve. This plan will be reviewed as a formal modification to this permit and will be reviewed by both Resource Regulation and Land Management.
21. The 0.96 acre of excess wetland creation and the 11.48 acres of wetland restoration within the Brooker Creek Preserve mitigation area are available to offset the wetland impacts associated with the East-West Connector Road, Phase I project only.
22. Refer to GENERAL CONDITION No. 15 herein.

GENERAL CONDITIONS

1. The general conditions attached hereto as Exhibit "A" are hereby incorporated into this permit by reference and the Permittee shall comply with them.



Authorized Signature

AS-BUILT DRAWINGS AND INFORMATION CHECKLIST

Following is a list of information that should be verified and submitted by the engineer in support of the Statement of Completion.

1. The registered professional engineer shall certify that:
 - a. At the time of final inspection, the surface water management system has been completed substantially in accordance with the permitted construction plans and information. Any minor deviations from the permitting plans and specifications will not prevent the system from functioning in compliance with the requirements of Chapters 40D-4, 40D-40, and 40D-45, F.A.C. The registered professional engineer shall provide two copies of signed, dated and sealed as-built drawings to the District to confirm the certification; or
 - b. At the time of final inspection, the system has not been completed in substantial conformance with the permitted construction plans and information. The registered professional engineer shall explain in writing, and with confirming depiction on the as-built drawings, the substantial deviations from the permitted construction plans and specifications, and provide two copies of the signed, dated and sealed as-built drawings to the District to support the certification. In this case, the professional engineer shall complete, but not sign and seal, the Statement of Completion.
2. The certification shall be based upon on-site observation of construction (scheduled and conducted by the professional engineer or by a project representative under direct supervision) and review of as-built drawings for the purpose of determining if the work was completed in accordance with original permitted construction plans, information and specifications.
3. The as-built drawings shall be based on the District permitted construction drawings revised to reflect any changes made during construction. Both the original design and condition must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawings. All surveyed dimensions and elevations required shall be verified and signed, dated and sealed by a Florida registered surveyor or engineer.

The following information, at a minimum, shall be verified on the as-built drawings:

- a. **Discharge structures** - dimensions and elevations of all, including weirs, orifices, gates, pumps, pipes, and oil and grease skimmers;
- b. **Side bank and underdrain filters, or exfiltration trenches** - locations, dimensions and elevations of all, including cleanouts, pipes, connections to control structures and points of discharge to receiving water.
- c. **Storage areas for treatment and attenuation** - dimensions, elevations, contours or cross-sections of all, sufficient to determine stage-storage relationships of the storage area and the permanent pool depth and volume below the control elevation for normally wet systems;

- d. **System grading** - dimensions, elevations, contours, final grades or cross-sections to determine contributing drainage areas, flow directions and conveyance of runoff to the system discharge point(s);
 - e. **Conveyance** - dimensions, elevations, contours, final grades or cross-sections of systems utilized to divert off-site runoff around or through the new system;
 - f. **Water levels** - existing water elevation(s) and the date determined;
 - g. **Benchmark(s)** - location and description (minimum of one per major water control structure); and
 - h. **Wetland compensation or restoration areas** - Show the plan view of all areas, depicting a spatial distribution of plantings conducted by zone (if plantings are required by permit), with a list showing all species planted in each zone, numbers of each species, sizes, date(s) planted and identification of source of material; also provide the dimensions, elevations, contours and representative cross-sections depicting the construction.
4. Submit the final subdivision plat or other legal documents, recorded in the county public records, showing dedicated rights-of-way, easement locations and special use areas that are reserved for water management purposes and continuing operation and maintenance.
5. Additional information should be shown on the as-built drawings or otherwise provided as needed to verify and support the Statement of Completion (Example: homeowners association final documents and other items required by permitting conditions).

EXHIBIT "A"

1. All activities shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit.
2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications, shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.
3. Activities approved by this permit shall be conducted in a manner which does not cause violations of state water quality standards. The permittee shall implement best management practices for erosion and a pollution control to prevent violation of state water quality standards. Temporary erosion control shall be implemented prior to and during construction, and permanent control measures shall be completed within 7 days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. Thereafter the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.
4. Water quality data for the water discharged from the permittee's property or into the surface waters of the state shall be submitted to the District as required by the permit. Analyses shall be performed according to procedures outlined in the current edition of Standard Methods for the Examination of Water and Wastewater by the American Public Health Association or Methods for Chemical Analyses of Water and Wastes by the U.S. Environmental Protection Agency. If water quality data are required, the permittee shall provide data as required on volumes of water discharged, including total volume discharged during the days of sampling and total monthly volume discharged from the property or into surface waters of the state.
5. District staff must be notified in advance of any proposed construction dewatering. If the dewatering activity is likely to result in offsite discharge or sediment transport into wetlands or surface waters, a written dewatering plan must either have been submitted and approved with the permit application or submitted to the district as a permit prior to the dewatering event as a permit modification. A water use permit may be required prior to any use exceeding the thresholds in Chapter 40D-2, F.A.C.

6. Stabilization measures shall be initiated for erosion and sediment control on disturbed areas as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 7 days after the construction activity in that portion of the site has temporarily or permanently ceased.
7. Off site discharges during construction and development shall be made only through the facilities authorized by this permit. Water discharged from the project shall be through structures having a mechanism suitable for regulating upstream stages. Stages may be subject to operating schedules satisfactory to the District.
8. The permittee shall complete construction of all aspects of the surface water management system, including wetland compensation (grading, mulching, planting), water quality treatment features, and discharge control facilities prior to beneficial occupancy or use of the development being served by this system.
9. The following shall be properly abandoned and/or removed in accordance with the applicable regulations:
 - a. Any existing wells in the path of construction shall be properly plugged and abandoned by a licensed well contractor.
 - b. Any existing septic tanks on site shall be abandoned at the beginning of construction.
 - c. Any existing fuel storage tanks and fuel pumps shall be removed at the beginning of construction.
10. All surface water management systems shall be operated to conserve water in order to maintain environmental quality and resource protection; to increase the efficiency of transport, application and use; to decrease waste; to minimize unnatural runoff from the property and to minimize dewatering of offsite property.
11. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District a written notification of commencement indicating the actual start date and the expected completion date.
12. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the occupation of the site or operation of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of that phase or portion of the system to a local government or other responsible entity.

13. Within 30 days after completion of construction of the permitted activity, the permittee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1, F.A.C. Additionally, if deviation from the approved drawings are discovered during the certification process the certification must be accompanied by a copy of the approved permit drawings with deviations noted.
14. This permit is valid only for the specific processes, operations and designs indicated on the approved drawings or exhibits submitted in support of the permit application. Any substantial deviation from the approved drawings, exhibits, specifications or permit conditions, including construction within the total land area but outside the approved project area(s), may constitute grounds for revocation or enforcement action by the District, unless a modification has been applied for and approved. Examples of substantial deviations include excavation of ponds, ditches or sump areas deeper than shown on the approved plans.
15. The operation phase of this permit shall not become effective until the permittee has complied with the requirements of the conditions herein, the District determines the system to be in compliance with the permitted plans, and the entity approved by the District accepts responsibility for operation and maintenance of the system. The permit may not be transferred to the operation and maintenance entity approved by the District until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall request transfer of the permit to the responsible operation and maintenance entity approved by the District, if different from the permittee. Until a transfer is approved by the District, the permittee shall be liable for compliance with the terms of the permit.
16. Should any other regulatory agency require changes to the permitted system, the District shall be notified of the changes prior to implementation so that a determination can be made whether a permit modification is required.
17. This permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations including a determination of the proposed activities' compliance with the applicable comprehensive plan prior to the start of any activity approved by this permit.
18. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40D-4 or Chapter 40D-40, F.A.C.

19. The permittee is hereby advised that Section 253.77, F.S., states that a person may not commence any excavation, construction, or other activity involving the use of sovereign or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.
20. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of the activities authorized by the permit or any use of the permitted system.
21. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under section 373.421(2), F.S., provides otherwise.
22. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of the permitted system or the real property at which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rule 40D-4.351, F.A.C. The permittee transferring the permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to such sale, conveyance or other transfer.
23. Upon reasonable notice to the permittee, District authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with District rules, regulations and conditions of the permits.
24. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the District and the Florida Department of State, Division of Historical Resources.
25. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.



An Equal
Opportunity
Employer

Southwest Florida Water Management District

Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
(813) 986-7481 or
1-800-836-0797 (FL only)
SUNCOM 578-2070

Bartow Service Office
170 Century Boulevard
Bartow, Florida 33830-7700
(863) 534-1448 or
1-800-482-7862 (FL only)
SUNCOM 572-6200

2379 Broad Street, Brooksville, Florida 34604-6899
(352) 796-7211 or 1-800-423-1476 (FL only)
SUNCOM 628-4150 TDD only 1-800-231-6103 (FL only)
World Wide Web: <http://www.swfwmd.state.fl.us>

Venice Service Office
115 Corporation Way
Venice, Florida 34292-3524
(941) 486-1212 or
1-800-320-3503 (FL only)
SUNCOM 526-6900

Lecanto Service Office
3600 West Sovereign Path
Suite 226
Lecanto, Florida 34461-8070
(352) 827-8131
SUNCOM 887-3271

October 4, 2000

Jan R. Herbst
Pinellas County Board of County Commissioners
440 Court Street
Clearwater, FL 33756

Subject: Notice of Final Agency Action for Approval
ERP Standard General
Permit No: 4902661.031
Project Name: East-West Connector Road (Phase II)
County: Pinellas & Hillsborough
Sec/Twp/Rge: 13/28S/16E & 18/28S/17E

Dear Ms. Herbst:

This letter constitutes notice of Final Agency Action for approval of the permit application referenced above. Final approval is contingent upon no objection to the District's action being received by the District within the time frames described below.

You or any person whose substantial interests are affected by the District's action regarding a permit may request an administrative hearing in accordance with Sections 120.569 and 120.57, F.S., and Chapter 28-106, F.A.C., of the Uniform Rules of Procedure. A request for hearing must: (1) explain how the substantial interests of each person requesting the hearing will be affected by the District's action, or proposed action, (2) state all material facts disputed by the person requesting the hearing or state that there are no disputed facts, and (3) otherwise comply with Chapter 28-106, F.A.C. Copies of Sections 28-106.201 and 28-106.301, F.A.C. are enclosed for your reference. A request for hearing must be filed with (received by) the Agency Clerk of the District at the District's Brooksville address within 21 days of receipt of this notice. Receipt is deemed to be the fifth day after the date on which this notice is deposited in the United States mail. Failure to file a request for hearing within this time period shall constitute a waiver of any right you or such person may have to request a hearing under Sections 120.569 and 120.57, F.S. Mediation pursuant to Section 120.573, F.S., to settle an administrative dispute regarding the District's action in this matter is not available prior to the filing of a request for hearing.

Enclosed is a "Noticing Packet" that provides information regarding the District Rule, Section 40D-1.1010, F.A.C., which addresses the notification of persons whose substantial interests may be affected by the District's action in this matter. The packet contains guidelines on how to provide notice of the District's action, and a notice that you may use.

The enclosed approved construction plans are part of the permit, and construction must be in accordance with these plans.

RECEIVED

OCT 6 2000

DEPT. OF ENGINEERING
RECEIVED

OCT 10 2000

BIOLOGICAL
RESEARCH
ASSOCIATES

Donald C. Johnson
Chair, Lake Wales
Maureen "AF" Coogler
Vice Chair, Lecanto
Sally Thompson
Secretary, Tampa
Ronnie E. Benson
Treasurer, Tarpon Springs
Thomas G. Delaney, II
Sarasota
Pamela L. Fennell
Lake Placid
John P. Marlowe, IV
Bradenton
Walter L. Mayers, II
St. Petersburg
John H. Boudin, III
New Port Richey

E. B. "Sonny" Vaughan
Executive Director
Steve A. Bault
Assistant Executive Director
William S. Wilkley
General Counsel

Pinellas County Board of County Commissioners

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October 4, 2000

If you have questions concerning the permit, please contact Robin L. McGill, P.E., at the Tampa Service Office, extension 2072. For assistance with environmental concerns, please contact Nancy Hartwig, extension 2047.

Sincerely,



Alba E. Mas, P.E., Director
Tampa Regulation Department

AEM:dsw

Enclosures: Approved Permit w/Conditions Attached
Approved Construction Drawings
Statement of Completion
Notice of Authorization to Commence Construction
Noticing Packet (42.00-039)
Sections 28-106.201 and 28-106.301, F.A.C.
cc/enc: File of Record 4902661.031
USACOE
Thomas Wm. McGrew, P.E., King Engineering Associates, Inc.

**SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
Standard General
PERMIT NO. 4902881.031**

EXPIRATION DATE: October 4, 2005

PERMIT ISSUE DATE: October 4, 2000

This permit issued under the provisions of Chapter 373, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.), Rule 40D-40 authorizes the Permittee to perform the work outlined herein and shown by the application, approved drawing(s), plans, and other documents, attached hereto and kept on file at the Southwest Florida Water Management District (District). All construction, operation and maintenance of the surface water management system authorized by this permit shall occur in compliance with Florida Statutes and Administrative Code and the conditions of this permit.

PROJECT NAME: East-West Connector Road (Phase II)
GRANTED TO: Pinellas County Board of County Commissioners
440 Court Street
Clearwater, FL 33758

ABSTRACT: This permit is for the construction of 1,300 linear feet of two (2) lane divided rural roadway and associated surface water management facilities from 1,300 feet west of Race Track Road to Race Track Road. There are no additional through lanes proposed at this time for Race Track Road. Improvements to Race Track Road are limited to extensions of the left turn lane and shoulders. The proposed wet detention pond will provide water quality treatment of the first inch of runoff from the contributing area. The pond will also provide attenuation of the peak discharge rates for the 25-year, 24-hour storm. The pond is designed for the ultimate build-out of the East-West Connector Road. The ultimate build-out is a six (6) lane divided roadway with a bicycle lane and sidewalk. The pond will outfall to the nearby natural wetland conveyance system.

OP. & MAINT. ENTITY: Pinellas County Public Works Department
PROPERTY LOCATION: Pinellas & Hillsborough County
SEC/TWP/RGE: 13/28S/16E & 18/28S/17E
**TOTAL ACRES OWNED
OR UNDER CONTROL:** 5.8
PROJECT SIZE: 5.8 Acres
LAND USE: Road Project
DATE APPLICATION FILED: April 25, 2000
AMENDED DATE: September 19, 2000

Permit No. 4902681.031
 Project Name: East-West Connector Road (Phase II)
 Page 2

I. Water Quantity/Quality

POND NO.	AREA ACRES AT TOP OF BANK	TREATMENT TYPE
8	0.60	Wet Detention
TOTAL	0.60	

Mixing Zone Required: YES () NO (X)

Variance Required: YES () NO (X)

II. 100-Year Floodplain

Encroachment (Acres-Feet of fill)	Compensation (Acres-Feet of excavation)	Compensation Type	Encroachment Result (feet)
3.01	0.00	MI	0.01

Comments: MI = Minimal Impact based on modeling of existing stages vs. post-project encroachment. Encroachment Result (feet) depth of change in flood stage (level) over existing receiving water stage resulting from floodplain encroachment caused by a project that claims MI type of compensation.

III. Environmental Considerations

Wetland Information:				
WETLAND NUMBER	TOTAL ACRES	NON IMPACTED ACRES	TEMPORARILY DISTURBED ACRES	PERMANENTLY DESTROYED ACRES
AA-1	0.33	0.00	0.00	0.33
AA-2	0.03	0.00	0.00	0.03
H-4	0.02	0.00	0.00	0.02
CC	0.13	0.00	0.00	0.13
DD-1	0.27	0.00	0.00	0.27
DD-2	0.06	0.00	0.00	0.06
BB	0.07	0.00	0.00	0.07
TOTAL	0.94	0.00	0.00	0.94

Comments: The East West Road Phase II project will impact 0.94 acre of forested and herbaceous wetlands. The Permittee shall compensate for these impacts by using excess wetland creation and wetland enhancement available at the County's mitigation site within Brooker Creek Preserve. The mitigation area was authorized under the East West Road Phase I project (ERP No. 492681.030). A total of 0.96 acre of wetland creation and 11.48 acres of wetland enhancement within the

Permit No. 4902681.031
Project Name: East-West Connector Road (Phase II)
Page 3

Brooker Creek Preserve mitigation area is set aside to offset the wetland impacts associated with this project.

Watershed name(s): Tampa Bay Drainage

A Conservation Easement is not required.

SPECIFIC CONDITIONS

1. If the ownership of the project area covered by the subject permit is divided, with someone other than the Permittee becoming the owner of part of the project area, this permit shall terminate, pursuant to Section 40D-1.6105, F.A.C. In such situations, each land owner shall obtain a permit (which may be a modification of this permit) for the land owned by that person. This condition shall not apply to the division and sale of lots or units in residential subdivisions or condominiums.
2. The discharges from this system shall meet state water quality standards as set forth in Chapter 62-302 and Section 62-4.242, F.A.C., for class waters equivalent to the receiving waters.
3. Unless specified otherwise herein, two copies of all information and reports required by this permit shall be submitted to:

Tampa Regulation Department
Southwest Florida Water Management District
7001 U.S. Highway 301 North
Tampa, FL 33637

The permit number, title of report or information and event (for recurring report or information submittal) shall be identified on all information and reports submitted.

4. The Permittee shall retain the design engineer, or other professional engineer registered in Florida, to conduct on-site observations of construction and assist with the as-built certification requirements of this project. The Permittee shall inform the District in writing of the name, address and phone number of the professional engineer so employed. This information shall be submitted prior to construction.
5. Within 30 days after completion of construction of the permitted activity, the Permittee shall submit to the Tampa Service Office a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1, F.A.C., and signed, dated, and sealed as-built drawings. The as-built drawings shall identify any deviations from the approved construction drawings.
6. The District reserves the right, upon prior notice to the Permittee, to conduct on-site research to assess the pollutant removal efficiency of the surface water management system. The Permittee may be required to cooperate in this regard by allowing on-site access by District representatives, by allowing the installation and operation of testing and monitoring equipment, and by allowing other assistance measures as needed on site.
7. The operation and maintenance entity shall submit inspection reports in the form required by the District, in accordance with the following schedule.

For systems utilizing retention or wet detention, the inspections shall be performed two (2) years after operation is authorized and every two (2) years thereafter.

Permit No. 4902881.031
Project Name: East-West Connector Road (Phase II)
Page 4

8. The removal of littoral shelf vegetation (including cattails) from wet detention ponds is prohibited unless otherwise approved by the District. Removal includes dredging, the application of herbicide, cutting, and the introduction of grass carp. Any questions regarding authorized activities within the wet detention ponds shall be addressed to the District's Surface Water Regulation Manager, Tampa Service Office.
9. The construction of all wetland impacts and wetland mitigation shall be supervised by a qualified environmental scientist/specialist/consultant. The Permittee shall identify, in writing, the environmental professional retained for construction oversight prior to initial clearing and grading activities.
10. Wetland buffers shall remain in an undisturbed condition except for approved drainage facility construction/maintenance.
11. The following boundaries, as shown on the approved construction drawings, shall be clearly delineated on the site prior to initial clearing or grading activities:
- (X) wetland preservation
 - (X) wetland buffers
 - () upland preservation
 - (X) limits of approved wetland impacts
 - () construction access for (list mitigation area(s))

The delineation shall endure throughout the construction period and be readily discernible to construction and District personnel.

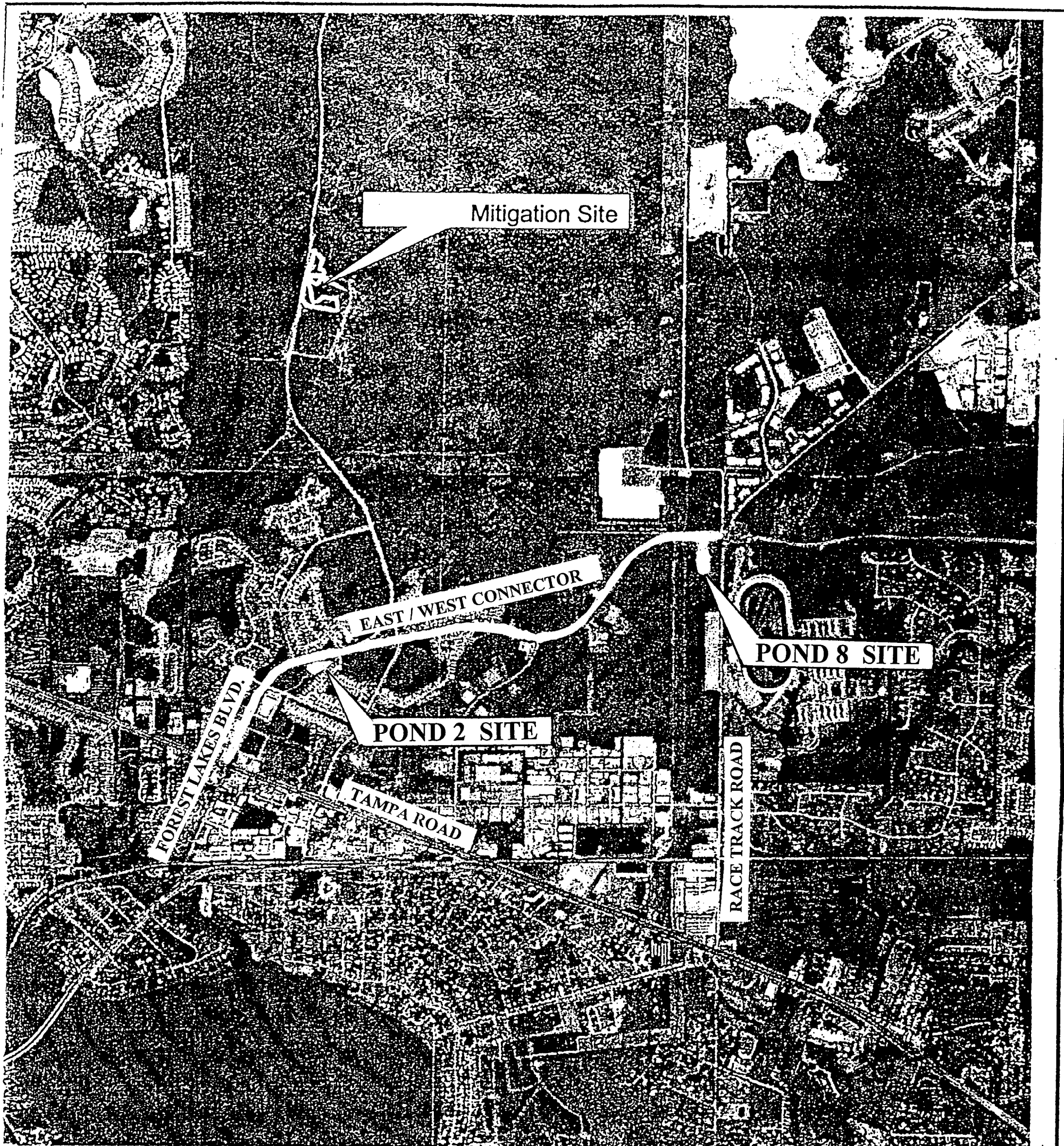
12. Wetland AA-1, AA-2, H4, CC, DD-1, DD-2, and BB boundaries shown on the approved construction drawings shall be binding upon the Permittee and the District.
13. Refer to GENERAL CONDITION No. 15 herein.

GENERAL CONDITIONS

1. The general conditions attached hereto as Exhibit "A" are hereby incorporated into this permit by reference and the Permittee shall comply with them.



Authorized Signature



NAME: e-w_conn-rd_calcs.apr
OUT NAME: coe_aerial 1:2640 aerial2640.ps5

Image Data: DigiAir February 2000

199402373 (IP-ES)
Pages 10 of 19 10/16/00

Pinellas County
E/W Connector Road
Phase 1 Mitigation
Aerial Map

PROJECT	TLN	PROJECT #	0576-042-B75
DRAWN BY	DHL	DATE	6 October 2000
CHECKED BY		REVISION DATE	

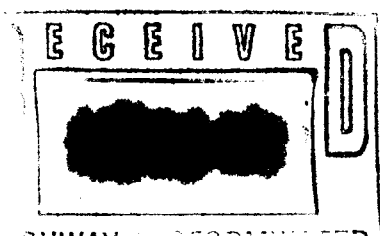
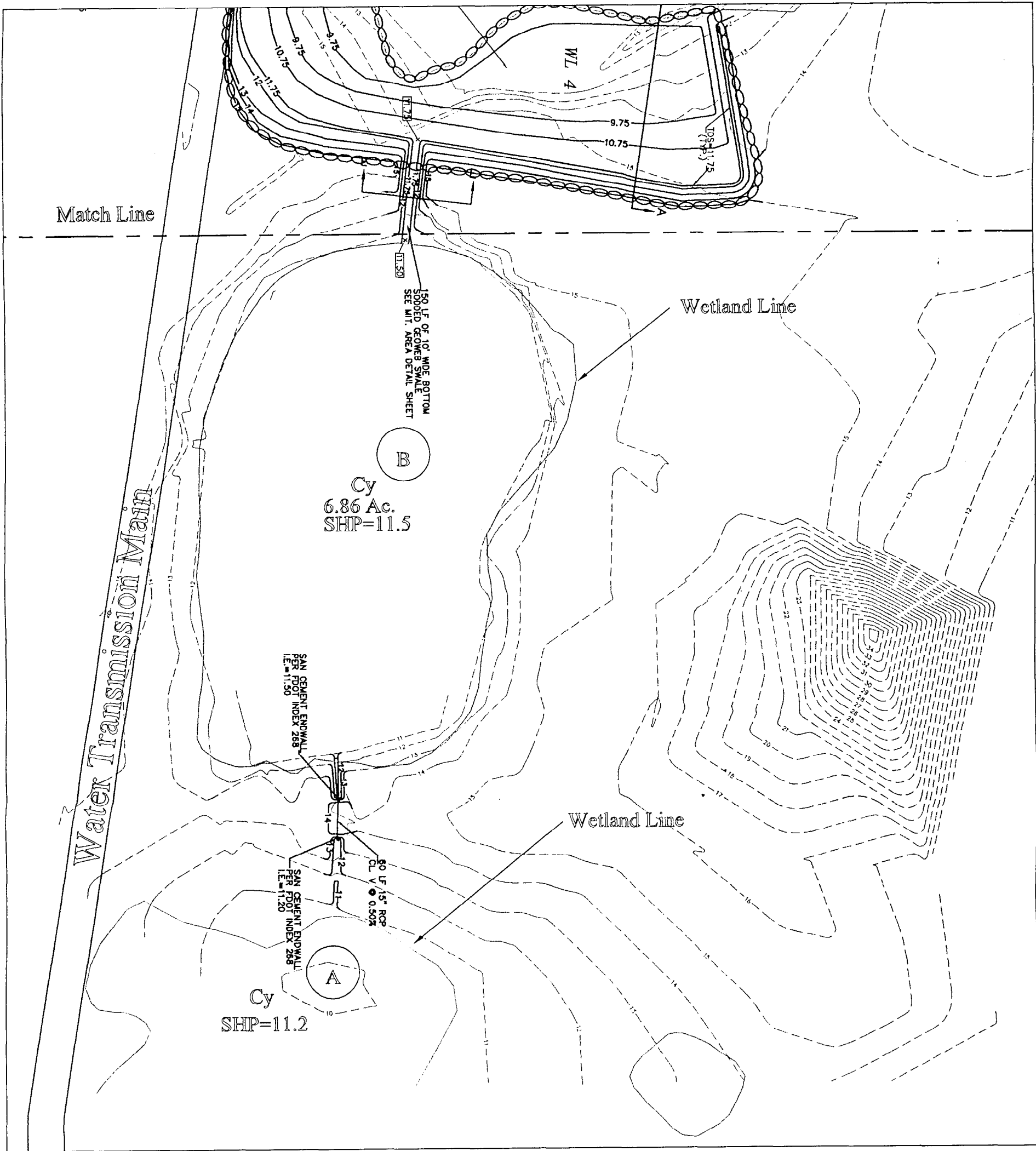
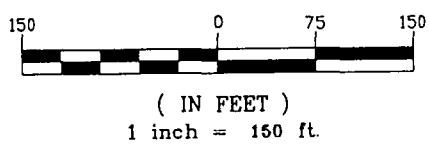


EXHIBIT "C"



Legend	
(A)	= Existing Wetland
Cy	= Cypress System
WL 4	= Wetland Creation Area
SHP	= Seasonal High Pool Elevation



3 OF 12

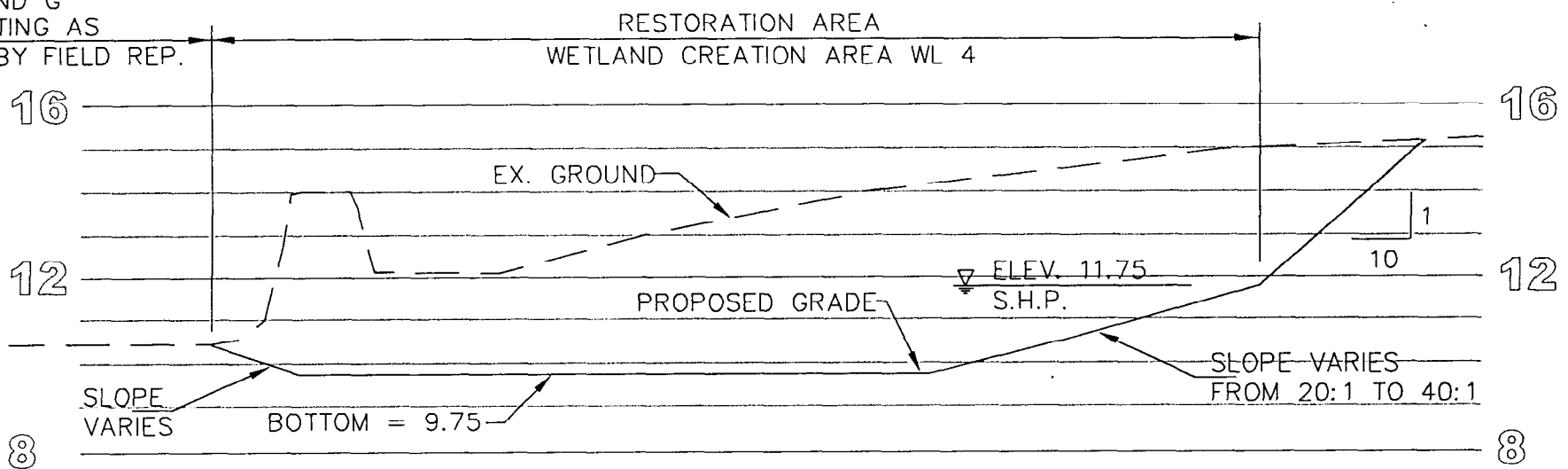


BIOLOGICAL RESEARCH ASSOCIATES
 3910 US HIGHWAY 301 N.
 TAMPA, FLORIDA 33619
 (813) 664-4500 FAX (813) 664-0440
www.biologicalresearch.com

Pinellas County
 E/W Connector Road
 MITIGATION SITE
 Plan View

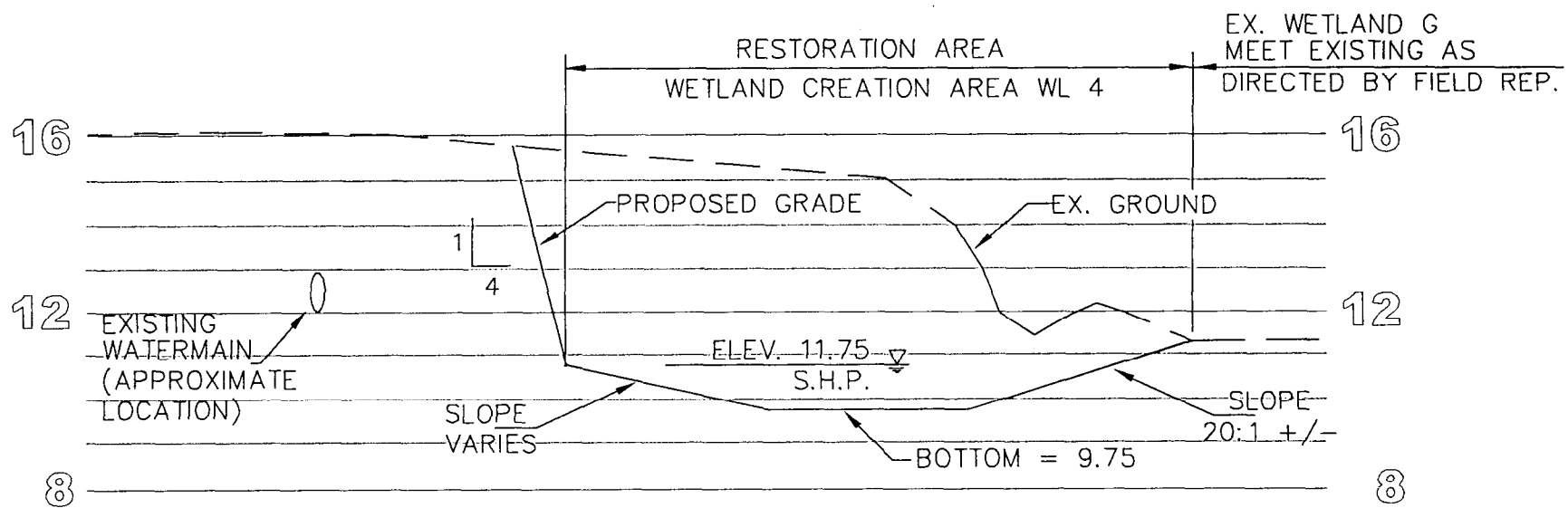
ECOLOGIST:	PROJECT #
DRAWN BY: DHL	0576/042/B75
CHECKED BY: <i>JMT</i>	DATE
DATE REISED:	12/01/00
	SHEET
	M2a

EX. WETLAND G
MEET EXISTING AS
DIRECTED BY FIELD REP.



SECTION A-A

SCALE: 1"=40' HORZ.
1"=4' VERT.



SECTION B-B

SCALE: 1"=40' HORZ.
1"=4' VERT.

4 OF 12



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(813) 664-4500 FAX (813) 664-0440
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Pinellas County
E/W Connector Road
MITIGATION SITE Area WL4
Cross Sections A-A and B-B

ECOLOGIST:

DRAWN BY:

DHL

CHECKED BY:

DATE REVISION:

PROJECT #

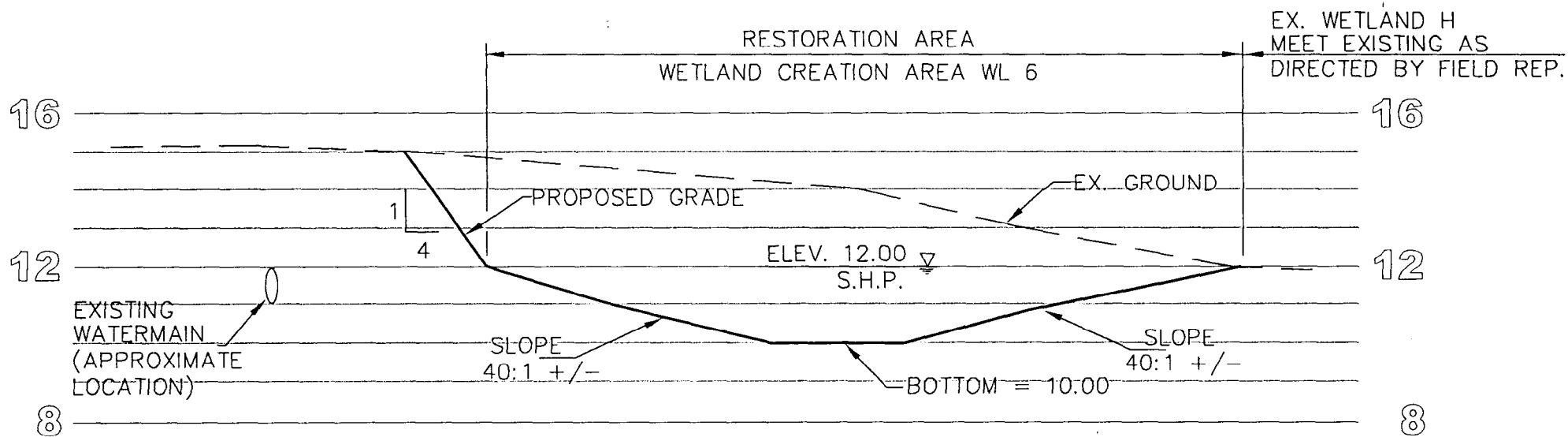
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DATE

12/01/00

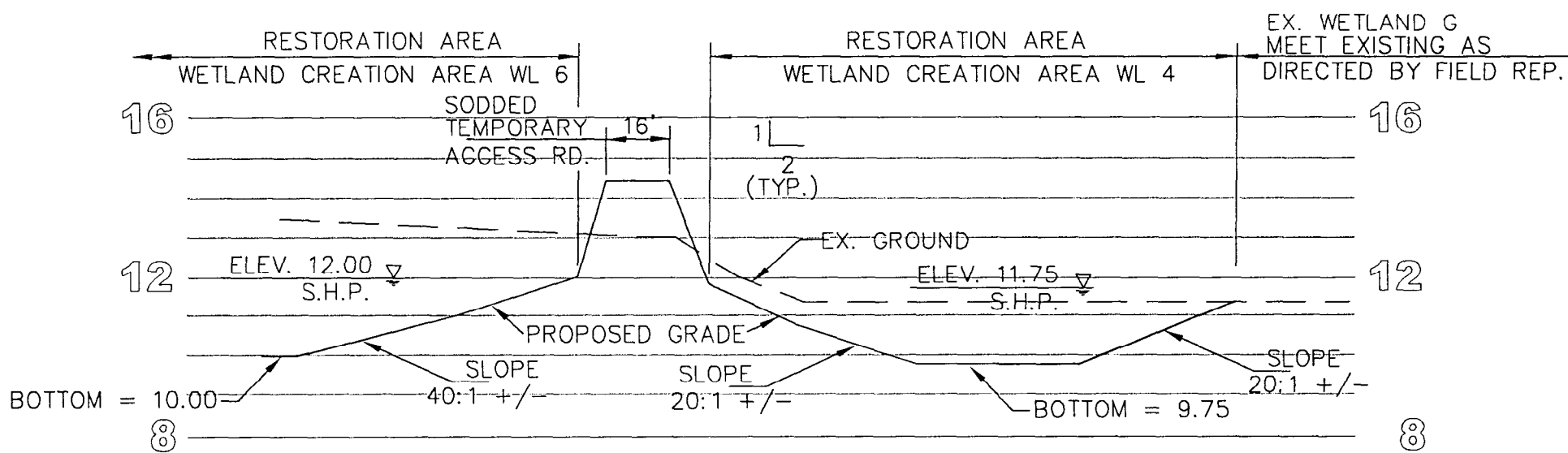
SHEET

M3a



SECTION C-C

SCALE: 1"=40' HORZ.
1"=4' VERT.



SECTION D-D

SCALE: 1"=40' HORZ.
1"=4' VERT.

5 OF 12



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(813) 684-4500 FAX (813) 684-0440
www.biologialresearch.com

Pinellas County
E/W Connector Road
MITIGATION SITE Area WL6 Section C-C
& Hydraulic Connection Section D-D

ECOLOGIST:

DRAWN BY:

DHL

CHECKED BY:

DATE REVISED:

PROJECT #

0576/042/B75

DATE

12/01/00

SHEET

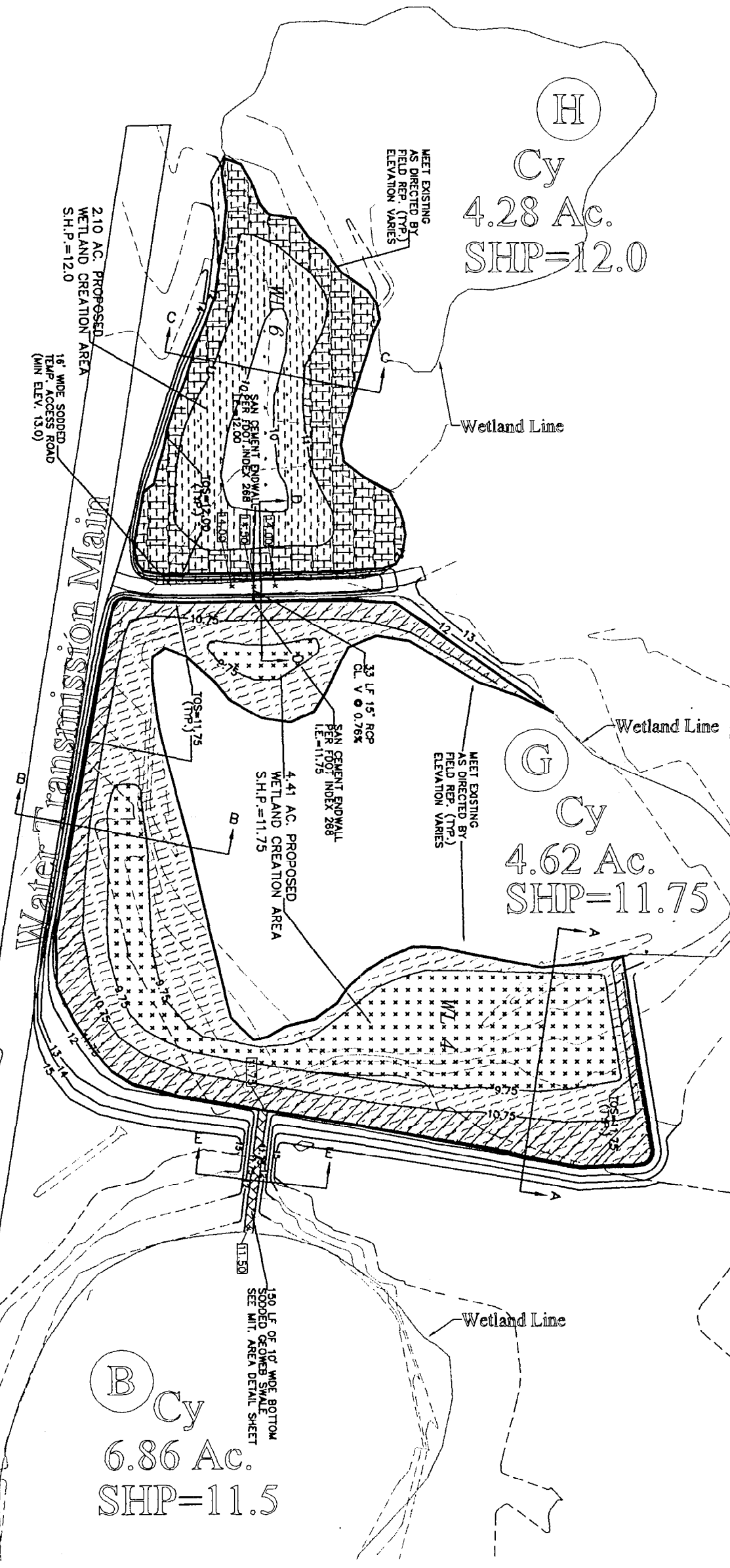
M4a

WETLAND CREATION AREA WL6
 AREA FROM CONTOUR ELEVATION 12.0 TO 11.0 = 1.054 AC.
 AREA FROM CONTOUR ELEVATION 11.0 TO 10.0 = 0.790 AC.
 AREA OF CONTOUR ELEVATION 10.0 = 0.256 AC.
 OVERALL AREA = 2.10 AC.

WETLAND CREATION AREAS

WETLAND CREATION AREA WL4
 AREA FROM CONTOUR ELEVATION 11.75 TO 10.75 = 1.130 AC.
 AREA FROM CONTOUR ELEVATION 10.75 TO 9.75 = 1.80 AC.
 AREA OF CONTOUR ELEVATION 9.75 = 1.48 AC.
 OVERALL AREA = 4.41 AC.

* THIS WETLAND CREATION AREA INCLUDES 0.90 AC. BETWEEN ELEVATION 9.75 AND THE MEET EXISTING OR WETLAND LINE (ACTUAL ELEVATION VARIES AT WETLAND LINE)

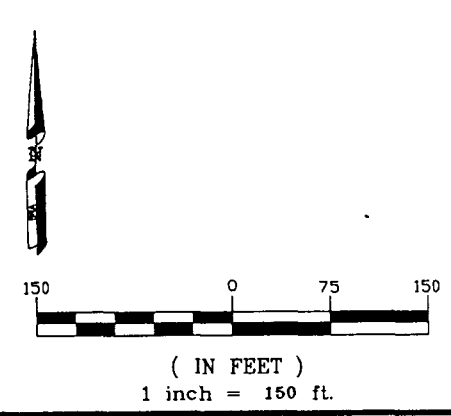


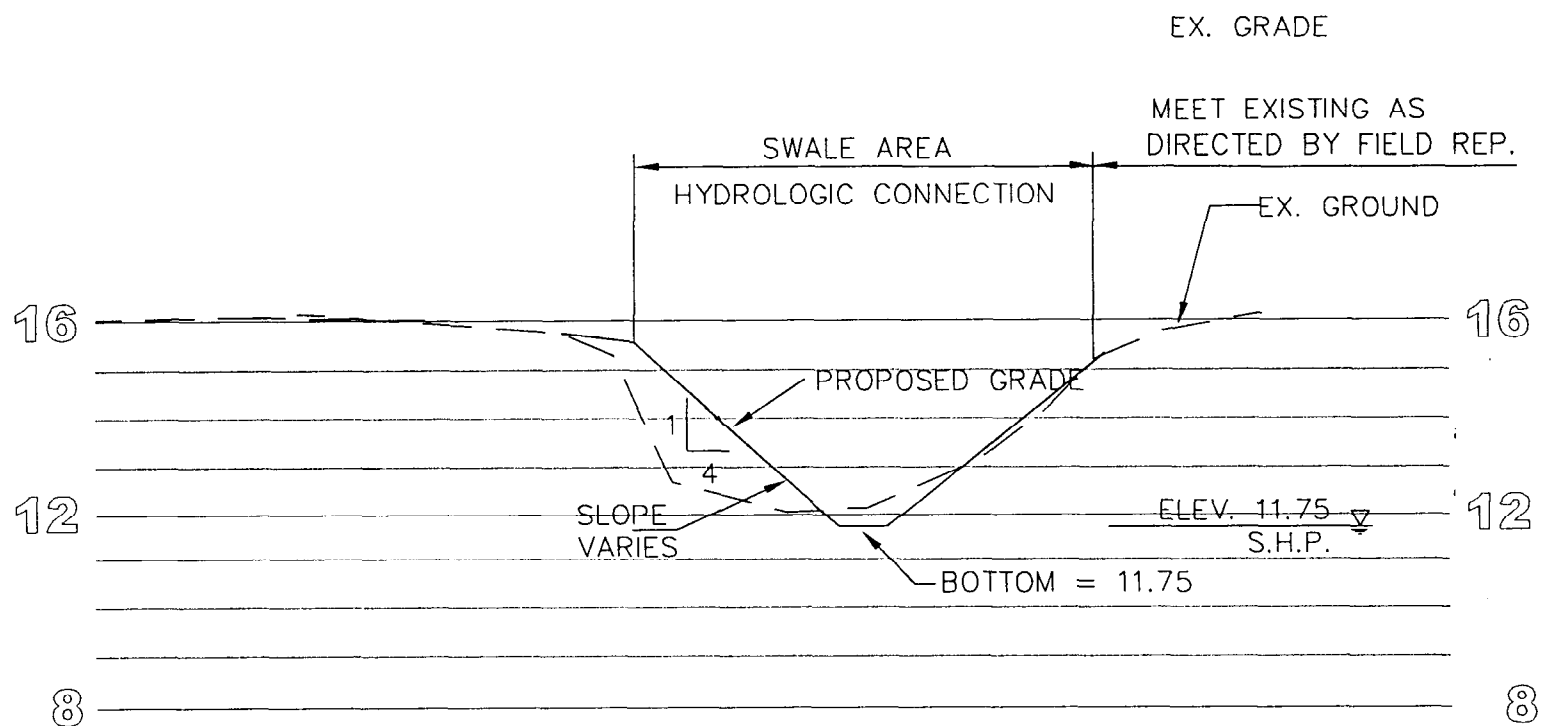
LEGEND

- Elev. 11.75 - 9.75
- Elev. 11.75 - 10.75
- Elev. 9.75
- Elev. 12.0 - 10.0
- Elev. 12.0 - 11.0
- Elev. 10.0
- Swale elev. 11.75 - 11.50

Legend

- = Existing Wetland
- = Cypress System
- = Wetland Creation Area
- = Seasonal High Pool Elevation





SECTION E-E

SCALE: 1"=40' HORZ.
1"=4' VERT.

BCP Restoration Site Phase 1 Mitigation Plan Planting Details						
WL-6						
Zone	Scientific Name	Common Name	Area	Size	Spacing	Quantity
12.0 - 10.0	<i>Taxodium distichum</i>	bald cypress	1.84	3 gal	10	400
12.0 - 10.0	<i>Nyssa sylvatica</i>	swamp black gum	1.84	3 gal	10	30
12.0 - 10.0	<i>Fraxinus caroliniana</i>	water ash	1.84	3 gal	10	185
12.0 - 10.0	<i>Magnolia virginiana</i>	sweet-bay	1.84	3 gal	10	185
12.0 - 10.0	<i>Cephalanthus occidentalis</i>	buttonbush	1.84	1 gal	5	3210
12.0 - 10.0	<i>Sagittaria lancifolia</i>	arrowhead	1.84	1 qt. - bareroot	3	8910
12.0 - 11.0	<i>Myrica cerifera</i>	wax myrtle	1.05	1 gal	10	230
12.0 - 11.0	<i>Lyonia lucida</i>	fetterbush	1.05	1 gal	10	230
12.0 - 11.0	<i>Cladium jamaicense</i>	sawgrass	1.05	1 qt. - bareroot	6	320
12.0 - 11.0	<i>Juncus effusus</i>	soft rush	1.05	1 qt. - bareroot	6	320
12.0 - 11.0	<i>Spartina bakeri</i>	cordgrass	1.05	1 qt. - bareroot	6	320
12.0 - 11.0	<i>Eleocharis interstincta</i>	knotted spike-rush	1.05	1 qt. - bareroot	6	320
12.0 - 11.0	<i>Quercus laurifolia</i>	laurel oak	1.05	3 gal	20	40
12.0 - 11.0	<i>Acer rubrum</i>	red maple	1.05	3 gal	20	40
12.0 - 11.0	<i>Ilex cassine</i>	dahoon holly	1.05	3 gal	20	40
10.0	<i>Panicum hemilomon</i>	maidencane	0.26	1 qt. - bareroot	3	630
10.0	<i>Pontederia cordata</i>	pickerelweed	0.26	1 qt. - bareroot	3	630
WL-4						
11.75 - 9.75	<i>Taxodium distichum</i>	bald cypress	2.93	3 gal	10	640
11.75 - 9.75	<i>Nyssa sylvatica</i>	swamp black gum	2.93	3 gal	10	70
11.75 - 9.75	<i>Fraxinus caroliniana</i>	water ash	2.93	3 gal	10	285
11.75 - 9.75	<i>Magnolia virginiana</i>	sweet-bay	2.93	3 gal	10	285
11.75 - 9.75	<i>Cephalanthus occidentalis</i>	buttonbush	2.93	1 gal	5	5105
11.75 - 9.75	<i>Sagittaria lancifolia</i>	arrowhead	2.93	1 qt. - bareroot	3	14180
11.75 - 10.75	<i>Myrica cerifera</i>	wax myrtle	1.13	1 gal	10	250
11.75 - 10.75	<i>Lyonia lucida</i>	fetterbush	1.13	1 gal	10	250
11.75 - 10.75	<i>Cladium jamaicense</i>	sawgrass	1.13	1 qt. - bareroot	6	345
11.75 - 10.75	<i>Juncus effusus</i>	soft rush	1.13	1 qt. - bareroot	6	345
11.75 - 10.75	<i>Spartina bakeri</i>	cordgrass	1.13	1 qt. - bareroot	6	345
11.75 - 10.75	<i>Eleocharis interstincta</i>	knotted spike-rush	1.13	1 qt. - bareroot	6	345
11.75 - 10.75	<i>Quercus laurifolia</i>	laurel oak	1.13	3 gal	20	40
11.75 - 10.75	<i>Acer rubrum</i>	red maple	1.13	3 gal	20	40
11.75 - 10.75	<i>Ilex cassine</i>	dahoon holly	1.13	3 gal	20	40
9.75	<i>Panicum hemilomon</i>	maidencane	1.48	1 qt. - bareroot	3	3580
9.75	<i>Pontederia cordata</i>	pickerelweed	1.48	1 qt. - bareroot	3	3580
Swale - 11.75	<i>E. interstincta</i> & <i>C. jamaicense</i>	knotted spike-rush & sawgrass	1500 sf	1 qt. - bareroot	3	120 & 50

MITIGATION SITE

7 OF 12



**BIOLOGICAL RESEARCH
ASSOCIATES**
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(813) 664-4500 FAX (813) 664-0440
www.biologicalresearch.com

Pinellas County
E/W Connector Road
Hydraulic Connection Cross Section E-E
and Planting Schedule

ECOLOGIST:

DRAWN BY:

DHL

CHECKED BY:

DATE REVISED:

PROJECT #

0576/042/B75

DATE

12/01/00

SHEET

M6a

EARTHWORK SUMMARY

** EXCAVATION = 168,500 C.Y.

WORK TO BE PAID FOR UNDER PAY ITEM 120-13 EXCAVATION, BROOKER CREEK RESTORATION SITE CONCEPT PLAN. MATERIAL FROM THE EXCAVATION OF THIS SITE WITHIN LIMITS SHOWN ON THIS SHEET SHALL NOT BE CLASSIFIED AS UNSUITABLE MATERIAL REGARDLESS OF CONTENT. REFER TO GEOTECHNICAL REPORT DATED APRIL 21, 2000 TITLED "RESULTS OF TEST PIT OBSERVATION PROGRAM" BY DRIGGERS ENGINEERING SERVICES INC.

** THE EARTHWORK QUANTITY SHOWN ABOVE IS APPROXIMATE. FINAL PAYMENT WILL BE BASED ON ACTUAL QUANTITIES MEASURED IN ACCORDANCE WITH THE SPECIFICATIONS.

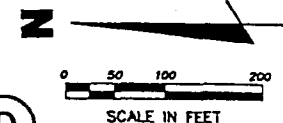
LEGEND

- G** EXISTING WETLAND IDENTIFICATION
- PROPOSED STAKED SILT FENCE
- EXISTING WETLAND LINE (MEET EXISTING GRADE)
- MEET EXISTING GRADE
- TREE SYSTEM DELINEATION
- EXISTING CONTOUR
- 12.0 PROPOSED CONTOUR

123 SOIL BORING

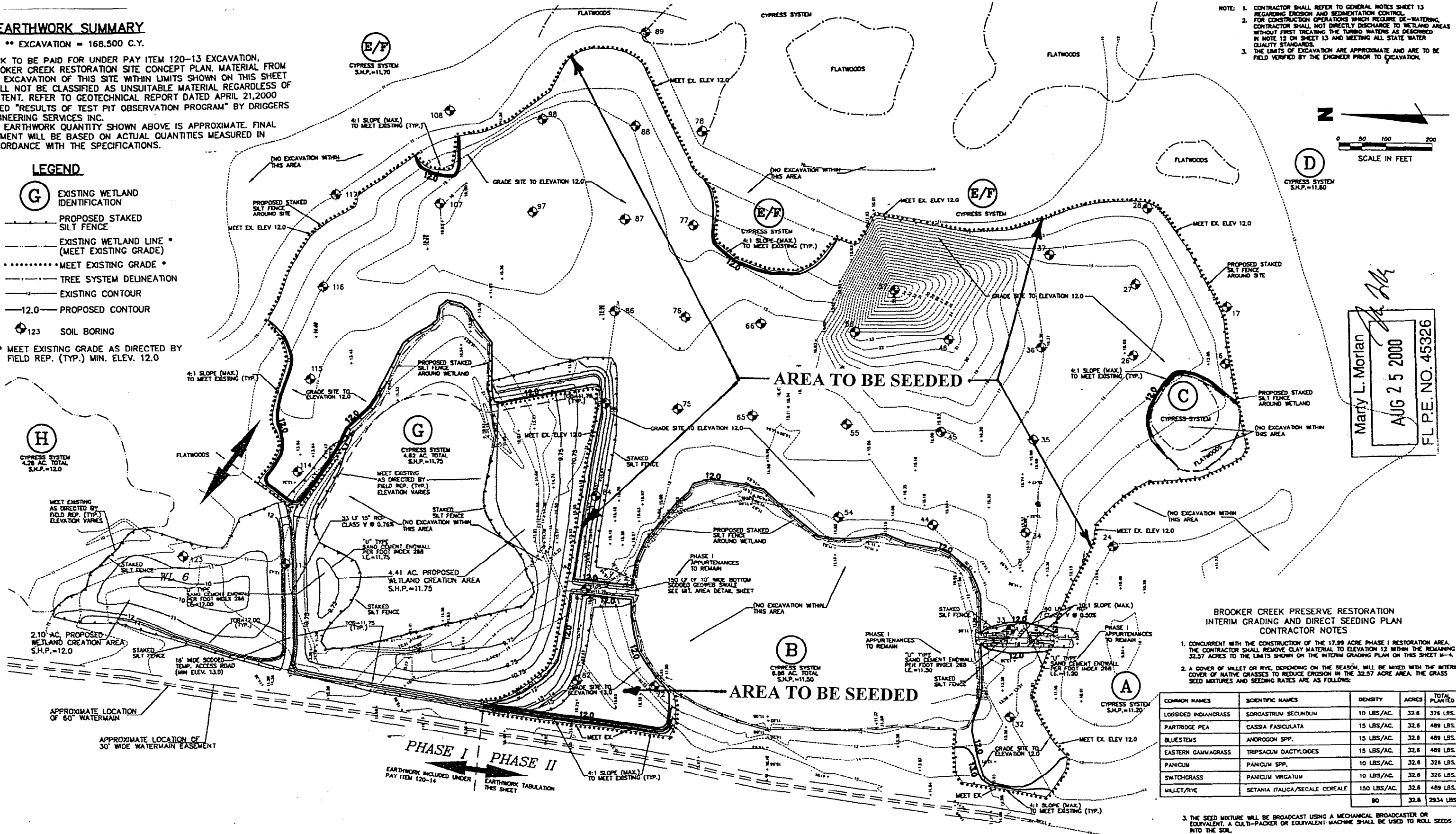
* MEET EXISTING GRADE AS DIRECTED BY FIELD REP. (TYP.) MIN. ELEV. 12.0

- NOTE: 1. CONTRACTOR SHALL REFER TO GENERAL NOTES SHEET 13 REGARDING EROSION AND SEDIMENTATION CONTROL.
2. FOR CONSTRUCTION OPERATIONS WHICH REQUIRE DE-WATERING, CONTRACTOR SHALL NOT DIRECTLY DISCHARGE TO WETLAND AREAS WITHOUT FIRST TREATING THE TURBID WATERS AS DESCRIBED IN NOTE 12 ON SHEET 13 AND MEETING ALL STATE WATER QUALITY STANDARDS.
3. THE LIMITS OF EXCAVATION ARE APPROXIMATE AND ARE TO BE FIELD VERIFIED BY THE ENGINEER PRIOR TO EXCAVATION.



D
CYPRESS SYSTEM
S.H.P.=11.80

Marty L. Morlan
AUG 25 2000
FL P.E. NO. 45326



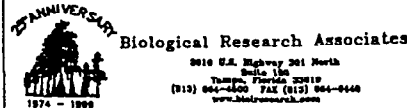
BROOKER CREEK PRESERVE RESTORATION INTERIM GRADING AND DIRECT SEEDING PLAN CONTRACTOR NOTES

- CONCURRENT WITH THE CONSTRUCTION OF THE 17.99 ACRE PHASE I RESTORATION AREA, THE CONTRACTOR SHALL REMOVE CLAY MATERIAL TO ELEVATION 12 WITHIN THE REMAINING 32.57 ACRES TO THE LIMITS SHOWN ON THE INTERIM GRADING PLAN ON THIS SHEET M-4.
- A COVER OF WHEAT OR RYE, DEPENDING ON THE SEASON, WILL BE MIXED WITH THE INTERIM COVER OF NATIVE GRASSES TO REDUCE EROSION IN THE 32.57 ACRE AREA. THE GRASS SEED MIXTURES AND SEEDING RATES ARE AS FOLLOWS:

COMMON NAMES	SCIENTIFIC NAMES	DENSITY	ACRES	TOTAL PLANTED
LOBLODGE INDIANGRASS	SORGHASTRUM SECUNDUM	10 LBS./AC.	32.6	326 LBS.
PARTBIRD PEA	CASSIA FASICULATA	15 LBS./AC.	32.6	489 LBS.
BLUESTEMS	ANDROGON SPP.	15 LBS./AC.	32.6	489 LBS.
EASTERN GAMMAGRASS	TRIPSACUM DACTYLOIDES	15 LBS./AC.	32.6	489 LBS.
PANICUM	PANICUM SPP.	10 LBS./AC.	32.6	326 LBS.
SMITHGRASS	PANICUM VIRGATUM	10 LBS./AC.	32.6	326 LBS.
WHEAT/RYE	SETARIA ITALICA/SECALE CEREALE	150 LBS./AC.	32.6	489 LBS.
		90	32.6	2834 LBS.

- THE SEED MIXTURE WILL BE BROADCAST USING A MECHANICAL BROADCASTER OR EQUIVALENT. A CULTI-PACKER OR EQUIVALENT MACHINE SHALL BE USED TO ROLL SEEDS INTO THE SOIL.
- NO SEED SUBSTITUTION WILL BE ALLOWED WITHOUT WRITTEN PERMISSION FROM THE DIRECTOR OF THE BROOKER CREEK PRESERVE.

MITIGATION SITE AND SEEDED AREA



PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

BROOKER CREEK PRESERVE
RESTORATION SITE
INTERIM GRADING PLAN

DATE: AUGUST 24, 2000

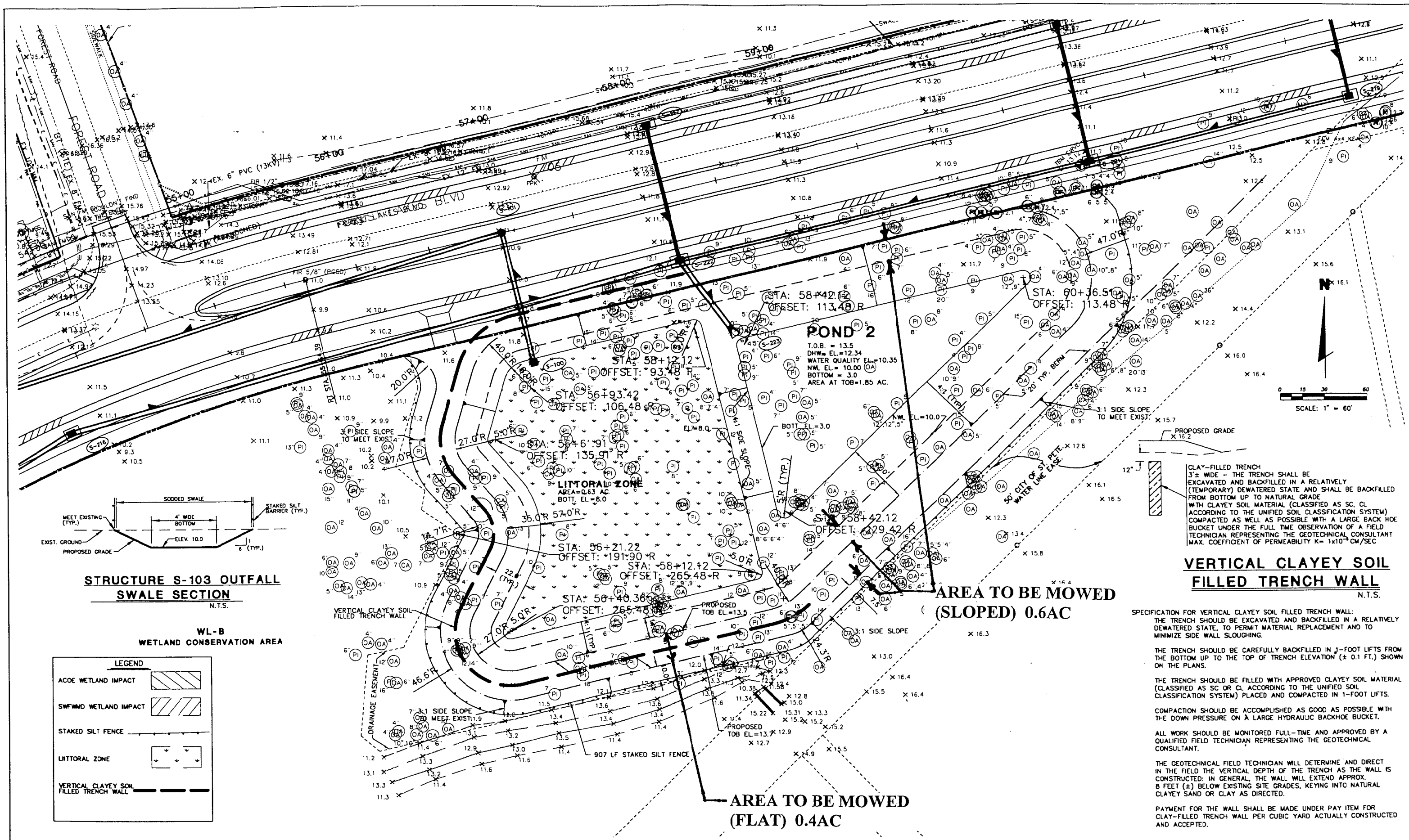
CONTRACT NO.:

SURVEY FILE NO.:

8 OF 12

File: WTERA-1012.DWG
View:

REVISIONS	BY	DATE	SURVEY BOOK No.:	SURVEY DIVISION	BY	DATE
				CRW	3-2000	
				GWK	3-2000	
				MJM	3-2000	
				DESIGN DIVISION		
				KING	8-2000	
				JLV	8-2000	
				MLM	8-2000	
REV. CLAY REMOVAL TO ELEV 12.0 PER PIN. CO.	MLM	8-24-00				
NEW SHEET REQUESTED BY PIN. CO. & S.W.F.W.M.D.	MLM	7-31-00				



CLAY-FILLED TRENCH
3'± WIDE - THE TRENCH SHALL BE
EXCAVATED AND BACKFILLED IN A RELATIVELY
(TEMPORARY) DEWATERED STATE AND SHALL BE BACKFILLED
FROM BOTTOM UP TO NATURAL GRADE
WITH CLAYEY SOIL MATERIAL (CLASSIFIED AS SC, CL
ACCORDING TO THE UNIFIED SOIL CLASSIFICATION SYSTEM)
COMPACTED AS WELL AS POSSIBLE WITH A LARGE BACK HOE
BUCKET UNDER THE FULL TIME OBSERVATION OF A FIELD
TECHNICIAN REPRESENTING THE GEOTECHNICAL CONSULTANT
MAX. COEFFICIENT OF PERMEABILITY $K = 1 \times 10^{-9}$ CM/SEC

**VERTICAL CLAYEY SOIL
FILLED TRENCH WALL**
N.T.S.

SPECIFICATION FOR VERTICAL CLAYEY SOIL FILLED TRENCH WALL:
THE TRENCH SHOULD BE EXCAVATED AND BACKFILLED IN A RELATIVELY
DEWATERED STATE, TO PERMIT MATERIAL REPLACEMENT AND TO
MINIMIZE SIDE WALL SLOUGHING.
THE TRENCH SHOULD BE CAREFULLY BACKFILLED IN 3'-FOOT LIFTS FROM
THE BOTTOM UP TO THE TOP OF TRENCH ELEVATION (± 0.1 FT.) SHOWN
ON THE PLANS.
THE TRENCH SHOULD BE FILLED WITH APPROVED CLAYEY SOIL MATERIAL
(CLASSIFIED AS SC OR CL ACCORDING TO THE UNIFIED SOIL
CLASSIFICATION SYSTEM) PLACED AND COMPACTED IN 1'-FOOT LIFTS.
COMPACTION SHOULD BE ACCOMPLISHED AS GOOD AS POSSIBLE WITH
THE DOWN PRESSURE ON A LARGE HYDRAULIC BACKHOE BUCKET.
ALL WORK SHOULD BE MONITORED FULL-TIME AND APPROVED BY A
QUALIFIED FIELD TECHNICIAN REPRESENTING THE GEOTECHNICAL
CONSULTANT.
THE GEOTECHNICAL FIELD TECHNICIAN WILL DETERMINE AND DIRECT
IN THE FIELD THE VERTICAL DEPTH OF THE TRENCH AS THE WALL IS
CONSTRUCTED. IN GENERAL, THE WALL WILL EXTEND APPROX.
8 FEET (\pm) BELOW EXISTING SITE GRADES, KEYING INTO NATURAL
CLAYEY SAND OR CLAY AS DIRECTED.
PAYMENT FOR THE WALL SHALL BE MADE UNDER PAY ITEM FOR
CLAY-FILLED TRENCH WALL PER CUBIC YARD ACTUALLY CONSTRUCTED
AND ACCEPTED.

REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
ADDED MAX. PERMEABILITY	MLM	8-20-00		DESIGNED	MLM	04/00
REVISED POND 2 DRY ELEV & ADDED OUTFALL SECTION	MLM/TJW	5-31-00		DRAWN	TJW	04/00
REVISED CLAY TRENCH LIMITS & NOTES	MLM	5-31-00		CHECKED	TJW	04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

STORMWATER FACILITIES AND DETAILS POND NO. 2	DATE: APRIL 10, 2000
	CONTRACT NO.:
	SURVEY FILE NO.:
	SHEET 9 OF 12

SHEET 12 OF 12

DRAFT

**ENGINEERING SERVICES REPORT
FOREST LAKES BOULEVARD
PAVEMENT EVALUATION
TAMPA ROAD TO COUNTY LINE**

**FOR
PINELLAS COUNTY, FL**

May 21, 2010

URS CORPORATION

May 21, 2010

DRAFT

Mr. Brent D. Hall
Senior Department Administrative Manager
PINELLAS COUNTY PUBLIC WORKS
440 Court Street
Clearwater, FL 33756

**Re: Contract No. 089-0461-A (DM)
Professional Engineering for Environmental and Geotechnical Services
Task Assignment #1**

Engineering Services Report
Forest Lakes Boulevard – Pavement Evaluation
From Tampa Road to County Line
Pinellas County, FL

Dear Mr. Hall:

URS Corporation (URS) is pleased to submit this engineering services report summarizing the results of our site exploration and evaluation of existing pavement conditions along Forest Lakes Boulevard in Pinellas County. The work was completed in general accordance with the scope of work outlined in our revised proposal (Revision 2) dated November 6, 2009.

We trust that the results of the evaluation provided in this report are satisfactory for your present needs. Please contact us if you require clarification or further discussion of any issues described herein. We appreciate the opportunity to be of service on this project and look forward to continuing to provide our services to Pinellas County on future task assignments.

Sincerely,
URS Corporation

Frederick K. Walker, P. E.
Vice President

Michael R. Sharp, P. E.
Senior Geotechnical Engineer

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**ENGINEERING SERVICES REPORT
FOREST LAKES BOULEVARD – PAVEMENT EVALUATION
FROM TAMPA ROAD TO COUNTY LINE
PINELLAS COUNTY, FL**

DRAFT

1.0 INTRODUCTION

It is our understanding that Forest Lakes Boulevard, located in northeastern Pinellas County, was improved and extended from Tampa Road (SR 584) to just west of the Hillsborough/Pinellas county line in 2002. Since then there has been deterioration in the asphaltic concrete pavement surface course. Pinellas County has requested URS to evaluate the existing roadway in order to assess potential causes of the pavement deterioration and to provide recommendations and cost estimates for repairing the roadway.

From Tampa Road to Pine Avenue, Forest Lakes Boulevard is a four-lane divided roadway. Beyond Pine Avenue, the roadway narrows to a two-lane divided roadway. The two roadways are separated by a landscaped median. Roadway lighting structures are also located in the median. The approximate location of the project is shown on Figure 1, Site Location Map.

2.0 SCOPE OF WORK

To accomplish the objectives of the project, URS completed the following tasks:

- 1) Review of available existing documents including construction plans relating to geotechnical and roadway drainage issues, construction records, and geotechnical reports;
- 2) A reconnaissance of the roadway to document general pavement conditions and to note areas of particular concern and to attempt to identify drainage issues that could potentially be contributing to the pavement degradation;
- 3) Development of a site exploration program based on our document review and project reconnaissance;

- 4) Completion of a limited site exploration program consisting of a series of pavement cores and auger borings to assess pavement, base, subgrade and roadway embankment materials as well as groundwater conditions;
- 5) Completion of a laboratory testing program on selected asphalt core and soil samples to identify asphalt types and engineering properties of the soils;
- 6) Evaluation and analysis of the field and laboratory data;
- 7) Assessment of potential causes of pavement deterioration and feasible remediation alternatives;
- 8) Preparation of budgetary cost estimate for recommended remediation alternative;
- 9) Preparation of this final report summarizing our findings, conclusions, and recommendations.

3.0 EXISTING DATA REVIEW

Our initial task on the project was to complete a review of existing available data that consisted of construction plans, construction records, and geotechnical reports. The construction plans indicated a design pavement section consisting of three inches of PC-1 asphaltic concrete structural course over 10½ inches of limerock base with a minimum limerock bearing ratio (LBR) of 100. Beneath the base, the plans required 12 inches of LBR 40 Type B stabilization.

The roadway section consists of curb and gutter along the inside lanes, adjacent to the median, and paved and sodded shoulders along the outside lanes. A landscaped median separates the eastbound and westbound roadways. Stormwater runoff typically drains into outside roadside swales which outfall into stormwater control ponds. Typical sections for the existing four lane and two lane portions of the roadway are provided on Figure 2. The plans also indicate that the roadway was built almost entirely on fill material ranging in thickness from about one foot to as much as about eight feet.

Available construction records that were reviewed indicated that the embankment fill material, as well as the stabilized subgrade and limerock base, were generally placed and compacted as required. However, several laboratory test records on materials sampled from “stockpile (pit)”

locations reflect American Association of State Highway and Transportation Officials (AASHTO) soil classifications of A-7-5 and A-7-6 which indicate plastic to highly plastic material. Using Florida Department of Transportation (FDOT) criteria, these materials should not be placed within four feet of the roadway base. It should be noted, however, that the available records do not identify if or where these materials were actually used.

Two geotechnical reports that were prepared after construction of the roadway were also reviewed. One report by Central Florida Testing Laboratories, Inc., dated October 1, 2002, was completed as part of an evaluation of shallow soil conditions and groundwater levels in “an attempt to collect data that might indicate the cause of transverse cracking taking place in certain areas of the roadway.” The site exploration discussed in the report consisted of a series of seven hand auger borings, extended to a typical depth of six feet below grade, within a 300-foot section of Forest Lakes Boulevard beginning about 600 feet east of Pine Avenue. The borings were located along both sides of the roadway as well as in the median. The report indicated that the soils encountered consisted predominantly of sands and sands with “small clay inclusions”. Groundwater levels were encountered at depths ranging from 1.6 feet to five feet below existing grade. The report stated that the soils “do not contain a sufficient amount of clay to be unsuitable from a structural standpoint...however, (they) do have slower permeability rates and thus restrict the flow of surface water both vertically and horizontally.” The report conclusions state that “Relatively shallow water table levels found at the majority of the locations tested....may be a factor in the distress being experienced.”

The second geotechnical report that was reviewed by URS as part of this task was prepared by Driggers Engineering Services, Inc.. This report, dated August 4, 2004, was a “Transmittal of Classification Borings and Laboratory Tests – Pinellas County Roadway Beautification (Forest Lakes Blvd.)”. The site exploration associated with this report consisted of a series of 35 hand auger borings typically extended to a depth of five feet below existing grade. No information was provided in the report regarding the locations of the borings except that all the borings were performed within the roadway median. “Geotechnical Comments” included in the report indicated that the borings encountered “variable thickness zones of sands, clay-sands, and clays that were apparently placed above the native soils to establish grades within the median.” The comments also state that this stratigraphy “...would tend to perch groundwater levels above the clay soils or potentially pocket water within sand seams sandwiched within low permeability soils.” The report also comments on the importance of having “...the medians appropriately crowned and shaped in order to provide positive runoff and avoid ponding behind the curbing. The ponding of water behind curbs can result in eventual saturation of the adjacent pavement

structure which can result in excessive pavement deformation...”. A review of the boring logs included in the report indicates that groundwater was typically encountered within a depth range of about three feet to five feet below grade. However, in extreme cases, the depth to groundwater was as shallow as about 2.3 feet below existing grade or was not encountered within the depth of exploration.

4.0 SITE RECONNAISSANCE

4.1 Geotechnical

URS geotechnical staff visited the site on several occasions to document general pavement conditions and to note areas of particular concern for use in developing an appropriate site exploration plan. The predominantly observed pavement distress consisted of cracking with some rutting in the wheelpath areas. The pavement cracking ranged from single longitudinal cracks to severe alligator cracking with some spalling of blocks which formed potholes (Photos 1 and 2). In addition, numerous areas where the roadway has been patched were observed (Photo 3).

One of our initial site visits was performed after a significant rainfall event. During this visit, numerous areas of poor drainage were observed including several areas of ponded water both against the median curb as well as along the outside roadway edge (Photos 4 and 5). In addition, as was pointed out in the Driggers Engineering Services, Inc., report, most of the roadway medians were not properly filled and shaped and were ponding water. In some areas, the ponded median water was causing seepage at the interface of the concrete gutter and the asphalt pavement (Photos 6 and 7). Additional observations by URS drainage staff are discussed below.

4.2 Drainage

URS drainage staff evaluated the existing plans and visited the site to identify contributing drainage factors to the degradation of the existing pavement. Our field review of the surface drainage conditions along the project alignment was performed on March 29, 2010. A documented rainfall event of 0.97 inches occurred on March 28 and a documented rainfall event of 0.85 inches occurred on the morning of March 29.

A visual inspection of Forest Lakes Boulevard and the associated stormwater management system resulted in the following general observations:

- Existing storm sewer system requires general maintenance (i.e., clearing grates, pipe desilting, etc., Photo 8);
- Swales directing surface runoff to ditch bottom inlets require maintenance (regular mowing) in many areas (Photo 9);
- Roadway maintenance/shoulder regrading is required at intersections to eliminate ponding water at turn radii. Some locations may require additional drainage structures to eliminate ponding (Photo 5);
- Raised medians/landscaped areas are not constructed per original design plans; median areas are depressed and hold water (Photo 6);
- Ponding water in shallow roadside swales is documented consistently along the entire length of roadway (Photo 10); swales are not draining to ditch bottom inlets per design even though adjacent wetlands/ponds are significantly lower than swales (Photo 11). Many of these ditches appear flat (Photo 12). In some locations the inlets are higher than the surrounding ditch holding water;
- Pavement is ‘wet’ at medians and outer edges because of ponding water in medians and shallow roadside swales.

URS design staff also reviewed the construction plans for the East-West Connector Road (Forest Lakes Boulevard), prepared by King Engineering Associates, Inc., dated 04/10/2000. One purpose of the review was to assess whether or not any of the observed pavement deterioration could be related to inadequate roadway base clearance above the seasonal high groundwater levels shown in the plans. The review considered both the existing roadway typical sections as well as the future typical sections shown in the plans. Results of this review are summarized in the table below. Stationing shown in the table was taken from the plans.

Stormwater Management Facility	Seasonal High Ground Water Level Elevation (ft).	Low Edge of Pavement Station	Profile Grade Elevation (ft).	Edge of Pavement Elevation (ft)	Existing Base Clearance From NWL (ft)	Future Base Clearance From NWL (ft)
2	11.04	58+12	14.39	13.71	1.55	1.13
3	11.91	80+00	16.10	15.48	2.45	1.97
4B	11.51	94+00	16.72	16.28	3.65	2.99
5	12.00	110+00	16.00	15.56	2.44	1.78
6	10.46	121+37	15.21	14.77	3.18	2.52
7	10.85	132+06	15.25	14.81	2.83	2.17

The review indicated that, per the as-built construction plans, the existing pavement should have a base clearance above the seasonal high groundwater levels provided in the plans that ranges from about 1.5 feet to 3.6 feet. The future widening should have a base clearance that ranges from about 1.1 feet to 3.0 feet. These clearances exceed the required one foot minimum for a facility of this type. Based on this information, the original design provided sufficient base clearance above the seasonal high groundwater levels established at the time of the design.

At the time of the field observations the ponds appear to have been staging at or above the design high water (DHW) elevations of the existing ponds (Pond 4A, Photos 13 and 14; Pond 5, Photo 15). These abnormally high water elevations in the ponds relative to the present water elevations in the adjacent wetlands indicate potential blockages in the pond outfall structures and/or outfall pipes. However, the high water elevations in the ponds could also be an indication that the groundwater regime has changed since the design of the roadway and a re-evaluation of seasonal high groundwater levels may be appropriate.

Recommendations for stormwater facility maintenance activities are provided in Section 8.0 of this report.

5.0 SITE EXPLORATION PLAN

Following the site reconnaissance, an exploration plan was developed to evaluate existing pavement, base, and subgrade conditions along the Forest Lakes Boulevard alignment. The plan included a series of asphalt cores and auger borings in areas where the pavement is exhibiting signs of distress as well as in areas where the pavement condition is relatively good. This procedure was intended to potentially identify variations in subsurface conditions that could be leading to pavement problems.

Based on the existing data review and the site reconnaissance, 12 areas were identified for exploration. The table below summarizes the locations by approximate roadway centerline station and existing roadway conditions. The stationing was not identifiable in the field; therefore, the stationing shown in the table was approximated using the project plans and aerial photographs. The approximate locations of the exploration sites are shown on Figures 2A – 2E, Subsurface Exploration Plan.

Location No.	Approximate Centerline Station	General Pavement Condition	
		Eastbound	Westbound
1	35+00	Isolated Areas of Moderate Cracking	Relatively Good
2	42+00	Moderate Cracking	Minor Cracking
3	60+00	Isolated Areas of Moderate Cracking & Patching	Relatively Good
4	71+00	Significant Cracking / Patching	Significant Cracking / Spalling / Patching
5	81+00	Relatively Good	Isolated Minor Cracking
6	92+00	Heavy Patching / Cracking / Some Spalling	Heavy Patching / Cracking / Some Spalling
7	98+00	Moderate Cracking / Patching	Isolated Areas of Minor Cracking / Patching
8	107+00	Isolated Areas of Minor Cracking / Patching	Isolated Areas of Moderate Cracking / Some Spalling
9	115+00	Moderate to Significant Cracking	Moderate Cracking / Patching
10	123+00	Isolated Areas of Moderate Cracking / Patching	Minor Cracking

Location No.	Approximate Centerline Station	General Pavement Condition	
		Eastbound	Westbound
11	131+00	Isolated Areas of Moderate Cracking / Patching	Minor Cracking
12	135+00	Relatively Good	Isolated Areas of Moderate Cracking / Patching

Note: Observed cracking was primarily interconnected cracks forming small pieces (“alligator” cracking) with some rutting typically located within wheelpaths.

6.0 SITE EXPLORATION RESULTS

6.1 General

The site exploration was completed during the period from March 8 – 11, 2010. At each of the 12 locations a “set” of explorations was completed that consisted of one 4-inch diameter asphalt core in each of the eastbound and westbound roadways, one five-foot deep auger boring at each core location after extraction of the core, one five-foot deep auger boring within the median (where possible) and five-foot deep auger borings generally in the swale area on each side of the roadway. In addition, to assist in evaluating base and subgrade strength variations, dynamic cone penetrometer tests were performed at the auger boring locations within the roadways. Some of the pavement cores were located directly over cracked areas while others were in areas of no cracking.

6.2 Pavement Coring

Results of the pavement coring are summarized in Table 1. As previously stated, the construction plans indicated a design pavement section consisting of three inches of PC-1 asphaltic concrete structural course over 10½ inches of limerock base. As shown in Table 1, the average core thickness was 2.9 inches and the average limerock base thickness was 12.2 inches. The cores indicate that the pavement section was placed in two, 1½-inch thick lifts. In roughly 50% of the cores, the two lifts of asphalt separated during extraction. Table 1 also indicates that crack depths varied from no crack to the full depth of asphalt. The overall average crack depth (considering all the cores) was 1.8 inches.

6.3 Subgrade and Embankment

6.3.1 Soil Conditions

Auger borings performed after extraction of the cores and at locations previously described were advanced to a depth of approximately five feet below existing grade. Soil samples extracted from the auger borings were visually examined and classified. Representative samples of the materials were retained for subsequent laboratory testing to verify field classifications.

The soils encountered in the auger borings generally consisted of a mixture of sands and clayey sands, sometimes containing lumps or balls of clay. Sandy clay was also encountered in one location and organic soils were encountered in a few borings performed in the swale areas.

Figure 3A, Soil Boring Legend, provides a summary of the soil types and descriptions of the materials encountered during the site exploration. The stratigraphies encountered in each set of auger borings were plotted on the roadway cross section included in the construction plans nearest to the location of the borings set. These cross sections, with the boring stratigraphies shown, are provided in Figures 3B – 3E. The strata numbers shown on the cross sections relate to the strata descriptions and soil types shown on the Soil Boring Legend (Figure 3A).

The construction plans also required 12 inches of LBR 40 Type B stabilization below the limerock base. Although no clear distinction between a stabilized subgrade layer and embankment fill was evident, it appears that clay and occasionally some shell were used to provide stabilization in the material immediately below the base.

6.3.2 Groundwater Conditions

In addition, to the soil stratigraphies, groundwater levels encountered at the time of the site exploration were plotted on the appropriate cross sections. To compare the groundwater levels encountered at the time of the exploration with the design seasonal high groundwater levels, the roadway drainage plans were reviewed and seasonal high groundwater levels shown on the plans closest to each of the cross sections were plotted on the cross sections. As shown in Figures 3B – 3E, in most cases, the groundwater level at the time of the exploration was higher than the design seasonal high groundwater level.

The data shown on the cross sections represent conditions encountered only at each boring location. Varying degrees of non-uniformity of the horizontal and vertical soil and groundwater conditions are likely to exist between boring locations.

6.3.3 Dynamic Cone Penetrometer Results

Dynamic cone penetrometer (DCP) testing was performed in conjunction with the auger borings located within the roadways. This test consists of the measurement of the penetration rate of a steel cone drive point resulting from dropping a steel ring sliding weight from a specified height. Based on variations in the rate of penetration, variations in soil strength can be identified.

For this project, the dynamic cone penetrometer was equipped with a 45° cone tip that was driven into the soil using a 15-pound steel weight dropped from a height of 20 inches. Tests were performed in each of the roadway auger borings at the top of the limerock base, at a depth of one foot below existing grade, and at one-foot intervals thereafter. Each test consisted of recording the number of blows required to drive the cone tip 1¾ inches. Results of the DCP testing are summarized in Appendix A.

7.0 LABORATORY TESTING

7.1 General

Classification tests, including percentage finer than the U.S. #200 sieve, natural moisture content, and Atterberg limits, were performed on representative soil samples from each stratum encountered during the field investigation. Atterberg limits tests were also performed on three representative limerock base samples. Density tests were performed on two representative asphaltic concrete cores. Two composite samples, comprised of four representative cores each, were tested to evaluate the material gradation and bitumen content of the asphaltic concrete used in each of the structural course lifts. All laboratory testing was performed in general accordance with ASTM procedures. Individual results from all the testing are provided in Appendix B.

7.2 Results

A summary of the representative soils properties, along with AASHTO classifications and material descriptions, is presented on the Soil Boring Legend, Figure 3A. Seven identifiable soil strata were encountered during the site exploration, and based on laboratory test results, AASHTO classifications ranged from A-3, A-2-4, A-2-6, A-7-6, to A-8. Results from the limerock base tests indicated the material to be non-plastic.

Gradation and bitumen content testing was performed on composite representative core samples from the top lift of the asphaltic concrete and from the bottom lift. The purpose of this testing was to confirm that the asphaltic concrete used on the project met the PC-1 requirements. Density testing was also performed. Results of the testing are shown in Table 2, Summary of Asphalt Pavement Core Testing Results. In addition, the gradation results are shown graphically in Figure 4, Summary of Asphalt Core Gradations. As can be seen in the table and figure, the material generally meets the PC-1 requirements although the composite sample from the top lift slightly exceeds the allowable percentage passing the #200 sieve and the bitumen content is slightly less than the minimum 5%.

8.0 DISCUSSION AND EVALUATION

8.1 General

Based on the results of this study, it appears that the early pavement distress being experienced at Forest Lakes Boulevard is the result of several inter-related factors which primarily consist of poor surface drainage, relatively low permeability subgrade soils, and high groundwater levels. The asphaltic concrete and limerock base thickness and materials appear to be in general compliance with the project plans and specifications.

As previously stated, 12 inches of LBR 40 Type B stabilization was required below the limerock base. The soil samples obtained from the auger borings within the pavement indicate that clay and occasionally some shell were used to provide stabilization in the material immediately below the base. However, the soils encountered in the auger borings sometimes contained lumps or balls of clay. FDOT specifications for stabilizing require that “clay lumps” be broken down or removed from the stabilized materials.

It is our understanding that no specific pavement design was performed during the design phase of the Forest Lakes Boulevard project. However, based on Pinellas County Public Works Roadway Pavement Guidelines for various roadway classifications, the pavement section that was constructed (three inches of PC-1 over 10½ inches of limerock over 12 inches of stabilized subgrade) would normally be adequate for this type of roadway.

8.2 Likely Pavement Failure Mechanism

The typically observed alligator cracking with some rutting in the wheelpaths is indicative of inadequate base or subgrade support. The clayey soils underlying the pavement and base should provide adequate support as long as they remain dry. However, inadequate drainage of water from the base and subgrade can lead to pavement problems as excess pore water pressures will develop under traffic loads resulting in subsequent softening of the subgrade.

Although it appears that the original design provided adequate base clearance from the seasonal high groundwater levels, the soil types used as fill and as stabilizing material have relatively low permeabilities. Therefore, water infiltrating these materials as a result of inadequate surface drainage cannot be rapidly dissipated. In addition, the presence of relatively high ambient groundwater levels further diminishes the ability of the subgrade soils to drain.

A comparison of the pavement conditions at the coring locations with the soil types, DCP penetration resistances, and groundwater levels encountered at each location generally indicates that areas with clayey soils (strata 3 and 4) and relatively high groundwater levels typically have lower DCP resistances in the limerock base and/or subgrade. These areas also tend to be the areas that exhibit the worst pavement conditions.

8.3 Contributors To Pavement Failure

It appears that water is migrating into the pavement structure through a combination of surface infiltration, edge inflow, and from the underlying groundwater as discussed below. With respect to the underlying groundwater, as previously stated, the groundwater levels encountered during our site exploration were at or above seasonal high groundwater levels shown in the project construction plans. This could be due to the fact that the months preceding the site exploration were wetter than typical for this time of year or, in some cases, could be the result of water

perched within the clayey soils. Regardless, the high groundwater could be reaching the subgrade and base material through capillary rise in these fine-grained soils.

During our site reconnaissance, several instances of lack of maintenance of the existing stormwater control system were observed. This lack of maintenance could be contributing to edge inflow of water into the pavement base and subgrade. Some of the observations included ditch bottom inlet grates in need of clearing, pipes requiring desilting, roadside swales not draining to ditch bottom inlets (lack of swale in some cases), and roadway shoulders requiring maintenance/regrading to eliminate ponding water. These existing conditions allow water to pond against the roadway embankment which eventually weakens the pavement base and subgrade.

Regarding surface infiltration, the most significant source of surface water infiltration appears to be the numerous cracks in the pavement surface. In addition, during our site reconnaissance, it was observed that most of the roadway medians were not properly filled and shaped and were ponding water. In several cases, the ponded median water was causing upward seepage at the interface of the concrete gutter and the asphalt pavement. This water is not only infiltrating the base and subgrade materials from below but also from above as the seepage water flows over the pavement and into existing surface cracks (Photos 6 and 7).

All of these conditions will likely result in a continued cycle of deterioration of the pavement as the pavement subgrade and base weakens causing more cracking which allows more infiltration of water. To help reduce the rate of pavement deterioration, minimum recommended surface drainage maintenance activities are provided below.

8.4 Recommended Surface Drainage Maintenance Activities

Based on our site reconnaissance and review of the as-built plans, the following items are recommended to help prevent surface drainage from further contributing to the pavement deterioration:

- Perform regular maintenance of the existing drainage system – clearing debris from grates, de-silting existing pipes as needed, regular mowing, etc.

- Correct the grading of the roadside swales to eliminate standing water adjacent to the roadway pavement.
- Correct the grading of the median and landscaped areas to prevent standing water in these areas adjacent to the curb and gutter and roadway pavement.
- Check stormwater ponds for proper operation.

9.0 REMEDIATION ALTERNATIVES EVALUATED

9.1 General

A major objective in pavement design should be to keep the base and subgrade materials from becoming saturated or exposed to constant high moisture levels. This can be accomplished by using materials that are not sensitive to the effects of moisture and by quickly removing moisture from the pavement system. Based on these considerations, we have evaluated several alternatives to provide long-term remediation as well as one option for temporary remediation which could serve as an interim solution.

All of the long-term alternatives evaluated involve the removal and replacement of the existing pavement and base materials. Because Forest Lakes Boulevard is a highly-traveled roadway providing access to businesses and because maintenance of traffic may be difficult in some areas, all of the long-term options evaluated include the use of asphalt base (Type B-12.5) to reduce the time required for base construction. Another advantage of asphalt base is that the required thickness of asphalt base is less than that for a comparable limerock base which results in additional clearance between the bottom of the base and the seasonal high groundwater. In addition, in lieu of subgrade stabilization, the long-term options evaluated include the use of a relatively permeable granular subbase.

The project construction plans indicate that the entire roadway will be widened to six lanes at some point in the future. The temporary remediation option consists of milling and resurfacing the existing roadway to provide a suitable riding surface until the widening can be constructed. Milling and resurfacing could also serve as an interim solution until sufficient funds are available for long-term remediation.

The following sections provide discussions of the options evaluated along with our recommended alternative. All of the options discussed assume that appropriate maintenance activities will be performed to improve the existing surface drainage system.

9.2 Option 1 – Subgrade Excavation and Replacement Including Edgedrains

This alternative consists of removing the existing pavement and base and then excavating the existing 12-inch stabilized subgrade as well as an additional six inches of embankment material. The excavation would then be backfilled with 18 inches of AASHTO A-3 material followed by six inches of granular subbase in lieu of stabilized subgrade. The pavement section would consist of six inches of asphalt base (Type B-12.5) with two inches of Type SP asphaltic structural course and one inch of FC-9.5 friction course. This option would result in no net change in the roadway profile or grade.

The replacement pavement section is based on the construction of a new section that is approximately the structural equivalent of the existing section. In addition, for two-lane and multi-lane roads with design speeds of 35 to 45 miles per hour, the FDOT Flexible Pavement Design Manual (March 2008) requires a friction course of either FC-9.5 or FC-12.5. Forest Lakes Boulevard has a design speed of 45 miles per hour. The use of FC-9.5 satisfies the friction course requirement and provides one inch of structural support.

Because the median includes significant landscaping as well as roadway lighting structures, excavation and replacement of the median soils is not practical. In addition, as discussed previously, there is a potential for lateral edge flow from outside the roadway. The use of relatively permeable material in the subgrade and subbase in conjunction with positive outfall to swales or drainage structures should prevent an accumulation of lateral edge flow as well as vertical infiltration from affecting the asphalt base. To provide assurance that the subgrade is being adequately drained, the design should include the use of edgedrains extending to a depth of at least two feet below the base located on each side of each roadway. Groundwater collected from the edgedrains would be piped to new or existing drainage structures for positive discharge.

9.3 Option 1A – Subgrade Excavation and Replacement With No Edgedrains

Consideration was also given to subgrade excavation and replacement, as described above, without the use of edgedrains. However, without the edgedrains there is a potential for water to “pool” beneath the pavement in some low areas which could lead to early pavement deterioration. To overcome this potential for water to collect in the subgrade, “daylighting” of the permeable replacement subgrade material to the adjacent roadway swales would be required. However, throughout much of the roadway length, the swales are relatively shallow and adequate “daylighting” may not be possible. In addition, this option would require significantly more excavation and replacement of subgrade/embankment material which would exceed the cost of the edgedrains. As such, this was not considered a feasible alternative.

9.4 Option 2 – Pavement Replacement - Granular Subbase w/Edgedrains

Another option that was evaluated was the removal of the existing pavement and base and replacement with six inches of asphalt base (Type B-12.5) with two inches of Type SP asphaltic structural course and one inch of FC-9.5 friction course. The asphalt base would be underlain by six inches of granular subbase in lieu of stabilized subgrade. In addition, edgedrains would be included. The granular subbase and edgedrains should serve to remove lateral edge inflow. However, without replacing the existing subgrade, positive under-pavement drainage cannot be assured. Since this option does not eliminate the cause of early pavement distress (i.e., lack of under-pavement drainage and poor subgrade support), it is not recommended.

9.5 Option 3 – Raise Existing Roadway Grade

Another alternative that should keep the base and subgrade materials from becoming saturated or exposed to constant high moisture levels is to raise the grade of the existing roadway. This process would consist of removing existing pavement, base, curb and gutter, and sidewalks and then raising the entire cross section by one foot with suitable material. The pavement section would then be constructed with six inches of granular subbase followed by six inches of asphalt base (Type B-12.5). The structural course would consist of two inches of Type SP asphaltic concrete and one inch of FC-9.5 friction course. Replacement of curb and gutter and sidewalks would also be required.

Although this would likely be an effective solution, some issues that will require consideration include:

- Driveways and side road profiles will need to be modified to fit the new profile for the roadway. This could involve extending work back into subdivision entrance areas or sideroads or potentially off the right-of-way at driveways.
- The drainage structures will need to be adjusted accordingly for the new profile.
- Clearances for any signals or signs may need adjustment, if applicable.
- Changing the profile may potentially get the Southwest Florida Water Management District (SWFWMD) involved, which could result in more stringent water quality requirements based on rule changes since the original project was permitted.

Addressing these issues in the design and construction of the roadway at a higher grade is likely to make this option cost prohibitive.

9.6 Option 4 – Mill and Resurface

As previously mentioned, the project construction plans indicate that the entire roadway will be widened to six lanes at some point in the future. To save money and to provide a suitable riding surface until the widening can be constructed and the entire roadway can be remediated, milling and resurfacing the existing pavement may be an appropriate alternative. If widening is not in the foreseeable future, milling and resurfacing would provide a temporary solution until sufficient funds are available for long-term remediation of the roadway.

Based on the results of coring, crack depths ranged from no crack to the full depth of asphalt. Therefore, milling the entire depth of asphaltic concrete appears to be appropriate. The asphalt could be replaced with two inches of Type SP asphaltic concrete and one inch of FC-9.5 friction course.

With this option, it is likely that pavement distress will again manifest itself. However, with appropriate maintenance of the surface drainage system, it may not occur as quickly or be as

severe. This option is not recommended unless there is a need to postpone a long-term solution until it can be funded.

9.7 Recommended Alternatives

9.7.1 Long-Term Remediation

The results of this study indicate that the early pavement distress is primarily the result of the inability of the soils used as fill and stabilizing material to quickly dissipate water infiltrating as a result of inadequate surface drainage coupled with the presence of relatively high ambient groundwater levels. The inability of these materials to adequately drain can lead to pavement problems resulting from softening of the subgrade. Based on this conclusion, it appears that Option 1, discussed above, is the most appropriate remediation alternative to provide an effective long-term solution to the current pavement deterioration problems. Replacement of the existing stabilized subgrade and underlying six inches of embankment with relatively permeable material, along with the installation of edgedrains will allow for the quick removal of moisture from the pavement system. A conceptual typical section for this option is shown on Figure 6.

A preliminary cost estimate was prepared for this option and is summarized below. Included is a preliminary cost estimate for the roadway items along with estimates of mobilization and maintenance of traffic costs. The estimated mobilization cost is assumed to be 10% of the roadway costs while the maintenance of traffic cost is estimated to be 20% of the roadway and mobilization costs. It should be noted that this cost estimate is for preliminary budgeting purposes only. Actual costs will depend on the final design of the selected remediation option.

Recommended Long-Term Remediation Option - Preliminary Cost Estimate

Option #	Description	Roadway	Mobilization	Maintenance of Traffic	Total
1	12" Subgrade & 6" Embankment Excavation & Replacement Including Edgedrains	\$4,400,000	\$440,000	\$968,000	\$5,808,000

9.7.2 Temporary Repair

As previously discussed, milling and resurfacing may be appropriate to save money and to provide a suitable riding surface until the widening can be constructed and the entire roadway remediated or to provide a temporary repair until sufficient funds are available for long-term remediation of the roadway.

Based on these considerations, a budgetary estimate was prepared for milling and resurfacing assuming a milling depth of three inches and replacement of the milled pavement with two inches of Type SP asphaltic concrete and one inch of FC-9.5 friction course. The estimate is summarized below. As was done previously, the estimated mobilization cost is assumed to be 10% of the roadway costs while the maintenance of traffic cost is estimated to be 20% of the roadway and mobilization costs.

Temporary Repair Option - Preliminary Cost Estimate

Option #	Description	Roadway	Mobilization	Maintenance of Traffic	Total
4	Mill and Resurface Existing Pavement	\$1,280,000	\$128,500	\$281,600	\$1,689,600

9.8 Recommended Maintenance

To improve surface drainage conditions and to potentially reduce the rate of pavement deterioration, implementation of the surface drainage maintenance activities discussed in Section 8.4 of this report is recommended.

10.0 LIMITATIONS OF THE REPORT

This study has been conducted in accordance with generally accepted standards in the geotechnical engineering profession. No other warranty, expressed or implied is made.

PHOTOGRAPHS



Photo 1 – Typical Alligator Cracking



Photo 2 – Alligator Cracking With Spalling



Photo 3 – Area of Significant Patching



Photo 4 – Ponded Water Against Curb



Photo 5 – Ponded Water Along Intersection Radius

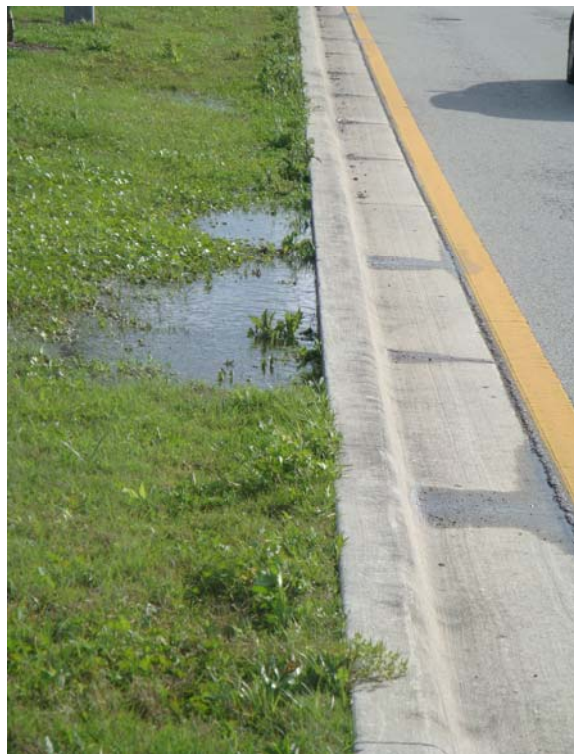


Photo 6 – Typical Ponded Water in Median



Photo 7 – Seepage From Median Ponded Water



Photo 8 – Typical Ditch Bottom Inlet Grate Requiring Maintenance



Photo 9 – Roadside Swale Requiring Mowing



Photo 10 – Standing Water in Roadside Swale



Photo 11 – Standing Water in Roadside Swale – Appears Higher Than Adjacent Pond



Photo 12 – Standing Water, Swale Not Apparent



Photo 13 – Pond 4A – Appears to be Staging Above Design High Water Elevation



Photo 14 – Pond 4A – Appears to be Staging Above DHW Elevation



Photo 15 – Ditch Bottom Inlet Not Draining Due to Pond 5 Above DHW Elevation

TABLES

Table 1

Summary of Pavement Coring Results
Forest Lakes Boulevard Pavement Evaluation
Pinellas County

Core Location		Total Core Thickness (in)	Top Lift Thickness (in)	Bottom Lift Thickness (in)	Lifts Intact	Crack Depth (in)	Limerock Base Thickness (in)	Comments
Section	Location ⁽¹⁾							
1	1B	2.8	1.2	1.6	Yes	2.8	15.2	
	1D	2.6	1.6	1.0	Yes	0.0	12.4	
2	2B	3.0	1.5	1.5	Yes	1.5	11.0	
	2D	2.5	1.0	1.5	Yes	2.5	13.5	
3	3B	3.0	1.5	1.5	No	3.0	13.0	Bottom lift fragmented during coring
	3D	3.0	1.5	1.5	Yes	0.0	12.0	
4	4B	3.0	1.5	1.5	No	1.5	11.0	
	4D	3.0	1.0	2.0	Yes	3.0	12.0	
5	5B	3.0	1.5	1.5	Yes	0.0	12.0	
	5D	--	1.5	--	No	3.0	12.0	Bottom lift highly fragmented during coring
6	6B	3.0	1.3	1.7	Yes	1.3	11.0	
	6D	3.2	1.7	1.5	Yes	3.2	11.8	
7	7B	3.0	1.5	1.5	No	1.5	11.0	
	7D	2.7	1.2	1.5	Yes	0.0	13.3	
8	8B	--	--	1.7	No	1.5	12.0	Top lift highly fragmented during coring
	8D	3.0	1.3	1.7	No	3.0	13.0	
9	9B	2.8	1.3	1.5	No	1.5	13.2	
	9D	2.7	1.2	1.5	No	2.7	12.3	
10	10B	2.7	1.2	1.5	Yes	2.7	11.3	
	10D	2.7	1.3	1.4	Yes	1.3	12.3	
11	11B	3.0	1.3	1.8	No	3.0	11.0	
	11D	3.0	1.5	1.5	No	1.5	12.0	
12	12B	3.0	1.5	1.5	Yes	0.0	12.0	
	12D	2.8	1.5	1.3	No	2.8	12.2	
Average:		<u><u>2.9</u></u>				<u><u>1.8</u></u>	<u><u>12.2</u></u>	

⁽¹⁾ B - Denotes core taken in eastbound roadway
D - Denotes core taken in westbound roadway

Table 2

Summary of Asphalt Pavement Core Testing Results
Forest Lakes Boulevard Pavement Evaluation
Pinellas County

Sample Identification: Top Lift - Cores #2D, #3D, #9B, and #10B

Sieve #	% Passing	Allowable Range % Passing		
3/4"	100	100	-	100
1/2"	96.8	88	-	100
3/8"	88.4	75	-	93
No. 4	55.3	47	-	75
No. 10	35.1	31	-	53
No. 40	24.7	19	-	35
No. 80	13.8	7	-	21
No. 200	7.1	2	-	6

Bitumen Content: 4.7%
Core Density: 136.2 lbs/ft³

Allowable Range % Passing		
5	-	9

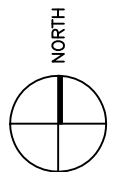
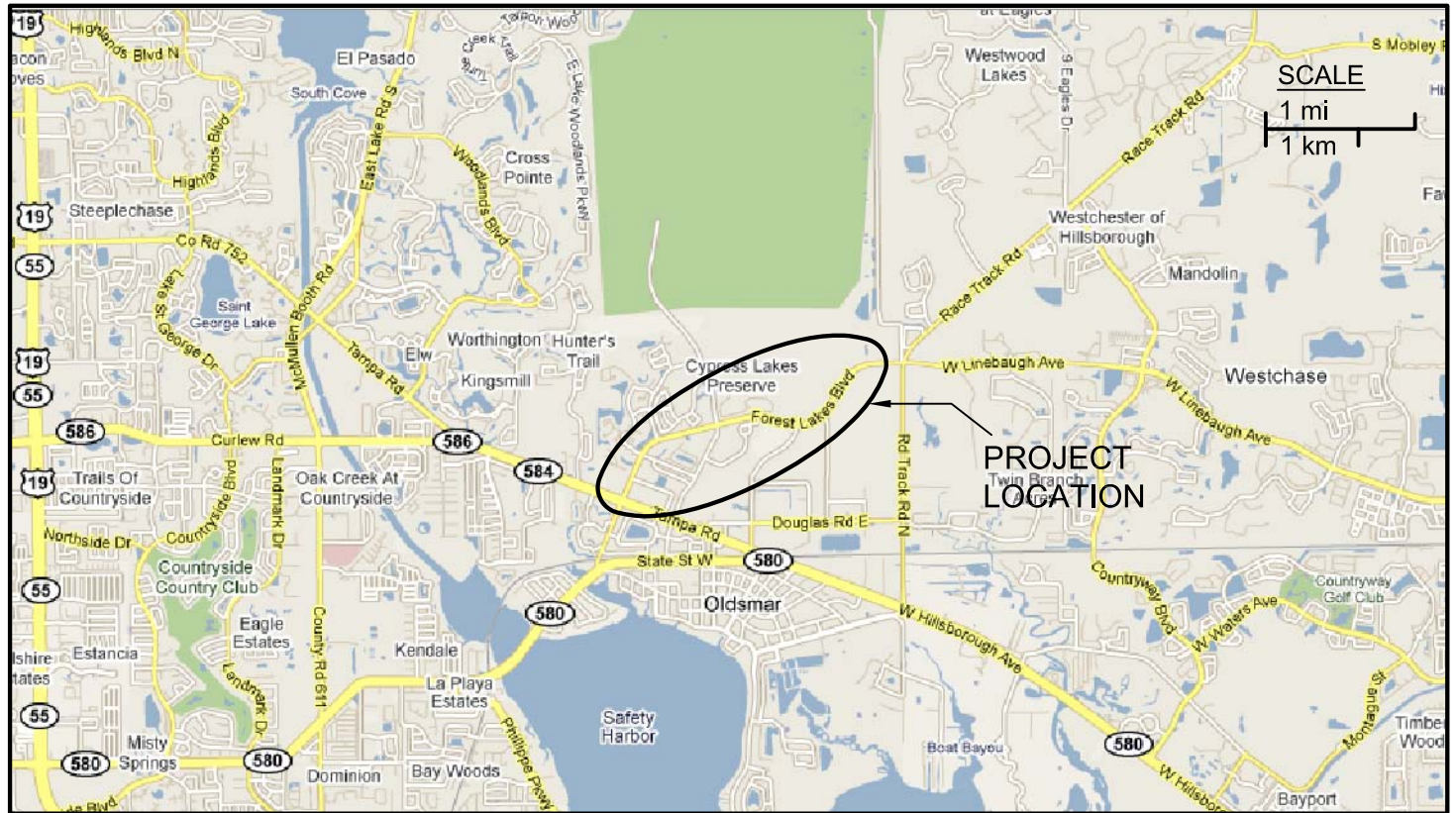
Sample Identification: Bottom Lift - Cores #2D, #3D, #9B, and #10B

Sieve #	% Passing	Allowable Range % Passing		
3/4"	100	100	-	100
1/2"	98.4	88	-	100
3/8"	92.6	75	-	93
No. 4	61.8	47	-	75
No. 10	38.8	31	-	53
No. 40	24.2	19	-	35
No. 80	12	7	-	21
No. 200	5	2	-	6

Bitumen Content: 5.2%
Core Density: 135.1 lbs/ft³

Allowable Range % Passing		
5	-	9

FIGURES



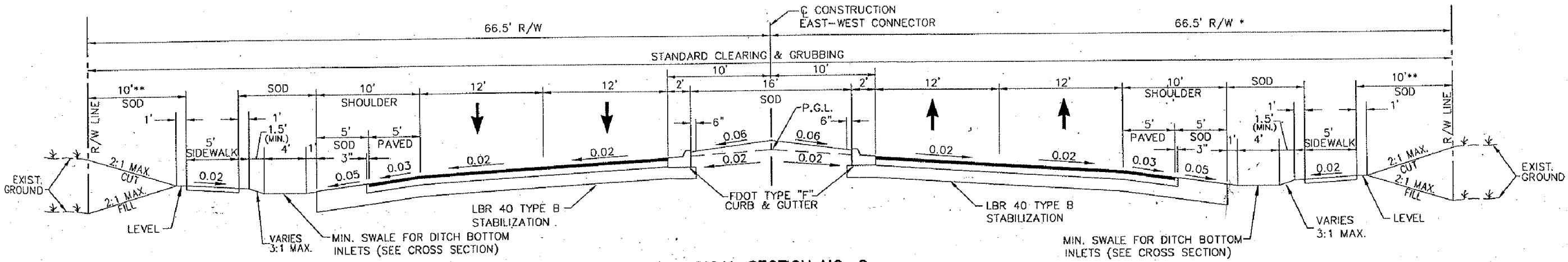
URS Corporation Southern
7850 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
No. 00000002

SITE LOCATION MAP
FOREST LAKES BOULEVARD PAVEMENT EVALUATION
PINELLAS COUNTY PUBLIC WORKS
PINELLAS COUNTY, FLORIDA

DRAWING NO.

FIGURE
1

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NOTE: SIDEWALKS SHALL BE CONSTRUCTED UPON COMPACTED SUBGRADE

TYPICAL SECTION NO. 2
4 LANE RURAL DESIGN
N. T. S.

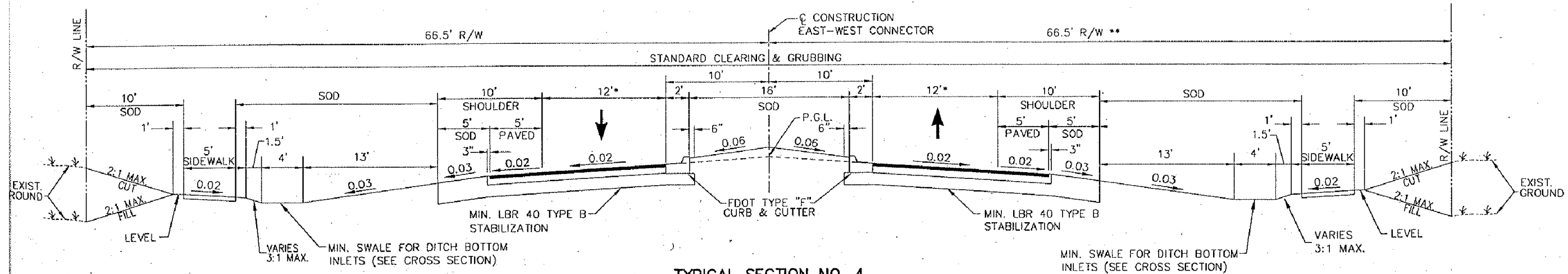
DESIGN SPEED 45 MPH
STA. 30+56 TO STA. 78+00.00

ROADWAY PAVEMENT SPECIFICATIONS
3" PC-1 ASPHALTIC CONCRETE STRUCTURAL COURSE
10 1/2" LIMEROCK BASE (MIN. LBR 100)

SHOULDER PAVEMENT SPECIFICATIONS
3" PC-1 ASPHALTIC CONCRETE STRUCTURAL COURSE
10 1/2" LIMEROCK BASE (MIN. LBR 100)

* STA. 63+45 TO STA. 66+45 - TRANSITION 66.5' RIGHT-OF WAY TO 88' RIGHT-OF WAY
STA. 66+45 TO STA. 69+60 - 88' RIGHT-OF-WAY
STA. 69+60 TO STA. 71+40 - TRANSITION 88.0' RIGHT-OF WAY TO 100' RIGHT-OF WAY
STA. 71+40 TO STA. 78+00 - 100' RIGHT-OF-WAY
** STA. 30+56 TO STA. 33+25 - SEE X-SECTIONS FOR DIMENSION (10' STD.)

TRAFFIC DATA	
2015 ADT = 44,735	
K =	0.090
D =	0.50
T =	0.02 (2%)



NOTE: SIDEWALKS SHALL BE CONSTRUCTED UPON COMPACTED SUBGRADE

TYPICAL SECTION NO. 4
2 LANE RURAL DESIGN
N. T. S.

DESIGN SPEED 45 MPH
STA. 78+00.00 TO STA. 93+94.72

ROADWAY PAVEMENT SPECIFICATIONS
3" PC-1 ASPHALTIC CONCRETE STRUCTURAL COURSE
10 1/2" LIMEROCK BASE (MIN. LBR 100)

SHOULDER PAVEMENT SPECIFICATIONS
3" PC-1 ASPHALTIC CONCRETE STRUCTURAL COURSE
10 1/2" LIMEROCK BASE (MIN. LBR 100)

NOTE: SEE NEXT SHEET FOR MEDIAN TURN DETAIL

* VARIES 24' TO 12'
STA. 78+00 TO
STA. 84+00

** STA. 78+00.00 TO STA. 78+85.04 - 100' RIGHT-OF-WAY
STA. 78+85.04 TO STA. 81+43.84 - TRANSITION 100' RIGHT-OF WAY TO 88' RIGHT-OF WAY
STA. 81+85.04 TO STA. 91+43.84 - TRANSITION 88' RIGHT-OF WAY TO 66.5' RIGHT-OF WAY

TRAFFIC DATA	
2015 ADT = 44,735	
K =	0.090
D =	0.50
T =	0.02 (2%)

REF: PLANS PROVIDED BY PINELLAS COUNTY DATED APRIL, 2000

PINELLAS COUNTY PUBLIC WORKS
PINELLAS COUNTY, FLORIDA

FOREST LAKES BOULEVARD PAVEMENT
EVALUATION

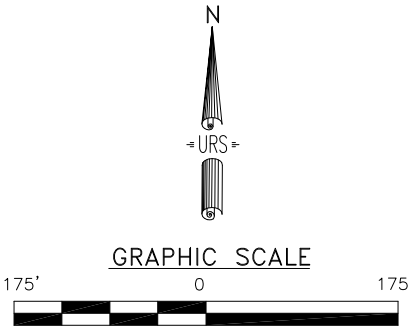
URS
URS Corporation Southern
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
No. 00000002

EXISTING ROADWAY
TYPICAL SECTIONS

DRAWING NO.

FIGURE
2

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LEGEND

STA. 35+00
APPROXIMATE STATIONING

①
APPROXIMATE LOCATION OF
EXPLORATION SET*

*EACH "SET" OF EXPLORATIONS REFERS TO ONE ASPHALT CORE IN EACH OF THE EASTBOUND AND WESTBOUND ROADWAYS, ONE FIVE-FOOT DEPTH AUER BORING AT EACH CORE LOCATION, ONE FIVE-FOOT DEPTH AUGER BORING WITHIN MEDIAN (WHERE POSSIBLE) AND TWO FIVE-FOOT DEPTH AUGER BORINGS IN THE SWALE AREA ON EACH SIDE OF ROADWAYS



REF: GOOGLE EARTH

PINELLAS COUNTY PUBLIC WORKS
PINELLAS COUNTY, FLORIDA

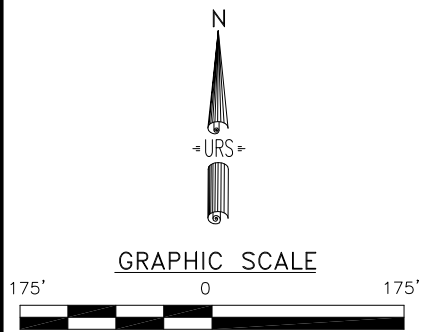
FOREST LAKES BOULEVARD PAVEMENT
EVALUATION

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No. 00000002

SUBSURFACE EXPLORATION PLAN

DRAWING NO.
**FIGURE
3A**

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LEGEND

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APPROXIMATE STATIONING

① --- ①
APPROXIMATE LOCATION OF EXPLORATION SET*

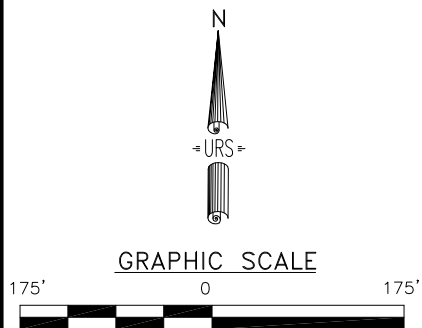
*EACH "SET" OF EXPLORATIONS REFERS TO ONE ASPHALT CORE IN EACH OF THE EASTBOUND AND WESTBOUND ROADWAYS, ONE FIVE-FOOT DEPTH AUER BORING AT EACH CORE LOCATION, ONE FIVE-FOOT DEPTH AUGER BORING WITHIN MEDIAN (WHERE POSSIBLE) AND TWO FIVE-FOOT DEPTH AUGER BORINGS IN THE SWALE AREA ON EACH SIDE OF ROADWAYS



REF: GOOGLE EARTH

PINELLAS COUNTY PUBLIC WORKS PINELLAS COUNTY, FLORIDA	FOREST LAKES BOULEVARD PAVEMENT EVALUATION	 <div>URS Corporation Southern 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 No. 00000002</div>	SUBSURFACE EXPLORATION PLAN	DRAWING NO.
				FIGURE 3B

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LEGEND

STA. 35+00
APPROXIMATE STATIONING

① --- ①
APPROXIMATE LOCATION OF EXPLORATION SET*

*EACH "SET" OF EXPLORATIONS REFERS TO ONE ASPHALT CORE IN EACH OF THE EASTBOUND AND WESTBOUND ROADWAYS, ONE FIVE-FOOT DEPTH AUER BORING AT EACH CORE LOCATION, ONE FIVE-FOOT DEPTH AUGER BORING WITHIN MEDIAN (WHERE POSSIBLE) AND TWO FIVE-FOOT DEPTH AUGER BORINGS IN THE SWALE AREA ON EACH SIDE OF ROADWAYS



REF: GOOGLE EARTH

PINELLAS COUNTY PUBLIC WORKS
PINELLAS COUNTY, FLORIDA

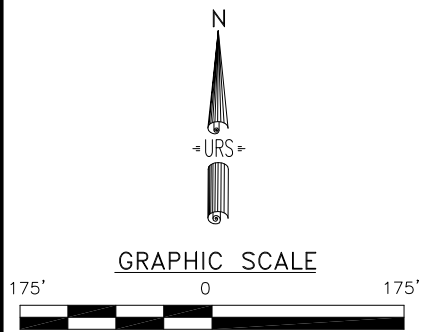
FOREST LAKES BOULEVARD PAVEMENT
EVALUATION

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SUBSURFACE EXPLORATION PLAN

DRAWING NO.
FIGURE 3C

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LEGEND

STA. 35+00
APPROXIMATE STATIONING

① --- **①**
APPROXIMATE LOCATION OF EXPLORATION SET*

*EACH "SET" OF EXPLORATIONS REFERS TO ONE ASPHALT CORE IN EACH OF THE EASTBOUND AND WESTBOUND ROADWAYS, ONE FIVE-FOOT DEPTH AUER BORING AT EACH CORE LOCATION, ONE FIVE-FEET DEPTH AUGER BORING WITHIN MEDIAN (WHERE POSSIBLE) AND TWO FIVE-FOOT DEPTH AUGER BORINGS IN THE SWALE AREA ON EACH SIDE OF ROADWAYS



REF: GOOGLE EARTH

PINELLAS COUNTY PUBLIC WORKS
PINELLAS COUNTY, FLORIDA

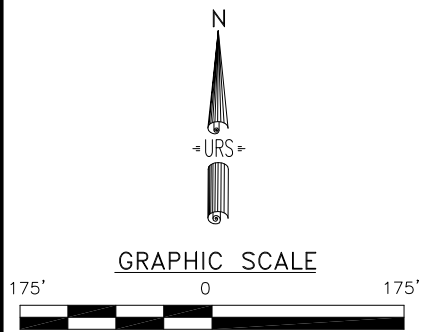
FOREST LAKES BOULEVARD PAVEMENT
EVALUATION

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SUBSURFACE EXPLORATION PLAN

DRAWING NO.
**FIGURE
3D**

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LEGEND

STA. 35+00
APPROXIMATE STATIONING

① --- ①
APPROXIMATE LOCATION OF EXPLORATION SET*

*EACH "SET" OF EXPLORATIONS REFERS TO ONE ASPHALT CORE IN EACH OF THE EASTBOUND AND WESTBOUND ROADWAYS, ONE FIVE-FOOT DEPTH AUER BORING AT EACH CORE LOCATION, ONE FIVE-FOOT DEPTH AUER BORING WITHIN MEDIAN (WHERE POSSIBLE) AND TWO FIVE-FOOT DEPTH AUER BORINGS IN THE SWALE AREA ON EACH SIDE OF ROADWAYS



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FOREST LAKES BOULEVARD PAVEMENT
EVALUATION

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URS Corporation Southern
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
No. 00000002


SUBSURFACE EXPLORATION PLAN

DRAWING NO.
**FIGURE
3E**

**SUMMARY OF MATERIAL TYPES ENCOUNTERED
FOREST LAKES BOULEVARD SITE EXPLORATION
(REFER TO ATTACHED CROSS SECTIONS)**

**FOREST LAKES BOULEVARD PAVEMENT EVALUATION
PINELLAS COUNTY**

Stratum No.	Gradation		Atterberg Limits			AASHTO Group	Description
	No. of Tests	% Passing #200 Mesh	No. of Tests	Liquid Limit	Plasticity Index		
1	5	5 - 10	1	NP	NP	A-3	Gray to Brown to White Fine Sand
2	8	11 - 14	7	NP	NP	A-2-4	Brown to Dark Brown Fine Sand w/some Silt
3	13	13 - 26	12	NP - 26	NP - 9	A-2-4	Brown to Dark Brown Fine Silty to Clayey Sand
4	2	28 - 30	2	29 - 34	12 - 19	A-2-6	Dark Brown Clayey Sand
5	1	50	1	56	39	A-7-6	Gray Sandy Clay
6	--	--	--	--	--	A-8	Dark Brown to Black Soil w/Organics (Peat)
7	--	--	3*	NP	NP	LR	Asphaltic Concrete over Limerock Base (* Atterberg Limits tests on Limerock Base)

 - Groundwater Level Where Encountered

GNE - Groundwater Not Encountered to Depth of Exploration

**PINELLAS COUNTY PUBLIC WORKS
PINELLAS COUNTY, FLORIDA**

**FOREST LAKES BOULEVARD
PAVEMENT EVALUATION**



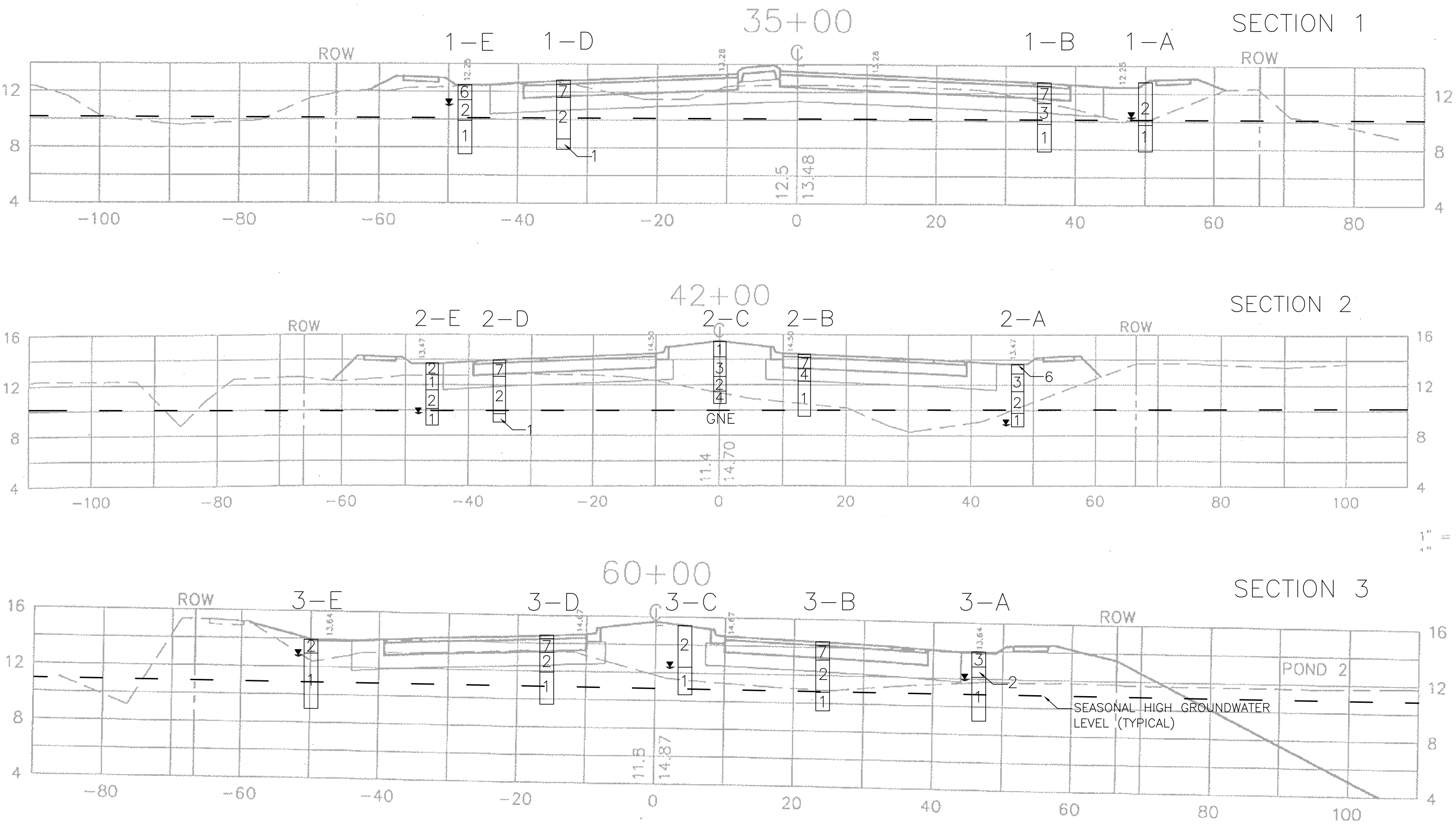
URS Corporation Southern
7650 West Courtney
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No. 00000002

SOIL BORING LEGEND

DRAWING NO.

**FIGURE
4A**

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REF: PLANS PROVIDED BY PINELLAS COUNTY DATED APRIL, 2000

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PINELLAS COUNTY, FLORIDA

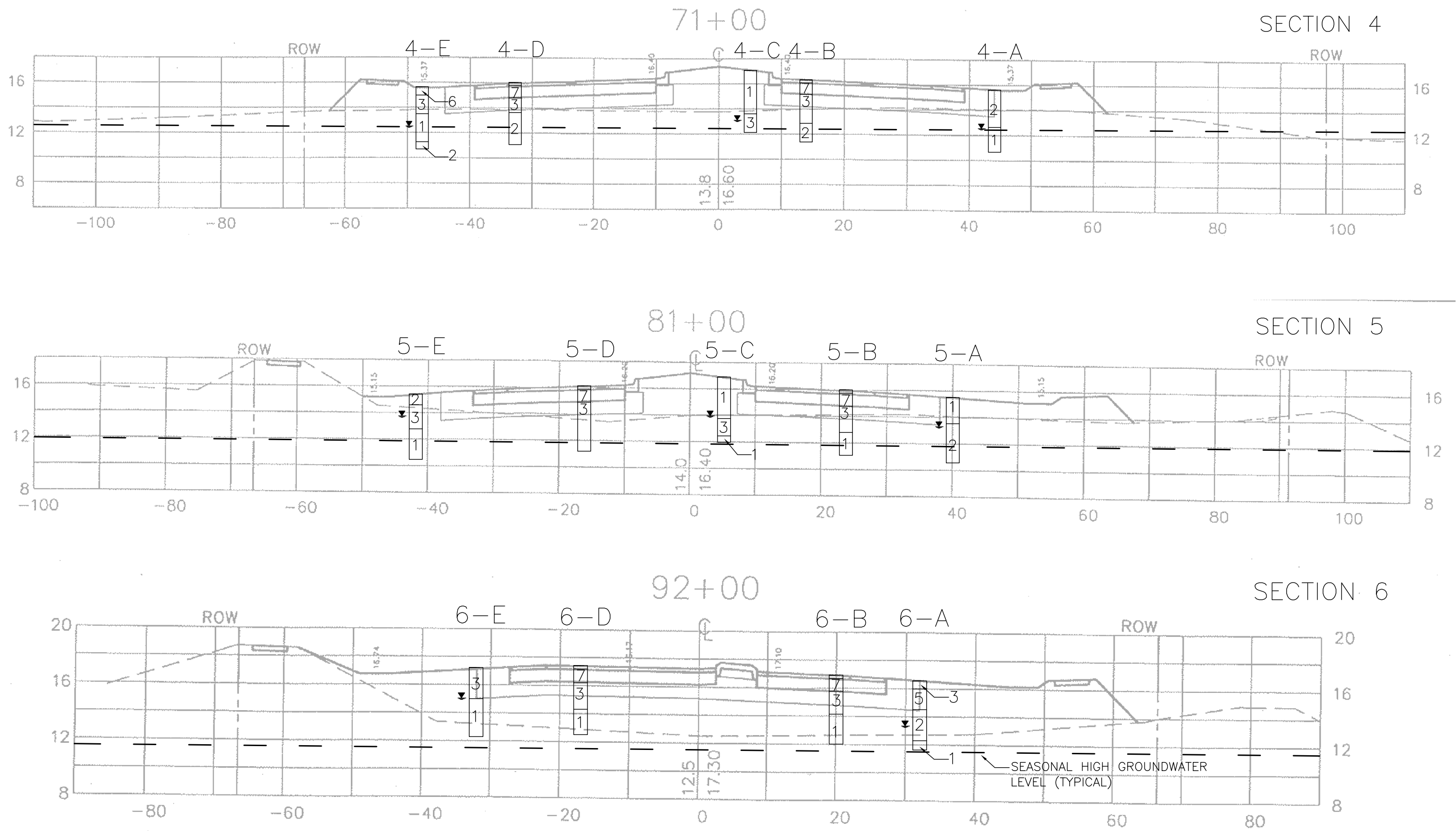
FOREST LAKES BOULEVARD PAVEMENT
EVALUATION

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No. 00000002

APPROXIMATE CROSS SECTIONS
AND SUBSURFACE PROFILES

DRAWING NO.
**FIGURE
4B**

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PINELLAS COUNTY, FLORIDA

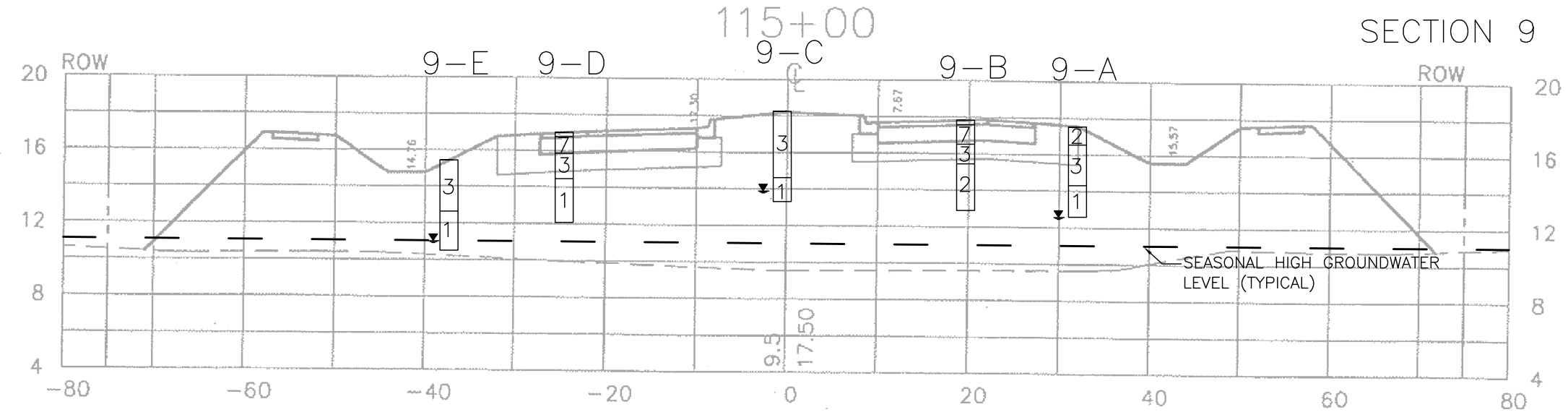
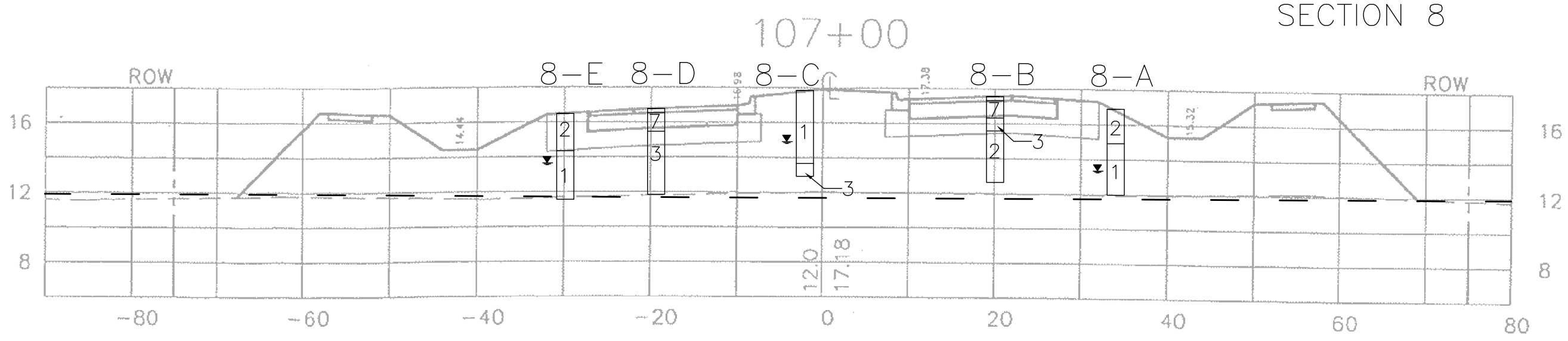
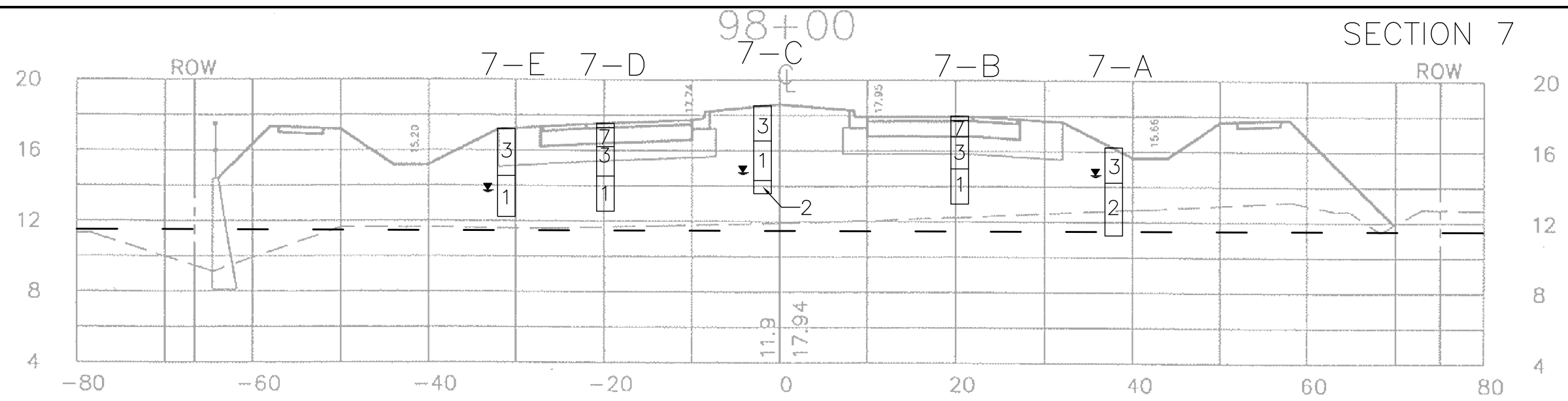
FOREST LAKES BOULEVARD PAVEMENT
EVALUATION

URS
URS Corporation Southern
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
No. 00000002

APPROXIMATE CROSS SECTIONS
AND SUBSURFACE PROFILES

DRAWING NO.
**FIGURE
4C**

N:\Geotech-DW\1200 Tampa Projects\9000\9209 - Forest Lakes Blvd - Pinellas Co\8 ACAD\Subsurface Profiles and Legend\Profiles.dwg 05/17/2010 10:24



REF: PLANS PROVIDED BY PINELLAS COUNTY DATED APRIL, 2000

PINELLAS COUNTY PUBLIC WORKS
PINELLAS COUNTY, FLORIDA

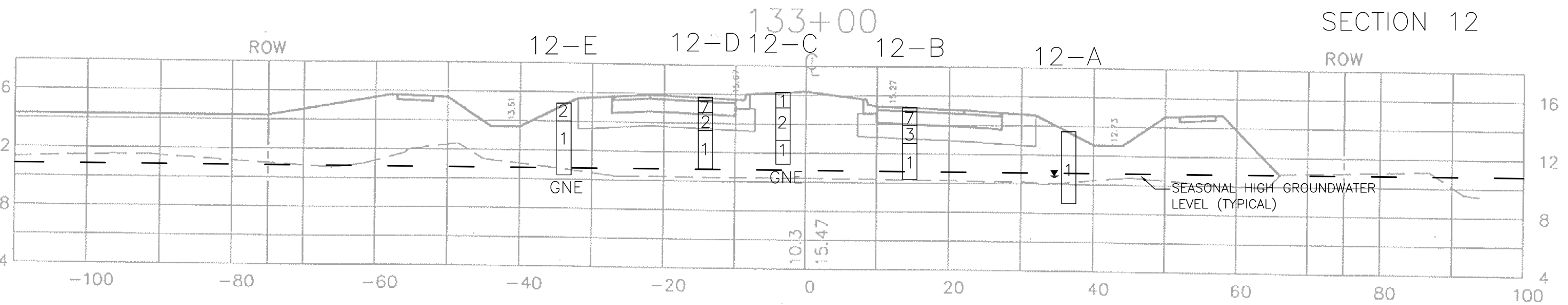
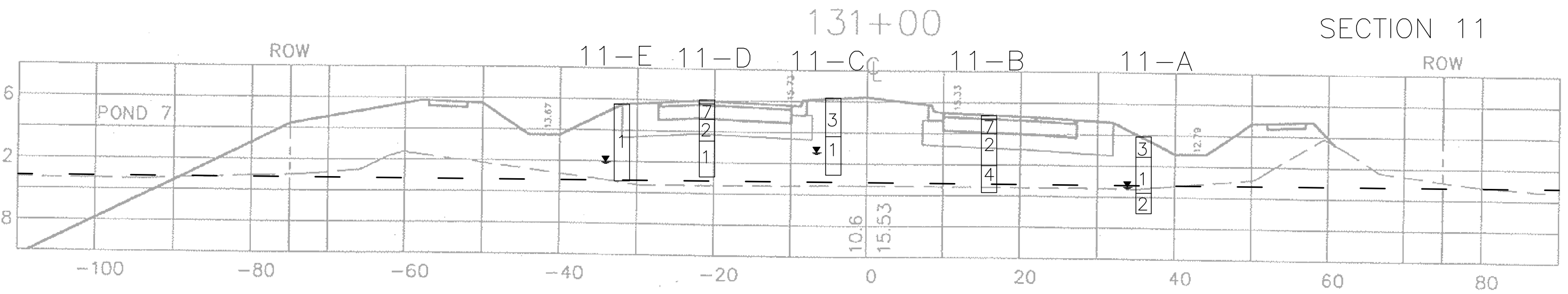
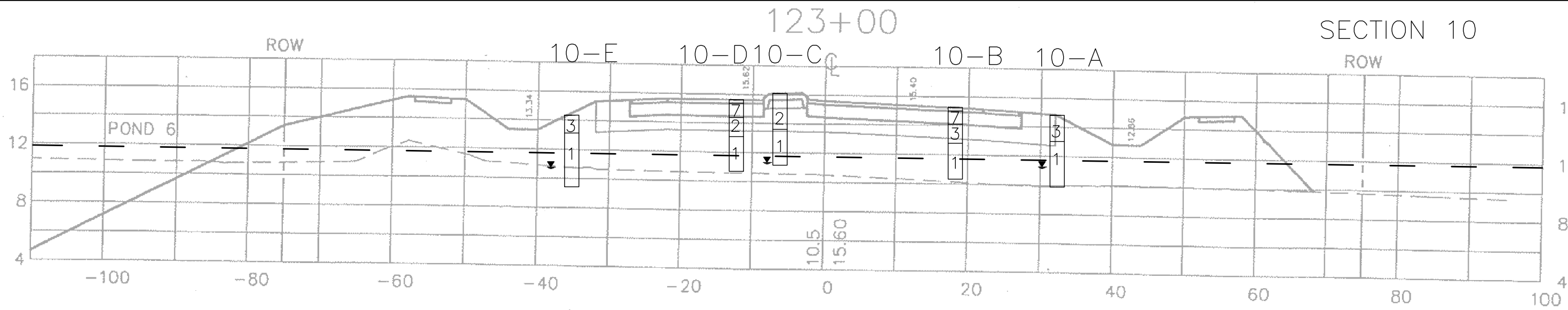
FOREST LAKES BOULEVARD PAVEMENT
EVALUATION

URS
URS Corporation Southern
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
No. 00000002

APPROXIMATE CROSS SECTIONS
AND SUBSURFACE PROFILES

DRAWING NO.
**FIGURE
4D**

N:\Geotech-DW\1200 Tampa Projects\9000\9209 - Forest Lakes Blvd - Pinellas Co\8 ACAD\Subsurface Profiles and Legend\Profiles.dwg 05/17/2010 10:25



REF: PLANS PROVIDED BY PINELLAS COUNTY DATED APRIL, 2000

PINELLAS COUNTY PUBLIC WORKS
PINELLAS COUNTY, FLORIDA

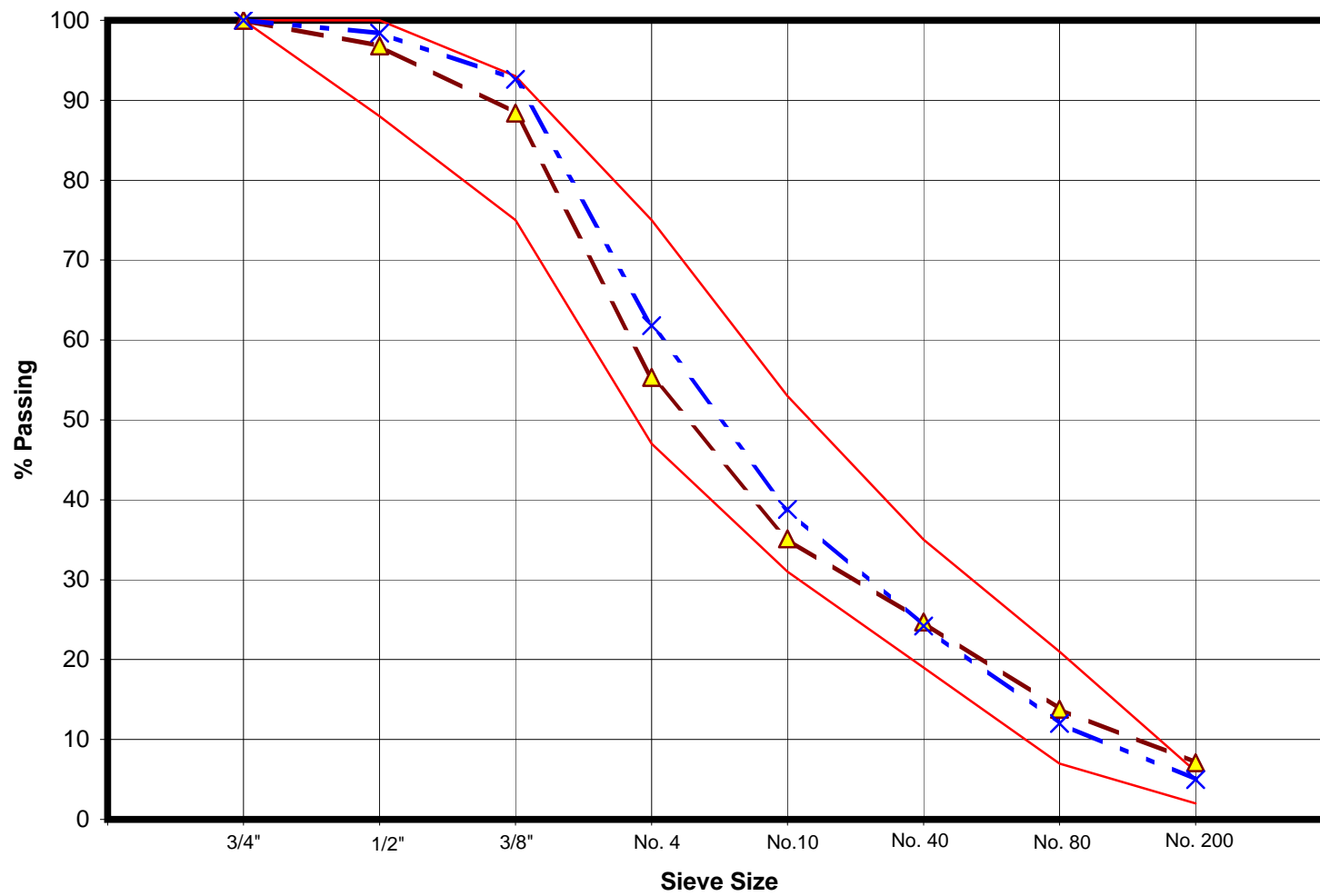
FOREST LAKES BOULEVARD PAVEMENT
EVALUATION

URS
URS Corporation Southern
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
No. 00000002

APPROXIMATE CROSS SECTIONS
AND SUBSURFACE PROFILES

DRAWING NO.
FIGURE
4E

Summary of Asphalt Core Testing
Gradation
Forest Lakes Boulevard Pavement Evaluation



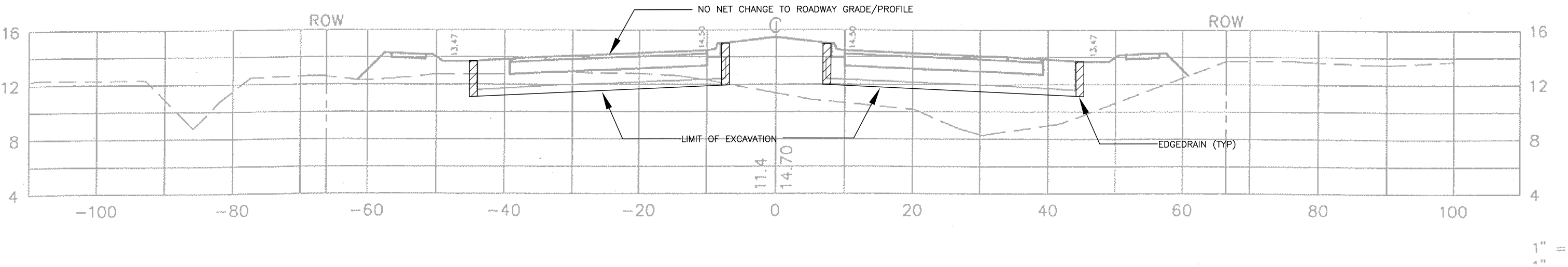
Top Lift - Cores #2D, #3D, #9B, and #10B Bottom Lift - Cores #2D, #3D, #9B, and #10B Allowable Range

N:\Geotech-DM\1200 Tampa Projects\9000\9209 - Forest Lakes Blvd - Pinellas Co\8 ACAD\Proposed Alternatives\Proposed alternatives rev.02.dwg 05/21/2010 13:53

RECOMMENDED REMEDIATION SOLUTION

OPTION #1

EXCAVATE EXISTING PAVEMENT BASE AND SUBGRADE TO 18" BELOW EXISTING BASE
RECONSTRUCT PAVEMENT SECTION WITH EDGEDRAINS



EXISTING CONDITION WITH EXCAVATION LIMIT AND PROPOSED EDGEDRAIN LOCATION

PAVEMENT REMOVAL AND EXCAVATION SUMMARY

- 3" ASPHALTIC CONCRETE (TYPE PC-1)
- 12" LIMEROCK BASE
- 12" STABILIZED SUBGRADE
- 6" EMBANKMENT
- 33"

PROPOSED REPLACEMENT MATERIAL SECTION

- 1" FRICTION CORSE (FC-9.5)
- 2" ASPHALTIC CONCRETE (TYPE SP)
- 6" ASPHALTIC BASE (TYPE B-12.5)
- 6" GRANULAR SUBBASE
- 18" A-3 SUBGRADE
- 33"

REF: PLANS PROVIDED BY PINELLAS COUNTY DATED APRIL, 2000

PINELLAS COUNTY PUBLIC WORKS
PINELLAS COUNTY, FLORIDA

FOREST LAKES BOULEVARD PAVEMENT
EVALUATION

URS
URS Corporation Southern
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
No. 00000002

CONCEPTUAL TYPICAL SECTION
RECOMMENDED
REMEDICATION SOLUTION

DRAWING NO.
FIGURE
6

APPENDIX A

SUMMARY OF DYNAMIC CONE PENETROMETER RESULTS

Summary of Dynamic Cone Penetrometer Results

Forest Lakes Boulevard Pavement Evaluation

Pinellas County

Note: EB = Eastbound Roadway, WB = Westbound Roadway

Boring No.: 1-B (EB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	37
2.0	3	27
3.0	3	17
4.0	1	16
5.0	1	13

Boring No.: 1-D (WB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	2	50
2.0	2	9
3.0	2	12
4.0	2	9
5.0	1	10

Boring No.: 2-B (EB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	11
2.0	4	7
3.0	1	28
4.0	1	50
5.0	1	50

Boring No.: 2-D (WB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	2	50
3.0	2	15
4.0	2	40
5.0	1	35

Boring No.: 3-B (EB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	2	28
3.0	2	50
4.0	1	33
5.0	1	25

Boring No.: 3-D (WB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	2	30
3.0	1	8
4.0	1	11
5.0	1	10

Boring No.: 4-B (EB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	3	22
3.0	3	50
4.0	2	26
5.0	2	26

Boring No.: 4-D (WB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	12
2.0	3	25
3.0	2	33
4.0	2	19
5.0	2	20

Summary of Dynamic Cone Penetrometer Results

Forest Lakes Boulevard Pavement Evaluation

Pinellas County

Note: EB = Eastbound Roadway, WB = Westbound Roadway

Boring No.: 5-B (EB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	3	22
3.0	3	50
4.0	1	32
5.0	1	19

Boring No.: 5-D (WB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	30
2.0	3	19
3.0	3	13
4.0	3	10
5.0	3	7

Boring No.: 6-B (EB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	19
2.0	3	9
3.0	3	50
4.0	1	50
5.0	1	36

Boring No.: 6-D (WB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	3	29
3.0	3	50
4.0	1	37
5.0	1	18

Boring No.: 7-B (EB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	32
2.0	3	43
3.0	1	50
4.0	1	50
5.0	1	50

Boring No.: 7-D (WB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	3	50
3.0	1	31
4.0	1	50
5.0	1	50

Boring No.: 8-B (EB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	18
2.0	3	50
3.0	2	50
4.0	2	50
5.0	2	50

Boring No.: 8-D (WB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	3	50
3.0	3	31
4.0	3	31
5.0	3	50

Summary of Dynamic Cone Penetrometer Results

Forest Lakes Boulevard Pavement Evaluation

Pinellas County

Note: EB = Eastbound Roadway, WB = Westbound Roadway

Boring No.: 9-B (EB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	3	32
3.0	2	50
4.0	2	50
5.0	2	50

Boring No.: 9-D (WB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	3	50
3.0	1	50
4.0	1	50
5.0	1	50

Boring No.: 10-B (EB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	3	50
3.0	1	50
4.0	1	50
5.0	1	50

Boring No.: 10-D (WB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	2	25
3.0	1	50
4.0	1	50
5.0	1	30

Boring No.: 11-B (EB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	2	35
3.0	2	50
4.0	4	50
5.0	4	17

Boring No.: 11-D (WB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	2	26
3.0	1	50
4.0	1	33
5.0	1	50

Boring No.: 12-B (EB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	3	27
3.0	1	50
4.0	1	33
5.0	1	50

Boring No.: 12-D (WB)

Depth (ft)	Soil Type	DCP (blows/1.75")
0.3	Top of Base	50
1.0	LR	50
2.0	2	21
3.0	1	30
4.0	1	39
5.0	1	50

APPENDIX B

LABORATORY TESTING RESULTS

LABORATORY TEST RESULTS

PROJECT: Forest Lake Blvd.
 Oldsmar, Florida

PROJECT NO: GE- 10-3532

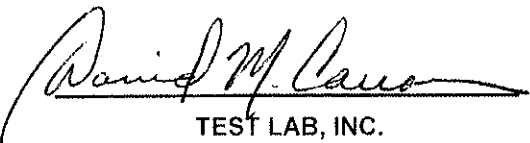
CLIENT: URS Corporation

DATE: March 29, 2010

SUMMARY OF LABORATORY TEST RESULTS

BORING No.	SAMPLE No.	DEPTH (ft.)	PERCENT PASSING SIEVE NUMBE									WASH	LL	PI	ORGANIC CONTENT (%)	NMC (%)
			% ¹¹	4	10	20	40	60	100	140	200					
7B	2	--	--	--	--	--	--	--	--	--	22	26	9	--	--	11.9
5D	2	--	--	--	--	--	--	--	--	--	21	24	6	--	--	11.5
2A	2	--	--	--	--	--	--	--	--	--	26	26	9	--	--	14.2
2B	2	--	--	--	--	--	--	--	--	--	28	29	12	--	--	14.7
11B	4	--	--	--	--	--	--	--	--	--	30	34	19	--	--	17.2
10B	2	--	--	--	--	--	--	--	--	--	23	23	6	--	--	11.9
4D	2	--	--	--	--	--	--	--	--	--	23	24	7	--	--	14.5
6A	2	--	--	--	--	--	--	--	--	--	50	56	39	--	--	20.9
6D	2	--	--	--	--	--	--	--	--	--	18	17	≤5	--	--	9.7
12B	2	--	--	--	--	--	--	--	--	--	14	21	≤5	--	--	13.9
7D	2	--	--	--	--	--	--	--	--	--	18	20	≤5	--	--	10.3
4C	2	--	--	--	--	--	--	--	--	--	13	21	≤5	--	--	11.3
1B	2	--	--	--	--	--	--	--	--	--	19	18	≤5	--	--	9.4
5B	2	--	--	--	--	--	--	--	--	--	17	19	≤5	--	--	10.0
9D	2	--	--	--	--	--	--	--	--	--	19	20	2	--	--	10.7
8C	1	--	--	--	--	--	--	--	--	--	10	--	--	--	--	17.5
10D	2	--	--	--	--	--	--	--	--	--	16	--	--	--	--	10.4
12D	2	--	--	--	--	--	--	--	--	--	12	--	--	--	--	11.2
11D	2	--	--	--	--	--	--	--	--	--	14	--	--	--	--	10.2
11B	2	--	--	--	--	--	--	--	--	--	11	--	--	--	--	9.7
8E	1	--	--	--	--	--	--	--	--	--	14	--	--	--	--	11.6
1A	1	--	--	--	--	--	--	--	--	--	13	--	--	--	--	21.3
3C	2	--	--	--	--	--	--	--	--	--	11	--	--	--	--	11.5
3B	2	--	--	--	--	--	--	--	--	--	11	--	--	--	--	9.2
1D	2	--	--	--	--	--	--	--	--	--	13	--	--	--	--	11.6
10B	3	--	--	--	--	--	--	--	--	--	5.4	--	--	--	--	10.9
6B	3	--	--	--	--	--	--	--	--	--	8.3	--	--	--	--	9.3
5A	2	--	--	--	--	--	--	--	--	--	8.9	--	--	--	--	9.7
3D	3	--	--	--	--	--	--	--	--	--	6.2	--	--	--	--	11.4

REPORT TO:
 URS Corporation
 Attn: Mike Sharp, P.E. (2)


 TEST LAB, INC.

ASPHALTIC
CONCRETE ANALYSIS

PROJECT: Forest Lake Blvd.
Oldsmar, Florida

PROJECT NO: GE 10-3532

CLIENT: URS Corporation

DATE: March 31, 2010

SAMPLE LOCATION: Delivered by client

SAMPLE DESCRIPTION: Top Lift -Core Nos. 2D, 3D, 9B and 10B

<u>SIEVE NUMBER</u>	<u>PERCENT PASSING</u>	<u>MIX FORMULA</u>	<u>ACCEPTANCE TOLERANCE (%)</u>
3/4"	100.00	*	---
1/2"	96.81	*	---
3/8"	88.42	*	---
No. 4	55.28	*	---
No. 10	35.10	*	---
No. 40	24.74	*	---
No. 80	13.82	*	---
No. 200	7.13	*	---

*NOTE: No mix design provided

BITUMEN CONTENT, Percent: 4.73

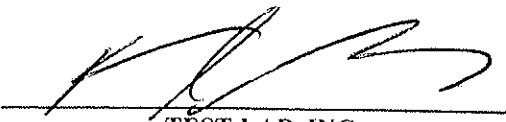
DATE RECEIVED : 3/26/10

DATE TESTED: 3/30/10

REPORTS TO:

URS Corporation

Attn: Mike Sharp, P.E. (2)


TEST LAB, INC.

ASPHALTIC
CONCRETE ANALYSIS

PROJECT: Forest Lake Blvd.
Oldsmar, Florida

PROJECT NO: GE 10-3532

CLIENT: URS Corporation

DATE: March 31, 2010

SAMPLE LOCATION: Delivered by client

SAMPLE DESCRIPTION: Bottom Lift – Core Nos. 2D, 3D, 9B and 10B

<u>SIEVE NUMBER</u>	<u>PERCENT PASSING</u>	<u>MIX FORMULA</u>	<u>ACCEPTANCE TOLERANCE (%)</u>
3/4"	100.00	*	---
1/2"	98.42	*	---
3/8"	92.59	*	---
No. 4	61.75	*	--
No. 10	38.82	*	---
No. 40	24.17	*	---
No. 80	12.01	*	---
No. 200	4.99	*	---

*NOTE: No mix design provided

BITUMEN CONTENT, Percent: 5.18


DATE RECIVED: 3/26/10

DATE TESTED: 3/30/10

REPORTS TO:

URS Corporation

Attn: Mike Sharp, P.E. (2)


TEST LAB, INC.

ASPHALTIC CONCRETE
CORE DATA

PROJECT: Forest Lake Blvd.
Oldsmar, Florida

PROJECT NO: GE 10-3532

CLIENT: URS Corporation

DATE: March 31, 2010

<u>Core No.</u>	<u>Location</u>	<u>Thickness Tested (inches)</u>	<u>Core Density (pcf)</u>
1	2D (Top layer)	1.26	136.2
2	10B (Bottom layer)	1.47	135.1

DATE CORE OBTAINED: 3/26/10

REPORT TO:
URS Corporation
Attn: Mike Sharp, P.E. (2)


TEST LAB, INC.

SOIL ANALYSIS



PROJECT: Forest Lake Blvd.
Oldsmar, Florida

PROJECT NO: GE 10-3532

CLIENT: URS Corporation

DATE: April 22, 2010

BORING NO.: 2-D-1

SAMPLE DESCRIPTION: Crushed limerock

ATTERBERG LIMITS: LL: NP PL: NP PI: NP

DATE SAMPLED: 4/15/10

DATE TESTED: 4/21/10

REPORTS TO:

URS Corporation

Attn: Mike Sharp, P.E. (2)

TEST LAB, INC.

SOIL ANALYSIS



PROJECT: Forest Lake Blvd.
Oldsmar, Florida

PROJECT NO: GE 10-3532

CLIENT: URS Corporation

DATE: April 22, 2010

BORING NO.: 6-B-1

SAMPLE DESCRIPTION: Crushed limerock

ATTERBERG LIMITS: LL: NP PL: NP PI: NP

DATE SAMPLED: 4/15/10

DATE TESTED: 4/21/10

REPORTS TO:

URS Corporation

Attn: Mike Sharp, P.E. (2)

TEST LAB, INC.

SIEVE ANALYSIS



PROJECT: Forest Lake Blvd.
Oldsmar, Florida

PROJECT NO: GE 10-3532

CLIENT: URS Corporation

DATE: April 22, 2010

BORING NO.: 9-D-1

SAMPLE DESCRIPTION: Crushed limerock

ATTERBERG LIMITS: LL: NP PL: NP PI: NP

DATE SAMPLED: 4/15/10

DATE TESTED: 4/21/10

REPORTS TO:

URS Corporation

Attn: Mike Sharp, P.E. (2)

TEST LAB, INC.

Date: August 13, 2013

To: Jeff Blazowski, Project Manager

From: John Westgate, Drainage Engineer

RE: Forest Lakes Underdrain Phase 2 Assessment

The purpose of this memorandum is to report on our assessment of the underdrain requirements and design issues for Forest Lakes Phase 2. Phase 2 of the Forest Lakes project will widen Forest Lakes from a two lane section to a four lane section from Pine Avenue to Commerce Boulevard and reconstruct the roadway pavement including installation of underdrains. This section of Forest Lakes drains to two stormwater ponds, Pond 3 and Pond 4B. The control weir in Pond 3 has been surveyed as 11.15 NAVD88. Field observation on 08-05-2013 found the water level in the outfall wetland 3 inches above the Pond 3 weir with very little flow over the weir. The long duration stage in Pond 3 is controlled by the Seasonal High Water (SHW) in the downstream Wetland C. Nicole Cribbs with Faller Davis & Associates Inc. has established SHW in Wetland C as around 11.7. (SHW 7 = 11.74, SHW 8 = 11.63, and SHW 9 = 12.11). The proposed system 3 underdrain will have a flowline above seasonal high water in Pond3.

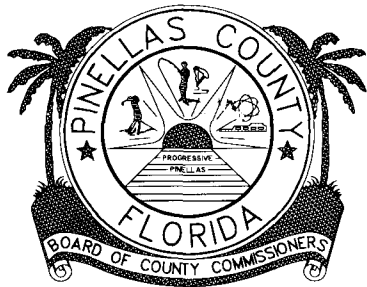
A preliminary underdrain design was made for Phase 2 based on AS BUILT plans by King Engineering and Associates adjusted from NGVD29 datum to current project datum NAVD88 by subtracting 0.85 feet. See attached Preliminary Phase 2 Underdrain Design. With the proposed flowlines of the underdrains set 2.0 feet below the bottom of base of a four lane Forest Lakes Boulevard, the minimum flowline will be 11.42 NAVD88 in Basin 3 and 11.99 NAVD88 in Basin 4A. This will keep the underdrain flowlines above the long duration stage in Ponds 3 and 4B except for the lowest flowline in the system flowing to Pond 3 that will be about 0.3 feet below SHW in Pond 3.

The maximum underdrain run length in Basin 3 and Basin 4B will be 800 feet. Six inch diameter type 3 underdrains will handle the design flows for these underdrain systems.

The proposed typical section is the same as for Phase I. The Type 3 underdrain will be located under the five foot wide shoulder pavement. The underdrains will outfall into new manholes inserted on the cross laterals of the storm sewer systems. The Type 3 underdrain is recommended for the Forest Lakes underdrain due to the anticipated high drainage rate. The typical roadway underdrain is located on an urban section with curb and gutter section. Runoff from the paved roadway is directed to the gutter and into the storm sewer system. The rainfall on the grass strip between the curb and the sidewalk and back of the sidewalk receives the runoff from the sidewalk and infiltrates it into the soil adjacent to the roadway pavement. The Forest Lakes typical section sends the runoff from two lanes of pavement and a paved shoulder into a grassed swale where it can infiltrate into the soil beneath the grassed swale. The proposed underdrain needs to be able to handle a high drainage rate in order to drain the soil under the swale dry within 24 hours after any appreciable rainfall.

The proposed underdrain flowlines have been checked against potential conflicts with the existing storm drain systems. With the exception of the 48-inch pipe critter crossing at Station 97+50, all of the storm drain laterals are at least six inches below the proposed underdrain flowlines. The 48-inch critter crossing will present a challenge. There is 450 linear feet of underdrain located between the 48-inch critter crossing and the high point at Commerce Boulevard. In order to pass over the 48-inch pipe it would be necessary to raise the flowline of the underdrain six inches above the standard depth. An alternative would be to discharge this 450 linear feet of underdrain into the 48-inch critter crossing. This might disturb the critters. Another option would be to discharge this 450 linear feet of underdrain through the retaining wall into the adjacent wetland.

Groundwater impacts to adjacent wetlands are not anticipated to be a design or permitting issue. The proposed underdrain flowlines are at or above the Normal Pool Elevations in the adjacent wetlands. The adjacent wetlands are generally downstream of the stormwater ponds 3 and 4B that the underdrain systems to which the underdrain systems will discharge. The worst case is Wetland C on the south side of Basin 4B that has a Seasonal High Water of 12.5 and a Normal Pool Elevation of 12.0 compared to the minimum underdrain flowline elevation of 12.0.



SERVING YOU EVERY DAY

PINELLAS COUNTY GOVERNMENT IS COMMITTED TO PROGRESSIVE PUBLIC POLICY, SUPERIOR PUBLIC SERVICE, COURTEOUS PUBLIC CONTACT, JUDICIOUS EXERCISE OF AUTHORITY AND SOUND MANAGEMENT OF PUBLIC RESOURCES TO MEET THE NEEDS AND CONCERNS OF OUR CITIZENS TODAY AND TOMORROW.

INDEX OF PLANS

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1	COVER SHEET
2-6	DRAINAGE MAPS
7	EXISTING DRAINAGE STRUCTURES
8	SUMMARY OF QUANTITIES
9-12	TYPICAL SECTIONS
13	GENERAL NOTES
14	SURVEY REFERENCES AND SHEET LAYOUT
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86-87	CONSTRUCTION DETAILS
89-106	UTILITY INFORMATION PLAN AND PROFILE
107-119	MAINTENANCE OF TRAFFIC
S1-S8	SIGNING & PAVEMENT MARKING PLANS
M1-M3	BROOKER CREEK PRESERVE AND RESTORATION SITE

(SHEET 88 NOT USED)

RELATED STANDARDS AND SPECIFICATIONS

DOCUMENT	DESCRIPTION
D-1	STATE OF FLORIDA "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS", DATED AUGUST, 1994.
D-2	U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", DATED 1988.
D-3	FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", DATED 2000 AND ALL SUPPLEMENTAL SPECIFICATIONS THERETO.
D-4	FLORIDA DEPARTMENT OF TRANSPORTATION "ROADWAY AND TRAFFIC DESIGN STANDARDS", DATED JANUARY, 1994.
D-5	PINELLAS COUNTY "SPECIFICATIONS FOR HOT BITUMINOUS MIXTURES, PLANT METHODS, EQUIPMENT AND CONSTRUCTION METHODS", DATED JUNE, 1997.
D-6	PINELLAS COUNTY ENGINEERING DEPARTMENT SPECIFICATIONS FOR PAVING AND DRAINAGE CONSTRUCTION, (FOR CONTRACT CORRESPONDING TO THESE PLANS).
D-7	FLORIDA DEPARTMENT OF TRANSPORTATION "STRUCTURE STANDARDS", DATED 1994.
D-8	PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS "STANDARD CONSTRUCTION DETAILS", DATED AUGUST, 1996.
D-	FLORIDA DEPARTMENT OF TRANSPORTATION "ROADWAY PLANS PREPARATION MANUAL", VOLUME 1, CHAPTER 2 & 2.1.

D-10 FLORIDA DEPARTMENT OF TRANSPORTATION "FLEXIBLE PAVEMENT DESIGN MANUAL FOR NEW CONSTRUCTION AND PAVEMENT REHABILITATION" (MARCH 1995).

ALL WORK WITHIN FDOT RIGHT-OF-WAY (ONLY) AT SR 584 IS TO COMPLY WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" DATED JANUARY 2000.

UTILITY WARNING NOTE

ABOVE - GROUND OR UNDER - GROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - CALL "SUNSHINE" AND THE UTILITY OWNER(S) BEFORE BEGINNING WORK. (800) 432-4770 (5 DAYS IN ADVANCE).

REVISIONS

DATE	SHEETS	REVISIONS
5-31-00	2,3,6,9,13,15-19,24,27,28,33-37,41,44,46	REVISED PGL & STORM SEWERS FOR FDOT
5-31-00	47-51,79-85,107,111,112,114-116,118,5-1,5-2	REVISED MISC. POND 2 DATA
6-20-00	2,15,22,28,29,33,39,45,46,79,89,106,M1,M2	REVISED STORM SEWER
7-07-00	107,108,111,112,115,116,5-1,5-2	ADDED WATERMAIN, NOTES AND CHANGED QTY'S

VICINITY MAP

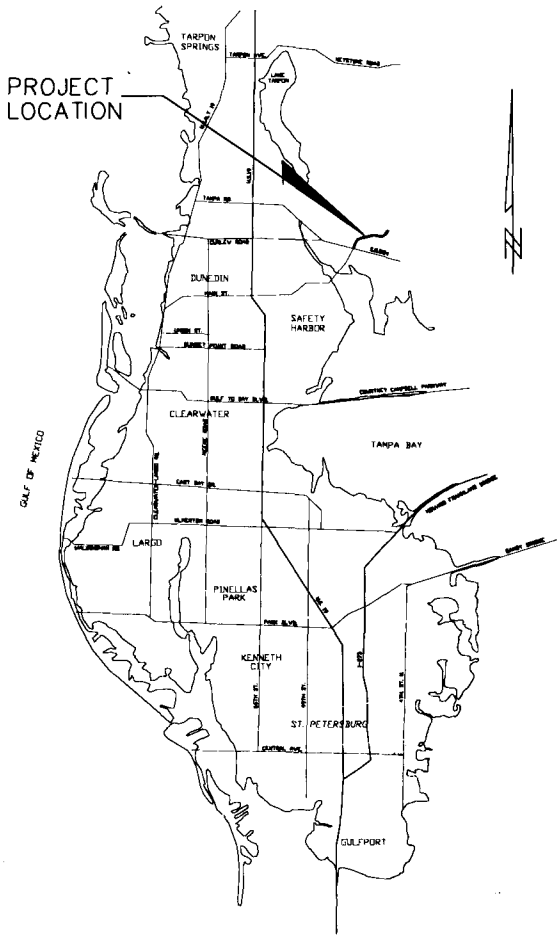
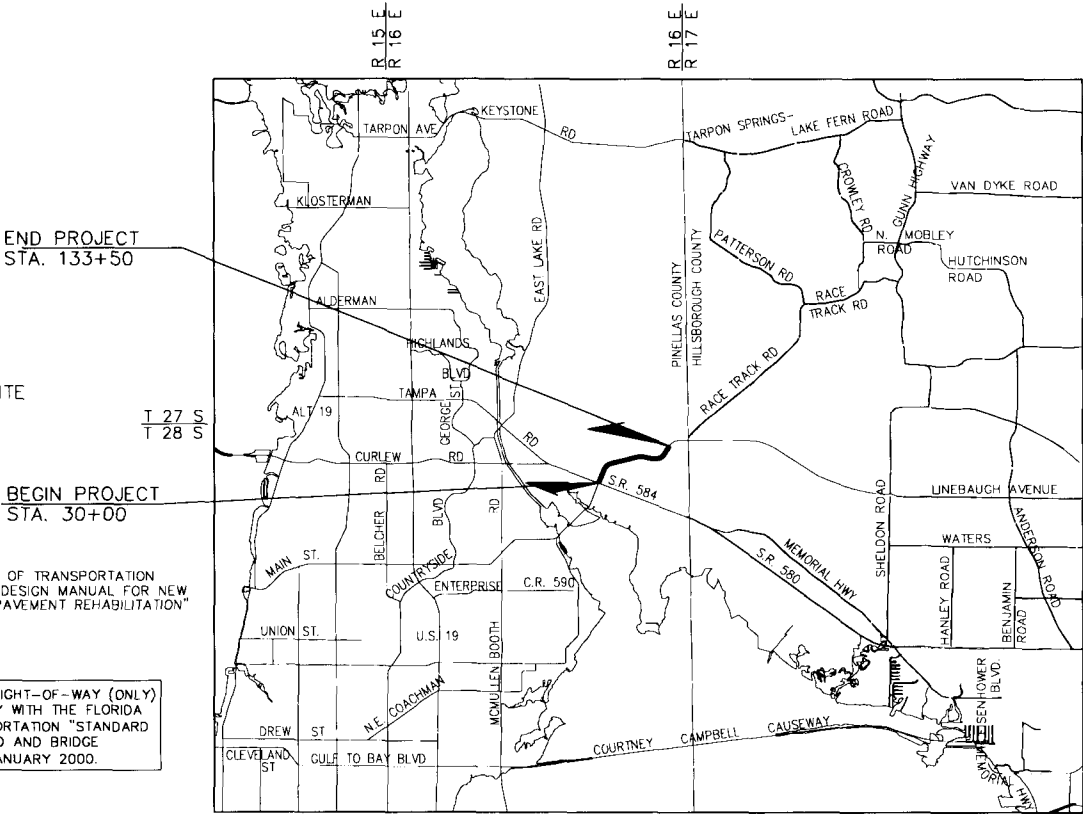
N.T.S.

LENGTH OF PROJECT		
	TOTAL	
	LINEAR FT.	MILES
ROADWAY	10,350.00	1.960
BRIDGES	-	-
NET LENGTH OF PROJECT	10,350.00	1.960
EXCEPTIONS	-	-
GROSS LENGTH OF PROJECT	10,350.00	1.960

PINELLAS COUNTY ENGINEERING DEPARTMENT
STATE OF FLORIDA
PLANS FOR THE PROPOSED
**EAST-WEST CONNECTOR ROAD
(PHASE I)**

TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

P.I.D. NO. 921563



VICINITY MAP

PLANS PREPARED BY:



FINAL PLANS
4/10/2000

PREPARED UNDER THE DIRECTION OF:

THOMAS W. Mc GREW, FLORIDA REG. NUMBER 25402

SUBMITTED BY:

DESIGN DIVISION ENGINEER

RECOMMENDED FOR APPROVAL BY:

DIRECTOR OF ENGINEERING

APPROVED BY:

DIRECTOR OF PUBLIC WORKS

PINELLAS COUNTY PROJECT MANAGER: JIM PLESO

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.



PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.
4921 MONROE AVENUE
ONE MONROE CENTER SUITE 300
TAMPA, FLORIDA 33634

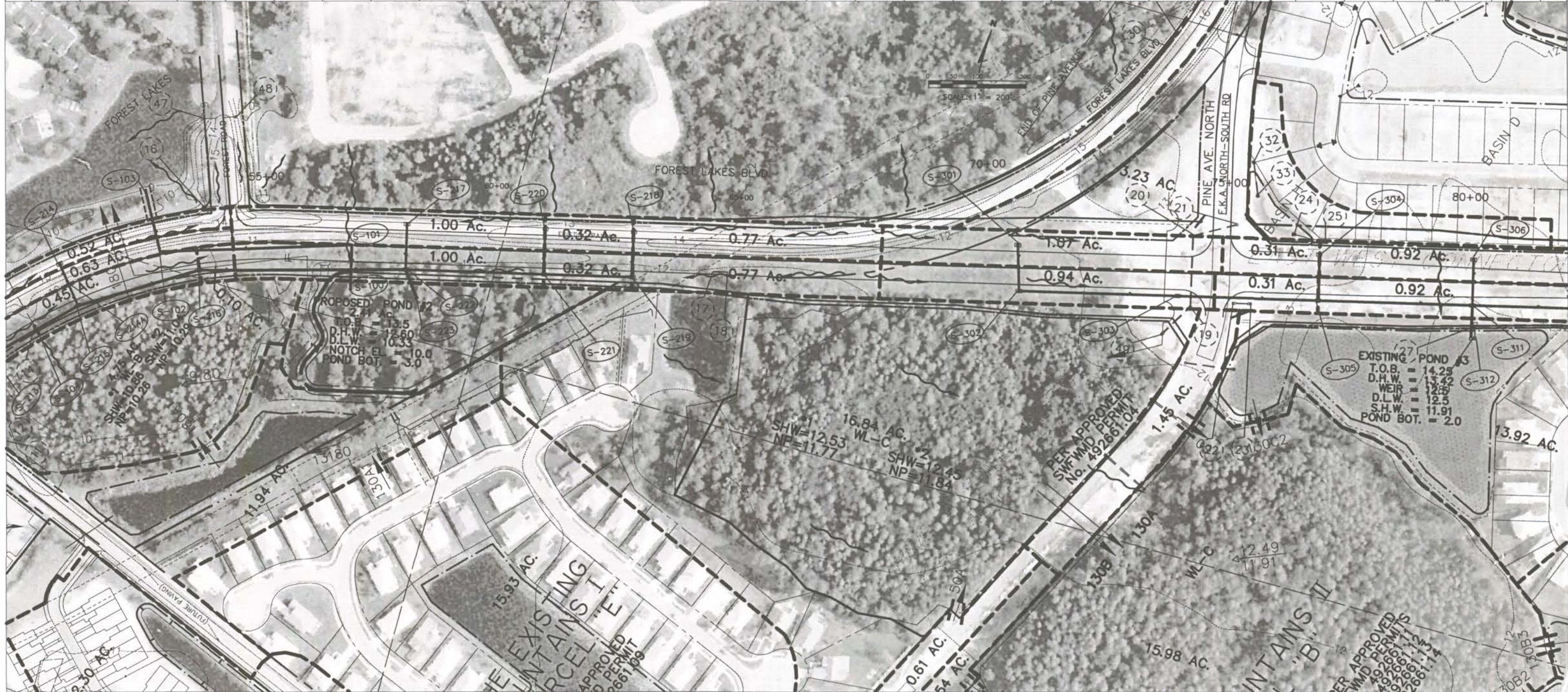
PHONE: 813-886-4882
FAX: 813-886-4883
E-MAIL: king@kingeng.com


IK **in g**
ENGINEERING ASSOCIATES, INC.
4921 WEDGEMAN HIGHWAY
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TEL: 813-880-4880
FAX: 813-880-4882
E-MAIL: info@ikengineering.com

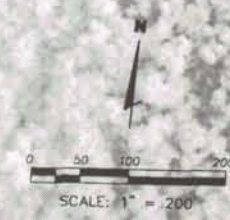
*EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES*

DRAINAGE MAP (1)

File: GRMPPRO1.DWG
View: t-11X17SH1



REVISIONS	BY	DATE	SURVEY BOOK No. _____ SURVEY DIVISION BY DATE SURVEYED TECHNICIAN CHECKED DESIGN DIVISION DESIGNED MLM 04/00 DRAWN TAW 04/00 CHECKED TWM 04/00			PINELLAS COUNTY, FLORIDA Department of Public Works 		EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES		DRAINAGE MAP (2)		DATE: APRIL 10, 2000 CONTRACT NO.: SURVEY FILE NO.: SHEET 3 OF 119 File: DRMP001.DWG View: 1-11X175Sh
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PINELLAS COUNTY, FLORIDA
Department of Public Works

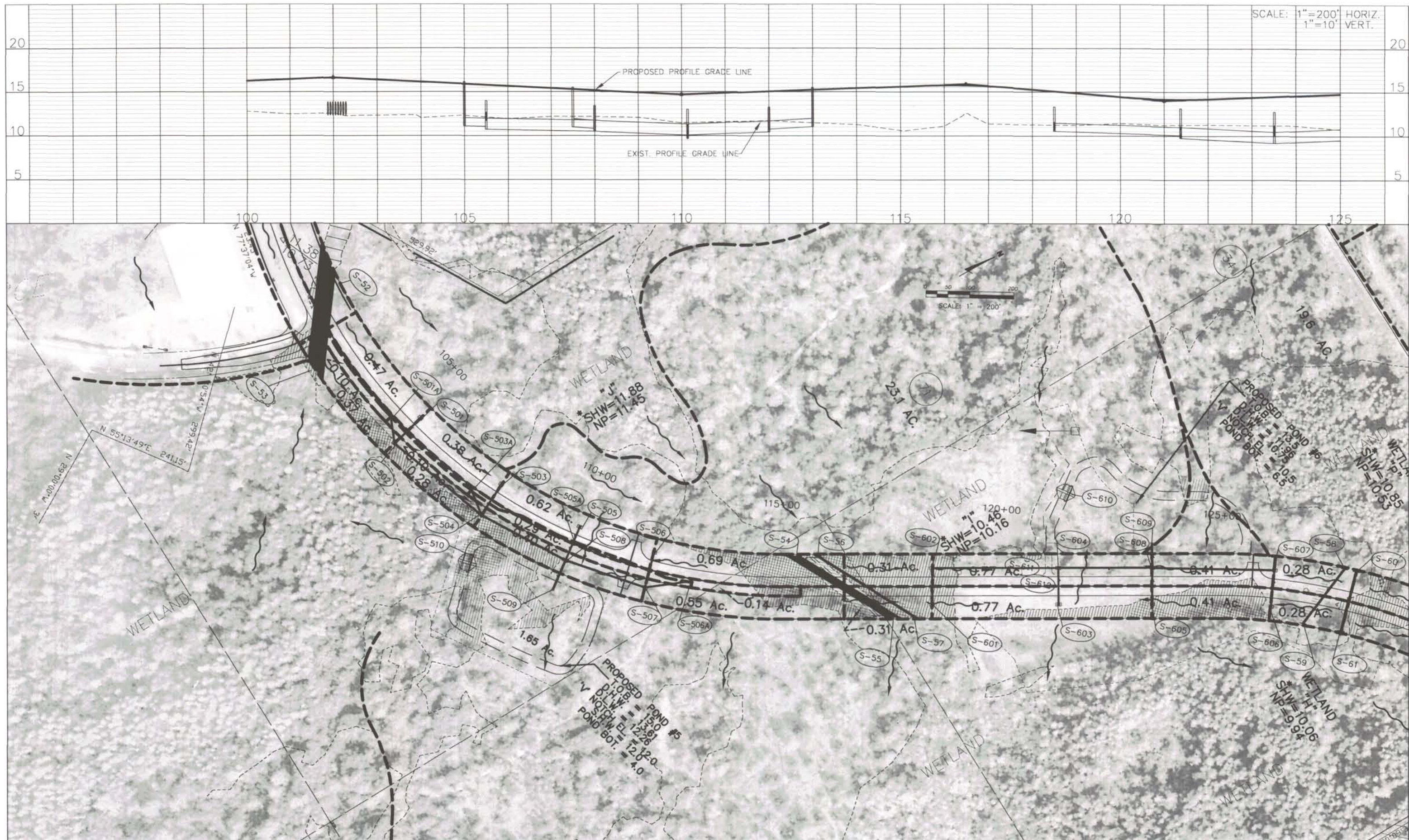
K i n g
ENGINEERING ASSOCIATES, INC.

4821 WOODLAND HIGHWAY
ONE MEMORIAL CENTER, SUITE 300
TAMPA, FLORIDA 33634

TEL: 813-880-4400
FAX: 813-880-4402
E-MAIL: KING@KINGASSOCIATES.COM

DRAINAGE MAP (3)

DATE: APRIL 10, 2000	
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET 4 OF 119	File: DRMPROD1.DWG View: 1:11X125X



REVISIONS		BY	DATE	SURVEY BOOK No.		BY	DATE
				SURVEY DIVISION			
				SURVEYED			
				TECHNICIAN			
				CHECKED			
				DESIGN DIVISION			
				DESIGNED		MLM	04/00
				DRAWN		TAW	04/00
				CHECKED		TWM	04/00
				PINELLAS COUNTY, FLORIDA Department of Public Works King ENGINEERING ASSOCIATES, INC. 4021 MEMORIAL HIGHWAY ONE WOODCREST CENTER, SUITE 200 TAMPA, FLORIDA 33634 PHONE: 813-885-4501 FAX: 813-885-4502 WEB: WWW.KING-ENGINEERING.COM			
				EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES			
				DRAINAGE MAP (4)			
				DATE: APRIL 10, 2000 CONTRACT NO.: SURVEY FILE NO.: SHEET 5 OF 119			
				File: DRMP001.DWG View: 1-11X175H4			

EXISTING DRAINAGE STRUCTURES

- 1

STM. M.E.S.
INV. EL.= 9.73
- 2

STM. M.E.S.
INV. EL.= 9.45
- 3

STM. M.E.S.
INV. EL.= 9.43
- 4

STM. M.E.S.
INV. EL.= 9.20
- 5

STM. M.E.S.
INV. EL.= 8.27
- 6

STM. M.E.S.
INV. EL.= 8.96
- 7

STM. M.E.S.
INV. EL.= 8.89
- 8

STM INLET
GR EL.= 10.33
INV. EL.= 8.86
- 9

STM. M.E.S.
INV. EL.= 9.25
- 10

STM. M.E.S.
INV. EL.= 9.40
- 11

STM. M.E.S.
INV. EL.= 8.74
- 12

STM. M.E.S.
INV. EL.= 9.41
- 13

STM. F.E.S.
INV. EL.= 5.06
- 14

STM INLET W/ SKIMMER
GR EL.= 10.22
INV. EL.= 8.88
- 15

1' W. RIPRAP WALL
INV. EL.= 8.42
- 16

STM. M.E.S.
INV. EL.= 9.46
- 17

INV. EL.= 10.71
INV. EL.= 10.82
- 18

INV. EL.= 10.82
INV. EL.= 10.69
- 19

CONTROL STRUCTURE
GRATE EL.= 14.26
SKIMMER= 13.23
INV. N. EL.= 10.38
INV. S. EL.= 10.30
- 20

GRATE INLET
GRATE EL.= 13.75
SKIMMER= 12.75
INV. E. EL.= 10.55
INV. S. EL.= 10.55
- 21

GRATE INLET
GRATE EL.= 13.71
SKIMMER= 12.70
INV. EL.= 10.73
- 22

STM. M.E.S.
INV. EL.= 13.68
- 23

STM. M.E.S.
INV. EL.= 13.61
- 24

STM. F.E.S.
INV. EL.= 8.67
- 25

STM INLET W/SLOT
GR EL.= 14.18
INV. EL. SLOT= 13.21 (E)
INV. EL.= 9.01
- 26

STM. M.E.S.
INV. EL.= 12.56
- 27

STM. M.E.S.
INV. EL.= 10.32
- 28

STM INLET W/SLOT
GRATE EL.= 13.73
INV. EL. SLOT E.&W.= 12.74
INV. EL.= 9.58
- 29

M.E.S. INLET
INV. EL.= 13.46
- 30

GRATE INLET
GRATE EL.= 13.50
INV. EL.= 8.53
- 31

STM. M.E.S.
INV. EL.= 8.31
- 32

STM. M.H.
RIM EL.= 14.95
INV. EL.= 8.06 (E)
INV. EL.= 8.18 (W)
- 33

24" MES
INV. EL.= 8.00
- 34

STM. M.E.S.
INV. EL.= 8.05
- 35

STM. M.E.S.
INV. EL.= 7.10
- 36

STM. M.E.S.
INV. EL.= 7.04
- 37

STM. M.E.S.
INV. EL.= 6.09
- 38

STM INLET
GRATE EL.= 9.27
BOT. EL.= 6.34
FULL OF WATER
- 39

STM INLET
GR EL.= 10.75
INV. EL.= 8.75 (SE)
3" PVC ORIFICE
INV. EL.= 8.85 (NW)
- 40

STM. INLET
GR EL.= 10.56
INV. EL.= 8.59 (NW)
INV. EL.= 8.59 (SE)
- 41

STM HDWALL
TOP OF WALL EL.= 10.17
INV. EL.= 7.89
- 42

STM F.E.S.
INV. EL.= 5.61
- 43

STM INLET
GR EL.= 11.42
INV. EL.= 8.55 (NE)
INV. EL.= 8.61 (NW)
- 44

STM M.E.S.
INV. EL.= 8.26
- 45

STM F.E.S.
INV. EL.= 6.50
- 46

STM INLET
GR EL.= 12.03
INV. EL.= 8.28
- 47

STM M.E.S.
INV. EL.= 10.25
- 48

CONTROL STRUCTURE
GRATE EL.= 13.73
SKIMMER= 12.72
INV. EL.= 10.72
- 49

STM M.E.S.
INV. EL.= 11.97
- 50

STM M.E.S.
INV. EL.= 11.71
- 51

STM M.E.S.
INV. EL.= 12.32
- 52

STM M.E.S.
INV. EL.= 12.48
- 53

CONTROL STRUCTURE
GRATE EL.= 13.71
SKIMMER= 12.70
INV. EL.= 10.73
- 54

STM CONTROL STRUCTURE
W/METAL SKIMMER
GR EL.= 12.33
INV. EL.= 8.44
- 55

STM M.E.S.
INV. EL.= 11.99
- 56

CONCRETE DEADWALL
INV. EL.= 10.67
INV. EL.= 10.57
- 57

CONCRETE HEADWALL
INV. EL.= 9.82
INV. EL.= 9.86
- 58

STM INLET
TYPE D
G.E. = 13.53
SLOT I.E. = 12.52(W)
I.E. = 9.40 (NE)
I.E. = 10.25 (SW)
- 59

30" FES
I.E. = 9.00
- 60

STM RIPRAP
HEADWALL 1'± W
INV. EL.= 9.90
- 61

STM RIPRAP
HEADWALL 1'± W
INV. EL.= 9.63
- 62

STM RIPRAP
HEADWALL 1'± W
INV. EL.= 9.27
- 63

STM RIPRAP
HEADWALL 1'± W
INV. EL.= 8.79
- 64

STM F.E.S.
INV. EL.= 9.78
- 65

STM F.E.S.
INV. EL.= 9.35
- 66


STM HDWALL 0.8' W
INV. EL.= 8.68
- 67

STM HDWALL 0.8' W
INV. WL.= 8.85
- 68

STM HDWALL 0.75' W
INV. EL.= 9.35
- 69

STM M.E.S.
INV. EL.= 11.30
- 70

STM M.E.S.
INV. EL.= 11.29

REVISIONS		BY	DATE	SURVEY BOOK No.			PINELLAS COUNTY, FLORIDA			EAST-WEST CONNECTOR ROAD			DATE: APRIL 10, 2000		
				SURVEY DIVISION			Department of Public Works			PHASE I			CONTRACT NO.:		
				SURVEYED						TAMPA ROAD (S.R. 584) TO THE EAST			SURVEY FILE NO.:		
				TECHNICIAN						PROPERTY LINE OF HARROD PROPERTIES			SHEET 7 OF 119		
				CHECKED									View:		
				DESIGN DIVISION											
				DESIGNED											
				DRAWN											
				CHECKED											

SUMMARY OF QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITIES
101-1	MOBILIZATION	LS	1
102-0101	MAINTENANCE OF TRAFFIC	LS	1
102-98-2	BARRICADE TYPE III (TO REMAIN)(RED & WHITE)	EA	3
104-0013	STAKED SILT FENCE	LF	35,270
104-11	TURBIDITY BARRIER, FLOATING	LF	397
104-1001	BALED HAY OR STRAW	TN	13.3
110-0100	CLEARING AND GRUBBING	LS	1
120-13	EXCAVATION, BROOKER CREEK RESTORATION SITE CONCEPT PLAN	CY	222,355
102-5000	WATER FOR DUST CONTROL	GAL.	10,000
*120-60	EMBANKMENT	CY	165,348
120-14	EXCAVATION, (DETENTION POND AND/OR MITIGATION AREA)	CY	57,013
120-0409	EXCAVATION, UNSUITABLE MATERIAL CONTINGENCY	CY	1000
120-1100	GRADING	LS	1
162-1	MUCK BLANKET (WETLAND MULCH OR ORGANIC TOPSOL)	SY	31,508
**125-3579	BEDDING MATERIAL, CRUSHED STONE SIZE #57	TONS	1725
*160-1481	STABILIZATION, TYPE B, LBR 40, 12" MIN. THICKNESS	SY	77,558
162-2	TOPSOIL	SY	111,262
*200-1421	ROADWAY BASE, LIMEROCK, PRIMED, 10 1/2" MIN. THICKNESS	SY	64,143
*200-1245	ROADWAY BASE, LIMEROCK, PRIMED, 6" THICKNESS (DRIVEWAY) (CONTINGENCY)	SY	100
*350-0224	PAVEMENT, CEMENT CONCRETE (DRIVEWAYS) 6" THICKNESS (CONTINGENCY)	SY	100
*391-1065	ASPHALT CONCRETE, TYPE PC-1, 1 1/2" SURFACE COURSE (DRIVEWAYS) (CONTINGENCY)	SY	100
391-1121	ASPHALTIC CONCRETE, TYPE PC-1, 3" MIN. THICKNESS, SURFACE COURSE	SY	63,250
400-1-2	CLASS I CONCRETE (ENDWALLS)	CY	82.44
400-1004	CLASS I CONCRETE (SHARP-CRESTED WEIR INCL. REINFORCING STEEL)	CY	19.69
400-1004	CLASS I CONCRETE (GRAVITY WALLS INCL. REINFORCING STEEL)	CY	165.52
425-1211	INLET, CURB, FDOT Type P1, Under 10'	EA	5
425-1215	INLET, CURB, FDOT Type P2, Under 10'	EA	2
425-1271	INLET, CURB, FDOT Type P7, Under 10'	EA	3
425-1441	INLET, DITCH BOTTOM, FDOT TYPE D, J BOTTOM, UNDER 10'	EA	1
425-1451	INLET, DITCH BOTTOM, FDOT TYPE E, UNDER 10'	EA	50
425-1455	INLET, DITCH BOTTOM, FDOT TYPE E, J BOTTOM, UNDER 10'	EA	10
425-628-6001	MANHOLE, FDOT TYPE J7 (6'-0" DIA.) UNDER 10' (CONFLICT) (CONTINGENCY)	EA	5
426-9310	RELOCATE EXISTING CONTROL STRUCTURE	EA	1
425-2109	OUTFALL STRUCTURE, (S-100), UNDER 10'	EA	1
425-2230	MANHOLE, FDOT TYPE P-8, UNDER 10'	EA	2
425-2-91	MANHOLE, FDOT TYPE J-8, UNDER 10'	EA	2
430-12-523	PIPE CULVERT, CONCRETE, ROUND, 15" ID, CLASS V	LF	93
430-1015	PIPE CULVERT, CONCRETE, ROUND, 15" ID	LF	1,084
430-1018	PIPE CULVERT, CONCRETE, ROUND, 18" ID	LF	3,116
430-1024	PIPE CULVERT, CONCRETE, ROUND, 24" ID	LF	3,346
430-1030	PIPE CULVERT, CONCRETE, ROUND, 30" ID	LF	4,220
430-1036	PIPE CULVERT, CONCRETE, ROUND, 36" ID	LF	489
430-1042	PIPE CULVERT, CONCRETE, ROUND, 42" ID	LF	571
430-1048	PIPE CULVERT, CONCRETE, ROUND, 48" ID	LF	909
430-2012	PIPE CULVERT, CONCRETE, ELLIPTICAL, 12"x18" ID	LF	62
430-2014	PIPE CULVERT, CONCRETE, ELLIPTICAL, 14"x23" ID	LF	137
430-2019	PIPE CULVERT, CONCRETE, ELLIPTICAL, 19"x30" ID	LF	17
430-2024	PIPE CULVERT, CONCRETE, ELLIPTICAL, 24"x38" ID	LF	89
430-2034	PIPE CULVERT, CONCRETE, ELLIPTICAL, 34"x53" ID	LF	206
430-2038	PIPE CULVERT, CONCRETE, ELLIPTICAL, 38"x60" ID	LF	429

ITEM	DESCRIPTION	UNIT	QUANTITIES
430-6118	END SECTION, FLARED, 18" RCP	EA	1
430-6124	END SECTION, FLARED, 24" RCP	EA	1
430-6130	END SECTION, FLARED, 30" RCP	EA	2
430-6136	END SECTION, FLARED, 36" RCP	EA	2
430-6142	END SECTION, FLARED, 42" RCP	EA	1
430-6612	END SECTION, MITERED, 12"x18" ERCP	EA	4
430-6515	END SECTION, MITERED, 15" RCP	EA	4
430-5215	ENDWALL, U-TYPE, SAND CEMENT, 15" RCP	CY	4.8
430-941-21	EXISTING PIPE DESILTING, (12" RCP)	LF	170
515-1123-1	HANDRAIL, GALVANIZED STEEL PIPE, 2 1/2" OD, 4.5' HEIGHT	LF	671.5
520-1231	CURB, CONCRETE, FDOT TYPE D	LF	44
520-2221	CURB & GUTTER, CONCRETE, FDOT TYPE F	LF	12,393
530-2300	CELLULAR CONFINEMENT SYSTEM	SY	167
520-8211	TRAFFIC SEPARATOR, CONCRETE, FDOT TYPE 1	LF	7,175
522-4001	SIDEWALK, CONCRETE, 4" MIN. THICKNESS	SY	10,933
522-6003	SIDEWALK, CONCRETE, 6" MIN. THICKNESS	SY	720
522-6009	SIDEWALK, CONCRETE, REINFORCED 6" MIN. THICKNESS (CONTINGENCY)	SY	100
*575-0101	SODDING, BAHIA	SY	111,262
*575-0209	SODDING, ST. AUGUSTINE (CONTINGENCY)	SY	100
900-0200	OFFICE FOR THE ENGINEER	LS	1
900-0301	CLAY-FILLED TRENCH WALL	CY	615

SUMMARY OF EARTHWORK	
ROADWAY EXCAVATION	3,350 C.Y.
ROADWAY EMBANKMENT	139,776 C.Y.
POND EXCAVATION	29,060 C.Y.
POND EMBANKMENT	10,140 C.Y.
MITIGATION EXCAVATION	27,953 C.Y.
MITIGATION EMBANKMENT	400 C.Y.


NOTE: EARTHWORK QUANTITIES ARE FOR CONTRACTORS INFORMATION ONLY. (ACCURACY NOT GUARANTEED) QUANTITIES CALCULATED WITH NO ALLOWANCE FOR SHRINKAGE, GRUBBING OR ANY OTHER CONSIDERATION.

*THESE ITEMS INCLUDE AN ADDITIONAL 10% CONTINGENCY QUANTITY AND ARE ONLY TO BE UTILIZED AS DIRECTED BY THE ENGINEER.
** THIS ITEM INCLUDES AN ADDITIONAL 15% CONTINGENCY QUANTITY AND ARE ONLY TO BE UTILIZED AS DIRECTED BY THE ENGINEER.

PAY ITEM NOTES:
120-13: THIS ITEM OF WORK IS FOR THE EARTHWORK SHOWN ON THE BROOKER CREEK RESTORATION SITE CONCEPT PLAN ONLY, WHICH IS OUTSIDE OF THE PROPOSED MITIGATION AREA. THIS WORK IS TO BE PERFORMED ONLY IF PINELLAS COUNTY OPTS TO INCLUDE IN CONTRACT.

REVISIONS	BY	DATE	SURVEY BOOK No.: SURVEY DIVISION	BY	DATE
REVISED PAY ITEM QUANTITY	MLM/JLW	12-19-00	DESIGN DIVISION	MLM	04/00
ADDED PAY ITEM	MLM/JKI	6-30-00	DESIGNED	TAW	04/00
REVISED PAY ITEM QUANTITIES	MLM/JKI	6-30-00	DRAWN	TAW	04/00
REVISED ROADWAY EXCAVATION AND EMBANKMENT QUANT	MLM/JLW	4-26-00	CHECKED	TWM	04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

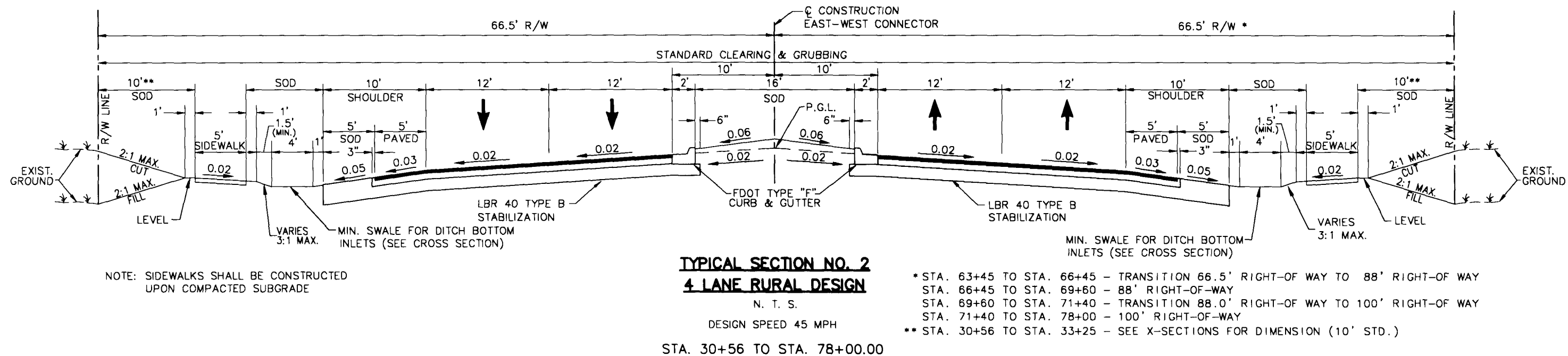
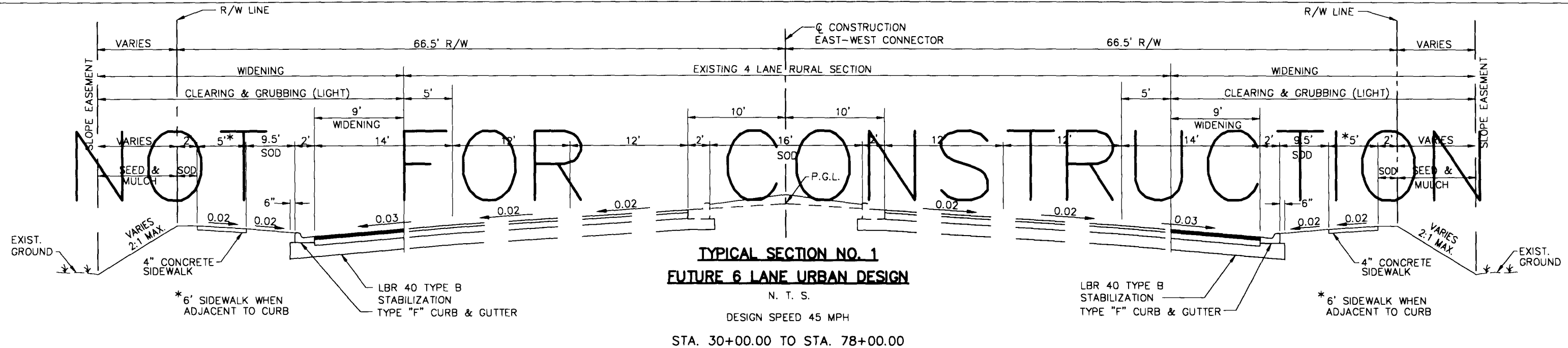
**King**
ENGINEERING ASSOCIATES, INC.
4921 MEMORIAL HIGHWAY
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TAMPA, FLORIDA 33634
PHONE 813-880-1881
FAX 813-880-1882
E-MAIL king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

SUMMARY OF QUANTITIES

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 8 OF 119
View: 2-11x17

W:\TRANS\LEW\PHASE1\CADD\Typsrd01.dwg Thu Jun 29 14:18:25 2000 King Engineering Associates, Inc. (jki-pasco)



REVISIONS	BY	DATE	SURVEY BOOK No.:
			SURVEY DIVISION
			BY
			DATE
			SURVEYED
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			MLM
			04/00
			DRAWN
			TAW
			04/00
			CHECKED
			TWM
			04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

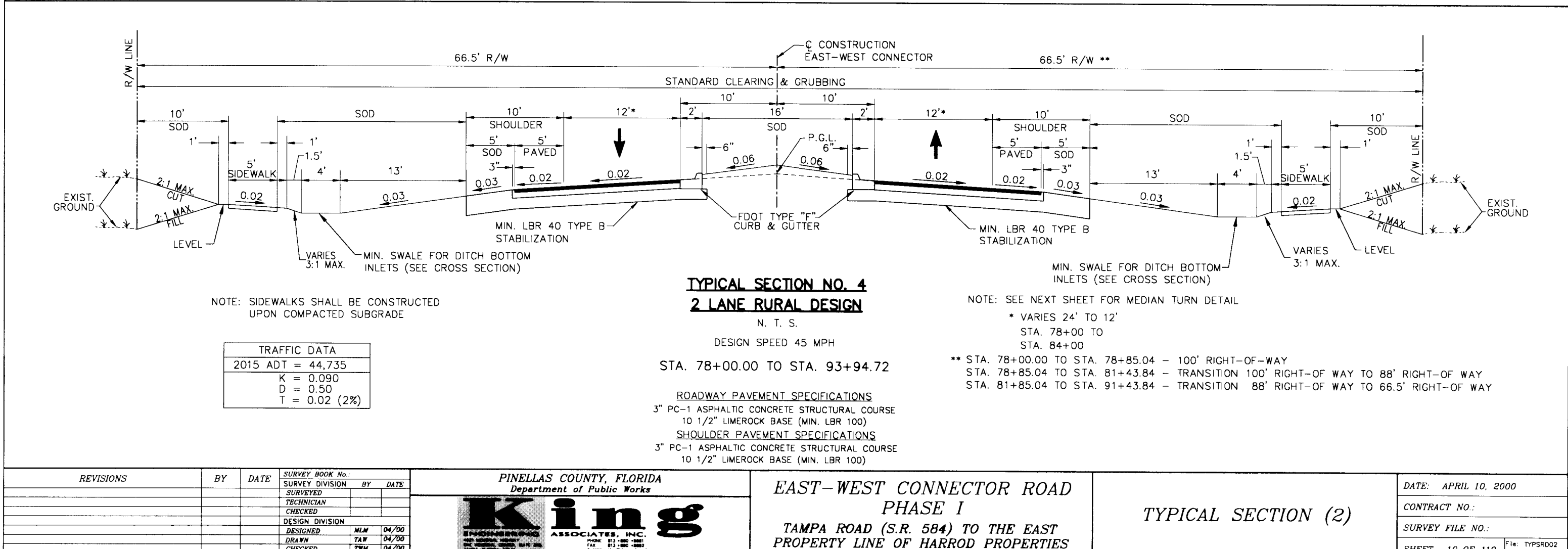
King
ASSOCIATES, INC.

PHONE 813-560-0801
FAX 813-560-0802
E-MAIL king@kingengineering.com

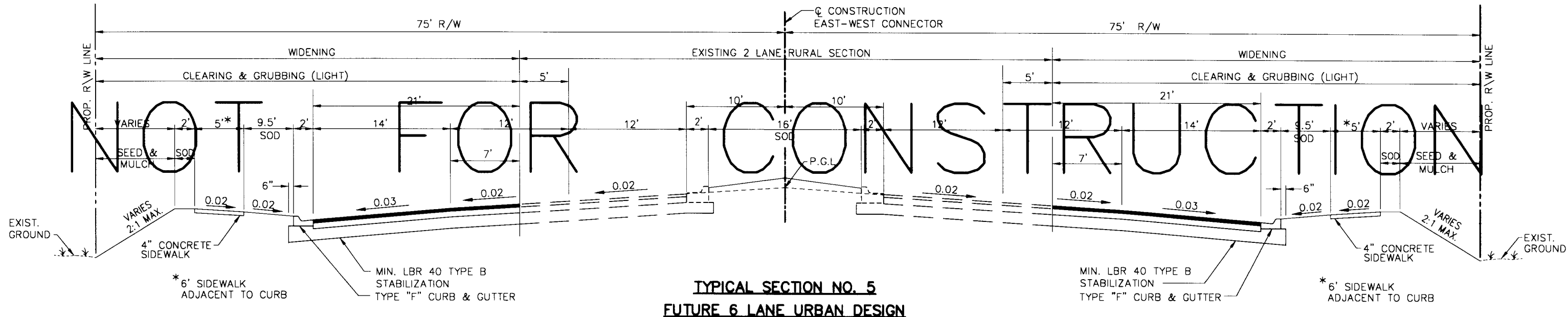
EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

TYPICAL SECTION (1)

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 9 OF 119
File: TYPsrd01 View: 100-11X17

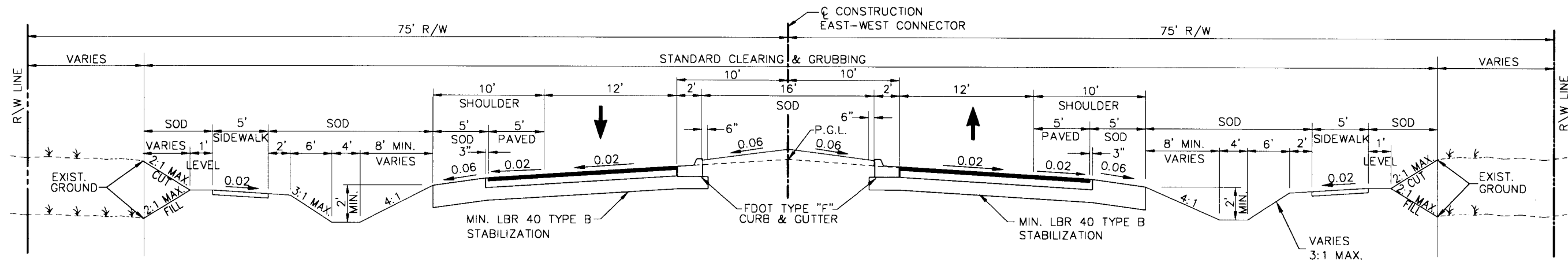


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TYPICAL SECTION NO. 5
FUTURE 6 LANE URBAN DESIGN

N. T. S.
DESIGN SPEED 45 MPH
STA. 93+94.72 TO STA. 133+50.00



TYPICAL SECTION NO. 6
2 LANE RURAL DESIGN

N. T. S.
DESIGN SPEED 45 MPH
STA. 93+94.72 TO STA. 133+50.00

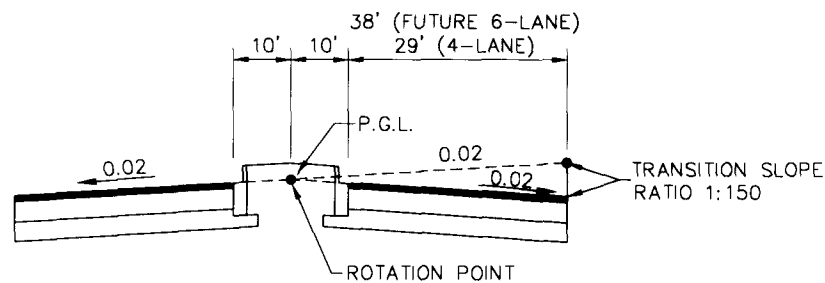
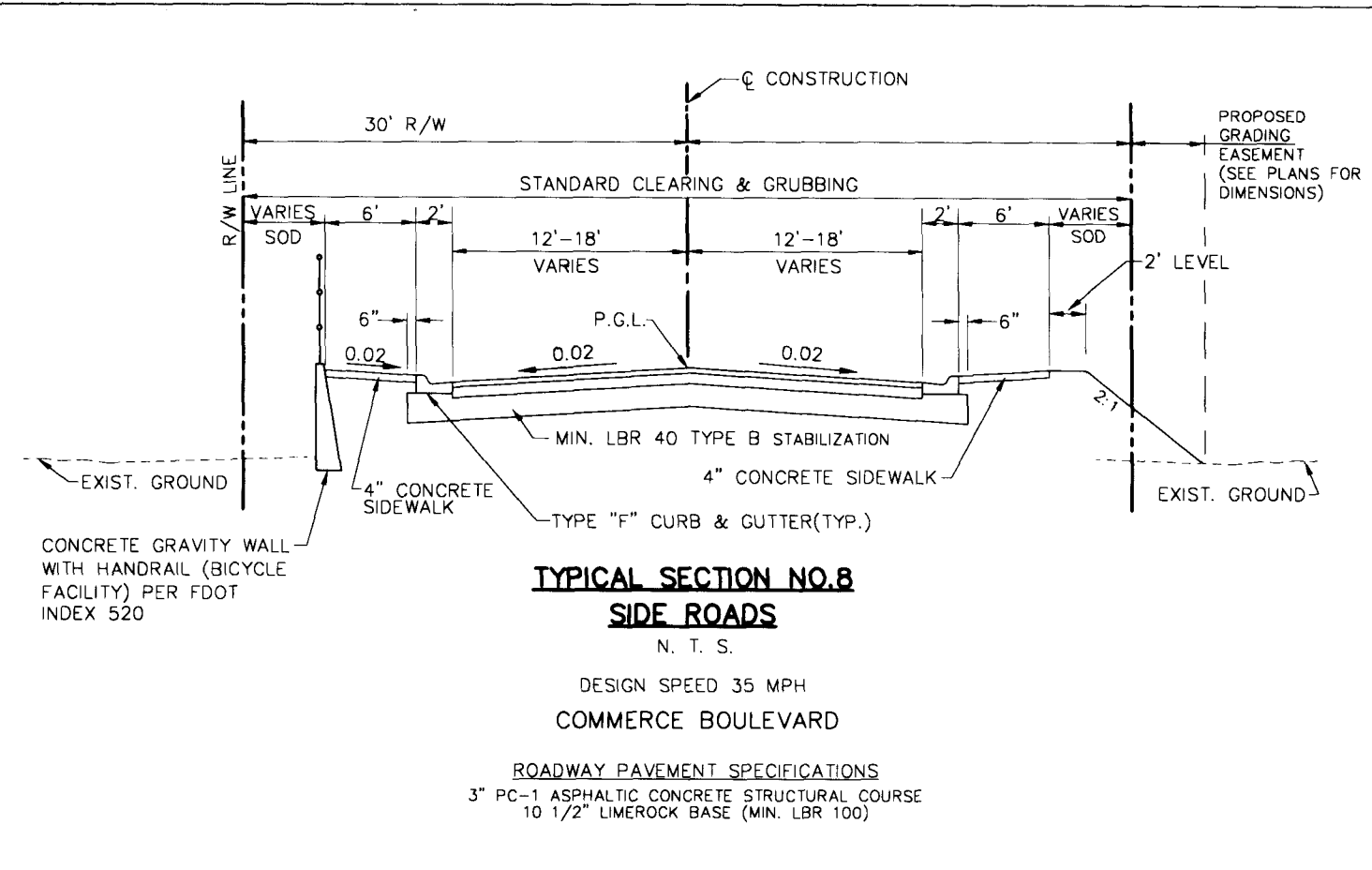
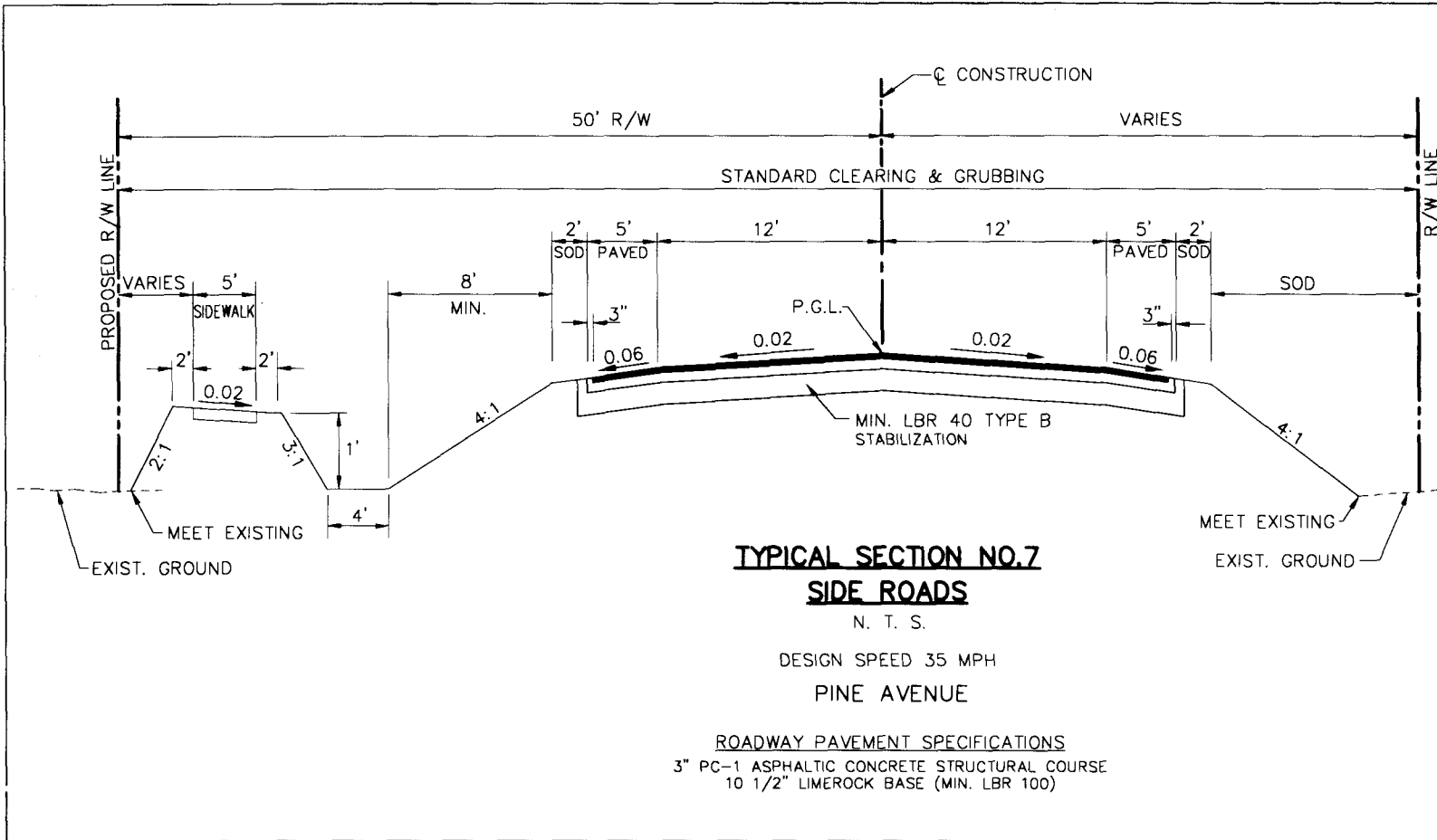
NOTE: SEE NEXT SHEET FOR MEDIAN TURN DETAIL

ROADWAY PAVEMENT SPECIFICATIONS
3" PC-1 ASPHALTIC CONCRETE STRUCTURAL COURSE
10 1/2" LIMEROCK BASE (MIN. LBR 100)
SHOULDER PAVEMENT SPECIFICATIONS
3" PC-1 ASPHALTIC CONCRETE STRUCTURAL COURSE
10 1/2" LIMEROCK BASE (MIN. LBR 100)

TRAFFIC DATA	
2015 ADT =	51,541
K =	0.090
D =	0.50
T =	0.02 (2%)

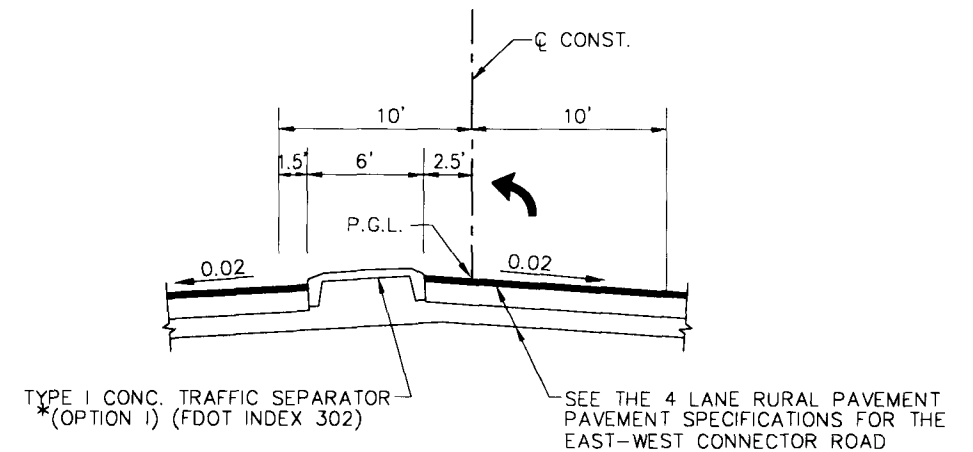
REVISIONS			BY	DATE	SURVEY BOOK No.		SURVEY DIVISION		BY	DATE	PINELLAS COUNTY, FLORIDA		EAST-WEST CONNECTOR ROAD		DATE: APRIL 10, 2000	
					SURVEYED						Department of Public Works		PHASE I		CONTRACT NO.:	
					TECHNICIAN						King		TAMPA ROAD (S.R. 584) TO THE EAST		SURVEY FILE NO.:	
					CHECKED						ASSOCIATES, INC.		PROPERTY LINE OF HARROD PROPERTIES		SHEET 11 OF 119	
					DESIGN DIVISION						PHONE 813-880-1881				File: TYPsRD03	
					DESIGNED		MLM		04/00		FAX 813-880-1882				View: 100-11X17	
					DRAWN		TAW		04/00		E-MAIL king@kingengineering.com					
					CHECKED		TWM		04/00							

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NOTE: SUPERELEVATION SHALL CONFORM TO FDOT INDEX 511

SUPERELEVATION DETAIL
N. T. S.



**EAST-WEST CONNECTOR
MEDIAN TURN LANE DETAIL**
N. T. S.

REVISIONS	BY	DATE	SURVEY BOOK No.:
			SURVEY DIVISION
			BY
			DATE
			SURVEYED
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			DRAWN
			CHECKED

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.

PHONE: 813-880-1881
FAX: 813-880-1882
E-MAIL: keng@kingengineering.com

**EAST-WEST CONNECTOR ROAD
PHASE I**
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

**TYPICAL SECTION (4)
PINE AVE. & COMMENCE BLVD**

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 12 OF 119
File: TYPsrd04 View: 100-11X17

GENERAL NOTES

1. BENCHMARK DATA IS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).
2. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHOULD NOTIFY THE COUNTY SURVEYOR WITHOUT DELAY.
3. ALL STATIONS AND OFFSETS REFER TO CENTERLINE OR BASELINE OF CONSTRUCTION UNLESS OTHERWISE NOTED. ALL ROADWAY DIMENSIONS ARE MEASURED FROM EDGE OF PAVEMENT.
4. MATERIALS INTERFERING WITH CONSTRUCTION, AND ALL ABANDONED UTILITY LINES, PIPES, STRUCTURES AND OTHER SUBTERRANEAN OBJECTS TO BE REMOVED, SHALL BE DISPOSED OF AS DIRECTED BY PINELLAS COUNTY. ALL MATERIALS NOT CLAIMED BY THE COUNTY SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE IN AREAS PROVIDED BY THE CONTRACTOR.
5. CONSTRUCTION ACTIVITIES SHOULD BE LIMITED TO THE PROJECT'S RIGHT-OF-WAY/ EASEMENTS. SODDING REQUIRED AS A RESULT OF CONTRACTOR'S ACTIVITIES OUTSIDE THE RIGHT-OF-WAY/EASEMENTS IS THE CONTRACTOR'S RESPONSIBILITY AND COST.
6. EXISTING ROADWAY MATERIALS SUCH AS SHELL, MARL, OR LIMEROCK SUITABLE FOR SUCH USE SHALL BE UTILIZED IN THE PREPARATION OF STABILIZED SUBGRADE.
7. ALL STORM SEWER INLET, MANHOLE AND JUNCTION BOX COVER LIDS SHALL BE FABRICATED AND STAMPED AS INDICATED IN THE PLANS AND DETAILS.
8. PAVEMENT CONSTRUCTED IN STREET INTERSECTION AREAS SHALL BE OF THE SAME MATERIAL AND THICKNESS AS THAT SPECIFIED FOR CORRESPONDING COURSES IN THE ADJACENT ROADWAY TYPICAL SECTION UNLESS OTHERWISE SPECIFIED IN THE PLANS.
9. THE CONTRACTOR SHALL PROVIDE ALL SHEETING, SHORING AND BRACING REQUIRED TO MEET THE REQUIREMENTS OF THE "TRENCH SAFETY ACT" AND TO PROTECT ADJACENT STRUCTURES OR TO MINIMIZE TRENCH WIDTH. WHERE A SEPARATE PAY ITEM IS NOT PROVIDED, THE COST FOR ALL SHEETING, SHORING AND BRACING REQUIRED SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE ITEM OF WORK FOR WHICH SHEETING, SHORING AND BRACING IS ANTICIPATED TO BE REQUIRED.
10. THE CONSTRUCTION LENGTHS INDICATED IN THESE PLANS ARE APPROXIMATE. ACTUAL LIMITS MAY BE SET IN THE FIELD AS DIRECTED BY THE ENGINEER.
11. ALL PROPOSED SURFACING OVERLAYED ON EXISTING PAVEMENT SHALL BE FEATHERED SMOOTHLY INTO THE EXISTING PAVEMENT.
12. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO PINELLAS COUNTY ORDINANCE NO. 74-11, SECTION 4, ITEM "B", CONSTRUCTION NOISE.
13. THE CONTRACTOR SHALL REMOVE AND RELOCATE MAILBOXES AS REQUIRED, THIS SHALL BE DONE AS NOT TO INTERRUPT MAIL DELIVERY. ANY DAMAGED MAILBOXES OR POSTS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
14. ALL WORK PERFORMED SHALL COMPLY WITH ALL APPLICABLE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENT AGENCIES HAVING JURISDICTION OVER THE WORK PERFORMED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PENALTIES/FINES LEVIED DUE TO WORK THAT IS NOT IN ACCORDANCE WITH PERMIT CONDITIONS.
15. ALL SIDEWALK RAMPS SHALL BE CONSTRUCTED TO MEET F.D.O.T. INDEX 304.
16. ALL GRASSED AREAS WITHIN THE PROJECT LIMITS SHALL BE MOWED AS DIRECTED BY THE ENGINEER.
17. RIGHT-OF-WAY WILL BE STAKED FROM THE RIGHT-OF-WAY PLANS BY PINELLAS COUNTY.
18. ALL DRIVEWAY AND RELATED SLOPE CONSTRUCTION OUTSIDE OF THE RIGHT-OF-WAY LIMITS SHALL BE SUBJECT TO THE PROPERTY OWNER'S APPROVAL.
19. ALL AREAS OF EXPOSED EARTH RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE SODDED AS DIRECTED BY THE ENGINEER. SEEDING AND MULCHING SHALL BE APPLIED ONLY WHERE SPECIFICALLY CALLED FOR IN THE PLANS AND SPECIFICATIONS, OR WHERE SPECIFICALLY DIRECTED BY THE ENGINEER.
20. ALL GRATES FOR DITCH BOTTOM INLETS ARE TO BE GALVANIZED STEEL PER FDOT INDEX NO. 232, AND SHALL BE CAPABLE OF WITHSTANDING H-20 LOADING.

21. NO SURFACING SHALL BE APPLIED TO ANY MANHOLE COVERS, FRAMES, VALVE BOXES, CHAS DROPS, ETC. ALL EXISTING AND PROPOSED UTILITY AND STORM SEWER STRUCTURES WHOSE TOPS WILL BE EXPOSED WITHIN ANY PAVED AREA SHALL BE ADJUSTED SO THAT THE TOP SURFACE OF COVERS OR FRAMES SHALL BE FLUSH WITH THE PAVEMENT SURFACE.
22. EXISTING DRAINAGE STRUCTURES AND PIPES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE REMOVED UNLESS OTHERWISE NOTED TO REMAIN. SOME EXISTING PIPES ARE TO BE PROPERLY CONNECTED TO PROPOSED DRAINAGE STRUCTURES (SEE PLANS FOR LOCATIONS).
23. BORROW MATERIAL REQUIRED FOR CONSTRUCTION OF THE PROJECT SHALL BE PROVIDED BY THE CONTRACTOR FROM BORROW AREAS PROVIDED BY THE CONTRACTOR.
24. ALL AREAS TO BE SODDED SHALL RECEIVE 6" TOPSOIL TREATMENT IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
25. BEFORE CONSTRUCTION IS TO BEGIN, THE APPLICANT SHALL DELIVER TO THE DEPARTMENT PROOF OF INSURANCE VERIFYING THAT THE APPLICANT OR THE APPLICANT'S CONTRACTOR HAS COVERAGE UNDER THE LIABILITY INSURANCE POLICY IN ACCORDANCE WITH THE REQUIREMENTS OF FLORIDA ADMINISTRATION CODE, RULE CHAPTER 14-96.007 (5)(C)6.
26. THE APPLICANT MUST NOTIFY THE DEPARTMENT OF TRANSPORTATION-LOCAL MAINTENANCE OFFICE FORTY-EIGHT (48) HOURS IN ADVANCE OF STARTING PROPOSED WORK. CALL: PINELLAS MAINTENANCE, B.A. BENNETT, P.E. AT (727) 570-5101.

EROSION AND SEDIMENTATION CONTROL NOTES

1. ALL PRACTICABLE AND NECESSARY EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIAL TO INLETS, SURFACE DRAINS, WETLANDS AND DETENTION AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.
2. PROVIDE ALL DISTURBED AREAS WITHIN THE LIMITS OF THE WORK WITH TEMPORARY SOIL EROSION CONTROL AND SEDIMENT CONTROL, UTILIZING EARTH DAMS & PONDS, GRADE TO DRAIN SWALES, SETTLING BASINS, SILT FENCES, STONE FILTERS, HAY BALE FILTERS, ETC., TREATING ALL SOIL SURFACES WITH SEEDED TOPSOIL AND / OR MULCH AFTER GRADING.
3. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS SHALL BE COMPLIED WITH AT ALL TIMES.
5. MINIMIZE THE AMOUNT OF BARE SOIL EXPOSED AT ONE TIME AND INSTALL SOIL EROSION CONTROL FENCES AS SHOWN AND IN SUCH A MANNER AS TO CAPTURE AND FILTER SURFACE WATER DURING CONSTRUCTION.
6. PERMANENT VEGETATION SHALL BE BY SODDING ALL EXPOSED AREAS WITHIN THREE DAYS AFTER FINAL GRADING.
- AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL WHICH WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY AS TO PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER.
7. ALL NEW EROSION AND SILT CONTROL METHODS AND LOCATIONS INDICATED ON THIS DRAWING ARE FOR START-UP AND GENERAL REFERENCE AND SHALL BE ADJUSTED, AS REQUIRED, TO SUIT THE PROCESS OF THE CONSTRUCTION.
8. ALL DISTURBED AREAS WITHIN THE LIMITS OF CONSTRUCTION SHALL RECEIVE VEGETATIVE TREATMENT AFTER FINAL GRADING IN ACCORDANCE WITH THESE PLANS. DISTURBED AREAS NOT SPECIFICALLY DESIGNATED WITH A VEGETATIVE COVER SHALL BE VEGETATED AS FOLLOWS:
- SIDE SLOPES CONSTRUCTED AT 4:1 (H TO V) SHALL BE SODDED WITH ARGENTINE BAHIA.
9. HAY BALES SHALL BE PLACED ON THE UPLAND SIDE AND ADJACENT TO ALL SILT FENCE WHICH IS ADJACENT TO WETLAND AREAS TO PROVIDE ADDED SILTATION PROTECTION OF THE COMMENCEMENT OF CONSTRUCTION. THE HAY BALES SHALL BE REMOVED AT SUCH TIME AS THEIR PRESENCE IMPEDES CONSTRUCTION.
10. THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.

11. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS OR HAY BALES TO PREVENT EROSION. FLOATING TURBIDITY CURTAINS SHOULD BE USED IN OPEN WATER SITUATIONS. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORMWATER RUNOFF FROM BEING DISCHARGED TO WETLANDS OR OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES, AND OTHER EROSION/TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.

12. WHERE PUMPS ARE TO BE USED TO REMOVE TURBID WATERS FROM THE CONSTRUCTION AREA, THE WATER SHALL BE TREATED TO REDUCE TURBIDITY TO STATE WATER QUALITY STANDARDS PRIOR TO DISCHARGE TO THE WETLANDS. TREATMENT METHODS INCLUDE, FOR EXAMPLE, TURBID WATER BEING PUMPED INTO GRASSED SWALES OR APPROPRIATE VEGETATED AREAS (OTHER THAN UPLAND PRESERVATION AREAS AND WETLAND BUFFERS), SEDIMENT BASINS, OR CONFINED BY AN APPROPRIATE ENCLOSURE SUCH AS TURBIDITY BARRIERS, AND KEPT CONFINED UNTIL ITS TURBIDITY LEVEL MEETS STATE WATER QUALITY STANDARDS.

13. THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOIL STABILIZED. SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND PLACED IN UPLAND AREAS.

14. WATER REMAINING IN THE EXCAVATIONS AFTER CONSTRUCTION MUST BE KEPT CONFINED WITHIN THE EXCAVATIONS PRIOR TO DISCHARGE (IF APPLICABLE), UNTIL THE TURBIDITY LEVEL OF THE POND WATER MEETS STATE WATER QUALITY STANDARDS.

15. NO CLAY MATERIAL SHALL BE LEFT EXPOSED IN THE EXCAVATIONS. IF CLAY OR SANDY CLAYS ARE LEFT EXPOSED AT THE PERMITTED DEPTH, THE CONTRACTOR SHALL OVER EXCAVATE THE SWALES AND/OR POND'S BOTTOM AND SIDE SLOPES BY A MINIMUM OF 12 INCHES AND BACKFILL WITH CLEAN SANDS.

16. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PLACE SILT FABRIC FENCE AT THE UPSTREAM END OF ALL STORM SEWER PIPES UNTIL INLETS ARE COMPLETED.

17. WHEN THE CONSTRUCTION OF INLETS IS COMPLETED, THE CONTRACTOR SHALL PLACE STRAW BALES STAKED IN PLACE AS PER DETAIL.

18. THE CONTRACTOR SHALL SOD SWALES AND PONDS PER SECTIONS, IMMEDIATELY AFTER CONSTRUCTION IS COMPLETED.

19. THE CONTRACTOR SHALL PROVIDE SILTATION REDUCTION DEVICES FOR THE DISCHARGE FROM THE DEWATERING PROCESS SO THAT DIRECT DISCHARGE DOES NOT OCCUR.

20. THE CONTRACTOR SHALL CHECK ALL EROSION AND SILTATION CONTROL DEVICES AFTER EACH RAINFALL AND REPAIR OR REPLACE THEM AS REQUIRED AT CONTRACTOR'S EXPENSE.

21. REQUIRED TREE BARRICADES AND EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. ENCROACHMENT INTO OR FAILURE TO MAINTAIN THESE BARRICADES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS AND/OR PERMIT REVOCATION.

22. THE REQUIREMENTS LISTED ABOVE SHALL BE CONSIDERED MINIMUM REQUIREMENTS AND THE CONTRACTOR SHALL USE WHATEVER METHODS HE DEEMS NECESSARY TO PREVENT EROSION AND SILTATION AS MAY BE REQUIRED FOR THE PROJECT.

UTILITY NOTES

1. EXCEPT WHERE THE PLANS AND SPECIFICATIONS PROVIDE THAT SUCH WORK SHALL BE PERFORMED UNDER THE CONTRACT FOR THIS PROJECT, ALL UTILITIES INTERFERING WITH CONSTRUCTION SHALL BE REMOVED, RELOCATED OR ADJUSTED BY THEIR OWNERS, AT THEIR EXPENSE. THE CONTRACTOR SHALL ARRANGE HIS SCHEDULE TO ALLOW UTILITY OWNERS TIME FOR THE NECESSARY RELOCATION AND ADJUSTMENT OF UTILITIES AND RELATED STRUCTURES.
2. THE CONTRACTOR SHALL REMOVE ALL OUT OF SERVICE UTILITY LINES, PIPES, STRUCTURES AND OTHER SUBTERRANEAN OBJECTS TO A MINIMUM DEPTH OF FOUR (4) FEET BELOW GRADE.
3. THE INDICATED LOCATION OF UNDERGROUND UTILITIES, STRUCTURES AND FACILITIES IS APPROXIMATE, AND REFLECTS THE BEST INFORMATION AVAILABLE FROM SURVEYS AND RECORDS. THE CONTRACTOR SHALL VERIFY THE ACTUAL LOCATION AND EXTENT OF UNDERGROUND FACILITIES PRIOR TO PROCEEDING WITH ANY CONSTRUCTION ACTIVITY WHICH MAY AFFECT SUCH FACILITIES.

REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
			SURVEYED			
			TECHNICIAN			
			CHECKED			
			DESIGN DIVISION			
			DESIGNED	MLM	04/00	
			DRAWN	TAW	04/00	
			CHECKED	TWM	04/00	
REVISED NOTES:	MLM/JLW	5-31-00				

PINELLAS COUNTY, FLORIDA
Department of Public Works



King
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PHONE 813-880-1981
FAX 813-880-1982
E-MAIL: king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

GENERAL NOTES

DATE: APRIL 10, 2000

CONTRACT NO.:

SURVEY FILE NO.:

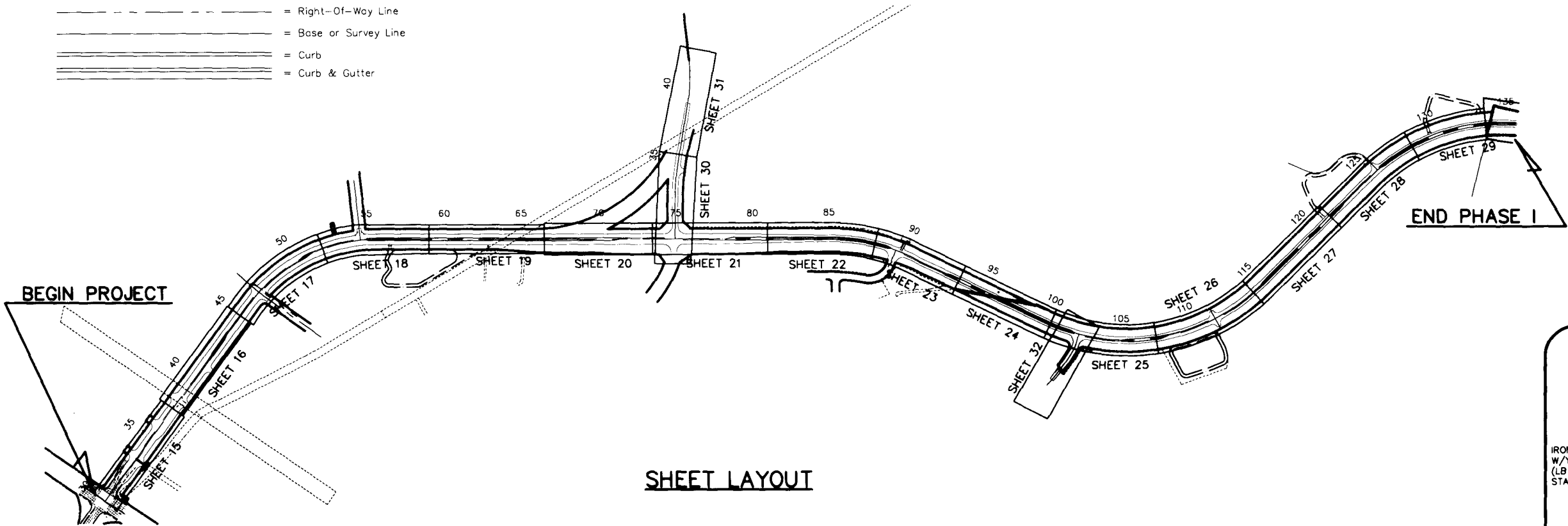
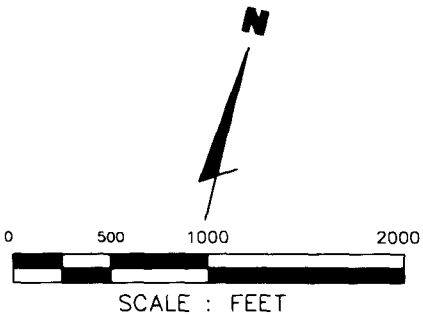
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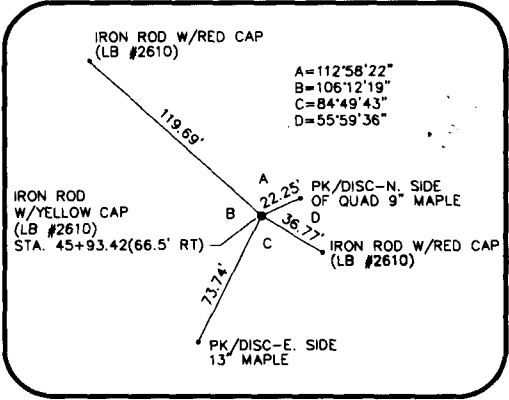
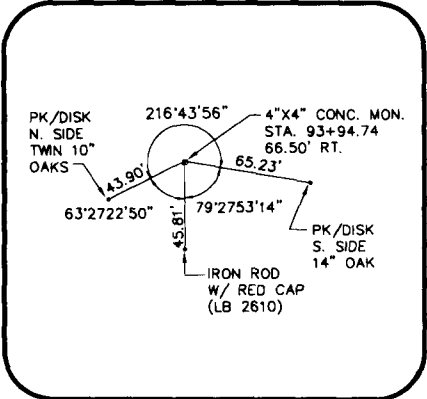
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GENERAL SYMBOLS

- = Base Line
- = Center Line
- = Property Line
- = Delta Angle
- = Right-Of-Way Line
- = Base or Survey Line
- = Curb
- = Curb & Gutter



SHEET LAYOUT



REFERENCES

SYMBOLS LEGEND

- (3) = Exist. Structure
- (S-107) = Proposed Structure

- = Aerial Target
- = Bench Mark
- = Cable T.V. Paint Stripe
- = Cable T.V. Box
- = Communications Manhole
- = Concrete Light Pole
- = Concrete Post
- = Concrete Utility Pole
- = Drainage Manhole
- = Electric Manhole
- = F.P.C. Paint Stripe
- = F.P.C. Pedestal
- = Fire Hydrant
- = Flag Pole
- = Gas Line Marker
- = Gas Filler Cap
- = Gas Valve
- = Gas Pump
- = Gas Line Paint Stripe
- = GTE Manhole
- = GTE Pedestal
- = GTE Marker
- = Guy Wire
- = Light Pole
- = Mail Box
- = Metal Post
- = Monitoring Well
- = Parking Meter
- = Reclaimed Water Paint Stripe
- = Reclaimed Water Box
- = Reclaimed Water Valve
- = Sanitary Sewer Manhole
- = Sanitary Cleanout
- = Section Corner
- = Sign
- = Sprinkler Head
- = Storm Water Paint Stripe
- = Traffic Signal Box
- = Traffic Signal Pole
- = Water Line Paint Stripe
- = Water Meter
- = Water Valve
- = Wood Utility Pole
- = Wood Light Pole
- = Wood Post

EXISTING TREE LEGEND

- Bottlebrush (size as noted)
- Bay Tree (red)(size as noted)
- Brazilian Pepper Tree (size as noted)
- Camphor Tree (size as noted)
- Cedar Tree (size as noted)
- China Berry Tree (size as noted)
- Citrus Tree
- Cypress Tree
- Dead Tree (size as noted)
- Magnolia Tree (size as noted)
- Maple Tree (size as noted)
- Oak Tree (size as noted)
- Palm Tree (size as noted)
- Pine Tree (size as noted)
- Sycamore Tree (size as noted)
- Unknown Tree Type (size as noted)
- Australian Pine (size as noted)
- Laurel (size as noted)
- Cherry (size as noted)
- Punk Tree
- Cherry Lural
- Holly Tree
- Elm Tree
- Evergreen Tree
- Jacaranda Tree
- Drake Elm

REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
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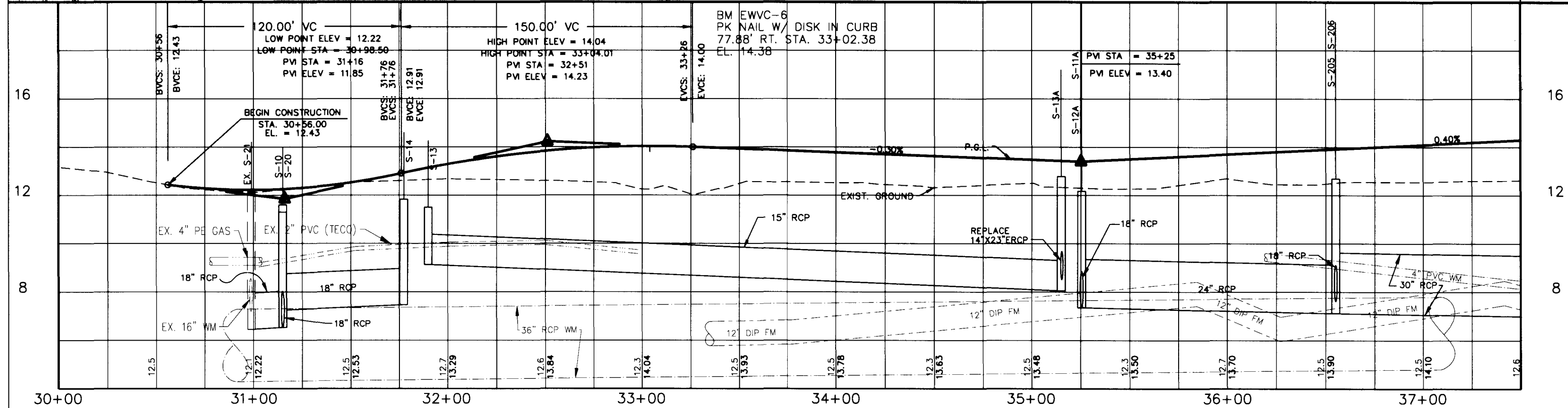
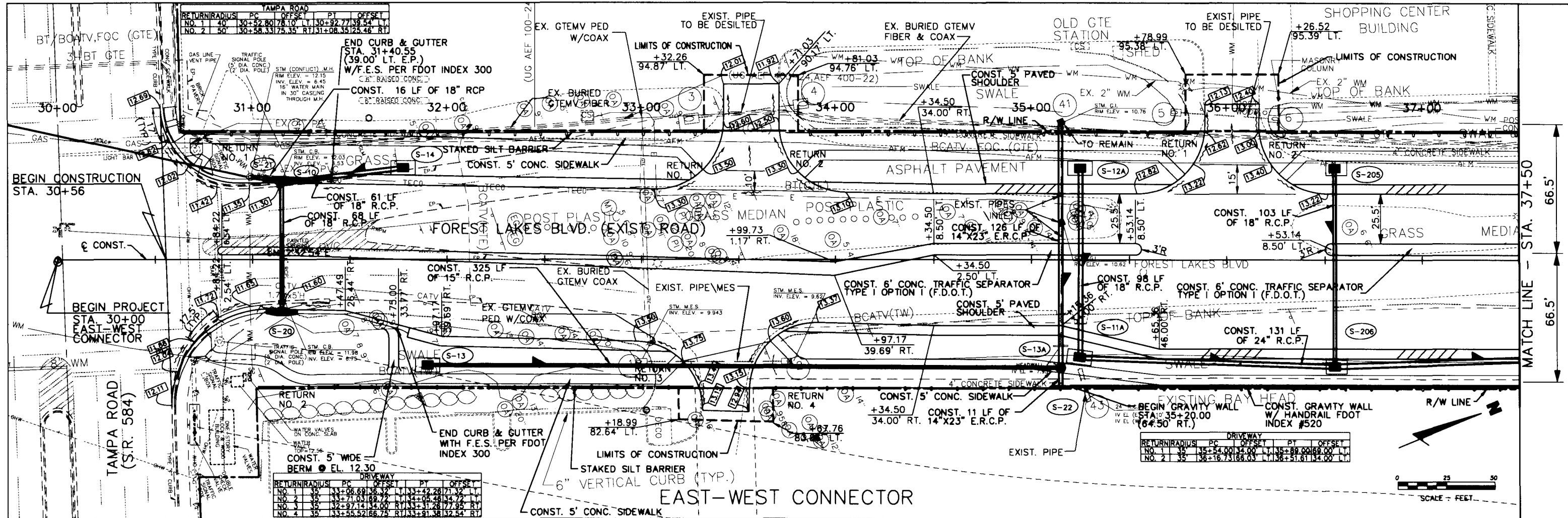
PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.
4021 W. BAYVIEW AVENUE
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TAMPA, FLORIDA 33611
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E-MAIL king@kingengineering.com


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

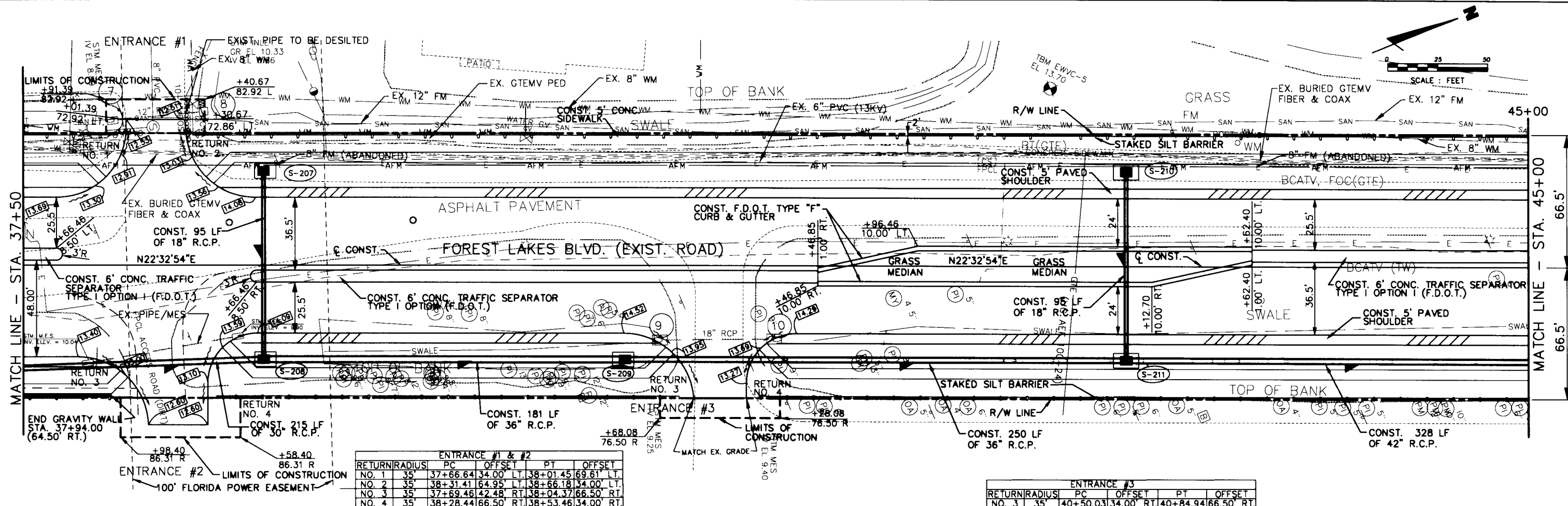
SURVEY REFERENCES &
SHEET LAYOUT

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 14 OF 119
File: PLAYRD01 View: 1-11X17

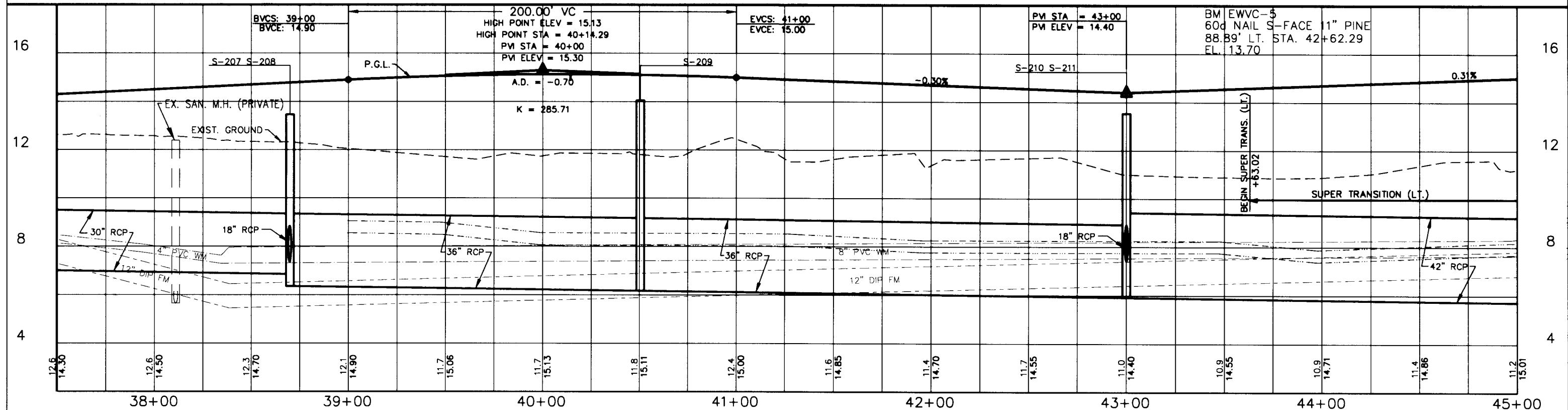


REVISIONS		BY	DATE	SURVEY BOOK No.		BY	DATE
DESIGNED		MLM	04/00	SURVEY DIVISION		BY	DATE
DRAWN		TAW	04/00	CHECKED			
DESIGN DIVISION				DESIGNED		MLM	04/00
REVISD STRUCTURES		MLM/TAW	8-20-00	DRAWN		TAW	04/00
REVISD PGL, GRADING, STRUCTURES, PIPES & SECTIONS		MLM/JLM	6-31-00	CHECKED		TWM	04/00

PINELLAS COUNTY, FLORIDA		EAST-WEST CONNECTOR ROAD		PLAN AND PROFILE (1)		DATE: APRIL 10, 2000	
Department of Public Works		PHASE I		STA. 30+00 TO STA. 37+50		CONTRACT NO.:	
		TAMPA ROAD (S.R. 584) TO THE EAST				SURVEY FILE NO.:	
		PROPERTY LINE OF HARROD PROPERTIES				SHEET 15 OF 119	
						File: PLPRD01	
						View: 1-11X17	



EAST-WEST CONNECTOR



REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
DESIGNED	MLM	04/00				
DRAWN	TAW	04/00				
CHECKED	TWM	04/00				
REVISED PGL, GRADING, STRUCTURES, PIPES & SECTIONS	MLM/ILW	5-31-00				

PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD PHASE I

TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

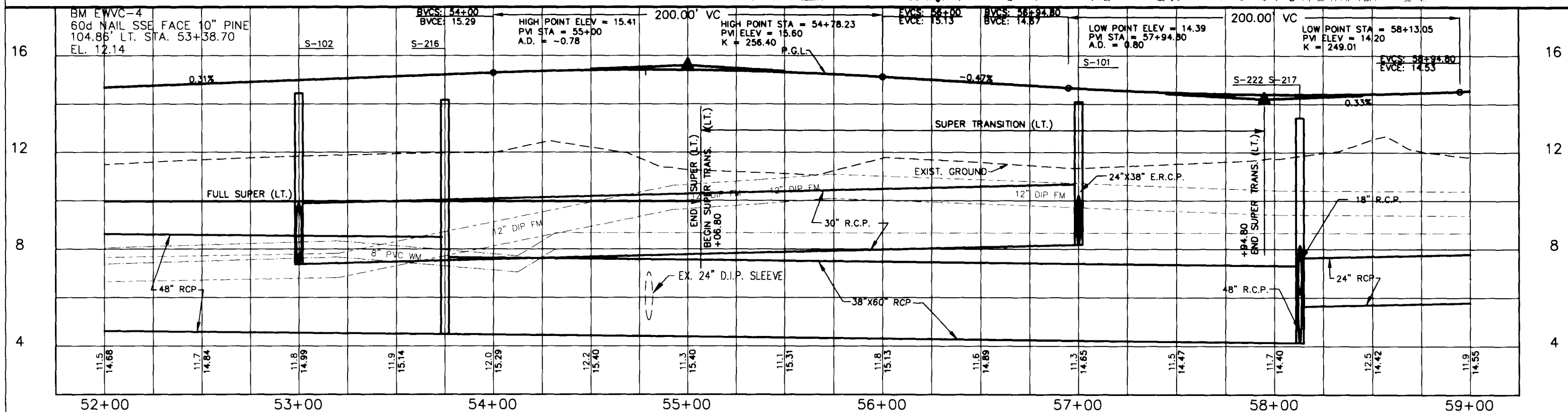
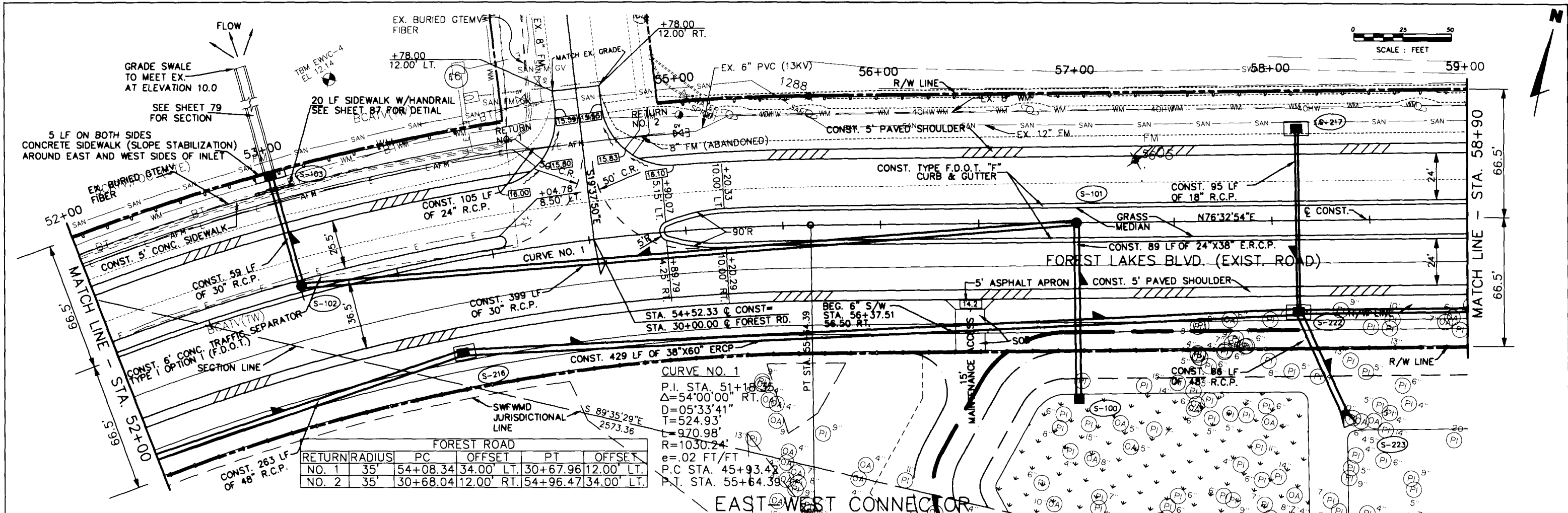
PLAN AND PROFILE (2)
STA. 37+50 TO STA. 45+00

DATE: APRIL 10, 2000

CONTRACT NO.:

SURVEY FILE NO.:

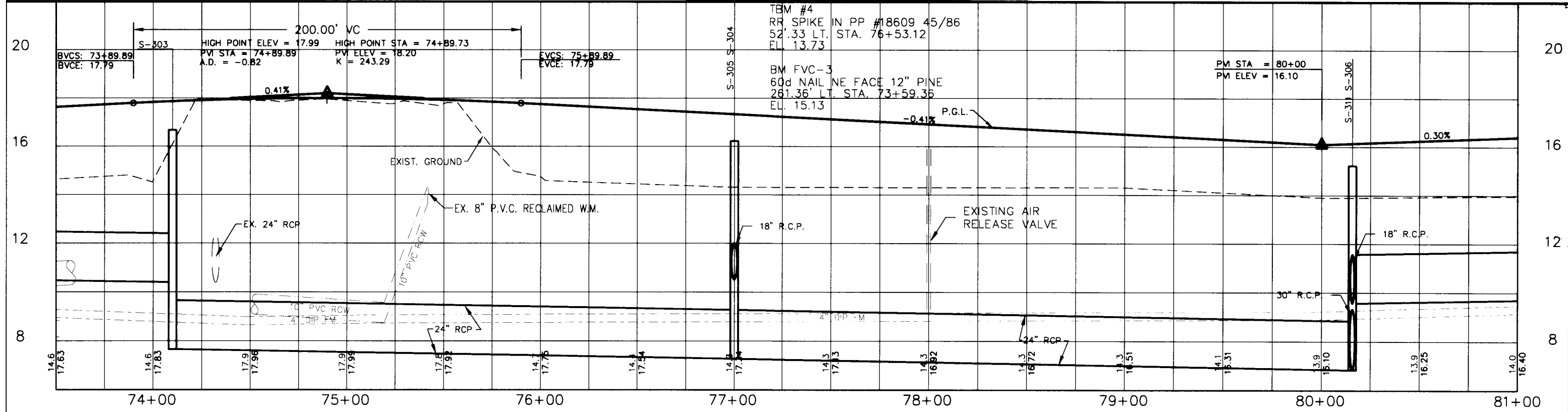
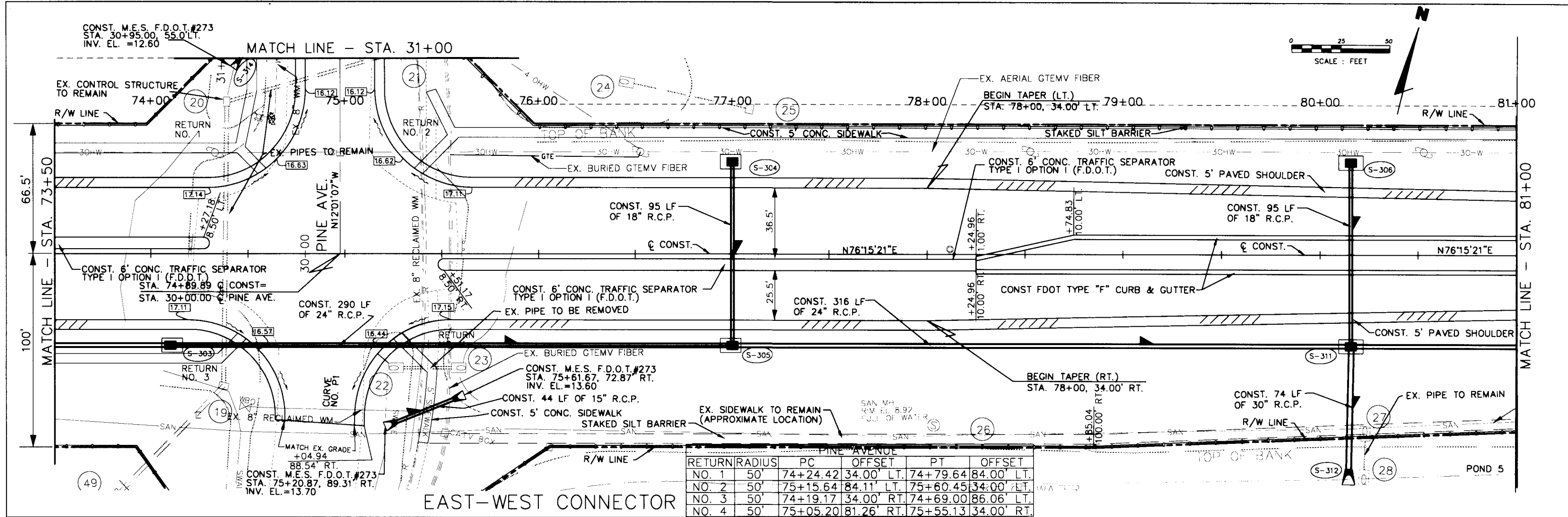
SHEET 16 OF 119 File: PLPRD02 View: 1-11X17



REVISIONS		BY	DATE	SURVEY BOOK No.		BY		DATE
REVISED PIPE SIZES & OUTFALL @ S-103 AND ADDED		MLM/JLN	5-31-00	DESIGNED		MLM		04/00
SLOPE PROTECTION AND HANDRAIL @ S-103				DRAWN		TJM		04/00
				CHECKED		TJM		04/00

PINELLAS COUNTY, FLORIDA Department of Public Works			
EAST-WEST CONNECTOR ROAD PHASE I		TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES	

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 18 OF 119



REVISIONS		BY	DATE	SURVEY BOOK No.		SURVEY DIVISION		BY	DATE
				SURVEYED		TECHNICIAN			
				CHECKED		DESIGN DIVISION			
				DESIGNED		MLM		04/00	
				DRAWN		TAW		04/00	
				CHECKED		TWM		04/00	

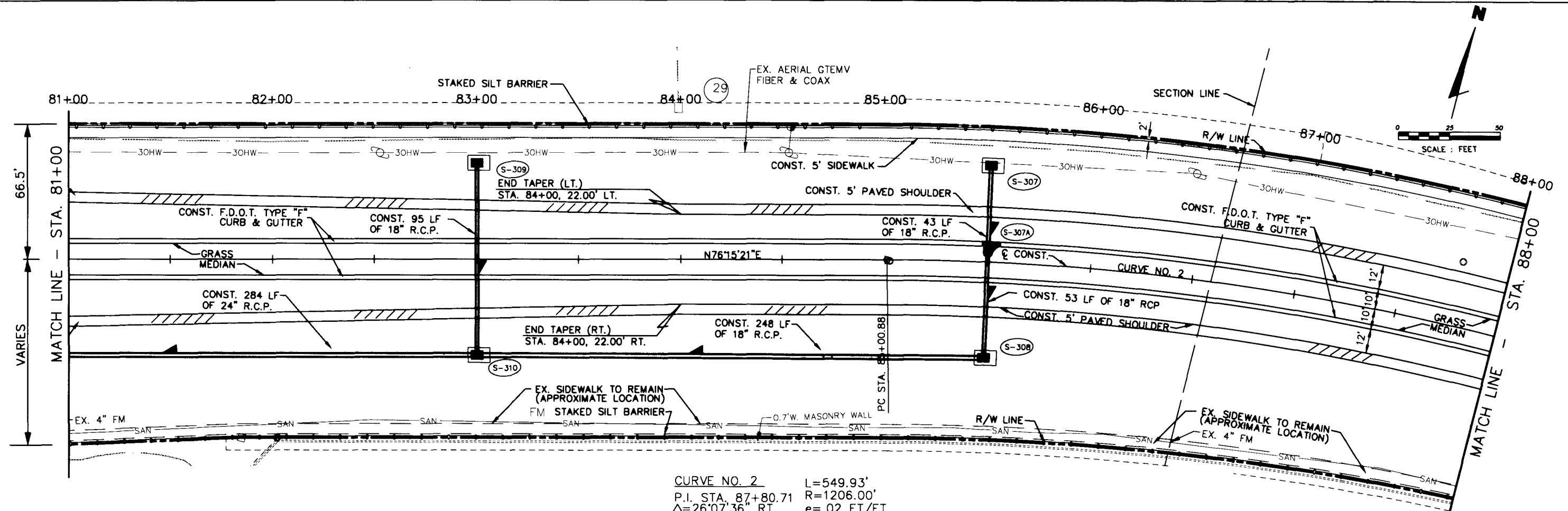
PINELLAS COUNTY, FLORIDA		Department of Public Works	
King		ASSOCIATES, INC.	
3100 15th Street, Suite 100		Tampa, FL 33606	
Phone: (813) 486-1882		Fax: (813) 486-1882	
E-Mail: king@kingassoc.com			

EAST-WEST CONNECTOR ROAD		PHASE I	
TAMPA ROAD (S.R. 584) TO THE EAST		PROPERTY LINE OF HARROD PROPERTIES	

PLAN AND PROFILE (7)		STA. 73+50 TO STA. 81+00	
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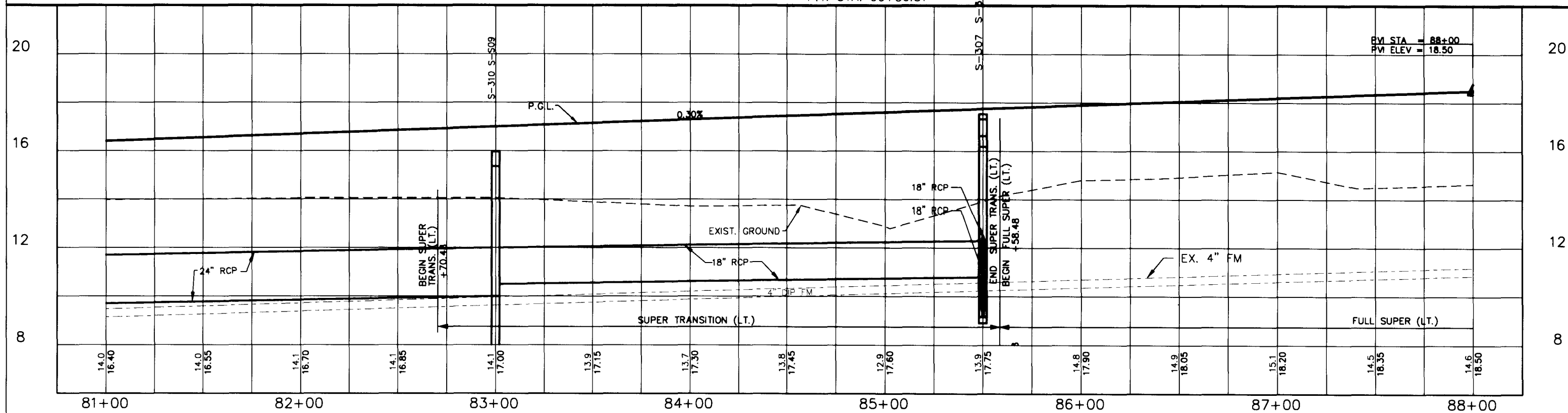
DATE: APRIL 10, 2000		CONTRACT NO.:	
		SURVEY FILE NO.:	
SHEET 21 OF 119		File: PLPRRD07	
		View: 1-11X17	

W: \\TRANS\\E\\PHASE1\\CADD\\PLPRRD08.dwg Sat Jul 08 15:51:07 2000 King Engineering Associates, Inc. (TAW-Pasco)



EAST-WEST CONNECTOR

CURVE NO. 2
L=549.93'
P.I. STA. 87+80.71 R=1206.00'
 $\Delta=26^{\circ}07'36''$ RT. $e=.02$ FT/FT
D=04'45'03" P.C. STA. 85+00.88
T=279.83' P.T. STA. 90+50.81



REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			MLM 04/00
			DRAWN
			TAW 04/00
			CHECKED
			TWM 04/00

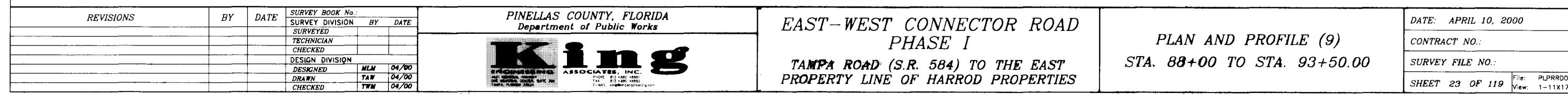
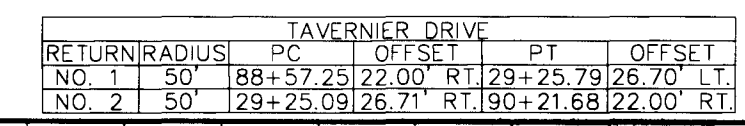
PINELLAS COUNTY, FLORIDA
Department of Public Works

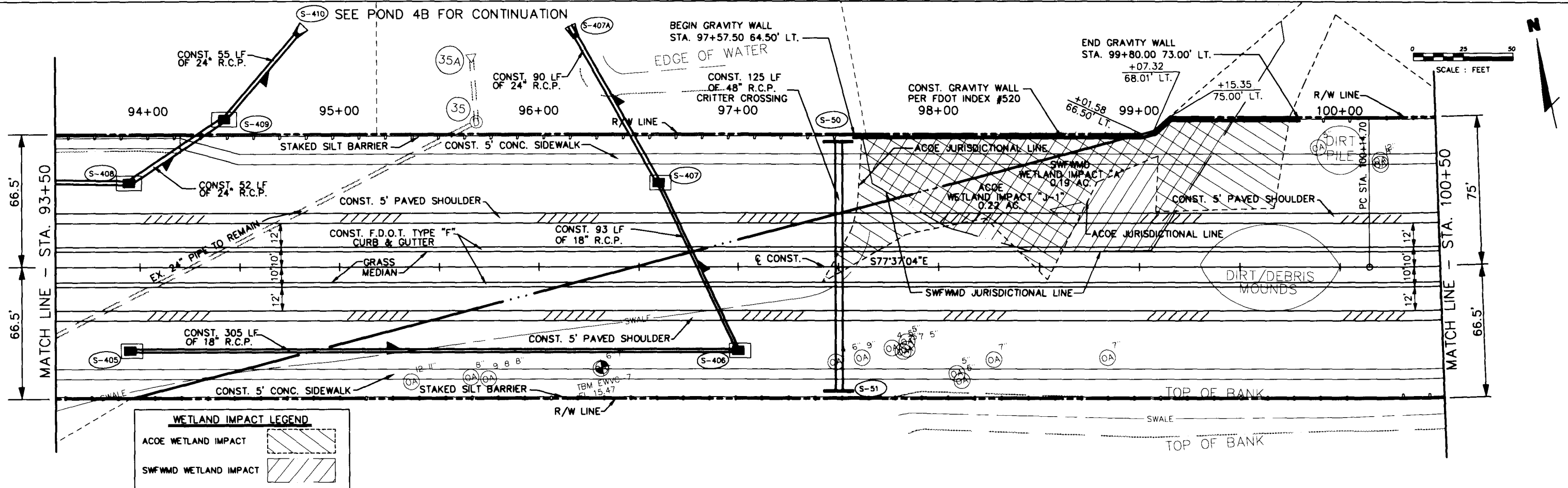
King
ASSOCIATES, INC.

PHONE: 813-480-4881
FAX: 813-480-4882
E-MAIL: info@kingeng.com

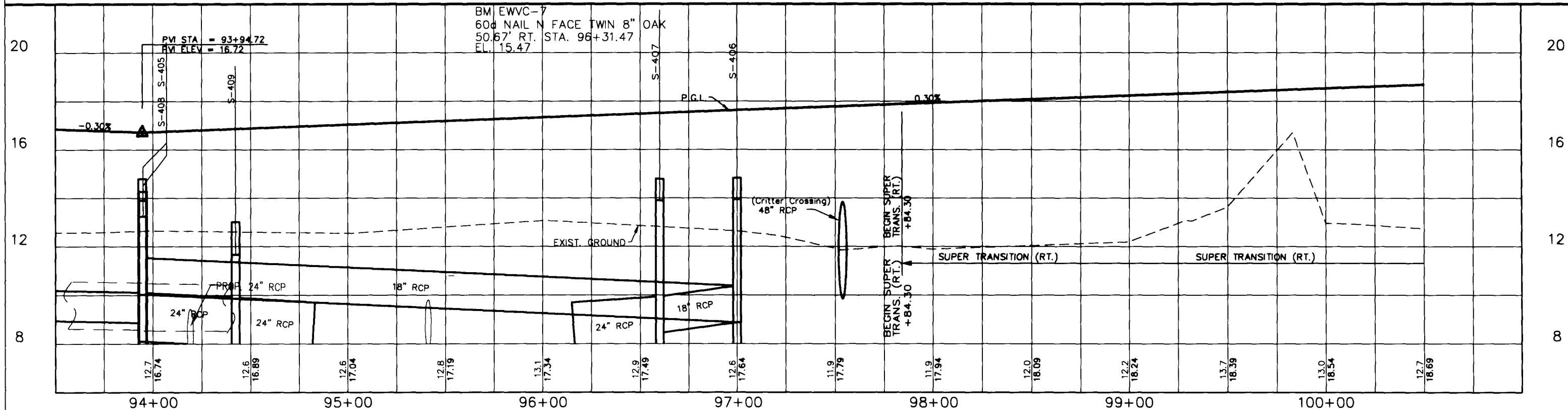
EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 22 OF 119
File: PLPRRD08 View: 1-11X17

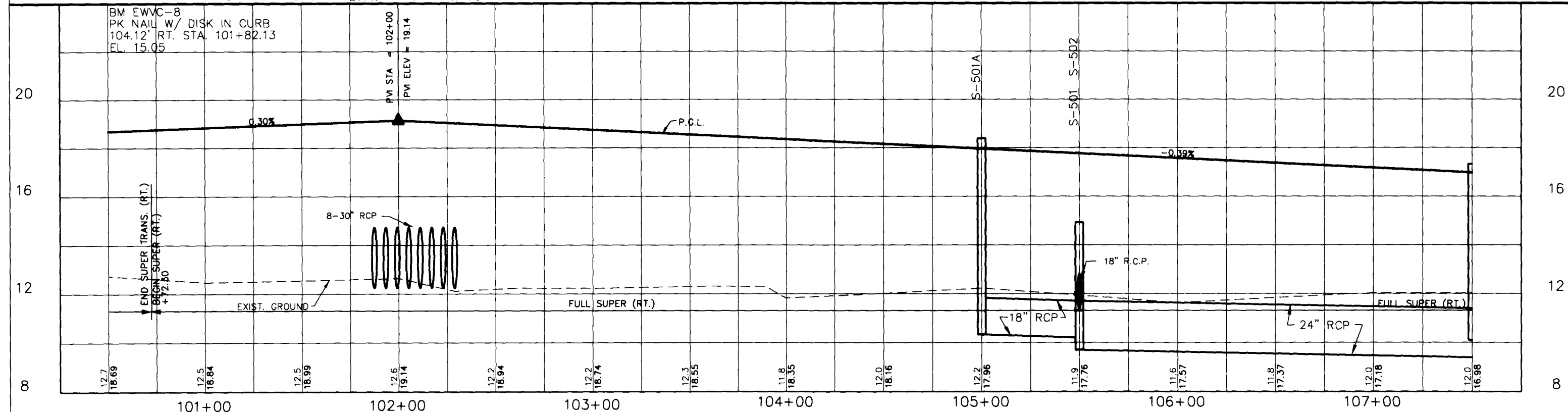
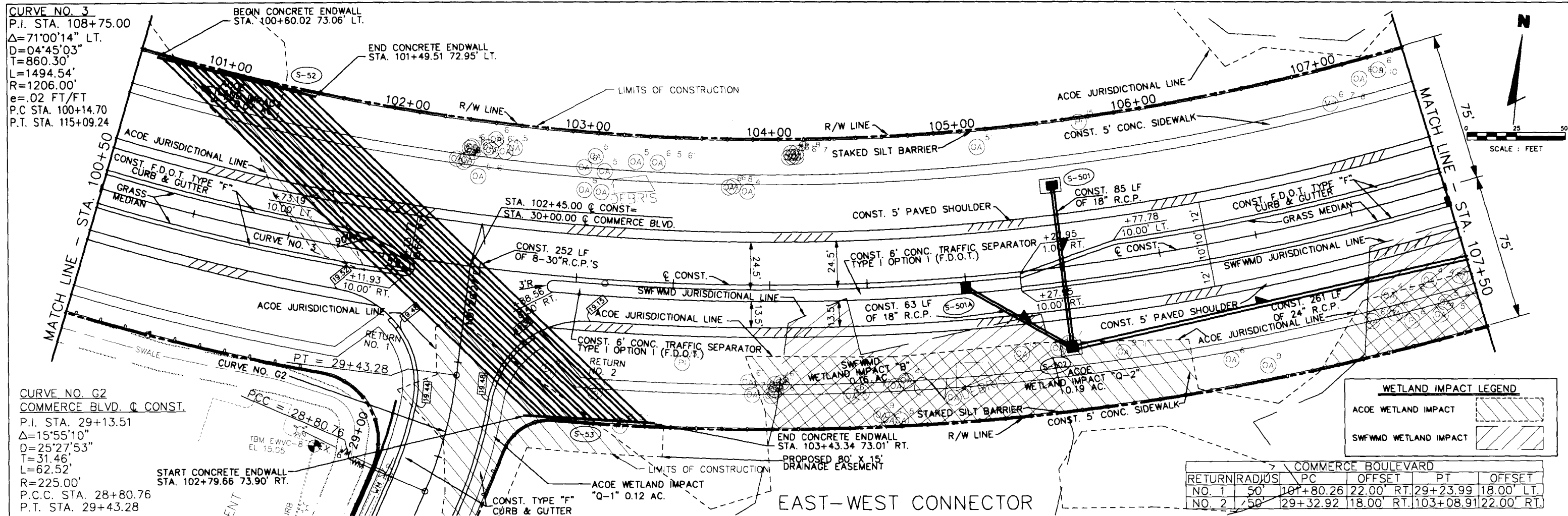


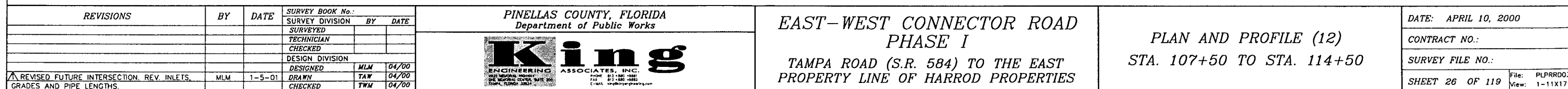


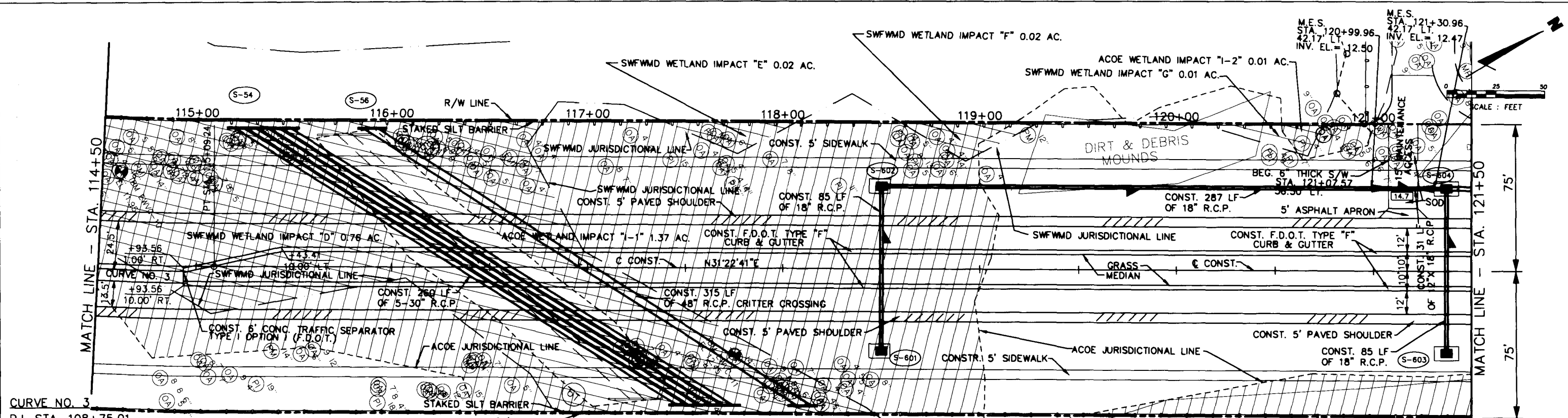
EAST-WEST CONNECTOR



REVISIONS BY DATE SURVEY DIVISION BY DATE SURVEYED TECHNICIAN CHECKED DESIGN DIVISION DESIGNED DRAWN CHECKED			PINELLAS COUNTY, FLORIDA Department of Public Works King ASSOCIATES, INC. 1101 11th St. N. St. Petersburg, FL 33701 Phone: 813-486-1800 Fax: 813-486-1801 E-Mail: king@kingengineering.com			EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES			PLAN AND PROFILE (10) STA. 93+50.00 TO STA. 100+50			DATE: APRIL 10, 2000 CONTRACT NO.: SURVEY FILE NO.: SHEET 24 OF 119 File: PLPRRD10 View: 1-11X17		
REV. CRITTER CROSSING PIPE SIZE			MLM/JLM 5-31-00			MLM 04/00 TAW 04/00 TWM 04/00								







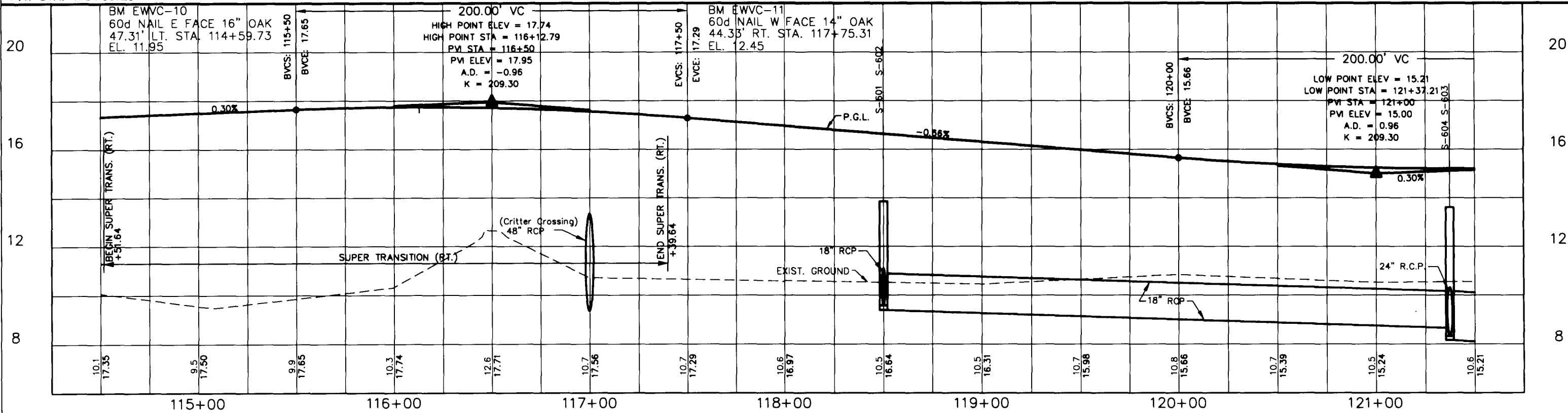
CURVE NO. 3
 P.I. STA. 108+75.01
 $\Delta=71^{\circ}00'15''$ LT.
 $D=04^{\circ}45'03''$
 $T=860.30'$
 $L=1494.54'$
 $R=1206.00'$
 $e=.02$ FT/FT
 P.C. STA. 100+14.71
 P.T. STA. 115+09.25

EAST-WEST CONNECTOR

WETLAND IMPACT LEGEND

ACOE WETLAND IMPACT

SWFWMD WETLAND IMPACT



REVISIONS BY DATE SURVEYED CHECKED DESIGN DIVISION DRAWN CHECKED			SURVEY BOOK No.: SURVEY DIVISION BY DATE SURVEYED CHECKED DESIGN DIVISION DRAWN CHECKED			PINELLAS COUNTY, FLORIDA Department of Public Works ASSOCIATES, INC. PHONE: 813-486-1888 FAX: 813-486-1889 E-MAIL: king@kingassoc.com			EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES			PLAN AND PROFILE (13) STA. 114+50 TO STA. 121+50			DATE: APRIL 10, 2000 CONTRACT NO.: SURVEY FILE NO.: SHEET 27 OF 119			File: PLPRD04 View: 1-11X17
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MATCH LINE - STA. 121+50

SCALE 1" = 40'

SCALE 1" = 40'

SCALE 1" = 40'

SCALE 1" = 40'

SCALE 1" = 40'

SCALE 1" = 40'

SCALE 1" = 40'

SCALE 1" = 40'

SCALE 1" = 40'

SCALE 1" = 40'

SCALE 1" = 40'

SCALE 1" = 40'

SCALE 1" = 40'

SEE POND 6 FOR CONTINUATION

STA. 125+77.35 & CONST=
STA. 30+00.00
& FUTURE INTERSECTION

CONST. 213 LF
OF 24" R.C.P.

CONST. 5' PAVED SHOULDER

+88.26
10.00' LT.

CONST. 85 LF
OF 18" R.C.P.

+88.26
1.00' LT.

CONSTR. F.D.O.T. TYPE "F"
CURB & GUTTER

+38.26
10.00' RT.

ACOE JURISDICTIONAL LINE

SWFWMD JURISDICTIONAL LINE

NESTING BIRDS FRAGILE PLANTS

CONST. 6' CONC. TRAFFIC SEPARATOR
TYPE I OPTION I (F.D.O.T.)

N.31°22'41"E

CONST. 5' SIDEWALK

SWFWMD WETLAND IMPACT "H" 0.21 AC.

CONST. 5' SIDEWALK

ACOE WETLAND IMPACT "H-1" 0.65 AC.

CONST. 5' SIDEWALK

SWFWMD WETLAND IMPACT "H" 0.21 AC.

CONST. 5' SIDEWALK

ACOE WETLAND IMPACT "H-1" 0.65 AC.

CONST. 5' SIDEWALK

SWFWMD WETLAND IMPACT "H" 0.21 AC.

CONST. 5' SIDEWALK

ACOE WETLAND IMPACT "H-1" 0.65 AC.

CONST. 5' SIDEWALK

SWFWMD WETLAND IMPACT "H" 0.21 AC.

CONST. 5' SIDEWALK

ACOE WETLAND IMPACT "H-1" 0.65 AC.

CONST. 5' SIDEWALK

SWFWMD WETLAND IMPACT "H" 0.21 AC.

CONST. 5' SIDEWALK

ACOE WETLAND IMPACT "H-1" 0.65 AC.

CONST. 5' SIDEWALK

SWFWMD WETLAND IMPACT "H" 0.21 AC.

CONST. 5' SIDEWALK

ACOE WETLAND IMPACT "H-1" 0.65 AC.

CONST. 5' SIDEWALK

SWFWMD WETLAND IMPACT "H" 0.21 AC.

CONST. 5' SIDEWALK

ACOE WETLAND IMPACT "H-1" 0.65 AC.

CONST. 5' SIDEWALK

SWFWMD WETLAND IMPACT "H" 0.21 AC.

CONST. 5' SIDEWALK

ACOE WETLAND IMPACT "H-1" 0.65 AC.

CONST. 5' SIDEWALK

SWFWMD WETLAND IMPACT "H" 0.21 AC.

CONST. 5' SIDEWALK

ACOE WETLAND IMPACT "H-1" 0.65 AC.

CONST. 5' SIDEWALK

SWFWMD WETLAND IMPACT "H" 0.21 AC.

CONST. 5' SIDEWALK

CURVE NO. 4

P.I. STA. 131+80.60

Δ=58°30'45" RT.

D=04°45'03"

T=675.57'

L=1231.61'

R=1206.00'

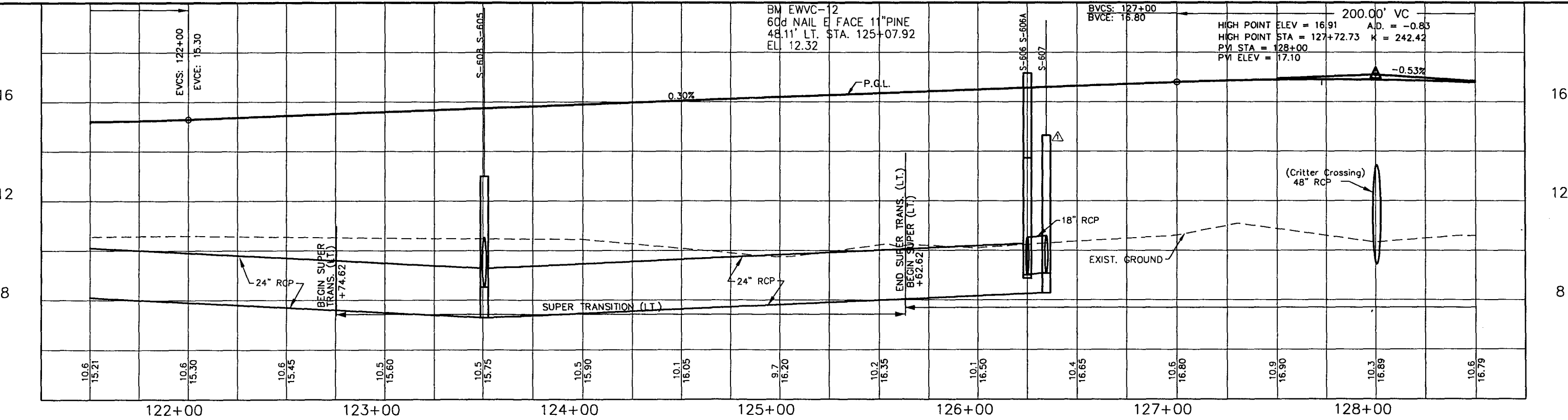
e=.02 FT/FT

P.C. STA. 125+05.02

P.T. STA. 137+36.63

EAST-WEST CONNECTOR

FUTURE INTERSECTION					
RETURN	RADIUS	PC	OFFSET	PT	OFFSET
NO. 1	40'	125+12.65	22.00' LT.	30+60.18	28.00' LT.
NO. 2	40'	30+60.58	20.00' RT.	126+34.44	22.00' LT.



REVISIONS	BY	DATE	SURVEY BOOK No.	BY	DATE
REVISED INLAY S-807 PIPE LENGTHS, INTERSECTION & GRADES	MLM/TAW	1-5-01	DESIGNED	MLM	04/00
ADDED STRUCTURE S-606A	MLM/TAW	6-20-00	DRAWN	TAW	04/00
REV. CRITTER CROSSING PIPE SIZE	MLM/TAW	5-31-00	CHECKED	TAW	04/00

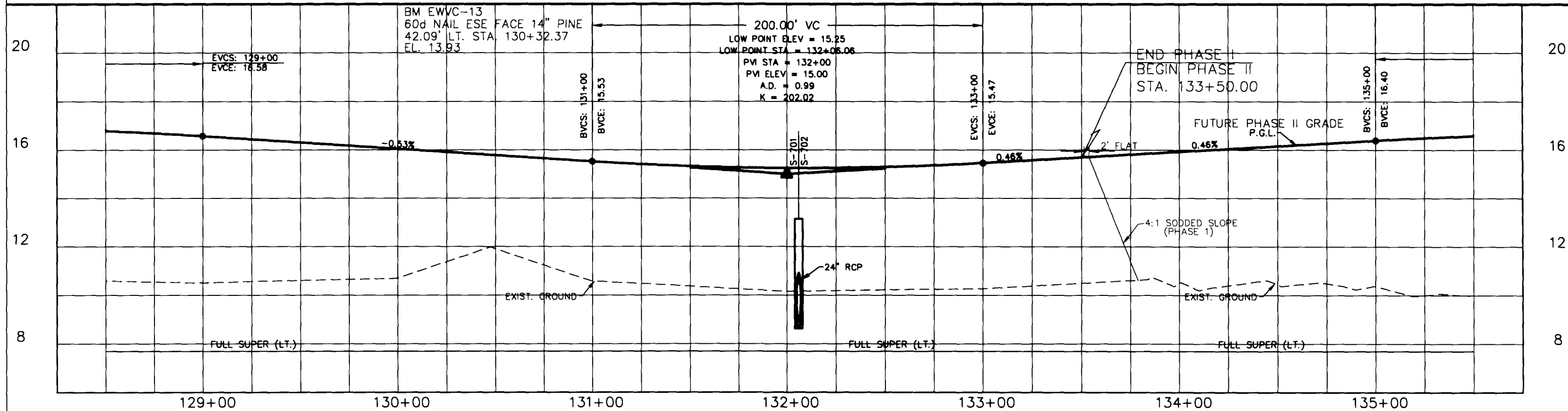
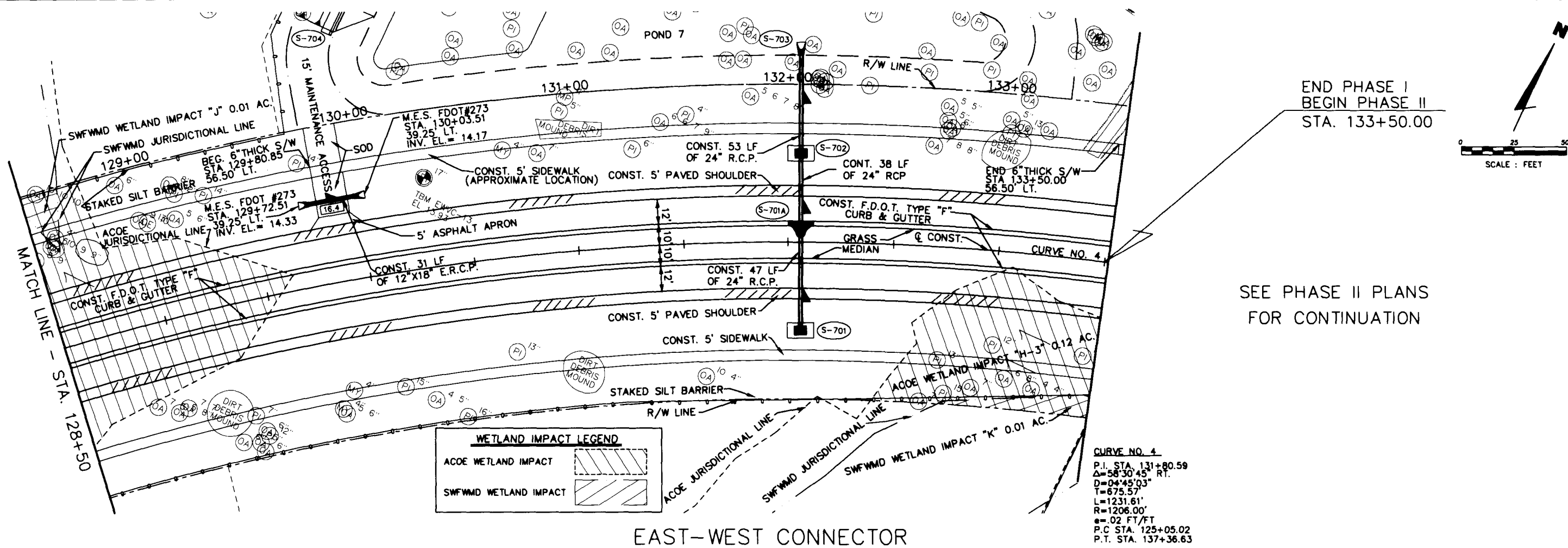
PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

PLAN AND PROFILE (14)
STA. 121+50 TO STA. 128+50

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 28 OF 119

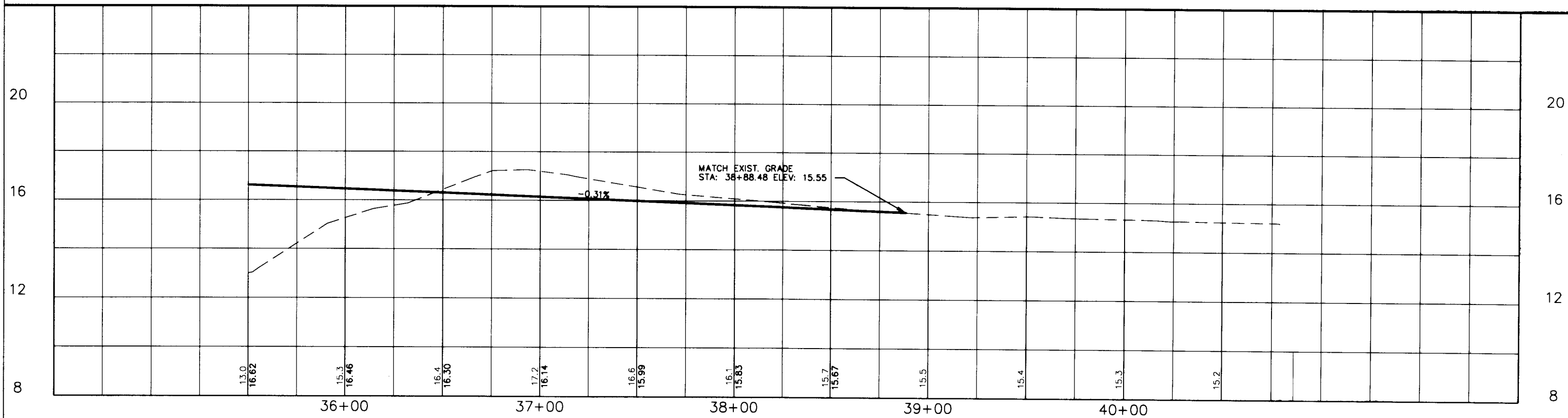
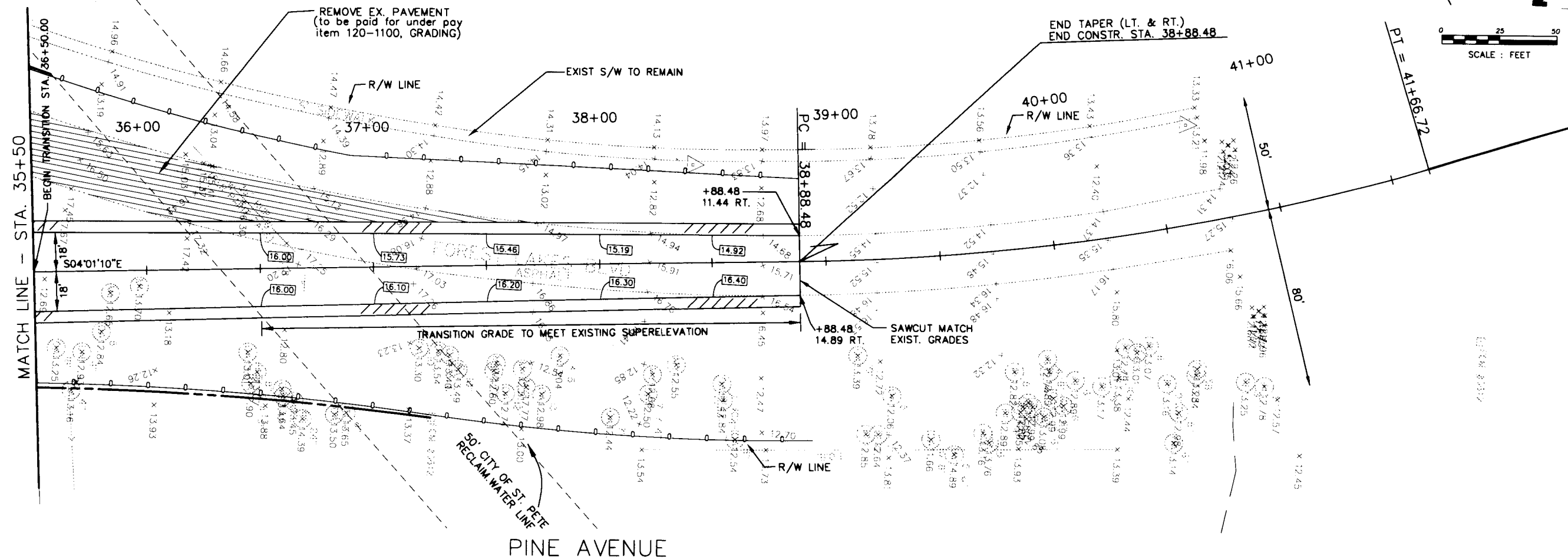



REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
ADDED STRUCTURE S-701A	TAW	5/19/00				

PINELLAS COUNTY, FLORIDA Department of Public Works	
King ASSOCIATES, INC.	
DESIGNED: MLW 04/00	CHECKED: TAW 04/00
DRAWN: TAW 04/00	CHECKED: TAW 04/00

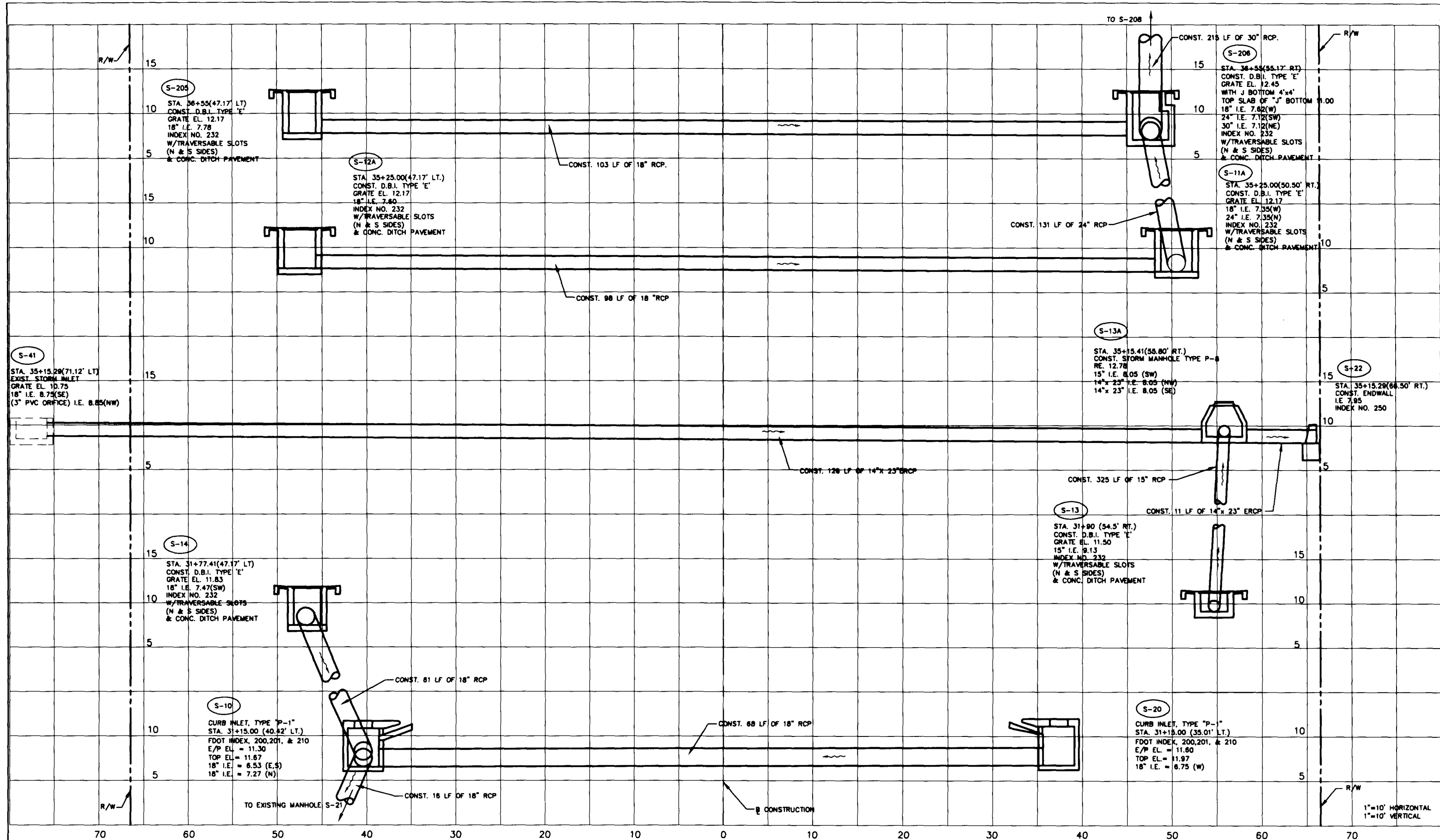
EAST-WEST CONNECTOR ROAD PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES

DATE: APRIL 10, 2000	CONTRACT NO.:	SURVEY FILE NO.:	SHEET 29 OF 119	File: PLPRD15 View: 1-11X17
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REVISIONS	BY	DATE	SURVEY BOOK No.: SURVEY DIVISION BY DATE SURVEYED TECHNICIAN CHECKED DESIGN DIVISION DESIGNED MLM 04/00 DRAWN TAW 04/00 CHECKED TWM 04/00			PINELLAS COUNTY, FLORIDA Department of Public Works 		EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES		PINE AVENUE PLAN AND PROFILE (17) STA. 35+50 TO STA. 38+88.48		DATE: APRIL 10, 2000 CONTRACT NO.: SURVEY FILE NO.: SHEET 31 OF 119	File: PLPRD17 Ver: 1.00
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REVISIONS		BY	DATE	SURVEY BOOK No.	
				SURVEY DIVISION	BY DATE
				SURVEYED	
				TECHNICIAN	
				CHECKED	
				DESIGN DIVISION	
				DESIGNED	MLM 04/00
				DRAWN	TAW 04/00
				CHECKED	TWM 04/00
REV. LOCATIONS & ELEVATIONS OF STRUCTURES & PIPES		MLM/TAW	6-20-00		
REV. LOCATIONS & ELEVATIONS OF STRUCTURES & PIPES		MLM/JLW	5-31-00		

PINELLAS COUNTY, FLORIDA
Department of Public Works

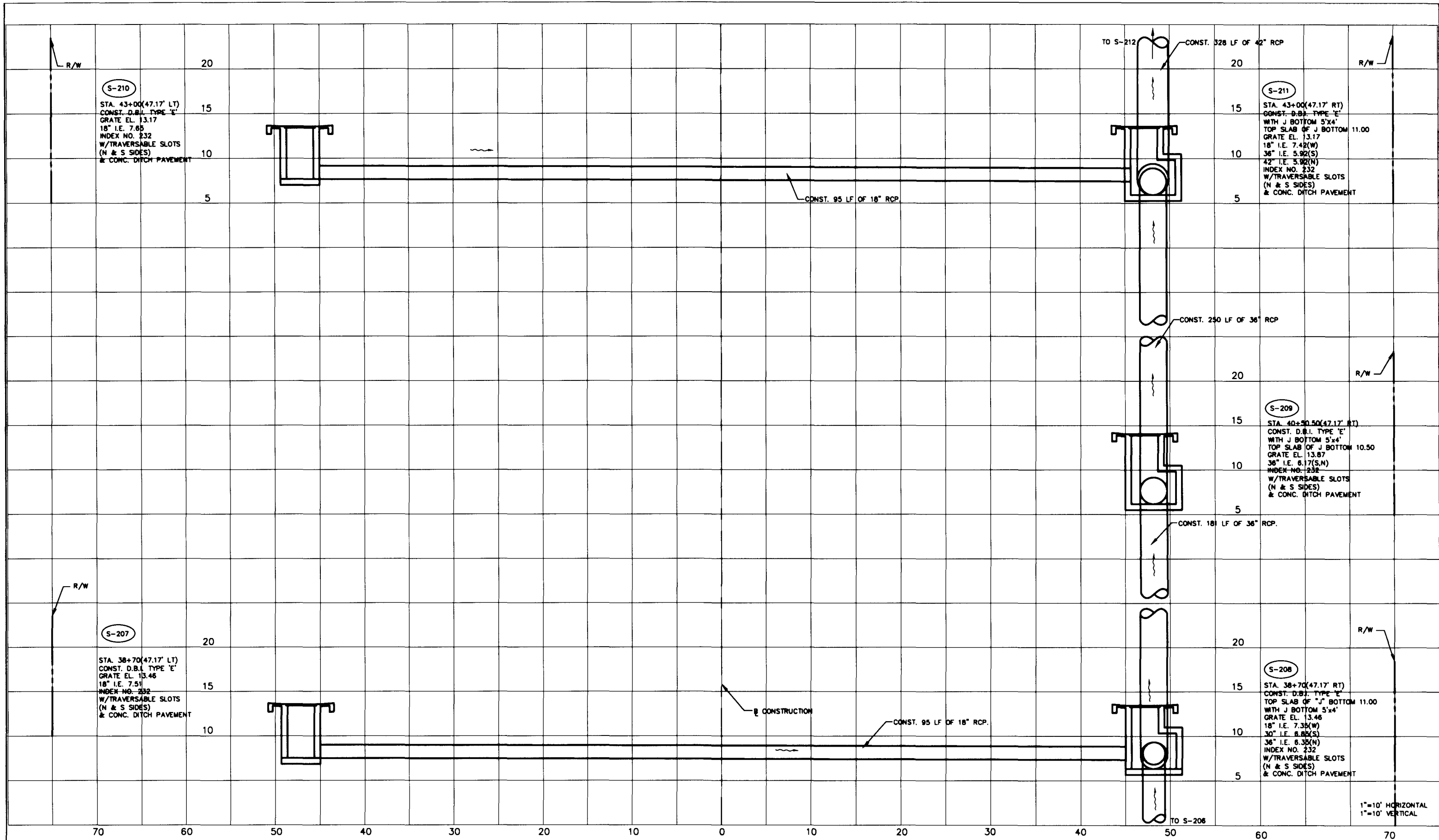
King
ENGINEERING ASSOCIATES, INC.

PHONE 813-880-8881
FAX 813-880-8882
E-MAIL king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DATE: APRIL 10, 2000	
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET 33 OF 119	File: View:

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REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	MLM	04/00
			DRAWN	TAW	04/00
			CHECKED	TWM	04/00
REV. LOCATIONS & ELEVATIONS OF STRUCTURES & PIPES			MLM/ILW	5-31-00	

PINELLAS COUNTY, FLORIDA
Department of Public Works

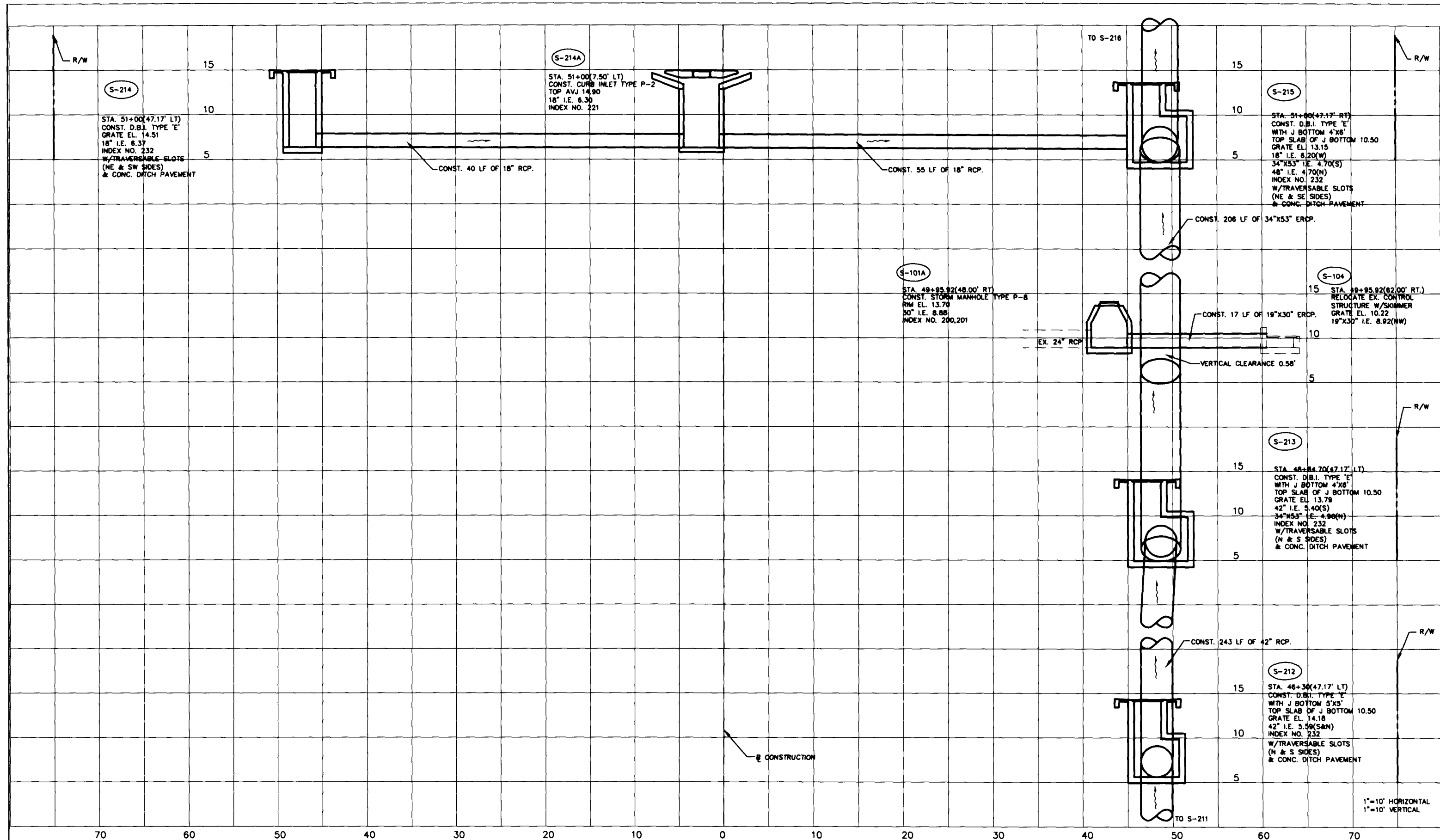


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DRAINAGE STRUCTURES (2)

DATE: APRIL 10, 2000	
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET 34 OF 119	File: View:

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REV. LOCATIONS & ELEVATIONS OF STRUCTURES & PIPES	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
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PINELLAS COUNTY, FLORIDA
Department of Public Works

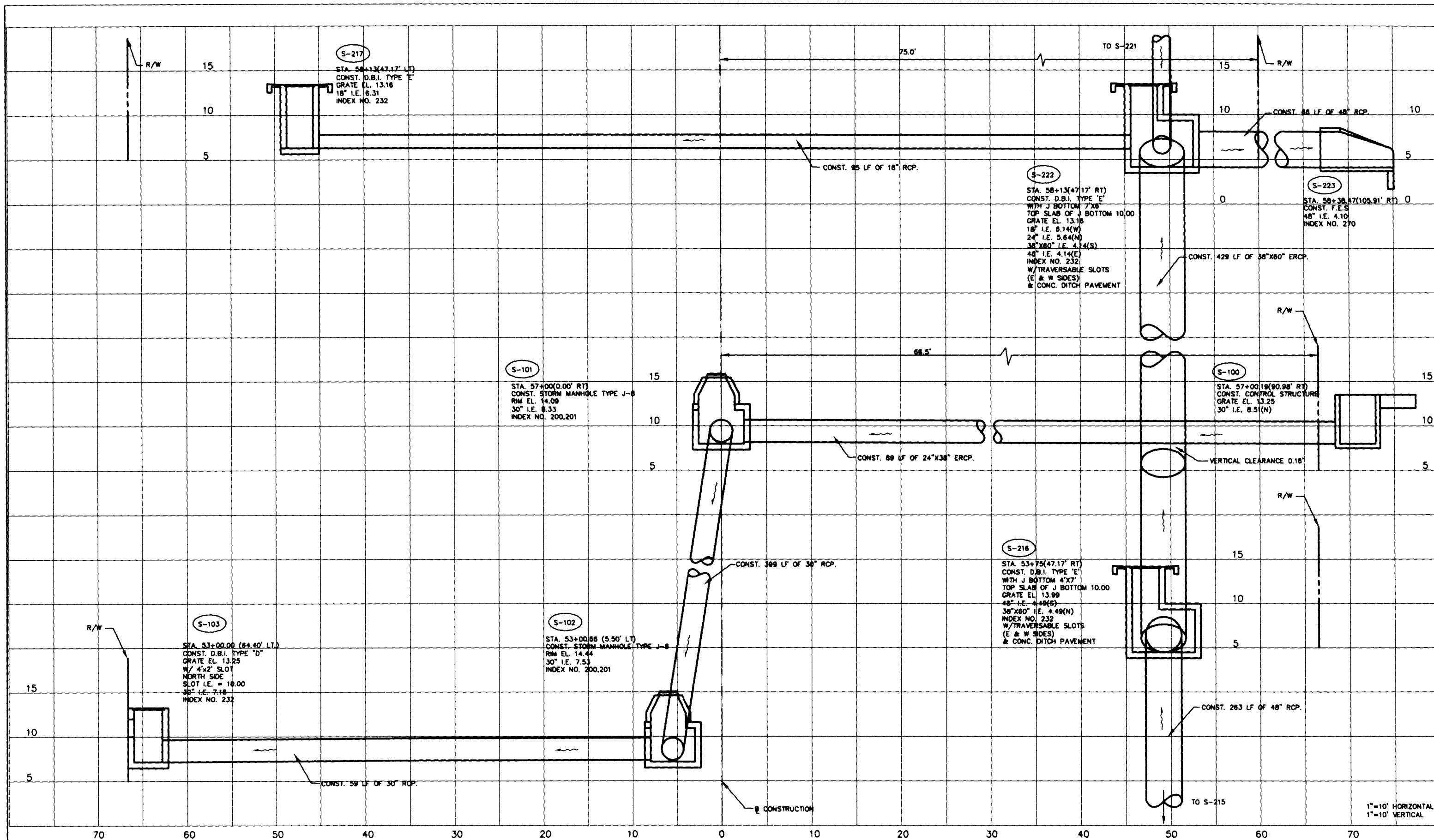
King
ASSOCIATES, INC.

PHONE 813 • 880 • 8881
FAX 813 • 880 • 8862
E-MAIL king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DRAINAGE STRUCTURES (3)

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 35 OF 119
File: View:



REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			DESIGNED
			DRAWN
			CHECKED
REV. LOCATIONS & ELEVATIONS OF STRUCTURES & PIPES			MLM/JLW 5-31-00

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ASSOCIATES, INC.

PHONE 813-880-8881
FAX 813-880-8882
E-MAIL king@kingengineering.com

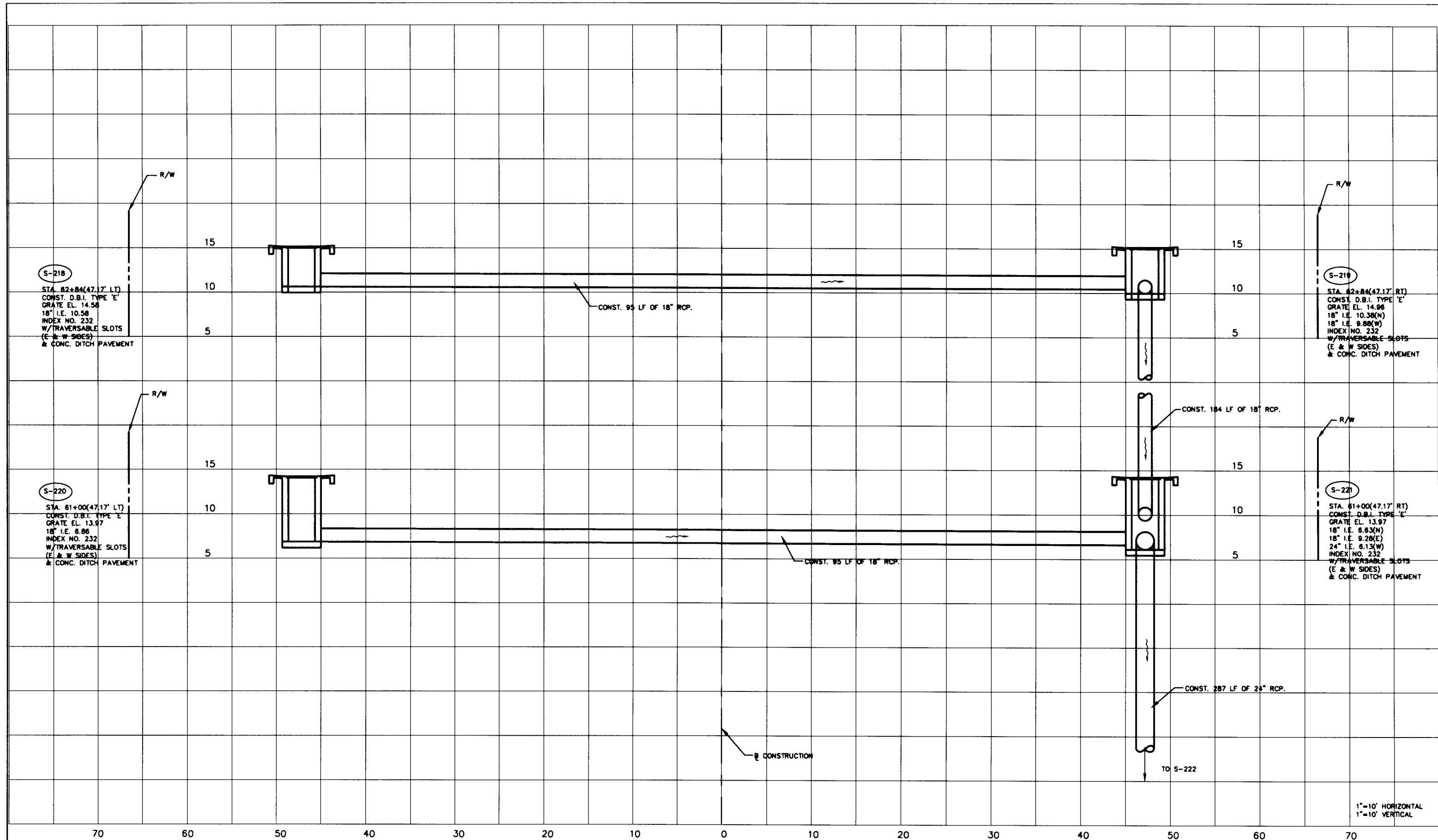
**EAST-WEST CONNECTOR ROAD
PHASE I**

TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 36 OF 119

DRAINAGE STRUCTURES (4)

W: \\TRANS\\EW\\PHASE1\\CADD\\drstr005.dwg Thu Jun 29 14:59:41 2000 King Engineering Associates, Inc. (jki-pasco)



REVISIONS	BY	DATE	SURVEY BOOK No.:
			SURVEY DIVISION
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			DRAWN
			CHECKED
REV. LOCATIONS & ELEVATIONS OF STRUCTURES & PIPES	MLM/JLW	5-31-00	

PINELLAS COUNTY, FLORIDA
Department of Public Works

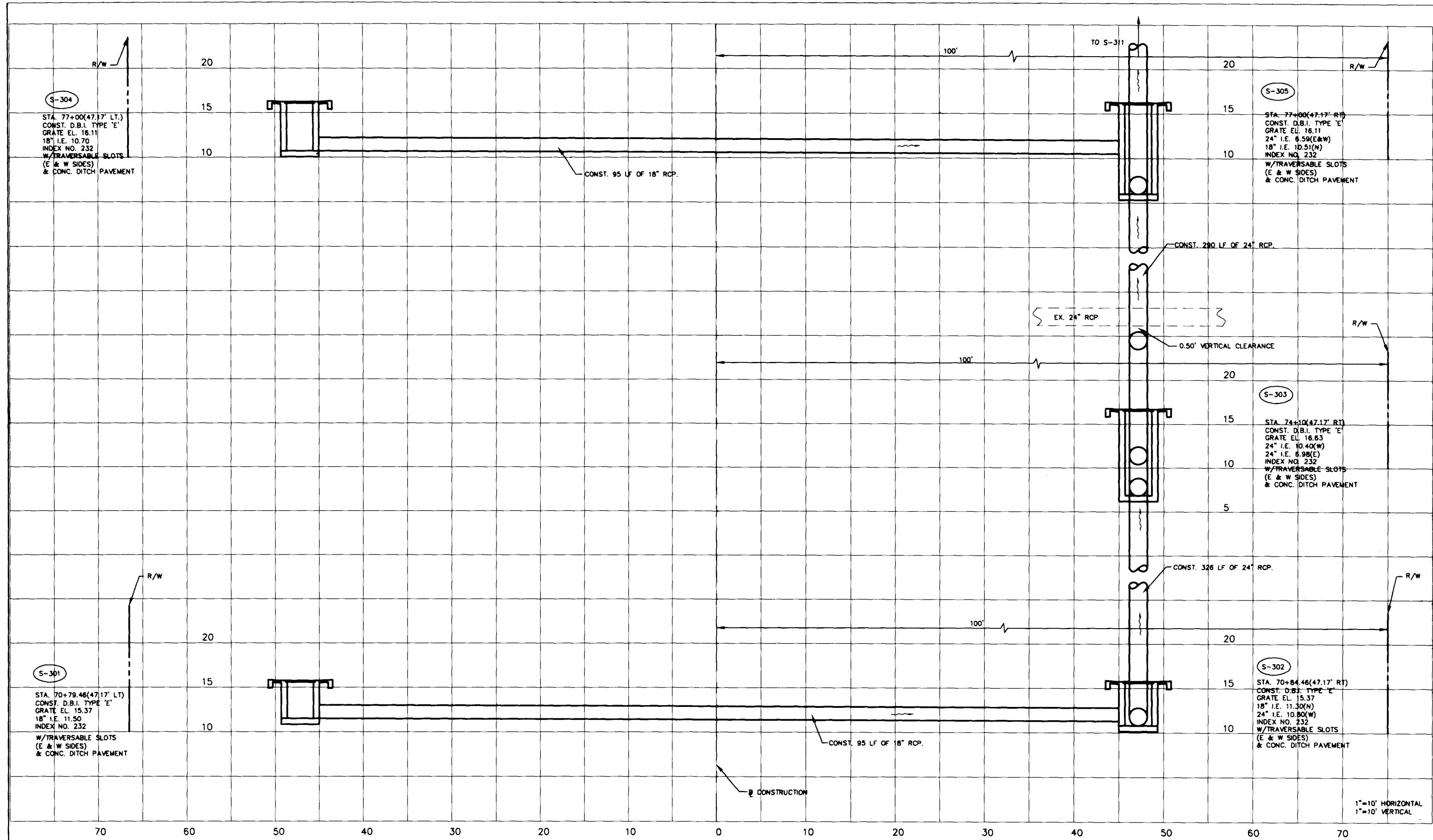
King
ASSOCIATES, INC.

PHONE: 813 • 880 • 8861
FAX: 813 • 880 • 8862
E-MAIL: kimg@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DRAINAGE STRUCTURES (5)

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 37 OF 119
View:



REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ASSOCIATES, INC.

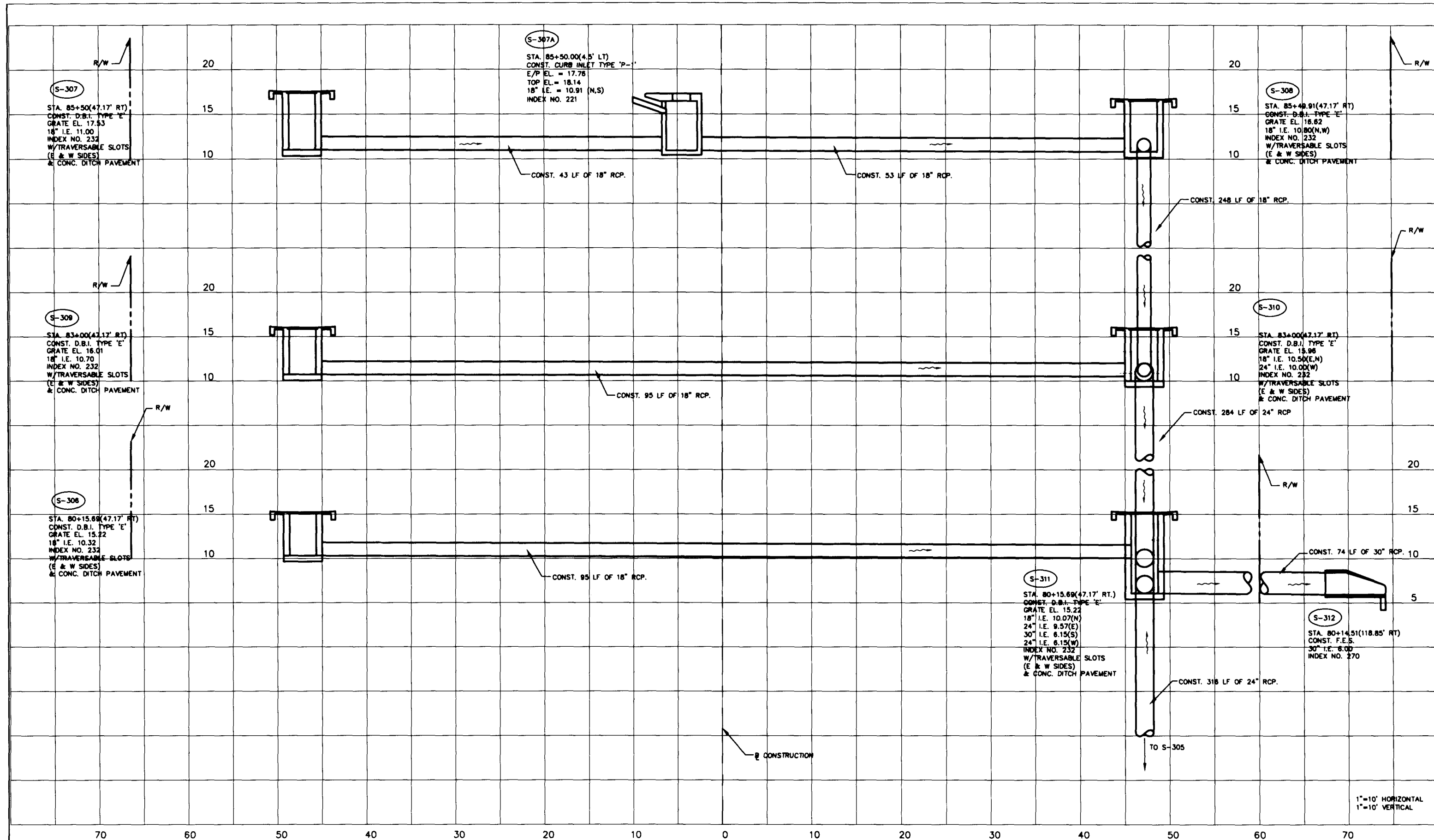
4921 MEDICAL HIGHWAY
ONE MEDICAL CENTER SUITE 300
TAMPA, FLORIDA 33613

PHONE: 813 • 880 • 8881
FAX: 813 • 880 • 8882
E-MAIL: king@kingassoc.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DRAINAGE STRUCTURES (6)

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 38 OF 119
File: View:



REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			MLM 04/00
			DRAWN
			TAW 04/00
			CHECKED
			TWM 04/00

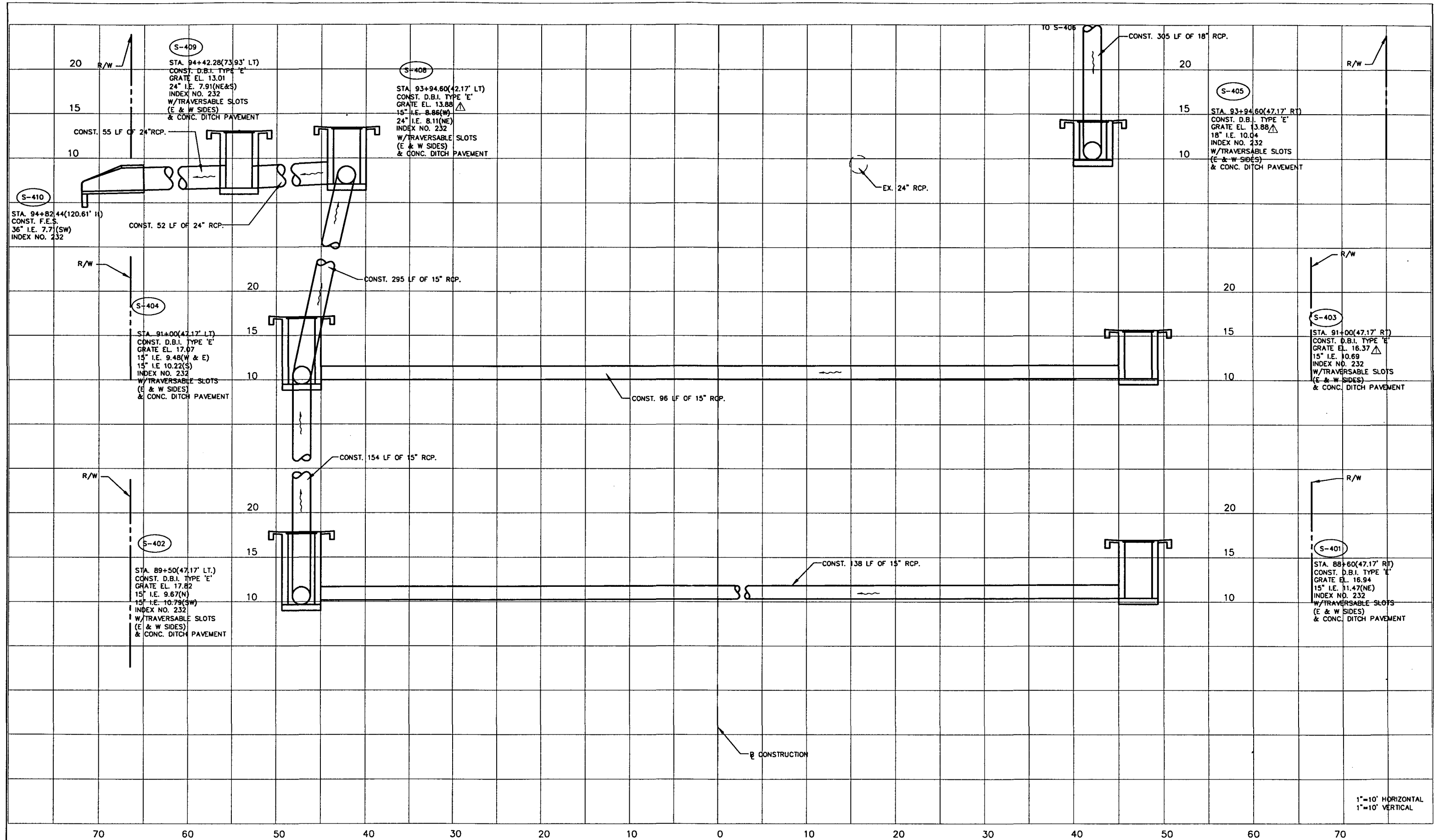
PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ASSOCIATES, INC.

PHONE 813-880-8881
FAX 813-880-8882
E-MAIL king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 39 OF 119
File: View:



REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	MLM	04/00
			DRAWN	TAW	04/00
			CHECKED	TWM	04/00
REVISED NOTED INLET GRATE EL.			MLM	1-5-01	

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.
4221 MEMORIAL HIGHWAY
ONE MEMORIAL CENTER, SUITE 300
TAMPA, FLORIDA 33614

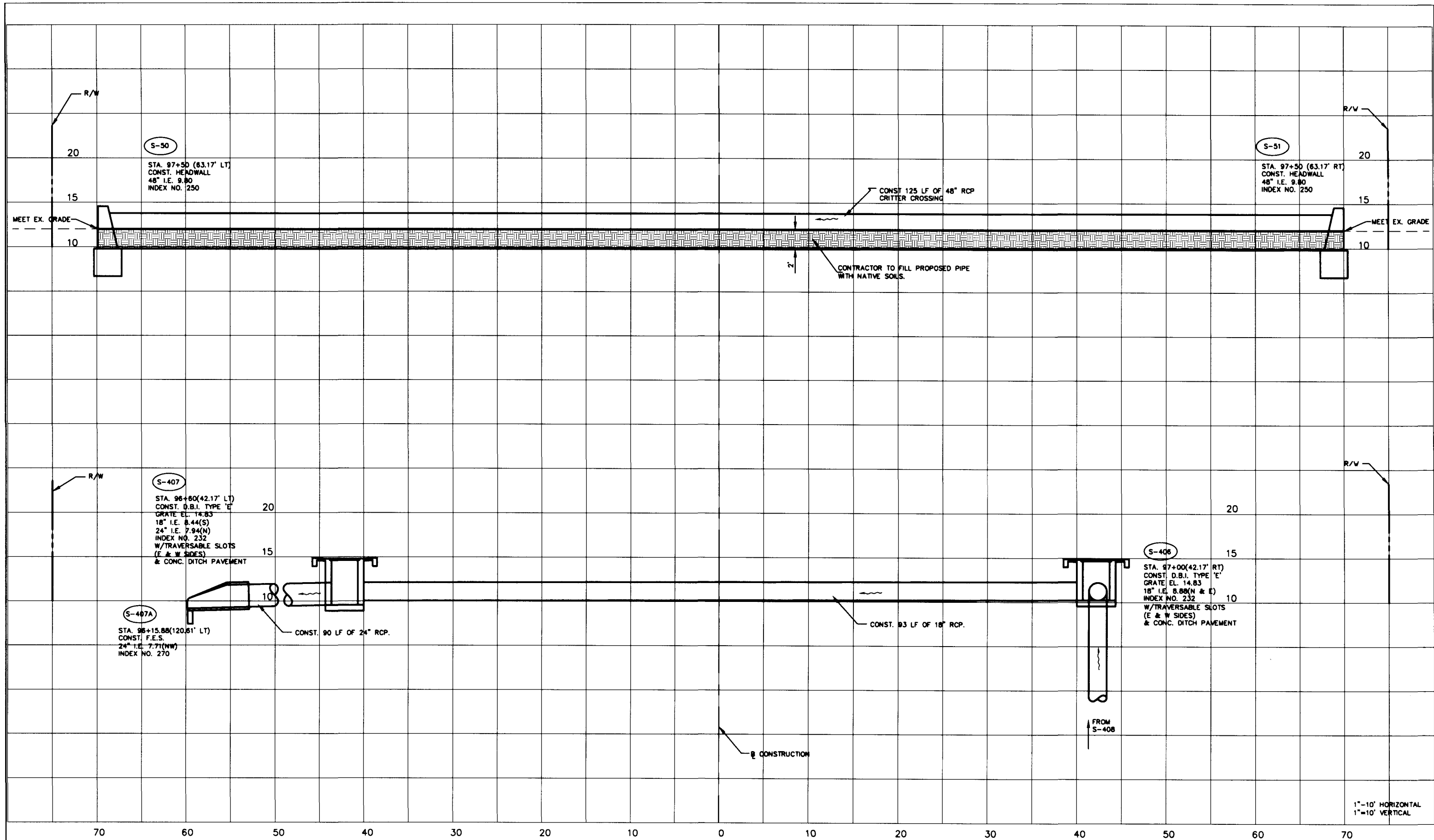
PHONE: 813 • 880 • 8881
FAX: 813 • 880 • 8882
E-MAIL: king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DRAINAGE STRUCTURES (8)


DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 40 OF 119
View:

W:\TRANS\EW\PHASE1\CADD\drstrd09.dwg Sat Jul 08 16:09:54 2000 King Engineering Associates, Inc. (TAW-Pasco)



REVISIONS		BY	DATE	SURVEY BOOK No.:	
				SURVEY DIVISION	BY DATE
				SURVEYED	
				TECHNICIAN	
				CHECKED	
				DESIGN DIVISION	
				DESIGNED	MLM 04/00
				DRAWN	TAW 04/00
				CHECKED	TAW 04/00
REV. CRITTER CROSSING PIPE SIZE AND NOTE ON PIPE FILL.		MLM/ILW	5-31-00		

PINELLAS COUNTY, FLORIDA
Department of Public Works

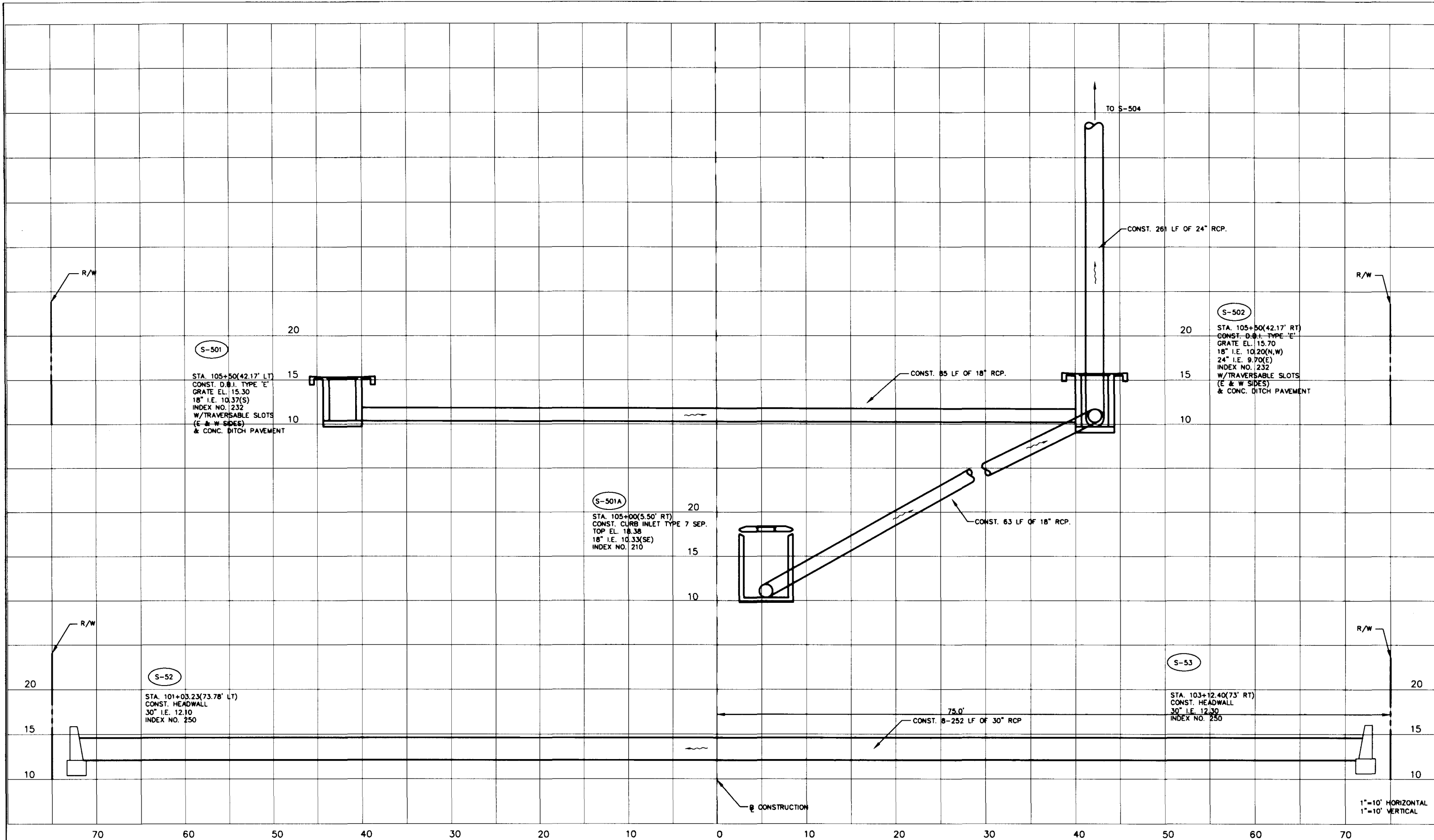
**king**
ENGINEERING
ASSOCIATES, INC.
PHONE: 813 • 880 • 8881
FAX: 813 • 880 • 8882
E-MAIL: king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DRAINAGE STRUCTURES (9)

DATE:	APRIL 10, 2000
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET 41 OF 119	File: View:

W:\TRANS\EW\PHASE1\CADD\drstrd10.dwg Mon Apr 10 11:32:36 2000 King Engineering Associates, Inc. (TAM-Pasco)



REVISIONS	BY	DATE	SURVEY BOOK No.:
			SURVEY DIVISION
			BY
			DATE
			DESIGNED
			MLM 04/00
			DRAWN
			TAM 04/00
			CHECKED
			TWM 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.

4921 W. BAYVIEW AVENUE
TAMPA, FLORIDA 33611

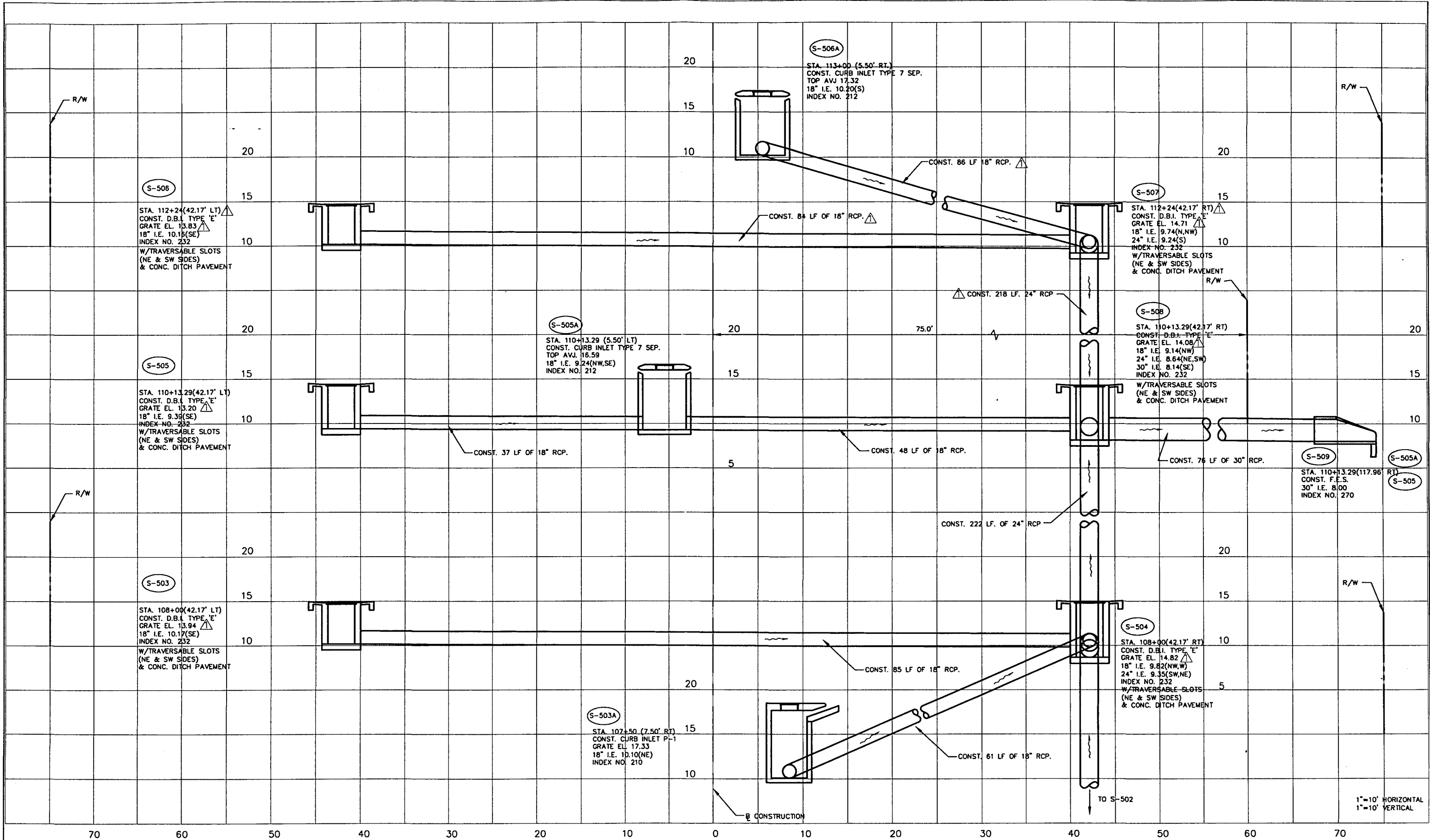
PHONE 813-880-8881
FAX 813-880-2882
E-MAIL king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DRAINAGE STRUCTURES (10)

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 42 OF 119
File: View:

O: \\TRANS\\EW\\PHASE1\\CADD\\drstrd11.dwg Mon Jan 08 16:36:28 2001 King Engineering and Associates, Inc. (TAW-Pasco)



REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
			SURVEYED			
			TECHNICIAN			
			CHECKED			
			DESIGN DIVISION			
			DESIGNED	MLM	04/00	
			DRAWN	TAW	04/00	
			CHECKED	TWM	04/00	
REVISED NOTED INLET G.E., STA. AND PIPE LENGTHS			MLM	1/5/01		

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.

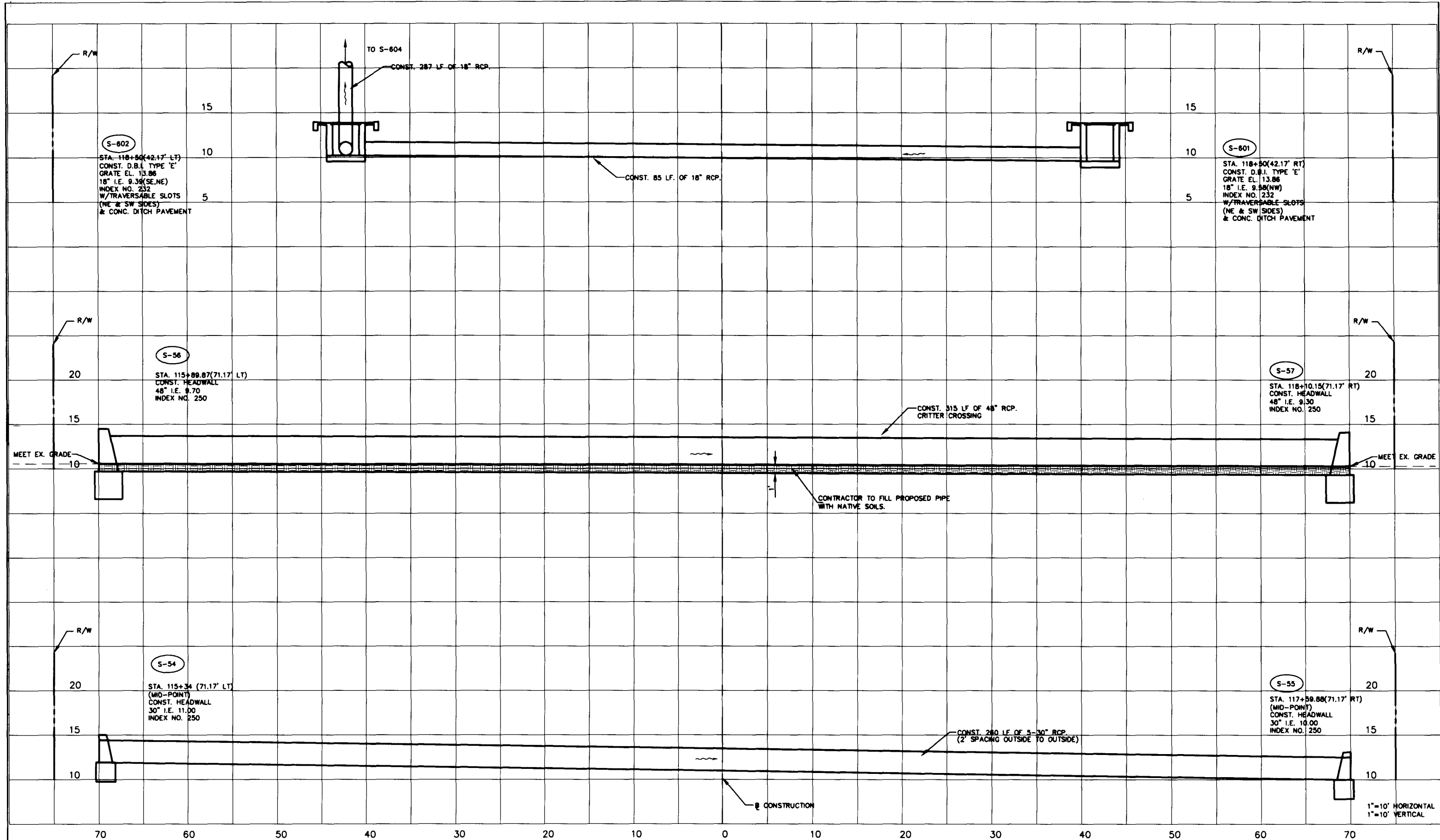
4821 REGIONAL HWY
ONE MIAMI, CORTEX, FL 33156
TAMPA, FLORIDA 33634

PHONE 813-880-8881
FAX 813-880-8882
E-MAIL king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DRAINAGE STRUCTURES (11)

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 43 OF 119
File: View:



REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	MLM	04/00
			DRAWN	TAW	04/00
			CHECKED	TWM	04/00
REV. CRITTER CROSSING PIPE SIZE AND NOTE ON PIPE FILL			MLM/ILW	5-31-00	

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.

PHONE 813-880-8881
FAX 813-880-8882
E-MAIL king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DRAINAGE STRUCTURES (12)

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 44 OF 119
File:
View:

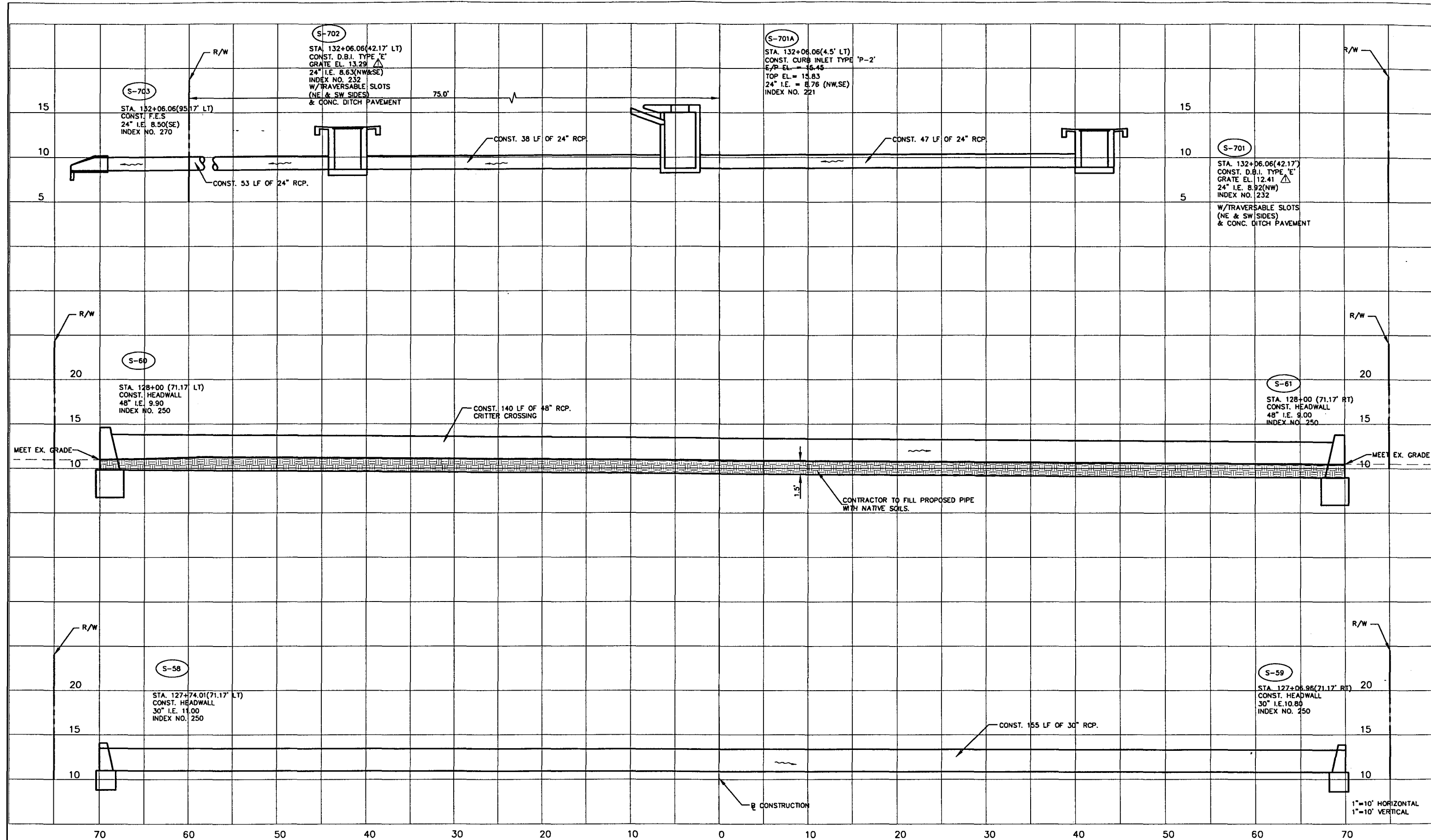
PINELLAS COUNTY, FLORIDA
Department of Public Works

K i n g
ENGINEERING ASSOCIATES, INC.

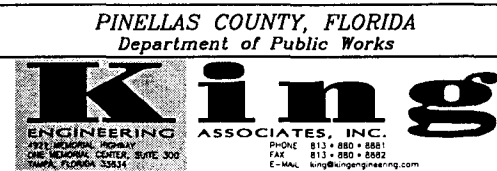
4921 MIDLAND HIGHWAY
ONE MEDICAL CENTER, SUITE 300
DUNN, FLORIDA 33618

PHONE: 813 • 880 • 8861
FAX: 813 • 880 • 8862
E-MAIL: king@kingengineering.com

DATE: APRIL 10, 2000	
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET 45 OF 119	File: View:



REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
Δ REVISED NOTED INLET GRATE EL.	MLM	1-5-01	DESIGNED	MLM	04/00	
ADDED STRUCTURE S-701A	MLM/TAW	6-20-00	DRAWN	TAW	04/00	
REV. CRITTER CROSSING PIPE SIZE AND NOTE ON PIPE FILL	MLM/JLW	5-31-00	CHECKED	TWM	04/00	

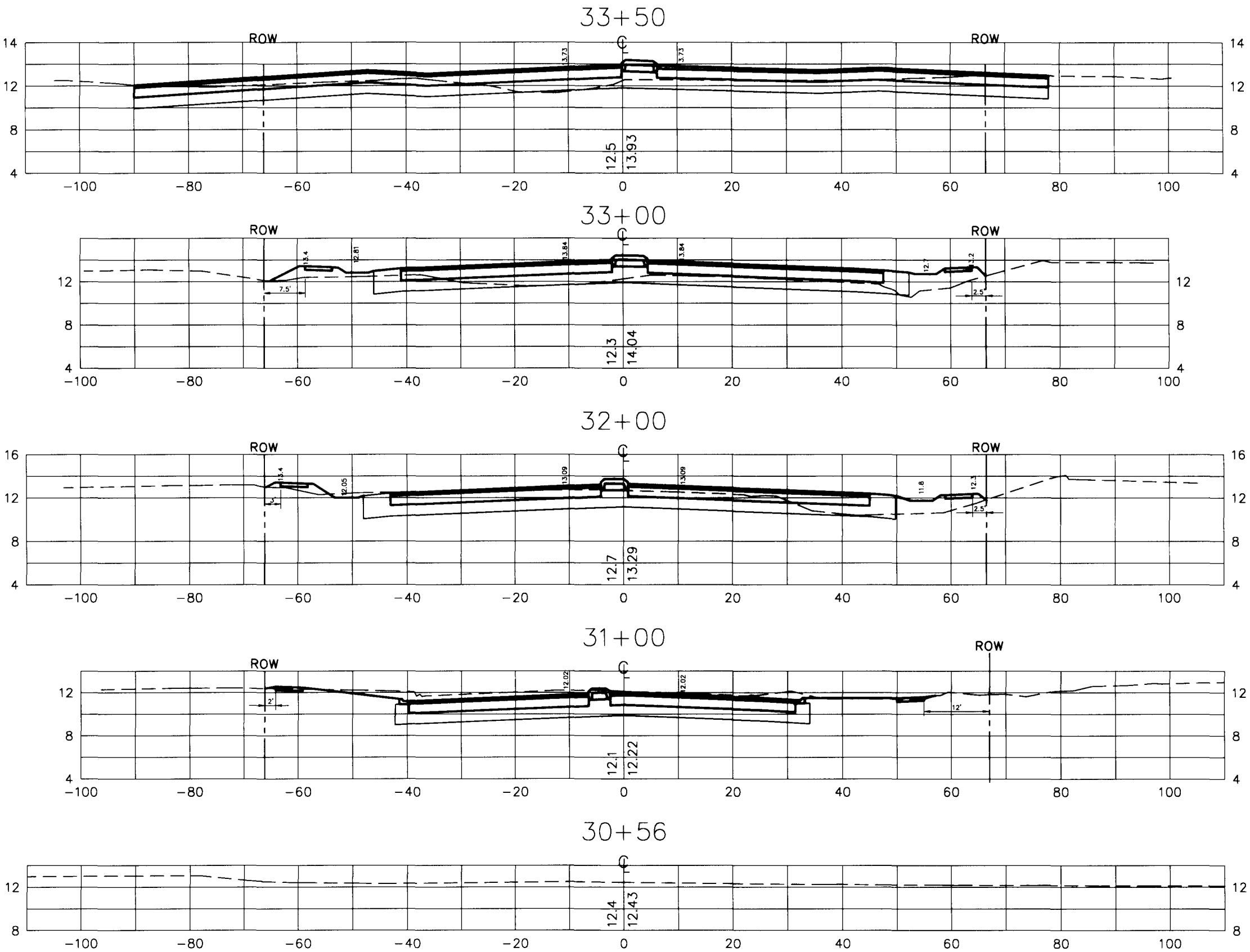


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

DRAINAGE STRUCTURE (14)

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 46 OF 119
File: View:

W: \\TRANS\\EW\\PHASE1\\CADD\\Rdxsrd01.dwg Thu Jun 29 15:28:30 2000 King Engineering Associates, Inc. (jki-pasco)



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
225.8		0	
	373.3	0.8	
177.4		0.9	
	743.3	3.3	
224.0		0.9	
	659.1	1.7	
131.9		0	
	107.5	0	
0		0	

REVISIONS	BY	DATE	SURVEY BOOK No.:	
			SURVEY DIVISION	BY DATE
			SURVEYED	
			TECHNICIAN	
			CHECKED	
			DESIGN DIVISION	
			DESIGNED	MLM 04/00
			DRAWN	TAN 04/00
			CHECKED	TWM 04/00
REVISED PGL & SIDEWALK LOCATIONS			MLM/JLW	5-31-00

PINELLAS COUNTY, FLORIDA
Department of Public Works

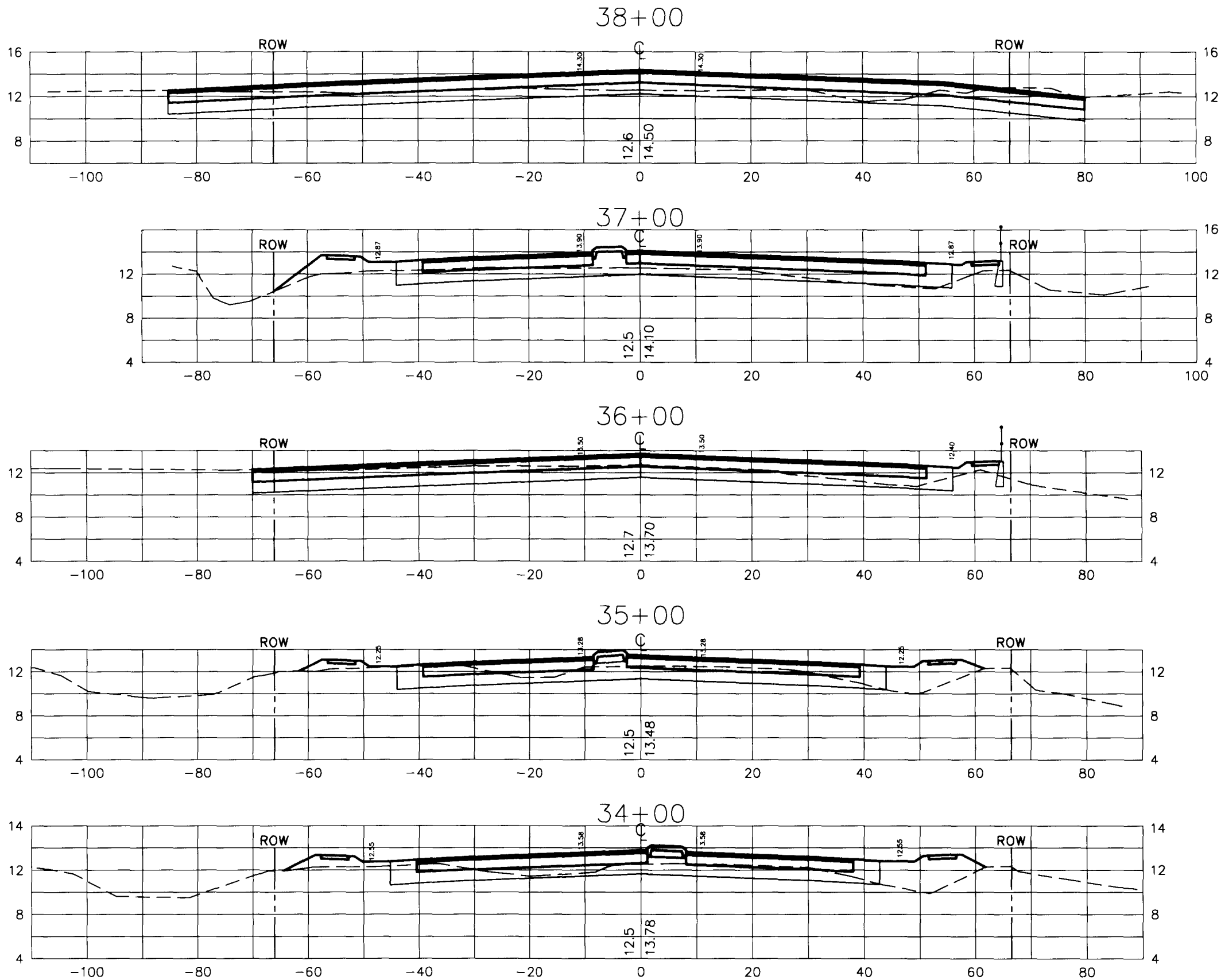


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (1)
STA. 30+56 TO STA. 32+50

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 47 OF 119
File: RDXSRD01 View: 1-11X17

W:\TRANS\EW\PHASE1\CADD\Rdxsrd01.dwg Thu Jun 29 15:29:37 2000 King Engineering Associates, Inc. (jki-pasco)



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
50.5		32.0	
	106.9		181.1
7.2		65.8	
	154.1		152.0
76.0		16.3	
	244.4		94.1
56.0		34.5	
	295.9		111.1
103.8		25.5	
	305.2		23.6

REVISIONS		BY	DATE	SURVEY BOOK No.		BY	DATE
				SURVEYED			
				TECHNICIAN			
				CHECKED			
				DESIGN DIVISION			
				DESIGNED		MLM	04/00
				DRAWN		TAW	04/00
				CHECKED		TWM	04/00
REVISED PCL		MLM/JLW	5-31-00				

PINELLAS COUNTY, FLORIDA
Department of Public Works

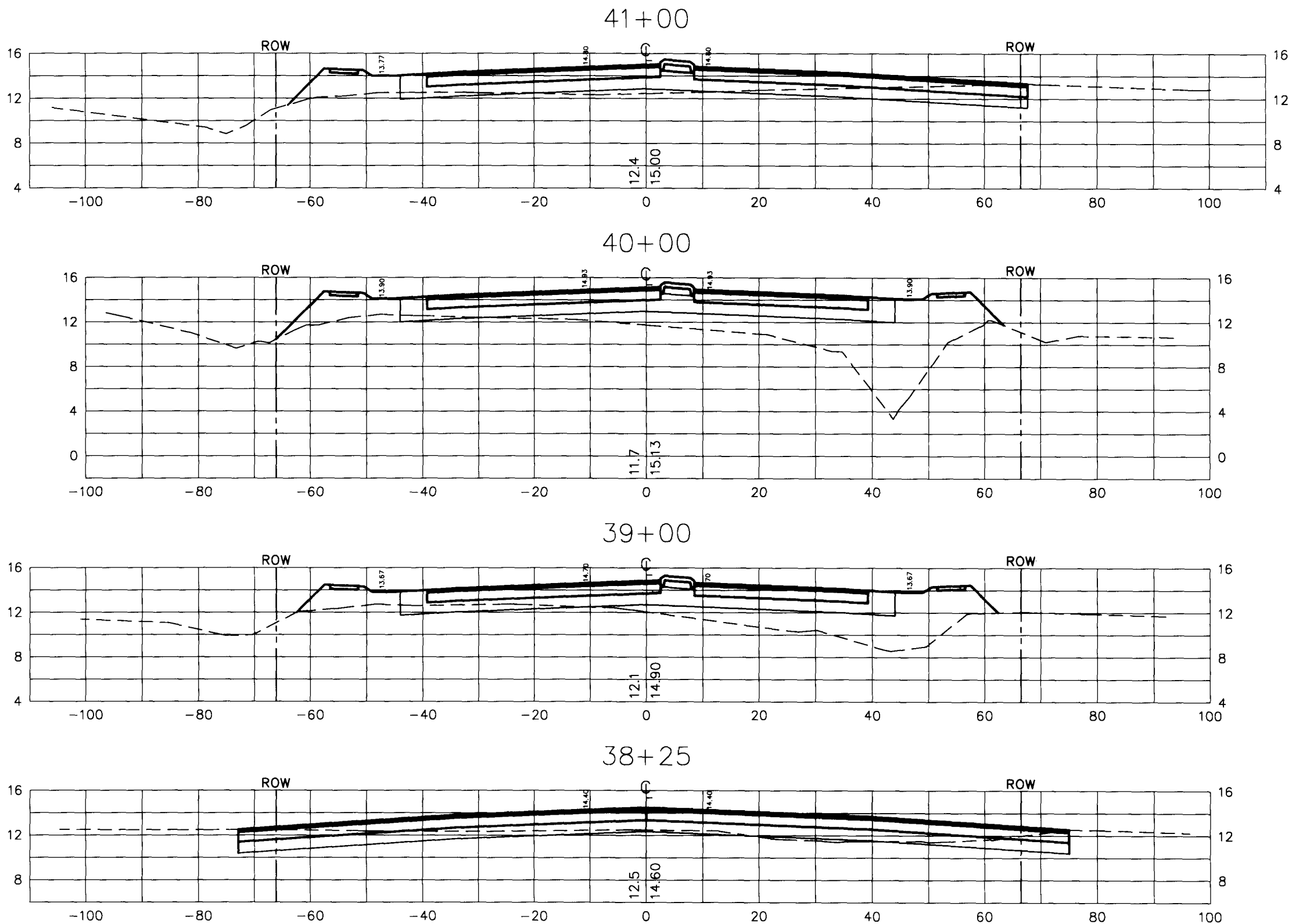
King
ASSOCIATES, INC.

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (2)
STA. 34+00 TO STA. 38+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 48 OF 119
File: RDXSRD01 View: 1-11X17

W:\TRANS\EW\PHASE1\CADD\Rdxsrd01.dwg Thu Jun 29 15:30:28 2000 King Engineering Associates, Inc. (jki-pasco)



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
14.6		113.6	
	27.0		880.7
0		362.0	
	0		1,142.1
0		254.8	
	30.3		461.5
21.8		77.5	
	33.5		50.7

REVISIONS		BY	DATE	SURVEY BOOK No.	
				SURVEY DIVISION	BY DATE
				SURVEYED	
				TECHNICIAN	
				CHECKED	
				DESIGN DIVISION	
				DESIGNED	MLM 04/00
				DRAWN	TAW 04/00
				CHECKED	TWM 04/00
REVISED PGL		MLM/JLW	5-31-00		

PINELLAS COUNTY, FLORIDA
Department of Public Works

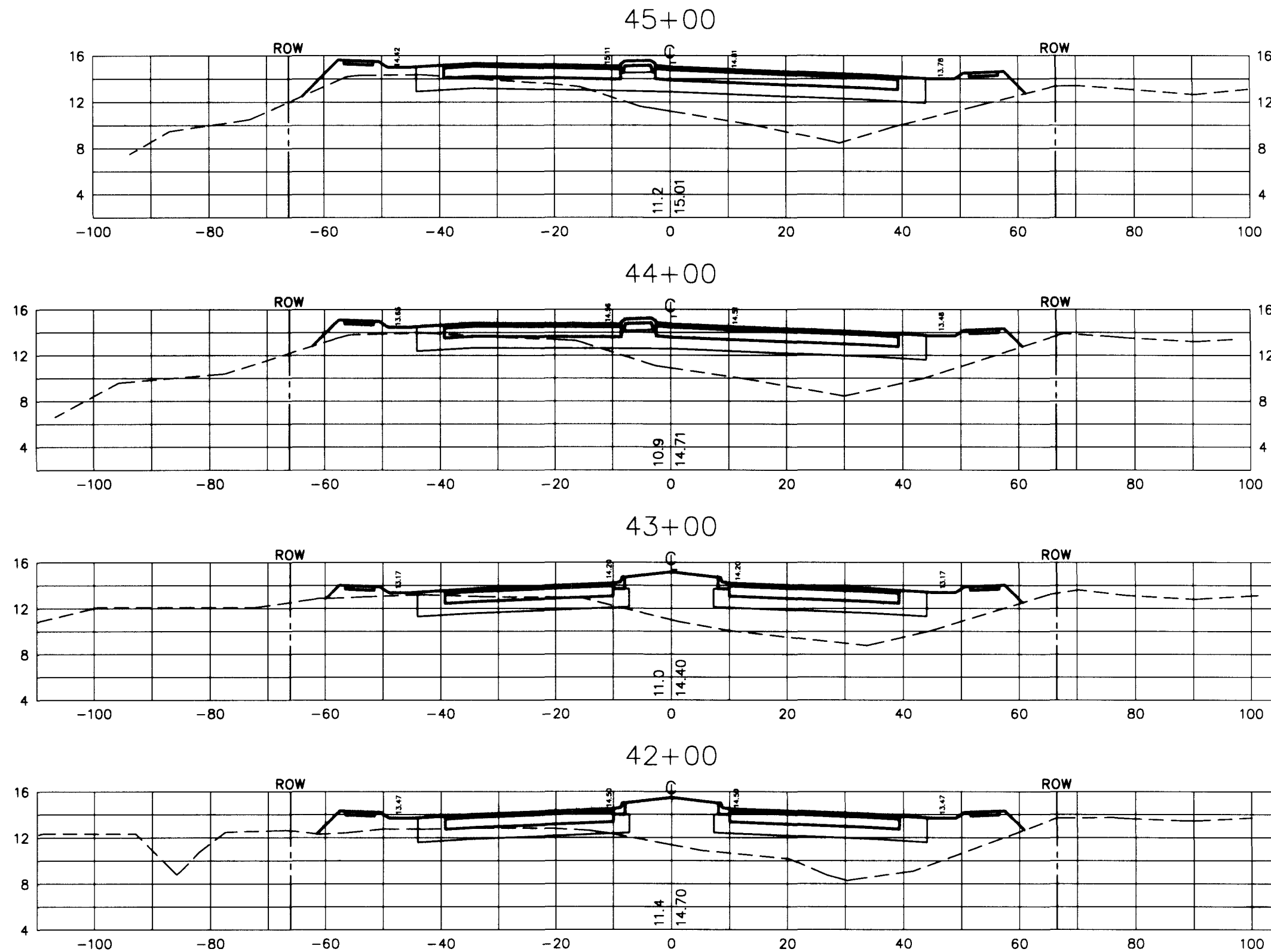


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (3)
STA. 38+25 TO STA. 41+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 49 OF 119
File: RDXSRD01 View: 1-11X17

W: \\TRANS\\E\\PHASE1\\CADD\\RDXSRD01.dwg Thu Jun 29 15:31:53 2000 King Engineering Associates, Inc. (jki-pasco)



EARTHWORK			
CUT		FILL	
A	V	A	V
0	2.0	274.5	982.6
1.1	15.2	256.1	921.9
7.1	13.1	241.7	970.0
0	27.0	282.1	732.8

REVISIONS	BY	DATE	SURVEY BOOK No.:
			SURVEY DIVISION BY DATE
			SURVEYED
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED BY DATE
			DRAWN TAW 04/00
			CHECKED TAW 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

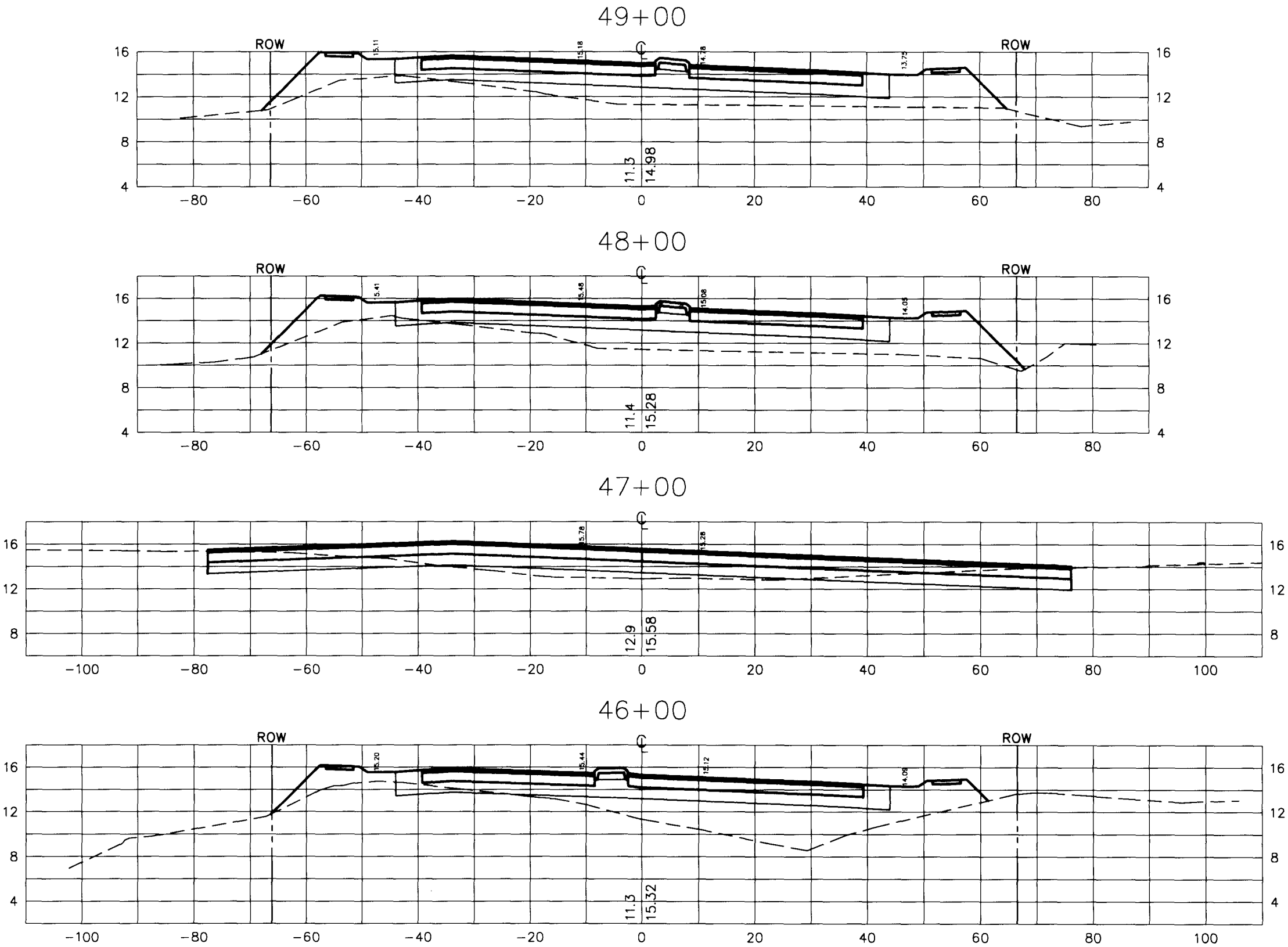
ing
ASSOCIATES, INC.
11111
Tampa, FL 33613
(813) 988-1111

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (4)
STA. 42+00 TO STA. 45+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 50 OF 119
File: RDXSRD01 View: 1-11X17

W: \\TRANS\\EW\\PHASE1\\CADD\\Rdxsrd01.dwg Thu Jun 29 15:33:23 2000 King Engineering Associates, Inc. (jki-pasco)



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		282.9	
0		1,102.0	
0		312.2	
54.4		776.7	
29.4		107.2	
54.4		760.9	
0		303.7	
0		1,070.7	

REVISIONS	BY	DATE	SURVEY BOOK No.	
			SURVEY DIVISION	BY DATE
			SURVEYED	
			TECHNICIAN	
			CHECKED	
			DESIGN DIVISION	
			DESIGNED	MLM 04/00
			DRAWN	TAW 04/00
REVISED PCL	MLM/JLN	8-31-00	CHECKED	TWN 04/00

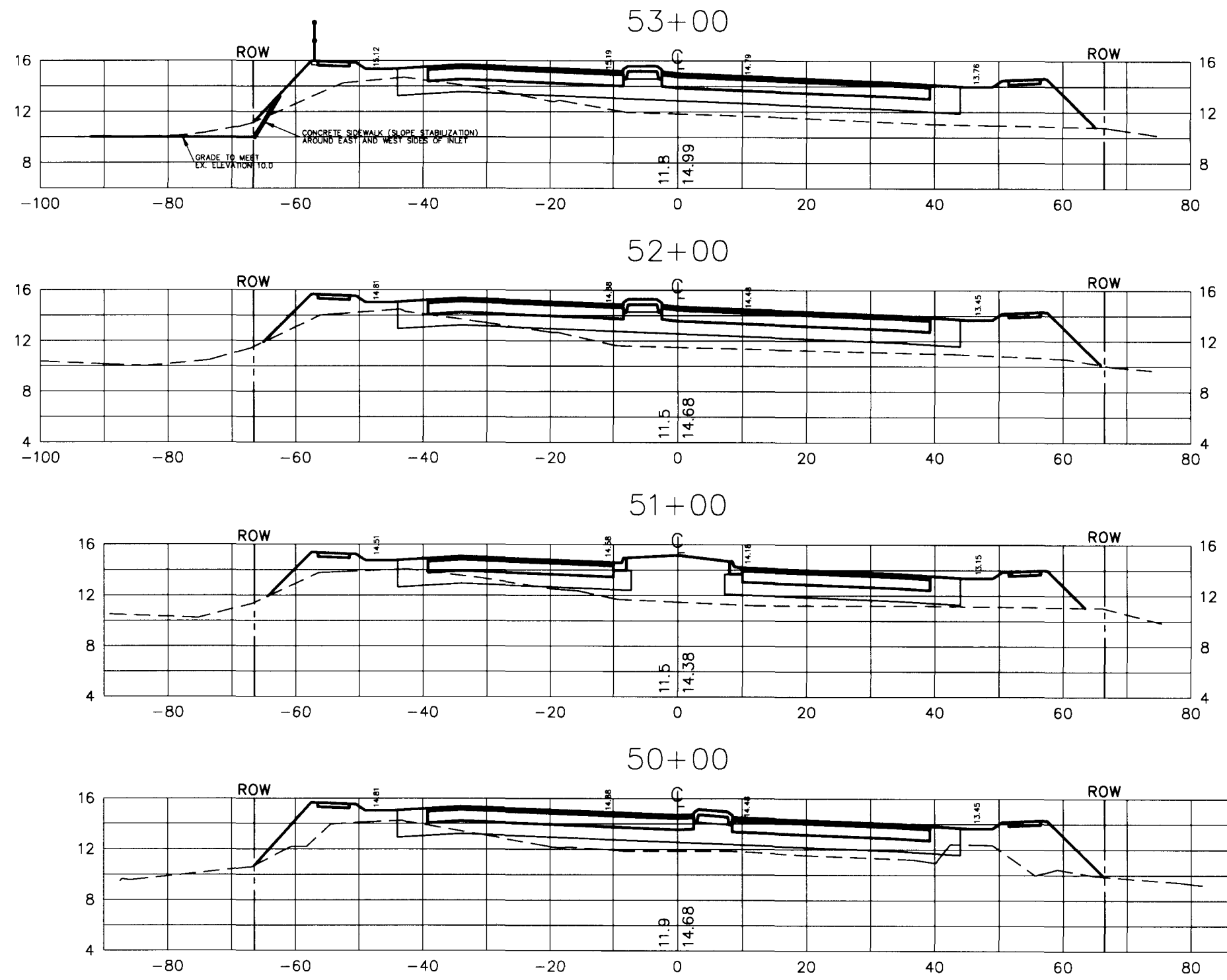
PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ASSOCIATES, INC.
P.O. Box 81
Tampa, FL 33601
Tel: 813-281-1111
Fax: 813-281-1112
E-Mail: kking@kingassoc.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (5)
STA. 46+00 TO STA. 49+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 51 OF 119
File: RDXSRD01 View: 1-11X17




EARTHWORK			
CUT		FILL	
A	V	A	V
0		243.1	
	0		872.8
0		228.2	
	0		816.7
0		212.8	
	0		801.1
0		219.8	
	0		930.9

1" = 20' HORZ.
1" = 10' VERT.

REVISIONS	BY	DATE	SURVEY BOOK No.:				
			SURVEY DIVISION	BY	DATE		
			SURVEYED				
			TECHNICIAN				
			CHECKED				
			DESIGN DIVISION				
			DESIGNED	MLM	04/00		
			DRAWN	TWM	04/00		
REVISED	OUTFALL	● STA. 53+00	MLM/JLW	6-31-00	CHECKED	TWM	04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

**ing**
ASSOCIATES, INC.

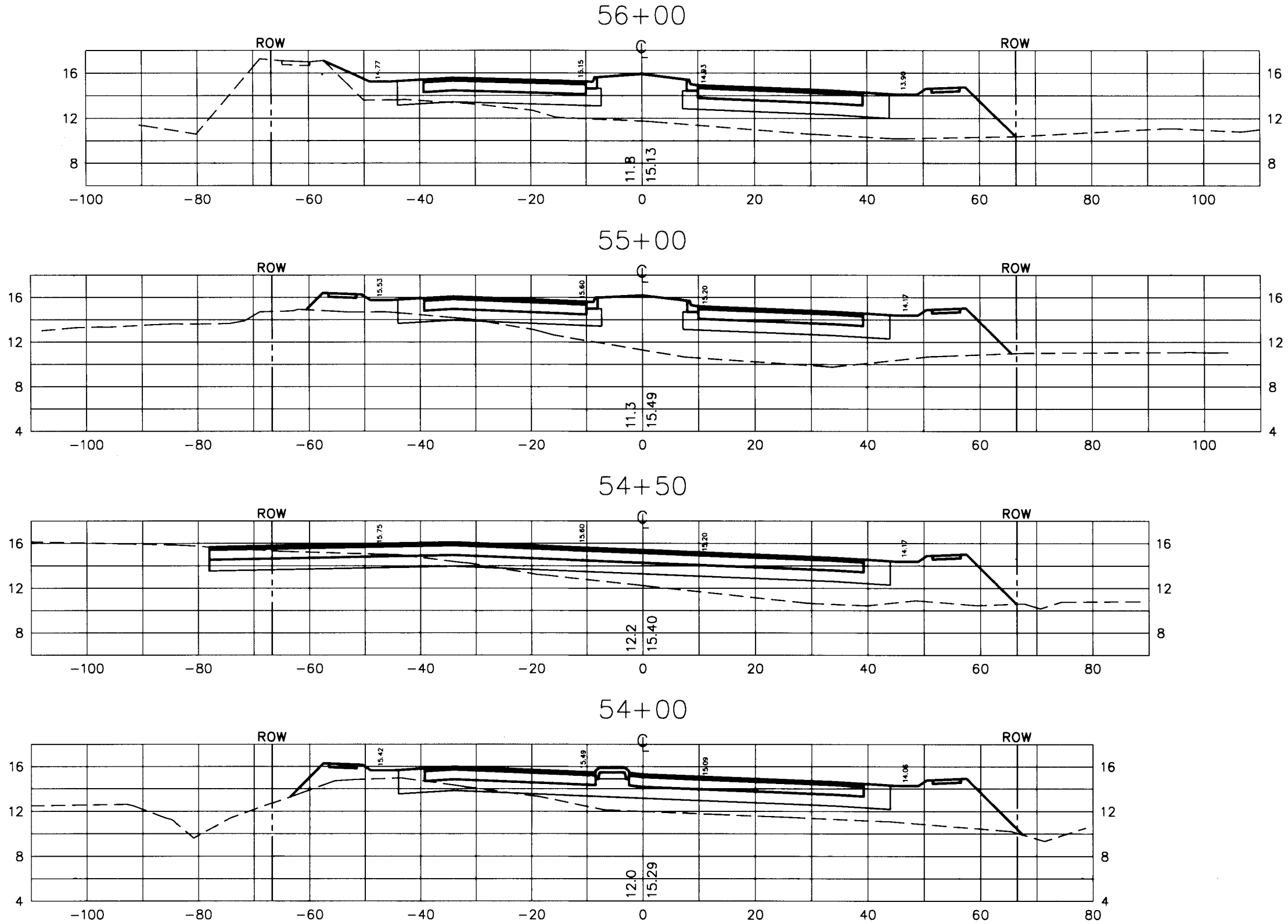
PHONE (813) 888-4889
FAX (813) 888-4888
E-MAIL engineering@ing.com

*EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES*

CROSS SECTIONS (6)
STA. 50+00 TO STA. 53+00

<i>DATE: APRIL 10, 2000</i>	
<i>CONTRACT NO.:</i>	
<i>SURVEY FILE NO.:</i>	
<i>SHEET 52 OF 119</i>	<i>File: RDXSRD01</i> <i>View: 1-11X17</i>

W: \\TRANS\\EW\\PHASE1\\CADD\\Rdxsrd01.dwg Mon Apr 10 12:25:30 2000 King Engineering Associates, Inc.



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		315.3	
0		1,235.2	
0		351.7	
17.1		553.0	
18.5		245.5	
17.1		457.6	
0		248.7	
0		910.7	

REVISIONS	BY	DATE	SURVEY BOOK No.	
			SURVEY DIVISION	BY DATE
			SURVEYED	
			TECHNICIAN	
			CHECKED	
			DESIGN DIVISION	
			DESIGNED	MLM 04/00
			DRAWN	TAW 04/00
			CHECKED	TWM 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

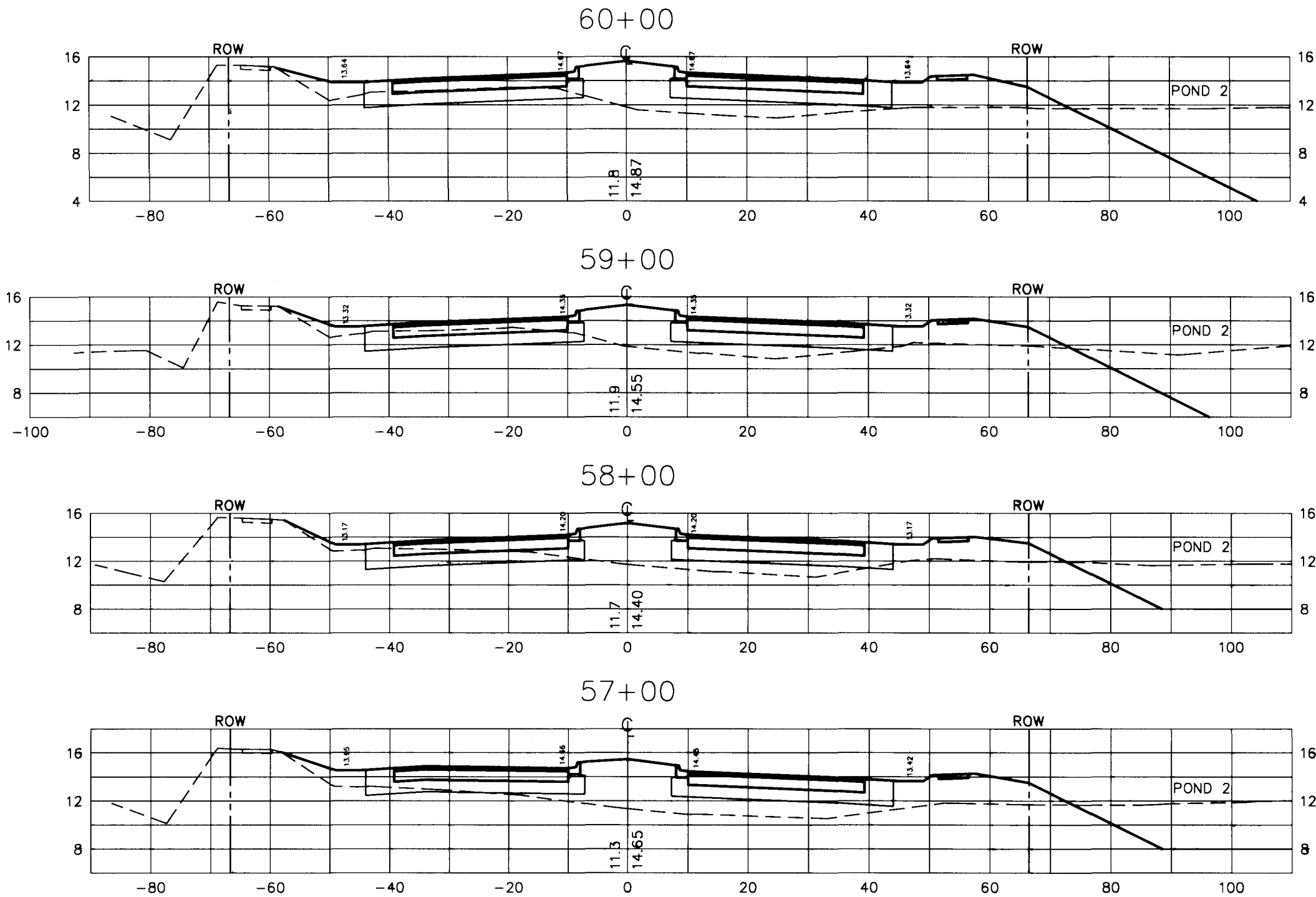
King
ASSOCIATES, INC.

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (7)
STA. 54+00 TO STA. 56+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 53 OF 119
File: RDXSRD01 View: 1-11X17

W: \TRANS\EW\PHASE1\CADD\Rdxsrd01.dwg Mon Apr 10 12:25:36 2000 King Engineering Associates, Inc.



1" = 20' HORZ.
1" = 10' VERT.

REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	MLM	04/00
			DRAWN	TAW	04/00
			CHECKED	TWM	04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



*EAST-WEST CONNECTOR ROAD
PHASE I*

**TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES**

CROSS SECTIONS (8)
STA. 57+00 TO STA. 60+00

DATE: *APRIL 10, 2000*

CONTRACT NO.:

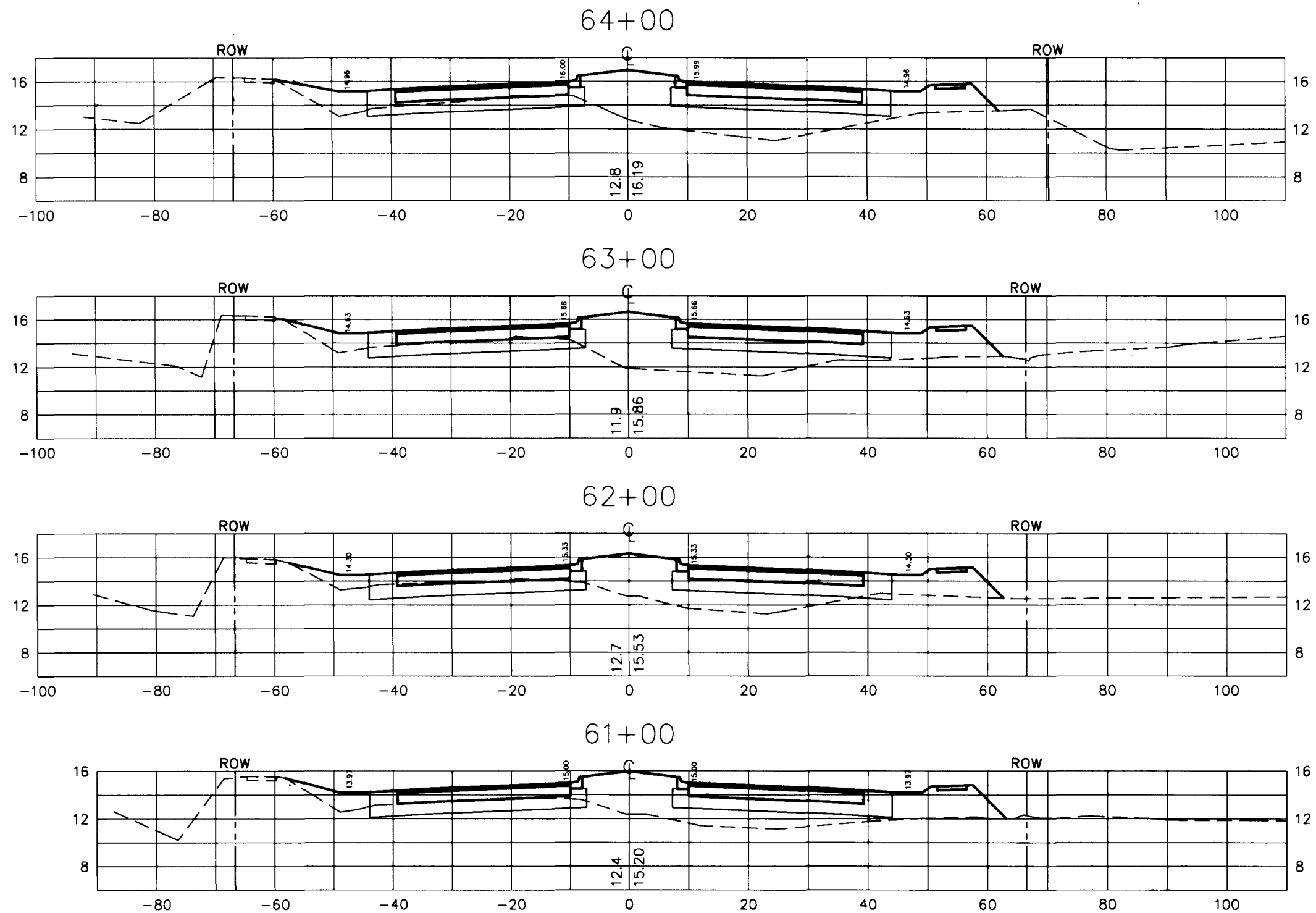
SURVEY FILE NO.:

SHEET 54 OF 11

File: RDXSRD01
View: 1-11X17

EARTHWORK			
CUT		FILL	
A	V	A	V
2.6		212.5	
	23.3		716.
10.0		174.3	
	28.3		642.
5.3		172.6	
	9.8		800.
0		259.4	
	0		1,064.

W: \\TRANS\\EW\\PHASE1\\CADD\\Rdxsrd01.dwg Mon Apr 10 12:25:42 2000 King Engineering Associates, Inc.



EARTHWORK			
CUT		FILL	
A	V	A	V
0.8		231.2	
	3.0		831.3
0.8		217.7	
	6.3		735.0
2.6		179.2	
	5.2		694.3
0.2		390	
	5.2		755.9

REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
			SURVEYED			
			TECHNICIAN			
			CHECKED			
			DESIGN DIVISION			
			DESIGNED	MLM	04/00	
			DRAWN	TAW	04/00	
			CHECKED	TWM	04/00	

PINELLAS COUNTY, FLORIDA
Department of Public Works

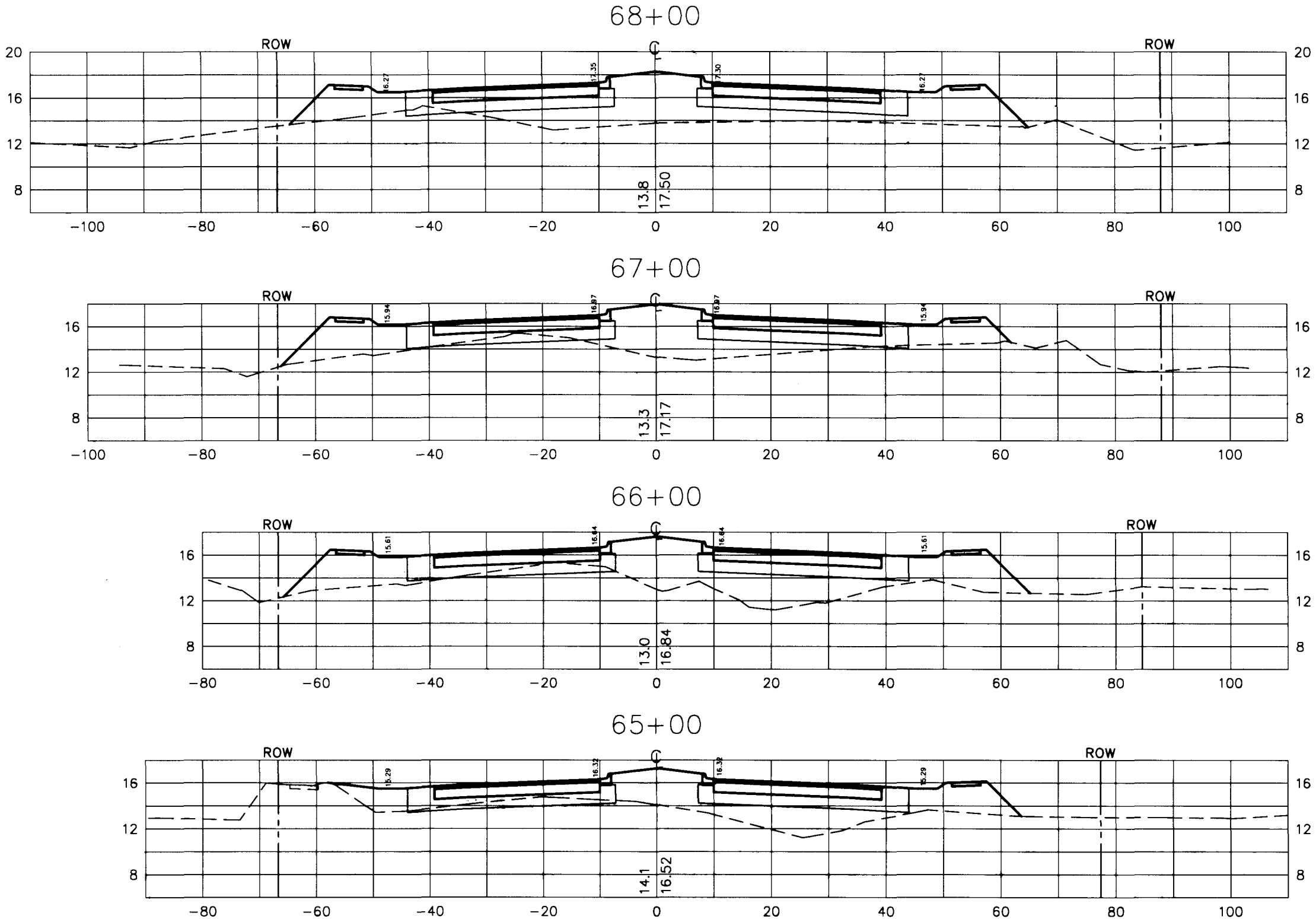


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS '(9)
STA. 61+00 TO STA. 64+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 56 OF 119
File: RDXSRD01 View: 1-11X17

W: \TRANS\EW\PHASE1\CADD\Rdxsrd01.dwg Mon Apr 10 12:25:48 2000 King Engineering Associates, Inc.



EARTHWORK			
CUT		FILL	
A	V	A	V
0		310.3	
	0		1,048.5
0		255.9	
	0		1,032.0
0		301.4	
	0		985.2
0		230.6	
	1.5		855.2

REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	MLM	04/00
			DRAWN	TAM	04/00
			CHECKED	TWB	04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



*EAST-WEST CONNECTOR ROAD
PHASE I*

**TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES**

CROSS SECTIONS (10)
STA. 65+00 TO STA. 68+00

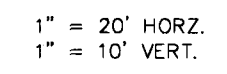
DATE: APRIL 10, 2000


CONTRACT NO.:

SURVEY FILE NO.:

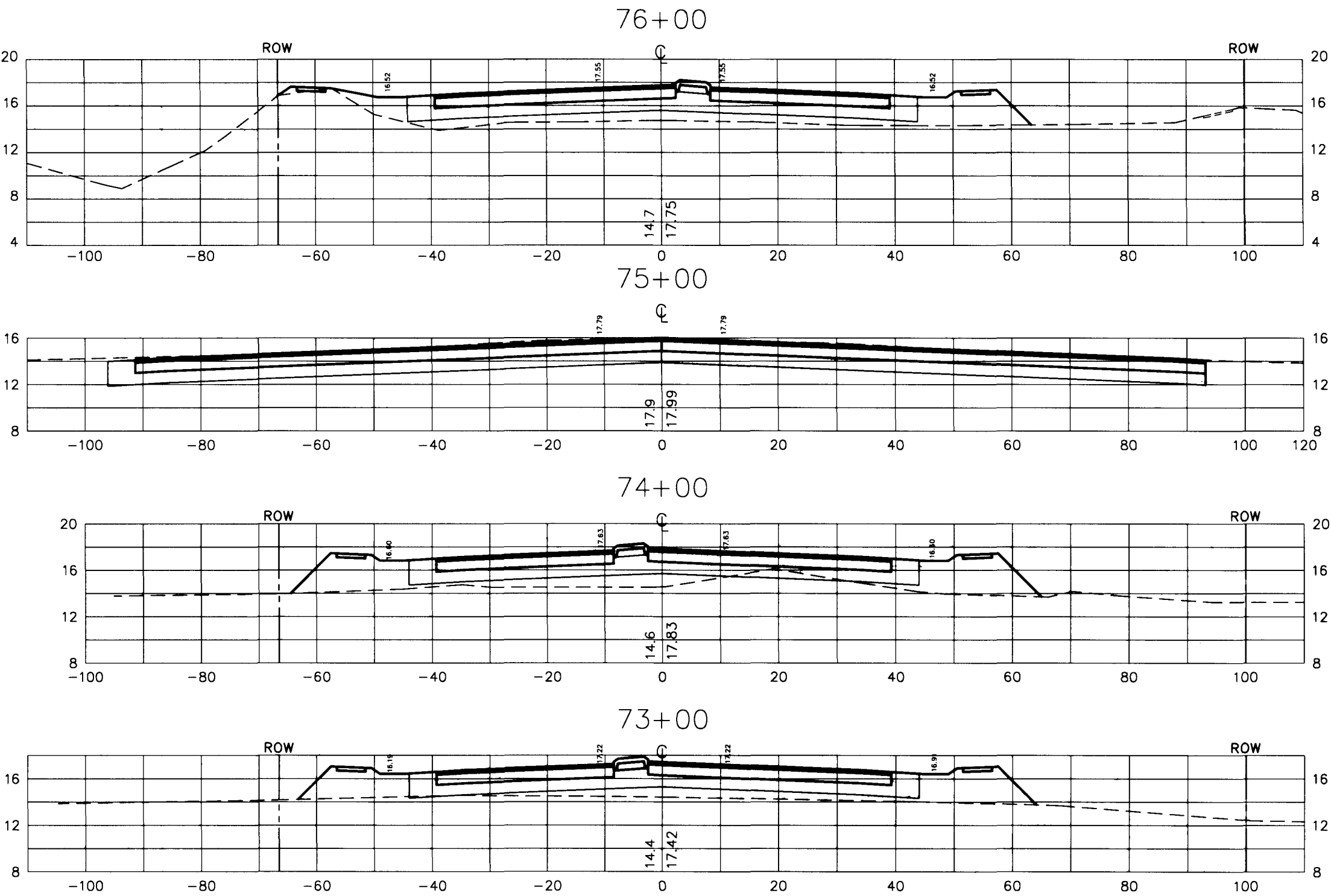
SHEET 56 OF 119

File: RDXSRD01
View: 1-11X17



REVISIONS	BY	DATE	SURVEY BOOK No.: SURVEY DIVISION BY DATE SURVEYED TECHNICIAN CHECKED DESIGN DIVISION DESIGNED MLM 04/00 DRAWN TAW 04/00 CHECKED TWM 04/00			PINELLAS COUNTY, FLORIDA Department of Public Works 		EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES		CROSS SECTIONS (11) STA. 69+00 TO STA. 72+00		DATE: APRIL 10, 2000 CONTRACT NO.: SURVEY FILE NO.: SHEET 57 OF 119		File: RDKSRD01 View: 1-11X17
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1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0.4		227.0	
	0.7		420.4
0		0	
	0		446.1
0		240.9	
	0		873.5
0		230.8	
	0		881.1

REVISIONS		BY	DATE	SURVEY BOOK No.	
SURVEYED				SURVEY DIVISION	BY DATE
TECHNICIAN					
CHECKED					
DESIGN DIVISION					
DESIGNED	MLM	04/00			
DRAWN	TAW	04/00			
CHECKED	TWM	04/00			

PINELLAS COUNTY, FLORIDA
Department of Public Works



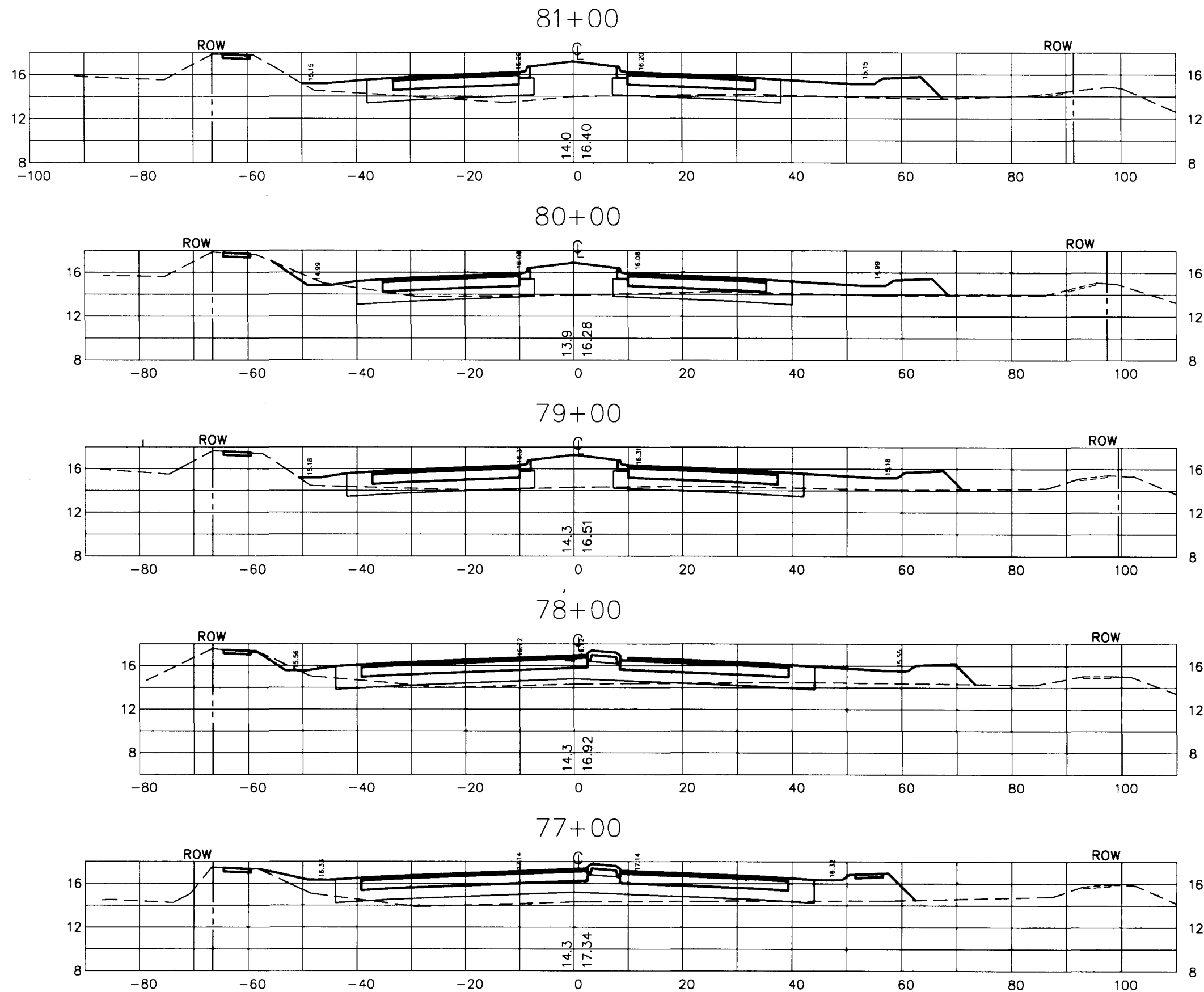
ASSOCIATES, INC.
10000 N. ...
Tampa, FL 33613
Tel. (813) ...
Fax (813) ...
E-mail: info@kingassoc.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (12)
STA. 73+00 TO STA. 76+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 58 OF 119
File: RDxsr001 View: 1-11X17

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EARTHWORK			
CUT		FILL	
A	V	A	V
1.5		162.3	
	13.9		504.8
6.0		110.3	
	13.9		467.6
1.5		142.2	
	9.3		542.0
3.5		150.5	
	9.3		636.5
1.5		193.2	
	3.5		778.1

REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			DESIGNED
			MLM 04/00
			DRAWN
			TAW 04/00
			CHECKED
			TWM 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

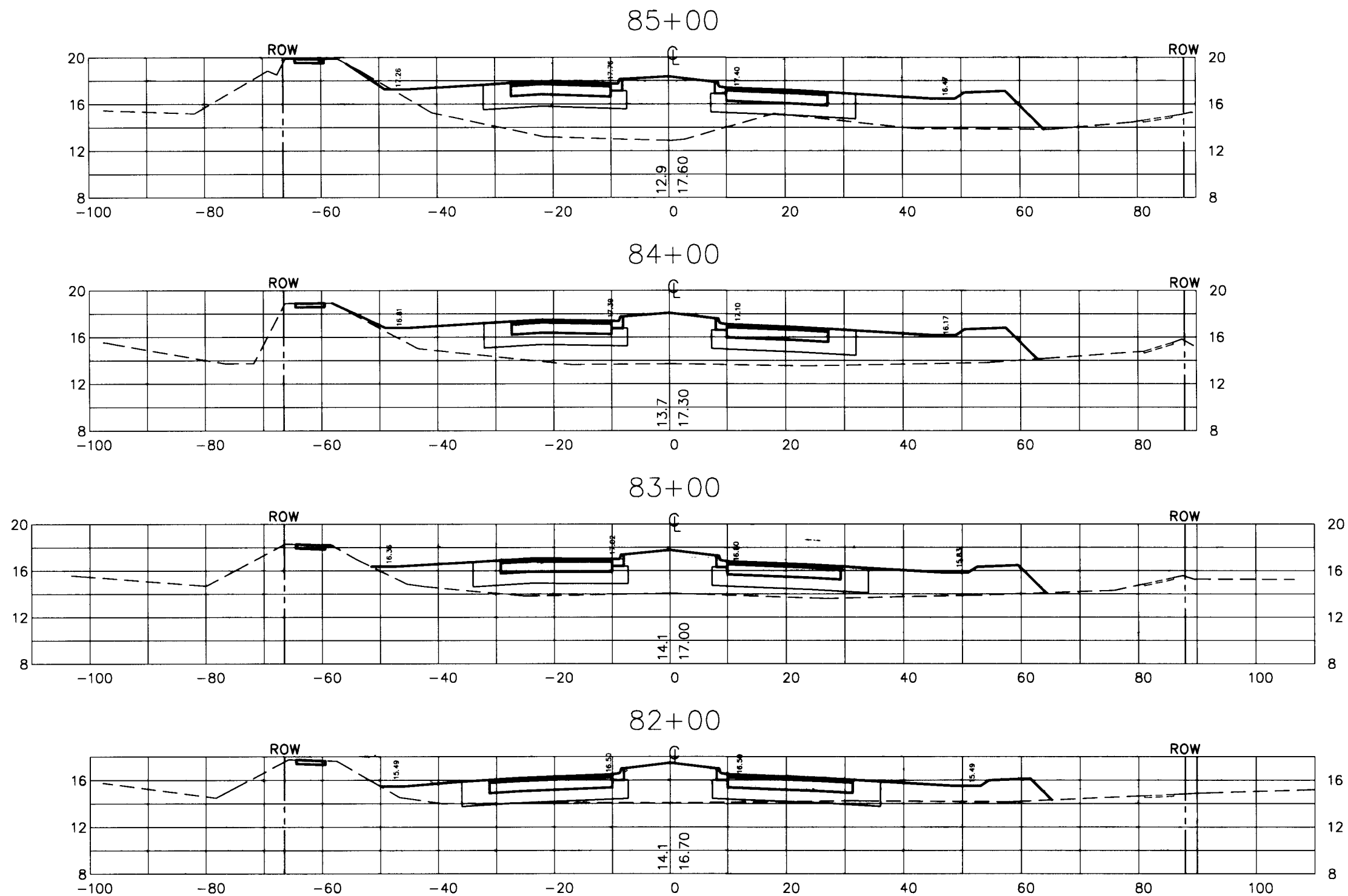


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (13)
STA. 77+00 TO STA. 81+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 59 OF 119
File: ROXSRD01 View: 1-11X17

W: \\TRANS\\EW\\PHASE1\\CADD\\Rdxsrd01.dwg Mon Apr 10 12:26:13 2000 King Engineering Associates, Inc.



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
1.6		319.3	
	5.6		1,145.6
1.5		299.3	
	5.6		897.6
1.5		255.4	
	5.6		800.5
1.5		181.2	
	5.6		636.1

REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			SURVEYED
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			DRAWN
			CHECKED

PINELLAS COUNTY, FLORIDA
Department of Public Works

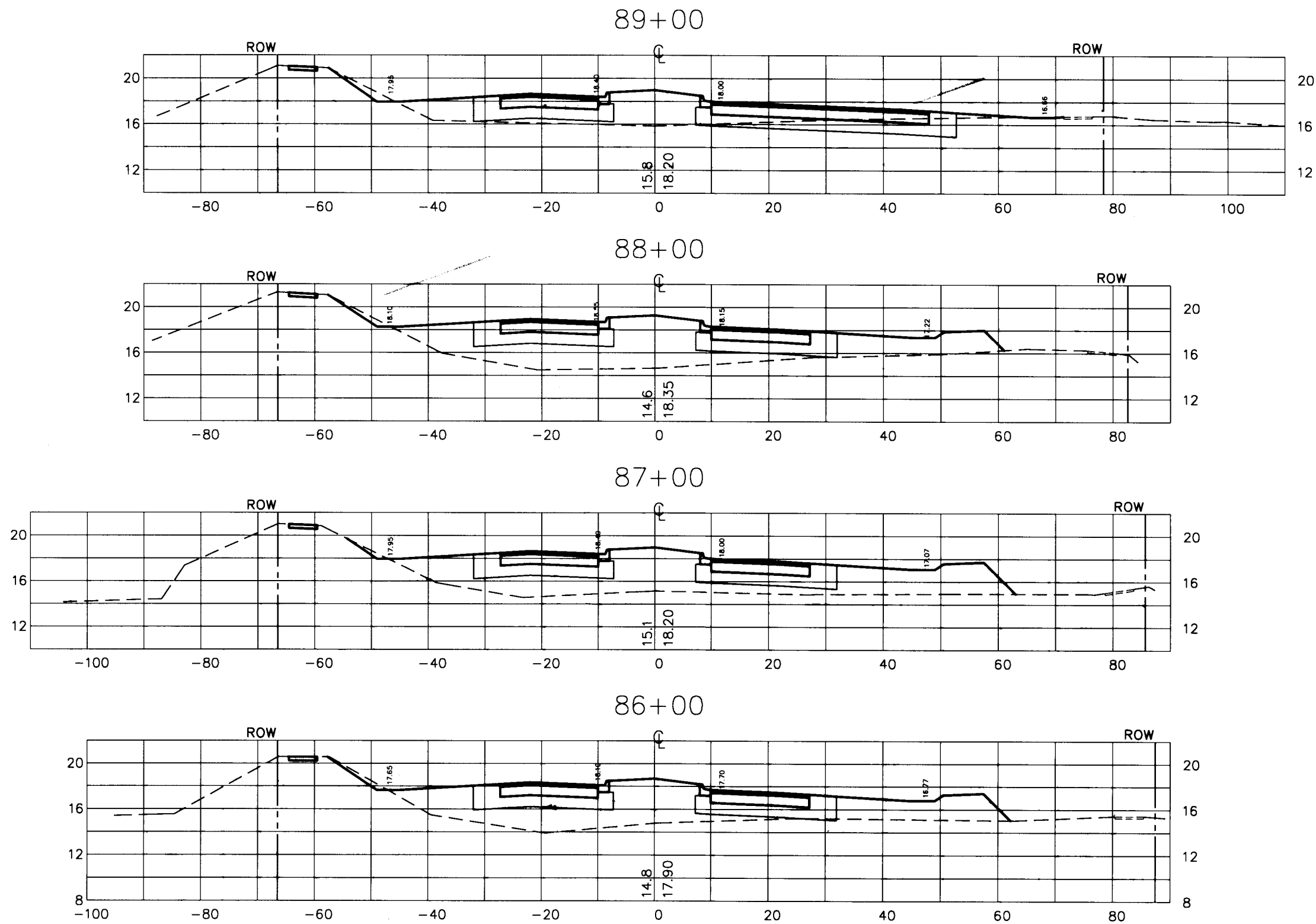


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (14)
STA. 82+00 TO STA. 85+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 60 OF 119
File: RDXSRD01 View: 1-11X17

W:\TRANSVIEW\PHASE1\CADD\Rdxsrd01.dwg Mon Apr 10 12:26:19 2000 King Engineering Associates, Inc.



EARTHWORK			
CUT		FILL	
A	V	A	V
6.6		212.4	
	21.3		723.3
4.9		269.2	
	15.0		1,002.0
3.2		271.9	
	14.8		973.1
4.8		253.6	
	11.9		1,060.9

REVISIONS		BY	DATE	SURVEY BOOK No.	
				SURVEY DIVISION	BY DATE
				TECHNICIAN	
				CHECKED	
				DESIGN DIVISION	
				DESIGNED	MLM 04/00
				DRAWN	TAW 04/00
				CHECKED	TWM 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

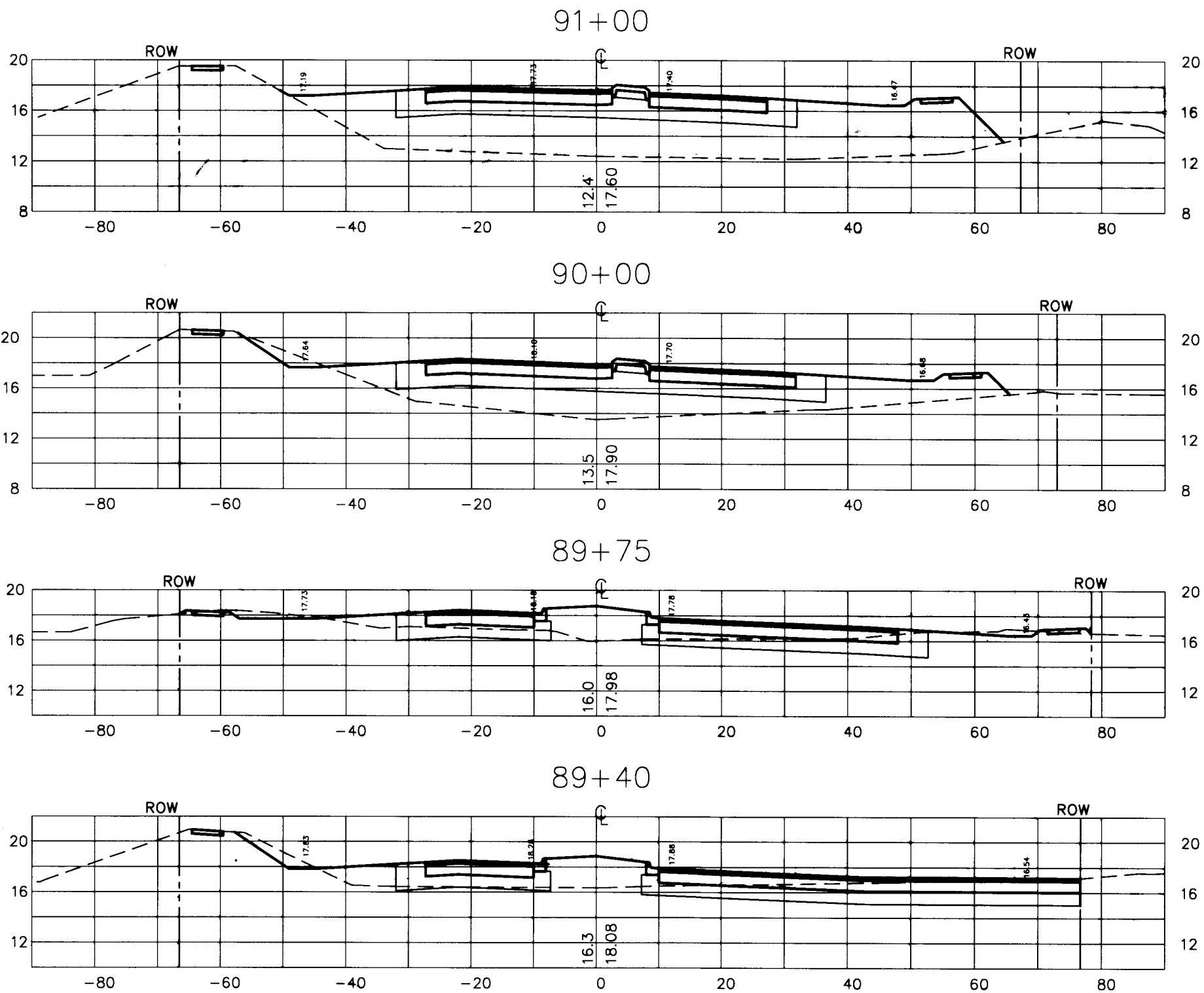


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (15)
STA. 86+00 TO STA. 89+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 01 OF 119
File: RDXSRD01 View: 1-11X17

W:\TRANS\EW\PHASE1\CADD\RDxsrd01.dwg Mon Apr 10 12:26:26 2000 King Engineering Associates, Inc.



EARTHWORK			
CUT		FILL	
A	V	A	V
1.5		430.3	
	21.1		1,280.2
9.9		261.0	
	11.6		152.1
15.2		67.5	
	41.2		97.1
48.4		82.3	
	40.7		150.9

REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
			SURVEYED			
			TECHNICIAN			
			CHECKED			
			DESIGN DIVISION			
			DESIGNED	MLM	04/00	
			DRAWN	TAW	04/00	
			CHECKED	TWM	04/00	

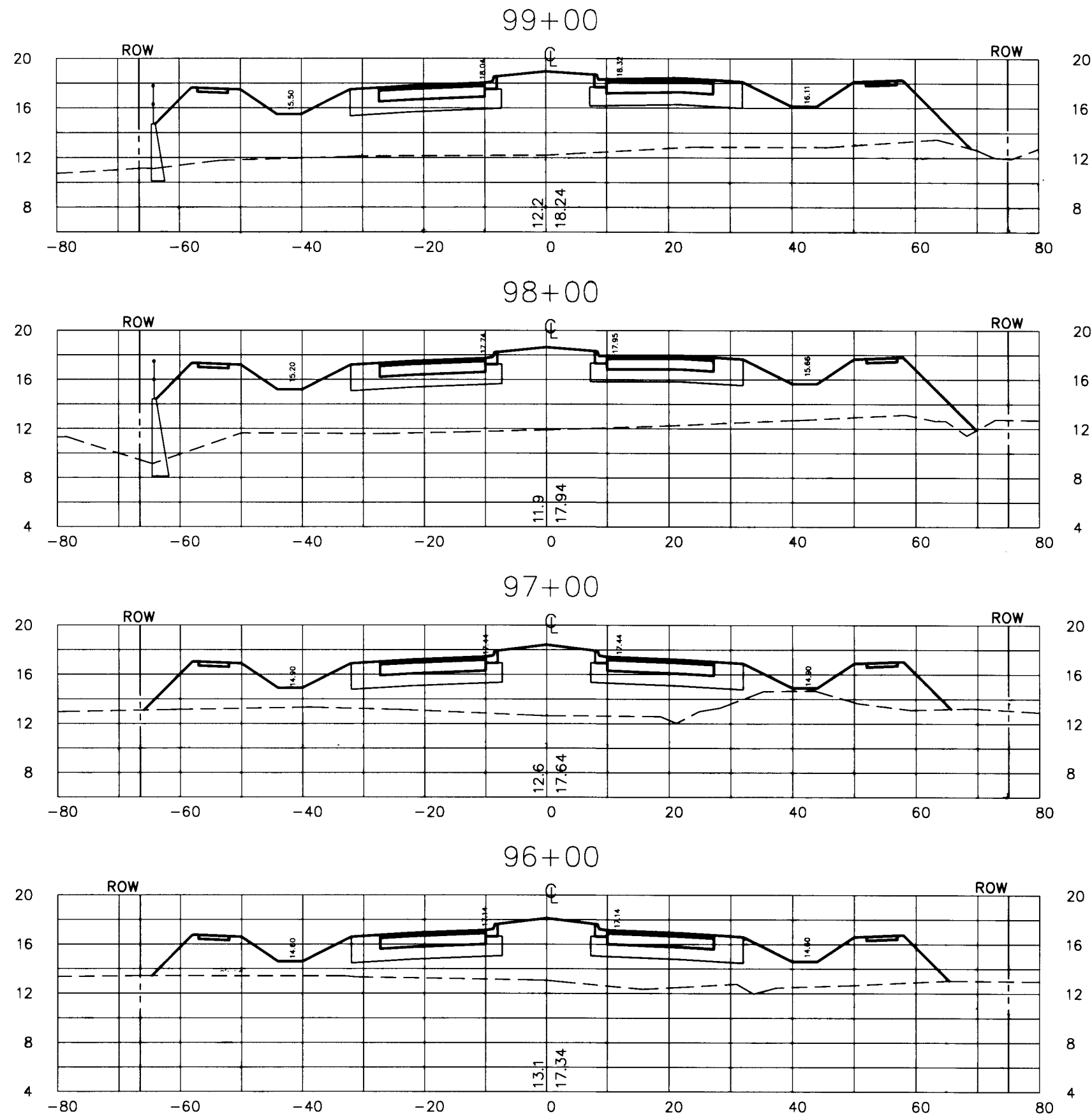
PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (10)
STA. 89+40 TO STA. 91+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 62 OF 119
File: RDXSRD01 View: 1-11X17



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		619.7	
0		2,314.1	
0		629.9	
0		1,915.0	
0		404.2	
0		1,485.0	
0		397.7	
0		1,460.0	

REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			DESIGNED
			MLW 04/00
			DRAWN
			TAW 04/00
			CHECKED
			TWN 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

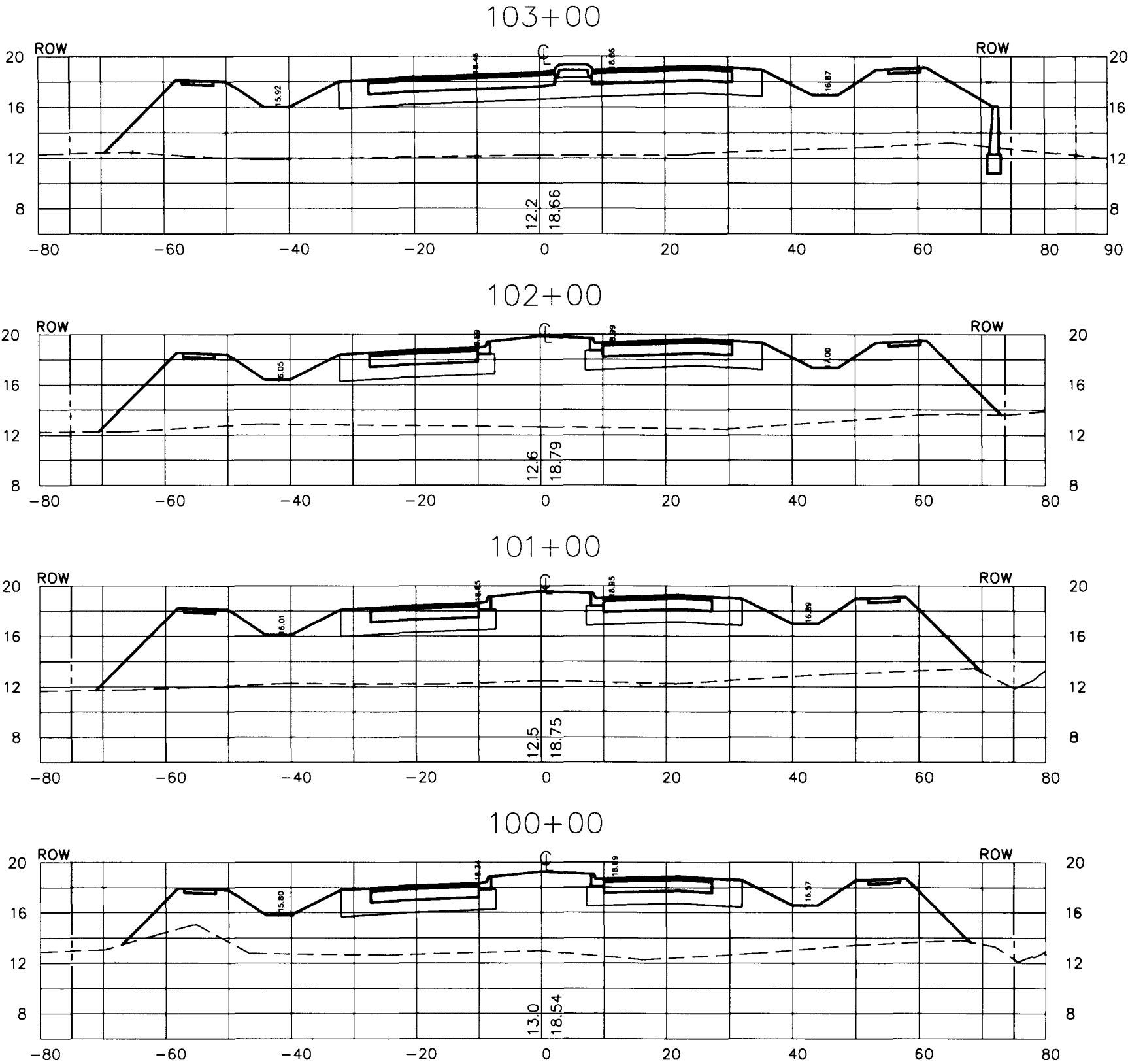


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (18)
STA. 96+00 TO STA. 99+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 64 OF 119
File: RDXSR001 View: 1-11X17

W: \\TRANS\\EW\\PHASE1\\CADD\\Rdxsr01.dwg Mon Apr 10 12:26:44 2000 King Engineering Associates, Inc.



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		729.7	
0		2,712.0	
0		734.8	
0		2,699.3	
0		722.8	
0		2,425.0	
0		586.7	
0		2,234.1	

REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			DESIGNED
			DRAWN
			CHECKED

PINELLAS COUNTY, FLORIDA
Department of Public Works

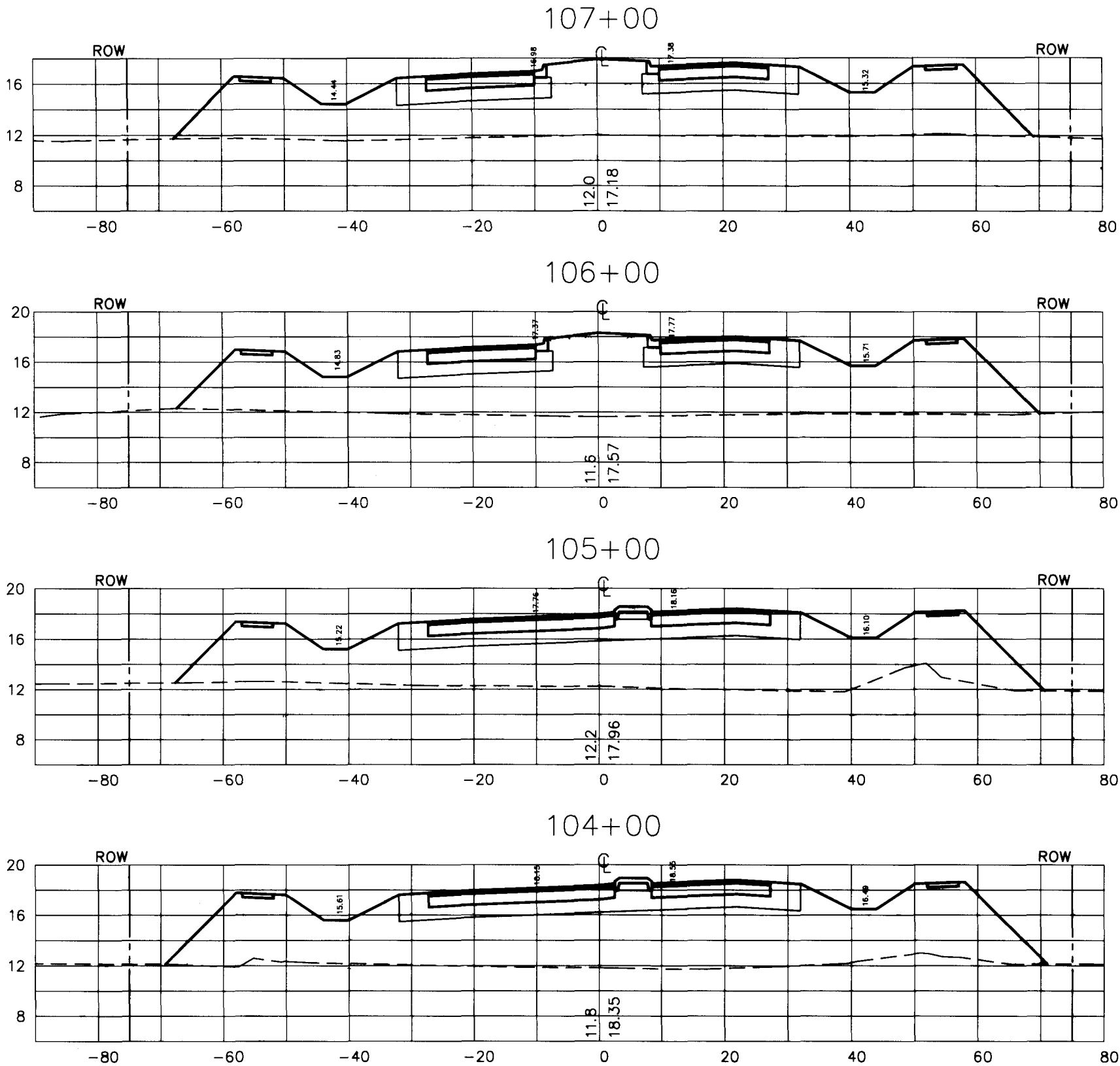
King
ASSOCIATES, INC.

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (19)
STA. 100+00 TO STA. 103+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 65 OF 119
File: RDXSRD01 View: 1-11X17

W: \\TRANS\\EW\\PHASE1\\CADD\\Rdxsrd01.dwg Mon Apr 10 12:26:50 2000 King Engineering Associates, Inc.



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		570.9	
0		2,217.2	
0		626.4	
0		2,251.3	
0		589.3	
0		2,349.8	
0		679.6	
0		2,609.8	

REVISIONS		BY	DATE	SURVEY BOOK No.	
				SURVEY DIVISION	BY DATE
				SURVEYED	
				TECHNICIAN	
				CHECKED	
				DESIGN DIVISION	
				DESIGNED	MLM 04/00
				DRAWN	TAW 04/00
				CHECKED	TWM 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

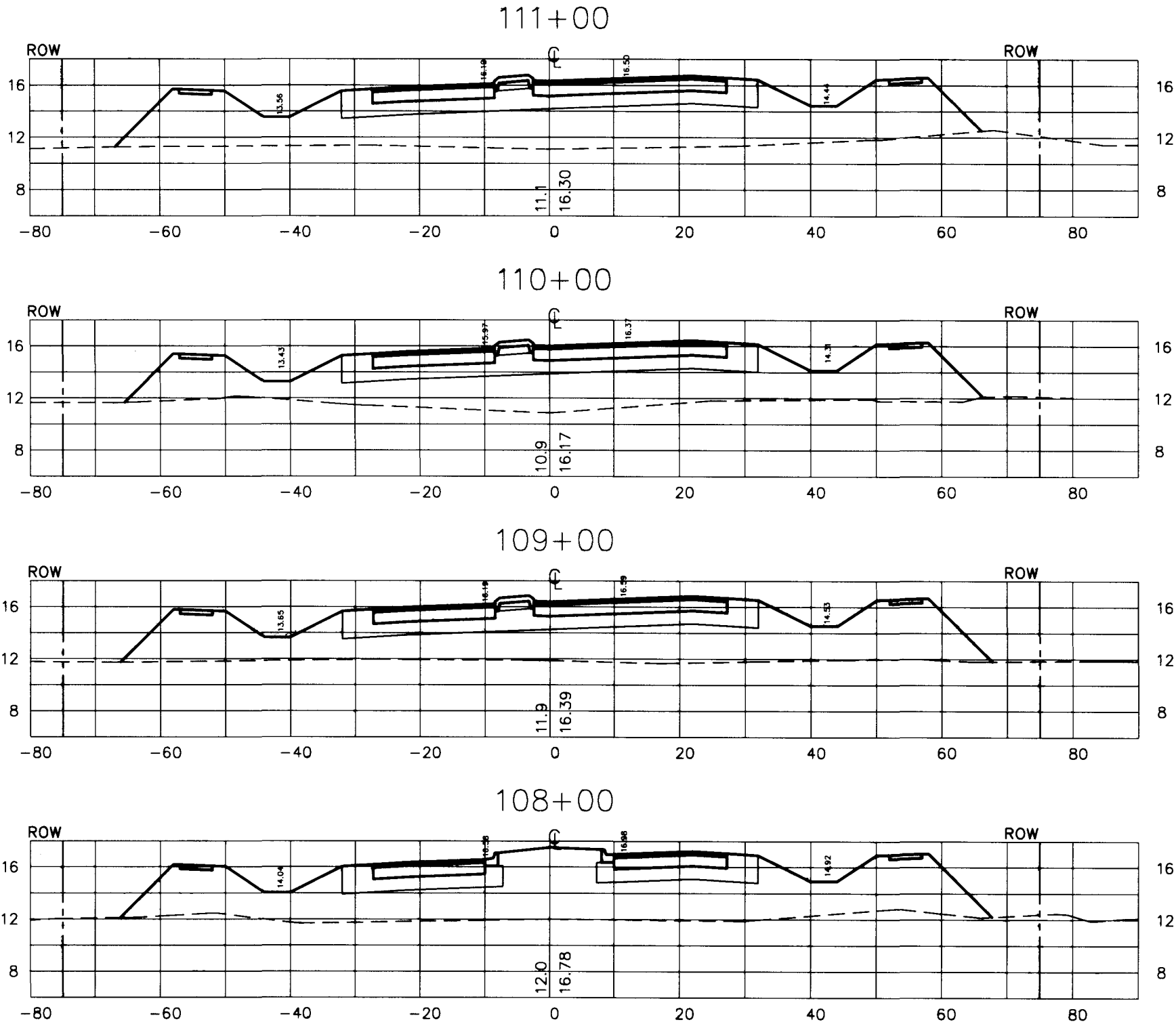


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (20)
STA. 104+00 TO STA. 107+00

DATE: APRIL 10, 2000	
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET 66 OF 119	File: RDXSRD01 View: 1-11X17

W: \\TRANS\\EW\\PHASE1\\CADD\\Rdxsrd01.dwg Mon Apr 10 12:26:57 2000 King Engineering Associates, Inc.



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		486.1	
		0	1,693.0
		0	428.1
		0	1,616.8
		0	445.0
		0	1,731.3
		0	489.9
		0	1,964.4

REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			SURVEYED
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			DRAWN
			CHECKED

PINELLAS COUNTY, FLORIDA
Department of Public Works

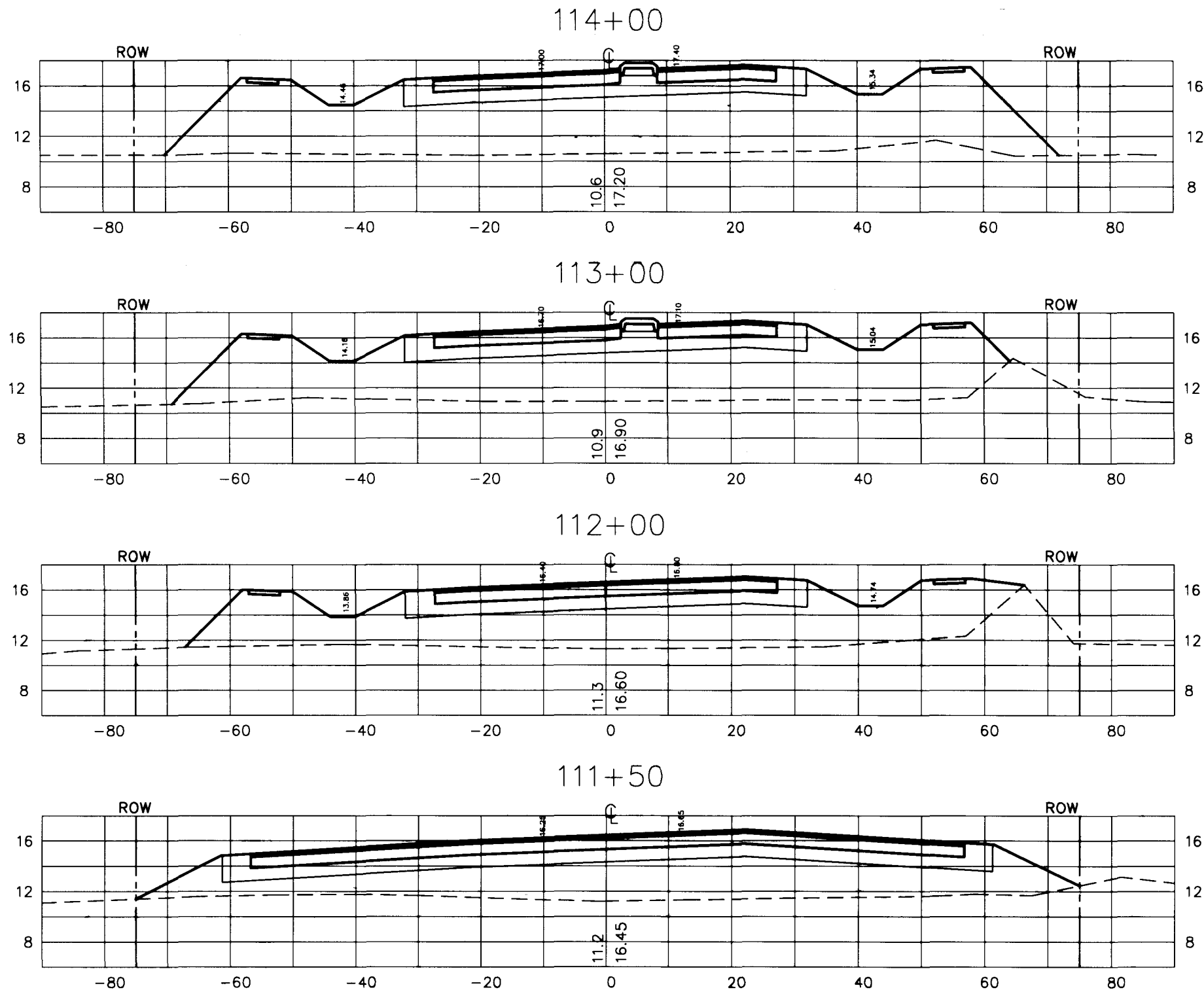
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ASSOCIATES, INC.

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (21)
STA. 108+00 TO STA. 111+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 67 OF 119
File: RDXSRD01 View: 1-11X17

W: \\TRANS\\EW\\PHASE1\\CADD\\Rdxsrd01.dwg Mon Apr 10 12:27:03 2000 King Engineering Associates, Inc.



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		712.1	
	0	2,445.4	
	0	608.4	
	0	1,022.7	
	0	496.1	
	0	906.4	
	0	482.8	
	0	897.1	

REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			MLM 04/00
			DRAWN
			TAW 04/00
			CHECKED
			TWM 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

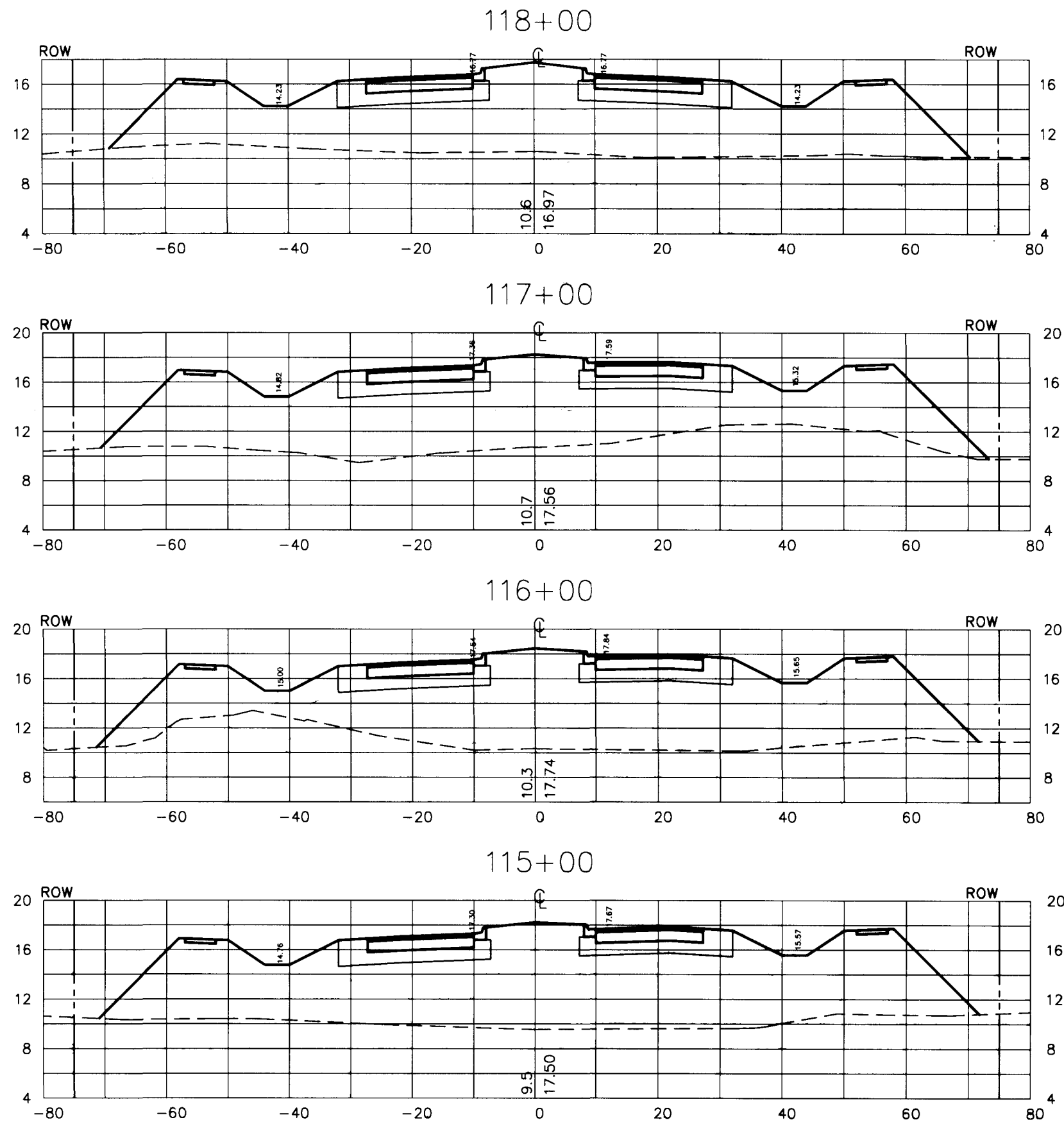
King
ASSOCIATES, INC.
1700 N. 11th St., Suite 200
Tampa, FL 33604
Phone: 813-288-1000
Fax: 813-288-1001
E-mail: king@kingassoc.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (22)
STA. 111+50 TO STA. 114+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 68 OF 119
File: RDXSRD01 View: 1-11X17

W: \\TRANS\\EW\\PHASE1\\CADD\\Rdxsrd01.dwg Mon Apr 10 12:27:09 2000 King Engineering Associates, Inc.



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		679.3	
	0		2,601.5
0		725.5	
	0		2,730.0
0		748.7	
	0		2,983.9
0		862.6	
	0		2,916.1

REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			SURVEYED
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			MLM 04/00
			DRAWN
			TAP 04/00
			CHECKED
			TWM 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

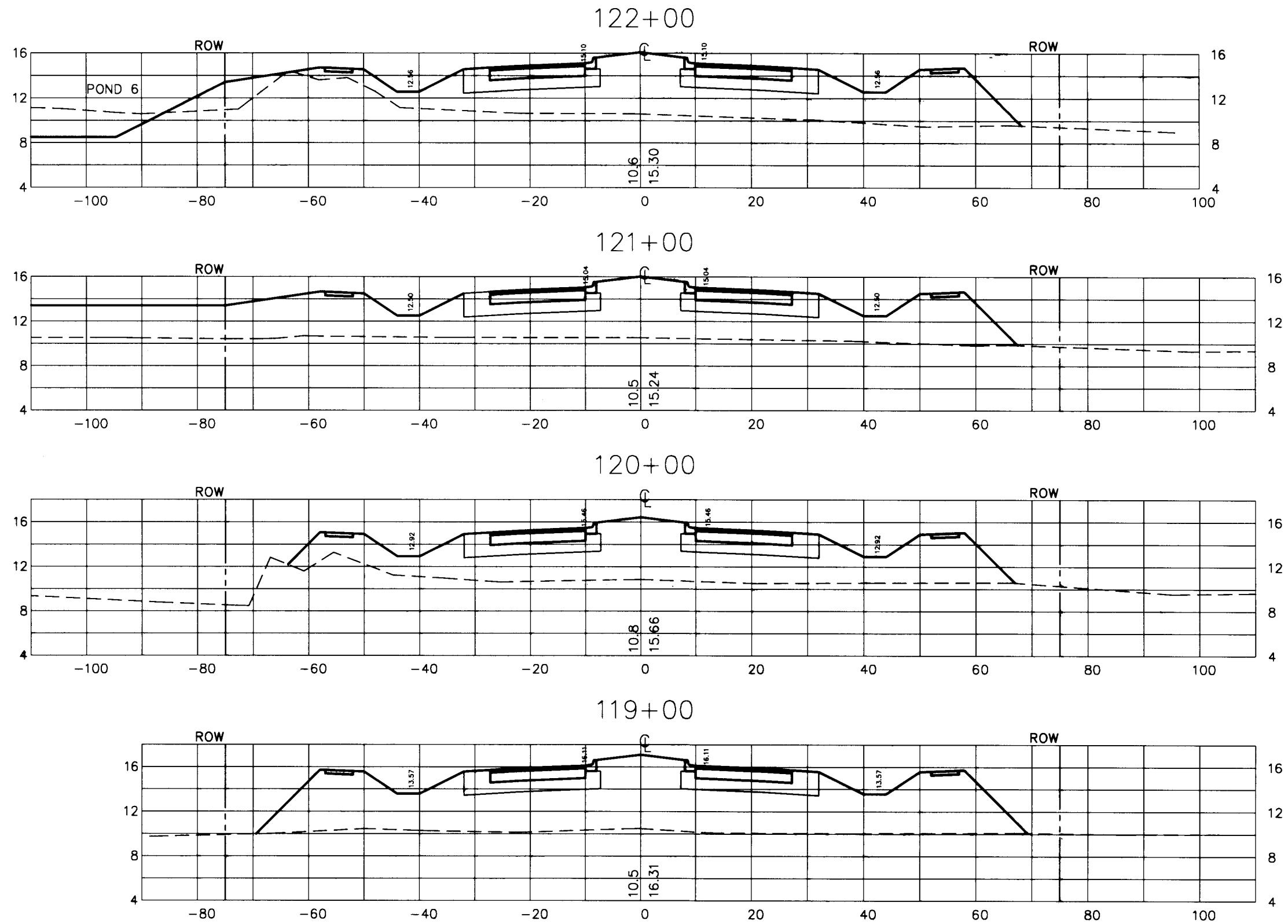


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (23)
STA. 115+00 TO STA. 118+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 69 OF 119
File: RDXSRD01 View: 1-11X17

W:\TRANS\EW\PHASE1\CADD\Rdxsr001.dwg Mon Apr 10 12:27:15 2000 King Engineering Associates, Inc.



EARTHWORK			
CUT		FILL	
A	V	A	V
0		426.6	
0		1,724.1	
0		504.4	
0		1,759.4	
0		445.7	
0		2,001.9	
0		635.3	
0		2,434.4	

REVISIONS		BY	DATE
SURVEY BOOK No.:		BY	DATE
SURVEYED			
TECHNICIAN			
CHECKED			
DESIGN DIVISION			
DESIGNED		MLM	04/00
DRAWN		TAW	04/00
CHECKED		TWM	04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

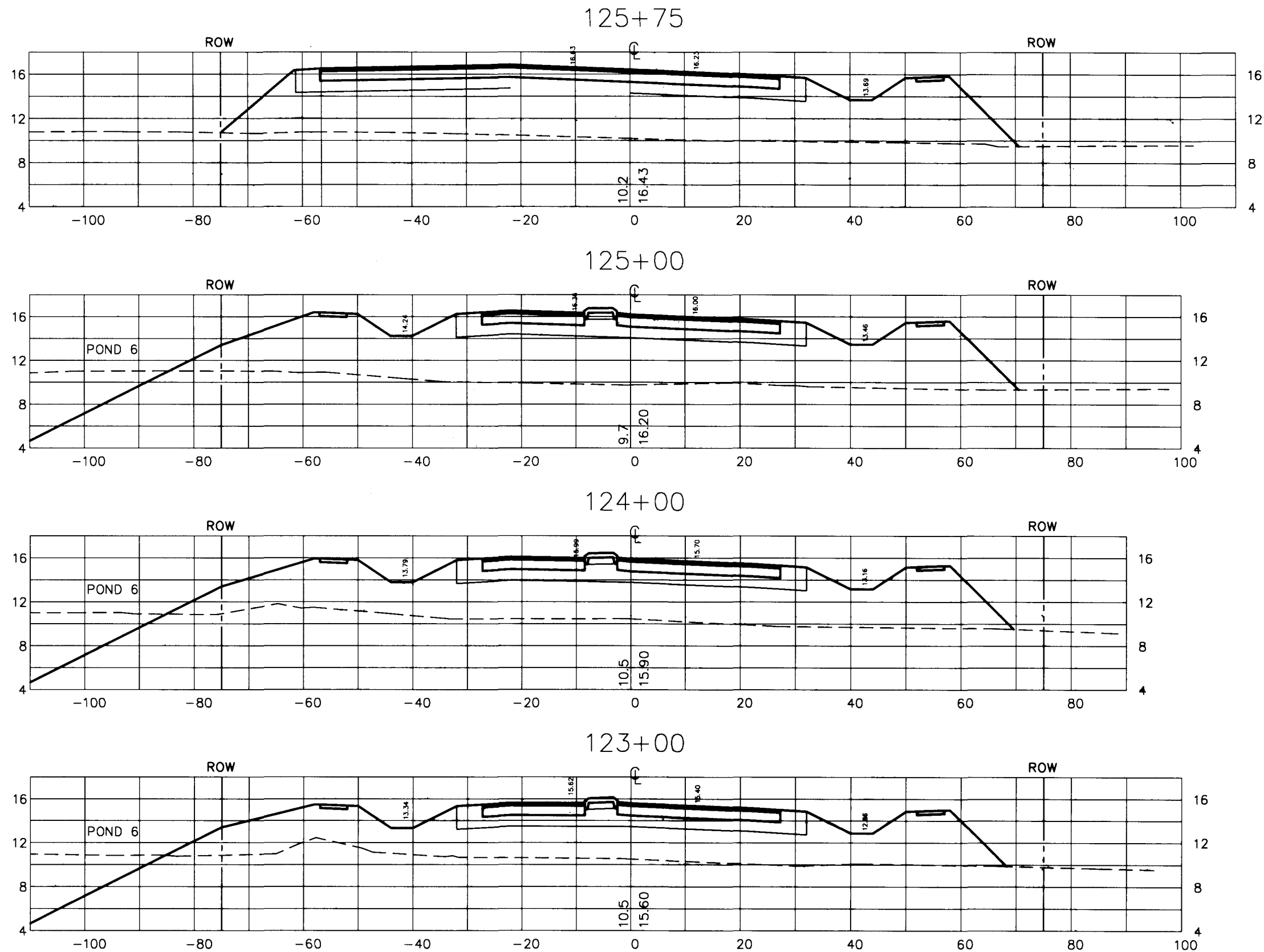
King
ASSOCIATES, INC.

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (24)
STA. 119+00 TO STA. 122+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 70 OF 119
File: RDXSR001 View: 1-11X17

W:\TRANS\VIEW\PHASE1\CADD\Rdxsrd01.dwg Mon Apr 10 12:27:22 2000 King Engineering Associates, Inc.



EARTHWORK			
CUT		FILL	
A	V	A	V
0		678.7	
0		2,572.4	
0		710.4	
0		2,441.7	
0		608.1	
0		2,113.0	
0		532.9	
0		1,776.9	

REVISIONS		BY	DATE	SURVEY BOOK No.	
				SURVEY DIVISION	BY DATE
				SURVEYED	
				TECHNICIAN	
				CHECKED	
				DESIGN DIVISION	
				DESIGNED	MLM 04/00
				DRAWN	TAM 04/00
				CHECKED	TWM 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

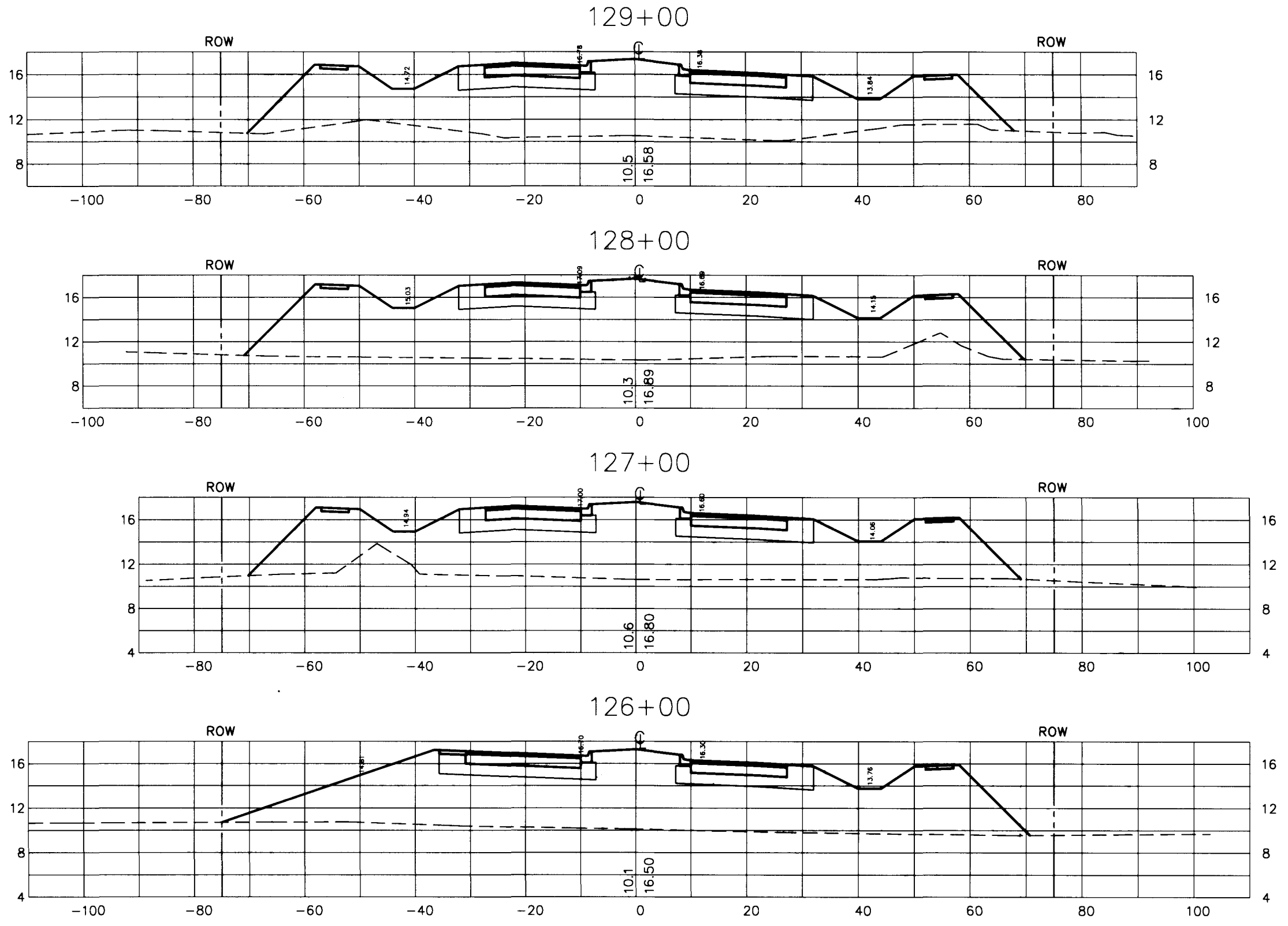


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (25)
STA. 123+00 TO STA. 125+75

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 71 OF 119
File: RDXSRD01 View: 1-11X17

N: \\TRANS\\EW\\PHASE1\\CADD\\Rdxsr01.dwg Mon Apr 10 12:27:28 2000 King Engineering Associates, Inc.




1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		627.0	
0		2,449.3	
0		2,478.0	
0		642.5	
0		2,494.6	
0		704.6	
0		2,561.7	

REVISIONS		BY	DATE	SURVEY BOOK No.	
				SURVEY DIVISION	BY DATE
				SURVEYED	
				TECHNICIAN	
				CHECKED	
				DESIGN DIVISION	
				DESIGNED	MLM 04/00
				DRAWN	TAW 04/00
				CHECKED	TWM 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



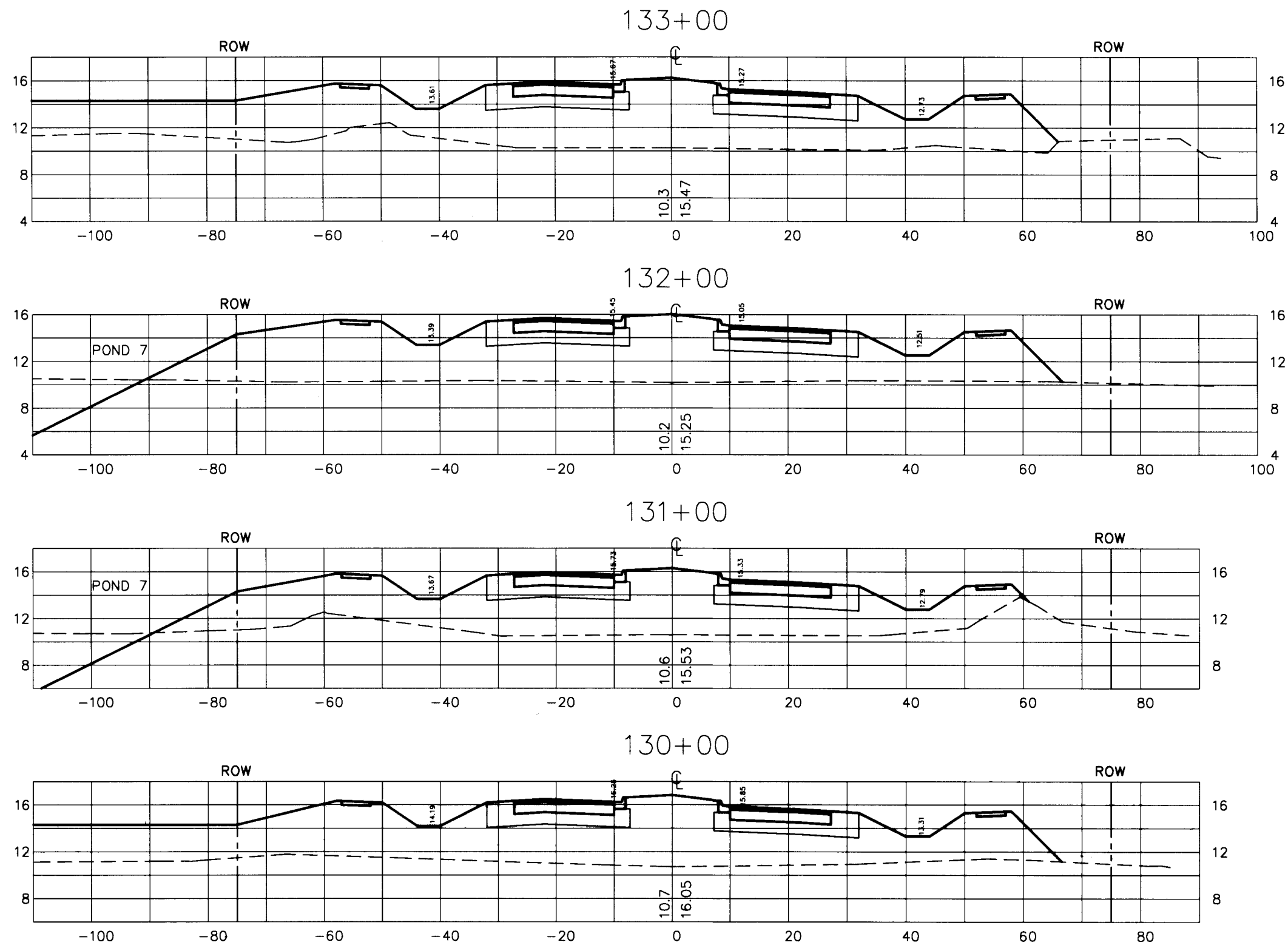
King
ASSOCIATES, INC.
P.O. Box 1111
Tampa, FL 33601
Tel: 813-288-1111
Fax: 813-288-1112
E-Mail: king@kingeng.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (26)
STA. 126+00 TO STA. 129+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 72 OF 119
File: RDXSRD01 View: 1-11X17

W: \\TRANS\\EW\\PHASE1\\CADD\\RDXSRD01.dwg Mon Apr 10 12:27:34 2000 King Engineering Associates, Inc.



EARTHWORK			
CUT		FILL	
A	V	A	V
0		568.0	
0		2,122.2	
0		578.0	
0		1,992.8	
0		498.1	
0		1,960.9	
0		560.8	
0		2,199.6	

REVISIONS		BY	DATE	SURVEY BOOK No.:	
				SURVEY DIVISION	BY DATE
				SURVEYED	
				TECHNICIAN	
				CHECKED	
				DESIGN DIVISION	
				DESIGNED	MLM 04/00
				DRAWN	TAW 04/00
				CHECKED	TWM 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

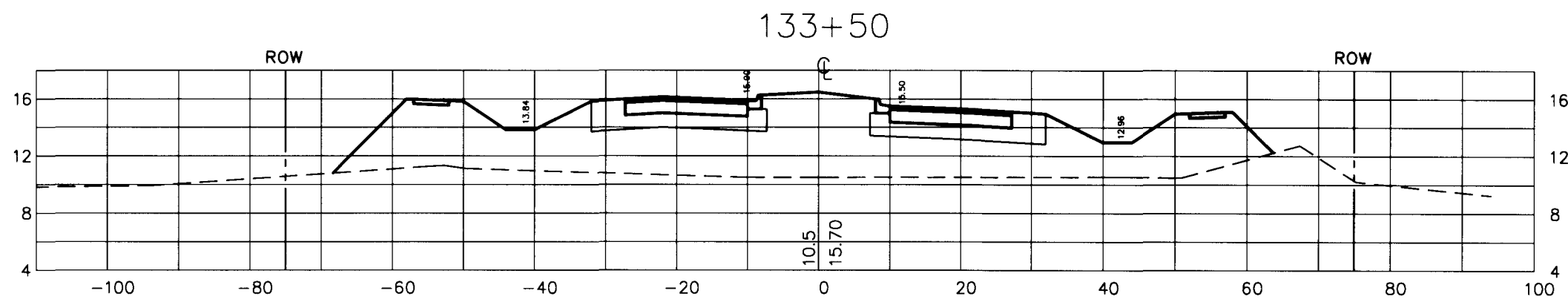


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (27)
STA. 130+00 TO STA. 133+00

DATE: APRIL 10, 2000	
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET 73 OF 119	File: RDXSRD01 View: 1-11X17

W: \\TRANS\\EW\\PHASE1\\CADD\\Rdxsr001.dwg Mon Apr 10 12:27:40 2000 King Engineering Associates, Inc.



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		519.2	
		0	1,006.7

REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			SURVEYED
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			DRAWN
			CHECKED

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ASSOCIATES, INC.

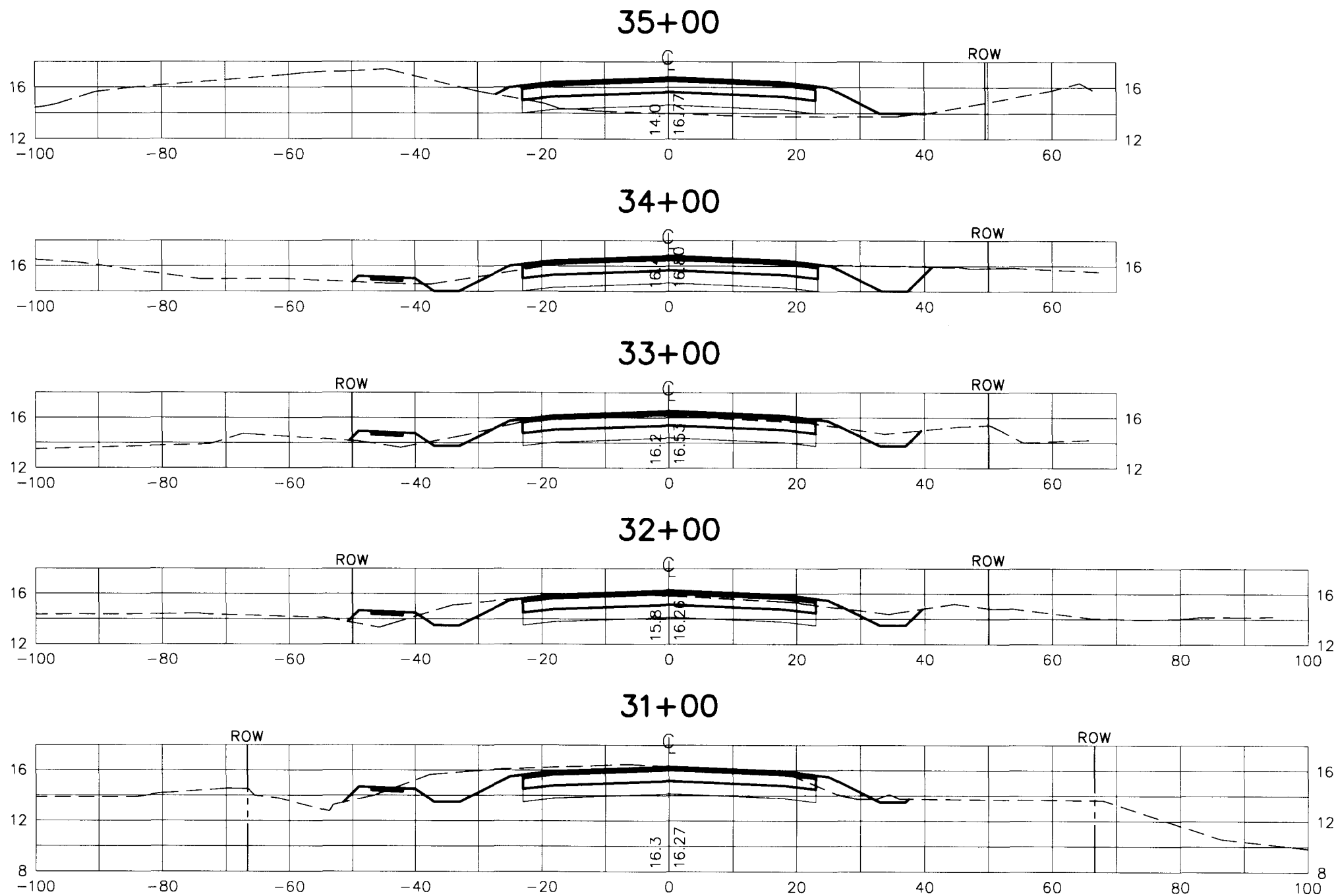
DATE: 04/00
FILE: 04/00
VIEW: 04/00

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (28)
STA. 133+50

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 74 OF 119
File: RDXSR001 View: 1-11X17

W:\TRANS\EW\PHASE1\CADD\Rdxsrd02.dwg Mon Apr 10 11:38:47 2000 King Engineering Associates, Inc. (TAW-Pasco)



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		76.6	
	125.4	150.9	
67.7		4.9	
	223.3	29.8	
52.9		11.2	
	211.9	39.4	
61.5		10.1	
	278.9	41.9	
89.1		12.5	

REVISIONS	BY	DATE	SURVEY BOOK No.		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	MLM	04/00
			DRAWN	TAW	04/00
			CHECKED	TWM	04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (29)
PINE AVENUE
STA. 30+00 TO STA. 35+00

DATE: APRIL 10, 2000

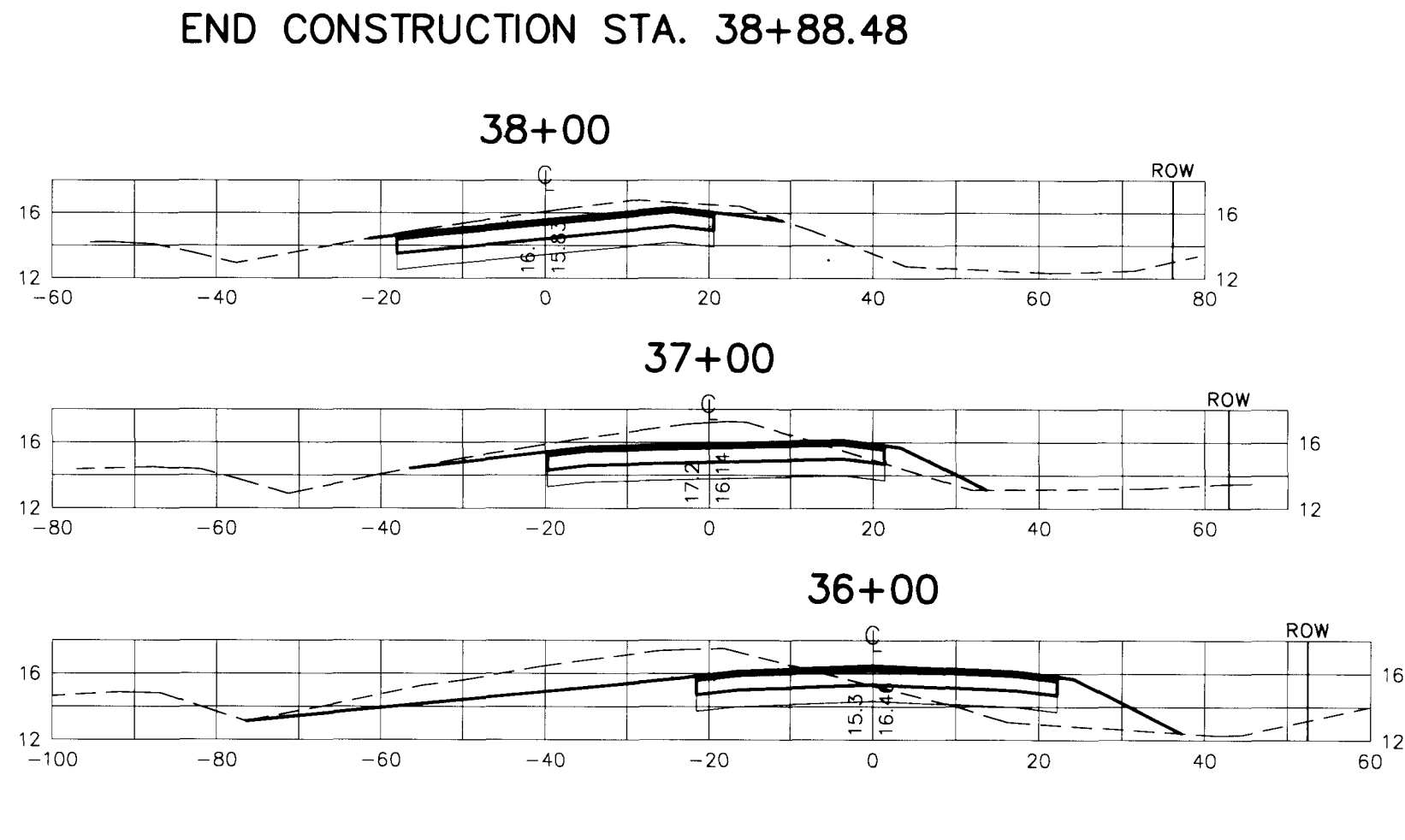
CONTRACT NO.:

SURVEY FILE NO.:

SHEET 75 OF 119

File: RDXSRD02
View: 1-11X17

W:\TRANS\LEW\PHASE1\CADD\Rdxsrd02.dwg Mon Apr 10 11:39:03 2000 King Engineering Associates, Inc. (TAW-Pasco)



EARTHWORK			
CUT		FILL	
A	V	A	V
0	0	0	0
105.2	0	0	0
64.2	0	0	0
254.6	18.5	0	0
73.3	10.0	0	0
309.6	112.8	0	0
93.9	50.9	0	0
173.9	236.1	0	0

REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			DRAWN
			CHECKED

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ASSOCIATES, INC.

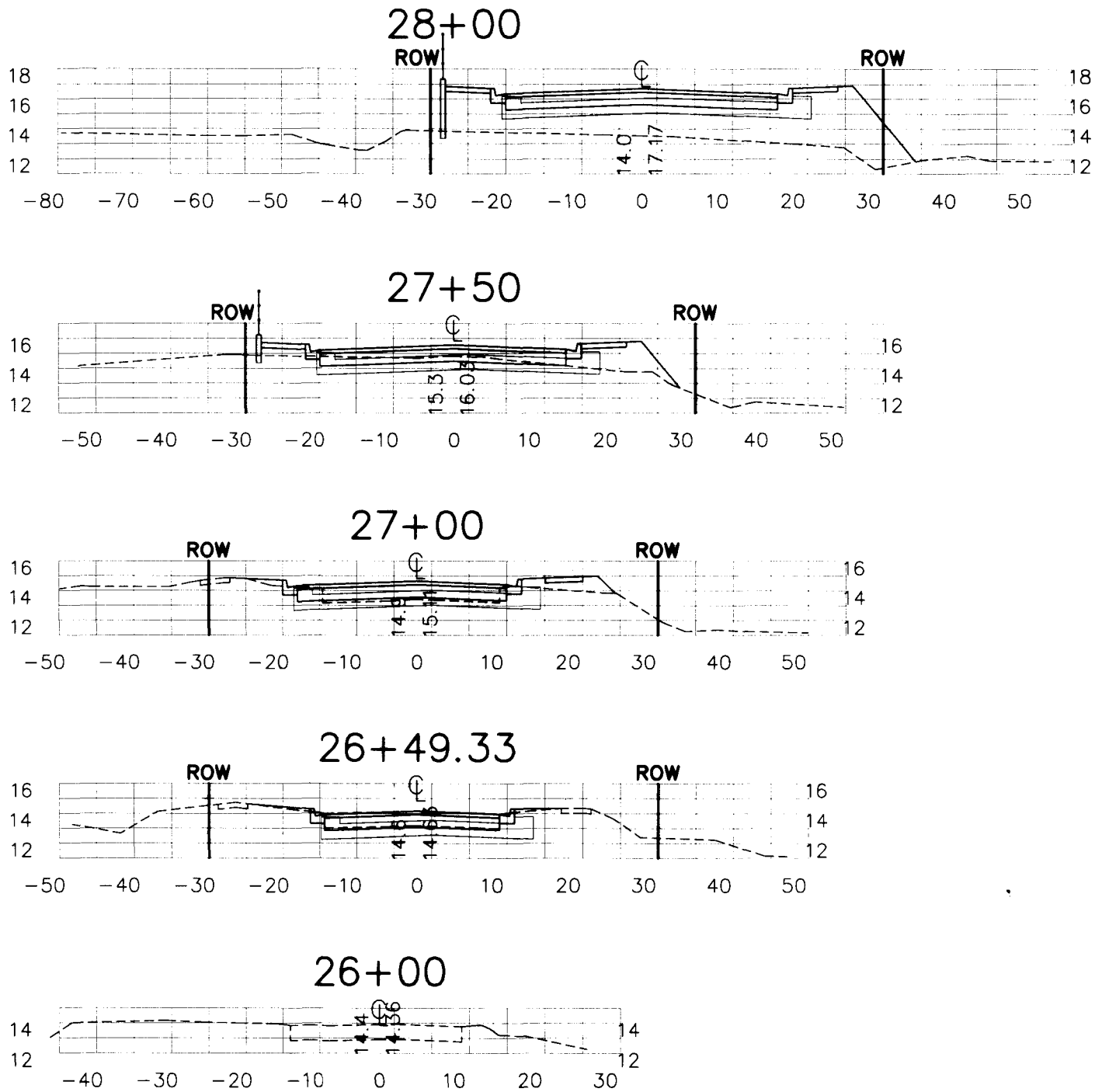
EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (30)
PINE AVENUE
STA. 36+00 TO STA. 38+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 76 OF 119

File: RDXSRD02
View: 1-11X17

W: \\TRANS\EW\PHASE1\CADD\Rdxsr03.dwg Mon Apr 10 13:45:27 2000 King Engineering Associates, Inc. (TAW-Pasco)



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		148.1	
	10.7	156.9	
11.6		21.3	
	16.5	32.0	
6.2		13.3	
	11.0	14.0	
5.5		1.6	
	5.0	1.5	
0		0	

REVISIONS	BY	DATE	SURVEY BOOK No.	
			SURVEY DIVISION	BY DATE
			SURVEYED	
			TECHNICIAN	
			CHECKED	
			DESIGN DIVISION	
			DESIGNED	NLM 04/00
			DRAWN	TAW 04/00
			CHECKED	TWM 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (31)
COMMERCE BOULEVARD
STA. 26+00 TO STA. 28+00

DATE: APRIL 10, 2000

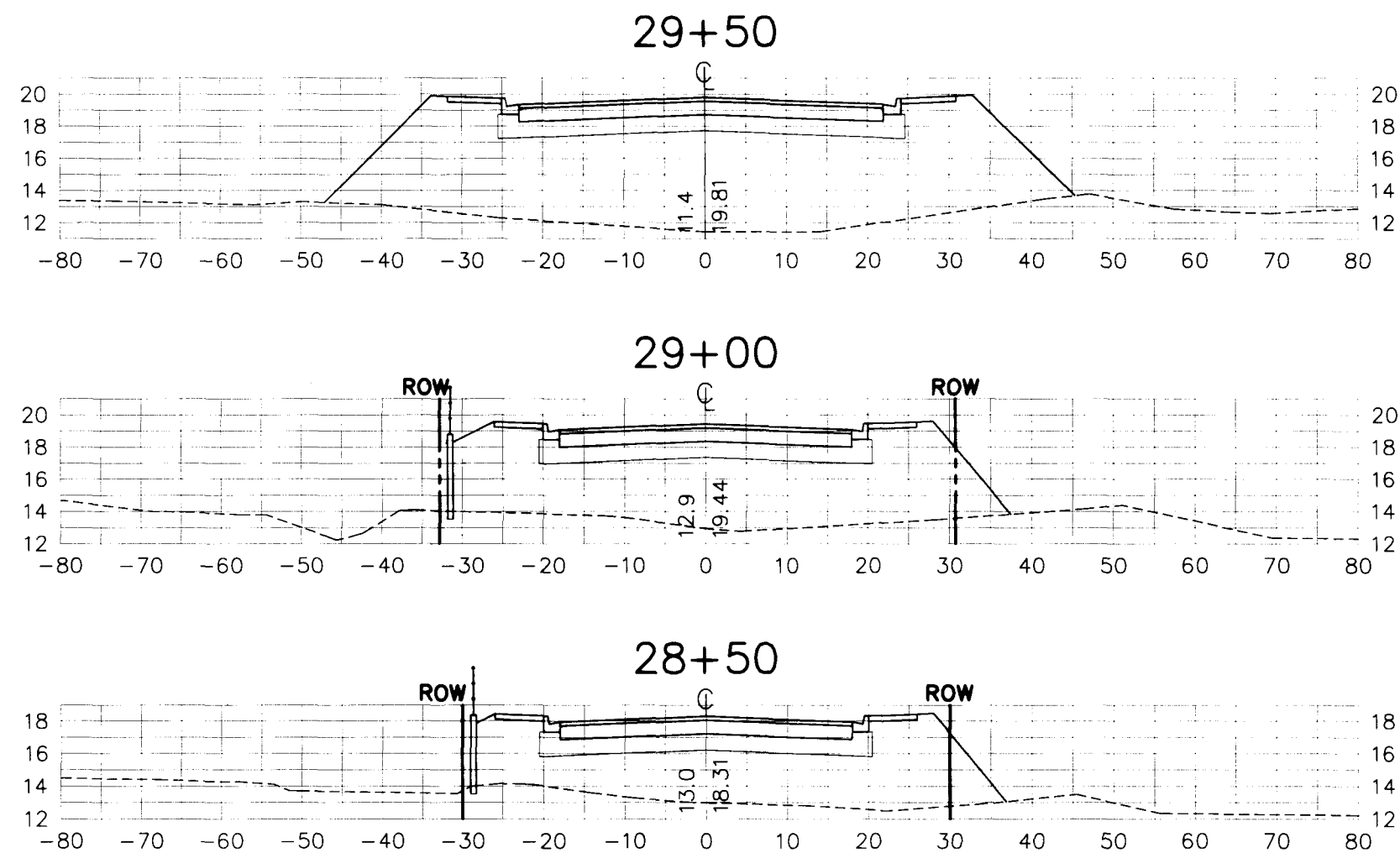
CONTRACT NO.:

SURVEY FILE NO.:

SHEET 77 OF 119

File:
View:

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1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		548.4	
0		815.6	
0		332.5	
0		550.3	
0		261.8	
0		379.5	

REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			SURVEYED
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			MLM 04/00
			DRAWN
			TAW 04/00
			CHECKED
			TWM 04/00

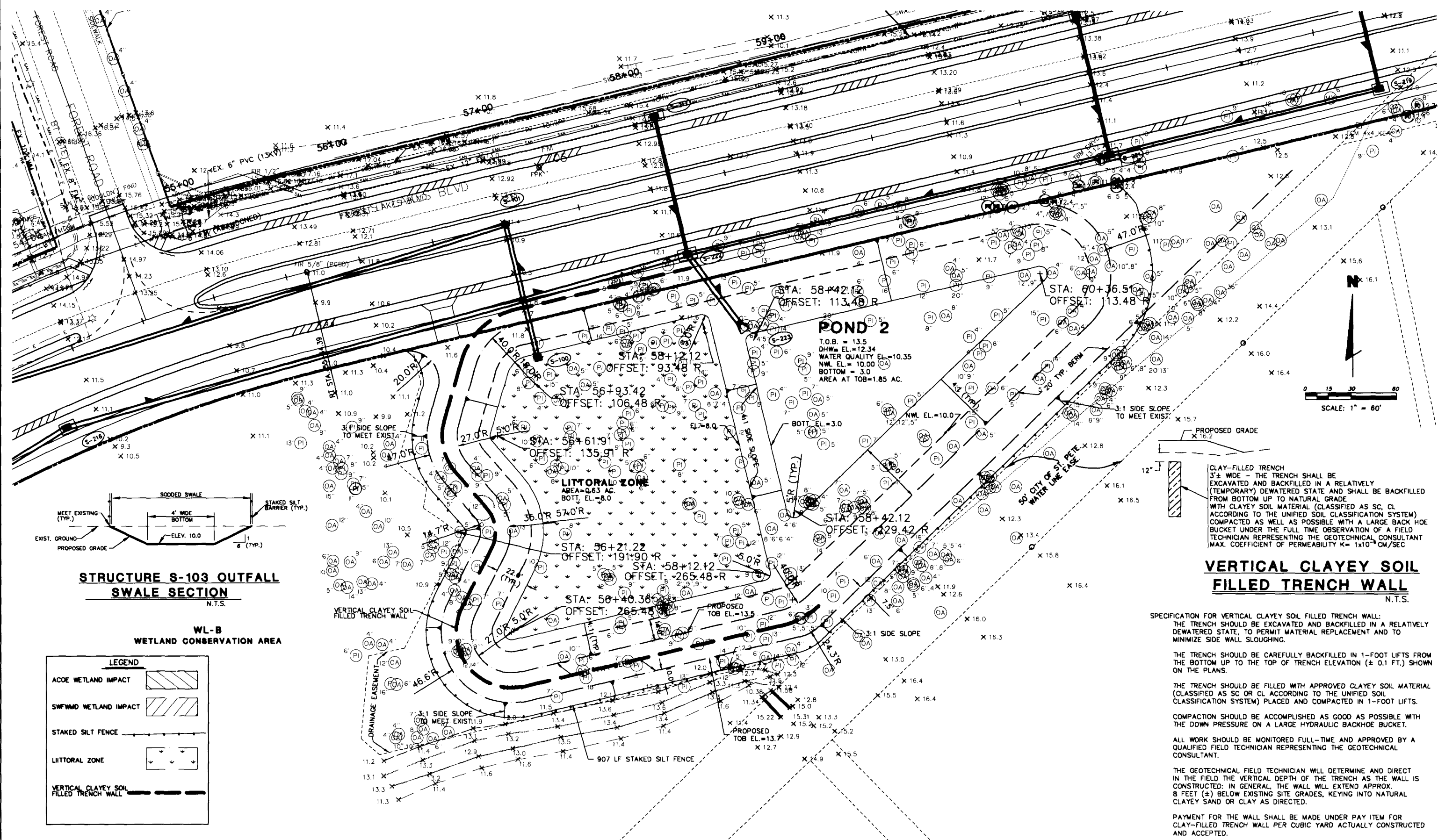
PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.
P.O. BOX 911111
TAMPA, FLORIDA 33691-1111
TEL: 813-988-1111
FAX: 813-988-1112
E-MAIL: keng@kingeng.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CROSS SECTIONS (32)
COMMERCE BOULEVARD
STA. 28+50 TO STA. 29+50

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 78 OF 119
File: View:



REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
				SURVEYED		
				TECHNICIAN		
				CHECKED		
				DESIGN DIVISION		
ADDED MAX. PERMEABILITY	MLM	8-20-00		DESIGNED	MLM	04/00
REVISED POND 2 DHW ELEV. & ADDED OUTFALL SECTION	MLM/JLW	8-31-00		DRAWN	TAW	04/00
REVISED CLAY TRENCH LIMITS & NOTES	MLM	8-31-00		CHECKED	TWM	04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

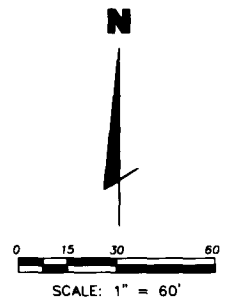
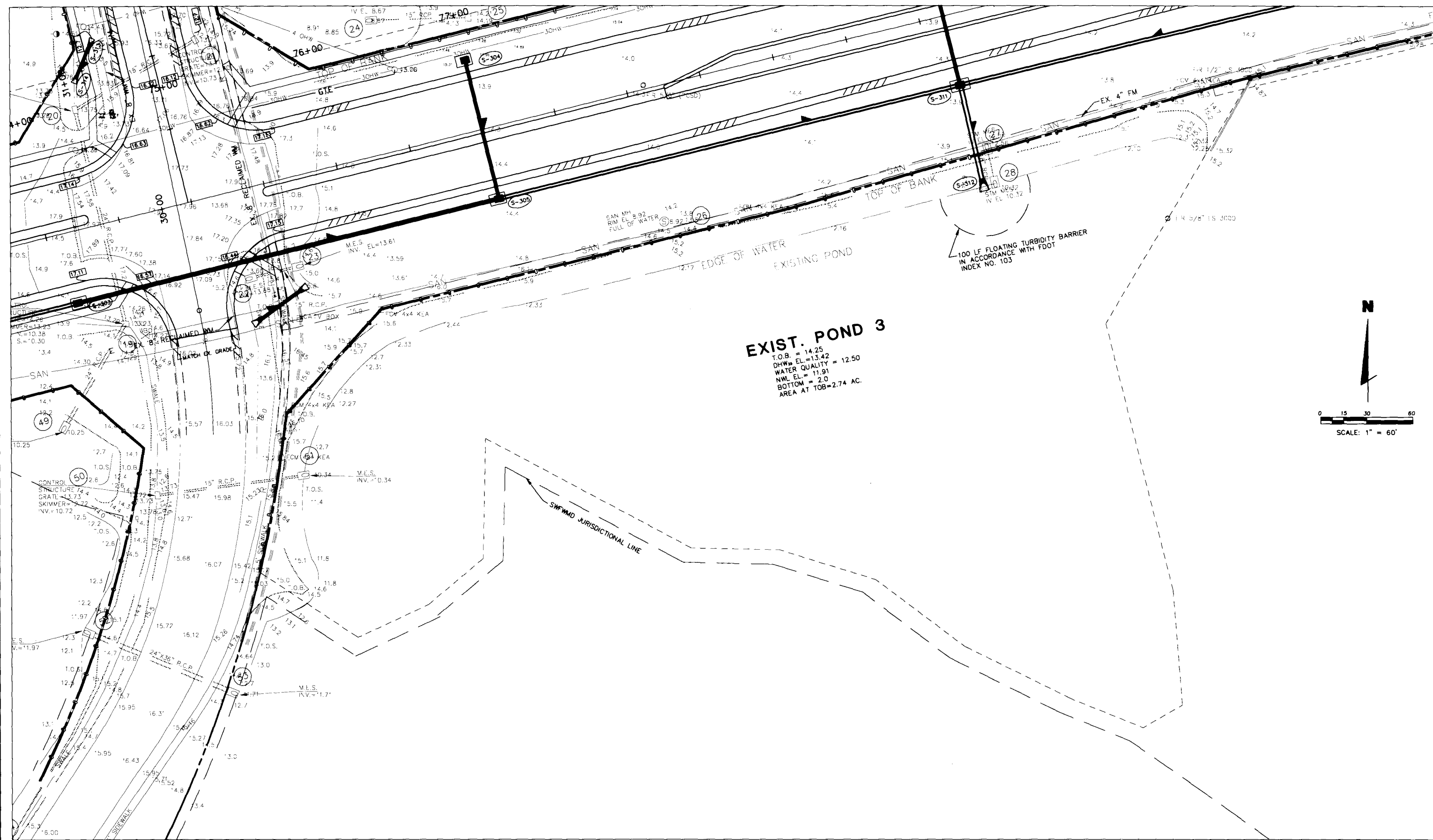
King
ASSOCIATES, INC.

PHONE 813-880-1001
FAX 813-880-1002
E-MAIL keng@kingengineering.com

**EAST-WEST CONNECTOR ROAD
PHASE I**
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

**STORMWATER FACILITIES
AND DETAILS
POND NO. 2**

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 79 OF 119
File: View:



REVISIONS		BY	DATE	SURVEY BOOK No.:	
				SURVEY DIVISION	BY DATE
				SURVEYED	
				TECHNICIAN	
				CHECKED	
				DESIGN DIVISION	
				DESIGNED	RWF 04/00
				DRAWN	JRL 04/00
				CHECKED	RWF 04/00

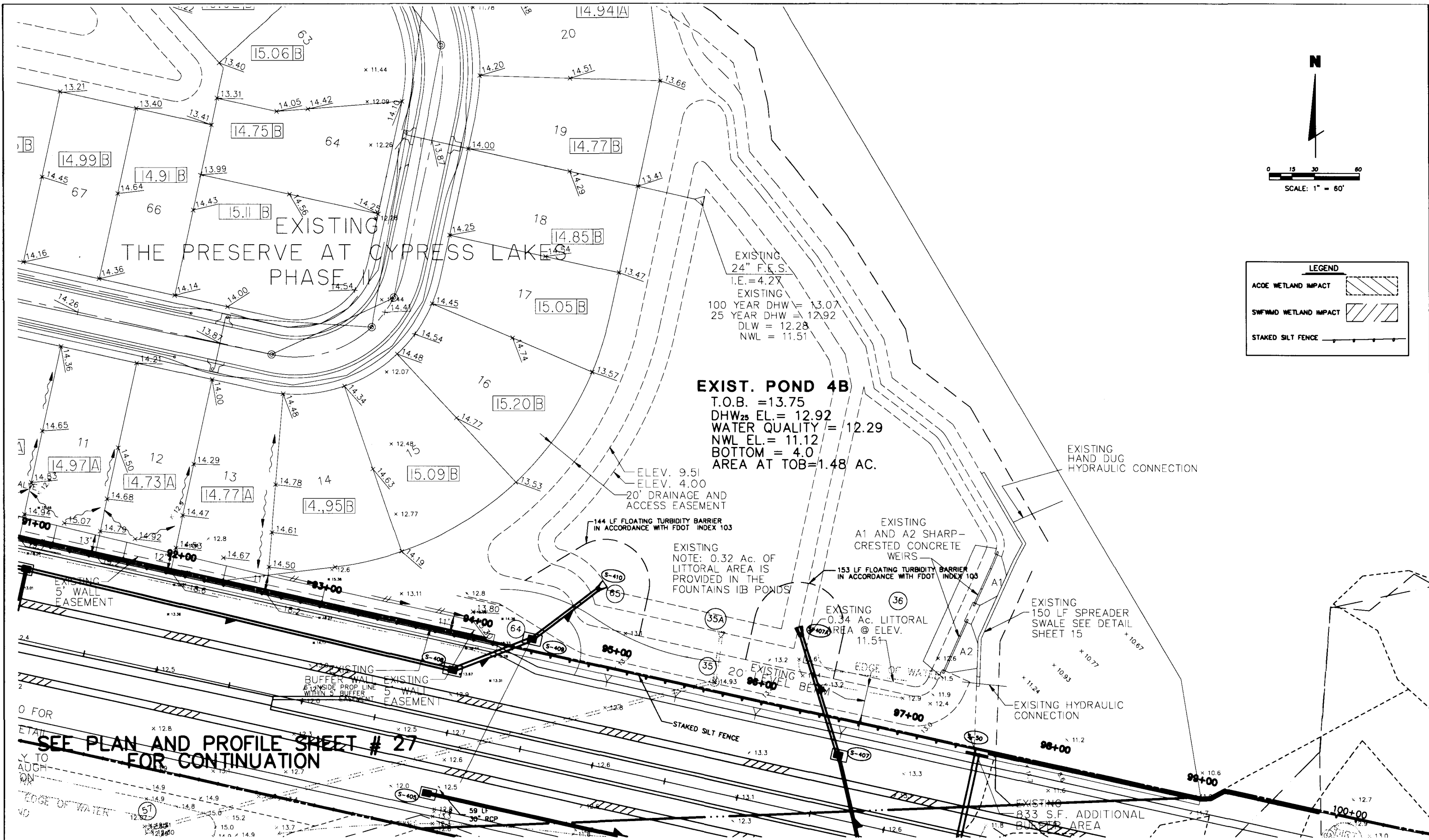
PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.

4001 W. H. H. ROAD
TAMPA, FLORIDA 33611
PHONE 813-880-1881
FAX 813-880-1882
E-MAIL kingengr@earthlink.net


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

STORMWATER FACILITIES AND DETAILS POND NO. 3		DATE: APRIL 10, 2000
		CONTRACT NO.:
		SURVEY FILE NO.:
		SHEET 80 OF 119
		File: View:



REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
				SURVEYED		
				TECHNICIAN		
				CHECKED		
				DESIGN DIVISION		
				DESIGNED	MLM	04/00
				DRAWN	TAW	04/00
				CHECKED	TWM	04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

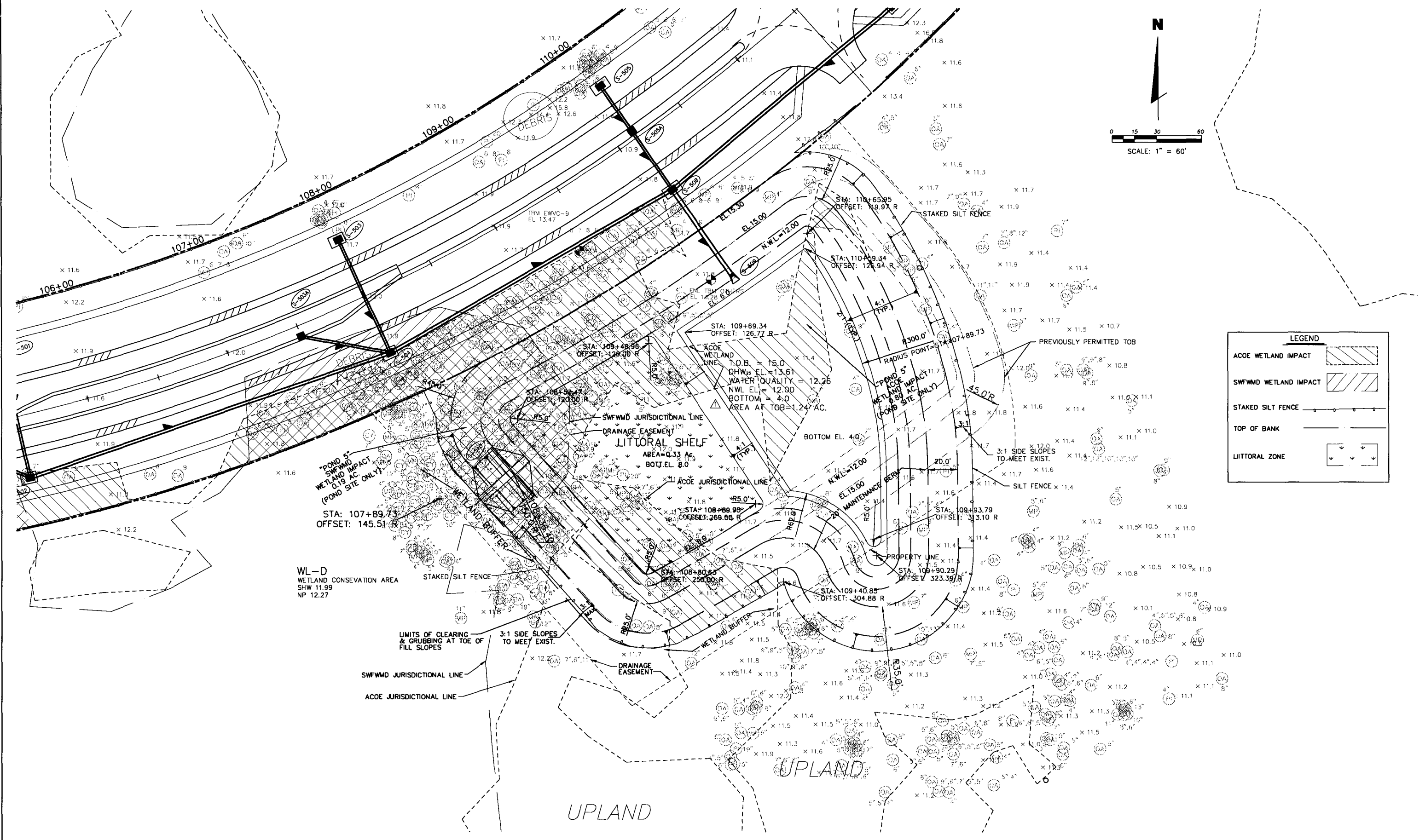
**king**
ASSOCIATES, INC.
PHONE 813-880-8881
FAX 813-880-8882
E-MAIL king@kingengr.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

STORMWATER FACILITIES
AND DETAILS
EXISTING POND NO 4B


DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 81 OF 119
File:
View:

W: \\TRANS\\EW\\PHASE1\\CADD\\pond5.dwg Thu Dec 21 15:21:45 2000 King Engineering Associates, Inc. (jki-pasco)



REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED		
			DRAWN		
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Δ REVISED TOP OF BANK	MLM	12/21/00			

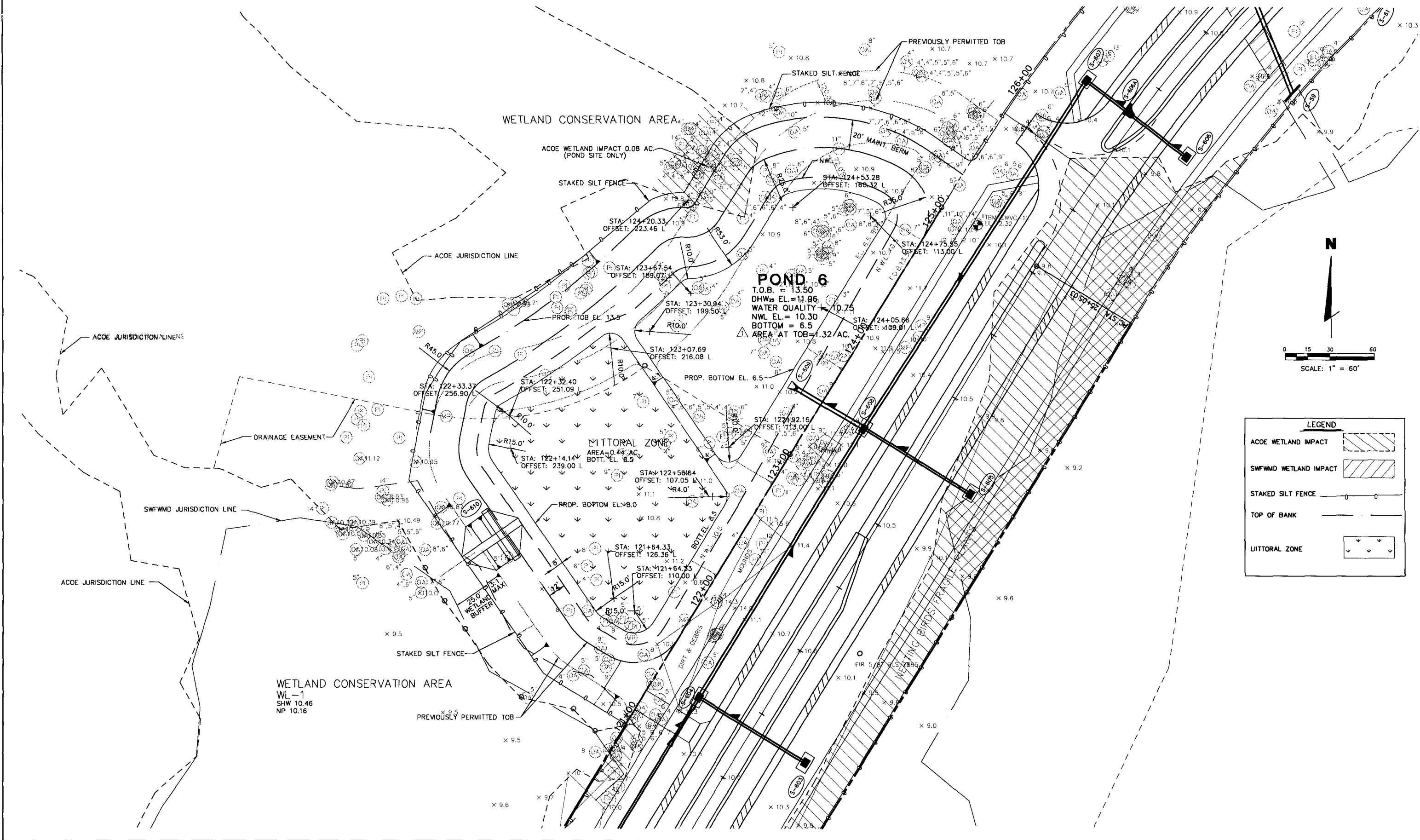
PINELLAS COUNTY, FLORIDA
Department of Public Works

**King**
ENGINEERING ASSOCIATES, INC.
1021 MEMORIAL HIGHWAY
ONE MEMORIAL CENTER, SUITE 300
TAMPA, FLORIDA 33634
PHONE 813-880-8881
FAX 813-880-8882
E-MAIL King@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

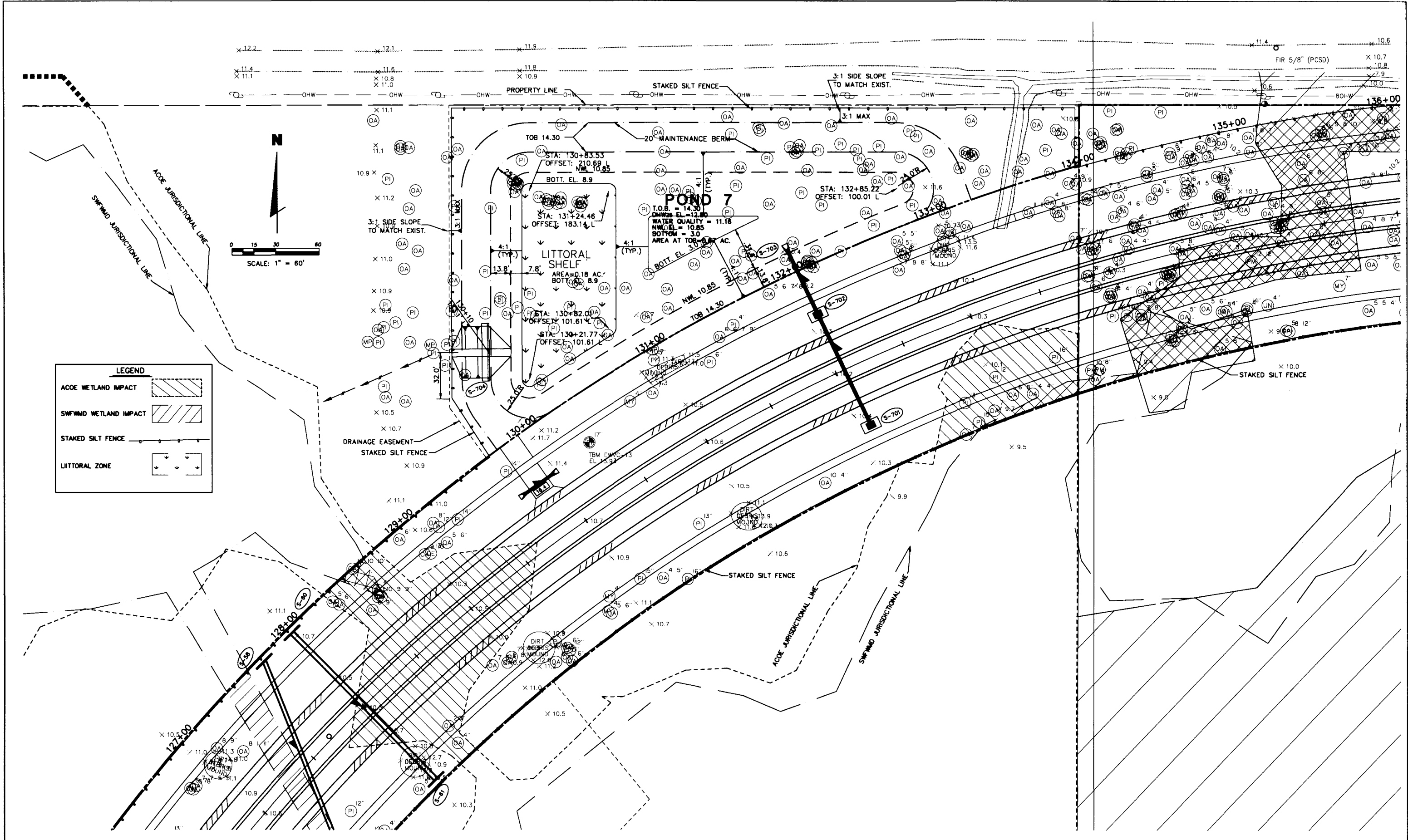
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		SHEET 82 OF 119
		File: View:

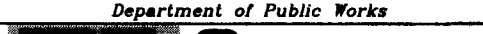
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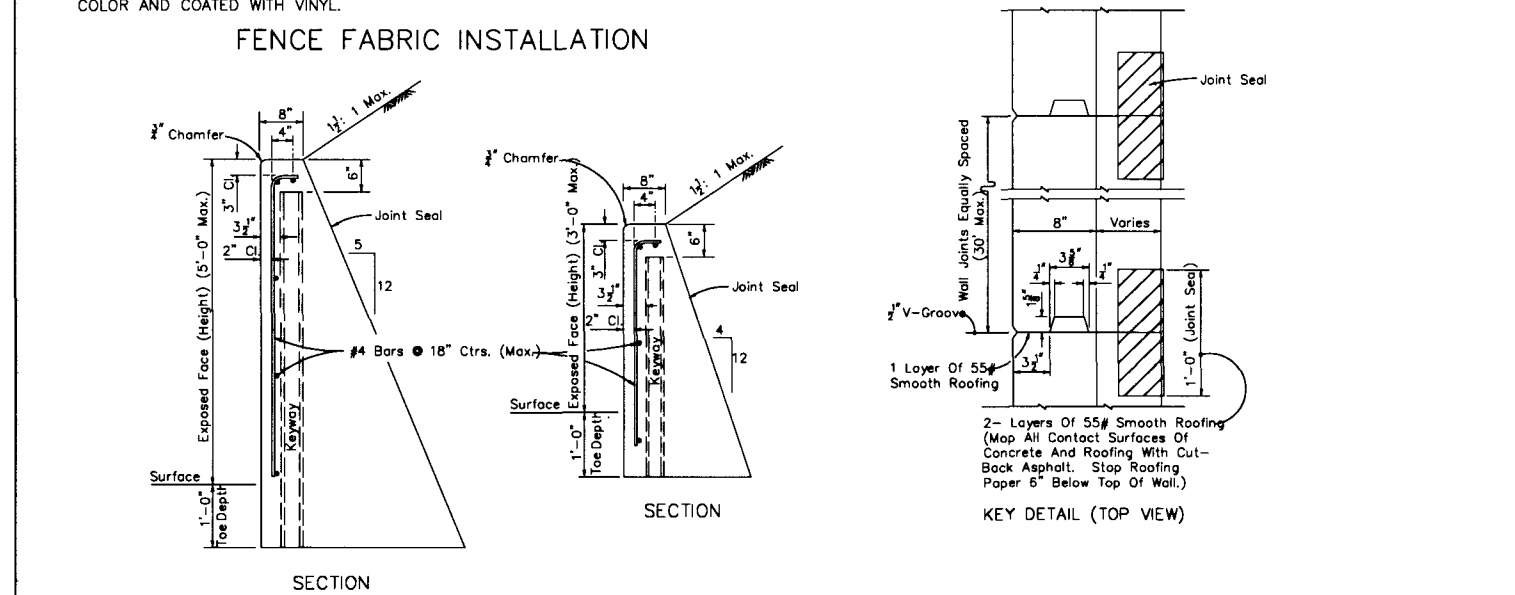
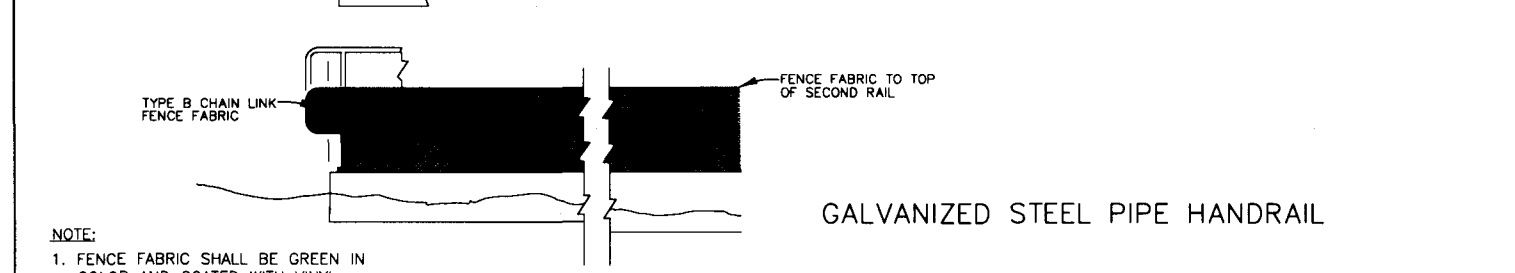
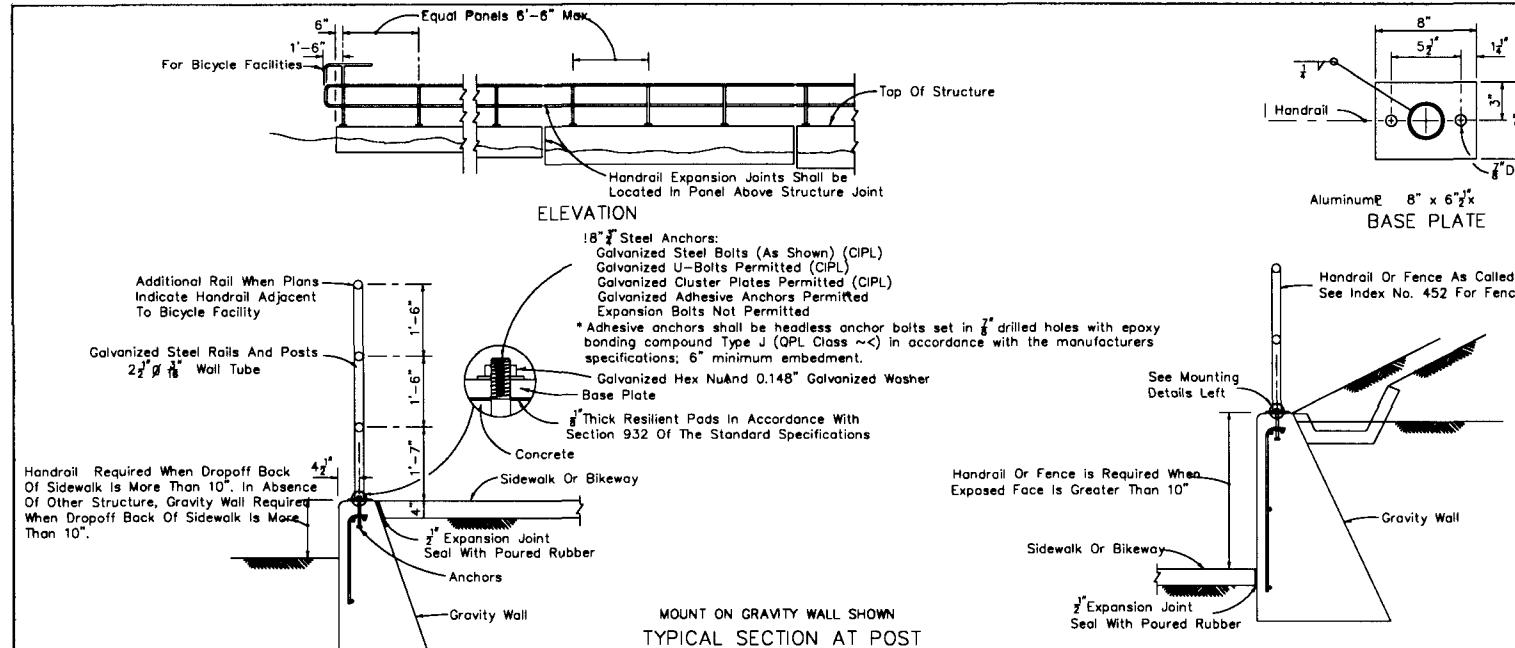


REVISIONS		BY	DATE	SURVEY BOOK No.:		PINELLAS COUNTY, FLORIDA		EAST-WEST CONNECTOR ROAD		STORMWATER FACILITIES		DATE: APRIL 10, 2000	
				SURVEY DIVISION		Department of Public Works		PHASE I		AND DETAILS		CONTRACT NO.:	
				SURVEYED		King		TAMPA ROAD (S.R. 584) TO THE EAST		POND NO. 6		SURVEY FILE NO.:	
				TECHNICIAN		ENGINEERING ASSOCIATES, INC.		PROPERTY LINE OF HARROD PROPERTIES				SHEET 83 OF 119	
				CHECKED		1921 MEMORIAL HIGHWAY						File:	
				DESIGN DIVISION		TAMPA, FLORIDA 33624						View:	
				DESIGNED		PHONE 813-880-8881							
				DRAWN		FAX 813-880-8882							
				CHECKED		E-MAIL KingEngineering.com							
REVISED TOP OF BANK		MLM	12/21/00										

W:\TRANS\EW\PHASE1\CADD\Pond7.dwg Mon Apr 10 10:07:49 2000 King Engineering Associates, Inc.



REVISIONS	BY	DATE	SURVEY BOOK No.:			PINELLAS COUNTY, FLORIDA Department of Public Works			 king ASSOCIATES, INC. PHONE 813-880-1880 FAX 813-880-1882 E-MAIL king@kingengineering.com			EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES			STORMWATER FACILITIES AND DETAILS POND NO. 7			DATE: APRIL 10, 2000		
			SURVEY DIVISION		BY													DATE	CONTRACT NO.:	
			SURVEYED										SURVEY FILE NO.:							
			TECHNICIAN																	
			CHECKED																	
			DESIGN DIVISION																	
			DESIGNED		MLM	04/00														
			DRAWN		TAM	04/00														
			CHECKED		TWM	04/00							SHEET 84 OF 119							
															File: View:					



ESTIMATED QUANTITIES FOR WALL			
HEIGHT (EXPOSED FACED)	CLASS ~ CONCRETE (CY)	STEEL (LB)	
1'	0.07	3	
2'	0.13	4	
3'	0.20	5	
4'	0.32	6	
5'	0.43	7	

GRAVITY WALL NOTES

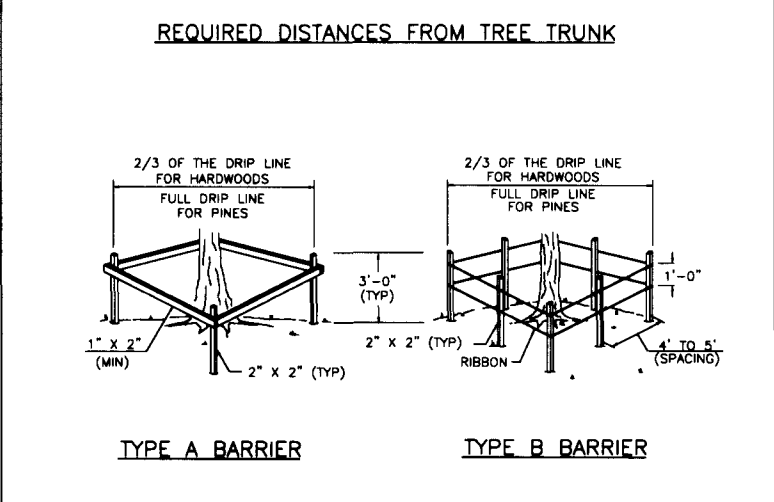
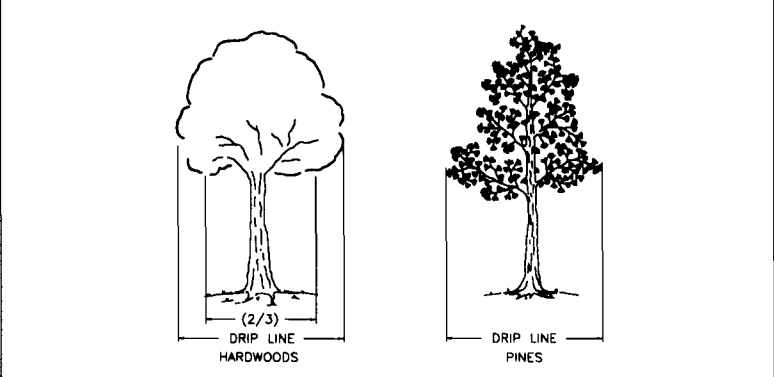
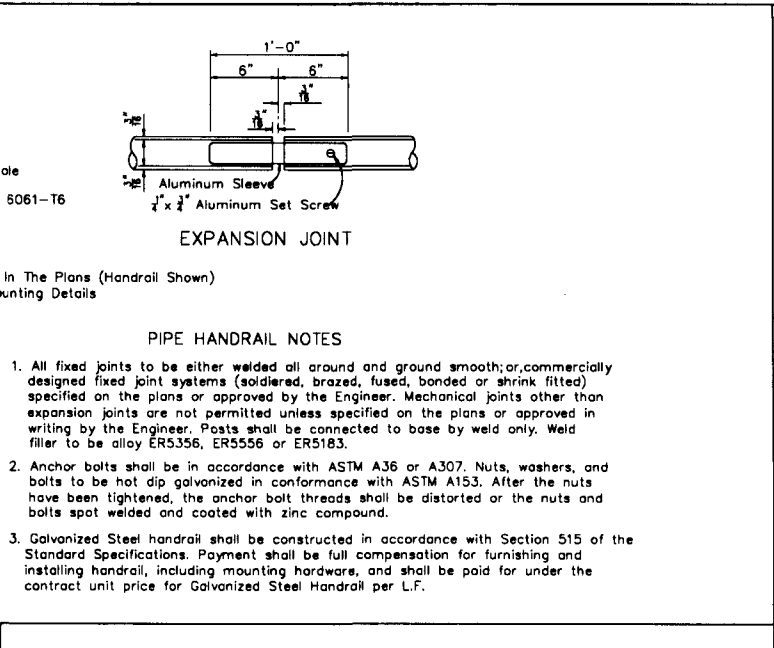
1. Gravity walls constructed as extensions of reinforced concrete retaining walls, except walls of proprietary designs, shall have the same face texture and finish as the reinforced concrete retaining wall.

2. Cost of reinforcing steel, face texture, finish and joint seal to be included in the contract unit price for Gravity Wall, C.Y.

GRAVITY WALL & GALVANIZED STEEL HANDRAIL
FDOT 520

(W/ FENCE FABRIC)

NTS



SPECIAL NOTES:

1. NO TREE SHALL BE REMOVED UNLESS SPECIFICALLY TAGGED FOR REMOVAL BY THE ENGINEER.

2. THE CONTRACTOR SHALL TAKE SPECIAL CARE NOT TO DAMAGE TREES THAT ARE TO REMAIN.

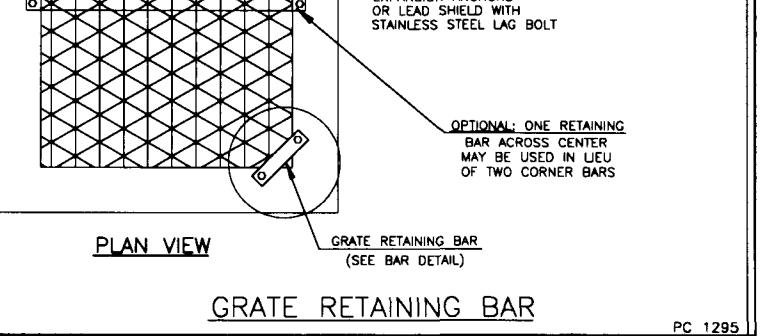
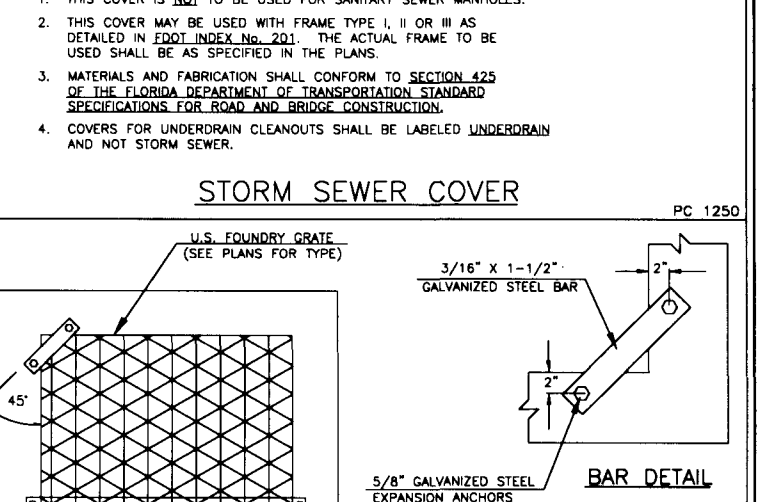
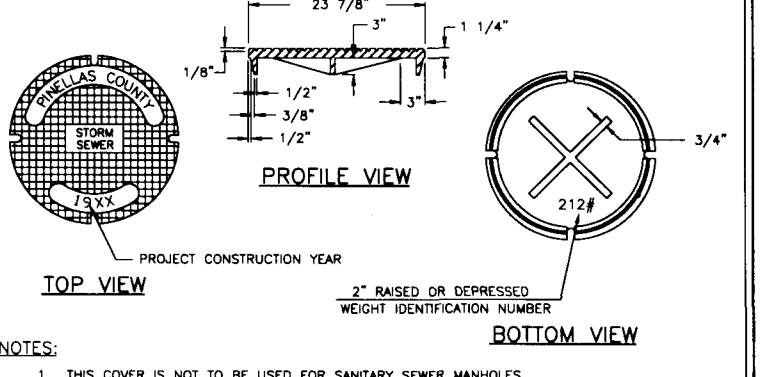
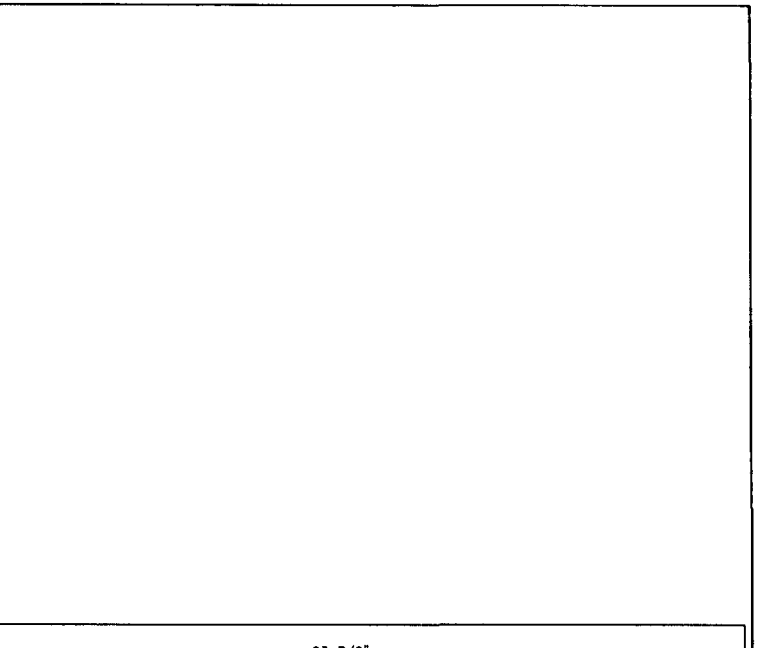
3. ROOTS GREATER THAN 1" DIAMETER SHALL NOT BE CUT UNLESS OTHERWISE APPROVED BY THE ENGINEER.

4. TREE ROOTS OF 1" DIAMETER OR LARGER THAT NEED TO BE CUT SHALL BE CUT NEATLY.

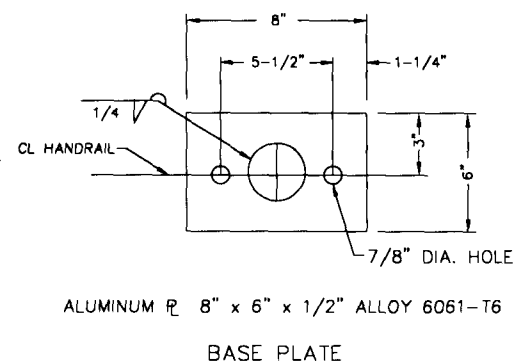
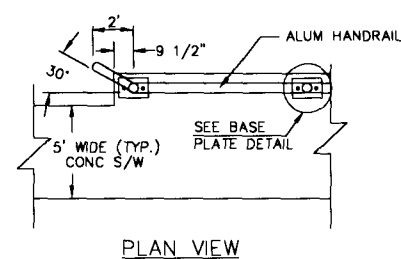
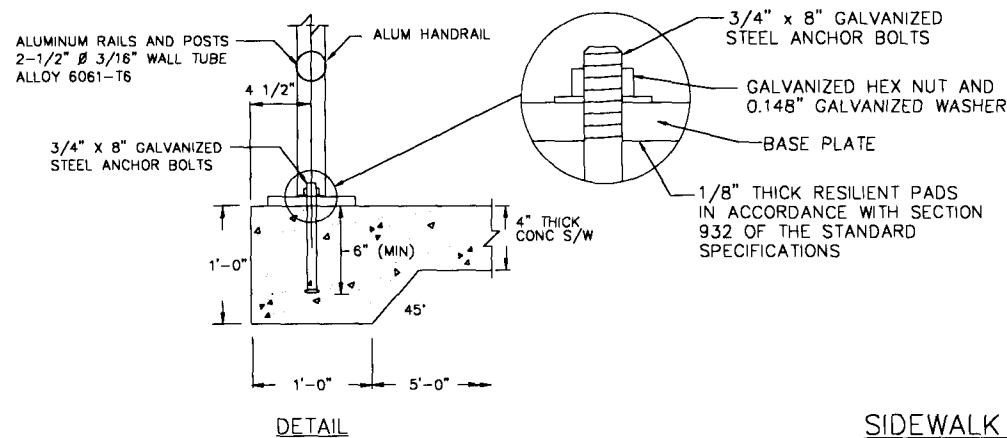
5. STOCKPILED MATERIALS OR UNNECESSARY VEHICULAR TRAFFIC SHALL NOT BE ALLOWED OVER ANY TREE ROOTS SYSTEM.

6. TYPE-A BARRIER OR TYPE-B BARRIER SHALL BE CONSTRUCTED WHEN CALLED FOR ON PLANS OR AS DIRECTED BY THE ENGINEER. BARRIERS SHALL BE MAINTAINED IN PLACE UNTIL REMOVAL IS DIRECTED BY THE ENGINEER.

7. COST OF ALL TREE BARRICADES SHALL BE INCLUDED IN PAY ITEM 120-1100 (GRADING).



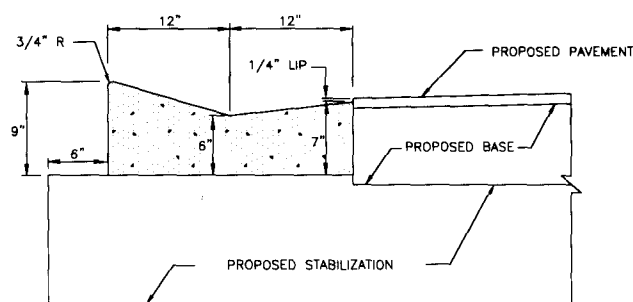
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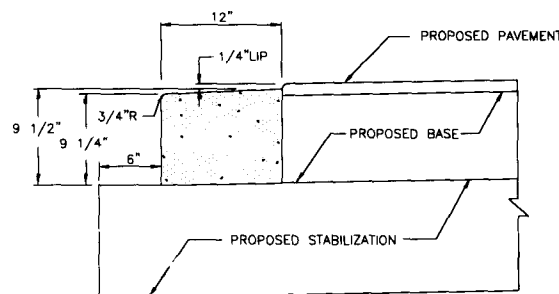
SIDEWALK WITH TYPICAL HANDRAIL DETAIL
N.T.S.
STA. 52+90 TO STA. 53+10

PIPE HANDRAIL NOTES

1. ALL FIXED JOINTS TO BE EITHER WELDED ALL AROUND AND GROUND SMOOTH; OR, COMMERCIALY DESIGNED FIXED JOINT SYSTEMS (SOLDERED, BRAZED, FUSED, BONDED OR SHRINK FITTED) SPECIFIED ON THE PLANS OR APPROVED BY THE ENGINEER. MECHANICAL JOINTS OTHER THAN EXPANSION JOINTS ARE NOT PERMITTED UNLESS SPECIFIED ON THE PLANS OR APPROVED IN WRITING BY THE ENGINEER. POSTS SHALL BE CONNECTED TO BASE BY WELD ONLY. WELD FILLER TO BE ALLOY ER5356, ER5556 OR ER5183.
2. ANCHOR BOLTS SHALL BE IN ACCORDANCE WITH ASTM A36 OR A307. NUTS, WASHERS AND BOLTS TO BE HOT DIP GALVANIZED IN CONFORMANCE WITH ASTM A153. AFTER THE NUTS HAVE BEEN TIGHTENED, THE ANCHOR BOLT THREADS SHALL BE DISTORTED OR THE NUTS AND BOLTS SPOT WELDED AND COATED WITH ZINC COMPOUND.
3. ALUMINUM HANDRAIL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 515 OF THE STANDARD SPECIFICATIONS. PAYMENT SHALL BE FULL COMPENSATION FOR FURNISHING AND INSTALLING HANDRAIL, INCLUDING MOUNTING HARDWARE, AND SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR PIPE HANDRAIL (ALUMINUM), L.F.. THE ADDITIONAL CONCRETE REQUIRED FOR THE ANCHOR BOLTS, SHALL BE CALCULATED IN CUBIC YARDS THEN CONVERTED TO SQUARE YARDS OF 4" THICK SIDEWALK (PAY ITEM 522-4001)



PROFILE VIEW OF CURB & GUTTER



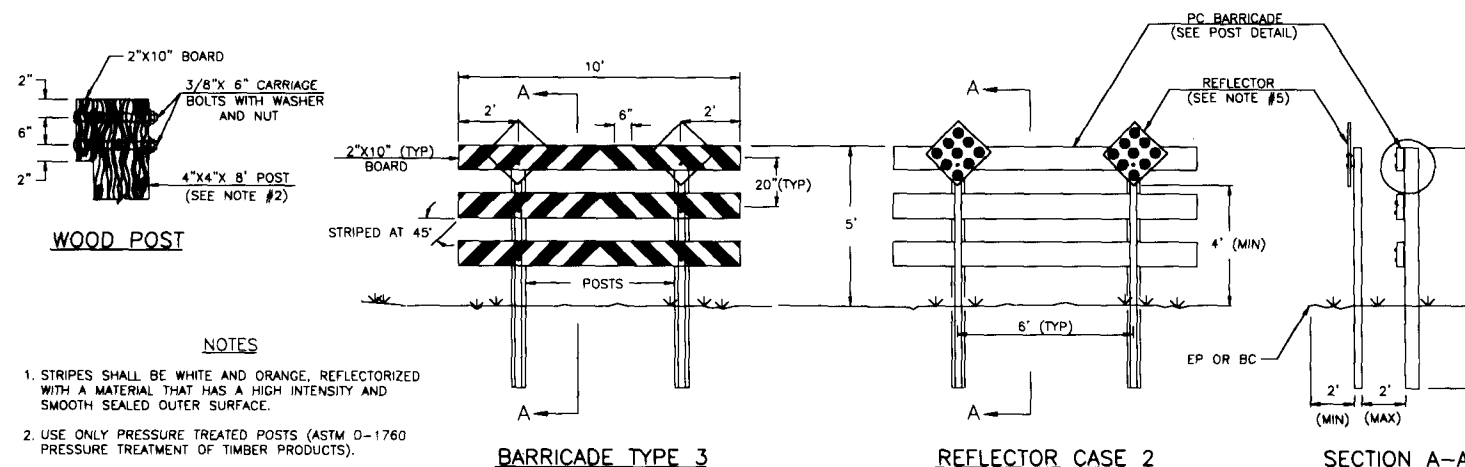
PROFILE VIEW OF HEADER CURB

NOTE:

1/2" EXPANSION JOINT EVERY 500', BETWEEN CURB SECTIONS, AT RADIUS, END OF POUR AND STRUCTURES. (FALSE JOINTS EVERY 10', LONGITUDINALLY. SEE SECTION 520 OF THE FDOT STANDARD SPECIFICATIONS.)

CURB AND GUTTER TYPE A & HEADER CURB

PC 1305

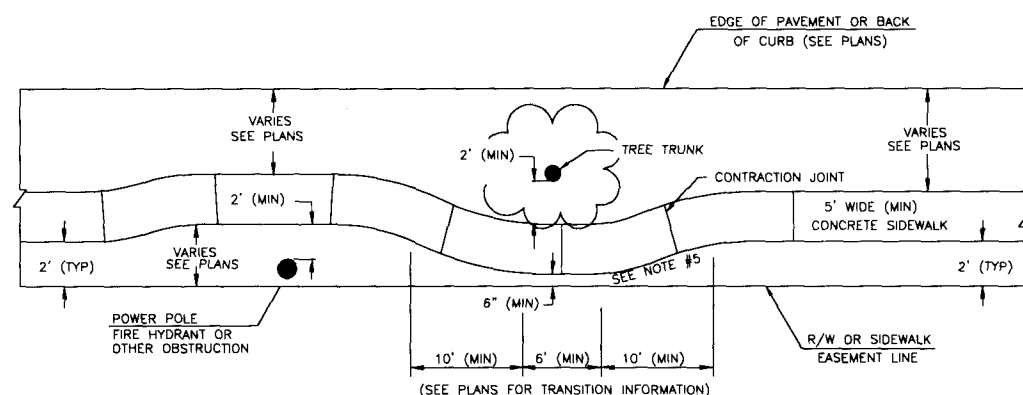


NOTES

1. STRIPES SHALL BE WHITE AND ORANGE, REFLECTORIZED WITH A MATERIAL THAT HAS A HIGH INTENSITY AND SMOOTH SEALED OUTER SURFACE.
2. USE ONLY PRESSURE TREATED POSTS (ASTM D-1760 PRESSURE TREATMENT OF TIMBER PRODUCTS).
3. USE ONLY GALVANIZED COATED HARDWARE.
4. THE SPACING OF REFLECTORS SHALL ALIGN WITH BARRICADE POSTS.
5. REFLECTOR PANEL AND POST ASSEMBLY SHALL COMPLY WITH FDOT INDEX No. 17349 FOR CASE 2.

BARRICADE WITH REFLECTORS

PC 1406



PLAN VIEW

NOTE:

1. ADJUST SIDEWALK TO AVOID OBSTRUCTIONS, AS SHOWN, OR AS DIRECTED BY THE ENGINEER.
2. CONSTRUCTION OF SIDEWALKS SHALL MEET ADA REQUIREMENTS AS SPECIFIED IN THE FDOT INDEX NO. 515 AND NO. 304.
3. POWER POLES SHALL BE MOVED WHEN POSSIBLE.
4. TREES SHALL BE TRIMMED 9' OVER SIDEWALK, 18' OVER STREETS.
5. MAXIMUM LATERAL DEFLECTION SHALL BE 5:1.
6. REMOVE TREE ROOTS WITHIN 10' OF PROPOSED GRADE.
7. CONTRACTION JOINTS SHALL MEET FDOT INDEX No. 310.

GUIDELINES FOR SIDEWALK ALIGNMENT

PC 1357

REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
			SURVEYED			
			TECHNICIAN			
			CHECKED			
			DESIGN DIVISION			
			DESIGNED	DEK	12/97	
			DRAWN	JMS	12/97	
			CHECKED	RRC	12/97	
ADDED SIDEWALK WITH TYPICAL HANDRAIL DETAIL			MLM/JLW	5-31-00		

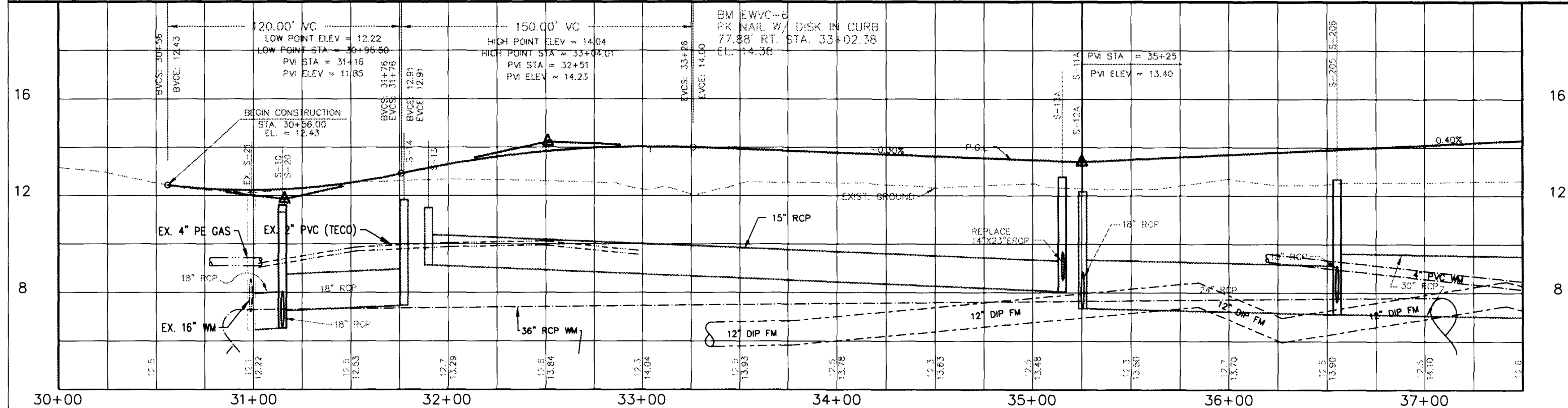
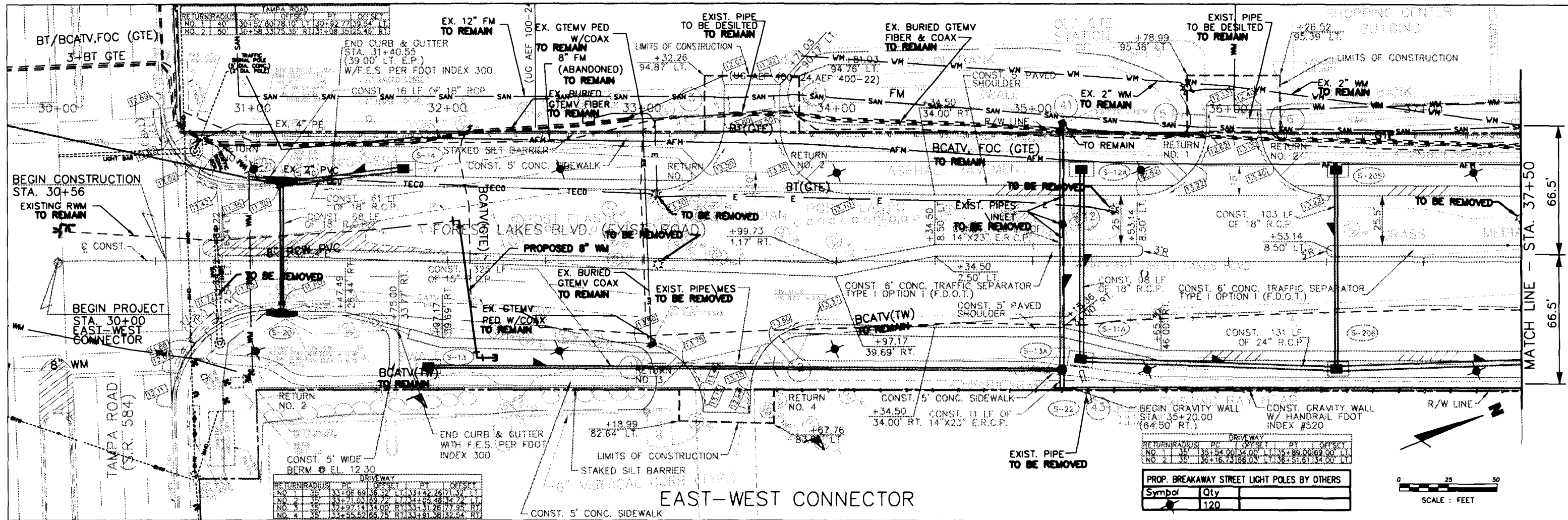
PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

CONSTRUCTION DETAILS

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 87 OF 119
File: DETAILS View: 1-11x17



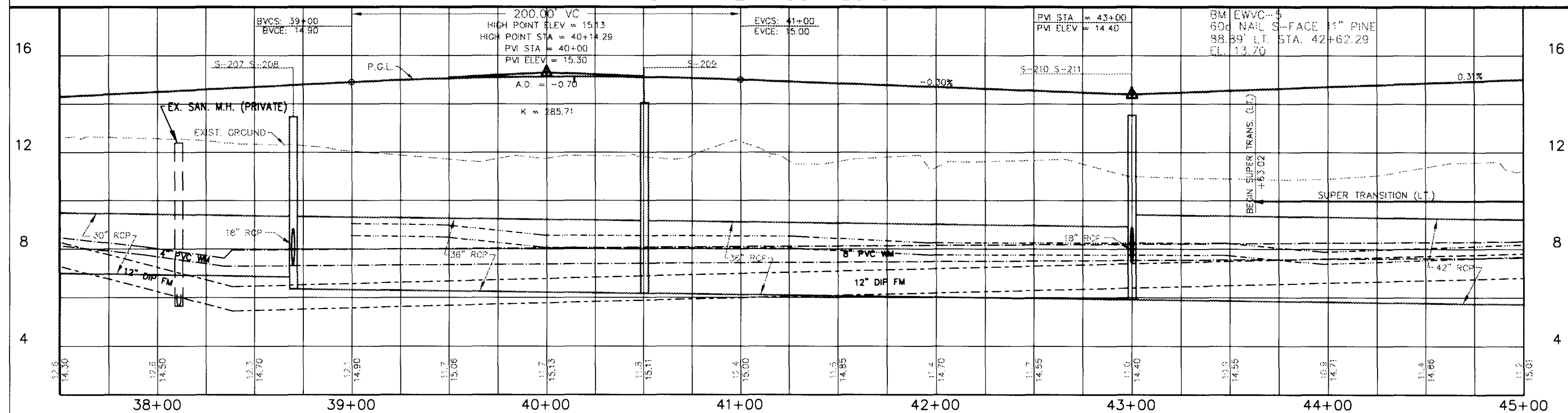
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						DESIGN DIVISION			
						DESIGNED		MLM	04/00
						DRAWN		TAW	04/00
						CHECKED		TWM	04/00
REVISED PLANS		MLM/JKI	7-07-00						

PINELLAS COUNTY, FLORIDA		Department of Public Works	
King		ASSOCIATES, INC.	
3200 W. BAYVIEW BLVD., SUITE 200		TAMPA, FL 33609	
PHONE: 813-880-8888		FAX: 813-880-8888	
E-MAIL: kji@kingeng.com			

EAST-WEST CONNECTOR ROAD	
PHASE I	
TAMPA ROAD (S.R. 584) TO THE EAST	
PROPERTY LINE OF HARROD PROPERTIES	

UTILITY INFORMATION	
PLAN AND PROFILE (1)	
STA. 30+00 TO STA. 37+50	

DATE: APRIL 10, 2000	
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET 89 OF 119	File: UTEXRD01 View: 1-11X17



REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	MLM	04/00
			DRAWN	TAW	04/00
REVISED PLANS	MLM / JKL	7-07-00	CHECKED	TWM	04/00

info@ikingassociates.com". Below the 'IK' logo is the text 'A Division of Iking & Associates, Inc.' and '10000 W. 10th Avenue, Suite 200, Denver, CO 80231'."/>

IK
A Division of Iking & Associates, Inc.
10000 W. 10th Avenue, Suite 200
Denver, CO 80231

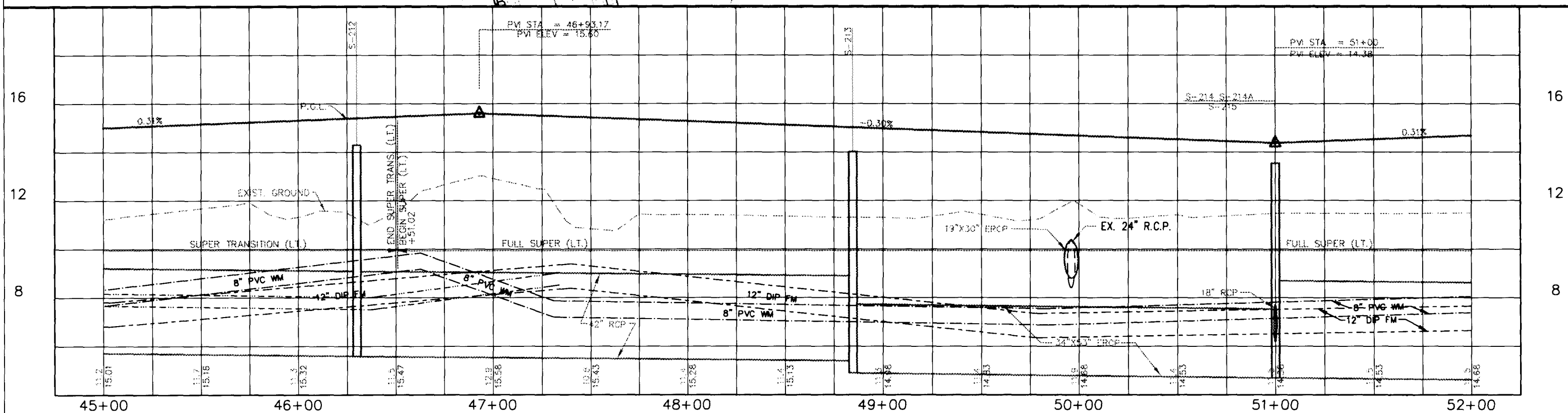
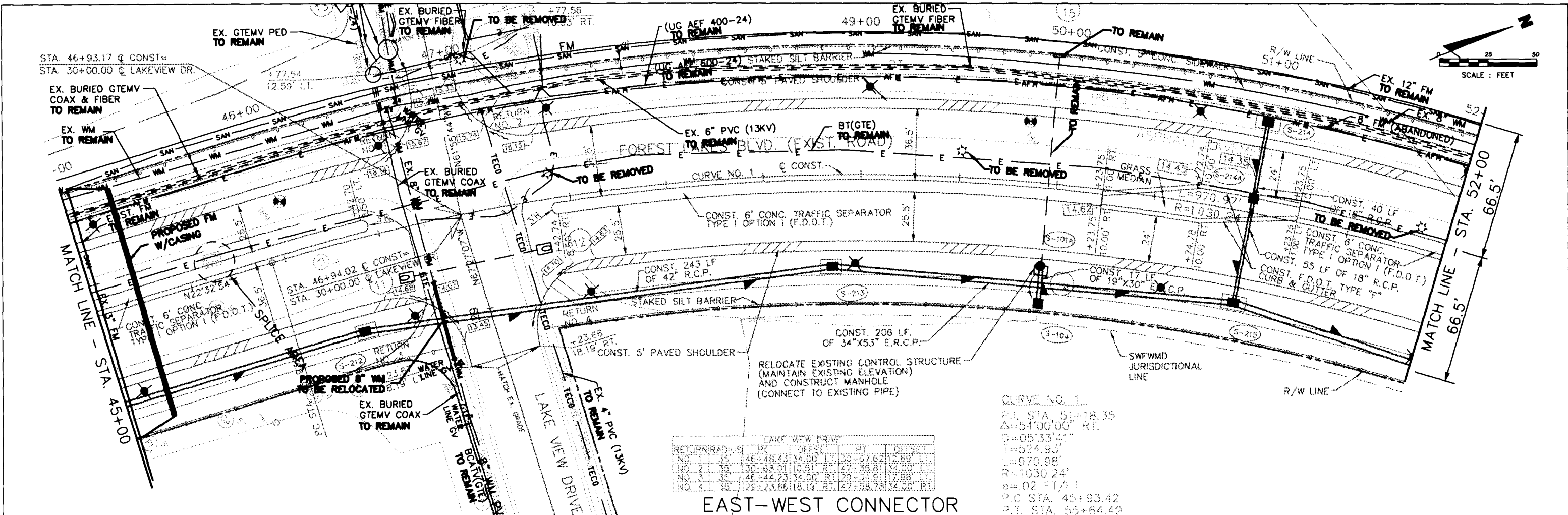
iking
ASSOCIATES, INC.
PHONE 812 • 680 • 9981
FAX 812 • 680 • 8882
E-MAIL info@ikingassociates.com

**TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES**

UTILITY INFORMATION
PLAN AND PROFILE (2)
STA. 37+50 TO STA. 45+00

SHEET 90 OF 119

File: UTEXRD02

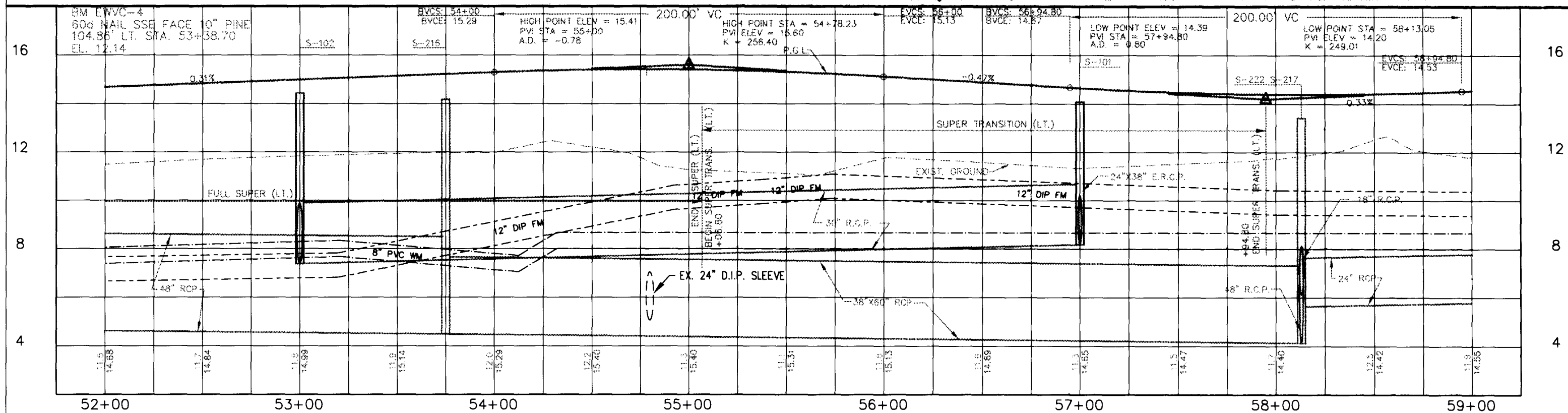
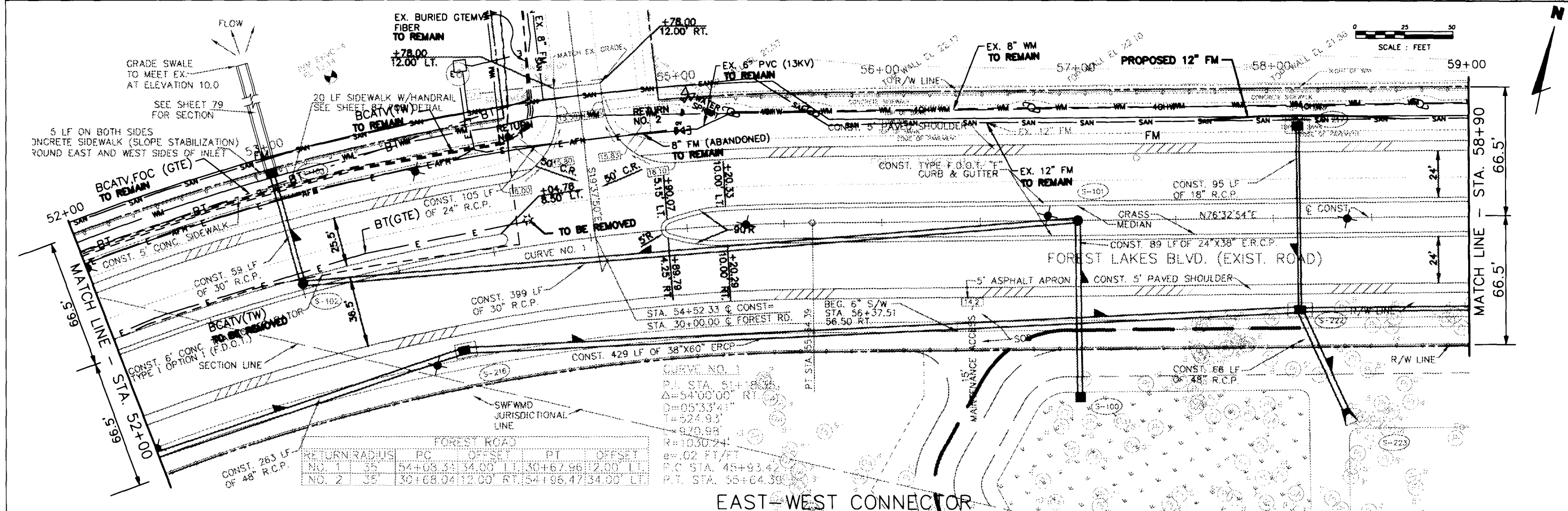


REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
DESIGNED	MLM	04/00				
DRAWN	TAW	04/00				
CHECKED	TWM	04/00				
REVISED PLANS	MLM/JKI	7-07-00				


PINELLAS COUNTY, FLORIDA Department of Public Works		King ASSOCIATES, INC. 1111 1st St. N. St. Petersburg, FL 33701 Phone: 813-886-1886 Fax: 813-886-1887 E-Mail: king@kingeng.com	
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EAST-WEST CONNECTOR ROAD PHASE I		UTILITY INFORMATION PLAN AND PROFILE (3)	
TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES		STA. 45+00 TO STA. 52+00	

DATE: APRIL 10, 2000	CONTRACT NO.:	SURVEY FILE NO.:	SHEET 91 OF 119
			File: UTEXRD03 View: 1-11X17



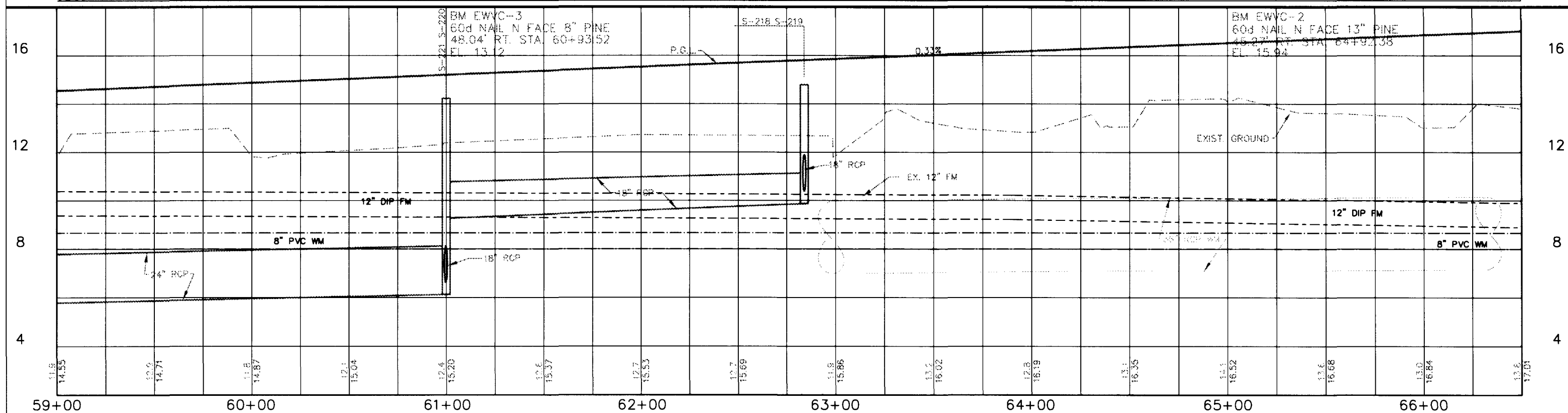
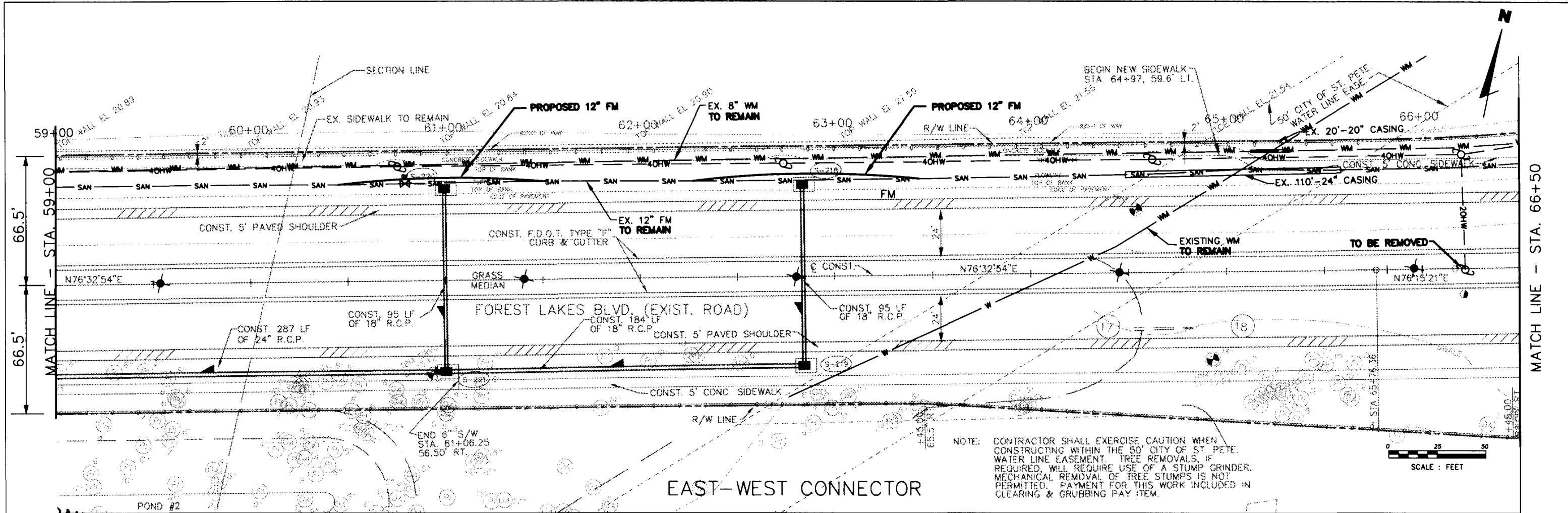
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			SURVEYED		BY
			TECHNICIAN		DATE
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	MLM	04/00
			DRAWN	TAW	04/00
REVISED PLANS	MLM/JKI	7-07-00	CHECKED	TWM	04/00

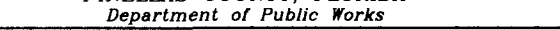
PINELLAS COUNTY, FLORIDA	
Department of Public Works	
	
ASSOCIATES, INC.	
PHONE 813-586-0881	
FAX 813-586-0881	
E-MAIL king@king-engineering.com	

EAST-WEST CONNECTOR ROAD	
PHASE I	
TAMPA ROAD (S.R. 584) TO THE EAST	
PROPERTY LINE OF HARROD PROPERTIES	

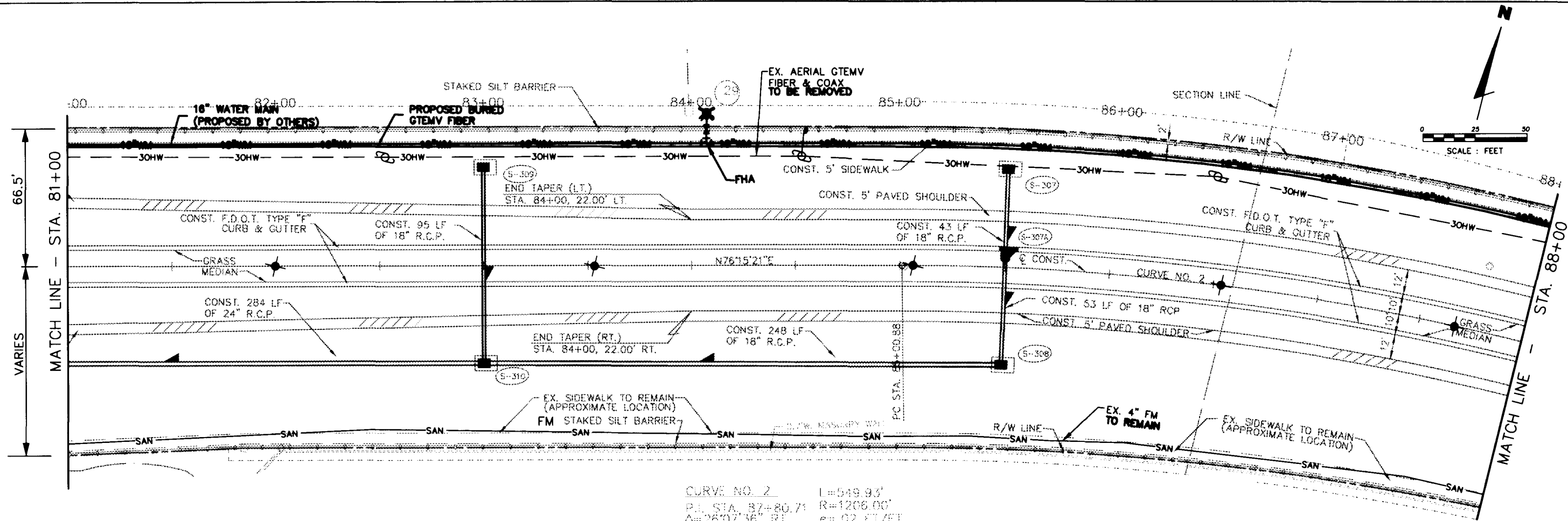
UTILITY INFORMATION	
PLAN AND PROFILE (4)	
STA. 52+00 TO STA. 59+00	

DATE: APRIL 10, 2000	
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET 92 OF 119	File: UTEXRD04 View: 1-11X17



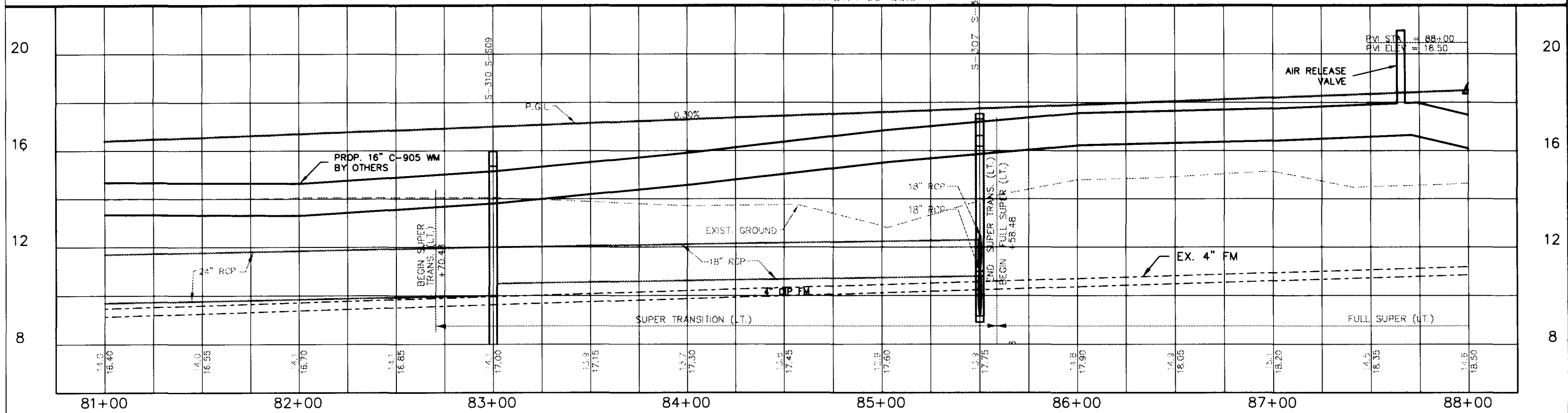
REVISIONS		BY	DATE	SURVEY BOOK No.:		PINELLAS COUNTY, FLORIDA		EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES	UTILITY INFORMATION PLAN AND PROFILE (5) STA. 59+00 TO STA. 66+50	DATE: APRIL 10, 2000	
				SURVEY DIVISION		BY	DATE			CONTRACT NO.:	
				SURVEYED						SURVEY FILE NO.:	
				TECHNICIAN						SHEET 93 OF 119	
				CHECKED						File: UTEXRD05	
				DESIGN DIVISION						View: 1-11X17	
				DESIGNED		MLM	04/00				
				DRAWN		TAW	04/00				
REVISED PLANS		MLM/JKI	7-07-00	CHECKED		TWM	04/00				

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EAST-WEST CONNECTOR

CURVE NO. 2
L=549.93'
P.I. STA. 87+80.71
Δ=26°07'36" RT.
D=04'45"03"
T=279.83'
R=1208.00'
e=.02 FT/FT
P.C. STA. 85+00.88
P.T. STA. 90+50.81



REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			SURVEYED
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			MLM
			04/00
			DRAWN
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			04/00
			CHECKED
			TWM
			04/00

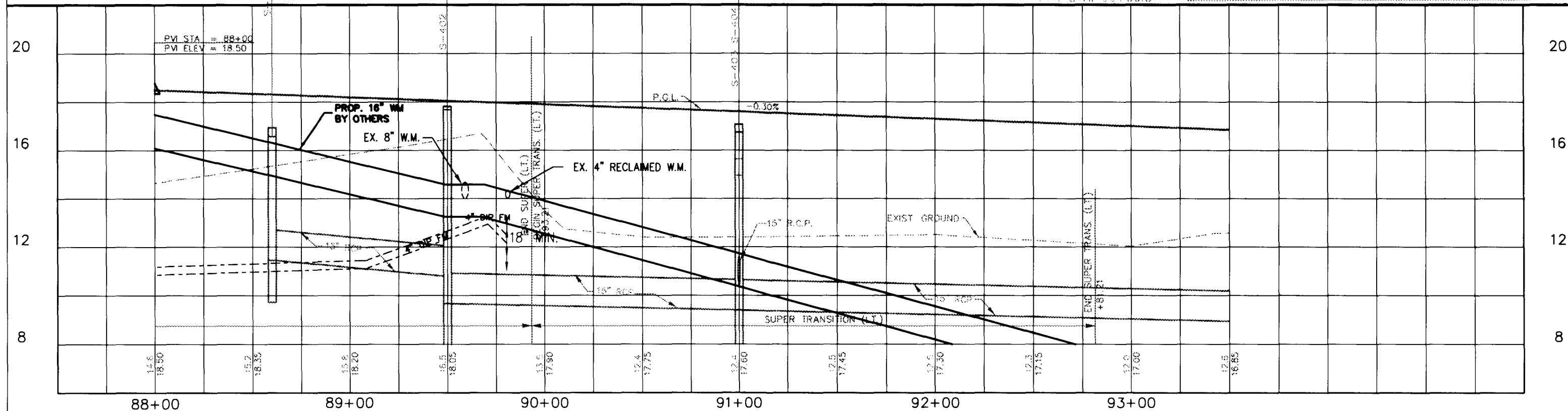
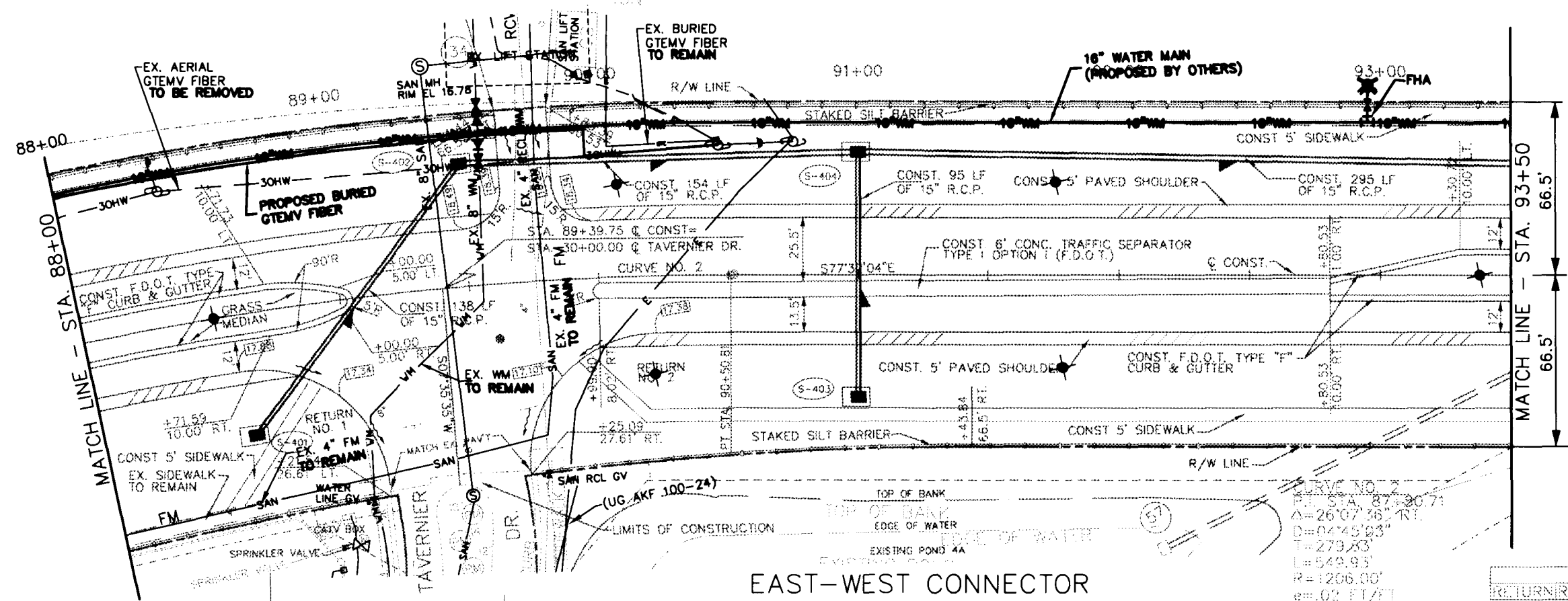
PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ASSOCIATES, INC.

PHONE: 813-880-1880
FAX: 813-880-1882
E-MAIL: kji@kingeng.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

UTILITY INFORMATION
PLAN AND PROFILE (8)
STA. 81+00 TO STA. 88+00
DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 96 OF 119
File: UTEXRD08
View: 1-11X17



REVISIONS	BY	DATE	SURVEY BOOK No.	
			SURVEY DIVISION	BY DATE
			SURVEYED	
			TECHNICIAN	
			CHECKED	
			DESIGN DIVISION	
			DESIGNED	MLM 04/00
			DRAWN	TAW 04/00
REVISED PLANS	MLM/JKI	7-07-00	CHECKED	TWM 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ASSOCIATES, INC.

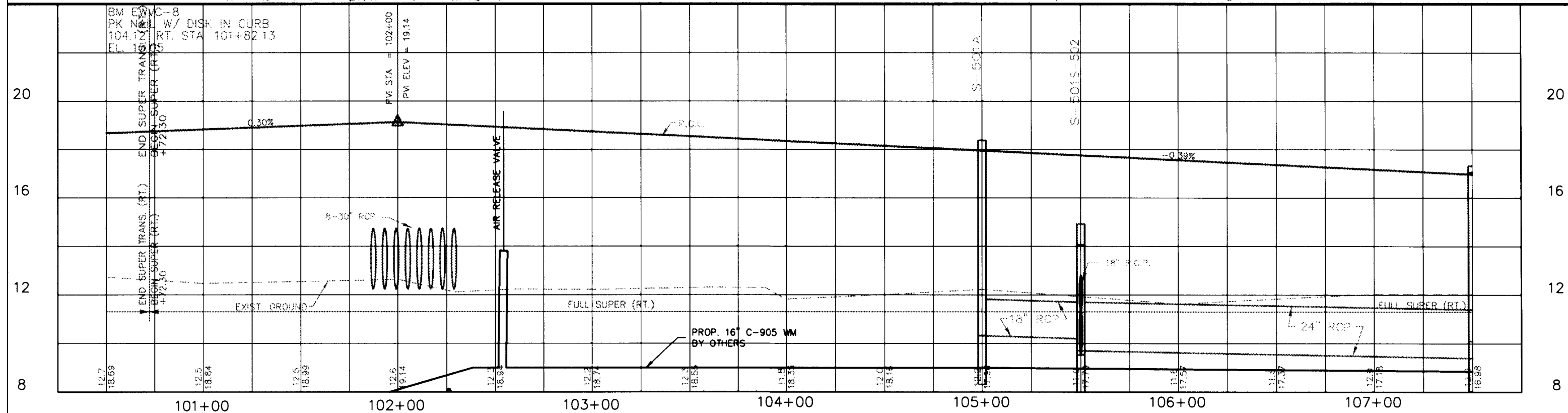
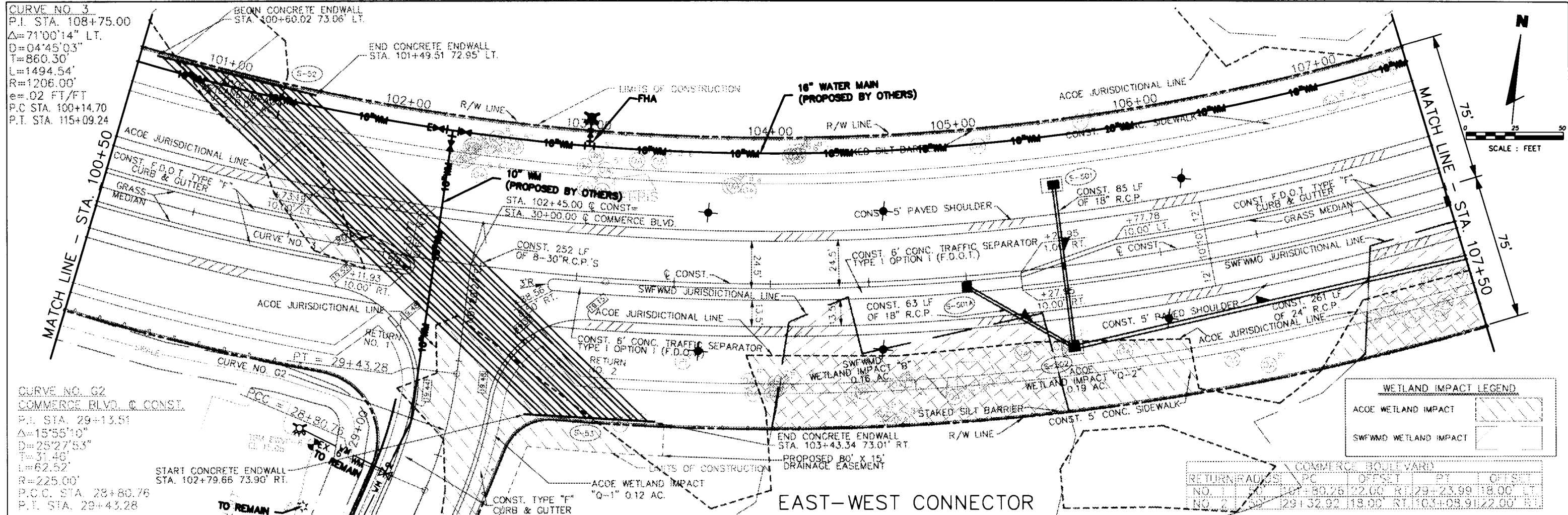
PHONE: 813-586-1888
FAX: 813-586-1889
E-MAIL: king@kingengineering.com

**EAST-WEST CONNECTOR ROAD
PHASE I**

TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

UTILITY INFORMATION	
PLAN AND PROFILE (9)	
STA. 88+00 TO STA. 93+50.00	
DATE: APRIL 10, 2000	
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET 97 OF 119	File: UTEXRD09 View: 1-11X17

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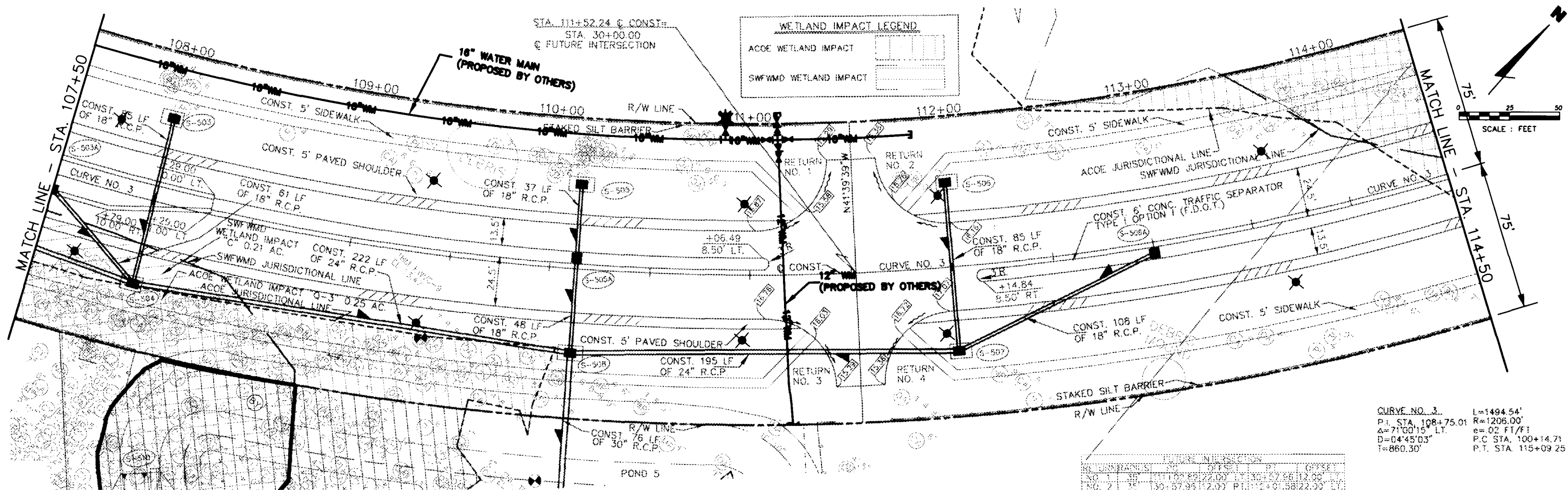


REVISIONS	BY	DATE	SURVEY BOOK No.: SURVEY DIVISION SURVEYED TECHNICIAN CHECKED DESIGN DIVISION DESIGNED DRAWN CHECKED	BY	DATE
REVISED PLANS	MLM/JKI	7-07-00	MLM TAW TWM		04/00 04/00 04/00

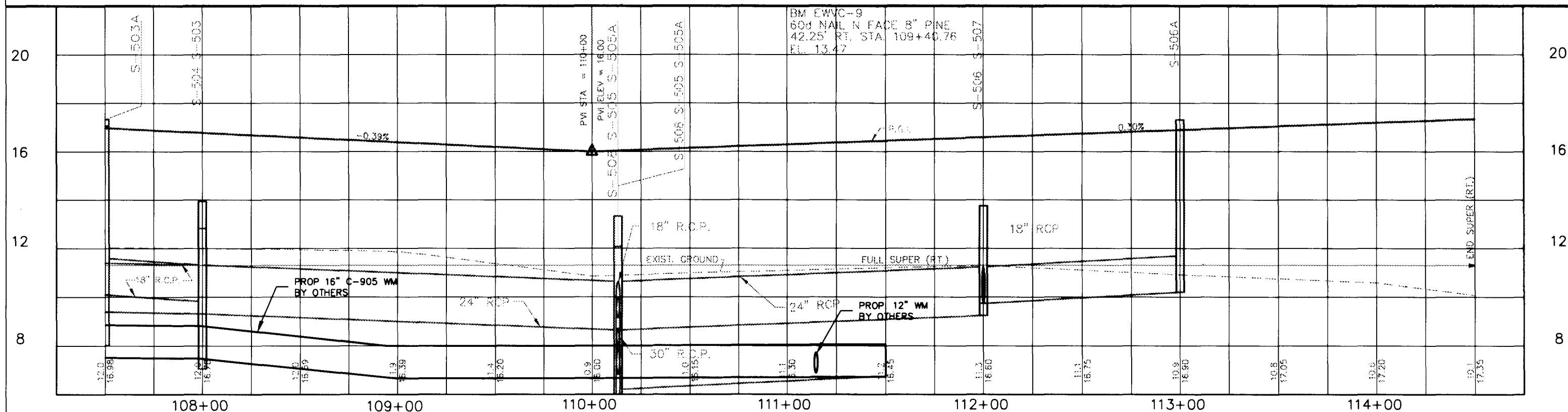
PINELLAS COUNTY, FLORIDA Department of Public Works	King ASSOCIATES, INC. PHONE: 813-486-1881 FAX: 813-486-1882 E-MAIL: kja@kingengineering.com
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EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES	UTILITY INFORMATION PLAN AND PROFILE (11) STA. 100+50 TO STA. 107+50
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DATE: APRIL 10, 2000	CONTRACT NO.:	SURVEY FILE NO.:	SHEET 99 OF 119	File: UTEXRD11 View: 1-11X17
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EAST-WEST CONNECTOR



REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
DESIGNED	MLM	04/00				
DRAWN	TAM	04/00				
CHECKED	TAM	04/00				
REVISED PLANS	MLM/JKI	07-07-00				

PINELLAS COUNTY, FLORIDA
Department of Public Works

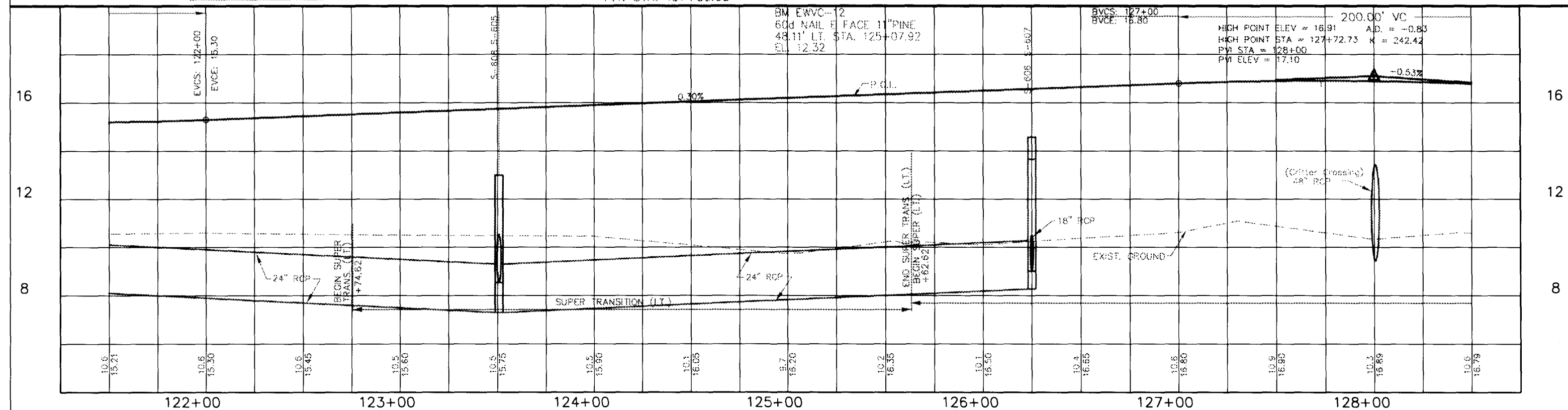


EAST-WEST CONNECTOR ROAD PHASE I

TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

UTILITY INFORMATION
PLAN AND PROFILE (12)
STA. 107+50 TO STA. 114+50

DATE:	APRIL 10, 2000
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET 100 OF 119	File: UTEXRD03 View: 1-11X17



REVISIONS	BY	DATE	SURVEY BOOK No. _____		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	MLM	04/00
			DRAWN	TAW	04/00
REVISED PLANS	MLM / JKI	7-07-00	CHECKED	TWM	04/00

IK
ENGINEERING, INC.
4815 SHAWNEE AVENUE
ANN ARBOR, MI 48106-1500
TEL: 734/769-8000 FAX: 734/769-8001
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FAX: 512/880-8002
E-MAIL: info@ingassociates.com

TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

UTILITY INFORMATION
PLAN AND PROFILE (14)
STA. 121+50 TO STA. 128+50

SHEET 102 OF 119

le: UTEXRD14
ew: 1-11X17

Profile view of a proposed road section. The vertical axis shows elevation in feet (8, 12, 16, 20). The horizontal axis shows stationing from 129+00 to 135+00.

Vertical Alignment Data:


- BM EWVC-13: 60d NAIL ESE FACE 14" PINE, 42.09' LT. STA. 130+32.37, EL. 13.93
- 200.00' VC
- LOW POINT ELEV = 15.25
- LOW POINT STA = 132+06.06
- PVI STA = 132+00
- PVI ELEV = 15.00
- A.D. = 0.99
- K = 202.02

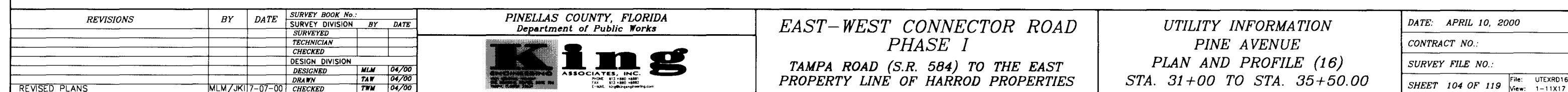
Proposed Grade and Slopes:

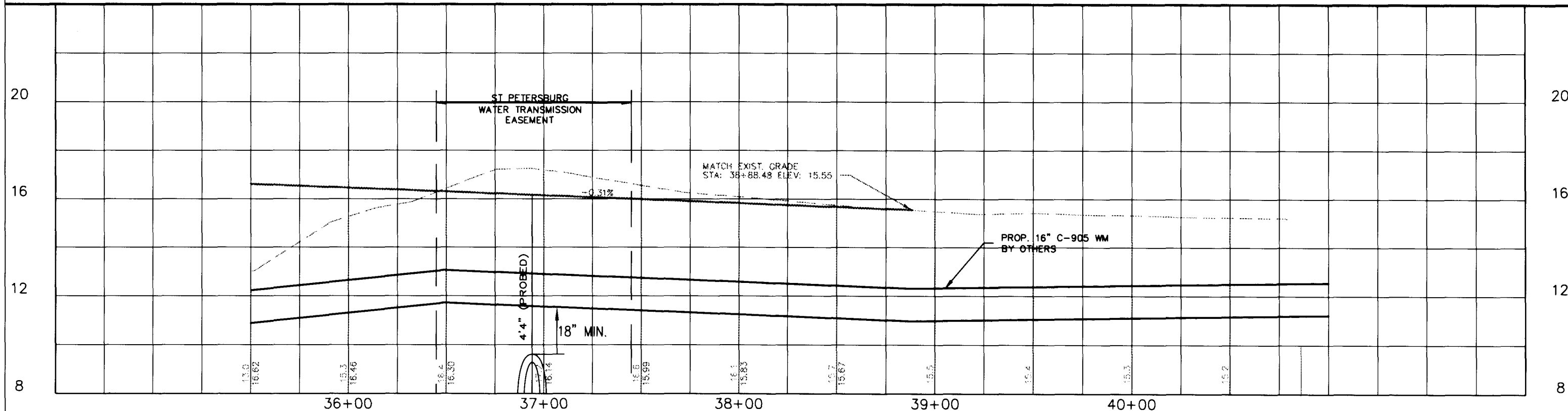
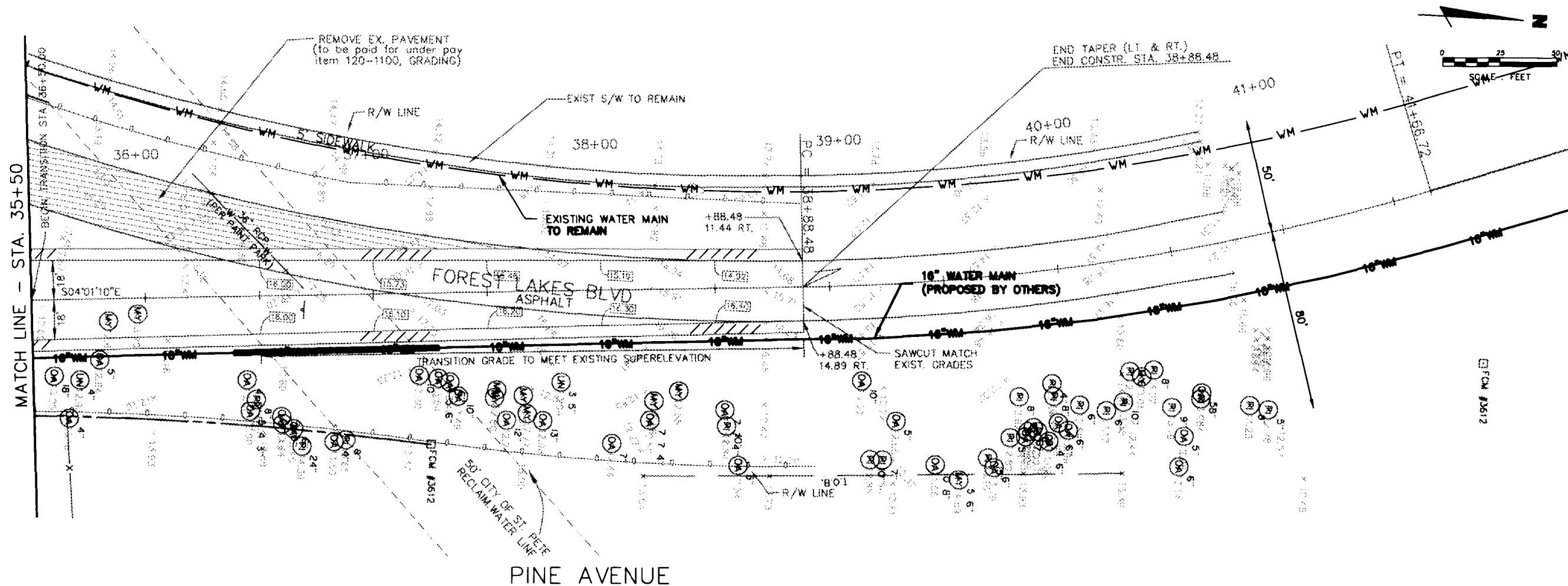
- Grade 1: -0.53%
- Grade 2: 0.46%
- Grade 3: 0.46%
- Grade 4: 2% (4:1)
- Grade 5: 0.46%

Key Points and Features:

- EVCS: 129+00, EVC: 16.58
- BVCS: 131+00, BVC: 15.53
- EVCS: 133+00, EVC: 15.47
- BVCS: 135+00, BVC: 16.40
- END PHASE I, BEGIN PHASE II, STA. 133+50.00
- FUTURE PHASE II GRADE P.C.L.
- 4:1 SLOPED SLOPE (PHASE I)
- EXIST. GROUND
- 24" RCP
- FULL SUPER (L.T.)

REVISIONS		BY	DATE	SURVEY BOOK No.:		PINELLAS COUNTY, FLORIDA Department of Public Works		EAST-WEST CONNECTOR ROAD PHASE I		UTILITY INFORMATION		DATE: APRIL 10, 2000		
				SURVEY DIVISION		BY	DATE	TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES		PLAN AND PROFILE (15)		CONTRACT NO.:		
				SURVEYED						STA. 128+50 TO STA. 135+50		SURVEY FILE NO.:		
		TECHNICIAN				SHEET 103 OF 119								File: UTEXRD15
		CHECKED				View: 1-11x17								
		DESIGN DIVISION												
				DESIGNED		MLM	04/00							
				DRAWN		TAW	04/00							
REVISED PLANS		MLM/JKI	07-07-00	CHECKED		TWM	04/00							





REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			DESIGNED
			DRAWN
			CHECKED
REVISED PLANS	MLM/JKI	7-07-00	

PINELLAS COUNTY, FLORIDA
Department of Public Works

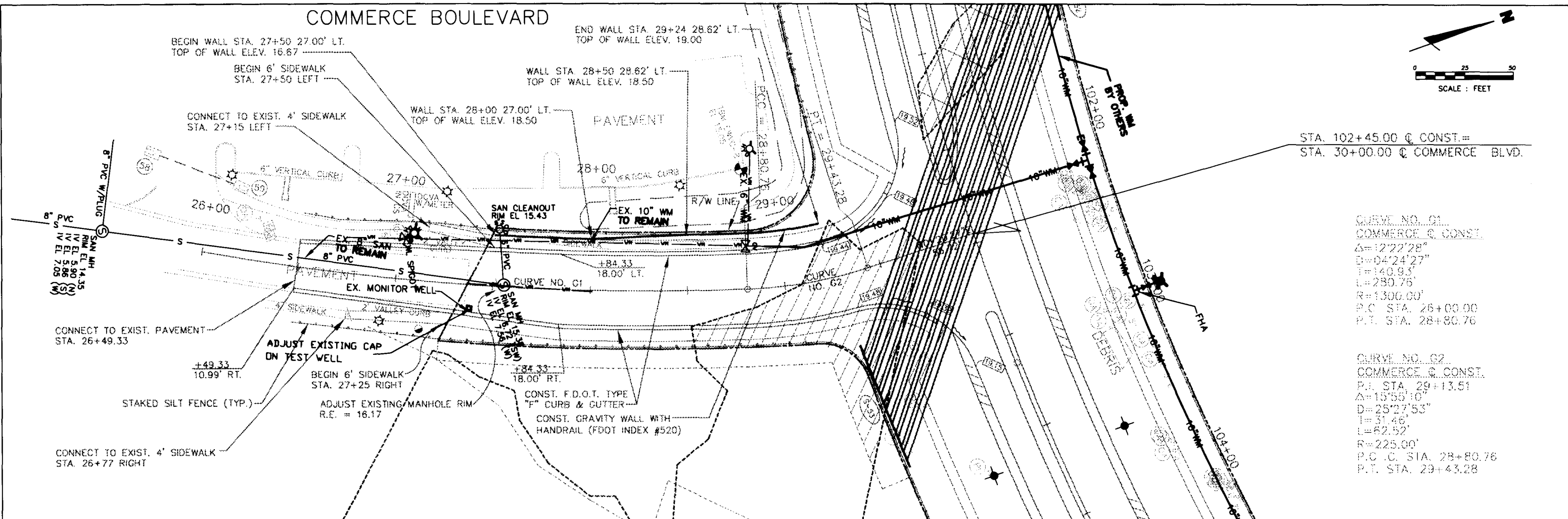
King
ENGINEERING ASSOCIATES, INC.
PHONE: 813-582-1481
FAX: 813-582-1482
E-mail: uk@kingeng.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

UTILITY INFORMATION	DATE: APRIL 10, 2000
PINE AVENUE	CONTRACT NO.:
PLAN AND PROFILE (17)	SURVEY FILE NO.:
STA. 35+50 TO STA. 38+88.48	SHEET 105 OF 119
	File: UTEXRD17 View: 1-11X17

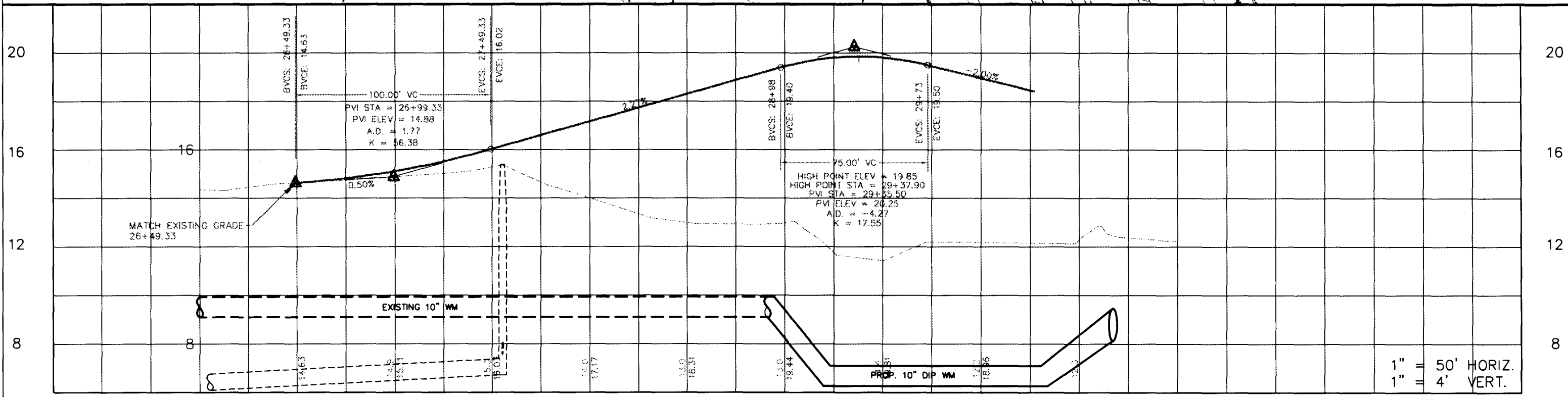
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COMMERCE BOULEVARD

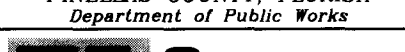


CURVE NO. 01
COMMERCE C. CONST.
 $\Delta=12^{\circ}22'28''$
 $D=04^{\circ}24'27''$
 $T=140.93'$
 $L=280.76'$
 $R=1300.00'$
P.C. STA. 26+00.00
P.T. STA. 28+80.76

CURVE NO. 02
COMMERCE C. CONST.
P.I. STA. 29+13.51
 $\Delta=15^{\circ}55'10''$
 $D=25^{\circ}27'53''$
 $T=31.46'$
 $L=62.52'$
 $R=225.00'$
P.C. STA. 28+80.76
P.T. STA. 29+43.28



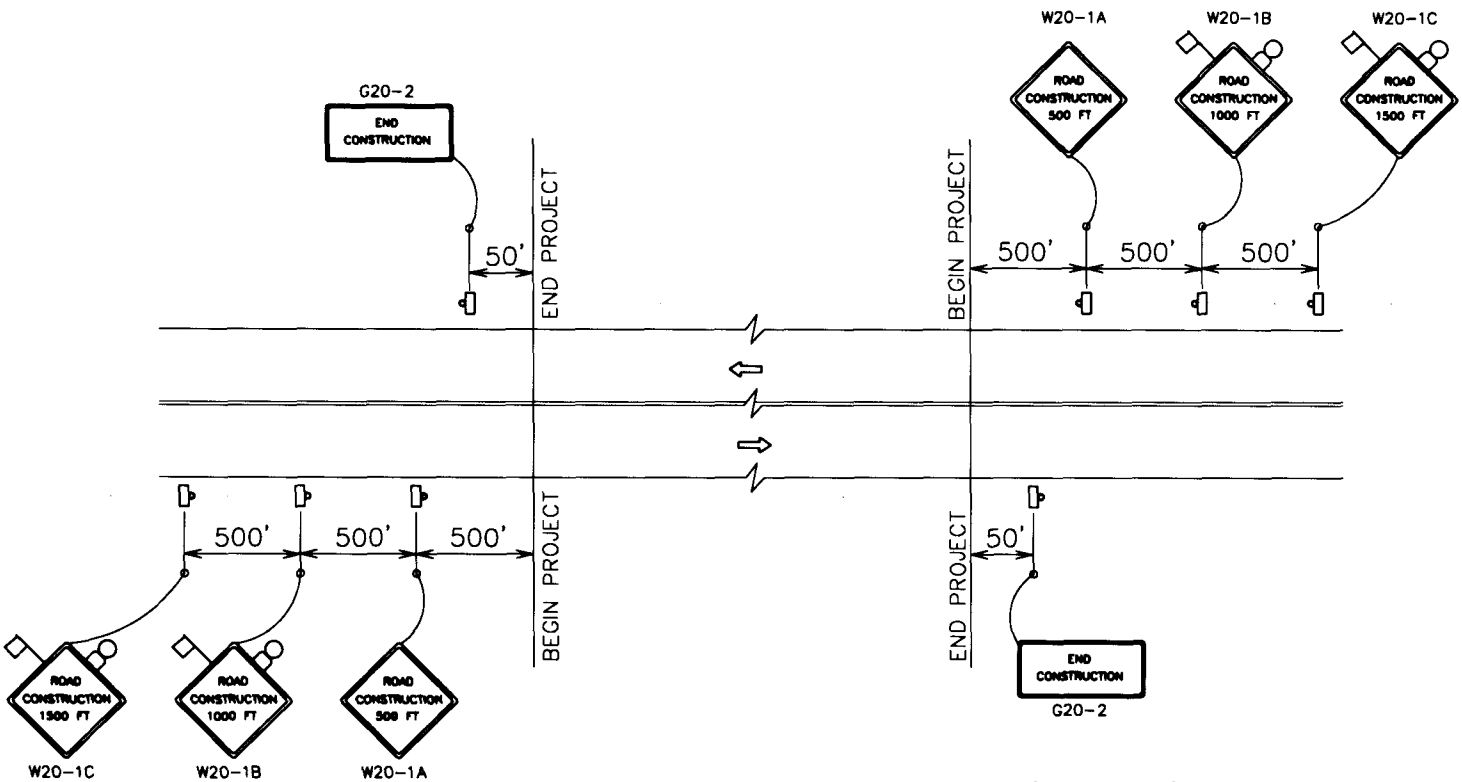
1" = 50' HORIZ.
1" = 4' VERT.

26+00				27+00				28+00				29+00				30+00								
REVISIONS		BY	DATE	SURVEY BOOK No.:		SURVEY DIVISION		BY	DATE	PINELLAS COUNTY, FLORIDA Department of Public Works				EAST-WEST CONNECTOR ROAD PHASE I				UTILITY INFORMATION COMMERCE BOULEVARD PLAN AND PROFILE (18) STA. 26+00 TO STA. 30+00				DATE: APRIL 10, 2000		
				SURVEYED						 ASSOCIATES, INC. Phone: 813-886-1880 Fax: 813-886-1882 E-Mail: kapi@kingassoc.com				TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES				STA. 26+00 TO STA. 30+00				CONTRACT NO.:		
				TECHNICIAN																		SURVEY FILE NO.:		
				CHECKED																		SHEET 106 OF 119		File: UTEXRD18
				DESIGN DIVISION																		View: 1-11X17		
				DESIGNED		MLM	04/00																	
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REVISED PLANS		MLM/JKI	7-07-00	CHECKED		TWM	04/00																	

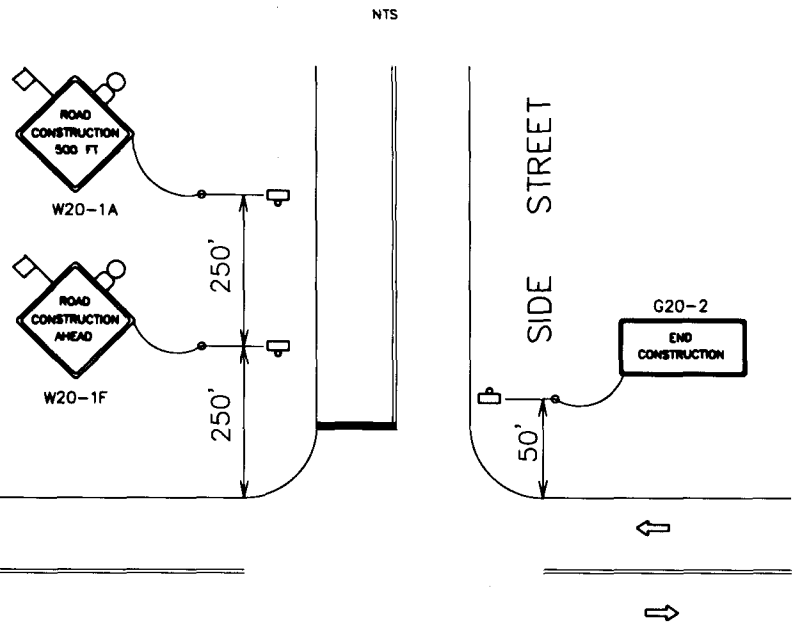
W: \\TRANS\\EW\\PHASE1\\CADD\\Matsrd02.dwg Sun Jul 09 18:04:55 2000 King Engineering Associates, Inc. (jki-pasco)

GENERAL NOTES

1. The maintenance of traffic for this project shall be in accordance with the U. S. Department of Transportation's "Manual on Uniform Traffic Control Devices"(1988) and the Florida Department of Transportation's "Roadway and Traffic Design Standards" (1994 edition).
2. Advance warning signs shall be installed before construction begins and shall remain throughout construction period. (See typical advance warning signs for details.)
3. See FDOT Standard Index 600 series for additional information and typical construction signing within the work zone.
4. Pedestrian access shall be maintained at all times. Should any sidewalks be closed, the contractor shall utilize FDOT Standard Index 660 for pedestrian control.
5. In accordance to the lane closure restrictions, maintain one-lane traffic minimum in each direction on the East-West Connector Road during periods of both active and inactive work zone. Utilize FDOT Standard Index 600 series for traffic control. Maintain existing traffic lanes on intersecting streets during periods of both active and inactive work zone.
6. The minimum allowable width for temporary travel lanes shall be 11 feet at all times during construction.
7. Arrows denote direction of traffic only and do not reflect pavement markings.
8. Maintenance of traffic signing locations are approximate and may be varied as deemed necessary by the engineer to avoid streets, driveways, or other conflicts. Minimum signing distances shall be maintained during construction.
9. Existing signs that conflict with construction signs shall be removed or covered during construction. All existing signs that are removed shall be stockpiled in a secure place and re-installed after construction unless shown to be removed in the signing and marking plans.
10. Conflicting or misleading existing pavement markings shall be removed by water blasting or other methods approved by the engineer. All existing pavement markings outside the limits of construction that have been altered because of construction operations shall be replaced in kind upon completion of the project.
11. All temporary center and edge line striping shall be 6" in width and painted in accordance with FDOT specifications.
12. The contractor shall comply with the drop off criteria during construction in accordance with Index 600.
13. Existing posted speed limits shall be maintained throughout the project unless otherwise noted.
14. Access onto existing streets and drives shall be maintained to local traffic and property owners. Cost of driveway maintenance shall be included in the lump sum maintenance of traffic pay item.
15. The traffic and travel ways shall not be altered by the contractor to create a work area until all labor and material are available for the construction in that area.
16. The contractor shall maintain drainage during construction activities. The contractor shall be responsible for the immediate removal of storm water from roadway(s) utilized for traffic maintenance in a manner approved by the engineer. Cost to be included in the lump sum maintenance of traffic pay item.
17. Provisions for traffic disruptions that are not anticipated in the traffic control plan, but are necessary to construct the project will be submitted in writing to the engineer before the start of any work. The submitted material shall include sketches, calculations and any other data required by the engineer.
18. The generalized construction sequence is set forth in these plans. The contractor may perform work within the different phases simultaneously or ahead of schedule, provided that this doesn't interfere with the intent of the construction sequence.
19. No lane closures are permitted between the hours of 5:00 a.m. and 9:00 p.m., unless prior approval is obtained from the proper authority.



TYPICAL ADVANCE WARNING SIGNS (MAINLINE)



TYPICAL ADVANCE WARNING SIGNS (SIDE-STREET)

LEGEND

- CONSTRUCTION SIGN
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT
- SIGN WITH 18"x 18" (MIN.) ORANGE FLAG & TYPE B LIGHT
- TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (W/ STEADY BURNING LIGHT @ NIGHT ONLY). TUBULAR MARKERS MAY BE USED DURING DAYLIGHT HOURS.
- ADVANCE WARNING ARROW PANEL
- TYPE III BARRICADE (W/ FLASHING LIGHT)
- TEMPORARY PAVEMENT MARKING

REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED		
ADDED NOTE #19.	RWF	5-31-00	DRAWN		
			CHECKED		

PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

MAINTENANCE OF TRAFFIC
GENERAL NOTES AND
TYPICAL ADVANCE WARNING SIGNS

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 107 OF 119
File:
View:

W: \\TRANS\\EW\\PHASE1\\CADD\\Motsrd03.dwg Mon Apr 10 11:44:36 2000 King Engineering Associates, Inc. (TAW-Pasco)

CONSTRUCTION SEQUENCE

PHASE 1: (STA. 30+56 TO STA. 133+50)

1. PLACE ALL ADVANCE WARNING SIGNS ALONG THE MAINLINE AND SIDE STREETS.

SUB-PHASE 1A: (STA. 30+56 TO STA. 41+00)

1. PLACE TYPE II BARRICADES, VERTICAL PANELS OR DRUMS ALONG THE EASTERN EDGE OF THE EXISTING PAVEMENT AS INDICATED IN THE PLAN. THE CONTRACTOR SHALL PROVIDE A SUFFICIENT TURNING RADIUS FOR EACH DRIVEWAY AND SIDE STREET CORNER.
2. CLEAR AND GRUB EXISTING GRASSED MEDIANS AND PROVIDE TEMPORARY PAVEMENT AS INDICATED IN THE PLAN. PLACEMENT OF TEMPORARY PAVEMENT SHALL BE ACCOMPLISHED DURING A NIGHTTIME OPERATION IN ACCORDANCE WITH FDOT STANDARD INDEX 621. FLAGGERS WILL BE REQUIRED FOR THIS PHASE OF CONSTRUCTION.
3. MAINTAIN TRAFFIC ALONG THE MAINLINE AND SIDE STREETS UTILIZING THE EXISTING AND TEMPORARY PAVEMENT. PROVIDE THE TEMPORARY PAVEMENT MARKINGS AND SIGNS AS INDICATED IN THE PLAN.
4. CONSTRUCT THE EASTERN HALF OF THE TYPICAL SECTION INCLUDING BUT NOT LIMITED TO THE PROPOSED DRAINAGE STRUCTURES AND PIPES, CURB AND GUTTERS, SIDEWALKS, ETC... THE DRAINAGE PIPE ENDS SHALL BE PLUGGED TO PREVENT WATER FROM ENTERING THE STRUCTURE.
5. THE TRAFFIC SEPARATOR SHALL BE CONSTRUCTED WITHIN PHASE 3.

SUB-PHASE 1B: (STA. 41+00 TO STA. 69+50)

1. PLACE TYPE II BARRICADES, VERTICAL PANELS OR DRUMS ALONG THE EASTERN EDGE OF THE EXISTING PAVEMENT AS INDICATED IN THE PLAN.
2. MAINTAIN TRAFFIC ALONG THE MAINLINE AND SIDE STREETS UTILIZING THE EXISTING PAVEMENT. PROVIDE THE TEMPORARY PAVEMENT MARKINGS AND SIGNS AS INDICATED IN THE PLAN.
3. CONSTRUCT THE EASTERN HALF OF THE TYPICAL SECTION INCLUDING BUT NOT LIMITED TO THE PROPOSED DRAINAGE STRUCTURES AND PIPES, CURB AND GUTTERS, SIDEWALKS, ETC... THE DRAINAGE PIPE ENDS SHALL BE PLUGGED TO PREVENT WATER FROM ENTERING THE STRUCTURE.

SUB-PHASE 1C: (STA. 69+50 TO STA. 133+50)

1. CONSTRUCT THE ENTIRE TYPICAL SECTION.
2. AT COMMERCE BLVD., CONSTRUCT THE CONNECTION TO THE EAST-WEST CONNECTOR RD.

PHASE 2: (STA. 30+56 TO STA. 133+50)

SUB-PHASE 2A: (STA. 30+56 TO STA. 41+00)

1. RELOCATE THE TYPE II BARRICADES, VERTICAL PANELS OR DRUMS TO THE EASTERN EDGE OF THE EXISTING PAVEMENT AS INDICATED IN THE PLAN.
2. SHIFT TRAFFIC TO THE NEWLY CONSTRUCTED ROADWAY AS INDICATED IN THE PLAN.
3. MAINTAIN TRAFFIC ALONG THE MAINLINE AND SIDE STREETS UTILIZING THE EXISTING AND NEWLY CONSTRUCTED PAVEMENT. PROVIDE THE TEMPORARY PAVEMENT MARKINGS AND SIGNS AS INDICATED IN THE PLAN.
4. CONSTRUCT THE WESTERN HALF OF THE TYPICAL SECTION INCLUDING BUT NOT LIMITED TO THE PROPOSED DRAINAGE STRUCTURES AND PIPES, CURB AND GUTTERS, SIDEWALKS, ETC...

SUB-PHASE 2B: (STA. 41+00 TO STA. 69+50)


1. PLACE TYPE II BARRICADES, VERTICAL PANELS OR DRUMS ALONG THE EASTERN EDGE OF THE EXISTING PAVEMENT AS INDICATED IN THE PLAN.
2. MAINTAIN TRAFFIC ALONG THE MAINLINE AND SIDE STREETS UTILIZING THE EXISTING AND NEWLY CONSTRUCTED PAVEMENT. PROVIDE THE TEMPORARY PAVEMENT MARKINGS AND SIGNS AS INDICATED IN THE PLAN.
3. CONSTRUCT THE WESTERN HALF OF THE TYPICAL SECTION INCLUDING BUT NOT LIMITED TO THE PROPOSED DRAINAGE STRUCTURES AND PIPES, CURB AND GUTTERS, SIDEWALKS, ETC...

PHASE 3: (STA. 30+56 TO STA. 41+00)

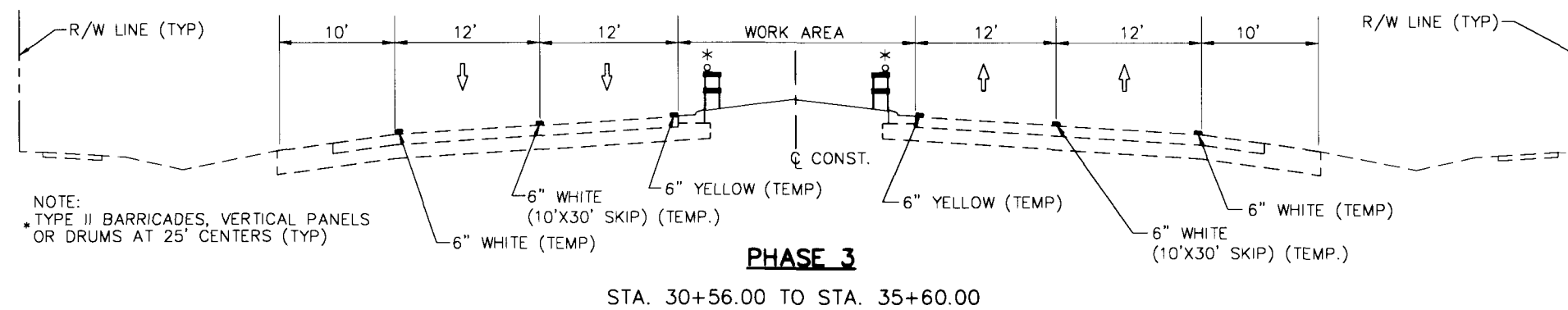
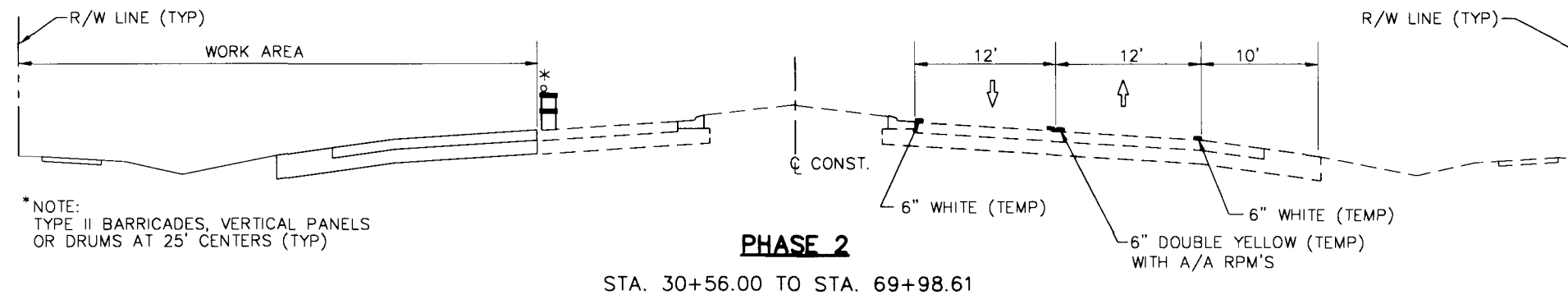
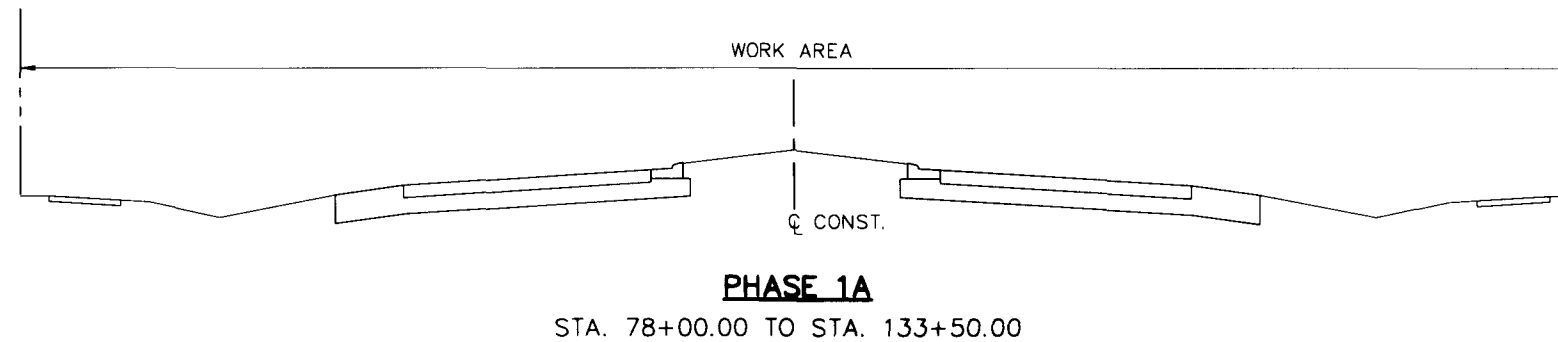
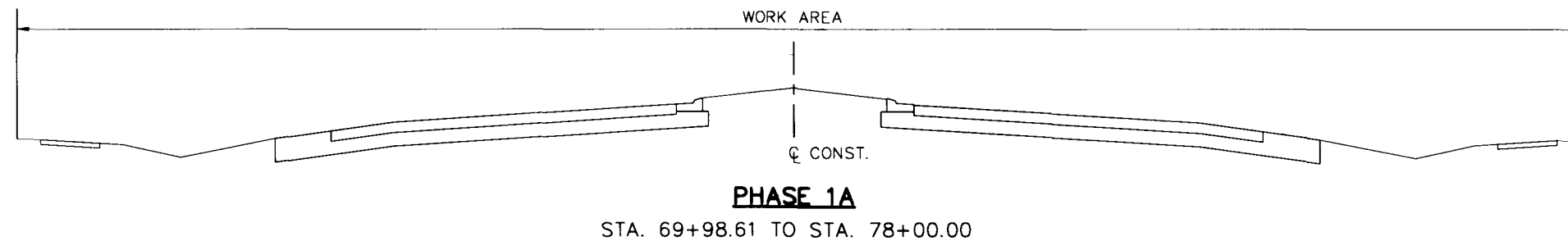
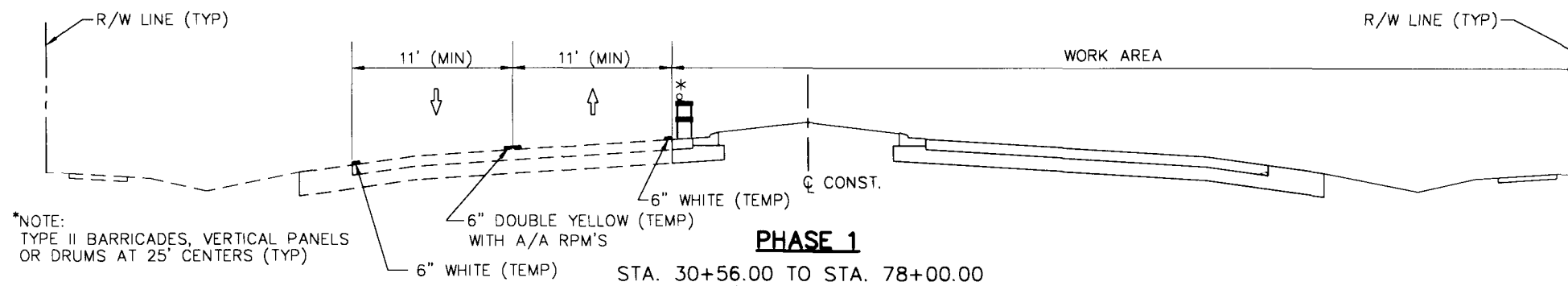
1. RELOCATE THE TYPE II BARRICADES, VERTICAL PANELS OR DRUMS ALONG THE EASTERN AND WESTERN EDGES OF THE NEWLY CONSTRUCTED PAVEMENT AS INDICATED IN THE PLAN.
2. MAINTAIN TRAFFIC ALONG THE MAINLINE BY SHIFTING TRAFFIC TO THE NEWLY CONSTRUCTED PAVEMENT. PROVIDE THE TEMPORARY PAVEMENT MARKINGS AND SIGNS AS INDICATED IN THE PLAN.
3. CONSTRUCT THE CONCRETE TRAFFIC SEPARATORS.

PHASE 4: (STA. 30+56 TO STA. 133+50)

1. PROVIDE PERMANENT SIGNING AND PAVEMENT MARKINGS. ANY PAVEMENT MARKINGS OUTSIDE THE PROJECT LIMITS THAT HAS BEEN ALTERED OR DISTURBED IN ANY WAY DURING CONSTRUCTION ACTIVITIES, ESPECIALLY THROUGH THE INTERSECTION AT TAMPA RD., SHALL BE RESTORED TO IT'S ORIGINAL CONDITION.
2. REMOVE ADVANCE WARNING SIGNS AND ALL OTHER ASSOCIATED TRAFFIC CONTROL DEVICES (I.E. BARRICADES, ETC...).
3. OPEN ALL NEWLY CONSTRUCTED TRAVEL LANES.

REVISIONS		BY	DATE	SURVEY BOOK No.:			PINELLAS COUNTY, FLORIDA Department of Public Works			 King ENGINEERING ASSOCIATES, INC. 4924 MEMORIAL HIGHWAY ONE MEMORIAL CENTER, SUITE 300 TAMPA, FLORIDA 33634 PHONE: 813 480-4881 FAX: 813 480-4882 E-MAIL: king@kingengineering.com	EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES			MAINTENANCE OF TRAFFIC CONSTRUCTION SEQUENCE			DATE: APRIL 10, 2000	
				SURVEY DIVISION		BY	DATE				CONTRACT NO.:			SURVEY FILE NO.:				
				SURVEYED														
				TECHNICIAN														
				CHECKED														
				DESIGN DIVISION														
				DESIGNED		RWF	04/00											
				DRAWN		JRL	04/00											
				CHECKED		RWF	04/00											
														SHEET 108 OF 119		File: View:		

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REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
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			CHECKED			
			DESIGN DIVISION			
			DESIGNED	RWF	04/00	
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			CHECKED	RWF	04/00	

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.

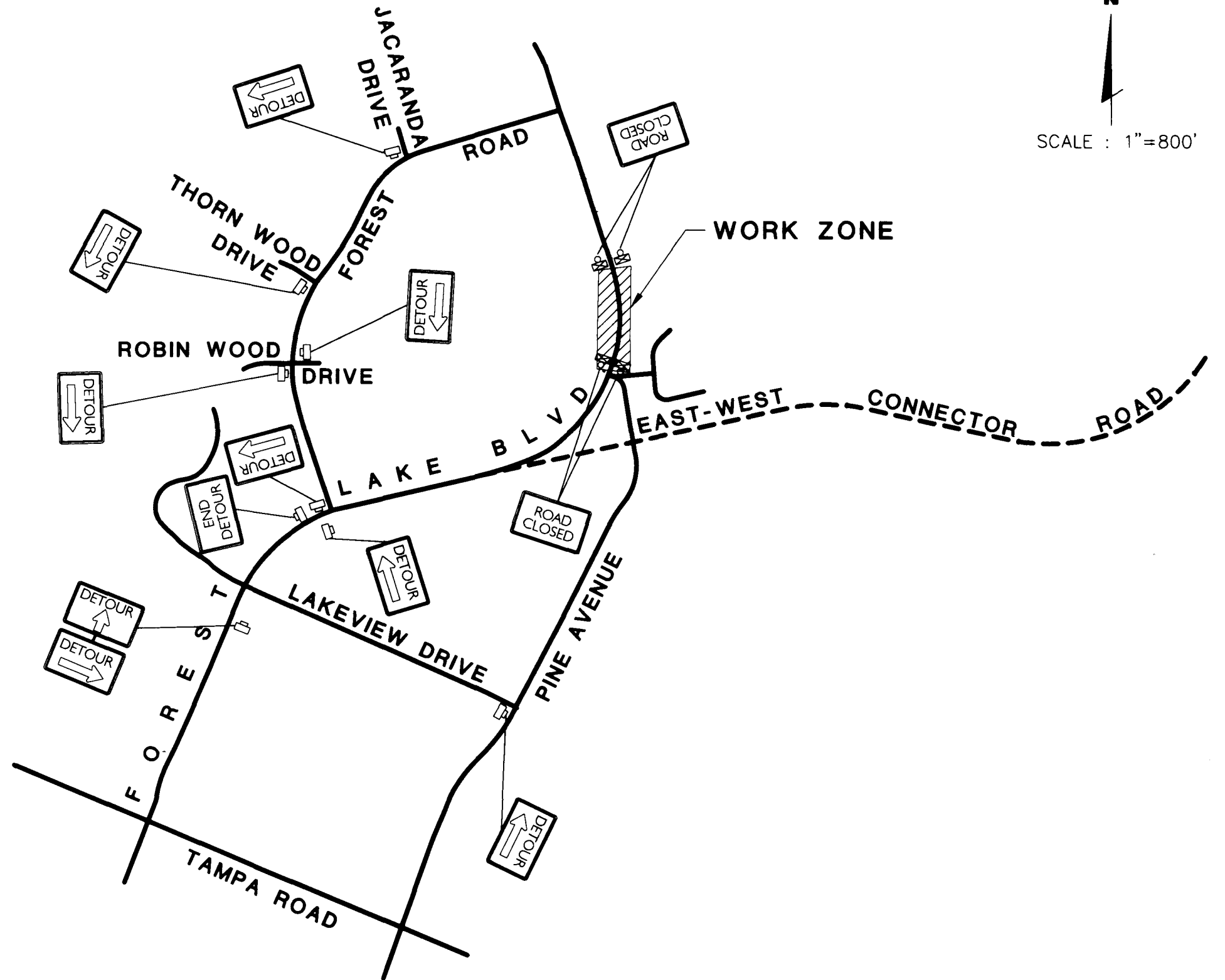
PHONE 813-880-1881
FAX 813-880-0882
E-MAIL king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 109 OF 119
File: MOTSRD01 View: 1-11X17

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REVISIONS	BY	DATE	SURVEY BOOK No.:		
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			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	RWF	04/00
			DRAWN	JRL	04/00
			CHECKED	RWF	04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ASSOCIATES, INC.

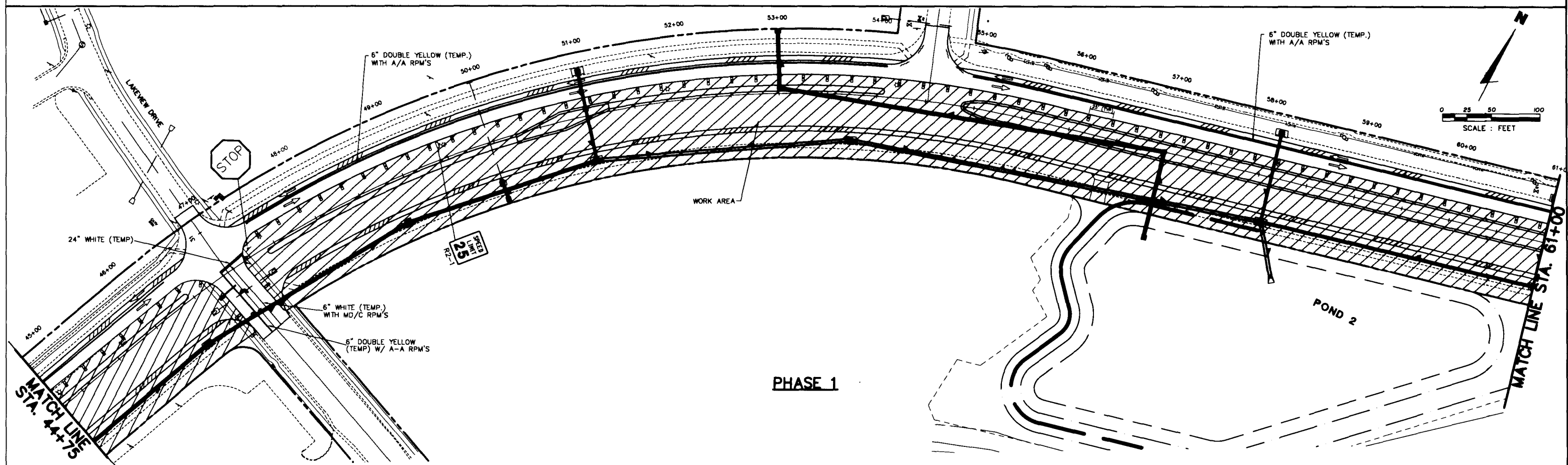
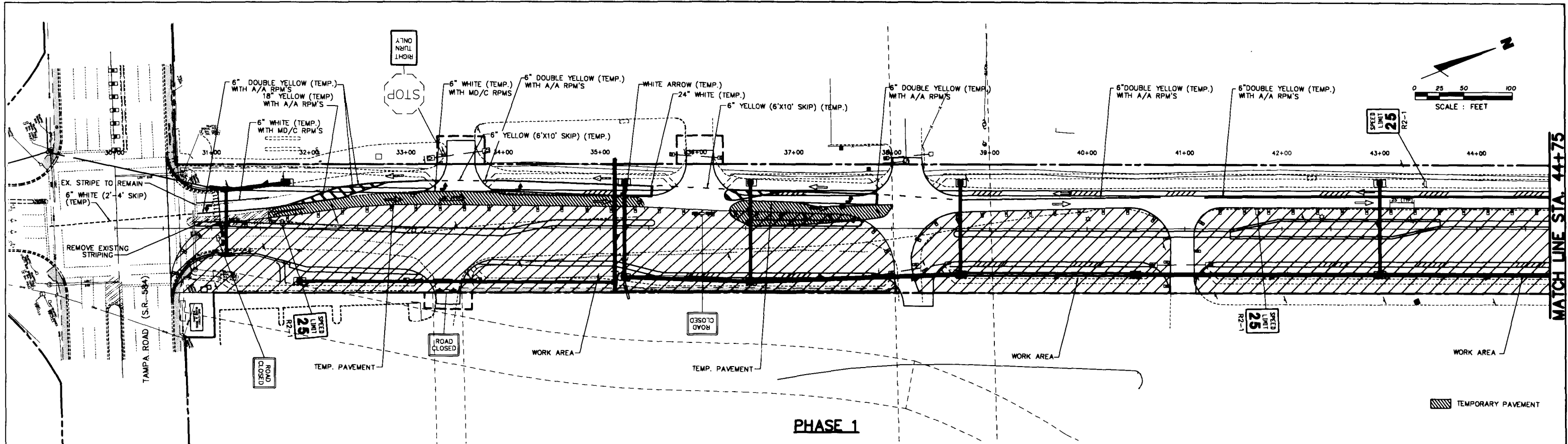
PHONE 813-280-1881
FAX 813-280-1882
E-MAIL king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

MAINTENANCE OF TRAFFIC
DETOUR PLAN
PHASE 1

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 110 OF 119
File: DETOUR View: 800-11X17

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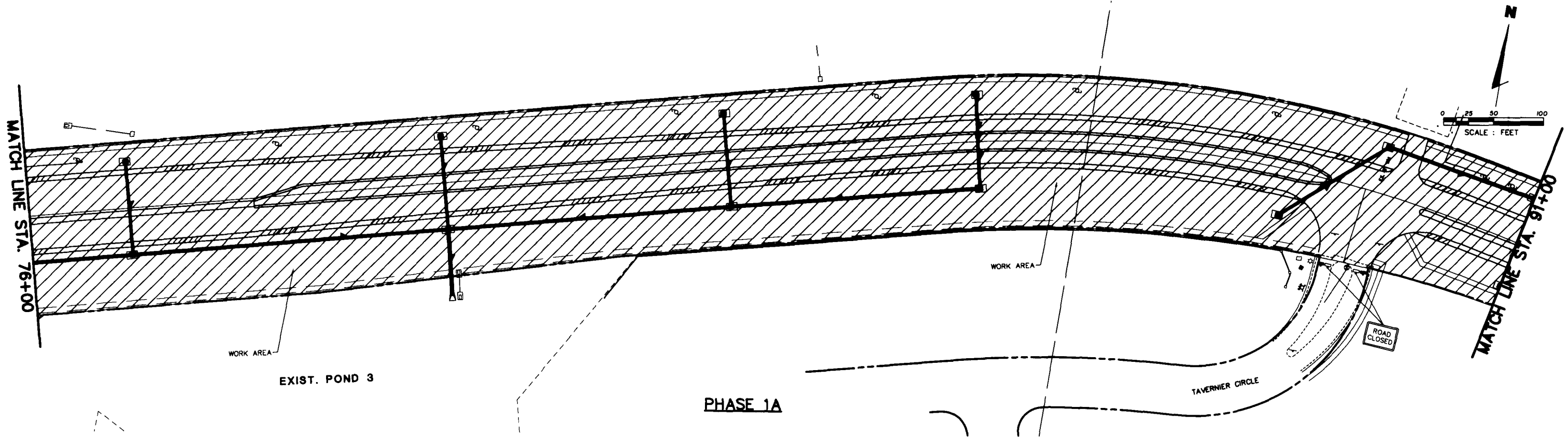
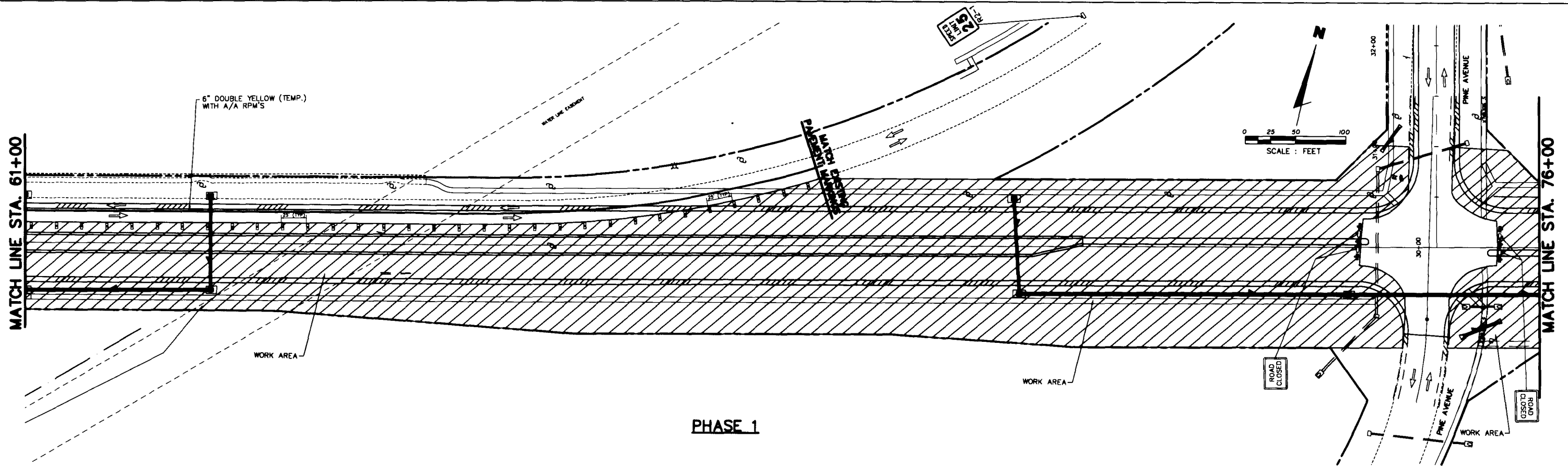
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				DESIGNED	RWF	04/00	
				DRAWN	JRL	04/00	
				CHECKED	RWF	04/00	
REV. STM, ADDED BARRICADES FOR TAMPA ROAD EB LEFT TURN.				MLM/RWF	5-31-00		

PINELLAS COUNTY, FLORIDA Department of Public Works		King ASSOCIATES, INC. PHONE: 813-880-1001 FAX: 813-880-1002 E-MAIL: king@kingengineering.com
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EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES		MAINTENANCE OF TRAFFIC PLANS (1) TAMPA ROAD TO STA. 61+00	
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DATE: APRIL 10, 2000	CONTRACT NO.:	SURVEY FILE NO.:	File: MOTRD01
		SHEET 111 OF 119	View: 1-11X17

W:\TRANS\EW\PHASE1\CADD\Motrd02.dwg Sat Jul 08 17:06:10 2000 King Engineering Associates, Inc. (TAM-Pasco)



REVISIONS	BY	DATE	SURVEY BOOK No.:		
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			SURVEYED		
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			DESIGN DIVISION		
			DESIGNED	MLM	04/00
			DRAWN	TAM	04/00
			CHECKED	MLM	04/00
ADDED STM. STR.			MLM/TAM	5-31-00	

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.

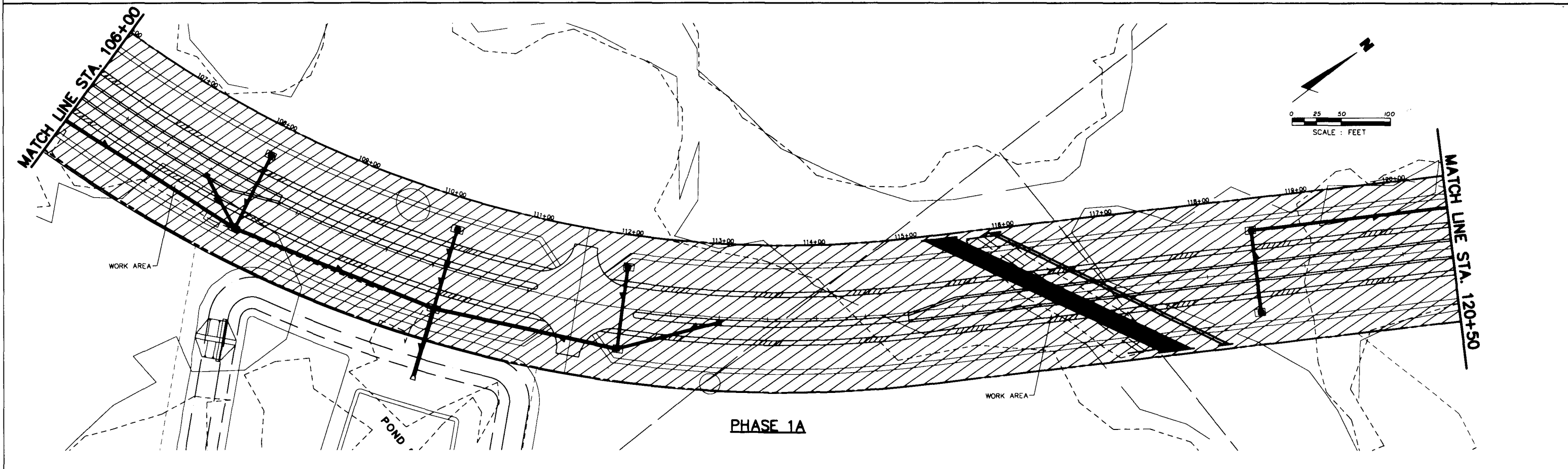
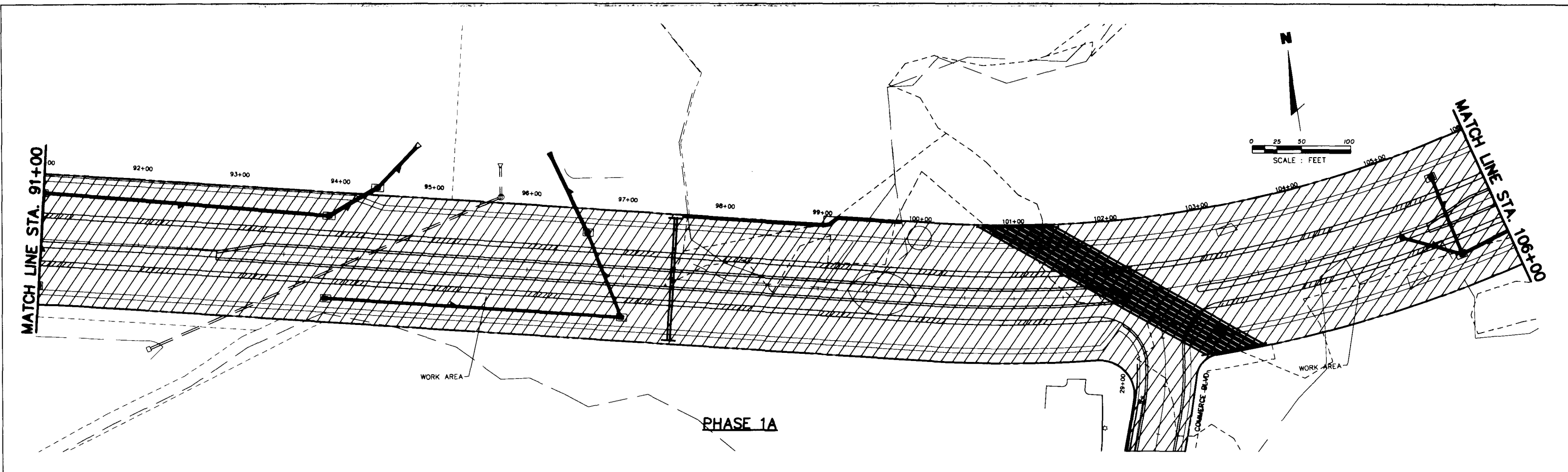
PHONE 813-880-0881
FAX 813-880-0882
E-MAIL king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

MAINTENANCE OF TRAFFIC PLANS (2)
STA. 61+00 TO STA. 91+00

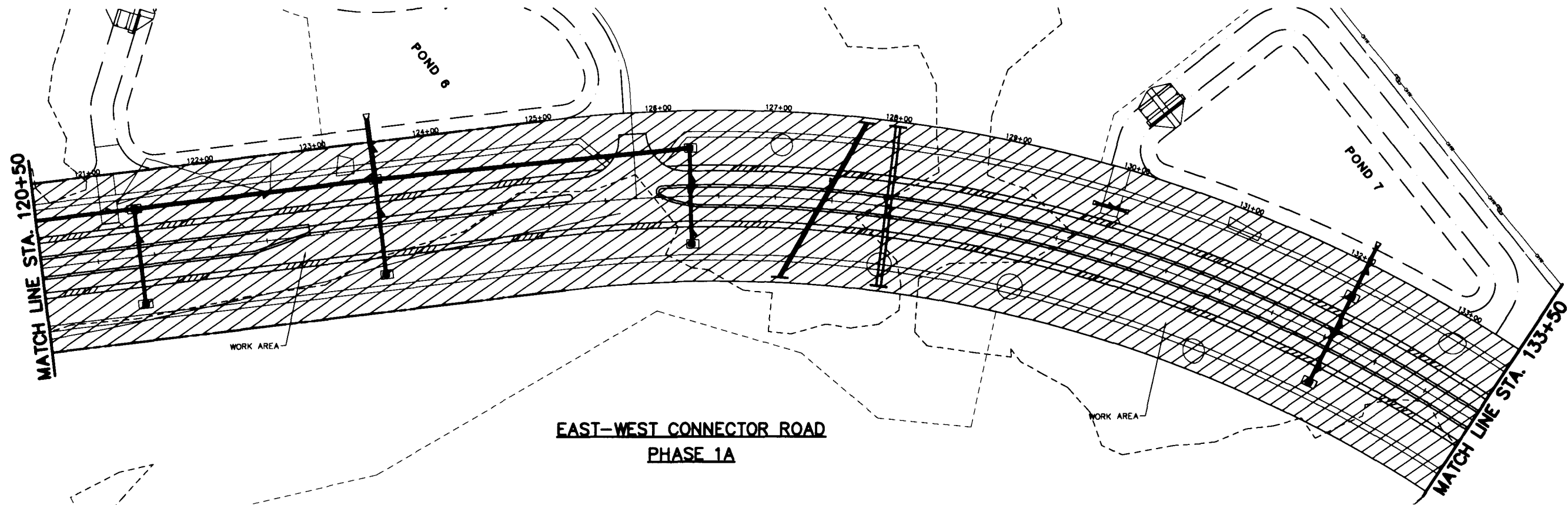
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SHEET 112 OF 119
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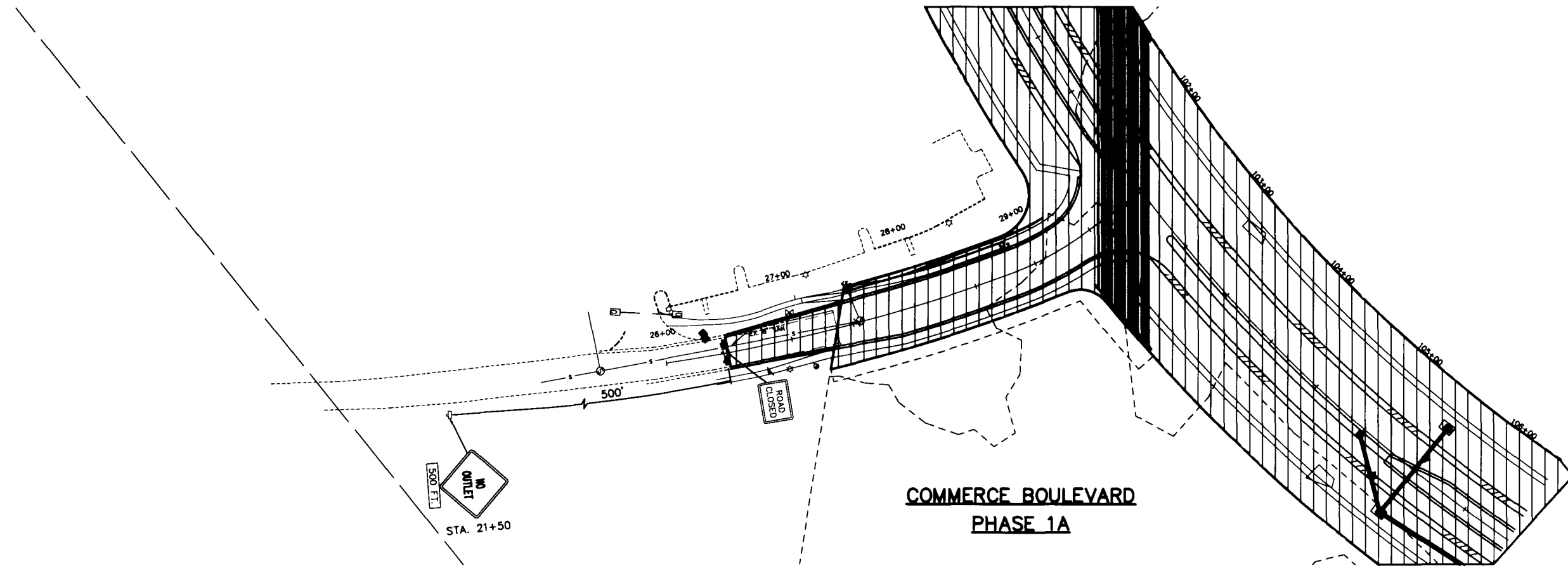


REVISIONS		BY	DATE	SURVEY BOOK No.	
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				DESIGNED	RWF 04/00
				DRAWN	JRL 04/00
				CHECKED	RWF 04/00
				PINELLAS COUNTY, FLORIDA Department of Public Works	
				King ENGINEERING ASSOCIATES, INC. 1401 W. MANHATTAN, SUITE 200 TAMPA, FLORIDA 33604 PHONE: 813-880-1881 FAX: 813-880-8882 E-MAIL: king@kingengineering.com	
				EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES	
				MAINTENANCE OF TRAFFIC PLANS (3) STA. 91+00 TO STA. 120+50	
				DATE: APRIL 10, 2000	
				CONTRACT NO.:	
				SURVEY FILE NO.:	
				SHEET 113 OF 119	
				File: MOTRD03 View: 1-11x17	

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**EAST-WEST CONNECTOR ROAD
PHASE 1A**



**COMMERCE BOULEVARD
PHASE 1A**

REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
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			DESIGNED	RWF	04/00
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ADDED STM. STR.			MLM/TAW	5-31-00	

PINELLAS COUNTY, FLORIDA
Department of Public Works



**EAST-WEST CONNECTOR ROAD
PHASE I**
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

MAINTENANCE OF TRAFFIC PLANS (4)
STA. 120+50 TO STA. 133+50
AND COMMERCE BOULEVARD

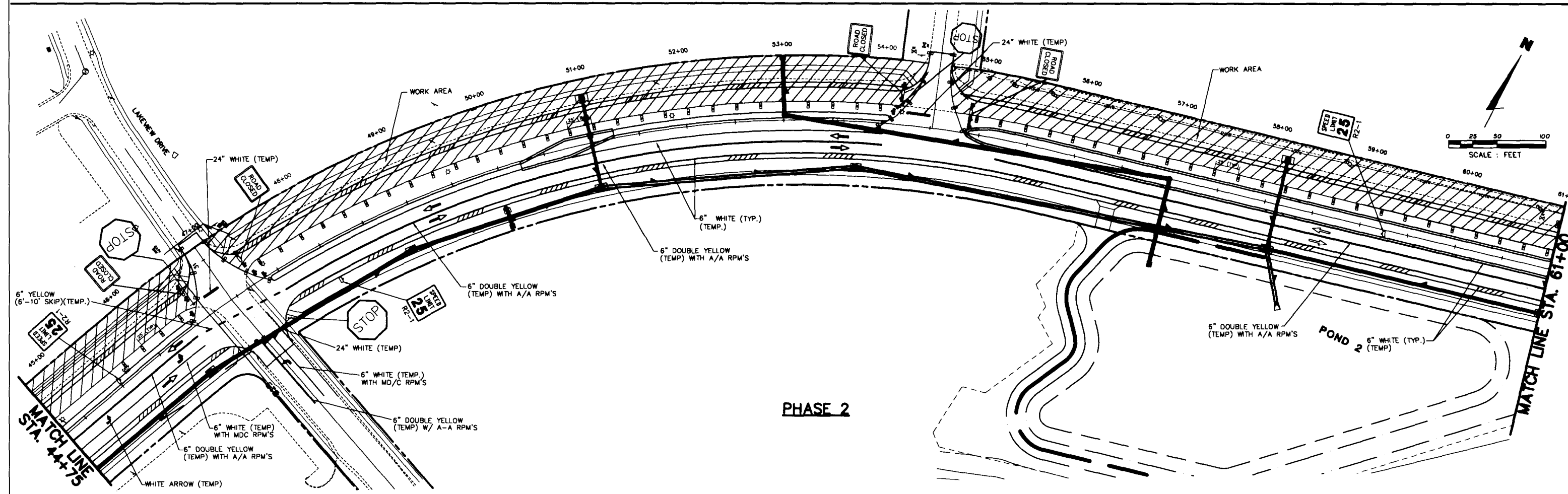
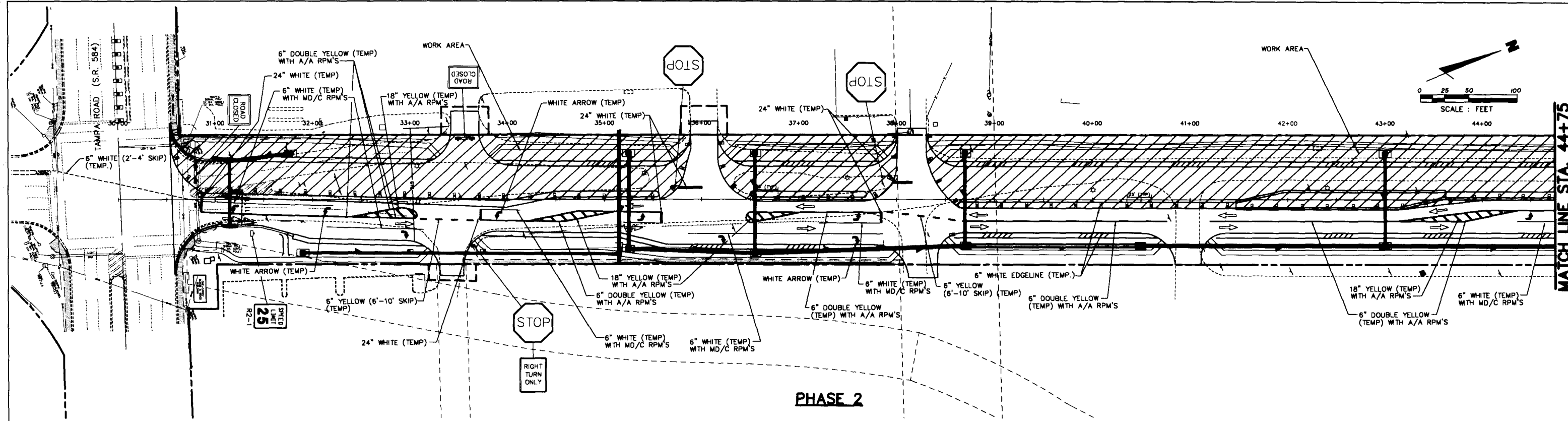
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CONTRACT NO.:


SURVEY FILE NO.:

SHEET 114 OF 119
File: MOTRD04
View: 1-11X17

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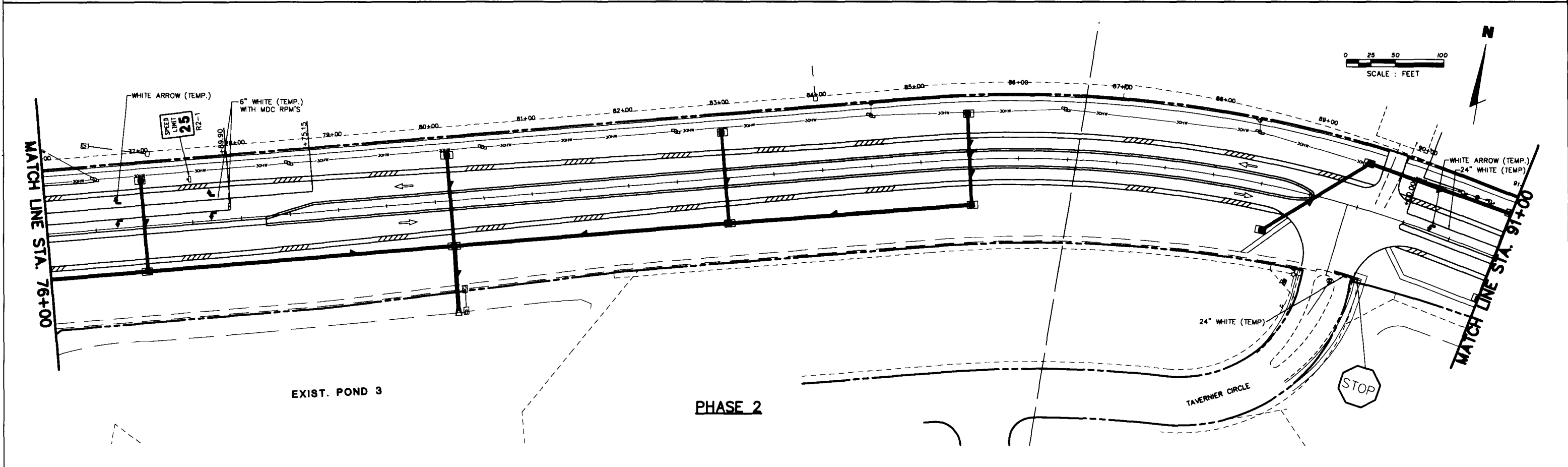
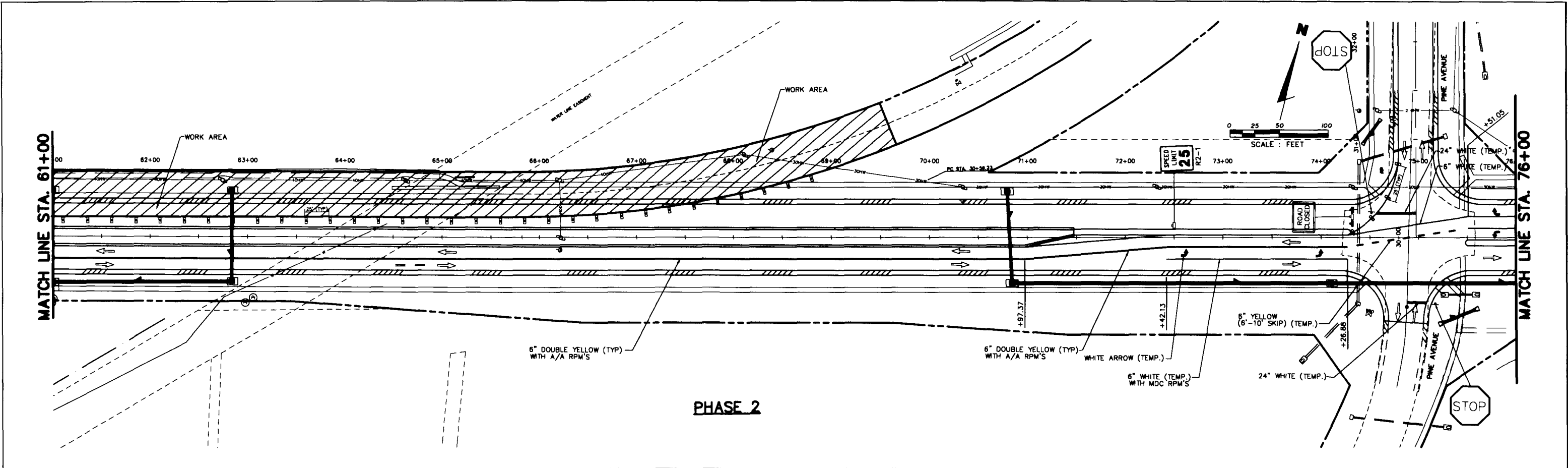


REVISIONS		BY	DATE	SURVEY BOOK No.	
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				CHECKED	RWF 04/00
REV. SYM. ADDED BARRICADES FOR TAMPA ROAD EB LEFT TURN.		MLM/RWF	5-31-00		


PINELLAS COUNTY, FLORIDA Department of Public Works			EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES		MAINTENANCE OF TRAFFIC PLANS (5) TAMPA ROAD TO STA. 61+00

DATE: APRIL 10, 2000		CONTRACT NO.:	SURVEY FILE NO.:
SHEET 115 OF 119			

W: \\TRANS\\EW\\PHASE1\\CADD\\Motrd06.dwg Sat Jul 08 17:16:33 2000 King Engineering Associates, Inc. (TAW-Pasco)



REVISIONS		BY	DATE	SURVEY BOOK No.	
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ADDED STM. STR.		MLM/TAW	5-31-00		

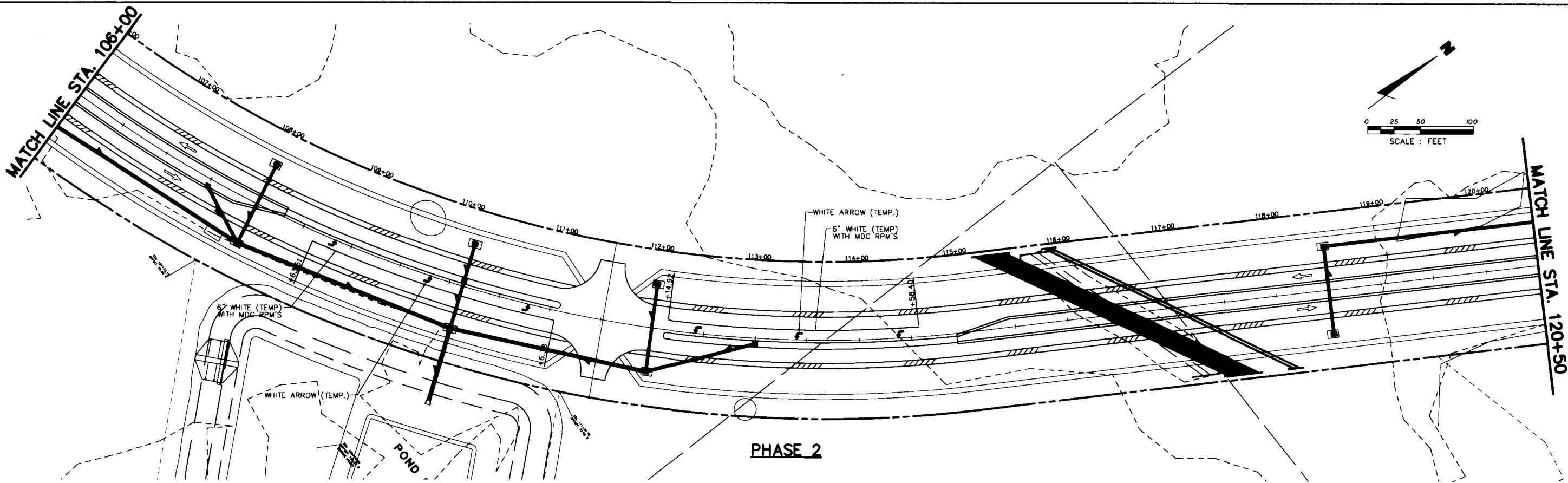
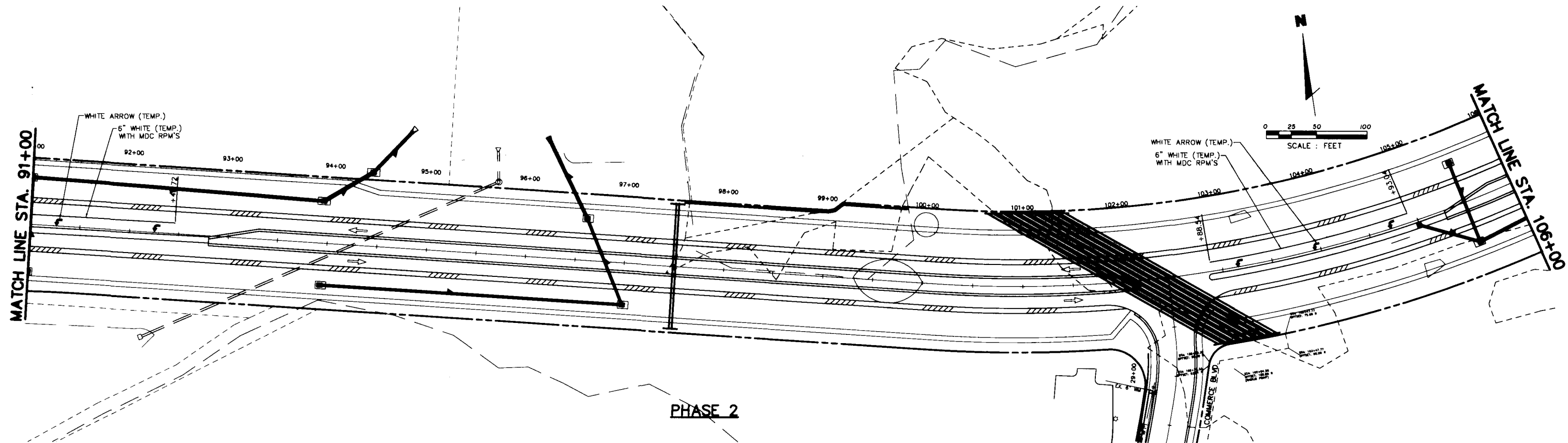
PINELLAS COUNTY, FLORIDA Department of Public Works	
	
PHONE 813-880-1881 FAX 813-880-1882 E-MAIL king@kingengineering.com	


EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES	
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MAINTENANCE OF TRAFFIC PLANS (6) STA. 61+00 TO STA. 91+00	
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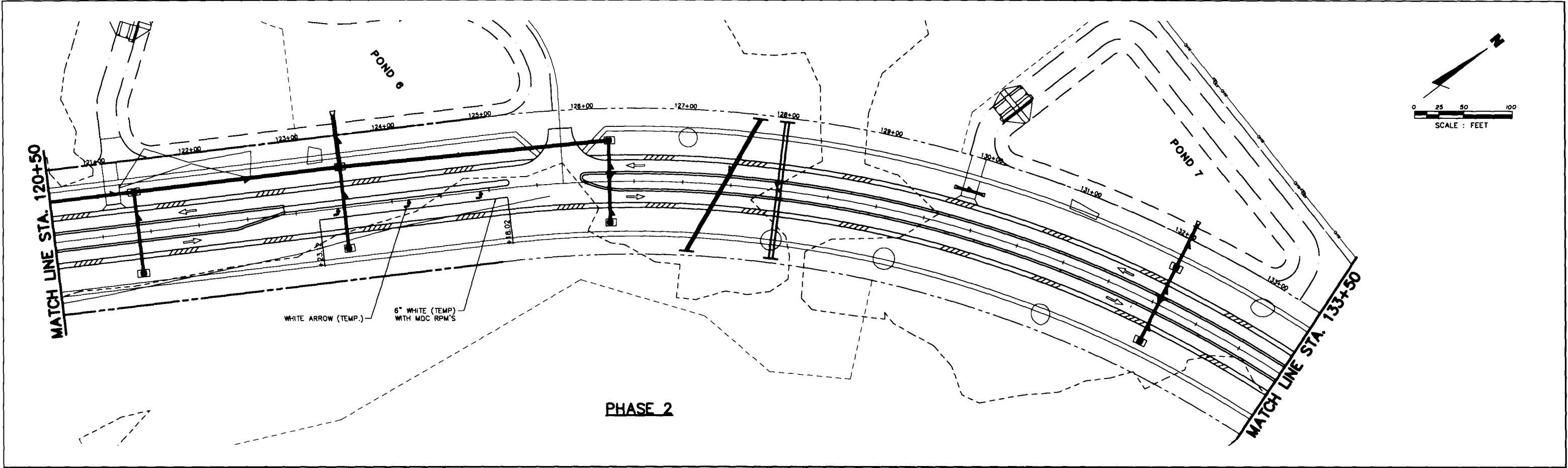
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SURVEY FILE NO.:	File: MOTRD06
SHEET 116 OF 119	View: 1-11X17

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REVISIONS		BY	DATE	SURVEY BOOK No.		PINELLAS COUNTY, FLORIDA		EAST-WEST CONNECTOR ROAD		DATE: APRIL 10, 2000	
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				TECHNICIAN							
				CHECKED							
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				DESIGNED		RWF		04/00		SURVEY FILE NO.:	
				DRAWN		JRL		04/00		SHEET 117 OF 119	
				CHECKED		RWF		04/00		View: 1-11X17	

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REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
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ADDED STM. STR.	MLM/TAF	5-31-00	CHECKED	RWP	04/00	

PINELLAS COUNTY, FLORIDA
Department of Public Works



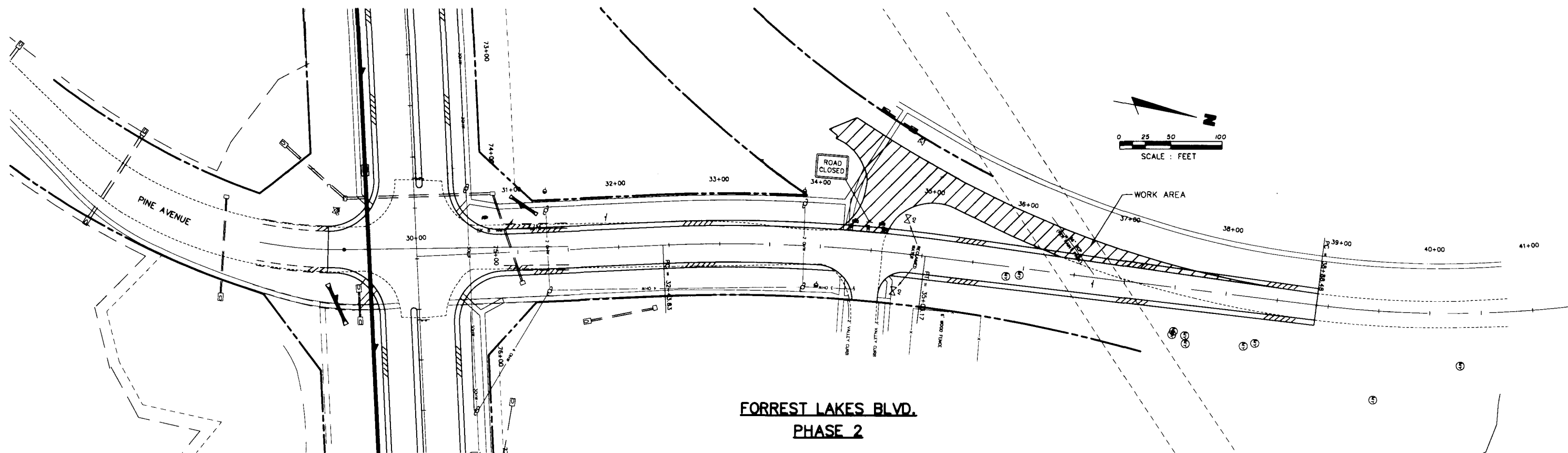
ASSOCIATES, INC.
PHONE 813-880-1881
FAX 813-880-1882
E-MAIL king@kingeng.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

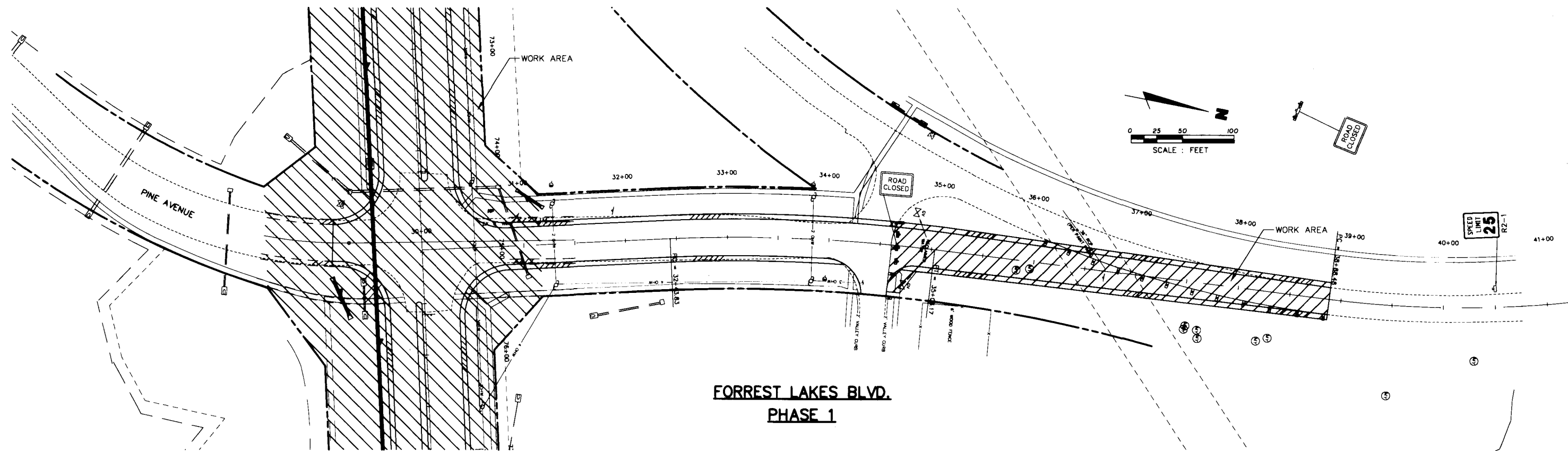
MAINTENANCE OF TRAFFIC PLANS (8)
STA. 120+50 TO STA. 133+50

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 118 OF 119
File: MOTRDOB View: 1-11X17

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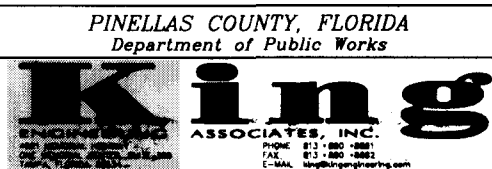


FORREST LAKES BLVD.
PHASE 2



FORREST LAKES BLVD.
PHASE 1

REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
			SURVEYED			
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EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

MAINTENANCE OF TRAFFIC PLANS (9)
STA. 33+00 TO STA. 40+00

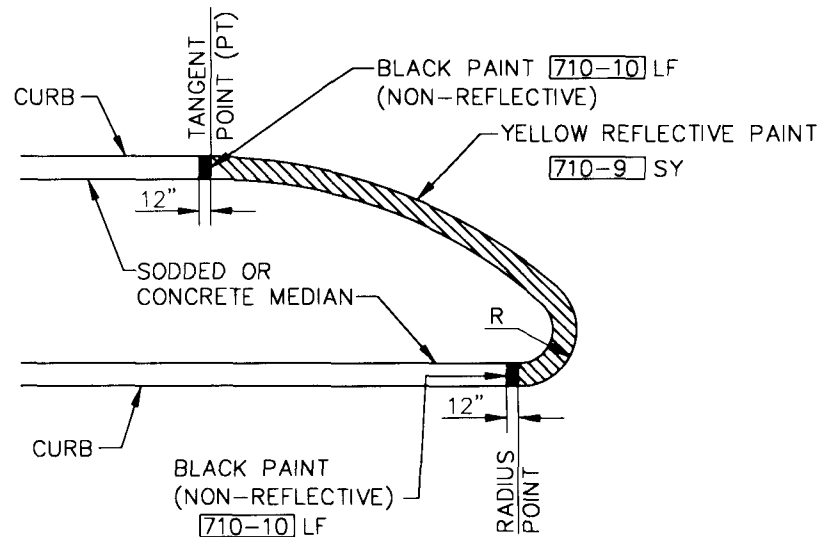
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SHEET 119 OF 119
File: MOTRD03 View: 1-11X17

ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL	
			S-2		S-3		S-4		S-5		S-6		S-7		S-8					
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL
700-1-12	ROADSIDE SIGN (SIGN 4-5 S.F.)	AS	5		3		2		2		1						13			
700-1-14	ROADSIDE SIGN (SIGN 6-6.25 S.F.)	AS	3		1		2		3		2						11			
700-1-15	ROADSIDE SIGN (SIGN 6.25-9 S.F.)	AS			2						1		1		1		5			
700-1-16	ROADSIDE SIGN (SIGN 9-12 S.F.)	AS							1								1			
700-1-20	ROADSIDE SIGN (CASE II) (RED REFLECTORS)	AS							6		3						9			
700-40-1	ROAD SIGN, STOP, R1-1	AS			3		2						1		1		7			
700-40-4	ROAD SIGN, KEEP RIGHT, R4-7	AS					1										1			
700-46-21	RELOCATE EXISTING SIGN (ONE POST)	AS	10														10			
700-84-1	SIGN PANEL INSTALLATION	EA	1														1			
705-4-9	DELINEATOR POST (AMBER/GREEN)	AS	7		4		2		4		2						19			
705-10-11	OBJECT MARKER (TYPE 1) (YELLOW)	AS			3						3		3		3		12			
706-1-13	REFLECTIVE PAVEMENT MARKER (BI-DIRECTIONAL, AMBER)	EA	4		10		12						78		44		148			
706-1-121	REFLECTIVE PAVEMENT MARKER (MONO-DIRECTIONAL, COLORLESS)	EA	198		144		15		37		10		5		8		417			
710-1-2	SKIP TRAFFIC STRIPE, PAINT (6" WHITE) (2'- 4' SKIP)	LF	248														248			
710-1-6	SKIP TRAFFIC STRIPE, PAINT (6" YELLOW) (6'-10' SKIP)	LF	200		72		84		144		72		160				732			
710-1-10	SKIP TRAFFIC STRIPE, PAINT (6" WHITE) (10'-30' SKIP)	GM	0.515		0.697		0.014										1.226			
710-2-1	SOLID TRAFFIC STRIPE, PAINT (6" WHITE)	NM	1.089		0.991		0.658		0.854		0.646		0.297		0.116		4.651			
710-2-2	SOLID TRAFFIC STRIPE, PAINT (6" YELLOW)	NM	0.753		0.857		0.613		0.762		0.588		0.486		0.153		4.212			
710-6	DIRECTIONAL ARROWS, PAINTED (WHITE)	EA	28		11		3		9		2		1		2		56			
710-7	PAVEMENT MESSAGE, PAINTED (WHITE)	EA	5		3												8			
710-9	REFLECTIVE PAINT (ISLAND NOSE) (YELLOW)	SY	21		29		23		23		17						113			
710-10	SOLID TRAFFIC STRIPE, PAINT (12" BLACK)	LF	42		22		10		22		10						106			
710-13	SOLID TRAFFIC STRIPE, PAINT (24" WHITE)	LF	189		60		35						16		35		335			
710-14	SOLID TRAFFIC STRIPE, PAINT (12" WHITE)	LF	673														673			
710-18-02	SOLID TRAFFIC STRIPE, PAINT (18" YELLOW)	LF					63						173		59		295			

NOTE: PINELLAS COUNTY PAY ITEM NUMBERS UTILIZED.

SIGNING AND PAVEMENT MARKING GENERAL NOTES

- ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE U. S. DEPARTMENT OF TRANSPORTATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", 1988 EDITION, AND THE FLORIDA DEPARTMENT OF TRANSPORTATION'S "ROADWAY AND TRAFFIC DESIGN STANDARDS", JANUARY, 1994.
- ALL PAVEMENT MARKINGS SHALL BE PAINTED IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS.
- ALL PAVEMENT MARKINGS TO BE REMOVED SHALL BE PERFORMED BY HYDROBLASTING.
- THE SIGN LOCATIONS SHOWN ARE APPROXIMATE AND MAY REQUIRE FIELD ADJUSTMENTS AS DIRECTED BY THE ENGINEER.
- ANY EXISTING SIGN TO REMAIN THAT IS DISTURBED DURING CONSTRUCTION OR RELOCATED SHALL BE RESET TO CURRENT STANDARDS FOR HEIGHT, OFFSET AND METHOD OF INSTALLATION.
- CAUTION SHALL BE EXERCISED WHILE RELOCATING EXISTING SIGNS SO AS TO PREVENT DAMAGE TO THE SIGNS. IF THE SIGNS ARE DAMAGED BEYOND USE, AS DETERMINED BY THE ENGINEER, THEY SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE LENGTH OF THE COLUMN SUPPORTS IN THE FIELD PRIOR TO FABRICATION.
- THE CONTRACTOR SHALL USE W-SHAPE STEEL POSTS FOR ALL MULTI-POST SIGNS. ALUMINUM ROUND TUBES SHALL BE USED FOR ALL SINGLE POST SIGNS.
- AFTER THE 90 DAY CURING PERIOD, ALL PAINT TRAFFIC STRIPES AND MARKINGS SHALL BE REPLACED WITH A LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC. THE PERMITTEE SHALL PROVIDE THE DEPARTMENT WITH MANUFACTURER'S CERTIFICATION PRIOR TO ISSUANCE OF "FINAL ACCEPTANCE".

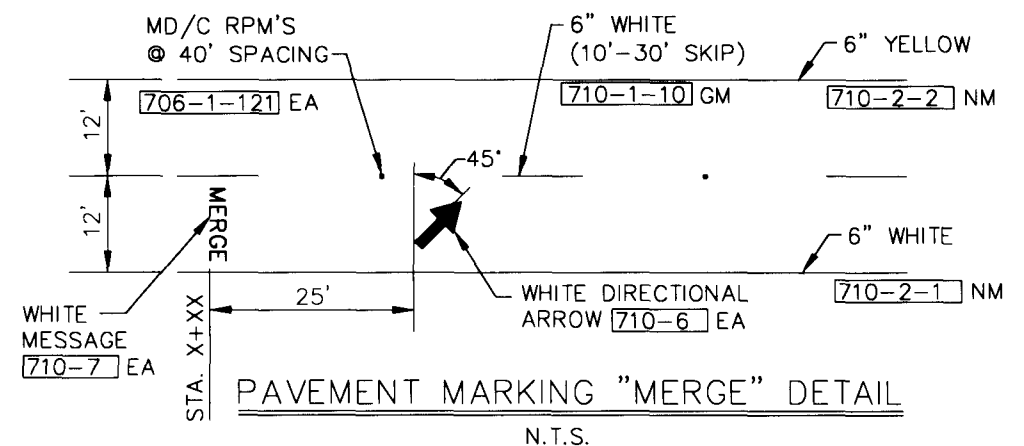
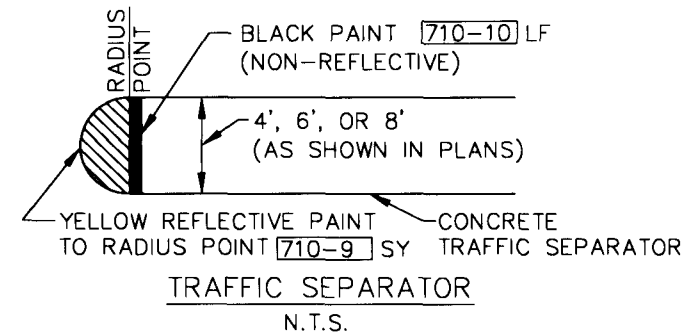


NOTE: PAINT SHALL COMPLETELY COAT ALL OF THE HORIZONTAL AND VERTICAL CONCRETE SURFACES EXCLUSIVE OF THE GUTTER SECTIONS.

SODDED OR CONCRETE MEDIANS
N.T.S.

MEDIAN NOSE PAINTING DETAILS

NOTE: ALL PROPOSED CONCRETE TRAFFIC SEPARATORS AND MEDIAN NOSES SHALL BE PAINTED PER THESE DETAILS.



REVISIONS	BY	DATE	SURVEY BOOK No.:
			SURVEY DIVISION
			BY
			DATE
			SURVEYED
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			MLM 04/00
			DRAWN
			TAW 04/00
			CHECKED
			TWM 04/00

REVISED QUANTITIES FOR 705-4-9 & 710-7. ADDED NOTE #9.

RWF

5-31-00

PINELLAS COUNTY, FLORIDA
Department of Public WorksEAST-WEST CONNECTOR ROAD
PHASE ITAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIESSIGNING & PAVEMENT MARKINGS
TABULATION OF QUANTITIES,
GENERAL NOTES AND DETAILS

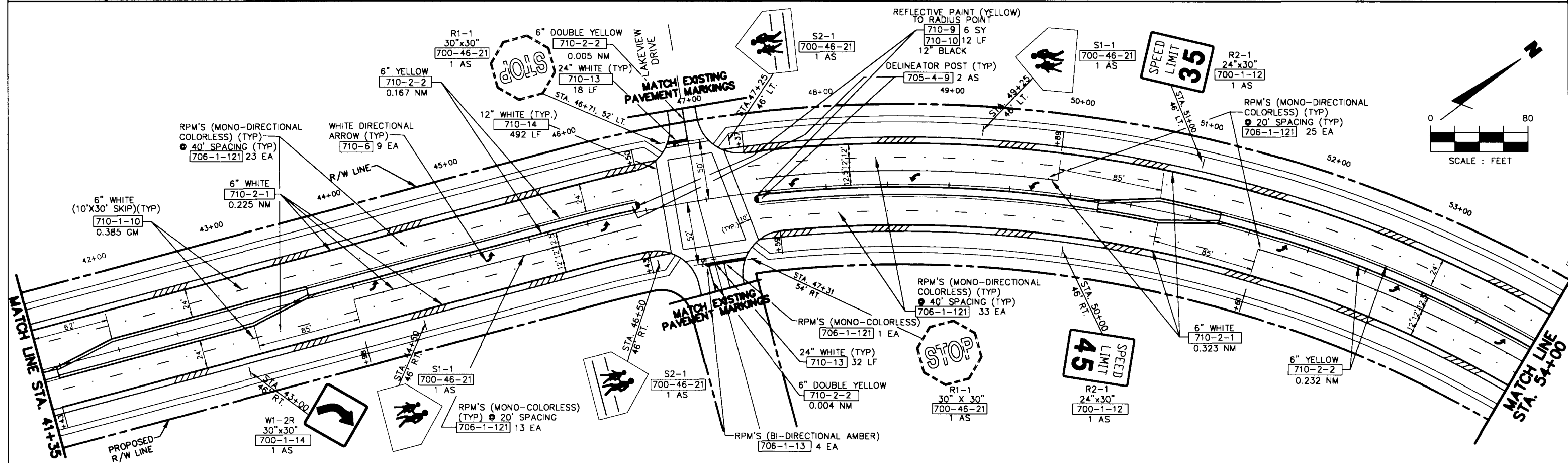
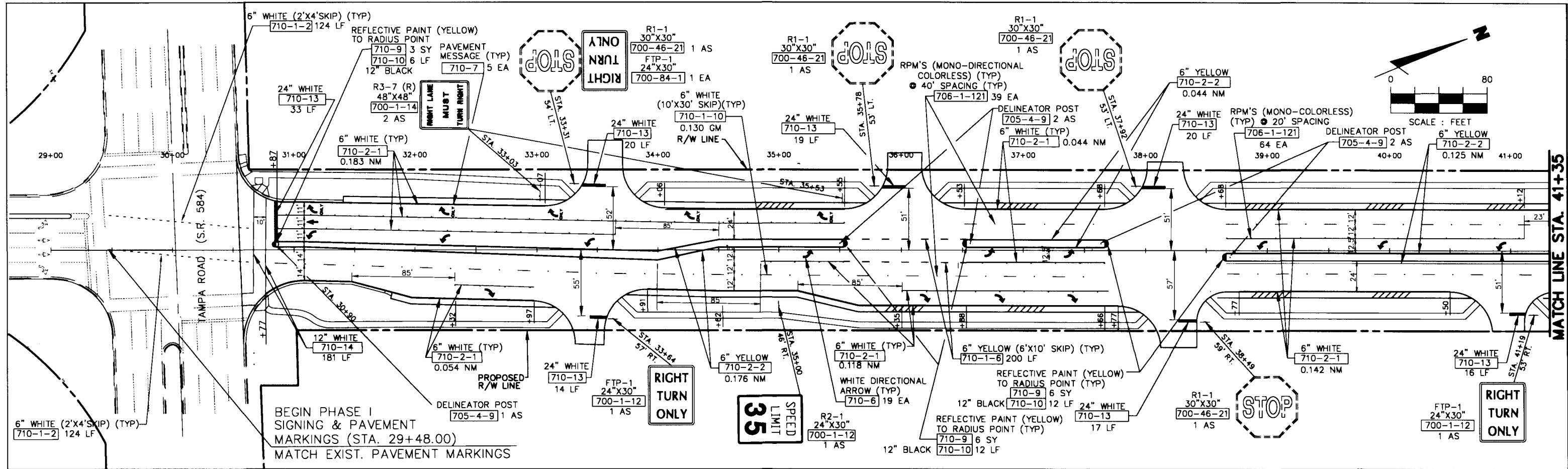
DATE: APRIL 10, 2000

CONTRACT NO.:

SURVEY FILE NO.:

SHEET S-1 OF S-8

File: TABQSPM01
View: 1-11X17



REVISIONS		BY	DATE	SURVEY BOOK No.		BY	DATE
				SURVEY DIVISION			
				SURVEYED			
				TECHNICIAN			
				CHECKED			
				DESIGN DIVISION			
				DESIGNED		RWF	04/00
				DRAWN		JRL	04/00
				CHECKED		RWF	04/00
REMOVED R4-7 SIGN & ADDED AMBER/GREEN DELINEATOR.		RWF	5-31-00				
ADDED PVT. MESSAGE "ONLY", REVISED SIGN SIZE.		RWF	5-31-00				

PINELLAS COUNTY, FLORIDA
Department of Public Works

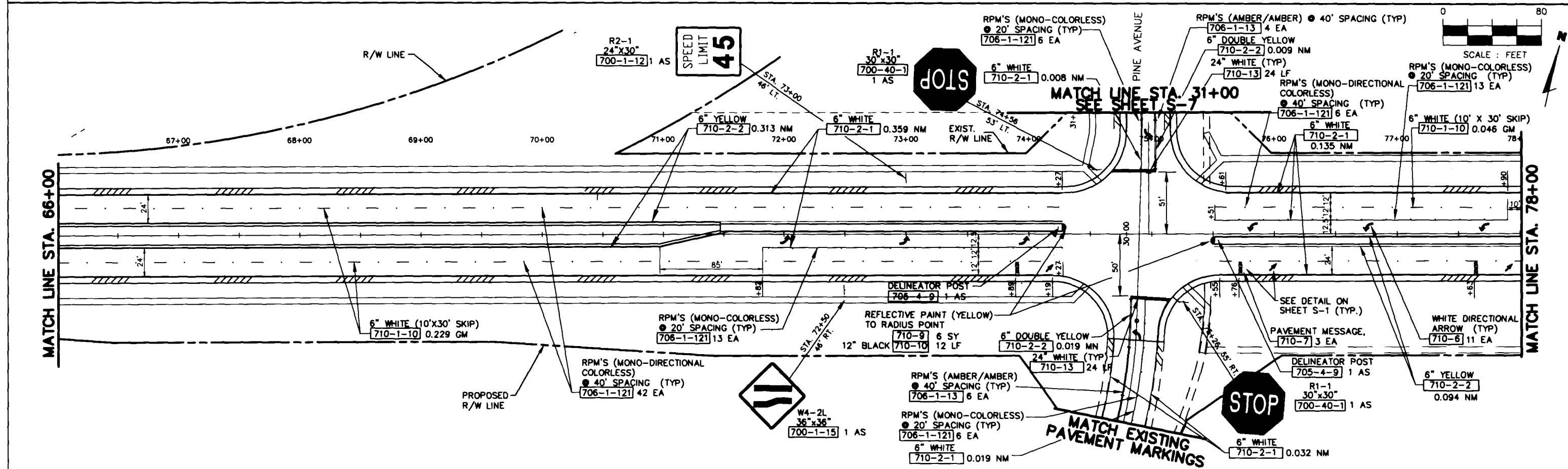
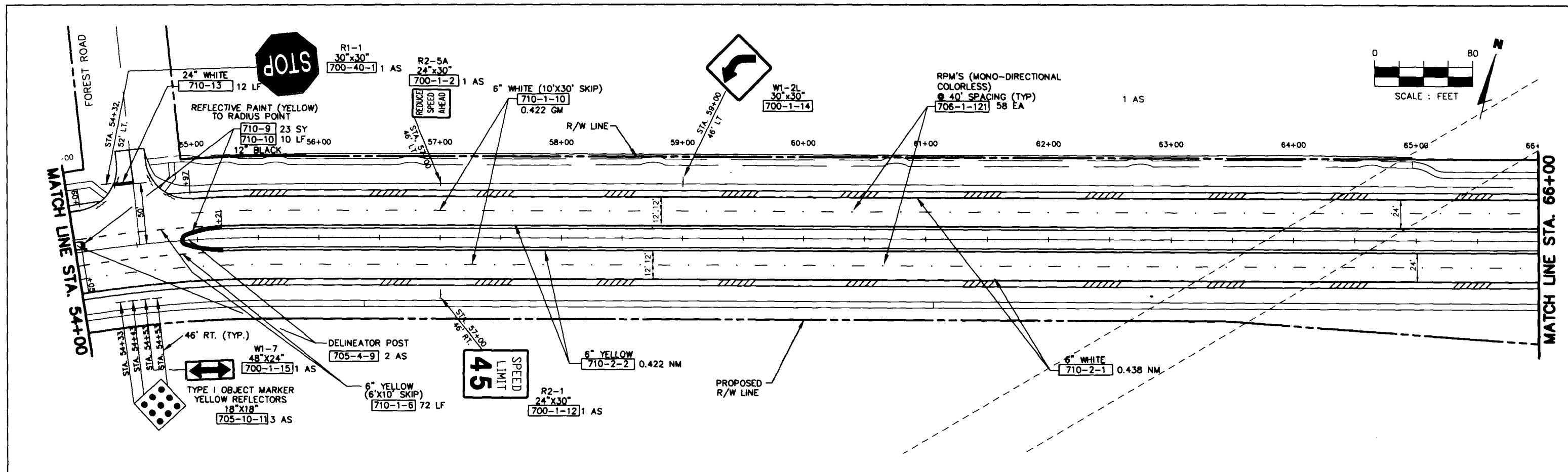
King
ASSOCIATES, INC.


PHONE: 813-880-8881
FAX: 813-880-8882
E-MAIL: King@kingengineering.com


EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

SIGNING & PAVEMENT MARKING (1)
STA. 29+48 TO STA. 54+00

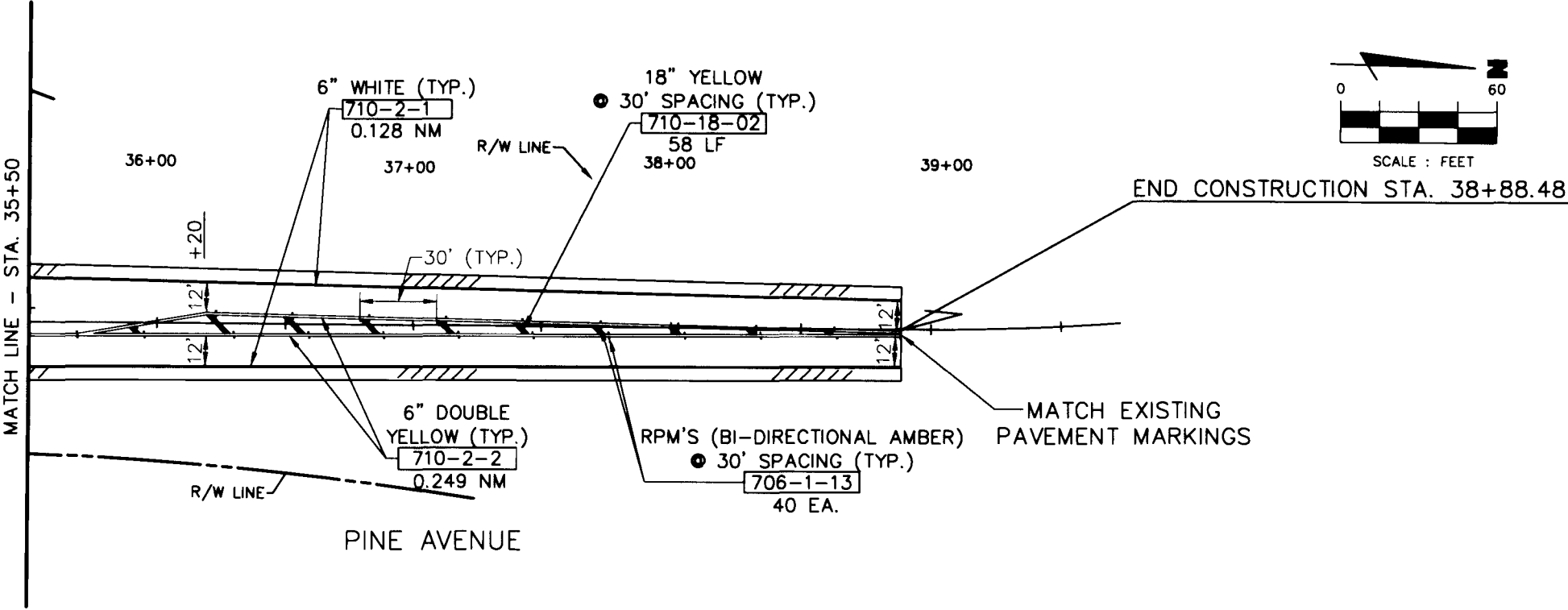
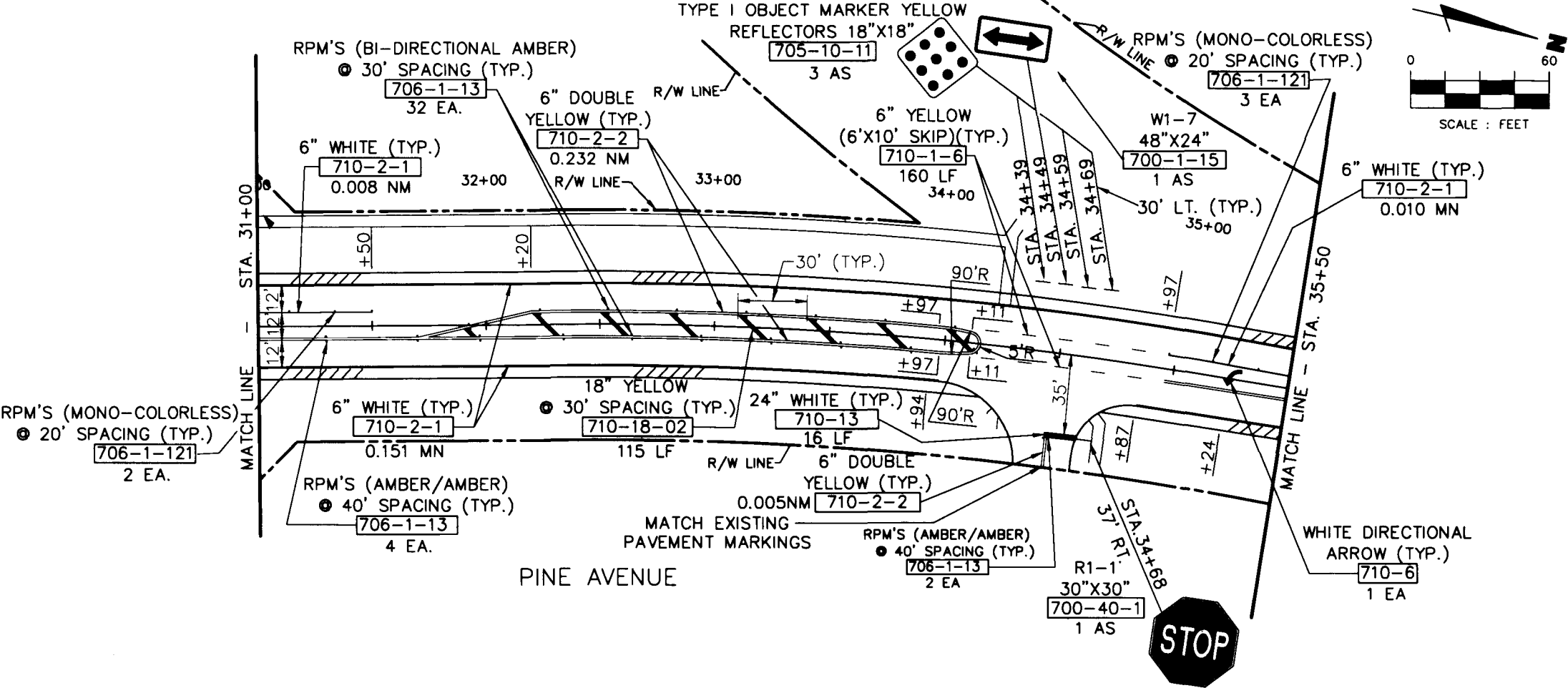
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CONTRACT NO.:
SURVEY FILE NO.:
SHEET S-2 OF S-8
File: PLANSPO1 View: 1-11X17



REVISIONS		BY	DATE	SURVEY BOOK No.	
				SURVEY DIVISION	BY DATE
				TECHNICIAN	
				CHECKED	
				DESIGN DIVISION	
				DESIGNED	RWF 04/00
				DRAWN	JRL 04/00
				CHECKED	RWF 04/00
				PINELLAS COUNTY, FLORIDA Department of Public Works	
					
				EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES	
				SIGNING & PAVEMENT MARKING (2) STA. 54+00 TO STA. 78+00	
				DATE: APRIL 10, 2000	
				CONTRACT NO.:	
				SURVEY FILE NO.:	
				SHEET S-3 OF S-8	
				File: PLANSPO2 View: 1-11X17	


REVISIONS	BY	DATE	SURVEY BOOK No.: SURVEY DIVISION BY DATE SURVEYED TECHNICIAN CHECKED DESIGN DIVISION DESIGNED RWF 04/00 DRAWN JRL 04/00 CHECKED RWF 04/00			PINELLAS COUNTY, FLORIDA Department of Public Works  king ASSOCIATES, INC. PHONE: 813-580-1881 FAX: 813-580-1882 E-MAIL: king@kingassoc.com	EAST-WEST CONNECTOR ROAD PHASE I TAMPA ROAD (S.R. 584) TO THE EAST PROPERTY LINE OF HARROD PROPERTIES	SIGNING & PAVEMENT MARKING (4) STA. 95+00 TO STA. 117+00	DATE: APRIL 10, 2000 CONTRACT NO.: SURVEY FILE NO.: SHEET S-5 OF S-8	File: PLANS04 View: 1-11X17
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W:\TRANS\EW\PHASE1\CADD\plansp06.dwg Mon Apr 10 12:28:51 2000 King Engineering Associates, Inc.



REVISIONS		BY	DATE	SURVEY BOOK No.:	
				SURVEY DIVISION	BY DATE
				SURVEYED	
				TECHNICIAN	
				CHECKED	
				DESIGN DIVISION	
				DESIGNED	RWF 04/00
				DRAWN	JRL 04/00
				CHECKED	RWF 04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

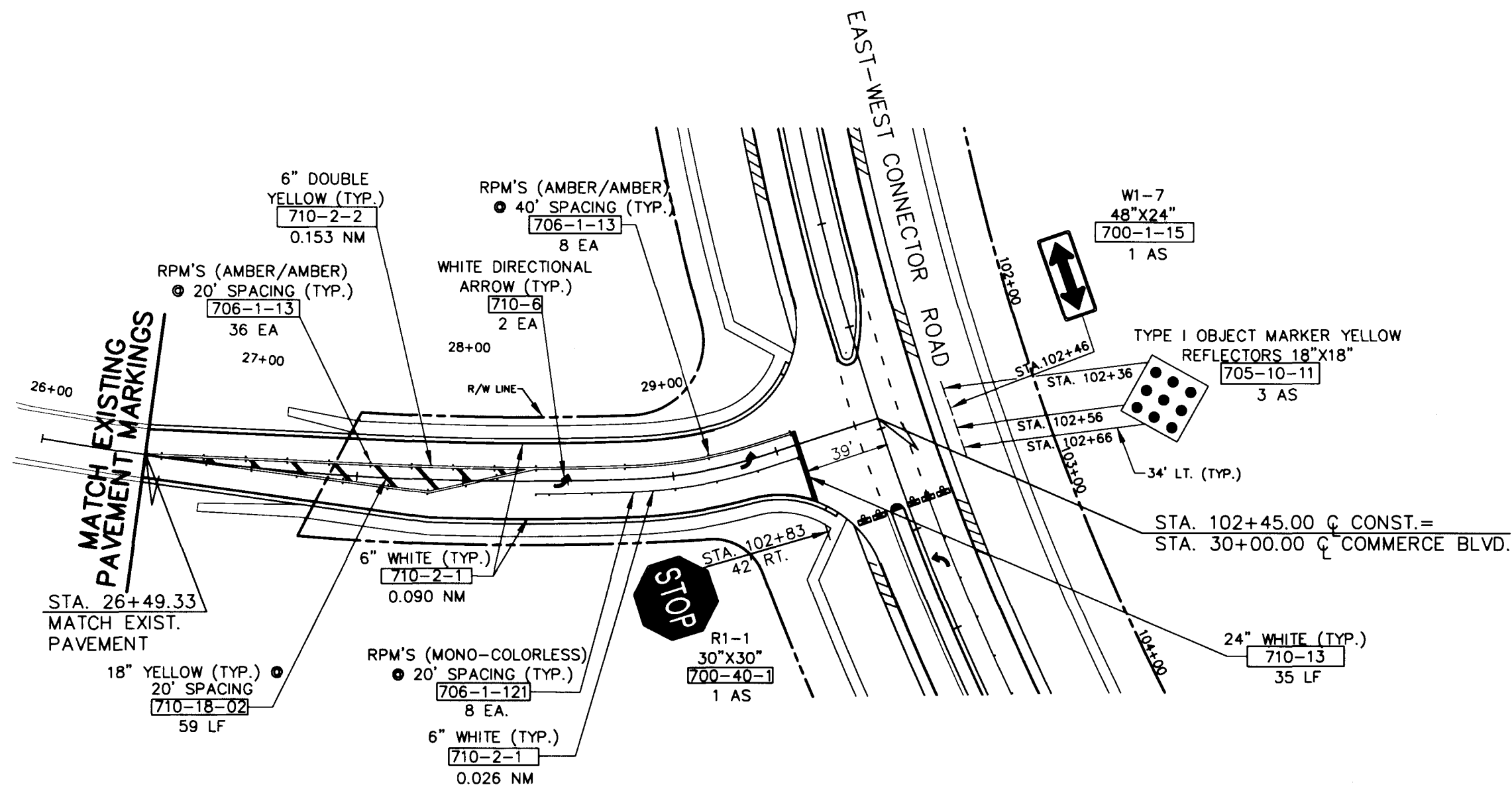
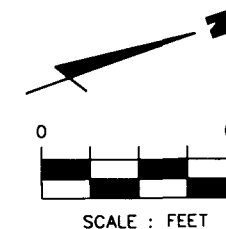


ASSOCIATES, INC.
PHONE 813-880-1881
FAX 813-880-1883
E-MAIL king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

PINE AVENUE
SIGNING & PAVEMENT MARKING (1)
STA. 31+00 TO STA. 35+50.00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET S-7 OF S-8
File: PLANSPO6 View: 1-11X17



REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	RWF	04/00
			DRAWN	JRL	04/00
			CHECKED	RWF	04/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ASSOCIATES, INC.

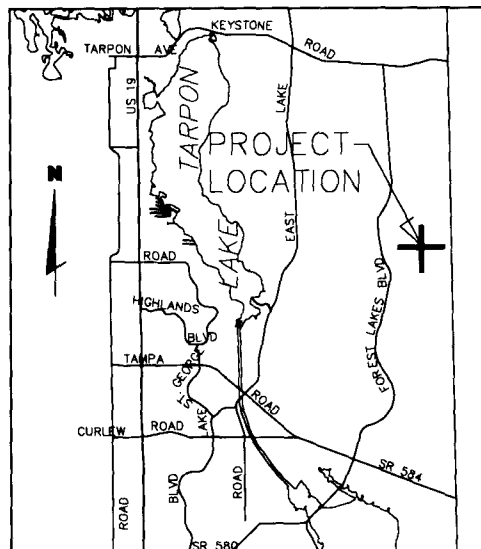
PHONE 813-880-8881
FAX 813-880-8882
E-MAIL keng@kingeng.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

COMMERCE BOULEVARD
SIGNING & PAVEMENT MARKING (1)
STA. 27+35.30 TO STA. 30+00

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET S-8 OF S-8
File: PLANS07 View: 1-11X17

W:\trans\ew\brooker\ph1-mit.dwg Sun Jul 09 17:59:27 2000 King Engineering Associates, Inc. (jki-pasco)



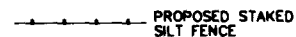
VICINITY MAP
N.T.S.

LEGEND



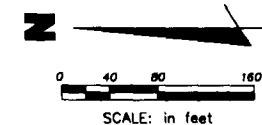
EXISTING WETLAND
IDENTIFICATION

WL 4 PROPOSED WETLAND
CREATION AREA



PROPOSED STAKED
SILT FENCE

- NOTE: 1. CONTRACTOR SHALL REFER TO GENERAL NOTES SHEET 13 REGARDING EROSION AND SEDIMENTATION CONTROL.
2. FOR CONSTRUCTION OPERATIONS WHICH REQUIRE DE-WATERING, CONTRACTOR SHALL NOT DIRECTLY DISCHARGE TO WETLAND AREAS WITHOUT FIRST TREATING THE TURBID WATERS AS DESCRIBED IN NOTE 12 ON SHEET 13 AND MEETING ALL STATE WATER QUALITY STANDARDS.



SCALE: in feet

(H)

CYPRESS SYSTEM
4.28 AC. TOTAL
S.H.P.=12.0

MEET EXISTING
AS DIRECTED BY
FIELD REP. (TYP.)
ELEVATION VARIES

2.10 AC. PROPOSED
WETLAND CREATION AREA
S.H.P.=12.0

STAKED
SILT FENCE

16' WIDE SODDED
TEMP. ACCESS ROAD
(MIN ELEV. 13.0)

APPROXIMATE LOCATION
OF 60" WATERMAIN

APPROXIMATE LOCATION OF
30" WIDE WATERMAIN EASEMENT

(G)

CYPRESS SYSTEM
4.82 AC. TOTAL
S.H.P.=11.75

MEET EXISTING
AS DIRECTED BY
FIELD REP. (TYP.)
ELEVATION VARIES

STAKED
SILT FENCE

33 LF 15" RCP
CLASS V @ 0.76%

"U" TYPE
SAND CEMENT ENDWALL
PER FOOT INDEX 268
I.E.=11.75

4.41 AC. PROPOSED
WETLAND CREATION AREA
S.H.P.=11.75

STAKED
SILT FENCE

106'±11.75
(TYP.)

STAKED
SILT FENCE

150 LF OF 10" WIDE BOTTOM
SODDED GEOWEB SWALE
SEE INT. AREA DETAIL SHEET

(B)

CYPRESS SYSTEM
6.86 AC. TOTAL
S.H.P.=11.50

STAKED
SILT FENCE

"U" TYPE
SAND CEMENT ENDWALL
PER FOOT INDEX 268
I.E.=11.50

STAKED
SILT FENCE

50 LF 15" RCP
CLASS V @ 0.50%

"U" TYPE
SAND CEMENT ENDWALL
PER FOOT INDEX 268
I.E.=11.20

(A)

WETLAND CREATION AREAS

WETLAND CREATION AREA WL6

AREA FROM CONTOUR ELEVATION 12.0 TO 11.0 = 1.054 AC.
AREA FROM CONTOUR ELEVATION 11.0 TO 10.0 = 0.790 AC.
AREA OF CONTOUR ELEVATION 10.0 = 0.256 AC.
OVERALL AREA = 2.10 AC.

WETLAND CREATION AREA WL4

AREA FROM CONTOUR ELEVATION 11.75 TO 10.75 = 1.130 AC.
AREA FROM CONTOUR ELEVATION 10.75 TO 9.75 = 1.80 AC.
AREA OF CONTOUR ELEVATION 9.75 = 1.48 AC.
OVERALL AREA = 4.41 AC.

* THIS WETLAND CREATION AREA INCLUDES 0.90 AC. BETWEEN ELEVATION 9.75
AND THE "MEET EXISTING" OR WETLAND LINE (ACTUAL ELEVATION VARIES
AT WETLAND LINE

25th ANNIVERSARY
Biological Research Associates
3910 U.S. Highway 301 North
Suite 180
Tampa, Florida 33619
(813) 864-4500 FAX (813) 864-0440
www.bioresearch.com
1974 - 1999

REVISIONS	BY	DATE	SURVEY BOOK No.:	SURVEY DIVISION	BY	DATE
ADDED NOTES 1&2 PER SWFWMD	MLM	6/20/00				
ADDED SILT FENCE	MLM	5/31/00				

PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD
PHASE I

TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

BROOKER CREEK PRESERVE
RESTORATION SITE
GRADING PLAN

DATE: APRIL 10, 2000

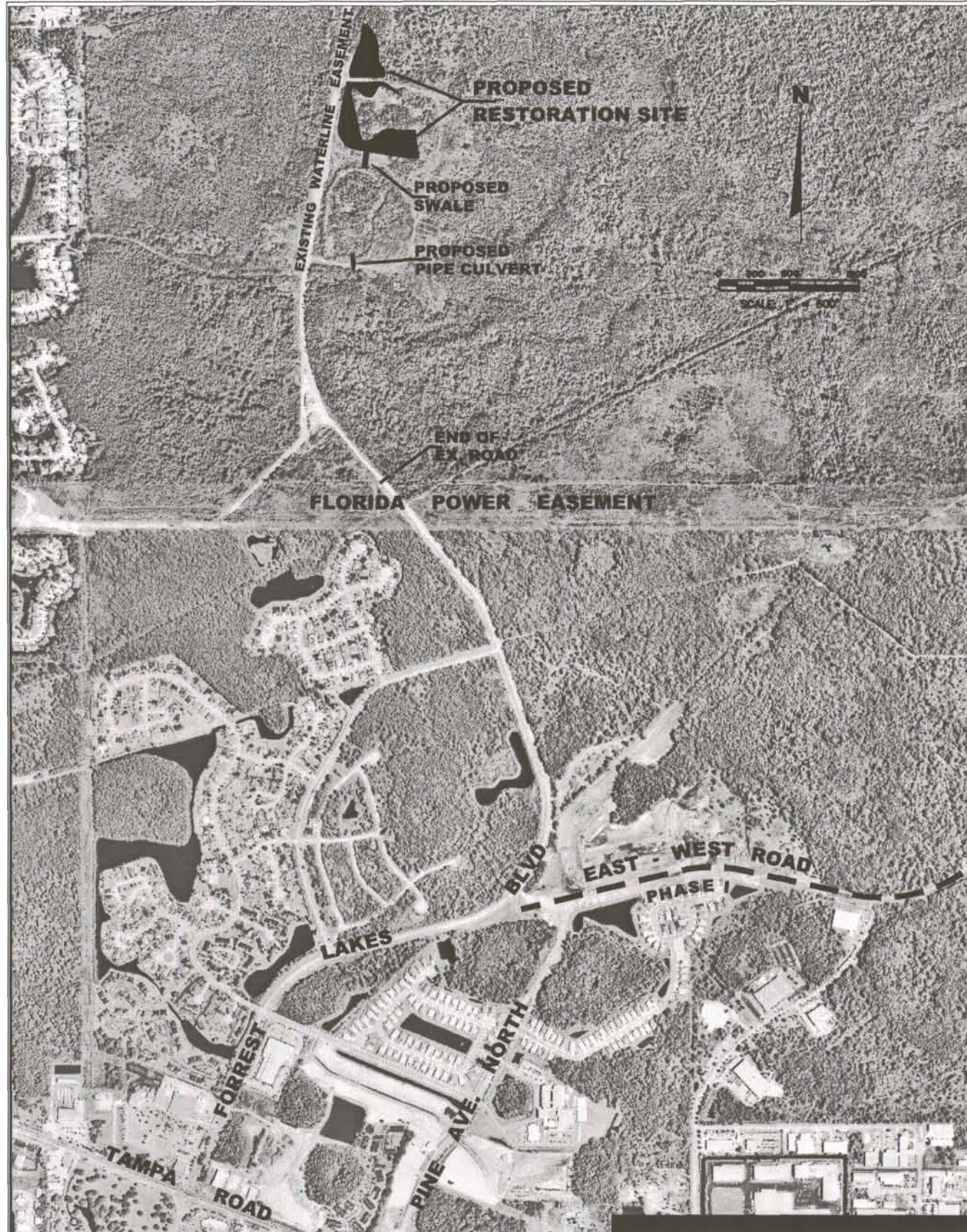
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SURVEY FILE NO.:

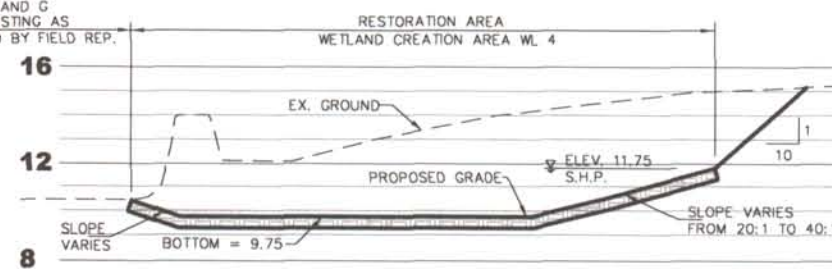
SHEET M1 OF M3

File: PH1-MIT.DWG
View:

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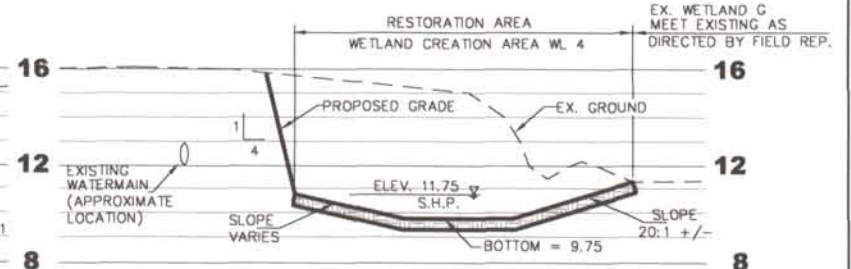
EX. WETLAND G
MEET EXISTING AS
DIRECTED BY FIELD REP.



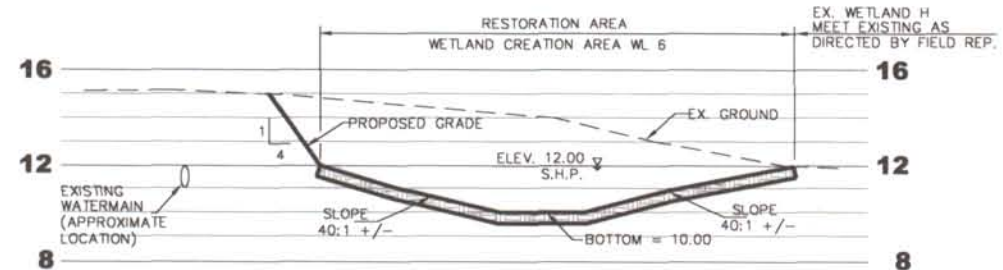
SECTION A-A



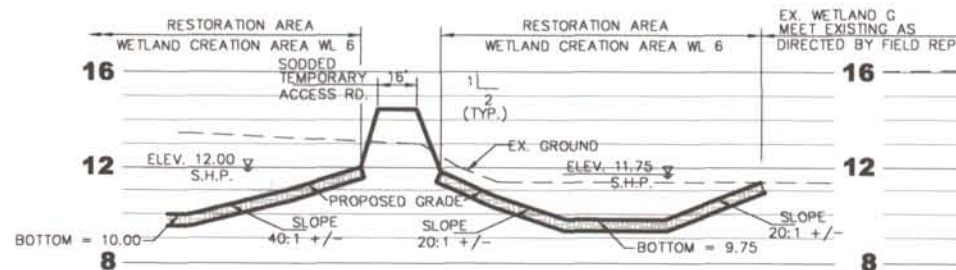
EX. WETLAND G
MEET EXISTING AS
DIRECTED BY FIELD REP.



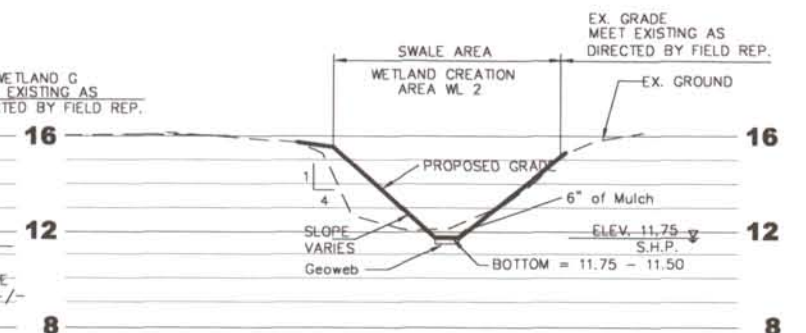
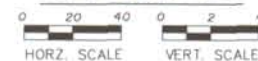
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E



LEGEND

6" THICKNESS (MIN.) WETLAND MULCH (MUCK BLANKET)
OR 6" ORGANIC TOPSOIL

NOTES:

1. THE WETLAND MULCH TO BE UTILIZED AS A PLANTING SUBSTRATE SHALL ORIGINATE FROM THE EXISTING WETLANDS WHICH WILL BE IMPACTED AS SHOWN IN THE PLANS. THESE MATERIALS SHALL NOT BE STOCKPILED FOR LONGER THAN SIXTY (60) DAYS. IN THE EVENT THAT AN INSUFFICIENT AMOUNT OF EXISTING WETLAND MATERIAL IS AVAILABLE, EXISTING TOPSOIL STRIPPINGS MAY BE UTILIZED SUBJECT TO THE APPROVAL OF ENGINEER.
2. EXISTING CLAY MATERIAL WHICH IS LOCATED BELOW THE PROPOSED GRADE WITHIN PROPOSED WETLAND CREATION AREAS SHALL BE REMOVED COMPLETELY AS DIRECTED BY ENGINEER AND REPLACED WITH SUITABLE FILL MATERIAL CONDUCTIVE TO PLANT GROWTH.

25th Anniversary
Biological Research Associates
3910 U.S. Highway 301 North
Suite 180
Tampa, Florida 33618
(813) 664-4500 FAX (813) 664-0440
www.biolresearch.com
1974 - 1999

REVISIONS	BY	DATE	SURVEY BOOK No.	BY	DATE
			SURVEY DIVISION	BY	DATE
			SURVEYED	CREW	2-2000
			TECHNICIAN	GWK	3-2000
			CHECKED	MJM	3-2000
			DESIGN DIVISION		
			DESIGNED	JLW	4-2000
			DRAWN	JLW	4-2000
			CHECKED	TWM	4-2000
ADDED NOTES 1&2 PER SWFWD	MLM	6/20/00			

PINELLAS COUNTY, FLORIDA
Department of Public Works
King
ENGINEERING ASSOCIATES, INC.
4921 MEMORIAL HIGHWAY
ONE MEMORIAL CENTER, SUITE 302
TAMPA, FLORIDA 33634
PHONE: 813-480-8881
FAX: 813-480-8882
E-MAIL: king@kingengineering.com

EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

BROOKER CREEK PRESERVE
RESTORATION SITE
DETAIL SHEET

DATE: APRIL 10, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET M2 OF M3
File:
View:

G:\TRANS\EW\BROOKER\WSTR-MIT.dwg Wed May 17 14:02:46 2000 King Engineering Associates, Inc.

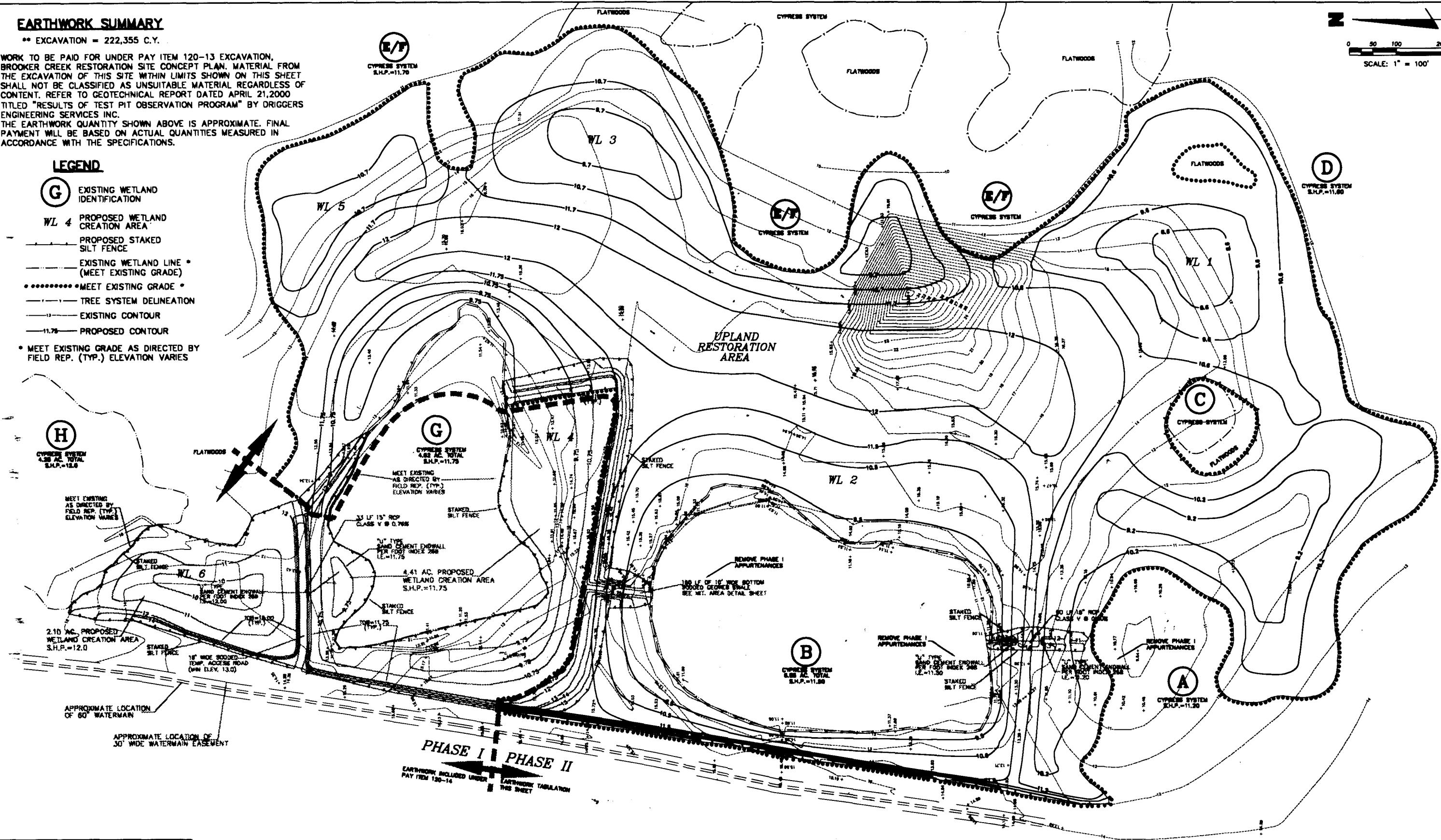
EARTHWORK SUMMARY

** EXCAVATION = 222,355 C.Y.

WORK TO BE PAID FOR UNDER PAY ITEM 120-13 EXCAVATION, BROOKER CREEK RESTORATION SITE CONCEPT PLAN. MATERIAL FROM THE EXCAVATION OF THIS SITE WITHIN LIMITS SHOWN ON THIS SHEET SHALL NOT BE CLASSIFIED AS UNSUITABLE MATERIAL REGARDLESS OF CONTENT. REFER TO GEOTECHNICAL REPORT DATED APRIL 21,2000 TITLED "RESULTS OF TEST PIT OBSERVATION PROGRAM" BY DRIGGERS ENGINEERING SERVICES INC. THE EARTHWORK QUANTITY SHOWN ABOVE IS APPROXIMATE. FINAL PAYMENT WILL BE BASED ON ACTUAL QUANTITIES MEASURED IN ACCORDANCE WITH THE SPECIFICATIONS.

LEGEND

- (G)** EXISTING WETLAND IDENTIFICATION
- WL 4** PROPOSED WETLAND CREATION AREA
- PROPOSED STAKED SILT FENCE
- EXISTING WETLAND LINE (MEET EXISTING GRADE)
- MEET EXISTING GRADE
- TREE SYSTEM DELINEATION
- EXISTING CONTOUR
- PROPOSED CONTOUR
- MEET EXISTING GRADE AS DIRECTED BY FIELD REP. (TYP.) ELEVATION VARIES



Biological Research Associates
8014 U.S. Highway 901 North
Tampa, FL 33610
(813) 964-2800 FAX (813) 964-8440
www.biologicalresearch.com
1974 - 1999

REVISIONS	BY	DATE	SURVEY BOOK No.	BY	DATE
			SURVEY DIVISION	CREW	3-2000
			TECHNICIAN	GWK	3-2000
			CHECKED	MJM	3-2000
			DESIGN DIVISION		
			DESIGNED	BRA	4-2000
			DRAWN	JLV	4-2000
			CHECKED	TWM	4-2000

PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD
PHASE I
TAMPA ROAD (S.R. 584) TO THE EAST
PROPERTY LINE OF HARROD PROPERTIES

BROOKER CREEK PRESERVE
RESTORATION SITE
CONCEPT PLAN

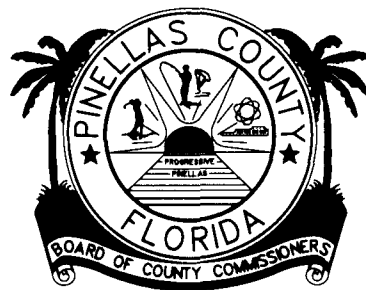
DATE: APRIL 10, 2000

CONTRACT NO.:

SURVEY FILE NO.:

SHEET M3 OF M3

File: PH1-MIT.DWG
View:



SERVING YOU EVERY DAY

PINELLAS COUNTY GOVERNMENT IS COMMITTED TO PROGRESSIVE PUBLIC POLICY, SUPERIOR PUBLIC SERVICE, COURTEOUS PUBLIC CONTACT, JUDICIOUS EXERCISE OF AUTHORITY AND SOUND MANAGEMENT OF PUBLIC RESOURCES TO MEET THE NEEDS AND CONCERNS OF OUR CITIZENS TODAY AND TOMORROW.

PINELLAS COUNTY ENGINEERING DEPARTMENT
STATE OF FLORIDA
PLANS FOR THE PROPOSED
EAST-WEST CONNECTOR ROAD
(PHASE II)

EAST PROPERTY LINE OF HARROD PROPERTIES
TO RACE TRACK ROAD

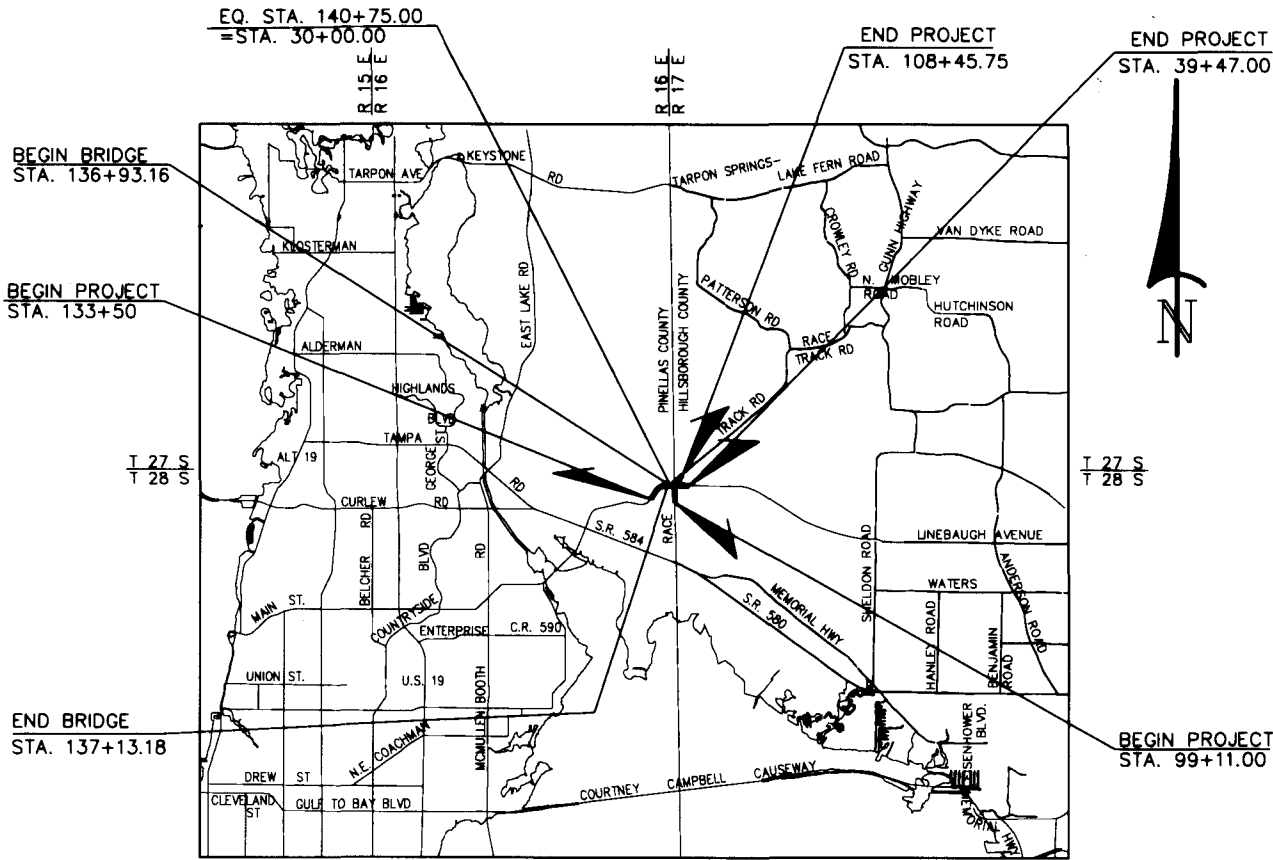
P.I.D. NO. 922365

INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
1	COVER SHEET
2	DRAINAGE MAP
3	EXISTING DRAINAGE STRUCTURES
4	SUMMARY OF QUANTITIES (ROADWAY)
5-6	TYPICAL SECTIONS
7	GENERAL NOTES
8	SURVEY REFERENCES & SHEET LAYOUT
9-13	PLAN AND PROFILES
14-15	DRAINAGE STRUCTURES
16-22	CROSS SECTIONS
23-24	STORMWATER FACILITIES AND DETAILS
25	CONSTRUCTION DETAILS
26-30	UTILITY INFORMATION PLAN AND PROFILE
31-35	MAINTENANCE OF TRAFFIC
S1-S3	SIGNING & PAVEMENT MARKING PLANS
T1-T8	SIGNALIZATION PLANS
B1-B21	BRIDGE PLANS

RELATED STANDARDS AND SPECIFICATIONS

DOCUMENT	DESCRIPTION
D-1	STATE OF FLORIDA "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS". DATED AUGUST, 1994.
D-2	U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", DATED 1988.
D-3	FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", DATED 1991 AND ALL SUPPLEMENTAL SPECIFICATIONS THERETO.
D-4	FLORIDA DEPARTMENT OF TRANSPORTATION "ROADWAY AND TRAFFIC DESIGN STANDARDS", DATED JANUARY, 1994.
D-5	PINELLAS COUNTY "SPECIFICATIONS FOR HOT BITUMINOUS MIXTURES, PLANT METHODS, EQUIPMENT AND CONSTRUCTION METHODS", DATED JUNE, 1997.
NOTE: THE PROVISIONS OF DOCUMENT D-5 SHALL SUPERSEDE THE CORRESPONDING PROVISIONS OF DOCUMENT D-3.	
D-6	PINELLAS COUNTY ENGINEERING DEPARTMENT SPECIFICATIONS FOR PAVING AND DRAINAGE CONSTRUCTION. (FOR CONTRACT CORRESPONDING TO THESE PLANS).
D-7	FLORIDA DEPARTMENT OF TRANSPORTATION "STRUCTURE STANDARDS", DATED 1994
D-8	PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS "STANDARD CONSTRUCTION DETAILS", DATED AUGUST, 1996



VICINITY MAP
N.T.S.

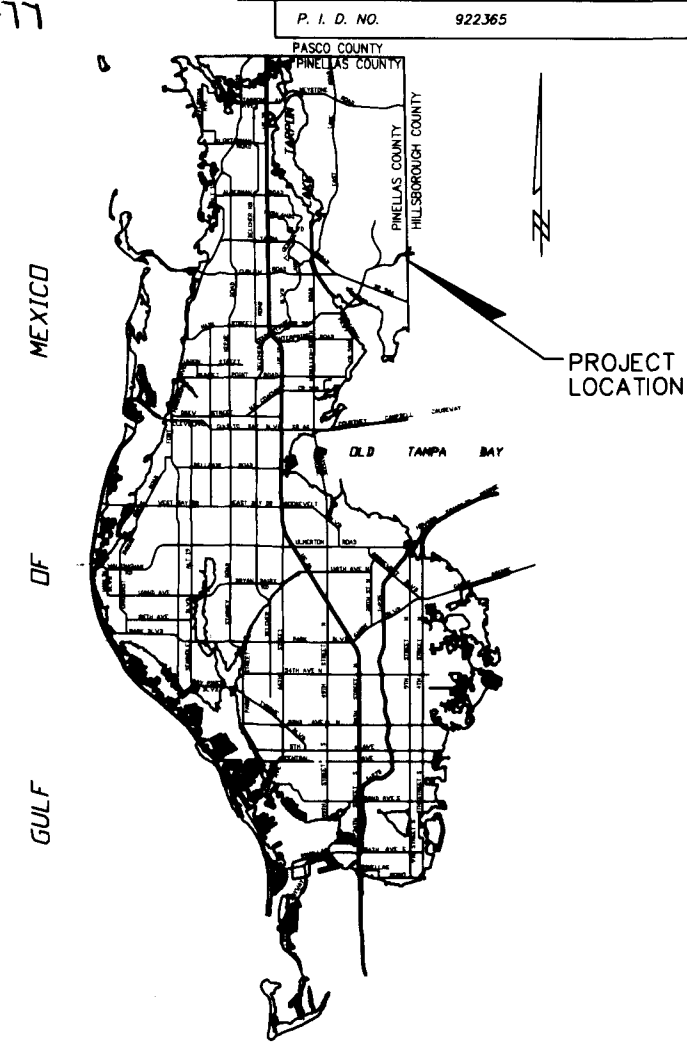
UTILITY WARNING NOTE
ABOVE - GROUND OR UNDER - GROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - CALL "SUNSHINE" AND THE UTILITY OWNER(S) BEFORE BEGINNING WORK. (800) 432-4770 (5 DAYS IN ADVANCE).

REVISIONS		
DATE	SHEETS	REVISIONS
6-05-00	2, 4, 7, 9, 11-13, 23, 24, 26-30, S-2	REV. POND 8, UTILS. NOTES ADDED GROUTING NOTE.

LENGTH OF PROJECT		
ROADWAY	TOTAL	
	LINEAR FT.	MILES
	2,550.75	0.483
BRIDGES	20.00	0.004
NET LENGTH OF PROJECT	2570.75	0.487
EXCEPTIONS	-	-
GROSS LENGTH OF PROJECT	2570.75	0.487

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.

GOVERNING SPECIFICATIONS: STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 1991 AND SUPPLEMENTS THERETO IF NOTED IN THE SPECIAL PROVISIONS FOR THIS PROJECT.

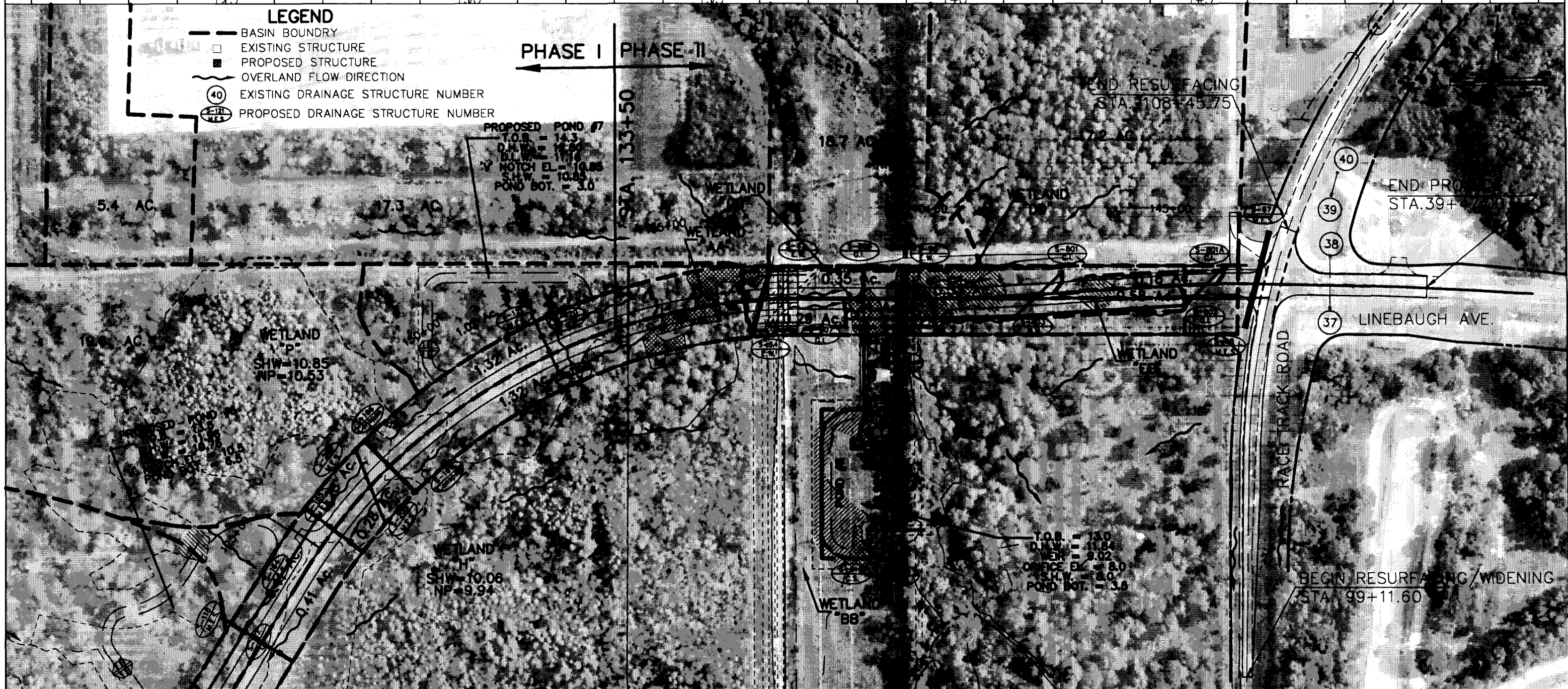


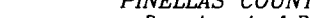
VICINITY MAP
PLANS PREPARED BY:



FINAL PLANS
5/16/00

PREPARED UNDER THE DIRECTION OF:		7-10-00 DATE
Thomas W. McGrew, FLORIDA REG. NUMBER 25402		
SUBMITTED BY:		7-10-00 DATE
TRANSPORTATION DIVISION ENGINEER JAMES K. COLLINS, P.E.		
RECOMMENDED FOR APPROVAL BY:		7/11/00 DATE
DIRECTOR OF ENGINEERING JAMES R. HERBST, P.E.		
APPROVED BY:		7/11/00 DATE
DIRECTOR OF PUBLIC WORKS J. KEITH WICKS, P.E. PINELLAS COUNTY PROJECT MANAGER: JIM PLESO		



REVISIONS	BY	DATE	SURVEY BOOK No.: SURVEY DIVISION BY DATE SURVEYED TECHNICIAN CHECKED DESIGN DIVISION DESIGNED MLM 05/00 DRAWN T.W. 05/00 CHECKED T.W. 05/00			PINELLAS COUNTY, FLORIDA Department of Public Works  KING ENGINEERING ASSOCIATES, INC. 4821 MEMORIAL HIGHWAY ONE MEMORIAL CENTRAL SUITE 300 TAMPA, FLORIDA 33629 PHONE 813-880-8881 FAX 813-880-8882 E-MAIL king@kingengineering.com			EAST-WEST CONNECTOR ROAD PHASE II EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD			DRAINAGE MAP			DATE: MAY 16, 2000 CONTRACT NO.: SURVEY FILE NO.: SHEET 2 OF 35 File: DRWPRDP.DWG View: 1-11X17	
REVISED POND & DHW	MLM	6/5/00														

EXISTING DRAINAGE STRUCTURES

- 1

STM. M.E.S.
INV. EL.= 9.73
- 2

STM. M.E.S.
INV. EL.= 9.45
- 3

STM. M.E.S.
INV. EL.= 9.43
- 4

STM. M.E.S.
INV. EL.= 9.20
- 5

STM. M.E.S.
INV. EL.= 8.27
- 6

STM. M.E.S.
INV. EL.= 8.96
- 7

STM. M.E.S.
INV. EL.= 8.89
- 8

STM INLET
GR EL.= 10.33
INV. EL.= 8.86
- 9

STM. M.E.S.
INV. EL.= 9.25
- 10

STM. M.E.S.
INV. EL.= 9.40
- 11

STM. M.E.S.
INV. EL.= 8.74
- 12

STM. M.E.S.
INV. EL.= 9.41
- 13

STM. F.E.S.
INV. EL.= 5.06
- 14

STM INLET W/ SKIMMER
GR EL.= 10.22
INV. EL.= 8.88
- 15

1' W. RIPRAP WALL
INV. EL.= 8.42
- 16

STM. M.E.S.
INV. EL.= 9.46
- 17

INV. EL.= 10.71
INV. EL.= 10.82
- 18

INV. EL.= 10.82
INV. EL.= 10.69
- 19

CONTROL STRUCTURE
GRATE EL.= 14.26
SKIMMER= 13.23
- 20

GRATE INLET
GRATE EL.= 13.75
SKIMMER= 12.75
- 22

STM. M.E.S.
INV. EL.= 13.68
- 23

STM. M.E.S.
INV. EL.= 13.61
- 24

STM. F.E.S.
INV. EL.= 8.67
- 25

STM INLET W/SLOT
GR EL.= 14.18
INV. EL. SLOT= 13.21 (E)
INV. EL.= 9.01
- 27

STM. M.E.S.
INV. EL.= 12.56
- 28

STM. M.E.S.
INV. EL.= 10.32
- 29

STM INLET W/SLOT
GRATE EL.= 13.73
INV. EL. SLOT E.&W.= 12.74
INV. EL.= 9.58
- 30

M.E.S. INLET
INV. EL.= 13.46
- 31

STM. M.E.S.
INV. EL.= 13.46
- 32

GRATE INLET
GRATE EL.= 13.50
INV. EL.= 8.53
- 33

STM. M.E.S.
INV. EL.= 8.31
- 35

STM. M.H.
RIM EL.= 14.95
- 36

STM. M.E.S.
INV. EL.= 8.05
- 37

STM. M.E.S.
INV. EL.= 7.10
- 38

STM. M.E.S.
INV. EL.= 7.04
- 39

STM. M.E.S.
INV. EL.= 6.09
- 40

STM INLET
GRATE EL.= 9.27
BOT. EL.= 6.34
FULL OF WATER
- 41

STM INLET
GR EL.= 10.75
INV. EL.= 8.75 (SE)
3" PVC ORIFICE
INV. EL.=8.85 (NW)
- 42

STM. INLET
GR EL.= 10.56
INV. EL.= 8.59 (NW)
INV. EL.= 8.59 (SE)
- 43

STM HDWALL
TOP OF WALL EL.= 10.17
INV. EL.= 7.89
- 44

STM F.E.S.
INV. EL.= 5.61
- 45

STM INLET
GR EL.= 11.42
INV. EL.= 8.55 (NE)
INV. EL.= 8.61 (NW)
- 46

STM M.E.S.
INV. EL.= 8.26
- 47

STM F.E.S.
INV. EL.= 6.50
- 48

STM INLET
GR EL.= 12.03
INV EL. 8.28
- 49

STM M.E.S.
INV. EL.= 10.25
- 50

CONTROL STRUCTURE
GRATE EL.= 13.73
SKIMMER= 12.72
INV. EL.= 10.72
- 51

STM M.E.S.
INV. EL.= 10.34
- 52

STM M.E.S.
INV. EL.= 11.97
- 53

STM M.E.S.
INV. EL.= 11.71
- 54

STM M.E.S.
INV. EL.= 12.32
- 55

STM M.E.S.
INV. EL.= 12.48
- 56

CONTROL STRUCTURE
GRATE EL.= 13.71
SKIMMER= 12.70
INV. EL.= 10.73
- 57

STM CONTROL STRUCTURE
W/METAL SKIMMER
GR EL.= 12.07
- 58

STM M.E.S.
INV. EL.= 11.99
- 59

STM M.E.S.
INV. EL.= 12.17
- 60

CONCRETE DEADWALL
INV. EL.= 10.67
INV. EL.= 10.57
- 61

CONCRETE HEADWALL
INV. EL.= 9.82
INV. EL.= 9.86
- 62

INV. EL.= 7.93 (S)
INV. EL.= 7.88 (N)
- 63

INV. EL.= 7.93 (S)
INV. EL.= 7.88 (N)
- 64

STM INLET
TYPE D
G.E. = 13.53
SLOT I.E. = 12.52(W)
I.E. = 9.40 (NE)
I.E. = 10.25 (SW)
- 65

30" FES
I.E. = 9.00
- 66

22"x14" ERCP
INV. EL.= 9.82 (N&S)
- 67

STM RIPRAP
HEADWALL 1'± W
INV. EL.= 9.90
- 68

STM RIPRAP
HEADWALL 1'± W
INV. EL.= 9.63
- 69

STM RIPRAP
HEADWALL 1'± W
INV. EL.= 9.27
- 70

STM RIPRAP
HEADWALL 1'± W
INV. EL.= 8.79
- 71

STM F.E.S.
INV. EL.= 9.78
- 72

STM F.E.S.
INV. EL.= 9.35
- 73

STM HDWALL 0.8' W
INV. EL.= 8.68
- 74

STM HDWALL 0.8' W
INV. WL.= 8.85
- 75


STM HDWALL 0.75' W
INV. EL.= 9.35
- 76

STM M.E.S.
INV. EL.= 11.30
- 77

STM M.E.S.
INV. EL.= 11.29

REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	MLM	05/00
			DRAWN	TAW	05/00
			CHECKED	TWM	05/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

 King ASSOCIATES, INC.
PHONE: 813-580-4881
FAX: 813-580-4882
E-MAIL: info@kingassoc.com

EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

EXISTING DRAINAGE
STRUCTURES

DATE: MAY 16, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 3 OF 35
File: View:

SUMMARY OF QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITIES
101-1	MOBILIZATION	LS	1
102-0101	MAINTENANCE OF TRAFFIC	LS	1
104-0013	STAKED SILT FENCE	LF	6126
110-0100	CLEARING AND GRUBBING	LS	1
102-5000	WATER FOR DUST CONTROL	GAL.	10,000
*120-60	EMBANKMENT	CY	31,376
120-14	EXCAVATION, (DETENTION POND AND/OR MITIGATION AREA)	CY	1,412
120-0409	EXCAVATION, UNSUITABLE MATERIAL CONTINGENCY	CY	1,000
120-1100	GRADING	LS	1
**125-3579	BEDDING MATERIAL, CRUSHED STONE SIZE #57	TONS	22.4
*160-1481	STABILIZATION, TYPE B, LBR 40, 12" MIN. THICKNESS	SY	13,620
162-2	TOPSOIL	SY	4,029
*200-1421	ROADWAY BASE, LIMEROCK, PRIMED, 10 1/2" MIN. THICKNESS	SY	6,826
*200-1245	ROADWAY BASE, LIMEROCK, PRIMED, 6" THICKNESS (DRIVEWAY) (CONTINGENCY)	SY	238
*337-5-3	ASPHALTIC CONCRETE FRICTION COURSE - FDOT TYPE FC-3, 1" THICKNESS	SY	5,194
*350-0224	PAVEMENT, CEMENT CONCRETE (DRIVEWAYS) 6" THICKNESS (CONTINGENCY)	SY	32
*391-1065	ASPHALT CONCRETE, TYPE PC-1, 1 1/2" SURFACE COURSE (DRIVEWAYS) (CONTINGENCY)	SY	238
*391-1069	ASPHALT CONCRETE, TYPE PC-1, 6" BASE COURSE	SY	2,518
391-1121	ASPHALTIC CONCRETE, TYPE PC-1, 3" MIN. THICKNESS, SURFACE COURSE	SY	9,265
400-1-2	CLASS I CONCRETE (ENDWALLS)	CY	39
400-1004	CLASS I CONCRETE (GRAVITY WALLS INCL. REINFORCING STEEL)	CY	11
425-1231	INLET, CURB, FDOT TYPE P3, UNDER 10'	EA	1
425-1451	INLET, DITCH BOTTOM, FDOT TYPE E, UNDER 10'	EA	5
425-628-6001	MANHOLE, FDOT TYPE J7 (6'-0" DIA.) UNDER 10' (CONFLICT) (CONTINGENCY)	EA	2
425-2109	OUTFALL STRUCTURE, (S-810), UNDER 10'	EA	1
425-2230	MANHOLE, FDOT TYPE P-8, UNDER 10'	EA	2
425-2131	MANHOLE, FDOT TYPE J-8, OVER 10'	EA	1
430-1018	PIPE CULVERT, CONCRETE, ROUND, 18" ID	LF	860
430-1024	PIPE CULVERT, CONCRETE, ROUND, 24" ID	LF	205
430-1036	PIPE CULVERT, CONCRETE, ROUND, 36" ID	LF	562
430-1048	PIPE CULVERT, CONCRETE, ROUND, 48" ID	LF	414
430-2019	PIPE CULVERT, CONCRETE, ELLIPTICAL, 19x30" ID	LF	105
430-2014	PIPE CULVERT, CONCRETE, ELLIPTICAL, 14"x23" ID	LF	410

ITEM	DESCRIPTION	UNIT	QUANTITIES
430-6118	END SECTION, FLARED, 18" RCP	EA	1
430-6136	END SECTION, FLARED, 36" RCP	EA	1
430-6518	END SECTION, MITERED, 18" RCP	EA	2
430-6614	END SECTION, MITERED, 14"x23" ERCP	EA	4
104-1102	STAKED TURBIDITY BARRIER	LF	18
515-1124	HANDRAIL, GALVANIZED STEEL PIPE, 2 1/2" OD, 3' HEIGHT	LF	527
520-2221	CURB & GUTTER, CONCRETE, FDOT TYPE F	LF	1,617
522-4001	SIDEWALK, CONCRETE, 4" MIN. THICKNESS	SY	716
522-6003	SIDEWALK, CONCRETE, 6" MIN. THICKNESS W/ WIRE MESH FABRIC	SY	23
*530-2201	RIPRAP, RUBBLE W/ FILTER FABRIC	TONS	30.7
*575-0101	SODDING, BAHIA	SY	4,432
900-1201	LOW SLUMP COMPACTION GROUTING, GROUT PIPES	LF	500
900-1202	LOW SLUMP COMPACTION GROUTING, GROUT MATERIAL	CY	150
900-0200	OFFICE FOR THE ENGINEER	LS	1

SUMMARY OF EARTHWORK		
ROADWAY EXCAVATION	580	C.Y.
ROADWAY EMBANKMENT	24,676	C.Y.
POND EXCAVATION	1,412	C.Y.
POND EMBANKMENT	3,848	C.Y.


NOTE: EARTHWORK QUANTITIES ARE FOR CONTRACTORS INFORMATION ONLY. (ACCURACY NOT GUARANTEED) QUANTITIES CALCULATED WITH NO ALLOWANCE FOR SHRINKAGE, GRUBBING OR ANY OTHER CONSIDERATION.

*THESE ITEMS INCLUDE AN ADDITIONAL 10% CONTINGENCY QUANTITY AND ARE ONLY TO BE UTILIZED AS DIRECTED BY THE ENGINEER.

** THIS ITEM INCLUDES AN ADDITIONAL 15% CONTINGENCY QUANTITY AND ARE ONLY TO BE UTILIZED AS DIRECTED BY THE ENGINEER.

REVISIONS	BY	DATE	SURVEY BOOK No.: SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	MLM	06/00
ADDED PAY ITEMS	RWF	11/20/00	DRAWN	TAW	06/00
ADDED PAY ITEMS	MLM	6/12/00	CHECKED	TWM	06/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

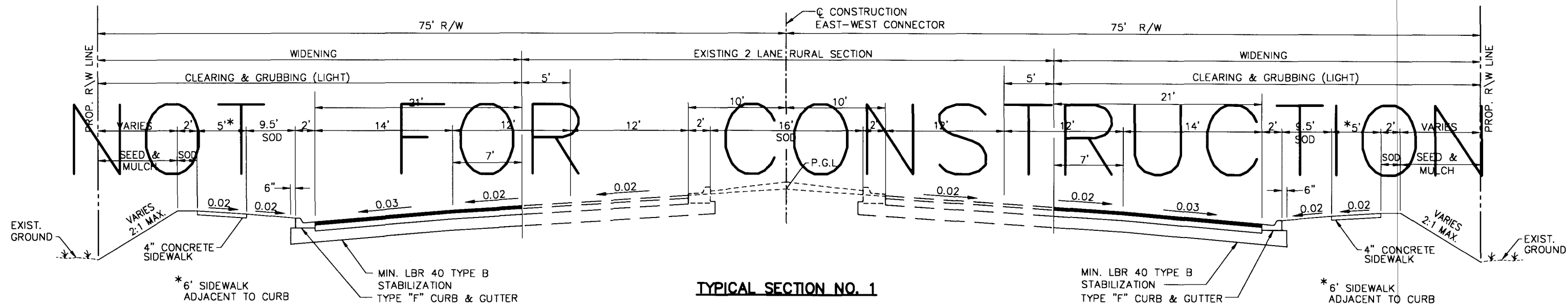

ASSOCIATES, INC.
PHONE: 813-486-1888
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E-MAIL: ing@ingpinellas.com

EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

SUMMARY OF QUANTITIES (ROADWAY)

DATE: MAY 16, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 4 OF 35

W: \\TRANS\\EW\\PHASE2\\CADD\\typsrd01.DWG Wed May 17 14:05:41 2000 King Engineering Associates, Inc.



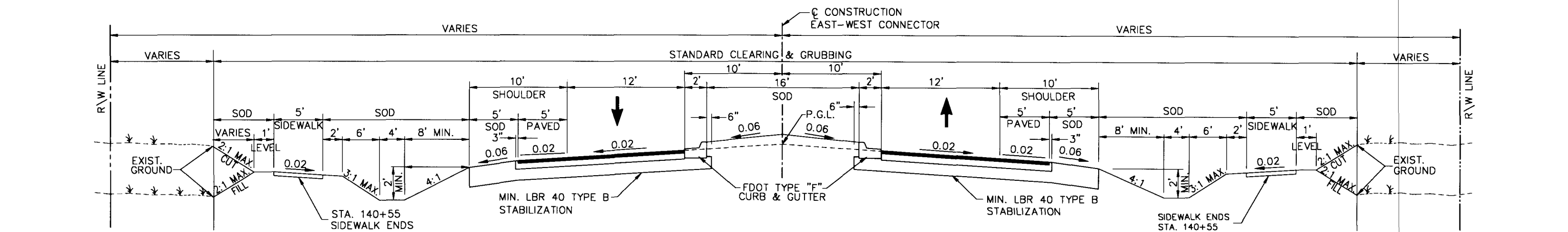
TYPICAL SECTION NO. 1
FUTURE 6 LANE URBAN DESIGN

N. T. S.

DESIGN SPEED 45 MPH

STA. 133+50 TO STA. 140+75

STA. 30+00 TO STA. 36+11



TYPICAL SECTION NO. 2
2 LANE RURAL DESIGN

N. T. S.

DESIGN SPEED 45 MPH

STA. 133+50 TO STA. 140+75

STA. 30+00 TO STA. 36+11

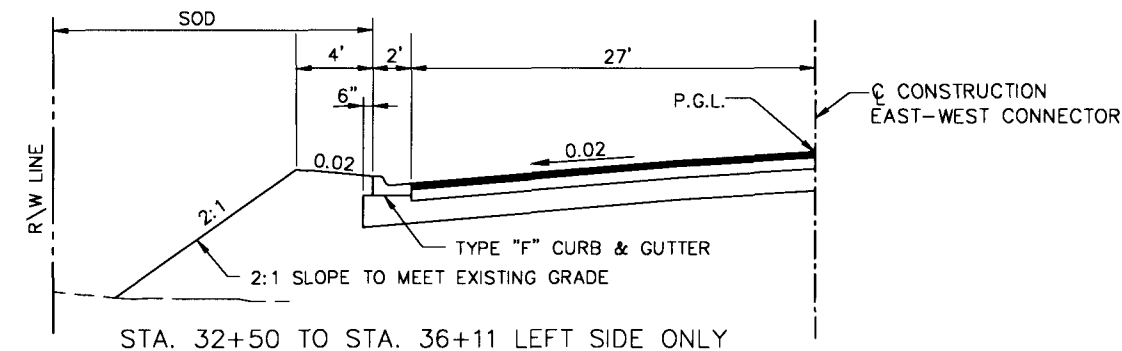
ROADWAY PAVEMENT SPECIFICATIONS

3" PC-1 ASPHALTIC CONCRETE STRUCTURAL COURSE
10 1/2" LIMEROCK BASE (MIN. LBR 100)

SHOULDER PAVEMENT SPECIFICATIONS

3" PC-1 ASPHALTIC CONCRETE STRUCTURAL COURSE
10 1/2" LIMEROCK BASE (MIN. LBR 100)

TRAFFIC DATA	
2015 ADT =	51,541
K =	0.090
D =	0.50
T =	0.02 (2%)



STA. 32+50 TO STA. 36+11 LEFT SIDE ONLY

REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEYED	BY	DATE
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	MLM	05/00
			DRAWN	TAV	05/00
			CHECKED	TWM	05/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD
PHASE II

EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

TYPICAL SECTIONS (1)

DATE: MAY 16, 2000

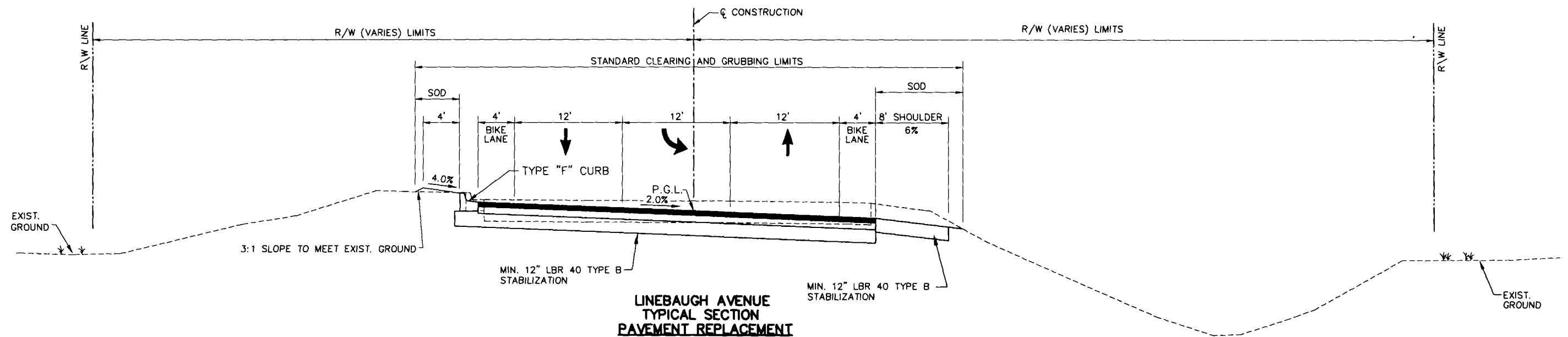
CONTRACT NO.:

SURVEY FILE NO.:

SHEET 5 OF 35

File: TYPsrd01
View: 100-11x17

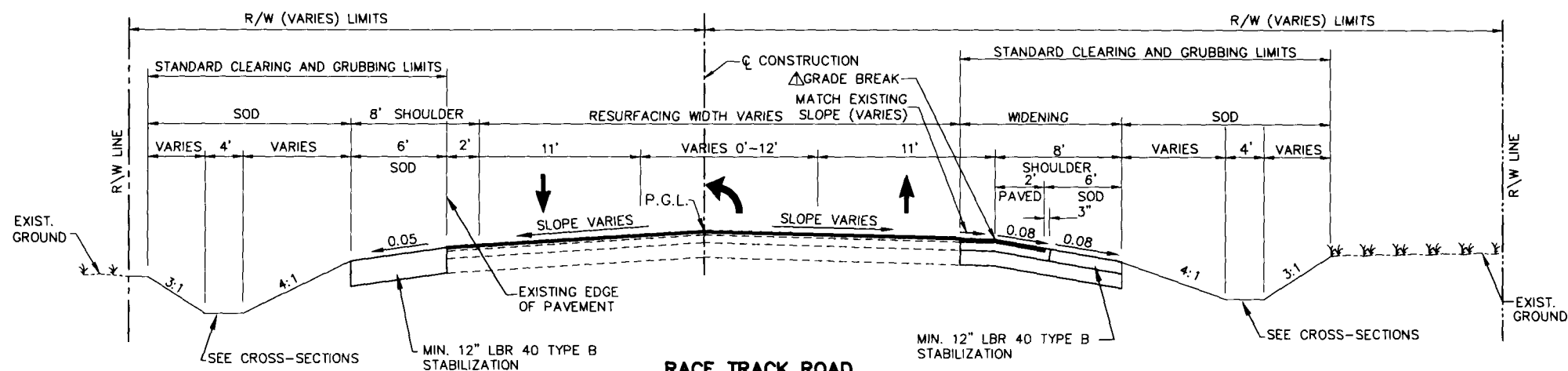
W:\TRANS\EW\PHASE2\CADD\typsrd02.dwg Thu Aug 17 13:28:54 2000 King Engineering Associates, Inc. (jki-pasco)



**LINEBAUGH AVENUE
TYPICAL SECTION
PAVEMENT REPLACEMENT**

N. T. S.
DESIGN SPEED 45 MPH
STA. 36+47.00 TO STA. 39+47.00

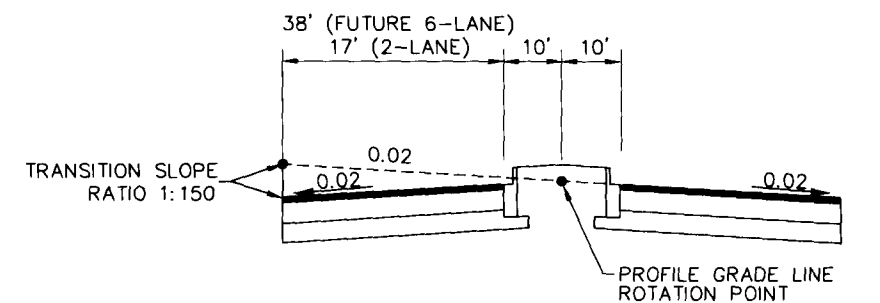
ROADWAY PAVEMENT SPECIFICATIONS
1" FC-3 ASPHALTIC CONCRETE FRICTION COURSE
3" TYPE PC-1 ASPHALTIC CONCRETE STRUCTURAL COURSE
6" TYPE PC-1 ASPHALTIC CONCRETE BASE COURSE



**RACE TRACK ROAD
TYPICAL SECTION
2 LANE RURAL DESIGN**

N. T. S.
DESIGN SPEED 50 MPH
STA. 99+11.00 TO STA. 108+45.75

RESURFACING PAVEMENT SPECIFICATIONS
1" FC-3 ASPHALTIC CONCRETE FRICTION COURSE
WIDENING/SHOULDER PAVEMENT SPECIFICATIONS
1" FC-3 ASPHALTIC CONCRETE FRICTION COURSE
3" TYPE PC-1 ASPHALTIC CONCRETE STRUCTURAL COURSE
6" TYPE PC-1 ASPHALTIC CONCRETE BASE COURSE



NOTE: SUPERELEVATION SHALL CONFORM TO FDOT INDEX 511

SUPERELEVATION DETAIL

N. T. S.
STA. 133+50 TO STA. 139+67.03

REVISIONS	BY	DATE	SURVEY BOOK No.:	SURVEY DIVISION	BY	DATE
			SURVEYED			
			TECHNICIAN			
			CHECKED			
			DESIGN DIVISION			
			DESIGNED	MLM	05/00	
			DRAWN	TAW	05/00	
			CHECKED	TWM	05/00	

CLARIFIED GRADE BREAK PER HILLS, CO. REVIEW. MLM 7/24/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



**EAST-WEST CONNECTOR ROAD
PHASE II**
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

**TYPICAL SECTIONS (2)
RACE TRACK ROAD**

DATE: MAY 16, 2000

CONTRACT NO.:

SURVEY FILE NO.:

SHEET 6 OF 35

File: TYPsRD02
View: 100-11X17

W: \\TRANS\\EW\\PHASE2\\CADD\\Gennote.dwg Sat Jul 08 17:47:00 2000 King Engineering Associates, Inc. (TAW-Pasco)

GENERAL NOTES

- BENCHMARK DATA IS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).
- ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHOULD NOTIFY THE COUNTY SURVEYOR WITHOUT DELAY.
- ALL STATIONS AND OFFSETS REFER TO CENTERLINE OR BASELINE OF CONSTRUCTION UNLESS OTHERWISE NOTED. ALL ROADWAY DIMENSIONS ARE MEASURED FROM EDGE OF PAVEMENT.
- MATERIALS INTERFERING WITH CONSTRUCTION, AND ALL ABANDONED UTILITY LINES, PIPES, STRUCTURES AND OTHER SUBTERRANEAN OBJECTS TO BE REMOVED, SHALL BE DISPOSED OF AS DIRECTED BY PINELLAS COUNTY. ALL MATERIALS NOT CLAIMED BY THE COUNTY SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE IN AREAS PROVIDED BY THE CONTRACTOR.
- CONSTRUCTION ACTIVITIES SHOULD BE LIMITED TO THE PROJECT'S RIGHT-OF-WAY/ EASEMENTS. SODDING REQUIRED AS A RESULT OF CONTRACTOR'S ACTIVITIES OUTSIDE THE RIGHT-OF-WAY/EASEMENTS IS THE CONTRACTOR'S RESPONSIBILITY AND COST.
- EXISTING ROADWAY MATERIALS SUCH AS SHELL, MARL, OR LIMEROCK SUITABLE FOR SUCH USE SHALL BE UTILIZED IN THE PREPARATION OF STABILIZED SUBGRADE.
- ALL STORM SEWER INLET, MANHOLE AND JUNCTION BOX COVER LIDS SHALL BE FABRICATED AND STAMPED AS INDICATED IN THE PLANS AND DETAILS.
- PAVEMENT CONSTRUCTED IN STREET INTERSECTION AREAS SHALL BE OF THE SAME MATERIAL AND THICKNESS AS THAT SPECIFIED FOR CORRESPONDING COURSES IN THE ADJACENT ROADWAY TYPICAL SECTION UNLESS OTHERWISE SPECIFIED IN THE PLANS.
- THE CONTRACTOR SHALL PROVIDE ALL SHEETING, SHORING AND BRACING REQUIRED TO MEET THE REQUIREMENTS OF THE "TRENCH SAFETY ACT" AND TO PROTECT ADJACENT STRUCTURES OR TO MINIMIZE TRENCH WIDTH. WHERE A SEPARATE PAY ITEM IS NOT PROVIDED, THE COST FOR ALL SHEETING, SHORING AND BRACING REQUIRED SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE ITEM OF WORK FOR WHICH SHEETING, SHORING AND BRACING IS ANTICIPATED TO BE REQUIRED.
- THE CONSTRUCTION LENGTHS INDICATED IN THESE PLANS ARE APPROXIMATE. ACTUAL LIMITS MAY BE SET IN THE FIELD AS DIRECTED BY THE ENGINEER.
- ALL PROPOSED SURFACING OVERLAYED ON EXISTING PAVEMENT SHALL BE FEATHERED SMOOTHLY INTO THE EXISTING PAVEMENT.
- THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO PINELLAS COUNTY ORDINANCE NO. 74-11, SECTION 4, ITEM "B", CONSTRUCTION NOISE.
- THE CONTRACTOR SHALL REMOVE AND RELOCATE MAILBOXES AS REQUIRED, THIS SHALL BE DONE AS NOT TO INTERRUPT MAIL DELIVERY. ANY DAMAGED MAILBOXES OR POSTS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- ALL WORK PERFORMED SHALL COMPLY WITH ALL APPLICABLE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENT AGENCIES HAVING JURISDICTION OVER THE WORK PERFORMED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PENALTIES/FINES LEVIED DUE TO WORK THAT IS NOT IN ACCORDANCE WITH PERMIT CONDITIONS.
- ALL SIDEWALK RAMPS SHALL BE CONSTRUCTED TO MEET F.D.O.T. INDEX 304.
- ALL GRASSED AREAS WITHIN THE PROJECT LIMITS SHALL BE MOWED AS DIRECTED BY THE ENGINEER.
- RIGHT-OF-WAY WILL BE STAKED FROM THE RIGHT-OF-WAY PLANS BY PINELLAS COUNTY.
- ALL DRIVEWAY AND RELATED SLOPE CONSTRUCTION OUTSIDE OF THE RIGHT-OF-WAY LIMITS SHALL BE SUBJECT TO THE PROPERTY OWNER'S APPROVAL.
- ALL AREAS OF EXPOSED EARTH RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE SODDED AS DIRECTED BY THE ENGINEER. SEEDING AND MULCHING SHALL BE APPLIED ONLY WHERE SPECIFICALLY CALLED FOR IN THE PLANS AND SPECIFICATIONS, OR WHERE SPECIFICALLY DIRECTED BY THE ENGINEER.
- ALL GRATES FOR DITCH BOTTOM INLETS ARE TO BE GALVANIZED STEEL PER FDOT INDEX NO. 232, AND SHALL BE CAPABLE OF WITHSTANDING H-20 LOADING.

- ALL AREAS OF EXPOSED EARTH RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE SODDED AS DIRECTED BY THE ENGINEER. SEEDING AND MULCHING SHALL BE APPLIED ONLY WHERE SPECIFICALLY CALLED FOR IN THE PLANS AND SPECIFICATIONS, OR WHERE SPECIFICALLY DIRECTED BY THE ENGINEER.
- ALL GRATES FOR DITCH BOTTOM INLETS ARE TO BE GALVANIZED STEEL PER FDOT INDEX NO. 232, AND SHALL BE CAPABLE OF WITHSTANDING H-20 LOADING.
- NO SURFACING SHALL BE APPLIED TO ANY MANHOLE COVERS, FRAMES, VALVE BOXES, GAS DROPS, ETC. ALL EXISTING AND PROPOSED UTILITY AND STORM SEWER STRUCTURES WHOSE TOPS WILL BE EXPOSED WITHIN ANY PAVED AREA SHALL BE ADJUSTED SO THAT THE TOP SURFACE OF COVERS OR FRAMES SHALL BE FLUSH WITH THE PAVEMENT SURFACE.
- EXISTING DRAINAGE STRUCTURES AND PIPES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE REMOVED UNLESS OTHERWISE NOTED TO REMAIN. SOME EXISTING PIPES ARE TO BE PROPERLY CONNECTED TO PROPOSED DRAINAGE STRUCTURES (SEE PLANS FOR LOCATIONS).
- BORROW MATERIAL REQUIRED FOR CONSTRUCTION OF THE PROJECT SHALL BE PROVIDED BY THE CONTRACTOR FROM BORROW AREAS PROVIDED BY THE CONTRACTOR.
- ALL AREAS TO BE SODDED SHALL RECEIVE 6" TOPSOIL TREATMENT IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

EROSION AND SEDIMENTATION CONTROL NOTES

- ALL PRACTICABLE AND NECESSARY EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIAL TO INLETS, SURFACE DRAINS, WETLANDS AND DETENTION AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.
- PROVIDE ALL DISTURBED AREAS WITHIN THE LIMITS OF THE WORK WITH TEMPORARY SOIL EROSION CONTROL AND SEDIMENT CONTROL, UTILIZING EARTH DAMS & PONDS, GRADE TO DRAIN SWALES, SETTLING BASINS, SILT FENCES, STONE FILTERS, HAY BALE FILTERS, ETC., TREATING ALL SOIL SURFACES WITH SEEDED TOPSOIL AND / OR MULCH AFTER GRADING.
- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS SHALL BE COMPLIED WITH AT ALL TIMES.
- MINIMIZE THE AMOUNT OF BARE SOIL EXPOSED AT ONE TIME AND INSTALL SOIL EROSION CONTROL FENCES AS SHOWN AND IN SUCH A MANNER AS TO CAPTURE AND FILTER SURFACE WATER DURING CONSTRUCTION.
- PERMANENT VEGETATION SHALL BE BY SODDING ALL EXPOSED AREAS WITHIN THREE DAYS AFTER FINAL GRADING.

AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL WHICH WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY AS TO PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER.
- ALL NEW EROSION AND SILT CONTROL METHODS AND LOCATIONS INDICATED ON THIS DRAWING ARE FOR START-UP AND GENERAL REFERENCE AND SHALL BE ADJUSTED, AS REQUIRED, TO SUIT THE PROCESS OF THE CONSTRUCTION.
- ALL DISTURBED AREAS WITHIN THE LIMITS OF CONSTRUCTION SHALL RECEIVE VEGETATIVE TREATMENT AFTER FINAL GRADING IN ACCORDANCE WITH THESE PLANS. DISTURBED AREAS NOT SPECIFICALLY DESIGNATED WITH A VEGETATIVE COVER SHALL BE VEGETATED AS FOLLOWS:

SIDE SLOPES CONSTRUCTED AT 4:1 (H TO V) SHALL BE SODDED WITH ARGENTINE BAHIA.
- HAY BALES SHALL BE PLACED ON THE UPLAND SIDE AND ADJACENT TO ALL SILT FENCE WHICH IS ADJACENT TO WETLAND AREAS TO PROVIDE ADDED SILTATION PROTECTION OF THE COMMENCEMENT OF CONSTRUCTION. THE HAY BALES SHALL BE REMOVED AT SUCH TIME AS THEIR PRESENCE IMPEDES CONSTRUCTION.
- THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.

11. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS OR HAY BALES TO PREVENT EROSION. FLOATING TURBIDITY CURTAINS SHOULD BE USED IN OPEN WATER SITUATIONS. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORMWATER RUNOFF FROM BEING DISCHARGED TO WETLANDS OR OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES, AND OTHER EROSION/TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.

12. WHERE PUMPS ARE TO BE USED TO REMOVE TURBID WATERS FROM THE CONSTRUCTION AREA, THE WATER SHALL BE TREATED TO REDUCE TURBIDITY TO STATE WATER QUALITY STANDARDS PRIOR TO DISCHARGE TO THE WETLANDS. TREATMENT METHODS INCLUDE, FOR EXAMPLE, TURBID WATER BEING PUMPED INTO GRASSED SWALES OR APPROPRIATE VEGETATED AREAS (OTHER THAN UPLAND PRESERVATION AREAS AND WETLAND BUFFERS), SEDIMENT BASINS, OR CONFINED BY AN APPROPRIATE ENCLOSURE SUCH AS TURBIDITY BARRIERS, AND KEPT CONFINED UNTIL ITS TURBIDITY LEVEL MEETS STATE WATER QUALITY STANDARDS.

13. THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOIL STABILIZED. SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND PLACED IN UPLAND AREAS.

14. WATER REMAINING IN THE EXCAVATIONS AFTER CONSTRUCTION MUST BE KEPT CONFINED WITHIN THE EXCAVATIONS PRIOR TO DISCHARGE (IF APPLICABLE), UNTIL THE TURBIDITY LEVEL OF THE POND WATER MEETS STATE WATER QUALITY STANDARDS.

15. NO CLAY MATERIAL SHALL BE LEFT EXPOSED IN THE EXCAVATIONS. IF CLAY OR SANDY CLAYS ARE LEFT EXPOSED AT THE PERMITTED DEPTH, THE CONTRACTOR SHALL OVER EXCAVATE THE SWALES AND/OR POND'S BOTTOM AND SIDE SLOPES BY A MINIMUM OF 12 INCHES AND BACKFILL WITH CLEAN SANDS.

16. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PLACE SILT FABRIC FENCE AT THE UPSTREAM END OF ALL STORM SEWER PIPES UNTIL INLETS ARE COMPLETED.

17. WHEN THE CONSTRUCTION OF INLETS IS COMPLETED, THE CONTRACTOR SHALL PLACE STRAW BALES STAKED IN PLACE AS PER DETAIL.

18. THE CONTRACTOR SHALL SOD SWALES AND PONDS PER SECTIONS, IMMEDIATELY AFTER CONSTRUCTION IS COMPLETED.

19. THE CONTRACTOR SHALL PROVIDE SILTATION REDUCTION DEVICES FOR THE DISCHARGE FROM THE DEWATERING PROCESS SO THAT DIRECT DISCHARGE DOES NOT OCCUR.

20. THE CONTRACTOR SHALL CHECK ALL EROSION AND SILTATION CONTROL DEVICES AFTER EACH RAINFALL AND REPAIR OR REPLACE THEM AS REQUIRED AT CONTRACTOR'S EXPENSE.


21. REQUIRED TREE BARRICADES AND EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. ENCROACHMENT INTO OR FAILURE TO MAINTAIN THESE BARRICADES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS AND/OR PERMIT REVOCATION.

22. THE REQUIREMENTS LISTED ABOVE SHALL BE CONSIDERED MINIMUM REQUIREMENTS AND THE CONTRACTOR SHALL USE WHATEVER METHODS HE DEEMS NECESSARY TO PREVENT EROSION AND SILTATION AS MAY BE REQUIRED FOR THE PROJECT.

UTILITY NOTES

- EXCEPT WHERE THE PLANS AND SPECIFICATIONS PROVIDE THAT SUCH WORK SHALL BE PERFORMED UNDER THE CONTRACT FOR THIS PROJECT, ALL UTILITIES INTERFERING WITH CONSTRUCTION SHALL BE REMOVED, RELOCATED OR ADJUSTED BY THEIR OWNERS, AT THEIR EXPENSE. THE CONTRACTOR SHALL ARRANGE HIS SCHEDULE TO ALLOW UTILITY OWNERS TIME FOR THE NECESSARY RELOCATION AND ADJUSTMENT OF UTILITIES AND RELATED STRUCTURES.
- THE CONTRACTOR SHALL REMOVE ALL OUT OF SERVICE UTILITY LINES, PIPES, STRUCTURES AND OTHER SUBTERRANEAN OBJECTS TO A MINIMUM DEPTH OF FOUR (4) FEET BELOW GRADE.
- THE INDICATED LOCATION OF UNDERGROUND UTILITIES, STRUCTURES AND FACILITIES IS APPROXIMATE, AND REFLECTS THE BEST INFORMATION AVAILABLE FROM SURVEYS AND RECORDS. THE CONTRACTOR SHALL VERIFY THE ACTUAL LOCATION AND EXTENT OF UNDERGROUND FACILITIES PRIOR TO PROCEEDING WITH ANY CONSTRUCTION ACTIVITY WHICH MAY AFFECT SUCH FACILITIES.

REVISIONS			BY	DATE	SURVEY BOOK No.:		
					SURVEY DIVISION	BY	DATE
					SURVEYED		
					TECHNICIAN		
					CHECKED		
					DESIGN DIVISION		
					DESIGNED	MLM	05/00
					DRAWN	TAW	05/00
					CHECKED	TWM	05/00
REV. GEN AND UTIL NOTES			MLM/TAW	6-05-00			

PINELLAS COUNTY, FLORIDA Department of Public Works			EAST-WEST CONNECTOR ROAD PHASE II EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD			GENERAL NOTES	
						DATE: MAY 16, 2000	
						CONTRACT NO.:	
						SURVEY FILE NO.:	
						SHEET 7 OF 35	
						File: GENNOTE View: 1-11X17	

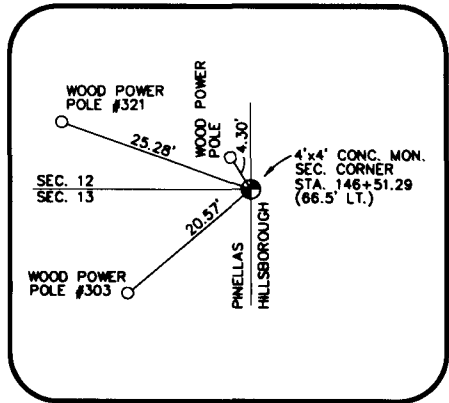
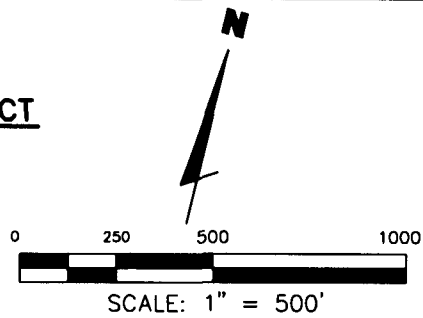
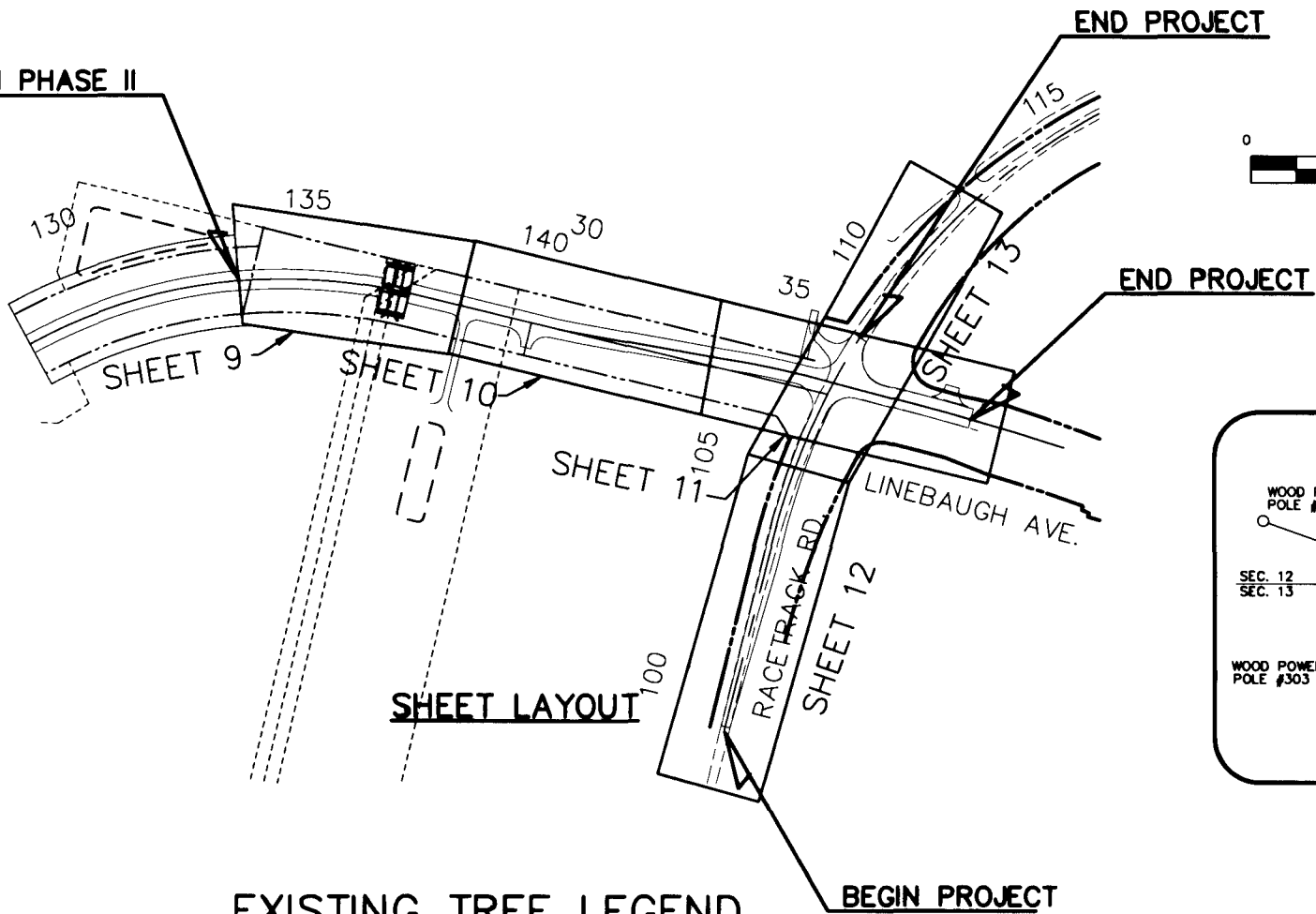
GENERAL SYMBOLS

	= Base Line
	= Center Line
	= Property Line
	= Delta Angle
	= Right-Of-Way Line
	= Base or Survey Line
	= Curb
	= Curb & Gutter
	= A.C.O.E. Jurisdictional Line
	= S.W.F.W.M.D. Jurisdictional Line
	= Both A.C.O.E. & S.W.F.W.M.D. Jurisdictional Line
	= A.C.O.E. Jurisdictional Impact
	= S.W.F.W.M.D. Jurisdictional Impact
	= Both A.C.O.E. & S.W.F.W.M.D. Jurisdictional Impact

SYMBOLS LEGEND

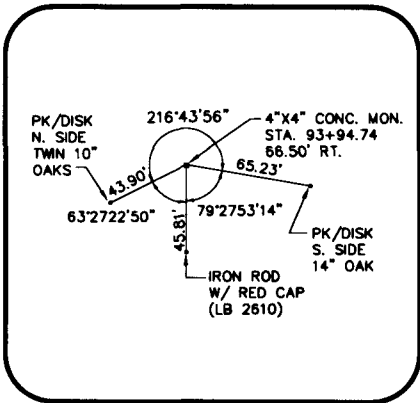
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	= Bench Mark		= Light Pole
	= Cable T.V. Paint Stripe		= Mail Box
	= Cable T.V. Box		= Metal Post
	= Communications Manhole		= Monitoring Well
	= Concrete Light Pole		= Parking Meter
	= Concrete Post		= Reclaimed Water Paint Stripe
	= Concrete Utility Pole		= Reclaimed Water Box
	= Drainage Manhole		= Reclaimed Water Valve
	= Electric Manhole		= Sanitary Sewer Manhole
	= F.P.C. Paint Stripe		= Sanitary Cleanout
	= F.P.C. Pedestal		= Section Corner
	= Fire Hydrant		= Sign
	= Flag Pole		= Sprinkler Head
	= Gas Line Marker		= Storm Water Paint Stripe
	= Gas Filler Cap		= Traffic Signal Box
	= Gas Valve		= Traffic Signal Pole
	= Gas Pump		= Water Line Paint Stripe
	= Gas Line Paint Stripe		= Water Meter
	= Grate Inlet		= Water Valve
	= GTE Manhole		= Wood Utility Pole
	= GTE Pedestal		= Wood Light Pole
	= GTE Marker		= Wood Post
			= Existing Drainage Structure number
			= Proposed Drainage Structure Number

BEGIN PHASE II



EXISTING TREE LEGEND

	Bottlebrush (size as noted)
	Bay Tree (red)(size as noted)
	Brazilian Pepper Tree (size as noted)
	Camphor Tree (size as noted)
	Cedar Tree (size as noted)
	China Berry Tree (size as noted)
	Citrus Tree
	Cypress Tree
	Dead Tree (size as noted)
	Magnolia Tree (size as noted)
	Maple Tree (size as noted)
	Oak Tree (size as noted)
	Palm Tree (size as noted)
	Pine Tree (size as noted)
	Sycamore Tree (size as noted)
	Unknown Tree Type (size as noted)
	Australian Pine (size as noted)
	Laurel (size as noted)
	Cherry (size as noted)
	Punk Tree
	Cherry Lural
	Holly Tree
	Elm Tree
	Evergreen Tree
	Jacaranda Tree
	Drake Elm



REFERENCES

REVISIONS	BY	DATE	SURVEY BOOK No.: SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	MLM	06/00
			DRAWN	TAW	05/00
			CHECKED	TWM	05/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



king
ASSOCIATES, INC.
PHONE: 813-486-1881
FAX: 813-486-1882
E-MAIL: k2@kingpin.org.com

EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

SURVEY REFERENCES &
SHEET LAYOUT

DATE: MAY 16, 2000

CONTRACT NO.:

SURVEY FILE NO.:

SHEET 8 OF 35

File: PLAYRD01
View: 1-11X17

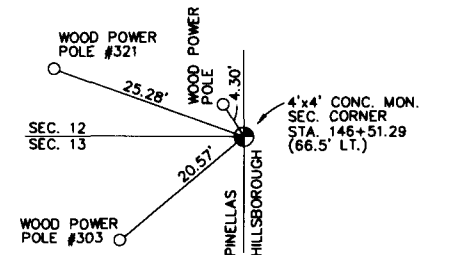
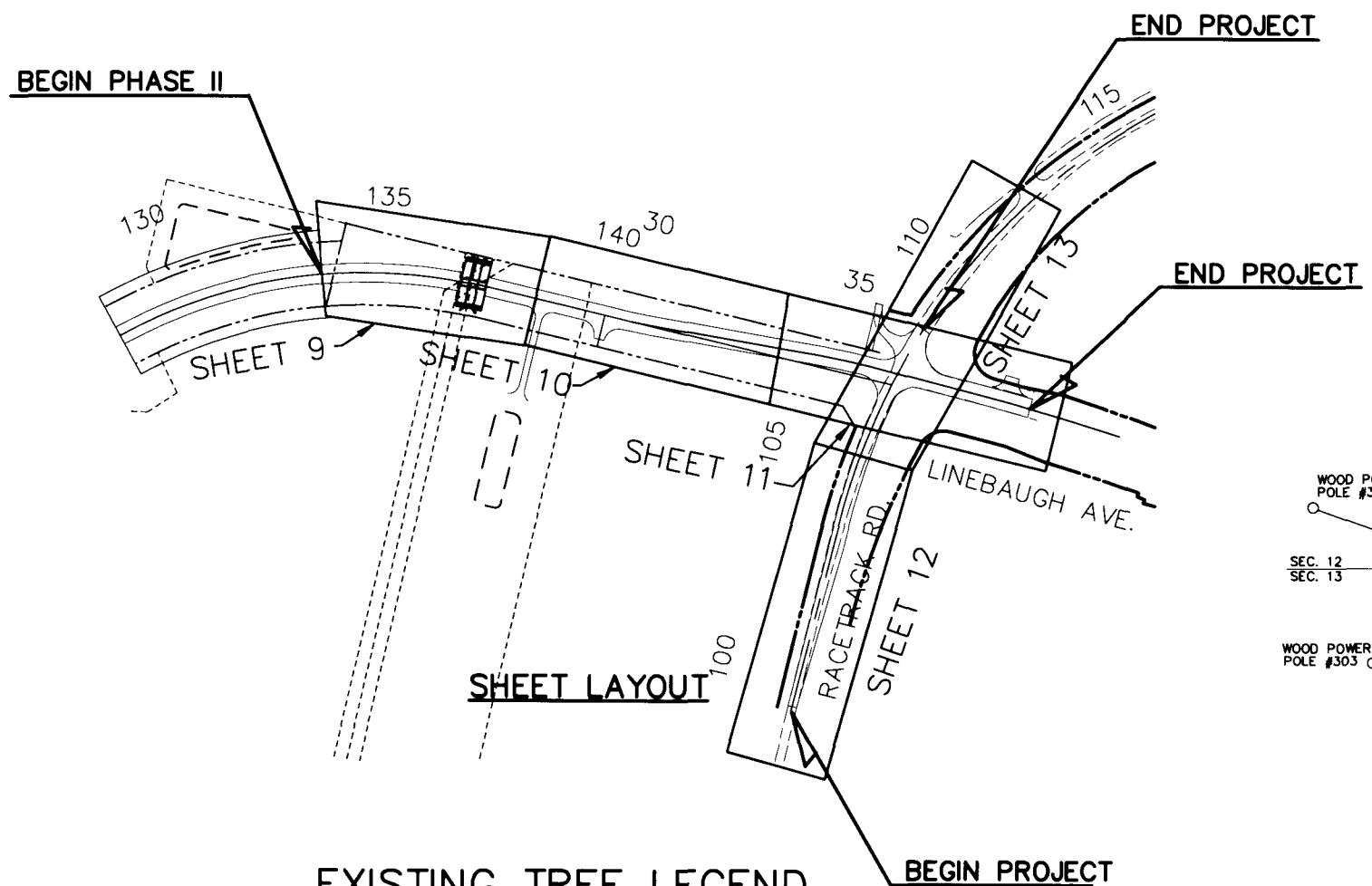
GENERAL SYMBOLS

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	= Both A.C.O.E. & S.W.F.W.M.D. Jurisdictional Line
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	= S.W.F.W.M.D. Jurisdictional Impact
	= Both A.C.O.E. & S.W.F.W.M.D. Jurisdictional Impact

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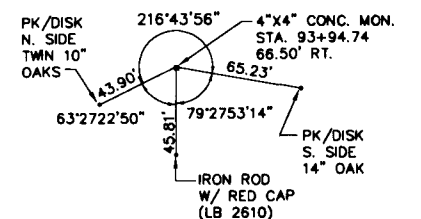
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	= Cable T.V. Box		= Metal Post
	= Communications Manhole		= Monitoring Well
	= Concrete Light Pole		= Parking Meter
	= Concrete Post	RWPS	= Reclaimed Water Paint Stripe
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	= Drainage Manhole		= Reclaimed Water Valve
	= Electric Manhole		= Sanitary Sewer Manhole
FPAPS	= F.P.C. Paint Stripe		= Sanitary Cleanout
	= F.P.C. Pedestal		= Section Corner
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	= Gas Valve		= Traffic Signal Pole
	= Gas Pump	WPS	= Water Line Paint Stripe
GLPS	= Gas Line Paint Stripe		= Water Meter
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	= GTE Pedestal		= Wood Light Pole
	= GTE Marker		= Wood Post
	= Existing Drainage Structure number		
	= Proposed Drainage Structure Number		

BEGIN PHASE II



EXISTING TREE LEGEND

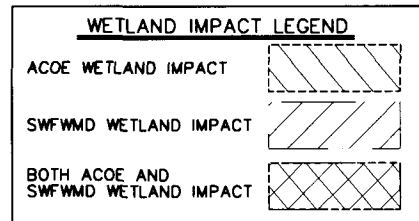
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	Bay Tree (red)(size as noted)
	Brazilian Pepper Tree (size as noted)
	Camphor Tree (size as noted)
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	Punk Tree
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	Evergreen Tree
	Jacaranda Tree
	Drake Elm



REFERENCES

REVISIONS	BY	DATE	SURVEY BOOK No.: SURVEY DIVISION	BY	DATE	PINELLAS COUNTY, FLORIDA Department of Public Works	EAST-WEST CONNECTOR ROAD PHASE II EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD	SURVEY REFERENCES & SHEET LAYOUT	DATE: MAY 16, 2000
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			TECHNICIAN						SURVEY FILE NO.:
			CHECKED						SHEET 8 OF 35
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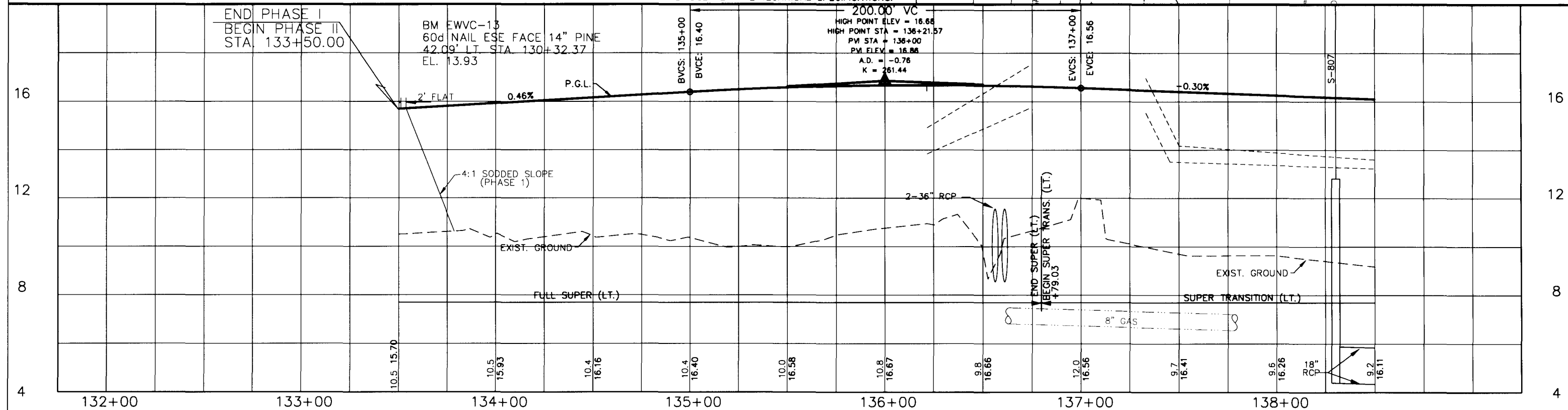
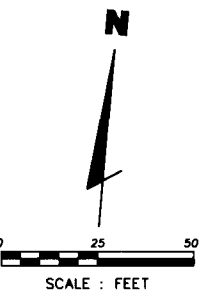
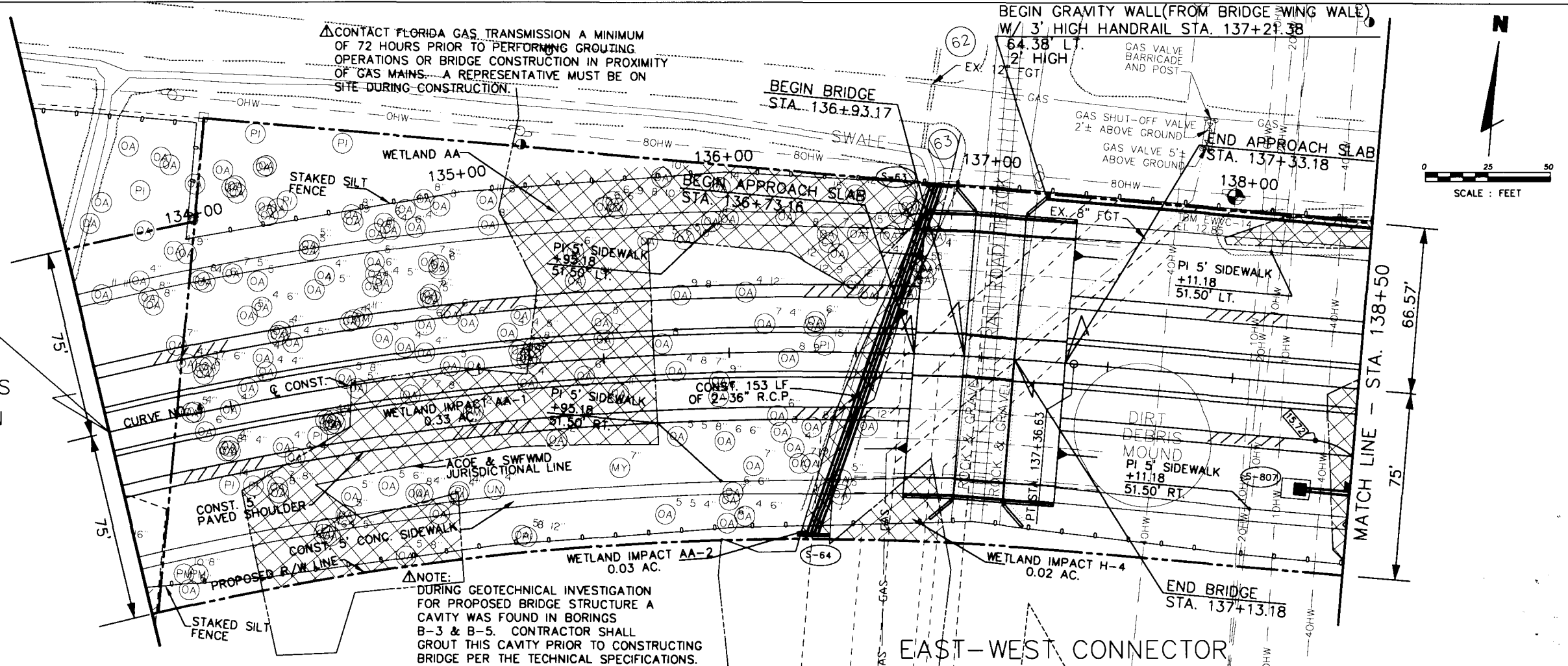


END PHASE I
BEGIN PHASE II
STA. 133+50.00

SEE PHASE I PLANS
FOR CONTINUATION

CURVE NO. 4

P.I. STA. 131+80.60
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 $D=04^{\circ}45'03''$
 $T=675.57'$
 $L=1231.61'$
 $R=1206.00'$
 $e=.02$ FT/FT
P.C. STA. 125+05.03
P.T. STA. 137+36.64



REVISIONS		BY	DATE	SURVEY BOOK No.:	
				SURVEY DIVISION	BY DATE
				TECHNICIAN	
				CHECKED	
				DESIGN DIVISION	
				DESIGNED	MLM 05/00
				DRAWN	TAM 05/00
				CHECKED	TWM 05/00
ADDED NOTE ON GROUTING		MLM	6/12/00		

PINELLAS COUNTY, FLORIDA
Department of Public Works

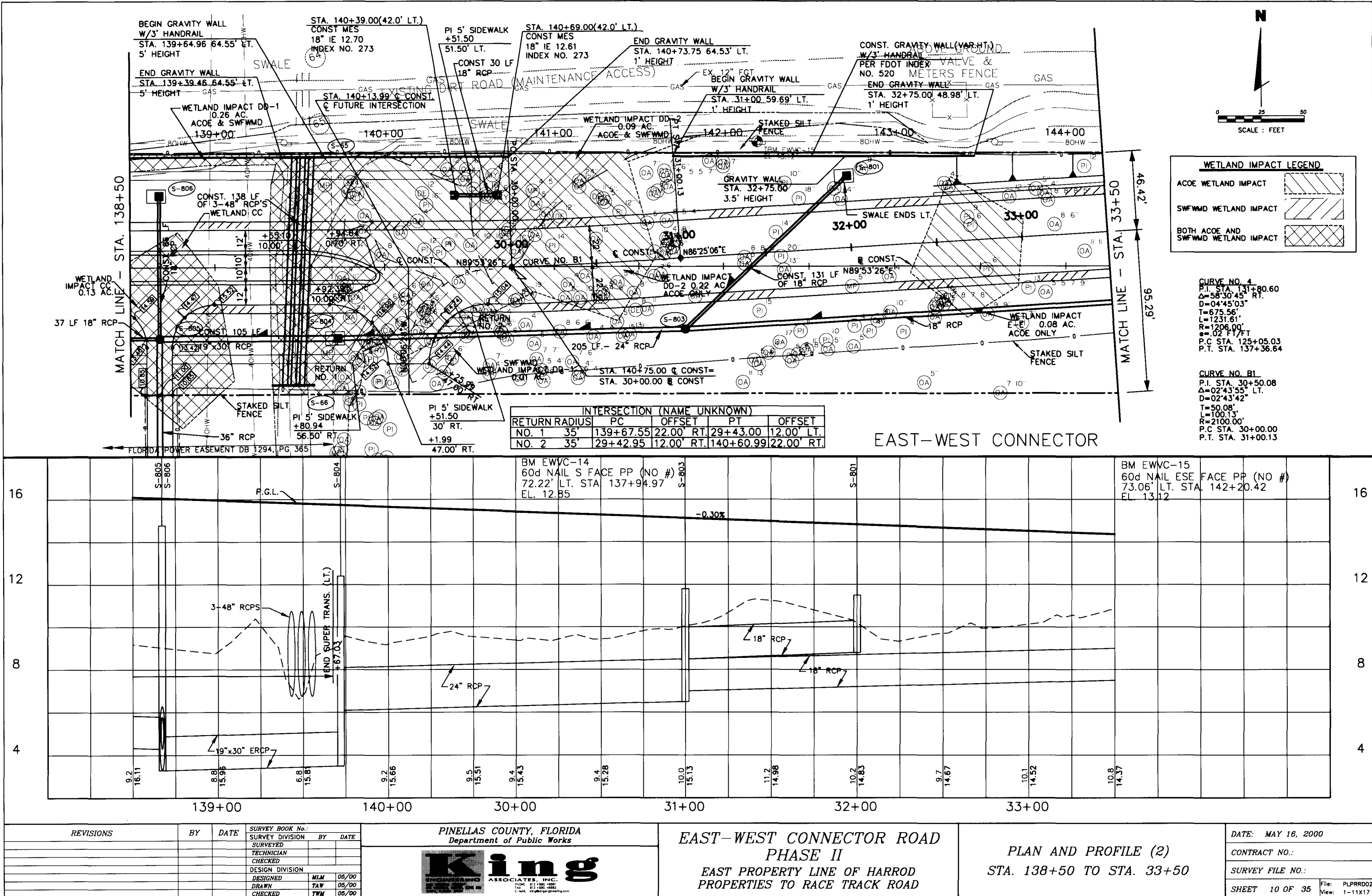


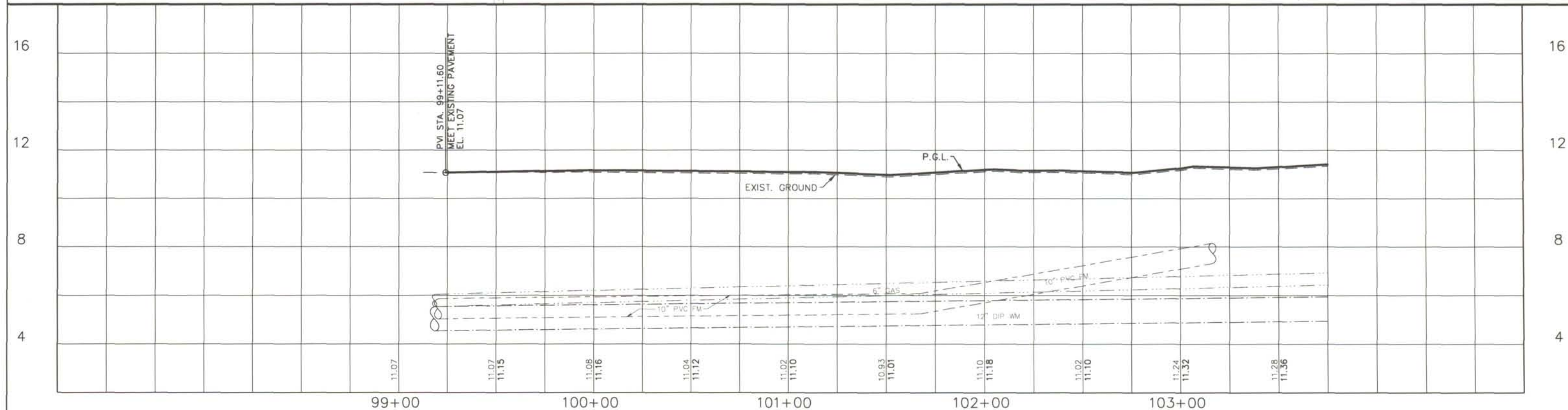
**EAST-WEST CONNECTOR ROAD
PHASE II**
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD


PLAN AND PROFILE (1)
STA. 133+50 TO STA. 138+50

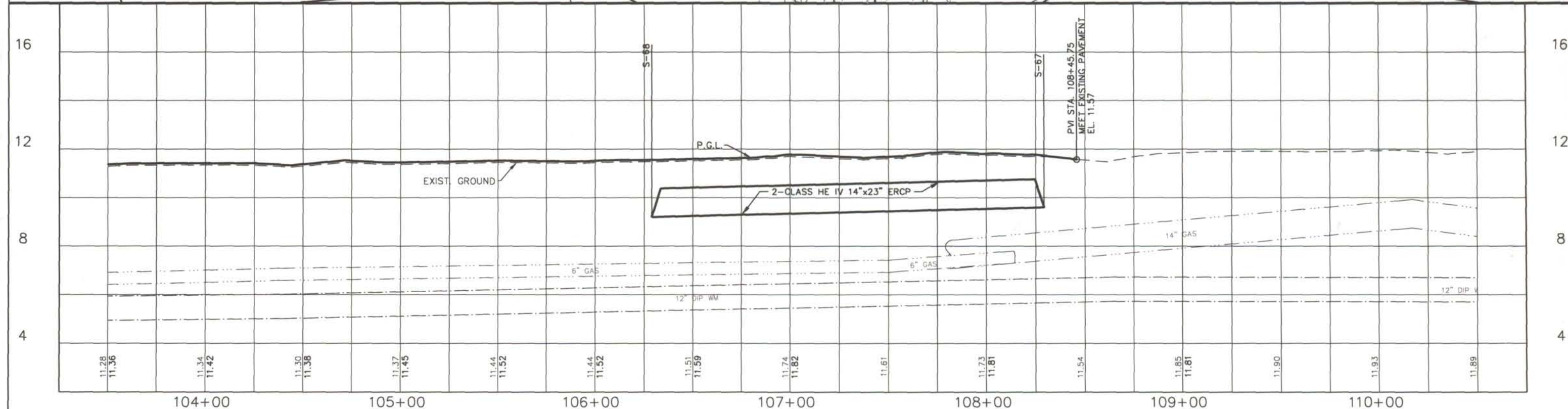
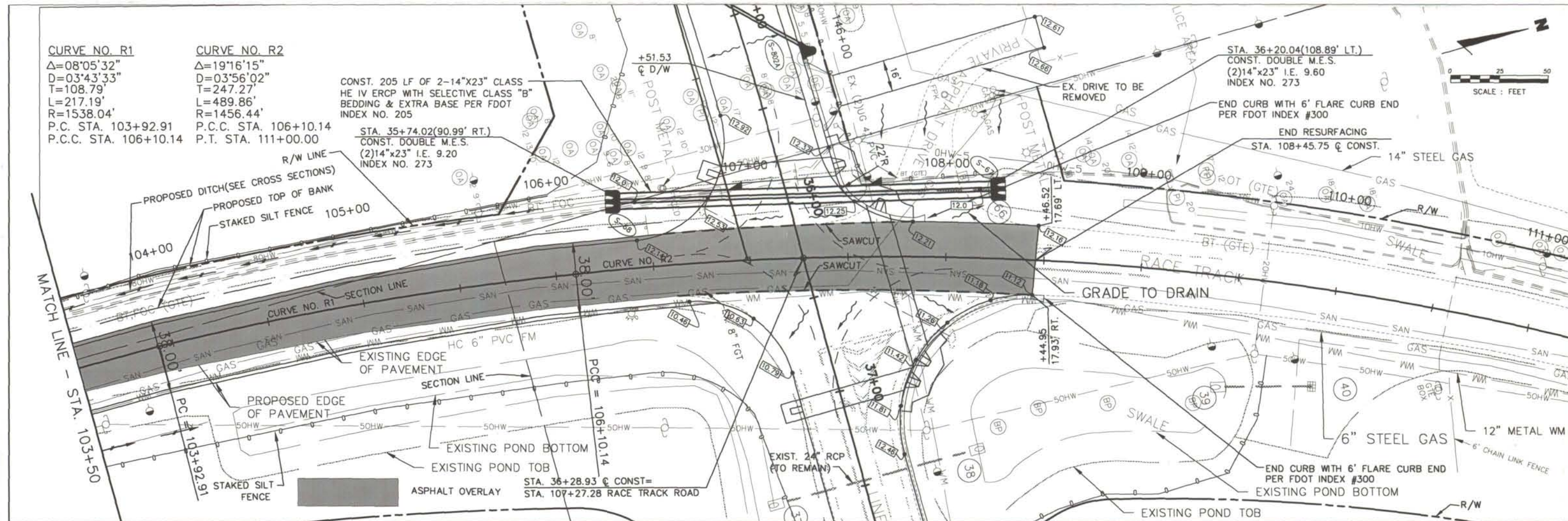
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SURVEY FILE NO.:
SHEET 9 OF 35
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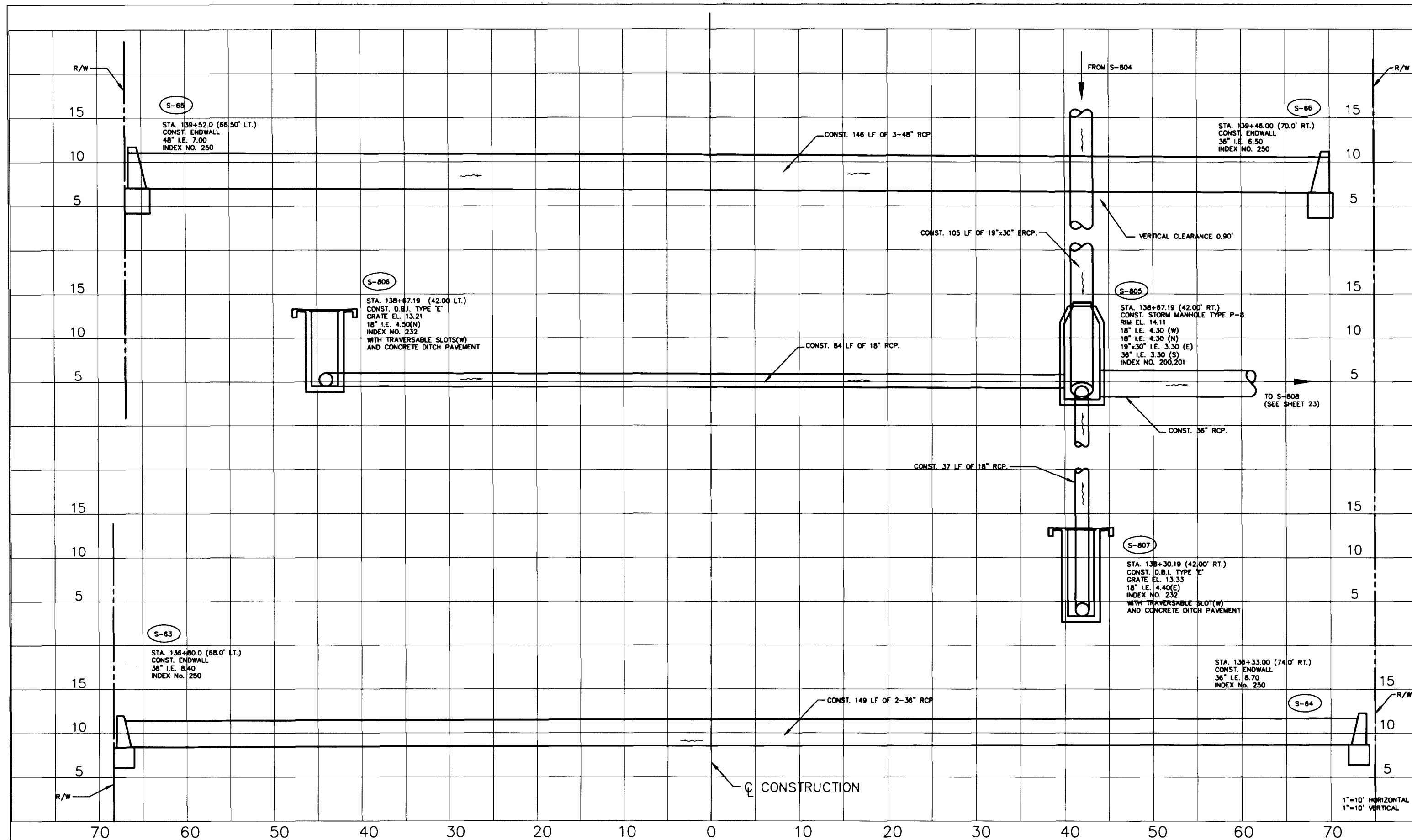




REVISIONS	BY	DATE	SURVEY BOOK No.:			PINELLAS COUNTY, FLORIDA Department of Public Works			EAST-WEST CONNECTOR ROAD PHASE II EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD			RACE TRACK ROAD PLAN AND PROFILE (4) STA. 99+00 TO STA. 103+50			DATE: MAY 16, 2000		
			SURVEY DIVISION		BY	DATE				EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD			PLAN AND PROFILE (4) STA. 99+00 TO STA. 103+50			CONTRACT NO.: 97041	
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			TECHNICIAN													SHEET 12 OF 35	
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			DRAWN		TAW	05/00											
ADDED UTILITY INFORMATION	JKI	7-5-00	CHECKED		TWM	05/00											



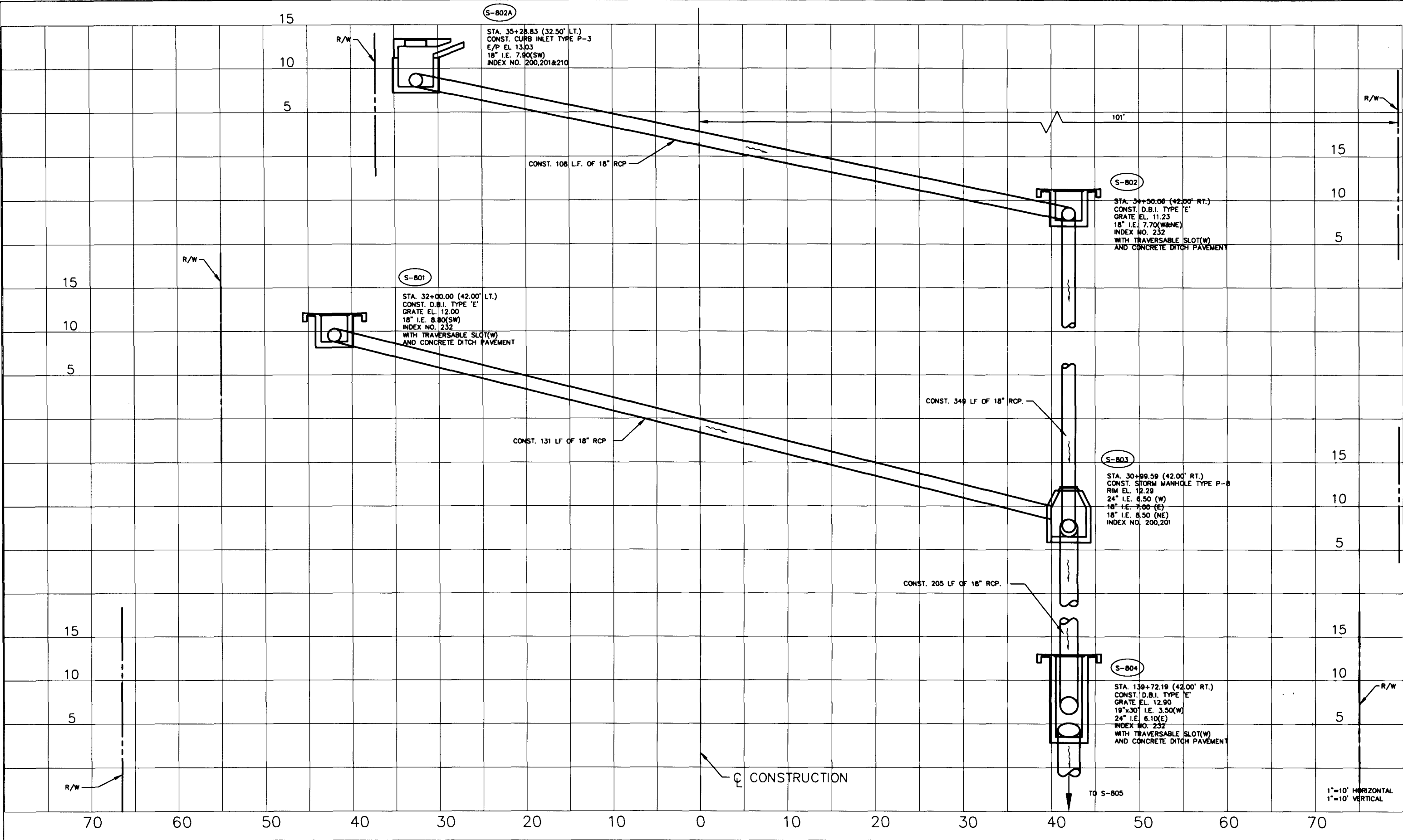
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PINELLAS COUNTY, FLORIDA Department of Public Works King ENGINEERING ASSOCIATES, INC. 4425 MANICOR ROAD TAMPA, FLORIDA 33611 PHONE: 813-887-1000 FAX: 813-887-1001 E-MAIL: KING@KINGENGINEERING.COM		EAST-WEST CONNECTOR ROAD PHASE II EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD RACE TRACK ROAD PLAN AND PROFILE (5) STA. 103+50 TO STA. 108+40.25		



REVISIONS		BY	DATE	SURVEY BOOK No.	
				SURVEY DIVISION	BY DATE
				SURVEYED	
				TECHNICIAN	
				CHECKED	
				DESIGN DIVISION	
				DESIGNED	MLM 06/00
				DRAWN	TAW 05/00
				CHECKED	TWM 06/00
				PINELLAS COUNTY, FLORIDA Department of Public Works	
				King ASSOCIATES, INC. PHONE: 813-480-1550 FAX: 813-480-1552 E-MAIL: kye@king-engineers.com	
				EAST-WEST CONNECTOR ROAD PHASE II EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD	
				DRAINAGE STRUCTURE (1)	
				DATE: MAY 16, 2000	
				CONTRACT NO.:	
				SURVEY FILE NO.:	
				SHEET 14 OF 35	


1"=10' HORIZONTAL
1"=10' VERTICAL

N: \\TRANS\\EW\\PHASE2\\CADD\\drstrd02.dwg Wed May 17 14:02:53 2000 King Engineering Associates, Inc.



REVISIONS	BY	DATE	SURVEY BOOK No.:	
			SURVEY DIVISION	BY DATE
			SURVEYED	
			TECHNICIAN	
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			DRAWN	TAW 05/00
			CHECKED	TWM 05/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



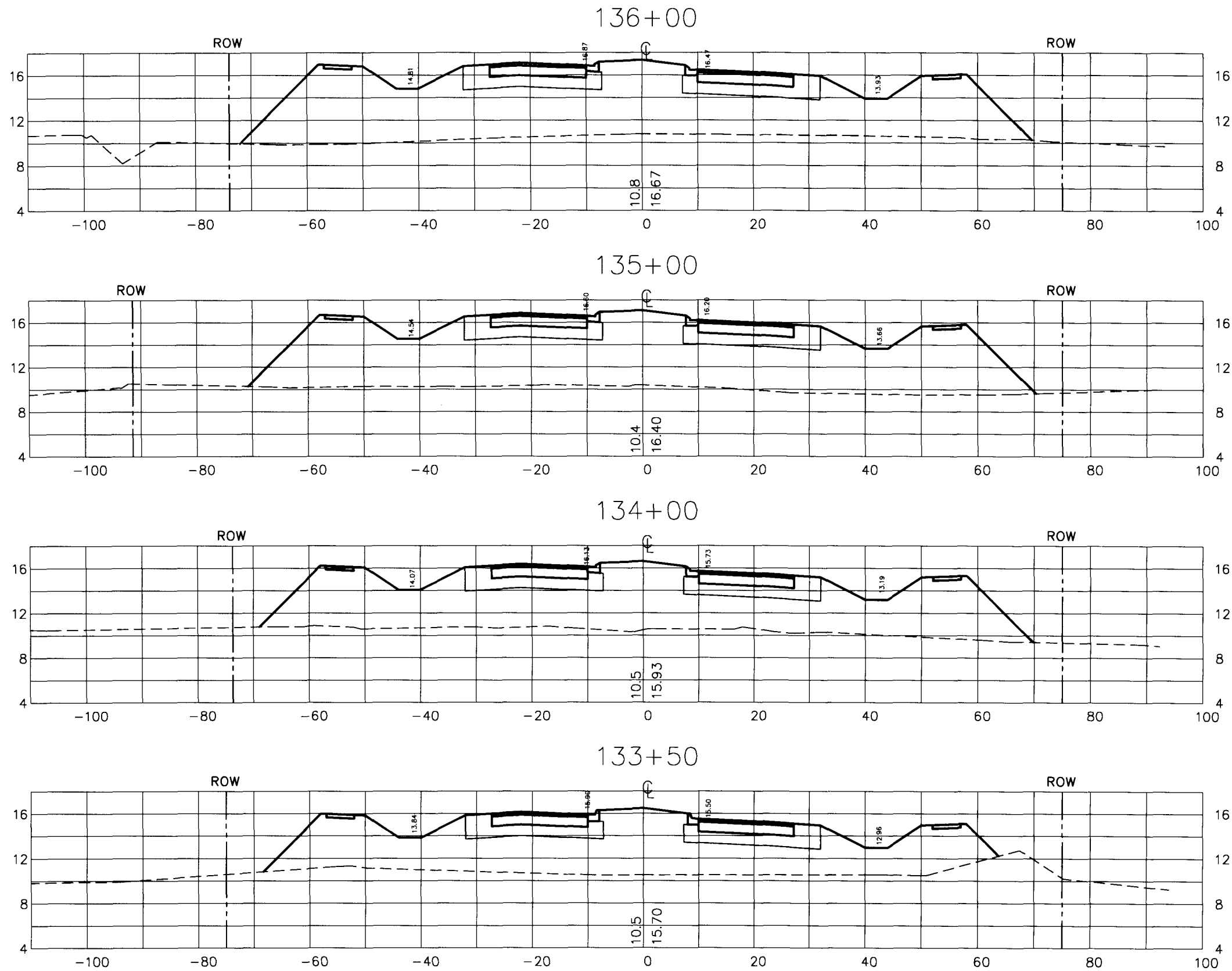
King
ENGINEERING ASSOCIATES, INC.
PHONE: 813-586-4881
FAX: 813-586-4882
E-MAIL: keng@kingeng.com

EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

DRAINAGE STRUCTURE (2)

DATE: MAY 16, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 15 OF 35
File: View:

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**STA. 133+50
BEGIN CONSTRUCTION
EAST-WEST
CONNECTOR ROAD**

1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		700.9	
0		2,627.6	
0		718.0	
0		2,440.9	
0		600.1	
0		1,036.4	
0		519.2	

REVISIONS	BY	DATE	SURVEY BOOK No.
			SURVEY DIVISION
			BY
			DATE
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			MLM 05/00
			DRAWN
			TAW 05/00
			CHECKED
			TWM 05/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



**EAST-WEST CONNECTOR ROAD
PHASE II**
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

CROSS SECTIONS (1)
STA. 133+50 TO STA. 136+00

DATE: MAY 16, 2000

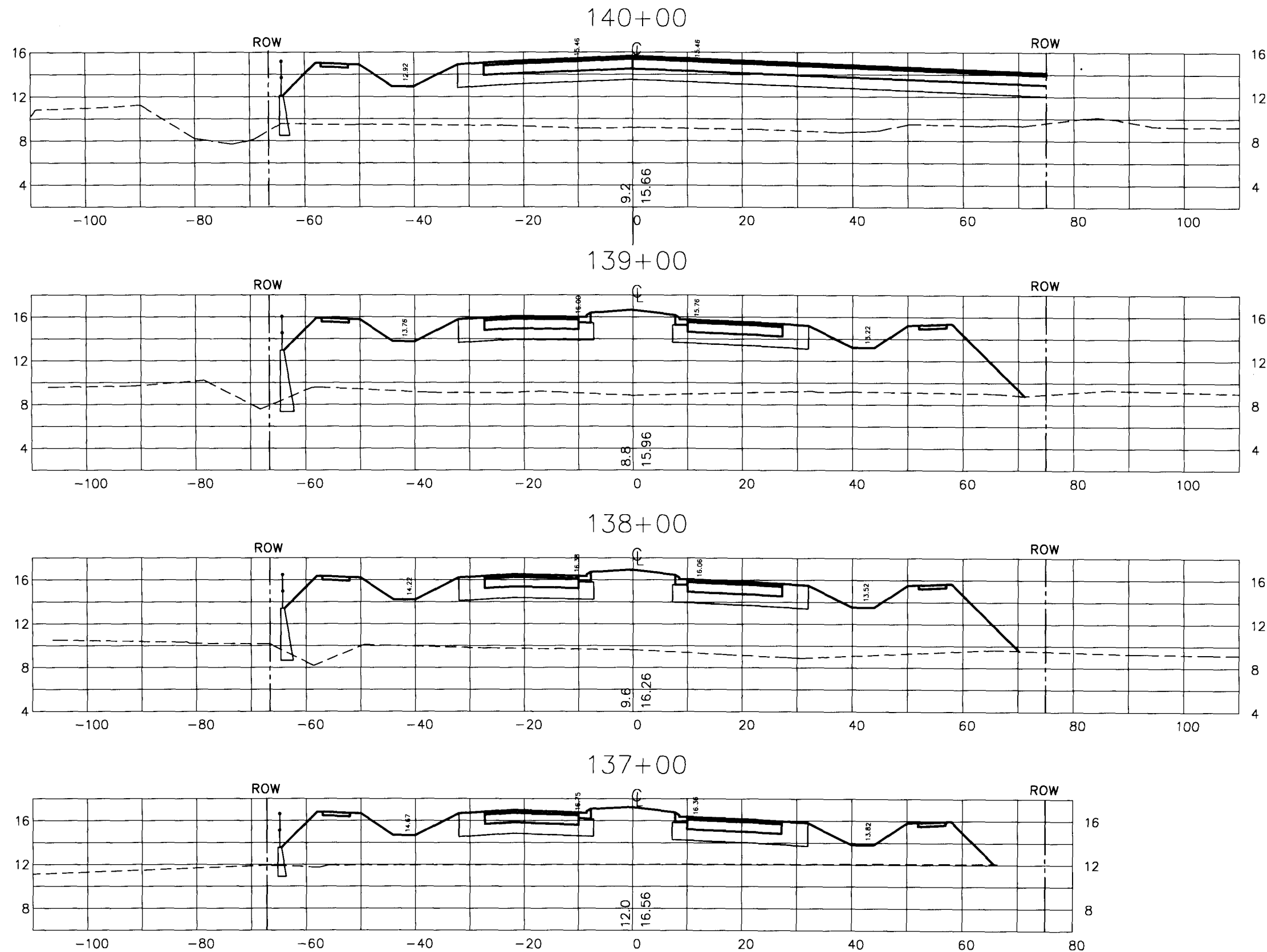
CONTRACT NO.:

SURVEY FILE NO.:

SHEET 16 OF 35

File: RDXSR001
View: 1-11X17

W: \\TRANS\\EW\\PHASE2\\CADD\\rdxsrd01.dwg Wed May 17 13:45:41 2000 King Engineering Associates, Inc.



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		651.1	
0		2593.5	
0		2780.9	
0		752.3	
0		2256.1	
0		466.0	
0		2160.9	

REVISIONS	BY	DATE	SURVEY BOOK No.:
			SURVEY DIVISION BY DATE
			SURVEYED
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED MLM 05/00
			DRAWN TAW 05/00
			CHECKED TWM 05/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

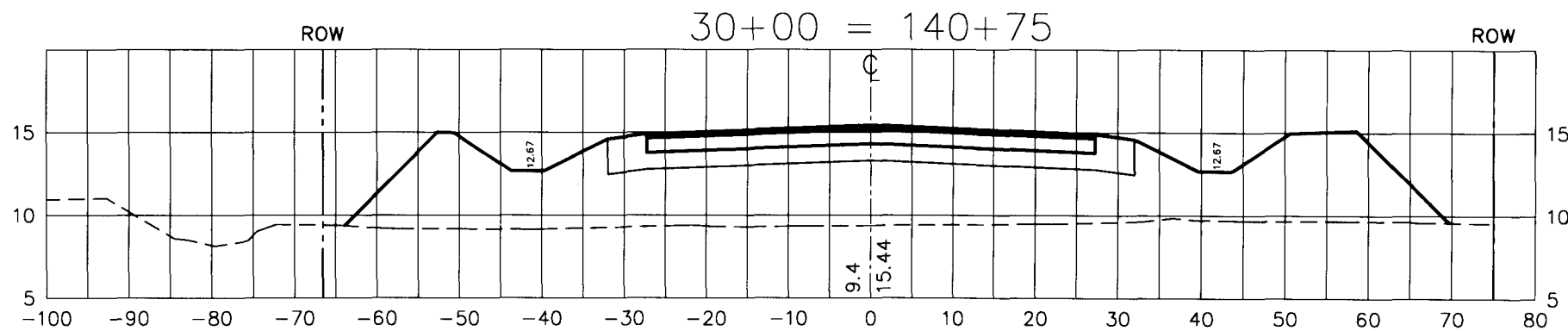
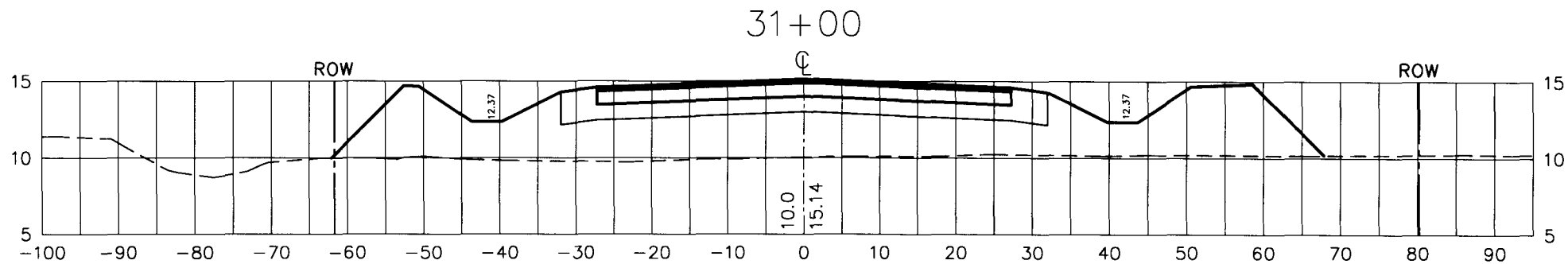
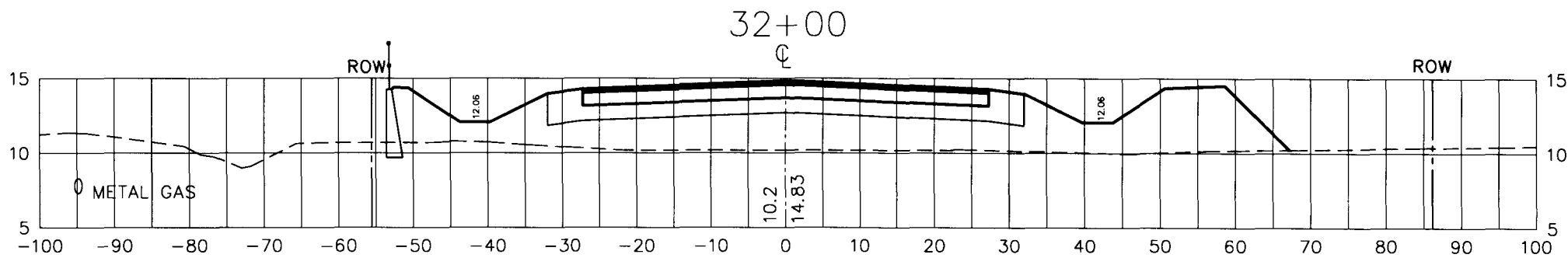
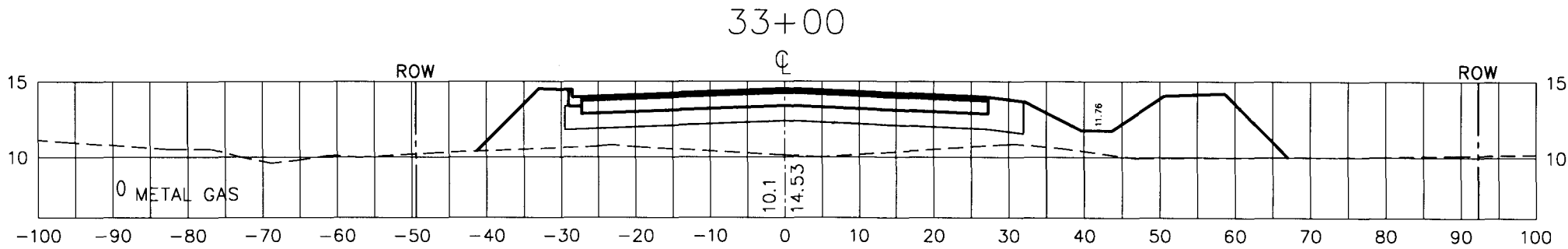


EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD


CROSS SECTIONS (2)
STA. 137+00 TO STA. 140+00

DATE: MAY 16, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 17 OF 35
File: RDXSRD01 View: 1-11X17

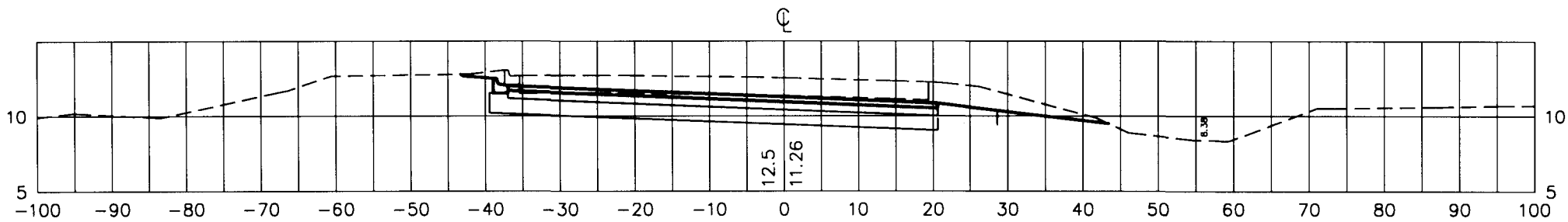
\\TRANS\EW\PHASE2\CADD\rdxsrd01.dwg Wed May 17 13:46:46 2000 King Engineering Associates, Inc.



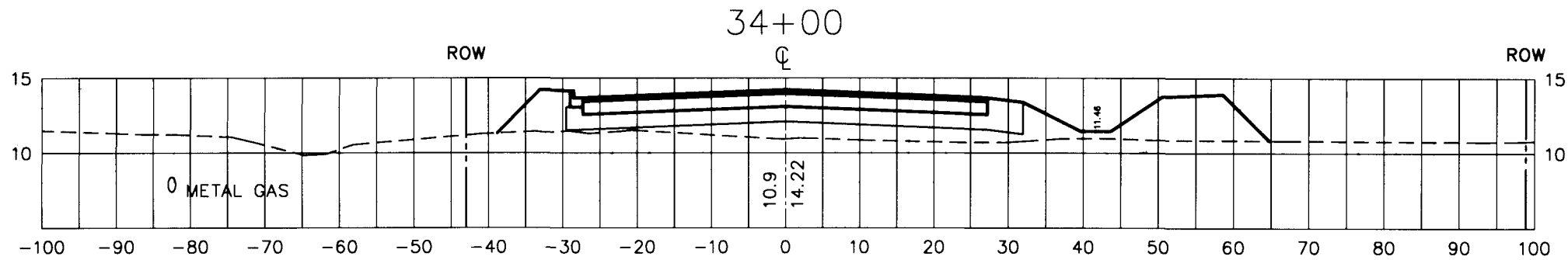
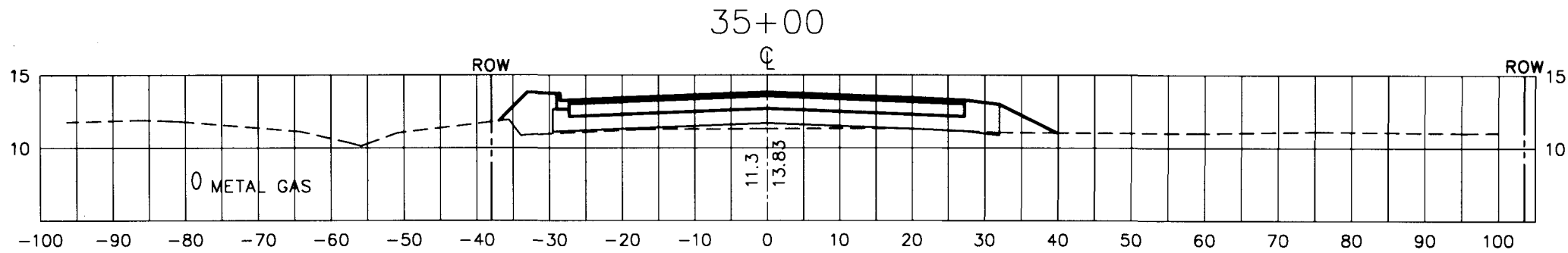
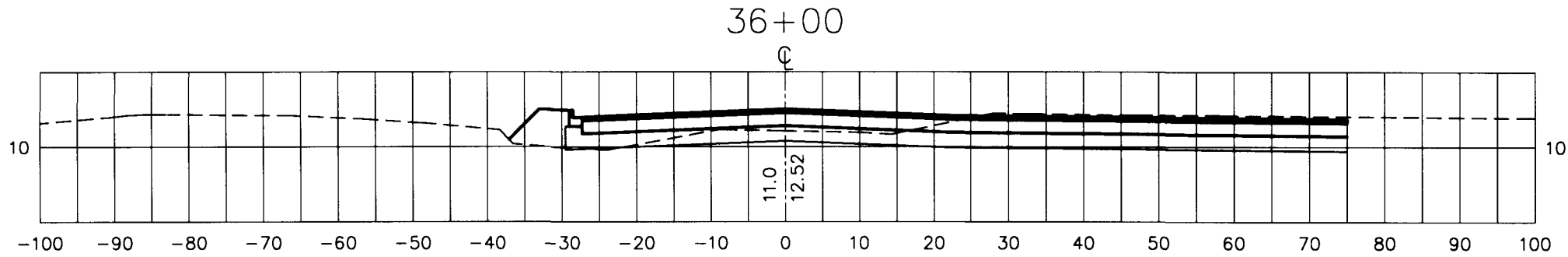
1" = 20' HORZ.
1" = 10' VERT.

REVISIONS	BY	DATE	SURVEY BOOK No.:			PINELLAS COUNTY, FLORIDA Department of Public Works				EAST-WEST CONNECTOR ROAD PHASE II EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD		CROSS SECTIONS (3) STA. 30+00 TO STA. 33+00		DATE: MAY 16, 2000	
			SURVEY DIVISION BY DATE											CONTRACT NO.:	
			SURVEYED									SURVEY FILE NO.:			
			TECHNICIAN											SHEET 18 OF 35	
			CHECKED											File: RDXSR001	
			DESIGN DIVISION											View: 1-11X17	
			DESIGNED			MLM	05/00								
			DRAWN			TAW	05/00								
			CHECKED			TWM	05/00								

W:\TRANS\VIEW\PHASE2\CADD\rdxsrd01.dwg Wed May 17 13:46:41 2000 King Engineering Associates, Inc.



STA. 36+11.00
END CONSTRUCTION EAST-WEST CONNECTOR ROAD
STA. 36+47.00
BEGIN CONSTRUCTION LINEBAUGH AVENUE



1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
2.6		25.6	
	98.0		119.3
50.3		38.8	
	99.3		356.7
3.3		153.8	
	6.1		642.2
0		193.0	
	0		912.2

REVISIONS	BY	DATE	SURVEY BOOK No.:	
			SURVEY DIVISION	BY DATE
			TECHNICIAN	
			CHECKED	
			DESIGN DIVISION	
			DESIGNED	MLM 06/00
			DRAWN	TAW 06/00
			CHECKED	TWM 06/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD
PHASE II

EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

CROSS SECTIONS (4)
STA. 34+00 TO STA. 37+00

DATE: MAY 18, 2000

CONTRACT NO.:

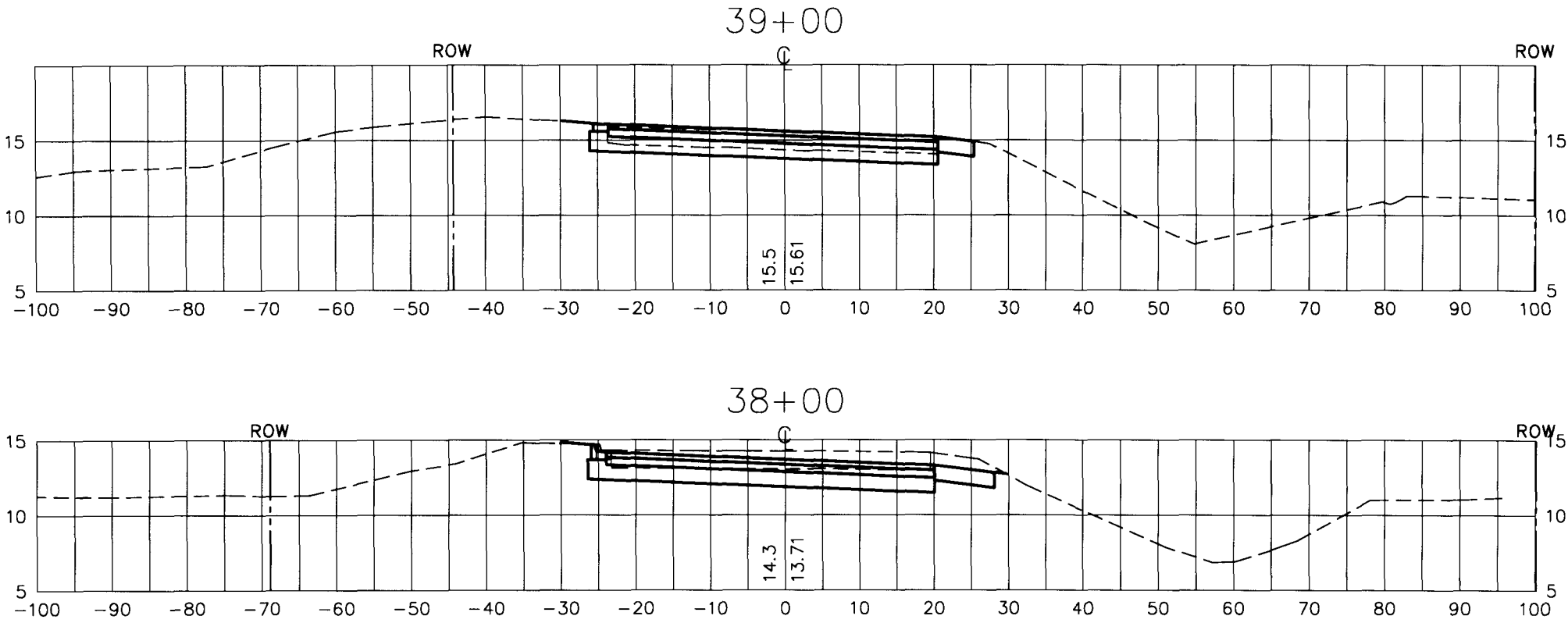
SURVEY FILE NO.:

SHEET 19 OF 35

File: RDXSRD01
View: 1-11X17

W: \\TRANS\\EW\\PHASE2\\CADD\\rdxsr01.dwg Wed May 17 13:47:08 2000 King Engineering Associates, Inc.

STA. 39+47.00
END CONSTRUCTION LINEBAUGH AVENUE




1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
0		299.6	
	0		1,260.2
0		380.9	
	0		1,543.7
0		0	
	53.1		0
28.7		0	
	58.0		47.4

REVISIONS	BY	DATE	SURVEY BOOK No.:	
			SURVEY DIVISION	BY DATE
			TECHNICIAN	
			CHECKED	
			DESIGN DIVISION	
			DESIGNED	MLM 05/00
			DRAWN	TAV 05/00
			CHECKED	TWM 05/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

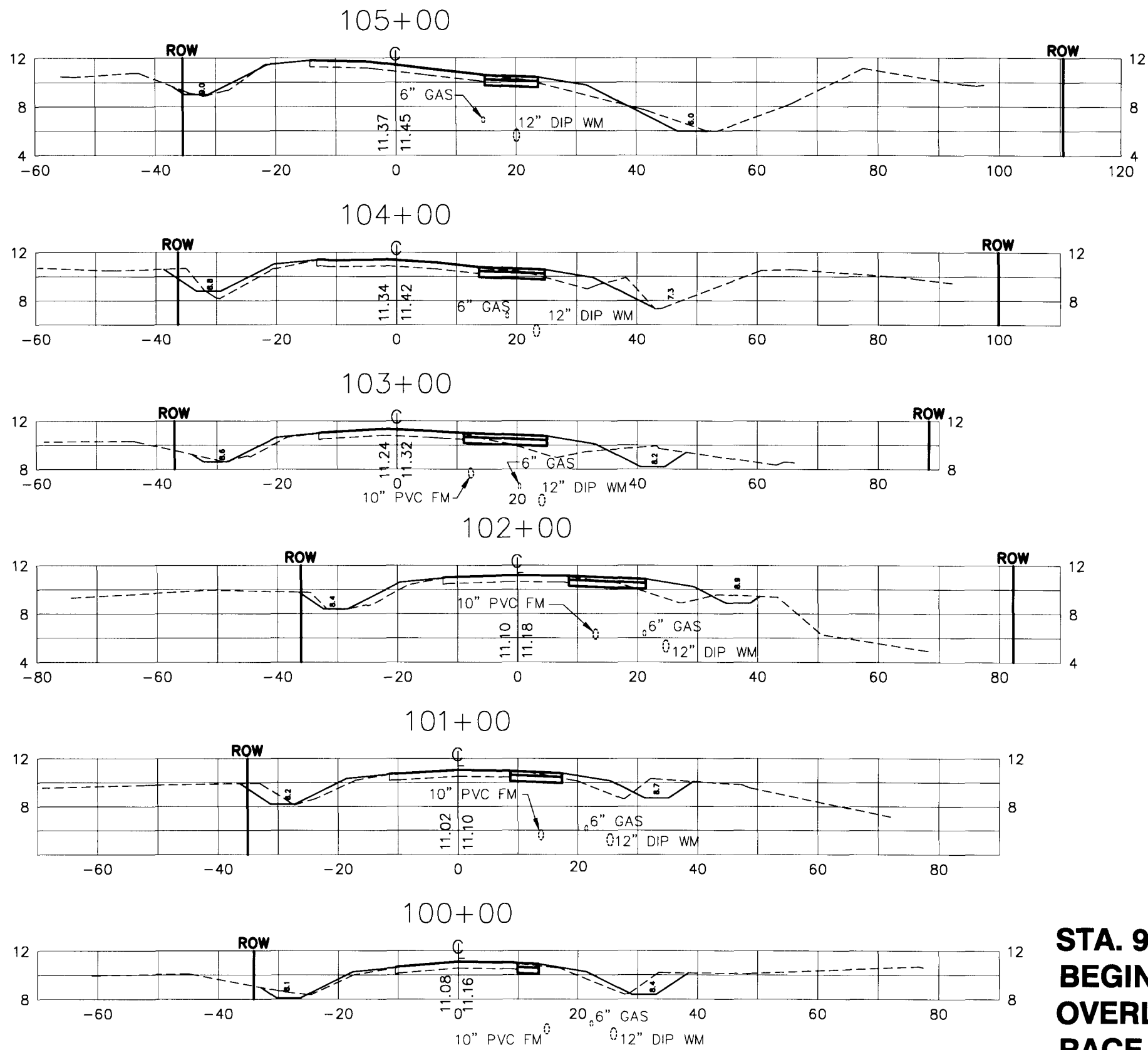
**King**
ASSOCIATES, INC.
PHONE 813-885-8881
FAX 813-885-8882
E-MAIL: info@kingengr.com

EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

CROSS SECTIONS (5)
STA. 38+00 TO STA. 39+71.93

DATE: MAY 18, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 20 OF 35
File: RDXSRD01 View: 1-11X17


W: \\TRANS\\EW\\PHASE2\\CADD\\rdxsr01.dwg Wed May 17 17:24:16 2000 King Engineering Associates, Inc.



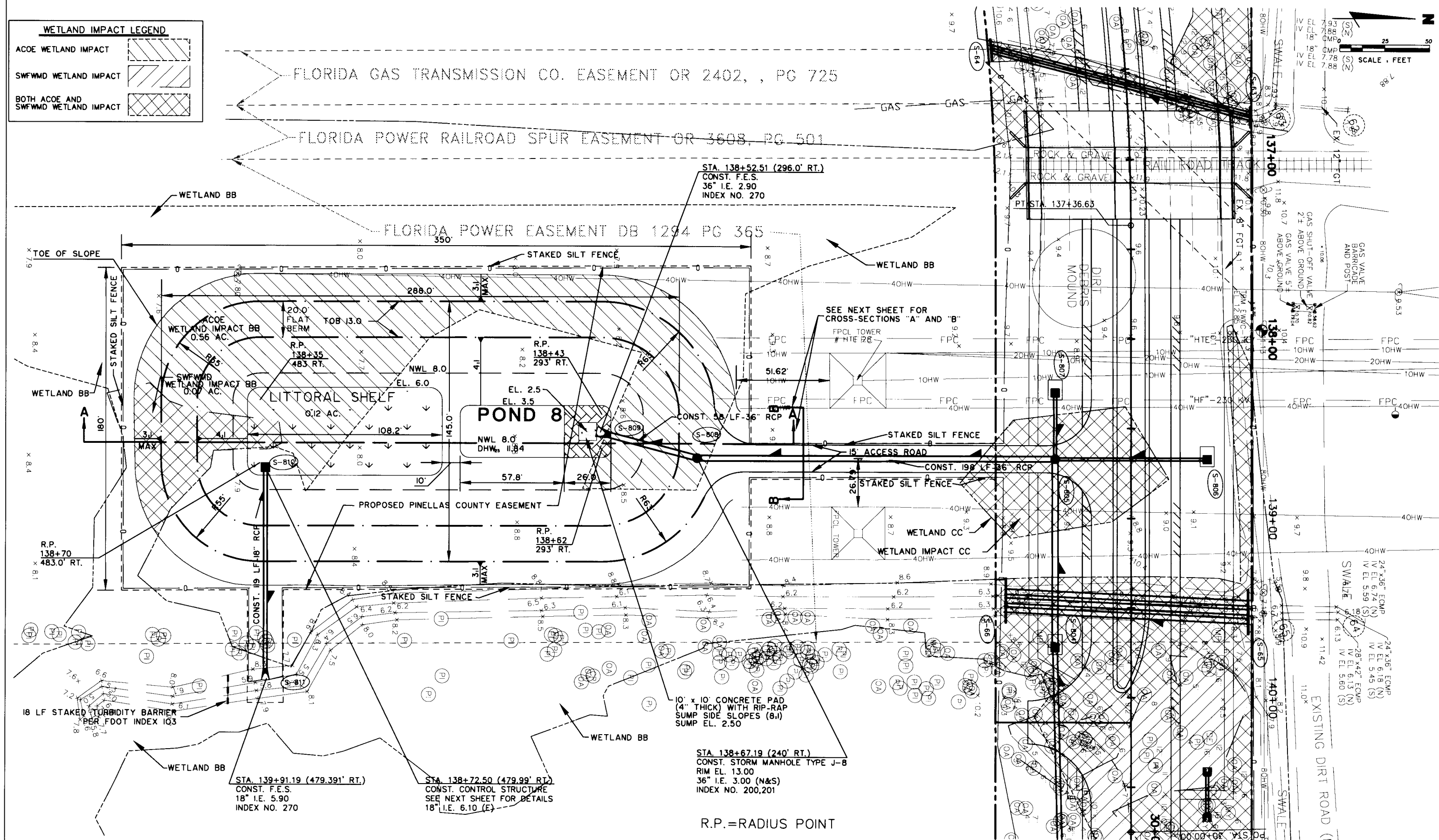
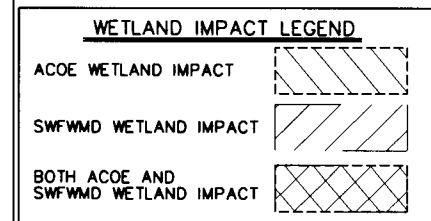
**STA. 99+11.60
BEGIN CONSTRUCTION/ASPHALT
OVERLAY
RACE TRACK ROAD**

1" = 20' HORZ.
1" = 10' VERT.

EARTHWORK			
CUT		FILL	
A	V	A	V
8.3		2.1	
	60.0		28.7
24.1		13.4	
	71.9		54.3
14.7		15.9	
	38.9		63.3
6.3		18.3	
	44.1		57.8
17.5		12.9	
	54.3		37.6
11.8		7.4	

REVISIONS	BY	DATE	SURVEY BOOK No.:			PINELLAS COUNTY, FLORIDA Department of Public Works		 king ASSOCIATES, INC. PHONE: 813-588-1100 FAX: 813-588-1088 E-MAIL: king@kingassoc.com		EAST-WEST CONNECTOR ROAD PHASE II EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD		CROSS SECTIONS (6) RACE TRACK ROAD STA. 100+00 TO STA. 105+00		DATE: MAY 16, 2000		
			SURVEY DIVISION		BY									DATE	CONTRACT NO.:	
			SURVEYED												SURVEY FILE NO.:	
			TECHNICIAN												SHEET 21 OF 35	
			CHECKED												File: RDXSRD01	
			DESIGN DIVISION												View: 1-11X17	
DESIGNED	MLM	05/00														
DRAWN	TAW	05/00														
CHECKED	TWM	05/00														

W:\TRANS\VIEW\PHASE2\CADD\pond8.dwg Wed Jul 05 09:08:46 2000 King Engineering Associates, Inc. (jki-pasco)



REVISIONS	BY	DATE	SURVEY BOOK No.:	
			SURVEY DIVISION	BY DATE
			SURVEYED	
			TECHNICIAN	
			CHECKED	
			DESIGN DIVISION	
			DESIGNED	MLM 05/00
REVISED POND 8 DHW	MLM	6/5/00	DRAWN	TAM 05/00
ADD ACOE, SWFWMD, PIN. CO. EASE. & REDES. PND. 8	A.L.E.	11/20/00	CHECKED	TWM 05/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ENGINEERING ASSOCIATES, INC.

PHONE: 813-580-4881
FAX: 813-580-6882
E-MAIL: king@kingengineering.com

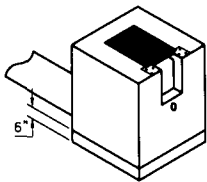
**EAST-WEST CONNECTOR ROAD
PHASE II**

EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

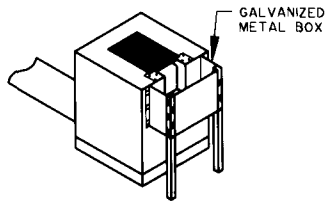
DATE: MAY 16, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 23 OF 35
File: POND8 View: 1-H22X34

W:\TRANS\EW\PHASE2\CADD\details1.DWG Wed Jul 05 09:10:03 2000 King Engineering Associates, Inc. (jki-pasco)

STANDARD						DIMENSIONS			
"A"	"B"	"C"	"D"	"F"	"G"	"H"	"I"	"J"	
4'-0"	4'-0"	2'-0"	2'-6"	0.33'	.096'	12.50	9.02	8.00	

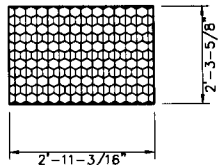


ISOMETRIC VIEW

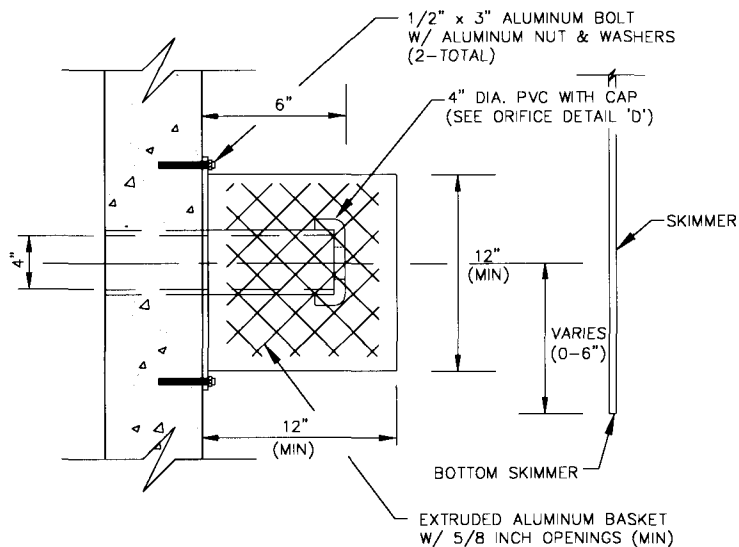


ISOMETRIC VIEW
W/ SKIMMER

U.S. FOUNDRY & MANUFACTURING
CORPORATION (U.S.F. NO. 6610,
PAINTED) OR APPROVED EQUAL.
APPROXIMATE WT. 100 LBS.

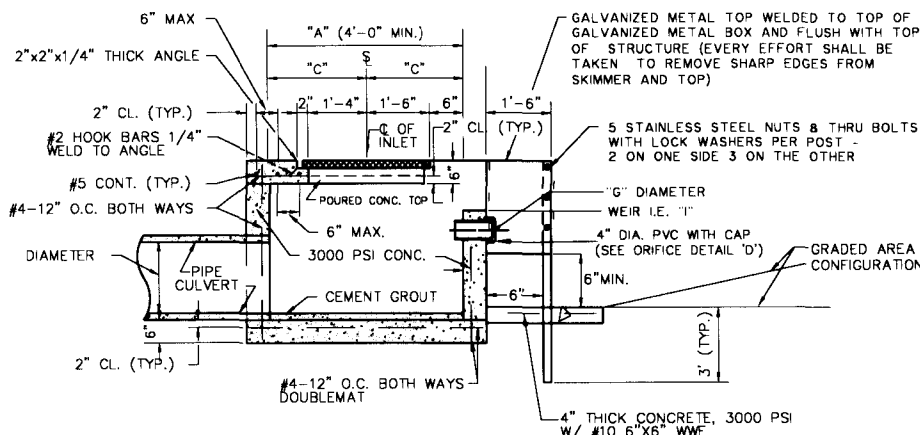


STEEL GRATING

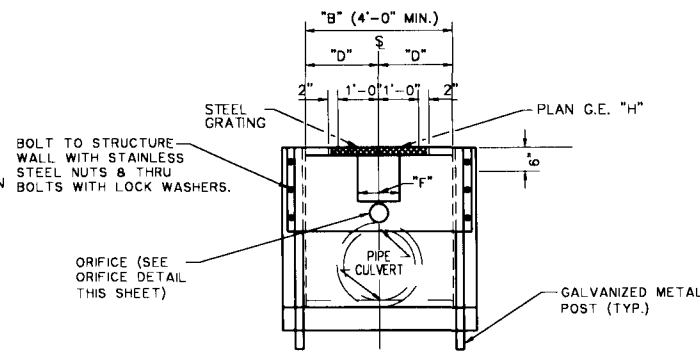


DETAIL 'C'
N.T.S.

NOTE: CONTRACTOR TO RECESS
2" x 2" x 1/4" ANGLE 1/4" BELOW
PLAN G.E. SO AS TO INSURE
STEEL GRATING IS FLUSH WITH
CONCRETE SLAB.

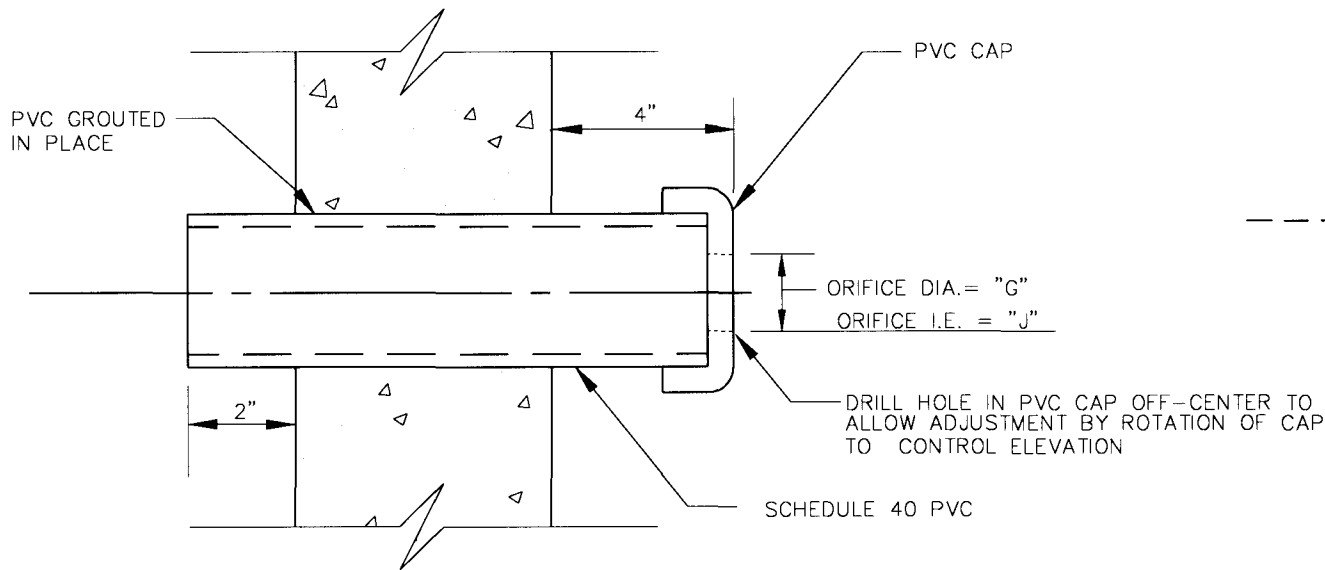


SECTION "A-A"

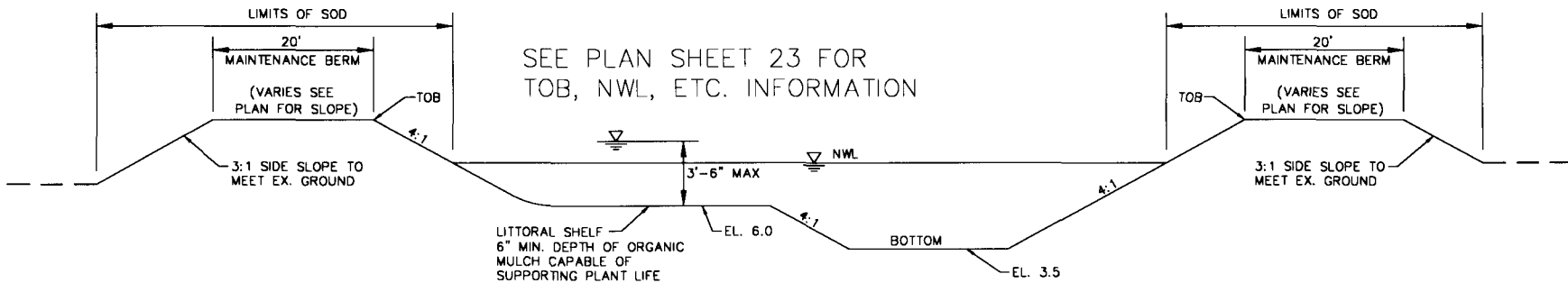


RIGHT SIDE VIEW "B-B"

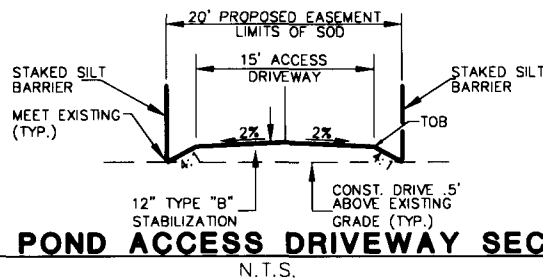
CONTROL STRUCTURE NO. 810
N.T.S.



ORIFICE DETAIL 'D'
N.T.S.



TYPICAL POND SECTION A-A WITH LITTORAL SHELF
N.T.S.



TYPICAL POND ACCESS DRIVEWAY SECTION B-B
N.T.S.

REVISIONS	BY	DATE	SURVEY BOOK No.	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGNED	MLM	05/00
ADDED ORIFICE ELEV.'S	MLM	6/5/00	DRAWN	TAW	05/00
			CHECKED	TWM	05/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

STORMWATER FACILITIES
AND DETAILS

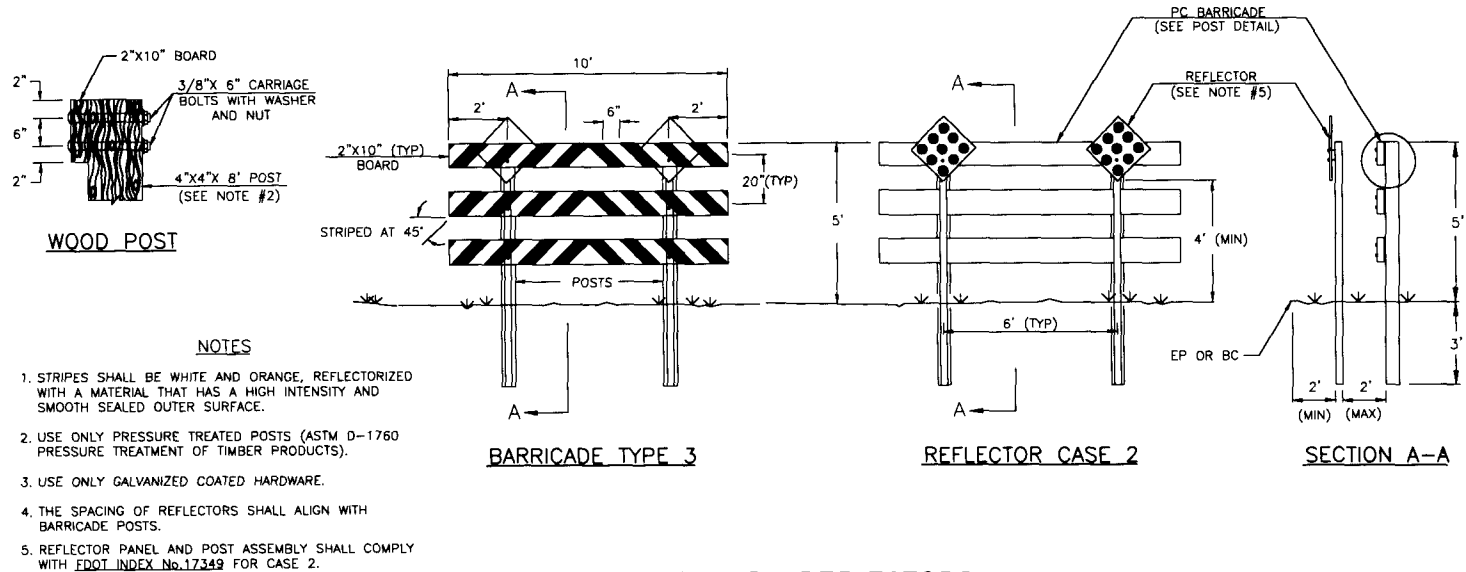
DATE: MAY 16, 2000

CONTRACT NO.:

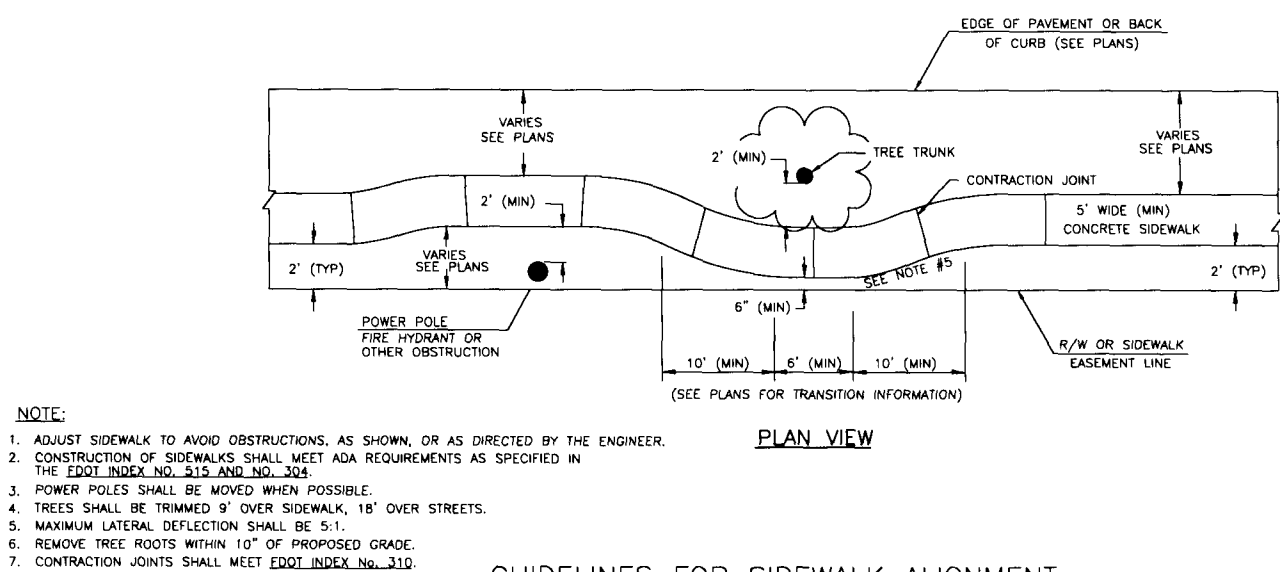
SURVEY FILE NO.:

SHEET 24 OF 35

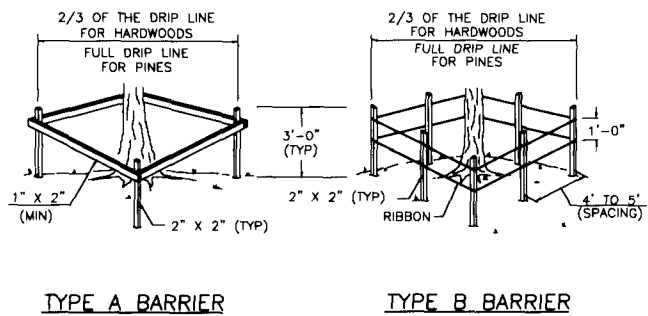
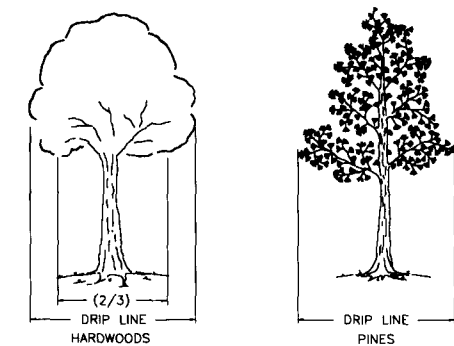
View:



PC 1406

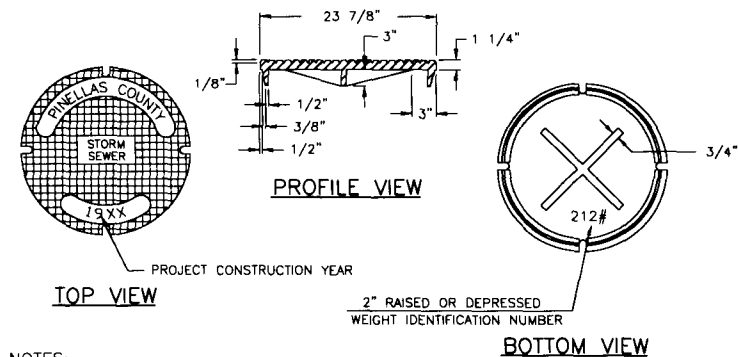


PC 1357

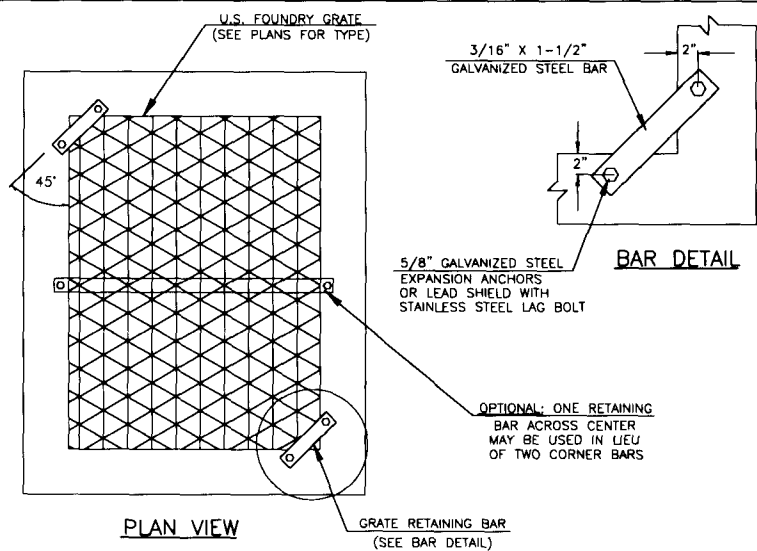


- SPECIAL NOTES:**
1. NO TREE SHALL BE REMOVED UNLESS SPECIFICALLY TAGGED FOR REMOVAL BY THE ENGINEER.
 2. THE CONTRACTOR SHALL TAKE SPECIAL CARE NOT TO DAMAGE TREES THAT ARE TO REMAIN.
 3. ROOTS GREATER THAN 1" DIAMETER SHALL NOT BE CUT UNLESS OTHERWISE APPROVED BY THE ENGINEER.
 4. TREE ROOTS OF 1" DIAMETER OR LARGER THAT NEED TO BE CUT SHALL BE CUT NEATLY.
 5. STOCKPILED MATERIALS OR UNNECESSARY VEHICULAR TRAFFIC SHALL NOT BE ALLOWED OVER ANY TREE ROOTS SYSTEM.
 6. TYPE-A BARRIER OR TYPE-B BARRIER SHALL BE CONSTRUCTED WHEN CALLED FOR ON PLANS OR AS DIRECTED BY THE ENGINEER. BARRIERS SHALL BE MAINTAINED IN PLACE UNTIL REMOVAL IS DIRECTED BY THE ENGINEER.
 7. COST OF ALL TREE BARRICADES SHALL BE INCLUDED IN PAY ITEM 120-1100 (GRADING).

TREE PROTECTION



- NOTES:**
1. THIS COVER IS NOT TO BE USED FOR SANITARY SEWER MANHOLES.
 2. THIS COVER MAY BE USED WITH FRAME TYPE I, II OR III AS DETAILED IN FDOT INDEX No. 201. THE ACTUAL FRAME TO BE USED SHALL BE AS SPECIFIED IN THE PLANS.
 3. MATERIALS AND FABRICATION SHALL CONFORM TO SECTION 425 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
 4. COVERS FOR UNDERDRAIN CLEANOUTS SHALL BE LABELED UNDERDRAIN AND NOT STORM SEWER.



GRATE RETAINING BAR

REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
			SURVEYED			
			TECHNICIAN			
			CHECKED			
			DESIGN DIVISION			
			DESIGNED	MLM	05/00	
			DRAWN	TAM	05/00	
			CHECKED	TWM	05/00	

PINELLAS COUNTY, FLORIDA
Department of Public Works

King
ASSOCIATES, INC.

PHONE: 813-480-1881
FAX: 813-480-1882
E-MAIL: king@kingengineering.com

**EAST-WEST CONNECTOR ROAD
PHASE II**

**EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD**

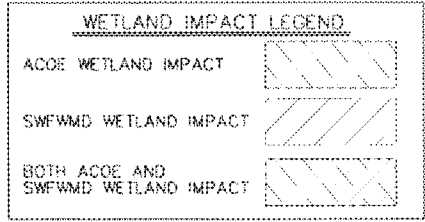
CONSTRUCTION DETAILS

DATE: MAY 16, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 25 OF 35
File: DETAILS View: 1-11X17

PC 1111

PC 1295

W:\TRANS\EW\PHASE2\CADD\utexrd01.dwg Sat Jul 08 18:57:59 2000 King Engineering Associates, Inc. (jki-pasco)

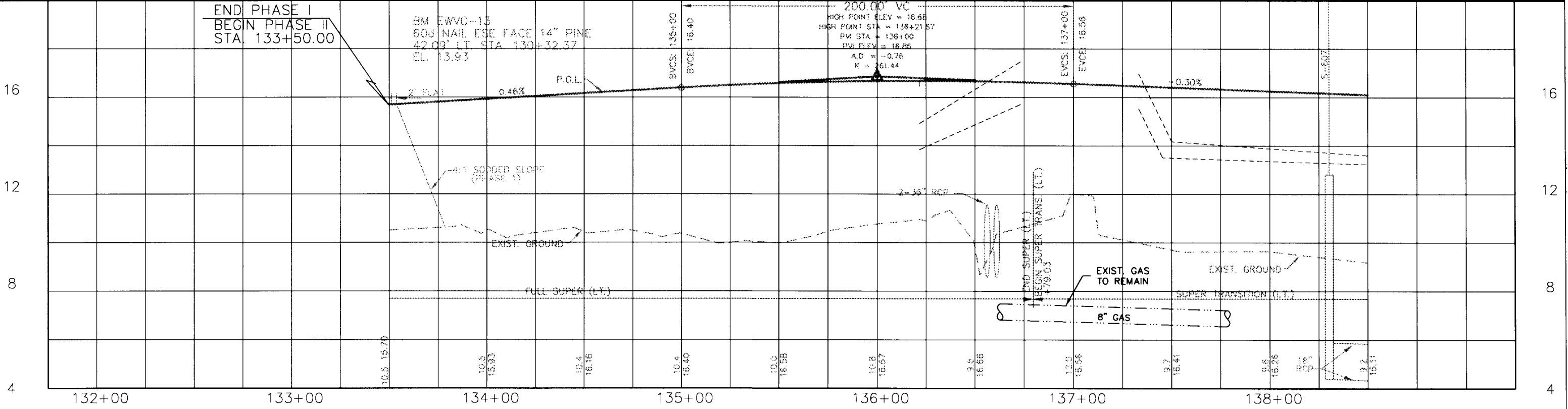
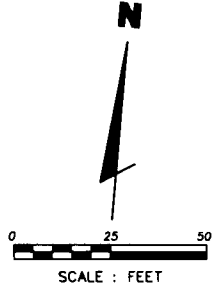
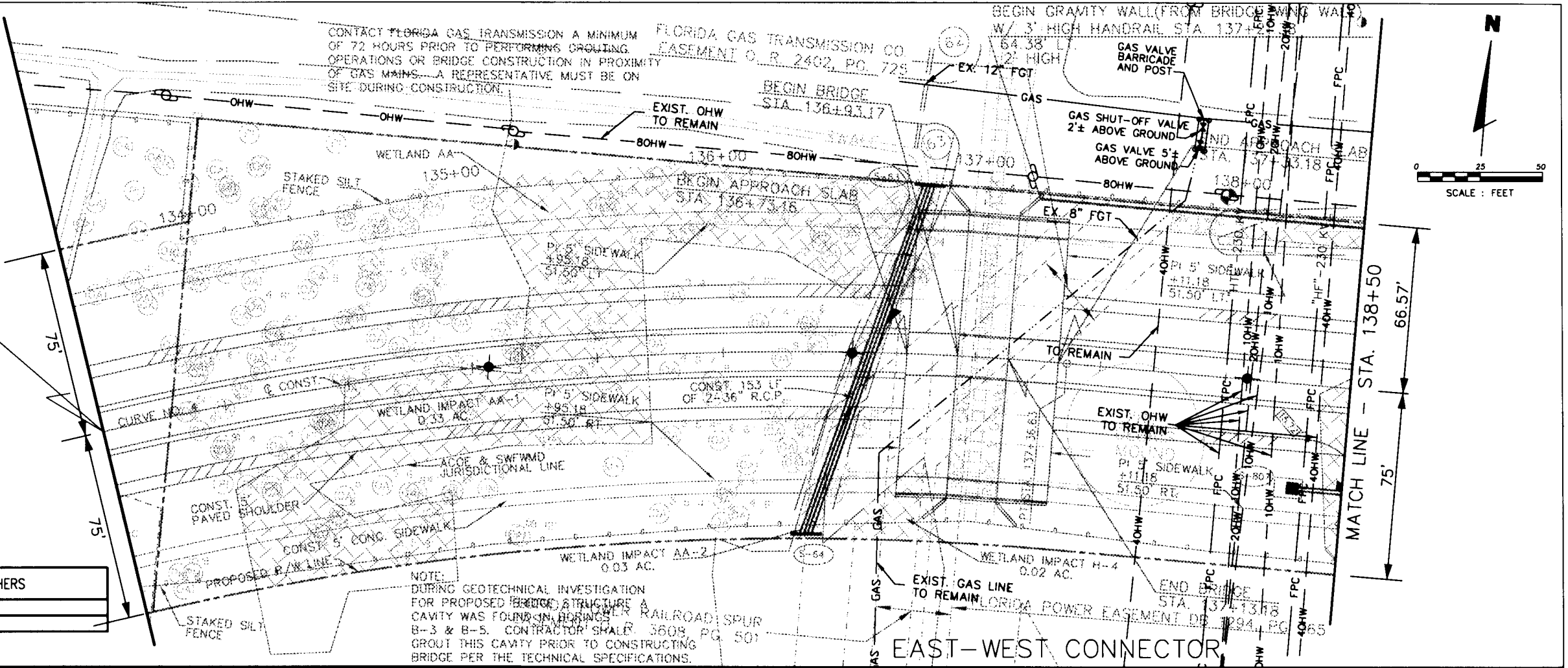


END PHASE I
BEGIN PHASE II
STA. 133+50.00

SEE PHASE I PLANS
FOR CONTINUATION

CURVE NO. 4
P.I. STA. 131+80.60
 $\Delta=58^{\circ}30'45"$ RT.
 $D=04^{\circ}45'03"$
 $T=675.57'$
 $L=1231.61'$
 $R=1206.00'$
 $e=.02$ FT/FT
P.C. STA. 125+05.03
P.T. STA. 137+36.64

PROP. BREAKAWAY STREET LIGHT POLES BY OTHERS		
Symbol	Qty	
	120	



REVISIONS	BY	DATE	SURVEY BOOK No.	
			SURVEY DIVISION	BY DATE
			SURVEYED	
			TECHNICIAN	
			CHECKED	
			DESIGN DIVISION	
			DESIGNED	MLM 05/00
			DRAWN	TAW 05/00
ADDED UTILITY INFORMATION	JKI	7-5-00	CHECKED	TWM 05/00

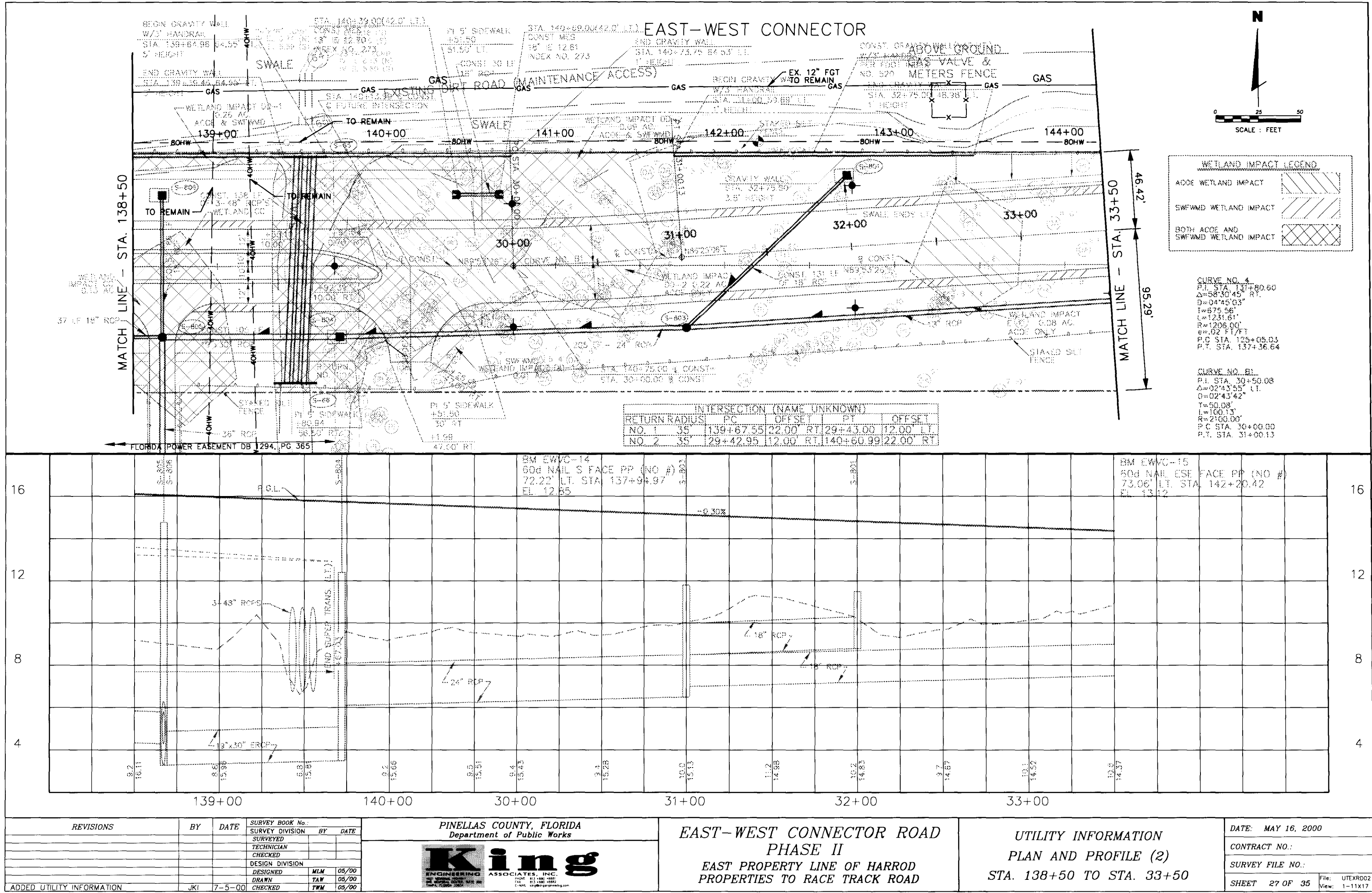
PINELLAS COUNTY, FLORIDA
Department of Public Works

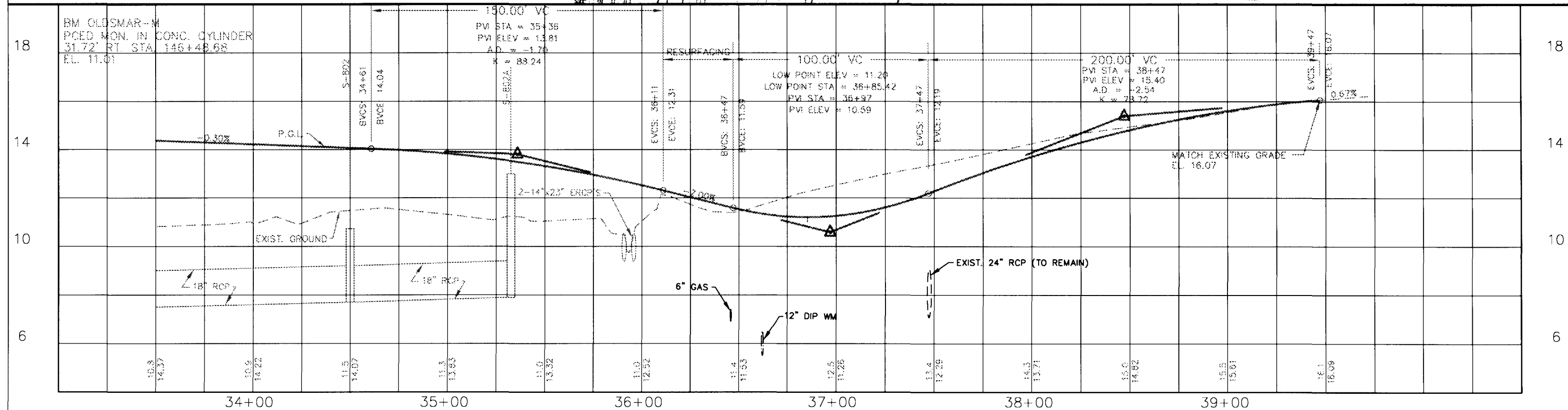
King
ENGINEERING ASSOCIATES, INC.
4401 W. GULF BLVD., SUITE 200
TAMPA, FLORIDA 33607
PH: 813-880-0881
FAX: 813-880-0882
E-MAIL: king@kingeng.com

EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

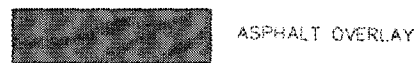
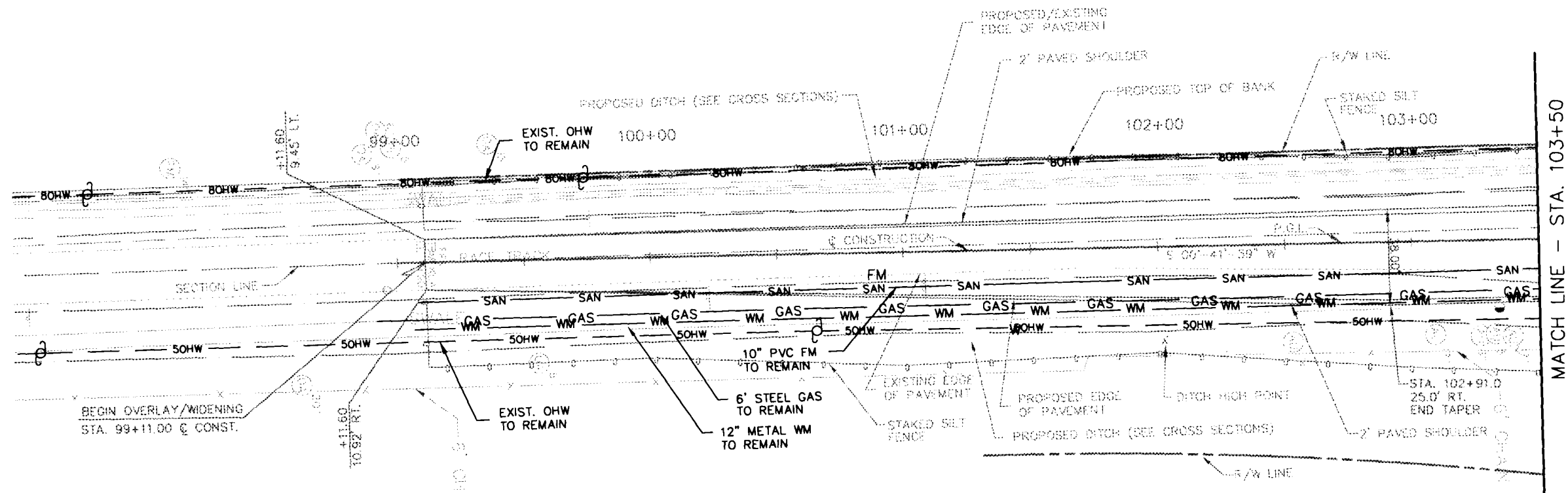
UTILITY INFORMATION
PLAN AND PROFILE (1)
STA. 133+50 TO STA. 138+50

DATE: MAY 16, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 26 OF 35
File: UTEXRD01 View: 1-11X17

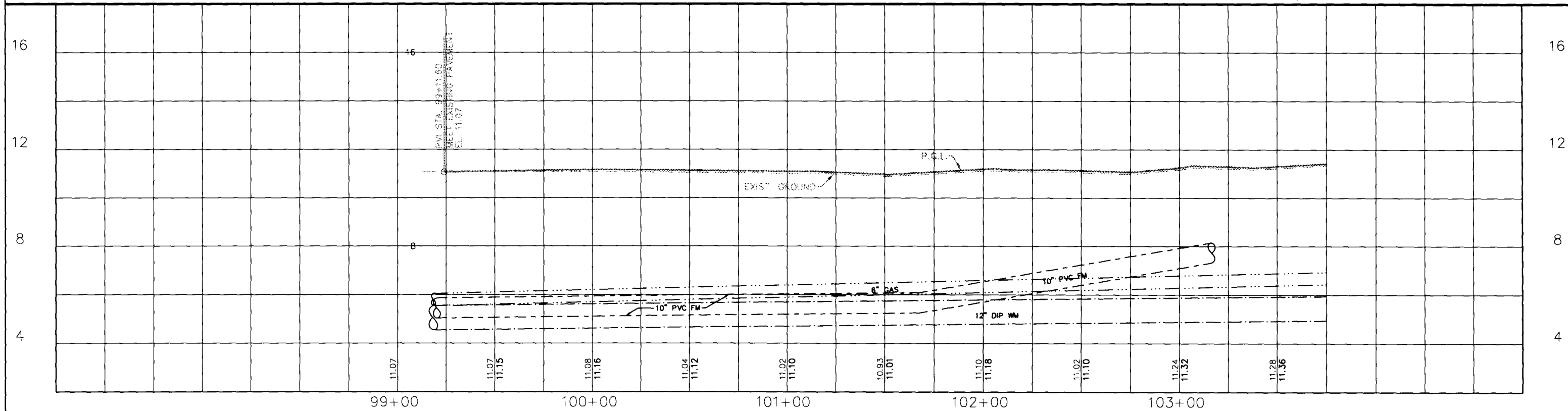




DATE: MAY 16, 2000	
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET 28 OF 35	File: UTEXRD03 View: 1-11X17



RACE TRACK ROAD



REVISIONS	BY	DATE	SURVEY BOOK No.:	
			SURVEY DIVISION	BY DATE
			SURVEYED	
			TECHNICIAN	
			CHECKED	
			DESIGN DIVISION	
			DESIGNED	MLM 05/00
			DRAWN	TAW 05/00
			CHECKED	TWM 05/00
ADDED UTILITY INFORMATION			JKI	7-5-00

PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

UTILITY INFORMATION
PLAN AND PROFILE (4)
STA. 99+00 TO STA. 103+50

DATE: MAY 16, 2000
CONTRACT NO.: 97041
SURVEY FILE NO.:
SHEET 29 OF 35
File: UTEXRD04 View: 1-11X17

W: \\TRANS\\EW\\PHASE2\\CADD\\Motsrd02.dwg Wed May 17 18:21:48 2000 King Engineering Associates, Inc.

GENERAL NOTES

1. The maintenance of traffic for this project shall be in accordance with the U. S. Department of Transportation's "Manual on Uniform Traffic Control Devices"(1988) and the Florida Department of Transportation's "Roadway and Traffic Design Standards" (1997 edition).

2. Advance warning signing shall be installed before construction begins and shall remain throughout construction period. (See typical advance warning signing for details.)

3. See FDOT Standard Index 600 series for additional information and typical construction signing within the work zone.

4. Pedestrian access shall be maintained at all times. Should any sidewalks be closed, the contractor shall utilize FDOT Standard Index 660 for pedestrian control.

5. Maintain one-lane traffic minimum in each direction on the East-West Connector Road and Race Track Road during periods of both active and inactive work zone. Utilize FDOT Standard Index 600 series for traffic control.

6. The minimum allowable width for temporary travel lanes shall be 11 feet at all times during construction.

7. Arrows denote direction of traffic only and do not reflect pavement markings.

8. Maintenance of traffic signing locations are approximate and may be varied as deemed necessary by the engineer to avoid streets, driveways, or other conflicts. Minimum signing distances shall be maintained during construction.

9. Existing signs that conflict with construction signs shall be removed or covered during construction. All existing signs that are removed shall be stockpiled in a secure place and re-installed after construction unless shown to be removed in the signing and marking plans.
10. Conflicting or misleading existing pavement markings shall be removed by water blasting or other methods approved by the engineer. All existing pavement markings outside the limits of construction that have been altered because of construction operations shall be replaced in kind upon completion of the project.

11. All temporary center and edge line striping shall be 6" in width and painted in accordance with FDOT specifications.

12. The contractor shall comply with the drop off criteria during construction in accordance with Index 600.

13. Existing posted speed limit (45 mph) shall be maintained throughout the project unless otherwise noted.

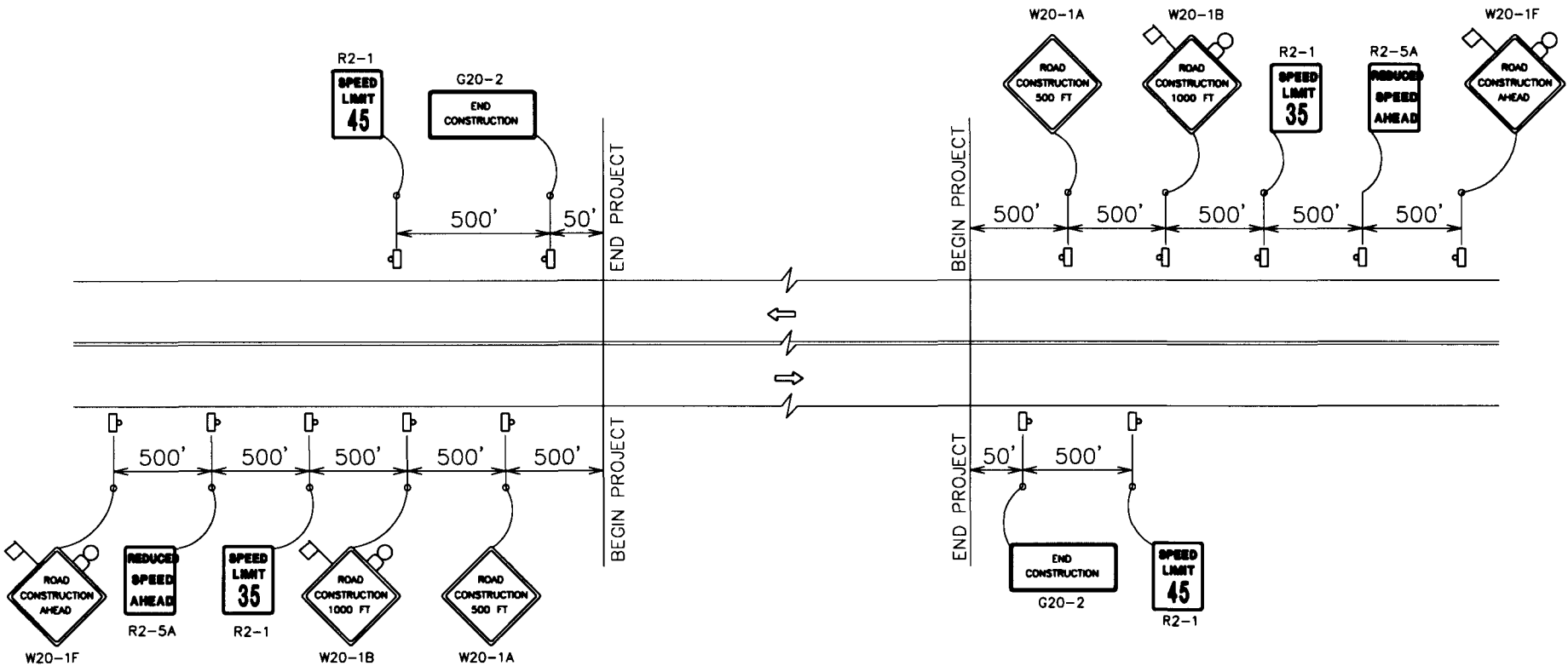
14. Access onto existing streets and drives shall be maintained to local traffic and property owners. Cost of driveway maintenance shall be included in the lump sum maintenance of traffic pay item.

15. The traffic and travel ways shall not be altered by the contractor to create a work area untill all labor and material are available for the construction in that area.

16. The contractor shall maintain drainage during construction activities. The contractor shall be responsible for the immediate removal of storm water from roadway(s) utilized for traffic maintenance in a manner approved by the engineer. Cost to be included in the lump sum maintenance of traffic pay item.

17. Provisions for traffic disruptions that are not anticipated in the traffic control plan, but are necessary to construct the project will be submitted in writing to the engineer before the start of any work. The submitted material shall include sketches, calculations and any other data required by the engineer.









18. The generalized construction sequence is set forth in these plans. The contractor may perform work within the different phases simultaneously or ahead of schedule, provided that this doesn't interfere with the intent of the construction sequence.



TYPICAL ADVANCE WARNING SIGNING (MAINLINE)

NTS

LEGEND

-  CONSTRUCTION SIGN
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  TEMPORARY PAVEMENT
-  SIGN WITH 18"x 18" (MIN.) ORANGE FLAG & TYPE B LIGHT
-  TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (W/ STEADY BURNING LIGHT @ NIGHT ONLY). TUBULAR MARKERS MAY BE USED DURING DAYLIGHT HOURS.
-  TYPE III BARRICADE (W/ FLASHING LIGHT)
-  TEMPORARY PAVEMENT MARKING

REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED		
			DRAWN		
			CHECKED		

PINELLAS COUNTY, FLORIDA
Department of Public Works



King
ASSOCIATES, INC.
PHONE: 813-486-1881
FAX: 813-486-1882
E-MAIL: king@kingassoc.com

EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

MAINTENANCE OF TRAFFIC
GENERAL NOTES

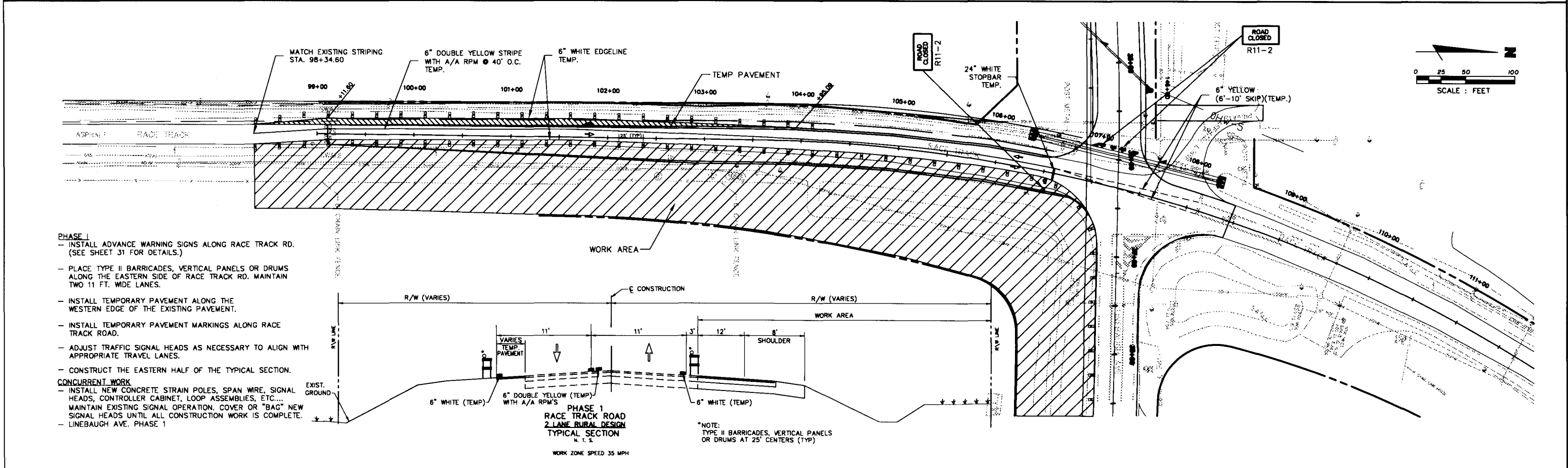
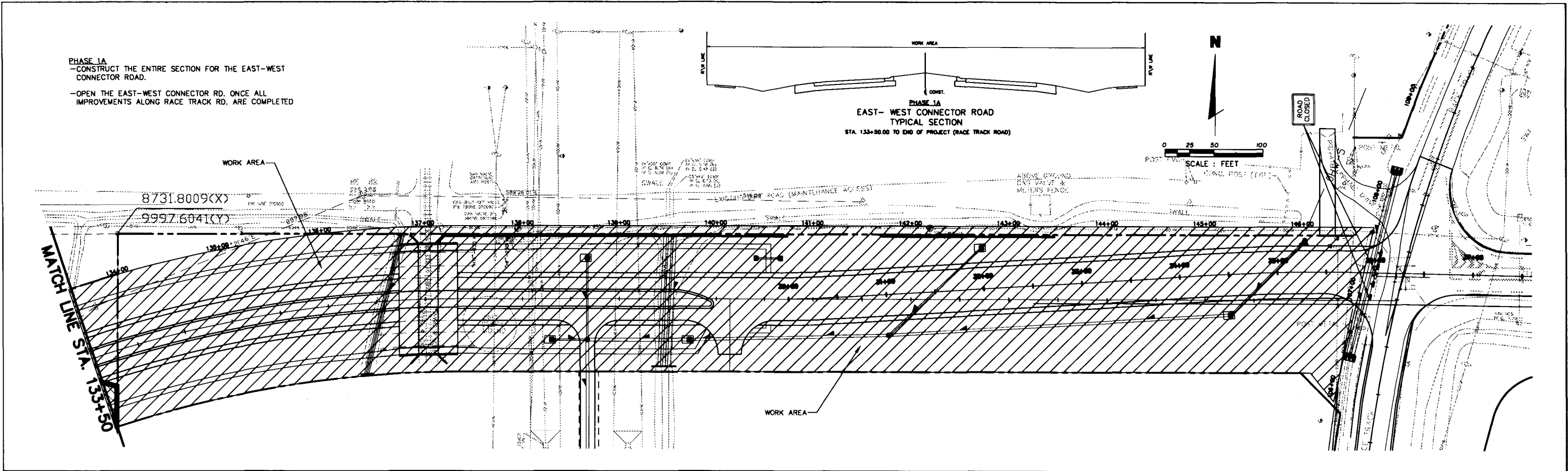
DATE: MAY 16, 2000

CONTRACT NO.:

SURVEY FILE NO.:

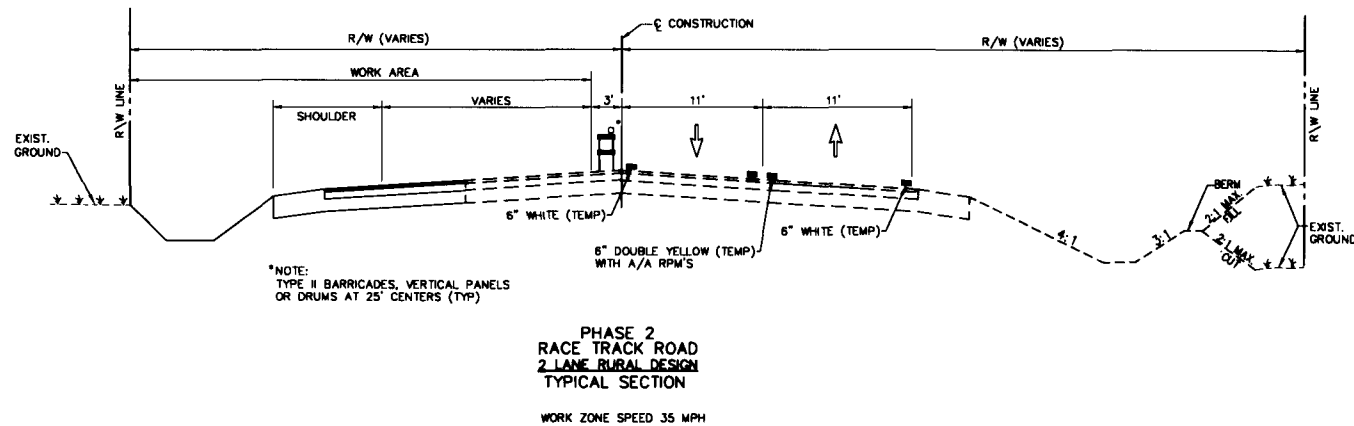
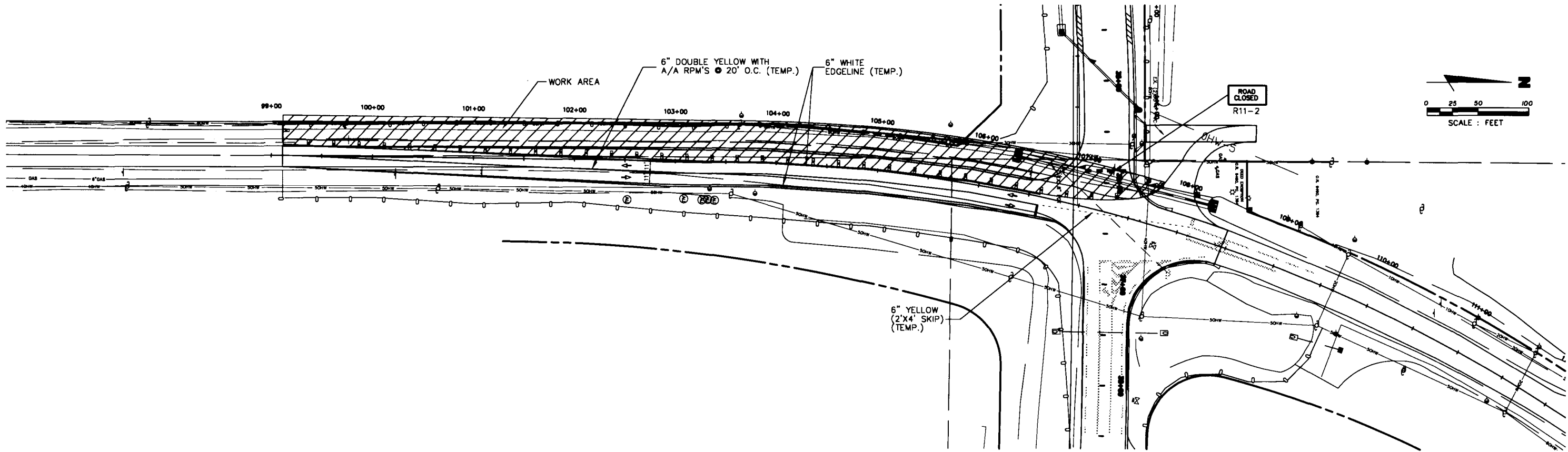
SHEET 31 OF 35

File: MOTSRD02
View: 1-11x17



REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE	PINELLAS COUNTY, FLORIDA	EAST-WEST CONNECTOR ROAD	MAINTENANCE OF TRAFFIC PLANS (1)	DATE: MAY 16, 2000
			SURVEYED				Department of Public Works	PHASE II	EAST-WEST CONNECTOR ROAD	CONTRACT NO.:
			TECHNICIAN					EAST PROPERTY LINE OF HARROD	STA. 133+50 TO STA. 146+96.25	SURVEY FILE NO.:
			CHECKED					PROPERTIES TO RACE TRACK ROAD	RACE TRACK ROAD	SHEET 32 OF 35
			DESIGN DIVISION						STA. 98+65.40 TO STA. 108+40.25	File: MOTRD01
			DESIGNED	DPS	05/00					View: 1-11X17
			DRAWN	JKI	05/00					
			CHECKED	RWF	05/00					

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- PHASE 2**
- PLACE TYPE II BARRICADES, VERTICAL PANELS OR DRUMS ALONG THE WESTERN SIDE OF RACE TRACK RD.
 - INSTALL TEMPORARY PAVEMENT MARKINGS ALONG RACE TRACK RD.
 - MAINTAIN TWO 11 FT. WIDE LANES UTILIZING EXISTING AND NEWLY CONSTRUCTED PAVEMENT
 - ADJUST TRAFFIC SIGNAL HEADS AS NECESSARY TO ALIGN WITH APPROPRIATE TRAVEL LANES.
 - CONSTRUCT THE EASTERN HALF OF THE TYPICAL SECTION.
- CONCURRENT WORK**
- LINEBAUGH AVE. PHASE 2
- PHASE 3**
- OVERLAY RACETRACK ROAD FROM STATION 99+11.00 TO STATION 108+45.75. FOOT INDEX 600 SERIES, ESPECIALLY INDEX NO. 606 SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC DURING THE OVERLAY PROCESS.
 - APPLY PERMANENT PAVEMENT MARKINGS. (SEE SHEET S-3 FOR DETAILS.)

REVISIONS	BY	DATE	SURVEY BOOK No.:
			SURVEY DIVISION
			BY
			DATE
			SURVEYED
			TECHNICIAN
			CHECKED
			DESIGN DIVISION
			DESIGNED
			DPS
			05/00
			DRAWN
			JKI
			05/00
			CHECKED
			RWF
			05/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

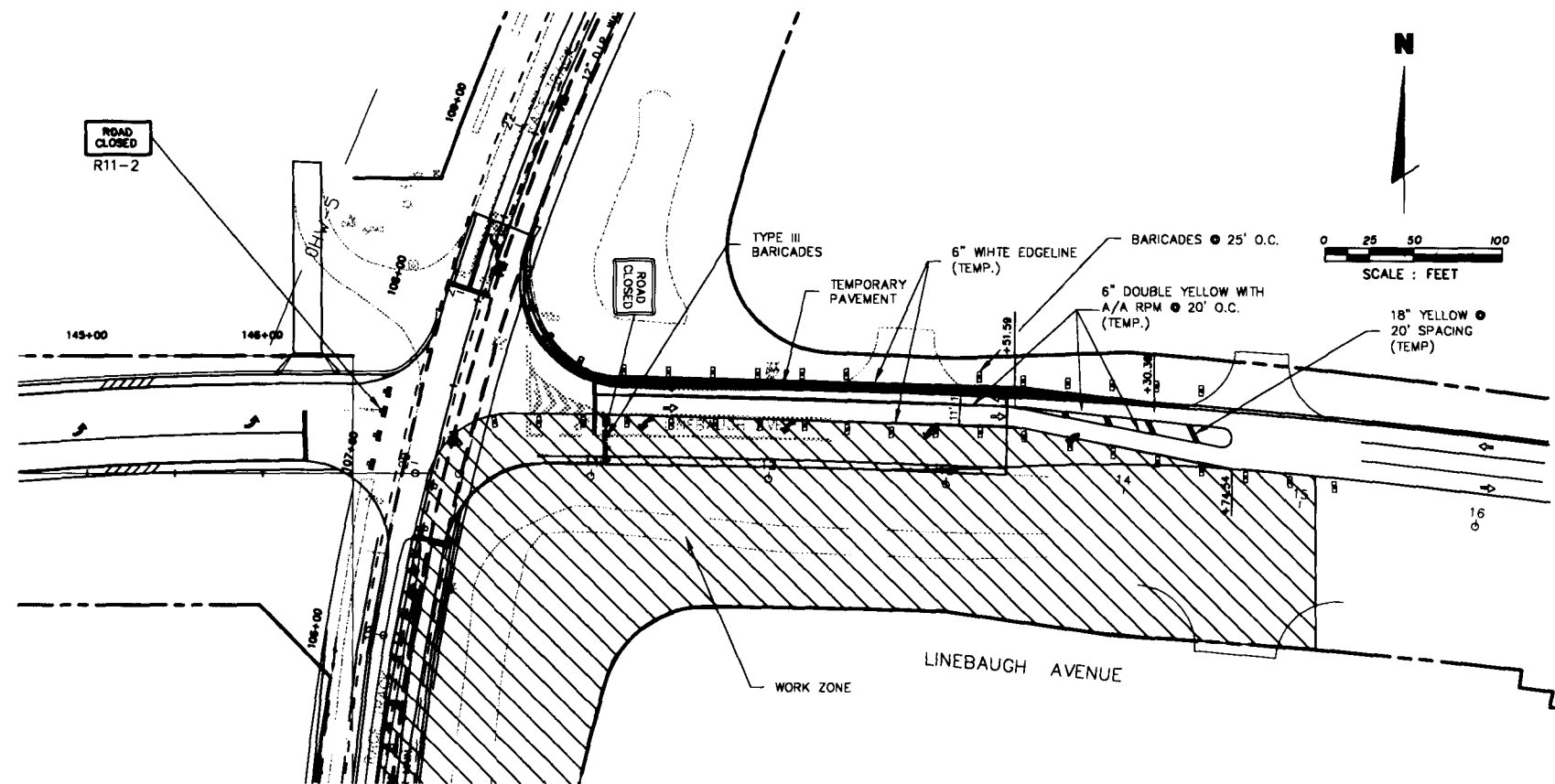


EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

MAINTENANCE OF TRAFFIC PLANS (2)
EAST-WEST CONNECTOR ROAD
STA. 133+50 TO STA. 146+96.25
RACE TRACK ROAD
STA. 99+11 TO STA. 108+40.25

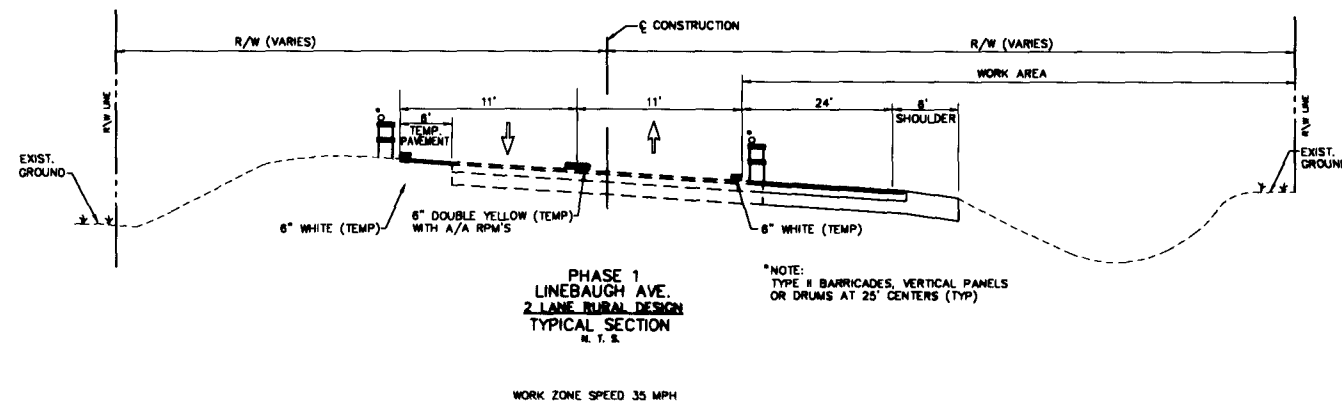
DATE: MAY 16, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET 33 OF 35
File: MOTRD02 View: 1-11X17

W: \\TRANS\\EW\\PHASE2\\CADD\\motrd03.dwg Wed May 17 18:46:23 2000 King Engineering Associates, Inc.



PHASE 1

- INSTALL ADVANCE WARNING SIGNS ALONG LINEBAUGH AVE. (SEE SHEET S-3 FOR DETAILS.)
 - PLACE TYPE II BARRICADES, VERTICAL PANELS OR DRUMS ALONG THE BOTH SIDES OF LINEBAUGH AVE. MAINTAIN TWO 11 FT. WIDE LANES.
 - REMOVE CURBING AND PREPARE NORTHERN EDGE OF LINEBAUGH AVE. FOR TEMPORARY PAVEMENT.
 - INSTALL 6 FT. OF TEMPORARY PAVEMENT ALONG THE NORTHERN EDGE OF THE EXISTING PAVEMENT.
 - INSTALL TEMPORARY PAVEMENT MARKINGS ALONG LINEBAUGH AVE.
 - ADJUST TRAFFIC SIGNAL HEADS AS NECESSARY TO ALIGN WITH APPROPRIATE TRAVEL LANES.
 - CONSTRUCT THE SOUTHERN HALF OF THE TYPICAL SECTION.
- CONCURRENT WORK**
- RACE TRACK ROAD PHASE 1



REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	DPS	5/00
			DRAWN	JKI	5/00
			CHECKED	RWF	5/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



**EAST-WEST CONNECTOR ROAD
PHASE II**
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

MAINTENANCE OF TRAFFIC PLANS (1)
EAST-WEST CONNECTOR ROAD
STA. 133+50 TO STA. 146+96.25
LINEBAUGH AVE.
STA. 32+00 TO STA. 41+24.65

DATE: MAY 16, 2000

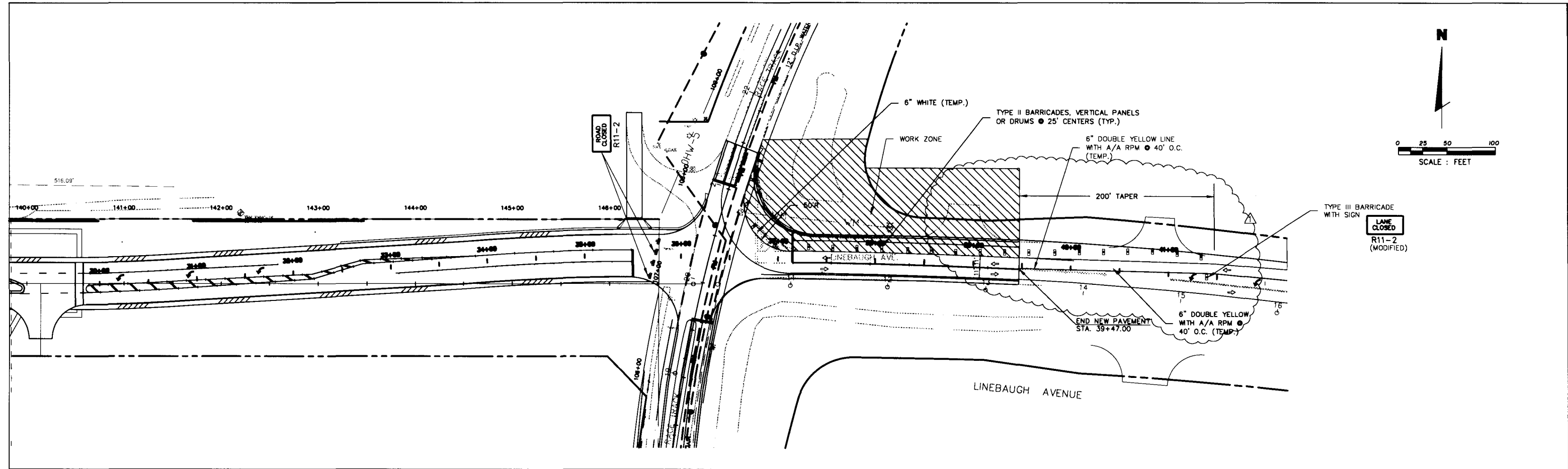
CONTRACT NO.:

SURVEY FILE NO.:

SHEET 34 OF 35

File: M0TR003
View: 1-11x17

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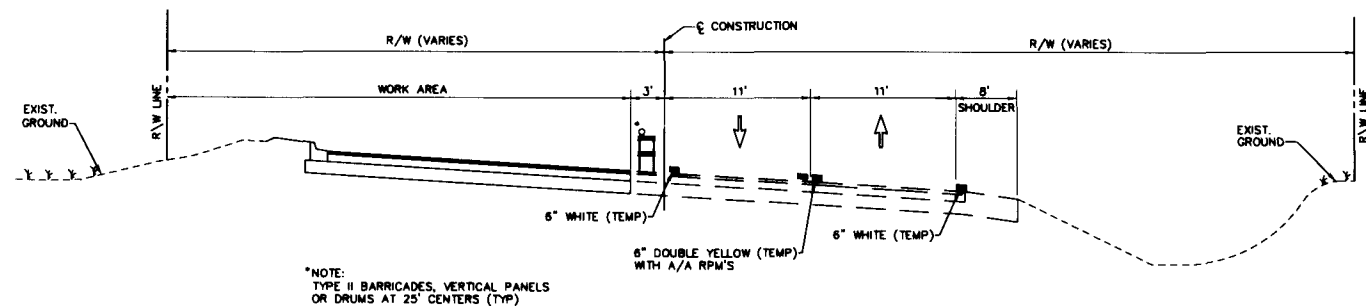


PHASE 2

- PLACE TYPE II BARRICADES, VERTICAL PANELS OR DRUMS ALONG THE NORTHERN SIDE OF LINEBAUGH AVE..
- INSTALL TEMPORARY PAVEMENT MARKINGS ALONG LINEBAUGH AVE.
- MAINTAIN TWO 11 FT. WIDE LANES UTILIZING EXISTING AND NEWLY CONSTRUCTED PAVEMENT
- ADJUST TRAFFIC SIGNAL HEADS AS NECESSARY TO ALIGN WITH APPROPRIATE TRAVEL LANES.
- CONSTRUCT THE NORTHERN HALF OF THE TYPICAL SECTION.

CONCURRENT WORK

- RACE TRACK ROAD PHASE 2



REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION	BY	DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	DPS	5/00
			DRAWN	JKI	5/00
			CHECKED	RWF	5/00
Δ REVISED MOT PLAN TAPER ALONG LINEBAUGH AVE.	RWF	8/8/00			

PINELLAS COUNTY, FLORIDA
Department of Public Works



EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

MAINTENANCE OF TRAFFIC PLANS (2)
EAST-WEST CONNECTOR ROAD
STA. 133+50 TO STA. 146+96.25
LINEBAUGH AVE.
STA. 29+50 TO STA. 44+30.46

DATE: MAY 16, 2000

CONTRACT NO.:

SURVEY FILE NO.:

SHEET 35 OF 35

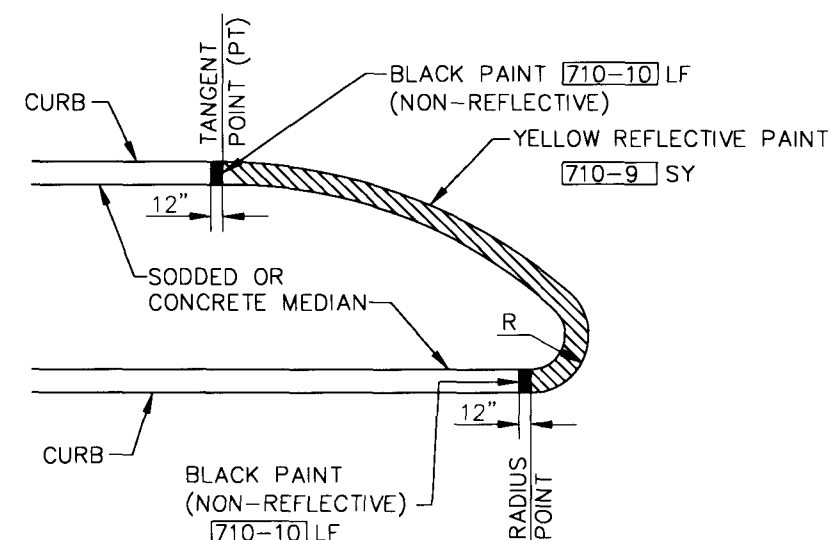
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View: 1-11X17

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NOTE: PINELLAS COUNTY PAY ITEM NUMBERS UTILIZED.

SIGNING AND PAVEMENT MARKING GENERAL NOTES

1. ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE U. S. DEPARTMENT OF TRANSPORTATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", 1988 EDITION, AND THE FLORIDA DEPARTMENT OF TRANSPORTATION'S "ROADWAY AND TRAFFIC DESIGN STANDARDS", JANUARY, 1994.
2. ALL PAVEMENT MARKINGS SHALL BE PAINTED IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS.
3. ALL PAVEMENT MARKINGS TO BE REMOVED SHALL BE PERFORMED BY HYDROBLASTING. PAYMENT FOR REMOVAL SHALL BE PAID FOR UNDER PAY ITEM 711-7.
4. THE SIGN LOCATIONS SHOWN ARE APPROXIMATE AND MAY REQUIRE FIELD ADJUSTMENTS AS DIRECTED BY THE ENGINEER.
5. ANY EXISTING SIGN TO REMAIN THAT IS DISTURBED DURING CONSTRUCTION OR RELOCATED SHALL BE RESET TO CURRENT STANDARDS FOR HEIGHT, OFFSET AND METHOD OF INSTALLATION.
6. CAUTION SHALL BE EXERCISED WHILE RELOCATING EXISTING SIGNS SO AS TO PREVENT DAMAGE TO THE SIGNS. IF THE SIGNS ARE DAMAGED BEYOND USE, AS DETERMINED BY THE ENGINEER, THEY SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
7. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE LENGTH OF THE COLUMN SUPPORTS IN THE FIELD PRIOR TO FABRICATION.
8. THE CONTRACTOR SHALL USE W-SHAPE STEEL POSTS FOR ALL MULTI-POST SIGNS. ALUMINUM ROUND TUBES SHALL BE USED FOR ALL SINGLE POST SIGNS.



NOTE: PAINT SHALL COMPLETELY COAT ALL OF THE HORIZONTAL AND VERTICAL CONCRETE SURFACES EXCLUSIVE OF THE GUTTER SECTIONS.

SODDED OR CONCRETE MEDIANS

N.T.S.

MEDIAN NOSE PAINTING DETAILS

NOTE: ALL PROPOSED CONCRETE TRAFFIC
SEPARATORS AND MEDIAN NOSES SHALL BE
PAINTED PER THESE DETAILS.

REVISIONS		BY	DATE	SURVEY BOOK No.:		
				SURVEY DIVISION	BY	DATE
				SURVEYED		
				TECHNICIAN		
				CHECKED		
				DESIGN DIVISION		
				DESIGNED	MLM	05/05/00
△	ADDED PAY ITEM NO. 710-14	RWF	11/20/00	DRAWN	JRL	05/05/00
△	REVISED QTY'S PER PLAN CHANGES	RWF	8/8/00	CHECKED	TWM	05/05/00

PINELLAS COUNTY, FLORIDA
Department of Public Works



*EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD*

*SIGNING & PAVEMENT MARKINGS
TABULATION OF QUANTITIES,
GENERAL NOTES AND DETAILS*

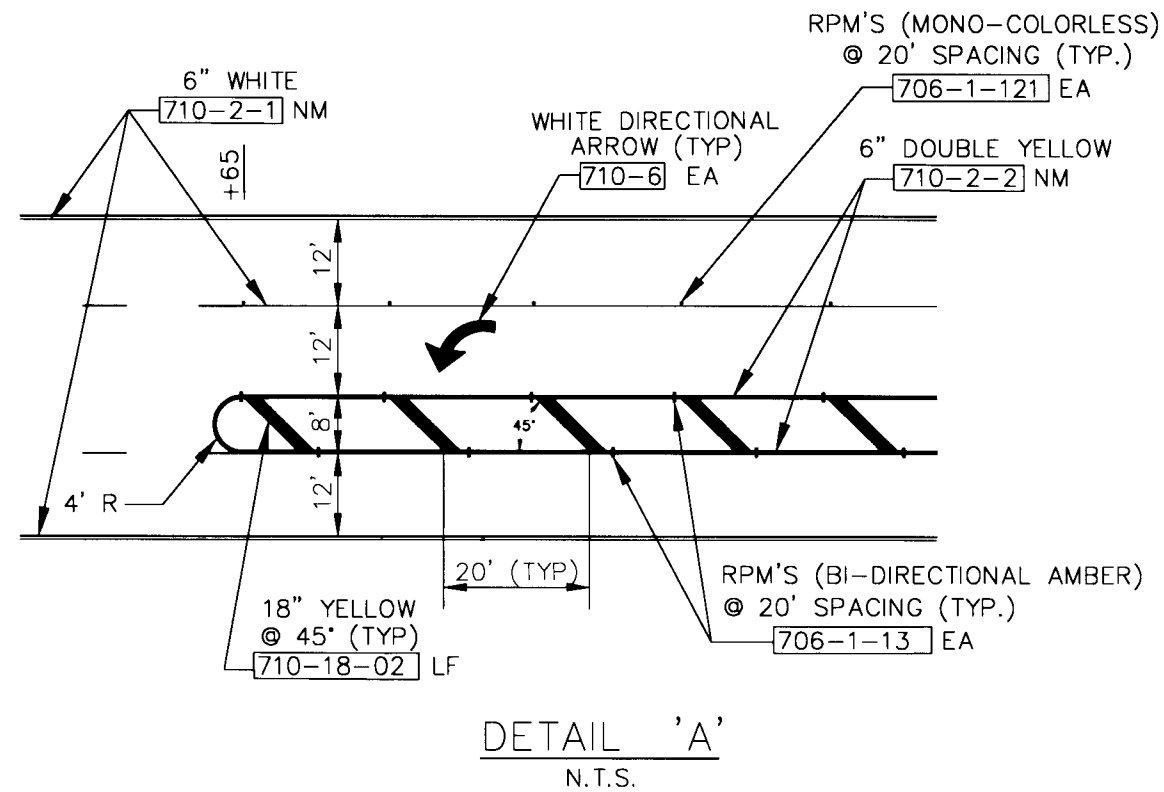
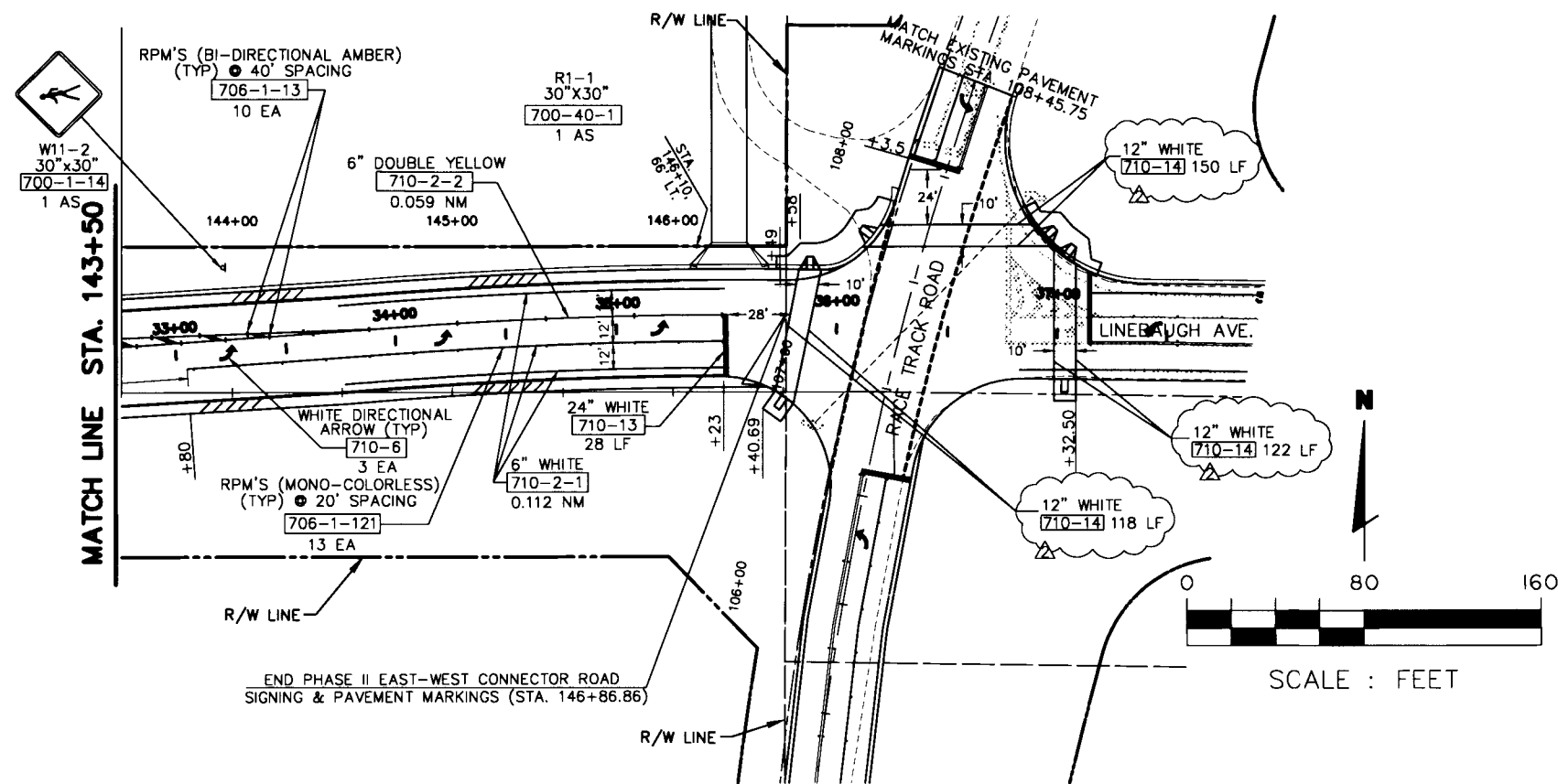
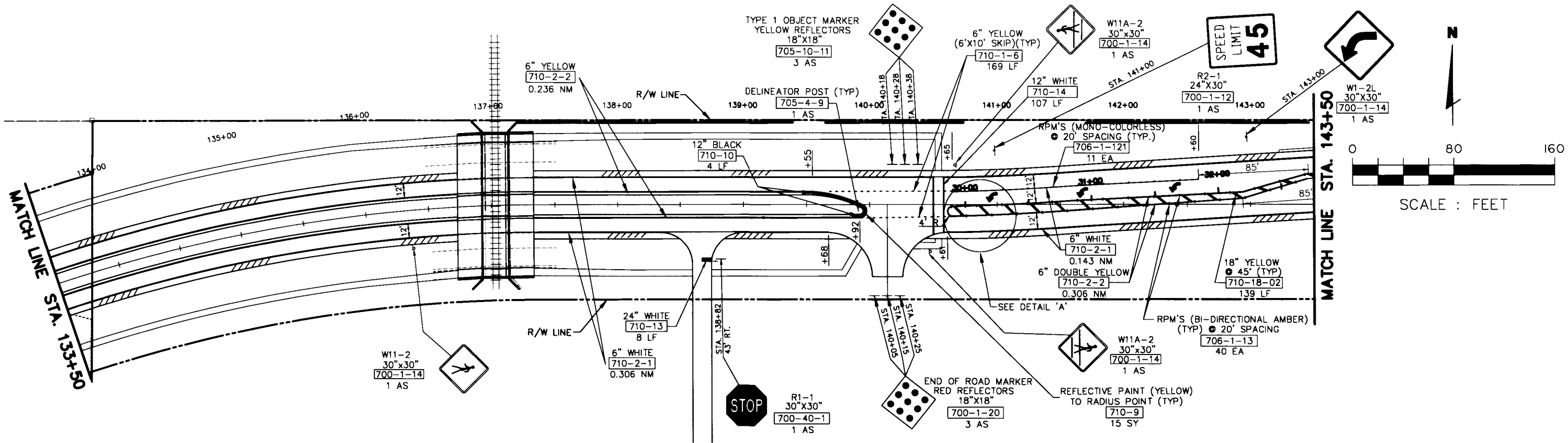
DATE: MAY 16, 2000

CONTRACT NO.:

SURVEY FILE NO.:

SHEET S-1 OF S-3

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REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
ADDED CROSS WALKS @ RACE TRACK RD	RWF	11-20-00			JRL	05/00
REVISED SIGN W11A-2 TO W11-2	RWF	8-05-00			TWN	06/00

PINELLAS COUNTY, FLORIDA
Department of Public Works

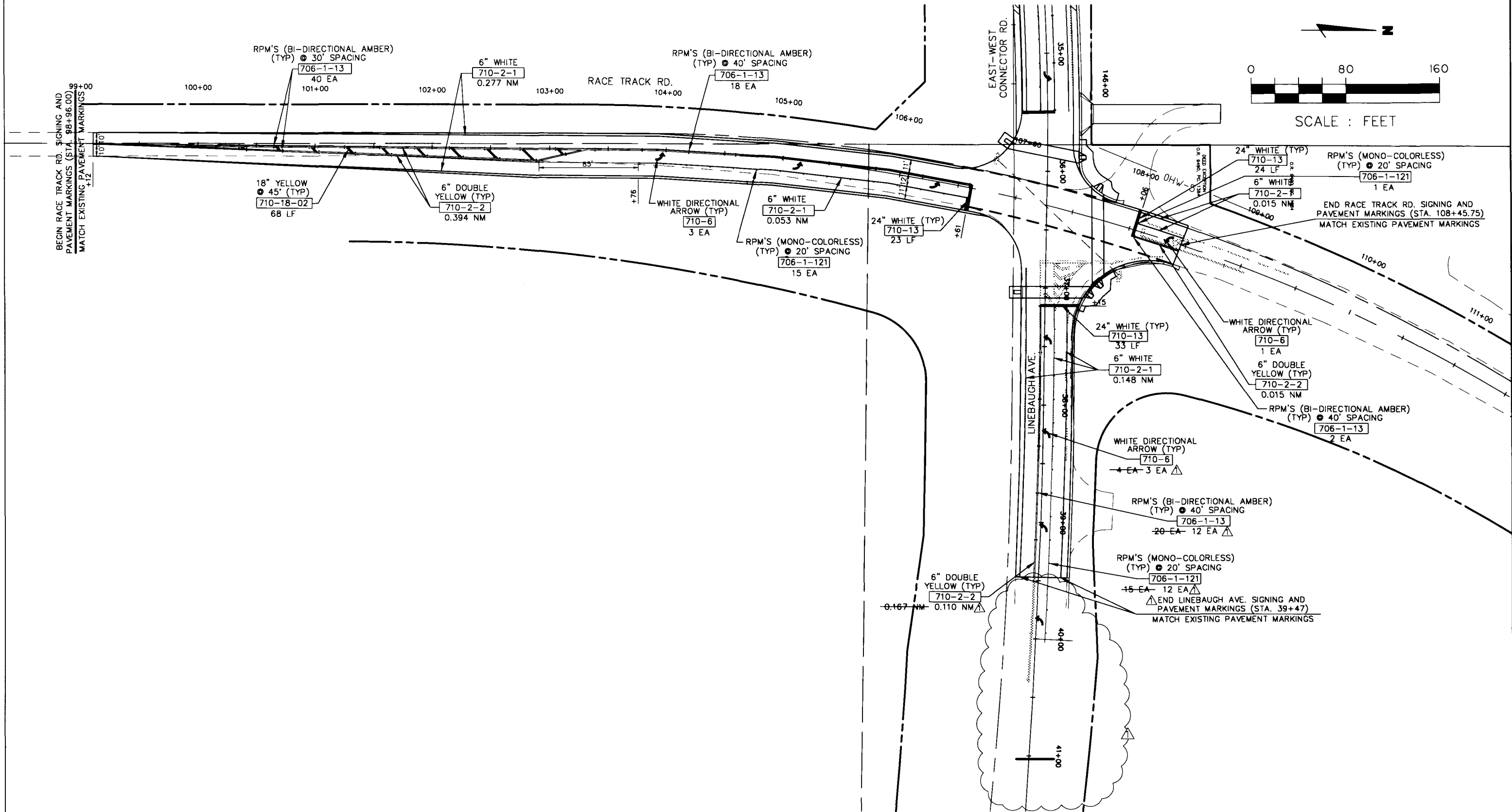


EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

SIGNING & PAVEMENT MARKING
STA. 133+50 TO STA. 146+86.86

DATE: MAY 16, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET S-2 OF S-3
File: PLANSPO1 View: 1-11X17

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REVISIONS	BY	DATE	SURVEY BOOK No.	SURVEY DIVISION	BY	DATE
			SURVEYED			
			TECHNICIAN			
			CHECKED			
			DESIGN DIVISION			
ADDED CURB CUT RAMPS OR LANDING PADS			DESIGNED	RWF	05/00	
IN ALL QUADS AND CROSS WALKS.			DRAWN	JRL	05/00	
REVISED LINEBAUGH AVE. MARKINGS/QTYS	RWF	11/20/00	CHECKED	TWM	05/00	
	RWF	8/8/00				

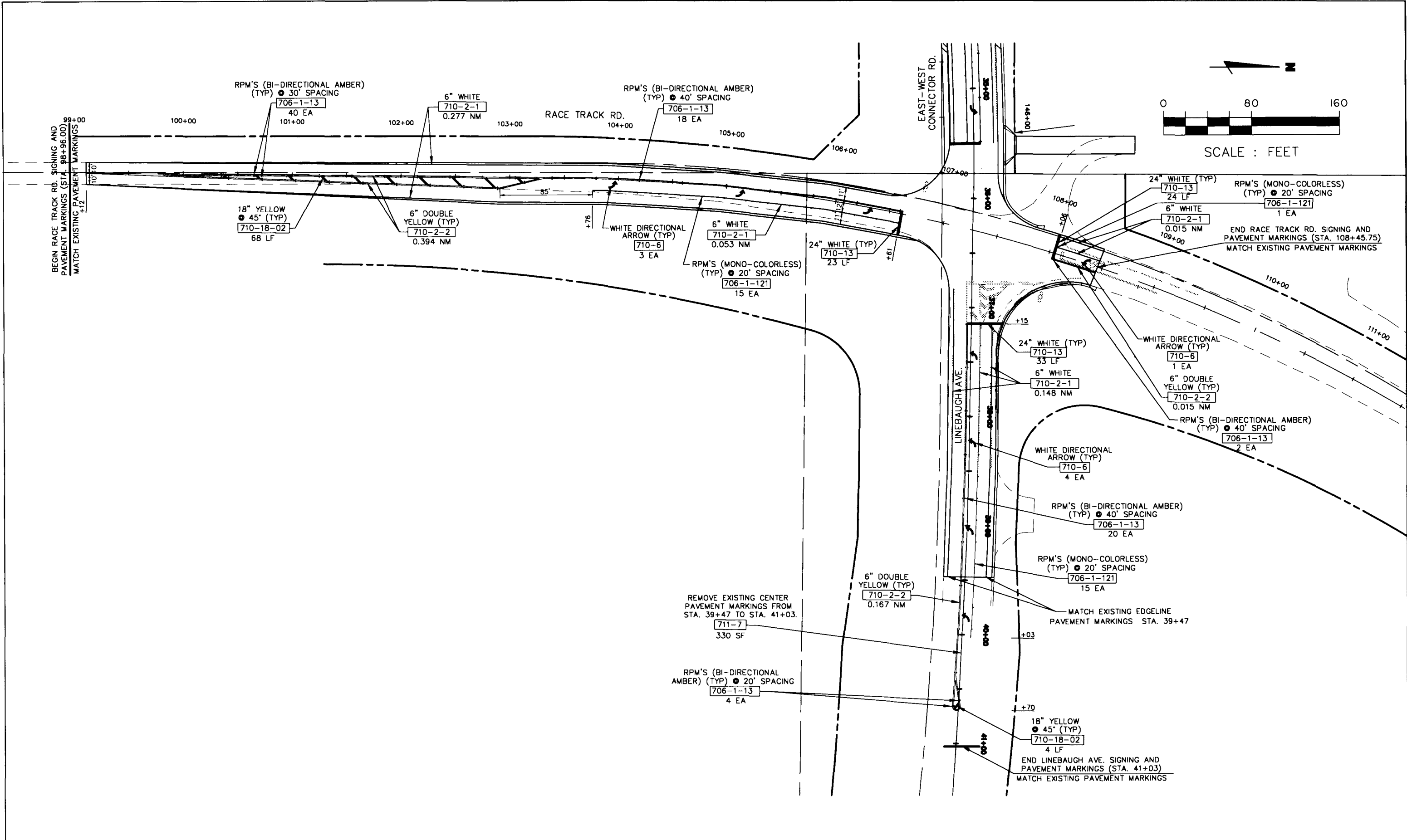
PINELLAS COUNTY, FLORIDA
Department of Public Works




EAST-WEST CONNECTOR ROAD
PHASE II
EAST PROPERTY LINE OF HARROD
PROPERTIES TO RACE TRACK ROAD

RACE TRACK ROAD
SIGNING & PAVEMENT MARKING
STA. 98+96.00 TO STA. 108+45.75

DATE: MAY 16, 2000
CONTRACT NO.:
SURVEY FILE NO.:
SHEET S-3 OF S-3
File: PLANSPO2 View: 1-11X17



REVISIONS	BY	DATE	SURVEY BOOK No.:		
			SURVEY DIVISION		BY DATE
			SURVEYED		
			TECHNICIAN		
			CHECKED		
			DESIGN DIVISION		
			DESIGNED	RWF	06/00
DRAWN	JRL	05/00			
CHECKED	TWM	06/00			

PINELLAS COUNTY, FLORIDA Department of Public Works	
	king ASSOCIATES, INC. PHONE 813-980-0881 FAX 813-980-0882 E-MAIL king@kingengineering.com

EAST-WEST CONNECTOR ROAD PHASE II EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD	
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RACE TRACK ROAD SIGNING & PAVEMENT MARKING STA. 98+96.00 TO STA. 108+45.75	
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DATE: MAY 16, 2000	
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET S-3 OF S-3	File: PLANSPO2 View: 1-11X17

DATE: MAY 16, 2000	
CONTRACT NO.:	
SURVEY FILE NO.:	
SHEET 11 OF 18	File: TABSIGL View: 1-11X17

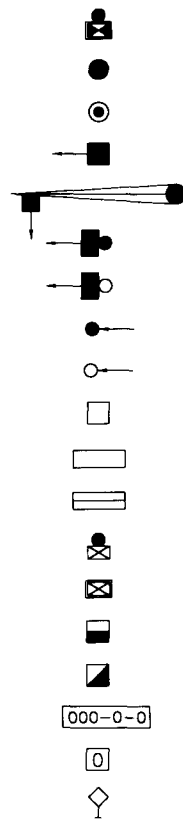
29. All grounding wire shall be exothermically welded to ground rod electrodes or an array of electrodes.
30. Item 665-11: shall include additional cost of labor and materials required for the installation of pedestrian signal signs FTP-49. This sign shall contain international symbols and be mounted above each pedestrian actuated signal sign FTP-47.
31. Possible tree trimming and removal may be required to provide adequate site distance, or as ordered by the Engineer. All expenses incurred for this work will be included in the price bid for clearing and grubbing.
32. Item 639-2-1: Payment shall be based on the total linear foot of conductors.
33. Item 700-89-1: Shall include sign assembly with photo electric cells and mounting hardware. The sign illumination level shall be 20 footcandles. Sign shall be installed on concrete pole as shown on the plan. The cost shall include a terminal strip connected to the existing 15 amp auxilliary breaker in the controller cabinet for the sign conductor.

1. Item Number 670-1- ACTUATED SOLID STATE CONTROLLER ASSEMBLY: The controller and all modules furnished with the cabinet and its internal equipment shall be wired to be compatible with Hillsborough County Central MIST Computer System.
2. The cabinet circuitry shall have provisions to revert to Time Based Coordination (T.B.C.) in the event the loss of telemetry communication occurs. The timebase coordination unit shall be internal to the controller, and shall have operational capabilities of generating a minimum of 8 cycles, 4 splits/cycle, eight separate force offs, and 8 separate permissive periods, (each individually programmable for both start and end time).
3. The controller/time base unit shall be capable of providing a printed output of all programmed data through the use of a hand held printer.
4. The contractor shall consult with Hillsborough County Traffic Engineering to approve the type and make of equipment being proposed.
5. The controller shall have the capability of sending and receiving data to and from a lap top personal computer at the intersection.

1. Greenlee # 431, two ply poly line or approved equal shall be installed in all conduits which are to receive cable at a future time. At least three feet of pull wire shall be accessible at each conduit termination and secured within the pullbox or place of termination.
2. All conduit shall be rodde and brushed as per Hillsborough County's Traffic Signal Specification, subarticle B-630-3.
3. All conduit with pull line installed shall be sealed and capped to avoid further debris and soil from entering during construction.
4. Detectable locating tape shall be placed over centerline of all P.V.C. pipe at one foot below grade. Payment for detection tape is included in the pay item for conduit.
5. The termination ends of all Polyvinyl Chloride (PVC) plastic conduit entering all pull boxes, shall be fitted with an End Bell Duct Fitting prior to any pull line or cable installation.


1. Alkaline base thermoplastic compound will be used on all thermoplastic pavement markings.
2. All existing traffic signs shall be maintained by the contractor during construction until they are removed and replaced by the new signs upon completion of the project.
3. All traffic sign posts shall be compatible (make, design) with posts now in use by the Hillsborough County Traffic Maintenance Section.
4. Contact Sandy Mulholland, Streets and Addresses; 744-5911 for street sign block numbers.
5. Caution shall be exercised while relocating existing signs to prevent unnecessary damage to the signs. If the signs are damaged beyond use, as determined by the project engineer, signs shall be replaced by the contractor at his expense.
6. The sign locations shown are approximate and may require field adjustment as directed by the project manager.
7. The raised pavement marker adhesive for use on asphalt highways shall be a bituminous adhesive.

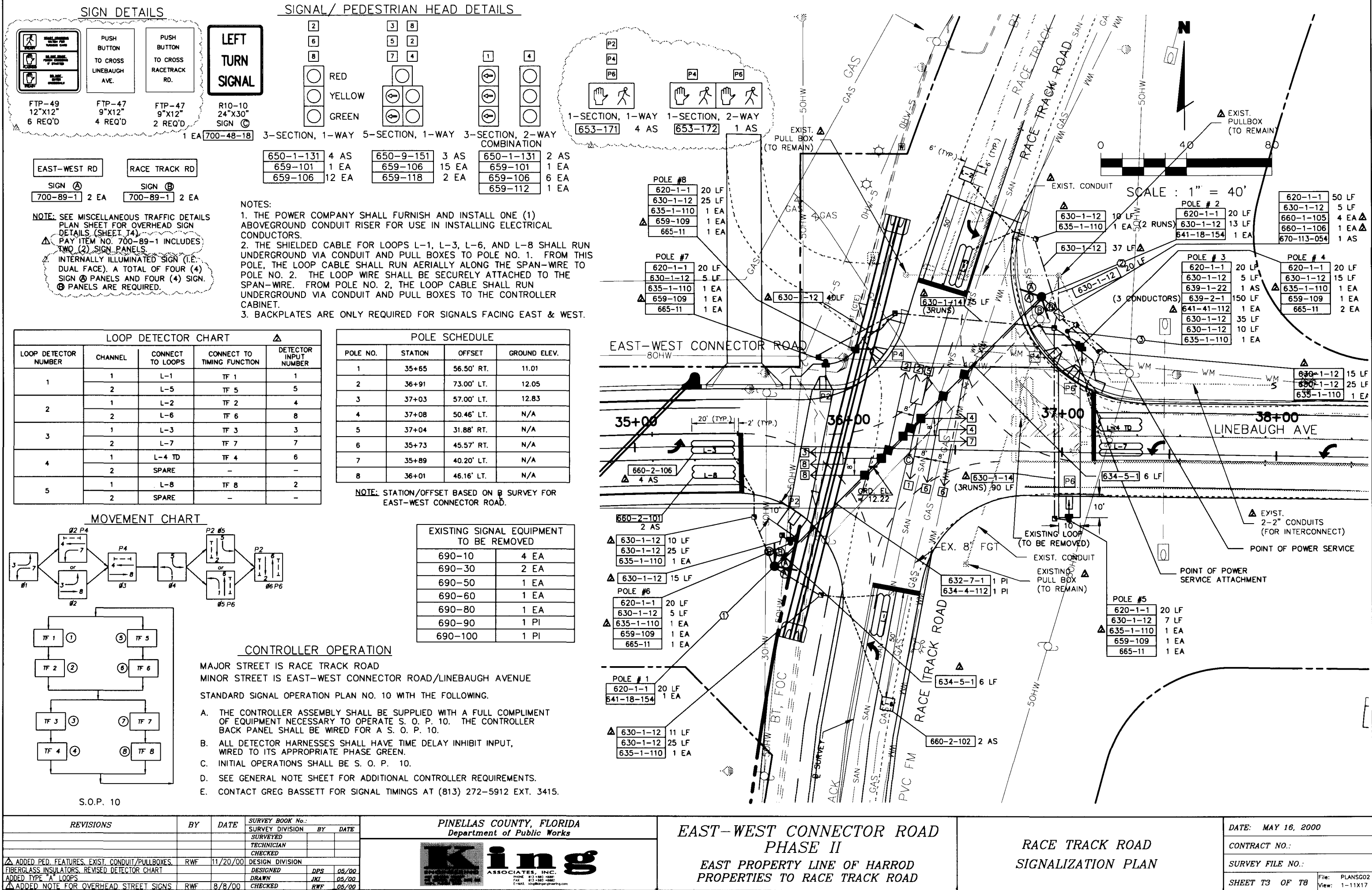
CONVENTIONAL SIGNAL SYMBOLS



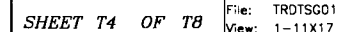
R.R. POST (M.P. No. 0.00)

LIGHT STANDARD

REVISIONS	BY	DATE	SURVEY BOOK No.: SURVEY DIVISION BY DATE SURVEYED TECHNICIAN CHECKED DESIGN DIVISION DESIGNED DRAWN CHECKED	PINELLAS COUNTY, FLORIDA Department of Public Works  PHONE: 813-880-4841 FAX: 813-880-4840 E-MAIL: king@kingassoc.com	EAST-WEST CONNECTOR ROAD PHASE II EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD	SIGNAL NOTES AND SYMBOLS	DATE: MAY 16, 2000 CONTRACT NO.: SURVEY FILE NO.: SHEET T2 OF T8 File: NTSYSG01 View: 1-11X17
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GENERAL NOTES

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FURNISH AND INSTALL CONCRETE POLE, FOUNDATION, SIGNALS AND SIGNS AS SHOWN ON PLAN SHEETS. THE MATERIALS SHALL BE IN ACCORDANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 1994 EDITION. PRIOR TO THE MANUFACTURE OF THE POLES, CONTRACTOR SHALL FURNISH POLE AND FOUNDATION SHOP DRAWINGS FOR REVIEW AND APPROVAL. THESE SHOP DRAWINGS SHALL BE PREPARED FOR APPROVAL IN ACCORDANCE WITH SECTION 5 AND 603 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR THE APPROPRIATE SPECIAL PROVISIONS. SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.

1. GENERAL DESIGN SPECIFICATIONS:

- A. STRAIN POLES ARE DESIGNED FOR WIND LOADING BASED ON A 90 MPH BASIC WIND SPEED AND 30% GUST FACTOR. THIS WIND SPEED IS BASED ON A 50-YEAR MEAN RECURRENCE INTERVAL AS DESCRIBED IN SECTIONS 1.2.4 AND 1.2.5 OF THE AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 1994 EDITION.
- B. WIND LOAD DESIGN INCLUDES POLES EQUIPPED WITH SIGNALS AND SIGNS.
- C. SIGNALS AND SIGNS ARE DESIGNED TO ROTATE 30 DEGREES REDUCING THE WIND LOAD THROUGH SHEDDING.
- D. FOR DESIGN PURPOSE, THE NUMBER AND LOCATION OF SIGNAL HEADS AND TRAFFIC SIGNS IS AS NOTED IN THE SIGNAL CONFIGURATION CHART. THE ACTUAL SIGNAL HEAD, TRAFFIC SIGN PLACEMENT AND CONFIGURATION SHALL BE AS NOTED ON THE PLANS.

2. MATERIAL REQUIREMENTS:

- A. THE POLE SHALL CONSIST OF A CONCRETE SHAFT, HANDHOLES WITH COVERS AND SPAN WIRE ATTACHMENT HARDWARE.
- B. APPROVED CROSS SECTIONS SHALL INCLUDE:
SQUARE TAPERED CONCRETE SHAFT
- C. CONCRETE POLES SHALL BE CLASS V (SPECIAL) CONCRETE WITH A 28-DAY MINIMUM COMPRESSIVE STRENGTH OF 6000 PSI. PRESTRESSING TENDONS SHALL BE 270 KSI LOW-RELAXATION.
- D. HAND HOLE COVERS AND OTHER MISCELLANEOUS STEEL COMPONENTS SHALL CONFORM TO REQUIREMENTS SET FORTH IN ASTM A36 OR ASTM A572, GRADE 50 (AND GALVANIZED IN ACCORDANCE WITH ASTM A123).
- E. ALL NUTS AND BOLTS LESS THAN 5/8 DIAMETER SHALL BE STAINLESS STEEL.
- F. ALL OTHER NUTS AND BOLTS 5/8 DIAMETER AND OVER SHALL CONFORM TO REQUIREMENTS SET FORTH IN ASTM A325, AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM B633.
- G. SPAN WIRE CLAMPS SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT SIGNAL HEAD ASSEMBLIES, SPAN WIRE, SIGNAL CABLE AND SIGNS AS SHOWN ON PLAN SHEET. THE DESIGN SHALL BE IN ACCORDANCE WITH AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 1994 EDITION.

3. SPECIAL REQUIREMENTS:

THE BASE IS DESIGNED SUCH THAT THE POLE SHAFT SHALL ROTATE NO MORE THAN TWO DEGREES UNDER DEAD LOAD CONDITIONS.

4. FINISHING REQUIREMENTS:

ALL STEEL ASSEMBLIES AND COMPONENT PARTS SHALL BE GALVANIZED TO THE APPROPRIATE GOVERNING SPECIFICATION AS NOTED ON THE SHEET.

5. FOUNDATION REQUIREMENTS:

FOUNDATION DEPTHS ARE CALCULATED USING BROMS METHOD FOR COHESIONLESS SOILS WITH A SAFETY FACTOR OF 1.5. THE SOIL DESIGN PARAMETERS USED ARE A 30 DEGREE ANGLE OF INTERNAL FRICTION AND A SATURATED UNIT WEIGHT OF 42.6 PCF, WHICH MEET THE CRITERIA FOR SOILS TYPE A3.

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE SOILS INFORMATION FOR THE STRUCTURE FOUNDATION, AND THE COMPLETE DESIGN OF THE FOUNDATION IF DIFFERENT THAN OUTLINED ABOVE. IF DIFFERENT, THE CONTRACTOR SHALL FOLLOW THE PROCEDURE OUTLINED BELOW:

- A. SPT BORINGS RECORDED AND SAMPLED AT EACH FOOTING SITE, PERFORMED IN ACCORDANCE WITH FDOT'S SOIL AND FOUNDATION MANUAL.
- B. LABORATORY RESULTS AND SOILS CLASSIFICATIONS (INCLUDING ENVIRONMENTAL CLASSIFICATION OF SOILS) PERFORMED AND DETERMINED, AS OUTLINED IN THE FDOT'S SOIL AND FOUNDATION MANUAL.
- C. TYPE OF ANALYSIS USED, ALONG WITH SAMPLE CALCULATIONS (OR COMPUTER PRINTOUT) FOR THE FOOTING DESIGN. THE ANALYSIS AND RESULTS SHOULD FOLLOW THAT OUTLINED IN THE FDOT'S SOIL AND FOUNDATION MANUAL, AND INCLUDE, BUT NOT LIMITED TO DEFLECTION, SHAFT DIAMETER AND LENGTH, POLE HEIGHT AND IMPOSED LOADS (LATERAL AND AXIAL LOADS).
- D. DESIGN OF THE FOUNDATION SHALL BE SUBMITTED TO THE COUNTY FOR REVIEW AND APPROVAL.
- E. THE FOUNDATION SHALL MEET THE REQUIREMENTS OF FDOT SUPPLEMENTAL SPECIFICATION B455.
- F. CONCRETE FOR DRILLED SHAFTS SHALL BE CLASS IV WITH A 28-DAY MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.

ALL SOILS INFORMATION AND RECOMMENDATIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE COUNTY STRUCTURAL ENGINEER PRIOR TO PREPARATION OF ANY STRUCTURAL DESIGN OR SHOP DRAWINGS.


INDEX OF DRAWINGS - CONCRETE

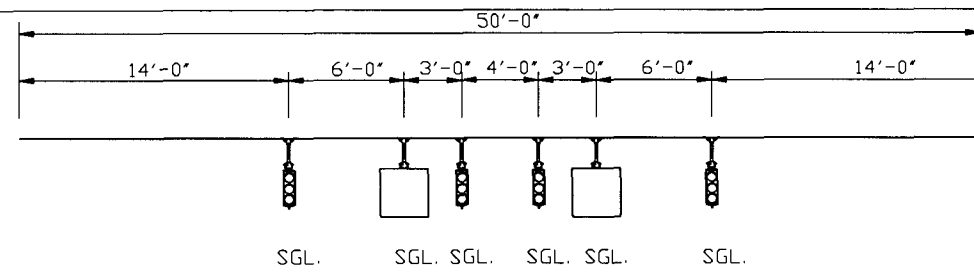
GENERAL NOTES AND INDEX OF DRAWINGS

SIGNAL CONFIGURATION CHART

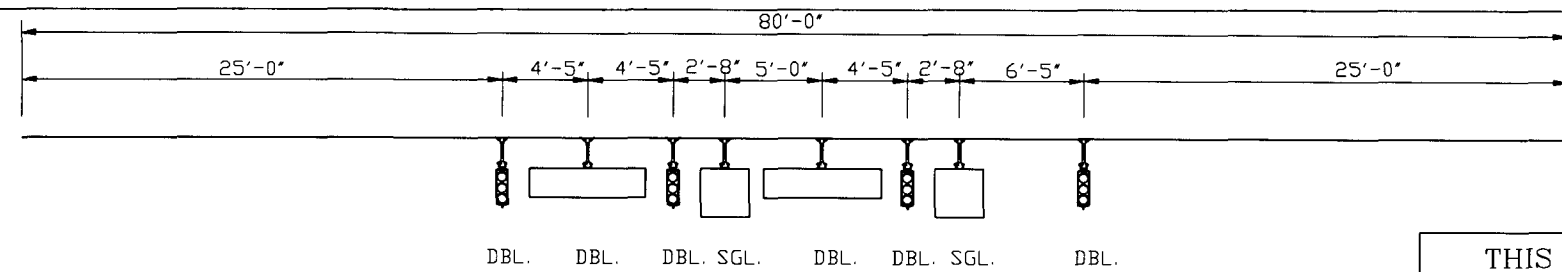
STRAIN POLE DETAILS AND SELECTION TABLE

STRAIN POLE ELEVATION

REVISIONS		BY	DATE	SURVEY BOOK No.:			PINELLAS COUNTY, FLORIDA			EAST-WEST CONNECTOR ROAD			DATE: MAY 16, 2000	
				SURVEY DIVISION			Department of Public Works			PHASE II			CONTRACT NO.:	
				SURVEYED						EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD			SURVEY FILE NO.:	
			TECHNICIAN			SHEET T5 OF T8								
			CHECKED			View: 1-11X17								
			DESIGN DIVISION											
				DESIGNED			DPS	05/00						
				DRAWN			JKI	05/00						
				CHECKED			RWF	05/00						

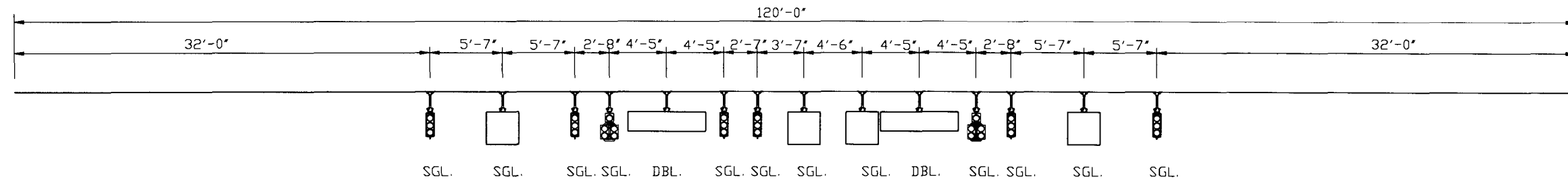


CONFIGURATION 1 - 50'-0" SPAN



CONFIGURATION 2 - 80'-0" SPAN

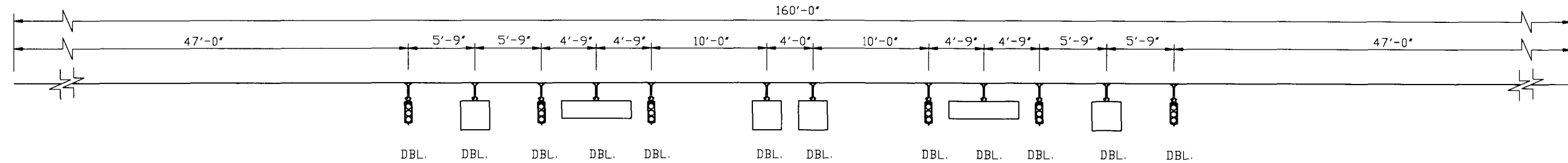
THIS SHEET IS FOR
INFORMATION ONLY



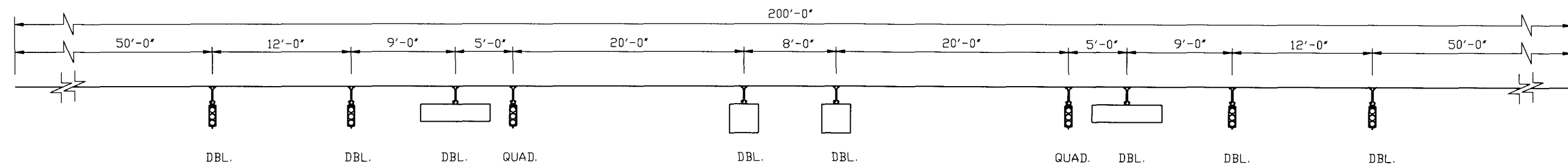
CONFIGURATION 3 - 120'-0" SPAN

LEGEND

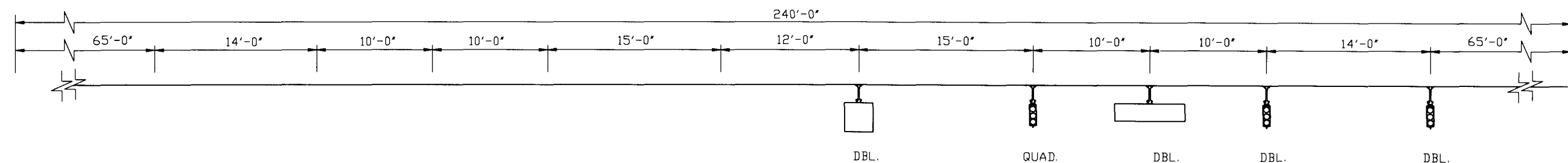
- SGL. - 1 SIGNAL HEAD OR SIGN W/ BACKPLATES
DBL. - 2 SIGNAL HEADS OR SIGNS
QUAD. - 4 SIGNAL HEADS OR SIGNS




CONFIGURATION 4 - 160'-0" SPAN

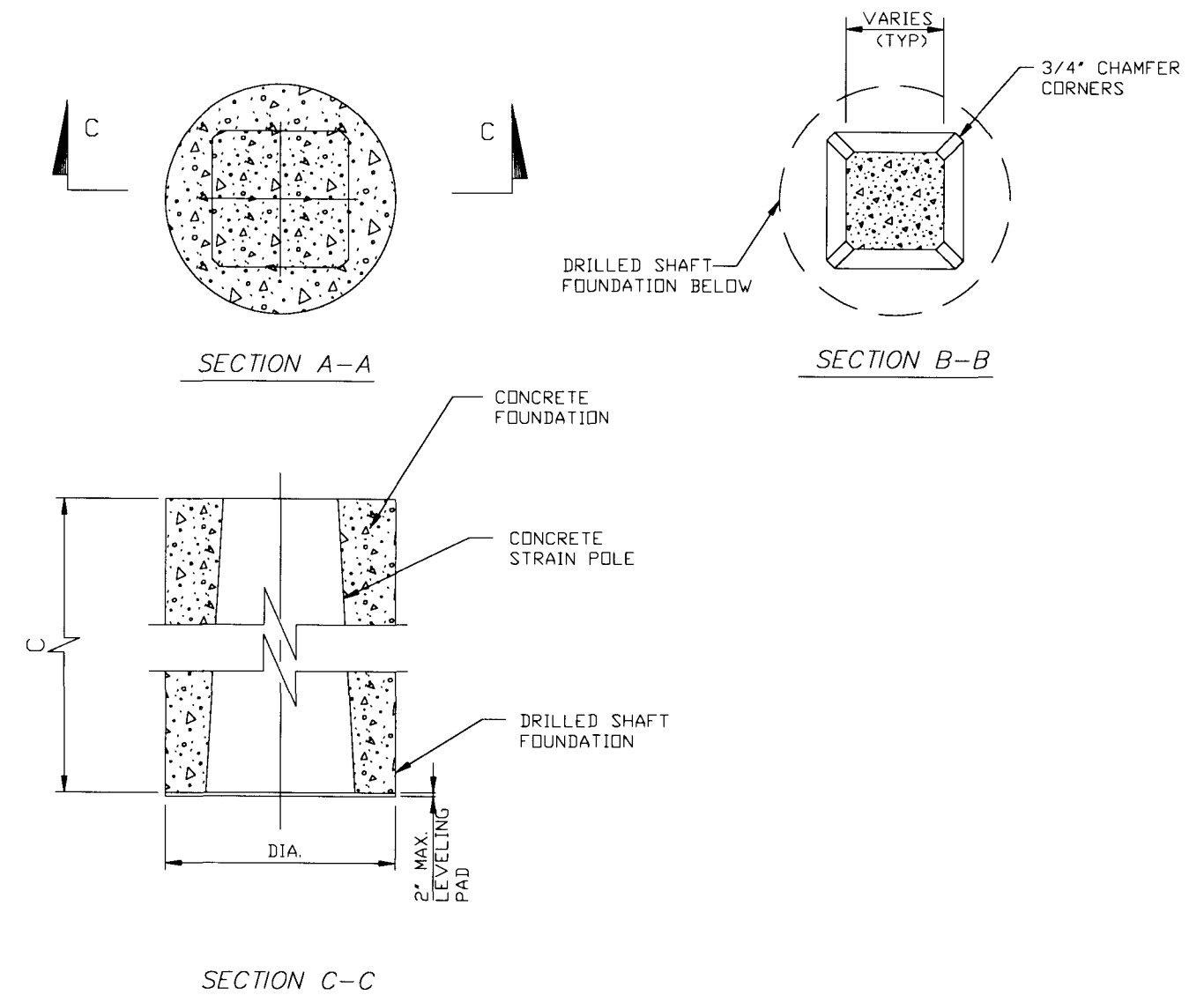
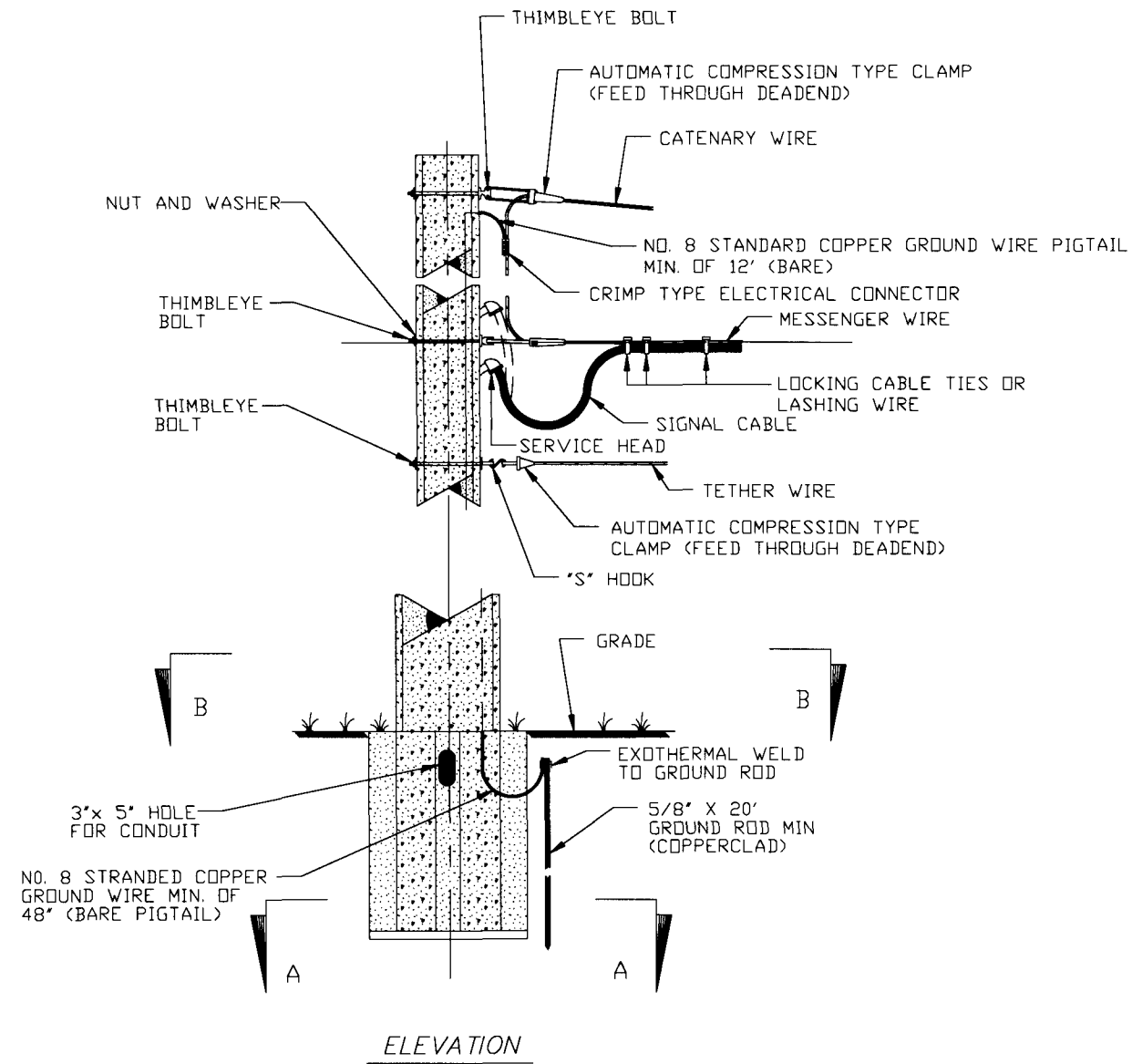


CONFIGURATION 5 - 200'-0" SPAN



CONFIGURATION 6 - 240'-0" SPAN

REVISIONS		BY	DATE	SURVEY BOOK No.:		BY		DATE	PINELLAS COUNTY, FLORIDA		EAST-WEST CONNECTOR ROAD		DATE: MAY 16, 2000	
				SURVEY DIVISION					Department of Public Works		PHASE II		CONTRACT NO.:	
				SURVEYED							EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD		SURVEY FILE NO.:	
				TECHNICIAN									SHEET T6 OF T8	
				CHECKED									View: 1-11X17	
				DESIGN DIVISION										
				DESIGNED		DPS		05/00						
				DRAWN		JKL		05/00						
				CHECKED		RWF		05/00						



CONCRETE STRAIN POLE SELECTION TABLE

CONFIG. NUMBER	POLE** TYPE	MAXIMUM SERVICE FORCES		POLE DIMENSION				POLE SIZE		SHAFT TAPER	FOUNDATION DIMENSION	
		MOMENT (FT-K)	SHEAR (K)	A *	B *	D	E *	TOP	BASE		DIA.	C *
1	VIII	391	14.8	4'-0"	25'-6"	1'-0"	46'-0"	1'-10"	2'-5 1/2"	0.162 IN/FT	4'-6"	15'-6"
2	VIII	441	16.4	5'-10"	25'-6"	1'-0"	48'-0"	1'-10"	2'-5 7/8"	0.162 IN/FT	4'-6"	15'-8"
3	VIII	695	25.1	8'-2"	25'-6"	1'-0"	54'-0"	1'-10"	2'-6 3/4"	0.162 IN/FT	4'-6"	19'-4"
4	VIII	614	20.9	10'-7"	26'-6"	1'-0"	56'-0"	1'-10"	2'-7 1/8"	0.162 IN/FT	4'-6"	17'-11"
5	VIII	611	20.4	13'-0"	26'-6"	1'-0"	58'-0"	1'-10"	2'-7 3/8"	0.162 IN/FT	4'-6"	17'-6"
6	VIII	630	20.5	15'-5"	26'-6"	1'-0"	62'-0"	1'-10"	2'-8"	0.162 IN/FT	4'-6"	19'-1"

* - FOR ACTUAL DIMENSIONS SEE PROJECT POLE SCHEDULE

** - POLE TYPE SHOWN IN CONFORMANCE WITH FDOT STANDARD POLE TYPES

REVISIONS		BY	DATE	SURVEY BOOK No.		BY		DATE	PINELLAS COUNTY, FLORIDA		EAST-WEST CONNECTOR ROAD		DATE: MAY 16, 2000	
				SURVEY DIVISION					Department of Public Works		PHASE II		CONTRACT NO.:	
				TECHNICIAN							EAST PROPERTY LINE OF HARROD PROPERTIES TO RACE TRACK ROAD		SURVEY FILE NO.:	
				CHECKED									SHEET T7 OF T8	
				DESIGN DIVISION									View: 1-11X17	
				DESIGNED		DPS		05/00						
				DRAWN		JKL		05/00						
				CHECKED		RWF		05/00						

INDEX OF SHEETS

SHEET NO.	SHEET TITLE
B-1	INDEX OF BRIDGE SHEETS, GENERAL NOTES & PAY ITEM NOTES
B-2	12", 14", 18", 20", 24", & 30" PRESTRESSED CONCRETE PILES - SHEET 1 OF 2
B-3	12", 14", 18", 20", 24", & 30" PRESTRESSED CONCRETE PILES - SHEET 2 OF 2
B-4	TRAFFIC RAILING BARRIER
B-5	ALUMINUM BICYCLE RAILING
B-6	APPROACH SLAB DETAILS
B-7	STANDARD BAR BENDING DETAILS
B-8	APPROACH SLAB GEOMETRY
B-9	GENERAL PLAN
B-10	FOUNDATION LAYOUT
B-11	END BENT 1 - NORTH HALF
B-12	END BENT 1 - SOUTH HALF
B-13	END BENT 2 - NORTH HALF
B-14	END BENT 2 - SOUTH HALF
B-15	END BENT DETAILS - SHEET 1 OF 2
B-16	END BENT DETAILS - SHEET 2 OF 2
B-17	SUPERSTRUCTURE SECTION
B-18	FRAMING PLAN & BEARING DETAILS
B-19	STEEL BEAM AND GRID DECK DETAILS - SHEET 1 OF 2
B-20	STEEL BEAM AND GRID DECK DETAILS - SHEET 2 OF 2
B-21	REINFORCING STEEL BAR LIST

PAY ITEM NOTES

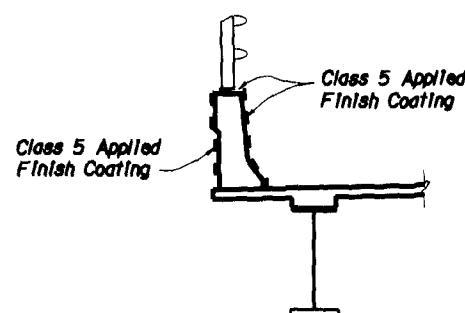
- Each firm shall visit the construction site during the bidding phase and determine for themselves the site conditions.
- Payment for incidental items not specifically covered in the individual bid items shall be included in the contract unit price for the bid items.
- The total plan area of approach slabs required is 516 sq. yds. Total No. of Approach Slabs = 2.
- Payment for surveying the existing rails shall be at the contract lump sum price for Protection of Existing Structures.

ABBREVIATIONS

CL denotes Centerline
C.C. denotes center-to-center.
C.I.P. & C-I-P denotes Cast-In-Place
C.J. denotes Construction Joint
CJP denotes Complete Joint Penetration weld
E denotes Expansion
E.F. denotes Each Face
E.S. denotes Each Side
Ext. denotes Exterior
F denotes Fixed
F.F.B.W. denotes Front Face of Backwall
F.S. denotes Far Side
H.S. denotes High Strength
Int. denotes Interior
L.L. denotes Live Load
N.J.C. denotes Not in Contract
N.S. denotes Near Side
Opp. denotes Opposite
R/W denotes Roadway
S.S. denotes Stainless Steel
U.N.O. denotes Unless Noted Otherwise
w/ denotes With
W.P. denotes Working Point

NOTE:

For additional abbreviations see Florida Department of Transportation Roadway and Traffic Design Standards Index No. 001.



SURFACE FINISH DETAIL

GENERAL NOTES

1. SPECIFICATIONS:

A. GENERAL

Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction, 1991 Edition, as amended.

B. DESIGN

- American Association of State Highway and Transportation Officials (AASHTO) Standard Specifications for Highway Bridges, 1996 (16th Edition) and Interims through 1999.
- FDOT Structures Design Guidelines for Load Factor Design, January 1, 2000, Topic No. 625-020-152-a.

2. DESIGN LOADINGS (U.N.O.)

A. DEAD LOADS:

Unit Weight - Concrete (Structural)	150 pcf
- Steel	490 pcf
- Steel Open Grid Deck	20 pcf
- Concrete Filled Steel Grid Deck	62 pcf
- Concrete Bridge Railings	418 pcf

B. LIVE LOADS:

- HS20-44 Truck and Lane Loading per AASHTO
- Alternate Military Loading per AASHTO
- Sidewalk Live Load per AASHTO
- Impact per AASHTO

3. DESIGN METHODS

A. SERVICE LOAD METHOD (ALLOWABLE STRESS DESIGN):

- Superstructure Span (Deck & Beams)
- Bridge Railing
- Prestressed Concrete Piling
- Superstructure Composite Neoprene Bearings

B. STRENGTH DESIGN METHOD (LOAD FACTOR DESIGN):

- Reinforced Concrete (End Bent)

4. ENVIRONMENT

A. DESCRIPTION:

Slightly Aggressive

B. LOCATION:

Inland

5. MATERIALS

Material stresses are in accordance with current AASHTO Standard Specifications for all the materials shown in the Plans.

A. STRUCTURAL STEEL:

Structural steel shall be in accordance with the following Specifications:
ASTM A709-99 Grade 50 for main load carrying members (e.g., Beams) and ASTM A709-99 Grade 36 for secondary load carrying, stiffening, and bracing members unless noted otherwise in the Plans or Specifications.

B. CONNECTIONS

- Unless noted otherwise, bolted connections for structural steel (shop or field) shall be made with $\frac{1}{2}$ " ASTM A325-97 hot-dip galvanized high-strength bolts and shall be placed in $\frac{1}{4}$ " holes. Allowable loads shall be based on a Class D contact surface per AISC.
- All welding and corresponding weld inspection for structural steel shall be performed in accordance with ANSI/AASHTO/AWS D1.5-96 Bridge Welding Code.
Unless noted otherwise, welds shall be $\frac{1}{8}$ " continuous fillet welds, groove welds shall be Complete Joint Penetration (CJP). Weld electrodes shall be E70XX Series except for electrodes used for field welding of the hot dip galvanized grid deck to the steel framing which shall be E60XX Series. Field welding shall not be allowed unless noted otherwise.
- Anchor bolts shall be ASTM A307 and shall be hot-dip galvanized unless otherwise noted in the Plans.

C. CONCRETE

- Concrete shall be in accordance with the Specifications. The following concrete shall be used (properties based on Florida Limerock Aggregate):

Location	Class	f'c *	E _c **
End Bent, Barriers & Approach Slabs	II	3,400 psi	3.0x10 ⁶ psi

* Minimum 28-Day Compressive Strength.
** Modulus of Elasticity at 28 days with a Unit Weight of 145 pcf.
- Size No. 8 or No. 89 Aggregate may be substituted for size No. 57 or No. 67 Aggregate in accordance with the Specifications.

D. REINFORCING STEEL

- Reinforcing steel shall be uncoated (black) ASTM A615-96a Grade 60.
- During reinforcing cage assembly, lifting, and placement of the concrete, reinforcing shall be supported in its proper position by use of mortar blocks, wire bar supports, supplementary bars or other approved devices. Such devices shall be such height and placed at sufficiently frequent intervals so as to maintain the distance between the reinforcing and the formed surface or the top surface of elements within specified tolerances of that indicated on the contract documents. Platforms for support of men and equipment during concrete placement shall be supported directly on the forms and not on the reinforcing steel.

E. PROTECTIVE COATINGS:

- All structural steel shall be galvanized after fabrication in accordance with ASTM A123. High-strength structural bolts and anchor bolts including nuts and washers shall be galvanized in accordance with ASTM A153. Galvanizing damaged during fabrication, shipping, erection or construction shall be repaired in accordance with the Specifications. Contact surfaces for structural connections shall be lightly scored by wire brushing or blasting after galvanizing and prior to assembly.

6. CONSTRUCTION:

A. CONCRETE CONSTRUCTION:

- Concrete Cover:
Concrete covers shown in the Plans do not include placement and fabrication tolerances unless shown as "Minimum Cover". See Specifications for allowable tolerances.
- Surface Finishes:
- A Class 5 Applied Finish Coating shall be applied to the inside, backside and top of the traffic barrier. See Detail this sheet.
- Concrete on the median and sidewalks shall receive a Class 4 Floor Finish except the surface shall not be grooved.
- All other concrete shall receive a Class 1 Surface Finish.

7. MISCELLANEOUS

A. UTILITIES:

Contact utility companies with equipment in the work zone prior to construction. For utilities see Roadway Plans.

B. EXISTING RAILROAD:

The existing railroad spur line is an infrequently used maintenance spur line (approximately one operation every two years year.) The Contractor shall exercise care during construction to avoid disturbing or damaging the rails, ties and ballast. The Contractor shall monitor the existing rails for movement during construction. Prior to construction and following pile driving operations, the Contractor shall survey the top of each rail (elevations and location at a minimum of 10' intervals for 75' both sides of the CL BRIDGE.)

REVISIONS

Date	By	Description	Date	By	Description

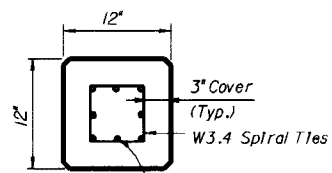
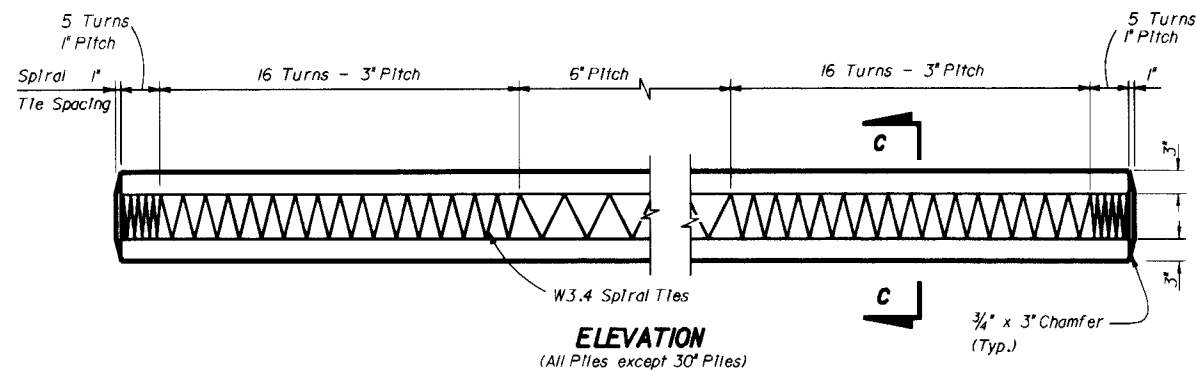
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Checked by J.W.E.	4/00
Designed by J.H.M.	4/00
Checked by G.C.P.	4/00
Approved by G.C.Patton	

ENGINEER OF RECORD:
E. C. DRIVER & ASSOCIATES, INC.
300 N. Westshore Blvd. Suite 700
Tampa, Florida 33609

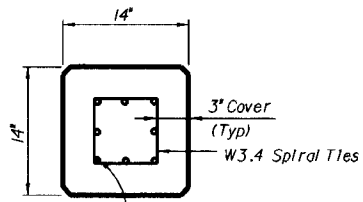


PINELLAS COUNTY, FLORIDA
DEPARTMENT OF PUBLIC WORKS

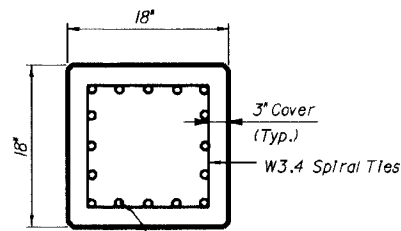
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PROJECT NAME:	EAST-WEST CONNECTOR ROAD PHASE II



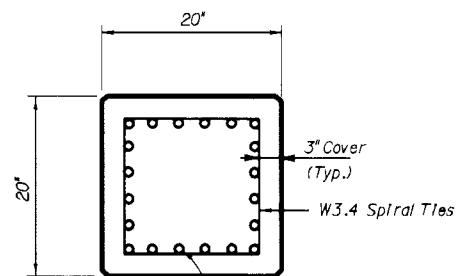
- ALTERNATE STRAND PATTERN** ***
- 8 ~ 7/16" ϕ , Grade 270 L.R.S. at 21,700* each
 - 8 ~ 1/2" ϕ , Grade 250 S.R. at 24,100* each
 - 12 ~ 3/8" ϕ , Grade 270 L.R.S. at 14,800* each
 - 12 ~ 3/8" ϕ , Grade 270 S.R. at 15,600* each



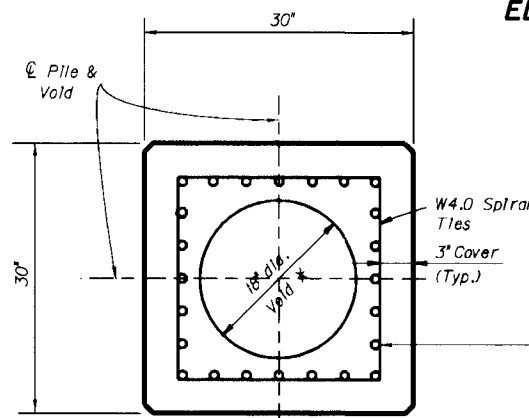
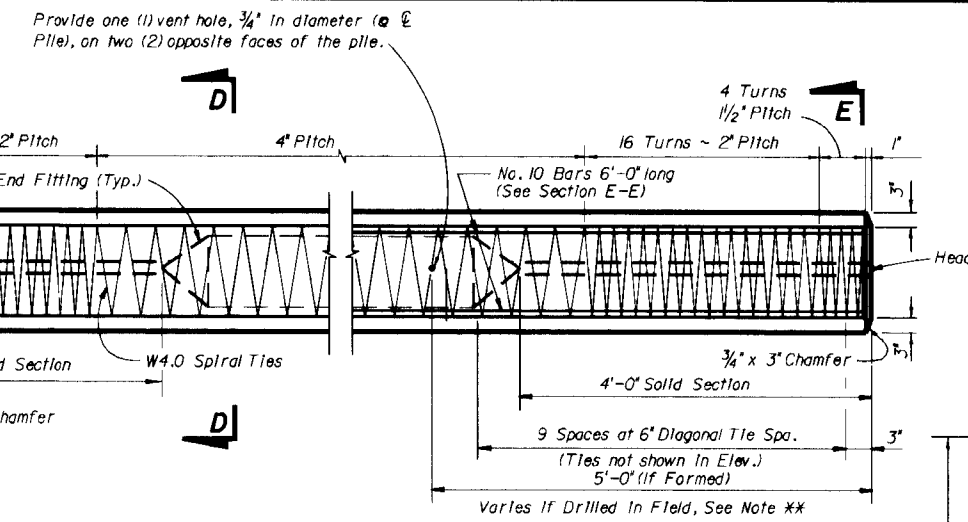
- ALTERNATE STRAND PATTERN** ***
- 8 ~ 1/2" ϕ , Grade 270 (Spec.) L.R.S. at 30,000* each
 - 8 ~ 1/2" ϕ , Grade 270 (Spec.) S.R. at 31,570* each
 - 8 ~ 1/2" ϕ , Grade 270 L.R.S. at 29,500* each
 - 12 ~ 7/16" ϕ , Grade 270 S.R. at 21,200* each
 - 12 ~ 1/2" ϕ , Grade 250 S.R. at 22,600* each
 - 16 ~ 3/8" ϕ , Grade 270 S.R. at 15,070* each



- ALTERNATE STRAND PATTERN** ***
- 12 ~ 1/2" ϕ , Grade 270 (Spec.) L.R.S. at 32,400* each
 - 12 ~ 3/16" ϕ , Grade 270 S.R. at 35,100* each
 - 16 ~ 1/2" ϕ , Grade 270 S.R. at 26,800* each
 - 20 ~ 7/16" ϕ , Grade 270 L.R.S. at 20,000* each
 - 20 ~ 7/16" ϕ , Grade 270 S.R. at 21,100* each
 - 24 ~ 3/8" ϕ , Grade 270 L.R.S. at 16,300* each



- ALTERNATE STRAND PATTERN** ***
- 16 ~ 1/2" ϕ , Grade 270 L.R.S. at 30,000* each
 - 16 ~ 1/2" ϕ , Grade 270 (Spec.) S.R. at 31,570* each
 - 20 ~ 1/2" ϕ , Grade 270 S.R. at 26,500* each
 - 24 ~ 7/16" ϕ , Grade 270 L.R.S. at 20,500* each
 - 24 ~ 7/16" ϕ , Grade 270 S.R. at 21,740* each

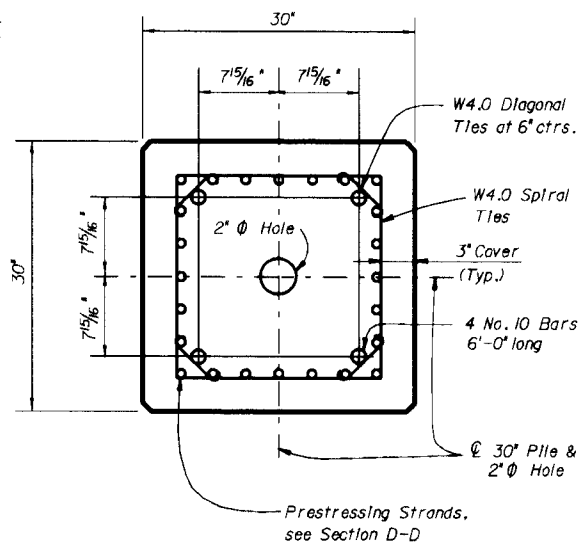


* Omit Void at Ends, see Elevation View

DETAIL 'A'

2" ϕ Hole thru solid portion of Pile. See Note **

- ALTERNATE STRAND PATTERN** ***
- 20 ~ 3/16" ϕ , Grade 270 (Spec.) L.R.S. at 38,600* each
 - 20 ~ 3/16" ϕ , Grade 270 L.R.S. at 38,880* each
 - 24 ~ 1/2" ϕ , Grade 270 (Spec.) L.R.S. at 32,300* each
 - 24 ~ 3/16" ϕ , Grade 270 S.R. at 35,000* each
 - 24 ~ 3/16" ϕ , Grade 270 (Spec.) S.R. at 35,200* each
 - 28 ~ 1/2" ϕ , Grade 270 L.R.S. at 28,100* each
 - 28 ~ 1/2" ϕ , Grade 270 (Spec.) S.R. at 30,200* each



**** NOTE:**

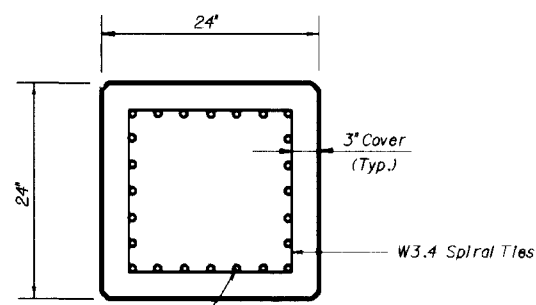
The 18" ϕ Void in the pile shall be positively vented to water or air after the final pile installation. If the 3/4" ϕ vents are included in the pile cut-off section, two (2) new holes, 3/4" in diameter, shall be drilled on two (2) opposite faces of the pile below the bottom of substructure elevation. If the pile void can not be vented directly to water or air, then venting shall be provided by the use of a 1" ϕ P.V.C. conduit through the 2" ϕ hole(s) or the 18" ϕ void to the outside. This might involve venting through a substructure cap or column. Voids between segments of spliced piles shall be connected by 2" ϕ hole(s). See Detail 'A'.

***** NOTE:**

Any of the given Alternate Strand Patterns may be utilized. The strands shall be located as follows: place one strand at each corner and place the remaining strands equally spaced between the corner strands. The Total strand pattern shall be concentric with the nominal concrete section of the pile.

NOTE:

CONTRACTOR OPTION: The 30" pile may be cast SOLID by omitting the 18" void, the 2" holes, and the 3/4" vent holes. In this event, the Contractor shall submit for approval calculations and a proposed strand configuration that provide net prestressing after losses equal to 1000 psi.



- ALTERNATE STRAND PATTERN** ***
- 20 ~ 1/2" ϕ , Grade 270 (Spec.) L.R.S. at 33,820* each
 - 20 ~ 3/16" ϕ , Grade 270, S.R. 270 at 36,290* each
 - 20 ~ 3/16" ϕ , Grade 270 (Spec.) S.R. at 37,050* each
 - 24 ~ 1/2" ϕ , Grade 270 L.R.S. at 29,000* each
 - 24 ~ 1/2" ϕ , Grade 270 (Spec.) S.R. at 31,570* each

REVISIONS

Date	By	Description	Date	By	Description

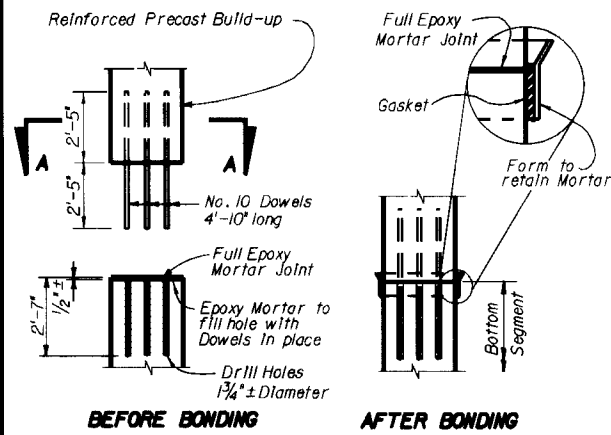
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J.H.M.	J.W.E.	J.H.M.	J.W.E.	G.C. Patton

ENGINEER OF RECORD:
E. C. DRIVER & ASSOCIATES, INC.
500 N. Westshore Blvd. Suite 700
Tampa, Florida 33609



PINELLAS COUNTY, FLORIDA
DEPARTMENT OF PUBLIC WORKS

12", 14", 18", 20", 24", & 30" PRESTRESSED CONCRETE PILES - SHEET 2 OF 2
EAST-WEST CONNECTOR ROAD PHASE II



NOTE: Dowels shown for 24" Pile. See Sect. A-A for spacing and number of Dowels for each Pile.

REINFORCED PRECAST SPLICES

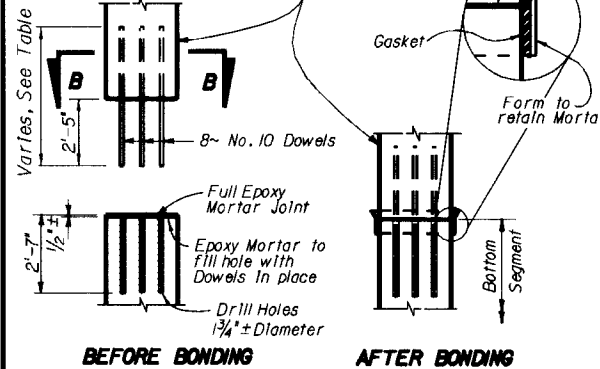
(Extensions 2' Min. but less than 5') (Not Drivable)

NOTE: The reinforced precast Build-up shall conform with the Specifications and Section A-A. Spiral ties pitch shall be 6" Max.

TABLE OF BONDED SPICE DATA		
Drivable Splice	Min. Splice Length	No. 10 Dowel Length
YES	10'-0"	7'-5"
NO *	5'-0"	4'-10"

* For Splices less than 5'-0" (not Drivable), use the Reinforced Precast Splice.

Prestressed Precast Build-up according to Specifications & Drawing No. 2 of 2.

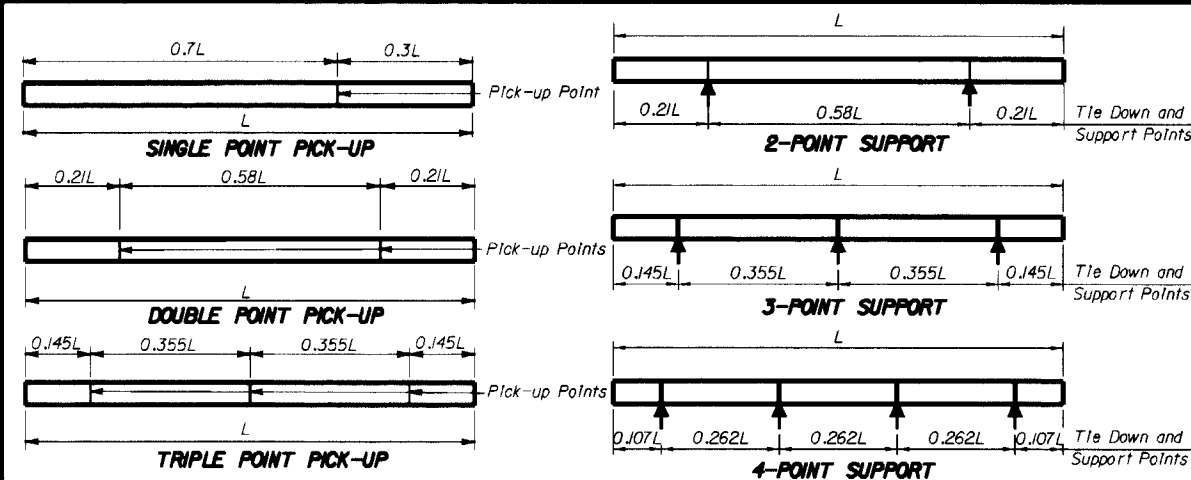


NOTE: Dowels shown for 24" Pile. See SECTION B-B for spacing & Number of Dowels for each Pile.

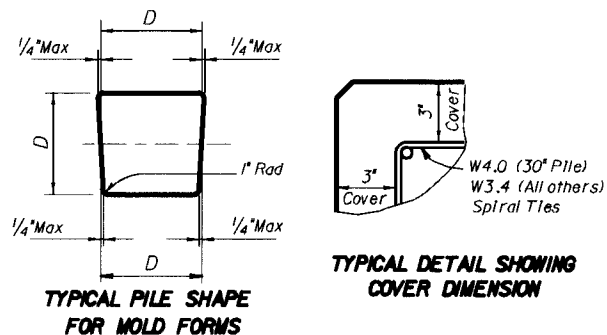
PRESTRESSED PRECAST SPLICES

(Extensions 5' or longer)

DETAILS FOR REINFORCED PRECAST & PRESTRESSED PRECAST PILE SPLICES

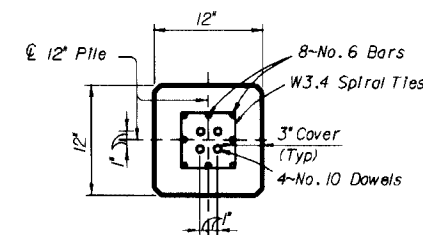


PILE SIZE	MAX. LENGTH 'L' FOR PICK-UP		
	SINGLE POINT	DOUBLE POINT	TRIPLE POINT
12"	50'	70'	L > 70'
14"	55'	75'	L > 75'
18"	60'	90'	L > 90'
20"	65'	95'	L > 95'
24"	70'	100'	L > 100'
30"	90'	125'	L > 125'



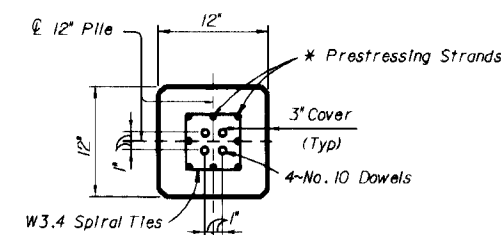
TYPICAL DETAIL SHOWING COVER DIMENSION

* For actual prestressing strand pattern, see Drawing 2 of 2.



SECTION A-A

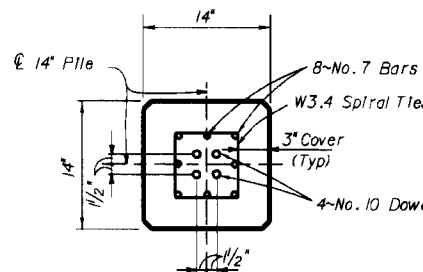
(See Reinf. Precast Splice Detail)



SECTION B-B

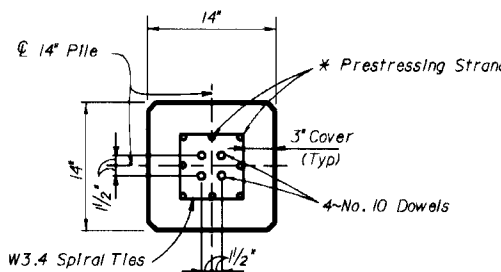
(See Prstr. Precast Splice Detail)

12" PILE



SECTION A-A

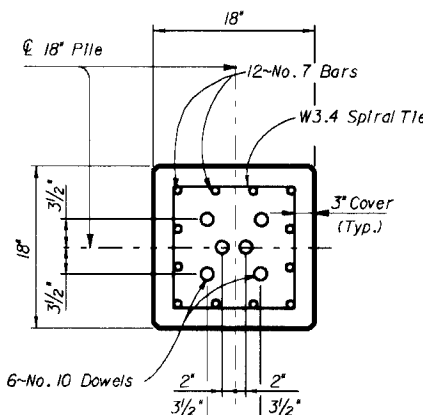
(See Reinf. Precast Splice Detail)



SECTION B-B

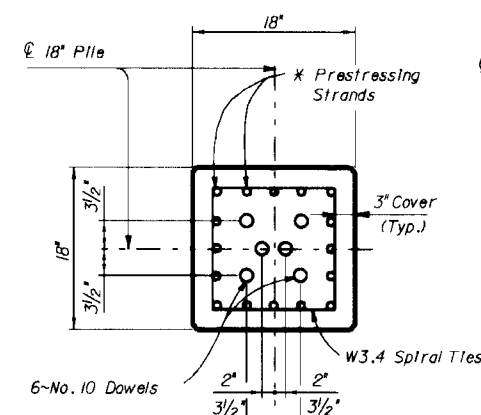
(See Prstr. Precast Splice Detail)

14" PILE



SECTION A-A

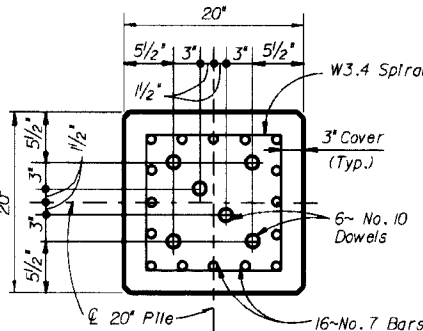
(See Reinf. Precast Splice Detail)



SECTION B-B

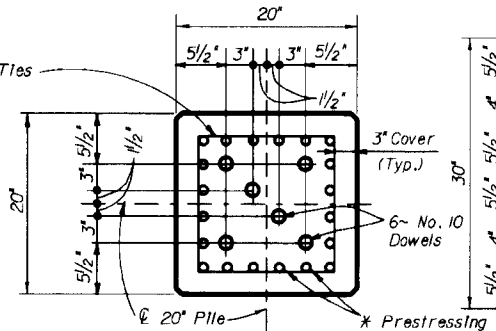
(See Prstr. Precast Splice Detail)

18" PILE



SECTION A-A

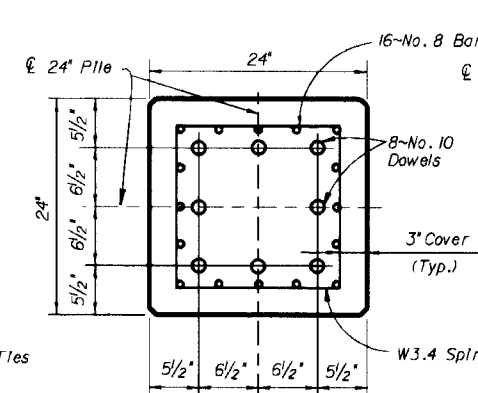
(See Reinf. Precast Splice Detail)



SECTION B-B

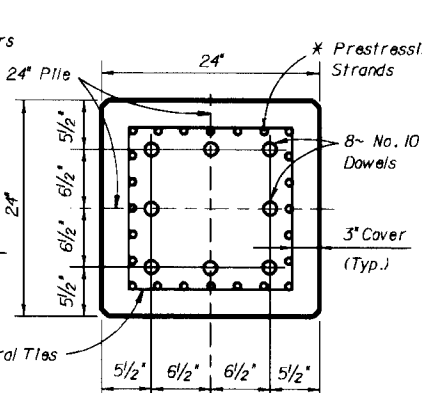
(See Prstr. Precast Splice Detail)

20" PILE



SECTION A-A

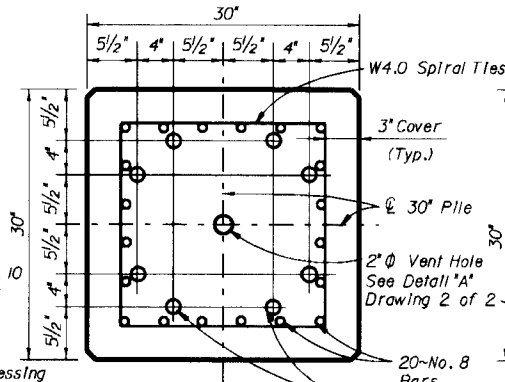
(See Reinf. Precast Splice Detail)



SECTION B-B

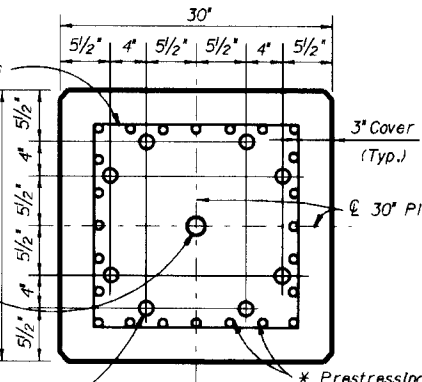
(See Prstr. Precast Splice Detail)

24" PILE



SECTION A-A

(See Reinf. Precast Splice Detail)



SECTION B-B

(See Prstr. Precast Splice Detail)

30" PILE

PILE NOTES

SPIRAL TIES: Each wrap of spirals shall be tied to at least two corner strands or bars. One turn required for spiral splices. Spirals shall be manufactured from cold-drawn steel wire meeting the requirements of ASTM A 82.

PILE CUT OFF: Piles required to be cut off shall be sawcut at the pile cut off elevation shown on the plans with an abrasive saw. Unless otherwise noted on the plans, the cut shall be made to the depth into the pile necessary to cleanly cut through the prestressing strands.

CONCRETE CLASS: Concrete for all piles shall be Class V (Special). Class V (Special) Concrete shall conform to all requirements for Class V Concrete except for the 28-day strength as noted below.

CONCRETE STRENGTH: The cylinder strength shall be 6,000 p.s.i. minimum at 28 days and 4,000 p.s.i. minimum at transfer of the Prestressing Force.

SPLICED PILES: Piles may be spliced in accordance with Section 455-5J2 of the standard specifications. Precast buildups shall be prestressed or reinforced according to pile details for the 'head' section of the pile shown on this Standard. Drivable spliced piles may be driven after splice is two days old.

PICK-UP POINTS: Piles shall be marked at the pick-up points to indicate proper points for attaching handling lines.

STORAGE AND TRANSPORTATION: Piles shall be supported on adequate dunnage both in the precasting yard and at the jobsite and shall be supported and tied down during transit in accordance with the following schedule:

Type Pickup Required by Pile Length	Type Storage and Transportation Support Detail
Single or Double Triple	2, 3 or 4 Point Support 3 or 4 Point Support

REINFORCING STEEL: All Reinforcing Steel except spiral ties shall be ASTM A 615, Grade 60.

STRAND NOMENCLATURE:

S.R. = Stress Relieved Strand

L.R.S. = Low-Relaxation Strand

1/2" ϕ (Spec.): $A_s = 0.167 \text{ in}^2$

3/8" ϕ (Spec.): $A_s = 0.196 \text{ in}^2$

15-MAY-2000 14:57 F:\0335\gen\000_1a\2.dgn NONE
\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$SYTIME\$\$\$\$\$

REVISIONS

Date	By	Description	Date	By	Description

Drawn by	Checked by	Designed by	Checked by	Approved by
J.H.M.	J.W.E.	J.H.M.	J.W.E.	G.C. Patton

ENGINEER OF RECORD:
E. C. DRIVER & ASSOCIATES, INC.
500 N. Wenshore Blvd. Suite 700
Tampa, Florida 33609

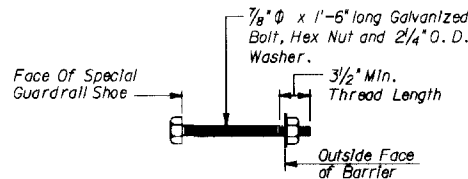
LOGO:

ECDriver

PINELLAS COUNTY, FLORIDA
DEPARTMENT OF PUBLIC WORKS

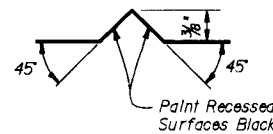
12", 14", 18", 20", 24", & 30" PRESTRESSED CONCRETE PILES - SHEET 1 OF 2
PROJECT NAME: **EAST-WEST CONNECTOR ROAD PHASE II**

ROADWAY CROSS-SLOPE	LOW GUTTER		HIGH GUTTER	
	Ø1	Ø2	Ø1	Ø2
0% to 2%	90"	90"	90"	90"
2% to 6%	93"	87"	87"	93"
6% to 10%	96"	84"	84"	96"

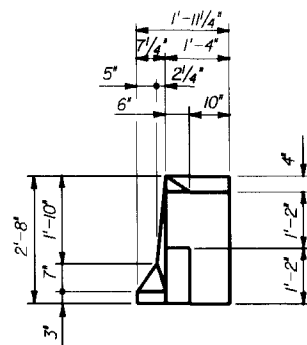


BOLT DETAIL

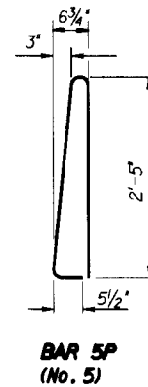
NOTE: The Cost of Bolts Is to be Included In the Contract Unit Price for Guardrail



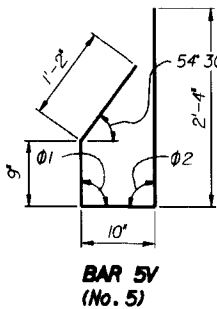
**SECTION THRU RECESSED 'V' GROOVE
TO FORM INSCRIBED LETTERS
AND FIGURES**



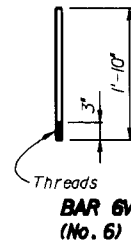
VIEW B-B



**BAR 5P
(No. 5)**



**BAR 5V
(No. 5)**



**BAR 6V
(No. 6)**

NOTES:

- Hot Dip Galvanize Bar per ASTM A153.
- Provide two sets of heavy galvanized hex nuts and washers with each Bar 6R.

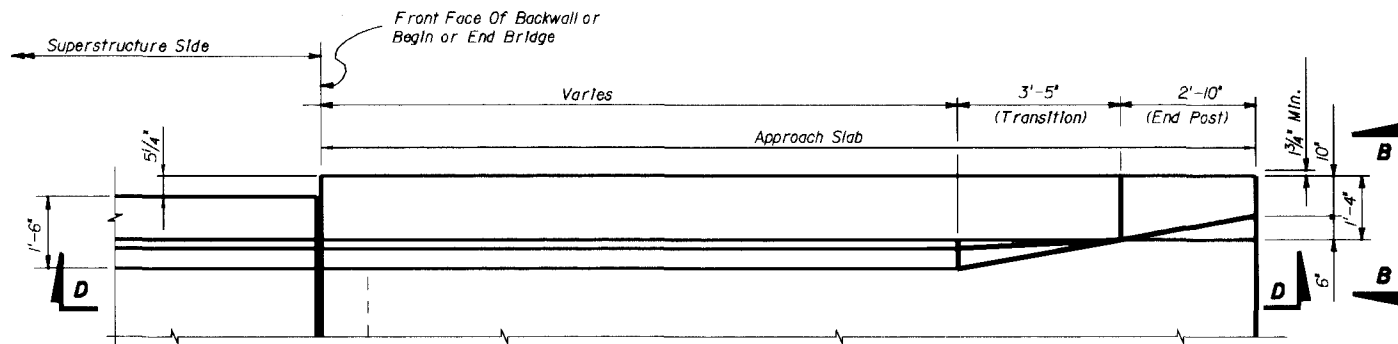
BENDING DIAGRAMS

BAR BENDING NOTES

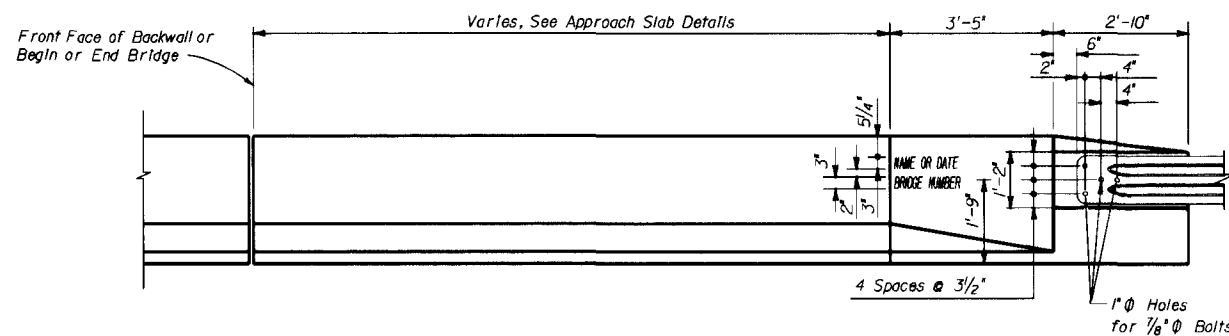
- All bar dimensions in the bending diagrams are out to out.
- Bars 5P and 5V shall be bent around a pin diameter = 2 1/2".
- The 9" and the 2'-4" vertical dimensions shown for Bar 5V are based on a bridge slab 8" thick or greater and without raised sidewalk or wearing surface. If the slab thickness is less than 8" decrease these dimensions by an amount equal to the difference in the thicknesses; and if a wearing surface or a raised sidewalk is to be provided, increase the dimensions by an amount equal to the wearing surface thickness or sidewalk thickness.
- Reinforcement for Barrier on Retaining Wall shall be the same as detailed above for a 8" slab with Ø1 = Ø2 = 90°.

TYPICAL TRAFFIC RAILING QUANTITIES

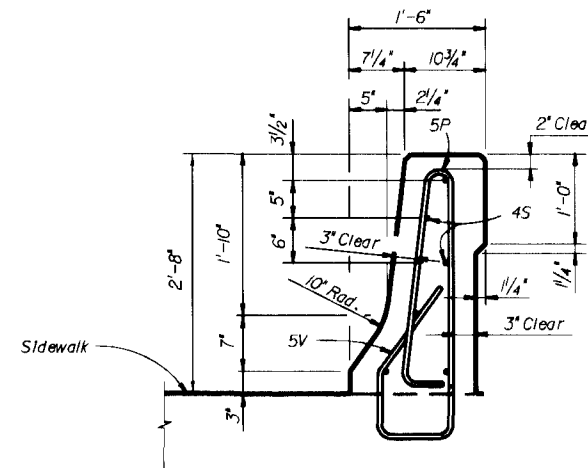
CONCRETE: 0.103 c.y. per linear foot
REINFORCING STEEL: 20.49 lbs per linear foot
(Above quantities are based on 8" slab and 2% cross-slope).



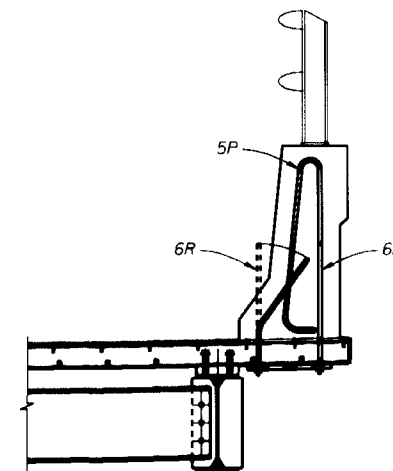
PLAN



VIEW D-D



**TYPICAL SECTION THRU TRAFFIC RAILING
AT APPROACH SLAB**



**TYPICAL SECTION THRU TRAFFIC RAILING
ON BRIDGE**

NOTE:

All dimensions similar to Typical Section thru Traffic Railing at Approach Slab.

REINFORCING STEEL NOTES

Place longitudinal steel in bottom of slab as shown above to facilitate tying bars 5V. Do not add reinforcing steel for tie purposes.

All vertical reinforcing steel in Traffic Railing shall be No. 5 Bars spaced at 8" c.c. and all longitudinal reinforcing steel shall be No. 4 Bars. At all open joints all reinforcing shall have 2" minimum cover. At all construction joints Bars 4S (No. 4) may be continuous or spliced. All splices in Bars 4S shall be 1'-4" minimum.

TRAFFIC RAILING NOTES

CONCRETE AND REINFORCING STEEL: See General Notes.

PAYMENT: Traffic Railing on Bridges shall be paid for per linear foot (Item No. 400-148-1), which shall include all Concrete and Reinforcing Steel. Traffic Railing shall be measured along the centerline of the top surface of the concrete barrier.

MARKERS: Markers recording the elevation shall be placed on top of the Traffic Railing at End Bents. On bridges longer than 100 ft, one marker shall be placed at each end of the bridge. On bridges 100 ft or less, one marker shall be placed at one end of the bridge only. Markers are to be furnished by the Florida Department of Transportation and installed by the Contractor. The cost of installing the markers shall be included in the Contract Unit Price for Traffic Railing (Barrier).

TRAFFIC RAIL CONSTRUCTION: The contractor may construct the railing by the use of stationary removable forms or by the use of slip forms without altering the rail dimensions shown above.

SUPERELEVATED BRIDGES: At the option of the Contractor, Traffic Railing and End Bent Wing Posts on super-elevated bridges, may be constructed perpendicular to the roadway surface. The cost of modifications shall be at the Contractor's expense.

BOLTS: Bolts, Nuts, and Washers shall be hot dip galvanized in accordance with ASTM A153.

NAME AND BRIDGE NUMBER: The Name and Bridge Number to be placed on the Traffic Railing shall be seen on the driver's right when approaching bridge. The date is to be placed on the driver's left when approaching the bridge. The date shall be the year the bridge is constructed. Black plastic letters and figures 3" in height, as approved by the Engineer, may be used in lieu of letters and figures formed by 3/8" V-Grooves. V-Grooves shall be formed by preformed letters and figures.

REVISIONS

Date	By	Description	Date	By	Description

Name	Date
Drawn by J.H.M.	4/00
Checked by J.W.E.	5/00
Designed by G.C.P.	4/00
Checked by J.W.E.	5/00
Approved by G.C.Patton	

ENGINEER OF RECORD:
E. C. DRIVER & ASSOCIATES, INC.
500 N. Westshore Blvd. Suite 700
Tampa, Florida 33609

LOGO:



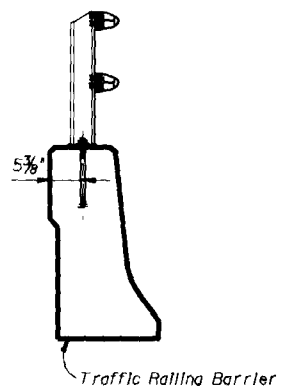
PINELLAS COUNTY, FLORIDA
DEPARTMENT OF PUBLIC WORKS

SHEET TITLE:

TRAFFIC RAILING BARRIER

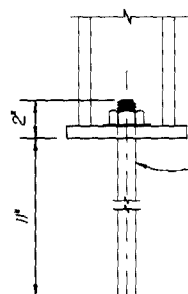
PROJECT NAME:

**EAST-WEST CONNECTOR ROAD
PHASE II**

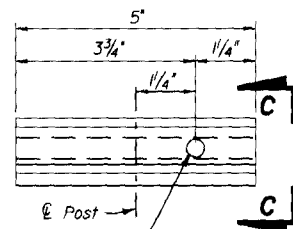


SECTION F-F

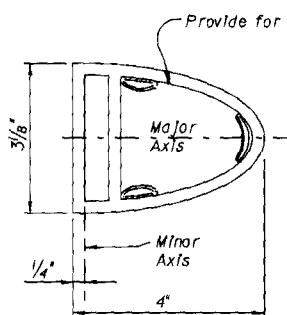
NOTE: Rail shall be continuous over a minimum of three posts before splicing.



DETAIL 'A'



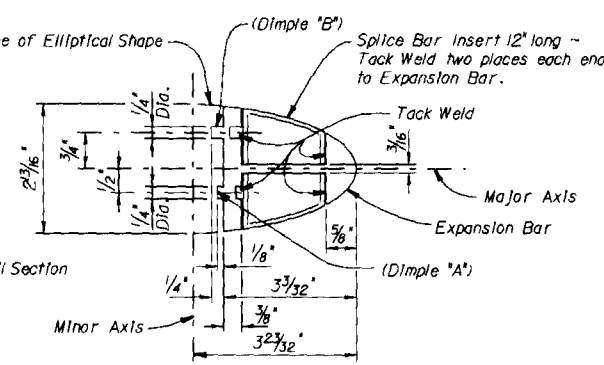
RAIL CLAMP BAR



RAIL END CAP



BICYCLE BARRIER RAIL



SECTION D-D

PAYMENT: Aluminum Bicycle Railing shall be paid for per linear foot under Concrete Handrail (Parapet Aluminum). This item includes all components of the metal rail and anchor bolts. Railing shall be measured along the centerline of the top surface of the traffic railing barrier.

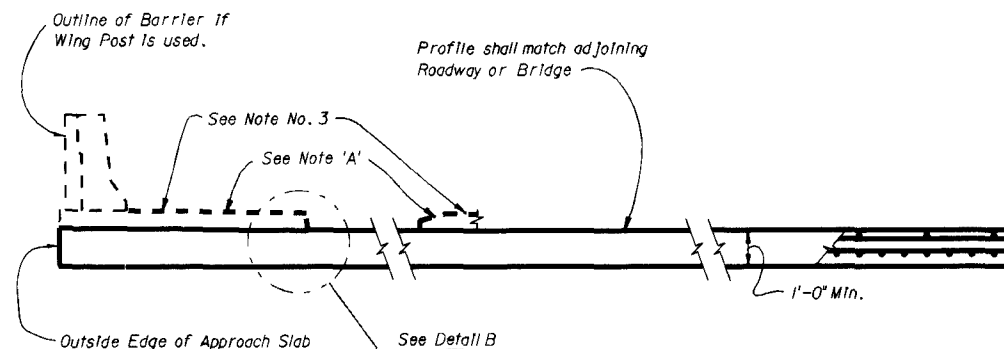
SHOP DRAWINGS: Complete details and description of materials of the proposed metal rail shall be submitted by the contractor for the Engineer's approval prior to fabrication.

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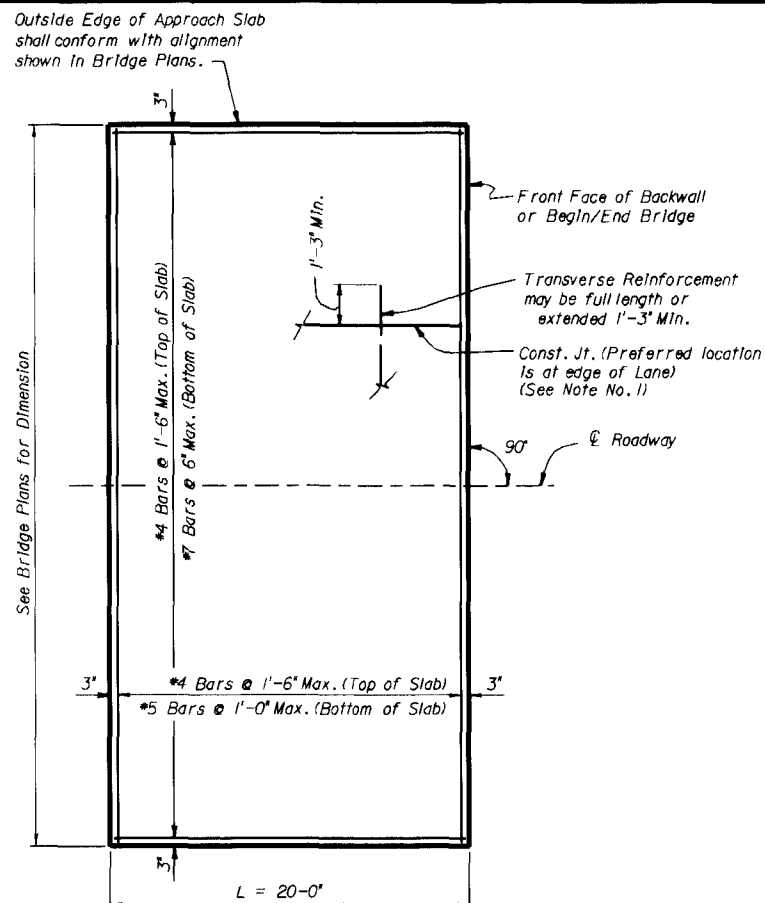
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Checked by	J.W.E.	5/00
Designed by	G.C.P.	5/00
Checked by	J.W.E.	5/00
Approved by	G.C.Patton	

LOGO: **ECDriver**

**EAST-WEST CONNECTOR ROAD
PHASE II**



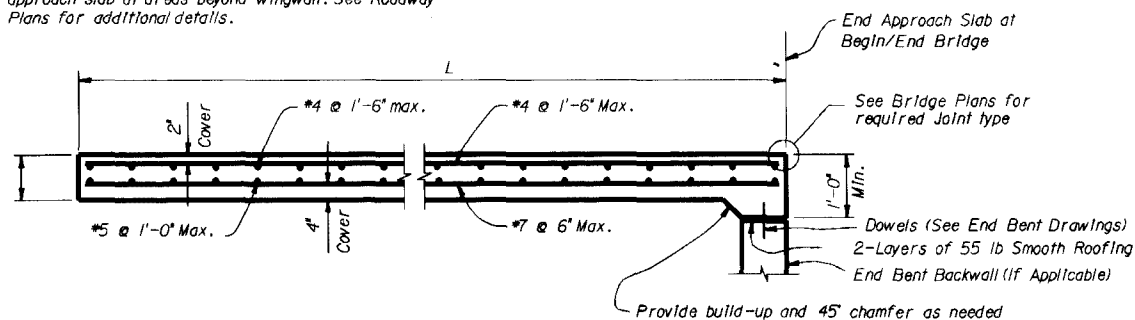
TRANSVERSE SECTION



CASE I

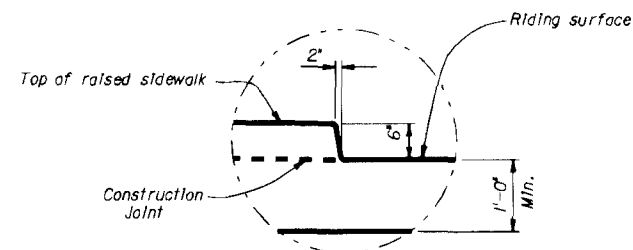
(See Note No. 2)

NOTE 'A':
Raised Sidewalks and raised median shall be built using plain (unreinforced) concrete. The sidewalk width shall be extended to the outside edge of approach slab at areas beyond wingwall. See Roadway Plans for additional details.



LONGITUDINAL SECTION THRU SLAB

NOTE:
Barriers, including reinforcement, shall comply with applicable standard drawings.



DETAIL B

GENERAL NOTES

GENERAL SPECIFICATIONS: Florida Department of Transportation Standard Specifications

DESIGN SPECIFICATIONS: Standard Specifications for Highway Bridges (AASHTO).

DESIGN LOADING: HS20

CONCRETE: Class II

REINFORCING STEEL: ASTM A615, Grade 60.

SURFACE TREATMENT: Groove the riding surface of Approach Slab.

NOTE No. 1: When a longitudinal joint is necessary or allowed by the Engineer, the transverse steel shall be extended as shown.

NOTE No. 2: The plan view for case CASE I applies when the skew angle = 0.

NOTE No. 3: If the Bridge or Roadway Plans indicate a raised sidewalk(s) and/or any type of railing on the approach slab, these shall be provided as shown.

*** ESTIMATED QUANTITIES**

ITEM	UNIT	QUANTITY
Concrete	C.Y.	0.333
Reinforcing Steel	LB.	54.200

* Quantities shown are per square yard (plan area), and do not include items placed on the slab such as: sidewalks, raised median and barriers.

NOTE: Total area of Approach Slab is given in the Bridge Plans.

REVISIONS

Date	By	Description	Date	By	Description

Drawn by	Checked by	Designed by	Checked by	Approved by
J.H.M.	J.W.E.	J.W.E.	G.C.P.	G.C.Patton
4/00	5/00	4/00	5/00	

ENGINEER OF RECORD:
E. C. DRIVER & ASSOCIATES, INC.
500 N. Westshore Blvd. Suite 700
Tampa, Florida 33609

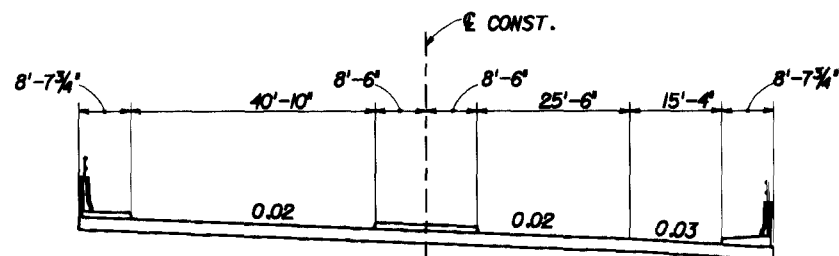
LOGO:
ECDriver
ENGINEERING & DESIGN

PINELLAS COUNTY, FLORIDA
DEPARTMENT OF PUBLIC WORKS

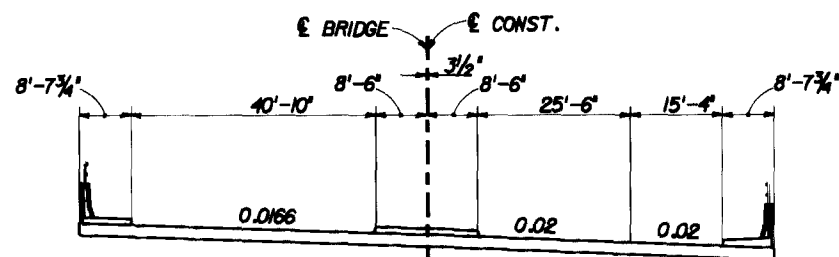
APPROACH SLAB DETAILS

**EAST-WEST CONNECTOR ROAD
PHASE II**

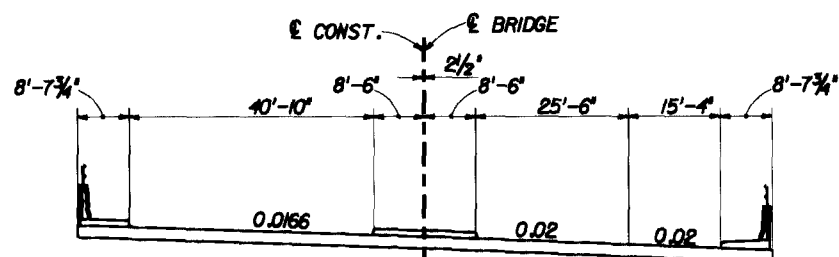
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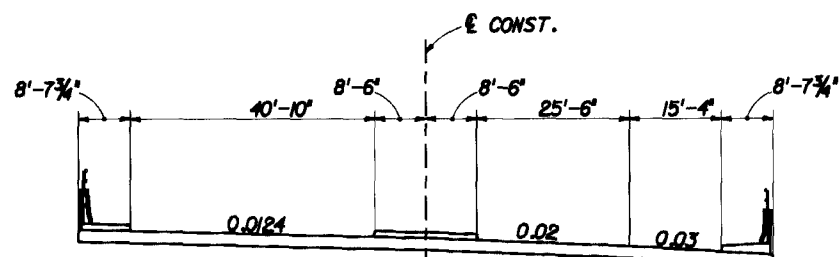
APPROACH SLAB SECTION
STA. 136+73.290
N.T.S.



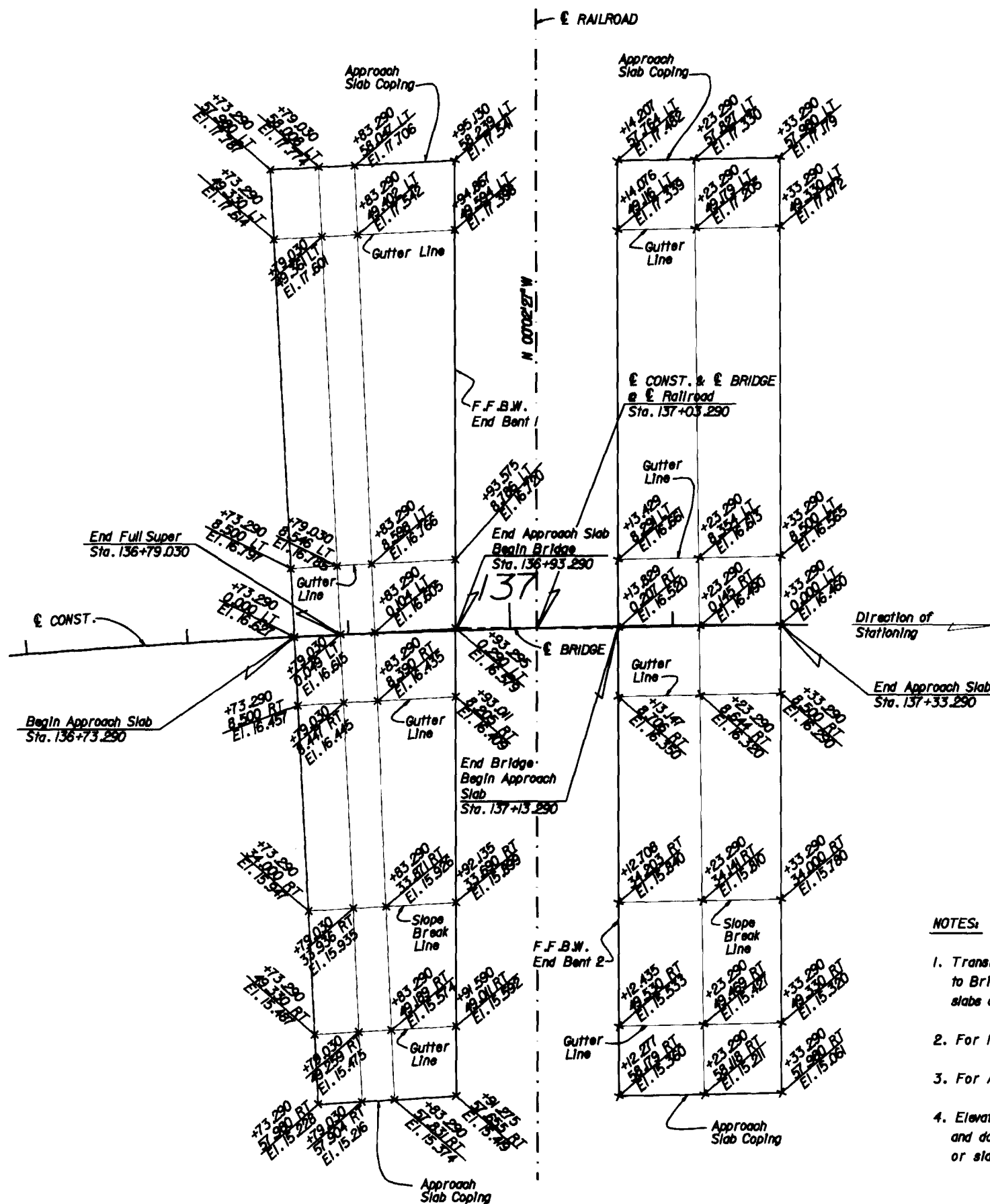
APPROACH SLAB SECTION
STA. 136+93.290
N.T.S.



APPROACH SLAB SECTION
STA. 137+13.290
N.T.S.



APPROACH SLAB SECTION
STA. 137+33.290
N.T.S.



NOTES:

1. Transition approach slabs from Roadway Typical Section to Bridge Typical Section over the length of the approach slabs as shown.
2. For horizontal and vertical curve data, see Roadway Plans.
3. For Approach Slab Details, see Sheet B-6.
4. Elevations shown are at the top of approach slab and do not account for thickness of the median or sidewalk.

REVISIONS

Date	By	Description	Date	By	Description

Drawn by	T.D.E.	5/00
Checked by	J.W.E.	5/00
Designed by	T.D.E.	5/00
Checked by	J.W.E.	5/00
Approved by	G.C. Patton	

ENGINEER OF RECORD:

E. C. DRIVER & ASSOCIATES, INC.
500 N. Westshore Blvd. Suite 700
Tampa, Florida 33609

LOGO:



PINELLAS COUNTY, FLORIDA

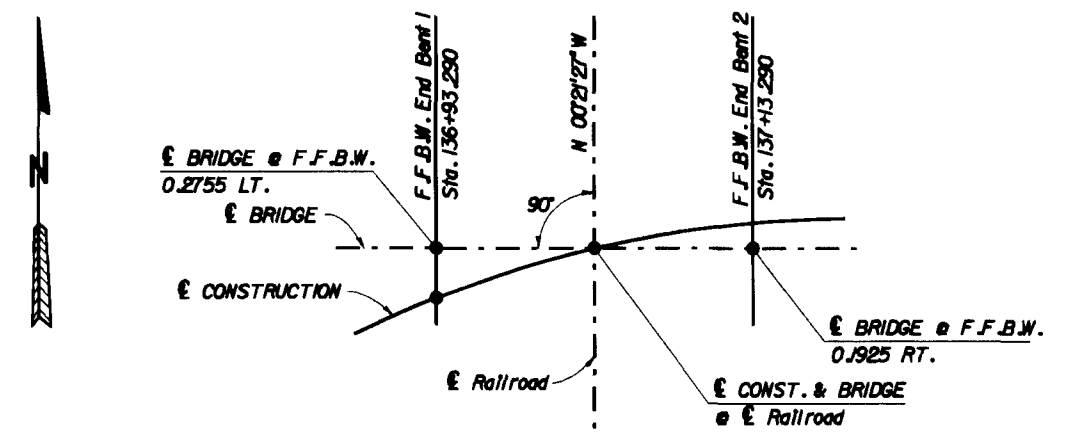
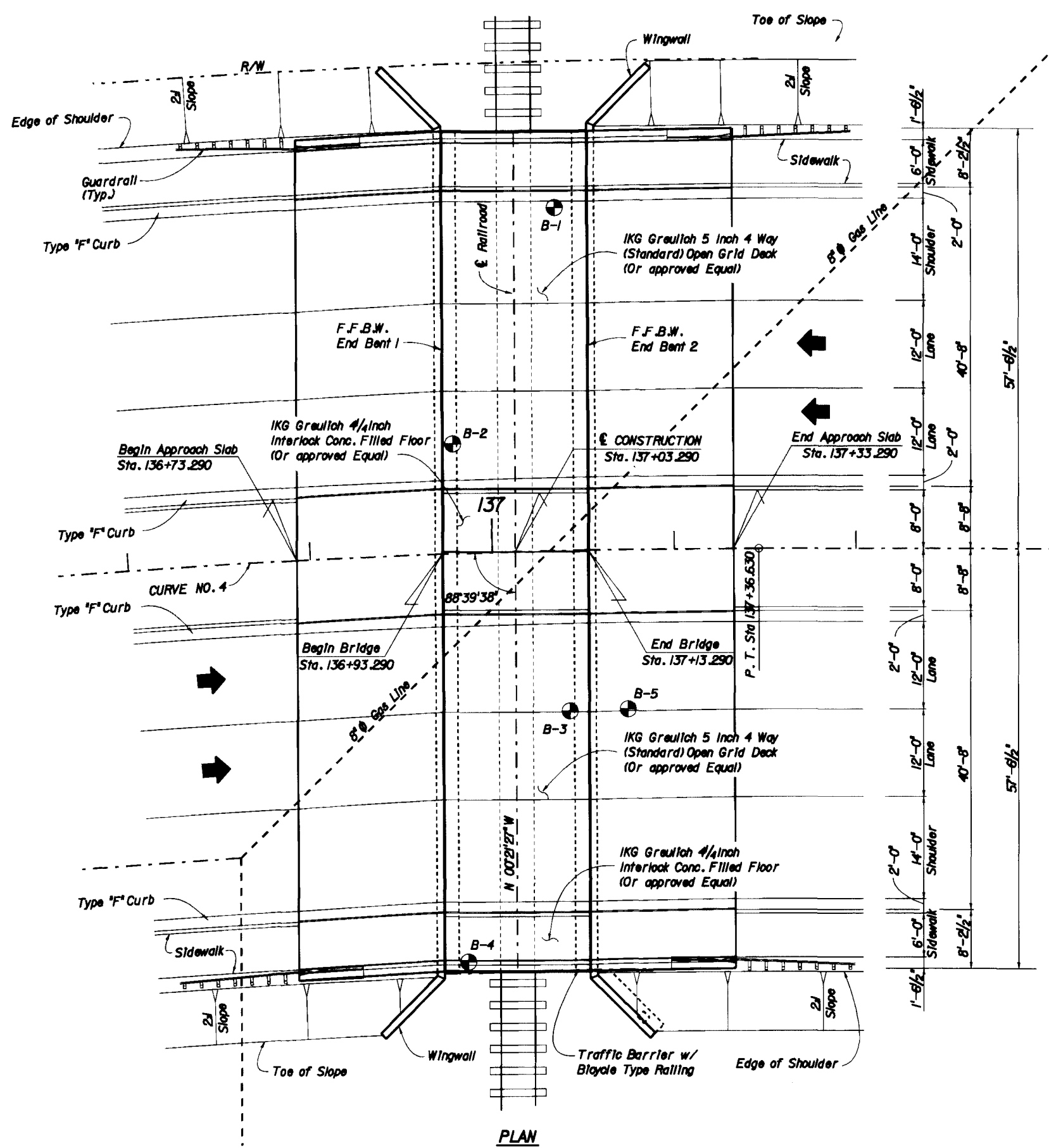
DEPARTMENT OF PUBLIC WORKS

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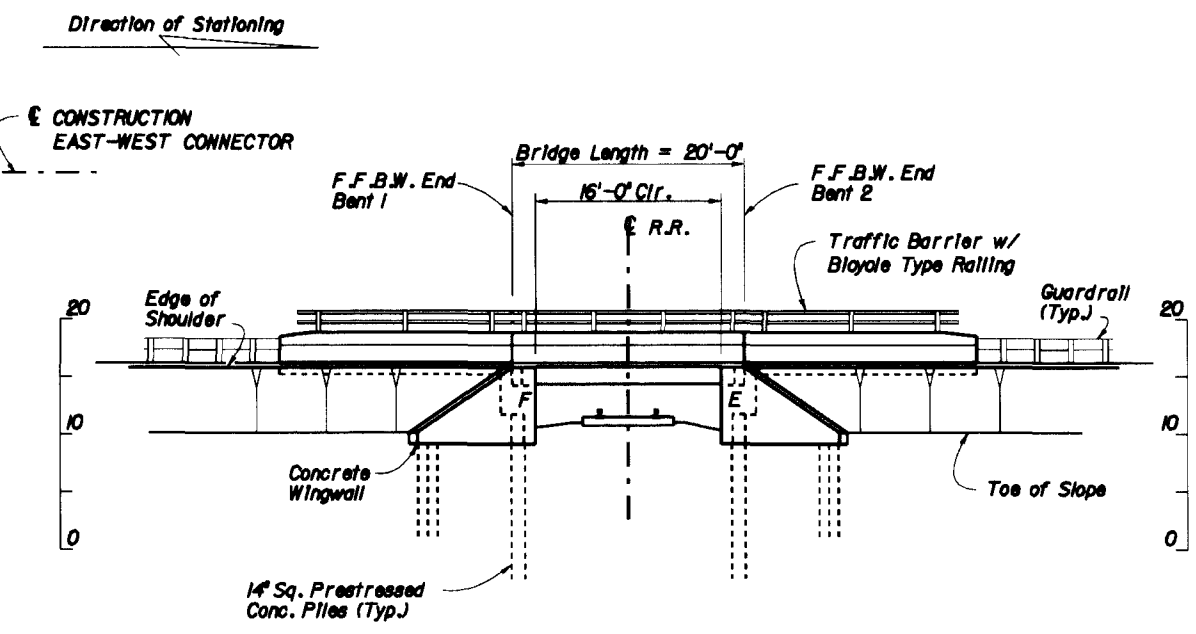
APPROACH SLAB GEOMETRY

PROJECT NAME:

EAST-WEST CONNECTOR ROAD
PHASE II



BRIDGE GEOMETRY



ELEVATION

NOTES:
1. For Horizontal and Vertical Curve Data, see Roadway Plans.

REVISIONS

Date	By	Description	Date	By	Description

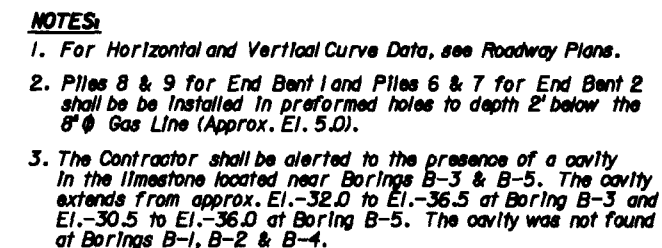
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Checked by	J.W.E.	5/00
Designed by	J.W.E.	4/00
Checked by	G.C.P.	5/00
Approved by	G.C.Patton	

ENGINEER OF RECORD:
E. C. DRIVER & ASSOCIATES, INC.
500 N. Westshore Blvd. Suite 700
Tampa, Florida 33609

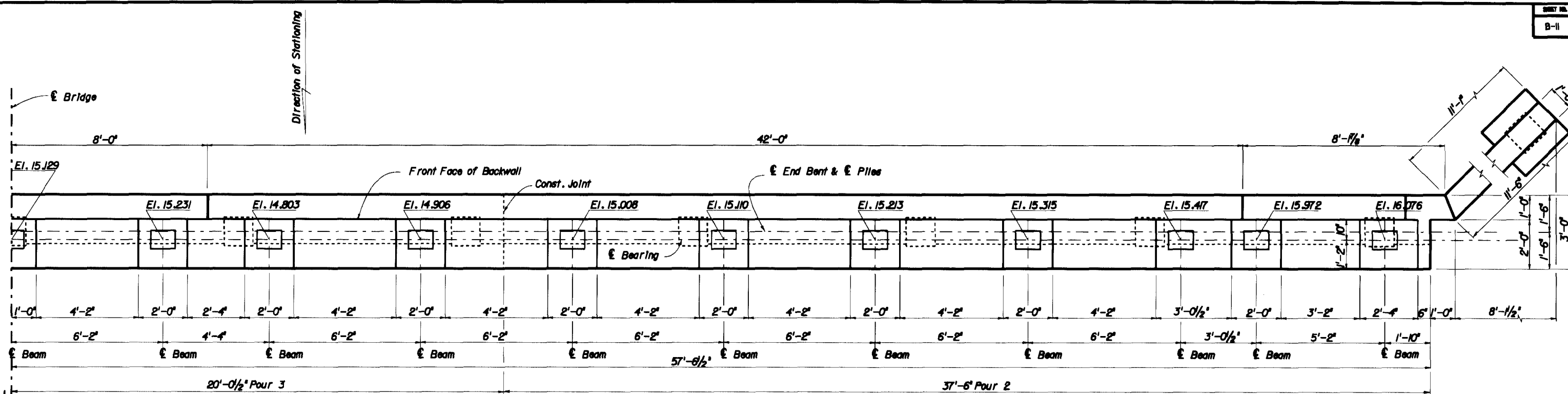


PINELLAS COUNTY, FLORIDA
DEPARTMENT OF PUBLIC WORKS

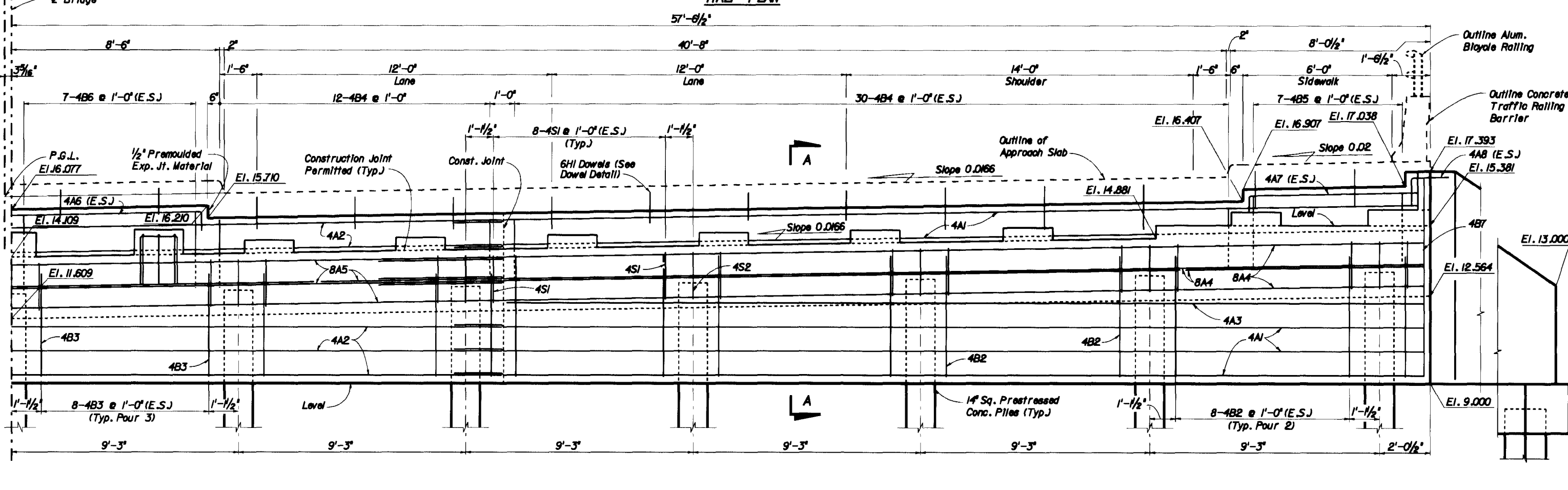
GENERAL PLAN & ELEVATION
EAST-WEST CONNECTOR ROAD
PHASE II



PROJECT TITLE	FILE LAYOUT & INSTALLATION DATA
PROJECT NAME	EAST-WEST CONNECTOR ROAD PHASE II

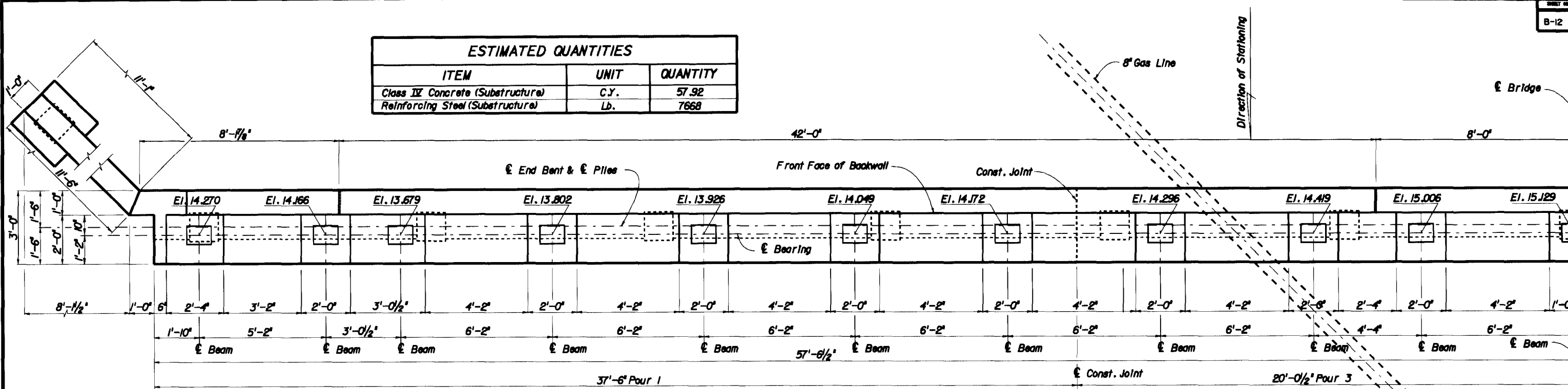


NOTES:
1. For Section A-A, see Sheet B-16.



REVISIONS				ENGINEER OF RECORD:			PINELLAS COUNTY, FLORIDA DEPARTMENT OF PUBLIC WORKS	SHEET TITLE:	
Date	By	Description		Drawn by	Date			END BENT 1 - NORTH HALF	
				Checked by				EAST-WEST CONNECTOR ROAD	
				Designed by				PHASE II	
				Approved by					

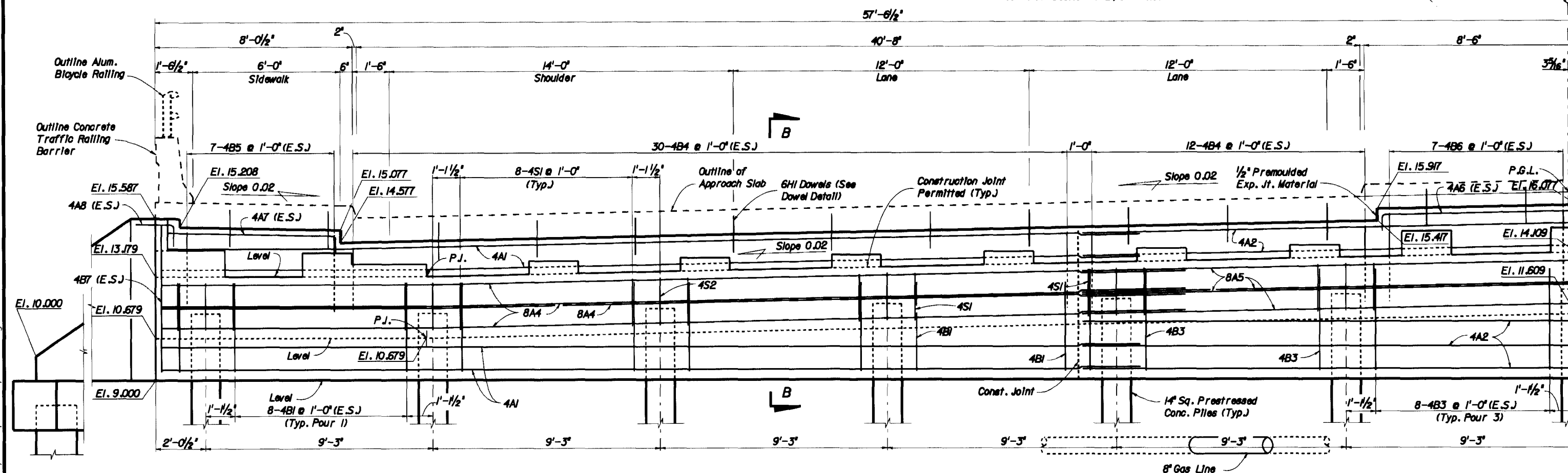
ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
Class IV Concrete (Substructure)	C.Y.	57.92
Reinforcing Steel (Substructure)	Lb.	7668



HALF PLAN

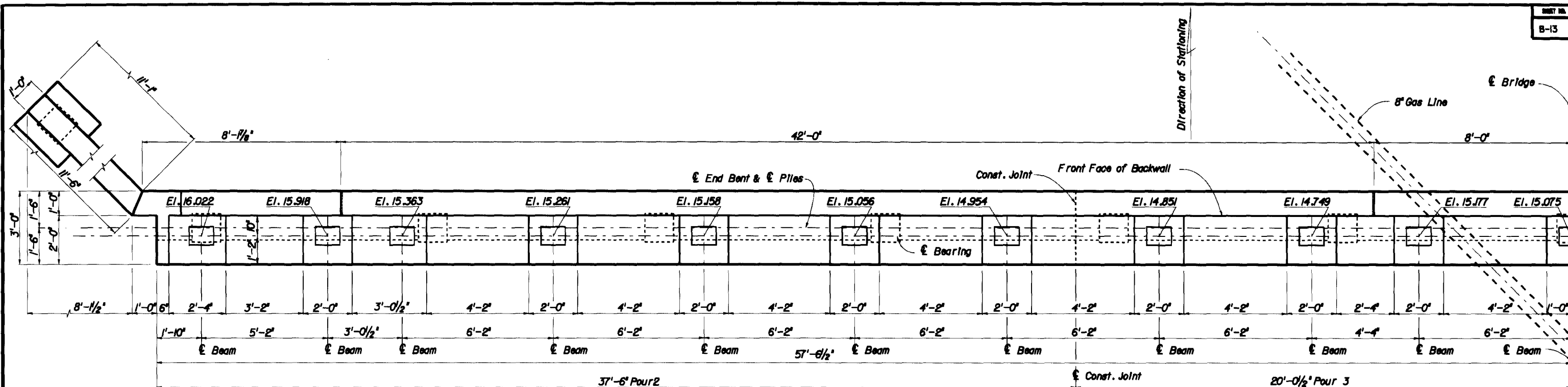
NOTES:

1. For Section B-B, see Sheet B-15.



HALF ELEVATION

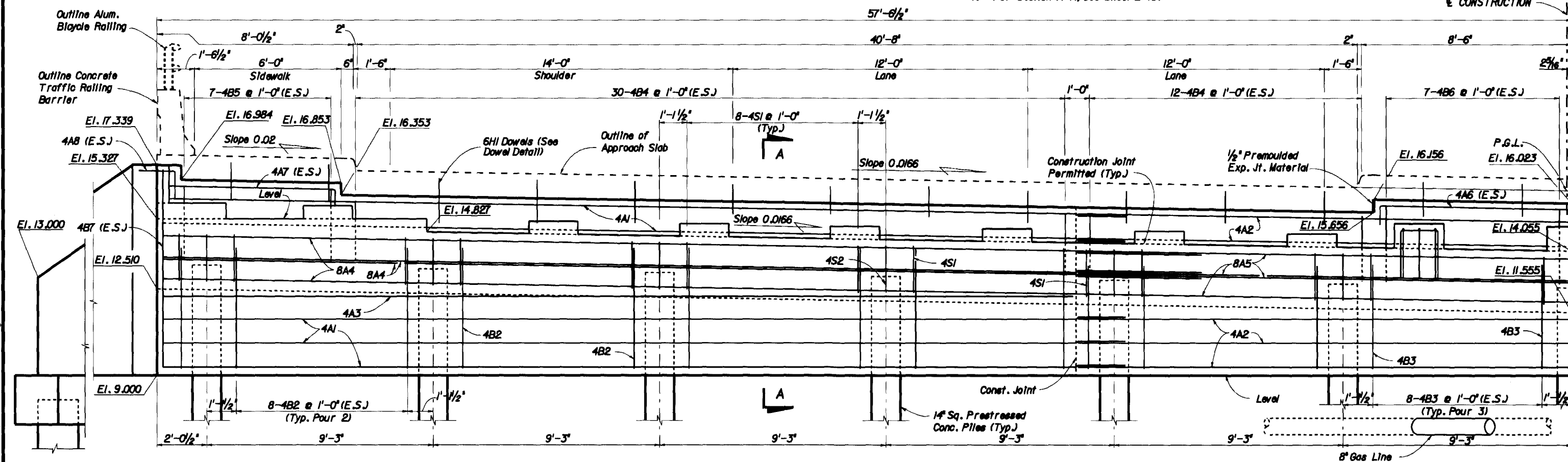
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HALF PLAN

NOTES:

1. For Section A-A, see Sheet B-16.



HALF ELEVATION

REVISIONS

Date	By	Description	Date	By	Description

	Names	Date
Drawn by	J.H.M.	4/00
Checked by	J.W.E.	4/00
Designed by	G.C.P.	4/00
Checked by	J.W.E.	4/00
Approved by	G.C. Patton	

ENGINEER OF RECORD:

E. C. DRIVER & ASSOCIATES, INC.

500 N. Westshore Blvd. Suite 700
Tampa, Florida 33609

LOGO:

ECDriver

PINELLAS COUNTY, FLORIDA

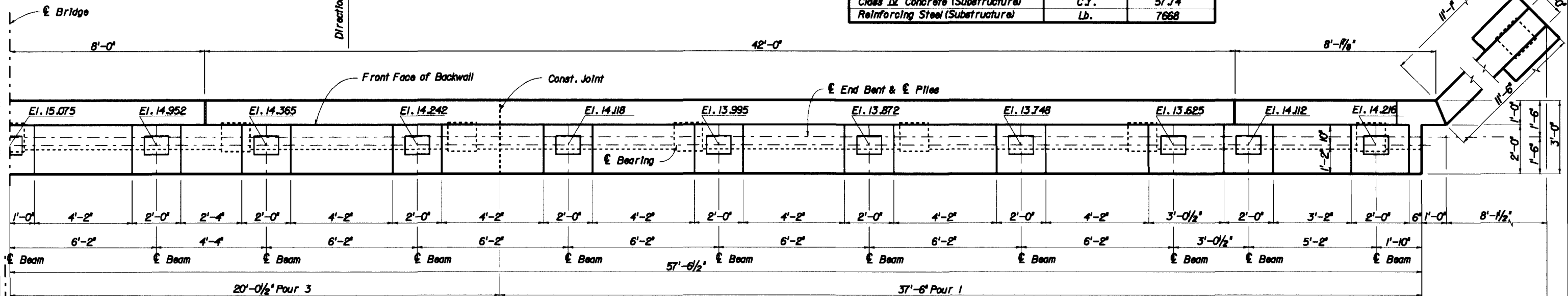
DEPARTMENT OF PUBLIC WORKS

END BENT 2 - NORTH HALF

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**EAST-WEST CONNECTOR ROAD
PHASE II**

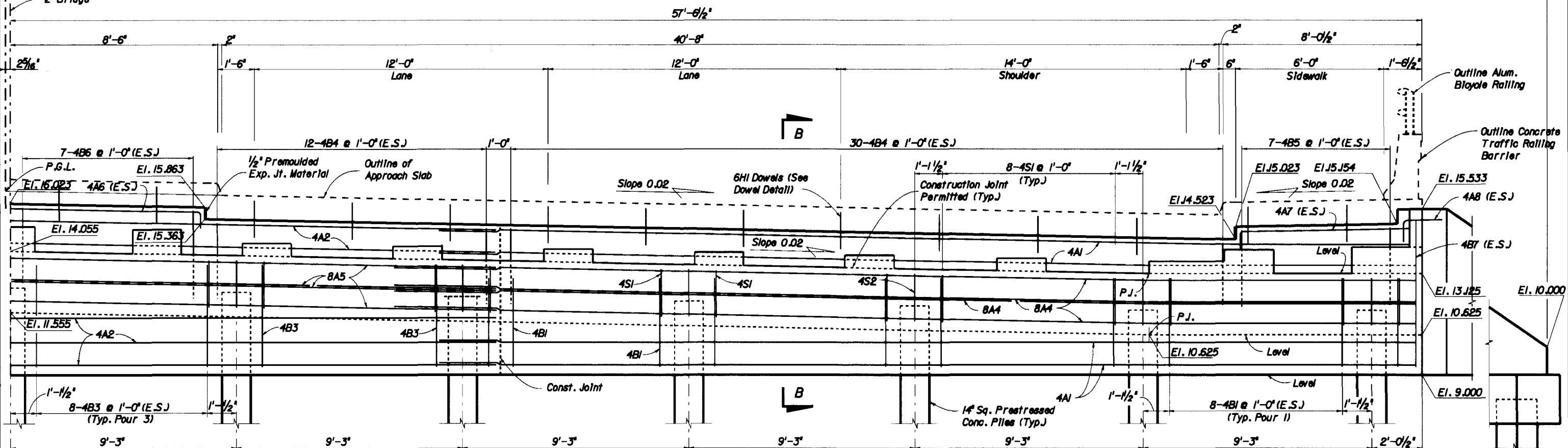
ITEM	UNIT	QUANTITY
Class IV Concrete (Substructure)	C.Y.	57.74
Reinforcing Steel (Substructure)	Lb.	7668



NOTES:

1. For Section B-B, see Sheet B-15.

HALF PLAN



HALF ELEVATION

REVISIONS

[illegible]

	Name	Date
Drawn by	J.H.M.	4/00
Checked by	J.W.E.	4/00
Designed by	G.C.P.	4/00
Checked by	J.W.E.	4/00
Approved by	G.C. Patton	

ENGINEER OF RECORD:
E. C. DRIVER & ASSOCIATES, INC.
500 N. Westshore Blvd. Suite 700
Tampa, Florida 33609

LOGO:



PINELLAS COUNTY, FLORIDA
DEPARTMENT OF PUBLIC WORKS

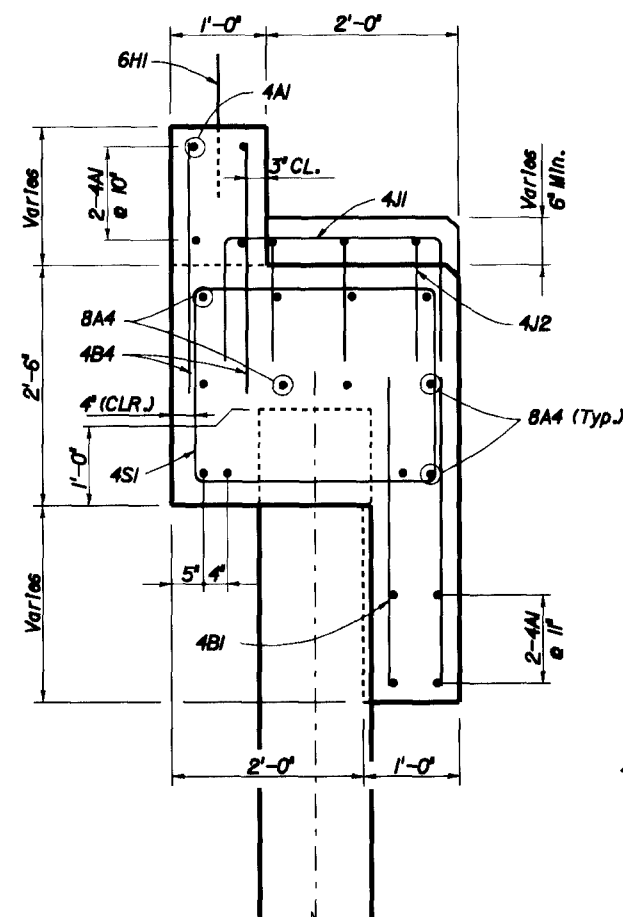
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END BENT 2 - SOUTH HALF

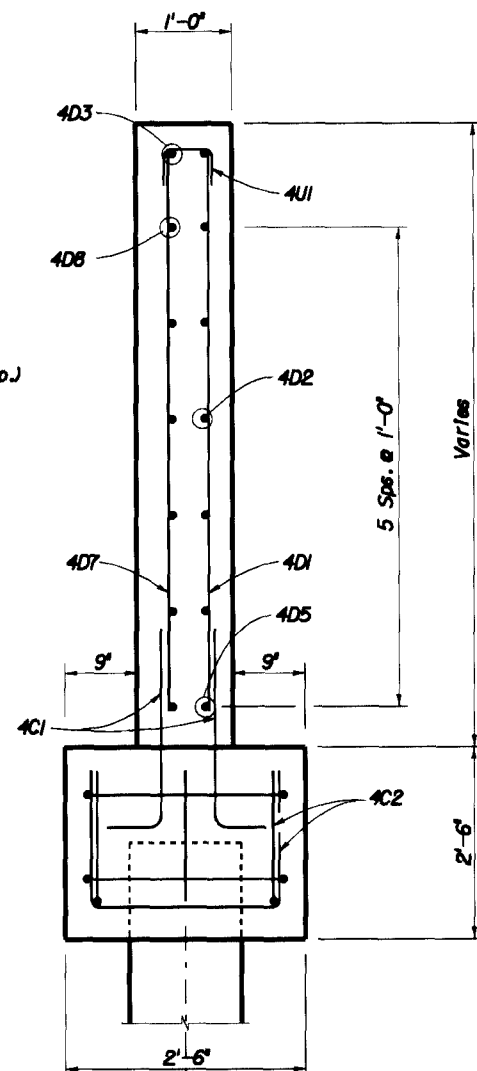
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**EAST-WEST CONNECTOR ROAD
PHASE II**

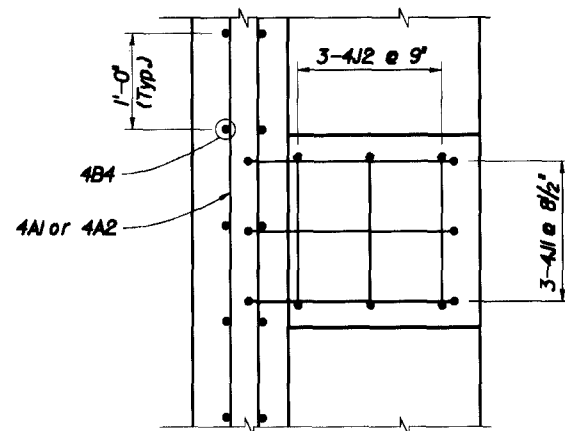
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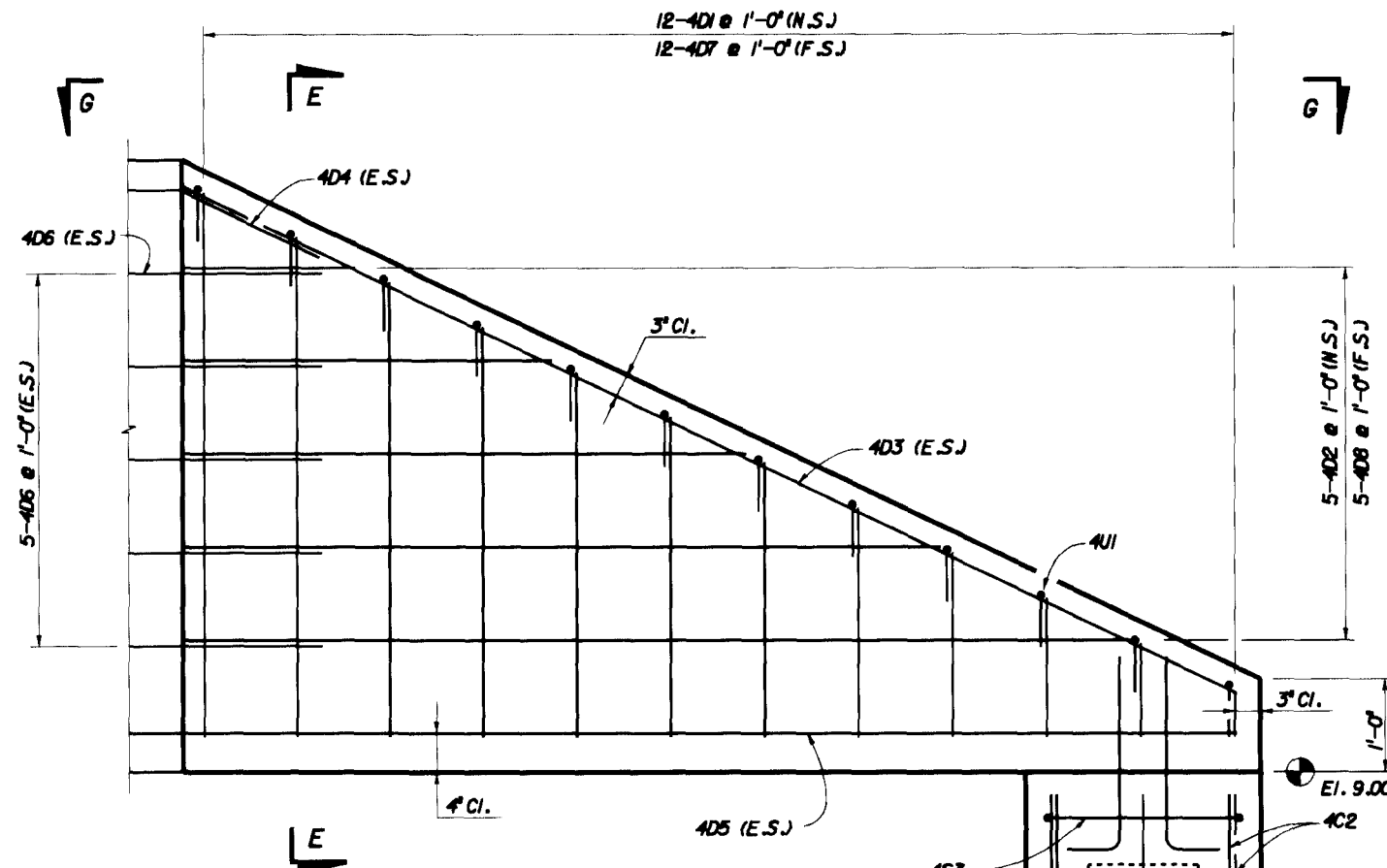
SECTION B-B



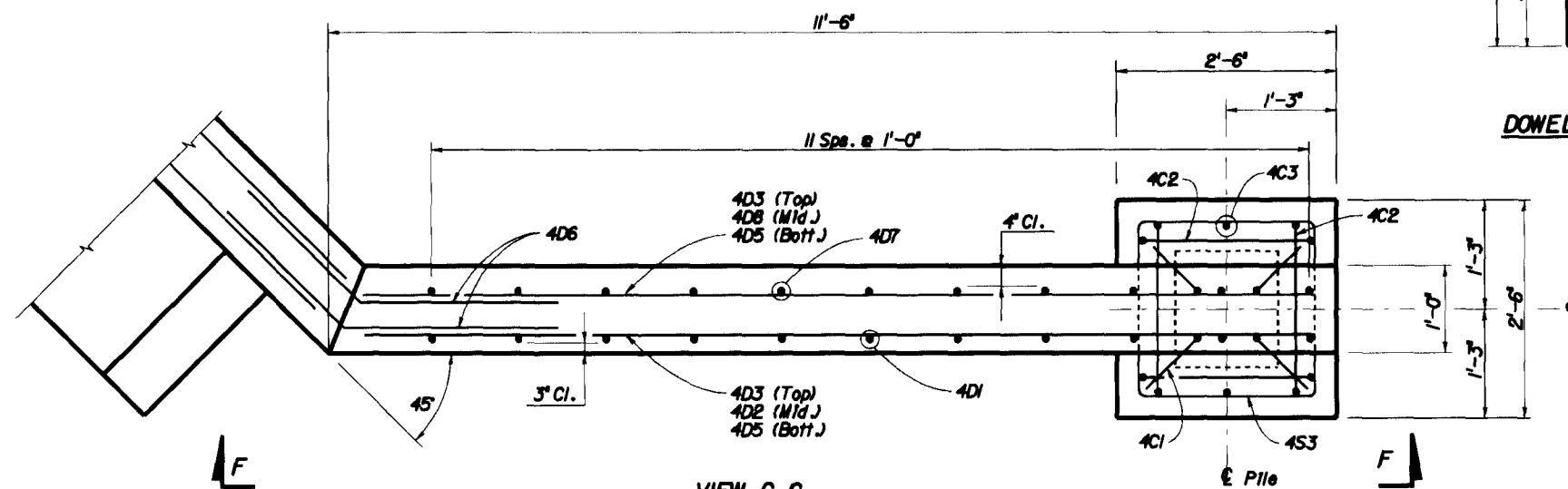
SECTION E-E



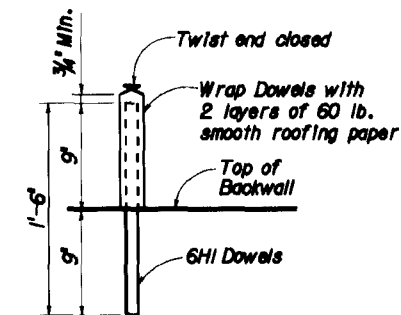
TYPICAL PLAN FOR PEDESTAL



VIEW F-F



VIEW G-G



DOWEL DETAIL

REVISIONS

Date	By	Description	Date	By	Description

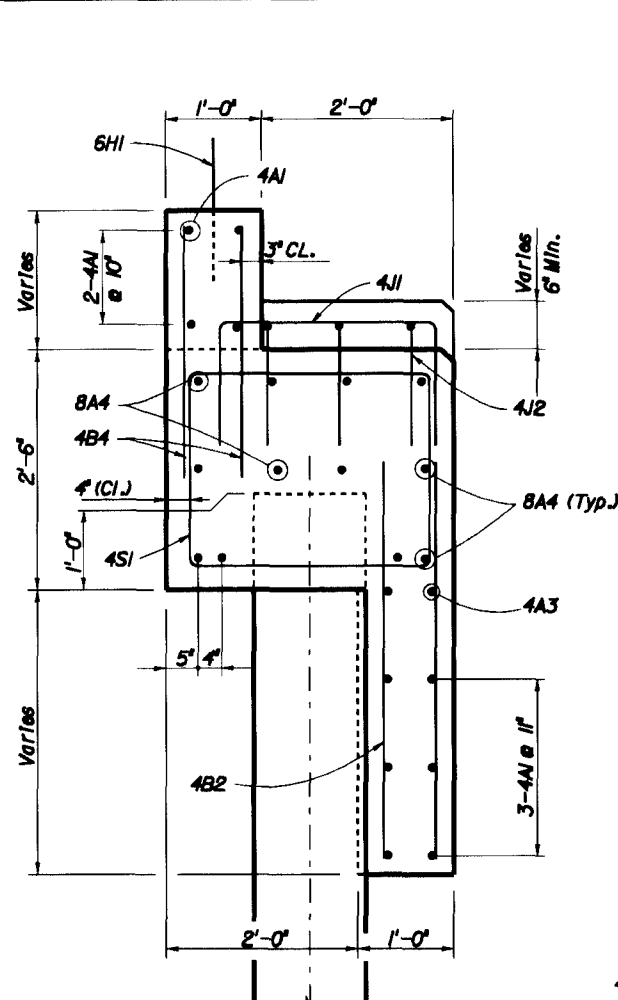
Drawn by	J.H.M.	4/00
Checked by	J.W.E.	5/00
Designed by	G.C.P.	4/00
Checked by	J.W.E.	5/00
Approved by	G.C.Patton	

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E. C. DRIVER & ASSOCIATES, INC.
500 N. Westshore Blvd. Suite 700
Tampa, Florida 33609

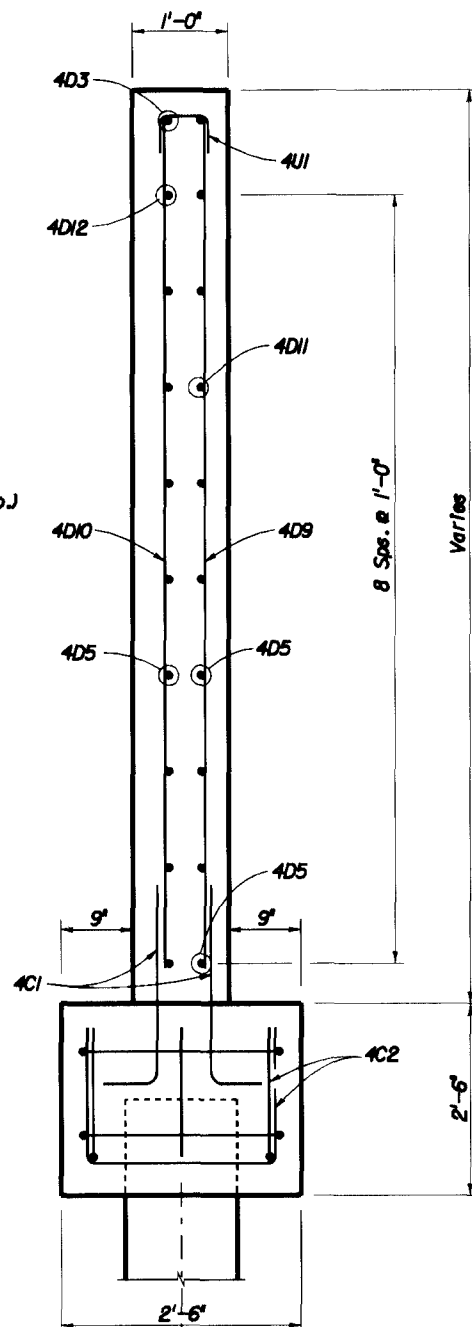


PINELLAS COUNTY, FLORIDA
DEPARTMENT OF PUBLIC WORKS

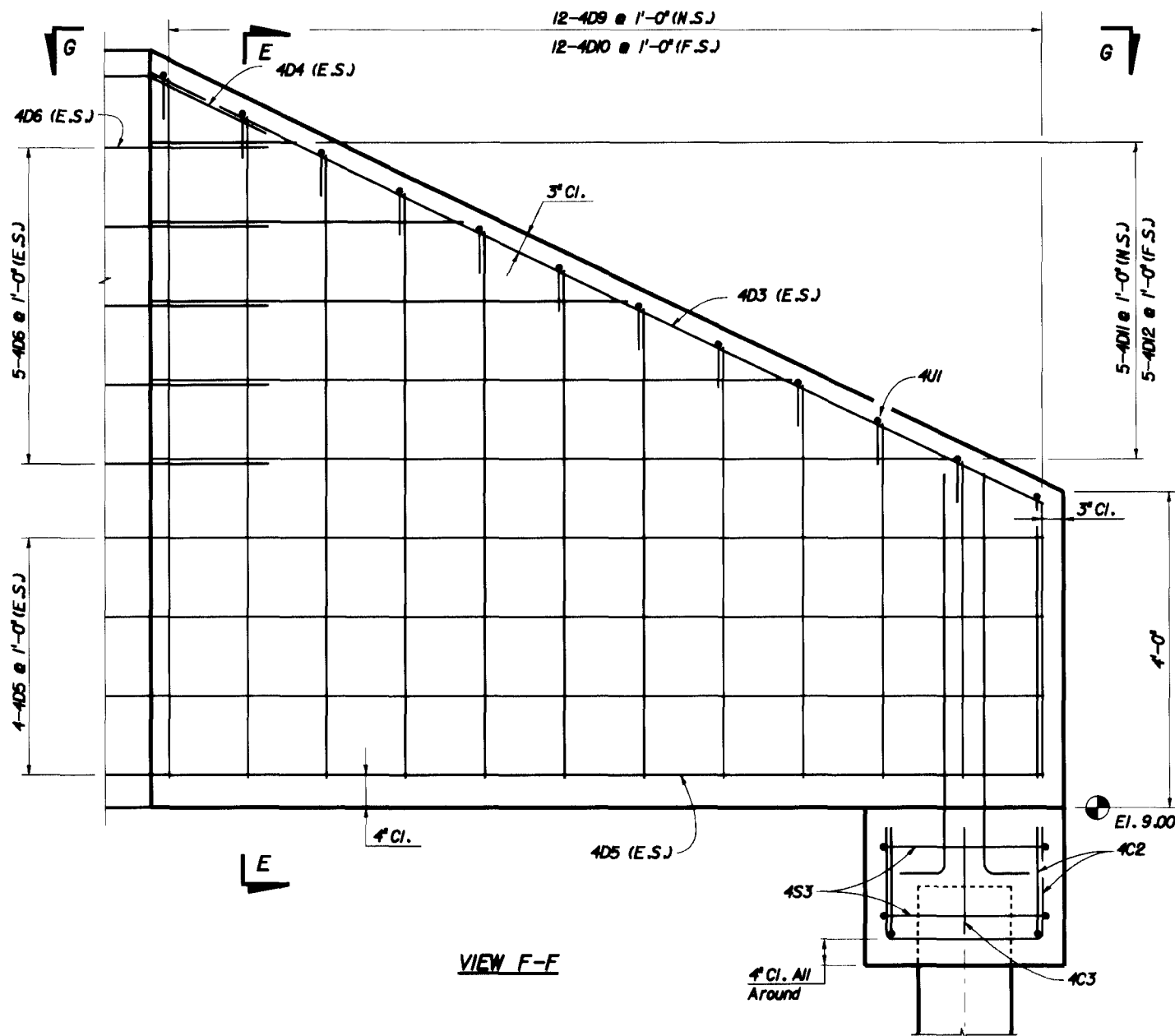
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EAST-WEST CONNECTOR ROAD
PHASE II



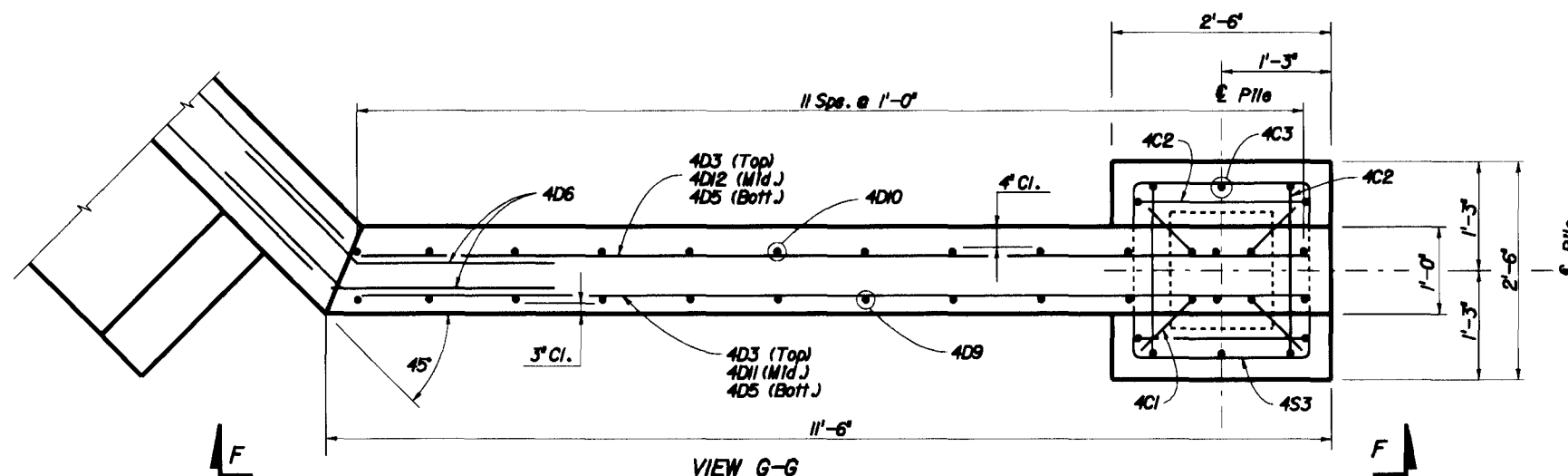
SECTION A-A



SECTION E-E



VIEW F-F



VIEW G-G

REVISIONS

Date	By	Description	Date	By	Description

Drawn by	J.H.M.	4/00
Checked by	J.W.E.	5/00
Designed by	G.C.P.	4/00
Checked by	J.W.E.	5/00
Approved by	G.C.Patton	

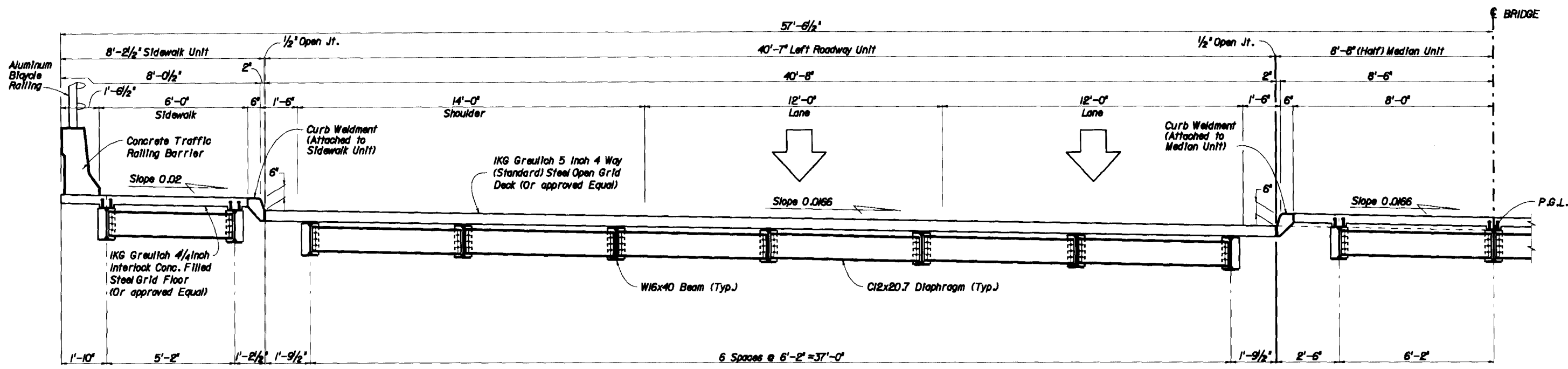
ENGINEER OF RECORD:
E. C. DRIVER & ASSOCIATES, INC.
500 N. Westshore Blvd. Suite 700
Tampa, Florida 33609

LOGO:
ECDriver
ENGINEERING ASSOCIATES

PINELLAS COUNTY, FLORIDA
DEPARTMENT OF PUBLIC WORKS

END BENT DETAILS - 2 OF 2

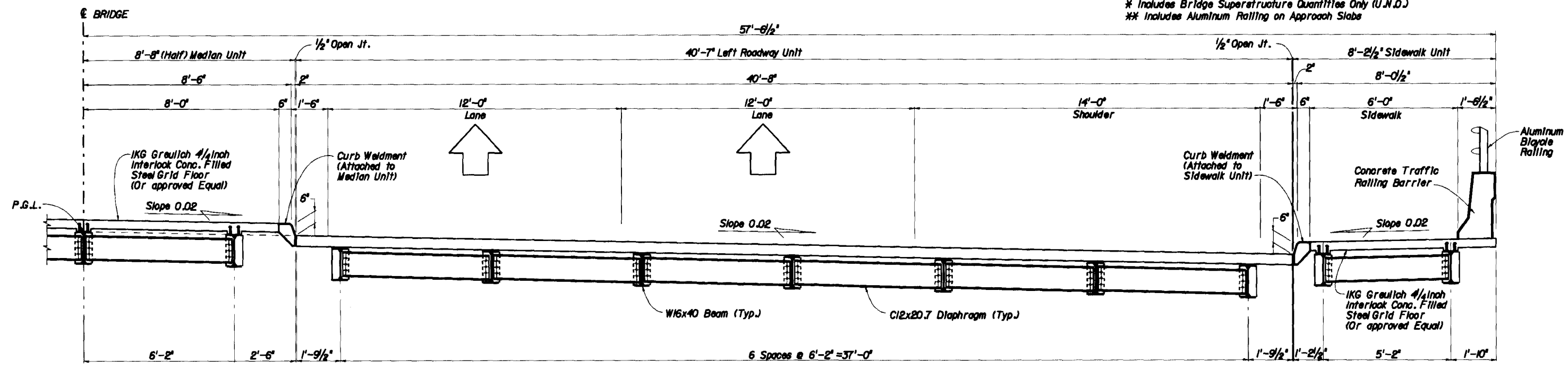
EAST-WEST CONNECTOR ROAD
PHASE II



HALF SECTION THRU SUPERSTRUCTURE
 (NOTE: Future Roadway Typical Section shown. See Roadway Plans for Lane Configuration and Pavement Markings.)

ESTIMATED QUANTITIES*		
ITEM	UNIT	QUANTITY
Structural Steel (Low Alloy)	LB	16,259
Structural Steel (Carbon)	LB	8,581
Steel Roadway Floor (5' Open)	SF	805
Steel Roadway Floor (4' Armored)	SF	673
Composite Neoprene Pads	CF	1.64
Traffic Railing (Barrier)	LF	40
Conc. Handrail (Parapet Aluminum)**	LF	120

* Includes Bridge Superstructure Quantities Only (U.N.D.)
 ** Includes Aluminum Railing on Approach Slabs



HALF SECTION THRU SUPERSTRUCTURE
 (NOTE: Future Roadway Typical Section shown. See Roadway Plans for Lane Configuration and Pavement Markings.)

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REVISIONS						ENGINEER OF RECORD:	LOGO:	PROJECT TITLE:
Date	By	Description	Date	By	Description			
						E. C. DRIVER & ASSOCIATES, INC. 500 N. Westshore Blvd. Suite 700 Tampa, Florida 33609	ECDriver	SUPERSTRUCTURE SECTION EAST-WEST CONNECTOR ROAD PHASE II
						PINELLAS COUNTY, FLORIDA DEPARTMENT OF PUBLIC WORKS		

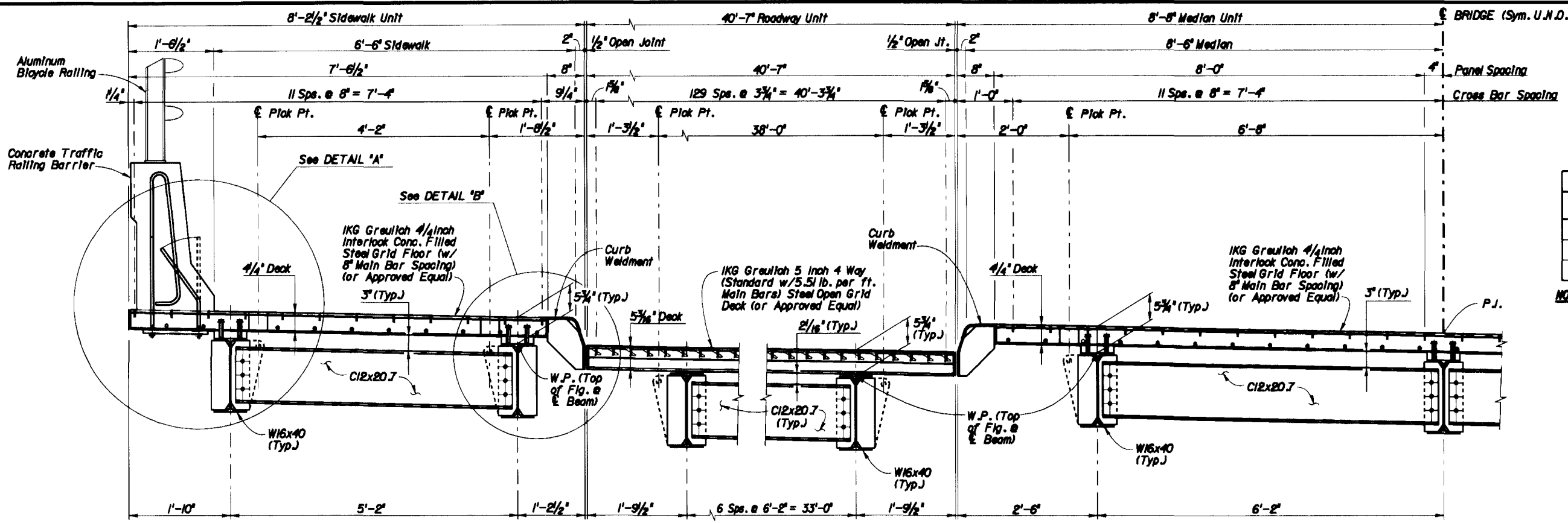
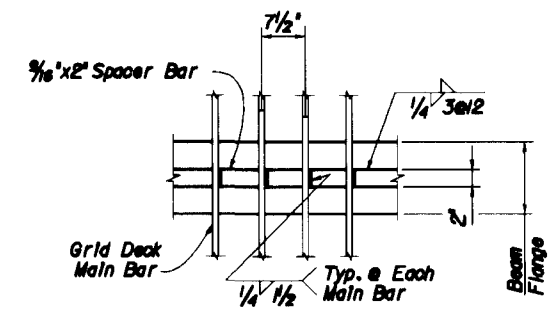


TABLE OF LIFTING WEIGHTS	
Unit	Weight (Tons)
8'-2 1/2' Sidewalk	11
40'-7' Roadway	12
17'-6' Median	12

NOTE: Lifting details are based on plumb wire ropes connected to the lifting shackles. Spreader beams should be used as required to maintain this lifting configuration.

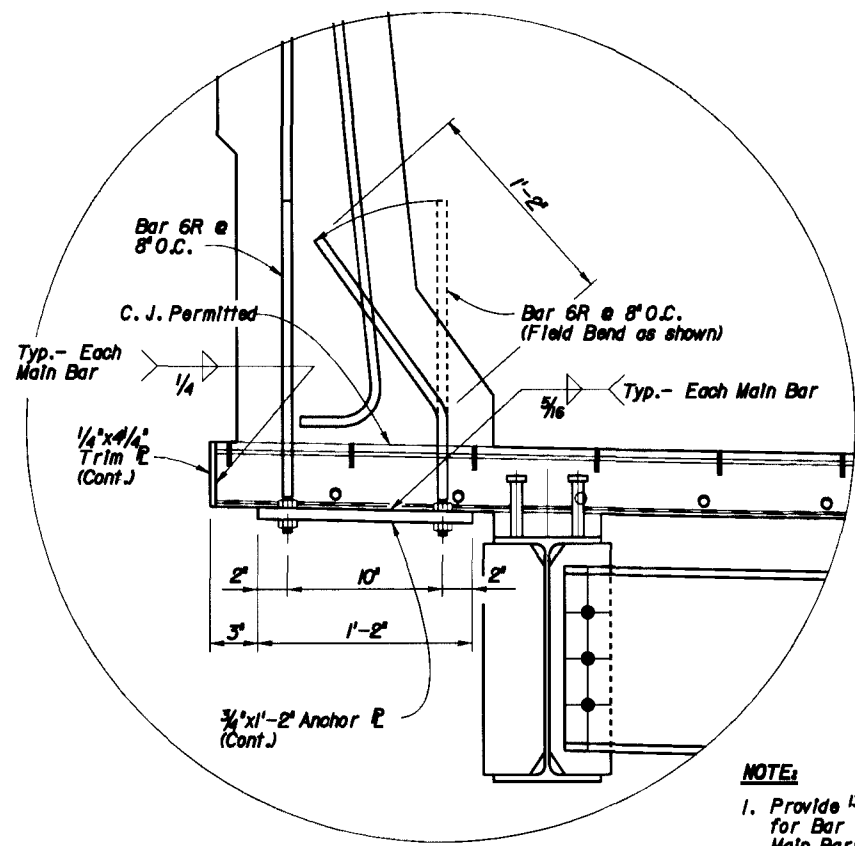
NOTES:

- Steel Grid Deck (Open and Conc. Filled) Panels and all attached steel members shall be hot dip galvanized in accordance with ASTM A123. Trim plates, anchor plates and curb assemblies shall be welded to the deck panels prior to galvanizing.
- Steel for grid deck panel main bars, cross bars, diagonal bars and supplemental bars shall be ASTM A588. Steel for trim plates, curb assemblies and anchor plates shall be ASTM A36 or ASTM A588.
- Weld size for attachment of the steel open grid deck is based on a maximum root opening between the spacer bar and main bars of 1/16". If the root opening exceeds 1/16", the weld size shall be increased by the amount of the root opening in excess of 1/16". The root opening shall not exceed 3/16". Galvanizing damaged by welding shall be repaired in accordance with the Specifications.
- The Contractor shall prepare and submit shop drawings for the structural steel and steel grid deck panels for review and approval by the Engineer. The Contractor is responsible for coordination of the deck details with the structural steel framing members.
- Welded shear studs may be placed in the shop or in the field.
- Concrete for the conc. filled steel grid deck shall be Class II and shall include the use of Size No. 89 (pea gravel) coarse aggregate.
- The conc. for the median and sidewalk shall be secured flush w/ the top of the steel grid and shall receive a broom finish.
- The Grid Deck Main Bars shall be bent (or cut and welded with complete joint penetration welds) at the P.J. to achieve the change in grade.
- Grid Deck Panels shall be fabricated per the tolerances shown in the Table of Panel Tolerances.
- Unit deck trim plates, anchor plates and curb assembly weldments shall be included in the Contract Unit Price for Steel Roadway Floor (5' Open) and Steel Roadway Floor (4' Armored).
- Concrete for the conc. filled steel grid deck shall be included in the Contract Unit Price for Steel Roadway Floor (4' Armored).
- For additional structural steel & grid deck details, see Sheet B-20.



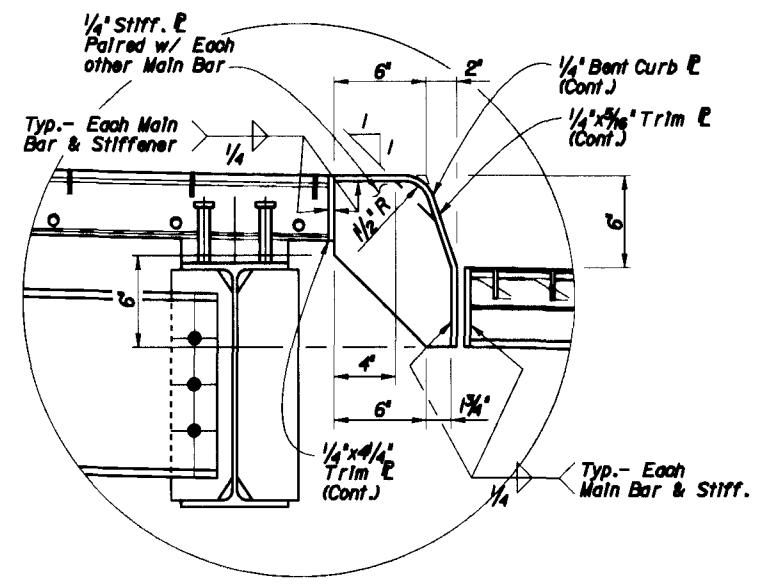
PLAN - TYPICAL OPEN GRID DECK ATTACHMENT DETAIL

TABLE OF PANEL TOLERANCES	
Panel Width	± 1/4"
Panel Length	± 1/8"
Top Bar Offset	± 1/16"
Squareness	± 1/2" Measured Diagonally
Camber - Width	.003 x Width
Camber - Length	.003 x Length
Bar-Sweep	± 1/4"
Main Bar Verticality	± 1/16"



DETAIL 'A'

NOTE:
1. Provide 1 3/8" Ø Holes for Anchor P for Bar 6R located midway between Main Bars (Typ.).



DETAIL 'B'

REVISIONS

Date	By	Description	Date	By	Description

Drawn by	G.C.P.	Date	3/00
Checked by	J.W.E.	Date	5/00
Designed by	G.C.P.	Date	3/00
Checked by	J.W.E.	Date	5/00
Approved by	G.C.Patton		

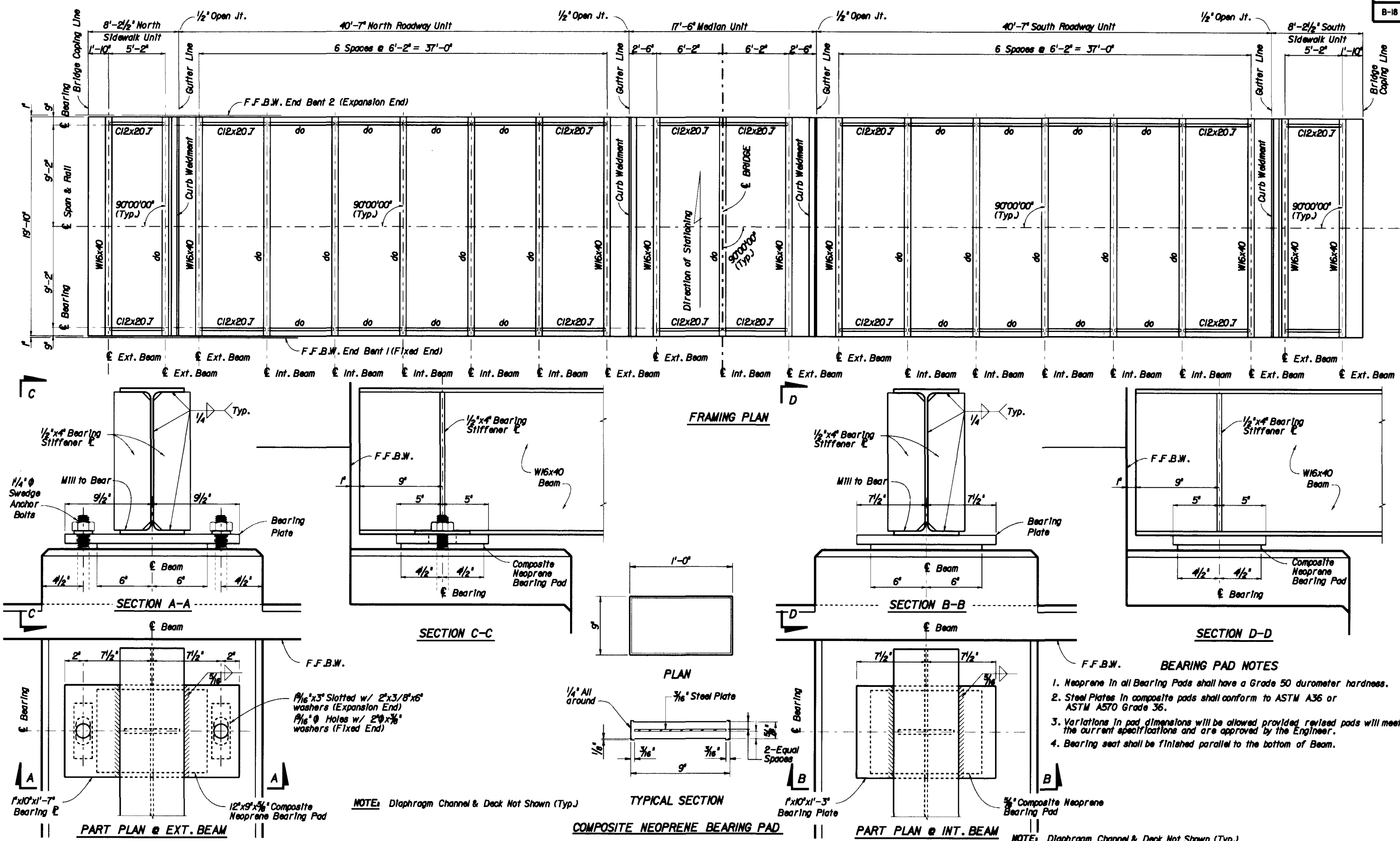
ENGINEER OF RECORD:
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DEPARTMENT OF PUBLIC WORKS

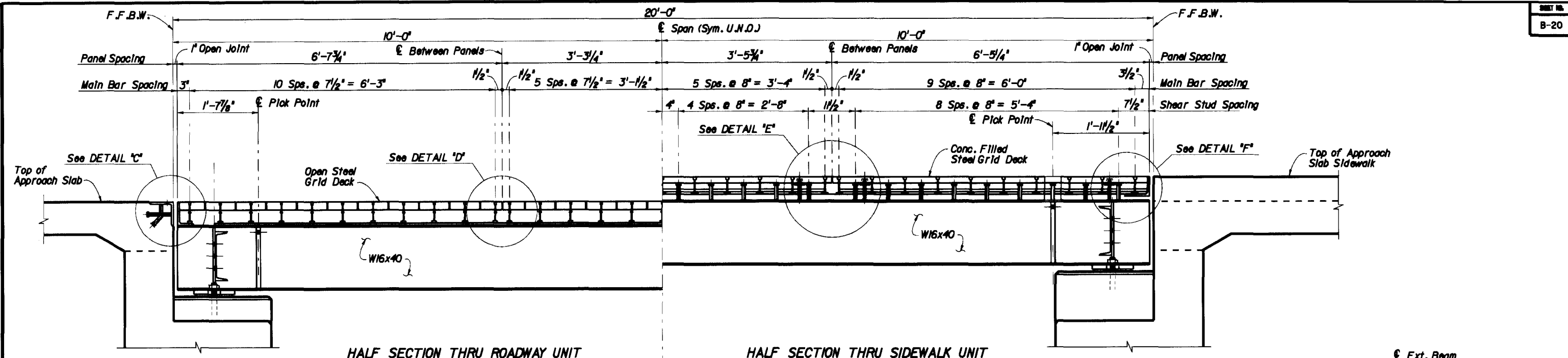
STEEL BEAM AND GRID DECK DETAILS
SHEET 1 OF 2
EAST-WEST CONNECTOR ROAD
PHASE II

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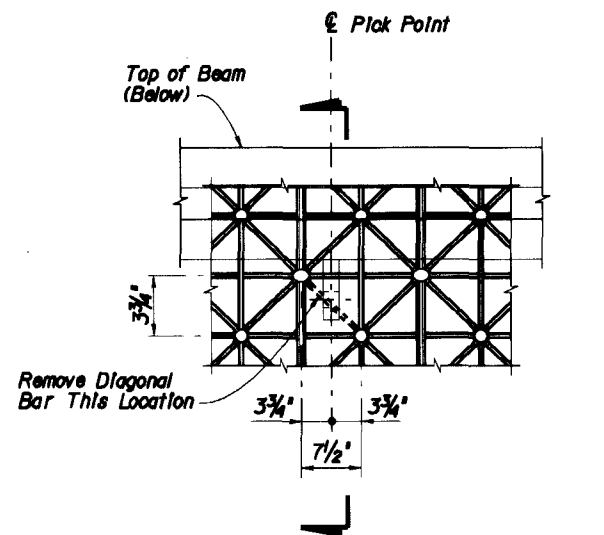
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REVISIONS						Drawn by	Checked by	Designed by	Checked by	Approved by	ENGINEER OF RECORD:	LOGO:	PINELLAS COUNTY, FLORIDA		FRAMING PLAN & BEARING DETAILS
Date	By	Description	Date	By	Description	J.H.M.	J.W.E.	G.C.P.	J.W.E.	G.C. Patton	E. C. DRIVER & ASSOCIATES, INC.		DEPARTMENT OF PUBLIC WORKS		EAST-WEST CONNECTOR ROAD PHASE II
											500 N. Westshore Blvd. Suite 700 Tampa, Florida 33609				

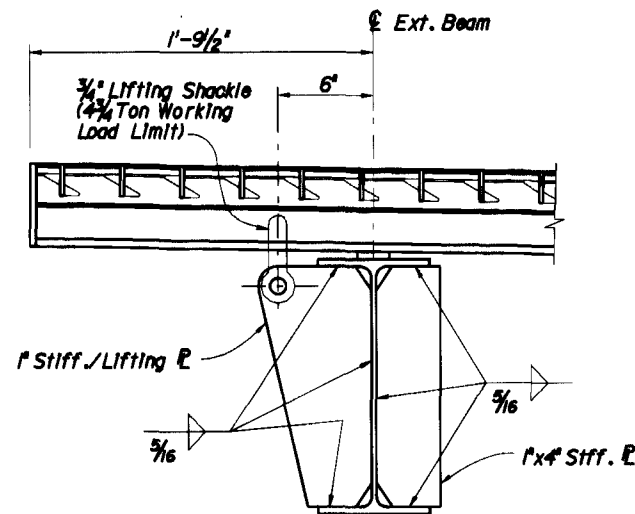


HALF SECTION THRU ROADWAY UNIT

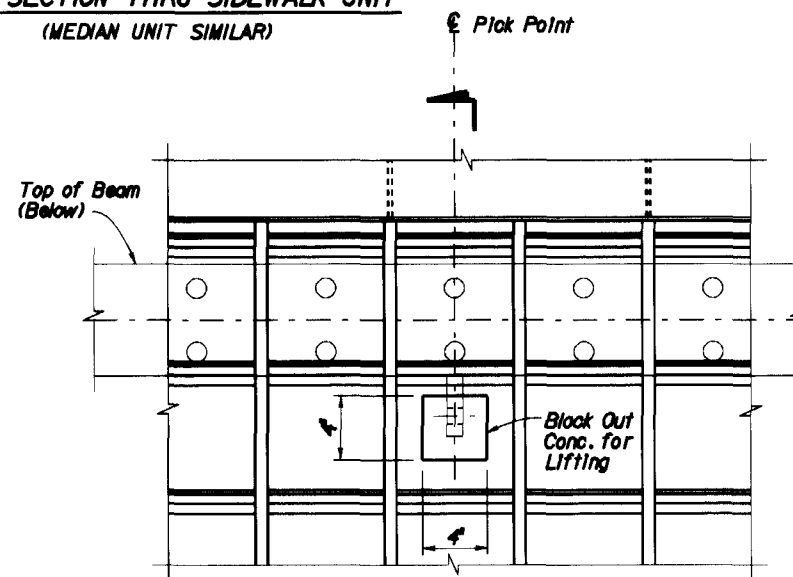
HALF SECTION THRU SIDEWALK UNIT
(MEDIAN UNIT SIMILAR)



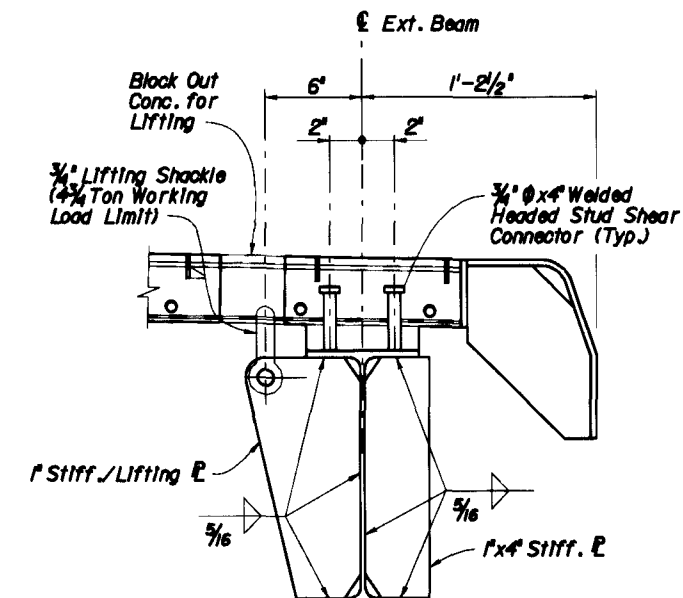
PART DECK PLAN AT PICK POINT



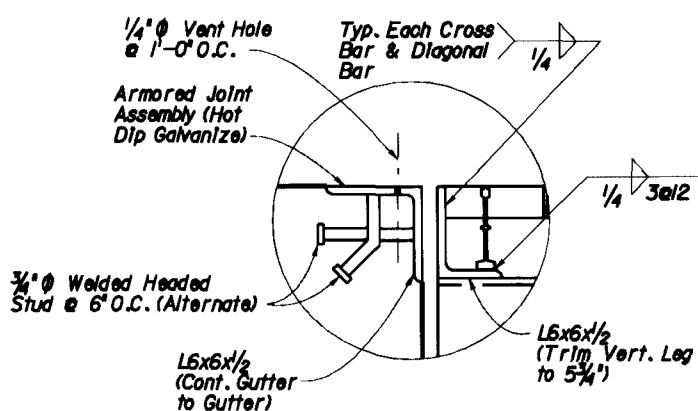
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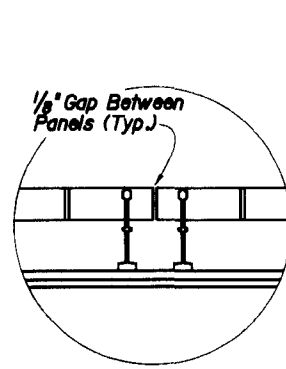
PART DECK PLAN AT PICK POINT



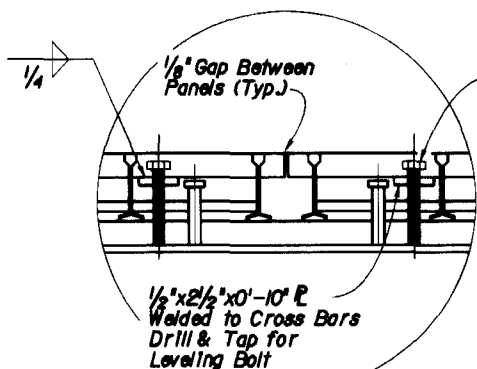
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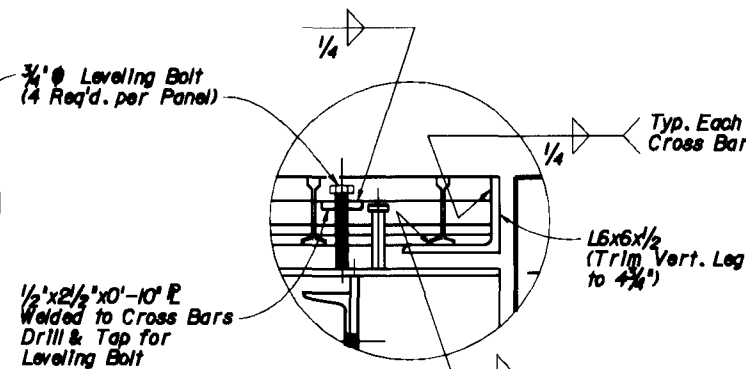
DETAIL 'C'



DETAIL 'D'



DETAIL 'E'



DETAIL 'F'

NOTES:

1. For structural steel & grid deck fabrication notes, see sheet B-19.
2. For additional structural steel & grid deck details, see Sheet B-19.
3. The cost of the approach slab armored joint assemblies shall be included in the Contract unit price for approach slabs.

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REVISIONS				ENGINEER OF RECORD:		LOGO:		PROJECT TITLE	
Date	By	Description	Date	By	Description	E. C. DRIVER & ASSOCIATES, INC.		STEEL BEAM AND GRID DECK DETAILS	
						500 N. Westshore Blvd. Suite 700		SHEET 2 OF 2	
						Tampa, Florida 33609		EAST-WEST CONNECTOR ROAD	
								PHASE II	

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M A R K		FEET	NO	TYP	STY	METERS										NO	ANG
SIZE	DES	LENGTH	BARS	BAR	A G	B	C	D	E	F	H	J	K	N	S		
END BENT 1 OR 2			NO. REQ'D. D-2														
4	A1	40-0	18	1		40-0											
4	A2	40-0	10	1		40-0											
4	A3	37-0	2	1		37-0											
8	A4	45-0	24	1		45-0											
8	A5	39-9	12	1		39-9											
4	A6	17-5	2	11		15-5	1-0	1-0									
4	A7	8-0	4	10		7-0	1-0										
4	A8	2-5	4	10		1-5	1-0										
4	B1	3-7	66	1		3-7											
4	B2	4-1	66	1		4-1											
4	B3	4-10	64	1		4-10											
4	B4	2-9	168	1		2-9											
4	B5	3-2	28	1		3-2											
4	B6	3-4	28	1		3-4											
4	B7	6-0	4	1		6-0											
4	C1	3-0	8	10		2-0	1-0										
4	C2	5-5	8	11		1-9	1-10	1-10									
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6	H1	1-6	28	1		1-6											
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4	S3	8-1	4	4	4	1-10	1-10										
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4	D12	VARY	5	1		9-9	1-5										
		5-7															
4	J1	5-0	63	11		2-0	1-6	1-6									
4	J2	4-6	63	11		1-6	1-6	1-6									

REVISIONS					
Date	By	Description	Date	By	Description

Drawn by	Checked by	Designed by	Approved by
J.H.M.	J.W.E.	J.H.M.	G.C.Patton
5/00	5/00	5/00	

ENGINEER OF RECORD:
E. C. DRIVER & ASSOCIATES, INC.
500 N. Westshore Blvd. Suite 700
Tampa, Florida 33609

LOGO:

PINELLAS COUNTY, FLORIDA

DEPARTMENT OF PUBLIC WORKS

REINFORCING BAR LIST

EAST-WEST CONNECTOR ROAD
PHASE II



An Equal
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Employer

Southwest Florida Water Management District

Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
(813) 985-7481 or
1-800-836-0797 (FL only)
SUNCOM 578-2070

Bartow Service Office
170 Century Boulevard
Bartow, Florida 33830-7700
(863) 534-1448 or
1-800-492-7862 (FL only)
SUNCOM 572-6200

2379 Broad Street, Brooksville, Florida 34609-6899
(352) 796-7211 or 1-800-423-1476 (FL only)
SUNCOM 628-4150 TDD only 1-800-231-6103 (FL only)
World Wide Web: <http://www.swfwmd.state.fl.us>

Venice Service Office
115 Corporation Way
Venice, Florida 34292-3524
(941) 486-1212 or
1-800-320-3503 (FL only)
SUNCOM 526-6900

Lecanto Service Office
3600 West Sovereign Path
Suite 226
Lecanto, Florida 34461-8070
(352) 527-8131
SUNCOM 667-3271

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New Port Richey

E. D. **"Sonny" Vergara**
Executive Director
Gone A. Heath
Assistant Executive Director
William S. **Bilenky**
General Counsel

September 26, 2000

Jan R. Herbst, P.E.
Pinellas County Board of County Commissioners
440 Court Street
Clear-water, FL 33756

Subject: **Final Agency Action Transmittal Letter**
Permit No: 43002661.030
Project Name: East-West Connector Road, Phase I
County: Pinellas
Sec/Twp/Rge: 13 and 14/28S/16E

Dear Ms. Herbst:

The permit referenced above was **approved** by the District Governing Board subject to all terms and conditions set forth in the permit.

The enclosed approved construction plans are part of the permit, and construction must be in accordance with these plans.

If you have questions concerning the permit, please contact Robin L. McGill, P.E., at the Tampa Service Office, extension 2072. For assistance with environmental concerns, please contact Nancy **B. Hartwig**, extension 2047.

Sincerely,

A handwritten signature in cursive script that reads "Adeline Wood".

Adeline Wood, Supervisor
Records and Data Department

AW:kr
Enclosures: Approved Permit w/Conditions
Statement of Completion
Notice of Authorization
cclenc: File of Record 43002661.030
cc/Permit: Thomas Wm. McGrew, P.E., King Engineering Associates, Inc.
USACOE

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
INDIVIDUAL CONSTRUCTION
PERMIT NO. 43002661.030

EXPIRATION DATE: September 26, 2005

PERMIT ISSUE DATE: September 26, 2000

This permit, issued under the provisions of Chapter 373, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.), Rule 40D-4, authorizes the Permittee to perform the work outlined herein and shown by the application, approved drawing(s), plans, and other documents, attached hereto and kept on file at the Southwest Florida Water Management District (District). All construction, operation and maintenance of the surface water management system authorized by this permit shall occur in compliance with Florida Statutes and Administrative Code and the conditions of this permit.

PROJECT NAME: East-West Connector Road, Phase I

GRANTED TO: Pinellas County Board of County Commissioners
440 Court Street
Clearwater, FL 33756

ABSTRACT: This Individual permit is for the construction of 10,350 linear feet of two (2) and four (4) lane divided rural roadway and associated surface water management facilities from the intersection of Tampa Road (S.R. 584) and Forest Lakes Boulevard to 1,300 feet west of Race Track Road. In essence, this section known as East-West Connector Road Phase I, will serve as an extension of Linebaugh by connecting Race Track Road to Tampa Road. The East-West Connector Road is located in Sections 13 and 14, Township 28 South, Range 16 East in Pinellas County. This roadway improvement will be constructed within the Cypress Lakes D.R.I. and the Tampa Bay Park of Commerce Industrial Park. Water quality treatment and water quantity attenuation will be provided for in six (6) wet detention ponds located along the East-West Connector Road right-of-way. The proposed ponds are designed for the ultimate build-out of the East-West Connector Road, which calls for a six (6) lane divided roadway with a bicycle lane and sidewalk. The ponds will outfall to the nearby natural wetland conveyance systems.

OP. 8 MAINT. ENTITY: Pinellas County Board of County Commissioners

PROPERTY LOCATION: Pinellas County

SEC/TWP/RGE: 13 and 14/28S/16E

**TOTAL ACRES OWNED
OR UNDER CONTROL:** 53.10

PROJECT SIZE: 53.10 Acres

LAND USE: Road Project

DATE APPLICATION FILED: November 24, 1999

AMENDED DATE: August 1, 2000

Permit No. 43002661.030
 Project Name: East-West Connector Road, Phase I
 Page 2

I. Water Quantity/Quality

POND NO.	AREA ACRES AT TOP OF BANK	TREATMENT TYPE
Pond 2	1.85	Wet detention
Pond 3	2.74	Wet detention
Pond 4	1.48	Wet detention
Pond 5	1.18	Wet detention
Pond 6	1.22	Wet detention
Pond 7	0.67	Wet detention
TOTAL	9.14	

Mixing Zone required: YES () NO (X)

Variance required: YES () NO (X)

II. 100-Year Floodplain

Encroachment (ac-ft):	Compensation (ac-ft):
0.00	0.00

III. Environmental Considerations

Wetland Information:				
WETLAND NO.	TOTAL AC.	NOT IMPACTED AC.	TEMPORARILY DISTURBED AC.	PERMANENTLY DESTROYED AC.
A	0.19	0.00	0.00	0.19
B	0.16	0.00	0.00	0.16
C	0.21	0.00	0.00	0.21
D	0.76	0.00	0.00	0.76
E	0.02	0.00	0.00	0.02
F	0.02	0.00	0.00	0.02
G	0.01	0.00	0.00	0.01
H	0.21	0.00	0.00	0.21
I	0.06	0.00	0.00	0.06
J	0.01	0.00	0.00	0.01
K	0.01	0.00	0.00	0.01
Pond 5	0.19	0.00	0.00	0.19
TOTAL	1.85	0.00	0.00	1.85

Permit No. 43002661.030
 Project Name: East-West Connector Road, Phase I
 Page 3

Comments: The East/West Road Phase I project will impact 1.85 acres of forested and herbaceous wetlands. To mitigate for the impacts the Permittee is creating 6.51 acres of forested wetlands within the Brooker Creek Preserve. The excess mitigation (0.96 acre of wetland creation, and 11.48 acres of wetland enhancement) will be used to offset wetland impacts associated with the East-West Connector Road, Phase II project, which is being permitted simultaneously. The proposed mitigation is located on lands owned by the Southwest Florida Water Management District. The District's Land Management Department agreed to allow the Permittee to mitigate on District owned lands on the condition that the County submit a plan for the removal of fill material at the "clay disposal area" within one year of the date of issuance of this permit for approval by both Regulatory and Land Management.

Mitigation Information:					
AREA NO.	CREATED/ RESTORED AC.	UPLAND PRESERVED AC.	ENHANCED WETLAND AC.	WETLANDS PRESERVED AC.	MISC. MITI AC.
BCP	6.51	0.00	11.48	0.00	0.00
TOTAL	6.51	0.00	11.48	0.00	0.00
NET CHANGE	+4.66	OTHER MITIGATION TOTAL			0.00

Watershed name: Tampa Bay Drainage

A Conservation Easement is not required.

SPECIFIC CONDITIONS

1. If the ownership of the project area covered by the subject permit is divided, with someone other than the Permittee becoming the owner of part of the project area, this permit shall terminate, pursuant to Section 40D-1.6105, F.A.C. In such situations, each land owner shall obtain a permit (which may be a modification of this permit) for the land owned by that person. This condition shall not apply to the division and sale of lots or units in residential subdivisions or condominiums.
2. The discharges from this system shall meet state water quality standards as set forth in Chapter 62-302 and Section 62-4.242, F.A.C., for class waters equivalent to the receiving waters.
3. Unless specified otherwise herein, two copies of all information and reports required by this permit shall be submitted to:

Tampa Regulation Department
 Southwest Florida Water Management District
 7601 U.S. Highway 301 North
 Tampa, FL 33637

The permit number, title of report or information and event (for recurring report or information submittal) shall be identified on all information and reports submitted.

Permit No. 43002661.030
Project Name: East-West Connector Road, Phase I
Page 4

4. The Permittee shall retain the design engineer, or other professional engineer registered in Florida, to conduct on-site observations of construction and assist with the as-built certification requirements of this project. The Permittee shall inform the District in writing of the name, address and phone number of the professional engineer so employed. This information shall be submitted prior to construction.
5. Within 30 days **after** completion of construction of the permitted activity, the Permittee shall submit to the Tampa Service Office a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1, F.A.C., and signed, dated, and sealed as-built drawings. The as-built drawings shall identify any deviations from the approved construction drawings.
6. The District reserves the right, upon prior notice to the Permittee, to conduct on-site research to assess the pollutant removal **efficiency of the** surface water management system. The Permittee may be required to cooperate in this regard by allowing on-site access by District representatives, by allowing the installation and operation of testing and monitoring equipment, and by allowing other assistance measures as needed on site.
7. The operation and maintenance entity shall submit inspection reports in the form required by the District, in accordance with the following schedule.

For systems utilizing retention or wet detention, the inspections shall be performed two (2) years after operation is authorized and every two (2) years thereafter.
8. The removal of littoral shelf vegetation (including cattails) from wet detention ponds is prohibited unless otherwise approved by the District. Removal includes dredging, the application of herbicide, cutting, and the introduction of grass carp. Any questions regarding authorized activities within the wet detention ponds shall be addressed to the District's Surface Water Regulation Manager, Tampa Service Office.
9. The Permittee shall monitor and maintain the wetland mitigation area(s) until the **criteria** set forth in the Wetland Mitigation Success Criteria Condition(s) below are met.
10. The Permittee shall undertake required maintenance activities within the wetland mitigation area(s) as needed at any time between mitigation area construction and **termination** of monitoring, with the exception of the **final** year. Maintenance shall include the manual removal of all nuisance and exotic species, with sufficient frequency that their combined coverage at no time exceeds the Wetland Mitigation Success Criteria **Condition(s)** above. Herbicides shall not be used without the prior written approval of the District.
11. A Wetland Mitigation Completion Report shall be submitted to the District within 30 days of completing construction and planting of the wetland mitigation area(s). Upon District inspection and approval of the mitigation area(s), the monitoring program shall be initiated with the date of the District **field** inspection being the construction completion date of the mitigation area(s). Monitoring events shall occur between March 1 and November 30 of each year. An Annual Wetland Monitoring Report shall be submitted upon the anniversary date of District approval to initiate monitoring.

Permit No. 43002661.030
 Project Name: East-West Connector Road, Phase I
 Page 5

Annual reports shall provide documentation that a sufficient number of maintenance inspection/activities were conducted to maintain the mitigation area(s) in compliance with the Wetland Mitigation Success Criteria Condition(s) above. Note that the performance of maintenance inspections and maintenance activities will normally need to be conducted more frequently than the collection of other monitoring data to maintain the mitigation area(s) in compliance with the Wetland Mitigation Success Criteria Condition(s) above.

Monitoring Data shall be collected semi-annually.

12. WETLAND MITIGATION SUCCESS CRITERIA MITIGATION AREAS WL-4 and WL-6

Mitigation is expected to offset adverse impacts to wetlands and other surface waters caused by regulated activities and to achieve viable, sustainable ecological and hydrological wetland functions. Wetlands constructed for mitigation purposes will be considered successful and will be released from monitoring and reporting requirements when the following criteria are met continuously for a period of at least one year without intervention in the form of irrigation or the addition or removal of vegetation.

- a. The mitigation area can be reasonably expected to develop into **Palustrine** Forested Wetland as determined by the USFWS Classification of Wetlands and Deepwater Habitats of the United States.
- b. Topography, water depth and water level fluctuation in the mitigation area are characteristic of the wetland/surface water type specified in criterion "a."
- c. The dominant and subdominant species of desirable wetland plants comprising each vegetation zone and stratum of the mitigation area shall be as follows:

ZONE	STRATUM	PERCENT COVER	DOMINANT SPECIES ¹	SUBDOMINANT SPECIES ²
1	Canopy	50	<i>Taxodium distichum</i>	<i>Fraxinus caroliniana</i> <i>Magnolia virginiana</i> <i>Acer rubrum</i> <i>Quercus laurifolia</i>
	Shrub	50	<i>Cephalanthus occidentalis</i>	<i>Myrica cerifera</i> <i>Lyonia lucida</i> <i>Ilex cassine</i>
	Herbaceous	85	<i>Sagittaria lancifolia</i>	<i>Cladium jamaicense</i> <i>Juncus effusus</i> <i>Spartina bakeri</i> <i>Eleocharis interstincta</i>
2	Herbaceous	85	<i>Panicum hemitomon</i> <i>Pon tederia cordata</i>	
3	Shrub	50	<i>Myrica cerifera</i> <i>Ilex cassine</i>	

¹ Tree species must be greater than 12 feet in height and have been planted for greater than 5 years.
² Plant species providing the same function as those listed may also be considered in determining success.

This criterion must be achieved within 5 years of mitigation area construction. The Permittee shall complete any activities necessary to ensure the successful achievement of the mitigation requirements by the deadline specified. Any request for an extension of the deadline specified shall be accompanied with an explanation and submitted as a permit letter modification to the District for evaluation.

- d. Species composition of recruiting wetland vegetation are indicative of the wetland type specified in **criterion "a."**
- e. Density of *Taxodium distichum*, *Fraxinus caroliniana*, *Magnolia virginiana*, *Acer rubrum*, and *Quercus laurifolia* surviving in the mitigation areas equals or exceeds **436/acre** for trees greater than or equal to 12 feet in height.
- f. Coverage by nuisance or exotic species does not exceed 5 percent.
- g. The wetland mitigation areas can be determined to be a wetland or other surface water according to Chapter 62-340, F.A.C.

The mitigation area may be released from monitoring and reporting requirements and be deemed successful at any time during the monitoring period if the Permittee demonstrates that the conditions in the mitigation area have adequately replaced the wetland and surface water functions affected by the regulated activity and that the site **conditions** are sustainable.

- 13. The Permittee shall coordinate termination of monitoring for wetland mitigation area(s) with the District by:
 - a. Notifying the District in writing when the Wetland Mitigation Success Criteria Condition(s) above have been initially achieved;
 - b. Upon District acknowledgment, suspending all maintenance activities including but not limited to irrigation and addition or removal of vegetation ;
 - c. After one year, submitting a monitoring report to the District.

The District will evaluate the wetland mitigation area(s) to determine **if the** Wetland Mitigation Success Criteria have been maintained, and will notify the Permittee in writing of the evaluation results. The District reserves the right to require that corrective action be performed by the Permittee if any of the wetland mitigation area(s) fail to maintain the success criteria.

- 14. The District reserves the right to require the Permittee to identify and perform corrective actions if the District issues a wetland mitigation deficiency determination.
- 15. The Permit-tee shall, within 90 days of initial wetland impact and prior to beneficial use of the site, complete all aspects of the mitigation plan, including the grading, mulching, and planting, in accordance **with** the design details in the final approved construction drawings and information submitted in support of the application .

Permit No. 43002661.030
Project Name: East-West Connector Road, Phase I
Page 7

16. The construction of all wetland impacts and wetland mitigation shall be supervised by a qualified environmental **scientist/specialist/consultant**. The Permittee shall identify, in writing, the environmental professional retained for construction oversight prior to initial clearing and grading activities.
17. Wetland buffers shall remain in an undisturbed condition except for approved drainage facility construction/maintenance.
18. The following boundaries, as shown on the approved construction drawings, shall be clearly delineated on the site prior to initial clearing or grading activities:

- (X) Wetland preservation
- (X) Wetland buffers
- (X) **Limits** of approved wetland impacts
- (X) Construction access for (list mitigation area(s))

The delineation shall endure throughout the construction period and be readily discernible to **construction** and District personnel.

19. Wetlands A, **B**, C, D, E, F, G, H, I, J, K, and Pond 5 boundaries shown on the approved construction drawings shall be binding upon the Permittee and the District.
20. **Within** one year of the date of issuance of this permit, the Permittee shall submit a plan to the District for the removal of fill within the "clay disposal area" located on District owned lands **within** the Brooker Creek Preserve. This plan will be reviewed as a formal modification to this permit and will be reviewed by both Resource Regulation and Land Management.
21. The 0.96 acre of excess wetland creation and the **11.48** acres of wetland restoration within the Brooker Creek Preserve mitigation area are available to offset the wetland impacts associated **with** the East-West Connector Road, Phase I project only.
22. Refer to GENERAL CONDITION No. **15** herein.

GENERAL CONDITIONS

- I. The general conditions attached hereto as Exhibit "A" are hereby incorporated into this permit by reference and the Permittee shall comply with them.



Authorized Signature




Lona

PUBLIC WORKS ENGINEERING SURFACE WATER DIVISION

Transmittal

TO: File

FROM: Nancy S. Castricone, E.I.
Permit Coordinator 

SUBJECT: Southwest Florida Water Management District
Environmental Resource Permit **Correction**
East-West Connector Road Phase I
SWFWMD Permit No. 4302661.030
PID No. 921563

DISTR: Paul Giuliani, P.E., Division Engineer, Public Works Construction
Charles R. Nor-wood, P.L.S., Chief, Land Survey Division
Robert L. Warren, Director, Highway Department
Jim Pleso, Project Manager, Transportation Engineering
Ivan Fernandez, P.E., Senior Engineer, Transportation Engineering

DATE: November 17, 2000

Please attach this **correction letter** to your copy of the permit. Thank you

Enclosure

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NOV 20 2000
HIGHWAY DEPT



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Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
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(352) 527-8131
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Vice Chair, Citrus

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Watson L. Haynes, II
Pinellas

Janet D. Kovach
Hillsborough

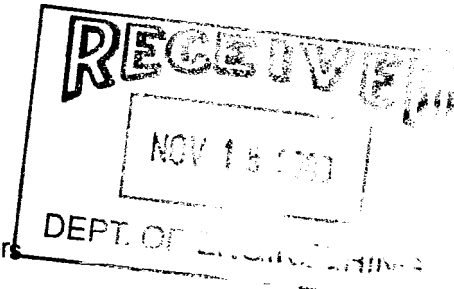
Heidi B. **McCree**
Hillsborough

John K. Renke, **III**
Pasco

E. D. **"Sonny" Vergara**
Executive Director
Gene A. Heath
Assistant Executive Director
William **S. Bilenky**
General Counsel

November 14, 2000

Jan R. Herbst, P.E.
Pinellas County Board of County Commissioners
440 Court Street
Clearwater, FL 33756



Subject: **Corrected Permit**
Project Name: East-West Connector Road, Phase I
Permit No(s): 4302661.030
County: Pinellas
Sec/Twp/Rge: 13 and 14/28S/16E

Dear Ms. Herbst:

Thank you for advising us of an error in the permit issued to you on September 26, 2000. The Operation and Maintenance Entity listed was incorrect. The correct Operation and Maintenance Entities are: Tampa Bay Park of Commerce (TBPOC) and Pinellas County Highway Department. Also, Specific Condition No. 21 should state that the excess mitigation within Brooker Creek Preserve is available to offset wetland impacts associated with the East-West Connector Road, Phase II project only.

Please attach this letter to your permit packet.

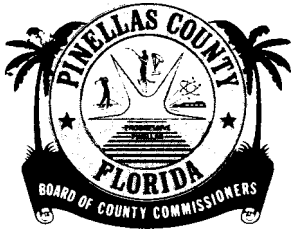
We hope that these errors have not caused an inconvenience for you. If you have questions, please contact our office.

Sincerely,

Alba E. Más, P.E., Director
Tampa Regulation Department

AEM:kr

cc: File of Record 4302661.030
Thomas Wm. **McGrew**, P.E. King Engineering Associates, Inc.

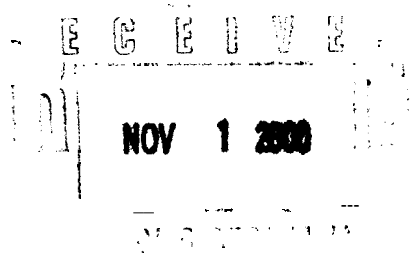


BOARD OF COUNTY COMMISSIONERS
PINELLAS COUNTY, FLORIDA

DEPARTMENT OF PUBLIC WORKS
440 COURT STREET
CLEARWATER, FLORIDA 33756
PHONE: (727) 464-3251

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BARBARA SHEEN TODD



October 31, 2000

Ms. Robin McGill, P.E.
Tampa Regulation Department
Southwest Florida Water Management District
7601 Highway 301 North
Tampa, Florida 33637

Re: Change in Operation & Maintenance Entity
East-West Connector Road, Phase I
Permit No. 4302661.03
PID No. 921563
East-West Connector Road, Phase II
Permit No. 4902661.031
PID No: 922365

Dear Ms. McGill:

Pinellas County has noticed an error in the Operation and Maintenance Entity for the two, above referenced permits. Enclosed is a copy of the Tampa Bay Park of Commerce (TBPOC) Development of Regional Impact agreement which states on page four that TBPOC will operate and maintain Ponds 5, 6, & 7. Pinellas County Highway Department will operate and maintain Ponds 2 & 8. Please correct the two permits referenced above and provide written confirmation of this correction.

Pinellas County appreciates your understanding and cooperation on this matter. Should you have any questions, please contact me at 464-3647.

Sincerely,

Nancy S. Castricone, E.I.
Permit Coordinator
Public Works Surface Water Engineering

Enclosure

cc: Jim Pleso, Project Manager, Public Works Transportation Engineering
Kevin Murren, PWESI, Highway Department, Stormwater Section

TAMPA BAY PARK OF COMMERCE
DEVELOPMENT OF REGIONAL IMPACT

EXHIBIT G

TAMPA BAY PARK OF COMMERCE/EAST-WEST CONNECTOR AGREEMENT

TAMPA BAY PARK OF COMMERCE/EAST-WEST CONNECTOR AGREEMENT

This Joint Project Agreement for building of the TBPOC DRI Segment (defined below) of the DRI Obligation Road (defined below), hereinafter referred to as the "Agreement", is made as of the effective date stated herein, between Cypress Lakes Industrial Park, Ltd., a Florida limited partnership ("**CLIP**"), and Pinellas County, Florida, a political subdivision of the State of Florida ("**PINELLAS COUNTY**"), and is joined in and consented to by the City of Oldsmar, Florida, a municipal corporation ("**CITY**"), for the limited purpose set forth in Section 11 hereof.

RECITALS

WHEREAS, CLIP is the developer of record of that certain development of regional impact ("DRI") situated in Pinellas County, Florida, known as the Tampa Bay Park of Commerce DRI, pursuant to PINELLAS COUNTY Resolution No. 85-264, as amended and superseded by PINELLAS COUNTY Resolution No. 98-229 ("TBPOC" or "TBPOC DRI"); and

WHEREAS, the Resolution Trust Corporation is the receiver for the developer of record of the Forest Lakes DRI ("Forest Lakes" or "Forest Lakes DRI"), an approved DRI, pursuant to City of Oldsmar Resolution No. 8 1-10, as amended; and

WHEREAS, the Milford Corporation ("Milford") is the developer of record of the Cypress Lakes Development of Regional Impact ("Cypress Lakes" or "Cypress Lakes DRI"), an approved DRI, pursuant to City of Oldsmar Resolution No. 95-13; and

WHEREAS, the development orders for the Forest Lakes DRI, Cypress Lakes **DRI** and **TBPOC** DRI contemplated the cooperative design and dedication requirements for that certain public six lane road, previously known and referred to herein as the "East-West Connector," to be situated along the same alignment as the DRI Obligation Road more particularly albeit generally depicted on Exhibit "A;" and

WHEREAS, the development orders for the Forest Lakes DRI, Cypress Lakes DRI and **TBPOC** DRI contemplated the coordinated construction ("Road Project") of a public two-lane road, situated, in Pinellas County ("DRI Obligation Road"), more particularly albeit generally located on Exhibit "A" hereto; and

WHEREAS, PINELLAS COUNTY as a political subdivision of the State of Florida is the governmental entity responsible for the approval of plans and construction for, and ultimate maintenance of, Pinellas County roadways and is the recipient of the Forest Lakes DRI proportionate share contribution that previously was apportioned out of the proceeds of the sale of certain Forest Lakes DRI properties to PINELLAS **COUNTY** and the Southwest Florida Water Management District; and

WHEREAS, the approved development orders for the Cypress Lakes **DRI**, **TBPOC DRI** and Forest Lakes **DRI** contain certain respective obligations related to the planning, design, and right-of-way and retention pond dedication requirements of the East-West Connector to the extent the road traverses, or is adjacent to or contiguous with, the Cypress Lakes **DRI**, **TBPOC DRI** and Forest Lakes **DRI**, respectively, and with respect to the **TBPOC DRI**, to the extent that the East-West Connector extend:, beyond its boundaries to Race Track Road; and

WHEREAS, no funds or contributions related to the East-West Connector, the **DRI** Obligation Road or the Road Project (as defined below) have been or are to be paid to **CLIP**, directly or indirectly, by the Forest Lakes **DRI** developer or Milford, nor has **CLIP** paid, nor does it owe, any such amounts to **PINELLAS COUNTY**, Milford, or the Forest Lakes **DRI** developer; and

WHEREAS, **PINELLAS COUNTY** desires to proceed expeditiously with completion of the plans and right-of-way and pond site acquisition for the East-West Connector, and construction of what is hereinafter defined as the **TBPOC Segment of the DRI Obligation Road**, together with appurtenant retention areas and other related improvements and facilities which will facilitate the subsequent six lane expansion thereof, referred to herein collectively as the "Road Project"; and

WHEREAS, to minimize public cost, **PINELLAS COUNTY** desires to utilize, in whole or in part, the existing plans and improvements previously procured or prepared at the direction of **CLIP** for the **TBPOC Segment of the DRI Obligation Road** and the East-West Connector; and

WHEREAS, **CLIP** intends to excavate a borrow pit on a portion of the **TBPOC DRI** and can make available certain fill dirt that may be used in the construction of the East-West Connector; and

WHEREAS, concurrently herewith **CLIP** and the **CITY** are consummating an annexation of portions of the **TBPOC DRI** into the **CITY**, and adoption of a new joint development order by the **CITY** as **CITY** of Oldsmar Resolution No. 98-28 and **PINELLAS COUNTY** Resolution No. 98-229 (the "Joint development order") pursuant to Section 380.06(15)(g), Florida Statutes; and

WHEREAS, the Joint development order for the **TBPOC DRI** will provide that construction of the **TBPOC Segment of the DRI Obligation Road** pursuant to this Agreement shall satisfy **CLIP's** pipelining obligations with respect to the **TBPOC Segment of the DRI Obligation Road** and the East-West Connector under the development order for the **TBPOC DRI**; and

WHEREAS, **PINELLAS COUNTY**, **CLIP**, and the **CITY** all desire and intend, that the terms of this Agreement shall survive any such annexation, development order adoption and/or conditions and amendment(s), and changes in land use, without any legal effect on the terms and conditions and the enforceability of this Agreement;

NOW, THEREFORE, for and in consideration of the mutual covenants which follow, and of other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

AGREEMENT

SECTION 1. INCORPORATION OF RECITALS AND EXHIBITS The above recitals are true and correct and are incorporated **by** reference herein. Exhibits attached hereto are demonstrative in nature.

SECTION 2. DELINEATION OF DRI OBLIGATION ROAD SEGMENTS AND OTHER PROPERTY

2.1 **THE DRI OBLIGATION ROAD** The DRI Obligation Road consists of a two-lane divided, arterial roadway, designed for a forty-five miles per hour (45 mph) speed limit and having access to adjoining properties restricted as established in the Forest Lakes DRI, Cypress Lakes DRI and TBPOC DRI development orders. The DRI Obligation Road is to extend from the north intersection of Forest Lakes Boulevard and State Road 584 to Race Track Road, as shown, albeit generally, in Exhibit "A" of this Agreement.

2.2 **TBPOC SEGMENT** For purposes of this Agreement, the "TBPOC Segment" of the East-West Connector is a right-of-way 150' wide and extending 5,034 linear feet more or less, **from** the western property boundary of the TBPOC DRI extending eastward to Race Track Road, as generally depicted on Exhibit "B." The parties **acknowledge** that said 150' right-of-way is intended to follow the centerline alignment of the original 133' right-of-way depicted on the Roadway Plans identified in Section 2.3, below. The TBPOC Segment includes approximately 914 **linear** feet more or **less east of the TBPOC** eastern property boundary (the 'Race Track Road Access Parcel') for which CLIP shall have no responsibility or obligation hereunder. Portions of the DRI Obligation Road also are to be located within the Forest Lakes DRI ("Forest Lakes Segment") and the Cypress Lakes DRI ("Cypress Lakes Segment"), as denoted in that certain Forest Lakes/East-West Connector Road Agreement bearing an effective date of April 18, 1995. CLIP and its successors and assigns covenant and agree to retain ownership of said 150' right-of-way within the TBPOC boundaries pending conveyance thereof to Pinellas County hereunder, and not to encumber or restrict said ability to convey **by reason** of any intervening property transfers to third parties within the TBPOC project.

2.3 **OTHER PROPERTY** In addition to the 150' wide road right-of-way within the TBPOC property required for the TBPOC Segment of the East-West Connector, certain drainage and/or retention areas within TBPOC are required for the TBPOC Segment of the East-West Connector. The original 133 feet of the road right-of-way and the original location of drainage and/or retention areas and the wetland mitigation areas are generally depicted and described in the sixty percent (60%) plans prepared by King Engineering Associates, Inc. filed with the Clerk of the Board of County Commissioners as part of the record in support of the April 18, 1995,

adoption of the Forest ~~Lakes~~**East-West** Connector Road Agreement with ~~the~~ **Milford** Corporation, hereinafter referred to as the "Roadway **Plans.**" The **TBPOC** pond areas are hereby relocated and re-designated as "Pond **#5,**" "Pond **#6,**" and "Pond **#7,**" respectively, as generally depicted on Exhibit "**C**" hereto, which areas equal or exceed the requirements originally contemplated within **TBPOC** by the Roadway Plans. The **TBPOC** pond areas do not include Pond **#8,** related to the Race Track Road Access ~~Parcel,~~ for which CLIP shall have no responsibility or obligation hereunder. With respect to the **TBPOC** pond areas, the parties agree that:

2.3.1. Subject to non-Pinellas County permitting agency legal requirements, CLIP may utilize **4:1** (rather than **3:1**) pond slopes to ensure an aesthetically pleasing feature for **TBPOC**; provided, however, that **CLIP** shall dedicate easements over, for no ~~cash~~ or credits, the additional areas(s) necessary to accommodate such **4:1** slope (as opposed to a **3:1** slope).

2.3.2. Subject to non-Pinellas permitting agency legal requirements, the pond areas shall not be fenced, and shall be maintained (including littoral shelves, structure, wetland buffers and slopes) by CLIP, its successor **DRI** developer-of-record, or a designated owner's association in a manner consistent with the aesthetic appearance of **TBPOC's** developed areas; provided, however, that **PINELLAS** COUNTY shall have reasonable maintenance access to and the right to enter upon and maintain said areas if CLIP or its designee fail to do so in a reasonable manner, the expenses for which actions by the County shall be paid by CLIP or its designee to the county.

2.3.3. CLIP or its designee shall retain fee ownership of ~~the~~ pond areas subject to appropriate non-exclusive drainage easements in favor of the County.

2.3.4. **CLIP** may request **PINELLAS** COUNTY to relocate any **TBPOC** pond area(s) prior to execution of a road construction contract by **PINELLAS** COUNTY; provided, however that (i) the capacity of the **TBPOC** ponds equals or exceeds that contemplated by the Roadway Plans, (ii) **TBPOC** pays the cost of re-design of the Roadway Plans related thereto, and (iii) the projected cost of road construction is not increased thereby, or **CLIP** agrees to pay such additional cost; and (iv) **TBPOC** dedicates easements over the substitute areas pursuant to Section 4.1.1 below.

2.3.5. The parties agree to cooperate fully and to utilize their respective best efforts to facilitate the procurement on non-Pinellas County agency permits, including both drainage and construction permits, to expedite both the road construction and **TBPOC** site development without merging said applications, to allow utilization of existing **PINELLAS** COUNTY land that is available for road mitigation, and to minimize the cost of required drainage and mitigation for the Road Project and the **TBPOC** project, respectively. The parties agree that the permit applicant as to each required permit shall be that party which best can facilitate the intent hereof, regardless of which party is responsible as the Constructing Entity or for pond or mitigation operation and maintenance hereunder.

SECTION 3. COMPLETION OF THE ROAD

3.1 **CONSTRUCTING ENTITY** As of the Effective Date (as defined below) of this Agreement, and subject to Sections 3.1.1, 3.1.2 and 3.1.3 below, the parties agree that **PINELLAS COUNTY** shall be the entity responsible for finalizing the design and for construction of the **TBPOC** Segment ("Constructing Entity") of the **DRI** Obligation Road, as part of the Road Project. The parties recognize that **PINELLAS COUNTY'S** obligation to complete the **DRI** Obligation Road is subject to:

3.1.1. **CLIP** fulfilling its obligations under this Agreement and the Joint development order; and

3.1.2. The funding restrictions set forth in Sections 129.07, 129.08, and 129.09, Florida Statutes (1997), the regulatory restrictions of **PINELLAS COUNTY'S** transportation impact fee ordinance, **PINELLAS COUNTY'S** legislative responsibilities to its comprehensive plan, and regulatory restrictions of the Metropolitan Planning Organization's ("**MPo**") long-range plan and other regulatory agencies, which may affect **PINELLAS COUNTY'S** obligations with respect thereto.

3.1.3. Acquisition of necessary property rights.

The parties further recognize that to the extent that County's obligations are not fulfilled because of failure of one of the conditions set forth in this Section 3.1, **CLIP's** obligations under the development order are not **fulfilled**, unless **CLIP** or its successor or designee (i) reaches agreement with the County to become the Constructing Entity hereunder, or (ii) otherwise complies with Section 4.2.2 of the Joint development order.

3.2 **Environmental Permit construction, maintenance and monitoring**

3.2.1. **CLIP** shall remain responsible for the mitigation maintenance and monitoring for **the TBPOC** Mitigation Area depicted and described on Exhibit "**D**" hereto, which is subject to existing permits as of the Effective Date of this agreement. **CLIP** hereby agrees to indemnify Pinellas County and hold it harmless with respect to such required mitigation maintenance and monitoring for said existing area

3.2.2. Pinellas County hereby assumes responsibility for procurement of any additional environmental permits, for provision of land owned or controlled by Pinellas County for any additional mitigation area, and for all additional mitigation construction required for **the Road** Project. Once such additional permits are procured and said additional construction is completed on Pinellas County owned or controlled land, **CLIP** or its designee shall assume the operation and maintenance responsibility, including monitoring, under said permits and agrees to indemnify Pinellas County and hold it harmless with respect to such required mitigation maintenance and monitoring.

PHASE 1

From: Kevin Murren
To: "Kim.Schwartz@SWFWMD.STATE.FL.US".GWIA.PCGMail
Date: 8/23/04 12:10:44 PM
Subject: Re: Permit No. 49002661.030/031

This is their address according to the County's property records:

H/A Partners LTD
777 S Harbour Island Blvd #877
Tampa, FL 33602-5746

>>> Kim.Schwartz@SWFWMD.STATE.FL.US> 8/23/04 11:37:42 AM >>

There won't be any paperwork involved, but I wonder if you have an address for TBPOC address. We have H/A Partners Ltd on Harbour Island Blvd. in Tampa. Is that right?

Kim L. Schwartz
Sr Admin Asst, Tampa Regulation Department
Southwest Florida Water Management District
(813) 985-7481, ext. 2023
Kim.Schwartz@swfwmd.state.fl.us
<http://www.swfwmd.state.fl.us>

IMPORTANT: All e-mails sent to this address are public record and are archived. SWFWMD does not endorse use of District equipment for non-District purposes.

"Kevin Murren"<kmurren@co.pinellas.fl.us>
To: <Kim.Schwartz@SWFWMD.STATE.FL.US>
Subject: Re: Permit No. 49002661.030/031
08/18/2004 03:45PM

Will revised O&M transfer paperwork be sent out to both parties?

>>> Kim.Schwartz@SWFWMD.STATE.FL.US> 8/18/04 3:39:39 PM >>

Sounds good to me. Consider it done.

Kim L. Schwartz
Sr Admin Asst, Tampa Regulation Department
Southwest Florida Water Management District
(813) 985-7481, ext. 2023
Kim.Schwartz@swfwmd.state.fl.us
<http://www.swfwmd.state.fl.us>

IMPORTANT: All e-mails sent to this address are public record and are archived. SWFWMD does not endorse use of District equipment for non-District purposes.

"Kevin Murren" kmurren@co.pinellas.fl.us
To: <Kim.Schwartz@SWFWMD.STATE.FL.US>
Subject: Re: Permit No. 49002661.030/031
08/18/2004 03:37PM

Kim, then make .030 TBPOC and .031 Pinellas County. While pond 2 is part of .030 the agreement between TBPOC and Pinellas County is very specific who has what O&M responsibilities. Will that work for you?

>>> <Kim.Schwartz@SWFWMD.STATE.FL.US> 8/18/04 3:34:47 PM >>>

Kevin, that is the problem. Our system only allows us to input one O&M.

Kim L. Schwartz
Sr Admin Asst, Tampa Regulation Department
Southwest Florida Water Management District
(813) 985-7481, ext. 2023
Kim.Schwartz@swfwmd.state.fl.us
<http://www.swfwmd.state.fl.us>

IMPORTANT: All e-mails sent to this address are public record and are archived. SWFWMD does not endorse use of District equipment for non-District purposes.

"Kevin Murren" kmurren@co.pinellas.fl.us
To: <Kim.Schwartz@SWFWMD.STATE.FL.US>
Subject: Re: Permit No. 49002661.030/031
08/18/2004 02:53PM

Kim,

By letter to the District dated Oct. 31, 2000 we requested correction of the permits to reflect that Tampa Bay Park of Commerce (TBPOC) was the O&M entity for ponds 3, 4, 5, 6 & 7 and Pinellas County was the O&M entity for Ponds 2 and 8. By letter dated Nov. 14, 2000 the District corrected the permit to reflect the two O&M entities. Since Permit .030 covers ponds 2 - 7 the O&M entity is both TBPOC and Pinellas County. Permit .031 is for Pond 8 only and Pinellas County is the sole O&M entity. So I guess the question is can you show two O&M entities for a permit?

Kevin P. Murren
Environmental Program Manager
Stormwater Permitted Facility Management
P. C. Highway Department
727-464-5922

>>> Kim.Schwartz@SWFWMD.STATE.FL.US> 8/18/04 9:40:06 AM >>
Kevin,

I researched the above permit files and it looks like ponds 2,3,4,5,6 and 7 are covered under the .030 revision and pond 8 is covered under the .031. As far as showing the proper O&M entity, I am not sure how to do this in my computer.

Kim L. Schwartz
Sr Admin Asst, Tampa Regulation Department
Southwest Florida Water Management District
(813) 985-7481, ext. 2023
Kim.Schwartz@swfwmd.state.fl.us
<http://www.swfwmd.state.fl.us>

IMPORTANT: All e-mails sent to this address are public record and are archived. SWFWMD does not endorse use of District equipment for non-District purposes.

IMPORTANT NOTICE: All E-mail sent to this address is public record and archived. The Southwest Florida Water Management District does not allow use of District equipment and E-mail facilities for non-District business purposes.

PHASE 1

From: Antony Rodwell
To: Murren, Kevin
Date: 7/29/2004 2:06:15 PM
Subject: East-West Connector Permit files

Attached are the O&M and the original permit.

The correction of the original permit is clear, but does the O&M document accurately reflect that?

Thanks, Tony.

Sent email to Kim, SWFUMD 7/29 to revise to two O&M
entries - County Bonds 2 & 3, TBPOC - others.
Problem w/ PDF attachments - resent 7/29 email w/o PDF.
8/11/04 - sent email to Kim w/ ~~new~~ PDF of letter mod.



An Equal
Opportunity
Employer

Southwest Florida Water Management District

Bartow Service Office
170 Century Boulevard
Bartow, Florida 33830-7700
(863) 534-1448 or
1-800-492-7862 (FL only)
SUNCOM 572-6200

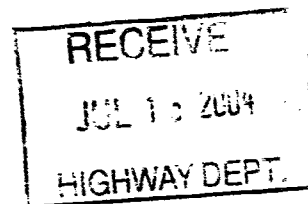
Lecanto Service Office
3600 West Sovereign Path
Suite 226
Lecanto, Florida 34461-8070
(352) 527-8131
SUNCOM 667-3271

2379 Broad Street, Brooksville, Florida 34604-6899
(352) 796-7211 or 1-800-423-1476 (FL only)
SUNCOM 628-4150 TDD only 1-800-231-6103 (FL only)
On the Internet at: WaterMatters.org

Sarasota Service Office
6750 Fruitville Road
Sarasota, Florida 34240-9711
(941) 377-3722 or
1-800-320-3503 (FL only)
SUNCOM 531-6900

Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
(813) 985-7481 or
1-800-836-0797 (FL only)
SUNCOM 578-2070

June 30, 2004



Robert Warren, Director
Pinellas County Highway Department
22211 U.S. Highway 19 North
Clearwater, FL 33765

Subject: Transfer to Operation Phase

Project Name: East-West Connector Road - Phase **II**
Permit No.: 49002661.030 and **.031**
Compliance No.: 123610
Sec/Twp/Rge: 13, 14/28S/16E; 18/28S/17E
County: Pinellas

Dear Mr. Warren:

The request to transfer the permit referenced above to the operation phase has been approved. District staff has reviewed the as-built drawings, inspected the project, and determined the surface water management system in compliance at the time of our inspection. The District reserves the right to inspect the project in the future to ensure continued compliance with state law and District rules.

The Permit contains conditions requiring periodic inspection and maintenance. The inspections are required every 18 to 24 months. The inspection results must be reported to the District on the enclosed form entitled "Statement of Inspection for Proper Operation and Maintenance." Please refer to the permit to determine the inspection schedule and when this form should be filed.

As outlined in Subsection 40D-4.351(1)(a), "A Permittee shall notify the District within 30 days of any sale, conveyance or any other transfer for a permitted surface water management system or the real property at which the system is located." For your convenience, we have enclosed a "Notification and Request for Transfer of Environmental Resource Permit" form to submit for transferring the permit.

If you have questions, please contact Stephan R. Stokes, P.E. at extension 2089 in the Tampa Service Office.

Sincerely,

Alba E. Más, P.E.
Tampa Regulation Department

AEM:SRS:elb

Enclosures: Executed Statement of Completion, As-Built Drawings, Permit, Statement of Inspection Form, Notification and Request to Transfer Form

cc: File of Record 49002661.030 and .031/CT 123610
Marty L. Morlan, P.E., King Engineering Associates, Inc.

Watson L. Haynes II
Chair, Pinellas

Heidi B. McCree
Vice Chair, Hillsborough

Judith C. Whitehead
Secretary, Hernando

Talmadge G. "Jerry" Rice
Treasurer, Pasco

Edward W. Chance
Manatee

Thomas G. Dabney
Sarasota

Maggie N. Dominguez
Hillsborough

Ronnie E. Duncan
Pinellas

Ronald C. Johnson
Polk

Janet D. Kovach
Hillsborough

Patsy C. Symons
DeSoto

David L. Moore
Executive Director

Gene A. Heath
Assistant Executive Director

William S. Bilenky
General Counsel

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
Standard General
PERMIT NO. 4902661.031

EXPIRATION DATE: October 4, 2005

PERMIT ISSUE DATE: October 4, 2000

This permit issued under the provisions of Chapter 373, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.), Rule 40D-40 authorizes the Permittee to perform the work outlined herein and shown by the application, approved drawing(s), plans, and other documents, attached hereto and kept on file at the Southwest Florida Water Management District (District). All construction, operation and maintenance of the surface water management system authorized by this permit shall occur in compliance with Florida Statutes and Administrative Code and the conditions of this permit.

PROJECT NAME: East-West Connector Road (Phase II)
GRANTED TO: Pinellas County Board of County Commissioners
440 Court Street
Clearwater, FL 33756

ABSTRACT: This permit is for the construction of 1,300 linear feet of two (2) lane divided rural roadway and associated surface water management facilities from 1,300 feet west of Race Track Road to Race Track Road. There are no additional through lanes proposed at this time for Race Track Road. Improvements to Race Track Road are limited to extensions of the left turn lane and shoulders. The proposed wet detention pond will provide water quality treatment of the first inch of runoff from the contributing area. The pond will also provide attenuation of the peak discharge rates for the 25-year, 24-hour storm. The pond is designed for the ultimate build-out of the East-West Connector Road. The ultimate build-out is a six (6) lane divided roadway with a bicycle lane and sidewalk. The pond will outfall to the nearby natural wetland conveyance system.

OP. & MAINT. ENTITY: Pinellas County Public Works Department
PROPERTY LOCATION: Pinellas & Hillsborough County
SEC/TWP/RGE: 13/28S/16E & 18/28S/17E
**TOTAL ACRES OWNED
OR UNDER CONTROL:** 5.8
PROJECT SIZE: 5.8 Acres
LAND USE: Road Project
DATE APPLICATION FILED: April 25, 2000
AMENDED DATE: September 19, 2000

TRANSFERRED TO
OPERATION PHASE

Permit No. 4902661.031
 Project Name: East-West Connector Road (Phase II)
 Page 2

I. Water Quantity/Quality

POND NO.	AREA ACRES AT TOP OF BANK	TREATMENT TYPE
8	0.60	Wet Detention
TOTAL	0.60	

Mixing Zone Required: YES () NO (X)

Variance Required: YES () NO (X)

II. 100-Year Floodplain

Encroachment (Acre-Feet of fill)	Compensation (Acre-Feet of excavation)	Compensation Type	Encroachment Result (feet)
3.01	0.00	MI	0.01

Comments: MI = Minimal Impact based on modeling of existing stages vs. post-project encroachment. Encroachment Result (feet) depth of change in flood stage (level) over existing receiving water stage resulting from floodplain encroachment caused by a project that claims MI type of compensation.

III. Environmental Considerations

Wetland Information:				
WETLAND NUMBER	TOTAL ACRES	NON IMPACTED ACRES	TEMPORARILY DISTURBED ACRES	PERMANENTLY DESTROYED ACRES
AA-1	0.33	0.00	0.00	0.33
AA-2	0.03	0.00	0.00	0.03
H-4	0.02	0.00	0.00	0.02
CC	0.13	0.00	0.00	0.13
DD-1	0.27	0.00	0.00	0.27
DD-2	0.09	0.00	0.00	0.09
BB	0.07	0.00	0.00	0.07
TOTAL	0.94	0.00	0.00	0.94

Comments: The East West Road Phase II project will impact 0.94 acre of forested and herbaceous wetlands. The Permittee shall compensate for these impacts by using excess wetland creation and wetland enhancement available at the County's mitigation site within Brooker Creek Preserve. The mitigation area was authorized under the East West Road Phase I project (ERP No. 492661.030). A total of 0.96 acre of wetland creation and 11.48 acres of wetland enhancement within the

Permit No. 4902661.031
Project Name: East-West Connector Road (Phase II)
Page 3

Brooker Creek Preserve mitigation area is set aside to offset the wetland impacts associated with this project.

Watershed name(s): Tampa Bay Drainage

A Conservation Easement is not required.

SPECIFIC CONDITIONS

1. If the ownership of the project area covered by the subject permit is divided, with someone other than the Permittee becoming the owner of part of the project area, this permit shall terminate, pursuant to Section 40D-1.6105, F.A.C. In such situations, each land owner shall obtain a permit (which may be a modification of this permit) for the land owned by that person. This condition shall not apply to the division and sale of lots or units in residential subdivisions or condominiums.
2. The discharges from this system shall meet state water quality standards as set forth in Chapter 62-302 and Section 62-4.242, F.A.C., for class waters equivalent to the receiving waters.
3. Unless specified otherwise herein, two copies of all information and reports required by this permit shall be submitted to:

Tampa Regulation Department
Southwest Florida Water Management District
7601 U.S. Highway 301 North
Tampa, FL 33637

The permit number, title of report or information and event (for recurring report or information submittal) shall be identified on all information and reports submitted.
4. The Permittee shall retain the design engineer, or other professional engineer registered in Florida, to conduct on-site observations of construction and assist with the as-built certification requirements of this project. The Permittee shall inform the District in writing of the name, address and phone number of the professional engineer so employed. This information shall be submitted prior to construction.
5. Within 30 days after completion of construction of the permitted activity, the Permittee shall submit to the Tampa Service Office a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1, F.A.C., and signed, dated, and sealed as-built drawings. The as-built drawings shall identify any deviations from the approved construction drawings.
6. The District reserves the right, upon prior notice to the Permittee, to conduct on-site research to assess the pollutant removal efficiency of the surface water management system. The Permittee may be required to cooperate in this regard by allowing on-site access by District representatives, by allowing the installation and operation of testing and monitoring equipment, and by allowing other assistance measures as needed on site.
7. The operation and maintenance entity shall submit inspection reports in the form required by the District, in accordance with the following schedule.

For systems utilizing retention or wet detention, the inspections shall be performed two (2) years after operation is authorized and every two (2) years thereafter.

Permit No. 4902661.031
Project Name: East-West Connector Road (Phase II)
Page 4

8. The removal of littoral shelf vegetation (including cattails) from wet detention ponds is prohibited unless otherwise approved by the District. Removal includes dredging, the application of herbicide, cutting, and the introduction of grass carp. Any questions regarding authorized activities within the wet detention ponds shall be addressed to the District's Surface Water Regulation Manager, Tampa Service Office.
9. The construction of all wetland impacts and wetland mitigation shall be supervised by a qualified environmental scientist/specialist/consultant. The Permittee shall identify, in writing, the environmental professional retained for construction oversight prior to initial clearing and grading activities.
10. Wetland buffers shall remain in an undisturbed condition except for approved drainage facility construction/maintenance.
11. The following boundaries, as shown on the approved construction drawings, shall be clearly delineated on the site prior to initial clearing or grading activities:
 - (X) wetland preservation
 - (X) wetland buffers
 - () upland preservation
 - (X) limits of approved wetland impacts
 - () construction access for (list mitigation area(s))

The delineation shall endure throughout the construction period and be readily discernible to construction and District personnel.
12. Wetland AA-1, AA-2, H4, CC, DD-1, DD-2, and BB boundaries shown on the approved construction drawings shall be binding upon the Permittee and the District
13. Refer to GENERAL CONDITION No. 15 herein.

GENERAL CONDITIONS

1. The general conditions attached hereto as Exhibit "A" are hereby incorporated into this permit by reference and the Permittee shall comply with them.



Authorized Signature