

CONTRACT DOCUMENTS FOR:



COLLEGE ROAD ENHANCEMENTS

OVERSEAS HIGHWAY TO KOKENZIE RD. FEBRUARY 2011 PROJECT No. GN-0711 (LAP AGREEMENT# FM 421379-1)

MAYOR: CRAIG CATES

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PREPARED BY:
BERMELLO AJAMIL & PARTNERS, INC

COPY NO. _____

CITY OF KEY WEST

KEY WEST, FLORIDA

CONTRACT DOCUMENTS

for

COLLEGE ROAD
ENHANCEMENTS

OVERSEAS HIGHWAY TO KOKENZIE RD

CONSISTING OF:
BIDDING REQUIREMENTS
CONTRACT FORMS
CONDITIONS OF THE CONTRACT
SPECIFICATIONS
DRAWINGS

BERMELLO AJAMIL & PARTNERS, INC.

KEY WEST, FLORIDA

FEBRUARY 2011

Project No. GN 0711

Copy No.

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PART 1

BIDDING REQUIREMENTS

INVITATION TO BID

INVITATION TO BID NOTICE is hereby given to prospective Bidders that sealed bids will be received by the CITY of KEY WEST, FLORIDA at the Office of the City Clerk, 525 Angela Street, Key West, Florida 33040 until 3:30PM, local time, on Wed. March 30, 2011 for "College Road Enhancements." Bids will be opened in the Office of the City Clerk and then will be publicly opened and read. Any Proposal received after the time announced will not be considered.

One (1) original, two (2) copies and two (2) CD-ROMs or flash drives each with one PDF file of the full Proposal are to be enclosed in a sealed envelope, clearly marked on the outside: "BID FOR: "COLLEGE ROAD ENHANCEMENTS " addressed and delivered to the City Clerk at the address noted above.

The City retains the right to award bid to the bidder that best meet the needs of the City.

A MANDATORY PRE-BID CONFERENCE WILL BE HELD IN THE CONFERENCE ROOM AT 3140 FLAGLER AVENUE, KEY WEST, FLORIDA, ON MARCH 17TH, 2011 @ 2PM. BIDS WILL ONLY BE ACCEPTED FROM THOSE WHO ARE REPRESENTED AT THE MANDATORY BID CONFERENCE.

This project is located on College Road on Stock Island. The proposed improvements for this corridor consist of constructing a 6' wide sidewalk that begins at SR-5/US-1 (Overseas Highway) and ends at Kokenzie Road.

Drawings and Specifications may be obtained from Demand Star by Onvia. Please contact Demand Star at www.demandstar.com or call 1-800-711-1712.

EACH BID MUST BE SUBMITTED ON THE PRESCRIBED FORM AND ACCOMPANIED BY BID SECURITY AS PRESCRIBED IN THE INSTRUCTIONS TO BIDDERS, PAYABLE TO THE CITY OF KEY WEST, FLORIDA, IN AN AMOUNT NOT LESS THAN FIVE (5) PERCENT OF THE AMOUNT BID.

THE BIDDER MUST BE A LICENSED CONTRACTOR BY THE STATE OF FLORIDA AND SUBMIT PROOF OF SUCH WITH THE BID. BIDDER SHALL PROVIDE WITH THE BID PROPOSAL THE COMPLETED ATTACHMENT I; NON-COLLUSION DECLARATION AND COMPLIANCE WITH 49 CFR §29; FDOT FORM 575-060-13; FAILURE TO SUBMIT COPIES MAY REQUIRE THE BID BE VOIDED.

The successful Bidder will be required to furnish the necessary additional bond(s) for the faithful performance of the Contract, as prescribed in the Bidding Documents. Within 10 days after the Notice of Award, the successful Bidder will also be required to furnish documentation showing that he is in compliance with the licensing requirements of the state and that the provisions of Chapter 66 Section 87 of the Code of Ordinances of the City of Key West. Compliance with these provisions is required before he can enter into the agreement contained in the Contract Documents. Specifically, within 10 days after the Notice of Award, the successful Bidder must demonstrate that he holds, as a minimum, the following licenses and certificates:

- A. City of Key West License, as defined in Code of Ordinances, Chapter 66, enabling the Contractor to perform the work stated herein.
- B. A valid Certificate of Competency issued by the Chief Building Official of Key West, Florida.
- C. A valid occupational license issued by the City of Key West, Florida.

All bid bonds, contract bonds, insurance contracts, and certificates of insurance shall be either executed by or countersigned by a licensed resident agent of the Surety or insurance company having his place of business in the State of Florida, and in all ways complying with the insurance laws of the State of Florida. Further, the said Surety or Insurance Company shall be duly licensed and qualified to do business in the State of Florida.

Before a Contract will be awarded for the work contemplated herein, the OWNER will conduct such investigation as is necessary to determine the performance record and ability of the apparent low Bidder to perform the size and type of work specified under this Contract. Upon request, the Bidder shall submit such information as deemed necessary by the OWNER to evaluate the Bidder's qualifications.

The Local Agency of The City of Key West hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprise will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, gender, religion, age, disability, marital status or national origin in consideration for this award.

For information concerning the proposed work, or for appointment to visit the sites within the City for work that may be issued, contact Janet Muccino, Project Manager, General Services, telephone: (305) 809-3867.

At the time of the award, the successful Bidder must show satisfactory document of such State, County, and City licenses as would be required. Any permit and/or license requirement and subsequent costs are located within the bid documents. The successful Bidder must also be able to satisfy the City Attorney as to such insurance coverage and legal requirements as may be demanded by the Bid in question. The City may reject bids for any and/or all of the following reasons: (1) for budgetary reasons, (2) if the bidder misstates or conceals a material fact in its bid, (3) if the bid does not strictly conform to the law or is non-responsive to the bid requirements, (4) if the bid is conditional, or (5) if a change of circumstances occurs making the purpose of the bid unnecessary to the City. (6) The City may also waive any minor formalities or irregularities in any bid.

CITY OF KEY WEST

By _____
 Jim Scholl, City Manager

* * * * *

INSTRUCTIONS TO BIDDERS

1. CONTRACT DOCUMENTS

A. FORMAT

The Contract Documents are divided into parts, divisions, and sections for convenient organization and reference. Generally, there has been no attempt to divide the Specification sections into work performed by the various building trades, work by separate subcontractors, or work required for separate facilities in the project.

B. DOCUMENT INTERPRETATION

The separate sections contained within these Contract Documents are intended to be mutually cooperative and to provide all details reasonably required for the execution of the proposed work.

Should there be any doubt as to the meaning or intent of said Contract Documents, the Bidder should request of the Engineer, in writing (at least 8 working days prior to bid opening) an interpretation thereof. Any interpretation or change in said Contract Documents will be made only in writing in the form of Addenda to the Documents, which will be furnished to all registered holders of Contract Documents. Bidders shall submit with their Proposals, or indicate receipt of, all Addenda. The Owner will not be responsible for any other explanation or interpretations of said Documents.

C. DRAWINGS

Drawings and details of construction are bound herein.

2. GENERAL DESCRIPTION OF THE PROJECT

A general description of the work to be done is contained in the Invitation to Bid. The scope is specified in applicable parts of these Contract Documents.

3. QUALIFICATION OF CONTRACTORS

The prospective Bidders must meet the statutorily prescribed requirements before award of Contract by the Owner.

Bidders must hold or obtain all Licenses as required by Florida State Statutes in order to bid and perform the work specified herein.

BIDDERS AND SUBCONTRACTORS MUST BE FDOT PREQUALIFIED. AS PER FDOT STANDARD SPECIFICATIONS 2-1: PREQUALIFICATION OF BIDDERS.

ALL PREQUALIFIED CONTRACTORS BIDDING MUST INCLUDE WITH THEIR BID PROPOSAL A COPY OF THEIR CERTIFICATION OF CURRENT CAPACITY (FORM 375-020-22) AND STATUS OF CONTRACTS ON HAND (FORM 375-020-21)

4. BIDDER'S UNDERSTANDING

Each Bidder must inform himself of the conditions relating to the execution of the work, and it is assumed that he will inspect the site and make himself thoroughly familiar with all the Contract Documents. Failure to do so will not relieve the successful Bidder of his obligation to enter into a Contract and complete the contemplated work in strict accordance with the Contract Documents. It shall be the Bidder's obligation to verify for himself and to his complete satisfaction all information concerning site and subsurface conditions.

The Owner will make available to prospective Bidders upon request and at the office of the Engineer, prior to bid opening, any information that he may have as to subsurface conditions and surface topography at the worksite.

Investigations conducted by the Engineer of subsurface conditions were made for the purpose of study and design and neither the Owner nor the Engineer assumes any responsibility whatever in respect to the sufficiency or accuracy of borings or of the logs of test borings or of other investigations that have been made or of the interpretations made thereof and there is no warranty or guarantee either expressed or implied that the conditions indicated by such investigations are representative of those existing throughout such area or any part thereof or that unforeseen developments may not occur.

Logs of test borings, geotechnical reports, or topographic maps showing a record of the data obtained by the Engineer's investigations of surface and subsurface conditions that are made available shall not be considered a part of the Contract Documents, said logs representing only the opinion of the Engineer as to the character of the materials encountered by him in his investigations and are available only for the convenience of the Bidders.

Information derived from inspection of logs of test borings, or pits, geotechnical reports, topographic maps, or from Drawings showing location of utilities and structures will not in any way relieve the Contractor from any risk, or from properly examining the site and making such additional investigations as he may elect or from properly fulfilling all the terms of the Contract Documents.

Each Bidder shall inform himself of, and the Bidder awarded a Contract shall comply with federal, state, and local laws, statutes, and ordinances relative to the execution of the work. This requirement includes, but is not limited to, applicable regulations concerning minimum wage rates, nondiscrimination in the employment of labor, protection of public and employee safety and health, environmental protection, the protection of natural resources, fire protection, burning and non-burning requirements, permits, fees, and similar subjects.

5. TYPE OF PROPOSAL

A. UNIT PRICE

The Proposal for the work is to be submitted on a unit price basis. Unit prices shall be submitted for all items of work set forth in the Proposal. All items required to complete the work specified or shown on the Drawings but not included in the Proposal shall be considered incidental to those set forth in the Proposal. The estimate of quantities of work to be done is tabulated in the Proposal and although stated with as much accuracy as possible is approximate only and is assumed solely for the basis of calculation upon which the award of Contract shall be made. Payment to the Contractor will be made on the measurement of the work actually performed by the Contractor as specified in the Contract Documents.

6. PREPARATION OF PROPOSALS

A. GENERAL

All blank spaces in the Proposal form must be filled in, as required, preferably in BLACK INK. All price information shall be shown in both words and figures where required. No changes shall be made in the phraseology of the forms. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures. In case of discrepancy between unit prices and extended totals, unit prices shall prevail.

Any Proposal shall be deemed informal which contains omissions, erasures, alterations, or additions of any kind, or prices uncalled for, or in which any of the prices are obviously unbalanced, or which in any manner shall fail to conform to the conditions of the published Invitation to Bid.

Only one Proposal from any individual, firm, partnership, or corporation, under the same or different names, will be considered. Should it appear to the Owner that any Bidder is interested in more than one Proposal for work contemplated; all Proposals in which such Bidder is interested will be rejected.

B. SIGNATURE

The Bidder shall sign his Proposal in the blank space provided therefor. If Bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of the officer or officers authorized to sign Contracts on behalf of the corporation. If Bidder is a partnership, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign Contracts in behalf of the partnership. If signature is by an agent, other than an officer of a corporation or a member of a partnership, a notarized power-of-attorney must be on file with the Owner prior to opening of Proposals or submitted with the Proposal otherwise the Proposal will be regarded as not properly authorized.

C. SPECIAL BIDDING REQUIREMENTS

The Bidder's attention is brought to the hiring practices and licenses and permits of the City of Key West. These are defined in the addition to Article 39, ORDINANCES, PERMITS AND LICENSES, as set forth in the Supplementary Conditions.

The successful Bidder shall maintain a yard and office within the Lower Keys (west of the Seven-Mile Bridge). All equipment required for the work shall be available at that site. If the Contractor does not have this equipment at his yard he may obtain it by lease, rent, subcontract, or from another site within his company as long as the equipment is available within 7 calendar days after receiving notice to do the work.

The Bidder shall submit with his Bid his experience record showing his experience and expertise in installation, repair, and replacement of stormwater structures as well as installation, repair and replacement of roads and sidewalks. Such experience record shall provide at least ten (10) current or recent projects of similar work preferably within Florida or the southeastern United States. For each project the following information shall be provided:

1. Description and location of work.
2. Contract amount.
3. Dates work was performed.
4. Owner.
5. Name of Owner's contact person and phone number.
6. Engineer.
7. Name of Engineer's contact person and phone number.

D. ATTACHMENTS

Bidder shall complete and submit the following forms with his bid:

Bid Bond
Anti-Kickback Affidavit
Public Entity Crimes Form
Key West Indemnification Form
Prohibited Interests Form & Notice
Bidders Checklist
ATTACHMENT I; NON-COLLUSION DECLARATION AND COMPLIANCE
WITH 49 CFR §29. FDOT form 575-060-13

E. PUBLIC ENTITY CRIMES FORM

Pursuant to the requirements of Chapter 287-133, Laws of Florida, pertaining to the sworn statement on Public Entity Crimes and the Convicted Vendor List all Bidders shall submit a signed and notarized statement with their Bid on the form provided herein.

F. FLORIDA TRENCH SAFETY ACT

The Bidder's attention is directed to the enactment of the Florida Trench Safety Act which incorporates OSHA Standards 29 CFR s. 1926.650, Subpart P, as the state's trench excavation safety standards. The Bidder shall list separately in the Proposal the cost of compliance with these standards on a lineal footage basis and the method of compliance. The Bidder shall determine if special shoring requirements are needed. Special shoring shall be identified and priced on a square footage basis in the proposal. The successful Bidder is fully responsible for the design of the trench safety system and the compliance with the applicable standards for the project.

7. STATE AND LOCAL SALES AND USE TAXES

Unless the Supplementary Conditions contains a statement that the Owner is exempt from state sales tax on materials incorporated into the work due to the qualification of the work under this Contract, all state and local sales and use taxes as required by the laws and statutes of the state and its political subdivisions shall be paid by the Contractor. Prices quoted in the Proposal shall include all nonexempt sales and use taxes unless provision is made in the Proposal form to separately itemize the tax.

8. SUBMISSION OF PROPOSALS

All Proposals must be submitted not later than the time prescribed, at the place, and in the manner set forth in the Invitation to Bid. Proposals must be made on the Proposal forms provided herewith and submitted intact with the volume containing the Bidding Requirements, Contract Forms, Specifications, Drawings and Conditions of the Contract.

Each Proposal must be submitted in a sealed envelope, so marked as to indicate the Bidder's name and its contents without being opened, and addressed in conformance with the instructions in the Invitation to Bid. One original and six copies of the bid must be submitted.

9. MODIFICATION OR WITHDRAWAL OF PROPOSALS

Prior to the time and date designated for receipt of Proposals, any Proposal submitted may be withdrawn by notice to the party receiving Proposals at the place designated for receipt of Proposals. Such notice shall be in writing over the signature of the Bidder or by telegram. If by telegram, written confirmation over the signature of the Bidder shall be mailed and postmarked on or before the date and time set for receipt of Proposals. No Proposal may be withdrawn after the time scheduled for opening of Proposals unless the time specified in paragraph AWARD OF CONTRACT of these Instructions to Bidders shall have elapsed.

10. BID SECURITY

Proposals must be accompanied by cash, a certified check, or cashier's check drawn on a bank in good standing or a bid bond issued by a Surety authorized to issue such bonds in the state where th

work is located in the amount of 5 percent of the total amount of the Proposal submitted. This bid security shall be given as a guarantee that the Bidder will not withdraw his Proposal for a period of 60 days after bid opening and that if awarded the Contract the successful Bidder will execute the attached Contract and furnish properly executed Performance and Payment Bonds, each in the full amount of the Contract price within the time specified.

The Attorney-in-Fact that executes this bond in behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the bond. Where State Statute requires, certification by a resident agent shall also be provided.

If the Bidder elects to furnish a Bid Bond, he shall use the Bid Bond form bound herewith, or one conforming substantially thereto in form and content.

11. RETURN OF BID SECURITY

Within 15 days after the award of the Contract the Owner will return the bid securities to all Bidders whose Proposals are not to be further considered in awarding the Contract. Retained bid securities will be held until the Contract has been finally executed after which all bid securities, other than Bidders' bonds and any guarantees which have been forfeited, will be returned to the respective Bidders whose Proposals they accompanied.

12. AWARD OF CONTRACT

Within 45 calendar days after the opening of Proposals the Owner will accept one of the Proposals or will act in accordance with the following paragraphs. The acceptance of the Proposal will be by written notice of award mailed to the office designated in the Proposal or delivered to the Bidder's representative. In the event of failure of the lowest responsive, responsible Bidder to sign the Contract and provide an acceptable Performance Bond, Payment Bond, insurance certificate(s) and evidence of holding required licenses and certificates, the Owner may award the Contract to the next lowest responsive, responsible Bidder. Such award, if made, will be made within 60 days after the opening of Proposals.

The Owner reserves the right to accept or reject any or all Proposals and to waive any informalities and irregularities in said Proposals.

13. BASIS OF AWARD

The award will be made by the Owner on the basis of that Proposal from the lowest responsive, responsible Bidders which, in the Owner's sole and absolute judgment will best serve the interest of the Owner.

If, at the time this Contract is to be awarded, the total of the lowest bid is deemed unbalanced with 1 or more items or the bid exceeds the Engineers estimate by 20% on 2 or more items the Owner may reject all Proposals or take such other action as best serves the Owner's interests.

14. EXECUTION OF CONTRACT

The successful Bidder shall, within 10 working days after receiving Notice of Award, sign and deliver to the Owner a Contract in the form hereto attached together with the insurance certificate examples of the bonds as required in the Contract Documents and evidence of holding required licenses and certificates. Within 10 working days after receiving the signed Contract from the successful Bidder the Owner's authorized agent will sign the Contract. Signature by both parties constitutes execution of the Contract.

15. CONTRACT BONDS

A. PERFORMANCE AND PAYMENT BONDS

The successful Bidder shall file with the Owner, at the time of delivery of the signed Contract, a Performance Bond and Payment Bond on the form bound herewith, each in the full amount of the Contract price in accordance with the requirements of Florida Statutes Section 255.05 or 713.23, as applicable, as security for the faithful performance of the Contract and the payment of all persons supplying labor and materials for the construction of the work and to cover all guarantees against defective workmanship or materials, or both, during the warranty period following the date of final acceptance of the work by the Owner. The Surety furnishing this bond shall have a sound financial standing and a record of service satisfactory to the Owner, shall be authorized to do business in the State of Florida, and shall be listed on the current U.S. Department of Treasury Circular Number 570 or amendments thereto in the Federal Register of acceptable Sureties for federal projects. The Contractor shall supply the owner with phone numbers, addresses, and contacts for the Surety and their agents.

B. POWER-OF-ATTORNEY

The Attorney-in-Fact (Resident Agent) who executes this Performance and Payment Bond in behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the bond.

All Contracts, Performance and Payment Bonds, and respective powers-of-attorney will have the same date.

16. FAILURE TO EXECUTE CONTRACT AND FURNISH BOND

The Bidder who has a Contract awarded to him and who fails to promptly and properly execute the Contract or furnish the required Bonds shall forfeit the bid security that accompanied his bid and the bid security shall be retained as liquidated damages by the Owner and it is agreed that this said sum is a fair estimate of the amount of damages the Owner will sustain in case the Bidder fails to enter into a Contract or furnish the required Bonds. Bid security deposited in the form of cash, a certified check, or cashier's check shall be subject to the same requirement as a Bid Bond.

17. PERFORMANCE OF WORK BY CONTRACTOR

The Contractor shall perform on the site and with his own organization labor equivalent to at least 30 percent of the total amount of the work to be performed under this Contract. If, during the progress of the work hereunder, the Contractor requests a reduction of such percentage and the Engineer determines that it would be to the client's advantage the percentage of the labor required to be performed by the Contractor's own organization may be reduced; provided prior written approval of such reduction is obtained by the contractor from the Engineer.

Each Bidder must furnish with his Proposal a list of the items that he will perform with his own forces and the estimated total cost of these items. Attach additional pages if necessary.

18. TIME OF COMPLETION

The time of completion of the work to be performed under this Contract is the essence of the Contract. Delays and extensions of time may only be allowed in accordance with the provisions stated in the General Conditions.

When the Contractor receives a Notice to Proceed he shall commence work within 14 days and shall complete all work within the number of calendar days stipulated in the Contract.

* * * * *

Contract Provisions

All contracts awarded by a recipient, including small purchases, shall contain the following provisions as applicable:

1. **Equal Employment Opportunity** - All contracts shall contain a provision requiring compliance with Executive Order (E.O.) 11246, "Equal Employment Opportunity," as amended by E.O. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and as supplemented by regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."
2. **Copeland "Anti-Kickback" Act (18 U.S.C. 874 and 40 U.S.C. 276c)** - All contracts and subgrants in excess of \$2000 for construction or repair awarded by recipients and subrecipients shall include a provision for compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. 874), as supplemented by Department of Labor regulations (29 CFR part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or sub-recipient shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he is otherwise entitled. The recipient shall report all suspected or reported violations to the Federal awarding agency.
3. **Davis-Bacon Act, as amended (40 U.S.C. 276a to a-7)** - When required by Federal program legislation, all construction contracts awarded by the recipients and subrecipients of more than \$2000 shall include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 276a to a-7) and as supplemented by Department of Labor regulations (29 CFR part 5, "Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction"). Under this Act, contractors shall be required to pay wages to laborers and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor. In addition, contractors shall be required to pay wages not less than once a week. The recipient shall place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation and the award of a contract shall be conditioned upon the acceptance of the wage determination. The recipient shall report all suspected or reported violations to the Federal awarding agency.

The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home address shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number).

4. **Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333)** - Where applicable, all contracts awarded by recipients in excess of \$2000 for construction contracts and in excess of \$2500 for other contracts that involve the employment of mechanics or laborers shall include a provision for compliance with Sections 102 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333), as supplemented by Department of Labor regulations (29 CFR part 5). Under Section 102 of the Act, each contractor shall be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at

a rate of not less than 1 ½ times the basic rate of pay for all hours worked in excess of 40 hours in the work week. Section 107 of the Act is applicable to construction work and provides that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

5. **Rights to Inventions Made Under a Contract or Agreement** - Contracts or agreements for the performance of experimental, developmental, or research work shall provide for the rights of the Federal Government and the recipient in any resulting invention in accordance with 37 CFR part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.
6. **Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.)** - Contracts and subgrants of amounts in excess of \$100,000 shall contain a provision that requires the recipient to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251 et seq.). Violations shall be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).
7. **Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)** - Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.
8. **Debarment and Suspension (E.O.s 12549 and 12689)** - No contract shall be made to parties listed on the General Services Administration's List of Parties Excluded from Federal Procurement or Nonprocurement Programs in accordance with E.O.s 12549 and 12689, "Debarment and Suspension." This list contains the names of parties debarred, suspended, or otherwise excluded by agencies, and contractors declared ineligible under statutory or regulatory authority other than E.O. 12549. Contractors with awards that exceed the small purchase threshold shall provide the required certification regarding its exclusion status and that of its principal employees.
9. **Section 508 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1368) and Section 1424(e) of the Safe Drinking Water Act (42 U.S.C. 300h-3(e))** - Contracts and subgrants of amounts in excess of \$100,000 shall contain a provision that requires the recipient to agree to comply with all applicable standards, orders or regulations issued pursuant to Section 508 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1368) and Section 1424(e) of the Safe Drinking Water Act (42 U.S.C. 300h-3(e)). Violations shall be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

10. **Compliance with all Federal statutes relating to nondiscrimination** - These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352), which prohibits discrimination on the basis of sex; (b) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 795), which prohibits discrimination on the basis of handicaps; (c) the Age Discrimination Act of 1975, as amended (42 U.S.C. 6101-6107), which prohibits discrimination on the basis of age; (d) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (e) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (f) Sections 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (g) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (h) any other nondiscrimination provisions in the specific statute(s) made; and, (i) the requirements of any other nondiscrimination statute(s) that may apply.
11. **Compliance with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646)** that provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
12. **Compliance with the provisions of the Hatch Act (5 U.S.C. 1501 – 1508 and 7324 – 7328)** that limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
13. **Compliance, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234)** that requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
14. **Compliance with environmental standards which may be prescribed to the following:** (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order 11514; (b) notification of violating facilities pursuant to E.O. 11738; (c) protection of wetlands pursuant to E.O. 11990; (d) evaluation of flood hazards in floodplains in accordance with E.O. 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.); (f) conformity with Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
15. **Compliance with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.)** related to protecting components or potential components of the national wild and scenic rivers system.

16. **Compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), E.O. 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).**
17. **Compliance with P.L. 93-348** regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
18. **Compliance with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. 2131 et seq.)** pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this Agreement.
19. **Compliance with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4801 et seq.)** that prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
20. **Compliance with the mandatory standards and policies relating to energy efficiency** that are contained in the State energy conservation plan issued in accordance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

PROPOSAL

To: The City of Key West

Address: 525 Angela Street, P.O. Box 1409
Key West, Florida 33041

Project Title: **College Road Enhancements
Overseas Highway to Kokenzie Road**

Project No.: GN- 0711

Bidder's person to contact for additional information on this Proposal:

Name: _____

Telephone: _____

BIDDER'S DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Proposal are those named herein, that this Proposal is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Proposal is made without any connection or collusion with any person submitting another Proposal on this Contract.

The Bidder further declares that he has carefully examined the Contract Documents, that he has personally inspected the Project, that he has satisfied himself as to the quantities involved, including materials and equipment, and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the work and to identify the said quantities with the detailed requirements of the Contract Documents, and that this Proposal is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Proposal.

The Bidder further agrees that he has exercised his own judgment regarding the interpretation of subsurface information and has utilized all data which he believes pertinent from the Engineer, Owner, and other sources in arriving at his conclusions.

The Bidder further agrees, as evidenced by signing the Proposal, which if awarded a Contract, the Florida Trench Safety Act and applicable trench safety standards will be complied with.

The Bidder understands and agrees that if a Contract is awarded, the Owner may elect to award all schedules under one Contract, separately, or in any combination that best serves the interests of the Owner.

CONTRACT EXECUTION AND BONDS

The Bidder agrees that if this Proposal is accepted, he will, within 10 days, not including Sundays and legal holidays, after Notice of Award, sign the Contract in the form annexed hereto, and will at that time, deliver to the Owner examples of the Performance Bond and Payment Bond required herein, and evidence of holding required licenses and certificates, and will, to the extent of his Proposal, furnish all machinery, tools, apparatus, and other means of construction and do the work and furnish all the materials necessary to complete all work as specified or indicated in the Contract Documents.

CERTIFICATES OF INSURANCE

Bidder agrees to furnish the Owner, before commencing the work under this Contract, the certificates of insurance as specified in these Documents.

START OF CONSTRUCTION AND CONTRACT COMPLETION TIME

The Bidder further agrees to begin work within 14 calendar days of the Notice to Proceed (NTP) and to complete the construction in all respects within 120 calendar days from the date of the NTP.

LIQUIDATED DAMAGES

In the event the Bidder is awarded the Contract and fails to complete the work within the time limit or extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages shall be paid to the Owner based on the current FDOT Standard Specifications Section 8-10 until the work has been satisfactorily completed as provided by the Contract Documents. Sundays and legal holidays shall be included in determining days in default. FDOT 8-10 Code requirements govern, and herewith made a part of the Contract.

Original Contract Amount	Daily Charge Per Calendar Day
\$50,000 and Under	\$313
Over \$50,000 but less than \$250,000	\$580
\$250,000 but less than \$500,000	\$715
\$500,000 but less than \$2,500,000	\$1,423
\$2,500,000 but less than \$5,000,000	\$2,121
\$5,000,000 but less than \$10,000,000	\$3,057

ADDENDA

The Bidder hereby acknowledges that he has received Addenda No's. ____, ____, ____, ____, (Bidder shall insert No. of each Addendum received) and agrees that all addenda issued are hereby made part of the Contract Documents, and the Bidder further agrees that his Proposal(s) includes all impacts resulting from said addenda.

SALES AND USE TAXES

The Bidder agrees that all federal, state, and local sales and use taxes are included in the stated bid prices for the work.

UNIT PRICE ITEMS

The Bidder further proposes to accept as full payment for the work proposed herein the amounts computed under the provisions of the Contract Documents and based on the following unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved. The Bidder agrees that the unit prices represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these Contract Documents. The amounts shall be shown in both words and figures. In case of a discrepancy, the amount shown in words shall govern. Unit price line items may be deleted, reduced or increased as needed within the awarded contract price by the city.

COLLEGE ROAD ENHANCEMENTS

BID SCHEDULE

The Bidder further Proposes to accept as full payment for the work Proposed herein the amounts computed under the Provisions of the Contract Documents and based on the following unit Price amounts, it being expressly understood that the unit Prices are independent of the exact quantities involved. The Bidder agrees that the unit Prices represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and Profit for each type and unit of work called for in these Contract Documents. The amounts shall be shown in both words and figures. In case of a discrepancy, the amount shown in words shall govern. . Unit price line items may be deleted, reduced or increased as needed within the awarded contract price by the city

<u>Item</u>	<u>Quant.</u>	<u>Unit</u>	<u>UP (Fig)</u>	<u>UP (Words)</u>	<u>Extended Total Amount</u>
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1. Performance and Payment Bonds

	1	LS	\$ _____		\$ _____
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2.) Mobilization / Demobilization, FDOT Grant Requirements, General & Supplementary Conditions, MOT, Certified AutoCAD As-Builts)

a.) Mobilization / Field Engineering /Testing / Environmental / Construction layout/ pre –construction video (paid 25%, then on percentage of completion)

	1	LS	\$ _____		\$ _____
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b.) Demobilization (paid at completion of final punch list completion)

	1	LS	\$ _____		\$ _____
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c.) FDOT Grant Requirements, General & Supplementary Conditions, (paid 25%, then on percentage of completion)

	1	LS	\$ _____		\$ _____
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d.) MOT, (paid 25%, then on percentage of completion)

	1	LS	\$ _____		\$ _____
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e.) Certified AutoCAD As-Builts / Surveyor (paid after submission and acceptance of as-builts)

	1	LS	\$ _____		\$ _____
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<u>Item</u>	<u>Quant.</u>	<u>Unit</u>	<u>UP (Fig)</u>	<u>UP (Words)</u>	<u>Extended Total Amount</u>
3). Clearing and Grubbing_ (to be paid for as described in the current FDOT Standards and Specifications, Section 110; includes cutting back grass growing over edge of pavement; includes tree/plant relocation or transplantation; includes pruning tree roots adjacent to roadway as required)	0.98	AC	\$ _____	_____	\$ _____
4). Sidewalk Installation (material and labor to install; including excavation, backfill and compaction)					
a. 4" Depth (e.g. sidewalk throughout most of project)	974	SY	\$ _____	_____	\$ _____
b. 6" Depth (e.g. sidewalk crossing driveways, 6' X 12' bus stop pads)	199	SY	\$ _____	_____	\$ _____
c. Thickened Edge (sections of sidewalk / driveway without f curbs and as directed)	3,362	LF	\$ _____	_____	\$ _____
d. Bridged sidewalk over ditch bottom inlet (material and labor to install; including formwork required for 6" thick concrete)	5	CY	\$ _____	_____	\$ _____
5). Curb Installation (material and labor to install; including excavation, backfill and compaction)					
a. FDOT Type "F"	50	LF	\$ _____	_____	\$ _____
b. Flared end curb	1	EA	\$ _____	_____	\$ _____
6). Guardrail (e.g. for section of sidewalk bridged over ditch bottom inlet)	35	LF	\$ _____	_____	\$ _____
7). Asphalt/sp 9.5/1.5" (e.g. for incidental damage to sections of asphalt where sidewalk is formed close to edge of pavement and where 6" sidewalk crosses driveways)	50	SY	\$ _____	_____	\$ _____
8). Utility Adjustments (cost for complete installation, labor and materials)					
a. Adjust water valves / boxes (FKAA) vertically and/or laterally as required (complete cost for material and labor to adjust existing utility features as required)	3	EA	\$ _____	_____	\$ _____

<u>Item</u>	<u>Quant.</u>	<u>Unit</u>	<u>UP (Fig)</u>	<u>UP (Words)</u>	<u>Extended Total Amount</u>
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9). Silt Fence (e.g. for use behind back of proposed sidewalk at wetland area, as shown on plans)

415	LF	\$ _____	_____	\$ _____
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10). Plastic Delineators – flexible tubing (cost for complete installation, labor, and materials)

20	EA	\$ _____	_____	\$ _____
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11). ADAAG Detectable Warning System (2-1/4 x 4 x 8 Endicott Red Brick Pavers (cost for complete installation, labor, and materials)

12	SY	\$ _____	_____	\$ _____
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12). Sodding (areas disturbed by construction activity -- replace with same material)

3200	SY	\$ _____	_____	\$ _____
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13). Remove Existing Trees/Shrubs (0-10” Diameter). Includes all Labor, Materials, Equipment and Maintenance, and Disposal / including city permit requirements

4	EA	\$ _____	_____	\$ _____
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14). Remove Existing Tree (over 10” Diameter) Includes all Labor, Materials, Equipment and Maintenance, and Disposal / including city permit requirements

2	EA	\$ _____	_____	\$ _____
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15). Business Sign relocation (Includes all Labor, Materials, and Equipment to remove and replace existing signs as directed by engineer)

3	EA	\$ _____	_____	\$ _____
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16). Allowance

LS	\$ <u>30,000</u>	<u>Thirty thousand</u>	\$ <u>30,000</u>
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TOTAL OF ALL EXTENDED UNIT PRICE ITEMS LISTED ABOVE including allowance items

\$ _____ Dollars and _____ Cents

(Amount Written in Words has Precedence)

ADD/ALTS 1-3

Add Alternates are not a part of the base bid and shall only be added to the contract at the owners discretion.

<u>Item</u>	<u>Quant.</u>	<u>Unit</u>	<u>UP (Fig)</u>	<u>UP (Words)</u>	<u>Extended Total Amount</u>
1). Seepage Trench					
	100	LF	\$ _____	_____	\$ _____
2). Striping (White retro-reflective 6", as required)					
	0.6	NM	\$ _____	_____	\$ _____
3). Bus Shelters					
	6	EA	\$ _____	_____	\$ _____

SUBCONTRACTORS

The Bidder further proposes that the following subcontracting firms or businesses will be awarded subcontracts for the following portions of the work in the event that the Bidder is awarded the Contract:
Note to Bidder: Subcontractors shall be prequalified to perform projects for FDOT.

Portion of Work

Name

_____, _____, _____, _____
Street City State Zip

Portion of Work

Name

_____, _____, _____, _____
Street City State Zip

Portion of Work

Name

_____, _____, _____, _____
Street City State Zip

Portion of Work

Name

_____, _____, _____, _____
Street City State Zip

SURETY

_____ whose address is

_____, _____, _____,
Street City State Zip

BIDDER

The name of the Bidder submitting this Proposal is

_____ doing business at

_____, _____, _____,
Street City State Zip

which is the address to which all communications concerned with this Proposal and with the Contract shall be sent.

The names of the principal officers of the corporation submitting this Proposal, or of the partnership, or of all persons interested in this Proposal as principals are as follows:

Name	Title
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

If Sole Proprietor or Partnership

IN WITNESS hereto the undersigned has set his (its) hand this _____ day of _____ 2011.

Signature of Bidder

Title

If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this _____ day of _____ 2011.

(SEAL)

Name of Corporation

By _____

Title _____

Attest _____
Secretary

FLORIDA BID BOND

BOND NO. _____

AMOUNT: \$ _____

KNOW ALL MEN BY THESE PRESENTS, that _____

hereinafter called the PRINCIPAL, and _____

a corporation duly organized under the laws of the State of _____

having its principal place of business at _____

_____ in the State of _____

and authorized to do business in the State of Florida, as SURETY, are held and firmly bound

unto _____

hereinafter called the OBLIGEE, in the sum of _____

DOLLARS (\$ _____) for the payment for which we bind ourselves, our

heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these present.

THE CONDITION OF THIS BOND IS SUCH THAT:

WHEREAS, the PRINCIPAL is herewith submitting his or its Bid Proposal for GN 0711, COLLEGE ROAD ENHANCEMENTS, OVERSEAS HIGHWAY TO KOKENZIE ROAD, Key West, Florida said Bid Proposal, by reference thereto, being hereby made a part hereof.

WHEREAS, the PRINCIPAL contemplates submitting or has submitted a bid to the OBLIGEE for the furnishing of all labor, materials (except those to be specifically furnished by the Owner), equipment, machinery, tools, apparatus, means of transportation for, and the performance of the work covered in the Proposal and the detailed Drawings and Specifications, entitled:

GN 0711, COLLEGE ROAD ENHANCEMENTS, OVERSEAS HIGHWAY TO KOKENZIE ROAD, Key West, Florida.

WHEREAS, it was a condition precedent to the submission of said bid that a cashier's check, certified check, or bid bond in the amount of 5 percent of the base bid be submitted with said bid as a guarantee that the Bidder would, if awarded the Contract, enter into a written Contract with the Owner for the performance of said Contract, within 10 working days after written notice having been given of the award of the Contract.

NOW, THEREFORE, the conditions of this obligation are such that if the PRINCIPAL within 10 consecutive calendar days after written notice of such acceptance, enters into a written Contract with the OBLIGEE and furnishes the Performance and Payment Bonds, each in an amount equal to 100 percent of the base bid, satisfactory to the Owner, then this obligation shall be void; otherwise the sum herein stated shall be due and payable to the OBLIGEE and the Surety herein agrees to pay said sum immediately upon demand of the OBLIGEE in good and lawful money of the United States of America, as liquidated damages for failure thereof of said PRINCIPAL.

Signed and sealed this _____ day of _____, 2011.

PRINCIPAL _____

By _____

SURETY _____

By _____
Attorney-In-Fact

* * * * *

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA

SS:

COUNTY OF MONROE

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS,

This sworn statement is submitted to the City of Key West, Florida, by _____ (print individual's name and title)
for _____
(print name of entity submitting sworn statement)

whose business address is _____
and (if applicable) its Federal Employer Identification Number (FEIN) is _____
_____ (if the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement):

I, the undersigned, being hereby duly sworn, depose and say that no sum has been paid and no sum will be paid to any employee or elected official of the City of Key West as a commission, kickback, reward or gift, directly or indirectly, by me or any member of my firm, or by any officer or agent of the corporation.

BY: _____

TITLE: _____

sworn and prescribed before me this _____ day of _____, 2011

NOTARY PUBLIC, State of Florida
My commission expires:

PUBLIC ENTITY CRIMES CERTIFICATION

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS,

1. This sworn statement is submitted to the City of Key West , Florida, by _____ (print individual's name and title) for _____ (print name of entity submitting sworn statement)

whose business address is _____ and (if applicable) its Federal Employer Identification Number (FEIN) is _____

_____(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement _____):

2. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and _____ directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or of the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

3. I understand that "conviction" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

4. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:

- 1. A predecessor or successor of a person convicted of a public entity crime: or
2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment of income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement (indicate which statement applies).

___ Neither the entity submitting this sworn statement, or any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

___ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

___ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before an Administrative Law Judge of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Administrative Law Judge determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (attach a copy of the final order)

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH ONE (1) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES, FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

_____(SIGNATURE)

(DATE)

STATE OF _____

COUNTY OF _____

PERSONALLY APPEARED BEFORE ME, the undersigned authority _____ who, after first being sworn by me, _____ (name of individual) affixed his/her signature in the space provided above on this ____ day of _____, 2011.

NOTARY PUBLIC

Printed Name

My commission expires:

SUSPENSION AND DEBARMENT CERTIFICATION

**CERTIFICATION REGARDING DEBARMENTS, SUSPENSION, INELIGIBILITY
AND VOLUNTARY EXCLUSION-LOWER TIER FEDERALLY FUNDED TRANSACTIONS**

1. The undersigned hereby certifies that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. The undersigned also certifies that it and its principals:
 - (a) Have not within a three-year period preceding this certification been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State anti-trust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
 - (b) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 2.(a) of this Certification; and
 - (c) Have not within a three-year period preceding this certification had one or more public transactions (Federal, State or local) terminated for cause or default.

3. Where the undersigned is unable to certify to any of the statements in this certification, an explanation shall be attached to this certification.

Dated this _____ day of _____, 2011.

By _____
Authorized Signature/Contractor

Typed Name/Title

Contractor's Firm Name

Street Address

Building, Suite Number

City/State/Zip Code

Area Code/Telephone Number

authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Print Name:

Title:

Telephone No.: _____

Date: _____

Federal Use Only:

Authorized for Local Reproduction
Standard Form – LLL (Rev 7 – 97)

Form DEP 55-221 (01/01)

INSTRUCTIONS FOR COMPLETION OF SELF DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a follow up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by the reporting entity for this covered Federal action.
4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee", then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.

(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

Form DEP 55-221 (01/01)

**NON-COLLUSION DECLARATION AND
COMPLIANCE WITH 49 CFR §29.**
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

ITEM/SEGMENT NO.: _____
F.A.P. NO.: _____
PARCEL NO.: _____
COUNTY OF: _____
BID LETTING OF: _____, _____

I, _____, hereby
(NAME)
declare that I am _____ of _____
(TITLE) (FIRM)
Of _____
(CITY AND STATE)

and that I am the person responsible within my firm for the final decision as to the price(s) and amount of this Bid on this State Project.

I further declare that:

1. The prices(s) and amount of this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition with any other contractor, bidder or potential bidder.

2. Neither the price(s) nor the amount of this bid have been disclosed to any other firm or person who is a bidder or potential bidder on this project, and will not be so disclosed prior to the bid opening.

3. No attempt has been made or will be made to solicit, cause or induce any other firm or person to refrain from bidding on this project, or to submit a bid higher than the bid of this firm, or any intentionally high or non-competitive bid or other form of complementary bid.

4. The bid of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary bid.

5. My firm has not offered or entered into a subcontract or agreement regarding the purchase of materials or services from any firm or person, or offered, promised or paid cash or anything of value to any firm or person, whether in connection with this or any other project, in consideration for an agreement or promise by any firm or person to refrain from bidding or to submit a complementary bid on this project.

6. My firm has not accepted or been promised any subcontract or agreement regarding the sale of materials or services to any firm or person, and has not been promised or paid cash or anything of value by any firm or person, whether in connection with this or any other project, in consideration for my firm's submitting a complementary bid, or agreeing to do so, on this project.

7. I have made a diligent inquiry of all members, officers, employees, and agents of my firm with responsibilities relating to the preparation, approval or submission of my firm's bid on this project and have been advised by each of them that he or she has not participated in any communication, consultation, discussion, agreement, collusion, act or other conduct inconsistent with any of the statements and representations made in this Declaration.

8. As required by Section 337.165, Florida Statutes, the firm has fully informed the Department of Transportation in writing of all convictions of the firm, its affiliates (as defined in Section 337.165(l)(a), Florida Statutes), and all directors, officers, and employees of the firm and its affiliates for violation of state or federal antitrust laws with respect to a public contract or for violation of any state or federal law involving fraud, bribery, collusion, conspiracy or material misrepresentation with respect to a public contract. This includes disclosure of the names of current employees of the firm or affiliates who were convicted of contract crimes while in the employ of another company.

9. I certify that, except as noted below, neither my firm nor any person associated therewith in the capacity of owner, partner, director, officer, principal, investigator, project director, manager, auditor, and/or position involving the administration of Federal funds:

(a) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions, as defined in 49 CFR §29.110(a), by any Federal department or agency;

(b) has within a three-year period preceding this certification been convicted of or had a civil judgment rendered against him or her for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, State or local government transaction or public contract; violation of Federal or State antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;

(c) is presently indicted for or otherwise criminally or civilly charged by a Federal, State or local governmental entity with commission of any of the offenses enumerated in paragraph 9(b) of this certification; and

(d) has within a three-year period preceding this certification had one or more Federal, State or local government public transactions terminated for cause or default..

10. I(We), certify that I(We), shall not knowingly enter into any transaction with any subcontractor, material supplier, or vendor who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this contract by any Federal Agency unless authorized by the Department.

Where I am unable to declare or certify as to any of the statements contained in the above stated paragraphs numbered (1) through (10), I have provided an explanation in the "Exceptions" portion below or by attached separate sheet.

EXCEPTIONS:

(Any exception listed above will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted, indicate to whom it applies, initiating agency and dates of agency action.

Providing false information may result in criminal prosecution and/or administrative sanctions.)

I declare under penalty of perjury that the foregoing is true and correct.

CONTRACTOR: (Seal)

BY: _____ WITNESS: _____
NAME AND TITLE PRINTED

BY: _____ WITNESS: _____
SIGNATURE

Executed on this _____ day of _____, _____

**FAILURE TO FULLY COMPLETE AND EXECUTE THIS DOCUMENT
MAY RESULT IN THE BID BEING DECLARED NONRESPONSIVE**

CITY OF KEY WEST INDEMNIFICATION FORM

The Contractor shall indemnify and hold harmless the City of Key West, its officers, and employees, from liabilities, damages, losses and costs, including, but not limited to reasonable attorney's fees, to the extent caused by the negligence, recklessness or intentional wrongful misconduct of Contractor and persons employed or utilized by Contractor in the performance of this agreement. Except as specifically provided herein, this agreement does not require Contractor to indemnify the City of Key West, its employees, officers, directors, or agents from any liability, damage, loss, claim, action or proceeding.

These indemnifications shall survive the term of this agreement. In the event that any action or proceeding is brought against the City of Key West by reason of such claim or demand, Contractor shall, upon written notice from the City of Key West, resist and defend such action or proceeding by counsel satisfactory to the City of Key West.

The indemnification provided above shall obligate Contractor to defend at its own expense to and through appellate, supplemental or bankruptcy proceeding, or to provide for such defense, at the City of Key West's option, any and all claims of liability and all suits and actions of every name and description covered above which may be brought against the City of Key West whether performed by Contractor, or persons employed or utilized by Contractor.

The Contractor's obligation under this provision shall not be limited in any way by the agreed upon Contract Price as shown in this agreement, or the Contractor's limit of or lack of sufficient insurance protection.

CONTRACTOR: _____

SEAL:

Address

Signature

Print Name

Title

DATE: _____

BIDDER'S CHECKLIST

(Note: The purpose of this checklist is to serve as a reminder of major items to be addressed in submitting a bid and is not intended to be all inclusive. It does not alleviate the Bidder from the responsibility of becoming familiar with all aspects of the Contract Documents and Proper completion and submission of his bid.)

1. All Contract Documents thoroughly read and understood
2. All blank spaces in Proposal filled in, using black ink.
3. Total and unit Prices added correctly.
4. Addenda acknowledged.
5. Subcontractors are named as indicated in the Proposal.
6. Experience record included.
7. Proposal signed by authorized officer.
8. Bid Bond completed and executed, including power-of-attorney dated the same date as Bid Bond.
9. Bidder familiar with federal, state, and local laws, ordinances, rules and regulations affecting performance of the work.
10. Bidder shall demonstrate possession of required licenses and certificates to bid the job.
11. Proposal submitted intact with the volume entitled "Proposal" and Contract Forms, submit 1 original & 2 copies and 2 CD-Roms or flash drives each with one PDF file of the full Proposal.
12. Bid Documents submitted in sealed envelope and addressed and labeled in conformance with the instructions in the Invitation to Bid.
13. Bidder submitted FDOT Pre-certification paperwork
14. Bidder signed and submitted the suspension and debarment certification
15. Bidder signed and submitted Non-Collusion Declaration and Compliance with 49 CFR §29 form
16. Bidder signed and submitted the Prohibited Interests Form
17. Remainder of required forms.

STATEMENT OF NO PROPOSAL

Note: If you do not intend to submit a Proposal, please return this form ONLY.

TO: "College Road Enhancements, Overseas Highway to Kokenzie Road" GN 0711
Office of the City Clerk
City of Key West P.O. Box 1409
Key West, FL. 33041-1409

We, the undersigned, have declined to submit a Proposal on the above-noted Request for Proposal for the following reasons:

- Insufficient time to respond to the Request for Proposal
- Do not offer this Product
- Our schedule will not permit us to perform
- Unable to meet specifications
- Specifications unclear (Please explain below)
- Remove us from the City of Key West's, "Bidder's Mailing List"
- Other (Please specify below)

REMARKS: _____

We understand that if a "no Proposal" statement is not returned, our name may be removed from the bidder's list of the City of Key West.

COMPANY NAME: _____

SIGNATURE: _____

DATE: _____ TELEPHONE: _____

PART 2

CONTRACT FORMS

CONTRACT

This Contract, made and entered into this _____ day of _____ 2011,

by and between the City of Key West, hereinafter called the "Owner", and _____

hereinafter called the "Contractor";

WITNESSETH:

The Contractor, in consideration of the sum to be paid him by the Owner and of the covenants and agreements herein contained, hereby agrees at his own proper cost and expense to do all the work and furnish all the materials, tools, labor, and all appliances, machinery, and appurtenances for COLLEGE ROAD ENHANCEMENTS, OVERSEAS HIGHWAY TO KOKENZIE ROAD, GN 0711, Key West, Florida to the extent of the Proposal made by the Contractor, dated the _____ day of _____, 2011, all in full compliance with the Contract Documents referred to herein.

The BIDDING REQUIREMENTS, including the signed copy of the PROPOSAL, the CONTRACT FORMS, PERFORMANCE and PAYMENT BONDS, the CONDITIONS OF THE CONTRACT, the SPECIFICATIONS, and the DRAWINGS.

In consideration of the performance of the work as set forth in these Contract Documents, the Owner agrees to pay to the Contractor the amount bid in the Proposal as adjusted in accordance with the Contract Documents, or as otherwise herein provided, and to make such payments in the manner and at the times provided in the Contract Documents.

The Contractor agrees to complete the work within the time specified in the Contract and to accept as full payment hereunder the amounts computed as determined by the Contract Documents and based on the said Proposal.

The Contractor agrees to remedy all defects appearing in the work or developing in the materials furnished and the workmanship performed under this Contract during the warranty period after the date of final acceptance of the work by the Owner, and further agrees to indemnify and save the Owner harmless from any costs encountered in remedying such defects.

It is agreed that the Contract, based upon the Proposal, shall be fully complete within the stated number of consecutive calendar days from the date the Notice to Proceed is issued..

In the event the Contractor and fails to complete the work within the time limit or extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages shall be paid to the Owner based on the current FDOT Standard Specifications Section 8-10 until the work has been satisfactorily completed as provided by the Contract Documents. Sundays and legal holidays shall be included in determining days in default. FDOT 8-10 Code requirements govern, and herewith made a part of the Contract.

PERFORMANCE BOND

BOND NO. _____

AMOUNT: \$ _____

KNOW ALL MEN BY THESE PRESENTS, that in accordance with Florida Statutes Section 255.05,

_____ with offices at _____ hereinafter called the CONTRACTOR (Principal), and

_____ with offices at _____ a corporate duly organized and existing under and by virtue of the laws of the State of hereinafter called the SURETY, and authorized to transact business within the State of Florida, as SURETY, are held and firmly bound unto **CITY OF KEY WEST**, represented by its _____, hereinafter called the CITY (Obligee), in the sum of:

_____ DOLLARS (\$ _____), lawful money of the United States of America, for the payment of which, well and truly be made to the CITY, the CONTRACTOR and the SURETY bind themselves and each of their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents as follows:

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT:

WHEREAS, the CONTRACTOR has executed and entered into a certain Contract hereto attached, with the CITY, dated _____, 2011, to furnish at his own cost, charges, and expense all the necessary materials, equipment, and/or labor in strict and express accordance with said Contract and the Contract Documents as defined therein, all of which is made a part of said Contract by certain terms and conditions in said Contract more particularly mentioned, which Contract, consisting of the various Contract Documents is made a part of this Bond as fully and completely as if said Contract Documents were set forth herein;

NOW THEREFORE, the conditions of this obligation are such that if the above bounden CONTRACTOR:

1. Shall in all respects comply with the terms and conditions of said Contract and his obligation thereunder, including the Contract Documents, being made a part of this bond by reference, at the times and in the manner prescribed in the contract; and
2. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying CONTRACTOR with labor, materials, or supplies, used directly or indirectly by CONTRACTOR in the prosecution of the work provided for in the contract; and

3. Pays CITY all losses, costs, expenses, damages, attorney's fees, including appellate proceedings, injury or loss of whatever kind and however arising including, without limitation, delay damages to which said CITY may be subject by reason of any wrongdoing, misconduct, want of care or skill, negligence, failure of performance, breach, failure to petition within the prescribed time, or default, including patent infringements, on the part of said CONTRACTOR, his agents or employees, in the execution or performance of said Contract; and

4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this obligation shall be void; otherwise, to remain in full force and effect for the term of said Contract.

AND, the said Surety for value received, hereby stipulates and agrees that no change involving any extension of time, or addition to the terms of the Contract Documents, or to the work to be performed, or materials to be furnished thereunder shall affect said obligation of said Surety on this Bond, and the said Surety does hereby waive notice of any such changes, extension of time, alterations, or additions of the terms of the Contract Documents, or to the work.

Any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes.

IN WITNESS WHEREOF, the above parties bounded together have executed this instrument this day of _____, 2011, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACTOR

By: _____

(SEAL)

ATTEST

SURETY

By: _____

(SEAL)

ATTEST

PAYMENT BOND

BOND NO. _____

AMOUNT: \$ _____

KNOW ALL MEN BY THESE PRESENTS, that in accordance with Florida Statutes Section 255.05,

with offices at _____
hereinafter called the CONTRACTOR, (Principal), and

with offices at _____
a corporation duly organized and existing under and by virtue of the laws of the State of

_____, hereinafter called the SURETY, and authorized to transact business
within the State of Florida, as SURETY, are held and firmly bound CITY OF KEY WEST, represented

by its _____, hereinafter called the City (Obligee), in the sum of:

_____ DOLLARS (\$ _____), lawful money of the
United States of America, for the payment of which, well and truly be made to the CITY, and the
CONTRACTOR and the SURETY bind themselves and each of their heirs, executors, administrators,
successors, and assigns, jointly and severally, firmly by these presents as follows:

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT:

WHEREAS, the CONTRACTOR has executed and entered into a certain Contract for
_____ attached hereto, with the CITY, dated _____

_____, 2011, to furnish at his own cost, charges, and expense the
necessary materials, equipment, and/or labor in strict and express accordance with said Contract and the
plans, drawings (if any), and specifications prepared by the CITY, all of which is made a part of said
Contract by certain terms and conditions in said Contract more particularly mentioned, which Contract,
consisting of the various Contract Documents specifically mentioned herein and relative hereto, is made
a part of this Bond as fully and completely as if said Contract Documents were set forth herein.

NOW THEREFORE, the conditions of this obligation are such that if the above bounden
CONTRACTOR shall in all respects comply with the terms and conditions of said Contract and his
obligation thereunder, including the Contract Documents (which include the plans, drawings,
specifications, and conditions prepared by the CITY, invitation to bid, instructions to bidders, the
CONTRACTOR'S bid as accepted by the CITY, the bid and contract and payment bonds, and all

addenda, if any, issued prior to the opening of bids), and further that if said CONTRACTOR shall promptly make payments to all persons supplying materials, equipment, and/or labor, used directly or indirectly by said CONTRACTOR or subcontractors in the prosecution of the work for said contract in accordance with Florida Statutes, Section 255.05 or Section 713.23, then this obligation shall be void; otherwise to remain in full force and effect for the term of said contract, including and all guarantee periods as specifically mentioned in said Contract Documents.

AND, the said SURETY for value received, hereby stipulates and agrees that no change involving any extension of time, or addition to the terms of the Contract or to the work to be performed, or materials to be furnished thereunder, or in the Contract Documents and specifications accompanying the said contract shall affect said obligation of said SURETY on this Bond, and the said SURETY does hereby waive notice of any such changes, extension of time, alternations, or additions of the terms of the Contract, or to the work, to the Contract Documents, or to the specifications.

Claimant shall give written notice to the CONTRACTOR and the SURETY as required by Section 255.05 or Section 713.23, Florida Statutes. Any action instituted against the CONTRACTOR or SURETY under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2) or Section 713.23, Florida Statutes.

IN WITNESS WHEREOF, the above parties bounded together have executed this instrument this day of _____, 2011, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACTOR

By: _____

(SEAL)

ATTEST

SURETY

By: _____ (SEAL)

ATTEST

LICENSE AND COST

License required for this Project. Contractor must be general contractor or building contractor or engineering contractor.

Licensing cost not to exceed \$400.00

Other licenses that may also be required as for sub-contracting landscaping contractor, engineering services, and professional surveying.

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Licensing Division

P.O. Box 1409, Key West, FL 33041
305.809.3955 305.809.3978 (FAX)

REQUIREMENTS FOR STATE CERTIFIED CONTRACTOR REGISTERING TO WORK IN KEY WEST LESS THAN 30 DAYS PER FISCAL YEAR

1. NEED STATE OF FLORIDA CERTIFIED CONTRACTOR LICENSE.
2. OCCUPATIONAL LICENSE FROM BASE LOCATION.
3. LIABILITY INSURANCE AND WORKER'S COMPENSATION (WITH THE CITY OF KEY WEST CERTIFICATE HOLDERS) SET AT STATE STUTUTE REQUIREMENTS.
4. FEDERAL I.D. NUMBER /SOCIAL SERCURITY (IF NOT INCORPORATED).
5. LETTER OF INTENT STATING THE FOLLOWING:

BUSINESS NAME

JOB SITE

DAYS INTENDING ON WORKING IN THE CITY

PLEASE FAX DOCUMENTS TO THE TELEPHONE NUMBER LISTED BELOW, OR MAIL TO CAROLYN WALKER / KIM PITA, CITY OF KEY WEST LICENSE DIVISION, P.O. BOX 1409, KEY WEST, FLORIDA 33041.



City of Key West

P.O. Box 1409

Key West, FL 33041

Notice of Award

Date

Project Number: 0711

File: II F

Owner City of Key West
Company City of Key West
Address Office of the City Clerk
Address City of Key West P.O. Box 1409
Key West, FL 33041-1409

Project Name: COLLEGE ROAD ENHANCEMENTS, OVERSEAS HIGHWAY TO KOKENZIE ROAD

Dear:

At a meeting of the City of Key West Commission held on_____, 2011. **COMPANY NAME** was awarded the contract for the **College Road Enhancements, Overseas Highway to Kokenzie Road**. The total Contract amount shall not exceed \$ _____.

*Enclosed please find three copies of the Contract Documents for your execution. Please complete the necessary pages, affixing signatures, notary and / or corporate seals, etc. where necessary and return to this office by **DATE**. Also, you need to be mobilized on **DATE**, and remit a bill to the City of Key West by **DATE**.*

The Certificate of Insurance must be attached to the documents; one original and two copies are acceptable.

Powers – of – Attorney must be submitted in each bond document, an original and two copies are permissible.

A copy of your City of Key West Occupational License must be attached.

Sincerely,

Janet Muccino
Engineering Services

cc: Cheri Smith, City Clerk
Project File

CERTIFICATE OF SUBSTANTIAL COMPLETION

PROJECT; COLLEGE ROAD ENHANCEMENTS, OVERSEAS HIGHWAY TO KOKENZIE RD.

DATE OF ISSUANCE _____

OWNER City of Key West

OWNER'S CONTRACT NO. GN 0711

CONTRACTOR _____ ENGINEER Bermello Ajamil & Partners, Inc.

This Certificate of Substantial Completion applies to all Work under the Contract Documents or to the following specified parts thereof:

TO: _____

OWNER

And To _____

CONTRACTOR

The Work to which this Certificate applies has been inspected by authorized representatives of OWNER, CONTRACTOR, AND ENGINEER and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on

DATE OF SUBSTANTIAL COMPLETION

A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does no alter the responsibility of CONTRACTOR to complete all the Work in accordance with the Contract Documents. The items in the tentative list shall be completed or corrected by CONTRACTOR within ____ days of the above date of Substantial Completion.

CERTIFICATE OF FINAL COMPLETION

Project :.....**Project #:**.....

Date of Issuance:.....

Owner:.....

Contractor:.....**Engineer:**.....

This Certificate of Completion applies to all Work under the Contract Documents.

The Work to which this Certificate applies has been inspected by authorized representatives of OWNER and ENGINEER, and that Work is hereby declared to be complete in accordance with the Contract Documents (including as-builts, Work Change Directives and Field orders) on

.....
DATE OF COMPLETION

Executed by ENGINEER on, 20.....

.....
ENGINEER

By:.....
(Authorized Signature)

CONTRACTOR accepts this Certificate of Completion on.....,20.....

.....
CONTRACTOR

By:.....

OWNER accepts this Certificate of Completion on.....,20.....

.....
OWNER

By:.....
(Authorized Signature)

NOTICE TO PROCEED

DATE: _____

Project No: GN 0711

Contractor: _____

Address: _____

PROJECT: College Road Enhancements, Overseas Highway to Kokenzie Rd.

You are hereby notified to commence work on _____, 20____ in accordance with the Contract made with the City of Key West on the _____ day of _____, 20____. The amount of time to complete the work is 120 consecutive calendar days. The project should be fully completed on or before _____.

Sincerely,

Project Manager

Receipt of this NOTICE TO PROCEED is hereby acknowledged this, the _____ day of _____, 20____.

CONTRACTOR: _____

By: _____

Title: _____

Date: _____

Please return one (1) copy of this notice to:

Janet Muccino, Engineering Services
P.O. Box 1409
Key West, Florida 33041

Certificate of Final Payment

Date: _____
Page: _____ of _____

Payment Application No. _____

Period From: _____ to _____

Project: _____ Project No. _____

Contractor: _____

I Hereby Acknowledge that this contract has been completed in substantial compliance with the items of the agreement, Specifications and Plans, as-builts, work change directives and field orders. I, therefore, recommend acceptance of the work and processing of this final estimate as showing the total amount of money due to Contractor in compliance with the terms of the Contract.

Project Manager

Date

Owner

By: _____

Date

Contractor: _____

Address: _____

With the acceptance of this final payment, we, the Contractor, release the owner and the Engineer and their agents, from all claims and liability to us, the Contractor, for all things done or furnished in connection with the Work, and every act of the Owner and others relating to, or arising, out of the Work.

Signature

Date

Title

PART 3

CONDITIONS OF THE CONTRACT

GENERAL CONDITIONS / DEFINITIONS

Whenever in the Contract Documents the following terms are used, the intent and meaning shall be interpreted as follows:

1. AS APPROVED

The words "as approved", unless otherwise qualified, shall be understood to be followed by the words "by the Engineer for conformance with the Contract Document".

2. AS SHOWN, AND AS INDICATED

The words "as shown" and "as Indicated" shall be understood to be followed by the words "on the Drawings".

3. BIDDER

The person or persons, partnership, firm, or corporation submitting a Proposal for the work contemplated.

4. CONTRACT DOCUMENTS

The "Contract Documents" consist of the Bidding Requirements, Contract Forms, Conditions of the Contract, Specifications, Drawings, all modifications thereof incorporated into the Documents before their execution, Change Orders, and all other requirements incorporated by specific reference thereto. These form the Contract.

5. CONTRACTOR

The person or persons, partnership, firm, or corporation who enters into the Contract awarded him by the Owner.

6. CONTRACT COMPLETION

The "Contract Completion" is the date the Owner accepts the entire work as being in compliance with the Contract Documents, or formally waives nonconforming work to extent of nonconformity, and issues the final payment in accordance with the requirements set forth in Article, "Final Payment" of these General Conditions.

7. DAYS

Unless otherwise specifically stated, the term "days" will be understood to mean calendar days. Business day or working day means any day other than Saturday, Sunday, or legal holiday.

8. DRAWINGS

The term "Drawings" refers to the official Drawings, profiles, cross sections, elevations, details, and other working drawings and supplementary drawings, or reproductions thereof, signed by the Engineer, which shows the location, character, dimensions, and details of the work to be performed. Drawings may either be bound in the same book as the balance of the Contract Documents, or bound in separate sets, and are a part of the Contract Documents, regardless of the method of binding.

9. ENGINEER

The person or organization identified as such in the Contract Documents. The Term "Engineer" means Engineer or his authorized representative.

10. NOTICE

The term "notice" or the requirement to notify, as used in the Contract Documents or applicable state or federal statutes, shall signify a written communication delivered in person or by registered mail to the individual, or to a member of the firm, or to an officer of the corporation for whom it is intended. Certified or registered mail shall be addressed to the last business address known to him who gives the notice.

11. OR EQUAL

The term "or equal" shall be understood to indicate that the "equal" product is equivalent to or better than the product named in function, performance, reliability, quality, and general configuration. Determination of equality in reference to the project design requirements will be made by the Engineer. Such equal products shall not be purchased or installed by the Contractor without written authorization.

12. OWNER

The person, organization, or public body identified as such in the Contract Documents.

13. PLANS (See Drawings)

14. SPECIFICATIONS

The term "Specifications" refers to those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards, and workmanship as applied to the work and certain administrative details applicable thereto. Where standard specifications, such as those of ASTM, AASHTO, etc., have been referred to, the applicable portions of such standard specifications shall become a part of these Contract Documents. If referenced specifications conflict with specifications contained herein, the requirements contained herein shall prevail.

15. NOTICE TO PROCEED

A written notice given by the Owner to the Contractor (with a copy to the Engineer) fixing the date on which the Contract time will commence to run and on which the Contractor shall start to perform his obligation under the Contract Documents. The Notice to Proceed will be given within 30 days following the execution of the Contract by the Owner.

16. SUBSTANTIAL COMPLETION

"Substantial Completion" shall be that degree of completion of the project or a defined portion of the project, as evidenced by the Engineer's written notice of Substantial Completion, sufficient to provide the Owner, at his discretion, the full-time use of the project or defined portion of the project for the purposes for which it was intended. "Substantial Completion" of an operating facility shall be that degree of completion that has provided a minimum of 7 continuous days of successful, trouble-free, operation, which period shall begin after all performance and acceptance testing has been successfully demonstrated to the Engineer. All equipment contained in the work, plus all other components necessary to enable the Owner to operate the facility in a manner that was intended, shall be complete on the substantial completion date.

17. WORK

The word "work" within these Contract Documents shall include all material, labor, tools, and all appliances, machinery, transportation, and appurtenances necessary to perform and complete the Contract, and such additional items not specifically indicated or described which can be reasonably inferred as belonging to the item described or indicated and as required by good practice to provide a complete and satisfactory system or structure. As used herein, "provide" shall be understood to mean "furnish and install, complete in-place".

CONTRACT DOCUMENTS

18. INTENT OF CONTRACT DOCUMENTS

The Contract Documents are complementary, and what is called for by one shall be as binding as if called for by all. The intent of the Documents is to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents. Any work, materials, or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result shall be supplied whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe work, materials, or equipment, such words shall be interpreted in accordance with that meaning.

Reference to standard specifications, manuals, or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or laws or regulations in effect on the first published date of the Invitation to Bid, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of Owner, Contractor, or Engineer, or any of their consultants, agents, or employees from those set forth in the Contract Documents, nor shall it be effective to assign to Engineer, or any Engineer's consultants, agents, or employees, any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibility contrary to the provisions of Article LIMITATIONS ON ENGINEER'S RESPONSIBILITIES.

FDOT does not allow Local Hiring Preferences (23 CFR 635.117) for LAP projects. The City's Local Preference Ordinance will not apply to this project.

No Indian Preference for labor and employment will be allowed under this contract (23 CFR 635.117).

19. DISCREPANCIES AND OMISSIONS

Any discrepancies or omissions found in the Contract Documents shall be reported to the Engineer immediately. The Engineer will clarify discrepancies or omissions, in writing, within a reasonable time.

In resolving inconsistencies among two or more sections of the Contract Documents, precedence shall be given in the following order:

- A. CONTRACT
- B. PROPOSAL
- C. SUPPLEMENTARY CONDITIONS
- D. INVITATION TO BID
- E. INSTRUCTIONS TO BIDDERS
- F. GENERAL CONDITIONS
- G. SPECIFICATIONS
- H. DRAWINGS

Addenda shall take precedence over all sections referenced therein. Figure dimensions on Drawings shall take precedence over scale dimensions. Detailed Drawings shall take precedence over general Drawings.

20. CHANGES IN THE WORK

The Owner, without notice to the Sureties and without invalidating the Contract, may order changes in the work within the general scope of the Contract by altering, adding to, or deducting from the work, the Contract being adjusted accordingly. All such work shall be executed under the conditions of the original Contract, except as specifically adjusted at the time of ordering such change.

In giving instructions, the Engineer may order minor changes in the work not involving extra cost and not inconsistent

with the purposes of the project, but otherwise, except in an emergency endangering life and property, additions or deductions from the work shall be performed only in pursuance of an approved Change Order from the Owner, countersigned by the Engineer.

If the work is reduced by alterations, such action shall not constitute a claim for damages based on loss of anticipated profits.

21. EXAMINATION AND VERIFICATION OF CONTRACT DOCUMENTS

The Contractor shall thoroughly examine and become familiar with all of the various parts of these Contract Documents and determine the nature and location of the work, the general and local conditions, and all other matters which can in any way affect the work under this Contract. Failure to make an examination necessary for this determination shall not release the Contractor from the obligations of this Contract. No verbal agreement or conversation with any officer, agent, or employee of the Owner, or with the Engineer either before or after the execution of this Contract, shall affect or modify any of the terms or obligations herein contained.

22. DOCUMENTS TO BE KEPT ON THE JOBSITE

The Contractor shall keep one copy of the Contract Documents on the job site, in good order, available to the Engineer and to his representatives.

The Contractor shall maintain on a daily basis at the jobsite, and make available to the Engineer on request, one current record set of the Drawings which have been accurately marked to indicate all modifications in the completed work that differ from the design information shown on the Drawings. Upon Substantial completion of the work, the Contractor shall give the Engineer one complete set of these marked up record Drawings.

23. ADDITIONAL CONTRACT DOCUMENTS

Copies of Contract Documents or Drawings may be obtained on request from the Engineer and by paying the actual cost of reproducing the Contract Documents or Drawings.

24. OWNERSHIP OF CONTRACT DOCUMENTS

All portions of the Contract Documents, and copies thereof furnished by the Engineer are instruments of service for this project. They are not to be used on other work and are to be returned to the Engineer on request at the completion of the work. Any reuse of these materials without specific written verification or adaptation by the Engineer will be at the risk of the user and without liability or legal expense to the Engineer. Such user shall hold the Engineer harmless from any and all damages, including reasonable attorneys' fees, from any and all claims arising from any such reuse. Any such verification and adaptation shall entitle the Engineer to further compensation at rates to be agreed upon by the user and the Engineer.

THE OWNER

25. AUDITS

The owner is responsible for performing audits related to the project. Audits will be performed on an annual basis and will be in compliance with the criteria outlined in Section 5.04 of the Local Agency Program agreement.

26. OWNER FORCE ACCOUNT/COST EFFECTIVE JUSTIFICATION

The owner shall not provide construction or construction engineering inspection services related to this contract without prior approval by the District LAP Administrator through submittal of a finding of cost-effectiveness.

THE ENGINEER

27. AUTHORITY OF THE ENGINEER

The Engineer will be the Owner's representative during the construction period. His authority and responsibility will be limited to the provisions set forth in these Contract Documents. The Engineer will have the Authority to reject work which does not conform to the Contract Documents. However, neither the Engineer's authority to act under this provision, nor any decision made by him in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the Engineer to the Contractor, any Subcontractor, their respective Sureties, any of their agents or employees, or any other person performing any of the work.

28. DUTIES AND RESPONSIBILITIES OF THE ENGINEER

The Engineer will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the work and to determine, in general, if the work is proceeding in accordance with the intent of the Contract Documents. He will not make comprehensive or continuous review or observation to check quality or quantity of the work, and he will not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the work. Visits and observations made by the Engineer shall not relieve the Contractor of his obligation to conduct comprehensive inspections of the work and to furnish materials and perform acceptable work, and to provide adequate safety precautions, in conformance with the intent of the Contract.

The Engineer will make recommendations to the Owner, in writing, on all claims of the Owner or the Contractor arising from interpretation or execution of the Contract Documents. Such recommendations will be of factual and/or technical nature, and will not include the legal interpretation of the Contract Documents. Any necessary legal interpretation of the Contract Document will be made by the Owner. Such recommendation shall be necessary before the Contractor can receive additional money under the terms of the Contract. Changes in work ordered by the Engineer shall be made in compliance with Article CHANGES IN THE WORK.

One or more project representatives may be assigned to observe the work. It is understood that such project representatives shall have the authority to issue notice of nonconformance and make decisions within the limitations of the authority of the Engineer. The Contractor shall furnish all reasonable assistance required by the Engineer or project representatives for proper observation of the work. The above-mentioned project representatives shall not relieve the Contractor of his obligations to conduct comprehensive inspections of the work and to furnish materials and perform acceptable work, and to provide adequate safety precautions, in conformance with the intent of the Contract.

29. LIMITATIONS ON ENGINEER'S RESPONSIBILITIES

Engineer will not be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, and Engineer will not be responsible for Contractor's failure to perform or furnish the work in accordance with the Contract Documents.

Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any supplier, or of any other person or organization performing or furnishing any of the work.

Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed", "as approved", or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper", or "satisfactory", or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of Engineer as to the work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to Engineer any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibility contrary to the provisions of this Article.

30. REJECTED WORK

Any defective work or nonconforming materials or equipment that may be discovered at any time prior to expiration of the warranty period shall be removed and replaced by work which shall conform to the provisions of the Contract Documents. Any material condemned or rejected shall be removed at once from the project site.

Failure on the part of the Engineer to condemn or reject bad or inferior work or to note nonconforming materials or equipment on Contractor submittals shall not be construed to imply acceptance of such work. The Owner shall reserve and retain all of its rights and remedies at law against the Contractor and its Surety for correction of any and all latent defects discovered after the guarantee period.

31. LINES AND GRADES

Lines and grades shall be established as provided in the supplementary conditions. All stakes, marks, and other reference information shall be carefully preserved by the Contractor, and in case of their careless or unnecessary destruction or removal by him or his employees, such stakes, marks, and other information shall be replaced at the Contractor's expense.

32. SUBMITTALS

After checking and verifying all field measurements and after complying with applicable procedures specified in Division I, GENERAL REQUIREMENTS, Contractor shall submit to Engineer, in accordance with the schedule for submittals for review, shop drawings, electrical diagrams, and catalog cuts for fabricated items and manufactured items (including mechanical and electrical equipment), which shall bear a stamp or specific written indication that Contractor has satisfied Contractor's responsibilities under the Contract Documents with respect to the review of the submittal. All submittals shall be identified as Engineer may require. The data shown shall be complete with respect to quantities, dimensions specified, performance and design criteria, materials, and similar data to enable Engineer to review the information. Contractor shall also submit to Engineer for review, with such promptness as to cause no delay in work, all samples required by the Contract Documents. All samples shall have been checked by and accompanied by a specific written indication that Contractor has satisfied Contractor's responsibilities under the Contract Documents with respect to the review of the submission and shall be identified clearly as to material, supplier, pertinent data such as catalog numbers and the use for which intended.

Before submission of each submittal, Contractor shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar data with respect thereto and reviewed or coordinated each submittal with other submittals and with the requirements of the work and the Contract Documents.

At the time of each submission, Contractor shall give Engineer specific written notice of each variation that the submittal may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each shop drawing submitted to Engineer for review and approval of each variation.

Engineer will review submittals with reasonable promptness, but Engineer's review will be only for conformance with the design concept of the project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences, or procedures of construction (except where a specific means, method, technique, sequence, or procedure of construction is indicated in or required by the Contract Documents) or to safety precautions or programs incident thereto. The review of a separate item as such will not indicate review of the assembly in which the item functions. Contractor shall make corrections required by Engineer, and shall return the required number of corrected copies of shop drawings and submit as required new samples for review. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

Engineer's review of submittals shall not relieve Contractor from the responsibility for any variation from the requirements of the Contract Documents unless Contractor has in writing called Engineer's attention to each such variation at the time of submission and Engineer has given written approval of each such variation by a specific written notation thereof incorporated therein or accompanying the shop drawing or sample approval; nor will any approval by Engineer relieve

Contractor from responsibility for errors or omissions in the shop drawings or from responsibility for having complied with the provisions herein.

Where a shop drawing or sample is required by the specifications, any related work performed prior to Engineer's review and approval of the pertinent submission shall be at the sole expense and responsibility of the Contractor.

33. DETAIL DRAWINGS AND INSTRUCTIONS

The Engineer will furnish, with reasonable promptness, additional instructions by means of Drawings or otherwise, if, in the Engineer's opinion, such are required for the proper execution of the work. All such Drawings and instructions will be consistent with the Contract Documents, true developments thereof, and reasonably inferable therefrom.

THE CONTRACTOR AND HIS EMPLOYEES

34. CONTRACTOR, AN INDEPENDENT AGENT

The Contractor shall independently perform all work under this Contract and shall not be considered as an agent of the Owner or of the Engineer, nor shall the Contractor's Subcontractors or employees be subagents of the Owner or of the Engineer.

34. (a) ASSIGNMENT OF CONTRACT

Assignment of any part or the whole of this Contract shall be subject to review and approval of the City Commission.

35. SUBCONTRACTING

Unless modified in the Supplementary Conditions, within 10 days after the execution of the Contract, the Contractor shall submit to the Engineer the names of all Subcontractors proposed for the work, including the names of any Subcontractors that were submitted with the Proposal. The Contractor shall not employ any subcontractors to which the Owner may object to as lacking capability to properly perform work of the type and scope anticipated.

The Contractor is as fully responsible to the Owner for the acts and omissions of his Subcontractors and of persons either directly or indirectly employed by them as he is for the acts and omissions of persons directly employed by him.

Nothing contained in the Contract Documents shall create any contractual relationship between any Subcontractor and the Owner or Engineer.

36. INSURANCE AND LIABILITY

A. GENERAL

The Contractor shall provide (from insurance companies acceptable to the Owner) the insurance coverage designated hereinafter and pay all costs.

Before commencing work under this Contract, the Contractor shall furnish the Owner with certificates of insurance specified herein showing the type, amount and class of operations covered, effective dates, and date of expiration of policies, and containing substantially the following statement:

"The insurance covered by this certificate shall not be canceled or materially altered, except after 30 days' written notice has been received by the Owner."

In case of the breach of any provision of this Article, the Owner, at his option, may take out and maintain, at the expense of the Contractor, such insurance as the Owner may deem proper and may deduct the cost of such insurance from any monies which may be due or become due the Contractor under this Contract.

B. CONTRACTOR AND SUBCONTRACTOR INSURANCE

The Contractor shall not commence work under this Contract until he has obtained all the insurance required hereunder and such insurance has been reviewed by the Owner, nor shall the Contractor allow any Subcontractor to commence work on his subcontract until insurance specified below has been obtained. Review of the insurance by the Owner shall not relieve or decrease the liability of the Contractor hereunder.

C. WORKER'S COMPENSATION AND EMPLOYER' LIABILITY INSURANCE

The Contractor shall maintain during the life of this Contract the statutory amount of Workmen's Compensation Insurance, in addition, Employer's Liability Insurance in an amount as specified in the Supplementary Conditions, for each occurrence, for all of his employees to be engaged in work on the project under this Contract. In case any such work is subcontracted, the Contractor shall require the Subcontractor to provide similar Worker's Compensation and Employer's Liability Insurance for all of the Subcontractor's employees to be engaged in such work.

D. GENERAL LIABILITY INSURANCE (INCLUDING AUTOMOBILE)

The Contractor shall maintain during the life of this Contract such general liability, completed operations and products liability, and automobile liability insurance as will provide coverage for claims for damages for personal injury, including accidental death, as well as for claims for property damage, which may arise directly or indirectly from performance of the work under this Contract. The general liability policy shall include contractual liability assumed by the Contractor under Article **INDEMNITY**. Coverage for property damage shall be on a "broad form" basis with no exclusions for "X, C & U". The amount of insurance to be provided shall be as specified in the Supplementary Conditions.

In the event any work under this Contract is performed by a Subcontractor, the Contractor shall be responsible for any liability directly or indirectly arising out of the work performed by the Subcontractor; to the extent such liability is not covered by the Subcontractor's insurance.

The Owner and Engineer, their officers, agents, and employees shall be named as Additional Insured on the Contractor's and any Subcontractor's general liability and automobile liability insurance policies for any claims arising out of work performed under this Contract.

E. BUILDERS RISK ALL RISK INSURANCE

Unless otherwise modified in the Supplementary Conditions, the Contractor shall secure and maintain during the life of this Contract, Builders Risk All Risk Insurance coverage in an amount equal to the full value of the facilities under construction. Such insurance shall include coverage for earthquake, landslide, flood, collapse, loss due to the results of faulty workmanship or design, and all other normally covered risks, and shall provide for losses to be paid to the Contractor, Owner, and Engineer as their interests may appear.

The Owner and Engineer, their officers, agents, and employees shall be named as additional insured on the Contractor's and any subcontractor's Builders Risk All Risk insurance policies for any claims arising out of work performed under this Contract.

This insurance shall include a waiver of subrogation as to the Engineer, the Owner, the Contractor, and their respective officers, agents, employees and subcontractors.

F. NO PERSONAL LIABILITY OF PUBLIC OFFICIALS

In carrying out any of the provisions hereof in exercising any authority granted by the Contract, there will be no personal liability upon any public official.

37. INDEMNITY

To the maximum extent permitted by law, the Contractor shall indemnify and defend the Owner and the Engineer, and their officers, employees, agents, and sub consultants, from all claims and losses, including attorney's fees and litigation costs arising out of property losses or health, safety, personal injury, or death claims by the Contractor, its subcontractors of any tier, and their employees, agents, or invitees regardless of the fault, breach of Contract, or negligence of the Owner or Engineer, excepting only such claims or losses that have been adjudicated to have been caused solely by the negligence of the Owner or the Engineer and regardless of whether or not the Contractor is or can be named a party in a litigation. Nothing herein is intended to waive the sovereign immunity afforded to CITY pursuant to Florida Law, including section 768.28, Florida Statutes.

38. EXCLUSION OF CONTRACTOR CLAIMS

In performing its obligations, the Engineer and its consultants may cause expense for the Contractor or its subcontractors and equipment or material suppliers. However, those parties and their sureties shall maintain no direct action against the Engineer, its officers, employees, agents, and consultants for any claim arising out of, in connection with, or resulting from the engineering services performed or required to be performed.

39. TAXES AND CHARGES

The Contractor shall withhold and pay any and all sales and use taxes and all withholding taxes, whether State or Federal, and pay all Social Security charges and also all State Unemployment Compensation charges, and pay or cause to be withheld, as the case may be, any and all taxes, charges, or fees or sums whatsoever, which are now or may hereafter be required to be paid or withheld under any laws.

40. REQUIREMENTS OF STATE LAW FOR PUBLIC WORKS PROJECTS

When the Contract Documents concern public works of the state or any county, municipality, or political subdivision created by its laws, the applicable statutes shall apply. All parties to this Contract shall determine the contents of all applicable statutes and comply with their provisions throughout the performance of the Contract.

41. CODES, ORDINANCES, PERMITS AND LICENSES

The Contractor shall keep himself fully informed of all local codes and ordinances, as well as state and federal laws, which in any manner affect the work herein specified. The Contractor shall at all times comply with said codes and ordinances, laws, and regulations, and protect and indemnify the Owner, the Engineer and their respective employees, and its officers and agents against any claim or liability arising from or based on the violation of any such laws, ordinances, or regulations. All permits, licenses and inspection fees necessary for prosecution and completion of the work shall be secured and paid for by the Contractor, unless otherwise specified.

42. SUPERINTENDENCE

The Contractor shall keep at the project site, competent supervisory personnel. The Contractor shall designate, in writing, before starting work, a project superintendent who shall be an employee of the Contractor and shall have complete authority to represent and to act for the Contractor. Engineer shall be notified in writing prior to any change in superintendent assignment. The Contractor shall give efficient supervision to the work, using his best skill and attention. The Contractor shall be solely responsible for all construction means, methods, techniques, and procedures, and for providing adequate safety precautions and coordinating all portions of the work under the Contract. It is specifically understood and agreed that the Engineer, its employees and agents, shall not have control or charge of and shall not be responsible for the construction means, methods, techniques, procedures, or for providing adequate safety precautions in connection with the work under Contract. Contractor shall provide PDF copies of the contractor's daily reports with each pay application monthly.

43. RECEPTION OF ENGINEER'S COMMUNICATIONS

The superintendent shall receive for the Contractor all communications from the Engineer. Communications of major importance will be confirmed in writing upon request from the Contractor.

The Engineer may schedule project meetings for the purposes of discussing and resolving matters concerning the various elements of the work. Time and place for these meetings and the names of persons required to be present shall be as determined by the Engineer. Contractor shall comply with these attendance requirements and shall also require his Subcontractors to comply.

44. SAFETY

The Contractor shall be solely and completely responsible for conditions of the jobsite, including safety of all persons (including employees) and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. Safety provisions shall conform to U.S. Department of Labor (OSHA), and all other applicable federal, state, county, and local laws, ordinances, codes, and regulations. Where any of these are in conflict, the more stringent requirement shall be followed. The Contractor's failure to thoroughly familiarize himself with the aforementioned safety provisions shall not relieve him from compliance with the obligations and penalties set forth therein.

The Contractor shall develop and maintain for the duration of this Contract, a safety program that will effectively incorporate and implement all required safety provisions. The Contractor shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the safety program.

The duty of the Engineer to conduct construction review of the work does not include review or approval of the adequacy of the Contractor's safety program, safety supervisor, or any safety measures taken in, on, or near the construction site.

The Contractor, as a part of his safety program, shall maintain at his office or other well-known place at the jobsite, safety equipment applicable to the work as prescribed by the aforementioned authorities, all articles necessary for giving first-aid to the injured, and shall establish the procedure for the immediate removal to a hospital or a doctor's care of persons (including employees) who may be injured on the jobsite.

If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to both the Engineer and the Owner. In addition, the Contractor must promptly report in writing to the Engineer all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.

If a claim is made by anyone against the Contractor or any Subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Engineer, giving full details of the claim.

45. PROTECTION OF WORK AND PROPERTY

The Contractor shall at all times safely guard and protect from damage the Owner's property, adjacent property, and his own work from injury or loss in connection with this Contract. All facilities required for protection by federal, state, or municipal laws and regulations and local conditions must be provided and maintained.

The Contractor shall protect his work and materials from damage due to the nature of the work, the elements, carelessness of other contractors, or from any cause whatever until the completion and acceptance of the work. All loss or damages arising out of the nature of the work to be done under these Contract Documents, or from any unforeseen obstruction or defects which may be encountered in the prosecution of the work, or from the action of the elements, shall be sustained by the Contractor.

46. RESPONSIBILITY OF CONTRACTOR TO ACT IN AN EMERGENCY

In case of an emergency which threatens loss or injury of property, and/or safety of life, the Contractor shall act, without previous instructions from the Owner or Engineer, as the situation may warrant. The Contractor shall notify the Engineer thereof immediately thereafter. Any claim for compensation by the Contractor, together with substantiating documents in regard to expense, shall be submitted to the Owner through the Engineer and the amount of compensation shall be determined by agreement.

47. MATERIALS AND APPLIANCES

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, heat, light, fuel, power, transportation, construction equipment and machinery, appliances, telephone, sanitary facilities, temporary facilities and other facilities and incidentals necessary for the execution and completion of the work. At contract completion, no equipment purchased by the contractor shall be transferred to state or local ownership.

Unless otherwise specified, all materials shall be new, and both workmanship and materials shall be of good quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

In selecting and/or approving equipment for installation in the project, the Owner and Engineer assume no responsibility for injury or claims resulting from failure of the equipment to comply with applicable federal, state, and local safety codes or requirements, or the safety requirements of a recognized agency, or failure due to faulty design concepts, or defective workmanship and materials.

48. CONTRACTORS' AND MANUFACTURERS' COMPLIANCE WITH STATE SAFETY, OSHA, AND OTHER CODE REQUIREMENTS

The completed work shall include all necessary permanent safety devices, such as machinery guards and similar ordinary safety items required by the state and federal (OSHA) industrial authorities and applicable local and national codes. Further, any features of the work subject to such safety regulations shall be fabricated, furnished, and installed (including Owner-furnished equipment) in compliance with these requirements. Contractors and manufacturers of equipment shall be held responsible for compliance with the requirements included herein. Contractors shall notify all equipment suppliers and Subcontractors of the provisions of this Article.

49. SUBSTITUTION OF MATERIALS

Except for Owner-selected equipment items, and items where no substitution is clearly specified, whenever any material, article, device, product, fixture, form, type of construction, or process is indicated or specified by patent or proprietary name, by name of manufacturer, or by catalog number, such specifications shall be deemed to be used for the purpose of establishing a standard of quality and facilitating the description of the material or process desired. This procedure is not to be construed as eliminating from competition other products of equal or better quality by other manufacturers where fully suitable in design, and shall be deemed to be followed by the words "or equal". The Contractor may, in such cases, submit complete data to the Engineer for consideration of another material, type, or process which shall be substantially equal in every respect to that so indicated or specified. Substitute materials shall not be used unless approved in writing. The Engineer will be the sole judge of the substituted article or material.

50. TESTS, SAMPLES, AND OBSERVATIONS

The Contractor shall furnish, without extra charge, the necessary test pieces and samples, including facilities and labor for obtaining the same, as requested by the Engineer. When required, the Contractor shall furnish certificates of tests of materials and equipment made at the point of manufacture by a recognized testing laboratory.

The Owner, Engineer, and authorized government agents, and their representatives shall at all times be provided safe access to the work wherever it is in preparation or progress, and the Contractor shall provide facilities for such access and for observations, including maintenance of temporary and permanent access.

If the Specifications, laws, ordinances, or any public authority require any work, to be specially tested or approved, the

Contractor shall give timely notice of its readiness for observations. If any work should be covered up without approval or consent of the Engineer, it shall, if required by the Engineer, be uncovered for examination at the Contractor's expense.

Reexamination of questioned work may be ordered by the Engineer, and, if so ordered, the work shall be uncovered by the Contractor. If such work is found to be in accordance with the Contract Documents, the Owner will pay the cost of uncovering, exposure, observation, inspection, testing and reconstruction. If such work is found to be not in accordance with the Contract Documents, the Contractor shall correct the defective work, and the cost of reexamination and correction of the defective work shall be paid by the Contractor.

51. ROYALTIES AND PATENTS

The Contractor shall pay all royalty and licenses fees, unless otherwise specified. The Contractor shall defend all suits or claims for infringement of any patent rights and shall save the Owner and the Engineer harmless from any and all loss, including reasonable attorneys' fees, on account thereof.

52. CONTRACTOR'S RIGHT TO TERMINATE CONTRACT

If the work should be stopped under an order of any court or other public authority for a period of more than 3 months, through no act or fault of the Contractor, its Subcontractors, or respective employees or if the Engineer should fail to make recommendation for payment to the Owner or return payment request to Contractor for revision within 30 days after it is due, or if the Owner should fail to pay the Contractor within 30 days after time specified in Article PARTIAL PAYMENTS, any sum recommended by the Engineer, then the Contractor may, upon 15 days' written notice to the Owner and the Engineer, stop work or terminate this Contract and recover from the Owner payment for all acceptable work performed and reasonable termination expenses, unless said default has been remedied.

53. CORRECTION OF DEFECTIVE WORK DURING WARRANTY PERIOD

The Contractor hereby agrees to make, at his own expense, all repairs or replacements necessitated by defects in materials or workmanship, provided under terms of this Contract, and pay for any damage to other works resulting from such defects, which become evident within 2 years after the date of final acceptance of the work or within 2 years after the date of substantial completion established by the Engineer for specified items of equipment, or within such longer period as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents. Unremedied defects identified for correction during the warranty period but remaining after its expiration shall be considered as part of the obligations of the warranty. Defects in material, workmanship, or equipment which are remedied as a result of obligations of the warranty shall subject the remedied portion of the work to an extended warranty period of 2 years after the defect has been remedied.

The Contractor further assumes responsibility for a similar guarantee for all work and materials provided by Subcontractors or manufacturers of packaged equipment components. The effective date for the start of the guarantee or warranty period for equipment qualifying as substantially complete is defined in Article SUBSTANTIAL COMPLETION, AND Article SUBSTANTIAL COMPLETION DATE, in these General Conditions.

The Contractor also agrees to hold the Owner and the Engineer harmless from liability of any kind arising from damage due to said defects. The Contractor shall make all repairs and replacements promptly upon receipt of written order for same from the Owner. If the Contractor fails to make the repairs and replacements promptly, or in an emergency where delay would cause serious risk, or loss, or damage, the Owner may have the defective work corrected or the rejected work removed and replaced, and the Contractor and his Surety shall be liable for the cost thereof.

PROGRESS OF THE WORK

54. BEGINNING OF THE WORK

Following execution of the Contract, the Contractor shall meet with the Owner and Engineer relative to his arrangements for prosecuting the work.

55. SCHEDULES AND PROGRESS REPORTS

Prior to starting the construction, the Contractor shall prepare and submit to the Engineer, a progress schedule showing the dates on which each part or division of the work is expected to be started and finished, and a preliminary schedule for submittals. The progress schedule for submittals shall be brought up to date and submitted to the Engineer at the end of each month or at such other times the Engineer may request.

The Contractor shall forward to the Engineer, at the end of each month, an itemized report of the delivery status of major and critical items of purchased equipment and material, including shop drawings and the status of shop and field fabricated work. These progress reports shall indicate the date of the purchase order, the current percentage of completion, estimated delivery, and cause of delay, if any.

If the completion of any part of the work or the delivery of materials is behind the submitted progress schedule, the Contractor shall submit in writing a plan acceptable to the Owner and Engineer for bringing the work up to schedule.

The Owner shall have the right to withhold progress payments for the work if the Contractor fails to update and submit the progress schedule and reports as specified.

56. PROSECUTION OF THE WORK

It is expressly understood and agreed that the time of beginning, rate of progress, and time of completion of the work are the essence of this Contract. The work shall be prosecuted at such time, and in or on such part or parts of the project as may be required, to complete the project as contemplated in the Contract Documents and the progress schedule.

If the Contractor desires to carry on work at night or outside the regular hours, he shall give timely notice to the Engineer to allow satisfactory arrangements to be made for observing the work in progress.

57. OWNER'S RIGHT TO RETAIN IMPERFECT WORK

If any part or portion of the work completed under this Contract shall prove defective and not in accordance with the Drawings and Specifications, and if the imperfection in the same shall not be of sufficient magnitude or importance as to make the work dangerous or unsuitable, or if the removal of such work will create conditions which are dangerous or undesirable, the Owner shall have the right and authority to retain such work but will make such deductions in the final payment therefore as may be just and reasonable.

58. OWNER'S RIGHT TO DO WORK

Should the Contractor neglect to prosecute the work in conformance with the Contract Documents or neglect or refuse at his own cost to remove and replace work rejected by the Engineer, then the Owner may notify the Surety of the condition, and after 10 days' written notice to the Contractor and the Surety, or without notice if an emergency or danger to the work or public exists, and without prejudice to any other right which the Owner may have under Contract, or otherwise, take over that portion of the work which has been improperly or non timely executed, and make good the deficiencies and deduct the cost thereof from the payments then or thereafter due the Contractor.

59. OWNER'S RIGHT TO TRANSFER EMPLOYMENT

If the Contractor should abandon the work or if he should persistently or repeatedly refuse or should fail to make prompt payment to Subcontractors for material or labor, or to persistently disregard laws, ordinances, or to prosecute the work in conformance with the Contract Documents, or otherwise be guilty of a substantial violation of any provision of the Contract or any laws or ordinance, then the Owner may, without prejudice to any other right or remedy, and after giving the Contractor and Surety 10 days' written notice, transfer the employment for said work from the Contractor to the Surety. Upon receipt of such notice, such Surety shall enter upon the premises and take possession of all materials, tools, and appliances thereon for the purpose of completing the work included under this Contract and employ by Contract or otherwise, any qualified person or persons to finish the work and provide the materials therefor, in accordance with the Contract Documents, without termination of the continuing full force and effect of this Contract. In case of such transfer

of employment to such Surety, the Surety shall be paid in its own name on estimates according to the terms hereof without any right of the Contractor to make any claim for the same or any part thereof.

If, after the furnishing of said written notice to the Surety, the Contractor and the Surety still fail to make reasonable progress on the performance of the work, the Owner may terminate the employment of the Contractor and take possession of the premises and of all materials, tools, and appliances thereon and finish the work by whatever method he may deem expedient and charge the cost thereof to the Contractor and the Surety. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the expense of completing the Contract, including compensation for additional managerial and administrative services, shall exceed such unpaid balance, the Contractor and the Surety shall pay the difference to the Owner.

60. DELAYS AND EXTENSION OF TIME

If the Contractor is delayed in the progress of the work by any act or neglect of the Owner or the Engineer, or by any separate Contractor employed by the Owner, or by strikes, lockouts, fire, adverse weather conditions not reasonably anticipated, or acts of Nature, and if the Contractor, within 48 hours of the start of the occurrence, gives written notice to the Owner of the cause of the potential delay and estimate of the possible time extension involved, and within 10 days after the cause of the delay has been remedied, the Contractor gives written notice to the Owner of any actual time extension requested as a result of the aforementioned occurrence, then the Contract time may be extended by change order for such reasonable time as the Engineer determines. It is agreed that no claim shall be made or allowed for any damages, loss, or expense which may arise out of any delay caused by the above referenced acts or occurrences other than claims for the appropriate extension of time.

No extension of time will be granted to the Contractor for delays occurring to parts of the work that have no measurable impact on the completion of the total work under this Contract. No extension of time will be considered for weather conditions reasonably anticipated for the area in which the work is being performed. Reasonably anticipated weather conditions will be based on official records of monthly precipitation and other historical data. Adverse weather conditions, if determined to be of a severity that would impact progress of the work, may be considered as cause for an extension of Contract completion time.

Delays in delivery of equipment or material purchased by the Contractor or his Subcontractors, including Owner-selected equipment shall not be considered as a just cause for delay, unless the Owner determines that for good cause the delay is beyond the control of the Contractor. The Contractor shall be fully responsible for the timely ordering, scheduling, expediting, delivery, and installation of all equipment and materials.

Within a reasonable period after the Contractor submits to the Owner a written request for an extension of time, the Engineer will present his written opinion to the Owner as to whether an extension of time is justified, and, if so, his recommendation as to the number of days for time extension. The Owner will make the final decision on all requests for extension of time.

61. DIFFERING SITE CONDITIONS

The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Owner and Engineer of:

- A. subsurface or latent physical conditions at the site which differ materially from those indicated in this contract,
- B. unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

The Engineer will investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this Contract, whether or not changed as a result of the conditions, and equitable adjustment shall be made this Article and the Contract modified in writing accordingly.

No request by the Contractor for an equitable adjustment to the Contract under this Article will be allowed, unless the Contractor has given the written notice required; provided that the time prescribed above for giving written notice may be extended by the Owner.

No request by the Contractor for an equitable adjustment to the Contract for differing site conditions will be allowed if made after final payment under this Contract.

62. LIQUIDATED DAMAGES

Should the Contractor fail to complete the work, or any part thereof, in the time agreed upon in the Contract or within such extra time as may have been allowed for delays by extensions granted as provided in the Contract, the Contractor shall reimburse the Owner for the additional expense and damage for each calendar day, Sundays and legal holidays included, that the Contract remains uncompleted after the Contract completion date. It is agreed that the amount of such additional expense and damage incurred by reason of failure to complete the work is the per-diem rate, as stipulated in the Proposal. The said amount is hereby agreed upon as a reasonable estimate of the costs which may be accrued by the Owner after the expiration of the time of completion. It is expressly understood and agreed that this amount is not to be considered in the nature of a penalty, but as liquidated damages which have accrued against the Contractor. The Owner shall have the right to deduct such damages from any amount due, or that may become due the Contractor, or the amount of such damages shall be due and collectible from the Contractor or Surety.

63. OTHER CONTRACTS

The Owner reserves the right to let other Contracts in connection with the work. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work and shall properly connect and coordinate his work with theirs.

If any part of the work under this Contract depends for proper execution or results upon the work of any other Contractor, utility service company or Owner, the Contractor shall inspect and promptly report to the Engineer in writing any patent or apparent defects to deficiencies in such work that render it unsuitable for such proper execution and results. The Contractor's failure to so report shall constitute acceptance of the work by others as being fit and proper for integration with work under this Contract, except for latent or non apparent defects and deficiencies in the work.

64. USE OF PREMISES

The Contractor shall confine his equipment, the storage of materials and the operation of his workers to limits shown on the Drawings or indicated by law, ordinances, permits, or directions of the Engineer, and shall not unreasonably encumber the premises with his materials. The Contractor shall provide, at his own expense, the necessary rights-of-way and access to the work which may be required outside the limits of the Owner's property and shall furnish the Engineer copies of permits and agreements for use of the property outside that provided by the Owner.

The Contractor shall not load nor permit any part of the structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the work or adjacent property to stresses or pressures that will endanger it.

65. SUBSTANTIAL COMPLETION DATE

The Engineer may issue a written notice of substantial completion for the purpose of establishing the starting date for specific equipment guarantees, and to establish the date that the Owner will assume the responsibility for the cost of operating such equipment. Said notice shall not be considered as final acceptance of any portion of the work or relieve the Contractor from completing the remaining work within the specified time and in full compliance with the Contract Documents. See SUBSTANTIAL COMPLETION under DEFINITIONS of these General Conditions.

66. PERFORMANCE TESTING

Operating equipment and systems shall be performance tested in the presence of the Engineer to demonstrate compliance with the specified requirements. Performance testing shall be conducted under the specified design operating conditions or under such simulated operating conditions as recommended or approved by the Engineer. Schedule such testing with the Engineer at least one week in advance of the planned date for testing.

67. OWNER'S USE OF PORTIONS OF THE WORK

Following issuance of the written notice of Substantial Completion, the Owner may initiate operation of the facility. Such use shall not be considered as final acceptance of any portion of the work, nor shall such use be considered as cause for an extension of the Contract completion time, unless authorized by a Change Order issued by the Owner.

68. CUTTING AND PATCHING

The Contractor shall do all cutting, fitting, or patching of his work that may be required to make its several parts come together properly and fit it to receive or be received by work of other Contractors shown upon or reasonably implied by the Drawings.

69. CLEANING UP

The Contractor shall, at all times, keep property on which work is in progress and the adjacent property free from accumulations of waste material or rubbish caused by employees or by the work. Upon completion of the construction, the Contractor shall remove all temporary structures, rubbish, and waste materials resulting from his operations.

PAYMENT

70. PAYMENT FOR CHANGE ORDERS

The Owner's request for quotations on alterations to the work shall not be considered authorization to proceed with the work prior to the issuance of a formal Change Order, nor shall such request justify any delay in existing work. Quotations for alterations to the work shall include substantiating documentation with an itemized breakdown of Contractor and Subcontractor costs, including labor, material, rentals, approved services, overhead, and profit. Owner may require detailed cost data in order to substantiate the reasonableness of the proposed costs.

Any compensation paid in conjunction with the terms of a Change Order shall comprise total compensation due the Contractor for the work or alteration defined in the Change Order. By signing the Change Order, the Contractor acknowledges that the stipulated compensation includes payment for the work or alteration plus all payment for the interruption of schedules, extended overhead, delay, or any other impact claim or ripple effect, and by such signing specifically waives any reservation or claim for additional compensation in respect to the subject Change Order.

At the Owner's option, payment or credit for any alterations covered by a Change Order shall be determined by one or a combination of the methods set forth in A, B, or C below, as applicable:

A. UNIT PRICES

Those unit prices stipulated in the Proposal shall be utilized where they are applicable. In the event the Change Order results in a change in the original quantity that is materially and significantly different from the original bid quantity, a new unit price shall be negotiated upon demand of either party. Unit prices for new items included in the Change Order shall be negotiated and mutually agreed upon.

B. LUMP SUM

A total lump sum for the work negotiated and mutually acceptable to the Contractor and the Owner.

Lump sum quotations for modifications to the work shall include substantiating documentation with an itemized breakdown of Contractor and Subcontractor costs, including labor, material, rentals, approved services, overhead, and profit, all calculated as specified under "C" below.

C. COST REIMBURSEMENT WORK

The term "cost reimbursement" shall be understood to mean that payment for the work will be made on a time and expense basis, that is, on an accounting of the Contractor's forces, materials, equipment, and other items of cost as required and used to do the work.

If the method of payment cannot be agreed upon prior to the beginning of the work, and the Owner directs by written Change Order that the work be done on a cost reimbursement basis, then the Contractor shall furnish labor, and furnish and install equipment and materials necessary to complete the work in a satisfactory manner and within a reasonable period of time. For the work performed, payment will be made for the documented actual cost of the following:

1. Labor including foremen for those hours they are assigned and participating in the cost reimbursement work (actual payroll cost, including wages, fringe benefits as established by negotiated labor agreements, labor insurance, and labor taxes as established by law). Fixed Burden shall not exceed 20%. No other fixed labor burdens will be considered, unless approved in writing by the Owner.
2. Material delivered and used on the designated work, including sales tax, if paid by the Contractor or his Subcontractor.
3. Rental or equivalent rental cost of equipment, including necessary transportation for items having a value in excess of \$100.

Rental or equivalent rental cost will be allowed for only those days or hours during which the equipment is in actual use. Rental and transportation allowances shall not exceed the current rental rates prevailing in the locality. The rentals allowed for equipment will, in all cases, be understood to cover all fuel, supplies, repairs, and renewals, and no further allowances will be made for those items, unless specific agreement to that effect is made.

4. Additional bond, as required and approved by the owner.
5. Additional insurance (other than labor insurance) as required and approved by the Owner.

In addition to items 1 through 5 above, an added fixed fee for general overhead and profit shall be 15% for the Contractor (approved Subcontractor 10%) actually executing the Cost Reimbursement work.

An additional fixed fee shall be 05% and allowed the Contractor for the administrative handling of portions of the work that are executed by an approved Subcontractor. No additional fixed fee will be allowed for the administrative handling of work executed by a Subcontractor of a Subcontractor, unless by written permission from the Owner.

The added fixed fees shall be considered to be full compensation, covering the cost of general supervision, overhead, profit, and any other general expense. The Contractor's records shall make clear distinction between the direct costs of work paid for on a cost reimbursement basis and the costs of other work. The Contractor shall furnish the Engineer report sheets in duplicate of each day's cost reimbursement work no later than the working day following the performance of said work. The daily report sheets shall itemize the materials used, and shall cover the direct cost of labor and the charges for

equipment rental, whether furnished by the Contractor, Subcontractor or other forces. The daily report sheets shall provide names or identifications and classifications of workers, the hourly rate of pay and hours worked, and also the size, type, and identification number of equipment and hours operated.

Material charges shall be substantiated by valid copies of vendors' invoices. Such invoices shall be submitted with the daily report sheets, or, if not available, they shall be submitted with subsequent daily report sheets. Said daily report sheets shall be signed by the Contractor or his authorized agent.

The Owner reserves the right to furnish such materials and equipment as he deems expedient and the Contractor shall have no claim for profit or added fees on the cost of such materials and equipment. To receive partial payments and final payment for cost reimbursement work, the Contractor shall submit to the Engineer, detailed and complete documented verification of the Contractor's and any of his Subcontractors' actual costs involved in the cost reimbursement work. Such costs shall be submitted within 30 days after said work has been performed.

71. PARTIAL PAYMENTS

A. GENERAL

Nothing in this Article shall be construed to affect the right, hereby reserved, to reject the whole or any part of the aforesaid work, should such work be later found not to comply with the provisions of the Contract Documents. All estimated quantities of work for which partial payments have been made are subject to review and correction on the final estimate. Payment by the Owner and acceptance by the Contractor of partial payments based on periodic estimates of quantities of work performed shall not, in any way, constitute acceptance of the estimated quantities used as a basis for computing the amounts of the partial payments.

B. ESTIMATE

At least 30 days before each progress payment falls due, as specified in the Supplementary Conditions, the Contractor shall submit to the Engineer a detailed estimate of the amount earned during the preceding month for the separate portions of the work, and request payment. As used in this Article, the words "amount earned" means the value, on the date of the estimate for partial payment, of the work completed in accordance with the Contract Documents, and the value of approved materials delivered to the project site suitable stored and protected prior to incorporation into the work.

Engineer will, within 7 days after receipt of each request for payment, either indicate in writing a recommendation of payment and present the request to Owner, or return the request to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may, within 7 days, make the necessary corrections and resubmit the request.

Engineer may refuse to recommend the whole or any part of any payment if, in his opinion, it would be incorrect to make such representations to Owner. Engineer may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended to such an extent as may be necessary in Engineer's opinion to protect the Owner from loss because:

1. The work is defective, or completed work has been damaged requiring correction or replacement;
2. Written claims have been made against Owner or Liens have been filed in connection with the work;
3. The Contract Price has been reduced because of Change Orders;
4. Owner has been required to correct defective work or complete the work in accordance with Article OWNER'S RIGHT TO DO WORK;
5. Of Contractor's unsatisfactory prosecution of the work in accordance with the Contract Documents; or
6. Contractor's failure to make payment to Subcontractors or for labor, materials, or equipment.

C. DEDUCTION FROM ESTIMATE

Unless modified in the Supplementary Conditions, deductions from the estimate will be as described below:

1. The Owner will deduct from the estimate, and retain as part security, 10 percent of the amount earned for work satisfactorily completed. A deduction and retainage of 10 percent will be made on the estimated amount earned for approved items of material delivered to and properly stored at the jobsite but not incorporated into the work. When the work is 50 percent complete, the Owner will reduce the retainage to 5 percent of the dollar value of all work satisfactorily completed to date provided the Contractor is making satisfactory progress and there is no specific cause for a greater retainage. The Owner may reinstate the retainage up to 10 percent if the Owner determines, at his discretion, that the Contractor is not making satisfactory progress or where there is other specific cause for such withholding.

D. QUALIFICATION FOR PARTIAL PAYMENT FOR MATERIALS DELIVERED

Unless modified in the Supplementary Conditions, qualification for partial payment for materials delivered but not yet incorporated into the work shall be as described below:

1. Materials, as used herein, shall be considered to be those items which are fabricated and manufactured material and equipment. No consideration shall be given to individual purchases of less than \$200 for any one item.
2. To receive partial payment for materials delivered to the site, but not incorporated in the work, it shall be necessary for the Contractor to include a list of such materials on the Partial Payment Request. At his sole discretion, the Engineer may approve items for which partial payment is to be made. Partial payment shall be based on the Contractor's actual cost for the materials as evidenced by invoices from the supplier. Proper storage and protection shall be provided by the Contractor, and as approved by the Engineer. Final payment shall be made only for materials actually incorporated in the work and, upon acceptance of the work, all materials remaining for which advance payments had been made shall revert to the Contractor, unless otherwise agreed, and partial payments made for these items shall be deducted from the final payment for the work.
3. Contractor warrants and guarantees that title to all work, materials, and equipment covered by any Application for Payment, whether incorporated in the project or not, will pass to Owner at the time of payment free and clear of all liens, claims, security interests, and encumbrances.
4. If requested by the Engineer, the Contractor shall provide, with subsequent pay requests, invoices receipted by the supplier showing payment in full has been made.

E. PAYMENT

After deducting the retainage and the amount of all previous partial payments made to the Contractor from the amount earned, the amount due will be made payable to the Contractor. Recommendations for payment received by the Owner less than 9 days prior to the scheduled day for payment will not be processed or paid until the following month.

72. CLAIMS FOR EXTRA WORK

In any case where the Contractor deems additional time or compensation will become due him under this Contract for circumstances other than those defined in Article DELAYS AND EXTENSION OF TIME, the Contractor shall notify the Engineer, in writing, of his intention to make claim for such time or compensation before he begins the work on which he bases the claim, in order that such matters may be settled, if possible, or other appropriate action taken. The notice of claim shall be in duplicate, in writing, and shall state the circumstances and the reasons for the claim, but need not state the amount. If such notification is not given or if the Engineer is not afforded proper facilities by the Contractor for

keeping strict account of actual cost, then the Contractor hereby agrees to waive the claim for such additional time or compensation. Such notice by the Contractor, and fact that the Engineer has kept account of the cost as aforesaid, shall not in any way be construed as proving the validity of the claim.

No extension of time will be granted to the Contractor for delays resulting from extra work that have no measurable impact on the completion of the total Work under this Contract. Claims for additional time or compensation shall be made in itemized detail and submitted, in writing, to the Owner and Engineer within 10 days following completion of that portion of the work for which the Contractor bases his claim. Failure to make the claim for additional compensation in the manner and within the time specified above shall constitute waiver of that claim. In case the claim is found to be just, it shall be allowed and paid for as provided in Article **PAYMENT FOR CHANGE ORDERS**.

73. RELEASE OF LIENS OR CLAIMS (Notice to Owners)

The Contractor shall indemnify and hold harmless the Owner from all claims for labor and materials furnished under this Contract. Prior to the final payment, the Contractor shall furnish to the Owner, as part of his final payment request, a certification that all of the Contractor's obligations on the project have been satisfied and that all monetary claims and indebtedness have been paid. The Contractor shall furnish complete and legal effective releases or waivers, satisfactory to the Owner, of all liens and notice to owners arising out of or filed in connection with the work.

74. FINAL PAYMENT

Upon completion of all the work under this Contract, the Contractor shall notify the Engineer, in writing, that he has completed his part of the Contract and shall request final payment. Upon receipt of such notice the Engineer will inspect and, if acceptable, submit to the Owner his recommendation as to acceptance of the completed work and as to the final estimate of the amount due the Contractor. Upon approval of this final estimate by the Owner and compliance by the Contractor with provisions in Article **RELEASE OF LIENS OR CLAIMS**, and other provisions as may be applicable, the Owner shall pay to the Contractor all monies due him under the provisions of these Contract Documents.

75. NO WAIVER OF RIGHTS

Neither the inspection by the Owner, through the Engineer or any of his employees, nor any order by the Owner for payment of money, nor any payment for, or acceptance of, the whole or any part of the work by the Owner or Engineer, nor any extension of time, nor any possession taken by the owner or its employees, shall operate as a waiver of any provision of this Contract, or any power herein reserved to the Owner, or any right to damages herein provided, nor shall any waiver of any breach in this Contract be held to be a waiver of any other or subsequent breach. Acceptance or final payment shall not be final and conclusive with regards to latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under the warranty.

**76. ACCEPTANCE OF FINAL PAYMENT
CONSTITUTES RELEASE**

The acceptance by the Contractor of the final payment shall release the Owner and the Engineer, as representatives of the Owner, from all claims and all liability to the Contractor for all things done or furnished in connection with the work, and every act of the Owner and others relating to or arising out of the work except claims previously made in writing and still unsettled. No payment, however, final or otherwise, shall operate to release the Contractor or his Sureties from obligations under this Contract and the Performance Bond, Payment Bond, and other bonds and warranties, as herein provided.

SUPPLEMENTARY CONDITIONS

REVISIONS AND ADDITIONS TO THE GENERAL CONDITIONS

The General Conditions are hereby revised as follows:

ARTICLE 9 "ENGINEER"

Add the following:

Wherever in these Documents the word "Engineer" appears, it shall be understood to mean Bermello Ajamil & Partners, Inc. (Frantz Tassy), Engineer of Record or authorized representatives.

ARTICLE 12 "OWNER"

Add the following:

Wherever in these Documents the word "Owner" appears, it shall be understood to mean the City of Key West whose address is 525 Angela Street, Key West, Florida 33040.

ARTICLE 14 "SPECIFICATIONS"

Add the following:

FEDERAL, STATE, COUNTY, AND LOCAL STANDARD SPECIFICATIONS

Where portions of the work traverse or cross federal, state, county, or local highways, roads, or streets, and the agency in control of such property has established standard specifications governing items of work that differ from these Specifications, the most stringent requirements shall apply. The Contractor shall comply with all regulations and requirements of the State Highway Department and the County Road Department wherever the work traverses or crosses state or county highways..

ARTICLE 18 "INTENT OF CONTRACT DOCUMENTS"

Add the following:

FEDERAL GRANT REQUIREMENTS

This Project is funded by Federal Grant Money. The Contractor and Subcontractors shall comply with the Federal Grant Requirements.

18.1 Prequalifications of Bidders: Florida Law (Chapter 337.14 F.S.) and rules of the State of Florida, Department of Transportation (Chapter 14-22) require Contractors to be prequalified with the Department in order to bid for the performance of Road, Bridge or Public Transportation contracts greater than \$250,000.00.
Reference Attachment A: FDOT Standard Specifications.

18.2 Access to Records: Authorized representatives of the OWNER, the Florida department of Environmental Protection, other state agencies associated with the grant and the United States Agency responsible for this grant shall have access to, for the purpose of inspection, any books, documents, papers, and records of the CONTRACTOR that are pertinent to this Agreement/Contract. The CONTRACTOR shall retain all books, documents, papers, and records pertinent to this Agreement/Contract for a period of five years after receiving and accepting final payment under his Agreement/Contract.

18.3 Access to Work Sites: Authorized representatives of the OWNER, the Florida Department of Environmental Protection (FDEP), other state agencies associated with this grant, and the United States Agency responsible for this grant shall have access to the Work site(s) at any reasonable time. The CONTRACTOR shall cooperate (including making available working copies of documents and supplementary materials) during Work site inspections conducted by the OWNER and state and federal agencies.

18.4 Debarment and Suspension (Executive Order 12549)
Reference Attachment B: Suspension and Debarment Certification

18.4.1 If the price of this Agreement/Contract equals or exceeds \$25,000, the OWNER shall not award this Agreement/Contract, nor permit any lower-tier goods or services (including construction) subcontract with a price equaling or exceeding \$25,000 to be awarded, to any party that is debarred or suspended or is otherwise excluded from, or ineligible for participation in, Federal assistance programs under Executive Order 12549 (Debarment and Suspension).

18.4.2 The attention of all bidders or prospective contractors (including the CONTRACTOR) is directed to the certification/clause entitled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions.” Which has been extracted from Appendix B to 40 CFR Part 32 and included as Appendix A to these Supplementary Conditions? The certification/clause entitled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions.” Is applicable to this Agreement/Contract if the price of this Agreement/Contract equals or exceeds \$25,000.

18.4.3 If bidders or prospective contractors (including the CONTRACTOR), or any prospective subcontractors at any tier, intend to let any lower-tier goods or services (including construction) subcontracts for any portion of the Work, they shall physically include the certification/clause entitled Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions which is included as Appendix A to these Supplementary Conditions, in all lower-tier goods and services (including construction) subcontracts with a price equaling or exceeding \$25,000 and in all solicitations for such subcontracts.

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION – LOWER TIER COVERED TRANSACTIONS

Note: This certification/clause has been extracted from Appendix B to 40 CFR Part 32 is applicable to all goods and services (including construction) contracts and subcontracts with a price equaling or exceeding \$25,000 and in all solicitations for such contracts and subcontracts.

Instructions for Certification:

1. By signing and submitting this Proposal, the prospective lower tier participant is providing the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to whom this Proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms “covered transaction,” “debarred,” “suspended,” “ineligible,” “lower tier covered transaction,” “participant,” “person,” “primary covered transaction,” “principal,” “proposal,” and “voluntarily excluded,” as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this Proposal is submitted for assistance in obtaining a copy of those regulations.

COLLEGE ROAD ENHANCEMENTS SUPPLEMENTARY CONDITIONS

5. The prospective lower tier participant agrees by submitting this Proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this Proposal that it will include this clause titled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions,” without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion – Lower Tier Covered Transactions

1 The prospective lower tier participant certifies, by submission of this Proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2 Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this Proposal.

3 The Prospective Lower-Tier Participant Also Certifies that it and its Principals:

a. Have not within a three-year period preceding this Proposal been convicted of or had a civil judgment rendered against them for COLLEGE ROAD ENHANCEMENTS SUPPLEMENTARY CONDITIONS

commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State anti-trust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

b. Are not presently indicated for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (3)(a) of this certification; and

c. Have not within a three-year period preceding this Proposal had one or more public transactions (Federal, State or local) terminated for cause or default. Where the prospective lower-tier participant is unable to certify to any of the above, such prospective participant shall attach an explanation to this Proposal.

Reference Attachment B: Suspension and Disbarment

18.5 Equal Employment Opportunity:

Reference Attachment C: Executive Order 11246

18.5.1 The Contractor, Sub Recipient or Subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out

applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

18.6 Disadvantaged Business Enterprise: Reference Attachment D: DBE Special Provisions; the DBE participation goal established by the City of Key West is 8.18%, which is consistent with the goal set by Florida Department of Transportation's (FDOT) Disadvantaged Business Enterprise (DBE) program. The City encourages all of its contractors to obtain bids and quotes from Certified DBEs. FDOT, as well as the City's Grants Administrator, offers assistance in reaching out to DBEs in an effort to locate DBEs capable of performing work relevant to the project.

18.7 Minority Owned Business Enterprise: Utilization of minority and Women-Owned firms and enterprises are encouraged.

18.8 Buy America/Foreign Contractor and Supply Restrictions:
Reference Attachment E: FDOT Supplemental Specification

18.9 Prohibition Against Convict Produced Materials
Reference Attachment F: FDOT Supplemental Specification

18.10 FHWA 1273
Reference Attachment G: Required Contract Provisions

18.11 Lobbying:
Reference Attachment H: Disclosure of Lobbying Activities

18.12 Non-Collusion Provision
Reference Attachment I: Non-Collusion Declaration

18.13 Prevailing Minimum Wage Compliance:
Reference Attachment J: Davis-Bacon Wage Table

18.14 Salvage Credits
In accordance with 49 CFR 18.36, salvage credits will not be allowed in this Contract.

18.15 Standardized Change Condition Contract Clauses:
Standardized Changed Conditions per 23 CFR 635.109 apply to this Contract.

18.16 State and Local Materials
Per 23 CFR 635.409, preferences for State and Local Materials will not be allowed in this contract.

18.17 Patented/Proprietary Materials
Per 23 CFR 635.411, Patented/Proprietary Materials will not be allowed in this contract.

18.18 Public Agencies in Competition with the Private Sector

In accordance with 23 CFR 635.112(e), public agencies competing with businesses in the private sector will not be allowed in this contract.

18.19 Publicly Owned Equipment

In accordance with 23 CFR 635.106, the usage of publicly owned equipment will not be allowed in this contract.

18.20 Contractor Purchased Equipment

In accordance with 23 CFR 140 / 49 CFR Part 18 / 49 CFR Section 18.3, contractor purchased equipment for State or Local ownership will not be allowed in this contract.

ARTICLE 29 "LINES AND GRADES"

Add the following:

It will be the Contractor's responsibility to layout the work and to transfer elevations from benchmarks. Where new construction connects to existing facilities, the Contractor shall check and establish the exact location prior to construction of the facilities.

The Contractor shall furnish all surveys, labor, and equipment, including setting all alignment and gradient, grade stakes, batter boards, and everything necessary to lay out his work. The Contractor shall be responsible for maintaining and re-establishing at his expense, all control points. After completion of his construction, he shall reset all permanent monuments at their original locations and elevations.

The Engineer may check all layout work, and the Contractor shall furnish all necessary labor, equipment, and materials, and shall cooperate and assist the Engineer in making such checks.

The dimensions for lines and elevations for grades of the structures, appurtenances, and utilities will be shown on Drawings, together with other pertinent information required for laying out the work. If site conditions vary from those indicated, the Contractor shall notify the Engineer immediately, who will make any minor adjustment as required.

ARTICLE 36 "INSURANCE AND LIABILITY", SUBARTICLE C "WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE"

Add the following:

Provide Employer's Liability Insurance in an amount not less than \$3,000,000.

ARTICLE 36 "INSURANCE AND LIABILITY", SUBARTICLE D "GENERAL LIABILITY INSURANCE (INCLUDING AUTOMOBILE)"

Add the following:

The amount of General Liability Insurance shall not be less than \$3,000,000 for bodily injury for each occurrence, with coverage for property damage not less than \$3,000,000. Comprehensive automobile liability shall not be less than \$3,000,000 for each person and \$3,000,000 for each occurrence. Contractual liability shall not be less than \$3,000,000 for bodily injury per each occurrence with coverage for property damage not less than \$3,000,000 for each occurrence. Additional umbrella excess liability coverage for the General Liability and Automobile Liability insurance shall be not less than \$ 3,000,000 per occurrence in excess of the above stated primary limits. Bermello Ajamil & Partners, Inc. shall also be named on the policy with the City of Key West.

ARTICLE 36 "INSURANCE AND LIABILITY", SUBARTICLE E "BUILDERS RISK ALL RISK INSURANCE"

Delete the following coverages:

Loss caused by earthquake.
Loss caused by landslide.

ARTICLE 36 "INSURANCE AND LIABILITY"

Add the following Article:

G. SURETY AND INSURER QUALIFICATIONS

All bonds, insurance contracts, and certificates of insurance shall be either executed by or countersigned by a licensed resident agent of the Surety or insurance company, having his place of business in the State of Florida, and in all ways complying with the insurance laws of the State of Florida. Further, the said Surety or Insurance Company shall be duly licensed and qualified to do business in the State of Florida. If requested, Contractor shall Provide Proof of Florida Licensure for all insurance companies. Bermello Ajamil & Partners, Inc. shall also be named on the policy with the City of Key West.

H. Insurance contracts and Certificates of Insurance required by this contract shall contain a "waiver of subrogation" provision whereas the contractor's insurers waive any claim against the City of Key West.

ARTICLE 37 "INDEMNITY"

Add the following:

The obligation of the Contractor under this Article shall be limited to the contractual liability as specified in the Supplementary Conditions, Article INSURANCE AND LIABILITY.

ARTICLE 39 "CODES, ORDINANCES, PERMITS, AND LICENSES"

Add the following:

A. PERMIT FOR WORK WITHIN THE FEDERAL, COUNTY, AND/OR STATE RIGHTS-OF-WAY

The Owner will obtain from the county and/or state the necessary permit for work within the rights-of-way. A copy of the permit is available at the office of the Owner. The Contractor shall abide by all regulations and conditions stipulated in the permits, and such conditions and requirements are hereby made a part of these Supplementary Conditions, as fully and completely as though the same were fully set forth herein. The Contractor shall examine the permits granted to the Owner, by the county and/or state. Failure to do so will not relieve the Contractor from compliance with the requirements stated therein.

The Contractor shall prepare, submit, and have approved at his expense traffic maintenance plans required by federal, state, county, and local agencies having jurisdiction.

B. PERMIT FOR WORK WITHIN LOCAL RIGHTS-OF-WAY

The Contractor shall obtain from the City of Key West the necessary permits for work within the rights-of-way. The Contractor shall abide by all regulations and conditions, including maintenance of traffic.

C. PUBLIC WORKS COMPLIANCE ACT

1. GENERAL

If the Contract amount exceeds \$25,000, the Contractor shall abide by the requirements of the State Public Works Compliance Act, Section 446.101 Florida Statutes. The Act generally requires the Contractor to:

- a. Participate in registered training programs with the State of Florida.
- b. Hire for the duration of the Contract, a ratio of at least one registered apprentice or trainee to every five journeymen working on the project.
- c. Prior to the commencement of the work, submit a letter of intent to the Bureau of Apprenticeship and to others as required by the Act.
- d. Prepare and submit quarterly to the Bureau of Apprenticeship, records of employment on report form BAP-500.

2. ADMINISTRATION

Administration of the apprenticeship program for this Contract will be under the designated area field office of the Bureau of Apprenticeship.

D. NOISE ORDINANCE

The Contractor shall comply with the City of Key West Noise Ordinance.

E. "LICENSES"

THE BIDDER MUST BE A LICENSED CONTRACTOR BY THE STATE OF FLORIDA AND SUBMIT PROOF OF SUCH WITH THE BID.

- A. Within 10 days of Notice of Award, the successful Bidder must represent that he holds all applicable, county, and City of Key West licenses and permits required to do business as a contractor with respect to the work described in the Contract Documents.
- B. Further, the successful Bidder must, within 10 days of Notice of Award, furnish documentation showing that, as a minimum, he has complied with the provisions of Chapter 18 of the Code of Ordinances of the City of Key West in order to enter into the Agreement contained in the Contract Documents.
- C. Specifically, within 10 days after Notice of Award, the successful Bidder must demonstrate that he holds, as a minimum, the following licenses and certificates:
 - 1) City of Key West Tax License Receipt;
 - 2) A valid Certificate of Competency issued by the Chief Building Official of Key West, Florida
 - 3) A valid occupational license issued by the City of Key West, Florida.

ARTICLE 42 "SAFETY"

Add the following sub article:

OCCUPATIONAL SAFETY AND HEALTH

The Contractor shall observe and comply with all applicable local, state, and federal occupational safety and health regulations during the prosecution of work under this Contract. In addition, full compliance by the Contractor with the U.S. Department of Labor's Occupational Safety and Health Standards, as established in Public Law 91-596, will be required under the terms of this Contract.

ARTICLE 43 "PROTECTION OF WORK AND PROPERTY"

Add the following Article:

HISTORIC PRESERVATION

The Contractor shall comply with Florida's Archives and Historic Act (Florida Statutes, Chapter 267) and the regulations of the local historic preservation board as applicable and protect against the potential loss or destruction of significant historical or archaeological data, sites, and properties in connection with the project.

ARTICLE 57 "OWNERS RIGHT TO TRANSFER EMPLOYMENT"

Add the following Article:

TERMINATION FOR CONVENIENCE AND RIGHT OF SUSPENSION

A. Owner shall have the right to terminate this Contract without cause by written notice of Termination to the Contractor. In the event of such termination for convenience, the Contractor's recovery against the Owner shall be limited to that portion of the Contract amount earned through the date of termination, together with any retainage withheld and reasonable termination expenses incurred. Contractor shall not be entitled to any other or further recovery against the Owner, including, but not limited to, damages or any anticipated profit on portions of the Work not performed.

B. The Owner shall have the right to suspend all or any portions of the Work upon giving the Contractor prior written notice of such suspension. If all or any portion of the Work is so suspended, the Contractor shall be entitled to reasonable costs, expenses and time extension associated with the suspension.

ARTICLE 60 "LIQUIDATED DAMAGES"

Delete Article "LIQUIDATED DAMAGES" in its entirety and substitute the following:

LIQUIDATED DAMAGES

Should the Contractor fail to complete the work or any part thereof in the time agreed upon in the Contract Documents or within such extra time as may have been allowed for delays by extensions granted as provided in the Contract, the Contractor shall reimburse the Owner for the additional expense and damage for each calendar day, Sundays and legal holidays included, that project outlined in Contract Documents remains uncompleted after the completion date. Liquidated damages shall be assessed. It is agreed that the amount of such additional expense and damage incurred by reason of failure to complete the work is the per diem rate as stipulated in the Proposal. The said amount is hereby agreed upon as a reasonable estimate of the costs which may be accrued by the Owner after the expiration of the time of completion. It is expressly understood and agreed that this amount is not to be considered in the nature of a penalty but as liquidated damages, which have accrued against the Contractor. The Owner shall have the right to deduct such damages from any amount due or that may become due the Contractor or the amount of such damages shall be due and collectible from the Contractor or Surety.

ARTICLE 69 "PARTIAL PAYMENTS"

Delete the first paragraph of Article "PARTIAL PAYMENTS" and substitute the following:

No more than once each month the Contractor shall submit to the Engineer a detailed estimate of the amount earned during the preceding month for the separate portions of the work and request payment. As used in this Article the words "amount earned" means the value, on the date of the estimate, for partial payment of the work completed in accordance with the Contract Documents and the value of approved materials delivered to the project site suitably stored and protected prior to incorporation into the work.

ARTICLE 69 "PARTIAL PAYMENTS"

Add the following:

Payment will be made by the Owner to the Contractor within 40 days receipt of the written recommendation of payment from the Engineer.

ARTICLE 69 "PARTIAL PAYMENTS"

Delete Subarticle C "DEDUCTION FROM ESTIMATE" in its entirety and substitute the following:

DEDUCTION FROM ESTIMATE

The Owner will deduct from the estimate and retain as part security 10 percent of the amount earned for work satisfactorily completed. A deduction and retainage of 10 percent will be made on the estimated amount earned for approved items of material delivered to and properly stored at the jobsite but not incorporated into the work.

ARTICLE 69 "PARTIAL PAYMENT"

Delete Subarticle E "PAYMENT" in its entirety and substitute the following:

PAYMENT

After deducting the retainage and the amount of all previous partial payments made to the Contractor from the amount earned the amount due will be made payable to the Contractor. Recommendations for payment received by the Owner less than 40 days prior to the scheduled day for payment will not be processed or paid until the following month.

ARTICLE 72 "FINAL PAYMENT"

Delete Article "FINAL PAYMENT" in its entirety and substitute the following:

FINAL PAYMENT

Upon completion of the work the Contractor shall notify the Engineer, in writing, that he has completed it and shall request final payment. The Contractor shall be responsible for keeping an accurate and detailed record of his actual construction. Upon completion of construction and before final acceptance and payment the Contractor shall furnish the Engineer record drawings of his construction. Upon receipt of a request for final payment

and the record drawings the Engineer will inspect and, if acceptable, submit to the Owner his recommendation as to acceptance of the completed work and as to the final estimate of the amount due the Contractor. Upon approval of this final estimate by the Owner and compliance by the Contractor with provisions in Article RELEASE OF LIENS OR CLAIMS, and other provisions as may be applicable, the Owner shall pay to the Contractor all monies due him under the provisions of these Contract Documents.

* * * * *

ATTACHMENT A: FDOT STANDARD SPECIFICATIONS

2-1 Prequalification of Bidders.

Except as noted below, prequalify with the Department to be eligible to bid. The Department publishes regulations covering prequalification of bidders under separate cover.

The Department does not require the Contractor to be prequalified if bidding construction contracts of \$250,000 or less if constructing buildings.

For construction contracts exceeding \$250,000 in amount, file an application for qualification on forms furnished by the Department, giving detailed information with respect to financial resources, equipment, past record, personnel, and experience. For qualified applicants, the Department will issue a certificate fixing the types of work and the aggregate amount of work that the Department allows the prequalified bidder to have under contract at any one time.

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit the following:

- (a) A bid on a contract to provide any goods or services to a public entity.
- (b) A bid on a contract with a public entity for the construction or repair of a public building or public work.
- (c) Bids on leases of real property to a public entity.

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017 F.S., for Category Two. All restrictions apply for a period of 36 months from the date of placement on the convicted vendor list.

All prequalified Contractors bidding on any Contract must include with their bid proposal a copy of their Certification of Current Capacity (Form 375-020-22) and Status of Contracts On Hand (Form 375-020-21).

ATTACHMENT B: SUSPENSION AND DEBARMENT CERTIFICATION

**CERTIFICATION REGARDING DEBARMENTS, SUSPENSION, INELIGIBILITY
AND VOLUNTARY EXCLUSION-LOWER TIER FEDERALLY FUNDED TRANSACTIONS**

1. The undersigned hereby certifies that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. The undersigned also certifies that it and its principals:

(a) Have not within a three-year period preceding this certification been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State anti-trust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

(b) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 2.(a) of this Certification; and

(c) Have not within a three-year period preceding this certification had one or more public transactions (Federal, State or local) terminated for cause or default.

3. Where the undersigned is unable to certify to any of the statements in this certification, an explanation shall be attached to this certification.

Dated this day of, 20__.

By _____
Authorized Signature/Contractor

Typed Name/Title

Contractor's Firm Name

Street Address

Building, Suite Number

City/State/Zip Code

Area Code/Telephone Number

ATTACHMENT C: EXECUTIVE ORDER 11246

Executive Order 11246 - Equal Employment Opportunity

SOURCE: The provisions of Executive Order 11246 of Sept. 24, 1965, appear at 30 FR 12319, 12935, 3 CFR, 1964-1965 Comp., p.339, unless otherwise noted.

Under and by virtue of the authority vested in me as President of the United States by the Constitution and statutes of the United States, it is ordered as follows:

Part I - Nondiscrimination in Government Employment

[Part I superseded by EO 11478 of Aug. 8, 1969, 34 FR 12985, 3 CFR, 1966-1970 Comp., p. 803]

Part II - Nondiscrimination in Employment by Government Contractors and Subcontractors

Subpart A - Duties of the Secretary of Labor

SEC. 201. The Secretary of Labor shall be responsible for the administration and enforcement of Parts II and III of this Order. The Secretary shall adopt such rules and regulations and issue such orders as are deemed necessary and appropriate to achieve the purposes of Parts II and III of this Order.

[Sec. 201 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Subpart B - Contractors' Agreements

SEC. 202. Except in contracts exempted in accordance with Section 204 of this Order, all Government contracting agencies shall include in every Government contract hereafter entered into the following provisions:

"During the performance of this contract, the contractor agrees as follows:

"(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

"(2) The contractor will, in all solicitations or advancements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to

race, color, religion, sex or national origin.

"(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

"(4) The contractor will comply with afl provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

"(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

"(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

"(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor win take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States." [Sec. 202 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684, EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 203. Each contractor having a contract containing the provisions prescribed in Section 202 shall file, and shall cause each of his subcontractors to file, Compliance Reports with the contracting agency or the Secretary of Labor as may be directed. Compliance Reports shall be filed within such times and shall contain such information as to the practices, policies, programs, and employment policies, programs, and employment statistics of the contractor and each subcontractor, and shall be in such form, as the Secretary of Labor may prescribe.

(b) Bidders or prospective contractors or subcontractors may be required to state whether they have participated in any previous contract subject to the provisions of this Order, or any preceding similar Executive order, and in that event to submit, on behalf of themselves and their proposed

subcontractors, Compliance Reports prior to or as an initial part of their bid or negotiation of a contract.

(c) Whenever the contractor or subcontractor has a collective bargaining agreement or other contract or understanding with a labor union or an agency referring workers or providing or supervising apprenticeship or training for such workers, the Compliance Report shall include such information as to such labor union's or agency's practices and policies affecting compliance as the Secretary of Labor may prescribe: Provided, That to the extent such information is within the exclusive possession of a labor union or an agency referring workers or providing or supervising apprenticeship or training and such labor union or agency shall refuse to furnish such information to the contractor, the contractor shall so certify to the Secretary of Labor as part of its Compliance Report and shall set forth what efforts he has made to obtain such information.

(d) The Secretary of Labor may direct that any bidder or prospective contractor or subcontractor shall submit, as part of his Compliance Report, a statement in writing, signed by an authorized officer or agent on behalf of any labor union or any agency referring workers or providing or supervising apprenticeship or other training, with which the bidder or prospective contractor deals, with

supporting information, to the effect that the signer's practices and policies do not discriminate on the grounds of race, color, religion, sex or national origin, and that the signer either will affirmatively cooperate in the implementation of the policy and provisions of this Order or that it consents and agrees that recruitment, employment, and the terms and conditions of employment under the proposed contract shall be in accordance with the purposes and provisions of the order. In the event that the union, or the agency shall refuse to execute such a statement, the Compliance Report shall so certify and set forth what efforts have been made to secure such a statement and such additional factual material as the Secretary of Labor may require.

[Sec. 203 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684; EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 204. The Secretary of Labor may, when he/she deems that special circumstances in the national interest so require, exempt a contracting agency from the requirement of including any or all of the provisions of Section 202 of this Order in any specific contract, subcontract, or purchase order. The Secretary of Labor may, by rule or regulation, also exempt certain classes of contracts, subcontracts, or purchase orders (1) whenever work is to be or has been performed outside the United States and no recruitment of workers within the limits of the United States is involved; (2) for standard commercial supplies or raw materials; (3) involving less than specified amounts of money or specified numbers of workers; or (4) to the extent that they involve subcontracts below a specified tier. The Secretary of Labor may also provide, by rule, regulation, or order, for the exemption of facilities of a contractor which are in all respects separate and distinct from activities of the contractor related to the performance of the contract: Provided, That such an exemption will not interfere with or impede the effectuation of the purposes of this Order: And provided further, That in the absence of such an exemption, all facilities shall be covered by the provisions of this Order.

Subpart C - Powers and Duties of the Secretary of Labor and the Contracting Agencies

SEC. 205. The Secretary of Labor shall be responsible for securing compliance by all Government contractors and subcontractors with this Order and any implementing rules or regulations. All contracting agencies shall comply with the terms of this Order and any implementing rules, regulations, or orders of the Secretary of Labor. Contracting agencies shall cooperate with the Secretary of Labor

and shall furnish such information and assistance as the Secretary may require.
[Sec. 205 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 206. The Secretary of Labor may investigate the employment practices of any Government contractor or subcontractor to determine whether or not the contractual provisions specified in Section 202 of this Order have been violated. Such investigation shall be conducted in accordance with the procedures established by the Secretary of Labor.

(b) The Secretary of Labor may receive and investigate complaints by employees or prospective employees of a Government contractor or subcontractor which allege discrimination contrary to the contractual provisions specified in Section 202 of this Order.

[Sec. 206 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 207. The Secretary of Labor shall use his/her best efforts, directly and through interested Federal, State, and local agencies, contractors, and all other available instrumentalities to cause any labor union engaged in work under Government contracts or any agency referring workers or providing or supervising apprenticeship or training for or in the course of such work to cooperate in the implementation of the purposes of this Order. The Secretary of Labor shall, in appropriate cases, notify the Equal Employment Opportunity Commission, the Department of Justice, or other appropriate Federal agencies whenever it has reason to believe that the practices of any such labor organization or agency violate Title VI or Title VII of the Civil Rights Act of 1964 or other provision of Federal law.

[Sec. 207 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 208. The Secretary of Labor, or any agency, officer, or employee in the executive branch of the Government designated by rule, regulation, or order of the Secretary, may hold such hearings, public or private, as the Secretary may deem advisable for compliance, enforcement, or educational purposes.

(b) The Secretary of Labor may hold, or cause to be held, hearings in accordance with Subsection of this Section prior to imposing, ordering, or recommending the imposition of penalties and sanctions under this Order. No order for debarment of any contractor from further Government contracts under Section 209(6) shall be made without affording the contractor an opportunity for a hearing.

Subpart D - Sanctions and Penalties

SEC. 209. In accordance with such rules, regulations, or orders as the Secretary of Labor may issue or adopt, the Secretary may:

(1) Publish, or cause to be published, the names of contractors or unions which it has concluded have complied or have failed to comply with the provisions of this Order or of the rules, regulations, and orders of the Secretary of Labor.

(2) Recommend to the Department of Justice that, in cases in which there is substantial or material violation or the threat of substantial or material violation of the contractual provisions set forth in Section 202 of this Order, appropriate proceedings be brought to enforce those provisions, including the enjoining, within the limitations of applicable law, of organizations, individuals, or groups who prevent directly or indirectly, or seek to prevent directly or indirectly, compliance with the provisions of

this Order.

(3) Recommend to the Equal Employment Opportunity Commission or the Department of Justice that appropriate proceedings be instituted under Title VII of the Civil Rights Act of 1964.

(4) Recommend to the Department of Justice that criminal proceedings be brought for the furnishing of false information to any contracting agency or to the Secretary of Labor as the case may be.

(5) After consulting with the contracting agency, direct the contracting agency to cancel, terminate, suspend, or cause to be cancelled, terminated, or suspended, any contract, or any portion or portions thereof, for failure of the contractor or subcontractor to comply with equal employment opportunity provisions of the contract. Contracts may be cancelled, terminated, or suspended absolutely or continuance of contracts may be conditioned upon a program for future compliance approved by the Secretary of Labor.

(6) Provide that any contracting agency shall refrain from entering into further contracts, or extensions or other modifications of existing contracts, with any noncomplying contractor, until such contractor has satisfied the Secretary of Labor that such contractor has established and will carry out personnel and employment policies in compliance with the provisions of this Order.

(b) Pursuant to rules and regulations prescribed by the Secretary of Labor, the Secretary shall make reasonable efforts, within a reasonable time limitation, to secure compliance with the contract provisions of this Order by methods of conference, conciliation, mediation, and persuasion before proceedings shall be instituted under subsection (a)(2) of this Section, or before a contract shall be cancelled or terminated in whole or in part under subsection (a)(5) of this Section.

[Sec. 209 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 210. Whenever the Secretary of Labor makes a determination under Section 209, the Secretary shall promptly notify the appropriate agency. The agency shall take the action directed by the Secretary and shall report the results of the action it has taken to the Secretary of Labor within such time as the Secretary shall specify. If the contracting agency fails to take the action

directed within thirty days, the Secretary may take the action directly.

[Sec. 210 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 211. If the Secretary shall so direct, contracting agencies shall not enter into contracts with any bidder or prospective contractor unless the bidder or prospective contractor has satisfactorily complied with the provisions of this Order or submits a program for compliance acceptable to the Secretary of Labor.

[Sec. 211 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 212. When a contract has been cancelled or terminated under Section 209(a)(5) or a contractor has been debarred from further Government contracts under Section 209(a)(6) of this Order, because of noncompliance with the contract provisions specified in Section 202 of this Order, the Secretary of Labor shall promptly notify the Comptroller General of the United States.

[Sec. 212 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Subpart E - Certificates of Merit

SEC. 213. The Secretary of Labor may provide for issuance of a United States Government Certificate of Merit to employers or labor unions, or other agencies which are or may hereafter be engaged in work under Government contracts, if the Secretary is satisfied that the personnel and employment practices of the employer, or that the personnel, training, apprenticeship, membership, grievance and representation, upgrading, and other practices and policies of the labor union or other agency conform to the purposes and provisions of this Order.

SEC. 214. Any Certificate of Merit may at any time be suspended or revoked by the Secretary of Labor if the holder thereof, in the judgment of the Secretary, has failed to comply with the provisions of this Order.

SEC. 215. The Secretary of Labor may provide for the exemption of any employer, labor union, or other agency from any reporting requirements imposed under or pursuant to this Order if such employer, labor union, or other agency has been awarded a Certificate of Merit which has not been suspended or revoked.

Part III - Nondiscrimination Provisions in Federally Assisted Construction Contracts

SEC. 301. Each executive department and agency, which administers a program involving Federal financial assistance shall require as a condition for the approval of any grant, contract, loan, insurance, or guarantee thereunder, which may involve a construction contract, that the applicant for Federal assistance undertake and agree to incorporate, or cause to be

incorporated, into all construction contracts paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to such grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the provisions prescribed for Government contracts by Section 202 of this Order or such modification thereof, preserving in substance the contractor's obligations thereunder, as may be approved by the Secretary of Labor, together with such additional provisions as the Secretary deems appropriate to establish and protect the interest of the United States in the enforcement of those obligations. Each such applicant shall also undertake and agree (1) to assist and cooperate actively with the Secretary of Labor in obtaining the compliance of contractors and subcontractors with those contract provisions and with the rules, regulations and relevant orders of the Secretary, (2) to obtain and to furnish to the Secretary of Labor such information as the Secretary may require for the supervision of such compliance, (3) to carry out sanctions and penalties for violation of such obligations imposed upon contractors and subcontractors by the Secretary of Labor pursuant to Part II, Subpart D, of this Order, and (4) to refrain from entering into any contract subject to this Order, or extension or other modification of such a contract with a contractor debarred from Government contracts under Part II, Subpart D, of this Order.

[Sec. 301 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 302. "Construction contract" as used in this Order means any contract for the construction,

rehabilitation, alteration, conversion, extension, or repair of buildings, highways, or other improvements to real property.

(b) The provisions of Part II of this Order shall apply to such construction contracts, and for purposes of such application the administering department or agency shall be considered the contracting agency referred to therein.

(c) The term "applicant" as used in this Order means an applicant for Federal assistance or, as determined by agency regulation, other program participant, with respect to whom an application for any grant, contract, loan, insurance, or guarantee is not finally acted upon prior to the effective date of this Part, and it includes such an applicant after he/she becomes a recipient of such Federal assistance.

SEC. 303. The Secretary of Labor shall be responsible for obtaining the compliance of such applicants with their undertakings under this Order. Each administering department and agency is directed to cooperate with the Secretary of Labor and to furnish the Secretary such information and assistance as the Secretary may require in the performance of the Secretary's functions under this Order.

(b) In the event an applicant fails and refuses to comply with the applicant's undertakings pursuant to this Order, the Secretary of Labor may, after consulting with the administering department or agency, take any or all of the following actions: (1) direct any administering department or agency to cancel, terminate, or suspend in whole or in part the agreement, contract or other arrangement with such applicant with respect to which the failure or refusal occurred; (2) direct any administering department or agency to refrain from extending any further assistance to the applicant under the program with respect to which the failure or refusal occurred until satisfactory assurance of future compliance has been received by the Secretary of Labor from such applicant; and (3) refer the case to the Department of Justice or the Equal Employment Opportunity Commission for appropriate law enforcement or other proceedings.

(c) In no case shall action be taken with respect to an applicant pursuant to clause (1) or (2) of subsection (b) without notice and opportunity for hearing.

[Sec. 303 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 304. Any executive department or agency which imposes by rule, regulation, or order requirements of nondiscrimination in employment, other than requirements imposed pursuant to this Order, may delegate to the Secretary of Labor by agreement such responsibilities with respect to compliance standards, reports, and procedures as would tend to bring the administration of such requirements into conformity with the administration of requirements imposed under this Order: Provided, That actions to effect compliance by recipients of Federal financial assistance with requirements imposed pursuant to Title VI of the Civil Rights Act of 1964 shall be taken in conformity with the procedures and limitations prescribed in Section 602 thereof and the regulations of the administering department or agency issued thereunder.

Part IV - Miscellaneous

SEC. 401. The Secretary of Labor may delegate to any officer, agency, or employee in the Executive branch of the Government, any function or duty of the Secretary under Parts II and III of this Order.

[Sec. 401 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 402. The Secretary of Labor shall provide administrative support for the execution of the

program known as the "Plans for Progress."

SEC. 403. Executive Orders Nos. 10590 (January 19, 1955), 10722 (August 5, 1957), 10925 (March 6, 1961), 11114 (June 22, 1963), and 11162 (July 28, 1964), are hereby superseded and the President's Committee on Equal Employment Opportunity established by Executive Order No. 10925 is hereby abolished. All records and property in the custody of the Committee shall be transferred to the Office of Personnel Management and the Secretary of Labor, as appropriate.

(b) Nothing in this Order shall be deemed to relieve any person of any obligation assumed or imposed under or pursuant to any Executive Order superseded by this Order. All rules, regulations, orders, instructions, designations, and other directives issued by the President's Committee on Equal Employment Opportunity and those issued by the heads of various departments or agencies under or pursuant to any of the Executive orders superseded by this Order, shall, to the extent that they are not inconsistent with this Order, remain in full force and effect unless and until revoked or superseded by appropriate authority. References in such directives to provisions of the superseded orders shall be deemed to be references to the comparable provisions of this Order.

[Sec. 403 amended by EO 12107 of Dec. 28, 1978, 44 FR 1055, 3 CFR, 1978 Comp., p, 264]

SEC. 404. The General Services Administration shall take appropriate action to revise the standard Government contract forms to accord with the provisions of this Order and of the rules and regulations of the Secretary of Labor.

SEC. 405. This Order shall become effective thirty days after the date of this Order.

ATTACHMENT D: DBE SPECIAL PROVISIONS

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM.

(REV 6-6-02) (FA 7-17-02) (1-03)

SECTION 7 (Pages 55-71) is expanded by the following:

7-24 Disadvantaged Business Enterprise Program.

7-24.1 General: Prior to award of the Contract, have an approved DBE Affirmative Action Program Plan filed with the Equal Opportunity Office. Update and resubmit the plan every three years. No Contract will be awarded until the Department approves the Plan. The DBE Affirmative Action Program Plan and commitment to carry out the Plan must be incorporated into and become a part of the awarded Contract. Failure to keep these commitments will be deemed noncompliance with these Specifications and a breach of the Contract. Take all necessary and reasonable steps to ensure that FDOT Certified Disadvantaged Business Enterprises, as defined in 49 CFR Part 26 and DOT Rule Chapter 14-78, have the opportunity to participate in, compete for and perform subcontracts. Do not discriminate on the basis of age, race, color, religion, national origin, sex or disability in the award and performance of DOT assisted Contracts.

7-24.2 Plan Requirements: Include the following in the DBE Affirmative Action Program Plan:

(a) A policy statement, expressing a commitment to use DBEs in all aspects of contracting to the maximum extent feasible. The policy making body must issue a policy statement signed by the chairperson, which expresses its commitment to utilize DBEs, outlines the various levels of responsibility, and states the objectives of the program. Circulate the policy statement throughout the Contractor's organization.

(b) The designation of a Liaison Officer within the Contractor's organization, as well as support staff, necessary and proper to administer the program, and a description of the authority, responsibility, and duties of the Liaison Officer and support staff. The Liaison Officer and staff are responsible for developing, managing, and implementing the program on a day-to-day basis for carrying out technical assistance activities for DBEs and for disseminating information on available business opportunities so that DBEs are provided an equitable opportunity to participate in Contracts let by the Department.

Use techniques to facilitate DBE participation in contracting activities which include, but are not limited to:

1. Soliciting price quotations and arranging a time for the review of plans, quantities, specifications, and delivery schedules, and for the preparation and presentation of quotations.

2. Providing assistance to DBEs in overcoming barriers such as the inability to obtain bonding, financing, or technical assistance.

3. Carrying out information and communication programs or workshops on contracting procedures and specific contracting opportunities in a timely manner, with such programs being bilingual where appropriate.

4. Encouraging eligible DBEs to apply for certification with the Department.

5. Contacting Minority Contractor Associations and city and county agencies with programs for disadvantaged individuals for assistance in recruiting and encouraging eligible DBE contractors to apply for certification with the Department.

7-24.3 DBE Records and Reports: Submit the Anticipated DBE Participation Statement at or before the

Pre-Construction Conference. Report monthly, through the Equal Opportunity Reporting System on the Department's Website, actual payments, retainage, minority status, and work type of all subcontractors and major suppliers. The Equal Opportunity Office will provide instructions on accessing this system. Develop a record keeping system to monitor DBE affirmative action efforts which include the following:

- (a) the procedures adopted to comply with these Specifications;
- (b) the number of subordinated Contracts on Department projects awarded to DBEs;
- (c) the dollar value of the Contracts awarded to DBEs;
- (d) the percentage of the dollar value of all subordinated Contracts awarded to DBEs as a percentage of the total Contract amount;
- (e) a description of the general categories of Contracts awarded to DBEs; and
- (f) the specific efforts employed to identify and award Contracts to DBEs.

Upon request, provide the records to the Department for review.

All such records are required to be maintained for a period of five years following acceptance of final payment and have them available for inspection by the Department and the Federal Highway Administration.

ATTACHMENT E: BUY AMERICAN/FOREIGN CONTRACTOR AND SUPPLIER RESTRICTIONS

FDOT Standard Specification

6-5.2 Source of Supply-Steel (Federal-Aid Contracts Only): For Federal-aid Contracts, only use steel and iron produced in the United States, in accordance with the Buy America provisions of 23 CFR 635.410, as amended. Ensure that all manufacturing processes for this material occur in the United States. As used in this specification, a manufacturing process is any process that modifies the chemical content, physical shape or size, or final finish of a product, beginning with the initial melding and mixing and continuing through the bending and coating stages. A manufactured steel or iron product is complete only when all grinding, drilling, welding, finishing and coating have been completed. If a domestic product is taken outside the United States for any process, it becomes foreign source material. When using steel and iron as a component of any manufactured product incorporated into the project (e.g., concrete pipe, prestressed beams, corrugated steel pipe, etc.), these same provisions apply, except that the manufacturer may use minimal quantities of foreign steel and iron when the cost of such foreign materials does not exceed 0.1% of the total Contract amount or \$2,500, whichever is greater. These requirements are applicable to all steel and iron materials incorporated into the finished work, but are not applicable to steel and iron items that the Contractor uses but does not incorporate into the finished work. Provide a certification from the producer of steel or iron, or any product containing steel or iron as a component, stating that all steel or iron furnished or incorporated into the furnished product was manufactured in the United States in accordance with the requirements of this specification and the Buy America provisions of 23 CFR 635.410, as amended. Such certification shall also include (1) a statement that the product was produced entirely within the United States, or (2) a statement that the product was produced within the United States except for minimal quantities of foreign steel and iron valued at \$ (actual value). Furnish each such certification to the Engineer prior to incorporating the material into the project. When FHWA allows the use of foreign steel on a project, furnish invoices to document the cost of such material, and obtain the Engineer's written approval prior to incorporating the material into the project.

ATTACHMENT F: CONVICT PRODUCED MATERIAL

FDOT Supplemental Specifications

6-12 Products and Source of Supply.

6-12.1 Source of Supply – Convict Labor (Federal-Aid Contracts Only): Do not use materials that were produced after July 1, 1991, by convict labor for Federal-aid highway Construction projects unless the prison facility has been producing convict-made materials for Federal-aid highway construction projects before July 1, 1987. Use materials that were produced prior to July 2, 1991, by convicts on Federal-aid highway construction projects free from the restrictions placed on the use of these materials by 23 U.S.C. 114. The Department will limit the use of materials produced by convict labor for use in Federal-aid highway construction projects to:

- 1 materials produced by convicts on parole, supervised release, or probation from a prison or,
- 2 materials produced in a qualified prison facility.

The amount of such materials produced for Federal-aid highway construction during any 12-month period shall not exceed the amount produced in such facility for use in such construction during the 12-month period ending July 1, 1987

ATTACHMENT G: FHWA 1273

FHWA-1273 Electronic version -- March 10, 1994

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS (REV 3-10-94) (7-00)

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Payment of Predetermined Minimum Wage
- V. Statements and Payrolls
- VI. Record of Materials, Supplies, and Labor
- VII. Subletting or Assigning the Contract
- VIII. Safety: Accident Prevention
- IX. False Statements Concerning Highway Projects
- X. Implementation of Clean Air Act and Federal Water Pollution Control Act
- XI. Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion
- XII. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

- A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

I. GENERAL

1 These Contract provisions shall apply to all work performed on the Contract by the Contractor's own organization and with the assistance of workers under the Contractor's immediate superintendence and to all work performed on the Contract by piecework, station work, or by subcontract.

2 Except as otherwise provided for in each section, the Contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3 A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the Contract.

4 A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2;
Section IV, paragraphs 1, 2, 3, 4, and 7;
Section V, paragraphs 1 and 2a through 2g.

5 Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth

in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the DOL, or the Contractor's employees or their representatives.

6. Selection of Labor: During the performance of this Contract, the Contractor shall not:
 - a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
 - b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction Contracts and to all related subcontracts of \$10,000 or more.)

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the Contractor's project activities under this Contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this Contract. In the execution of this Contract, the Contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The Contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the Contract.

- b. The Contractor will accept as his operating policy the following statement:

“It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training.”

2. **EEO Officer:** The Contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active Contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the Contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the Contractor's EEO policy and Contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the Contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the Contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the Contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the Contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The Contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the Contractor for employment consideration.

b. In the event the Contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO Contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the Contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The Contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The Contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The Contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The Contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The Contractor will promptly investigate all complaints of alleged discrimination made to the Contractor in connection with his obligations under this Contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other

persons. Upon completion of each investigation, the Contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The Contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the Contractor's work force requirements and as permissible under Federal and State regulations, the Contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this Contract, this subparagraph will be superseded as indicated in the special provision.

c. The Contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The Contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the Contractor relies in whole or in part upon unions as a source of employees, the Contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the Contractor either directly or through a Contractor's association acting as agent will include the procedures set forth below:

a. The Contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The Contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The Contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the Contractor, the Contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the Contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the Contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the Contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the Contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these Specifications, such Contractor shall immediately notify the SHA.

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The

Contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The Contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this Contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the Contractor enters into pursuant to this Contract. The Contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The Contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The Contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of 3 years following completion of the Contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the Contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The Contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and nonminority group employees currently engaged in each work classification required by the Contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the Contractor will be required to collect and report training data

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction Contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this Contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction Contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this Contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis

of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The Contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction Contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter “the wage determination”) which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b) (2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than 1 classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer’s payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this Contract.

2. Classification:

a. The SHA Contracting officer shall require that any class of laborers or mechanics employed under the Contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The Contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the Contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the Contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the Contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting officer or will notify the Contracting officer within the 30-day period that additional time is necessary.

d. In the event the Contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the Contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting officer or will notify the Contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the Contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the Contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or

otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the Contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the Contractor or subcontractor under this Contract or any other Federal Contract with the same Prime Contractor, or any other Federally-assisted Contract subject to Davis-Bacon prevailing wage requirements which is held by the same Prime Contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the Contract, the SHA Contracting officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No Contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the Contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under Contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the Contractor or subcontractor under any such Contract or any other Federal Contract with the same Prime Contractor, or any other Federally-assisted Contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same Prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such

Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction Contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1 Compliance with Copeland Regulations (29 CFR 3):

The Contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2 Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the Contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the Contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian Contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the Contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each Contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the Contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the Contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or

indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the Contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the Contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The Contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the Contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid Contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification Contracts, and Contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the Contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this Contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the Contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the Prime Contractor's option, either a single report covering all Contract work or separate reports for the Contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The Contractor shall perform with its own organization Contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the Contract) of the total original Contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original Contract price before computing the amount of work required to be performed by the Contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the Prime Contractor and equipment owned or rented by the Prime Contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the Prime Contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of Contracting organizations qualified and expected to bid on the Contract as a whole and in general are to be limited to minor components of the overall Contract.

2. The Contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the Contractor under the Contract provisions.

3. The Contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the Contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the Contract.

4. No portion of the Contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the Contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the Prime Contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this Contract the Contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The Contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the Contract.

2. It is a condition of this Contract, and shall be made a condition of each subcontract, which the Contractor enters into pursuant to this Contract, that the Contractor and any subcontractor shall not permit any employee, in performance of the Contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this Contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of Contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by Engineers, Contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in 1 or more places where it is readily available to all persons concerned with the project:

**NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY
PROJECTS**

18 U.S.C. 1020 reads as follows:

“Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.

**X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION
CONTROL ACT**

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

By submission of this bid or the execution of this Contract, or subcontract, as appropriate, the bidder, Federal-aid construction Contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 *et seq.*, as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 *et seq.*, as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of Contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

**XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY
AND VOLUNTARY
EXCLUSION**

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency’s determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms “covered transaction,” “debarred,” “suspended,” “ineligible,” “lower tier covered transaction,” “participant,” “person,” “primary covered transaction,” “principal,” “proposal,” and “voluntarily excluded,” as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction,” provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the “Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs” (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION--PRIMARY COVERED TRANSACTIONS

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or Contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
- d. Have not within a 3-year period preceding this application/proposal had 1 or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms “covered transaction,” “debarred,” “suspended,” “ineligible,” “primary covered transaction,” “participant,” “person,” “principal,” “proposal,” and “voluntarily excluded,” as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction,” without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and

frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION--LOWER TIER COVERED TRANSACTIONS:

1 The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2 Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction Contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal Contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal Contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal Contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

1. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

2. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A EMPLOYMENT PREFERENCE FOR APPALACHIAN CONTRACTS
(Applicable to Appalachian contracts only.)

1. During the performance of this Contract, the Contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the Contract work is situated, or the sub region, or the Appalachian counties of the State wherein the Contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the Contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the Contract work.

c. For the obligation of the Contractor to offer employment to present or former employees as the result of a lawful collective bargaining Contract, provided that the number of nonresident persons employed under this subparagraph 1c shall not exceed 20 percent of the total number of employees employed by the Contractor on the Contract work, except as provided in subparagraph 4 below.

2. The Contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the Contract work, (b) the number of employees required in each classification, (c) the date on which he estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the Contract work, the information submitted by the Contractor in the original job order is substantially modified, he shall promptly notify the State Employment Service.

3. The Contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The Contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within 1 week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the Contractor, or less than the number requested, the State Employment Service will forward a certificate to the Contractor indicating the unavailability of applicants. Such certificate shall be made a part of the Contractor's permanent project records. Upon receipt of this certificate, the Contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph 1c above.

5. The Contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

ATTACHMENT H: DISCLOSURE OF LOBBYING ACTIVITIES

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure.)

<p>1. Type of Federal Action:</p> <input type="checkbox"/> a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	<p>2. Status of Federal Action:</p> <input type="checkbox"/> a. bid/offer/application b. initial award c. post-award	<p>3. Report Type:</p> <input type="checkbox"/> a. initial filing b. material change <p>For Material Change Only:</p> year _____ quarter _____ date of last report _____
<p>4. Name and Address of Reporting Entity:</p> <input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, <i>if known:</i> Congressional District, <i>if known:</i>	<p>5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime:</p> Congressional District, <i>if known:</i>	
<p>6. Federal Department/Agency:</p>	<p>7. Federal Program Name/Description:</p> CFDA Number, <i>if applicable:</i> _____	
<p>8. Federal Action Number, if known:</p>	<p>9. Award Amount, if known:</p> \$	
<p>10. a. Name and Address of Lobbying Entity <i>(if individual, last name, first name, MI):</i></p>	<p>b. Individuals Performing Services <i>(including address if different from No. 10a)</i> <i>(last name, first name, MI):</i></p>	

(attach Continuation Sheet(s) SF-LLLA, if necessary)

11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Signature:

Print Name:

Title:

Telephone No.: _____ Date:

Federal Use Only:

Authorized for Local Reproduction
Standard Form – LLL (Rev 7 – 97)

Form DEP 55-221 (01/01)

ATTACHMENT I: NON-COLLUSION DECLARATION AND COMPLIANCE WITH 49 CFR §29

FORM 575-060-13
RIGHT OF WAY - 05/01

**NON-COLLUSION DECLARATION AND
COMPLIANCE WITH 49 CFR §29.**
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

ITEM/SEGMENT NO.: _____
F.A.P. NO.: _____
PARCEL NO.: _____
COUNTY OF: _____
BID LETTING OF: _____, _____

I, _____, hereby
(NAME)
declare that I am _____ of _____
(TITLE) (FIRM)
Of _____
(CITY AND STATE)

and that I am the person responsible within my firm for the final decision as to the price(s) and amount of this Bid on this State Project.

I further declare that:

1. The prices(s) and amount of this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition with any other contractor, bidder or potential bidder.
2. Neither the price(s) nor the amount of this bid have been disclosed to any other firm or person who is a bidder or potential bidder on this project, and will not be so disclosed prior to the bid opening.
3. No attempt has been made or will be made to solicit, cause or induce any other firm or person to refrain from bidding on this project, or to submit a bid higher than the bid of this firm, or any intentionally high or non-competitive bid or other form of complementary bid.
4. The bid of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary bid.
5. My firm has not offered or entered into a subcontract or agreement regarding the purchase of materials or services from any firm or person, or offered, promised or paid cash or anything of value to any firm or person, whether in connection with this or any other project, in consideration for an agreement or promise by any firm or person to refrain from bidding or to submit a complementary bid on this project.
6. My firm has not accepted or been promised any subcontract or agreement regarding the sale of materials or services to any firm or person, and has not been promised or paid cash or anything of value by any firm or person, whether in connection with this or any other project, in consideration for my firm's submitting a complementary bid, or agreeing to do so, on this project.

7. I have made a diligent inquiry of all members, officers, employees, and agents of my firm with responsibilities relating to the preparation, approval or submission of my firm's bid on this project and have been advised by each of them that he or she has not participated in any communication, consultation, discussion, agreement, collusion, act or other conduct inconsistent with any of the statements and representations made in this Declaration.

8. As required by Section 337.165, Florida Statutes, the firm has fully informed the Department of Transportation in writing of all convictions of the firm, its affiliates (as defined in Section 337.165(1)(a), Florida Statutes), and all directors, officers, and employees of the firm and its affiliates for violation of state or federal antitrust laws with respect to a public contract or for violation of any state or federal law involving fraud, bribery, collusion, conspiracy or material misrepresentation with respect to a public contract. This includes disclosure of the names of current employees of the firm or affiliates who were convicted of contract crimes while in the employ of another company.

9. I certify that, except as noted below, neither my firm nor any person associated therewith in the capacity of owner, partner, director, officer, principal, investigator, project director, manager, auditor, and/or position involving the administration of Federal funds:

(a) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions, as defined in 49 CFR §29.110(a), by any Federal department or agency;

(b) has within a three-year period preceding this certification been convicted of or had a civil judgment rendered against him or her for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, State or local government transaction or public contract; violation of Federal or State antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;

(c) is presently indicted for or otherwise criminally or civilly charged by a Federal, State or local governmental entity with commission of any of the offenses enumerated in paragraph 9(b) of this certification; and

(d) has within a three-year period preceding this certification had one or more Federal, State or local government public transactions terminated for cause or default..

10. I(We), certify that I(We), shall not knowingly enter into any transaction with any subcontractor, material supplier, or vendor who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this contract by any Federal Agency unless authorized by the Department.

Where I am unable to declare or certify as to any of the statements contained in the above stated paragraphs numbered (1) through (10), I have provided an explanation in the "Exceptions" portion below or by attached separate sheet.

EXCEPTIONS:

(Any exception listed above will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted, indicate to whom it applies, initiating agency and dates of agency action.

Providing false information may result in criminal prosecution and/or administrative sanctions.)

I declare under penalty of perjury that the foregoing is true and correct.

CONTRACTOR: _____ (Seal)

BY: _____ WITNESS: _____
NAME AND TITLE PRINTED

BY: _____ WITNESS: _____
SIGNATURE

Executed on this _____ day of _____, _____

***FAILURE TO FULLY COMPLETE AND EXECUTE THIS DOCUMENT
MAY RESULT IN THE BID BEING DECLARED NONRESPONSIVE***

ATTACHMENT J: DAVIS BACON WAGE TABLE

GENERAL DECISION: FL20100299 03/12/2010 FL299

Date: March 12, 2010

General Decision Number: FL20100299 03/12/2010

Superseded General Decision Number: FL20080299

State: Florida

Construction Type: Highway

Counties: Glades, Hardee, Hendry and Monroe Counties in Florida.

HIGHWAY CONSTRUCTION PROJECTS

Modification Number Publication Date

0 03/12/2010

SUFL2009-196 08/05/2009

	Rates	Fringes
CARPENTER, Including Formwork	\$ 11.97	0.00
CEMENT MASON/CONCRETE FINISHER	\$ 10.05	0.00
LABORER: Asphalt Raker	\$ 9.75	2.19
LABORER: Common or General	\$ 9.94	0.00
LABORER: Flagger	\$ 9.43	0.00
LABORER: Pipelayer	\$ 8.33	0.00
OPERATOR: Backhoe/Excavator	\$ 10.42	0.00
OPERATOR: Bulldozer	\$ 11.69	0.00
OPERATOR: Distributor	\$ 10.38	0.00
OPERATOR: Grader/Blade	\$ 13.78	0.00
OPERATOR: Loader	\$ 10.33	0.00
OPERATOR: Milling Machine	\$ 10.08	0.00
OPERATOR: Oiler	\$ 9.58	0.00
OPERATOR: Paver	\$ 11.59	2.10

	Rates	Fringes
OPERATOR: Roller	\$ 10.23	0.00
OPERATOR: Screed	\$ 11.70	0.00
OPERATOR: Tractor	\$ 8.15	0.00
TRUCK DRIVER: 4 Axle Truck	\$ 11.18	1.60
TRUCK DRIVER: Lowboy Truck	\$ 11.86	0.00
TRUCK DRIVER: Dump Truck	\$ 17.00	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

PART 4

SPECIFICATIONS

DIVISION 1

GENERAL REQUIREMENTS

SECTION 01001
GENERAL REQUIREMENTS

PART 1 PROJECT DESCRIPTION

1.1 GENERAL

- A. The following additional information, though not all-inclusive, is given to assist contractors in their evaluation of the work required to meet the project objectives.
- B. A brief description of the work is stated in the Invitation to Bid. To determine the full scope of the project or, any particular part of the project, coordinate the applicable information in the several parts of these Contract Documents.

1.2 FDOT SPECIFICATIONS

- A. Portions of The Florida Department of Transportation Standard Specifications for Road and Bridge Construction and their Roadway and Traffic Design Standards, hereinafter referred to as the FDOT Specifications, are referred to herein and amended, in part, and the same are hereby made a part of this Contract to the extent of such references and shall be as binding upon the Contract as though reproduced herein. Such reference shall mean the current edition, including all supplements. In case of a conflict in the requirements of the FDOT Specifications and the requirements stated herein, the requirements herein shall prevail.

1.3 ENGINEER

- A. The Engineer for this project is Bermello Ajamil & Partners, Inc, Miami, Florida.

PART 2 SEQUENCE OF OPERATIONS

2.1 MOBILIZATION AND DEMOBILIZATION

- A. Contractor shall be responsible for mobilization and demobilization of labor, materials and equipment. Payment for mobilization and demobilization will be based on the unit price indicated in the Proposal for mobilization and demobilization.

2.2 SCHEDULING

- A. Plan the work and carry it out with minimum interference to the operation of the existing facilities. Prior to starting the work confer with the Engineer and Owner's representative to develop an approved work schedule which will permit the facilities to function normally as practical. It may be necessary to do certain parts of the construction work outside normal working hours in order to avoid undesirable conditions. The Contractor shall do this work at such times and at no additional cost to

the Owner. Do not make connections between existing work and new work until necessary inspection and tests have been completed on the new work and it is found to conform in all respects to the requirements of the Contract Documents.

- B. Work on existing structures and facilities shall be performed on a schedule and in a manner that will permit the existing facility to operate continuously.
- C. In order to meet the overall objectives of the project certain elements of work may have to be completed or substantially completed in a given sequence that will be identified by the Engineer.
- D. No work shall be started until the Contractor has sufficient manpower, equipment, and material to complete the project. No work shall commence without express consent of the Owner.

2.3 COORDINATION

- A. Contractors shall cooperate in the coordination of their separate activities in a manner that will provide the least interference with the Owner's operations and other contractors and utility companies working in the area and in the interfacing and connection of the separate elements of the overall project work.
- B. If any difficulty or dispute should arise in the accomplishment of the above, the problem shall be brought immediately to the attention of the Engineer and Owner.
- C. All contractors working on the site are subject to this requirement for cooperation and all shall abide by the Engineer's decision in resolving project coordination problems without additional cost to the Owner.

2.4 SHUTDOWN OF EXISTING OPERATIONS OR UTILITIES

- A. Continuous operation of the Owner's existing sewer system is of critical importance. The Contractor's operation shall not result in the interruption of sewage, water, or solid waste service to any customers.
- B. Connections to existing services or utilities or other work that requires the temporary shutdown of any existing operations or utilities shall be planned in detail with appropriate scheduling of the work and coordinated with the Owner or Engineer. Advance notice shall be given in order that the Owner or Engineer may witness the shutdown, tie-in, and startup. The temporary shutdown must be approved by the Owner.
- C. All materials and equipment (including emergency equipment) necessary to expedite the tie-in shall be on hand prior to the shutdown of existing services or utilities.

2.5 OPERATION OF EXISTING SYSTEM PROHIBITED

- A. At no time undertake to close off any lines or open valves or take any other action which would affect the operation of the existing system except as specifically required by the Drawings and Specifications and after approval is granted by the Owner. Request approval 5 working days in advance of the time that interruption of the existing system is required.

PART 3 SITE CONDITIONS

3.1 SITE INVESTIGATION AND REPRESENTATION

- A. The Contractor acknowledges satisfaction as to the general nature and location of the work, the general and local conditions, particularly those bearing upon availability of transportation, availability of labor, water, electric power, roads, and uncertainties of weather or similar physical conditions, the character of equipment and facilities needed preliminary to and during the prosecution of the work, and all other matters which can in any way affect the work or the cost thereof under this contract.
- B. Failure by the Contractor to become acquainted with the physical conditions and all the available information will not relieve the contractor from responsibility for properly estimating the difficulty or cost of successfully performing the work.
- C. The Contractor warrants that as a result of examination and investigation of all the aforesaid data, the Contractor can perform the work in a good and workmanlike manner and to the satisfaction of the Owner. The Owner assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of this Contract, unless (1) such representations are expressly stated in the Contract, and (2) the Contract expressly provides that the responsibility therefore is assumed by the Owner.
- D. A pre-construction video is required for this project prior to mobilization of equipment. Contractor is responsible for the quality of this video. Provide 4 CD disc capable of viewing on windows media player. Video shall extend at minimum 200 LF outside the limits of Construction. (video to paid for under Item #2a. in the proposal)

3.2 INFORMATION ON SITE CONDITIONS

- A. General: Any information obtained by the Engineer regarding site conditions, subsurface information, groundwater elevations, existing construction of site facilities as applicable and similar data will be available for inspection at the office of the Engineer upon request. Such information is offered as supplementary information only. Neither the Engineer nor the Owner assumes any responsibility for the completeness or interpretation of such supplementary information.

3.3 SUBSURFACE INVESTIGATION

- A. No test holes or borings have been made by the Owner; however, any information the Owner may have concerning subsurface conditions will be made available to the Contractor upon request.
- B. The Contractor shall examine the site and may make arrangements with the Owner to conduct his own subsurface investigation.

3.4 UTILITIES

- A. The Contractor shall be responsible for determining, at his cost, the locations and elevations of all utilities in each project areas and shall be responsible for contacting each utility for location and notification prior to commencing work.

3.5 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

- A. Where the Contractor's operations could cause damage or inconvenience to telephone, television, power, water, or sewer systems, the operations shall be suspended until all arrangements necessary for the protection of these utilities and services have been made by the Contractor.
- B. Notify all utility offices which are affected by the construction operation at least 48 hours in advance. Under no circumstances expose any utility without first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose, and provide temporary support for all existing underground utilities. Hand digging is required in the tolerance zone. If the Contractor fails to adhere to State Statutes and the Florida Administrative Code the appropriate law enforcement agencies will be contacted
- C. The Contractor shall be solely and directly responsible to the Owner and operators of such properties for any damage, injury, expense, loss inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this Contract.
- D. Neither the Owner nor its officers or agents shall be responsible to the Contractor for damages as a result of the Contractor's failure to protect utilities encountered in the work.
- E. In the event of interruption to domestic water, sewer, storm drain, or other utility services as a result of accidental breakage due to construction operations, promptly notify the proper authority. Cooperate with said authority in restoration of service as promptly as possible and bear all costs of repair. In no case shall interruption of any water or utility service be allowed to exist outside working hours unless prior approval is granted.

- F. In the event the Contractor encounters water service lines that interfere with the trenching he may, by obtaining prior approval of the property owner, Florida Keys Aqueduct Authority or Fire Department, as applicable, and the Engineer cut the service, dig through, and restore the service with similar and equal materials at the Contractor's expense.
- G. The Contractor shall replace, at his own expense, all existing utilities or structures removed or damaged during construction unless otherwise provided for in these Contract documents or ordered by the Engineer.

3.6 INTERFERING STRUCTURES

- A. Take necessary precautions to prevent damage to existing structures whether on the surface, aboveground, or underground.
- B. Protect underground and above ground existing structures from damage, whether or not they lie within the limits of the easements obtained by the Owner. Where such existing fences, gates, sheds, buildings, or any other structure must be removed in order to properly carry out the construction, or are damaged during construction, restore to their original condition to the satisfaction of the property owner involved at the Contractor's own expense. Notify the Engineer of any damaged underground structure and make repairs or replacements before backfilling.
- C. Without additional compensation the Contractor may remove and replace in a condition as good as or better than original such small miscellaneous structures as fences, mailboxes, and signposts that interfere with the Contractor's operations.

3.7 FIELD RELOCATION

- A. During the progress of construction it is expected that minor relocations of the work will be necessary. Such relocations shall be made only by direction of the Engineer. If existing structures are encountered which prevent the construction and which are not properly shown on the Drawings, notify the Engineer before continuing with the construction in order that the Engineer may make such field revisions as necessary to avoid conflict with the existing structures. If the Contractor shall fail to so notify the Engineer when an existing structure is encountered and shall proceed with the construction despite this interference he shall do so at his own risk.

3.8 LAND MONUMENTS:

- A. The Contractor shall notify the Engineer prior to disturbing any existing federal, state, county, city, and private land monuments. Contractor shall hire a licensed land surveyor to research and reference all private and government land monuments prior to construction. Private and government land monuments shall be preserved or replaced by a licensed surveyor at the Contractor's expense. When government monuments are encountered the Contractor shall notify the Engineer at least 2 weeks in advance of the proposed construction in order that the Engineer will have ample

opportunity to notify the proper authority to reference these monuments for later replacement.

PART 4 TEMPORARY CONSTRUCTION UTILITIES AND FACILITIES

4.1 TEMPORARY WATER

- A. The Contractor shall make his own arrangements to obtain suitable water and shall pay all costs.

4.2 TEMPORARY ELECTRIC POWER

- A. The Contractor shall make arrangements to obtain and pay for electrical power used until final acceptance by the Owner.

4.3 SAFETY REQUIREMENTS FOR TEMPORARY ELECTRIC POWER

- A. Temporary electric power installation shall meet the construction safety requirements of OSHA, state and other governing agencies.

4.4 SANITARY FACILITIES

- A. The Contractor shall provide and maintain sanitary facilities for his employees and his subcontractors' employees that will comply with the regulations of the local and state departments of health and as directed by the Engineer.

4.5 STORAGE OF MATERIALS

- A. Materials shall be so stored as to ensure the preservation of their quality and fitness for the work. When considered necessary they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground. Stored materials shall be located so as to facilitate prompt inspection. Private property shall not be used for storage purposes without the written permission of the owner or lessee.
- B. Delicate instruments and materials subject to vandalism shall be placed under locked cover and, if necessary, provided with temperature control as recommended by the manufacturer.

PART 5 SAFETY AND CONVENIENCE

5.1 SAFETY EQUIPMENT

- A. The Contractor shall do all work necessary to protect the general public from hazards, including but not limited to, surface irregularities or un-ramped grade changes in pedestrian sidewalk or walkway and trenches or excavations in roadway. Barricades, lanterns, and proper signs shall be furnished in sufficient amount to safeguard the

public and the work. All barricades and signs shall be, in the opinion of the Engineer, clean and serviceable.

- B. During construction the Contractor shall construct and at all times maintain satisfactory and substantial temporary chain link fencing, solid fencing, railing, barricades or steel plates, as applicable, at all openings, obstructions, or other hazards in streets sidewalks, floors, roofs, and walkways. All such barriers shall have adequate warning lights as necessary, or required, for safety. All lights shall be regularly maintained and in a fully operational state at all times
- A. All excavations left open while work is not progressing shall meet MUTCD and shall be barricaded with a minimum of one barricade every 10 feet around the perimeter of the excavation and 3-inch "caution" tape or barricades placed across each walkway/entrance to private property. Barricades shall meet ADA code
- D. Excavations will not remain open for more than 24 hours unless written permission from the Owner is obtained.

5.2 ACCIDENT REPORTS

- A. The Contractor must promptly report in writing to the Engineer all accidents whatsoever arising out of or in connection with the performance of the work whether on or adjacent to the site, giving full details and statements of witness. If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to the Engineer.
- B. If a claim is made by anyone against the Contractor or any subcontractor on account of any accident the Contractor shall promptly report the facts in writing to the Engineer, giving full details of the claim.

5.3 SAFE ACCESS BY FEDERAL, STATE, AND LOCAL GOVERNMENT OFFICIALS

- A. Authorized representatives of the state, federal, or local governmental agencies shall at all times have safe access to the work and the Contractor shall provide proper facilities for such access and inspection. (i.e. hard hats, safety glasses, hearing protection)

5.4 TRAFFIC MAINTENANCE AND SAFETY

- A. Provide traffic maintenance plans where required by federal, state, county, or local agencies having jurisdiction.
- B. Comply with all rules and regulations of the state, county, and city authorities regarding closing or restricting the use of public streets or highways. No public or private road shall be closed, except by express permission of the Owner. Conduct the work so as to assure the least possible obstruction to traffic and normal commercial

pursuits. Protect all obstructions within traveled roadways by installing approved signs, barricades, and lights where necessary for the safety of the public. The convenience of the general public and residents adjacent to the project and the protection of person and property are of prime importance and shall be provided for in an adequate and satisfactory manner. Maintenance of Traffic shall be considered incidental to work performed.

- C. Where traffic will pass over trenches after they are backfilled and before they are paved, the top of the trench shall be maintained in a condition that will allow normal vehicular traffic to pass over. Temporary access driveways must be provided where required. Cleanup operations shall follow immediately behind backfilling and the worksite shall be kept in an orderly and clean condition at all times.
- D. When certified flaggers and guards are required by regulation or when deemed necessary for safety, they shall be furnished with approved orange wearing apparel and other regulation traffic-control devices in accordance with FDOT provisions.

5.5 TRAFFIC CONTROL

- A. Traffic control on all City, County and State highway rights-of-way shall meet the requirements of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, as well as FDOT Standard Details for Maintenance of Traffic, in accordance with The Manual for Uniform Traffic Control and Safe Practices.
- B. The Contractor shall provide an ROW permit request with 11 x 17 engineered drawing of his intended maintenance of traffic scheme to the Engineer and Owner for approval at the pre-construction meeting. This shall include barrier details, barricade type, location and dates. County and State shall be submitted to the appropriate departments for approval.

5.6 PROTECTION OF PROPERTY

- A. Protect stored materials located adjacent to the proposed work. Notify property owners affected by the construction at least 48 hours in advance of the time construction begins. During construction operations construct and maintain such facilities as may be required to provide access by all property owners to their property. No person shall be cut off from access to his residence or place of business for a period exceeding 8 hours unless the Contractor has made special arrangements with the affected persons.
- B. The Contractor shall identify and isolate his work zone in such a manner as to exclude all personnel not employed by him, the Engineer, and the Owner.

5.7 FIRE PREVENTION AND PROTECTION

- A. The Contractor shall perform all work in a fire-safe manner. He shall supply and maintain on the site adequate fire-fighting equipment capable of extinguishing

incipient fires. The Contractor shall comply with applicable federal, state, and local fire-prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed.

5.8 ACCESS FOR POLICE, FIRE, AND POSTAL SERVICE

- A. Notify the City Engineer and City Liaison a minimum of 48 hours before closing any street or portion thereof not already approved at the pre-construction meeting. No closing shall be made without the Owner's approval. Notify said departments when the streets are again passable for emergency vehicles. Do not block off emergency vehicle access to consecutive arterial crossings or dead-end streets, in excess of 300 linear feet, without special written permission from City Engineer. Conduct operations with the least interference to fire equipment access, and at no time prevent such access.
- B. The Contractor shall leave a night emergency telephone number or numbers with the police department, the Engineer, and the Owner, so that contact may be made easily at all times in case of barricade and flare trouble or other emergencies.
- D. Maintain postal service facilities in accordance with the requirements of the U.S. Postal Service. Move mailboxes to temporary locations designated by the U.S. Postal Service, and at the completion of the work in each area, replace them in their original location and in a condition satisfactory to the U.S. Postal Service.

PART 6 PRESERVATION, RESTORATION, AND CLEANUP

6.1 SITE RESTORATION AND CLEANUP

- A. At all times during the work keep the premises clean and orderly. Upon completion of the day's work repair all damage caused by equipment and leave the project clean and free of rubbish or excess materials of any kind.
- B. Stockpile excavated materials in a manner that will cause the least damage to adjacent lawns, grassed areas, gardens, shrubbery, or fences, regardless of whether these are on private property or on state, county, or city rights-of-way. Remove all excavated materials from grassed and planted areas and leave these surfaces in a condition equivalent to their original condition. Replace topsoiled areas as specified in Section TRENCH EXCAVATION AND BACKFILL raked and graded to conform to their original contours.
- C. All existing drainage ditches and culverts shall be reopened and graded and natural drainage restored. Restore culverts broken or damaged to their original condition and location.
- D. Upon completion of pipe laying and backfilling operations hand-rake and drag all former grassed and planted areas, leaving all disturbed areas free from rocks, gravel,

clay, or any other foreign material. The finished surface shall conform to the original surface, and shall be free-draining and free from holes, ruts, rough spots, or other surface features detrimental to a seeded area.

6.2 FINISHING OF SITE, BORROW, AND STORAGE AREAS

- A. Upon completion of the project all areas used by the Contractor shall be properly cleared of all temporary structures, rubbish, and waste materials and properly graded to drain and blend in with the abutting property. Areas used for the deposit of waste materials shall be finished to properly drain and blend with the surrounding terrain.

6.3 STREET CLEANUP DURING CONSTRUCTION

- A. Thoroughly clean all spilled dirt, gravel, or other foreign material caused by the construction operations from all streets and roads at the conclusion of each day's operation. Sidewalks, unless under construction, shall be kept clear of material and available for pedestrian use at all times.

6.4 DUST PREVENTION

- A. Give all unpaved or disturbed streets, roads, detours or haul roads used in the construction areas an approved dust-preventive treatment or periodically water to prevent dust. Applicable environmental regulations for dust prevention shall be strictly enforced.

6.5 PRESERVATION OF IRRIGATION AND DRAINAGE DITCHES

- A. After backfilling of the trenches restore all irrigation and storm drain ditches destroyed, damaged, or otherwise modified during construction to a condition equivalent, in the opinion of the Engineer, to the condition of the ditch before construction. Ditches so reconstructed shall be built in their original locations.

PART 7 SUBMITTALS

7.1 GENERAL

- A. Requirements in this section are in addition to any specific requirements for submittals specified in other sections of these Contract Documents. The Contractor is required to provide a submittal log at the pre-construction conference.
- B. Submittals to the Engineer shall be addressed to:

Bermello Ajamil & Partners, Inc.
ATTN: Frantz Tassy
2601 South Bayshore Drive, Suite 1000
Miami, Florida 33133

- C. Submitted data shall be fully sufficient in detail for determination of compliance with the Contract Documents.
- D. Review, acceptance, or approval of substitutions, schedules, shop drawings, lists of materials, and procedures submitted or requested by the Contractor shall not add to the Contract amount and all additional costs which may result there from shall be solely the obligation of the Contractor.
- E. It shall not be the responsibility of the Owner to provide engineering or other services to protect the Contractor from additional costs accruing from such approvals.
- F. No equipment or material for which listings, drawings, or descriptive material is required shall be installed until the Engineer has on hand copies of such approved lists and the appropriately stamped final shop drawings.
- G. The review of drawings by the Engineer will be limited to general design requirements only and shall in no way relieve the Contractor from responsibility for errors or omissions contained therein. Drawings are to be sent to FDOT for approval.
- H. Submittals will be acted upon by the Engineer as promptly as possible and returned to the Contractor not later than 20 working days.
- I. A sample of requirements for submittals is:
 - 1. All MSDS data forms.
 - 2. Complete manufacturer's specifications, including materials description and paint system.
 - 3. Suggested spare parts list with current price information.
 - 4. List of special tools required for checking, testing, parts replacement, and maintenance. (Special tools are those which have been especially not customarily and routinely carried by maintenance mechanics.)
 - 5. Samples of finish colors for selection.
 - 6. Special handling instructions.
 - 7. Requirements for storage and protection prior to installation.
 - 8. Requirements for routine maintenance as well as three copies of all Maintenance Manuals needed to allow the Owner to operate and/or maintain the installed device.
 - 9. A copy of the manufacturer's warranty on all equipment and material installed, providing for the warranty period to commence on the date of final acceptance by the Owner.
 - 10. All products installed in the project.
- J. The submittals shall include satisfactory identification of items, units and assemblies in relation to the specification section number and the system or equipment identification or tag number shown on the drawings or as provided in the applicable specification section.

- K. Should the Contractor propose any item on his shop drawings or incorporate an item into the work and that item should subsequently prove to be defective or otherwise unsatisfactory, (regardless of the Engineer's preliminary review), the Contractor shall, at his own expense replace the item with another item that will perform satisfactorily.

7.2 FINAL SHOP DRAWINGS TO BE SUBMITTED TO OWNER

Complete sets of reproducible final shop drawings shall be submitted to the Owner before or at the time of delivery of equipment to the site.

7.3 RECORD DRAWINGS

The Contractor shall submit AutoCAD 2006 as-built drawings certified by a Licensed Surveyor on CD and Mylar for this project. The Drawings shall be submitted before final completion and payment for the project can be certified.

7.4 FDOT GRANT REQUIREMENTS

As required by FDOT Attachments A-J

PART 9 PAYMENT

9.1 GENERAL

- A. Payment for all labor, equipment, materials and submittals in this section will be paid under Item number 2 in the proposal. It shall include all notes for construction noted on the drawings not otherwise noted. It shall include all temporary facilities required by the CONTRACTOR for the duration of construction including the movement of all equipment to and from the site and acceptable cleanup of the project area upon completion of the work.
- B. Maintenance of Traffic (M.O.T.) shall be paid under item 2d in the proposal.
- C. AutoCAD as-built drawings shall be shall be paid under item 2e in the proposal.

01010 – SUMMARY OF WORK

PART 1 - GENERAL:

1.01 DESCRIPTION:

- A. Work Included: Engineering Services, Testing, AutoCAD Asbuilts, and FDOT grant administration. Furnishing all materials, equipment and labor for the construction and/ or replacement of sidewalks, curbs, gutters, crosswalks, miscellaneous concrete work, asphalt work, landscaping, site clean up, and all necessary appurtenances and incidental work to provide a complete and serviceable project identified as:

CITY OF KEY WEST, FLORIDA
COLLEGE ROAD ENHANCEMENTS
OVERSEAS HIGHWAY TO KOKENZIE ROAD

The Contractor shall submit a proposed schedule and the completion date for the proposed work with the bid Proposal.

- B. Related requirements in other parts of the Contract Documents: General Conditions of the Contract for Construction.
- C. Contractor's Duties:
1. In addition to provisions stipulated in other portions of the Contract Documents, the Contractor shall:
 - a. Secure permits as necessary for proper execution and completion of the work.
 - b. Give required notices.
 2. The Contractor shall be totally responsible for all permits required and shall ensure that construction complies with all applicable local, state, and federal codes.
 3. Provide an experienced, qualified, and competent Superintendent to oversee the Work. Prior to starting construction, the Proposed Superintendent's qualifications shall be submitted in writing to the City for approval. The approved Superintendent shall be expected to remain for the duration of the Project, unless the City or Engineer deem him inadequate and requests his removal or the Contractor cannot continue his services to the project for a reason or reasons that shall be communicated to the City. A replacement Superintendent shall be required to follow the same approval process as required for the original.

4. It shall be the Contractor's responsibility to request approval for entrance to the site for work on Saturdays, Sundays, holiday, and weekday hours other than 7:00 am until 7:00 pm. Work shall not begin prior to 8:00 a.m.
5. The Contractor shall provide material safety data sheets (2 copies) for chemicals, paints, coatings and materials used on-site Prior to initiation of work.
6. The Contractor shall submit a site Safety and Health Plan as per OSHA 1910.120.

1.02 CONTRACTOR'S USE OF PREMISES

- A. Work shall be scheduled as to not interfere with on-going area activities.
- B. Coordinate use of premises and requirements for security under direction of City.
- C. Assume full responsibility for the protection and safekeeping of products under this Contract, stored on the site.
- D. Obtain and pay for the use of additional storage or work areas needed for operation.
- E. Contractor shall provide drinking water for construction personnel

1.03 MAINTENANCE OF EXISTING UTILITIES OPERATION

- A. Provide at least three weeks notice prior to interruption of utility services for temporary or permanent connections.
- B. Keep interruption of utility services, and utility outages during disconnection, moving, and reconnection to a minimum.

SECTION 01014 – ENVIRONMENTAL PROTECTION

PART 1 – GENERAL

1.01 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

1.02 DESCRIPTION OF WORK:

- A. General Contractor shall be responsible for conducting all work in such a manner that any and all environmental impacts or damages not specifically authorized by the contract and its controlling State and Federal permits are avoided. Should accidental or incidental damages occur, CONTRACTOR shall be responsible for all corrective measures at CONTRACTOR'S expense. CONTRACTOR shall save and hold harmless the CITY from all such violations. CONTRACTOR shall adhere to the following sections at a minimum in order to avoid such environmental damages. CONTRACTOR shall be responsible for all actions and compliance of any Subcontractors to CONTRACTOR.
- B. Permits. CONTRACTOR shall comply with all conditions of the state and federal permits (NPDES).
- C. Environmental Damage. CONTRACTOR shall immediately notify Engineer and City of any environmental damages or violations which may occur during Project mobilization/demobilization and construction.
- D. Contractor shall use Best Management Practices (BMPs) as per Florida's stormwater regulatory program and Florida NPDES permit requirements during construction to minimize erosion and sedimentation and to properly manage runoff for both stormwater quantity and quality. Contractor shall submit a BMPs erosion and sediment control plan for use during construction.

1.03 LOCAL SITE CONDITIONS:

- A. CONTRACTOR shall secure the work area limits from public access. CONTRACTOR shall cordon off resources within the work area that are to be protected. Such resources may include mangroves, upland trees and landscape material, structures, or utilities. CONTRACTOR shall be responsible for the replacement or repair of any damaged resources.
- B. CONTRACTOR shall avoid incidental damage to wetlands adjacent to the construction site through constant monitoring of the supervision. CONTRACTOR is responsible for any incidental impacts.

- C. At no time shall the CONTRACTOR be permitted to excavate, place fill on, traverse in any way, or place or store any equipment or material on sea grass or hard bottom resources outside the area designated for construction.
- D. CONTRACTOR shall avoid, contain, and control all other potential damages to the local resources including but not limited to fuel, oil, or other chemical or solid waste in the form of leaks, spills, or fugitive materials and trash. In the event of an impact of this type, CONTRACTOR shall take corrective actions immediately. Equipment and leaking products shall be retired until repaired.
- E. CONTRACTOR shall supply communications, sanitary facilities, fresh water, shade structure, and all other necessary actions immediately.

1.04 SUPERSEDING REQUIREMENTS:

In the event of differences between these requirements and laws, rules or regulations of other State, Federal, or local agencies, the more restrictive laws, rules, or regulations shall apply.

1.05 EXTENT OF FUGITIVE MATERIALS:

- A. CONTRACTOR shall control all fugitive materials including trash, chemicals, lubricants, oils, gas, debris, and removed materials as noted above. Fugitive materials as applied herein shall include all materials at the site and along the transit route. In the event of a fugitive materials event, including but not limited to, release due to automobile accidents and all other circumstances, CONTRACTOR shall take immediate corrective actions.
- B. The Contractor shall take sufficient precautions to prevent pollution of waters, with fuels, oils, bitumens, calcium, chloride, or other harmful materials (in accordance with local, State and Federal Requirements). Also, he shall conduct and schedule his operations so as to avoid or otherwise minimize pollution of any waters, and to avoid damage or interference to indigenous plants and organisms.

1.06 GENERAL

- A. The Contractor shall maintain all work areas within and outside the project boundaries free from environmental pollution that would be in violation to any Federal, state, or local regulations.

1.07 PROTECTION OF AIR QUALITY

- A. The pollution likely to occur due to construction operations shall be minimized by wetting down bare soils during windy periods, requiring the use of properly operating combustion emission control devices on construction vehicles and

equipment used by Contractor, and encouraging the shutdown of motorized equipment not actually in use.

- B. Trash burning will not be permitted on the construction site.

1.08 PROTECTION OF WATER QUALITY

- A. The addition of silt fence shall be incorporated to provide protection to the nearby water body located on the property of the golf course. The silt fence should be installed on site as shown on the plans.

1.09 CONSTRUCTION NOISE CONTROL

- A. The Contractor shall conduct all his work, use appropriate construction methods and equipment, and furnish and install acoustical barriers, all necessary so that no noise emanating from the process or any related tool or equipment will exceed legal levels, as set forth in the Code of Ordinances, City of Key West, Florida.

1.10 PAYMENT

- A. Payment for this section shall be included under item 2 in the proposal.

**SECTION 01025
MEASUREMENT AND PAYMENT**

PART 1 GENERAL

1.1 GENERAL

- A. The CONTRACTOR shall receive and accept the compensation as provided in the Proposal and the Contract in full payment for performing all operations necessary to complete the work under the Unit Price and Lump Sum portions of this Contract, and also in full payment for all loss or damages arising from the nature of the work, until the final acceptance by the OWNER.
- B. The Unit prices stated and Lump Sums stated in the Proposal include all costs and expenses for performing and completing the work as ordered and as shown on Contract Drawings, details, technical specifications, and specified herein. Measurement and payment for an item at a Unit Price or Lump Sum shown in the Proposal shall be in accordance with the description of the item in this section.
- C. The CONTRACTOR'S attention is called to the fact that the quotations for various items of work are intended to establish a total price for completing the work in its entirety. Should the CONTRACTOR feel that the cost for an item has not been established in the Proposal, or this section, he shall include the cost for that work in an applicable Proposal item, so that this bid reflects his total Unit Prices and Aggregate Sums for completing the work in its entirety. It is the intent of this Contract that the CONTRACTOR provide a completed operating system, and any item required to accomplish this shall be included to establish a total cost.
- D. The quantities for payment under this Contract shall be determined by actual measurement of completed items, in-place, and ready for service and accepted by the OWNER, in accordance with the applicable method of payment therefore contained herein. The CONTRACTOR shall designate and provide a representative to be present at, to witness, and to assist in the making of field measurement of payment.

1.2 MEASUREMENT – GENERAL

- A. Weighing, measuring, and metering devices used to measure quantity of materials for Work shall be suitable for purpose intended and conform to tolerances and Specifications as specified in National Institute of Standards and Technology, Handbook 44.
- B. Whenever pay quantities of material are determined by weight, the material shall be weighed on scales furnished by CONTRACTOR and certified accurate by the state agency responsible. A weight or load slip shall be obtained from the weigher and delivered to the OWNER'S representative at the point of delivery of the material.
- C. If material is shipped by rail, the car weights will be accepted provided that actual weight of material only will be paid for and not minimum car weight used for

assessing freight tariff, and provided further that car weights will not be acceptable for material to be passed through mixing plants.

- D. Vehicles used to haul material being paid for by weight shall be weighed empty daily and at such additional times as required by ENGINEER. Each vehicle shall bear a plainly legible identification mark.
- E. All materials which are specified for measurement by the cubic yard "measured in the vehicle" shall be hauled in vehicles of such type and size that the actual contents may be readily and accurately determined. Unless all vehicles are of uniform capacity, each vehicle must bear a plainly legible identification mark indicating its water level capacity. All vehicles shall be loaded to at least their water level capacity. Loads hauled in vehicles not meeting the above requirements or loads of a quantity less than the capacity of the vehicle, measured after being leveled off as above provided, will be subject to rejection, and no compensation will be allowed for such material.
- F. Units of measure shown on the Proposal shall be as follows unless specified otherwise.

Item	Method of Measurement
CY	Cubic Yard: Field Measure by ENGINEER within the limits specified or shown
EA	Each: Field Count by ENGINEER
LF	Linear Foot: Field Measure by ENGINEER
LS	Lump Sum: Unit is one; no measurement will be made
SF	Square Foot
SY	Square Yard
Ton	Weight Measure by Scale (2,000 pounds)

1.3 PAYMENT

- A. General: Progress payments will be made monthly on the date established at the preconstruction meeting.
- B. Payment for all Work shown or specified in the Contract Documents is included in the Contract Price. No measurement or payment will be made for individual items except as itemized herein as unit price items or lump sum.

1.4 NONPAYMENT FOR REJECTED OR UNUSED PRODUCTS

- A. Payment will not be made for following:
 - 1. Loading, hauling, and disposing of rejected material.
 - 2. Quantities of material wasted or disposed of in manner not called for under Contract Documents.

3. Rejected loads of material, including material rejected after it has been placed by reason of failure of CONTRACTOR to conform to provisions of Contract Documents.
4. Material not unloaded from transporting vehicle.
5. *Defective Work* not accepted by OWNER.
6. Material remaining on hand after completion of Work.

1.5 PARTIAL PAYMENT FOR STORED MATERIALS AND EQUIPMENT

- A. Partial Payment: No partial payments will be made for materials and equipment delivered or stored unless Shop Drawings are acceptable to ENGINEER and materials are properly stored at a site as agreed to by the OWNER.
- B. Final Payment: Will be made only for products incorporated in Work; remaining products, for which partial payments have been made, shall revert to CONTRACTOR unless otherwise agreed, and partial payments made for those items will be deducted from final payment.
- C. Stored Material not incorporated in the work shall be paid at 80% of the invoice(s) and must be on site or at a secure location acceptable to the city. Material security is the TOTAL RESPONSIBILITY of the CONTRACTOR and no claims will be permitted against the city or its agents for any lost and or stolen, missing stored materials.

SECTION 01050
FIELD ENGINEERING

PART 1 SCOPE

1.01 DESCRIPTION

A. Work Included:

1. Provide survey work necessary in execution of the Work. Contractor will be provided with an set of AUTOCAD drawings for construction layout.

B. Related Work:

1. General Conditions of the Contract.
2. Summary of the Work: Section 01010.

1.02 SUBMITTALS

A. Upon request of the City's Engineer, submit documentation to verify accuracy of field engineering work.

B. Submit certificates signed by the Surveyor or Engineer certifying that elevations and locations of the work of this project are in conformance, or non-conformance, with the Contract Documents. An explanation acceptable to the State and US Dept. of Justice will be required to work out of compliance. All work and applications to obtain FDOT approval shall be supplied by the contractor.

A. Submit fill, steel, and concrete specifications and test cylinders as requested by engineer.

D. AutoCAD 2006 As-built drawings on disc and four sets of signed and sealed by state of Florida licensed surveyor two (2) full size, two (2) 11 x 17 on Mylar.

E. As-builts / Record Drawings shall include the following:

- a. All pipe invert elevations, bottom of structure elevations, pipe grade, LF of new pipe installed;
- b. All rim elevations, All CB grate elevations
- c. Locations of Catch basins, Well structures, and Manholes.
- d. Elevations of FDOT "F" curb every 10 LF. (flow line and Top of Curb)
- e. Elevations of back of sidewalks every 10 LF. Elevations of ADA Ramps Top and Bottom.
- f. Limits of construction.
- g. Submit record drawings (four) signed and sealed. Provide to the city three DISCS with electric copies in AUTOCAD and PDF.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.01 EXAMINATION AND PREPARATION OF SITE

- A. Before starting operations, Contractor shall examine site of work to acquaint himself with conditions to be encountered.
- B. Compare actual site with drawings and specifications.
- C. Report discrepancies affecting work or cost thereof to the City.
- D. Verify exact locations of sewers, water mains, gas mains, above or below ground electrical wires and conduits and structures which may interfere with work.
- E. No extra compensation will be allowed for any extra work made necessary due to conditions or obstacles encountered during progress of work which could have been determined by examination of site or by contacting Owners of pipelines and conduits before starting operations.
- F. Comply with State law concerning Sunshine State One Call of Florida, State Statute Title 33, Chapter 556.

3.02 LINES AND GRADES

- A. Contractor shall furnish and maintain lines and grades for work.
- B. Contractor shall take immediate steps to correct errors or inconsistencies in lines and grades of work to be in conformity with Contract Documents.
- C. Contractor shall be fully responsible for accuracy of lines and grades of work and control and checking and immediate correction of it.

3.03 RESTORATION

- A. Items to remain which are disturbed, damaged, or removed when performing required work or for convenience of Contractor or to expedite his operations shall be restored, repaired, reinstalled, or replaced with new work and refinished, as appropriate, so as to be left in as good condition as existed before work commenced and such restoration shall be considered incidental to the work.

- B. Existing items to be altered, extended, salvaged, or relocated and reused, if found to be defective in any way, shall be reported to the City before items are disturbed.
- C. Materials and workmanship used in restoring work shall conform in type and quality to original existing construction.

4.0 PAYMENT

- A. Payment for this section shall be included under item 2 in the proposal.

SECTION 01500
TESTING SERVICES

PART 1 GENERAL

1.1 WORK INCLUDED

- A. The Contractor shall employ and pay for the services of a qualified commercial independent testing laboratory acceptable to the Engineer and the Owner to perform specified services.
- B. Inspection, sampling, and testing is required for:
 - 1. Trench excavation and backfill.
 - 2. Paving and surfacing.
 - 3. Additional quality checks as required by the Engineer.
 - 4. Slump testing for concrete as directed by Engineer.
- C. 1. Employment of a testing laboratory shall in no way relieve the Contractor of his obligation to perform work in accordance with the Contract.

PART 2 PRODUCTS

2.1 SUBMITTALS

- A. Submit six copies of reports of inspections and tests to Engineer promptly upon completion of inspections and tests, including:
 - 1. Date issued.
 - 2. Project title and Engineer's job number.
 - 3. Testing laboratory name and address.
 - 4. Name and signature of inspector.
 - 5. Date of inspection or sampling.
 - 6. Record of temperature and weather.
 - 7. Date of test.
 - 8. Location of inspection or test.
 - 9. Identification of product and specification section.
 - 10. Type of inspection or test.
 - 11. Observation regarding compliance with the Contract Documents.
- B. This report shall be signed and sealed by a Registered Professional Engineer Licensed in the State of Florida and qualified to perform such service

PART 3 EXECUTION

3.1 LABORATORY DUTIES - LIMITATIONS OF AUTHORITY

- A. Cooperate with the Engineer and Contractor; provide qualified personnel promptly on notice.
- B. Perform specified inspections, sampling, and testing of materials and methods of construction:
 - 1. Comply with specified standards, ASTM, other recognized standards, authorized and as specified.
 - 2. Ascertain compliance with requirements of Contract Documents.
- C. Notify the Engineer and Contractor immediately of irregularities or deficiencies of work which are observed during performance of services.
- D. Perform additional services as required by the Engineer.

PART 4 PAYMENT

- A. Payment for this section shall be included under item 2 in the proposal

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DIVISION 2

SITE WORK

SECTION 02920
FINISH GRADING AND GRASSING

PART 1 GENERAL

1.1 WORK INCLUDED

- A. This section covers the work necessary for establishing a standard of grass, including furnishing and placing of grass sod, and fertilizing, watering, and maintenance of sodded areas.
- B. See CONDITIONS OF THE CONTRACT and Division 1, GENERAL REQUIREMENTS, which contain information and requirements that apply to the work specified herein and are mandatory for this project.
- C. Areas disturbed by the CONTRACTOR whether inside or outside the limits of the trench area shall be restored in accordance with this section. Areas outside the limits of trench shall be restored at the CONTRACTOR'S sole expense.

1.2 SUBMITTALS

- A. Shop Drawings: Product labels/data sheets.
- B. Quality Control Submittals: Certification of sod, include source harvest date of sod and sod seed mix.

PART 2 PRODUCTS

2.1 SOD

- A. Sod shall be grown by a certified turf nursery. The CONTRACTOR shall inform the owner as to the source of the sod to be used prior to ordering and delivery of sod.
- B. Sod shall be similar to existing, free of weeds or growth detrimental to economical maintenance, proper establishment, or appearance of completed turf. It shall be well matted with roots and certified in writing to be free of weeds and mole crickets by the supplier. Mow to height of 3 inches before lifting.
- C. Dimensions: The sod shall be taken up in commercial-size rectangles, 12 inches by 24 inches or larger, except where 6-inch strip sodding is called for.

2.2 WATER

- A. Water used in the grassing operations may be obtained from FKKA. The contractor shall make all arrangements and pay for the cost of all water required for the establishment and maintenance of the grass.

2.3 TOPSOIL

- A. Topsoil shall be crushed limerock screening or tailings of a graduation similar to coarse sand. Approved on site Excavated fill to be kept on site and reused for project

PART 3 EXECUTION

3.1 INSTALLATION

- A. These areas shall be fine graded to achieve the finished subgrade after compaction which shall be obtained by rolling, dragging, or by an approved method which obtains an equivalent compaction to that produced by a hand roller weighing from 75 to 100 pounds per foot of width. All depressions caused by settlement or rolling shall be filled with additional existing or furnished topsoil and re-graded and prepared as specified above until it presents a reasonably smooth and even finish as the required sod subgrade.
- B. All sod furnished shall be living sod containing at least 70 percent of thickly Matter grasses as specified and free from noxious weeds.
- C. No broken pads or torn or uneven ends will be accepted. Standards size sections of sod shall be strong enough to support own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section. Sod shall not be harvested when its moisture content (excessively wet or dry) may adversely affect its survival.
- D. Sod shall be harvested, delivered, and installed within a period of 36 hours. Sod not installed within this time period shall be subject to inspection and rejection by owner and shall be removed from the side and a fresh sod supply shall be furnished at no extra cost to the owner.
- E. The sub-grade shall not be moist at time of installation; however, it should contain sufficient moisture so as not to be powdery or dusty, both as determined by the supplier's representative.
- F. The overlapping of existing lawn with new sod along limit of work lines will not be permitted. Sod shall be laid in stripes, edge, with the lateral joints staggered. All minor or unavoidable openings in the sod shall be closed with sod plugs or with topsoil, as directed by the Engineer. However, sod laid with joints determined to be too large shall be lifted and relay as specified herein at no extra cost to the owner.

- G. Immediately after the sod is laid, the sod shall be watered thoroughly by hand or mechanical sprinkling until the sod and at least 2 inches of the top soil bed have been thoroughly moistened.
- H. CONTRACTOR shall be responsible to furnish his own supply of water to the site at no extra cost.

3.2 MAINTENANCE

- A. Maintenance Period: Begin maintenance immediately after each portion of grass is planted and continued for 8 weeks after all planting is completed.
- B. Maintenance Operations: Maintenance shall include watering as specified, weeding and removal of stones, which may appear. All bare or dead spots which become apparent shall be properly prepared, limed and fertilized, and resodded at Contractor's expense as many times as necessary to secure a good growth. Mow to 3 inches after grass reaches 3 inches in height, and mow frequently enough to keep grass from exceeding 4 inches. Weed by local spot application of selective herbicide only after first planting season when grass is established.
- C. Take whatever measures are necessary to protect the sod while it is developing. These measures shall include furnishing or warning signs, barriers, or any other necessary measures of protection.
- D. If, at the end of the 8-week maintenance period, a satisfactory stand of grass has not been produced; the CONTRACTOR shall renovate and resod the grass or unsatisfactory portions thereof immediately.

3.3 INSPECTION FOR ACCEPTANCE

- A. Eight weeks after the start of maintenance on the last section of completed grass and on written notice from the CONTRACTOR, the ENGINEER will, within 15 days of such a written notice, make an inspection to determine if a satisfactory stand has been produced. If a satisfactory stand has not been established, another inspection will be made after written notice from the CONTRACTOR that the grass is ready for inspection following the next growing season.

3.4 PAYMENT

- A. Payment for grading shall be included in the unit price for sod. City to provide sand (as topsoil) for planter locations (contractor to load and haul to site from Indigenous Park)
- B. Payment for sod shall be at the unit price in the bid.

SECTION 02930
SEEPAGE TRENCH

PART I-GENERAL

- A. The work included in this Section consists of clearing, excavating, back filling, grading and compacting the areas required for the construction of a seepage trench as shown on the Details and as specified herein.
- B. The Contractor shall be responsible for having determined to his satisfaction, prior to the submission of his bid, the conformation of the ground, the type and quality of the substrata, the types of materials to be encountered, the nature of groundwater conditions and all other matters which can in any way affect the work in this Section.
- C. The price established in the Proposal for the construction of the seepage trench will reflect all costs pertaining to the work, and no claims for extra work based on substrata or groundwater table conditions will be allowed.

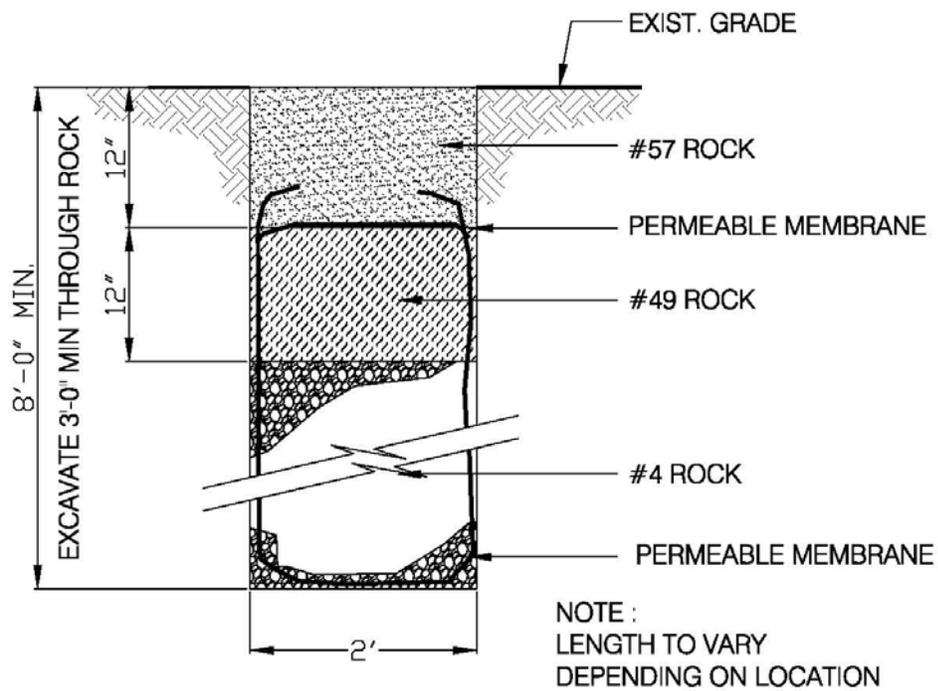
PART 2 - MATERIALS

- A. Ballast rock shall be # 4 coarse aggregate and free of any foreign material.
- B. 57 rock, shall be 3/4 inch in diameter and free of any foreign material, and be used as surface material.

PART 3 - EXECUTION

- A. The excavation of the seepage trench shall be by the open cut method. Walls of the excavation shall be kept vertical and, if required for the safety of workman and the general public, properly sheeted and braced, Materials encountered in the excavation which have a tendency to flow into the excavation, undermine the banks, weaken the overlying strata or are rendered unstable by the excavation operation shall be retained by sheeting, stabilization or other approved method.
- B. The material excavated from the seepage trench shall become the property of the contractor and shall be removed and disposed of properly by the contractor immediately after excavation.
- C. The seepage trench shall be excavated to a minimum depth of eight (8) feet below the finish grade elevation or until, as determined by the Engineer, cap rock is hit.
- D. Where the ballast rock material is deposited in water the layer and density requirements shall not apply until a one-foot layer of comparatively dry material is obtained. This one-foot layer shall be thoroughly compacted by tamping. The filling above water shall be deposited in horizontal layers not exceeding six (6) inches in depth, and shall be thoroughly compacted.

- E. The surface material 57 rock shall be deposited in 6 inch lifts and compacted, the top of which shall be no lower in elevation than the surrounding surface. The 57 rock shall be graded and rolled to assure that no rutting or other distortion will occur.



COMPACT IN 6" LIFTS W/ VIBRATORY COMPACTOR.

SEEPAGE TRENCH

NTS



City of
Key West
Engineering Services
604 Simonton Street
Key West, FL 33040

TITLE		<i>TYPICAL SEEPAGE TRENCH DETAIL</i>	
DESIGNED	A. MANNIX	(Proj.) No.	
DRAWN	K. OLSON	DWG. No.	A-514
CHK'D	A. MANNIX	DATE	3-3-09
SCALE	NOT TO SCALE	SHEET	1 of 1

DIVISION 3

CONCRETE

SECTION 03002
CONCRETE PLACEMENT, CURBS AND SIDEWALKS

PART 1 SCOPE

1.1 WORK INCLUDED:

- A. This section covers all formed concrete work reinforced and non-reinforced as required by the Project indicated on the plans or specified by the Engineer. The Contractor is responsible for all site work and construction supervision and quantity control required to meet ADAAG /ADA specifications when placing concrete

1.2 GENERAL

- A. See CONDITIONS OF THE CONTRACT and GENERAL REQUIREMENTS, Supplementary Conditions which contain information and requirements that apply to the work specified herein and are mandatory for this project.
- B. Contractor shall provide Quality Control for this project as per the requirements of FDOT STANDARD SPECIFICATIONS SECTION 105.
- C. A pre-construction video is required for this project prior to mobilization of equipment. Contractor is responsible for the quality of this video. Provide 4 CD disc capable of viewing on windows media player. Video shall extend at minimum 200 LF outside the limits of Construction. (video to paid for under Item #3 (Pay item 101-1) in the proposal)

1.3 FDOT LOCAL AGENCY SPECIFICATIONS (LAP) AND STANDARD SPECIFICATIONS / LOCAL AGENCY SPECIFICATIONS

- A. The term "Standard Specifications" is used; such reference shall mean the most current edition of Florida Department of Transportation Standard Specification for Road and Bridge Construction and LAP Specifications. The Standard Specifications shall be considered as part of this section of the Specifications; below are Listed references for the contractor's convenience; the contractor shall be responsible for obtaining and incorporation in the contract all of the Standard Specification's and the most current revisions that apply to this contract scope of work. The contractor shall document in his daily reports the required Standard Specifications that are used.
- B. ATTACHED; SECTION 344 CONCRETE FOR LOCAL AGENCIES
- C. ALSO SEE SECTION 02120 EXCAVATION AND BACKFILL PART 2 SECTION 120 EARTHWORK AND RELATED OPERATIONS FOR LOCAL AGENCIES.
- D. Any reference of the following "FDOT", "Agency" "Engineer" "Local Agency" in the ATTACHED; SECTION 344 CONCRETE FOR LOCAL AGENCIES , shall be considered to be the Owner (City of Key West) for this contract.

E. Listed Reference(s):

1) SECTION 105 CONTRACTOR QUALITY CONTROL REQUIREMENTS

1.4 SUBMITTALS REQUIRED FOR CONSTRUCTION:

A. Submittal during construction shall be made as required in PART 4 General Requirements.

B. SUBMITTALS REQUIRED FOR:

1. Concrete - Submit data sheets
2. Expansion joint fillers - Submit data sheets
3. Detectable Warnings System: - submit data sheets
4. Concrete Sealer - submit data sheets
5. New Sewer/Water Meter Boxes w/Lids

C. Detectable Warning Systems: Detectable Warning Systems on walking surfaces shall be "Endicott Handicap Detectable Warning Paver" or approved equal with raised truncated domes and specified color or approved equal. Contractor shall follow all manufacturer's instructions for installation and sealing and meet federal ADAAG/ ADA guidelines.

1.5 MATERIALS

A. Section 344-3.9.1 Category 1, in the referenced FDOT Standard and LAP Specifications shall be revised as follows:

***344-3.9.1 Category 1:** The Engineer may sample and test the concrete at his discretion to verify its quality. The minimum 28 day compressive strength requirement for this concrete is 3,000 psi*

PAYMENTS:

GENERAL:

- A. Disregard all references to method of payment in the referenced FDOT Standard and LAP Specifications.
- B. Unit prices as stated in the contractors proposal shall be complete Payment for the work in this section will be included as part of the applicable costs stated in the Contractor's Proposal, except where work is considered incidental to the contract price. Payment shall be considered full compensation for furnishing all labor, materials, and equipment and testing to complete the work specified in this contract. Re-work of the base or new base shall be incidental to Sidewalk, and Curbs installation.
- C. Miscellaneous concrete and aesthetics repairs to match the new concrete to the existing property lines, walls, planters, buildings, including painting etc. shall be incidental to Sidewalk, and Curbs installation
- D. The quantity and price in the proposal shall include work for the Installation New Sewer/Water Meter Boxes w/Lids; cost shall include labor, equipment and materials. Cost shall include

extension / lowering of six inch PVC sewer lateral pipe (caps) and Cost shall include extension / lowering-raising water meters and waterlines as required for the new sidewalk.

PART 2 MATERIALS

2.1 FORMS:

- A. Materials for curb forms shall be 2-inch dressed dimension lumber, fiberglass, or metal of equal strength, free from defects which would impair the appearance or structural quality of the complete curb. Where short-radius forms are required, 1-inch dressed lumber or plywood may be used. Form material for the face of the curb shall not have any horizontal joints closer than 7-inches from the top of the curb. Provide stakes and bracing materials as required to hold forms securely in place. Metal forms shall be subject to approval by the Engineer. Forms are incidental to the Contract Price.
- B. Materials for sidewalk forms shall be 2-inch dressed lumber straight and free from defects or fiberglass or standard metal forms may be used. Where short radius forms are required, 1-inch dressed lumber is required to hold forms securely in place.

2.2 GRANULAR FILL:

- A. Natural sand not having any piece of material larger than 1-inch, free from dirt, clay balls, or organic material, well graded from coarse to fine, containing sufficient finer material for proper compaction, and less than ten (10) percent by weight passing the No. 200 sieve. Payment shall be per the unit Price bid.

2.3 EARTH FILL:

- A. Earth must be free from rocks 2-inches or larger and other foreign materials. Earth fill is incidental to contract Prices. Approved on site Excavated fill to be kept on site and reused for project

2.4 EXPANSION JOINT FILLERS:

- A. Expansion joint fillers shall conform to F.D.O.T. Standard Specifications for Road and Bridge Construction 2010. Submit complete information regarding joint fillers for approval by the Engineer. Payment shall be per unit price bid.

2.5 CONCRETE:

- A. Submit complete information regarding mix to the Engineer for review in accordance with the requirements of the referenced ASTM Specification. The minimum 28 day compressive strength requirement for this concrete is 3,000 PSI. Payment for completed concrete structures shall be paid as bid in the Proposal.

2.6 DETECTABLE WARNING SYSTEM:

- A. Detectable Warning Systems on walking surfaces shall be “Endicott Handicap Detectable Warning Paver” or equal with raised truncated domes and specified color or equal and follow all manufacturers’ instructions for installation and sealing and meet federal ADAAG guidelines. Payment shall be per unit Price bid.

2.7 TRAFFIC MARKING PAINT:

- A. All traffic striping markings are to be replaced (i.e., lane, edge of pavement, directional, etc.) Any striping damaged by the CONTRACTOR during construction outside the work zone shall be replaced with new painted items at no cost to the city. All striping markings shall be in conformance with Section 971 of the FDOT Specifications. New Paint for curbs shall be Pride Baker Paint brand traffic marking paint or approved equal.
- B. The CONTRACTOR shall place and maintain Temporary Street striping markings throughout the course of the work until the permanent striping marking is placed on the final roadway surface. Temporary striping shall be 20 mils. As Per FDOT Section 711
- C. The Contractor shall place Final Street striping or marking. Final striping shall be 70 mils, thermo – plastic. As Per FDOT Section 711

2.8 ASPHALT:

- A. Cold patch asphalt. Asphalt and labor shall be incidental to the contract price for patches surrounding curbs and sidewalks. Hot mix asphalt conforming to FDOT R-3 shall be paid at the unit price bid for Asphalt paving repairs.

2.9 GRASSING:

- A. See Finish Grading and Grassing. Sod shall be of the same material, conforming to Division II – Site Work, Section 02920. Payment shall be paid as bid in the Proposal.

2.10 ACCEPTANCE OF MATERIALS:

- A. All materials shall be subject to inspection for suitability, as the Engineer may elect, Prior to or during incorporation into the work.

PART 3 WORKMANSHIP

3.1 EXCAVATION AND BACKFILL:

- A. Cut the existing sidewalk regardless of the thickness, with an approved pavement saw or approved pavement cutter wherever sidewalk edges do not follow straight lines. Saw

cutting of concrete shall be wet down to reduce air borne contamination. Remove and dispose of sidewalk at the Contractor's expense.

- B. Prior to excavation of the sidewalk the Contractor's superintendent and the Owner's Engineer or designee shall, together, walk the length of the site marking the limits of the excavation and marking any other pertinent information. Paint shall be supplied by the Contractor, incidental to the cost of the Contract.
- C. At the time of each walk through described in Section 3.1.2, each water meter box and sewer cleanout shall be inspected for structural integrity. Those which are deemed in need of replacement at that time will be supplied by the contractor at the unit price bid or the Florida Keys Aqueduct Authority. Those which meet normal structural and functional standards, and are broken by the Contractor during the construction Process shall be replaced by the Contractor at his cost.
 - 1. Sewer cleanout boxes shall be made from 100% homogenous polyethylene material having a minimum wall thickness of .550 inch, a compartment size of 12-inches by 20-inches with a clear opening of 10-inches by 17-inches. Provide knockouts or notches in each end sized to allow placement of a 6-inch PVC pipe inside the box. Vertical crush to exceed 20,000 pounds and sidewall loading to exceed 180 pounds per square inch. A flange shall encircle the top area for installation in concrete. Cleanout covers shall be cast of ductile conforming to ASTM A-536-84, grade 60-40-18. The meter box covers shall meet or exceed Federal specifications RR-F-621D for a minimum Proof load of 25,000 pounds on 9"x 9" area. All boxes and covers shall be manufactured by Mid- States Plastics, Mount Sterling, KY. Florida Master Distributor: Ferguson Water Works. (561-844-3222) or approved equal.
 - 2. Water meter boxes shall be Mid- States MS # 15P meter box or equal, covers shall have cast iron reading lid.
- D. As directed by the Engineer remove any unsuitable material to such a depth that the addition of the subgrade and granular fill can be placed and compacted. Unsuitable material shall consist of and not be limited to top soil, wood, root matter, stumps, trunks, roots or root systems. Excavation that cannot be accomplished without endangering present structures shall be performed with hand tools.

3.2 PREPARATION OF SUBGRADE:

- A. Bring the areas on which curbs and sidewalks are to be constructed to required grade and compact to 95 percent ASTM D 1557 by sprinkling and rolling or mechanical tamping. As depressions occur, refill with approved material and re-compact until the surface is at the proper grade.

3.3 PLACING GRANULAR FILL:

- A. After the sub-grade for sidewalks and curbs is compacted and at the proper grade, spread 4-inches or more of granular fill. Sprinkle with water and compact to 95 percent ASTM

D 1557 by rolling or other method. Top of the compacted fill shall be at the proper level to receive the concrete. Granular fill shall be used, when needed, to raise the level of grade to allow for proper thickness of concrete. After spreading fill, compact to 95 per cent.

3.4 SETTING FORMS:

- A. Construct forms to the shape, lines, grades, and dimensions as required for proper installation or as called for on the drawings or as directed by the Engineer. Stake wood or steel forms securely in place, true to line and grade.
- B. Provide forms at front and back of curbs. Forms on the face of the curb shall not have any horizontal joints within seven (7) inches of the top of the curb. Brace forms to prevent change of shape or movement in any direction resulting from the weight of the concrete during placement. Construct short-radius forms to exact radius. Tops of forms shall not depart from grade line more than 1/8-inch when checked with a ten-foot straightedge. Alignment of straight sections shall not vary more than 1/8-inch in ten (10) feet.

3.6 SIDEWALK CONSTRUCTION:

- A. Sidewalks shall be four inches or six inches thick or as directed by the Engineer.
- B. Place preformed asphalt expansion joints as in the adjacent curb, where the sidewalk ends at a curb, around posts, poles, concrete buildings or walls or other objects protruding through the sidewalk, and at locations shown on the Drawings.
- C. Provide dummy joints transversely to the walks at locations opposite the contraction joints in the curb and at intervals not exceeding five (5) feet. These joints shall be 1/4-inch by 1-inch weakened plane joints. They shall be straight and at right angles to the surface of the walk.
- D. Concrete shall have a minimum 28 day compressive strength of 3,000 PSI.
- E. Broom the surface with a fine hair broom at right angles to the length of the walk and tool all edges, joints and markings. Mark the walks transversely at five (5) foot intervals with a jointing tool. Protect the sidewalk from damage for a period of seven (7) days.
- F. Sidewalks shall be placed to slope towards the street at a maximum slope of 2% or as otherwise directed by the Engineer.
- G. Where sidewalks or curbs which were painted for legal traffic markings (i.e., loading zone, driveways, no parking zones) are removed and replaced with new curb or sidewalk or repaired, the Contractor shall be responsible to paint the new portions of the curbs or sidewalks. Painting shall be performed upon completion of the curing period, but not less than seven (7) days have elapsed since pouring the concrete. Curbs are to be painted from the inside edge of the curb to the edge of the pavement.

- H. Upon completion of the curing period fill with asphalt, any street side holes or ruts in the asphalt paving that were created by the installation of the curbs or sidewalks.

3.7 GRASSING

- A. Grassing shall take place in locations as directed by the Engineer. All grassing shall be sodding.
- B. Sodding: Before sod is laid, correct soft spots and inequalities in grade of prepared bed. Lay so that no voids occur and tamp or roll, brush or rake granular fill with no lumps or stones larger than 3/4-inch over sodded area, water sod thoroughly. Complete sod surface true to finished grade, even and firm.
- C. Maintenance:
 - 1. Maintenance period: Begin maintenance immediately after each portion of lawn and grass is planted and continue for 8 weeks after all lawn planting is completed.
 - 2. Maintenance Operations: Water to keep surface soil moist. Repair washed out areas by filling with topsoil, liming, fertilizing and seeding. Mow to 3 inches after grass reaches 4 inches in height, and mow frequently enough to keep grass from exceeding 4 inches. Weed by local spot application of selective herbicide only after first planting season when grass is established.
- D. Guarantee:
 - 1. If, at the end of the 8-week lawn maintenance period, a satisfactory stand of lawn or grass has not been produced, the Contractor shall renovate and reseed the lawn or grass or unsatisfactory portions thereof immediately.
 - 2. A satisfactory stand is defined as a lawn or grass or section of lawn or grass that has:
 - a. No bare spot larger than 3 square feet.
 - b. Not more than 10 percent of total area with bare spots larger than 1 square foot.
 - c. Not more than 15 percent of total area with bare spots larger than 6 inches square.
- E. Inspection for Acceptance: Eight weeks after the start of maintenance on the last section of completed lawn, and on written notice from the Contractor, the Engineer will, within 15 days of such written notice, make an inspection to determine if a satisfactory stand has been produced. If a satisfactory stand has not been established, another inspection will be made after written notice from the Contractor that the lawn is ready for inspection following the next growing season.

3.8 DETECTABLE WARNING SYSTEM:

- A. Detectable Warning Systems on walking surfaces shall be “Endicott Handicap Detectable

Warning Paver” or equal with raised truncated domes and specified color or equal and follow all manufacturers’ instructions for installation and sealing and meet federal ADAAG guidelines.

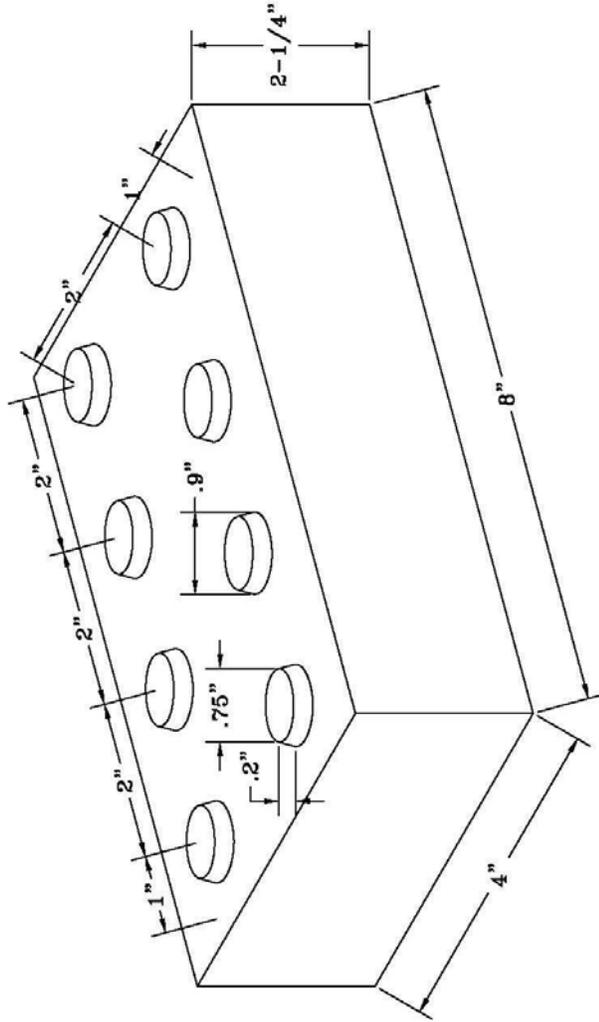
PART 4 PAYMENTS:

4.1 GENERAL:

- A. Payment for the work in this section will be included as part of the applicable unit prices stated in the Contractor's Proposal, except where work is considered incidental to the contract price. Payment shall be considered full compensation for furnishing all labor, materials, and equipment and testing to complete the work specified in this contract. Re-work of the base or new base shall be incidental to Sidewalk, and Curbs installation. Cost shall include any adjustments required to existing water valves or above ground utilities in the path of the proposed sidewalk.

* * * * *

Handicap Detectable Warning Paver



Endicott Clay Products Co

BUS SHELTER SPECIFICATIONS

SPECIFICATIONS

GENERAL: All shelters shall be #BSS-Bns ADV/Series, as manufactured by the Columbia Equipment Company, Inc., Jamaica, New York. Dimensions shall be: 8'-4 1/2" minimum overall length (outside of fascia to outside of fascia), by 5'-4 1/2" minimum overall width (outside of fascia to outside of fascia), by 7'-3 1/2" high to underside of fascia. Shelters shall be partially cantilevered. Shelters shall be open in front.

CONSTRUCTION MATERIALS: All structural frame and window frame members shall be extruded aluminum of 6061-T6 or 6063-T52 (for duranodic) alloy. Structural framing shall be one-piece seamless 2-1/2" x 2-1/2" hollow aluminum tubes of 0.125" minimum thickness. SNAP-TOGETHER OR TWO-PIECE CHANNELS WILL NOT BE ACCEPTED. Mullions shall be one-piece seamless 1-1/2" x 2-1/2" x 0.125" members. Window frames shall be separate extruded aluminum members with integral self-alignment lips and corner key slots. FRAMELESS GLAZING IN RECESSED POCKETS WILL NOT BE ACCEPTED. SNAP-ON GLAZING STOPS OR STOREFRONT GLAZING DETAILS WILL NOT BE ACCEPTED. Facias shall be one-piece seamless extruded aluminum sections of 0.125 thickness with integral gutter, raindrip molding, weep holes – cantilevered beyond face of glazing panels below double corner key slots and alignment lip. Shelters shall be prefabricated in four or five sections, completely glazed (so that total erection time at site required only about 1 to 2 hours/shelter). Skylight domed roofs shall be one-piece completely prefabricated units with domes mounted into facias and caulked and gasketed before shipping. All joints shall be neat and clean and all edges shall be free of burrs.

STANDARDS: All aluminum shall conform to the standards of the Aluminum Association, 750 3rd Avenue, New York, New York. Standards complied with in the design and construction of Columbia Shelters include AISC, Aluminum Association, ASTM, UL, etc, as applicable to the aluminum, steel, plastics and other parts. Shelter construction shall conform to construction standards of ASCE. Columbia Shelters are designed to withstand dead loads of 40 psf.min. and wind load over 80 mph.

STRUCTURAL FRAMING: All framing, both vertical and horizontal, shall be the same size. Minimum size shall be 2-1/2" x 2-1/2" x 1/8" structural tubes. Connections shall be concealed. Connections shall be by means of 1/4" thick minimum extruded aluminum channels, 2-1/4" x 2-1/4" x 2-1/4" high with tapered edges, or 1-1/4" x 2-1/4" x 2-1/4" high with tapered edges. Each main structural joint shall be fastened with two high strength stainless steel bolts of 1/4" each joint. SELF-TAPPING CONNECTORS WILL NOT BE ACCEPTED. Base connections shall be adjustable to varying sidewalk or mounting conditions. Base of Shelter columns shall be designed to accept both internal and external base flanges. Where external flanges are used, they shall have same anodized or duranodic finish as Shelter. PAINTED FLANGES WILL NOT BE ACCEPTABLE WITH ANODIZED OR DURANODIC FINISHED SHELTERS. Shelter posts shall contain internal drainage weep holes to prevent condensation build-up.

WINDOW FRAMING: Windows shall be factory installed in window frame which shall be factory installed into the separate structural frame. Window frames shall have mitered corners and shall be connected internally by extruded aluminum corner keys or screw bosses with concealed stainless steel screws for positive tamper-proof fastening. Window frames shall be affixed to Shelter frame with 3/16" shallow head aluminum rivets, at approximately 13-1/4" O.C. Rivets shall be on "inside of shelter. OUTSIDE RIVETS WILL NOT BE ACCEPTABLE. Rivets shall grip both surfaces being jointed continuously for a full 360 degrees. RIVETS FASTENED INTO "SLOTS" WILL NOT BE PERMITTED.

Window frames shall be independent so that windows with gasketing (mounted in frames) can be removed or installed as a complete unit without affecting any other member of the Shelters. FIN TUBE, SNAP-ON OR SCREW-ON GLAZING BEADS ARE NOT ACCEPTABLE. Where polycarbonate windows are used, specially deep frames with 1/2" to 3/4" edge engagement shall be used to prevent windows from being "popped out". In this case, specially deep continuous PVC dry set splines shall be used for gasketing. Design of window framing shall be such that only authorized personnel may remove window units.

FINISHES: All aluminum framing shall have a #313 Dark Bronze Duranodic finish to conform to "Aluminum Association Standards for anodically Coated Aluminum Alloys for Architectural Applications". Facias shall have a #313 Dark Bronze Duranodic finish. Duranodic finishes shall conform to the standards of the Aluminum Company of America.

GLAZING: All glazing shall be 1/4" clear mar-resistant polycarbonate. Gasketing around windows shall be continuous specially extruded polyvinyl chloride PVC dry set splines. Where polycarbonate or tempered glass glazing is used, specially deep continuous PVC dry set splines shall be used, as shall deep window frames. Glazing shall be fully gasketed and framed in independent, interchangeable factory assembled units for ease of maintenance and repair. Maximum glazing panel widths shall be 41-1/2".

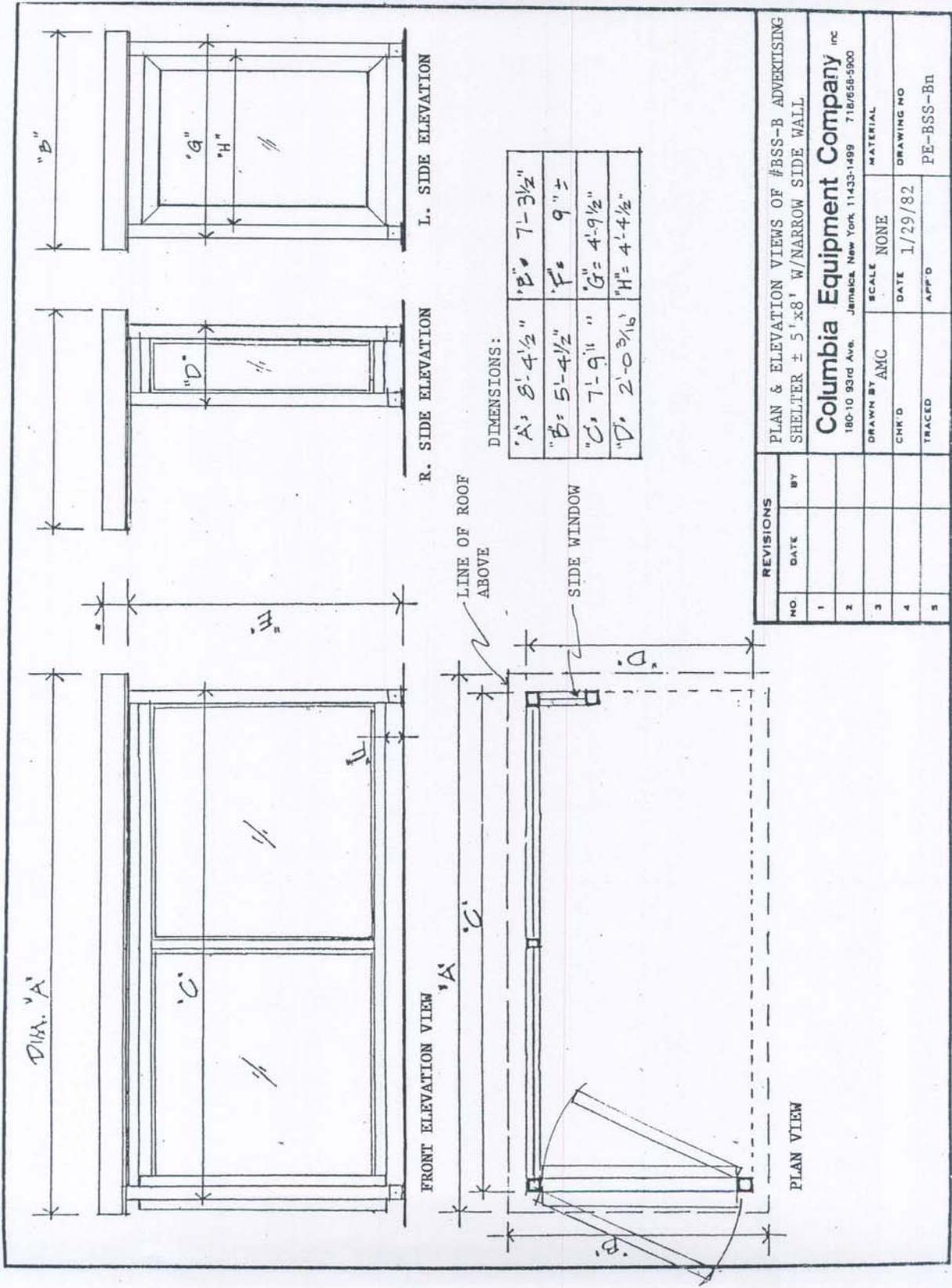
ROOF: roof shall be 5/8" thick fiberglass laminated plywood sandwich panel, with fiberglass on both sides. One side shall have a gel-coat finish. Both sides with white integral color. Roof shall be completely enclosed by continuous, compressed gaskets of expanded EPT rubber or Neoprene SCE41, with adhesive backing, and shall be leak and condensation proof. All roof seams and joints between dome and aluminum framing shall be continuously sealed with premium construction grade silicon such as Dow #780 or GE #1200. Roof panel shall be factory mounted into facia/gutter assembly. Roof panel shall be removable without removing facia.

ROOF/FACIA: Facia member shall be 6" high minimum. Facias shall be one-piece continuous extruded members with mitered corners; connection in facias shall be with two (2) aluminum angle corner keys and four (4) threaded stainless steel Allenhead set screws at each corner. FACIA MEMBERS SHALL HAVE NO EXPOSED FASTENINGS OF ANY SORT. Joints shall be mechanically fastened, NOT WELDED, to facilitate future maintenance. Facia members shall have integral self-aligning lips for perfect alignment. Weep holes in facia shall be located on a custom basis to prevent drainage from crossing through Shelter on sidewalk. Drainage shall take place through cantilevered weep holes to an external reveal inside the facia but outside the Shelter, to prevent streaking on the exterior surface of the facia. For safety, top edge of facia shall be rounded. Roof assembly shall be attached to roof beams with 1/4" minimum diameter stainless steel gasketed roof bolts approximately 13" o.c.

ADDITIONAL: Design of Shelter shall be such that the structure is stable with all windows, roof, facia and ground fastenings remove. Shelters shall be designed by Registered Architect and engineered by Licensed Engineers. Shelters shall be vandal-resistant, maintenance-free and completely weather-proof. The design shall permit integration of light fixture, bench, radiant heater, transit map and schedule panels, telephone, graphic treatments and other integrated street furniture. All installation hardware and ground anchors shall be supplied with Shelter.

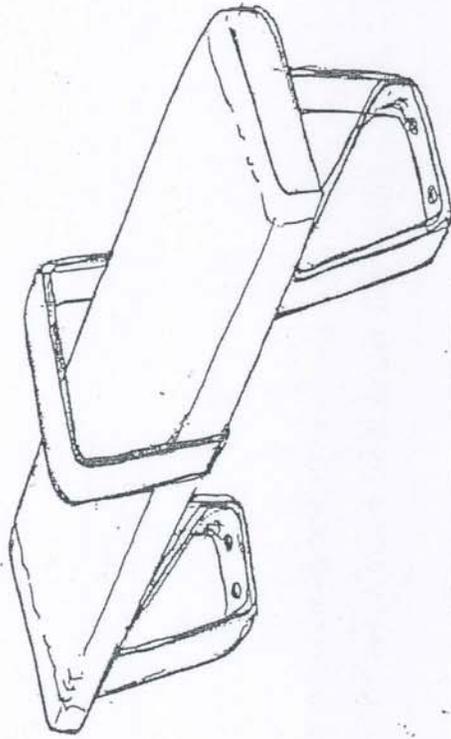
ADV LIGHT BOX: Shelter shall be furnished with a 2-sided internally illuminated Light Box (advertising panel) with (2) side-hinged doors glazed with 1/4" clear mar-resistant poly-carbonate with recessed tamper-proof tool head locks & 1/8" translucent white diffuser panels. Light Box shall be a back-lit solar powered (furnished by others) unit.

BENCH: Shelter shall be furnished with a 4'-0" independent bronze aluminum bench seat with one center armrest. Seat shall be 1-piece 2" x 12" (nom.) extruded aluminum plank with rounded edges, fluted surfaces, capped ends and hidden stainless steel hardware. Support brackets shall be formed aluminum 1/4" thick minimum with predrilled holes for expansion bolting to concrete slab.



REVISIONS		PLAN & ELEVATION VIEWS OF #BSS-B ADVERTISING SHELTER ± 5'x8' W/NARROW SIDE WALL	
NO	DATE	BY	
1			
2			
3			
4			
5			

Columbia Equipment Company inc 180-10 93rd Ave. Jamaica, New York 11433-1499 718/658-5900		SCALE: NONE	MATERIAL
DRAWN BY: AMC		DATE: 1/29/82	DRAWING NO:
CHK'D:		APP'D:	PE-BSS-Bn
TRACED:			



REVISIONS		DETAIL-INDEPENDENT ALUMINUM BENCH SEAT 4' - 0"	
NO	DATE	BY	WITH CENTER ARMREST
1	9/03/02	amc	
2			
3			
4			
5			

Columbia Equipment Company inc.		180-10 83rd Ave. Jamaica, New York 11433-1499 718/658-5900	
DRAWN BY	amc	SCALE	1:1
CHK'D		DATE	4/92
TRACED		MATERIAL	
		DRAWING NO	
		APP'D	

DIVISION 4

FDOT SPECIFIC SPECIFICATIONS

SECTION 110 CLEARING AND GRUBBING

110-1 Description.

Clear and grub within the areas of the roadway right-of-way and of borrow pits, sand-clay base material pits, lateral ditches, and any other areas shown in the plans to be cleared and grubbed. Remove and dispose of all trees, stumps, roots and other such protruding objects, buildings, structures, appurtenances, existing flexible asphalt pavement, and other facilities necessary to prepare the area for the proposed construction. Remove and dispose of all product and debris not required to be salvaged or not required to complete the construction.

Also, perform certain miscellaneous work the Engineer considers necessary for the complete preparation of the overall project site, as follows:

(a) Plug any water wells that are encountered within the right-of-way and that are to be abandoned.

(b) Level the terrain outside the limits of construction for purposes of facilitating maintenance and other post-construction operations in accordance with 110-10.3.

(c) Trim trees and shrubs within the project right-of-way that are identified in the Contract Documents. Meet the requirements for such miscellaneous work as specified in 110-10.

110-2 Standard Clearing and Grubbing.

110-2.1 Work Included: *Completely remove and dispose of all buildings, timber, brush, stumps, roots, rubbish, debris, and all other obstructions resting on or protruding through the surface of the existing ground and the surface of excavated areas, and all other structures and obstructions necessary to be removed and for which other items of the Contract do not specify the removal thereof, including septic tanks, building foundations, and pipes.*

Perform Standard Clearing and Grubbing within the following areas:

(a) All areas where excavation is to be done, including borrow pits, lateral ditches, right-of-way ditches, etc.

(b) All areas where roadway embankments will be constructed.

(c) All areas where structures will be constructed, including pipe culverts and other pipe lines.

110-2.2 Depths of Removal of Roots, Stumps, and Other Debris: *In all areas where excavation is to be performed, or roadway embankments are to be constructed, remove roots and other debris to a depth of 12 inches below the ground surface. Remove roots and other debris from all excavated material to be used in the construction of roadway embankment or roadway base. Plow the surface to a depth of at least 6 inches, and remove all roots thereby exposed to a depth of at least 12 inches. Completely remove and dispose of all stumps within the roadway right-of-way.*

Remove all roots, etc., protruding through or appearing on the surface of the completed excavation within the roadway area and for structures, to a depth of at least 12 inches below the finished excavation surface.

Remove or cut off all stumps, roots, etc., below the surface of the completed excavation in borrow pits, material pits, and lateral ditches.

In borrow and material pits, do not perform any clearing or grubbing within 3 feet inside the right-of-

way line.

Within all other areas where Standard Clearing and Grubbing is to be performed remove roots and other debris projecting through or appearing on the surface of the original ground to a depth of 12 inches below the surface, but do not plow or harrow these areas.

110-2.3 Trees to Remain: *As an exception to the above provisions, where so directed by the Engineer, trim, protect, and leave standing desirable trees within the roadway area. Trim branches of trees extending over the area occupied by the roadway as directed, to give a clear height of 16 feet above the roadway.*

110-2.4 Boulders: *Remove any boulders encountered in the roadway excavation (other than as permitted under the provisions of 120-7.2) or found on the surface of the ground. When approved by the Engineer place boulders in neat piles inside the right of way. The Contractor may stockpile boulders encountered in Department-furnished borrow areas, which are not suitable for use in the embankment construction, within the borrow area.*

110-3 Selective Clearing and Grubbing.

The Contractor shall remove and dispose of all vegetation, obstructions, etc., as provided above except that, where so elected, the Contractor may cut roots, etc., flush with the ground surface. Completely remove and dispose of stumps. Entirely remove undergrowth except in specific areas designated by the Engineer to remain for aesthetic purposes. Trim, protect, and leave standing desirable trees, with the exception of such trees as the Engineer may designate to be removed in order to facilitate right-of-way maintenance. Remove undesirable or damaged trees as so designated by the Engineer. Perform Selective Clearing and Grubbing only in areas so designated in the plans.

110-4 Protection of Property Remaining in Place.

Protect and do not displace property obstructions which are to remain in place, such as buildings, sewers, drains, water or gas pipes, conduits, poles, walls, posts, bridges, etc.

110-5 Removal of Buildings.

110-5.1 Parts to be Removed: *Completely remove all parts of the buildings, including utilities, plumbing, foundations, floors, basements, steps, connecting concrete sidewalks or other pavement, septic tanks, and any other appurtenances, by any practical manner which is not detrimental to other property and improvements. Remove utilities to the point of connection to the utility authority's cut-in. After removing the sewer connections to the point of cut-in, construct a concrete plug at the cut-in point, as directed by the Engineer, except where the utility owners may elect to perform their own plugging. Contact the appropriate utility companies prior to removal of any part of the building to ensure disconnection of services.*

110-5.2 Removal by Others: *Where buildings within the area to be cleared and grubbed are so specified to be removed by others, remove and dispose of any foundations, curtain walls, concrete floors, basements or other foundation parts which might be left in place after such removal of buildings by others.*

110-6 Removal of Existing Structures.

110-6.1 Structures to be Removed: *Remove and dispose of the materials from existing structures. Remove*

the following: (1) those structures, or portions of structures, shown in the plans to be removed; (2) those structures, or portions of structures, found within the limits of the area to be cleared and grubbed, and directed by the Engineer to be removed; (3) those structures, or portion of structures, which are necessary to be removed in order to construct new structures; and (4) other appurtenances or obstructions which may be designated in the Contract Documents as to be included in an item of payment for the work under this Article.

Provide detailed schedule information to the Engineer 15 working days prior to the commencement of any demolition or renovation of any structures, even if asbestos is not found on the project, for the Engineer's use in notifying the Department of Environmental Protection (DEP) on DEP Form 62-257.900(1) "Notice of Asbestos Renovation or Demolition".

110-6.2 Method of Removal:

110-6.2.1 General: Remove the structures in such a way so as to leave no obstructions to any proposed new structures or to any waterways. Pull, cut off, or break off pilings to the requirements of the permit or other Contract Documents, whichever requires the deepest removal, but not less than 2 feet below the finish ground line. In the event that the plans indicate channel excavation to be done by others, consider the finish ground line as the limits of such excavation. For materials which are to remain the property of the Department or are to be salvaged for use in temporary structures, avoid damage to such materials, and entirely remove all bolts, nails, etc. from timbers to be so salvaged. Mark structural steel members for identification as directed.

110-6.2.2 Removal of Steel Members With Hazardous Coatings: Provide to the Engineer for approval, a copy of the "Contractor's Lead in Construction Compliance Program" from the firm actually removing and disposing of these steel members before any members are disturbed.

Vacuum power tool clean any coated steel member to bare metal as defined by SSPC-SP11 a minimum of 4 inches either side of any area to be heated (torch cutting, sawing, grinding, etc.) in accordance with 29 CFR 1926.354. Abrasive blasting is prohibited.

Provide air supplied respirators in accordance with 29 CFR 1926.62 and 29 CFR 1910.134.

110-6.3 Partial Removal of Bridges: On concrete bridges to be partially removed and widened, remove concrete by manually or mechanically operated pavement breakers, by concrete saws, by chipping hammers, or by hydro-demolition methods. Do not use explosives. Where concrete is to be removed to neat lines, use concrete saws or hydro-demolition methods capable of providing a reasonably uniform cleavage face. If the equipment used will not provide a uniform cut without surface spalling, first score the outlines of the work with small trenches or grooves. For all demolition methods, submit for review and approval of the Engineer, a demolition plan that describes the method of removal, equipment to be used, types of rebar splices or couplers, and method of straightening or cutting rebars. In addition, for hydro-demolition, describe the method for control of water or slurry runoff and measures for safe containment of concrete fragments that are thrown out by the hydro-demolition machine.

110-6.4 Authority of U.S. Coast Guard: For structures in navigable waters, when constructing the project under authority of a U.S. Coast Guard permit, the U.S. Coast Guard may inspect and approve the work to remove any existing structures involved therein, prior to acceptance by the Department.

110-6.5 Asbestos Containing Materials (ACM) Not Identified Prior to the Work: When encountering or exposing any condition indicating the presence of asbestos, cease operations immediately in the vicinity and notify the Engineer.

Make every effort to minimize the disturbance of the ACM. Immediately provide for the health and safety of all workers at the job site and make provisions necessary for the health and safety of the public that may be exposed to any potentially hazardous conditions. Provisions shall meet all applicable laws, rules or regulations covering hazardous conditions and will be in a manner commensurate with the gravity of the conditions.

The Engineer will notify the District Contamination Assessment Coordinator who will coordinate selecting and tasking the Department's Asbestos Contractor or Contamination Assessment/Remediation Contractor (CAR). Provide access to the potential contamination area. Preliminary investigation by the Asbestos/CAR Contractor will determine the course of action necessary for site security and the steps necessary to resolve the contamination issue.

The Asbestos/CAR Contractor will delineate the contamination area(s), any staging or holding area required. Coordinate with the Asbestos/CAR Contractor and the Engineer to develop a work plan that will provide the Asbestos/CAR Contractor's operations schedule with projected completion dates for the final resolution of the contamination issue.

The Asbestos/CAR Contractor will maintain jurisdiction over activities inside any outlined contaminated areas and any associated staging holding areas. The Asbestos/CAR Contractor will be responsible for the health and safety of workers within the delineated areas. Provide continuous access to these areas for the Asbestos/CAR Contractor and representatives of regulatory or enforcement agencies having jurisdiction.

Both Contractors will use the schedule as a basis for planning the completion of both work efforts. The Engineer may grant the Contract Time extensions according to the provisions of 8-7.3.2.

Cooperate with the Asbestos/CAR Contractor to expedite integration of the Asbestos/CAR Contractor's operations into the construction project. The Prime Contractor is not expected to engage in routine construction activities involving asbestos containing materials. Adjustments to quantities or to Contract unit prices will be made according to work additions or reductions on the part of the Prime Contractor in accordance with 4-3.

The Engineer will direct the Prime Contractor when operations may resume in the affected area.

110-7 Removal of Existing Pavement.

Remove and dispose of existing rigid portland cement concrete pavement, sidewalk, slope pavement, ditch pavement, curb, and curb and gutter etc., where shown in the plans or ordered by the Engineer to be removed or where required because of the construction operations. Retaining walls, drainage structures and flexible asphalt pavement are not included in the work under this Article.

110-8 Ownership of Materials.

Except as may be otherwise specified in the Contract Documents, the Contractor shall take ownership of all buildings, structures, appurtenances, and other materials removed by him and shall dispose of them in accordance with 110-9.

110-9 Disposal of Materials.

110-9.1 General: *Either stack materials designated to remain the property of the Department in neat piles*

within the right-of-way or load onto the Department's vehicles.

Dispose of timber, stumps, brush, roots, rubbish, and other objectionable material resulting from clearing and grubbing in areas and by methods meeting the applicable requirements of all Local, State and Federal regulations. Do not block waterways by the disposal of debris.

110-9.2 Burning Debris: Where burning of such materials is permitted, perform all such burning in accordance with the applicable laws, ordinances, and regulations. Perform all burning at locations where trees and shrubs adjacent to the cleared area will not be harmed.

110-9.3 Timber and Crops: The Contractor may sell any merchantable timber, fruit trees, and crops that are cleared under the operations of clearing and grubbing for his own benefit, subject to the provisions of 7-1.2, which may require that the timber, fruit trees, or crops be burned at or near the site of their removal, as directed by the Engineer. The Contractor is liable for any claims which may arise pursuant to the provisions of this Subarticle.

110-9.4 Disposal of Treated Wood: Treated wood, including that which comes from bridge channel fender systems, must be handled and disposed of properly during removal. Treated wood should not be cut or otherwise mechanically altered in a manner that would generate dust or particles without proper respiratory and dermal protection. The treated wood must be disposed of in at least a lined solid waste facility or through recycling/reuse. Treated wood shall not be disposed by burning or placement in a construction and demolition (C&D) debris landfill. All compensation for the cost of removal and disposal of treated wood will be included in the Cost of Removal of Existing Structures.

110-9.5 Hazardous Materials/Waste: Handle, transport and dispose of hazardous materials in accordance with all Local, State and Federal requirements including the following:

- a. SSPC Guide 7
- b. Federal Water Pollution Control Act, and
- c. Resource Conservation and Recover Act (RCRA).

Accept responsibility for the collection, sampling, classification, packaging, labeling, accumulation time, storage, manifesting, transportation, treatment and disposal of hazardous waste, both solid and liquid. Separate all solid and liquid waste and collect all liquids used at hygiene stations and handle as hazardous materials/waste. Obtain written approval from the Engineer for all hazardous materials/waste stabilization methods before implementation.

Obtain an EPA/FDEP Hazardous Waste Identification Number (EPA/FDEP ID Number) before transporting and/or disposal of any hazardous materials/waste.

List the Department as the generator of all hazardous materials/waste. Submit the following for the Engineers' approval before transporting, treatment or disposal of any hazardous materials/waste:

- a. Name, address and qualifications of the transporter,
- b. Name, address and qualifications of the treatment facility,

- c. Proposed treatment and/or disposal of all Hazardous Materials/Waste.

Transport all hazardous materials/waste in accordance with applicable 40 CFR 263 Standards. Provide a copy of all completed Hazardous Materials/Waste manifest/bills of lading to the Engineer within 21 days of each shipment.

110-9.5.1 Steel Members With Hazardous Coating: Dispose of steel members with hazardous coating in one of the following manners:

- (a) Deliver the steel members and other hazardous waste to a licensed recycling or treatment facility

capable of processing steel members with hazardous coating.

(b) Deliver the steel members with hazardous coating to a site designated by the Engineer for use as an offshore artificial reef. Deliver any other hazardous materials/waste to a licensed hazardous materials/waste recycling treatment facility.

Dismantle and/or cut steel members to meet the required dimensions of the recycling facility, treatment facility or offshore artificial reef agency.

All compensation for the cost of removal and disposal of hazardous materials/waste will be included in the Cost of Removal of Existing Structures.

110-9.5.2 Certification of Compliance: Furnish two copies of Certification of Compliance from the firm actually removing and disposing of the hazardous materials/waste stipulating, the hazardous materials/waste has been handled, transported and disposed of in accordance with this Specification. The Certification of Compliance shall be attested to by a person having legal authority to bind the company.

Maintain all records required by this Specification and ensure these records are available to the Department upon request.

110-10 Miscellaneous Operations.

110-10.1 Water Wells Required to be Plugged: Fill or plug all water wells within the right-of-way, including areas of borrow pits and lateral ditches, that are not to remain in service, in accordance with applicable Water Management District rules or the Department of Environmental Protection regulations.

Cut off the casing of cased wells at least 12 inches below the ground line or 12 inches below the elevation of the finished excavation surface, whichever is lower. Water wells, as referred to herein, are defined either as artesian or non-artesian, as follows:

(a) An artesian well is an artificial hole in the ground from which water supplies may be obtained and which penetrates any water-bearing rock, the water in which is raised to the surface by natural flow or which rises to an elevation above the top of the water-bearing bed. Artesian wells are further defined to include all holes drilled as a source of water that penetrate any water-bearing beds that are a part of the artesian water system of Florida, as determined by representatives of the applicable Water Management District.

(b) A non-artesian (water table) well is a well in which the source of water is an unconfined aquifer. The water in a non-artesian well does not rise above the source bed.

When the plans do not indicate whether a non-flowing well is artesian or non-artesian, obtain this information from the Engineer.

110-10.2 Landscape Areas: When certain areas of the right-of-way, outside of the limits of construction, are shown in the plans or designated by the Engineer to be landscaped, either under the construction Contract or at a later time, remove undesirable trees, stumps, undergrowth, and vegetation, as directed, and preserve and trim natural growth and trees as directed by the Engineer.

110-10.3 Leveling Terrain: Within the areas between the limits of construction and the outer limits of clearing and grubbing, fill all holes and other depressions, and cut down all mounds and ridges. Make the area of a sufficient uniform contour so that the Department's subsequent mowing and cutting operations are not hindered by irregularity of terrain. Perform this work regardless of whether the irregularities were the

result of construction operations or existed originally.

110-10.4 Mailboxes: When the Contract Documents require furnishing and installing mailboxes, permit each owner to remove the existing mailbox. Work with the Local Postmaster to develop a method of temporary mail service for the period between removal and installation of the new mailboxes. Install the mailboxes in accordance with the Design Standards.

110-11 Method of Measurement.

110-11.1 Clearing and Grubbing: When direct payment is provided in the Contract, the quantity to be paid for will be the lump sum quantity.

110-11.2 Removal of Existing Structures: When direct payment is provided in the Contract, the quantity to be paid for will be the lump sum quantity or quantities for the specific structures removed, as designated.

110-11.3 Removal of Existing Pavement: Payment for removal of flexible asphalt pavement is included in the Lump Sum price for Clearing and Grubbing.

When a separate item for Removal of Existing Pavement is provided, the quantity to be paid for will be the number of square yards of existing pavement of the types listed in 110-7, acceptably removed and disposed of, as specified. The quantity will be determined by actual measurement along the surface of the pavement before its removal. Measurements for appurtenances which have irregular surface configurations, such as curb and gutter, steps, and ditch pavement, will be the area as projected to an approximate horizontal plane. Where the removal of pavement areas is necessary only for the construction of box culverts, pipe culverts, storm sewers, inlets, manholes, etc., these areas will not be included in the measurements.

110-11.4 Plugging Water Wells: When direct payment is provided in the Contract, the quantity to be paid for will be the number of water wells plugged, for each type of well (artesian or non-artesian).

110-11.5 Mailboxes: When direct payment is provided in the Contract, the quantity to be paid for will be the number of mailboxes acceptably furnished and installed.

110-11.6 Delivery of Salvageable Material to the Department When direct payment is provided in the Contract, the quantity to be paid for will be the Lump Sum quantity for delivery of salvageable materials to the Department as indicated in the plans.

110-11.7 General: In each case, except as provided below, where no item of separate payment for such work is included in the proposal, all costs of such work will be included in the various scheduled items in the Contract, or under specific items as specified herein below or elsewhere in the Contract.

110-12 Basis of Payment. 110-12.1 Clearing and Grubbing:

110-12.1.1 Lump Sum Payment: Price and payment will be full compensation for all clearing and grubbing required for the roadway right-of-way and for lateral ditches, channel changes, or other outfall areas, and any other clearing and grubbing indicated, or required for the construction of the entire project, including all necessary hauling, furnishing equipment, equipment operation, furnishing any areas required for disposal of debris, leveling of terrain and the landscaping work of trimming, etc., as specified herein, except for any areas designated to be paid for separately or to be specifically included in the costs of other work under the Contract.

Where construction easements are specified in the plans and the limits of clearing and grubbing for such easements are dependent upon the final construction requirements, no adjustment will be made in the lump sum price and payment, either over or under, for variations from the limits of the easement defined on the plans.

110-12.1.2 When No Direct Payment is Provided: When no item for clearing and grubbing is included in the proposal, the Contractor shall include the cost of any work of clearing and grubbing which is necessary for the proper construction of the project in the Contract price for the structure or other item of work for which such clearing and grubbing is required.

The Contractor shall include the cost of all clearing and grubbing which might be necessary in pits or areas from which base material is obtained in the Contract price for the base in which such material is used. The clearing and grubbing of areas for obtaining stabilizing materials, where required only for the purpose of obtaining materials for stabilizing, will not be paid for separately.

110-12.2 Removal of Existing Structures: Price and payment will be full compensation for all work of removal and disposal of the designated structures.

When direct payment for the removal of existing structures is not provided in the proposal, the Contractor shall include the cost of removing all structures in the Contract price for Clearing and Grubbing or, if no item of Clearing and Grubbing is included, in the compensation for the other items covering the new structure being constructed.

110-12.3 Removal of Existing Pavement: Price and payment will be full compensation for performing and completing all the work of removal and satisfactory disposal.

When no separate item for this work is provided and no applicable item of excavation or embankment covering such work (as provided in 120-13.1) is included, the Contractor shall include the costs of this work in the Contract price for the item of Clearing and Grubbing or for the pipe or other structure for which the pavement removal is required.

110-12.4 Plugging Water Wells: Price and payment will be full compensation for each type of well acceptably plugged.

If a water well requiring plugging is encountered and the Contract contains no price for plugging wells of that specific type, the plugging of such well will be paid for as unforeseeable work.

110-12.5 Mailboxes: Price and payment will be full compensation for all work and materials required, including supports and numbers.

110-12.6 Delivery of Salvageable Material to the Department: Price and payment will be full compensation for all work required for delivery of the materials to the Department.

110-12.7 Payment Items: Payment will be made under:

Item No. 110- 1-Clearing and Grubbing - lump sum.

Item No. 110- 3-Removal of Existing Structures - lump
sum.

Item No. 110- 4-Removal of Existing Pavement - per
square yard.

Item No. 110- 5-Plugging Water Wells (Artesian) - each.

Item No. 110- 6-Plugging Water Wells (Non-Artesian) -
each.

Item No. 110- 7-Mailbox (Furnish and Install) - each.

Item No. 110- 86-Delivery of Salvageable Material to

FDOT - LUMP SUM

SECTION 120 EARTHWORK AND RELATED OPERATIONS FOR LOCAL AGENCIES

120-1 Description.

120-1.1 General: Perform Earthwork and Related Operations based on the type of work specified in the Contract and the Earthwork Categories as defined below. Meet the applicable requirements for materials, equipment and construction as specified.

Earthwork and Related Operations consists of excavation for the construction of the roadway, excavation for structures and pipe, constructing backfill around structures and pipe, and constructing embankments as required for the roadway, ditches, and channel changes.

120-1.2 Earthwork Categories: Performance of Earthwork Operations will fall into one of the following Earthwork Categories:

120-1.2.1 Earthwork Category 1: Includes the earthwork and related operations associated with the construction of sidewalks and bike paths along with any drainage structures associated with these facilities.

120-1.2.2 Earthwork Category 2: Includes the earthwork and related operations associated with the construction of turn lanes and other non-mainline traffic lanes, widening, roadway shoulders, concrete box culverts, retaining walls, and other drainage structures on the non-mainline pavement.

120-1.2.3 Earthwork Category 3: Includes the earthwork and related operations associated with the construction of new mainline pavement, along with concrete box culverts, retaining walls, and other drainage structures on the mainline pavement.

120-2 Classes of Excavation.

120-2.1 Excavation of Unsuitable Material: Excavation of unsuitable material consists of the removal of muck, clay, rock or any other material that is unsuitable in its original position and that is excavated below the finished grading template. For stabilized bases and sand bituminous road mixes, the finished grading template is the top of the finished base, shoulders and slopes. For all other bases and rigid pavement, the finished grading template is the finished shoulder and slope lines and bottom of completed base or rigid pavement.

120-2.2 Lateral Ditch Excavation: Lateral Ditch Excavation consists of all excavation of inlet and outlet ditches to structures and roadway, changes in channels of streams, and ditches parallel to the roadway right-of-way. Dress lateral ditches to the grade and cross-section shown in the plans.

120-2.3 Channel Excavation: Channel Excavation consists of the excavation and satisfactory disposal of all materials from the limits of the channel as shown in the plans.

120-2.4 Excavation for Structures and Pipe: Excavation for Structures consists of the excavation for bridge foundations, box culverts, pipe culverts, storm sewers and all other pipe lines, retaining walls, headwalls for pipe culverts and drains, catch basins, drop inlets, manholes, and similar structures.

120-3 Excavation Requirements.

120-3.1 Excavation and Replacement of Unsuitable Materials: Where rock, muck, clay, or other material within the limits of the roadway is unsuitable in its original position, excavate such material to the cross-sections shown in the plans or indicated by the Engineer, and backfill with suitable material. Shape backfill materials to the required cross-sections. Where the removal of plastic soils

below the finished earthwork grade is required, meet a construction tolerance of ± 0.2 foot in depth and ± 6 inches (each side) in width.

120-3.2 Lateral Ditch Excavation: Excavate inlet and outlet ditches to structures and roadway, changes in channels of streams and ditches parallel to the roadway. Dress lateral ditches to the grade and cross-section shown in the plans.

120-3.3 Channel Excavation: Excavate and dispose of all materials from the limits of the channel as shown in the plans. Excavate for bridge foundations, box culverts, pipe culverts, storm sewers and all other pipe lines, retaining walls, headwalls for pipe culverts and drains, catch basins, drop inlets, manholes, and similar structures.

120-3.4 Excavation for Structures and Pipe.

120-3.4.1 Requirements for all Excavation: Excavate foundation pits to permit the placing of the full widths and lengths of footings shown in the plans, with full horizontal beds. Do not round or undercut corners or edges of footings. Perform all excavation to foundation materials, satisfactory to the Engineer, regardless of the elevation shown on the plans. Perform all excavation in stream beds to a depth at least 4 feet below the permanent bed of the stream, unless a firm footing can be established on solid rock before such depth is reached, and excavate to such additional depth as may be necessary to eliminate any danger of undermining. Wherever rock bottom is secured, excavate in such manner as to allow the solid rock to be exposed and prepared in horizontal beds for receiving the masonry. Remove all loose and disintegrated rock or thin strata. Have the Engineer inspect and approve all foundation excavations prior to placing masonry.

120-3.4.2 Earth Excavation:

120-3.4.2.1 Foundation Material other than the Rock: When masonry is to rest on an excavated surface other than rock, take special care to avoid disturbing the bottom of the excavation, and do not remove the final foundation material to grade until just before placing the masonry. In case the foundation material is soft or mucky, the Engineer may require excavation to a greater depth and to backfill to grade with approved material.

120-3.4.2.2 Foundation Piles: Where foundation piles are used, complete the excavation of each pit before driving the piles. After the driving is completed, remove all loose and displaced material, leaving a smooth, solid, and level bed to receive the masonry.

120-3.4.2.3 Removal of Obstructions: Remove boulders, logs, or any unforeseen obstacles encountered in excavating.

120-3.4.3 Rock Excavation: Clean all rock and other hard foundation material, remove all loose material, and cut all rock to a firm surface. Either level, step vertically and horizontally, or serrate the rock, as may be directed by the Engineer. Clean out all seams, and fill them with concrete or mortar.

120-3.4.4 Pipe Trench Excavation: Excavate trenches for pipe culverts and storm sewers to the elevation of the bottom of the pipe and to a width sufficient to provide adequate working room. Remove soil not meeting the classification specified as suitable backfill material in 120-8.3.2.2 to a depth of 4 inches below the bottom of the pipe elevation. Remove rock, boulders or other hard lumpy or unyielding material to a depth of 12 inches below the bottom of the pipe elevation. Remove muck or other soft material to a depth necessary to establish a firm foundation. Where the soils permit, ensure that the trench sides are vertical up to at least the mid-point of the pipe.

For pipe lines placed above the natural ground line, place and compact the embankment, prior to excavation of the trench, to an elevation at least 2 feet above the top of the pipe and to a width equal to four pipe diameters, and then excavate the trench to the required grade.

120-4 Disposal of Surplus and Unsuitable Material.

120-4.1 Ownership of Excavated Materials: *Dispose of surplus and excavated materials as shown in the plans or, if the plans do not indicate the method of disposal, take ownership of the materials and dispose of them outside the right-of-way.*

120-4.2 Disposal of Muck on Side Slopes: *As an exception to the provisions of 120-4.1, when approved by the Engineer, muck (A-8 material) may be placed on the slopes, or stored alongside the roadway, provided there is a clear distance of at least 6 feet between the roadway grading limits and the muck, and the muck is dressed to present a neat appearance. In addition, this material may also be disposed of by placing it on the slopes where, in the opinion of the Engineer, this will result in an aesthetically pleasing appearance and will have no detrimental effect on the adjacent developments. Where the Engineer permits the disposal of muck or other unsuitable material inside the right-of-way limits, do not place such material in a manner which will impede the inflow or outfall of any channel or of side ditches. The Engineer will determine the limits adjacent to channels within which such materials may be disposed.*

120-4.3 Disposal of Paving Materials: *Unless otherwise noted, take ownership of paving materials, such as paving brick, asphalt block, concrete slab, sidewalk, curb and gutter, etc., excavated in the removal of existing pavements, and dispose of them outside the right-of-way. If the materials are to remain the property of the Agency, place them in neat piles as directed. Existing limerock base that is removed may be incorporated in the stabilized portion of the subgrade. If the construction sequence will allow, incorporate all existing limerock base into the project as allowed by the Contract Documents.*

120-4.4 Disposal Areas: *Where the Contract Documents require disposal of excavated materials outside the right-of-way, and the disposal area is not indicated in the Contract Documents, furnish the disposal area without additional compensation.*

Provide areas for disposal of removed paving materials out of sight of the project and at least 300 feet from the nearest roadway right-of-way line of any road. If the materials are buried, disregard the 300 foot limitation.

120-5 Materials for Embankment.

120-5.1 General Requirements for Embankment Materials: *Construct embankments using suitable materials excavated from the roadway or delivered to the jobsite from authorized borrow pits.*

Construct the embankment using maximum particle sizes (in any dimension) as follows:

In top 12 inches: 3 1/2 inches (in any dimension).

12 to 24 inches: 6 inches (in any dimension).

In the depth below 24 inches: not to exceed 12 inches (in any dimension) or the compacted thickness of the layer being placed, whichever is less.

Spread all material so that the larger particles are separated from each other to minimize voids between them during compaction. Compact around these rocks in accordance with 120-7.2.

When and where approved by the Engineer, larger rocks (not to exceed 18 inches in any dimension) may be placed outside the one to two slope and at least 4 feet or more below the bottom of the base. Compact around these rocks to a firmness equal to that of the supporting soil. Where constructing embankments adjacent to bridge end bents or abutments, do not place rock larger than 3 1/2 inches in diameter within 3 feet of the location of any end-bent piling.

120-5.2 Use of Materials Excavated From the Roadway and Appurtenances: *Assume responsibility for determining the suitability of excavated material for use on the project in accordance with the applicable Contract Documents. Consider the sequence of work and maintenance of traffic*

phasing in the determination of the availability of this material.

120-5.3 Authorization for Use of Borrow: Use borrow only when sufficient quantities of suitable material are not available from roadway and drainage excavation, to properly construct the embankment, subgrade, and shoulders, and to complete the backfilling of structures and pipe. Do not use borrow material until so ordered by the Engineer, and then only use material from approved borrow pits.

120-5.3.1 Haul Routes for Borrow Pits: Provide and maintain, at no expense to the Agency, all necessary roads for hauling the borrow material. Where borrow area haul roads or trails are used by others, do not cause such roads or trails to deteriorate in condition.

Arrange for the use of all non-public haul routes crossing the property of any railroad. Incur any expense for the use of such haul routes. Establish haul routes which will direct construction vehicles away from developed areas when feasible, and keep noise from hauling operations to a minimum. Advise the Engineer in writing of all proposed haul routes.

120-5.3.2 Borrow Material for Shoulder Build-up: When so indicated in the plans, furnish borrow material with a specific minimum bearing value, for building up of existing shoulders. Blend materials as necessary to achieve this specified minimum bearing value prior to placing the materials on the shoulders. Take samples of this borrow material at the pit or blended stockpile.

120-5.4 Materials Used at Pipes, Culverts, etc.: Construct embankments over and around pipes, culverts, and bridge foundations with selected materials.

120-6 Embankment Construction.

120-6.1 General: Construct embankments in sections of not less than 300 feet in length or for the full length of the embankment.

120-6.2 Dry Fill Method:

120-6.2.1 General: Construct embankments to meet compaction requirements in Article 120-7 and in accordance with the acceptance program requirements in 120-9. Restrict the compacted thickness of the last embankment lift to 6 inches maximum.

As far as practicable, distribute traffic over the work during the construction of embankments so as to cover the maximum area of the surface of each layer.

Construct embankment in the dry whenever normal dewatering equipment and methods can accomplish the needed dewatering.

120-6.2.1.1 For A-3 and A-2-4 Materials with up to 15% fines: Construct the embankment in successive layers with lifts up to a maximum compacted thickness of 12 inches. Ensure the percentage of fines passing the No. 200 US Standard sieve in the A-2-4 material does not exceed 15%.

120-6.2.1.2 For A-1 Plastic materials (As designated in FDOT Design Standard Index 505) and A-2-4 Materials with greater than 15% fines: Construct the embankment in successive layers with lifts up to a maximum compacted thickness of 6 inches.

120-6.2.1.3 Equipment and Methods: Provide normal dewatering equipment including, but not limited to, surface pumps, sump pumps and trenching/digging machinery. Provide normal dewatering methods including, but not limited to, constructing shallow surface drainage trenches/ditches, using sand blankets, sumps and siphons.

When normal dewatering does not adequately remove the water, the Engineer may require the embankment material to be placed in the water or in low swampy ground in accordance with 120-7.2.4.

120-6.2.2 Placing in Unstable Areas: Where depositing the material in water, or in low swampy ground that will not support the weight of hauling equipment, construct the embankment by dumping successive loads in a uniformly distributed layer of a thickness not greater than necessary to support the hauling equipment while placing subsequent layers. Once sufficient material has been placed so that the hauling equipment can be supported, construct the remaining portion of the embankment in layers in accordance with the applicable provisions of 120-7.2.4 and 120-7.2.6.

120-6.2.3 Placing on Steep Slopes: When constructing an embankment on a hillside sloping more than 20 degrees from the horizontal, before starting the fill, deeply plow or cut into steps the surface of the original ground on which the embankment is to be placed.

120-6.2.4 Placing Outside Standard Minimum Slope: Where material that is unsuitable for normal embankment construction is to be used in the embankment outside the standard minimum slope (approximately one to two), place such material in layers of not more than 18 inches in thickness, measured loose. The Contractor may also place material which is suitable for normal embankment, outside such standard minimum slope, in 18 inch layers. Maintain a constant thickness for suitable material placed within and outside the standard minimum slope, unless placing in a separate operation.

120-6.3 Hydraulic Method:

120-6.3.1 Method of Placing: When the hydraulic method is used, as far as practicable, place all dredged material in its final position in the embankment by such method. Place and compact any dredged material that is rehandled, or moved and placed in its final position by any other method, as specified in 120-7.2. The Contractor may use baffles or any form of construction he may select, provided the slopes of the embankments are not steeper than indicated in the plans. Remove all timber used for temporary bulkheads or baffles from the embankment, and fill and thoroughly compact the holes thus formed. When placing fill on submerged land, construct dikes prior to beginning of dredging, and maintain the dikes throughout the dredging operation.

120-6.3.2 Excess Material: Do not use excess material placed outside the prescribed slopes, below the normal high-water level, to raise the fill. Remove only the portion of this material required for dressing the slopes.

120-6.3.3 Protection of Openings in Embankment: Leave openings in the embankments at the bridge sites. Remove any material which invades these openings or existing channels without additional compensation to provide the same depth of channel as existed before the construction of the embankment. Do not excavate or dredge any material within 200 feet of the toe of the proposed embankment.

120-7 Compaction Requirements.

120-7.1 Moisture Content: Compact the materials at a moisture content such that the specified density can be attained. If necessary to attain the specified density, add water to the material, or lower the moisture content by manipulating the material or allowing it to dry, as is appropriate.

120-7.2 Compaction of Embankments:

120-7.2.1 Earthwork Category 1 and 2 Density Requirements: Reduce the minimum required density from 100% to 95% of AASHTO T99 Method C for all earthwork items requiring densities.

120-7.2.2 Earthwork Category 3 Density Requirements: Except for embankments constructed by the hydraulic method as specified in 120-6.3, and for the material placed outside the standard minimum slope as specified in 120-6.2.4, and for other areas specifically excluded herein, compact each layer of the material used in the formation of embankments to a density of at least 100% of

the maximum density as required by AASHTO T 99, Method C. Uniformly compact each layer using equipment that will achieve the required density, and as compaction operations progress, shape and manipulate each layer as necessary to ensure uniform density throughout the embankment.

120-7.2.3 Compaction Over Unstable Foundations: Where the embankment material is deposited in water or on low swampy ground, and in a layer thicker than 12 inches (as provided in 120-6.2.2), compact the top 6 inches (compacted thickness) of such layer to the density as specified in 120-9.5.

120-7.2.4 Compaction Where Plastic Material Has Been Removed: Where unsuitable material is removed and the remaining surface is of the A-4, A-5, A-6, or A-7 Soil Groups, as determined by the Engineer, compact the surface of the excavated area by rolling with a sheepsfoot roller exerting a compression of at least 250 psi on the tamper feet, for the full width of the roadbed (subgrade and shoulders). Perform rolling before beginning any backfill, and continue until the roller feet do not penetrate the surface more than 1 inch. Do not perform such rolling where the remaining surface is below the normal water table and covered with water. Vary the procedure and equipment required for this operation at the discretion of the Engineer.

120-7.2.5 Compaction of Material To Be Used In Base, Pavement, or Stabilized Areas: Do not compact embankment material which will be incorporated into a pavement, base course, or stabilized subgrade, to be constructed as a part of the same Contract.

120-7.2.6 Compaction of Grassed Shoulder Areas: For the upper 6 inch layer of all shoulders which are to be grassed, since no specific density is required, compact only to the extent directed.

120-7.2.7 Compaction of Grassed Embankment Areas: For the outer layer of all embankments where plant growth will be established, do not compact. Leave this layer in a loose condition to a minimum depth of 6 inches for the subsequent seeding or planting operations.

120-7.3 Compaction of Subgrade: If the plans do not provide for stabilizing, compact the subgrade in both cuts and fills to the density specified in 120-9.5. For undisturbed soils, do not apply density requirements where constructing narrow widening strips or paved shoulders 5 feet or less in width.

Where trenches for widening strips are not of sufficient width to permit the use of standard compaction equipment, perform compaction using vibratory rollers, trench rollers, or other type compaction equipment approved by the Engineer.

Maintain the required density until the base or pavement is placed on the subgrade.

120-8 Backfilling Around Structures and Pipe.

120-8.1 Requirements for all Structures:

120-8.1.1 General: Backfill around structures and pipe in the Dry whenever normal dewatering equipment and methods can accomplish the needed dewatering.

120-8.1.2 Equipment and Methods: Provide normal dewatering equipment including, but not limited to, surface pumps, sump pumps, wellpoints and header pipe and trenching/digging machinery. Provide normal dewatering methods including, but not limited to, constructing shallow surface drainage trenches/ditches, using sand blankets, perforated pipe drains, sumps and siphons.

120-8.1.3 Backfill Materials: Backfill to the original ground surface or subgrade surface of openings made for structures, with a sufficient allowance for settlement. The Engineer may require that the material used for this backfill be obtained from a source entirely apart from the structure.

Do not allow heavy construction equipment to cross over culvert or storm

sewer pipes until placing and compacting backfill material to the finished earthwork grade or to an elevation at least 4 feet above the crown of the pipe.

120-8.1.4 Use of A-7 Material: In the backfilling of trenches, A-7 material may be used from a point 12 inches above the top of the pipe up to the elevation shown on the FDOT Design Standards as the elevation for undercutting of A-7 material.

120-8.1.5 Time of Placing Backfill: Do not place backfill against any masonry or concrete abutment, wingwall, or culvert until the Engineer has given permission to do so, and in no case until the masonry or concrete has been in place seven days or until the specified 28-day compressive strength occurs.

120-8.1.6 Placement and Compaction: Place the material in horizontal layers not exceeding 6 inches compacted thickness, in depth above water level, behind abutments, wingwalls and end bents or end rest piers, and around box culverts and all structures including pipe culverts. When the backfill material is deposited in water, compact per 120-8.2.5 and 120-8.3.4.

The Contractor may elect to place material in thicker lifts of no more than 12 inches compacted thickness outside the soil envelope if he can demonstrate with a successful test section that density can be achieved. Notify the Engineer prior to beginning construction of a test section. Construct a test section of 500 feet in length. Perform five tests at random locations within the test section. All five tests must meet the density required by 120-7.2. Identify the test section with the compaction effort and soil classification in the Agency Logbook. In case of a change in compaction effort or soil classification, construct a new test section. When a test fails the requirements of 120-7.2, construct a new test section. The Contractor may elect to place material in 6 inches compacted thickness at any time.

120-8.2 Additional Requirements for Structures Other than Pipe:

120-8.2.1 Density: Where the backfill material is deposited in water, obtain a 12 inch layer of comparatively dry material, thoroughly compacted by tamping, before verifying the layer and density requirements. Meet the requirements of the density Acceptance Criteria.

120-8.2.2 Box Culverts: For box culverts over which pavement is to be constructed, compact around the structure to an elevation not less than 12 inches above the top of the structure, using rapid-striking mechanical tampers.

120-8.2.3 Other Limited Areas: Compact in other limited areas using mechanical tampers or approved hand tampers, until the cover over the structure is at least 12 inches thick. When hand tampers are used, deposit the materials in layers not more than 4 inches thick using hand tampers suitable for this purpose with a face area of not more than 100 in². Take special precautions to prevent any wedging action against the masonry, and step or terrace the slope bounding the excavation for abutments and wingwalls if required by the Engineer.

120-8.2.4 Culverts and Piers: Backfill around culverts and piers on both sides simultaneously to approximately the same elevation.

120-8.2.5 Compaction Under Wet Conditions: Where wet conditions do not permit the use of mechanical tampers, compact using hand tampers. Use only A-3 material for the hand tamped portions of the backfill. When the backfill has reached an elevation and condition such as to make the use of the mechanical tampers practical, perform mechanical tamping in such manner and to such extent as to transfer the compaction force into the sections previously tamped by hand.

120-8.3 Additional Requirements for Pipe 15 Inches Inside Diameter or Greater:

120-8.3.1 General: Trenches for pipe may have up to four zones that must be backfilled.

Lowest Zone: The lowest zone is backfilled for deep undercuts up to within

4 inches of the bottom of the pipe.

Bedding Zone: The zone above the Lowest Zone is the Bedding Zone. Usually it will be the backfill which is the 4 inches of soil below the bottom of the pipe. When rock or other hard material has been removed to place the pipe, the Bedding Zone will be the 12 inches of soil below the bottom of the pipe.

Cover Zone: The next zone is backfill that is placed after the pipe has been laid and will be called the Cover Zone. This zone extends to 12 inches above the top of the pipe. The Cover Zone and the Bedding Zone are considered the Soil Envelope for the pipe.

Top Zone: The Top Zone extends from 12 inches above the top of the pipe to the base or final grade.

120-8.3.2 Material:

120-8.3.2.1 Lowest Zone: Backfill areas undercut below the Bedding Zone of a pipe with coarse sand, or other suitable granular material, obtained from the grading operations on the project, or a commercial material if no suitable material is available.

120-8.3.2.2 Soil Envelope: In both the Bedding Zone and the Cover Zone of the pipe, backfill with materials classified as A-1, A-2, or A-3. Material classified as A-4 may be used if the pipe is concrete pipe.

120-8.3.2.3 Top Zone: Backfill the area of the trench above the soil envelope of the pipe with materials allowed on Design Standard, Index No. 505.

120-8.3.3 Compaction:

120-8.3.3.1 Lowest Zone: Compact the soil in the Lowest Zone to approximately match the density of the soil in which the trench was cut.

120-8.3.3.2 Bedding Zone: If the trench was not undercut below the bottom of the pipe, loosen the soil in the bottom of the trench immediately below the approximate middle third of the outside diameter of the pipe.

If the trench was undercut, place the bedding material and leave it in a loose condition below the middle third of the outside diameter of the pipe. Compact the outer portions to meet the density requirements of the Acceptance Criteria. Place the material in lifts no greater than 6 inches (compacted thickness).

120-8.3.3.3 Cover Zone: Place the material in 6 inches layers (compacted thickness), evenly deposited on both sides of the pipe, and compact with mechanical tampers suitable for this purpose. Hand tamp material below the pipe haunch that cannot be reached by mechanical tampers. Meet the requirements of the density Acceptance Criteria.

120-8.3.3.4 Top Zone: Place the material in layers not to exceed 12 inches in compacted thickness. Meet the requirements of the density Acceptance Criteria.

120-8.3.4 Backfill Under Wet Conditions: Where wet conditions are such that dewatering by normal pumping methods would not be effective, the procedure outlined below may be used when specifically authorized by the Engineer in writing.

Granular material may be used below the elevation at which mechanical tampers would be effective, but only material classified as A-3. Place and compact the material using timbers or hand tampers until the backfill reaches an elevation such that it's moisture content will permit the use of mechanical tampers. When the backfill has reached such elevation, use normally acceptable backfill material. Compact the material using mechanical tampers in such manner and to such extent as to transfer the compacting force into the material previously tamped by hand.

120-9 Acceptance Program.

120-9.1 Density over 105%: When a computed dry density results in a value greater than 105% of the applicable Proctor maximum dry density, perform a second density test within 5 feet. If the second density results in a value greater than 105%, investigate the compaction methods, examine the applicable Maximum Density and material description. If necessary, test an additional sample for acceptance in accordance with AASHTO T 99, Method C.

120-9.2 Maximum Density Determination: Determine the maximum density and optimum moisture content by sampling and testing the material in accordance with the specified test method listed in 120-9.3.

120-9.3 Density Testing Requirements: Ensure compliance with the requirements of 120-9.5 by Nuclear Density testing in accordance with FDOT Florida Method FM 1-T 238. Determine the in-place moisture content for each density test. Use Florida Method FM 1-T 238, FM 5-507 (Determination of Moisture Content by Means of a Calcium Carbide Gas Pressure Moisture Tester), or ASTM D 4643 (Laboratory Determination of Moisture Content of Granular Soils By Use of a Microwave Oven) for moisture determination.

120-9.4 Soil Classification: Perform soil classification tests in accordance with AASHTO T-88. Classify soils in accordance with AASHTO M-145 in order to determine compliance with embankment utilization requirements.

120-9.5 Acceptance Criteria: Obtain a minimum density in accordance with 120-7.2 with the following exceptions:

- 1) embankment constructed by the hydraulic method as specified in 120-6.3;
- 2) material placed outside the standard minimum slope as specified in 120-6.2.4;
- 3) other areas specifically excluded herein.

120-9.6 Frequency: Conduct sampling and testing at a minimum frequency listed in the table below.

Test Name	Frequency
Maximum Density	One per soil type
Density	1 per 500' RDWY (Alt Lift)
Soil Classification	One per Maximum Density

120-10 Maintenance and Protection of Work.

While construction is in progress, maintain adequate drainage for the roadbed at all times. Maintain a shoulder at least 3 feet wide adjacent to all pavement or base construction in order to provide support for the edges.

Maintain and protect all earthwork construction throughout the life of the Contract, and take all reasonable precautions to prevent loss of material from the roadway due to the action of wind or water. Repair any slides, washouts, settlement, subsidence, or other mishap which may occur prior to final acceptance of the work. Maintain all channels excavated as a part of the Contract work against natural shoaling or other encroachments to the lines, grades, and cross-sections shown in the plans, until final acceptance of the project.

120-11 Construction.

120-11.1 Construction Tolerances: Shape the surface of the earthwork to conform to the lines, grades, and cross-sections shown in the plans. In final shaping of the surface of earthwork, maintain a

tolerance of 0.3 foot above or below the plan cross-section with the following exceptions:

1. Shape the surface of shoulders to within 0.1 foot of the plan cross-section.
2. Shape the earthwork to match adjacent pavement, curb, sidewalk, structures, etc.
3. Shape the bottom of ditches so that the ditch impounds no water.
4. When the work does not include construction of base or pavement, shape the entire roadbed (shoulder point to shoulder point) to within 0.1 foot above or below the plan cross-section.

Ensure that the shoulder lines do not vary horizontally more than 0.3 foot from the true lines shown in the plans.

120-11.2 Operations Adjacent to Pavement: Carefully dress areas adjacent to pavement areas to avoid damage to such pavement. Complete grassing of shoulder areas prior to placing the final wearing course. Do not manipulate any embankment material on a pavement surface.

When shoulder dressing is underway adjacent to a pavement lane being used to maintain traffic, exercise extreme care to avoid interference with the safe movement of traffic.

120-12 Method of Measurement.

120-12.1 Excavation: Excavation will be paid for by volume, in cubic yards, calculated by the method of average end areas, unless the Engineer determines that another method of calculation will provide a more accurate result. The material will be measured in its original position by field survey or by photogrammetric means as designated by the Engineer. Measurement for payment will include the excavation of unsuitable material, lateral ditch excavation, channel excavation, and excavation for structures and pipe. Payment will not be made for excavation or embankment beyond the limits shown in the plans or authorized by the Engineer.

120-12.2 Embankment: Measurement will be made on a loose volume basis, as measured in trucks or other hauling equipment at the point of dumping on the road. Payment will not be made for embankment beyond the limits shown in the plans or authorized by the Engineer.

120-13 Basis of Payment.

120-13.1 General: Prices and payments for the work items included in this Section will be full compensation for all work described herein, including excavating, dredging, hauling, placing, and compacting; dressing the surface of the earthwork; and maintaining and protecting the complete earthwork.

120-13.2 Excavation: The total quantity of all excavation specified under this Section will be paid for at the Contract unit price for Excavation. No payment will be made for the excavation of any materials which are used for purposes other than those shown in the plans or designated by the Engineer. No payment will be made for materials excavated outside the lines and grades given by the Engineer, unless specifically authorized by the Engineer.

120-13.3 Embankment: The total quantity of embankment specified in this Section will be paid for at the Contract unit price for embankment. No payment will be made for materials which are used for purposes other than those shown in the plans or designated by the Engineer. No payment will be made for materials placed outside the lines and grades given by the Engineer.

**SECTION 334
SUPERPAVE ASPHALT CONCRETE**

334-1 Description.

334-1.1 General: Construct a Superpave Asphalt Concrete pavement with the type of mixture specified in the Contract, or when offered as alternates, as selected. Superpave mixes are identified as Type SP-9.5, Type SP-12.5 or Type SP-19.0.

Meet the requirements of Section 320 for plant and equipment. Meet the general construction requirements of Section 330, except as modified herein, including the provision for Quality Control Plans and Quality Control Systems as specified in 6-8.

On projects with only Traffic Level A and/or B asphalt mixtures, select Option 1 or Option 2 Mixture Acceptance as specified in 334-5. The selection shall be indicated in the Contractor Quality Control Plan in accordance with Section 105 and shall apply to all mixes, including base, structural and friction courses, on the entire project. Traffic Level C, D and E mixtures will be accepted under Option 1 Mixture Acceptance only. On Contracts having both Traffic Level A or B and Traffic Level C, D or E asphalt mixtures, material will be accepted only under Option 1 Material Acceptance.

When Option 2 Mixture Acceptance is selected, the requirements of 330-2 will not apply, with the exception of the roadway requirements as defined in 330-2.2.

For Option 1 Mixture Acceptance, the Engineer will accept the work on a LOT to LOT basis in accordance with 334-5.1. The LOTs will be subdivided into sublots and the size of a LOT and subplot will be as specified in 334-5.1.2.

For Option 2 Mixture Acceptance, the Engineer will accept the work in accordance with 334-5.2.

334-1.2 Traffic Levels: The requirements for Type SP Asphalt Concrete mixtures are based on the design traffic level of the project, expressed in 18,000 pound Equivalent Single Axle Loads (ESAL 's). The five traffic levels are as shown in Table 334-1.

Table 334-1 Superpave Traffic Levels	
Traffic Level	Traffic Level (1x10 ⁶ ESAL 's)
A	<0.3
B	0.3 to <3
C	3 to <10
D	10 to <30
E	≥30

The traffic level(s) for the project are as specified in the Contract. A Type SP mix one traffic level higher than the traffic level specified in the Contract may be substituted, at no cost to the Department (i.e. Traffic Level B may be substituted for Traffic Level A, etc.).

334-1.3 Gradation Classification: The Superpave mixes are classified as either coarse or fine, depending on the overall gradation of the mixture. Coarse and fine mixes are defined in 334-3.2.2.

The equivalent AASHTO nominal maximum aggregate size Superpave

mixes are as follows:

Type	SP-9.5.....	9.5	mm
Type	SP-12.5.....	12.5	mm
Type	SP-19.0.....	19.0	mm

334-1.4 Thickness: The total thickness of the Type SP asphalt layer(s) will be the plan thickness as shown in the Contract Documents. Before paving, propose a thickness for each individual layer meeting the requirements of this specification, which when combined with other layers (as applicable) will equal the plan thickness. For construction purposes, the plan thickness and individual layer thickness will be converted to spread rate based on the maximum specific gravity of the asphalt mix being used, as well as the minimum density level, as shown in the following equation:

$$\text{Spread rate (lbs/yd}^2\text{)} = t \times G_{mm} \times 43.3$$

Where: t = Thickness (in.)
 (Plan thickness or individual layer thickness) G_{mm} = Maximum specific gravity from the verified mix design

The weight of the mixture shall be determined as provided in 320-2.2. For target purposes only, spread rate calculations should be rounded to the nearest whole number.

Note: Plan quantities are based on a G_{mm} of 2.540, corresponding to a spread rate of 110 lbs/yd²-in. Pay quantities will be based on the actual maximum specific gravity of the mix being used.

334-1.4.1 Layer Thicknesses - Fine Mixes: The allowable layer thicknesses for fine Type SP Asphalt Concrete mixtures are as follows:

Type	SP-9.5	1	-	1	1/2	inches
Type	SP-12.5	1	1/2	-	2	1/2 inches
Type	SP-19.0	2	-	3	inches	

In addition to the minimum and maximum thickness requirements, the following restrictions are placed on fine mixes when used as a structural course:

Type SP-9.5 - Limited to the top two structural layers, two layers maximum. Type SP-9.5 – May not be used on Traffic Level D and E applications. Type SP-19.0 - May not be used in the final (top) structural layer.

334-1.4.2 Layer Thicknesses - Coarse Mixes: The allowable layer thicknesses for coarse Type SP Asphalt Concrete mixtures are as follows:

Type	SP-9.5	1	1/2	-	2	inches
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Type	SP-12.5	2	-	3	inches
Type	SP-19.0	3	-	3 1/2	inches

In addition to the minimum and maximum thickness requirements, the following restrictions are placed on coarse mixes when used as a structural course:

Type SP-19.0 - May not be used in the final (top) structural layer. **334-1.4.3 Additional Requirements:** The following requirements also apply to coarse and fine Type SP Asphalt Concrete mixtures:

- 1 A minimum 1 1/2 inch initial lift is required over an Asphalt Rubber Membrane Interlayer (ARMI).
- 2 When construction includes the paving of adjacent shoulders (≤5 feet wide), the layer thickness for the upper pavement layer and shoulder must be the same and paved in a single pass, unless called for differently in the Contract Documents.
- 3 All overbuild layers must be fine Type SP Asphalt Concrete designed at the traffic level as stated in the Contract. Use the minimum and maximum layer thicknesses as specified above unless called for differently in the Contract Documents. On variable thickness overbuild layers, the minimum allowable thickness may be reduced by 1/2 inch, and the maximum allowable thickness may be increased 1/2 inch, unless called for differently in the Contract Documents.

334-2 Materials. 334-2.1 General Requirements: Meet the material requirements specified in Division III. Specific references are as follows: Superpave PG Asphalt Binder or Recycling Agent 916-1, 916-2 Coarse Aggregate Section 901 Fine Aggregate Section 902

334-2.2 Superpave Asphalt Binder: Unless specified otherwise in the Contract, use a PG 67-22 asphalt binder. In addition, meet the requirements of 334-2.3.

334-2.3 Reclaimed Asphalt Pavement (RAP) Material: : 334-2.3.1 General Requirements: RAP may be used as a component of the asphalt mixture subject to the following requirements:

- 1 For Traffic Levels A, B and C mixtures, limit the amount of RAP material used in the mix to a maximum of 50 percent by weight of total aggregate. For Traffic Levels D and E mixtures, limit the amount of RAP material used in the mix to a maximum of 30 percent by weight of total aggregate.
- 2 When using a PG 76-22 Asphalt Binder, limit the amount of RAP material used in the mix to a maximum of 15 percent by weight of total aggregate. As an exception, amounts greater than 15 percent RAP by weight of total aggregate can be used if no more than 15% by weight of the total asphalt binder comes from the RAP material.
- 3 Assume full responsibility for the design, production and construction of asphalt mixes which incorporate RAP as a component material.
- 4 Use RAP from an FDOT approved stockpile or RAP that has an FDOT furnished Pavement Composition Data Sheet.
- 5 Provide stockpiled RAP material that is reasonably consistent in characteristics and contains no aggregate particles which are soft or conglomerates of fines.
- 6 Provide RAP material having a minimum average asphalt content of 4.0 percent by weight of total mix. As an exception, when using fractionated RAP, the minimum average asphalt content for the coarse portion of the RAP shall be 2.5 percent by weight of the coarse portion of the RAP. The coarse portion of the RAP shall be the portion of the RAP retained on the No. 4 sieve. The Engineer may sample the stockpile(s) to verify that this requirement is met.

334-2.3.2 Material Characterization: Assume responsibility for establishing the asphalt binder content, gradation, viscosity and bulk specific gravity (G_{sb}) of the RAP material based on a representative sampling of the material. Obtain the samples by one of the following methods:

1 Roadway cores: Cut a minimum number of cores to be representative of the pavement prior to milling. Fill the core holes prior to opening to traffic. Assume responsibility for accounting for the degradation that will occur during the milling operation.

2 Milling: Obtain representative samples by milling the existing pavement to the full depth shown on the plans for a minimum length of approximately 200 feet. If required to maintain traffic, immediately replace the pavement removed with the mix specified in the Contract. This mix will be paid for at the Contract unit price.

3 Stockpile sampling: Obtain samples from a stockpile of either milled or processed RAP. Take representative samples at random locations around the stockpile. Request the Engineer to make a visual inspection of the stockpiled RAP material. Based on visual inspection and a review of the test data, the Engineer will determine the suitability of the stockpiled materials. Once the RAP stockpile has been approved, do not add additional material without prior approval of the Engineer.

Determine the binder content and gradation of the RAP material in accordance with FM 5-563 and FM 1-T 030, respectively. Extract and recover the asphalt binder from the RAP in accordance with FM 5-524 and FM 3-D 5404, respectively. Determine the viscosity of the recovered asphalt binder in accordance with ASTM D-2171. Establish the G_{sb} of the RAP material by using one of the following methods:

a) Calculate the G_{sb} value based upon the effective specific gravity (G_{se}) of the RAP material, determined on the basis of the asphalt binder content and maximum specific gravity (G_{mm}) of the RAP material. The Engineer will approve the estimated asphalt binder absorption value used in the calculation.

b) Measure the G_{sb} of the RAP aggregate, in accordance with FM 1-T 084 and FM 1-T 085. Obtain the aggregate by using either a solvent or ignition oven extraction method.

334-2.3.3 Pavement Composition: When the Contract includes milling of the existing asphalt pavement, the Pavement Composition Data Sheet may be available on the Department’s website. The URL for obtaining this information, if available, is:

www.dot.state.fl.us/statematerialsoffice/laboratory/asphalt/centrallaboratory/compositions/index.htm .

334-2.3.4 Asphalt Binder for Mixes with RAP: Select the appropriate asphalt binder grade based on Table 334-2. The Engineer reserves the right to change the asphalt binder type and grade at design based on the characteristics of the RAP asphalt binder, and reserves the right to make changes during production. Maintain the viscosity of the recycled mixture within the range of 5,000 to 15,000 poises. Obtain a sample of the mixture for the Engineer within the first 1,000 tons of production and at a continuing frequency of one sample per 4,000 tons of mix.

Table 334-2 Asphalt Binder Grade for Mixes Containing RAP	
Percent RAP	Asphalt Binder Grade
<20	PG 67-22
20 – 29	PG 64-22
≥ 30	Recycling Agent

334-2.4 Recycled Crushed Glass: Recycled crushed glass may be used as a component of the asphalt mixture subject to the following requirements:

- 1 Consider the recycled crushed glass a local material and meet all requirements specified in 902-6.
- 2 Limit the amount of recycled crushed glass to a maximum of 15 percent by weight of total aggregate.
- 3 Use an asphalt binder that contains a minimum of 0.5 percent anti-stripping agent by weight of binder. The antistrip additive shall be one of the products included on the Qualified Products List specified in 6-1 of the Specifications. The antistrip additive shall be introduced into the asphalt binder by the supplier during loading.
- 4 Do not use recycled crushed glass in friction course mixtures or in structural course mixtures which are to be used as the final wearing surface.

334-3 General Composition of Mixture.

334-3.1 General: Compose the asphalt mixture using a combination of aggregate (coarse, fine or mixtures thereof), mineral filler, if required, and asphalt binder material. Size, grade and combine the aggregate fractions to meet the grading and physical properties of the mix design. Aggregates from various sources may be combined.

334-3.2 Mix Design:

334-3.2.1 General: Design the asphalt mixture in accordance with AASHTO R35-04, except as noted herein. Prior to the production of any asphalt mixture, submit the proposed mix design with supporting test data indicating compliance with all mix design criteria to the Engineer. For Traffic Level B through E mix designs, include representative samples of all component materials, including asphalt binder. Allow the State Materials Engineer a maximum of four weeks to either conditionally verify or reject the mix as designed.

For Traffic Level C through E mix designs, final verification of the mix design will occur when the requirements of 334-5.1.2.1 have been met. Do not use more than three mix designs per nominal maximum aggregate size per traffic level per binder grade per contract year. Exceeding this limitation will result in a maximum Composite Pay Factor of 1.00 as defined in 334-8.2 for all designs used beyond this limit.

The Engineer will consider any marked variations from original test data for a mix design or any evidence of inadequate field performance of a mix design as sufficient evidence that the properties of the mix design have changed, and the Engineer will no longer allow the use of the mix design.

334-3.2.2 Mixture Gradation Requirements: Combine the coarse and fine aggregate in proportions that will produce an asphalt mixture meeting all of the requirements defined in this specification and conform to the gradation requirements at design as defined in AASHTO M-323-04, Table 3. Aggregates from various sources may be combined.

334-3.2.2.1 Mixture Gradation Classification: Plot the combined mixture gradation on an FHWA 0.45 Power Gradation Chart. Include the Control Points from AASHTO M-323-04, Table-3, as well as the Primary Control Sieve (PCS) Control Point from AASHTO M-323-04, Table 4. Coarse mixes are defined as having a combined aggregate gradation that passes below the primary control sieve control point and below the maximum density line for all sieve sizes smaller than the primary control sieve. Fine mixes are defined as having a gradation that passes above the primary control sieve control point and above the maximum density line for all sieve sizes smaller than the primary control sieve and larger than the #100 sieve. Use a fine mix for Traffic Levels A through C; use either a coarse mix or fine mix for Traffic Levels D and E.

334-3.2.3 Aggregate Consensus Properties: For Traffic Level C through E mixtures, meet the following consensus properties at design for the aggregate blend.

Aggregate consensus properties do not apply to Traffic Level A and B mixtures.

334-3.2.3.1 Coarse Aggregate Angularity: When tested in accordance with ASTM D-5821, meet the percentage of fractured faces requirements specified in AASHTO M-323-04, Table 5.

334-3.2.3.2 Fine Aggregate Angularity: When tested in accordance with AASHTO T-304, Method A, meet the uncompacted void content of fine aggregate specified in AASHTO M-323-04, Table 5.

334-3.2.3.3 Flat and Elongated Particles: When tested in accordance with ASTM D-4791, (with the exception that the material passing the 3/8 inch sieve and retained on the No. 4 sieve shall be included), meet the requirements specified in AASHTO M-323-04, Table 5. Measure the aggregate using the ratio of 5:1, comparing the length (longest dimension) to the thickness (shortest dimension) of the aggregate particles.

334-3.2.3.4 Sand Equivalent: When tested in accordance with AASHTO T-176, meet the sand equivalent requirements specified in AASHTO M-323-04, Table 5.

334-3.2.4 Gyratory Compaction: Compact the design mixture in accordance with AASHTO T-312-04, with the following exception: use the number of gyrations at N_{design} as defined in Table 334-3.

Table 334-3 Gyratory Compaction Requirements	
Traffic Level	N_{design} Number of Gyration
A	50
B	65
C	75
D	100
E	100

334-3.2.5 Design Criteria: Meet the requirements for nominal maximum aggregate size as defined in AASHTO M-323-04, as well as for relative density, VMA, VFA, and dust-to-binder ratio as specified in AASHTO M-323-04, Table 6. Use a dust-to-binder ratio of 0.8 to 1.6 for coarse mixes. $N_{maximum}$ requirements are not applicable for Traffic Level A and B mixtures.

334-3.2.6 Moisture Susceptibility:

- For Traffic Level A and B mixtures, use a liquid anti-strip additive, which is on the Department's Qualified Products List, at a rate of 0.5% by weight of the asphalt binder.
- For Traffic Level C through E mixtures, test 4 inch specimens in accordance with FM 1-T 283. Provide a mixture having a retained tensile strength ratio of at least 0.80 and a minimum tensile strength (unconditioned) of 100 psi. If necessary, add a liquid anti-stripping agent, which is on the Department's Qualified Products List or hydrated lime (meeting the requirements of 337-10.2) in order to meet these criteria.

334-3.2.7 Additional Information: In addition to the requirements listed above, provide the following information with each proposed mix design submitted for verification:

1. The design traffic level and the design number of gyrations (N_{design}).
2. The source and description of the materials to be used.
3. The DOT source number and the DOT product code of the aggregate components furnished from a DOT approved source.
4. The gradation and proportions of the raw materials as intended to be combined in the paving mixture. The gradation of the component materials shall be representative of the material at the time of use. Compensate for any change in aggregate gradation caused by handling and processing as necessary.
5. A single percentage of the combined mineral aggregate passing each specified sieve. Degradation of the aggregate due to processing (particularly material passing the No. 200 sieve) should be accounted for and identified.
6. The bulk specific gravity (G_{sb}) value for each individual aggregate and RAP component, as identified in the Department's aggregate control program.
7. A single percentage of asphalt binder by weight of total mix intended to be incorporated in the completed mixture, shown to the nearest 0.1 percent.
8. A target temperature at which the mixture is to be discharged from the plant (mixing temperature) and a target roadway temperature (compaction temperature) (per 330-6.3). Do not exceed a target temperature of 330°F for modified asphalts (PG 76-22, ARB5, and ARB-12) and 315°F for unmodified asphalts.
9. Provide the physical properties achieved at four different asphalt binder contents. One of which shall be at the optimum asphalt content, and must conform to all specified physical requirements.
10. The name of the CTQP Qualified Mix Designer.
The ignition oven calibration factor.

334-3.3 Mix Design Revisions: During production, the Contractor may request a target value revision to a mix design, subject to meeting the following requirements: (1) the target change falls within the limits defined in Table 334-4, (2) appropriate data exists demonstrating that the mix complies with production air voids specification criteria, and (3) the mixture gradation meets the basic gradation requirements defined in 334-3.2.2.

<i>Table 334-4 Limits for Potential Adjustments to Mix Design Target Values</i>	
<i>Characteristic</i>	<i>Limit from Original Mix Design</i>
<i>No. 8 sieve and Coarser</i>	<i>± 5.0 percent</i>
<i>No. 16 sieve</i>	<i>± 4.0 percent</i>
<i>No. 30 sieve</i>	<i>± 4.0 percent</i>
<i>No. 50 sieve</i>	<i>± 3.0 percent</i>
<i>No. 100 sieve</i>	<i>± 3.0 percent</i>
<i>No. 200 sieve</i>	<i>± 1.0 percent</i>
<i>Asphalt Binder Content (1)</i>	<i>± 0.3 percent</i>
<i>(1) Reductions to the asphalt binder content will not be permitted if the VMA during production is lower than 1.0 percent below the design criteria.</i>	

Submit all requests for revisions to mix designs, along with supporting documentation, to the Engineer. In order to expedite the revision process, the request for revision or discussions on the possibility of a revision may be made verbally, but must be followed up by a written request. The verified mix design will remain in effect until the Engineer authorizes a change. In no case will the effective date of the revision be established earlier than the date of the first communication between the Contractor and the Engineer regarding the revision.

A new design mix will be required if aggregate sources change, or for any substitution of an aggregate product with a different aggregate code, unless approved by the Engineer.

334-4 Contractor Process Control (for Option 1 Mixture Acceptance).

Assume full responsibility for controlling all operations and processes such that the requirements of these Specifications are met at all times. Perform any tests necessary at the plant and roadway for process control purposes. The Engineer will not use these test results in the acceptance payment decision.

Address in the Quality Control Plan how Process Control failures will be handled. When a Process Control failure occurs, investigate, at a minimum, the production process, testing equipment and/or sampling methods to determine the cause of the failure, and make any necessary changes to assure compliance with these Specifications. Obtain a follow up sample immediately after corrective actions are taken to assess the adequacy of the corrections. In the event the follow-up Process Control sample also fails to meet Specification requirements, cease production of the asphalt mixture until the problem is adequately resolved to the satisfaction of the Quality Control Manager.

334-5 Acceptance of the Mixture. 334-5.1 Option 1 Mixture

Acceptance:

***334-5.1.1 General:** The mixture will be accepted at the plant with respect to gradation (P-8 and P-200), asphalt content (P_b), and volumetrics (volumetrics is defined as air voids at N_{design}). The mixture will be accepted on the roadway with respect to density of roadway cores. Acceptance will be on a LOT-by-LOT basis (for each mix design) based on tests of random samples obtained within each subplot taken at a frequency of one set of samples per subplot. A roadway LOT and a plant production LOT shall be the same. Acceptance of the mixture will be based on Contractor Quality Control test results that have been verified by the Department.*

***334-5.1.1.1 Sampling and Testing Requirements:** Obtain the samples in accordance with FM 1 T-168. Obtain samples at the plant of a sufficient quantity to be split into three smaller samples; one for Quality Control, one for Verification and one for Resolution testing; each sample at approximately 35 pounds. The split samples for Verification testing and Resolution testing shall be reduced in size and stored in three boxes each. The approximate size of each box must be 12" x 8" x 4". Provide, label and safely store sample boxes in a manner agreed upon by the Engineer for future testing.*

The asphalt content of the mixture will be determined in accordance with FM 5-563. In the event the FM 5-563 ignition oven goes out of service during production, the Contractor may elect to use a replacement oven at another location for no more than 72 hours while the oven is being repaired. The gradation of the recovered aggregate will be determined in accordance with FM 1-T 030. Volumetric testing will be in accordance with AASHTO T-312-04 and FM 1 T-209. Prior to testing volumetric samples, condition the test-sized sample for one hour ± five minutes at the target roadway compaction temperature in a covered, shallow, flat pan, such that the mixture temperature at the end of the one hour conditioning period is within ± 20° F of the roadway compaction temperature. Test for roadway density in accordance with FM 1-T 166.

***334-5.1.1.2 Acceptance Testing Exceptions:** When the total combined quantity of hot mix asphalt for the project, as indicated in the plans for Type SP and Type FC mixtures only, is less than 2000 tons, the Engineer will accept the mix on the basis of visual inspection. The Engineer may require the Contractor to run process control tests for informational purposes, as defined in 334-4, or may run independent verification tests to determine the acceptability of the material.*

Density testing for acceptance will not be performed on widening strips or shoulders with a width of 5 feet or less, open-graded friction courses, variable thickness overbuild courses, leveling courses, any asphalt layer placed on subgrade (regardless of type), miscellaneous asphalt pavement, or any course with a specified thickness less than 1 inch or a specified spread rate that converts to less than 1 inch as described in 334-1.4. Density testing for acceptance will not be performed on asphalt courses placed on bridge decks or approach slabs; compact these courses in static mode only per the requirements of 330-10.1.9. In addition, density testing for acceptance will not be performed on the following areas when they are less than 1,000 feet (continuous) in length: crossovers, intersections, turning lanes, acceleration lanes, deceleration lanes, shoulders, parallel parking lanes or ramps.

Where density testing for acceptance is not required, compact these courses (with the exception of open-graded friction courses) in accordance with the rolling procedure (equipment and pattern) as approved by the Engineer or with Standard Rolling Procedure as specified in 330-10.1.2. In the event that the rolling procedure deviates from the procedure approved by the Engineer, or the Standard Rolling Procedure, placement of the mix shall be stopped.

The density pay factor (as defined in 334-8.2) for LOTs where there are areas not requiring density testing for acceptance will be prorated based on a pay factor of 1.00 for the quantity (tonnage) of material in areas not requiring density testing for acceptance and the actual pay factor for the tonnage of material in areas requiring density testing.

334-5.1.2 LOT Sizes: LOT sizes will be either 2,000 tons or 4,000 tons. The Initial Production LOT of all mix designs used on a project shall consist of 2,000 tons, subdivided into four equal sublots of 500 tons each. Following the Initial Production LOT, each remaining LOT will be defined (as selected by the Contractor prior to the start of the LOT) as either (1) 2,000 tons, with each LOT subdivided into four equal sublots of 500 tons each, or (2) 4,000 tons (as authorized by the Engineer per 334-5.1.2.1), with each LOT subdivided into four equal sublots of 1,000 tons each. Before the beginning of a LOT, the Engineer will develop a random sampling plan for each subplot and direct the Contractor on sample points, based on tonnage, for each subplot during construction.

In the event a LOT is terminated per 334-5.1.4.4, the LOT size upon resuming production of the mixture will be 2000 tons until the requirements of 334-5.1.2.1 are met.

334-5.1.2.1 Criteria for 4,000 ton LOTs: At the completion of the Initial Production LOT, the quality of the as-produced material will be evaluated by the Engineer. Begin the option of 4,000 ton LOT sizes only when authorized by the Engineer based upon the Quality Control test results for the Initial Production LOT meeting the following:

1. A minimum Pay Factor of 0.90 for each asphalt quality characteristic as defined in 334-8.2.
2. A favorable comparison with the Verification test results. Comparisons between the Quality Control and Verification test results will be based on between-laboratory precision values shown in Table 334-6.
3. A coefficient of permeability of less than 125×10^{-5} cm/s on each roadway core as determined in accordance with FM 5-565. Permeability criteria apply only to coarse mixes when the average density for the subplot is less than 93.00 percent of G_{mm} , or when an individual density value is less than 91.00 percent of G_{mm} .

In the event that the Initial Production LOT does not meet these criteria, limit production LOT sizes to 2,000 tons with 500 ton sublots until these criteria are met.

334-5.1.2.2 Partial LOTs: A partial LOT is defined as a LOT size that is less than a full LOT. A partial LOT may occur due to the following:

1. The completion of a given mix type or mix design on a project.
 2. LOTs will be terminated 20 calendar days after the start of the LOT. (Time periods other than 20 days may be used if agreed to by both the Engineer and the Contractor.)
 3. A LOT is terminated per 334-5.1.4.4.
- All partial LOTs will be evaluated based on the number of tests available, and will not be redefined.

334-5.1.3 Initial Production Requirements: The Initial Production LOT of all mix designs shall be established at 2,000 tons. During this period demonstrate the capability to produce and place the mixture as specified unless waived by the Engineer. If necessary, during this time, make adjustments to the mix design, as defined in 334-3.3. Any target value adjustments to the mix design will result in the LOT being terminated and evaluated for payment purposes per 334-8. Do not begin 4,000 ton LOT sizes until a 2,000 ton initial production LOT (for each mix design) has been successfully completed, or is waived by the Engineer.

At the sole option of the Engineer, the requirement for an Initial Production LOT may be waived based on evidence of satisfactory production, placement and performance on previous projects for that particular mix.

334-5.1.3.1 Plant Sampling and Testing Requirements: Obtain one random sample of mix per subplot in accordance with 334-5.1.1.1 as directed by the Engineer. Test the Quality Control split sample for gradation, asphalt binder content and volumetrics in accordance with 334-5.1.1.1. Complete all Quality Control testing within one working day from the time the samples were obtained.

334-5.1.3.2 Roadway Sampling and Testing Requirements: Obtain five 6 inch diameter roadway cores within 24 hours of placement at random locations as directed by the Engineer within each subplot. Test these Quality Control samples for density in accordance with 334-5.1.1.1. The G_{mm} used for the density evaluation will be based on the Quality Control test result for the corresponding subplot.

On coarse mixes when the average density for an Initial Production subplot is less than 93.00 percent of G_{mm} , or an individual core density is less than 91.00 percent of G_{mm} , cut five 6 inch diameter roadway cores (at locations determined by the Engineer) and have them evaluated for permeability in accordance with FM 5-565 by a laboratory as approved by the Engineer. If approved by the Engineer, the original cores cut for density testing purposes may be used to evaluate permeability.

334-5.1.3.3 Verification of Initial Production LOT: For Verification purposes the Engineer will test a minimum of one split sample as described in 334-5.1.1.1 from the Initial Production LOT at the completion of the LOT. The plant and roadway random samples shall be from the same subplot. However, for situations where roadway density is not required for the random subplot chosen, then another subplot shall be randomly chosen for roadway density only. Results of the testing and analysis for the LOT will be made available to the Contractor within one working day from when the LOT is completed.

The Verification test results will be compared with the corresponding Quality Control test results based on the between-laboratory precision values shown in Table 334-6.

If all of the specified mix characteristics compare favorably, then the LOT will be accepted, with payment based on the Quality Control results for the LOT.

If any of the results do not compare favorably, then the split Resolution samples from the LOT will be sent to the Resolution laboratory for testing, as described in 334-5.1.6.

334-5.1.3.4 Acceptance of Initial Production LOT: The Initial Production LOT shall be considered a single LOT and will receive a Composite Pay Factor as determined in 334-8, based on results of the verified Quality Control tests, or as determined by the Resolution System.

334-5.1.4 Quality Control Sampling and Testing: Obtain all samples randomly as directed by the Engineer.

Should the Engineer determine that the Quality Control requirements are not being met or that unsatisfactory results are being obtained, or should any instances of falsification of test data occur, approval of the Contractor's Quality Control Plan will be suspended and production will be stopped.

334-5.1.4.1 Lost or Missing Verification/Resolution Samples: In the event that any of the Verification and/or Resolution samples that are in the custody of the Contractor are lost, damaged, destroyed, or are otherwise unavailable for testing, the minimum possible pay factor for each quality characteristic as described in 334-8.2 will be applied to the entire LOT in question, unless called for otherwise by the Engineer. Specifically, if the LOT in question has more than two sublots, the pay factor for each quality characteristic will be 0.55. If the LOT has two or less sublots, the pay factor for each quality characteristic will be 0.80. In either event, the material in question will also be evaluated in accordance with 334-5.1.9.5.

If any of the Verification and/or Resolution samples that are in the custody of the Department are lost, damaged, destroyed or are otherwise unavailable for testing, the corresponding Quality Control test result will be considered verified, and payment will be based upon the Contractor's data.

334-5.1.4.2 Plant Sampling and Testing Requirements: Obtain one random sample of mix per subplot in accordance with 334-5.1.1.1 as directed by the Engineer. Test the Quality Control split sample for gradation, asphalt binder content and volumetrics in accordance with 334-5.1.1.1. Complete all Quality Control testing within one working day from the time the samples were obtained.

334-5.1.4.3 Roadway Sampling and Testing Requirements: Obtain five 6 inch diameter roadway cores within 24 hours of placement at random locations as directed by the Engineer within each subplot. Test these Quality Control samples for density (G_{mb}) in accordance with 334-5.1.1.1. In situations where it is impractical to cut five cores per subplot, obtain a minimum of three cores per subplot at random locations as identified by the Engineer. Do not obtain cores any closer than 12 inches from an unsupported edge. Maintain traffic during the coring operation; core the roadway, patch the core holes (within three days of coring); and trim the cores to the proper thickness prior to density testing.

Density for the subplot shall be based on the average value for the cores cut from the subplot with the target density being the maximum specific gravity (G_{mm}) of the subplot. Once the average density of a subplot has been determined, do not retest the samples unless approved by the Engineer. Ensure proper handling and storage of all cores until the LOT in question has been accepted.

334-5.1.4.4 Individual Test Tolerances for Quality Control Testing: Terminate the LOT if any of the following Quality Control failures occur:

- 1) An individual test result of a subplot for air voids does not meet the requirements of Table 334-5,
- 2) The average subplot density for coarse mixes does not meet the requirements of Table 334-5,
- 3) Two consecutive test results for gradation (P-200 only) do not meet the requirements of Table 334-5,
- 4) Two consecutive test results for asphalt binder content do not meet the requirements of Table 334-5,
- 5) The average subplot density for two consecutive subplots for fine mixes does not meet the requirements of Table 334-5,
- 6) Two core densities for coarse mixes within a subplot are less than 91.00 percent of G_{mm} .

When a LOT is terminated due to a QC failure, stop production of the mixture until the problem is resolved to the satisfaction of the Quality Control Manager(s) and/or Asphalt Plant Level II technician(s) responsible for the decision to resume production after a quality control failure, as identified in 105-8.6.4. In the event that it can be demonstrated that the problem can immediately be or already has been resolved, it will not be necessary to stop production. When a LOT is terminated, make all necessary changes to correct the problem. Do not resume production until appropriate corrections have been made. Inform the Engineer of the problem and corrections made to correct the problem. After resuming production, sample and test the material to verify that the changes have corrected the problem. Summarize this information and provide it to the Engineer prior to the end of the work shift when production resumes.

In the event that a Quality Control failure is not addressed as defined above, the Engineer's approval will be required prior to resuming production after any future Quality Control failures.

Address any material represented by a failing test result in accordance with 334-5.1.9.5. Any LOT terminated under this Subarticle will be limited to a maximum Pay Factor of 1.00 (as defined in 334-8.2) for each quality characteristic.

<i>Table 334-5 Master Production Range</i>	
<i>Characteristic</i>	<i>Tolerance (1)</i>
<i>Asphalt Binder Content (percent)</i>	<i>Target ±0.55</i>
<i>Passing No. 200 Sieve (percent)</i>	<i>Target ±1.50</i>
<i>Air Voids (percent) Coarse Graded</i>	<i>2.00 - 6.00</i>
<i>Air Voids (percent) Fine Graded</i>	<i>2.30 – 6.00</i>
<i>Density, percent G_{mm} (2)</i>	
<i>Coarse Graded (minimum)</i>	<i>93.00</i>
<i>Fine Graded (minimum)</i>	<i>90.00</i>
<i>(1) Tolerances for sample size of n = 1 from the verified mix design (2) Based on an average of 5 randomly located cores</i>	

334-5.1.5 Verification Testing: In order to determine the validity of the Contractor's Quality Control test results prior to their use in the Acceptance decision, the Engineer will run verification tests.

334-5.1.5.1 Plant Testing: At the completion of each LOT, the Engineer will test a minimum of one Verification split sample randomly selected from the LOT. Results of the testing and analysis for the LOT will be made available to the Contractor within one working day from the time the LOT is completed. Verification samples shall be reheated at the target roadway compaction temperature for 1 1/2 hours ± 5 minutes, reduced to the appropriate testing size, and conditioned and tested as described in 334-5.1.1.1.

The Verification test results will be compared with the Quality Control test results based on the between-laboratory precision values shown in Table 334-6.

<i>Table 334-6 Between-Laboratory Precision Values</i>	
<i>Property</i>	<i>Maximum Difference</i>
<i>G_{mm}</i>	<i>0.016</i>
<i>G_{mb}</i>	<i>0.022</i>
<i>P_b</i>	<i>0.44 percent</i>
<i>P-200</i>	<i>FM 1-T 030 (Figure 2)</i>

<i>Table 334-6 Between-Laboratory Precision Values</i>	
<i>Property</i>	<i>Maximum Difference</i>
<i>P-8</i>	<i>FM 1-T 030 (Figure 2)</i>

If all of the specified mix characteristics compare favorably, then the LOT will be accepted, with payment based on the Contractor's Quality Control test data for the LOT.

If any of the results do not compare favorably, then the Resolution samples from the LOT will be sent to the Resolution laboratory for testing, as described in 334-5.1.6.

334-5.1.5.2 Roadway Testing: At the completion of each LOT, the Engineer will determine the density (*G_{mb}*) of each core (previously tested by Quality Control) as described in 334-5.1.1.1 from the same subplot as the Plant samples. For situations where roadway density is not required for the random subplot chosen, then another subplot shall be randomly chosen for roadway density cores only. Results of the testing and analysis for the LOT will be made available to the Contractor within one working day from the time the LOT is completed.

The individual Verification test results will be compared with individual Quality Control test results by the Engineer based on the between-laboratory precision values given in Table 334-6 for *G_{mb}*.

If each of the core test results compare favorably, then the LOT will be accepted with respect to density, with payment based on the Contractor's Quality Control test data for the LOT.

If any of the results do not compare favorably, then the core samples from the LOT will

be sent to the Resolution laboratory for testing as specified in 334-5.1.6.

334-5.1.6 Resolution System:

334-5.1.6.1 Plant Samples: In the event of an unfavorable comparison between the Contractor's Quality Control test results and the Engineer's Verification test results on any of the properties identified in Table 334-6, the Resolution laboratory will test all of the split samples from the LOT for only the property (or properties) in question. Resolution samples shall be reheated at the target roadway compaction temperature for 1 1/2 hours \pm 5 minutes, reduced to the appropriate testing size, and conditioned and tested as described in 334-5.1.1.1.

334-5.1.6.2 Roadway Samples: In the event of an unfavorable comparison between the Contractor's Quality Control test data and the Engineer's Verification test data on the density results, the Resolution laboratory will test all of the cores from the LOT. Testing will be as described in 334-5.1.1.1. Any damaged roadway cores will not be included in the evaluation; replace damaged cores with additional cores at the direction of the Engineer.

334-5.1.6.3 Resolution Determination: If the Resolution laboratory results compare favorably (for the property or properties in question) with all of the Quality Control results, then acceptance and payment for the LOT will be based on the Quality Control results, and the Department will bear the costs associated with Resolution testing. No additional compensation, either monetary or time, will be made for the impacts of any such testing.

If the Resolution laboratory results do not compare favorably (for the property or properties in question) with all of the Quality Control results, then acceptance and payment for the LOT will be based on the Resolution test data for the LOT, and the costs of the Resolution testing will be deducted from monthly estimates. No additional time will be granted for the impacts of any such testing. In addition, in the event that the application of the Resolution test data results in a failure to meet the requirements of Table 334-5, address any material represented by the failing test result in accordance with 334-5.1.9.5.

In the event of an unfavorable comparison between the Resolution test results and Quality Control test results, make the necessary adjustments to assure that future comparisons are favorable.

334-5.1.7 Independent Verification Testing:

334-5.1.7.1 Plant: The Contractor shall provide sample boxes and take samples as directed by the Engineer for Independent Verification testing. Obtain enough material for three complete sets of tests (two samples for Independent Verification testing by the Engineer and one sample for testing by the Contractor). If agreed upon by both the Engineer and the Contractor, only one sample for Independent Verification testing by the Engineer may be obtained. Independent Verification samples will be reheated at the target roadway compaction temperature for 1 1/2 hours \pm 5 minutes, reduced to the appropriate testing size, and conditioned and tested as described in 334-5.1.1.1. The Contractor's split sample, if tested immediately after sampling, shall be reduced to the appropriate testing size, and conditioned and tested as described in 334-5.1.1.1. If the Contractor's sample is not tested immediately after sampling, then the sample shall be reheated at the target roadway compaction temperature for 1 1/2 hours \pm 5 minutes, reduced to the appropriate testing size, and conditioned and tested as described in 334-5.1.1.1. The Contractor's test results shall be provided to the Engineer within one working day from the time the sample was obtained.

If any of the Independent Verification test results do not meet the requirements of Table 334-5, then a comparison of the Independent Verification test results and the Contractor's test results, if available, will be made. If a comparison of the Independent Verification test results and the Contractor's test results meets the precision values of Table 334-6 for the material properties in question, or if the Contractor's test results are not available, then the Independent Verification test results are considered verified and the Contractor shall cease production of the asphalt mixture until the problem is adequately resolved (to the satisfaction of the Engineer), unless it can be demonstrated to the satisfaction of the Engineer that the problem can immediately be (or already has been) resolved. Address any material represented by the failing test results in accordance with 334-5.1.9.5.

If a comparison of the Independent Verification test results and the Contractor's test results does not meet the precision values of Table 334-6 for the material properties in question, then the second Independent Verification sample shall be tested by the Engineer for the material properties in question. If a comparison between the first and second Independent Verification test results does not meet the precision values of Table 334-6 for the material properties in question, then the first Independent Verification test results are considered unverified for the material properties in question and no action shall be taken.

If a comparison between the first and second Independent Verification test results meets the precision values of Table 334-6 for the material properties in question, then the first Independent Verification sample is considered verified and the Contractor shall cease production of the asphalt mixture until the problem is adequately resolved (to the satisfaction of the Engineer), unless it can be demonstrated to the satisfaction of the Engineer that the problem can immediately be (or already has been) resolved. Address any material represented by the failing test results in accordance with 334-5.1.9.5.

The Engineer has the option to use the Independent Verification sample for comparison testing as specified in 334-6.

334-5.1.7.2 Roadway: *Obtain five roadway cores as directed by the Engineer for Independent Verification testing. These independent cores will be obtained from the same LOTs and sublots as the Independent Verification Plant samples, or as directed by the Engineer. The density of these cores will be obtained as described in 334-5.1.1.1. If the average of the results for the subplot does not meet the requirements of Table 334-5 for density, cease production of the asphalt mixture until the problem is adequately resolved (to the satisfaction of the Engineer), unless it can be demonstrated to the satisfaction of the Engineer that the problem can immediately be (or already has been) resolved. Address any material represented by the failing test results in accordance with 334-5.1.9.5.*

334-5.1.8 Surface Tolerance: *The asphalt mixture will be accepted on the roadway with respect to surface tolerance in accordance with the applicable requirements of 330-12.*

334-5.1.9 Minimum Acceptable Quality Levels:

334-5.1.9.1 Pay Factors Below 0.90: *In the event that an individual pay factor for any quality characteristic of a LOT falls below 0.90, take steps to correct the situation and report the actions to the Engineer. In the event that the pay factor for the same quality characteristic for two consecutive LOTs is below 0.90, cease production of the asphalt mixture until the problem is adequately resolved (to the satisfaction of the Engineer), unless it can be demonstrated to the*

satisfaction of the Engineer that the problem can immediately be (or already has been) resolved. Actions taken must be approved by the Engineer before production resumes.

334-5.1.9.2 Composite Pay Factors Less Than 0.90 and Greater Than or Equal to 0.80: If the composite pay factor for the LOT is less than 0.90 and greater than or equal to 0.80, cease production of the asphalt mixture until the problem is adequately resolved (to the satisfaction of the Engineer), unless it can be demonstrated to the satisfaction of the Engineer that the problem can immediately be (or already has been) resolved. Actions taken must be approved by the Engineer before production resumes.

334-5.1.9.3 Composite Pay Factors Less Than 0.80 and Greater Than or Equal to 0.75: If the composite pay factor for the LOT is less than 0.80

and greater than or equal to 0.75, address the defective material in accordance with 334-5.1.9.5.

334-5.1.9.4 Composite Pay Factors Less Than 0.75: If the composite pay factor for the LOT is less than 0.75, remove and replace the defective LOT at no cost to the Department, or as approved by the Engineer.

334-5.1.9.5 Defective Material: Assume responsibility for removing and replacing all defective material placed on the project, at no cost to the Department.

As an exception to the above and upon approval of the Engineer, obtain an engineering analysis by an independent laboratory (as approved by the Engineer) to determine the disposition of the material. The engineering analysis must be signed and sealed by a Professional Engineer licensed in the State of Florida.

The Engineer may determine that an engineering analysis is not necessary or may perform an engineering analysis to determine the disposition of the material.

Any material that remains in place will be accepted with a composite pay factor as determined by 334-8, or as determined by the Engineer.

If the defective material is due to a gradation, asphalt binder content or density failure, upon approval of the Engineer the Contractor may perform delineation tests on roadway cores in lieu of an engineering analysis to determine the limits of the defective material that requires removal and replacement. Prior to any delineation testing, all sampling locations shall be approved by the Engineer. All delineation sampling and testing shall be monitored and verified by the Engineer. The minimum limit of removal of defective material is fifty-feet either side of the failed sample. For materials that are defective due to air voids, an engineering analysis is required.

334-5.2 Option 2 Mixture Acceptance:

334-5.2.1 General: The mixture will be accepted with respect to gradation (P-8 and P-200), asphalt content (P_b) and density of roadway cores. Acceptance of the mixture will be based on the Engineer's test results. Acceptance will be on a LOT-by-LOT basis (for each mix design) based on tests of random samples obtained within each subplot taken at a frequency of one set of samples per subplot. A roadway LOT and a plant production LOT shall be the same. A LOT shall consist of a maximum of four sublots, where a subplot is defined as one day's production. A day's production is defined as a period of time no longer than 24 hours where a minimum of 100 tons of hot mix asphalt for the project (including Type B, Type SP and Type FC) is produced. When less than 100 tons of hot mix asphalt for the project (including Type B, Type SP and Type FC) is produced in a day, no acceptance testing will be required. A LOT shall not extend past seven calendar days

from the start of the LOT. A LOT shall be complete after four sublots have been produced or seven calendar days have transpired (whichever comes first).

If a Traffic Level C mixture is substituted for a Traffic Level B mixture per 334-1.2 and Option 2 was selected, the mixture will be accepted under Option 2.

334-5.2.2 Gradation and Asphalt Content Testing: The Engineer (or Contractor, if directed by the Engineer) will randomly obtain a minimum of one sample per subplot. The samples shall be obtained in accordance with FM 1-T 168. At the completion of the LOT or seven calendar days (whichever comes first), the Engineer will randomly test one sample for gradation per FM 1T 030, asphalt content per FM 5-563 and maximum specific gravity per FM 1-T

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334-5.2.3 Roadway Density Testing: Obtain five 6 inch diameter roadway cores within 24 hours of placement at random locations as directed by the Engineer within each subplot. In situations where it is impractical to cut five cores per subplot, obtain a minimum of three cores per subplot at random locations as identified by the Engineer. Do not obtain cores any closer than 12 inches from an unsupported edge. Maintain traffic during the coring operation, core the roadway and patch the core holes (within three days of coring). The Engineer will determine density of the cores from the same subplot as the sample for gradation and asphalt content tested in 334-5.2.2.

334-5.2.4 Acceptance Criteria: Acceptance will be on a pass/fail basis. Engineer’s test results that meet the criteria shown in Table 334-7, Criteria A, will be accepted at full pay.

Characteristic	Tolerance (1)	
	Criteria A	Criteria B
Asphalt Binder Content (percent)	Target ± 0.55	Target ± 0.75
Passing No. 8 Sieve (percent)	Target ± 5.50	Target ± 10.00
Passing No. 200 Sieve (percent)	Target ± 1.50	Target ± 3.50
Density, minimum percent G_{mm} (2) (3)	92.00	90.00
Notes: (1) Tolerances for sample size of $n = 1$ from the verified mix design. (2) Based on the average value of the roadway cores and G_{mm} for the sample. (3) If the Engineer (or Contract Documents) limits compaction to the static mode only, the tolerance for Criteria A shall be 91.00 and the tolerance for Criteria B shall be 90.00.		

334-5.2.5 Failing Test Results: Should any of the test result(s) for the sample not meet the criteria given in Table 334-7, Criteria A, then the material for that subplot is considered defective. Cease production of the asphalt mixture until the problem is adequately resolved (to the satisfaction of the Engineer). The work can proceed if it can be demonstrated to the satisfaction of the Engineer that the problem can immediately be (or already has been) resolved. The Engineer will then test the remaining samples for all of the characteristics in Table 334-7 to determine the extent of the defective material. The additional samples to be tested are those from the remaining sublots of the LOT. The Contractor has the following options with respect to defective material:

- 1 Remove and replace the defective material at no cost to the Department.
- 2 Leave the defective material in place at 75% pay, if approved by the Engineer.
- 3 Perform delineation testing using a testing plan and a qualified laboratory approved by the Engineer to determine the limits of the defective material. The Engineer reserves the right to witness delineation testing

conducted by the approved laboratory. Delineated material not meeting the criteria given in Table 334-7, Criteria A, shall be removed and replaced at no cost to the Department or left in place at 75% pay, if approved by the Engineer.

Should the test result(s) for the sample not meet the criteria given in Table 334-7, Criteria B, the Contractor has the following options with respect to the defective material:

- 1 Remove and replace the defective material at no cost to the Department.
- 2 Perform delineation testing using a testing plan and a qualified laboratory approved by the Engineer to determine the limits of the defective material. The Engineer reserves the right to witness delineation testing conducted by the approved laboratory. Delineated material not meeting the criteria given in Table 334-7, Criteria A, but meeting the criteria given in Table 334-7, Criteria B shall be removed and replaced at no cost to the Department or left in place at 75% pay, if approved by the Engineer. Delineated material not meeting the criteria given in Table 334-7, Criteria B shall be removed and replaced at no cost to the Department.

334-5.2.6 Acceptance Testing Exceptions: When the total quantity of hot mix asphalt for the project, as indicated on the plans for Type SP and Type FC mixtures only, is less than 2000 tons, the Engineer will accept the mix on the basis of visual inspection, the Engineer may run acceptance tests to determine the acceptability of the material.

Density testing for acceptance will not be performed on widening strips or shoulders with a width of 5 feet or less, variable thickness overbuild courses, leveling courses, first lift of asphalt base course placed on subgrade, asphalt layers placed directly on stabilization layers, miscellaneous asphalt pavement, or any course with a specified thickness less than 1 inch or a specified spread rate that converts to less than 1 inch as described in 334-1.4. Density testing for acceptance will not be performed on asphalt courses placed on bridge decks or approach slabs; compact these courses in static mode only per the requirements of 330-10.1.9. In addition, density testing for acceptance will not be performed on the following areas when they are less than 1,000 feet in length: crossovers, intersections, turning lanes, acceleration lanes, deceleration lanes, shoulders, parallel parking lanes or ramps.

Where density testing for acceptance is not required, compact these courses (with the exception of open-graded friction courses) in accordance with the rolling procedure (equipment and pattern) approved by the Engineer or with Standard Rolling Procedure as specified in 330-10.1.2. In the event that the rolling procedure deviates from the procedure approved by the Engineer, or the Standard Rolling Procedure, placement of the mix shall be stopped.

334-5.2.7 Surface Tolerance: The asphalt mixture will be accepted on the roadway with respect to surface tolerance in accordance with the applicable requirements of 330-12.

334-6 Comparison Testing.

For materials accepted under Option 1, at the start of the project (unless waived by the Engineer) and at other times as determined necessary by the Engineer, provide split samples for comparison testing with the Engineer. The purpose of these tests is to verify that the testing equipment is functioning properly and that the testing procedures are being performed correctly. In the event that the Engineer determines that there is a problem with the Contractor's testing equipment and/or testing procedures, immediately correct the problem to the Engineer's satisfaction. In the event that the problem is not immediately corrected, cease production of the

asphalt mixture until the problem is adequately resolved to the satisfaction of the Engineer.

If so agreed to by both the Contractor and the Engineer, the split sample used for comparison testing may also be used for the Quality Control sample. The split sample used for comparison testing will also meet the requirements for Independent Verification Testing described in 334-5.1.7.

For materials accepted under Option 2, the requirements of this Article do not apply.

334-7 Method of Measurement.

For the work specified under this Section (including the pertinent provisions of Sections 320 and 330), the quantity to be paid for will be the weight of the mixture, in tons. The pay quantity will be based on the project average spread rate, excluding overbuild, limited to a maximum of 105% of the spread rate determined in accordance with 334-1.4 or as set by the Engineer. The project average spread rate is calculated by totaling the arithmetic mean of the average daily spread rate values for each layer.

The bid price for the asphalt mix will include the cost of the liquid asphalt or the asphalt recycling agent and the tack coat application as directed in 300-8. There will be no separate payment or unit price adjustment for the asphalt binder material in the asphalt mix. For the calculation of unit price adjustments of bituminous material, the average asphalt content will be based on the percentage specified in 9-2.1.2. The weight will be determined as provided in 320-2 (including the provisions for the automatic recordation system).

Prepare a Certification of Quantities, using the Department's current approved form, for the certified Superpave asphalt concrete pay item. Submit this certification to the Engineer no later than Twelve O'clock noon Monday after the estimate cut-off or as directed by the Engineer, based on the quantity of asphalt produced and accepted on the roadway per Contract. The certification must include the Contract Number, FPID Number, Certification Number, Certification Date, period represented by Certification and the tons produced for each asphalt pay item.

334-8 Basis of Payment.

334-8.1 General: Price and payment will be full compensation for all the work specified under this Section (including the applicable requirements of Sections 320 and 330). There will be no pay adjustments for materials accepted in accordance with 334-5.2.

For materials accepted in accordance with 334-5.1, based upon the quality of the material, a pay adjustment will be applied to the bid price of the material as determined on a LOT by LOT basis. The pay adjustment will be assessed by calculating a Pay Factor for the following individual quality characteristics: pavement density, air voids, asphalt binder content, and the percentage passing the No. 200 and No. 8 sieves. The pay adjustment will be computed by multiplying a Composite Pay Factor for the LOT by the bid price per ton. Perform all calculations with the Department's Asphalt Plant - Pay Factor Worksheets (Form No. 675-030-22).

334-8.2 Pay Factors:

334-8.2.1 Two or Less Sublot Test Results: In the event that two or less sublot test results are available for a LOT, Pay Factors will be determined based on Table 334-8, using the average of the accumulated deviations from the target value. (Deviations are absolute values with no plus or minus signs.) Use the 1-Test column when there is only one sublot test result and use the 2-Tests column when there are two sublots.

Table 334-8 Small Quantity Pay Table		
Pay Factor	1 Sublot Test Deviation	2 Sublot Test Average Deviation
Asphalt Binder Content		

1.05	0.00-0.23	0.00-0.16
1.00	0.24-0.45	0.17-0.32
0.90	0.46-0.55	0.33-0.39
0.80	>0.55	>0.39
<i>No. 8 Sieve</i>		
1.05	0.00-2.25	0.00-1.59
1.00	2.26-4.50	1.60-3.18
0.90	4.51-5.50	3.19-3.89
0.80	>5.50	>3.89
<i>No. 200 Sieve</i>		
1.05	0.00-0.55	0.00-0.39
1.00	0.56-1.10	0.40-0.78
0.90	1.11-1.50	0.79-1.06
0.80	>1.50	>1.06
<i>Air Voids (Coarse Mixes)</i>		
1.05	0.00-0.55	0.00-0.39
1.00	0.56-1.10	0.40-0.78
0.90	1.11-2.00	0.79-1.41
0.80	2.01-2.25	1.42-1.59
0.70	2.26-2.50	1.60-1.77

Table 334-8 Small Quantity Pay Table

<i>Pay Factor</i>	<i>1 Sublot Test Deviation</i>	<i>2 Sublot Test Average Deviation</i>
0.55	>2.50	>1.77
<i>Air Voids (Fine Mixes)</i>		
1.05	0.00-0.50	0.00-0.35
1.00	0.51-1.00	0.36-0.71
0.90	1.01-1.70	0.72-1.20
0.80	1.71-2.00	1.21-1.41
0.70	2.01-2.50	1.42-1.77
0.55	>2.50	>1.77
<i>Density (Coarse Mixes) Note (1)</i>		
1.05	0.00-0.50	0.00-0.35
1.00	0.51-1.00	0.36-0.71
0.95	1.01-1.50	0.72-1.06
0.90	>1.50	>1.06
<i>Density (Fine Graded Mixtures) Note (1)</i>		
1.05	0.00-0.50	0.00-0.35
1.00	0.51-1.00	0.36-0.71
0.95	1.01-2.00	0.72-1.41
0.90	2.01-3.00	1.42-2.12
0.80	>3.00	>2.12

Notes: (1) Each density test result is the average of five cores. The target density for coarse mixes is 94.50 percent of Gmm. The target density for fine mixes is 93.00 percent of Gmm (92.00 percent when compaction is limited to the static mode or for layers specified to be one inch thick).

334-8.2.2 Three or More Sublot Test Results: When three or more sublot test results are available for a LOT, the variability-unknown, standard deviation method will be used to determine the estimated percentage of the LOT that is within specification limits. The number of significant figures used in the calculations will be in accordance with requirements of AASHTO R 11-82 (2002), Absolute Method.

334-8.2.2.1 Percent Within Limits: The percent within limits (PWL) and Pay Factors for the LOT will be calculated as described below. Variables used in the calculations are as follows:

- x = individual test value (sublot)
- n = number of tests (sublots)
- s = sample standard deviation
- $\sum(x^2)$ = summation of squares of individual test values

$(\sum x)^2$ = summation of individual test values squared

Q_U = upper quality index

USL = upper specification limit (target value plus upper specification limit from Table 334-9) Q_L = lower quality index LSL = lower specification limit (target value minus lower specification limit from Table 334-9)

P_U	=	estimated	percentage	below	the	USL
P_L	=	estimated	percentage	above	the	LSL

(1) Calculate the arithmetic mean (\bar{X}) of the test values:

$$\bar{X} = \frac{\sum x}{n}$$

(2) Calculate the sample standard deviation (s):

$$s = \sqrt{\frac{n \sum (x^2) - (\sum x)^2}{n(n-1)}} \quad (1) - (0)x$$

$$s = \sqrt{\frac{\sum x^2 - \frac{(\sum x)^2}{n}}{n-1}}$$

$$s = n(n-1)$$

(3) Calculate the upper quality index (Q_U):
 $Q_U = \frac{USL - \bar{X}}{s}$

$$Q_U =$$

s

(4) Calculate the lower quality index (Q_L):
 $Q_L = \frac{\bar{X} - LSL}{s}$

- (5) From Table 334-10, determine the percentage of work below the USL (P_U).
- (6) From Table 334-10, determine percentage of work above the LSL (P_L) Note: If USL or LSL is not specified; percentages within (USL or LSL) will be 100.
- (7) If Q_U or Q_L is a negative number, then calculate the percent within limits for Q_U or Q_L as follows: enter Table 334-10 with the positive value of Q_U or Q_L and obtain the corresponding percent within limits for the proper sample size. Subtract this number from 100.00. The resulting number is the value to be used in the next step (Step 8) for the calculation of quality level.
- (8) Calculate the percent within limits (PWL) = $(P_U + P_L) - 100$
- (9) Calculate the Pay Factor (PF) for each quality characteristic using the equation given in 334-8.2.2.2.

Table 334-9 Specification Limits	
Quality Characteristic	Specification Limits
Passing No. 8 sieve (percent)	Target ± 3.1
Passing No. 200 sieve (percent)	Target ± 1.0

Table 334-9 Specification Limits	
Quality Characteristic	Specification Limits
Asphalt Content (percent)	Target ± 0.40
Air Voids - Coarse Mixes (percent)	4.00 ± 1.40
Air Voids - Fine Mixes (percent)	4.00 ± 1.20
Density - Coarse Mixes (percent of G_{mm}):	94.50 ± 1.30
Density - Fine Mixes (percent of G_{mm}):	$93.00 + 2.00, - 1.20$ (1)
Note (1): If the Engineer (or Contract Documents) limits compaction to the static mode only or for all one-inch thick lifts of SP-9.5 and FC-9.5 mixtures, compaction shall be in the static mode and the specification limits are as follows: $92.00 + 3.00, -1.20$ percent of G_{mm} . No additional compensation, cost or time, shall be made.	

<i>Table 334-10 Percent Within Limits</i>				
<i>Quality Index</i>	<i>Percent within Limits for Selected Sample Size</i>			
	<i>n = 3</i>	<i>n = 4</i>	<i>n = 5</i>	<i>n = 6</i>
0.00	50.00	50.00	50.00	50.00
0.05	51.38	51.67	51.78	51.84
0.10	52.76	53.33	53.56	53.67
0.15	54.15	55.00	55.33	55.50
0.20	55.54	56.67	57.10	57.32
0.25	56.95	58.33	58.87	59.14
0.30	58.37	60.00	60.63	60.94
0.35	59.80	61.67	62.38	62.73
0.40	61.26	63.33	64.12	64.51
0.45	62.74	65.00	65.84	66.27
0.50	64.25	66.67	67.56	68.00
0.55	65.80	68.33	69.26	69.72
0.60	67.39	70.00	70.95	71.41
0.65	69.03	71.67	72.61	73.08
0.70	70.73	73.33	74.26	74.71
0.75	72.50	75.00	75.89	76.32
0.80	74.36	76.67	77.49	77.89
0.85	76.33	78.33	79.07	79.43
0.90	78.45	80.00	80.62	80.93
0.95	80.75	81.67	82.14	82.39
1.00	83.33	83.33	83.64	83.80
1.05	86.34	85.00	85.09	85.18
1.10	90.16	86.67	86.52	86.50
1.15	97.13	88.33	87.90	87.78

<i>Table 334-10 Percent Within Limits</i>				
<i>Quality Index</i>	<i>Percent within Limits for Selected Sample Size</i>			
	<i>n = 3</i>	<i>n = 4</i>	<i>n = 5</i>	<i>n = 6</i>
1.20	100.00	90.00	89.24	89.01
1.25	100.00	91.67	90.54	90.19
1.30	100.00	93.33	91.79	91.31
1.35	100.00	95.00	92.98	92.37
1.40	100.00	96.67	94.12	93.37
1.45	100.00	98.33	95.19	94.32
1.50	100.00	100.00	96.20	95.19

1.55	100.00	100.00	97.13	96.00
1.60	100.00	100.00	97.97	96.75
1.65	100.00	100.00	98.72	97.42
1.70	100.00	100.00	99.34	98.02
1.75	100.00	100.00	99.81	98.55
1.80	100.00	100.00	100.00	98.99
1.85	100.00	100.00	100.00	99.36
1.90	100.00	100.00	100.00	99.65
1.95	100.00	100.00	100.00	99.85
2.00	100.00	100.00	100.00	99.97
2.05	100.00	100.00	100.00	100.00
2.10	100.00	100.00	100.00	100.00
2.15	100.00	100.00	100.00	100.00
2.20	100.00	100.00	100.00	100.00
2.25	100.00	100.00	100.00	100.00
2.30	100.00	100.00	100.00	100.00
2.35	100.00	100.00	100.00	100.00
2.40	100.00	100.00	100.00	100.00
2.45	100.00	100.00	100.00	100.00
2.50	100.00	100.00	100.00	100.00
2.55	100.00	100.00	100.00	100.00
2.60	100.00	100.00	100.00	100.00
2.65	100.00	100.00	100.00	100.00

334-8.2.2.2 Pay Factors (PF): Pay Factors will be calculated by using the following equation: $\text{Pay Factor} = (55 + 0.5 \times \text{PWL}) / 100$ The PWL is determined from Step (8) of 334-8.2.2.1.

334-8.3 Composite Pay Factor (CPF): A Composite Pay Factor for the LOT will be calculated based on the individual Pay Factors (PF) with the following weighting applied: 35 percent Density (D), 25 percent Air Voids (V_a), 25 percent asphalt binder content (P_b), 10 percent Passing No. 200 (P-200) and 5 percent Passing No. 8 (P-8). Calculate the CPF by using the following formula:

$$\text{CPF} = [(0.350 \times \text{PF } D) + (0.250 \times \text{PF } V_a) + (0.250 \times \text{PF } P_b) + (0.100 \times \text{PF } P_{-200}) + (0.050 \times \text{PF } P_{-8})]$$

Where the Pay Factor (PF) for each quality characteristic is determined in either 334-8.2.1 or 334-8.2.2, depending on the number of subplot tests. Note that the number after each multiplication will be rounded to the nearest 0.01.

The pay adjustment shall be computed by multiplying the Composite Pay Factor for the LOT by the bid price per ton. **334-8.4 Payment:** Payment will be made under: Item No. 334- 1-Superpave Asphaltic Concrete - per ton.

SECTION 344
LOCAL AGENCY PROGRAM CONCRETE

344-1 Description.

344-1 General: Construct Local Agency Program (LAP) Concrete based on the type of work as described in the Contract and the Concrete Work Categories as defined below.

344-1.2 Work Categories: Construction of LAP concrete elements will fall into one of the following Concrete Work Categories:

344-1.2.1 Concrete Work Category 1: Includes the construction of sidewalks, curb and gutter, ditch and slope pavement, or other non-reinforced cast-in-place or precast elements.

344-1.2.2 Concrete Work Category 2: Includes the construction of precast concrete including concrete barriers, traffic railing barriers, parapets, sound barriers, inlets, manholes, junction boxes, pipe culverts, storm sewers, box culverts, prestressed concrete poles, concrete bases for light poles, highway sign foundations, retaining wall systems, traffic separators or other structural precast elements.

344-1.2.3 Concrete Work Category 3: Includes the work associated with the placement and/or construction of structural cast-in-place concrete requiring a class of concrete specified in FDOT Section 346.

344-2 Materials.

344-2.1 General: Use concrete composed of a mixture of Portland cement, aggregates, and water, with or without chemical or mineral admixtures that meet the following requirements:

344-2.1.1 Portland Cement: Cement shall conform to the requirements of the AASHTO or ASTM designations. Different brands of cement, cement of the same brand from different facilities or different types of cement shall be stored separately and shall not be mixed. Portland cements meeting the requirements of AASHTO M-85 or ASTM C-150 are allowed for LAP concrete.

344-2.1.2 Coarse and Fine Aggregates: Aggregates shall meet current FDOT requirements except that source approval by the FDOT is not required.

344-2.1.3 Water: Water shall meet current FDOT requirements.

344-2.1.4 Chemical Admixtures: Chemical admixtures shall meet current FDOT requirements. Admixtures may be added at the dosage rates recommended by the manufacturer.

344-2.1.5 Pozzolans and Slag: Pozzolans and Slag shall meet the current FDOT requirements.

344-2.2 Material Storage: Use a concrete production facility that meets the following requirements.

344-2.2.1 Cementitious Materials Storage: Provide a separate and clearly labeled weatherproof facility to store each brand or type of cementitious material without mixing or contamination. Provide a suitable, safe and convenient means of collecting cementitious material samples at each storage facility.

344-2.2.2 Aggregate Storage: Provide suitable bins, stockpiles or silos to store and identify aggregates without mixing, segregating or contaminating different grades or types of materials. Identify aggregate type/gradation. Handle the aggregates in a manner to minimize segregation and meet the specification requirements when recovered from storage. Continuously and uniformly sprinkle coarse aggregate with water, for 24 hours preceding introduction into the concrete mix. Timers may be used to facilitate the sprinkling of aggregate stockpiles using an alternating on/off method. However, in no event shall the top surface of the stockpile be permitted to become dry prior to batching of concrete. Moisture probes may be used to determine the moisture content of the aggregate. Ensure that the accuracy of the probe is certified annually and verified weekly. Maintain stored aggregates in a well-drained condition to

minimize free water content. Provide access for the Engineer to sample the aggregates from the recovery side of the storage facility.

344-3 Production, Mixing and Delivery of Concrete.

344-3.1 Concrete Production Requirements: *Use concrete production facilities certified by the National Ready-Mixed Concrete Association (NRMCA), approved by the FDOT.*

Produce concrete utilizing equipment that is in good operating condition and operated in a manner to ensure a consistent product. When moisture probes are not used, ensure that the concrete production facility determines the free moisture for the coarse and fine aggregates within two hours prior to each day's batching. On concrete placements expected to exceed three hours, perform an additional moisture test approximately half way through the batching operations and adjust batch proportions accordingly.

Ensure that the calibration of the measuring devices of the concrete production facilities meets the requirements of Chapter 531 of the Florida Statutes, and are in accordance with Chapter 9.2 of the FDOT Materials Manual. At least quarterly, ensure that all scales, meters and other weighing or measuring devices are checked for accuracy by a qualified representative of a scale company registered with the Bureau of Weights and Measures of the Florida Department of Agriculture. As an alternative, the producer may have this frequency identified in an FDOT approved QC plan. The accuracy of admixture measuring dispensers will be certified annually by the admixture supplier.

When Volumetric Mixers are used for Category I applications, deliver concrete in accordance with the requirements of Volumetric Mixer Manufacturers Bureau (VMMB) and ensure that the vehicle has a VMMB registered rating plate.

344-3.2 Classes of Concrete: *Classes of concrete to be used on the project will be defined in the Contract Documents.*

344-3.3 Contractors Quality Control: *The Contractor will supply a Quality Control (QC) plan to identify to the Agency how quality will be ensured at the project site. During random inspections the Agency will use this document to verify that the construction of the project is in agreement with his QC plan.*

344-3.4 Concrete Mix Design: *Before producing any concrete, submit the proposed mix design to the Engineer on a form provided by the Agency. Otherwise, the agency will accept mix designs previously described in an FDOT approved QC plan. In any event, use only concrete mix designs having prior approval of the Engineer.*

Materials may be adjusted provided that the theoretical yield requirement of the approved mix design is met. Show all required original approved design mix data and batch adjustments and substituted material on an Agency approved concrete delivery ticket. The Engineer may disqualify any concrete production facility for non-compliance with specification requirements.

344-3.5 Delivery: *For cast-in-place applications, the maximum allowable mixing and agitation time of concrete is 90 minutes.*

Furnish a delivery ticket on a form approved by the Agency with each batch of concrete before unloading at the placement site. The delivery ticket shall be printed. Record material quantities incorporated into the mix on the delivery ticket. Ensure that the Batcher responsible for producing the concrete certifies that the batch was produced in accordance with these Specifications and signs the delivery ticket. The Contractor shall sign the delivery ticket certifying that the concrete was batched, delivered and placed in accordance with these Specifications.

The Contractor shall be responsible for rejecting loads of concrete that do not meet the plastic properties of the approve mix design or the minimum compressive strength requirements.

At the sole option of the Agency, the Engineer may accept concrete at a reduced pay when it

is determined that the concrete will serve its intended function.

344-3.6 Placing Concrete:

344-3.6.1 Concreting in Cold Weather: Do not place concrete when the temperature of the concrete at placement is below 45°F.

Meet the air temperature requirements for mixing and placing concrete in cold weather as specified in Section 346. During the curing period, if NOAA predicts the ambient temperature to fall below 35°F for 12 hours or more or to fall below 30°F for more than 4 hours, enclose the structure in such a way that the concrete and air within the enclosure can be kept above 60°F for a period of 3 days after placing the concrete or until the concrete reaches a minimum compressive strength of 1,500 psi.

Assume all risks connected with the placing and curing of concrete. Although the Engineer may give permission to place concrete, the Contractor is responsible for satisfactory results. If the placed concrete is determined to be unsatisfactory, remove, dispose of, and replace the concrete at no expense to the Agency.

344-3.6.2 Concreting in Hot Weather: Meet the temperature requirements and special measures for mixing and placing concrete in hot weather as specified in Section 346.

When the temperature of the concrete as placed exceeds 75°F, incorporate in the concrete mix a water-reducing retarder or water reducer if allowed by Section 346.

Spray reinforcing steel and metal forms with cool fresh water just prior to placing the concrete in a method approved by the Engineer.

Assume all risks connected with the placing and curing of concrete. Although the Engineer may give permission to place concrete, the Contractor is responsible for satisfactory results. If the placed concrete is determined to be unsatisfactory, remove, dispose of, and replace the concrete at no expense to the Agency.

344-3.7 Mixers: Ensure that mixers are capable of combining the components of concrete into thoroughly mixed and uniform mass, free from balls or lumps of cementitious materials, and capable of discharging the concrete uniformly. Operate concrete mixers at speeds per the manufacturer's design. Do not exceed the manufacturer's rated capacity for the volume of mixed concrete in the mixer, mixing drum, or container.

344-3.8 Small Quantities of Concrete: With approval of the Engineer, small quantities of concrete, less than 3 yd³ placed in one day and less than 0.5 yd³ placed in a single placement may be accepted using a pre-bagged mixture. The Agency may verify that the pre-bagged mixture is prepared in accordance with the manufacturer's recommendations and will meet the requirements of this Specification.

344-3.9 Sampling and Testing:

344-3.9.1 Category 1: The Engineer may sample and test the concrete at his discretion to verify its quality. The minimum 28 day compressive strength requirement for this concrete is 3,000 psi.

344-3.9.2: Category 2: Provide a statement of certification from the manufacturer of the precast element that the element meets the quality control and inspection testing requirements of the Contract Documents.

344-3.9.3 Category 3: The Agency will randomly select a sample from each 200 yd³ or one day's production to determine plastic properties and to make three 4 x 8 inch cylinders for testing by the Agency at 28 days to ensure that the design compressive strength has been met. The Agency may, at its discretion, test additional concrete samples to ensure compliance with the specifications.

344-3.10 Records: Maintain the following records for review for at least 3 years after final acceptance of the project:

1. Approved concrete mix designs.
2. Materials source (delivery tickets, certifications, certified mill test reports).
3. A copy of the scale company or testing agency report showing the observed deviations

from quantities checked during calibration of the scales and meters.

4. A copy of the documentation certifying the admixture weighing/measuring devices.

5. For Non Structural LAP concrete the Agency will accept recent NRMCA, VMMB or FDOT inspection records certifying the plant or truck can produce concrete. In addition, documentation will be available at the plant or in the truck showing that action has been taken to correct deficiencies noted during the inspections.

344-4 Acceptance of the Work.

344-4.1 Category 1 Work: *Category 1 work will be accepted based upon compliance with Production, Mixing and Delivery Requirements specified in 344-3.*

344-4.2 Category 2 Work: *Precast elements will be accepted based upon certification from the Contractor that the elements were produced by a production facility on the FDOT's current approved plant list. In addition, the producers QC stamp will be displayed on the element.*

344-4.3 Category 3 Work: *Category 3 work shall be in full compliance with this Specification, and with current FDOT Specifications, Section 346 and associated Contractor Quality Control (QC) specifications governing cast-in-place concrete. In addition, a Delivery Ticket as described in 344-3.5 will be required for acceptance of the material at the project site.*

344-5 Method of Measurement.

The quantities to be paid for will be the items shown in the plans, completed and accepted.

344-6 Basis of Payment.

Prices and payments will be full compensation for all work and materials specified in this Section.

SECTION 527
DETECTABLE WARNINGS ON WALKING SURFACES

527-1 Description.

Furnish and install Detectable Warning devices on newly constructed and/or existing concrete curb ramps and sidewalks constructed in accordance with the Design Standards, where indicated in the plans.

527-2 Materials.

527-2.1 Detectable Warning: *Provide Detectable Warnings in accordance with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) Section 4.29.2 - Detectable Warnings on Walking Surfaces. Use Detectable Warnings of materials intended for exterior use applied to concrete and subject to routine pedestrian traffic and occasional vehicular traffic. Use Detectable Warnings with size and pattern shown in the plans comprised of truncated domes aligned in parallel rows in accordance with Index No. 304 of the Design Standards. Do not use detectable warnings with a diagonal pattern.*

527-2.1.1 Preformed Materials: *Use Detectable Warnings consisting of weather-resistant tiles, pavers or mats that are adhered to concrete and have mechanical bond or fasteners, or torch-applied preformed thermoplastic. Preformed products may be used only if listed on the Qualified Products List in accordance with 527-2.4.*

527-2.1.2 Field-Formed Materials: *Use Detectable Warnings applied as a secondary application to cured concrete. Products applied as a secondary application on cured concrete, may be used only if listed on the Qualified Products List in accordance with 527-2.4.*

527-2.2 Material Properties: *Provide Detectable Warnings that meet the following minimum material property requirements when tested in accordance with the indicated Standard appropriate to the material.*

PROPERTY	STANDARD	MINIMUM THRESHOLD
<i>Slip Resistance</i>	<i>ASTM C1028, F609, F1677, F1678, F1679; E303</i>	<i>Dry Coefficient of Friction – 0.8 min. and Wet Coefficient of Friction – 0.65 min.; Or 35 BPN (include recessed areas between truncated domes)</i>
<i>Wear Resistance</i>	<i>ASTM C501</i>	<i>Average wear depth on dome ≤0.030" after 1000 abrasion cycles.</i>
<i>Water Absorption¹</i>	<i>ASTM D570</i>	<i>Not to exceed 5%.</i>
<i>Adhesion/Bond Strength</i>	<i>ASTM C482</i>	<i>No adhesion failure</i>
<i>Non-Hazardous Classification</i>	<i>RCRA Subtitle C</i>	<i>Non-Hazardous</i>

¹ *Applies only to pavers and tiles consisting of concrete materials.*

527-2.3 Color/Contrast: *Use Safety Yellow, Brick Red or Black colored Detectable Warnings, that provide an acceptable color/contrast on concrete sidewalk. Acceptable Detectable Warnings as listed on the Qualified Products List will meet the following criteria for a duration of three years.*

<i>COLOR</i>	<i>LIGHT REFLECTANCE VALUES (LRV) CAP Y*</i>
<i>Safety Yellow</i>	<i>25 – 40</i>
<i>Brick Red</i>	<i>5 – 15</i>
<i>Black</i>	<i>0 – 5</i>
<i>*When measured with a spectrophotometer</i>	

527-2.4 Qualified Products List: *Methods or products used to form Detectable Warnings in wet concrete will not be permitted. Use Detectable Warnings listed on the Department Qualified Products List (QPL). Manufacturers of Detectable Warnings seeking evaluation of their product shall submit an application in accordance with Section 6. Manufacturers must demonstrate performance in accordance with the requirements of these Specifications and with the acceptance criteria detailed in Index No. 304 of the Design Standards. Submit Applications that include certified test reports from an independent laboratory that shows the Detectable Warning meets the material properties and all requirements specified herein. Application must include manufacturer’s installation drawings that describe detailed quality control requirements for installation including, but not limited to: special materials and/or equipment; recommendations for cleaning/preparing substrate surfaces; bonding method describing thickness, spread rate and/or curing time(s) of grout or adhesive materials; mechanical anchorage; and protection of Detectable Warning materials during set-up/curing period.*

In addition, manufacturer’s drawings must provide recommended quality control procedures for touch-up and repair of localized areas of installations, for compliance with the acceptance criteria provided in Index No. 304 of the Design Standards.

527-3 Installation Procedures.

527-3.1 Surface Preparation and Installation: *Prepare the surface in accordance with the Detectable Warning manufacturer’s recommendations. Install Detectable Warnings in accordance with the manufacturer’s instructions, using materials and/or equipment recommended and approved by the Detectable Warning manufacturer for adherence to cementitious substrate surfaces. Ensure that all installations are made in accordance with the manufacturer’s installation drawings referenced by the QPL.*

527-4 Method of Measurement.

Detectable Warnings applied to newly constructed concrete sidewalk/curb ramps will be included in the cost of the concrete sidewalk/curb ramp. Detectable Warnings applied to existing curb ramps will be paid per each Detectable Warning that is furnished, installed and accepted.

527-5 Basis of Payment.

Price and payment will be full compensation for all work specified in this Section, including all labor, surface preparation, materials and incidentals necessary to complete the work for Detectable Warnings installed on each curb ramp.

Payment will be made under:

Item No. 527- 1- Detectable Warnings on Walking Surfaces - each.

SECTION 580 LANDSCAPE INSTALLATION

580-1 Description.

Plant trees and shrubs of the species, size, and quality indicated in the plans.

The Engineer reserves the right to adjust the number and location of any of the designated types and species to be used at any of the locations shown, in order to provide for any unanticipated effects which might become apparent after the substantial completion of other phases of the project, or for other causes.

580-2 Materials.

580-2.1 Plants:

580-2.1.1 Authority for Nomenclature; Species, etc.: *For the designated authority in the identification of all plant material, refer to two publications of L.H. Bailey: "Hortus III" and "Manual of Cultivated Plants," and ensure that all specimens are true to type, name, etc., as described therein. For the standard nomenclature, refer to the publication of the American Joint Committee on Horticultural Nomenclature, "Standardized Plant Names."*

580-2.1.2 Grade Standards and Conformity with Type and Species: *Only use nursery grown plant material except where specified as Collected Material. Use nursery grown plant material that complies with all required inspection, grading standards, and plant regulations in accordance with the latest edition of the Florida Department of Agriculture's "Grades and Standards for Nursery Plants".*

Except where a lesser grade might be specifically specified in the plans, ensure that the minimum grade for all trees and shrubs is Florida No. 1. Ensure that all plants are the proper size and grade at the time of delivery to the site, throughout the project construction period and during any designated plant establishment period.

Ensure that plant materials are true to type and species and that any plant materials not specifically covered in Florida Department of Agriculture's "Grades and Standards for Nursery Plants" conform in type and species with the standards and designations in general acceptance by Florida nurseries.

Ensure that plant materials are shipped with tags stating the botanical and common name of the plant.

580-2.1.3 Inspection and Transporting: *Move nursery stock in accordance with all Federal and State regulations therefor, and accompany each shipment with the required inspection certificates for filing with the Engineer.*

580-2.2 Water: *Water used in landscaping operations may be obtained from any approved source. Ensure that water is free of any substance which might be detrimental to plant growth. The use of effluent water is subject to approval and must meet all Federal, State and Local requirements.*

580-3 Specific Requirements for the Various Plant Designations.

580-3.1 Balled-and-Burlapped Plants (B&B), and Wired Balled-and-Burlapped (WB & B):

580-3.1.1 General: *Properly protect the root ball of these plants until planting them. The Engineer may reject any plant which shows evidence of having been mishandled.*

Set the B&B and WB&B plants then remove the top 2/3 of all wire, rope, and binding surrounding the plant. Remove the burlap from the top 4 inches [100 mm] of the root ball. Do not disturb the root ball in any way. Bare root material is not allowed for substitution.

At least 90 days before digging out B & B and WB & B plants, root-prune those 1 1/2 inches [38 mm] or greater in diameter and certify such fact on accompanying invoices.

580-3.1.2 Provisions for Wiring: For plants grown in soil of a loose texture, which does not readily adhere to the root system (and especially in the case of large plants or trees), the Engineer may require WB & B plants. For WB & B plants, before removing the plant from the excavated hole, place sound hog wire around the burlapped ball, and loop and tension it until the tightened wire netting substantially packages the burlapped ball such as to prevent disturbing of the loose soil around the roots during handling.

580-3.2 Container-Grown Plants (CG): The Engineer will not accept any CG plants with roots which have become pot-bound or for which the top system is too large for the size of the container. Fully cut and open all containers in a manner that will not damage the root system. Do not remove CG plants from the container until immediately before planting to prevent damage to the root system.

580-3.3 Collected Plants (Trees and Shrubs) (C): Use C plants which have a root ball according to "Florida Grades and Standards for Nursery Plants". Do not plant any C plant before the Engineer's inspection and acceptance at the planting site.

580-3.4 Collected Plants (Herbaceous) (HC): The root mass and vegetative portions of collected herbaceous plants shall be as large as the specified container-grown equivalent. Do not plant any collected plant before inspection and acceptance by the Engineer.

580-3.5 Specimen Plants (Special Grade): When Specimen (or Special Grade) plants are required, label them as such on the plant list, and tag the plant to be furnished.

580-3.6 Palms: Wrap the roots of all plants of the palm species before transporting, except if they are CG plants and ensure that they have an adequate root ball structure and mass for healthy transplantation as defined in "Florida Grades and Standards for Nursery Plants".

The Engineer will not require burlapping if the palm is carefully dug from marl or heavy soil that adheres to the roots and retains its shape without crumbling. During transporting and after arrival, carefully protect root balls of palms from wind and exposure to the sun. Muck grown palms are not allowed. After delivery to the job site, if not planting the palm within 24 hours, cover the root ball with a moist material. Plant all palms within 48 hours of delivery to the site.

Move sabal and coconut palms in accordance with the "Florida Grades and Standards for Nursery Plants."

580-3.7 Substitution of Container-Grown (CG) Plants: With the Engineer's approval, the Contractor may substitute CG plants for any other root classification types, if he has met all other requirements of the Contract Documents.

580-4 Planting Requirements.

580-4.1 Layout: Prior to any excavation or planting, mark all planting beds and individual locations of palms, trees, large shrubs and proposed art and architectural structures, as shown in the plans, on the ground with a common bright orange colored spray paint, or with other approved methods, within the project limits. Obtain the Engineer's approval and make necessary utility clearance requests.

580-4.2 Excavation of Plant Holes: Excavate plant holes after an area around the plant three times the size of the root ball has been tilled to a depth of the root ball. Ensure that the plant hole is made in the center of the tilled area only to the depth of the plant root ball.

Where excess material has been excavated from the plant hole, use the excavated material to backfill to proper level.

580-4.3 Setting of Plants: Center plants in the hole. Lower the plant into the hole so that it rests on a prepared hole bottom such that the roots are level with, or slightly above, the level of their previous growth and so oriented such as to present the best appearance.

Backfill with native soil, unless otherwise specified on the plans. Firmly rod and water-in the backfill so that no air pockets remain. Apply a sufficient quantity of water immediately upon planting to

thoroughly moisten all of the backfilled earth. Keep plants in a moistened condition for the duration of the planting period.

When so directed, form a water ring 6 inches [150 mm] in width to make a water collecting basin with an inside diameter equal to the diameter of the excavated hole. Maintain the water ring in an acceptable condition.

580-4.4 Special Bed Preparation: Where multiple or mass plantings are to be made in extended bedding areas, and the plans specify Special Bed Preparation, prepare the planting beds as follows:

Remove all vegetation from within the area of the planting bed and excavate the surface soil to a depth of 6 inches [150 mm]. Backfill the excavated area with peat, sand, finish soil layer material or other material to the elevation of the original surface. Till the entire area to provide a loose, friable mixture to a depth of at least 8 inches [200 mm]. Level the bed only slightly above the adjacent ground level. Then mulch the entire bedding area, in accordance with 580-8.

580-5 Staking and Guying.

580-5.1 General: When specified in the plans, or as directed by the Engineer, stake plants in accordance with the following.

Use wide plastic, rubber or other flexible strapping materials to support the tree to stakes or ground anchors that will give as the tree moves in any direction up to 30 degrees. Do not use rope or wire through a hose. Use guy chords, hose or any other thin bracing or anchorage material which has a minimum 12 inches [300 mm] length of high visibility flagging tape secured to guys, midway between the tree and stakes for safety.

Stake trees larger than 1 inch [25 mm] diameter and smaller than 2 inches [50 mm] diameter with a 2 by 2 inch [50 by 50 mm] stake, set at least 2 feet [0.6 m] in the ground and extending to the crown of the plant. Firmly fasten the plant to the stake with flexible strapping materials as noted above.

580-5.2 Trees of 2 to 3 1/2 inches [50 to 90 mm] Caliper: Stake all trees, other than palm trees, larger than 2 inches [50 mm] caliper and smaller than 3 1/2 inches [90 mm] caliper with two 2 by 4 inch [50 by 100 mm] stakes, 8 feet [2.4 m] long, set 2 feet [0.6 m] in the ground. Place the tree midway between the stakes and hold it firmly in place by flexible strapping materials as noted above.

580-5.3 Large Trees: Guy all trees, other than palm trees, larger than 3 1/2 inches [90 mm] caliper, from at least three points, with flexible strapping materials as noted above.

Anchor flexible strapping to 2 by 4 by 24 inch [50 by 100 by 600 mm] stakes, driven into the ground such that the top of the stake is at least 3 inches [75 mm] below the finished ground.

580-5.4 Special Requirements for Palm Trees: Brace palms which are to be staked with three 2 by 4 inch [50 by 100 mm] wood braces, toe-nailed to cleats which are securely banded at two points to the palm, at a point one third the height of the trunk. Pad the trunk with five layers of burlap under the cleats. Place braces approximately 120 degrees apart and secure them underground by 2 by 4 by 12 inch [50 by 100 by 300 mm] stake pads.

580-6 Tree Protection and Root Barriers.

Install tree barricades when called for in the Contract Documents or by the Engineer to protect existing trees from damage during project construction. Place barricades at the drip line of the tree foliage or as far from the base of the tree trunk as possible. Barricades shall be able to withstand bumps by heavy equipment and trucks. Maintain barricades in good condition.

When called for in the Contract Documents, install root barriers or fabrics in accordance with the details shown.

580-7 Pruning.

Prune all broken or damaged roots and limbs in accordance with established arboriculture practices. When pruning is completed ensure that all remaining wood is alive. Do not reduce the size or quality of the plant below the minimum specified.

580-8 Mulching.

Uniformly apply mulch material, consisting of wood chips (no Cypress Mulch is allowed), pine straw, compost, or other suitable material approved by the Engineer, to a minimum loose thickness of 3 inches [75 mm] over the entire area of the backfilled hole or bed within two days after the planting. Maintain the mulch continuously in place until the time of final inspection.

580-9 Disposal of Surplus Materials and Debris.

Dispose of surplus excavated material from plant holes by scattering or otherwise as might be directed so that it is not readily visible or conspicuous to the passing motorist or pedestrian. Remove all debris and other objectionable material from the site and clean up the entire area and leave it in neat condition.

580-10 Contractor's Responsibility for Condition of the Plantings.

Ensure that the plants are kept watered, that the staking and guying is kept adjusted as necessary, that all planting areas and beds are kept free of weeds and undesirable plant growth and that the plants are maintained so that they are healthy, vigorous, and undamaged at the time of acceptance.

580-11 Plant Establishment Period.

If the Contract Documents designate a Plant Establishment Period, assume responsibility for the proper maintenance, survival and condition of all landscape items during such period at no additional cost.

580-12 Method of Measurement.

The quantities to be paid for will be the items shown in the plans, completed and accepted.

580-13 Basis of Payment.

Prices and payments will be full compensation for all work specified in this Section.

**SECTION 993
OBJECT MARKERS AND DELINEATORS**

993-1 Object Markers.

993-1.1 General: Object markers shall meet the general requirements outlined in the Manual of Uniform Traffic Control Devices (MUTCD). For uniformity, all Type 1 markers shall be either OM1-1 or OM1-3 style markers, all Type 2 markers shall be either OM2-1V or OM2-2V style markers and all end of road markers shall be either OM4-1 or OM4-3 style markers.

993-1.2 Retroreflectors: The reflectors shall be of acrylic plastic and shall be a minimum of 3 inches in diameter. They shall be mounted in a heavy-duty housing with a back plate.

The reflector shall consist of a clear and transparent plastic lens, which shall be red or amber as specified, and a plastic back of the same material, fused to the lens under heat and pressure around the entire perimeter, in such manner as to form a homogeneous unit, permanently sealed against dust, water, and water vapor.

The lens shall consist of a smooth front surface, free from projections or indentations (other than for identification or orientation) and a rear surface bearing a prismatic configuration such that it will effect total internal reflection of light.

The acrylic plastic shall be of a type meeting the requirements of Federal Specification L-P-380, Type I, Class 3, and, in order that the Department can readily check the suitability of the raw material used, the manufacturer shall stipulate the raw material and the particular molding compound to be furnished.

993-1.2.1 Durability Tests for Retroreflectors: Seal Test: The following test will be used to determine if a reflector is adequately sealed against dust and water.

Submerge 20 samples in water bath at room temperature. Subject the submerged samples to a vacuum of 10 inches gauge for five minutes. Restore atmospheric pressure and leave samples submerged for five minutes, then remove and examine the samples for water intake. Failure of more than two of the 20 samples tested shall be cause for tentative rejection of the LOT.

993-1.2.2 Optical Requirements: The initial specific intensity of object markers shall be at least equal to the minimum values shown below. Failure to meet the required specific intensity shall constitute failure of the reflector being tested.

Observation Angle	Entrance Angle	Specific Intensity candelasr/foot-candle		
		Crystal	Yellow	Red
0.1 degree	0 degree	40	24	10
0.1 degree	20 degree	16	10	4

The reflector to be tested shall be spun so as to have an average orientation effect, and shall be placed at a distance of 100 feet from a single light source having an effective diameter of 2 inches. The light source shall be operated at approximately normal efficiency. The return light from the reflector shall be measured by means of a photo-electric photometer having a minimum sensitivity of 1 by 10⁷ foot-candles per mm scale division. The photometer shall have a receiving aperture of 1/2 inch

diameter, shielded to prevent the entry of stray light. The distance from light source center to aperture center shall be 2.1 inches for the 0.1 degree observation angle.

If a test distance other than the stipulated 100 feet is used, the source and the aperture dimensions, and the distance between source and aperture shall be modified directly as the test distance.

993-1.2.3 Reflector Housing: The reflector shall be mounted in a housing fabricated of aluminum alloy No. 3003-H 14 (or other alloy approved as equal for the purpose), and having a thickness of 0.064 inch.

993-1.3 Retroreflective Sheeting:

993-1.3.1 Retroreflective Sheeting: The retroreflective sheeting for object markers shall meet the requirements of Section 994, sheeting Types III, IV, or VII. The retroreflective area shall be in accordance with the MUTCD. The retroreflective sheeting shall be permanently adhered to 0.040 inch sheet aluminum for Type 2 markers and 0.080 inch sheet aluminum for Type 1, 3 and end of the road markers. Aluminum shall be of 6061-T6 (ASTM B-209) prepared in accordance with recommendations of the sheeting manufacturer.

993-1.3.2 Assembly: Type 2 and 3 markers shall be mounted directly to the post by two holes on the face of the marker. The mounting holes shall be 1/4 inch square holes to receive 1/4 inch carriage bolts, or other 1/4 inch bolts and shall be spaced to fit holes on the post spaced at 1 inch centers.

993-1.4 Posts: The marker posts shall be of steel or aluminum as shown in the Design Standards or plans. Steel posts shall be 2.5[#]/Ft. flanged U-Channel meeting the requirements of 700-2.3. Round aluminum posts shall meet the requirements of Index 11860.

993-2 Delineators.

993-2.1 General: Delineators shall be classified into four types: recycled flexible post delineators, nonflexible post delineators, high visibility median separator delineators, and high performance delineators.

993-2.2 Recycled Flexible Post Delineators: Meet the requirements of

Section 972. **993-2.3 Nonflexible Post Delineators:** **993-2.3.1 Posts:** The post shall be 1.1[#]/Ft. steel U-Channel posts meeting the requirements of 700-2.3.

993-2.3.2 Retroreflective Sheeting: The retroreflective sheeting shall be Types III, IV, V or VII sheeting and meet the requirements of Section 994. The reflective sheeting shall have a minimum width of 4 inches and have a minimum area of 32 square inches. The retroreflective sheeting shall be permanently adhered to 0.040 inch sheet aluminum.

993-2.4 High Visibility Median Separator Delineators: 993-2.4.1

Dimensions: The delineator shall have a minimum height of 42 inches above the surface of the separator.

993-2.4.2 Post Base: The base shall be manufactured to accommodate the replacement of the post. The base shall be mechanically anchored to the separator and be capable of withstanding ten vehicle impacts without damage.

993-2.4.3 Color: The plastic post shall be opaque white. The yellowness index shall

not exceed 12 when tested in accordance with ASTM D-1925 or ASTM E-313. The daylight 45 degree, 0 degree luminous directional reflectance shall be a minimum of 70 when tested in accordance with ASTM E 1347 or ASTM E-1164.

993-2.4.4 Retroreflective Sheeting: The reflective sheeting shall be Types III, IV, V or VII and meet the requirements of Section 994. The reflective sheeting shall have a minimum width of 8 inches and have a minimum area of 230 square inches facing the approach to the separator.

993-2.4.5 Impact Performance: The post, installed according to manufacturer's recommendations, shall be capable of returning to a vertical position ± 5 degrees when tested according to National Testing Product Evaluation Program (NTPEP). The NTPEP requirement of one-half of the hits at 32 F is waived. All hits may be at 65 F or greater. NTPEP data or independent test lab data shall be submitted for product approval.

993-2.5 High Performance Delineators: **993-2.5.1 Dimensions:** The delineator shall have a minimum height of 48 inches above the pavement surface and have a minimum dimension of 2 inches.

993-2.5.2 Post Base: The base shall be manufactured to accommodate the replacement of the post. The base shall be mechanically anchored to the pavement and be capable of withstanding fifty vehicle impacts without damage.

993-2.5.3 Color: The plastic post shall be opaque white. The yellowness index shall not exceed 12 when tested in accordance with ASTM D-1925 or ASTM E-313. The daylight 45 degree, 0 degree luminous directional reflectance shall be a minimum of 70 when tested in accordance with ASTM E-1347 or ASTM E-1164.

993-2.5.4 Retroreflective Sheeting: The reflective sheeting shall be Type V abrasion resistant sheeting and meet the requirements of Section 994. The reflective sheeting shall have a minimum omni directional area of 30 square inches.

993-2.5.5 Impact Performance: The post, installed according to manufacturer's recommendations, shall be capable of returning to a vertical position ± 5 degrees with no delaminating after receiving fifty vehicle impacts when tested according to National testing Product Evaluation Program (NTPEP). The NTPEP requirement of one-half of the hits at 32° F is waived. All hits shall be at 65° F or greater. NTPEP data or independent test lab data shall be submitted for product approval. For acceptance purposes there should be no post failures and no more than two posts may list between 5° and 10° after receiving fifty vehicle impacts.

993-3 Retroreflector Units for Guardrail and Concrete Barrier Wall.

993-3.1 General: Retroreflector units for use on guardrail and concrete barrier wall installations shall consist of retroreflective sheeting permanently adhered to 0.090 inch minimum thick body. The body shall have a flexible hinge which allows the reflector to fold down and spring back to an upright position after impact. Guardrail reflectors shall be designed for mounting to the web of steel posts or designed for mounting to wood posts. Barrier wall reflectors shall be designed for mounting to the top of the barrier wall.

993-3.2 Retroreflective Sheeting: The sheeting for these reflector units shall be Type IV, V, or VII meeting the requirements of Section 994. The sheeting shall be yellow or white, depending on the locations of use for each. The dimensions of the reflective sheeting shall be 3 wide by 4 inches high. The

sheeting shall be installed by the reflector manufacturer.

993-3.3 Installation: *The reflector units shall be capable of being installed on the top of guardrail posts or the top of the barrier wall.*

993-4 Product Acceptance on the Project.

Acceptance will be made in accordance with the requirements of Section 705. Manufacturers seeking evaluation of their product must submit an application in accordance with Section 6.

**PERMIT RELATED
CORRESPONDENCE**

SCANNED 09/02/2010 09:17 00



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Environmental Resource Regulation
Application No.: 100709-17

August 2, 2010

CITY OF KEY WEST
525 ANGELA STREET
KEY WEST, FL 33041

Dear Permittee:

SUBJECT: 44-00469-P

Project : CITY OF KEY WEST – COLLEGE ROAD ENHANCEMENTS
Location: Monroe County,

This is to acknowledge receipt of your application to construct a concrete sidewalk along the east side of College Road, with minimal impacts to transitional upper tidal wetlands adjacent to a tidal pond. The project design incorporates silt fencing as shown in Exhibit 2 to isolate the construction area from the wetlands along the 100 ft long portion of sidewalk adjacent to the wetlands.

The South Florida Water Management District (District) has reviewed the information submitted and has determined that the proposed activity will have only minimal or insignificant individual or cumulative adverse impacts on the water resources of the District. Therefore, based solely on the documents submitted to the District on July 9, 2010, the project qualifies for an exemption pursuant to subsection 373.406(6), Florida Statutes. Activities which qualify for this exemption must be conducted and operated using appropriate best management practices and in a manner which does not cause a water quality violation pursuant to Florida Administrative Code 62-302.

This letter does not relieve you from the responsibility of obtaining other permits (federal, state or local) which may be required for the project.

The determination that this project qualifies as an exempt activity may be revoked if the installation is substantially modified, if the basis for the exemption is determined to be materially incorrect, or if the installation results in violation of state water quality standards. Any changes made in the construction plans or location of the project may necessitate a permit from the District. Therefore, you are advised to contact the District before beginning the project and before beginning any work in wetlands which is not specifically described in the submittal.

The notice of determination that the project qualifies as an exempt activity constitutes final agency action by the District unless a petition for administrative hearing is filed. Upon timely filing of a petition, this Notice will not be effective until further Order of the District.

The District has not published a notice in the newspaper advising the public that it is determining that this activity is exempt pursuant to subsection 373.406(6), Florida Statutes. Enclosed is a sample package used for newspaper noticing by the District. Publication, using the District form, notifies members of the public

3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • FL WATS 1-800-432-2045
Mailing Address: P.O. Box 24680, West Palm Beach, FL 33416-4680 • www.sfwmd.gov

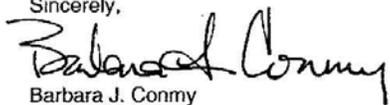
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Application No.: 100709-17
August 2, 2010
Page : 2

(third parties) of their rights to challenge the determination. If proper notice is given by publication, third parties have a 21-day time limit to file a petition opposing the determination. If you do not publish a notice, a party's right to challenge the determination extends for an indefinite period of time. If you wish to have certainty that the period of filing such a challenge is closed, then you may publish, at your own expense, such a notice in a newspaper of general circulation. A copy a list of newspapers typically used by the District is attached for your information (Attachment 1). If you choose to publish this notice, please provide us with proof of publication when it becomes available. A sample notice is included to provide guidance on the language used in the publication (see Attachment 2, Sample Notice).

Should you have any questions concerning this matter, please contact this office.

Sincerely,



Barbara J. Conmy
Sr Supv Environmental Analyst
Palm Beach Service Center

BC/ch

Enclosures

Certified Mail: 7006 2760 0004 3190 1695

c: Bermello Ajamil And Partners Inc

SCANNED 03/02/2010 08:17:08

NOTICE OF RIGHTS

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

RIGHT TO REQUEST ADMINISTRATIVE HEARING

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

Filing Instructions

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

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

Initiation of an Administrative Hearing

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

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

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

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

Mediation

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

RIGHT TO SEEK JUDICIAL REVIEW

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

SCANNED 09/02/2010 09:11:59

NEWSPAPERS:

Charlotte Sun Herald	(Charlotte County)
Clewiston News	(Hendry County)
Ft. Lauderdale News/Sun Sentinel	(Broward County)
Ft. Myers News Press	(Lee County)
Ft. Pierce News Tribune	(St. Lucie County)
Glades County Democrat	(Glades County)
Key West Citizen	(Monroe County)
Lake Placid Journal	(Highlands County)
Lakeland Ledger	(Polk County)
Miami Herald	(Miami-Dade County)
Naples Daily News	(Collier County)
Okeechobee News	(Okeechobee County)
Orlando Sentinel Start	(Orange County)
Osceola Shopper/News Gazette	(Osceola County)
Palm Beach Post	(Palm Beach County)
South Dade News Leader	(Miami-Dade County - Agr projects in south Miami -Dade)
Stuart News	(Martin County)

ATTACHMENT 1

Information on advertising Notice of Intended Agency Action or Notice of Agency Action:

Attached is sample language that can be used as a guideline in writing a notice. The sample is for noticing intended agency action and can be reworded to accommodate a Notice of Agency Action. Notice should include enough detail to satisfy adequate notice to interested parties. Please direct any questions on notice content to your legal staff.

Also included is a list of newspapers of general circulation used by the South Florida Water Management District when advertising Notice of Receipt of Application.

If you publish notice, please provide Proof of Publication and a copy of the notice to Beth Colavecchio, Regulatory Information Management Division, Environmental Resource Regulation Department, PO Box 24680, West Palm Beach, FL 33416-4680.

ATTACHMENT 2

1/7/2008

Page 1 of 4

SCANNED 09/02/2010 09:18:09

NOTICE OF INTENDED AGENCY ACTION

(For publication in newspaper of general circulation)

The South Florida Water Management District gives notice of its intent to issue an Environmental Resource permit (permit) with conditions **[Permit Number XXXX, Application Number XXXX]** to **[name and address of applicant]** to **[ACCURATE brief description of project or activity, include project name and land use, and the location of the project to include County, Section, Township and Range]**.

The Staff report setting forth the staff recommendation regarding the permit, including proposed limiting conditions to provide reasonable assurances that the project meets SFWMD statutes and rules, can be obtained by contacting the Regulatory Records Management Section, during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at 3301 Gun Club Road, West Palm Beach, FL 33406, Environmental Resource Regulation Department, by telephone at (561) 682-6911, by e-mail at permits@sfwmd.gov or by accessing the Staff Report directly from the District's website (www.sfwmd.gov) using the Application/Permit search on the ePermitting page.

The District's proposed agency action as set forth in the Staff Report shall become final unless a timely petition for an administrative hearing is filed under sections 120.569 and 120.57 of the Florida Statutes before the deadline for filing a petition.

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

11/9/07 (ERP)

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Filing Instructions

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

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1. Identification of the action being contested, including the permit number, application number, District file number or any other SFWMD identification number, if known.
2. The name, address and telephone number of the petitioner and the petitioner's substantial interests will be affected by the agency determination.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.

11/9/07 (ERP)

Page 3 of 4

SCANNED 09/02/2010 09:17:08

4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exists, the statement must also include and explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

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

Mediation

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and rules 28-106.111 and 28-106401405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

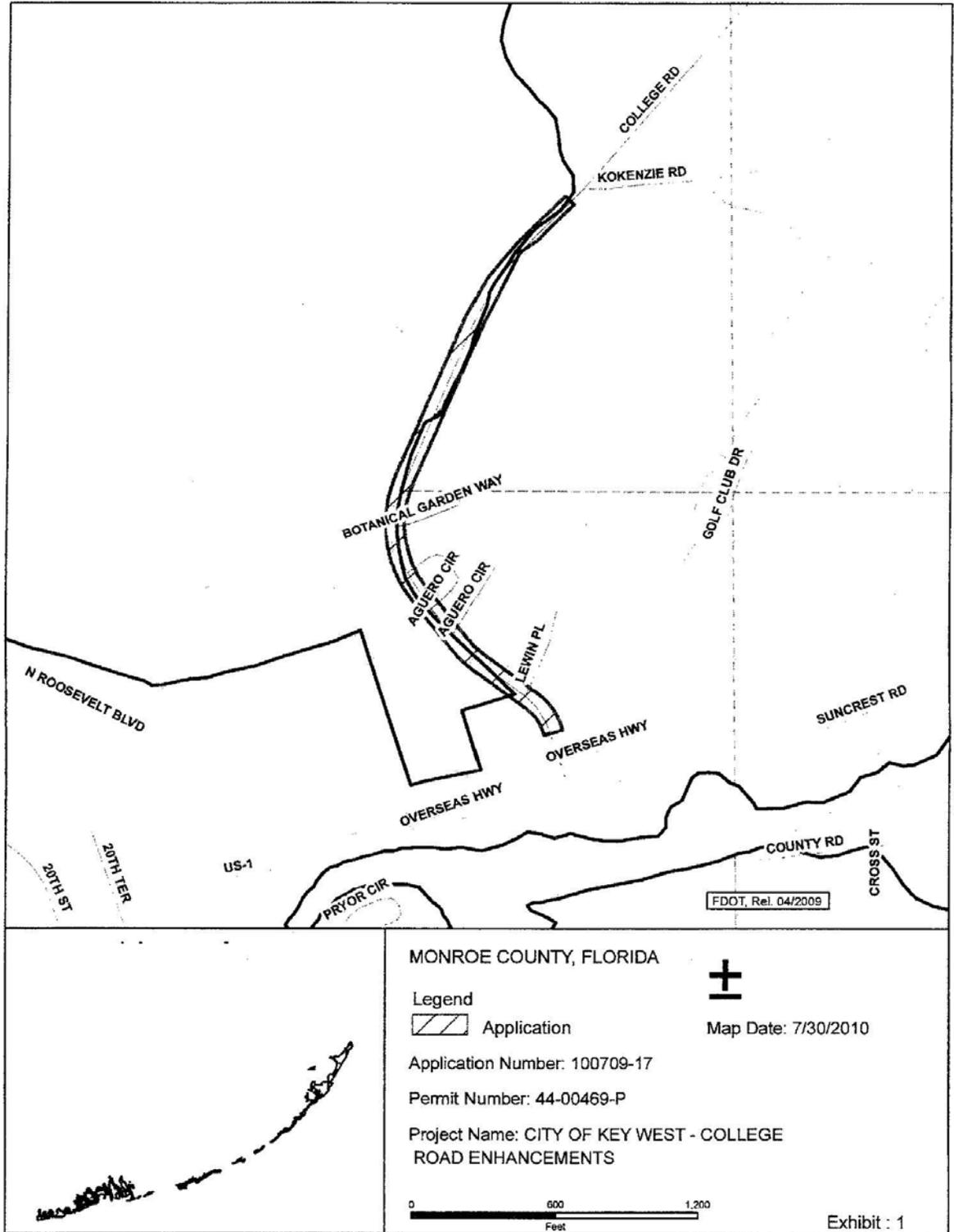
RIGHT TO SEEK JUDICIAL REVIEW

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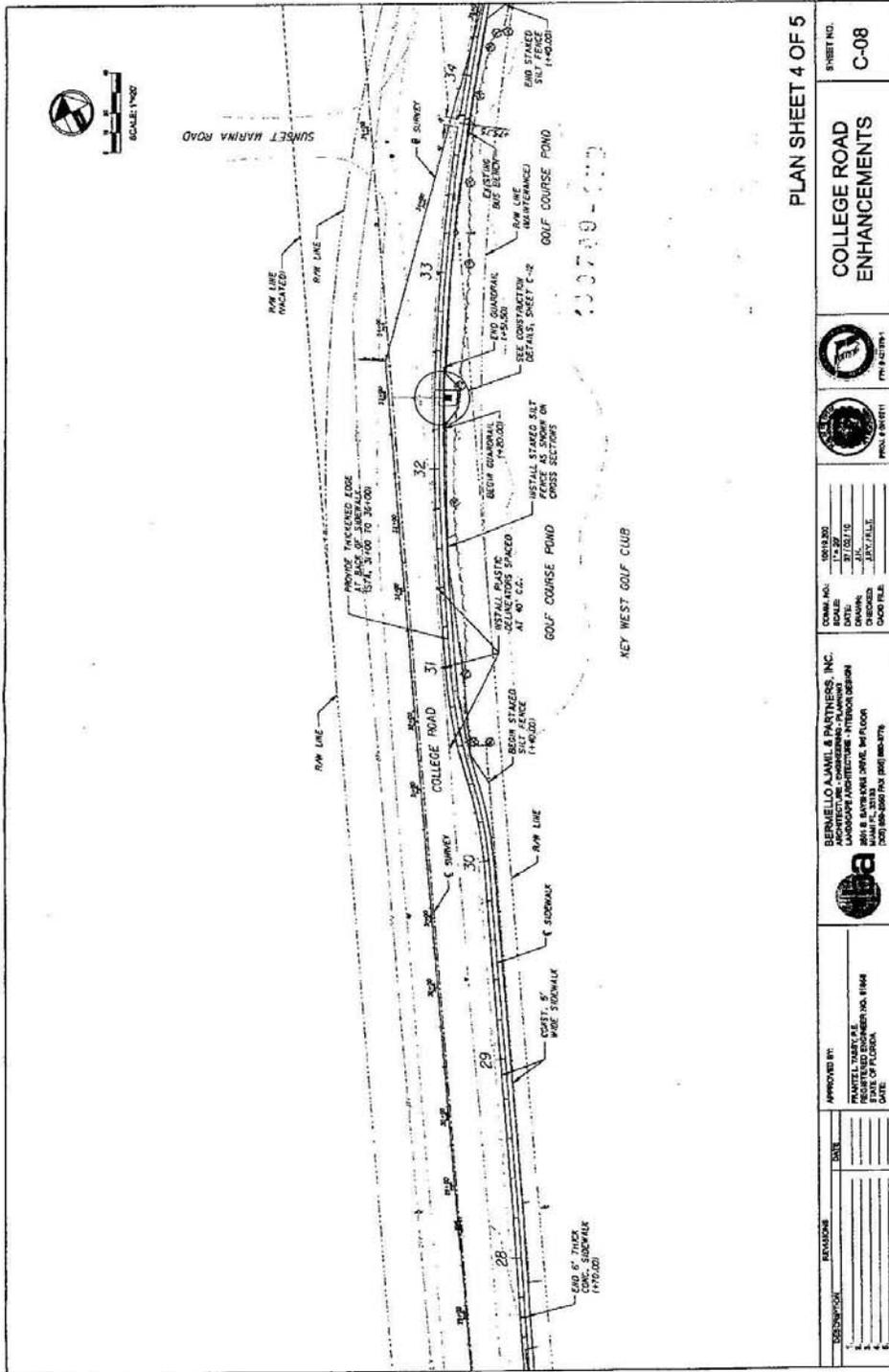
11/9/07 (ERP)

Page 4 of 4

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Application No. 100709-17

Exhibit 2

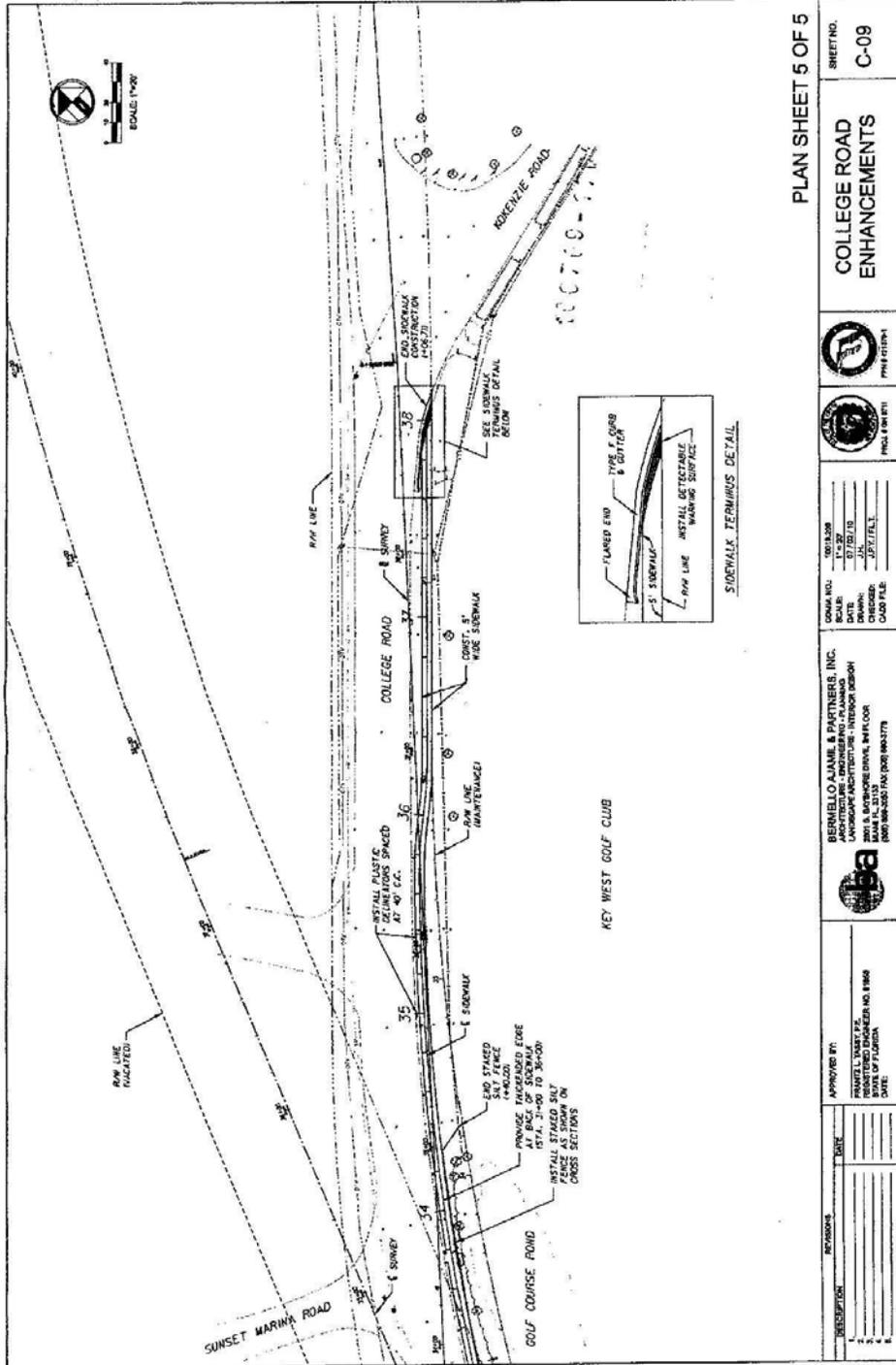
Page 1 of 4

GN 0711

246

College Road Enhancements
SFWMD Correspondence

SCANNED 08/02/2010 09:11:40

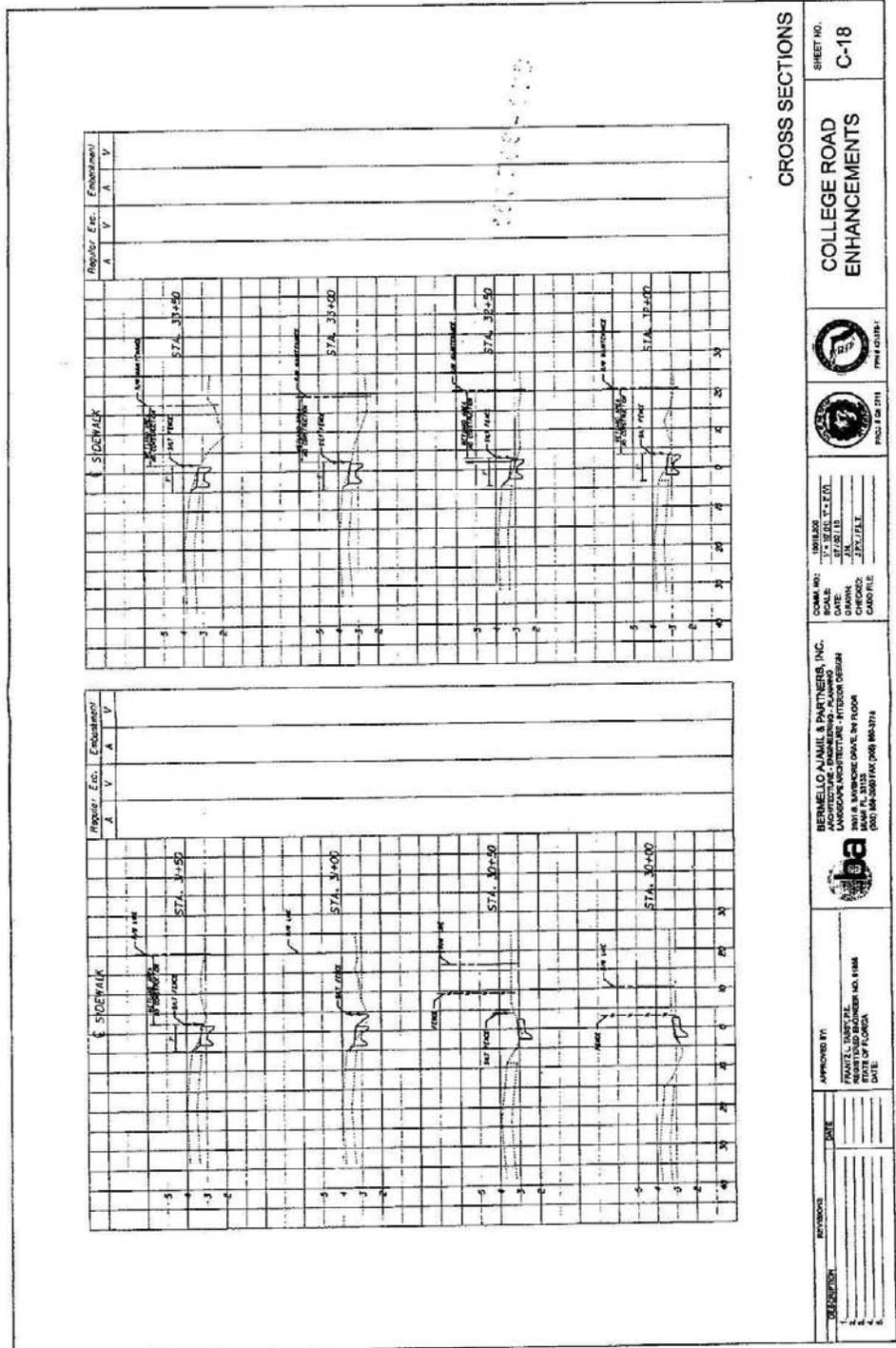


PLAN SHEET 5 OF 5

COLLEGE ROAD ENHANCEMENTS	SHEET NO. C-09			DRAWN BY: JUL CHECKED BY: JUL DATE: JUL		BERNIBLO AJAMI & PARTNERS, INC. ARCHITECTURE - ENGINEERING - PLANNING LANDSCAPE ARCHITECTURE - INTERIOR DESIGN 10000 BAYVIEW BLVD., SUITE 100 MIAMI, FL 33157 (305) 555-5555 FAX (305) 555-5578
DONALD NO. 100709-17 SCALE: 1" = 20' DATE: JUL DRAWN BY: JUL CHECKED BY: JUL DATE: JUL		PROJECT NO. 100709-17 PROJECT NAME: COLLEGE ROAD ENHANCEMENTS		APPROVED BY: FRANK L. WATTS, P.E. REGISTERED PROFESSIONAL ENGINEER STATE OF FLORIDA DATE:		DESCRIPTION:

SCANNED DRAWING 08117 08

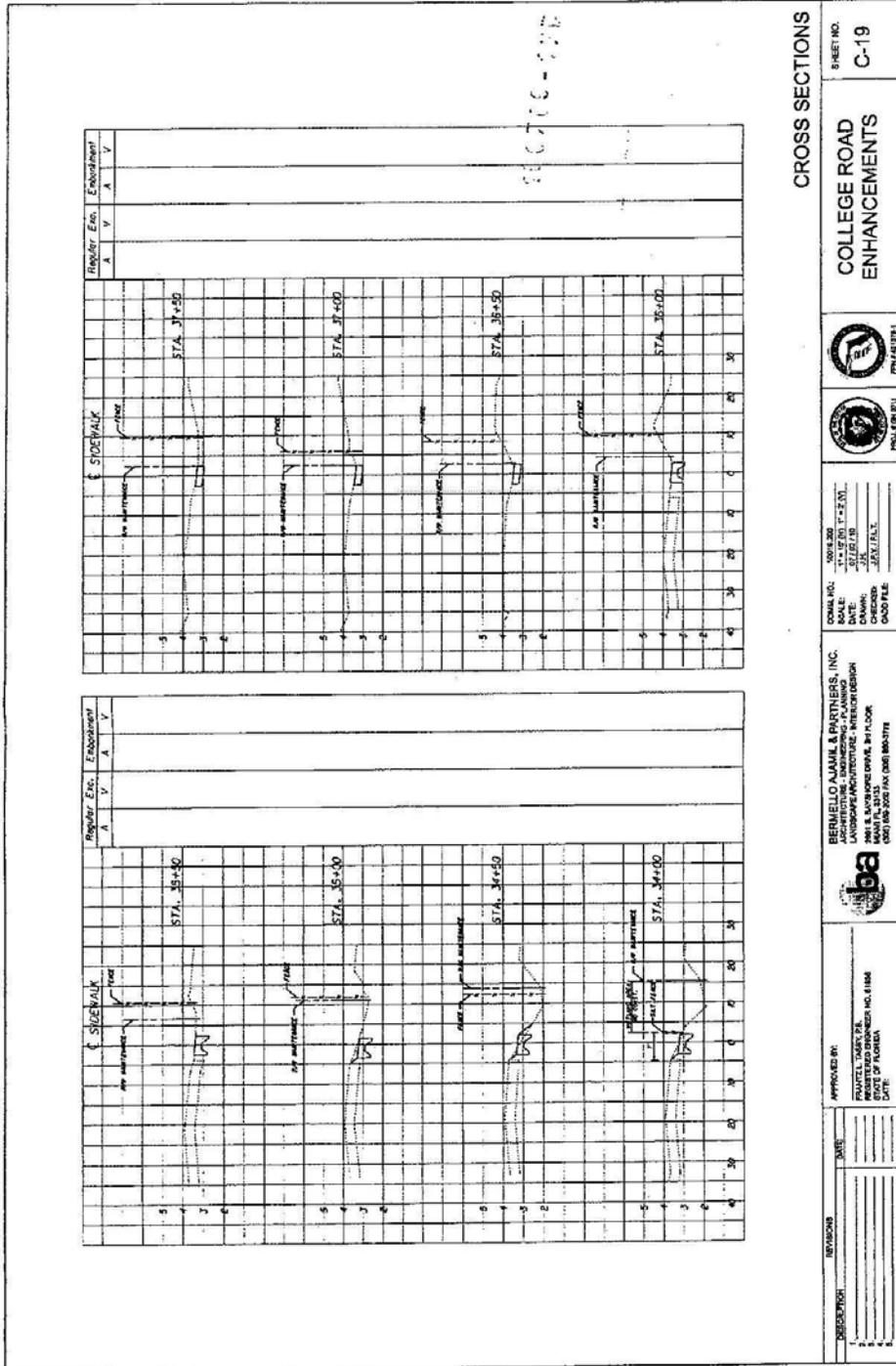
08117 08



CROSS SECTIONS

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">DESCRIPTION</td> <td style="width: 50%;">DATE</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	DESCRIPTION	DATE									<p>APPROVED BY: FRANK L. DANEY, P.E. REGISTERED ENGINEER, MA & FLORIDA DATE: _____</p>	<p>BERNARD LO JAMES & PARTNERS, INC. ARCHITECTURE, ENGINEERING, PLANNING & LANDSCAPE ARCHITECTURE - INTERIOR DESIGN 1000 N. WASHINGTON AVENUE, 10TH FLOOR PORTLAND, MAINE 04108-3274 PHONE: 603-833-7274</p>	<p>COMMA NO. 100709 SCALE: 1" = 20' (VERT. 1" = 10') DATE: 08/11/10 CHECKED: JFL/JEL CADD FILE</p>	<p>COLLEGE ROAD ENHANCEMENTS</p>	<p>SHEET NO. C-18</p>
DESCRIPTION	DATE														

SCANNED 08/02/2010 08:17:08



CROSS SECTIONS

COLLEGE ROAD ENHANCEMENTS

SHEET NO. **C-19**

DESIGNER:	DATE:	SCALE:	PROJECT:

BERNIELLO AJAMIL & PARTNERS, INC.
 2001 S. UNIVERSITY AVENUE, SUITE 100
 TAMPA, FLORIDA 33606
 (813) 288-8877

APPROVED BY:
 PROJECT ENGINEER
 REGISTERED SURVEYOR NO. 8184
 STATE OF FLORIDA
 DATE:

SCANNED 08/02/2010 08:11:09

Application No.: 100709-17
August 2, 2010
Page : 3

bc: Caroline Hanes
Kevin G. Dickson, P.E.
Environmental Resource Compliance - 4230
Keys Service Center - 6830
Permit File - 4240

COLLEGE ROAD ENHANCEMENTS FROM SR-5 / OVERSEAS HIGHWAY TO KOKENZIE ROAD CITY OF KEY WEST, FLORIDA

PROJECT Nos.	SHEET No.
GN 0711	C-00
CADD FILE	10019.200

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
C-00	COVER SHEET
C-01	HORIZONTAL ALIGNMENT
C-02	TYPICAL SECTION & DETAILS
C-03	GENERAL NOTES
C-04	EROSION CONTROL NOTES
C-05 to C-09	PLAN SHEETS
C-10 to C-11	SIDEWALK PROFILE
C-12	CONSTRUCTION DETAILS
C-13 to C-20	CROSS SECTIONS
C-21	TRAFFIC CONTROL PLANS



N.T.S.



DEVELOPED FOR:
CITY OF KEY WEST

CITY HALL
PO BOX 1409
KEY WEST, FL 33041

MAYOR:
CRAIG CATES

CITY MANAGER:
JAMES SCHOLL

CITY COMMISSIONERS:
JIMMY WEEKLEY
MARK ROSSI
BILLY WARDLOW
BARRY GIBSON
TERI JOHNSTON
CLAYTON LOPEZ

CITY PROJECT MANAGER
JANET MUCCINO

BID DOCUMENTS

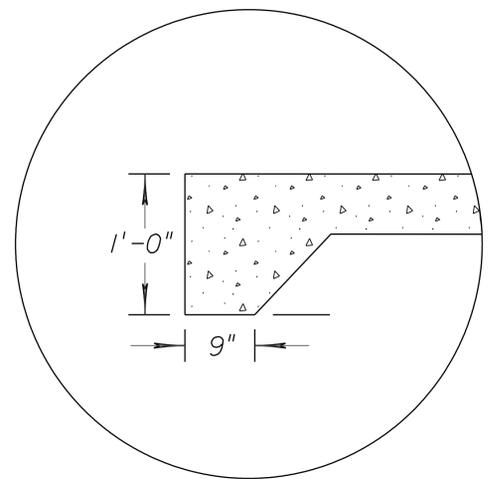
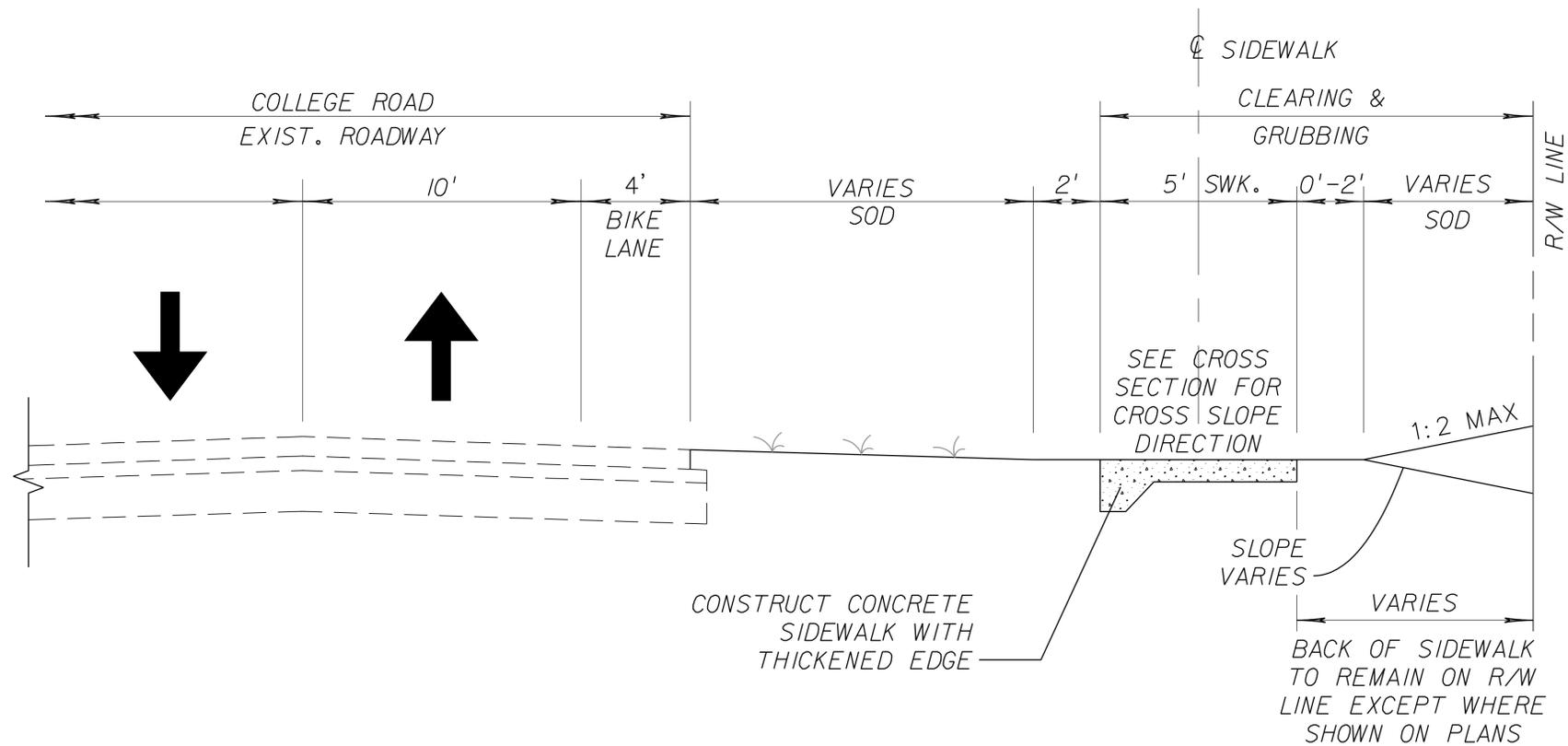
LOCATION SKETCH



BERMELLO, AJAMIL, & PARTNERS INC
Architecture · Engineering · Planning · Landscape Architecture · Interior Design
2601 SOUTH BAYSHORE DRIVE
10th FLOOR
MIAMI, FLORIDA 33133

APPROVED BY:

FRANTZ L. TASSY, P.E.
REGISTERED ENGINEER NO. 61856
STATE OF FLORIDA



**SIDEWALK EDGE
BEAM DETAIL**

TYPICAL SECTION & DETAILS

REVISIONS	
DESCRIPTION	DATE
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

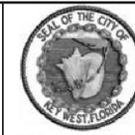
APPROVED BY:

 FRANTZ L. TASSY, P.E.
 REGISTERED ENGINEER NO. 61856
 STATE OF FLORIDA
 DATE: _____



BERMELLO AJAMIL & PARTNERS, INC.
 ARCHITECTURE - ENGINEERING - PLANNING
 LANDSCAPE ARCHITECTURE - INTERIOR DESIGN
 2601 S. BAYSHORE DRIVE, 3rd FLOOR
 MIAMI FL, 33133
 (305) 859-2050 FAX (305) 860-3778

COMM. NO.: 10019.200
 SCALE: N.T.S.
 DATE: 04 / 30 / 10
 DRAWN: J.H.
 CHECKED: J.P.Y. / F.L.T.
 CADD FILE: _____



PROJ. # GN 0711



FPN # 421379-1

**COLLEGE ROAD
ENHANCEMENTS**

SHEET NO.

C-02

GENERAL NOTES

1. ALL STATIONS AND OFFSETS ARE FROM CENTERLINE OF SIDEWALK.
2. ALL PUBLIC LAND CORNERS AND MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED BY THE CONTRACTOR AS FOLLOWS: CORNERS AND MONUMENTS IN CONFLICT WITH THE WORK AND IN DANGER OF BEING DAMAGED, DESTROYED OR COVERED SHALL BE PROPERLY REFERENCED BY A REGISTERED LAND SURVEYOR IN ACCORDANCE WITH THE MINIMUM TECHNICAL STANDARDS OF THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS PRIOR TO BEGINNING WORK AT THAT SITE. THE CONTRACTOR SHALL RETAIN THE LAND SURVEYOR TO REFERENCE, AND RESTORE UPON COMPLETION OF THE WORK, ALL SUCH CORNERS AND MONUMENTS AND SHALL FURNISH A SIGNED AND SEALED COPY OF THE LAND SURVEYOR'S REFERENCE DRAWING TO THE CITY OF KEY WEST ENGINEERING SERVICES DEPARTMENT. INCLUDE ALL COST OF REFERENCING, RESTORING AND PRESERVING IN THE BID ITEM PRICE FOR MOBILIZATION.
3. ALL DISPOSAL OF MATERIALS, RUBBISH AND DEBRIS SHALL BE MADE AT A LEGAL DISPOSAL SITE OR BY OTHER PRIOR APPROVED MANNER. MATERIAL CLEARED FROM THE SITE AND DEPOSITED ON ADJACENT AND/OR NEARBY PROPERTY WILL NOT BE CONSIDERED AS HAVING BEEN DISPOSED OF SATISFACTORILY.

4. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE SPECIFICATIONS OUTLINED IN THE ATTACHED BID DOCUMENT AND SPECIFICATIONS PACKAGE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH ALL THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 OR LATEST EDITION, AND ALL STATE AND LOCAL SAFETY AND HEALTH REGULATIONS.

6. NATIONAL GEODETICAL VERTICAL DATUM OF 1929, (N.G.V.D.), UNLESS OTHERWISE NOTED.

7. EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THESE DRAWINGS ARE BASED ON THE TOPOGRAPHIC SURVEY PERFORMED BY POLARIS 3 SURVEYORS AND MAPPERS, INC.

8. THE INFORMATION PROVIDED IN THESE PLANS IS TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT ANY INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED AND UPON WHICH THEIR BIDS WILL BE BASED.

9. UPON THE RECEIPT OF THE "NOTICE TO PROCEED", THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND ARRANGE A PRECONSTRUCTION CONFERENCE TO INCLUDE ALL INVOLVED GOVERNMENTAL AGENCIES, UTILITY OWNERS, THE OWNER AND THE ENGINEER OF RECORD.

10. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES AS SHOWN ON THE DRAWINGS WERE OBTAINED FROM THE BEST INFORMATION AVAILABLE AT THE TIME PLANS WERE PREPARED BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC., WITHIN THE PROJECT AREA WHICH WERE INSTALLED AND CONSTRUCTED AFTER THE PREPARATION OF THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE FACILITIES SHOWN OR FOR ANY FACILITIES NOT SHOWN. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING FACILITIES, STRUCTURES AND OTHER FEATURES (WHETHER SHOWN ON THE PLANS OR NOT) AFFECTING THE WORK.

11. SODDING TO BE USED AT LOCATIONS WHERE EXISTING LAWNS ARE DISTURBED OR EQUIPMENT IS STAGED. RESTORATION SODDING TYPE TO MATCH EXISTING.

12. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AS WELL AS ANY OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

13. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL APPLICABLE REGULATORY AGENCIES FOR INSPECTION REQUIREMENTS.

14. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, AND UPON FINAL CLEAN-UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE SWEEPED CLEAN.

15. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS WORK, EQUIPMENT AND/OR EMPLOYEES TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS.

16. THE CONTRACTOR SHALL REPLACE ALL DRIVEWAYS, SIDEWALKS, FENCES, MAILBOXES, SIGNS AND ANY OTHER FEATURES REMOVED DURING CONSTRUCTION WITH THE SAME TYPE OF MATERIAL AND TO THE CONDITION WHICH EXISTED PRIOR TO THE BEGINNING OF OPERATIONS.

17. WHERE MATERIAL OR DEBRIS HAVE WASHED OR FLOWED INTO, OR HAVE BEEN PLACED IN WATER COURSES, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING THE PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.

18. UPON COMPLETION OF CONSTRUCTION, AND PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD ONE COMPLETE SET OF ALL "AS-BUILT" CONTRACT DRAWINGS. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES AND DIMENSIONS, LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS.

19. ALL "AS-BUILT" INFORMATION SHALL BE CERTIFIED BY A FLORIDA REGISTERED LAND SURVEYOR.

20. ALL EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.

21. WHERE ANY PROPOSED SIDEWALK IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAW CUT.

22. THE CONTRACTOR ASSUMES THE RESPONSIBILITY OF OBTAINING ALL NECESSARY PERMITS.

UTILITY NOTES

1. ALL EXISTING UTILITIES AND DRAINAGE STRUCTURES ARE TO REMAIN UNLESS OTHERWISE NOTED.

2. THE CONTRACTOR SHALL CONDUCT AN ADVANCED EXPLORATION OF UTILITIES THAT COULD BE IN POTENTIAL CONFLICT WITH SIDEWALK CONSTRUCTION.

3. THE CONTRACTOR SHALL CONTACT "SUNSHINE STATE ONE-CALL OF FLORIDA" BY CALLING 1-800-432-4770 AT LEAST 48 HOURS PRIOR TO COMMENCING ANY EXCAVATION OR CONSTRUCTION IN ORDER TO PROVIDE FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

4. THE CONTRACTORS SHALL COORDINATE WITH UTILITIES TO ARRANGE FOR RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK, IF APPLICABLE.

5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ANY AND ALL EXISTING UTILITIES ON THIS PROJECT.

6. THE CONTRACTOR SHALL SECURE ALL UTILITY EASEMENTS (IF REQUIRED) TO BE SECURED PRIOR TO CONSTRUCTION.

7. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES AS SHOWN ON THE DRAWINGS WERE OBTAINED FROM THE BEST INFORMATION AVAILABLE AT THE TIME PLANS WERE PREPARED BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC., WITHIN THE PROJECT AREA WHICH WERE INSTALLED AND CONSTRUCTED AFTER THE PREPARATION OF THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE FACILITIES SHOWN OR FOR ANY FACILITIES NOT SHOWN. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING FACILITIES, STRUCTURES AND OTHER FEATURES (WHETHER SHOWN ON THE PLANS OR NOT) AFFECTING THE WORK.

8. IF, UPON EXCAVATION, EXISTING CONDITIONS ARE FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE THE PROBLEM.

9. CONTRACTOR SHALL NOTIFY THE UNITED STATES POSTAL SERVICE PRIOR TO RELOCATION OF MAILBOXES.

- | | | |
|---------------------------------|----------------------|---------------------|
| 10. UTILITY OWNERS: | | |
| ATT DISTRIBUTION | RICHARD RENFROW | TEL. (305) 260-8243 |
| COMCAST CABLE | LEONARD MAXWELL-BOLD | TEL. (954) 447-8405 |
| FLORIDA KEYS AQUEDUCT AUTHORITY | MARNIE THRIFT | TEL. (305) 295-2154 |
| KEY WEST PIPELINE COMPANY | VIC MALY | TEL. (305) 294-4812 |
| KEY WEST RESORT UTILITIES | CHRIS JOHNSON | TEL. (305) 295-0309 |
| KEYS ENERGY SERVICE | TONY BETHEL | TEL. (305) 295-1047 |
| OPERATIONS MGMT INTL, INC. | RALPH ESTEVEZ | TEL. (305) 292-5100 |

DRAINAGE NOTES

1. UNLESS OTHERWISE SHOWN, ALL EXISTING DRAINAGE STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION ARE TO REMAIN.

2. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING EXISTING INLETS CLEAN OF DEBRIS DURING CONSTRUCTION AT NO ADDITIONAL COST.

3. THE CONTRACTOR SHALL INSTALL A REUSABLE SCREEN OR FILTER FABRIC INSIDE ALL EXISTING INLETS TO PREVENT THE ACCUMULATION OF DEBRIS AND SURFACE WATER CONTAMINATION FROM ENTERING INSIDE CATCH BASINS. SPECIFICATIONS FOR SUCH DEVICES SHALL BE FORWARDED TO THE ENGINEER OF RECORD AND THE CITY OF KEY WEST FOR APPROVAL.

LANDSCAPE NOTES

1. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO COMMENCING WORK. THE LANDSCAPE CONTRACTOR SHALL COORDINATE WORK WITH THAT OF THE GENERAL CONTRACTOR.

2. LANDSCAPE CONTRACTOR SHALL EXAMINE THE SITE AND BECOME FAMILIAR WITH CONDITIONS AFFECTING THE RELOCATION PRIOR TO SUBMITTING BIDS. FAILURE TO DO SO SHALL NOT BE CONSIDERED CAUSE FOR EXTRAS OR COMPLAINTS.

3. THE COST OF OBTAINING ALL NECESSARY PERMITS FOR TREE REMOVAL OR RELOCATION IS THE RESPONSIBILITY OF THE CONTRACTOR.

4. ALL EXISTING TREES ARE TO REMAIN AND SHALL BE PROTECTED UNLESS OTHERWISE DESIGNATED IN THE PLANS. TREE PROTECTION MEASURES SHALL BE ERECTED AROUND THE TREES TO REMAIN AND SHALL BE MAINTAINED FUNCTIONAL THROUGHOUT THE DURATION OF THE PROJECT.

5. A CERTIFIED ARBORIST CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE SHALL BE PRESENT ON SITE TO DIRECT ALL ROOT PRUNING AND/OR CANOPY TRIMMING ACTIVITIES. ROOT PRUNING AND CANOPY TRIMMING SHALL PRODUCE A CLEAN CUT. COST TO BE INCLUDED IN THE RELATED BID ITEM.

6. IF MANGROVE TRIMMING IS REQUIRED DURING CONSTRUCTION FOR VEGETATION LOCATED OUTSIDE THE LIMITS OF CONSTRUCTION BUT EXTENDING WITHIN THE CONSTRUCTION AREAS, A PERMIT TO ALTER OR TRIM MANGROVES SHOULD BE OBTAINED FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). A CERTIFIED ARBORIST SHOULD BE PRESENT ON SITE TO DIRECT ALL MANGROVE TRIMMING ACTIVITIES.

7. ALL TREE REMOVALS SHALL BE IN ACCORDANCE WITH SECTION 110 OF THE SPECIFICATIONS OUTLINED IN THE BID DOCUMENT AND SPECIFICATIONS PACKAGE.

8. THE SPECIFIC PROPOSED LOCATION FOR RELOCATED TREES SHALL BE COORDINATED IN THE FIELD BY THE LANDSCAPE CONTRACTOR AND THE APPROPRIATE CITY OF KEY WEST OFFICIAL.

9. THE CONTRACTOR IS ADVISED THAT ANY ROOT PRUNING ACTIVITY THAT MAY JEOPARDIZE THE SUSTAINABILITY OF THE TREE DUE TO SIDEWALK CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER OF RECORD IMMEDIATELY SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE THE ISSUE.

10. THE CONTRACTOR SHALL TAKE CARE TO PROTECT ALL TREES AND LANDSCAPING MATERIAL WITHIN THE PROJECT LIMITS WHICH ARE NOT DESIGNATED FOR RELOCATION. TREES IMMEDIATELY ADJACENT TO BUT OUTSIDE OF THE RIGHT OF WAY LINE ALSO SHALL NOT BE IMPACTED. IF THE EXISTING LANDSCAPE MATERIAL OR OTHER RELATED ITEMS ARE IMPACTED DURING CONSTRUCTION OR AS A RESULT OF EQUIPMENT STAGING THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPLACEMENTS AND ALL ASPECTS OF REMEDIATION INCLUDING, BUT NOT LIMITED TO TREES, SHRUBS, GROUND COVERS, AND ANY OTHER LANDSCAPE-RELATED MATERIALS IMPACTED BY CONSTRUCTION. ALL IMPACTED LANDSCAPING MUST BE REPLACED WITH ITEMS OF SIMILAR SIZE AND VALUE, AND MUST BE SATISFACTORY TO THE CITY OF KEY WEST PROJECT ENGINEER. THE COST OF THE REPLACEMENT MATERIAL SHALL BE WARRANTED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR. COST FOR TREE PROTECTION MEASURES WILL BE INCLUDED UNDER THE RELATED BID ITEM.

GENERAL NOTES

<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td>1.</td><td></td></tr> <tr><td>2.</td><td></td></tr> <tr><td>3.</td><td></td></tr> <tr><td>4.</td><td></td></tr> <tr><td>5.</td><td></td></tr> </tbody> </table>		DESCRIPTION	DATE	1.		2.		3.		4.		5.		<p>APPROVED BY:</p> <p>FRANTZ L. TASSY, P.E. REGISTERED ENGINEER NO. 61856 STATE OF FLORIDA DATE:</p>	 <p>BERMELLO AJAMIL & PARTNERS, INC. ARCHITECTURE - ENGINEERING - PLANNING LANDSCAPE ARCHITECTURE - INTERIOR DESIGN 2601 S. BAYSHORE DRIVE, 3rd FLOOR MIAMI FL, 33133 (305) 859-2050 FAX (305) 860-3778</p>	<p>COMM. NO.: 10019.200 SCALE: N.T.S. DATE: 07 / 02 / 10 DRAWN: J.H. CHECKED: J.P.Y. / F.L.T. CADD FILE:</p>	 <p>PROJ. # GN 0711</p>  <p>FPN # 421379-1</p>	<p>COLLEGE ROAD ENHANCEMENTS</p>	<p>SHEET NO. C-03</p>
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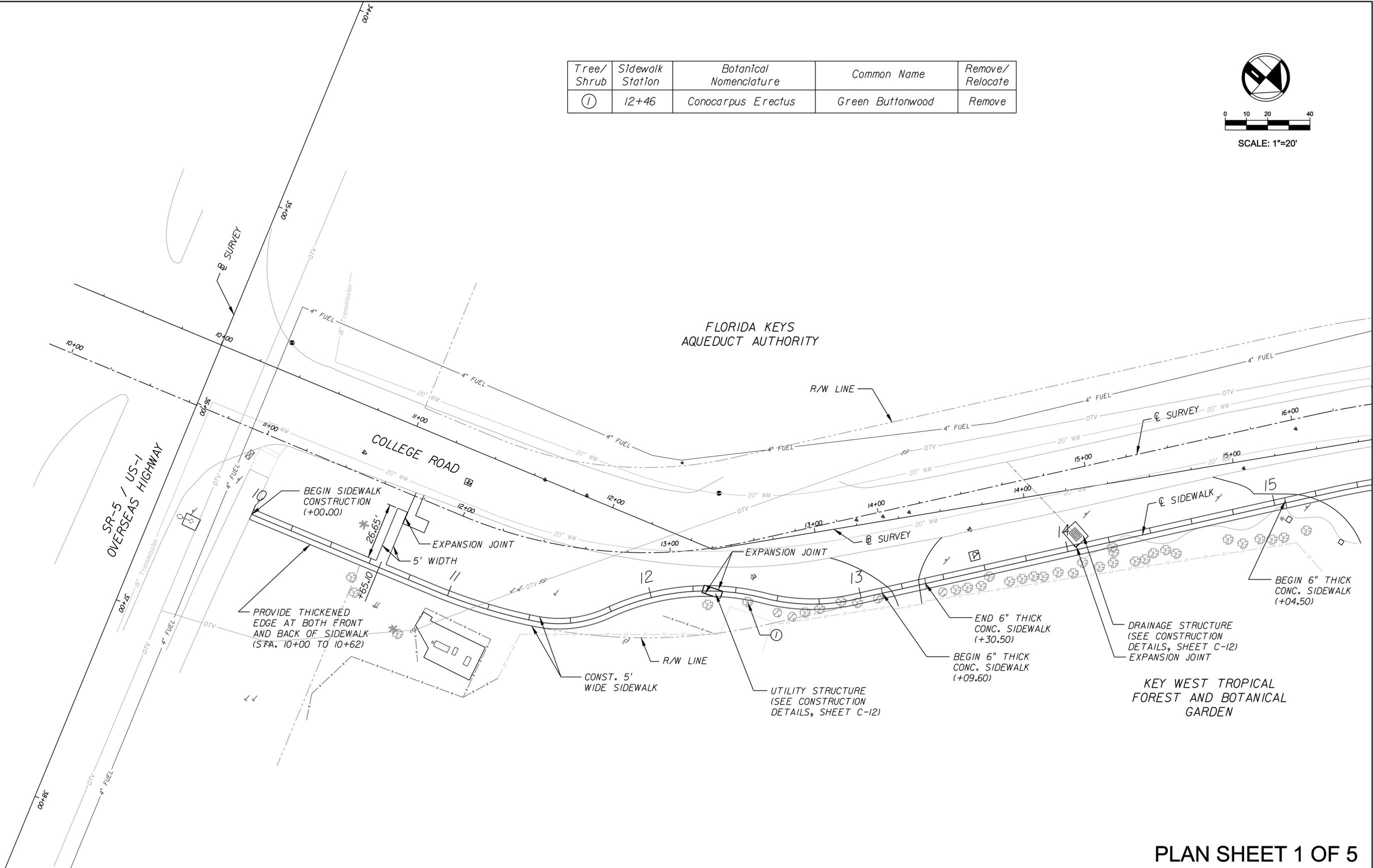
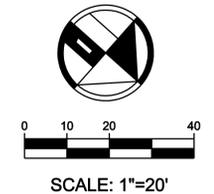
EROSION CONTROL NOTES

1. ANY MATERIAL TO BE STOCKPILED FOR PERIODS GREATER THAN 24 HOURS SHALL BE PROTECTED BY APPROPRIATE EROSION CONTROL DEVICES.
2. WETLANDS ARE PRESENT IN CLOSE PROXIMITY TO THIS PROJECT ALONG THE WEST SIDE OF THE GOLF COURSE POND. IN ORDER TO PREVENT IMPACTS FROM CONSTRUCTION ACTIVITIES, SILT FENCES SHOULD BE INSTALLED IN AREAS WHERE EXISTING WETLANDS ARE ADJACENT TO PROPOSED IMPROVEMENTS. LOCATIONS OF SILT FENCES ARE SHOWN ON THE PLAN AND CROSS SECTION SHEETS OF THE CONSTRUCTION PLANS. ALSO, NO STAGING OR OTHER ACTIVITIES FOR THIS PROJECT SHOULD OCCUR WITHIN EXISTING WETLANDS, EROSION-PRONE AREAS ADJACENT TO EXISTING WETLANDS, OR DRIPLINE OF EXISTING TREES.
3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
4. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREA HAVE BEEN STABILIZED.
5. ADDITIONAL PROTECTION ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNSEEN CONDITIONS OR ACCIDENTS.
6. CONTRACTOR SHALL ENSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
7. WIRE MESH SHALL BE LAID OVER ANY DROP INLETS SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH <-INCH OPENING SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.
8. IF THE WIRE MESH BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE MESH MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.
9. BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES.
10. BALES SHALL BE PLACE LENGTHWISE IN A SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.
11. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.
12. EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.
13. LOOSE STRAW SHOULD BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.
14. STRAW BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
15. CLOSE ATTENTION SHALL BE GIVEN TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.
16. NECESSARY REPAIRS TO BARRIER OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
17. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL, IT MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
18. ANY SEDIMENT DEPOSITS REMAINING IN PLACE, AFTER THE STRAW BALE OR FILTER BARRIERS, AND OR SILT FENCES ARE NO LONGER REQUIRED, SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
19. SILT FENCE AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
20. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
21. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND SOUTH FLORIDA WATER MANAGEMENT DISTRICT SPECIFICATIONS AND CRITERIA.
22. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO 'THE FLORIDA DEVELOPMENT MANUAL "A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (F.D.E.P.) CHAPTER 6.
23. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLANDS AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAIL 4 THIS SHEET FOR TYPICAL CONSTRUCTION.
24. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED, MULCHES AND MAINTAINED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.
25. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
26. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
27. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WITH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT.
28. ALL DISTURBED AREAS SHALL BE STABILIZED THROUGH COMPACTION, SILT SCREENS, HAY BALES, AND GRASSING. ALL FILL SLOPES 3# OR STEEPER TO RECEIVE STAKED SOLID SOD.
29. ALL DEWATERING, EROSION, AND SEDIMENT CONTROL SHALL REMAIN IN PLACE UNTIL AFTER COMPLETION OF CONSTRUCTION, AND REMOVED ONLY WHEN AREAS HAVE BEEN STABILIZED.
30. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
31. THE CONTRACTOR SHALL BE REQUIRED TO RESPOND TO ALL WATER MANAGEMENT DISTRICT INQUIRIES, RELATIVE TO COMPLIANCE OF SFWD FOR EROSION AND SEDIMENT CONTROL. THE COST OF THE COMPLIANCE SHALL BE PART OF THE CONTRACT.

EROSION CONTROL NOTES

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Tree/ Shrub	Sidewalk Station	Botanical Nomenclature	Common Name	Remove/ Relocate
①	12+46	Conocarpus Erectus	Green Buttonwood	Remove



FLORIDA KEYS
AQUEDUCT AUTHORITY

KEY WEST TROPICAL
FOREST AND BOTANICAL
GARDEN

PLAN SHEET 1 OF 5

REVISIONS	
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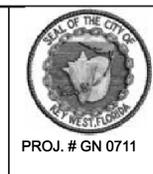
APPROVED BY:

FRANTZ L. TASSY, P.E.
REGISTERED ENGINEER NO. 61856
STATE OF FLORIDA
DATE:



BERMELLO AJAMIL & PARTNERS, INC.
ARCHITECTURE - ENGINEERING - PLANNING
LANDSCAPE ARCHITECTURE - INTERIOR DESIGN
2601 S. BAYSHORE DRIVE, 3rd FLOOR
MIAMI FL, 33133
(305) 859-2050 FAX (305) 860-3778

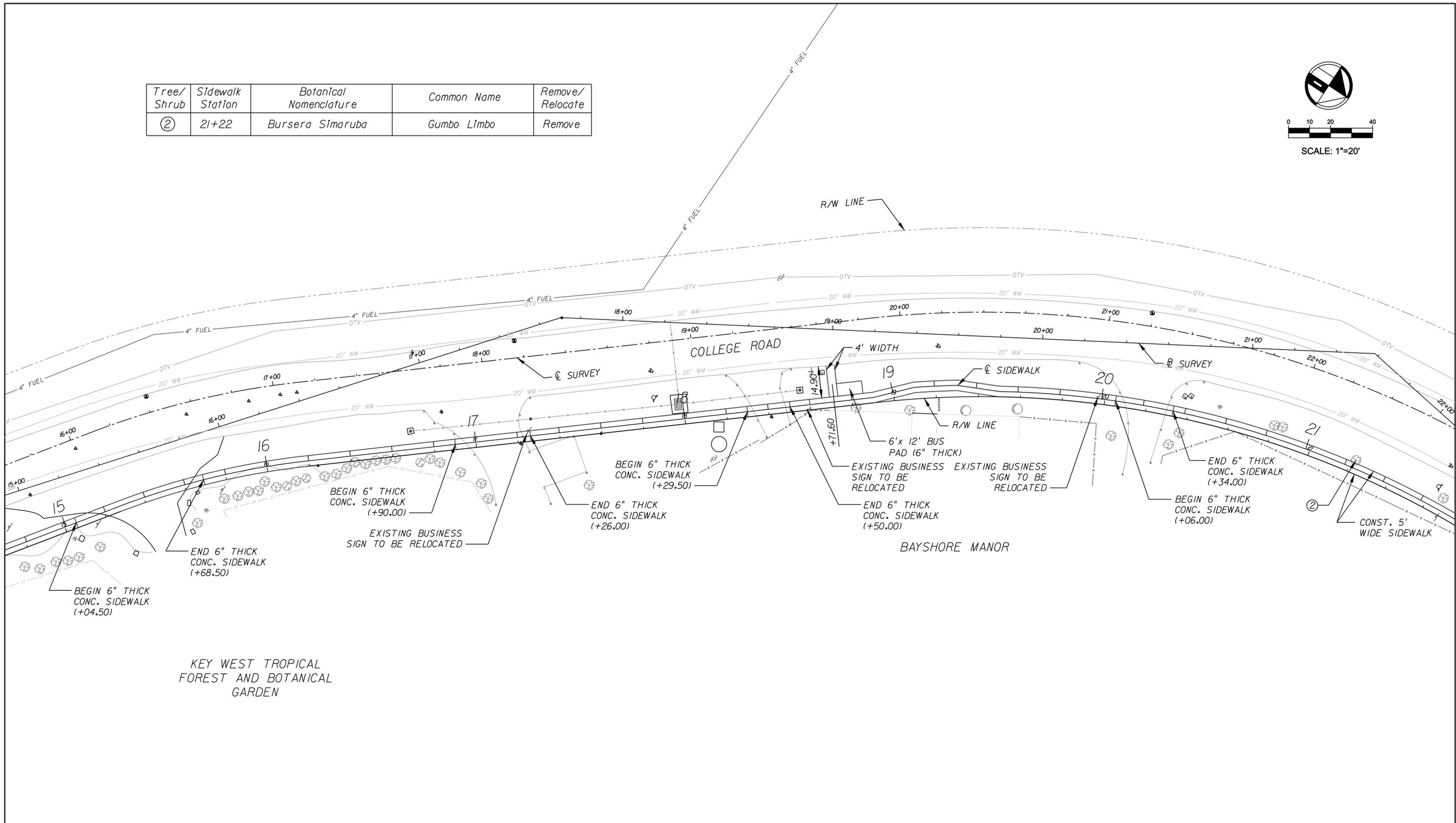
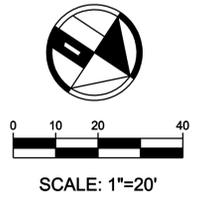
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DRAWN: J.H.
CHECKED: J.P.Y. / F.L.T.
CADD FILE:



**COLLEGE ROAD
ENHANCEMENTS**

SHEET NO.
C-05

Tree/ Shrub	Sidewalk Station	Botanical Nomenclature	Common Name	Remove/ Relocate
②	21+22	Bursera Simaruba	Gumbo Limbo	Remove



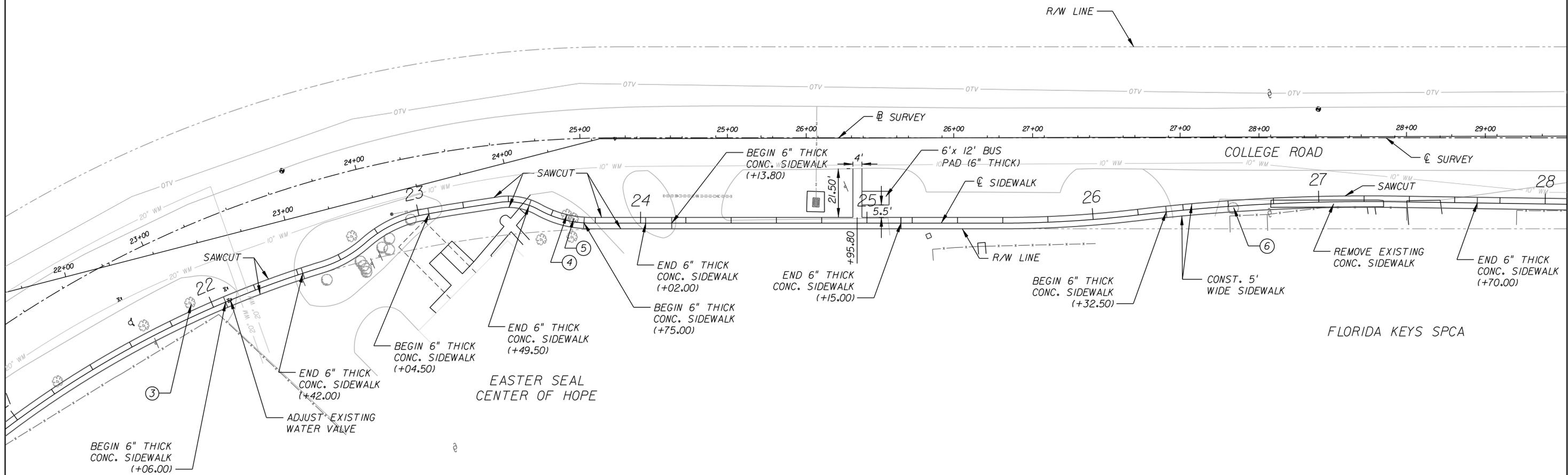
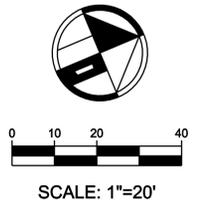
KEY WEST TROPICAL
FOREST AND BOTANICAL
GARDEN

BAYSHORE MANOR

PLAN SHEET 2 OF 5

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Tree/Shrub	Sidewalk Station	Botanical Nomenclature	Common Name	Remove/Relocate
③	21+91	<i>Quercus Virginiana</i>	Live Oak (multitrunk)	Remove
④	23+68	<i>Conocarpus erectus</i>	Green Buttonwood	Remove
⑤	23+70	<i>Conocarpus erectus</i>	Green Buttonwood	Remove
⑥	26+61	<i>Conocarpus erectus</i> var. <i>sericeus</i>	Silver Buttonwood	Remove

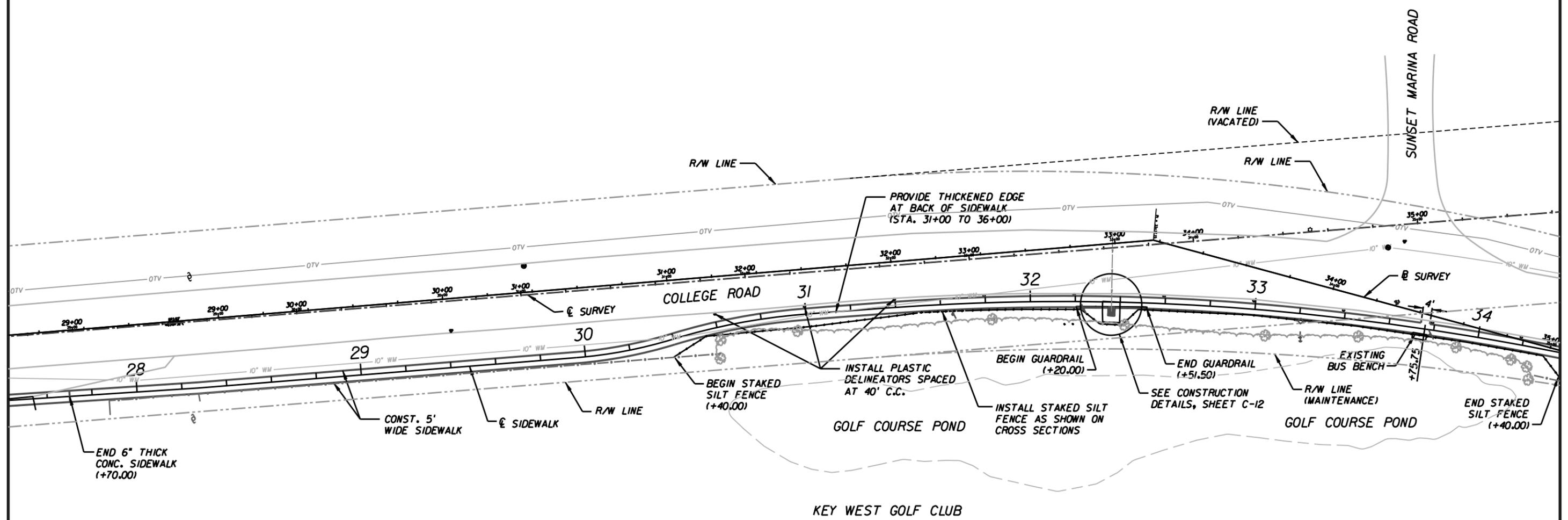


PLAN SHEET 3 OF 5

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SCALE: 1"=20'



PLAN SHEET 4 OF 5

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 STATE OF FLORIDA
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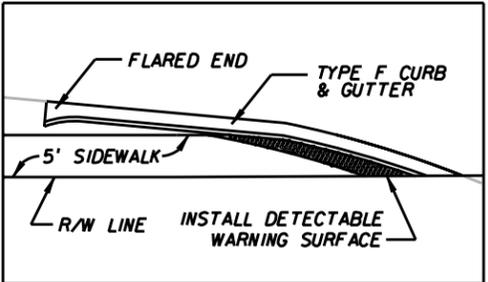
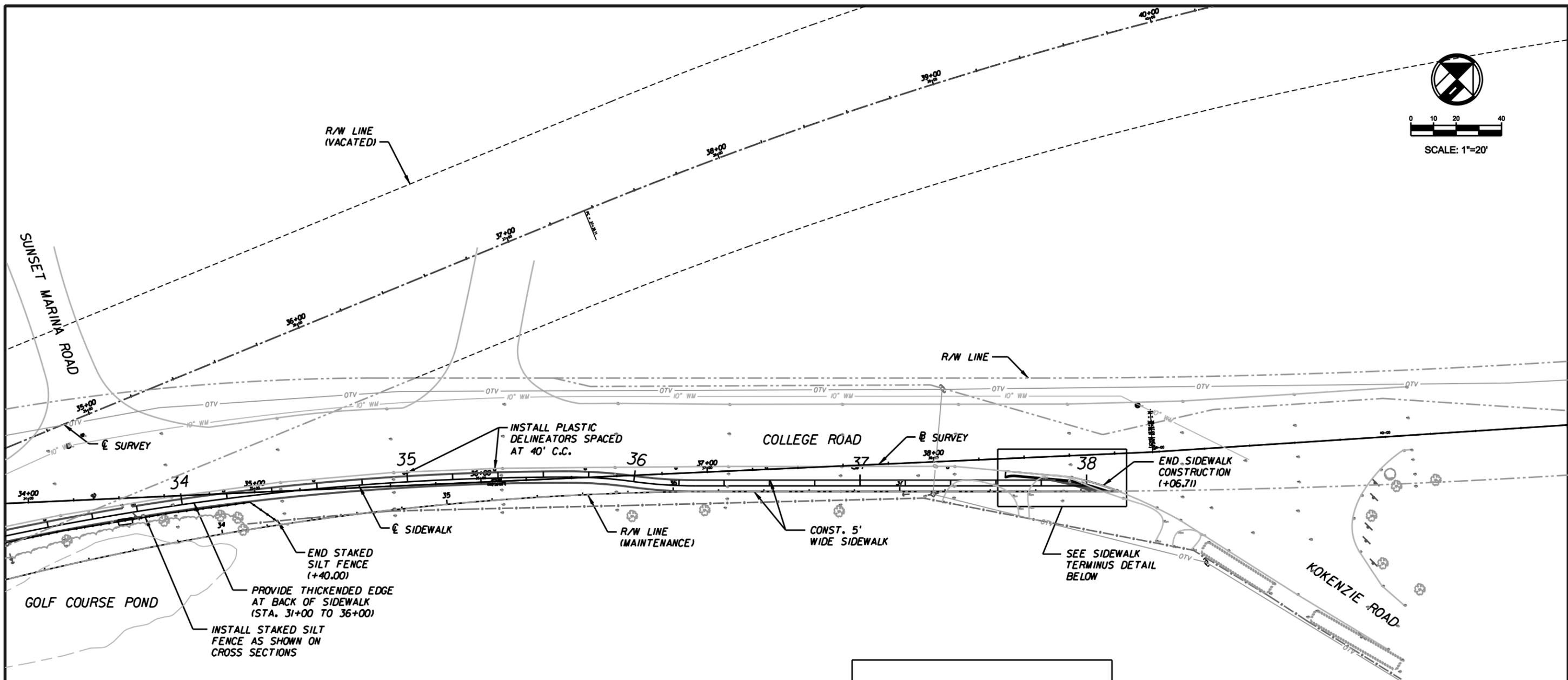
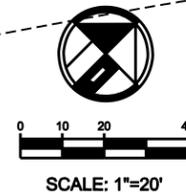
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COMM. NO.: 10019.200
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 DATE: 07 / 02 / 10
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**COLLEGE ROAD
 ENHANCEMENTS**

SHEET NO.
C-08



SIDEWALK TERMINUS DETAIL

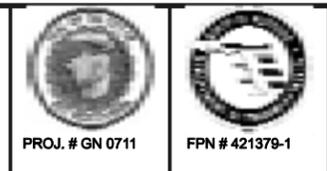
PLAN SHEET 5 OF 5

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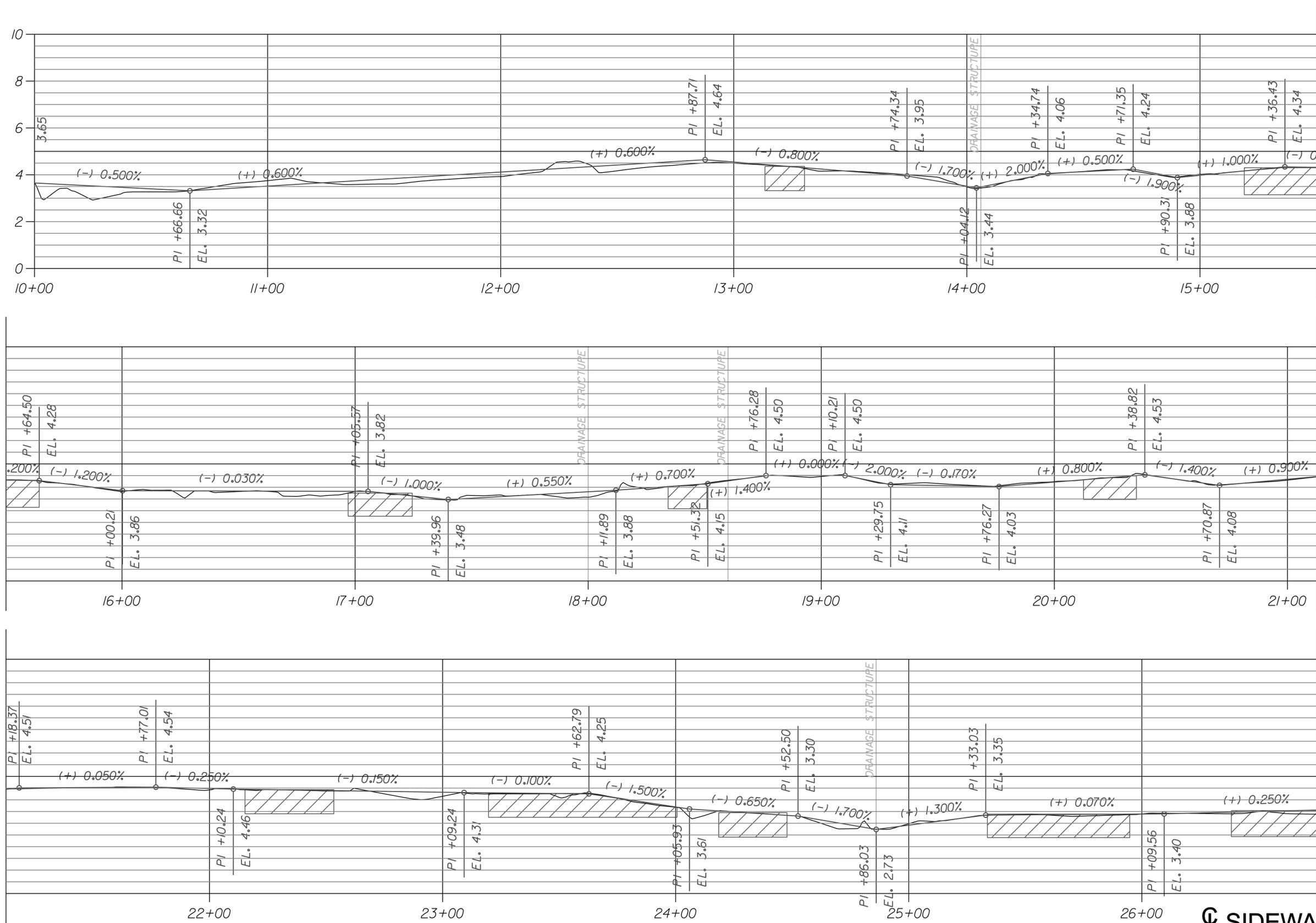
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COLLEGE ROAD
 ENHANCEMENTS

SHEET NO.
 C-09



LEGEND



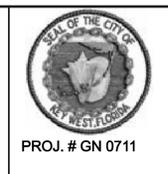
☑ SIDEWALK PROFILE

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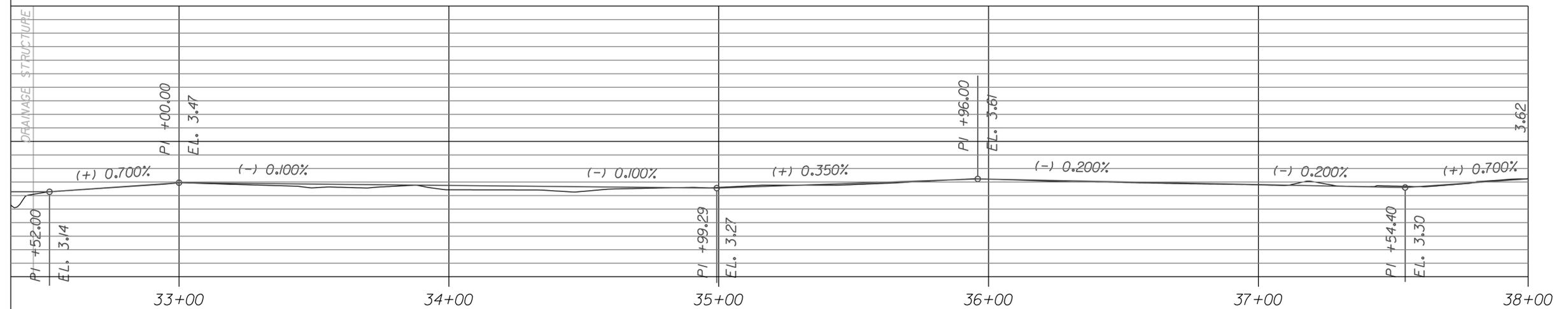
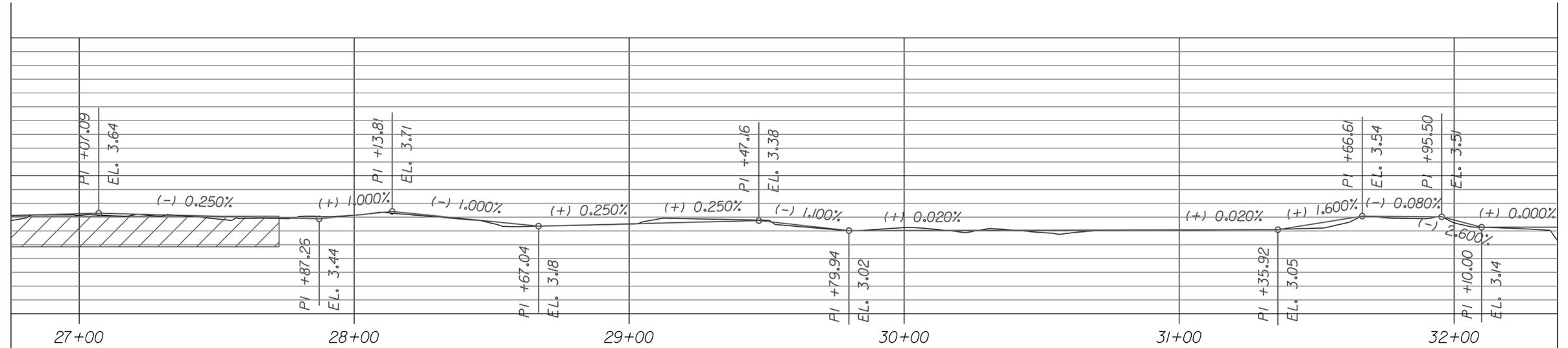
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 DATE: 04/30/10
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**COLLEGE ROAD
 ENHANCEMENTS**

SHEET NO.
C-10



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☉ SIDEWALK PROFILE

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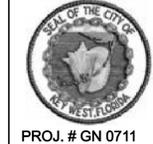
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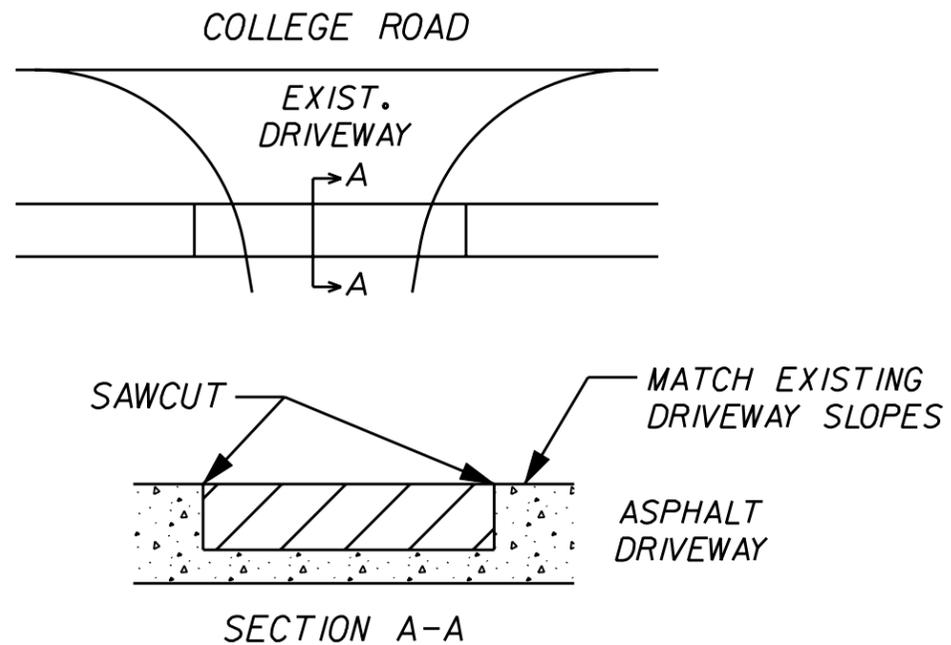
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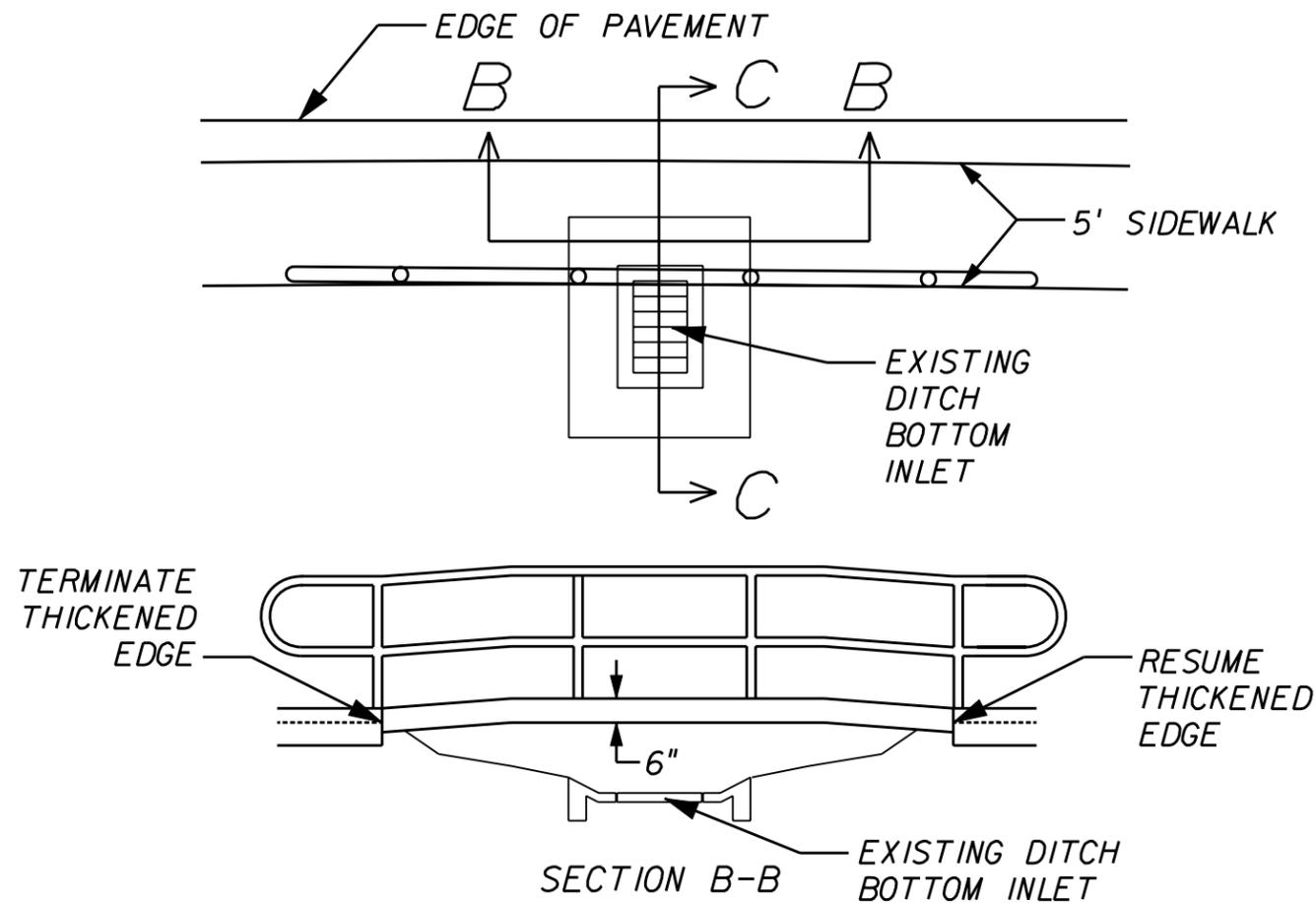
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**COLLEGE ROAD
 ENHANCEMENTS**

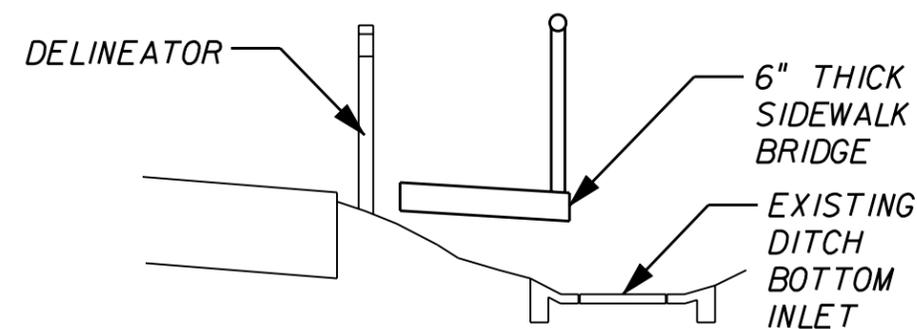
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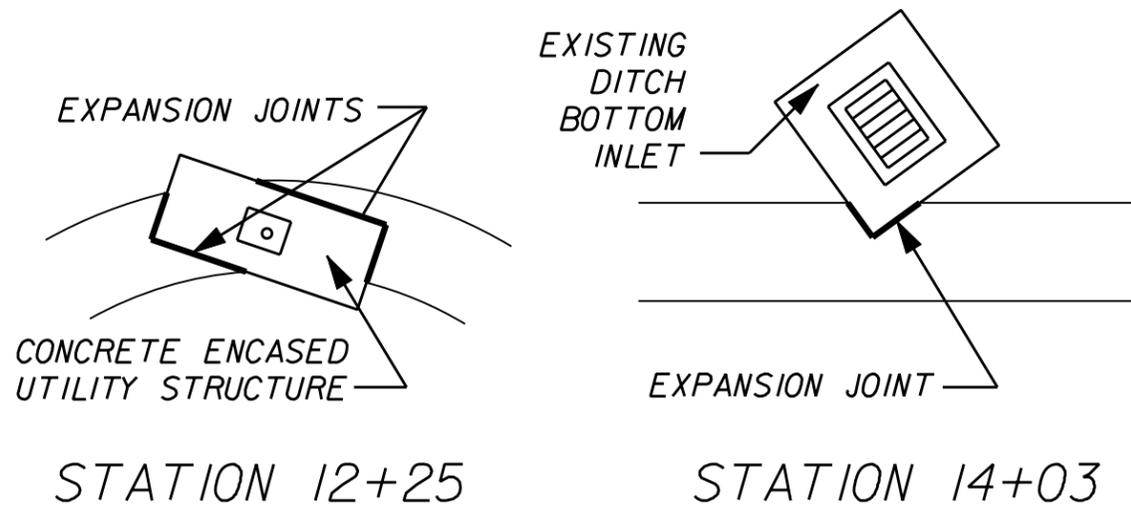
DRIVEWAY SAWCUT DETAIL



SECTION C-C
STATION 32+35



CONSTRUCTION DETAILS



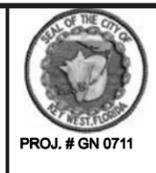
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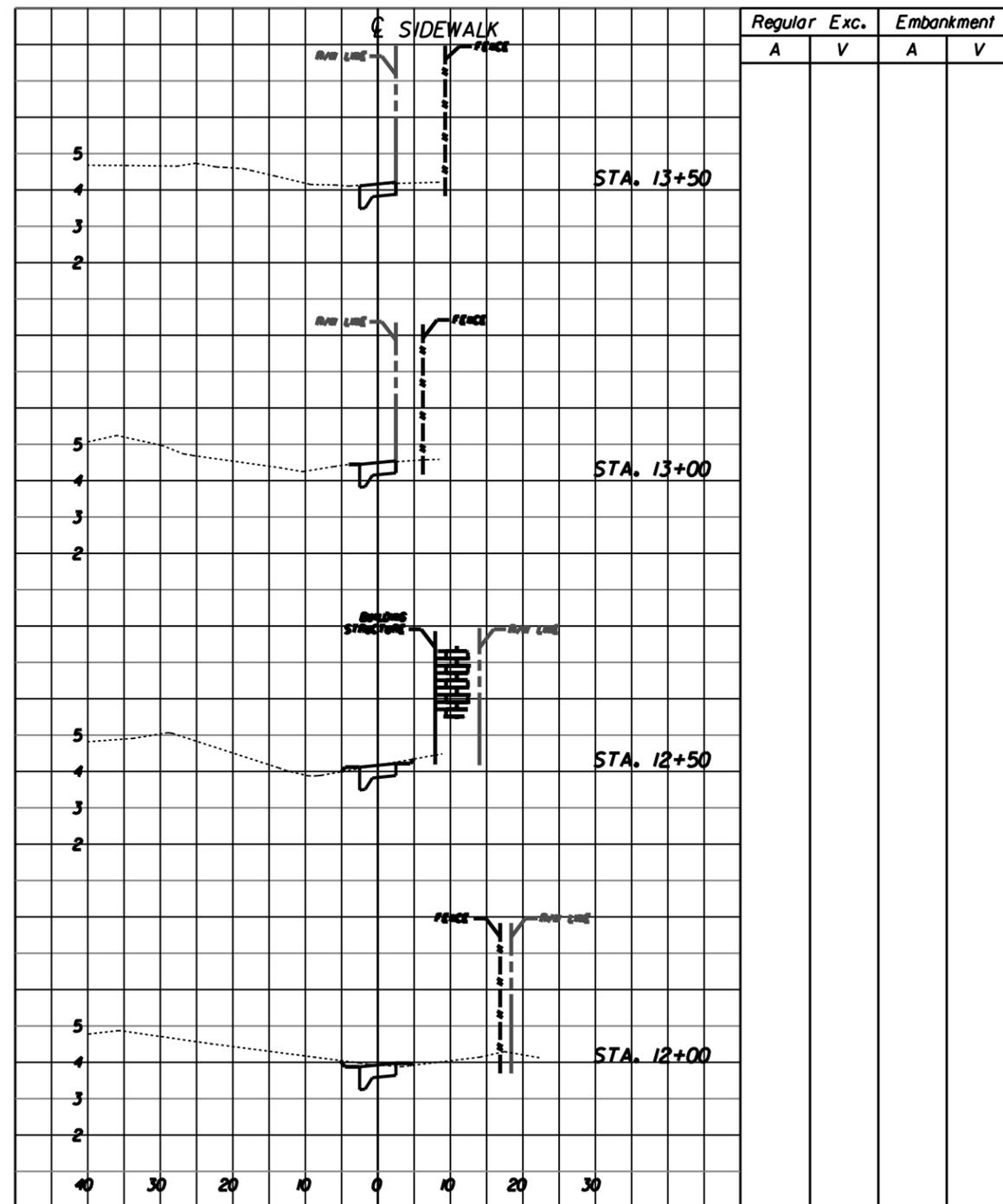
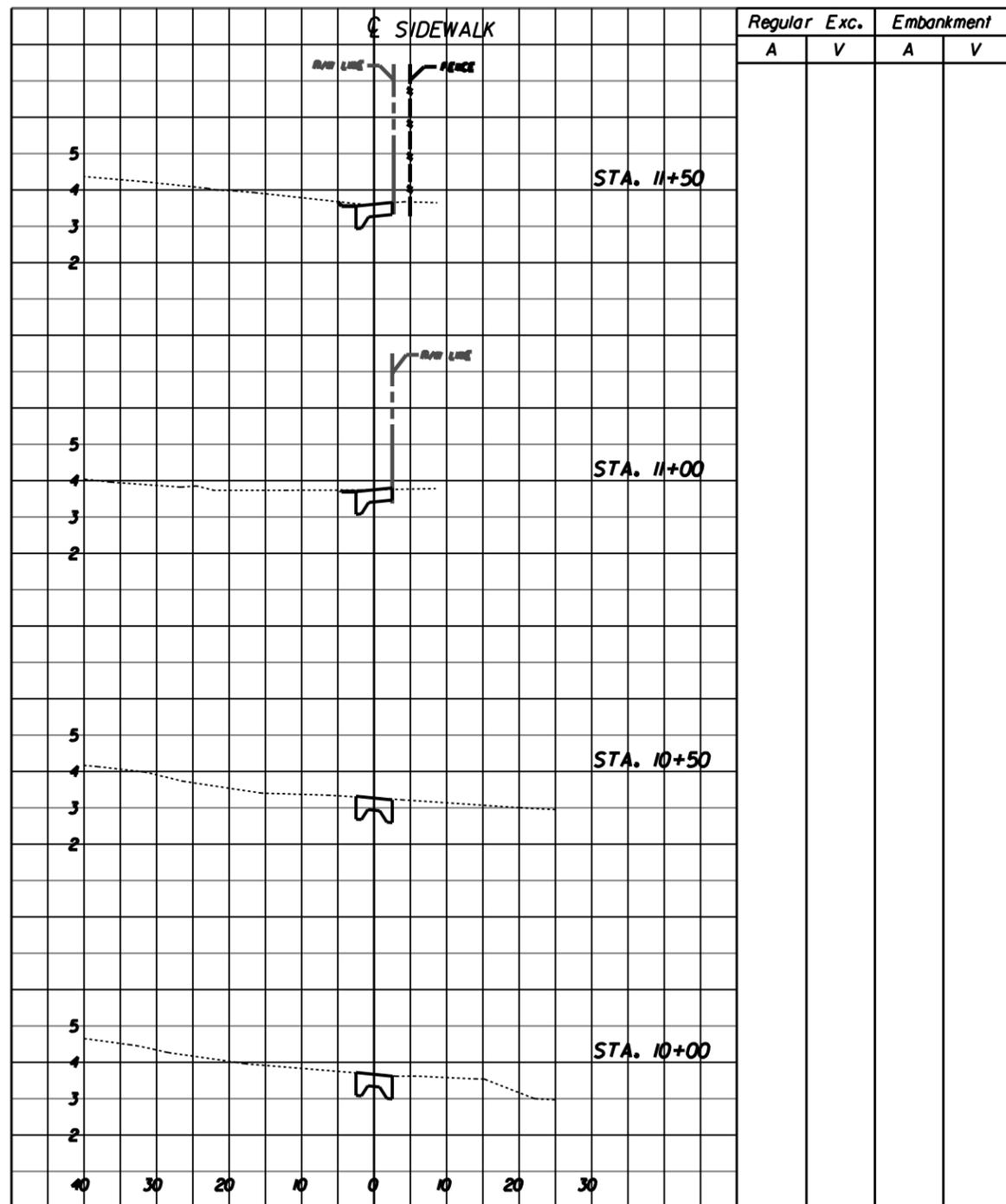
ba BERMELLO AJAMIL & PARTNERS, INC.
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COLLEGE ROAD ENHANCEMENTS

SHEET NO.
C-12



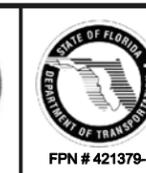
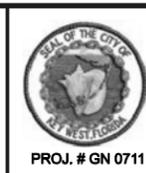
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APPROVED BY:
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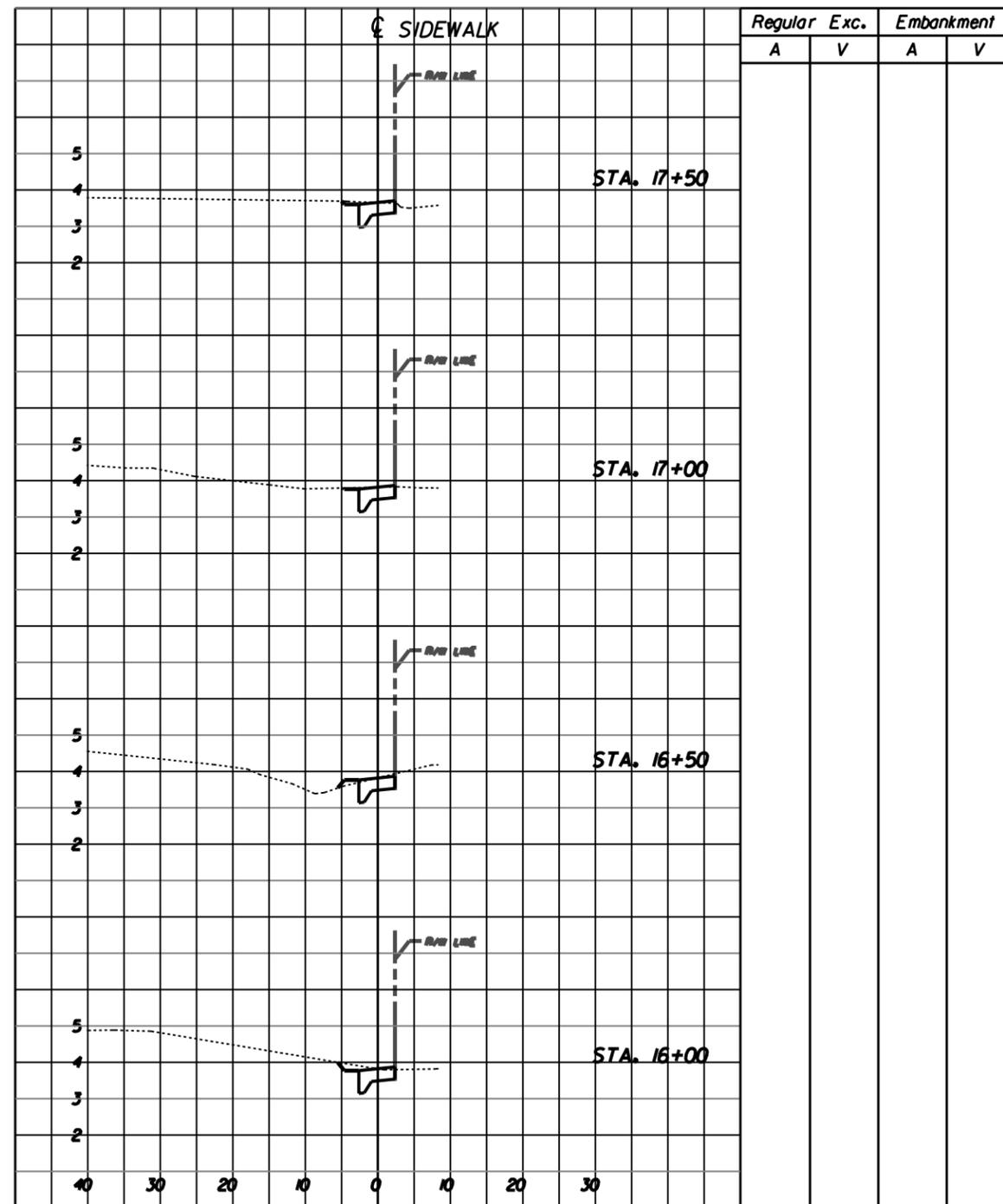
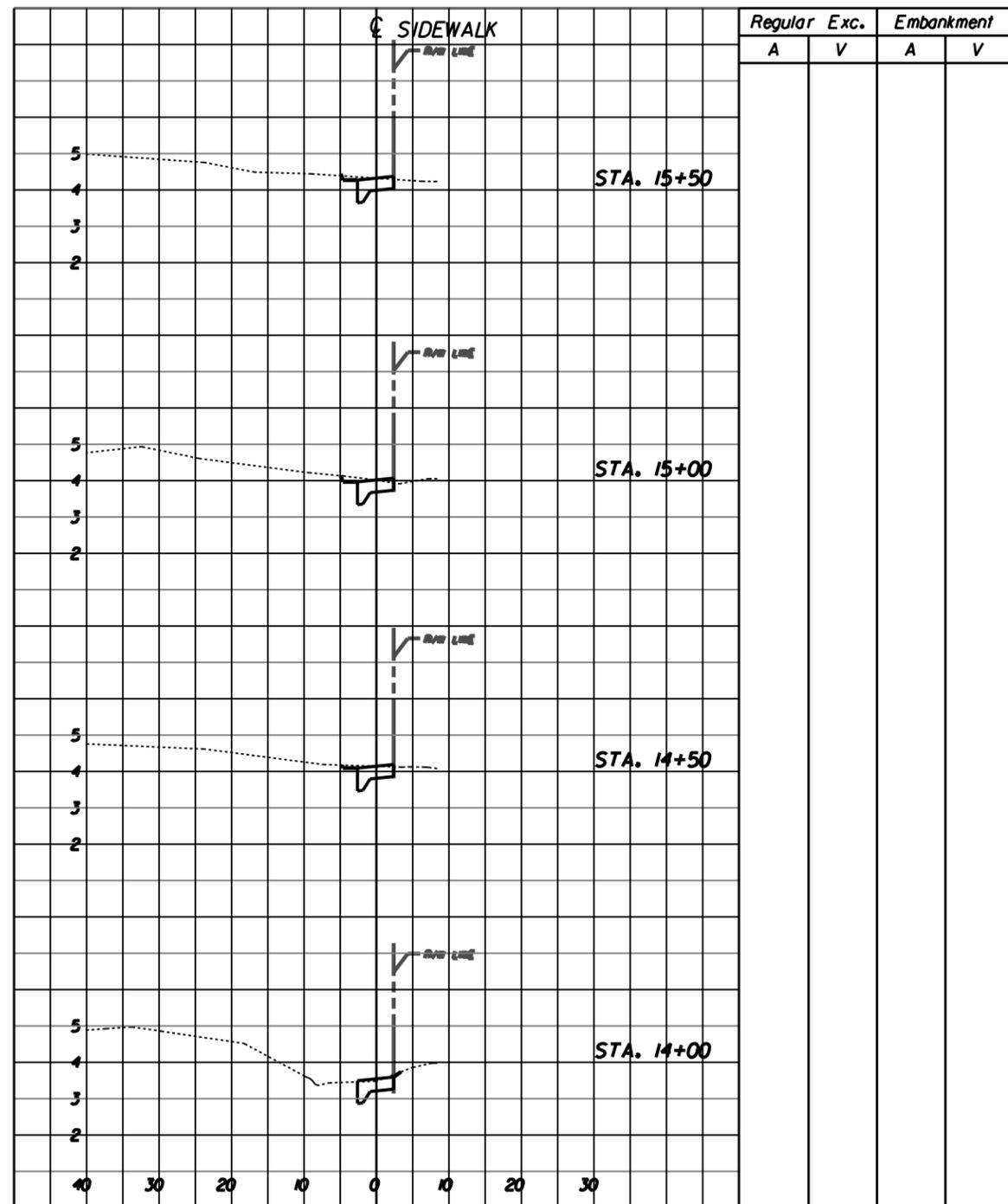
ba BERMELLO AJAMIL & PARTNERS, INC.
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 DATE: 07 / 02 / 10
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**COLLEGE ROAD
 ENHANCEMENTS**

SHEET NO.
C-13



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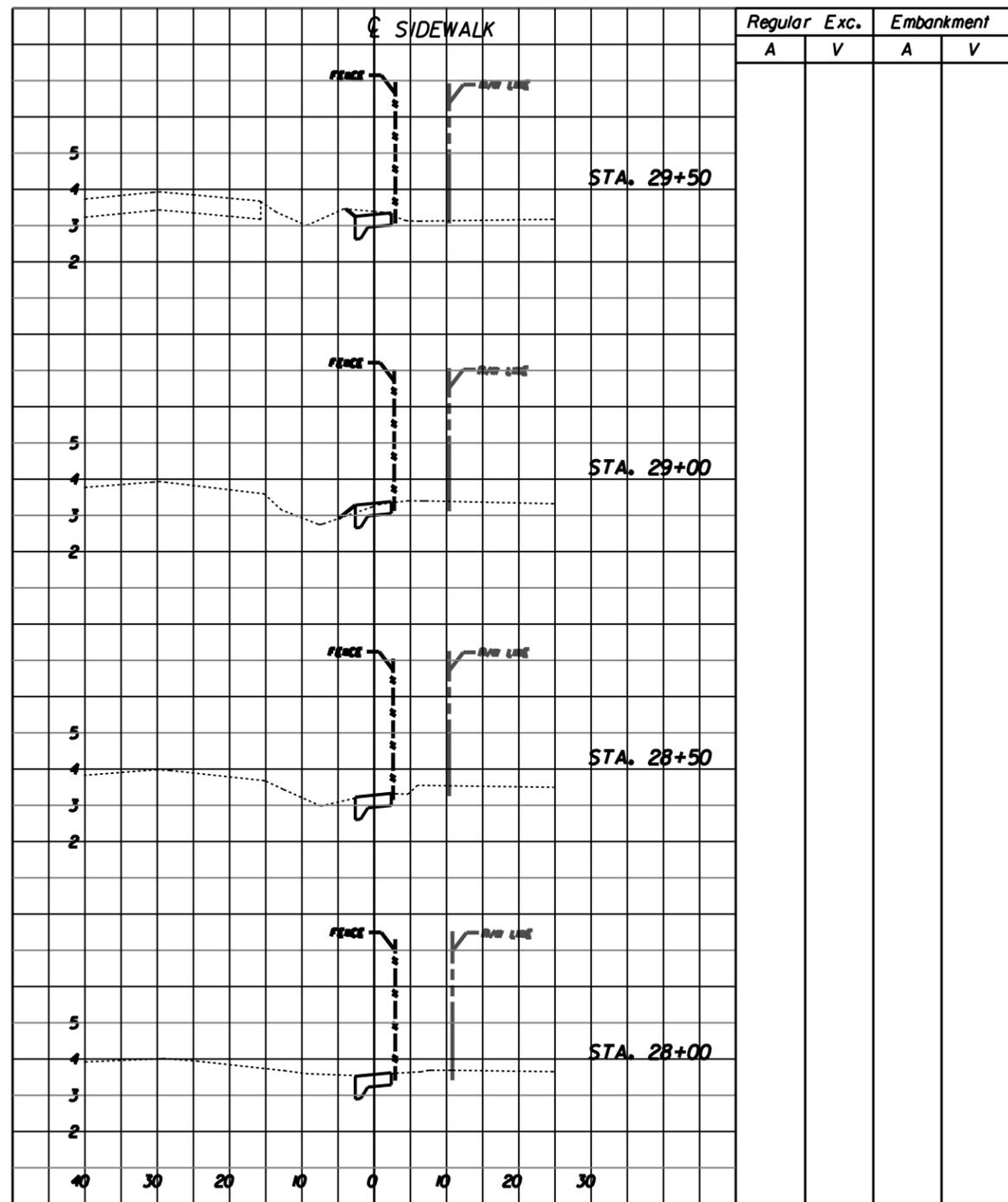
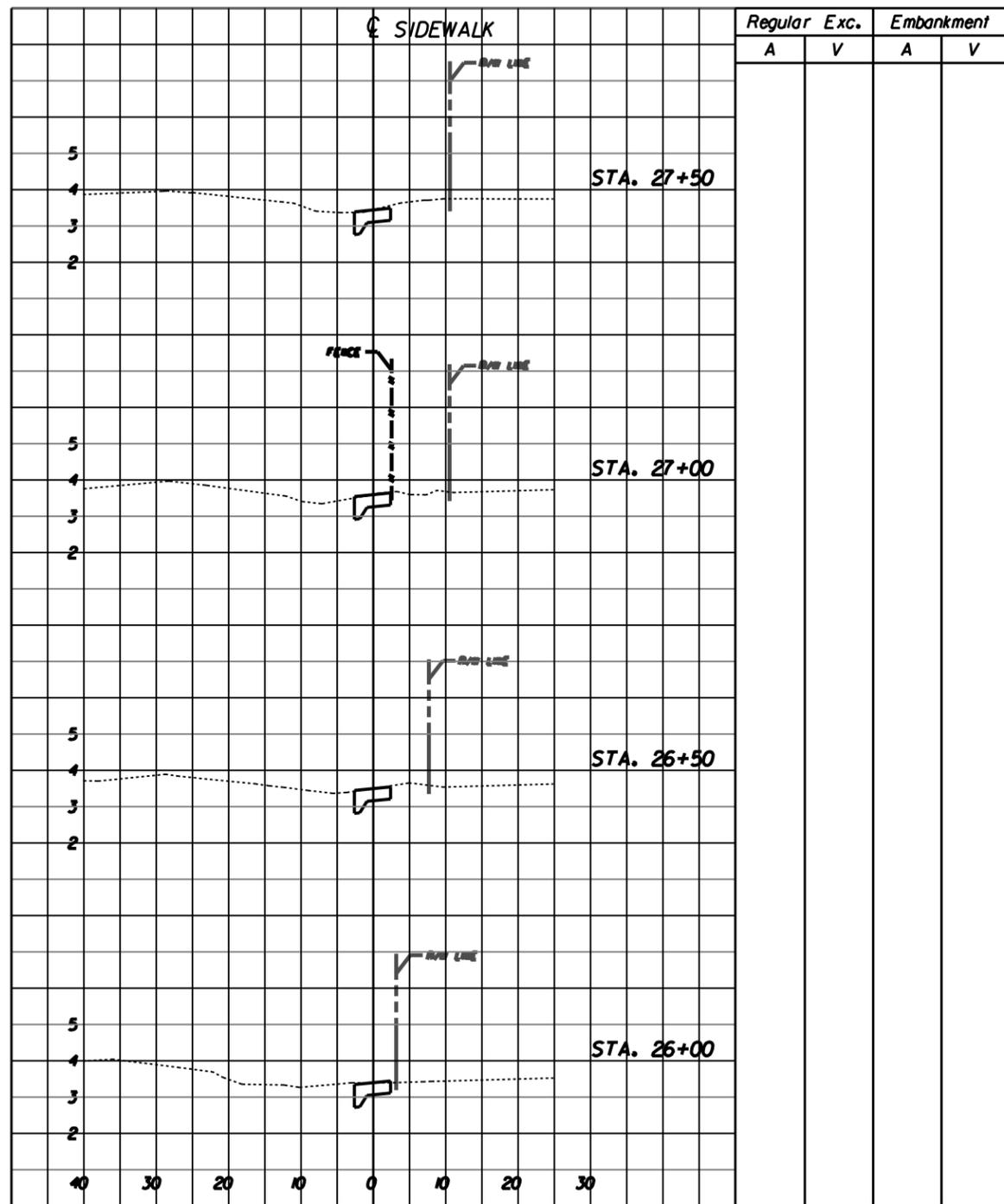
PROJ. # GN 0711



FPN # 421379-1

**COLLEGE ROAD
 ENHANCEMENTS**

SHEET NO.
C-14



CROSS SECTIONS

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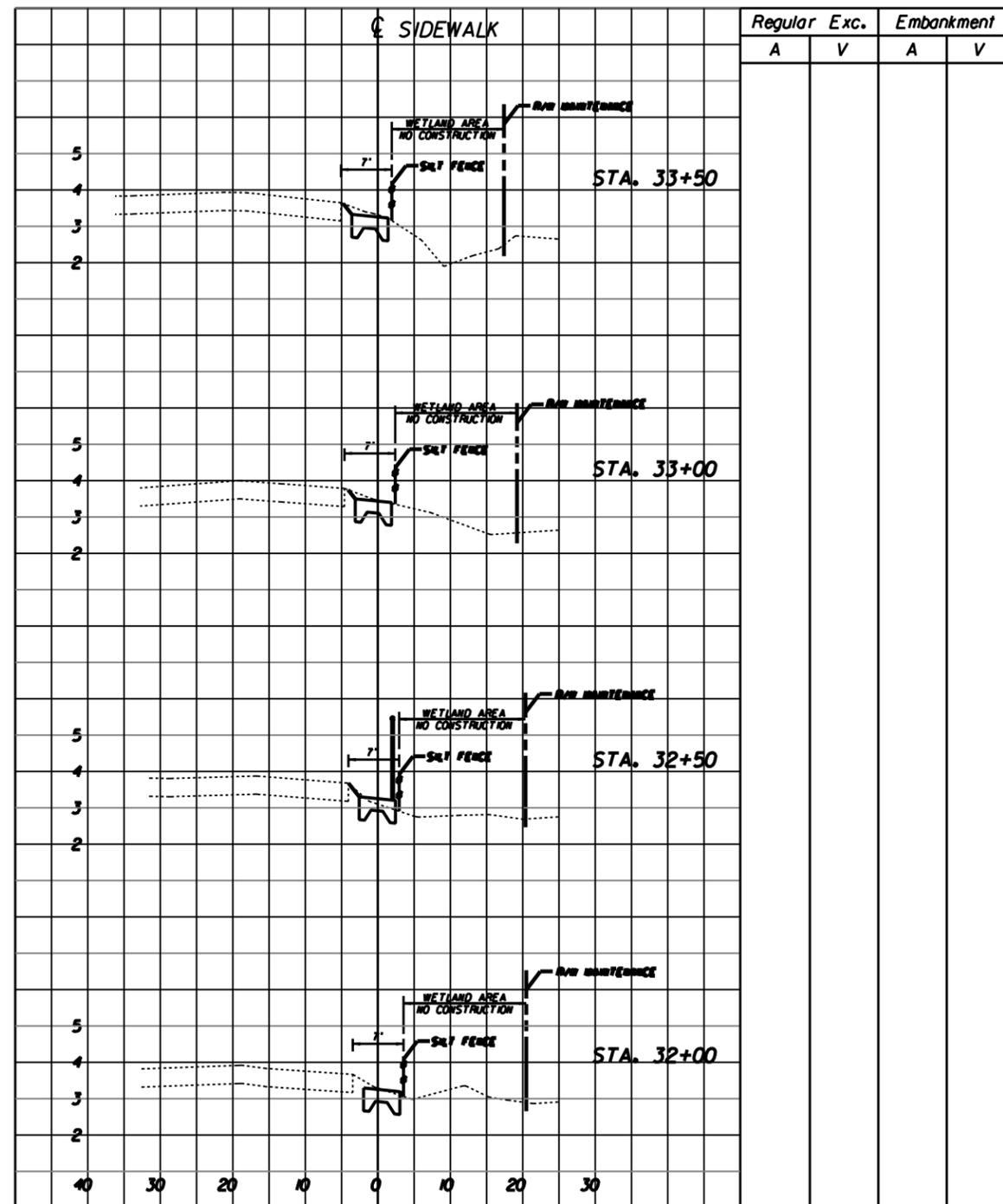
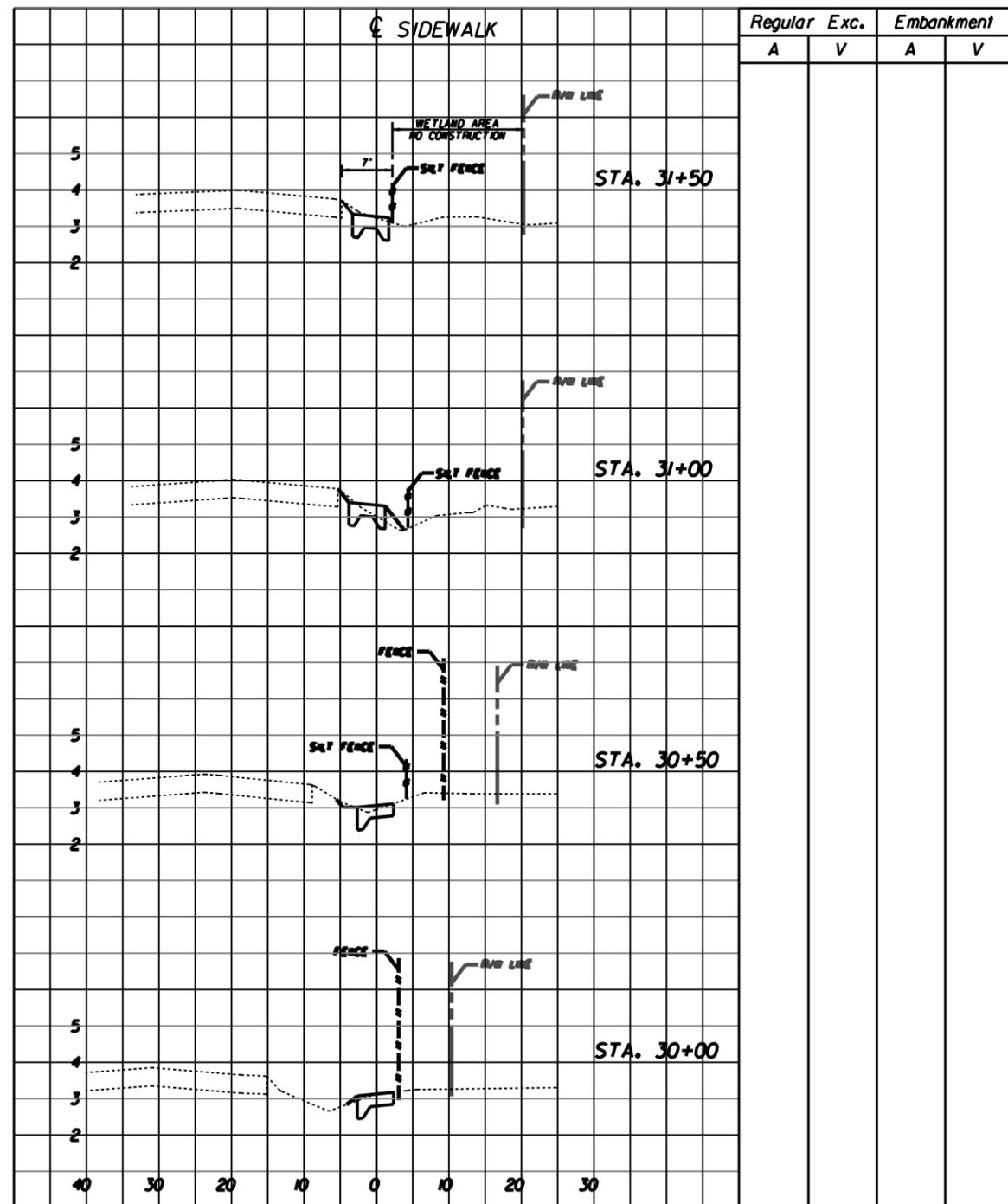
PROJ. # GN 0711



FPN # 421379-1

**COLLEGE ROAD
 ENHANCEMENTS**

SHEET NO.
C-17



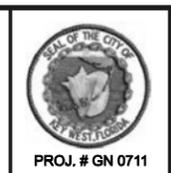
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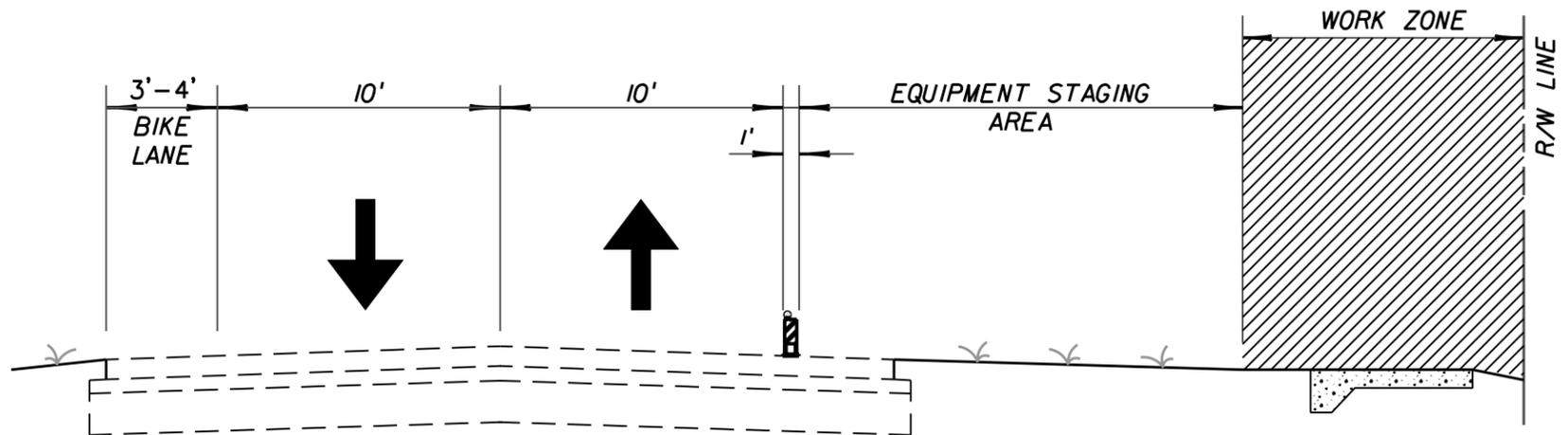


COLLEGE ROAD
 ENHANCEMENTS

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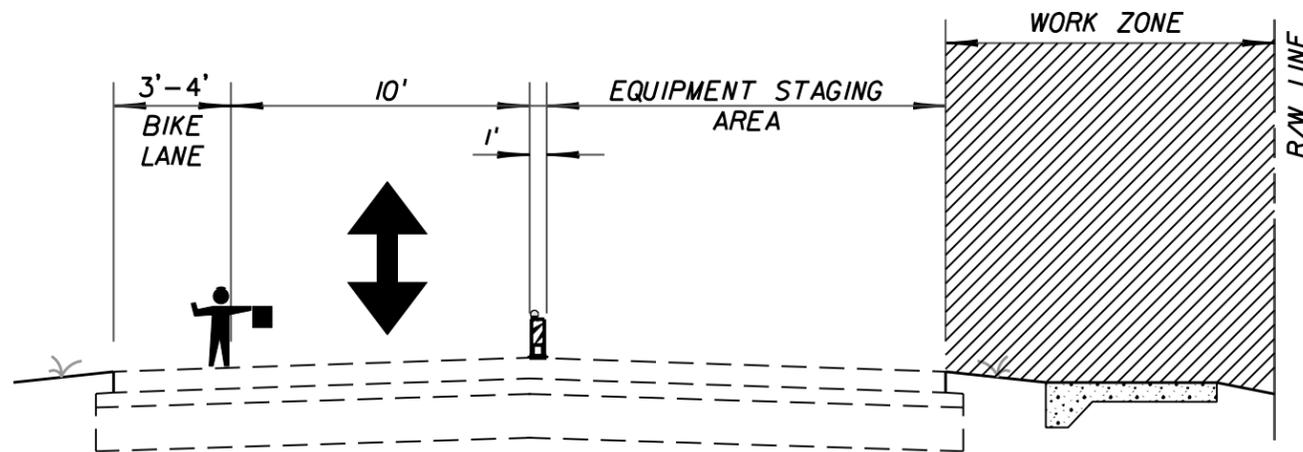
TRAFFIC CONTROL PLAN NOTES:

1. COORDINATION WITH THE CITY OF KEY WEST FOR MAINTENANCE OF TRAFFIC WILL BE REQUIRED.
2. TRAFFIC CONTROLS SHALL BE IN ACCORDANCE WITH THE PROJECT PLANS, THE CURRENT EDITION OF THE FLORIDA DOT DESIGN STANDARDS (600 SERIES), THE STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (2003 EDITION) AS MINIMUM CRITERIA.
3. NOTIFICATION OF LANE CLOSURES OR TEMPORARY DETOURS SHALL BE ACCOMPLISHED 14 WORKING DAYS PRIOR TO CLOSURE, DETOUR OR MOT PHASE CHANGE BY SUBMITTING THE REQUIRED LANE CLOSURE FORM, SKETCHES, CALCULATIONS, AND OTHER DATA THROUGH THE ENGINEER TO THE DISTRICT TRAFFIC OPERATIONS OFFICE.
4. THE TRAFFIC AND TRAVEL WAYS SHALL NOT BE ALTERED BY THE CONTRACTOR TO CREATE A WORK ZONE UNTIL ALL LABOR AND MATERIAL ARE AVAILABLE FOR THE CONSTRUCTION IN THAT AREA.
5. TRAFFIC SHALL BE MAINTAINED ON DUST FREE A.C. SURFACE AT ALL TIMES.
6. THE CONTRACTOR SHALL MAINTAIN VEHICULAR ACCESS TO DRIVEWAYS AND PEDESTRIAN ACCESS TO BUSINESSES AT ALL TIMES. ANY DISRUPTIONS NEEDED TO CAST SIDEWALKS IN THOSE AREAS SHALL BE LIMITED TO 24 HOURS AND SHALL BE COORDINATED 72 HOURS IN ADVANCE WITH THE AFFECTED BUSINESSES.
7. AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL COVER WORK ZONE SIGNS WHEN CONDITIONS NO LONGER WARRANT THEIR USE.
8. EACH EXISTING STREET NAME AND STOP SIGN AFFECTED BY CONSTRUCTION SHALL BE RELOCATED AND MAINTAINED IN AN APPROPRIATE LOCATION FOR THE DURATION OF THE PROJECT. WHEN NO LONGER AFFECTED BY CONSTRUCTION, THESE SIGNS SHALL BE RESTORED TO THEIR ORIGINAL POSITION.



STATION 10+00.00 TO STATION 30+50.00

1. PLACE SIGNS, BARRICADES, AND OTHER TRAFFIC CONTROL DEVICES TO MAINTAIN TRAFFIC AS PER INDEX 601.
2. USE AREA BETWEEN RIGHT SIDE EDGE OF PAVEMENT AND PROPOSED SIDEWALK LOCATION TO STAGE CEMENT TRUCK AND ASSOCIATED CONSTRUCTION EQUIPMENT.



STATION 30+50.00 TO STATION 38+07.02

1. PLACE SIGNS, BARRICADES, AND OTHER TRAFFIC CONTROL DEVICES TO MAINTAIN TRAFFIC AS PER INDEX 603 AS REQUIRED.
2. USE AREA BETWEEN NORTHBOUND TRAFFIC AND PROPOSED SIDEWALK LOCATION TO STAGE CEMENT TRUCK AND ASSOCIATED CONSTRUCTION EQUIPMENT.

TRAFFIC CONTROL PLANS

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