

INVITATION FOR BIDS

FOR

**INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD.
SOUTH TO WESTWOOD BLVD. NORTH)**

Mail or Hand Deliver

ORIGINAL BID FORM (MARKED "ORIGINAL") & THREE (3) COMPLETE COPIES

BY 2:00 PM – March 12, 2015

To:

**BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA
INTERNAL OPERATIONS CENTRE II
PROCUREMENT DIVISION
400 E. SOUTH STREET- 2nd FLOOR
ORLANDO, FLORIDA 32801**

Bid Opening:

March 12, 2015 - 2:00 PM

**Internal Operations Centre II
Procurement Division Conference Room, Second Floor
Orlando, Florida 32801**

**Non - Mandatory Pre-Bid Conference – February 18, 2015 2:00 P.M.
Public Works Complex, 1st Floor Main Conference Room
4200 South John Young Parkway, Orlando, Florida 32839
Interested bidders are encouraged to attend.**

NOTICE TO BIDDERS/OFFERORS

To ensure that your bid/proposal is responsive, you are urged to request clarification or guidance on any issues involving this solicitation before submission of your response. Your point-of-contact for this solicitation is Carol Hewitt at Carol.Hewitt@ocfl.net or (407) 836-5598.

**VOLUME I
PART A**

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NEW BID BOND REQUIREMENT – See Part C, Instructions to Bidders, Paragraph 19 e.

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ISSUED: February 10, 2015

**NOTICE
INVITATION FOR BID NO. Y15-750-CH**

**INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD.
SOUTH TO WESTWOOD BLVD. NORTH)**

Sealed bid offers (Original Bid Form and three (3) complete copies) for furnishing the above will be accepted up to **2:00 PM, March 12, 2015** in the Procurement Division; Internal Operations Centre II, 400 E. South Street; 2nd Floor, Orlando, FL 32801. Bids will be opened shortly thereafter in the Procurement Division Conference Room, 2nd Floor; Internal Operations Centre II.

Bid Documents are available in the following formats:

1. Complete bid documents may be obtained from the Procurement Division, Internal Operations Centre II, 400 E. South Street, 2nd floor, Orlando, FL 32801. Phone (407) 836-5635 and Fax (407) 836-5899. The documents are available for a cost of **\$175.00** non-refundable.
2. A printed copy of the basic solicitation documents and a CD containing the construction plans and Utilities specifications are available for a cost of **\$50** per CD non-refundable.
3. Complete bid documents **including construction plans and specifications** are now available for downloading from the internet at **orangecountyfl.net**.

A Non-Mandatory Pre-Bid Conference will be held on February 18, 2015, 2:00 P.M., Public Works Complex, 1st Floor Main Conference Room, 4200 South John Young Parkway, Orlando, Florida 32839. Interested bidders are encouraged to attend.

SCOPE OF WORK: The project consists of widening an existing segment of International Drive from a four-lane urban section to a six-lane divided urban section.

PROJECT LOCATION: International Drive from Westwood Blvd. South to Westwood Blvd. North, Orange County, Florida.

Johnny M. Richardson, CPPO, CFCM
Manager, Procurement Division

PART B

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PART C - INSTRUCTIONS TO BIDDERS

1. GENERAL:

The term County used herein refers to the Board of County Commissioners, Orange County, Florida, or its duly authorized representative. The term Bidder used herein refers to the manufacturer, dealer or business organization submitting a bid to the County in response to this Invitation for Bid.

2. PREPARATION AND SUBMISSION OF BIDS:

- a. Form of Proposal: Each Bidder shall submit the bid in four parts (original Bid Form, marked original, with attachments and three (3) copies of the Bid Form and all attachments) and indicate the base bid price and any alternative(s) that may be included in the proper space(s).

The estimated total base bid is the sum of all pay item totals and the County reserves the right to correct errors in pay item totals arising from incorrect extensions. See "Bid Errors", Item 4.

- b. All bids, proposals or quotations, unless otherwise specified, must be delivered in a sealed envelope, either mailed or hand carried, to the Procurement Division, Orange County Internal Operations Centre II, 400 E. South Street, 2nd Floor, Orlando, Florida 32801, prior to the bid opening time as specified in Part B. Bids received after the date and time specified will be returned unopened. The time/date stamp clock located in the Procurement Division shall serve as the official authority to determine lateness of any bids.

Respondents are cautioned that they are responsible for delivery to the specific location cited above. Therefore, if your bid, proposal or quotation is delivered by an express mail carrier or by any other means, it is your responsibility to ensure delivery to the above address. This office will not be responsible for deliveries made to any place other than the specified address.

The delivery of said bid to the Procurement Division prior to the time and date stated in Part A is solely and strictly the responsibility of the Bidder. The County shall not be responsible for delays in delivery to the Procurement Division caused by the United States Postal Service or courier service, delivery to any other County Office or delays caused by any other occurrence. The bid delivery time will be scrupulously observed. Under no circumstances will bid proposals delivered after the delivery time specified be considered.

The decision to refuse to consider a bid or proposal that was received beyond the date/time established in the solicitation shall not be the basis for a protest pursuant to the Orange County Code (Procurement Ordinance).

Bidders should indicate on the sealed envelope the following:

1. Invitation for Bid Number
 2. Hour and Date of Opening
 3. Name of Bidder
 4. Return Address of the Bidder
- c. Bids will be publicly opened in the Procurement Division Conference Room, 2nd Floor of the Orange County Internal Operations Centre II, 400 E. South Street; Orlando, Florida.
- d. All bid proposals must be manually and duly signed by an authorized corporate officer, principal, or partner (as applicable) with his signature in full. When a firm is a Bidder, the bid proposals shall be signed in the name of the firm by one or more of the partners. When a corporation is a Bidder, the officer signing shall set out the corporate name in full beneath which he shall sign his name, give title of his office and affix the corporate seal. Anyone signing the bid proposal as agent must file with it legal evidence of his authority to do so. Bidders who are nonresident corporations shall furnish to the County a duly certified copy of their permit to transact business in the State of Florida along with the Bid Proposal. Failure to promptly submit this evidence or qualification to do business in the State of Florida may be basis for rejection of the Bid Proposal.
- e. The Bidder is solely responsible for reading and completely understanding the requirements and the specifications of the solicitation.
- f. Bid proposals may be withdrawn by written, telecopied or telegraphic requests dispatched by the Bidder and received by the Manager of the County Procurement Division before the time for receiving bids has expired. Negligence on the part of the Bidder in preparing a bid proposal is not grounds for withdrawal or modification of a bid proposal after such bid proposal has been opened by the County. A Bidder may not withdraw or modify a bid proposal after the appointed bid proposal opening and such bid proposal must be in force for **ninety (90)** days after the bid opening. Bidders may not assign or otherwise transfer their bid proposals.
- g. At the time and place fixed for the opening of bid proposals (see above), every bid proposal properly delivered within the time fixed for receiving bid proposals will be opened and publicly read aloud, irrespective of any irregularities found therein. Bidders and other persons interested may be present, in person or by representative.
- h. A Bid, Payment and Performance Bond are a requirement of the IFB when the bid/contract amount exceeds \$100,000.

Submission of an original Bid Bond (copy not acceptable) completed and signed by all required parties and submitted on the form provided in Exhibit 1 to the Bid Proposal (Part D), or in the alternative, a Certified Check, or a Cashier's Check shall be required to accompany each bid proposal in a stated dollar amount of not less than ten (10%) percent of the sum of the computed total amount of the Bidder's Base Bid proposal. Submittal of a Bid Bond less than 10% of the bid sum shall result in rejection of the bid. **Failure to submit the Bid Bond on the form provided in Exhibit 1 to the Bid Proposal (Part D) shall result in rejection of the bid.**

In order to be acceptable to the County, the Surety company issuing the Bid Bond as called for in this Invitation for Bids, shall meet and comply with the minimum standards described in Part C, Section 19, "Qualifications of Surety Companies". **Failure to submit a Bid Bond from a Surety Company meeting these minimum standards shall result in rejection of the bid.**

Certified checks or cashier's checks shall be drawn on a solvent bank or trust company to the order of the Board of County Commissioners, Orange County, Florida and shall have all necessary documentary revenue stamps attached, if required by law. Personal checks are not acceptable to the County. See Section 19, "Qualifications of Surety Companies" for additional requirement.

- i. A pre-Bid conference will be held at the time and location shown in the Notice, Part B of this Bid package.
- j. No oral interpretation of the meaning of the plans, specifications, or other Contract documents shall be considered binding. Every request for interpretation shall be in writing addressed to **Carol Hewitt, Email Address: Carol.Hewitt@ocfl.net or Fax Number (407) 836-5899.** To be given consideration, such requests must be received Ten (10) days prior to bid opening.

Any and all such interpretations and any supplemental instructions will be in the form of a written addendum which, if issued, will be available for downloading from the Internet at orangecountyfl.net. All addenda so issued shall become part of the Contract Documents and receipt shall be acknowledged on the Bid Form, Part D or by completion of the applicable information on the addendum and returning it not later than the date and time for receipt of the bid.

- k. Before submitting bid proposals, Bidders must carefully examine the site of the proposed work and make all necessary investigations to inform themselves thoroughly as to all difficulties involved in the completion of all work required pursuant to the mandates and requirements of this bid package.

No plea of ignorance of conditions or difficulties that may hereafter exist, or of conditions or difficulties that may be encountered in the execution of the work pursuant to this bid package as a result of failure to make the necessary examinations and investigations will be accepted as an excuse for any failure or omission on the part of the successful Bidder (Contractor) to fulfill, in every detail, all of the requirements of the Contract Documents, nor will they be accepted as a basis for any claims whatsoever for extra compensation or for an extension of time.

3. MINORITY/WOMEN OWNED BUSINESS ENTERPRISES:

- a. To provide for the participation of certified minority and women owned businesses (M/WBE's) in the County's procurement of construction services. Bidders submitting bids to the County are urged to comply with M/WBE subcontracting goals established by the County Minority/Women Business Enterprise Ordinance, No. 94-02 and amended by Ordinance No.2009-21. The overall goal for all bids (inclusive of all additive and deductive alternates) is 25% participation for M/WBE subcontractors and suppliers. Upon Contract award the Contractor must meet the M/WBE expenditure required by the Contract.

The Ordinance also addresses minority/women group employment levels setting goals to encourage each Bidder to maintain 18% minority and 6% women employees.

Note: Only 50% of material/supply dollars purchased from M/WBE distributors is applied toward the goals for minority and women business enterprise participation on construction projects. Contractor shall list **the total amount of material/supply dollars** to be purchased from each M/WBE distributor on the Subcontractor/Supplier Page (Attachment C-2). **The County will calculate the actual dollars to be applied toward the goals.**

- b. **NOTICE: Goals for bids under \$100,000**

There are M/WBE goals for all bids including bids for IFB estimated to be less than \$100,000 (inclusive of all additive and deductive alternates).

- c. **M/WBE Bidders competing as primes**

If an M/WBE firm bidding as a prime certifies with his/her bid that it will self-perform 51% percent or more of the project, as evidenced by Attachment C-2, then that firm will not be required to comply with the M/WBE subcontracting goals. **Failure to include the percentage of work and the scope of work to be self-performed, and the dollar amount for the work an M/WBE Bidder competing as a prime intends to self-perform will result in the M/WBE Bidder receiving zero M/WBE participation for the bid.**

However, if the M/WBE Bidder will not be self-performing at least 51% percent of the project, then he/she must comply with the M/WBE

participation goal, and good faith effort documentation required from non-M/WBE Bidders to receive M/WBE compliance consideration.

d. **Subcontracts/Purchase Orders**

The successful Bidder shall provide a copy of all fully executed subcontracts and purchase orders issued to M/WBE's listed on Attachment C-2 to the Business Development Division. Submittal of these subcontracts/purchase orders is a condition precedent to execution of the prime Contract by the County.

The Contractor shall include a Prompt Payment Clause (reference Part F, Article 21, paragraph B) in all subcontracts and purchase orders. The Contractor should include in the subcontracts that they are contingent upon execution of the prime Contract.

The County may, at its discretion, require copies of subcontracts/purchase orders for the non-M/WBE's listed on Attachment C-2. However, if this option is not exercised, the awarded Contractor shall provide a list of all non-M/WBE Subcontractors and suppliers certifying that a prompt payment clause has been included in that Contract or purchase order.

e. **Good Faith Effort Documentation Requirements -**

If the established goals (reference paragraph 3.a above) are not achieved, to maximize consideration for MWBE participation, Bidders should provide with the bid sufficient documentation to substantiate that ALL FIVE of the mandatory efforts listed below were undertaken. Bidders meeting or exceeding the goals need not provide good faith effort documentation. Refer to paragraph f for the sliding scale for enforcement of the good faith effort document.

- i. If a bidder desires to meet the good faith effort documentation requirements he/she must provide written notice to certified M/WBEs that provides the type of work that the Bidder intends to subcontract. The notice shall be by e-mail or fax, no fewer than seven (7) calendar days prior to bid or proposal opening. All e-mails and faxes shall include the legal name of the M/WBE firm. The notice shall advise the M/WBE's:
 - a. that their interest in the contract is being solicited;
 - b. of the specific work the Bidder intends to subcontract
 - c. how to obtain information about and review the contract plans and specifications;
 - d. information on bonding, insurance and other pertinent requirements;
 - e. the deadline for bid or proposal submissions to the Bidder and the bid due date to the County;

- f. 24 hours notice of any addenda.
- ii. Also bidders shall provide an explanation why the M/WBE goals were not achieved, and list the scopes of service not subcontracted on Attachment C-2
- iii. Bidders shall follow up initial submittals of interest by contacting M/WBEs and documenting using a contract log, which shall include the firm's name address, contact information (e-mail, telephone and/or fax numbers), scope of work requested, the date, name of person making the effort, denote if M/WBEs will bid, time quote received and notes denoting if plans and specifications were sent. Each bidder shall use the standardized contact log, Attachment C-5.
- iv. In instances where a non-minority/non-woman contractor is listed for work for which M/WBE availability exists, the Bidder shall submit **ALL** quotations received from M/WBEs **AND** the listed non-M/WBE **within twenty-four (24) hours, if one of the three (3) apparent low Bidders**. The Bidder shall provide an explanation as to why the M/WBE's quotations were not accepted.

Receipt of a lower quotation from a non-M/WBE prior to bid opening will not in itself excuse a Bidder's failure to meet M/WBE participation goals. However, a Bidder's good faith effort obligation does not require a Bidder to accept a quotation from a M/WBE which is an unreasonable price. For the purpose of this subsection, "unreasonable price" means a price above (or below) competitive levels which cannot be attributed to the M/WBE's attempt to cover costs inflated by the present effect of discrimination.

- v. Bidder shall contact the Business Development division staff as a resource to obtain M/WBE participation goal.

If the Bidder fails to meet requirements (i – iv) of the above mentioned good faith effort documentation, then the bidder will be permitted to substitute one of the following with documentation showing that

- (1) The Disney Entrepreneur Center (DEC) was used to host a workshop that informed M/WBE firms how to better prepare for sub-contracting opportunities;
- (2) The Bidder has participated in Orange County Business Development Division's sponsored "How to do Business" workshop;
- (3) The Bidder has sponsored a match-maker event with certified M/WBE firms.

Orange County Business Development Division will determine the usage of this substitution, along with the appropriate time frame for utilizing this credit.

If, after Contract award, Prime Contractors who have not achieved the M/WBE participation goals choose to subcontract work indicated as being self-performed without prior written approval of the Business Development Division (reference Part F, Article 21, paragraph D), the matter will be reported to the Procurement Division with an appropriate responsibility recommendation for consideration in the event the contractor competes for future County contracts.

f. Sliding scale for enforcement of good faith effort requirements

If the established goals are not achieved by the low Bidder and it has been determined that the good faith efforts required for compliance have not been documented by the low Bidder, then the bid shall be rejected as non-responsive, but only if the next lowest responsive bid does not exceed the low bid by more than:

- i. Eight (8) percent on contract awards up to one hundred thousand dollars (\$100,000.00);or
- ii. Seven (7) percent on contract awards from \$100,000.00 to \$500,000.00; or
- iii. Six (6) percent on contract awards from \$500,000.01 to \$750,000.00; or
- iv. Five (5) percent on contract award from \$750,000.01 to \$2,000,000.00; or
- v. Four (4) percent on contract awards from \$2,00,000.01 to \$5,000,000.00; or
- vi. Three (3) percent on contract awards over \$5,000,000.01.

However, if the next low bid is responsive only because of the Bidder having made good faith effort (not because of having met the goals), the Board may approve award of the Contract to the next low Bidder only if the value of its M/WBE participation is equal to or greater than that of the low Bidder.

- g. Letters of Intent shall match **exactly the information provided on** Attachment C-2 to the Bid Forms D, Attachment C-3 and shall be executed by the apparent low Bidder and all M/WBE Subcontractors and/or suppliers listed on Attachment C-2 shall be submitted to the Business Development Division office before 5:00 P.M. on the second business day after bid opening.
- h. Bidders shall not reject an M/WBE as unqualified without sound reasons based on a thorough and documented investigation of that M/WBE's capabilities.

- i. Bidder's efforts will be evaluated considering the ability of other Bidders to meet the requirements relating to the use of M/WBE subcontractors.
- j. Bidders should make whatever additional efforts are necessary to achieve the goals and it is recommended that these efforts be documented. However, this documentation shall not replace the required documentation if the goals are not met. Bidders are encouraged to contact the Business Development Division for guidance and assistance. Additional efforts by Bidders may include but are not limited to the following:
 - i. Bidders should provide interested M/WBE's with assistance in reviewing the Contract plans and specifications.
 - ii. Bidders should assist interested M/WBE's in obtaining required lines of credit, insurance or bonding.
 - iii. Bidders should solicit only types of work that match the capabilities of the M/WBE's and for which they are certified.
- k. All participating M/WBE's must be certified by Orange County. The Business Development M/WBE Directory is available by e-mail or through the Orange County web site at Orangecountyfl.net. **Only firms having established offices in the Orlando MSA (Orange, Lake, Seminole and Osceola Counties) are eligible for Orange County certification. All firms must be certified prior to bid opening and must be certified in the area(s) for which they will be used.** If a firm claims to be certified, but is not listed in the Directory, Contractor should obtain a copy of their Certificate and/or contact the Business Development Division for verification of certification.
- l. The County has established a credit program whereby Contractors are awarded credits to be applied toward meeting the M/WBE goals on certain County bids. Emphasis will be placed on credits for Non-County Utilization and First-Time M/WBE Utilization. Bidders are encouraged to contact the Business Development Division for information on acquiring and applying the credits.
- m. Effective August 1, 2003, the County implemented a graduation program. Under this program, utilization of M/WBE firms designated as graduates shall count toward meeting M/WBE participation goals only on specified projects. All construction solicitations for which the County has determined the overall contract amount to be awarded to the prime in excess of \$10,000,000 for vertical construction, \$7,000,000 for horizontal construction and \$7,000,000 for all other construction are eligible for graduate M/WBE participation. Vertical construction is any construction of a structure or building which requires a general or building contractor's license. Horizontal construction includes but is not limited to roadwork, site work, drainage or utilities work. Other construction is any construction other than what is defined as vertical or horizontal construction.

The Bidder's total base bid, which is used by the Procurement Division as the basis for determining Contract award value, will be used to determine if graduated M/WBE firms are eligible to participate. If the contract has option provisions, the total base Bid is the total of the Basic Contract Year plus all Option Years. Prime contractors will receive full M/WBE credit for the use of graduated M/WBE's that meet all other requirements.

It is the Bidder's responsibility to insure that graduate M/WBE's are not listed in proposals to meet M/WBE participation requirements on projects in which they are not eligible to participate.

- n. The County is compiling information about the MWBE program in order to gauge the level of program understanding and acceptance. Bidders should complete the M/WBE Survey, Attachment C-4 and return with their Bid Proposal Form. Failure to submit the completed survey may delay award of the Contract.

Intentional failure to attempt compliance and/or intentional failure to comply with the M/WBE subcontract goals pursuant to the Minority/Women Business Enterprise Ordinance, may result in the County invoking penalties under that ordinance and/or a finding by the County that a Bidder is "non-responsible", thus resulting in that bid being rejected and the Bidder facing possible suspension or debarment from future County IFB's.

4. BID PREFERENCE FOR SERVICE-DISABLED VETERANS (SDV)

The Orange County Service-Disabled Veteran Business Program Ordinance sets vendor preferences for service-disabled veteran business enterprises registered with Orange County Business Development division.

As part of this program, Contractors are required to complete the Attachment C-2 listing ALL subcontractors (majority, women and minority, and service-disabled veteran) their firm will utilize in fulfillment of the requirements of this solicitation.

Also, in accordance with the County SDV Ordinance, preferences for certified service-disabled veteran business enterprises shall be applied on bid awards (sealed bids). The following bid preference scale shall apply to bids submitted by certified service-disabled veterans business enterprises as long as the bid does not exceed the low bid by more than 8% on bid awards up to \$100,000; 7% on bid awards from \$100,000 to \$500,000; 6% on bid awards from \$500,000.01 to \$750,000.00; 5% on bid award from \$750,000.01 to \$2,000,000; 4% on bid awards from \$2,000,000.01 to \$5,000,000; or 3% on bid awards over \$5,000,000.01.

Certified service-disabled veteran business enterprises may be awarded or recommended for award of contracts when their bids are within the above allowed percentage in comparison to the low responsive and responsible bid(s).

If a certified service-disabled veteran business enterprise, entitled to the vendor preference under this section, and one (1) or more other businesses also entitled to this preference, or another vendor preference provided by the Orange County

Code, submit bids, proposals, or replies for procurement of commodities or contractual services which are otherwise equal with respect to all relevant considerations, including price, quality, and service, then the Procurement Division Manager shall award the procurement or contract to the business having the smallest net worth.

5. BID ERRORS:

Where bid forms have erasures or corrections, each erasure or correction must be initialed in ink by the Bidder. In case of unit price bid items, if an error is committed in the extension of an item, the unit price as shown in the Official Bid Form will govern. Errors between any sum, computed by the Bidder, and the correct sum thereof will be resolved in favor of the correct sum. Any discrepancy between words and numbers will be resolved in favor of the written words.

6. DEVIATIONS:

Bidders are hereby advised that Orange County will only consider bid Proposals that meet the specifications and other requirements imposed upon them by this bid package. In instances where a deviation is stated in the bid form, said bid will be subject to rejection by the County in recognition of the fact that said bid Proposal does not meet the exact requirements imposed upon the Bidder by the Contract Documents.

7. SUBSTITUTE MATERIAL AND EQUIPMENT:

The Contract, if awarded, will be on the basis of material and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or-equal" items. Whenever materials or equipment or patented processes are specified or described in the Contract Documents by naming a trade name, manufacturer, supplier or proprietary item or catalog number, the naming of the item is intended to establish the type, function and quality required and to establish a basis for bidding.

Substitute materials or equipment may be considered after a Contract for the Work is executed if sufficient information is supplied by Contractor to allow Project Manager to evaluate the proposed substitution, unless the naming of the item is followed by words indicating that no substitution is permitted. The procedure for submittal of any such application by Contractor and consideration by Project Manager is set forth in the General Conditions.

In the event that substitute materials or equipment are used and are less costly than the originally specified material or equipment, then the difference in cost of the item shall benefit the County and Contractor in equal proportions. Applications for substitute materials and equipment shall only be evaluated after the Contract is executed. The Base Bid and Alternates shall reflect the costs for the materials and equipment named or specified only.

8. REQUESTED INFORMATION AND DESCRIPTIVE LITERATURE:

Bidders must furnish all requested information in the spaces provided on the bid form or attachments thereto. Additionally, where required pursuant to the provisions of this bid package, Bidders must submit with their bid proposal cuts, sketches, descriptive literature and/or complete specifications relative to the items proposed and offered.

9. AWARD OF CONTRACT/REJECTION OF BIDS:

The Board of County Commissioners will award a Contract to the low, responsive and responsible Bidder, price and other factors considered. The County will award one Contract for this requirement. The Board of County Commissioners, in its sole discretion, reserves the right to reject any and all bids and to waive any informality concerning bid proposals whenever such rejection or waiver is in the best interest of the County. The ability of a Bidder to obtain a performance bond and a payment bond shall not be regarded as the sole test of such Bidder's competency or responsibility. Nothing contained herein shall place a duty upon the County to reject bids or award a Contract based upon anything other than its sole discretion as described herein.

When more than one method of work is prescribed in the solicitation with separate pricing allowed for each method, the County will select the method determined to be in its best interests, price and other factors considered.

Determination of the low Bidder when additive or deductive bid items are involved shall be as follows:

A. ADDITIVE/DEDUCTIVE BID ITEMS:

1. If it is deemed to be in the best interest of the County to accept the additive or deductive items, award will be made to the Bidder that offers the lowest aggregate amount for the base bid, plus or minus (in the order listed on the bid form), those additive or deductive bid items that provide the most features of the work.
2. All bids will be evaluated on the basis of the same additive or deductive bid items.
3. Failure of the Bidder to provide pricing for all unit priced items and/or the Base Bid and ALL requested additive/deductive bid items, or alternate bids shall be cause for rejection of the bid as non-responsive.

B. RECIPROCAL LOCAL PREFERENCE:

In the event the lowest responsive and responsible bid submitted in response to any invitation for bid is by a bidder whose principal place of business is in a county other than Orange County, and such county grants a bid preference for purchases to a bidder whose principal place of business is in such county, then Orange County may award a preference to the (next) lowest responsive and responsible

bidder having a principal place of business within Orange County, Florida. Such preference shall be equal to the preference granted by the county in which the lowest responsive and responsible bidder has its principal place of business.

10. POSTING OF RECOMMENDED AWARD AND PROTESTS:

The recommended award will be posted for review by interested parties at the Procurement Division and at <http://apps.ocfl.net/OrangeBids/AwardsRec/default.asp> prior to submission through the appropriate approval process and will remain posted for a period of five full business days.

Failure to file a protest to the Procurement Division Manager by 5:00 PM on the fifth full business day after the posting date shall constitute a waiver of bid/proposal protest proceedings. Additional information relative to protests can be found at: <http://www.orangecountyfl.net/VendorServices/VendorProtestProcedures.aspx>

A lobbying blackout period shall commence upon issuance of the solicitation until the Board selects the successful Bidder. For procurements that do not require Board approval, the blackout period commences upon solicitation issuance and concludes upon Contract award. Additional information relative to lobbying can be found at: <http://www.orangecountyfl.net/OpenGovernment/LobbingAtOrangeCounty.aspx>

The Board of County Commissioners may void any Contract where the County Mayor, one or more County Commissioners, or a County staff person has been lobbied in violation of the blackout period restrictions of Ordinance No. 2002-15.

11. CONTRACT DOCUMENTS:

The Contract Documents shall include the documents stated in the Contract (Titles, Subtitles, Headings, Running Headlines, Table of Contents and Indexes are used merely for convenience purposes).

12. MODIFICATION/ALTERATION OF SOLICITATION AND OR CONTRACT DOCUMENTS

Modification or alteration of the documents contained in this solicitation or the contract resulting from this solicitation shall only be made upon receipt of prior written consent of the County.

13. LAWS AND REGULATIONS:

The Bidder's attention is directed to the fact that all applicable Federal and State laws, municipal and County ordinances, and the rules and regulations of all authorities having jurisdiction over any part of the project shall apply to the solicitation and Contract throughout, and they will be deemed to be included in the solicitation/Contract the same as though herein written.

14. REQUIRED DISCLOSURE:

Bidder shall disclose all material facts with its bid submission pertaining to any felony conviction or any pending felony charges in the last three (3) years anywhere in the United States against (i) Bidder, (ii) any business entity related to or affiliated with Bidder, or (iii) any present or former executive employee, officer, director, stockholder, partner or owner of Bidder or of any such related or affiliated entity. This disclosure shall not apply to any person or entity who is a stockholder, owning less than 20% of the outstanding shares of a Bidder whose stock is publicly owned and traded.

The Bidder shall also disclose any civil conviction or pending civil litigation involving Contract performance during the last three (3) years anywhere in the United States against the Bidder, or against any business controlled by or affiliated with Bidder.

The Board of County Commissioners may reject, at its sole discretion, any Bidder the Commission finds to lack, or whose present or former executive employees, officers, directors, stockholders, partners or owners are found by the Commission to lack honesty, integrity, or moral responsibility. The Commission's finding may be based on the disclosure required herein, the County's own investigation, public records, or any other reliable source of information. The Commission may also reject any Bidder failing to make the disclosure required herein. By submitting a bid, Bidder recognizes and accepts that the Board of County Commissioners may reject any bid at its sole discretion and the Bidder waives any claim it might have for damages or other relief arising from the rejection of its bid or resulting directly or indirectly from the rejection of its bid based on these grounds or from the disclosure of any pertinent information relating to the reasons for rejection of its bid.

15. EXECUTION OF WRITTEN CONTRACT:

The successful Bidder will be required to sign a written Contract which has been made a part of this bid package and identified as the Contract. Said written Contract will evidence in written form the agreement between the parties pursuant to the award having been theretofore made by the County to this Bidder; said signing to be accomplished within ten (10) days after receipt of Notice of Award.

The County will issue an "Official Notice to Proceed" on the project within ninety (90) days after contract award. In the event the Official Notice to Proceed has not been issued by the County within the 90-day period above, the Contractor shall have the option to rescind the Contract or continue with the Contract as originally bid.

16. LICENSING REQUIREMENTS:

The following licensing requirements shall apply when the applicable Florida statute mandates specific licensing for Contractors engaged in the type of work covered by this solicitation.

- a. State of Florida, Department of Professional Regulation, Construction Industries Licensing Board and licensed by other federal, state, regional, county or municipal agencies having jurisdiction over the specified construction work.
- b. Said licenses shall be in the Bidder's name as it appears on the Official Bid Form. Bidder shall supply appropriate license numbers, with expiration dates, as part of their bid. Failure to hold and provide proof of proper licensing, certification and registration may be grounds for rejection of the bid.
- c. Bidder shall provide copies of all applicable licenses with their Bid Proposal.
- d. Subcontractors contracted by the Prime Contractor shall be licensed in their respective fields to obtain construction permits from the County. Said license must be in the name of the subcontractor listed on Attachment C, Subcontractor/Supplier Page, herein.

17. SECURITY FORFEITURE:

When bid security has been required (Part C, Section 2, Paragraph h.): If, within ten (10) days after issuance of Notice of Award of a Contract, the successful Bidder refuses or otherwise neglects to execute the required written Contract and fails to furnish the required Performance Bond and Payment Bond, the amount of the Bidder's bid security (Cashier's Check or Bid Bond) shall be forfeited and the same shall be retained by the County. No plea of mistake in the bid or misunderstanding of the conditions of forfeiture shall be available to the Bidder for the recovery of his bid security or as a defense to any action.

18. PERFORMANCE BONDS AND PAYMENT BONDS:

When the contract amount exceeds \$100,000 a Payment Bond and a Performance Bond issued in a sum equal to one hundred (100%) percent of the total awarded Contract amount by a Surety company considered satisfactory by the County according to the criteria in Section 19 will be required from the successful Bidder for purposes of protecting the County from lawsuits for non-payment of debts as might be incurred during the successful Bidder's performance under such Contract, and insuring the faithful performance of the obligations imposed by the resulting Contract. The Payment Bond and the Performance Bond forms are included in the Contract Documents and said forms must be properly executed by the Surety Company and successful Bidder within ten (10) days after receipt of notification from the County of its award of the Contract. Awarded Bidders shall record bonds in the public records as required by Florida State Statutes, Chapter 255.05.

19. QUALIFICATIONS OF SURETY COMPANIES:

In order to be **ACCEPTABLE** to the County, the Surety company issuing **the Bid Bond, the Performance Bond and the Payment Bond**, as called for in this Invitation for Bids, shall meet and comply with the following minimum standards:

- a. Surety must be admitted to do business in the State of Florida and shall comply with the provisions of Florida Statute 255.05.

- b. Surety must be listed on the U.S. Department of Treasury Fiscal Service, Bureau of Government Financial Operations, Federal Register, Part V, latest revision, entitled: "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies".
- c. All bonds shall be originals and issued or countersigned by a producing agent with satisfactory evidence of the authority of the person or persons executing such bond shall be submitted with the bond. Attorneys-in-fact who sign bonds or other Surety instruments must attach with each bond or Surety instrument a signed, certified and effectively dated copy of their power of attorney. Agents of Surety companies must list their name, address and telephone number on all bonds.
- d. The life of the bonds shall extend twelve (12) months beyond the date of Final Completion and shall contain a waiver of alteration to the terms of the Contract, extensions of time and/or forbearance on the part of the County.
- e. **Surety must have financial standing having a rating from A.M. Best Company (or other equivalent rating company) equal to or better than A- Class VI.**
- f. Should the Bid, Payment and Performance Bonds be issued by co-sureties, each surety listed on the bond shall meet the requirements in paragraphs a. – e. above. In addition, each surety shall submit a power of attorney and all signatures of the co-sureties representatives shall be notarized. The "lead" surety shall be identified for the purposes of underwriting and claims management.

FAILURE TO MEET ANY OF THE REQUIREMENTS CONTAINED ABOVE SHALL RESULT IN REJECTION OF THE BID.

20. TRENCH SAFETY ACT:

Pursuant to Chapter 90-96 (CS/SB 2626), Laws of Florida, "Trench Safety Act", any person submitting a bid/proposal is required to complete the form entitled: COMPLIANCE WITH FLORIDA TRENCH SAFETY ACT (90-96, LAWS OF FLORIDA), if applicable, and return the form with the Official Bid Form, (Part D, Attachment D). This is not a pay item. The purpose of this form is to gather information on the costs associated with trench safety measures and to insure that the bidder has considered these costs and included them in the Base Bid. Failure to complete this form may result in the Bid being declared non-responsive.

21. DRUG-FREE WORKPLACE FORM:

The Drug-Free Workplace Form is attached in Part E and shall be completed and submitted with your bid.

22. BID TABULATION AND RECOMMENDED AWARD:

Bid files may be examined during normal working hours, thirty (30) days after bid opening, or upon recommendation for award, whichever occurs first. Bidders desiring to view these documents are urged to schedule an appointment. For

information concerning this bid, please contact the Procurement Division at the address listed above or by calling (407) 836-5635. Please specify the bid number for which you are inquiring. Bid opening results will be available at <http://apps.ocfl.net/orangebids/bidresults/results.asp>. Unsuccessful bidders will not be notified, unless a request is submitted in accordance with this paragraph.

23. INDEMNIFICATION FOR TORT ACTIONS/LIMITATION OF LIABILITY:

The provisions of Florida Statute 768.28 applicable to Orange County, Florida apply in full to this Contract. Any legal actions to recover monetary damages in tort for injury or loss of property, personal injury, or death caused by the negligent or wrongful act or omission of any employee of the County acting within the scope of his/her office or employment are subject to the limitations specified in this statute.

No officer, employee or agent of the County acting within the scope of his/her employment or function shall be held personally liable in tort or named as a defendant in any action for any or damage suffered as a result of any act, event, or failure to act.

The County shall not be liable in tort for the acts or omissions of an officer, employee, or agent committed while acting outside the course and scope of his/her employment. This exclusion includes actions committed in bad faith or with malicious purpose, or in a manner exhibiting wanton and willful disregard of human rights, safety, or property.

24. OCCUPATIONAL SAFETY AND HEALTH ACT (O.S.H.A.):

In instances where such is applicable due to the nature of the bid matter with which this bid package is concerned, all material, equipment, etc., as proposed and offered by Bidders must meet and conform to all O.S.H.A. requirements; the Bidder's signature upon the bid proposal form (Part D) being by this reference considered a certification of such fact.

25. PUBLIC ENTITY CRIME STATEMENT (FS 287.133):

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a Contract to provide any goods or services to a public entity, may not submit a bid on a Contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a Contractor, supplier, subcontractor, or any entity in excess of the threshold amount provided in Florida State Statutes Section 287.017 for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

26. SUBCONTRACTOR/SUPPLIER INFORMATION:

If maximum M/WBE participation is desired bidders must list all proposed subcontractors and suppliers to be used, regardless of racial or gender grouping, to include names, addresses, phone numbers, type of work subcontracted (trade or commodity), dollar amount of work, and the M/WBE designation or Majority (Non-M/WBE) owned company. Attachment C-2 is provided for this information. Contractor shall not change any subcontractors without just cause and approval by the County.

27. SUBCONTRACTOR'S PAST PERFORMANCE:

Bidder is responsible for verifying subcontractor's satisfactory performance on previous Orange County projects. Failure to do so may impact Bidder's responsibility determination.

28. REFERENCES:

- A.** Bidder should supply (with the bid form) a list of **THREE (3) similar projects** successfully completed **by the Bidder, as a Prime Contractor within the last EIGHT (8) years** prior to the submittal date for sealed bids in response to this Invitation for Bids which meets the similar project criteria defined as: **a road project which construction has been successfully completed within the last eight (8) years and shall contain the following elements:**

Project Elements

1. Construction of a multi-lane (4 or more lanes) urban roadway having a minimum length of 1.0 miles and a roadway construction cost, which excludes any utility work, equal to or greater than three million dollars (\$3,000,000). For purposes of this Invitation for Bid, "urban" is defined as projects which traverse an urbanized area which may have multiple intersecting streets and connecting driveways. Construction of a Limited Access projects with an interchange is not allowed. **Resurfacing, Restoration and Rehabilitation (RRR) projects shall not be considered to be similar projects.**
2. Preparation of roadway as-builts.
3. Construction of roadway stormwater conveyance system (must include at least 500 feet of 18" or larger pipe installation).
4. Construction of a traffic signal with Florida Department of Transportation's standard mast arm and signal interconnect.
5. Coordination with utility companies.
6. Construction of sidewalk.

- B.** **In addition to the list of THREE (3) Similar Projects criteria listed in "A" above, ONE (1) additional Similar Project successfully completed within the last EIGHT (8) years must be submitted (with the bid form) and shall meet the similar project criteria listed below:**

The Contractor (or Utility Subcontractor) responsible for the construction of Orange County Utilities work shall provide project experience that demonstrates they have successfully completed a utility project, as a Prime Contractor or Subcontractor. This project should have consisted of a minimum of 2,000 lineal feet of 16-inch or greater diameter pressurized main constructed within a Public Right-of-Way".

Failure to provide this information may be cause for rejection of this bid.

EACH SIMILAR PROJECT LISTED SHALL BE LISTED WITH COMPLETE INFORMATION AS SPECIFICALLY PROVIDED ON THE REFERENCE FORM (ATTACHMENT E). THE SPECIFIC INFORMATION ON REFERENCES MUST BE PROVIDED ON THE REFERENCE FORM. DO NOT ATTACH LISTINGS OF REFERENCE INFORMATION. FAILURE TO PROVIDE REFERENCE INFORMATION AS REQUESTED MAY RESULT IN THE REJECTION OF YOUR BID.

The determination of whether a bidder is responsible or not shall be at the sole discretion of the County. Although the County may request submission of a minimum number of similar projects for evaluation, the County's determination of a bidder's responsibility shall not be solely based on the number of similar projects submitted.

The contact person listed as a reference shall be someone who has personal knowledge of the Bidder's performance during the referenced project. Contact persons must have been informed that they are being used as a reference and that the County will be calling or emailing them.

29. BID AND RELATED COSTS:

By submission of a bid, the Bidder agrees that all costs associated with the preparation of his/her bid will be the sole responsibility of the Bidder. The Bidder also agrees that the County bears no responsibility for any costs associated with the preparation of the bid and/or any administrative or judicial proceedings resulting from the solicitation process.

30. SOLICITATION CANCELLATIONS

Orange County reserves the right, and the Manager of the Procurement Division, has the absolute and sole discretion to cancel a solicitation at any time prior to approval of the award by the Board of County Commissioners when such approval is required. The decision to cancel a solicitation cannot be the basis for a protest pursuant to the Orange County Code.

31. LICENSES/PERMITS/FEES:

The Orange County Government Fee Directory, incorporated herein by reference, contains a list of licenses, permits and fees that may apply to this project.

The fee directory link, "Fees" is available at:

<http://www.orangecountyfl.net/portals/0/resource%20library/open%20government/FeeDirectory.pdf>

Bidders shall review all applicable licenses, permits and fees and contact the applicable agency if there are any questions.

32. BID ACCEPTANCE PERIOD

Any bid submitted in response to this Invitation for Bids shall remain in effect for a period of 90 days after bid opening. Upon request of the County, the bidder at its sole option may extend this period.

33. EQUAL OPPORTUNITY

It is hereby declared that equal opportunity and nondiscrimination shall be the County's policy intended to assure equal opportunities to every person, regardless of race, religion, sex, sexual orientation and gender expression/identity, color, age, disability or national origin, in securing or holding employment in a field of work or labor for which the person is qualified, as provided by Section 17-314 of the Orange County Code and the County Administrative Regulations.

Further, the awarded Contractor shall abide by the following provisions:

- (a) The awarded Contractor shall represent that awarded Contractor has adopted and maintains a policy of nondiscrimination as defined by applicable County ordinance throughout the term of this contract.
- (b) The awarded Contractor shall allow reasonable access to all business and employment records for the purpose of ascertaining compliance with the nondiscrimination provision of the contract.
- (c) The provisions of the prime contract shall be incorporated by the awarded Contractor into the contracts of any applicable subcontractors.

34. ETHICS COMPLIANCE

The following forms are included in this solicitation as attachments F and G and shall be completed and submitted as indicated below:

- a. Orange County Specific Project Expenditure Report -The purpose of this form is to document any expenses incurred by a lobbyist for the purposes described in Section 2-351, Orange County Code.

This form shall be completed and submitted with any bid, proposal or other response to an Orange County solicitation. The bidder, proposer or responder to the solicitation shall not be awarded a contract unless this form has been completed and submitted. Any questions concerning this form shall be addressed to the senior contract administrator for this solicitation.

- b. **Relationship Disclosure Form – The purpose of this form is to document any relationships between a bidder, proposer or responder to an Orange County solicitation and the Mayor or any other member of the Orange County Board of County Commissioners.** This form shall be completed and submitted with the applicable bid, proposal or response to an Orange County solicitation.

No contract award will be made unless this form has been completed and submitted. Any questions concerning this form shall be addressed to the senior contract administrator identified in this solicitation. Also, a listing of

the most frequently asked questions concerning this form is attached for your information.

35. TOBACCO FREE CAMPUS

All Orange County operations under the Board of County Commissioners shall be tobacco free. This policy shall apply to parking lots, parks, break areas and worksites. It is also applicable to contractors and their personnel during contract performance on county-owned property. Tobacco is defined as tobacco products including, but not limited to, cigars, cigarettes, e-cigarettes, pipes, chewing tobacco and snuff. Failure to abide by this policy may result in civil penalties levied under Chapter 386, Florida Statutes and/or contract enforcement remedies.

36. VERIFICATION OF EMPLOYMENT STATUS

Prior to the employment of any person under this contract, the Contractor shall utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the Contractor during the contract term, and an express requirement that Contractors include in such subcontracts the requirement that subcontractors performing work or providing services pursuant to the state contract utilize the E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term. For more information on this process, please refer to United States Citizenship and Immigration Service site at:

<http://www.uscis.gov/portal/site/uscis>.

Only those employees determined eligible to work within the United States shall be employed under this contract.

By submission of a bid in response to this solicitation, the Contractor affirms that all employees in the above categories shall undergo e-verification before placement on this contract. The Contractor shall commit to comply with this requirement by completing the E-Verification certification, attached to this solicitation.

37. PROPRIETARY INFORMATION

In accordance with Chapter 119 of the Florida Statutes (Public Records Law), and except as may be provided by other applicable State or Federal Law, all proposers should be aware that Request for Proposals or Invitation for Bids and the responses thereto are in the public domain. **Proposers must identify specifically** any information contained in their response which they consider confidential and/or proprietary and which they believe to be exempt from disclosure, **citing specifically the applicable exempting law.**

38. MOBILIZATION:

Mobilization is defined as construction start-up costs required for performance of preparatory work and operations in mobilizing for beginning work on the project. Such costs are necessary for the movement of personnel, equipment, supplies and incidentals to the project site and for the establishment of temporary offices,

buildings, safety equipment, first aid supplies, sanitary and other facilities. Include the cost of bonds, insurance and any other preconstruction expense necessary for the start of work. Mobilization costs are not part of the physical construction.

The Contractor shall retain adequate documentation to support all mobilization costs. The County may at its discretion verify reasonableness of actual mobilization costs and make an equitable adjustment to contract price if deemed necessary.

The total cost of mobilization shall not exceed 10% of the Estimated Total Base Bid. For purposes of calculation of maximum allowable mobilization, the "Estimated Total Base Bid" is defined as the total of all line items specified to be included in the mobilization calculation, exclusive of any alternates or options, and exclusive of the Mobilization line item.

Failure of the Bidder to comply with this limitation shall result in a reduction of the line item price for Mobilization; or, in the alternative, the bid may be found non-responsive, at the County's option.

39. UNBALANCED PRICING

A. Unbalanced pricing may increase performance risk and could result in payment of unreasonably high prices. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly over or understated as indicated by the application of cost or price analysis techniques.

The greatest risk associated with unbalanced pricing occur when—

1. Startup work and mobilization are separate line items;
2. Base year quantities and option year quantities are separate line items ; or
The evaluated price is the aggregate of estimated quantities to be ordered under separate line items of an indefinite-delivery contract.

B. All offers with separately priced line items or subline items shall be analyzed to determine if the prices are unbalanced. If cost or price analysis techniques indicate that an offer is unbalanced, the Manager of the Procurement Division shall

1. Consider the risks to the County associated with the unbalanced pricing in determining the competitive range and in making the award decision; and
2. Consider whether award of the contract will result in paying unreasonably high prices for contract performance.
3. An offer may be rejected if the manager determines that the lack of balance poses an unacceptable risk to the County

40. UNIT PRICES

Unless the Bid Item Schedule contained in Part D specifies otherwise, unit prices shall include all incidental Project costs, including but not limited to, overhead and profit.

The Contract resulting from this solicitation is based on estimated quantities. The contractor shall only be paid for materials installed in the work in accordance with the applicable unit prices for the specific work element (line item). No payment shall be made for excess materials delivered to the jobsite and not incorporated into the work. Therefore, it shall be the contractor's responsibility to determine the quantities of materials necessary to perform the project to its completion.

OFFICIAL BID FORM
FOR
INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD.
SOUTH TO WESTWOOD BLVD. NORTH)

Mail or Hand Deliver
ORIGINAL BID FORM AND THREE (3) COMPLETE COPIES
BY 2:00 PM - March 12, 2015

To:
BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA
INTERNAL OPERATIONS CENTRE II
PROCUREMENT DIVISION
400 E. SOUTH STREET – 2nd FLOOR
ORLANDO, FLORIDA 32801

Bid Opening:
March 12, 2015, - 2:00 PM
INTERNAL OPERATIONS CENTRE II
PROCUREMENT DIVISION CONFERENCE ROOM, 2nd FLOOR
ORLANDO, FLORIDA

COMPANY NAME

COMPLETE MAILING ADDRESS

CITY, COUNTY, STATE, ZIP CODE

TELEPHONE NUMBER FAX NUMBER

CONTACT PERSON E-MAIL ADDRESS
TIN#: _____

NOTE: COMPANY NAME MUST MATCH LEGAL NAME ASSIGNED TO TIN
NUMBER. CURRENT W9 MUST BE SUBMITTED WITH BID/PROPOSAL

PART D

**To the Board of County Commissioners
Orange County, Florida**

The Undersigned, hereinafter called "Bidder", having visited the site of the proposed project and familiarized himself with the local conditions, nature and extent of the work, and having examined carefully the Contract Form, General Conditions, Supplementary Conditions, Plans and Specifications and other Contract Documents, with the Bond requirements herein, proposes to furnish all labor, materials, equipment and other items, facilities and services for the proper execution and completion of: **INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)** in full accordance with the drawings and specifications prepared in accordance with the Contract Documents and, if awarded the Contract, to complete the said work within the time limits specified for the following ESTIMATED TOTAL BASE BID.

It is understood that this is a unit price Contract and the resultant Contract will contain estimated quantities, unit prices, extended totals and that the Estimated Total Base Bid is the sum of all pay item totals from the schedule of prices, Page D-3 through D-12.

The Contract resulting from this solicitation is based on estimated quantities. The contractor shall only be paid for materials installed in the work in accordance with the applicable unit prices for the specific work element (line item). No payment shall be made for excess materials delivered to the jobsite and not incorporated into the work. Therefore, it shall be the contractor's responsibility to determine the quantities of materials necessary to perform the project to its completion.

ESTIMATED BASE BID FOR ROADWAY (A): \$ _____

ESTIMATED BASE BID FOR UTILITIES (B): \$ _____

ESTIMATED TOTAL BASE BID (A + B):

_____ DOLLARS

(In Words)

\$ _____

In the event the Contract is awarded to this Bidder, he/she will enter into a formal written agreement with the County in accordance with the accepted bid within ten (10) calendar days after said Contract is submitted to him/her and will furnish to the County a Contract Payment and Performance Bond with good and sufficient sureties, satisfactory to the County, in the amount of 100% of the accepted bid. The Bidder further agrees that in the event of the Bidder's default or breach of any of the agreements of this proposal, the said bid deposit shall be forfeited as liquidated damages.

Failure of the Bidder to provide pricing for all unit priced items and/or the Base Bid and ALL requested additive/deductive bid items, or alternate bids shall be cause for rejection of the bid as non-responsive.

Y15-750-CH; SCHEDULE OF PRICES
INTERNATIONAL DRIVE ROADWAY IMPROVEMENTS
(FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

A. ROADWAY PAY ITEMS						
Ref No	Pay Item	Description	Unit	Est. Qty	Unit Price	Total Price
1	101-1*	MOBILIZATION 10% (See Note at the end of the Schedule of Prices)	LS	1		
2	102-1	MAINTENANCE OF TRAFFIC	LS	1		
3	104-14	PREVENTION, CONTROL & ABATEMENT OF EROSION & WATER POLLUTION	LS	1		
4	110-1-1	CLEARING & GRUBBING	LS	1		
5	120-7	REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL	CY	500		
6	120-9	EXCAVATION, EMBANKMENT & GRADING	LS	1		
7	160-4	TYPE B STABILIZATION (MIN. LBR 40) (12")	SY	44,489		
8	285-707	SOIL CEMENT BASE (PLANT MIX) (PRIMED) (300 PSI) (10")	SY	34,001		
9	327-70-6	MILLING EXISTING ASPHALT PAVEMENT (1 1/2" AVG. DEPTH)	SY	707		
10	327-70-8	MILLING EXISTING ASPHALT PAVEMENT (2 1/2" AVG. DEPTH)	SY	8,215		
11	334-1-13	SUPERPAVE ASPHALTIC CONC. (SP-9.5) (TRAF. LEVEL C) (INCL. TACK COAT) (1")	SY	9,096		
12	334-1-13A	SUPERPAVE ASPHALTIC CONC. (SP-12.5) (TRAF. LEVEL C) (INCL. TACK COAT) (3")	SY	130,567		
13	334-70-100	COLD IN-PLACE RECYCLE (8.5" DEPTH)	SY	99,962		
14	334-70-200	ASPHALT EMULSION	GAL	209,445		
15	337-7-42	ASPHALTIC CONC. FRICTION COURSE (TRAFFIC C) (FC-12.5) (PG 76-22) (1.5")	SY	140,471		
16	425-1-311	INLETS, CURB, TYPE P-1, <10'	EA	49		
17	425-1-321	INLETS, CURB, TYPE P-2, <10'	EA	12		

Y15-750-CH; SCHEDULE OF PRICES
INTERNATIONAL DRIVE ROADWAY IMPROVEMENTS
(FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

Ref No	Pay Item	Description	Unit	Est. Qty	Unit Price	Total Price
18	425-1-411	INLETS, CURB TYPE J-1, <10'	EA	3		
19	425-1-421	INLETS, CURB, TYPE J-2, <10'	EA	2		
20	425-1-711	INLETS, GUTTER, TYPE V, <10'	EA	1		
21	425-2-41	INLETS, P-7, <10'	EA	7		
22	425-2-61	MANHOLES, P-8, <10'	EA	18		
23	425-2-63	MANHOLES, P-8, PARTIAL	EA	7		
24	425-2-91	MANHOLES, J-8, <10'	EA	7		
25	425-2-93	MANHOLES, J-8, PARTIAL	EA	2		
26	430-94-1	DESILTING EXISTING PIPE (0-24")	LF	8,662		
27	430-94-2	DESILTING EXISTING PIPE (25"-36")	LF	7,035		
28	430-94-3	DESILTING EXISTING PIPE (37"-48")	LF	1,907		
29	430-94-4	DESILTING EXISTING PIPE (49"-60")	LF	493		
30	430-94-5	DESILTING EXISTING PIPE (61" >)	LF	897		
31	430-95	DESILTING EXISTING 2-10'x5' BOX CULVERT	LF	324		
32	430-174-118**	PIPE CULV, STEEL REINF. CONC. PIPE, ROUND, 18" (See Note at the end of the Schedule of Prices)	LF	6,024		
33	430-174-124**	PIPE CULV, STEEL REINF. CONC. PIPE, ROUND, 24" (See Note at the end of the Schedule of Prices)	LF	449		
34	430-174-130**	PIPE CULV, STEEL REINF. CONC. PIPE, ROUND, 30" (See Note at the end of the Schedule of Prices)	LF	284		
35	430-174-218**	PIPE CULV, STEEL REINF. CONC. PIPE, ELLIP., 14"x23" (18" EQ.) (See Note at the end of the Schedule of Prices)	LF	59		
36	440-1-20	UNDERDRAIN TYPE II, 6", FDOT INDEX 286	LF	1,257		

Y15-750-CH; SCHEDULE OF PRICES
INTERNATIONAL DRIVE ROADWAY IMPROVEMENTS
(FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

Ref No	Pay Item	Description	Unit	Est. Qty	Unit Price	Total Price
37	440-70	UNDERDRAIN INSPECTION BOX, FDOT INDEX 245	EA	5		
38	440-73-1	UNDERDRAIN OUTLET PIPE, 6", FDOT INDEX 286	LF	35		
39	515-2-201	PEDESTRIAN/ BICYCLE RAILING, STEEL, 42", PICKET RAIL (FDOT INDEX 852)	LF	283		
40	520-1-7	CONCRETE CURB AND GUTTER (TYPE E)	LF	19,355		
41	520-1-10	CONCRETE CURB AND GUTTER (TYPE F)	LF	7,209		
42	520-2-1	CONCRETE CURB (TYPE A)	LF	571		
43	520-2-2	CONCRETE CURB (TYPE B)	LF	70		
44	520-3	CONCRETE VALLEY GUTTER	LF	96		
45	520-5-11	TRAFFIC SEPARATOR TYPE I (4' WIDE)	LF	236		
46	520-5-12	TRAFFIC SEPARATOR TYPE I (6' WIDE)	LF	416		
47	520-70	TRAFFIC SEPARATOR (SPECIAL)	SY	445		
48	522-1	CONCRETE SIDEWALK, 4" THICK	SY	10,039		
49	522-2	CONCRETE SIDEWALK, 6" THICK	SY	408		
50	526-1-1	PAVERS, ARCHITECTURAL, ROADWAY	SY	92		
51	527-1	DETECTABLE WARNINGS ON WALKING SURFACES	EA	19		
52	570-1-2	PERFORMANCE TURF (SOD) (BAHIA OR MATCH EXISTING)	SY	38,000		
53	580-1-1A	SMALL PLANTS - (BHJ) DWARF 'HELEN JOHNSON' BOUGAINVILLEA (3 GAL)	EA	1,719		
54	580-1-1B	SMALL PLANTS - (RIA) COMPACT INDIAN HAWTHORNE (3 GAL)	EA	3,891		
55	580-1-1C	SMALL PLANTS - MULCH, PINE STRAW, 3" DEPTH	SF	19,400		
56	580-1-2A	LARGE PLANTS - (PS) SYLVESTRIS PALM (14' C.T.)	EA	26		

Y15-750-CH; SCHEDULE OF PRICES
INTERNATIONAL DRIVE ROADWAY IMPROVEMENTS
(FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

Ref No	Pay Item	Description	Unit	Est. Qty	Unit Price	Total Price
57	580-1-2B	LARGE PLANTS - (WR) WASHINGTONIA PALM (14' C.T.)	EA	93		
58	580-3-1	LANDSCAPE ESTABLISHMENT AND MAINTENANCE	MO	12		
59	591-1-1	IRRIGATION SLEEVE, 3" DIAMETER (SCH 40)	LF	1,784		
60	591-1-2	IRRIGATION SLEEVE, 6" DIAMETER (SCH 40)	LF	1,784		
61	603-1	SIGNALIZATION AT THE INTERSECTION OF I-DRIVE & WESTWOOD BLVD. S.	LS	1		
62	603-2	SIGNALIZATION AT THE INTERSECTION OF I-DRIVE & AVENIDA VISTA	LS	1		
63	603- 3	SIGNALIZATION AT THE INTERSECTION OF I-DRIVE & CENTRAL FL. PKWY.	LS	1		
64	603-4	SIGNALIZATION AT THE INTERSECTION OF I-DRIVE & AQUATICA DRIVEWAY 1	LS	1		
65	603-5	SIGNALIZATION AT THE INTERSECTION OF I-DRIVE & AQUATICA DRIVEWAY 2	LS	1		
66	603-6	SIGNALIZATION AT THE INTERSECTION OF I-DRIVE & SEA HARBOR DR.	LS	1		
67	603-7	SIGNALIZATION AT THE INTERSECTION OF I-DRIVE & WESTWOOD BLVD. N.	LS	1		
68	700-20-11	SINGLE POST SIGN, F&I, LESS THAN 12 SF	AS	40		
69	700-20-12	SINGLE POST SIGN, F&I, 12-20 SF	AS	4		
70	700-20-14	SINGLE POST SIGN, F&I, 21-30 SF	AS	3		
71	700-20-40	SINGLE POST SIGN, RELOCATE	AS	24		
72	700-20-60	SINGLE POST SIGN, REMOVE	AS	41		
73	700-21-11	MULTI- POST SIGN, F&I, 50 SF OR LESS	AS	13		
74	700-21-12	MULTI- POST SIGN, F&I, 50-100 SF	AS	4		

Y15-750-CH; SCHEDULE OF PRICES
INTERNATIONAL DRIVE ROADWAY IMPROVEMENTS
(FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

Ref No	Pay Item	Description	Unit	Est. Qty	Unit Price	Total Price
75	700-21-60	MULTI- POST SIGN, REMOVE	AS	6		
76	700-48-38	SIGN PANELS, OVERLAY, 15 OR LESS	EA	1		
77	700-48-58	SIGN PANEL, REPLACE, 15 OR LESS	EA	46		
78	705-11-1	DELINEATOR, FLEXIBLE TUBULAR	EA	24		
79	706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	EA	2,173		
80	711-11-111	THERMOPLASTIC, STANDARD, WHITE, SOLID, 6"	NM	8.670		
81	711-11-122	THERMOPLASTIC, STANDARD, WHITE, SOLID, 8"	LF	1,461		
82	711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12"	LF	3,812		
83	711-11-124	THERMOPLASTIC, STANDARD, WHITE, SOLID, 18"	LF	428		
84	711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24"	LF	3,776		
85	711-11-131	THERMOPLASTIC, STANDARD, WHITE, 10-30 SKIP, 6"	GM	9.130		
86	711-11-151	THERMO., STD, WHITE, DOT/GUIDE/ 6-10 GAP, 6"	LF	2,170		
87	711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE	EA	5		
88	711-11-170	THERMOPLASTIC, STANDARD, WHITE, ARROW	EA	187		
89	711-11-180	THERMO., STANDARD, WHITE, YIELD LINE (SMALL)	LF	15		
90	711-11-211	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 6"	NM	5.086		
91	711-11-251	THERMO, STD, YELLOW, DOT/GUIDE/ 6-10 GAP, 6"	LF	848		
92	783-1	SIGNALIZATION- SIGNAL INTERCONNECT	LS	1		
93	900-1	AS-BUILT PLANS	LS	1		

Y15-750-CH; SCHEDULE OF PRICES
INTERNATIONAL DRIVE ROADWAY IMPROVEMENTS
(FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

Ref No	Pay Item	Description	Unit	Est. Qty	Unit Price	Total Price
94	900-2	INDEMNIFICATION	LS	1	\$100.00	\$100.00
95	900-3	GROUNDWATER TREATMENT & DISPOSAL	DA	300		

A. ESTIMATED BASE BID FOR ROADWAY: \$ _____
(Reference Numbers 1 through 95)

B. ORANGE COUNTY UTILITIES (OCU) PAY ITEMS

Ref No	Pay Item	Description	Unit	Est. Qty	Unit Price	Total Price
96	OCU-1	Mobilization, Demobilization, Bonds and Permits *** (See Note at the end of the Schedule of Prices)	LS	1		
97	OCU-2	Project Record Drawings **** (See Note at the end of the Schedule of Prices)	LS	1		

Subtotal for General Costs: \$ _____
(Reference Numbers 96 through 97)

98	OCU-3	24" DIP Potable Water Main	LF	1,360		
99	OCU-4	12" DIP Potable Water Main	LF	50		
100	OCU-5	24" Gate Valve with Box (Potable Water)	EA	3		
101	OCU-6	12" Gate Valve with Box (Potable Water)	EA	2		
102	OCU-7	Connection to Existing 24" Pipe (Potable Water)	EA	1		
103	OCU-8	Connection to Existing 12" Pipe (Potable Water)	EA	2		
104	OCU-9	Offset Air Release Valve Assembly (Potable Water)	EA	1		
105	OCU-10	2" Blow-Off Valve Assembly (Potable Water)	EA	1		

Y15-750-CH; SCHEDULE OF PRICES
INTERNATIONAL DRIVE ROADWAY IMPROVEMENTS
(FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

Ref No	Pay Item	Description	Unit	Est. Qty	Unit Price	Total Price
106	OCU-11	Utility Conflict Transition (24" Water Main)	EA	10	106	OCU-11
107	OCU-12	Utility Conflict Transition (16" Water Main)	EA	1		
108	OCU-13	Remove Existing Water Main and Appurtenances	LF	720		
109	OCU-14	Abandon Existing Water Main	LF	665		
110	OCU-15	12"x12" Tapping Sleeve and Valve Assembly (Potable Water)	EA	1		
111	OCU-16	24" Line Stop and Restraint (Potable Water)	EA	20		
112	OCU-17	16" Line Stop and Restraint (Potable Water)	EA	2		
113	OCU-18	12" Line Stop and Restraint (Potable Water)	EA	3		
114	OCU-19	Adjustment of Existing Valve Box and Collar (Potable Water)	EA	1		
<p>Subtotal Potable Water Improvements: \$ _____ (Reference Numbers 98 through 114)</p>						
115	OCU-20	24" DIP Reclaimed Water Main	LF	7,950		
116	OCU-21	24" Gate Valve with Box (Reclaimed Water)	EA	9		
117	OCU-22	18" Gate Valve with Box (Reclaimed Water)	EA	1		
118	OCU-23	12" Gate Valve with Box (Reclaimed Water)	EA	1		
119	OCU-24	24"x24" Tapping Sleeve and Valve Assembly (Reclaimed Water)	EA	1		
120	OCU-25	18"x18" Tapping Sleeve and Valve Assembly (Reclaimed Water)	EA	1		
121	OCU-26	12"x12" Tapping Sleeve and Valve Assembly (Reclaimed Water)	EA	1		
122	OCU-27	Remove Existing Steel Casing Pipe (Reclaimed Water)	LF	20		
123	OCU-28	Connection to Existing 12" Pipe (Reclaimed Water)	EA	1		

Y15-750-CH; SCHEDULE OF PRICES
INTERNATIONAL DRIVE ROADWAY IMPROVEMENTS
(FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

Ref No	Pay Item	Description	Unit	Est. Qty	Unit Price	Total Price
124	OCU-29	Connection to Existing 4" Pipe (Reclaim Water)	EA	1		
125	OCU-30	Remove Existing Reclaimed Water Main and Appurtenances	LF	575		
126	OCU-31	Offset Air Release Valve Assembly (Reclaimed Water)	EA	1		
127	OCU-32	Offset Air Release Valve Assembly in Vault (Reclaimed Water)	EA	6		
128	OCU-33	Adjustment of Existing Valve Box and Collar (Reclaimed Water)	EA	1		
129	OCU-34	4" Line Stop and Restraint (Reclaimed Water)	EA	1		
130	OCU-35	12" Line Stop and Restraint (Reclaimed Water)	EA	1		
<p>Subtotal for Reclaimed Water Improvements: \$ _____ (Reference Numbers 115 through 130)</p>						
131	OCU-36	12" PVC Force Main	LF	550		
132	OCU-37	12"x12" Tapping Sleeve and Valve Assembly (Force Main)	EA	2		
133	OCU-38	Remove Existing Force Main and Appurtenances	LF	520		
134	OCU-39	12" Line Stop and Restraint (Force Main)	EA	2		
135	OCU-40	Utility Conflict Transition (12" Force Main)	EA	4		
136	OCU-41	Offset Air Release Valve Assembly (Force Main)	EA	1		
137	OCU-42	Offset Air Release Valve Assembly in Vault (Force Main)	EA	4		
138	OCU-43	Adjustment of Existing Valve Box and Collar (Force Main)	EA	1		
139	OCU-44	Install 12" PVC Gravity Sanitary Sewer Main	LF	210		
140	OCU-45	Line Existing 18" Gravity Sanitary Sewer Main	LF	1,370		
141	OCU-46	Line Existing 15" Gravity Sanitary Sewer Main	LF	3,320		

Y15-750-CH; SCHEDULE OF PRICES
INTERNATIONAL DRIVE ROADWAY IMPROVEMENTS
(FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

Ref No	Pay Item	Description	Unit	Est. Qty	Unit Price	Total Price
142	OCU-47	Install New Sanitary Manhole	EA	1		
143	OCU-48	Rehab Existing Manhole (w/Protective Interior Lining)	EA	1		
144	OCU-49	Core Drill and Connect to Existing Manhole	EA	1		
145	OCU-50	Remove Existing Sanitary Manhole	EA	1		
146	OCU-51	Abandon Existing Gravity Sanitary Sewer Main	LF	470		
147	OCU-52	Remove Existing Gravity Sanitary Sewer Main	LF	305		
148	OCU-53	Adjust Existing Manhole Ring and Cover (Minor)	EA	16		
149	OCU-54	Adjust Existing Manhole Ring and Cover (Major)	EA	10		
150	OCU-55	Asphalt Pavement Removal and Replacement	SY	2,765		
151	OCU-56	Unsuitable Soil Removal, Disposal and Replacement	CY	200		
152	OCU-57	Utility Maintenance of Traffic (Utility M.O.T.)	LS	1		
153	OCU-58	Remove and Replace Concrete Sidewalk	SY	111		

Subtotal for Wastewater Improvements: \$ _____
(Reference Numbers 131 through 153)

B. ESTIMATED BASE BID FOR UTILITIES (OCU): \$ _____
(Reference Numbers 98 through 153)

SUMMARY

A. ESTIMATED BASE BID FOR ROADWAY: \$ _____
(REFERENCE NUMBERS 1 THROUGH 95)

B. ESTIMATED BASE BID FOR UTILITIES: \$ _____
(REFERENCE NUMBERS 96 THROUGH 153)

TOTAL ESTIMATED BASE BID (A+B): \$ _____
(REFERENCE NUMBERS 1 THROUGH 153)

Y15-750-CH; SCHEDULE OF PRICES
INTERNATIONAL DRIVE ROADWAY IMPROVEMENTS
(FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

NOTES

NOTE *	ANY AMOUNT OF MOBILIZATION IN EXCESS OF 10% OF BID ITEMS 2-95 WILL BE PAID UPON COMPLETION OF ALL WORK IN ACCORDANCE WITH TECHNICAL PROVISION 101.
NOTE **	ALL STORM DRAIN PIPES SHALL BE STEEL REINFORCED CONCRETE PIPES.
NOTE ***	ITEM OCU-1 SHALL NOT TO EXCEED 5% OF THE TOTAL OF ITEM NUMBERS OCU-3 THROUGH OCU-58
NOTE ****	ITEM OCU-2 SHALL NOT TO BE LESS THAN 1% OF THE TOTAL OF ITEM NUMBERS OCU-3 THROUGH OCU-58

The Bidder hereby agrees that there is attached:

- | | | | |
|-----|---|-----|-------------|
| 1. | Non-Collusion Affidavit, Attachment A | Yes | ___ |
| 2. | Required Disclosure, Attachment B | Yes | ___ |
| 3. | M/WBE Forms | | |
| | Employment Data, Attachment C-1 | Yes | ___ |
| | Subcontractor/Supplier Page, Attachment C-2 | Yes | ___ |
| | M/WBE Survey, Attachment C-4 | Yes | ___ |
| | Good Faith Effort, Attachment C-5 | Yes | ___ No ___ |
| 4. | Trench Safety Act Form, Attachment D | Yes | ___ N/A ___ |
| 5. | Drug-Free workplace Form | Yes | ___ |
| 6. | Bid Bond on Form in Exhibit 1 or Cashier's Check
(10% of Base Bid) | Yes | ___ N/A ___ |
| 7. | Original Bid Form (marked "Original") & 3
complete copies with all attachments | Yes | ___ |
| 8. | References, Attachment E | Yes | ___ |
| 9. | Licenses | Yes | ___ N/A ___ |
| 10. | Current W9 | Yes | ___ |
| 11. | Project Expenditure Report, Attachment F | Yes | ___ |
| 12. | Relationship Disclosure Form, Attachment G | Yes | ___ |
| 13. | Verification of Employment Status, Attachment H | Yes | ___ |

ACKNOWLEDGEMENT OF ADDENDA

The Bidder shall acknowledge receipt of any addenda issued to the solicitation by completing the blocks below or by completion of the applicable information on the addendum and returning it not later than the date and time for receipt of the bid. Failure to acknowledge an addendum that has a material impact on the solicitation may negatively impact the responsiveness of your bid. Material impacts include but are not limited to changes to specifications, delivery time, performance period, quantities, bonds, letters of credit, insurance, qualifications, etc.

Addendum No. _____ Dated _____ Addendum No. _____ Dated _____

Addendum No. _____ Dated _____ Addendum No. _____ Dated _____

If awarded this construction Contract, the Bidder agrees to complete the work covered by this Contract as follows:

1. Work shall start at the project site within fourteen (14) days of the effective date of the Notice to Proceed.
2. Substantially complete in **600** consecutive calendar days from date of Official Notice to Proceed.
3. Final completion in **660** consecutive calendar days from date of Official Notice to Proceed.
4. Should the Successful Bidder fail to complete work as specified, the liquidated damage clause will apply (Part E, Contract).

The Bidder hereby agrees that the County reserves the right to waive informalities in any bid and to reject any or all bids, or to accept any bid that in its judgment will be for the best interest of the County.

FLORIDA CONSTRUCTION INDUSTRIES LICENSING BOARD CERTIFICATION:

(NAME OF HOLDER) (CERTIFICATE NO.)

(SIGNATURE OF BIDDER) (CERTIFICATE EXPIRATION DATE)

(NAME TYPED)

IDENTIFICATION OF BUSINESS ORGANIZATION

Complete and submit the following information:

Type of Organization

Sole Proprietorship Partnership

Joint Venture Corporation

State of Incorporation: _____

Principal Place of Business (Florida Statute Chapter 607):
_____ City/County/State

THE PRINCIPAL PLACE OF BUSINESS SHALL BE THE ADDRESS OF THE BIDDER'S PRINCIPAL OFFICE AS IDENTIFIED BY THE FLORIDA DIVISION OF CORPORATIONS

AUTHORIZED SIGNATORIES/NEGOTIATORS

The bidder or proposer represents that the following principals are authorized to sign and/or negotiate Contracts and related documents to which the bidder or proposer will be duly bound. Principal is defined as an employee, officer or other technical or professional in a position capable of substantially influencing the development or outcome of an activity required to perform the covered transaction.

Name	Title	Telephone Number	E-Mail Address
------	-------	------------------	----------------

_____	_____	_____	_____
_____	_____	_____	_____

IN WITNESS WHEREOF, THE BIDDER HAS HEREUNTO SET HIS SIGNATURE AND AFFIXED HIS SEAL THIS DAY OF _____, A.D. 20__.

BY _____ (SEAL)

TITLE: _____

PRINT NAME AND TITLE

FEDERAL I.D.# _____

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NON-COLLUSION AFFIDAVIT

The undersigned being first duly sworn as provided by law, deposes and says:

1. This Affidavit is made with the knowledge and intent that it is to be filed with the Board of County Commissioners, Orange County, Florida and that it will be relied upon by said County, in any consideration which may give to and any action which it may take with respect to this Proposal.

2. The undersigned is authorized to make this Affidavit on behalf of,

(Name of Corporation, Partnership, Individual, etc.)

A _____, formed under the laws of _____ of which he is

(Sole Owner, Partner, President, etc.)

3. Neither the undersigned nor any other person, firm or corporation named in above Paragraph 2, nor anyone else to the knowledge of the undersigned, have themselves solicited or employed anyone else to solicit favorable action for this Proposal by the County, also that no head of any department or employee therein, or any officer of Orange County, Florida is directly interested therein.

4. This Proposal is genuine and not collusive or a sham; the person, firm or corporation named above in Paragraph 2 has not colluded, conspired, connived or agreed directly or indirectly with any bidder or person, firm or corporation, to put in a sham Proposal, or that such other person, firm or corporation, shall refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference with any person, firm or corporation, to fix the prices of said proposal or proposals of any other bidder; and all statements contained in the proposal or proposals described above are true; and further, neither the undersigned, nor the person, firm or corporation named above in Paragraph 3, has directly or indirectly submitted said proposal or the contents thereof, or divulged information or data relative thereto, to any association or to any member or agent thereof.

(AFFIANT)

TAKEN, SWORN AND SUBSCRIBED TO BEFORE ME this ____ day of _____, 20__.

Notary Public

(SEAL)

(Print, Type or Stamp Commissioned Name of Notary Public)

Personally Known _____ or Produced Identification _____ Type of

Identification: _____

REQUIRED DISCLOSURE

The following Disclosure is of all material facts pertaining to any felony or civil conviction or any pending felony or civil charges in the last three (3) years in this State or any other State of the United States against 1) Bidder, 2) any business entity related to or affiliated with bidder, or 3) any present or former executive employee, officer, director, stockholder, partner or owner of bidder or of any such related or affiliated entity. This Disclosure shall not apply to any person or entity which is only a stockholder, which person or entity owns twenty percent (20) or less of the outstanding shares of a bidder whose stock is publicly owned and traded.

BIDDER

IFB/RFP Number & Title: _____

EMPLOYMENT DATA, SCHEDULE OF MINORITIES AND WOMEN (Rev. 1/99)

Please provide the following data pertaining to your workforce. If you have an Orange County workforce, it should be shown. If you do not have an Orange County workforce, total permanent workforce should be shown. If this is a Joint Venture, employment data shall be furnished for each firm composing the joint venture. It is mandatory that you provide workforce data. Failure to provide this form with your bid/proposals may be cause for rejection of your bid/proposal.

JOB CATEGORIES	MAJORITY		MINORITY MALES				MINORITY FEMALES				TOTAL
	White Male	White Female	Black	Hispanic	American Indian	Asian American	Black	Hispanic	American Indian	Asian American	
Officials, Mgrs. Supervisors											
Professionals											
Technicians											
Sales Workers											
Office and Clerical											
Craftsman (Skilled)											
Operatives (Semi-Skilled)											
Laborers (Unskilled)											
Service Workers											
Apprentices											
Interns/Co-Ops											
Wages to Work Employees											
TOTAL											
Changes Since Last Report											

The above reflects (Check One): _____ Orange County Workforce _____ Total Permanent Workforce (Outside Orange County)

For Construction Projects Only: Do you intend to hire new employees for the project? ___ Yes ___ No If yes, how many approximately? _____

Name of Firm _____ Period of Report _____ No. of Years in Business in Orange County _____

Form Completed by _____
Name/Title (Printed or Typed)
Signature

Form Approved by _____
Name/Title (Printed or Typed)
Signature

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PRIME CONTRACTOR/SUBCONTRACTOR/SUPPLIER INFORMATION

If maximum M/WBE participation is desired, bidders must list **all** proposed Subcontractors **and suppliers** to be used. Provide company names; contacts, addresses, phone numbers; work to be performed with the Contractor's own workforce, including estimated dollar amount allocated for that work (work that is consistently and historically performed in-house); total amount to be paid to this sub/supplier (do not discount supply dollars); and M/WBE designation or if non-M/WBE (Majority). See Instructions to Bidders, Part C, for complete M/WBE requirements. Provide **all** information requested. Use additional sheets if necessary. Failure to provide all of the information requested may negatively impact the M/WBE evaluation.

1. What is the estimated percent of work that the Prime Contractor will self-perform? _____%
List these areas below with approximate dollar amounts to be allocated for the work.

2. Is all work (whether to be subbed or self-performed) listed below? Yes ____ No ____
Are all material suppliers listed? Yes ____ No ____
If no, please explain. _____

3. Is your firm certified through Orange County as an M/WBE? Yes ____ No ____
(See Part C for specific requirements for certified M/WBE firms)

4. Is your firm registered through Orange County as a Service Disabled-Veteran (SDV)? Yes ____ No ____

5. Did you include any M/WBE credits- First Time Utilization (FTU) or Non-County Utilization (NC) with this bid? (If so, insert copy of credit Yes ____ No ____
(If so, insert copy of credit and specify credit type below)

O.C. CERTIFIED

<u>COMPANY NAME, CONTACT ADDRESS, PHONE NUMBER</u>	<u>WORK TO BE PERFORMED (TRADE) OR COMMODITY TO BE SUPPLIED</u>	<u>DOLLAR AMOUNT</u>	<u>M/WBE or Non-M/WBE; or SDV; or TYPE OF M/WBE CREDIT-FTU or NC</u>
1 _____ _____ _____	<u>Sub / Supplier / In-house (Circle One)</u> _____ _____	_____ _____	_____ _____
2 _____ _____ _____	<u>Sub / Supplier / In-house (Circle One)</u> _____ _____	_____ _____	_____ _____
3 _____ _____ _____	<u>Sub / Supplier / In-house (Circle One)</u> _____ _____	_____ _____	_____ _____

Signature of Bidder

Title

PRIME CONTRACTOR/SUBCONTRACTOR/SUPPLIER INFORMATION

<u>COMPANY NAME, CONTACT ADDRESS, PHONE NUMBER</u>	<u>WORK TO BE PERFORMED (TRADE) OR COMMODITY TO BE SUPPLIED</u>	<u>DOLLAR AMOUNT</u>	<u>O.C. CERTIFIED M/WBE or Non-MWBE; or SDV; or TYPE OF M/WBE CREDIT-FTU or NC</u>
4 _____ _____ _____	<u>Sub/Supplier/In-house (Circle One)</u> _____ _____	_____	_____
5 _____ _____ _____	<u>Sub/Supplier/In-house (Circle One)</u> _____ _____	_____	_____
6 _____ _____ _____	<u>Sub/Supplier/In-house (Circle One)</u> _____ _____	_____	_____
7 _____ _____ _____	<u>Sub/Supplier/In-house (Circle One)</u> _____ _____	_____	_____
8 _____ _____ _____	<u>Sub/Supplier/In-house (Circle One)</u> _____ _____	_____	_____
9 _____ _____ _____	<u>Sub/Supplier/In-house (Circle One)</u> _____ _____	_____	_____
10 _____ _____ _____	<u>Sub/Supplier/In-house (Circle One)</u> _____ _____	_____	_____
11 _____ _____ _____	<u>Sub/Supplier/In-house (Circle One)</u> _____ _____	_____	_____
_____ Signature of Bidder	_____ Title		

INSTRUCTIONS Contractor shall place the following on their letterhead, executed by their authorized agent. Letter is to be submitted **before 5:00 PM on the second business day (i.e., if bid opens on Thursday, due on Monday before 5:00 PM)** after bid opening to: Orange County Business Development Division; 400 E. South Street; 2nd Floor, Orlando, FL 32801; Fax Number (407) 836-5477. A Letter of Intent is to be executed with all M/WBE Subcontractors and suppliers listed by the Contractor on the Subcontractor/Supplier page submitted with this bid. Any M/WBE's not listed on Subcontractor/Supplier page for this bid will not be accepted. Failure to submit this form within the required time frame may result in the bid being found non-responsive.

**LETTER OF INTENT
(VERIFICATION M/WBE UTILIZATION)**

IFB # _____ **PROJECT TITLE** _____

I, _____, (Prime Contractor) have entered into an agreement with the following Minority/Women-owned Business Enterprise to do the work shown on Attachment C-2 of the Bid Form and shown below. I understand that prior to execution of the prime Contract by Orange County, a subcontract and/or purchase order will be executed with this firm and a copy of the agreement will be sent to the Orange County Business Development Division.

SUBCONTRACTOR/SUPPLIER

SPECIFIC SCOPES OF WORK/COMMODITY

SUBCONTRACT/PURCHASE ORDER PRICE

I understand that I shall not be allowed to substitute or change Subcontractors, without the express prior approval of Orange County's Project Manager and the Business Development Division. Such approval shall in no way relieve my obligations pursuant to Orange County's M/WBE requirements and goals contained in the Orange County Minority/Women Business Enterprise Ordinance, Orange County Code, Chapter 17, Article III, Division 4.

Under penalty of perjury, I declare that I have read the foregoing and the facts stated in it are true. False statements may result in criminal prosecution for a felony of the third degree as provided for in Section 92.525(3), Florida Statutes.

Authorized Agent of Prime Contractor

Authorized Agent, Subcontractor/Supplier

Printed Name & Title

Printed Name & Title

Date: _____

Date: _____

Phone Number

Fax Number

INSTRUCTIONS Contractor shall place the following on their letterhead, executed by their authorized agent. Letter is to be submitted **before 5:00 PM on the second business day (i.e., if bid opens on Thursday , due on Monday before 5:00 PM)** after bid opening to: Orange County Business Development Division; 400 E. South Street; 2nd Floor, Orlando, FL 32801; Fax Number (407) 836-5477. A Letter of Intent is to be executed with all **SDV** Subcontractors and suppliers listed by the Contractor on the Subcontractor/Supplier page submitted with this bid. Any **SDV's** not listed on Subcontractor/Supplier page for this bid will not be accepted. Failure to submit this form within the required time frame may result in the bid being found non-responsive.

**LETTER OF INTENT
(VERIFICATION OF SERVICE-DISABLED VETERAN UTILIZATION)**

IFB # _____ **PROJECT TITLE** _____

I, _____, (Prime Contractor) have entered into an agreement with the following Service-Disabled Veteran Business to do the work shown on Attachment C-2 of the Bid Form and shown below (contingent upon award of the prime contract to our company). I understand that prior to execution of the prime Contract by Orange County, a subcontract and/or purchase order will be executed with this firm and a copy of the agreement will be sent to the Orange County Business Development Division.

SDV SUBCONTRACTOR/SUPPLIER

SPECIFIC SCOPES OF WORK/COMMODITY

SUBCONTRACT/PURCHASE ORDER PRICE

I understand that I shall not be allowed to substitute or change Subcontractors, without the express prior approval of Orange County's Project Manager and the Business Development Division. Such approval shall in no way relieve my obligations pursuant to Orange County's Service-Disable Veteran Business Program requirements contained in the Orange County Ordinance, Orange County Code, Chapter 17, Article III, Division 5.

Under penalty of perjury, I declare that I have read the foregoing and the facts stated in it are true. False statements may result in criminal prosecution for a felony of the third degree as provided for in Section 92.525(3), Florida Statutes.

Authorized Agent of Prime Contractor

Authorized Agent, Subcontractor/Supplier

Printed Name & Title

Printed Name & Title

Date: _____

Date: _____

Phone Number

Fax Number

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M/WBE Survey

Company _____ Contact Name: _____

Contact's Phone Number: _____ IFB #: _____

Please answer the following questions regarding Orange County's M/WBE Program:

1. If you failed to meet the County's M/WBE goal for this solicitation, please check reasons below:

- No M/WBE contractors/suppliers available
- Self-performing more than 75% of the work
- Self-performing 100% of the work
- Prices from M/WBE contractors/suppliers too high
- Other (please explain)

2. If checked "self performing work" in question #1, explain in detail why you propose to self perform the work and list any subcontractors you intend to use. Also, provide a detailed listing of the suppliers, items to be purchased and costs thereof:

3. When you submitted your bid without the desired M/WBE participation, were you concerned that this deficiency would cause rejection of your bid?
 Yes No

If no, why not?

4. What steps do you recommend the County take to ensure that the M/WBE goal is achieved on projects of this nature?

5. Do you support the County's M/WBE program?
 Yes No

If no, why not?

6. Do you believe you can remain competitive if you fully complied with the County's M/WBE program?
 Yes No

If no, why not?

7. Do you have any type of working relationship with M/WBE subcontractors?
Yes No

If yes, is it (check all that apply):

- Routine business only
 Only during bid solicitation
 Other (please explain)

8. Do you desire to establish a working relationship with M/WBE subcontractors?
 Yes No

9. Are you aware that you could call the Business Development Division for information or additional assistance with M/WBE participation in bid solicitations?
 Yes No

10. Please provide any additional comments:

Please note that failure to provide this information with your Bid Proposal may delay the award of the contract. Therefore, a timely response is requested. You may be contacted by staff from the Business Development Division in the near future.

GOOD FAITH EFFORT M/WBE CONTRACT LOG (See Part C, SECTION 3, Paragraph E-iii)
 (Required only if Good Faith Effort Documentation is being provided as part of this Bid)

IFB No/ Project Name

Firm's Name/Address	Contact Info: E-mail, Phone and /or fax	Scope of Work (Work to be performed/Trade/or Commodity Supplied)	Date	Name of Person Contacting Firms	Firm to Bid (Y or N)	Date & Time Quote Received	Notes

Under penalty of perjury, I declare that I have read the foregoing and the facts stated in it are true. False statements may result in criminal prosecution for a felony of the third degree as provided for in Section 92.525 (3), Florida Statutes. I,

 _____ (Signature off Authorized Agent),
 _____ / _____ / _____ (Printed Name, Title, and Date)

COMPLIANCE WITH FLORIDA TRENCH SAFETY ACT (90-96, LAWS OF FLORIDA)

Bidder hereby acknowledges that all costs for complying with the Florida Trench Safety Act are included in the various items of the Total Estimated Base Bid or Lump Sum Bid. For informational purposes only, the Bidder is required to further identify these costs in the summary below.

TRENCH SAFETY MEASURE (DESCRIPTION)	UNIT OF MEASURE (LF, SY)	UNIT (QUANTITY)	UNIT COST	EXTENDED COST
A) _____	_____	_____	\$ _____	\$ _____
B) _____	_____	_____	\$ _____	\$ _____
C) _____	_____	_____	\$ _____	\$ _____
D) _____	_____	_____	\$ _____	\$ _____
			TOTAL	\$ _____

SIGNED: _____

TITLE: _____

THIS IS NOT A PAY ITEM: The purpose of this form is to gather information on the costs associated with trench safety measures and to insure that the Bidder has considered these costs and included them in the Total Estimated Base Bid or Lump Sum Bid. Contractor will not receive additional payment if actual quantities differ from those estimated or if the Contractor uses a safety measure different than those listed.

(Failure to complete this form may result in the Bid being declared non-responsive.)

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REFERENCES:

- A. Bidder should supply (with the bid form) a list of **THREE (3) similar projects** successfully completed **by the Bidder, as a Prime Contractor within the last EIGHT (8) years** prior to the submittal date for sealed bids in response to this Invitation for Bids which meets the similar project criteria defined as: **a road project which construction has been successfully completed within the last eight (8) years and shall contain the following elements:**

Project Elements

1. Construction of a multi-lane (4 or more lanes) urban roadway having a minimum length of 1.0 miles and a roadway construction cost, which excludes any utility work, equal to or greater than three million dollars (\$3,000,000). For purposes of this Invitation for Bid, "urban" is defined as projects which traverse an urbanized area which may have multiple intersecting streets and connecting driveways. Construction of a Limited Access projects with an interchange is not allowed. **Resurfacing, Restoration and Rehabilitation (RRR) projects shall not be considered to be similar projects.**
 2. Preparation of roadway as-builts.
 3. Construction of roadway stormwater conveyance system (must include at least 500 feet of 18" or larger pipe installation).
 4. Construction of a traffic signal with Florida Department of Transportation's standard mast arm and signal interconnect.
 5. Coordination with utility companies.
 6. Construction of sidewalk.
- B. In addition to the list of **THREE (3) Similar Projects** criteria listed in "A" above, **ONE (1) additional Similar Project** successfully completed within the last **EIGHT (8) years** must be submitted (with the bid form) and shall meet the similar project criteria listed below:

The Contractor (or Utility Subcontractor) responsible for the construction of Orange County Utilities work shall provide project experience that demonstrates they have successfully completed a utility project, as a Prime Contractor or Subcontractor. This project should have consisted of a minimum of 2,000 lineal feet of 16-inch or greater diameter pressurized main constructed within a Public Right-of-Way".

Failure to provide this information may be cause for rejection of this bid.

The determination of whether a bidder is responsible or not shall be at the sole discretion of the County. Although the County may request submission of a minimum number of similar projects for evaluation, the County's determination of a bidder's responsibility shall not be solely based on the number of similar projects submitted.

The contact person listed as a reference shall be someone who has personal knowledge of the Bidder's performance during the referenced project. Contact persons must have been informed that they are being used as a reference and that the County will be calling or emailing them.

1. Project Name _____
Owner _____
Contact _____
Address _____

Telephone Number/Email Address _____

Contract Number and Amount # _____ \$ _____

Change Orders \$ _____

Final Contract \$ _____

Completed on Schedule? Yes ___ No ___ Date: _____

Project Description _____

2. Project Name _____
Owner _____
Contact _____
Address _____

Telephone Number/Email Address _____

Contract Number and Amount # _____ \$ _____

Change Orders \$ _____

Final Contract \$ _____

Completed on Schedule? Yes ___ No ___ Date: _____

Project Description _____

3. Project Name _____
Owner _____
Contact _____
Address _____

Telephone Number/Email Address _____

Contract Number and Amount # _____ \$ _____

Change Orders \$ _____

Final Contract \$ _____

Completed on Schedule? Yes ___ No ___ Date: _____

Project Description _____

4. Project Name _____
Owner _____
Contact _____
Address _____

Telephone Number/Email Address _____

Contract Number and Amount # _____ \$ _____

Change Orders \$ _____

Final Contract \$ _____

Completed on Schedule? Yes ___ No ___ Date: _____

Project Description _____

5. Project Name _____
Owner _____
Contact _____
Address _____

Telephone Number/Email Address _____
Contract Number and Amount # _____ \$ _____
Change Orders \$ _____
Final Contract \$ _____
Completed on Schedule? Yes ___ No ___ Date: _____
Project Description _____

6. Project Name _____
Owner _____
Contact _____
Address _____

Telephone Number/Email Address _____
Contract Number and Amount # _____ \$ _____
Change Orders \$ _____
Final Contract \$ _____
Completed on Schedule? Yes ___ No ___ Date: _____

Project Description _____

For Staff Use Only:

Initially submitted on _____

Updated On _____

Specific Project Expenditure Report (Revised November 5, 2010)

For use as of March 1, 2011

INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

Case or Bid No. **Y15-750 -CH**

ORANGE COUNTY SPECIFIC PROJECT EXPENDITURE REPORT

This lobbying expenditure form shall be completed in full and filed with all application submittals. This form shall remain cumulative and shall be filed with the department processing your application. Forms signed by a principal's authorized agent shall include an executed Agent Authorization Form.

This is the initial Form: _____

This is a Subsequent Form: _____

Part I

Please complete all of the following:

Name and Address of Principal (legal name of entity or owner per Orange County tax rolls): _____

Name and Address of Principal's Authorized Agent, if applicable: _____

List the name and address of all lobbyists, consultants, contractors, subcontractors, individuals or business entities who will assist with obtaining approval for this project. (Additional forms may be used as necessary.)

1. Name and address of individual or business entity: _____
Are they registered Lobbyist? Yes ___ or No ___
2. Name and address of individual or business entity: _____
Are they registered Lobbyist? Yes ___ or No ___
3. Name and address of individual or business entity: _____
Are they registered Lobbyist? Yes ___ or No ___
4. Name and address of individual or business entity: _____
Are they registered Lobbyist? Yes ___ or No ___
5. Name and address of individual or business entity: _____
Are they registered Lobbyist? Yes ___ or No ___
6. Name and address of individual or business entity: _____
Are they registered Lobbyist? Yes ___ or No ___
7. Name and address of individual or business entity: _____
Are they registered Lobbyist? Yes ___ or No ___
8. Name and address of individual or business entity: _____
Are they registered Lobbyist? Yes ___ or No ___

For Staff Use Only:

Initially submitted on _____

Updated On _____

Specific Project Expenditure Report (Revised November 5, 2010)

For use as of March 1, 2011

INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

Case or Bid No. **Y15-750 -CH**

Company Name: _____

Part II

Expenditures:

For this report, an "expenditure" means money or anything of value given by the principal and/or his/her lobbyist for the purpose of lobbying, as defined in section 2-351, Orange County Code. This may include public relations expenditures including, but not limited to, petitions, fliers, purchase of media time, cost of print and distribution of publications. However, the term "expenditure" **does not** include:

- Contributions or expenditures reported pursuant to chapter 106, Florida Statutes;
- Federal election law, campaign-related personal services provided without compensation by individuals volunteering their time;
- Any other contribution or expenditure made by or to a political party;
- Any other contribution or expenditure made by an organization that is exempt from taxation under 26 U.S.C. s. 527 or s. 501(c)(4), in accordance with s.112.3215, Florida Statutes; and/or
- Professional fees paid to registered lobbyists associated with the project or item.

The following is a complete list of all lobbying expenditures and activities (including those of lobbyists, contractors, consultants, etc.) incurred by the principal or his/her authorized agent and expended in connection with the above-referenced project or issue. **You need not include de minimus costs (under \$50) for producing or reproducing graphics, aerial photographs, photocopies, surveys, studies or other documents related to this project.**

Date of Expenditure	Name of Party Incurring Expenditure	Description of Activity	Amount Paid
TOTAL EXPENDED THIS REPORT			\$

For Staff Use Only:

Initially submitted on _____

Updated On _____

INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

Case or Bid No. **Y15-750 -CH**

Company Name: _____

**Part III
ORIGINAL SIGNATURE AND NOTARIZATION REQUIRED**

I hereby certify that information provided in this specific project expenditure report is true and correct based on my knowledge and belief. I acknowledge and agree to comply with the requirement of section 2-354, of the Orange County code, to amend this specific project expenditure report for any additional expenditure(s) incurred relating to this project prior to the scheduled Board of County Commissioner meeting. I further acknowledge and agree that failure to comply with these requirements to file the specific expenditure report and all associated amendments may result in the delay of approval by the Board of County Commissioners for my project or item, any associated costs for which I shall be held responsible. In accordance with s. 837.06, Florida Statutes, I understand and acknowledge that whoever knowingly makes a false statement in writing with the intent to mislead a public servant in the performance of his or her official duty shall be guilty of a misdemeanor in the second degree, punishable as provided in s. 775.082 or s. 775.083, Florida Statutes.

Date: _____

Signature of Principal or Principal's Authorized Agent

(check appropriate box)

PRINT NAME AND TITLE: _____

STATE OF _____ :

COUNTY OF _____ :

I certify that the foregoing instrument was acknowledged before me this ____ day of _____, 20__ by _____ He/she is personally known to me or has produced _____ as identification and did/did not take an oath.

Witness my hand and official seal in the county and state stated above on the ____ day of _____, in the year _____.

(Notary Seal)

Signature of Notary Public

Notary Public for the State of _____

My Commission Expires: _____

Staff signature and date of receipt of form _____

Staff reviews as to form and does not attest to the accuracy or veracity of the information provided herein.

**FREQUENTLY ASKED QUESTIONS (FAQ) ABOUT THE SPECIFIC PROJECT
EXPENDITURE REPORT**

Updated 3-1-11

WHAT IS A SPECIFIC PROJECT EXPENDITURE REPORT (SPR)?

A Specific Project Expenditure Report (SPR) is a report required under Section 2-354(b) of the Orange County Lobbying Ordinance, codified at Article X of Chapter 2 of the Orange County Code, reflecting all lobbying expenditures incurred by a principal and his/her authorized agent(s) and the principal's lobbyist(s), contractor(s), subcontractor(s), and consultant(s), if applicable, for certain projects or issues that will ultimately be decided by the Board of County Commissioners (BCC).

Matters specifically exempt from the SPR requirement are ministerial items, resolutions, agreements in settlement of litigation matters in which the County is a party, ordinances initiated by County staff, and some procurement items, as more fully described in 2.20 of the Administrative Regulations.

Professional fees paid by the principal to his/her lobbyist for the purpose of lobbying need not be disclosed on this form. (See Section 2-354(b), Orange County Code.)

WHO NEEDS TO FILE THE SPR?

The principal or his/her authorized agent needs to complete and sign the SPR and warrant that the information provided on the SPR is true and correct.

A principal that is a governmental entity does not need to file an SPR.

HOW ARE THE KEY RELEVANT TERMS DEFINED?

Expenditure means "a payment, distribution, loan, advance, reimbursement, deposit, or anything of value made by a lobbyist or principal for the purpose of lobbying. This may include public relations expenditures (including but not limited to petitions, flyers, purchase of media time, cost of print and distribution of publications) but does not include contributions or expenditures reported pursuant to Chapter 106, Florida Statutes, or federal election law, campaign-related personal services provided without compensation by individuals volunteering their time, any other contribution or expenditure made by or to a political party, or any other contribution or expenditure made by an organization that is exempt from taxation under 26 U.S.C. s. 527 or s. 501(c)(4)." (See Section 112.3215, Florida Statutes.) Professional fees paid by the principal to his/her lobbyist for the purpose of lobbying are not deemed to be "expenditures." (See Section 2-354, Orange County Code.)

Lobbying means seeking "to encourage the approval, disapproval, adoption, repeal, rescission, passage, defeat or modification of any ordinance, resolution, agreement, development permit, other type of permit, franchise, vendor, consultant, contractor, recommendation, decision or other foreseeable action of the [BCC]," and "include[s] all communications, regardless of whether initiated by the lobbyist or by the person being lobbied, and regardless of whether oral, written or electronic." (See Section 2-351, Orange County Code.) Furthermore, *lobbying* means communicating "directly with the County Mayor, with any other member of the [BCC], or with any member of a procurement committee." (See Section 2-351, Orange County Code.) *Lobbying* also means communicating "indirectly with the County Mayor or any other member of the [BCC]" by communicating with any staff member of the Mayor or any member of the BCC, the county administrator, any deputy or assistant county administrator, the county attorney, any county department director, or any county division manager. (See Section 2-351, Orange County Code.) *Lobbying* does not include the act of appearing before a Sunshine Committee, such as the Development Review Committee or the Roadway Agreement Committee other than the BCC.

Principal means “the person, partnership, joint venture, trust, association, corporation, governmental entity or other entity which has contracted for, employed, retained, or otherwise engaged the services of a lobbyist.” *Principal* may also include a person, partnership, joint venture, trust, association, corporation, limited liability corporation, or other entity where it or its employees do not qualify as a lobbyist under the definition set forth in Section 2-351 of the Orange County Code but do perform lobbying activities on behalf of a business in which it has a personal interest.

DOES THE SPR NEED TO BE UPDATED IF INFORMATION CHANGES?

Yes. It remains a continuing obligation of the principal or his/her authorized agent to update the SPR whenever any of the information provided on the initial form changes.

WHERE DO THE SPR AND ANY UPDATES NEED TO BE FILED?

The SPR needs to be filed with the County Department or County Division processing the application or matter. If and when an additional expenditure is incurred subsequent to the initial filing of the SPR, an amended SPR needs to be filed with the County Department or County Division where the original application, including the initial SPR, was filed.

WHEN DO THE SPR AND ANY UPDATES NEED TO BE FILED?

In most cases, the initial SPR needs to be filed with the other application forms. The SPR and any update must be filed with the appropriate County Department or County Division not less than seven (7) days prior to the BCC hearing date so that they may be incorporated into the BCC agenda packet. (See Section 2-354(b), Orange County Code.) When the matter is a discussion agenda item or is the subject of a public hearing, and any additional expenditure occurs less than 7 days prior to BCC meeting date or updated information is not included in the BCC agenda packet, the principal or his/her authorized agent is obligated to verbally present the updated information to the BCC when the agenda item is heard or the public hearing is held. When the matter is a consent agenda item and an update has not been made at least 7 days prior to the BCC meeting or the update is not included in the BCC agenda packet, the item will be pulled from the consent agenda to be considered at a future meeting.

WHO WILL BE MADE AWARE OF THE INFORMATION DISCLOSED ON THE SPR AND ANY UPDATES?

The information disclosed on the SPR and any updates will be a public record as defined by Chapter 119, Florida Statutes, and therefore may be inspected by any interested person. Also, the information will be made available to the Mayor and the BCC members. This information will accompany the other information for the principal’s project or item.

CONCLUSION:

We hope you find this FAQ useful to your understanding of the SPR. Please be informed that in the event of a conflict or inconsistency between this FAQ and the requirements of the applicable ordinance governing specific project expenditure reports, the ordinance controls.

Also, please be informed that the County Attorney’s Office is not permitted to render legal advice to a principal, his/her authorized agent, or any other outside party. Accordingly, if after reading this FAQ the principal, his/her authorized agent or an outside party has any questions, he/she is encouraged to contact his/her own legal counsel.

For Staff Use Only:

OC CE FORM 2P

Date Submitted _____

FOR PROCUREMENT-RELATED ITEMS (November 5, 2010) Date Updated _____

For use after March 1, 2011

Bid Number **Y15-750 -CH**

RELATIONSHIP DISCLOSURE FORM

FOR USE WITH PROCUREMENT ITEMS, EXCEPT THOSE WHERE THE COUNTY IS THE PRINCIPAL OR PRIMARY APPLICANT

For procurement items that will come before the Board of County Commissioners for final approval, this form shall be completed by the bidder, offerer, quoter or respondent and shall be submitted to the Procurement Division by the bidder, offerer, quoter or respondent.

In the event any information provided on this form should change, the applicant must file an amended form on or before the date the item is considered by the appropriate board or body.

Part I

INFORMATION ON APPLICANT (BIDDER, OFFEROR, QUOTER, PROPOSER, OR RESPONDENT):

Legal Name of Applicant: _____

Business Address (Street/P.O. Box, City and Zip Code):

Business Phone () _____

Facsimile () _____

INFORMATION ON APPLICANT'S AUTHORIZED AGENT, IF APPLICABLE:

(Agent Authorization Form also required to be attached)

Name of Applicant's Authorized Agent:

Business Address (Street/P.O. Box, City and Zip Code):

Business Phone () _____

Facsimile () _____

For Staff Use Only:

OC CE FORM 2P

Date Submitted _____

FOR PROCUREMENT-RELATED ITEMS (November 5, 2010) Date Updated _____

For use after March 1, 2011

Bid Number **Y15-750 -CH**

Company Name: _____

Part II

IS THE APPLICANT A RELATIVE OF THE MAYOR OR ANY MEMBER OF THE BCC?

___ YES ___ NO

IS THE MAYOR OR ANY MEMBER OF THE BCC THE APPLICANT'S EMPLOYEE?

___ YES ___ NO

IS THE APPLICANT OR ANY PERSON WITH A DIRECT BENEFICIAL INTEREST IN THE OUTCOME OF THIS MATTER A BUSINESS ASSOCIATE OF THE MAYOR OR ANY MEMBER OF THE BCC?

___ YES ___ NO

If you responded "YES" to any of the above questions, please state with whom and explain the relationship:

(Use additional sheets of paper if necessary)

For Staff Use Only:

OC CE FORM 2P

Date Submitted _____

FOR PROCUREMENT-RELATED ITEMS (November 5, 2010) Date Updated _____

For use after March 1, 2011

Bid Number **Y15-750 -CH**

Company Name: _____

Part III

ORIGINAL SIGNATURE AND NOTARIZATION REQUIRED

I hereby certify that information provided in this relationship disclosure form is true and correct based on my knowledge and belief. If any of this information changes, I further acknowledge and agree to amend this relationship disclosure form prior to any meeting at which the above-referenced project is scheduled to be heard. In accordance with s. 837.06, Florida Statutes, I understand and acknowledge that whoever knowingly makes a false statement in writing with the intent to mislead a public servant in the performance of his or her official duty shall be guilty of a misdemeanor in the second degree, punishable as provided in s. 775.082 or s. 775.083, Florida Statutes.

Signature of Applicant

Date: _____

Print Name and Title of Person completing this form: _____

STATE OF _____ :
COUNTY OF _____ :

I certify that the foregoing instrument was acknowledged before me this ____ day of _____, 20__ by _____. He/she is personally known to me or has produced _____ as identification and did/did not take an oath.

Witness my hand and official seal in the county and state stated above on the ____ day of _____, in the year _____.

(Notary Seal) _____
Signature of Notary Public
Notary Public for the State of _____
My Commission Expires: _____

Staff signature and date of receipt of form

Staff reviews as to form and does not attest to the accuracy or veracity of the information provided herein.



**AGENT AUTHORIZATION FORM
FOR PROCUREMENTS IN ORANGE COUNTY, FLORIDA**

I/WE, (PRINT BIDDER, OFFEROR, QUOTER OR RESPONDENT NAME)

_____, DO HEREBY AUTHORIZE TO ACT AS MY/OUR AGENT
(PRINT AGENT'S NAME), _____, TO EXECUTE ANY PETITIONS OR
OTHER DOCUMENTS NECESSARY TO AFFECT THE **CONTRACT APPROVAL PROCESS** MORE SPECIFICALLY
DESCRIBED AS FOLLOWS, IFB NO. Y15- 750-CH, INTERNATIONAL DRIVE IMPROVEMENT PROJECT
(FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH), AND TO APPEAR ON MY/OUR
BEHALF BEFORE ANY ADMINISTRATIVE OR LEGISLATIVE BODY IN THE COUNTY CONSIDERING THIS **CONTRACT**
AND TO ACT IN ALL RESPECTS AS OUR AGENT IN MATTERS PERTAINING TO THIS **CONTRACT**.

Date: _____
Signature of Bidder, Offeror, Quoter or Respondent

STATE OF _____ :
COUNTY OF _____ :

I certify that the foregoing instrument was acknowledged before me this ____ day of _____, 20__ by _____. He/she is personally known to me or has produced _____ as identification and did/did not take an oath.

Witness my hand and official seal in the county and state stated above on the ____ day of _____, in the year _____.

(Notary Seal) _____
Signature of Notary Public
Notary Public for the State of _____

My Commission Expires: _____

FREQUENTLY ASKED QUESTIONS (FAQ)
ABOUT THE
RELATIONSHIP DISCLOSURE FORM
Updated 6-28-11

WHAT IS THE RELATIONSHIP DISCLOSURE FORM?

The Relationship Disclosure Form (form OC CE 2D and form OC CE 2P) is a form created pursuant to the County's Local Code of Ethics, codified at Article XIII of Chapter 2 of the Orange County Code, to ensure that all development-related items and procurement items presented to or filed with the County include information as to the relationship, if any, between the applicant and the County Mayor or any member of the Board of County Commissioners (BCC). The form will be a part of the backup information for the applicant's item.

WHY ARE THERE TWO RELATIONSHIP DISCLOSURE FORMS?

Form OC CE 2D is used only for development-related items, and form OC CE 2P is used only for procurement-related items. The applicant needs to complete and file the form that is applicable to his/her case.

WHO NEEDS TO FILE THE RELATIONSHIP DISCLOSURE FORM?

Form OC CE 2D should be completed and filed by the owner of record, contract purchaser, or authorized agent. Form OC CE 2P should be completed and filed by the bidder, offeror, quoter, or respondent, and, if applicable, their authorized agent. In all cases, the person completing the form must sign the form and warrant that the information provided on the form is true and correct.

WHAT INFORMATION NEEDS TO BE DISCLOSED ON THE RELATIONSHIP DISCLOSURE FORM?

The relationship disclosure form needs to disclose pertinent background information about the applicant and the relationship, if any, between, on the one hand, the applicant and, if applicable, any person involved with the item, and on the other hand, the Mayor or any member of the BCC.

In particular, the applicant needs to disclose whether any of the following relationships exist: (1) the applicant is a business associate of the Mayor or any member of the BCC; (2) any person involved with the approval of the item has a beneficial interest in the outcome of the matter *and* is a business associate of the Mayor or any member of the BCC; (3) the applicant is a relative of the Mayor or any member of the BCC; or (4) the Mayor or any member of the BCC is an employee of the applicant. (See Section 2-454, Orange County Code.)

HOW ARE THE KEY RELEVANT TERMS DEFINED?

Applicant means, for purposes of a development-related project, the owner, and, if applicable, the contract purchaser or owner's authorized agent. *Applicant* means, for purposes of a procurement item, the bidder, offeror, quoter, respondent, and, if applicable, the authorized agent of the bidder, offeror, quoter, or respondent.

Business associate means any person or entity engaged in or carrying on a business enterprise with a public officer, public employee, or candidate as a partner, joint venture, corporate shareholder where the shares of such corporation are not listed on any national or regional stock exchange, or co-owner of property. In addition, the term includes any person or entity engaged in or carrying on a business enterprise, or otherwise engaging in common investment, with a public officer, public employee, or candidate as a partner, member, shareholder, owner, co-owner, joint venture partner, or other investor, whether directly or indirectly, whether through a Business Entity or through interlocking Parent Entities, Subsidiary Entities, or other business or investment scheme, structure, or venture of any nature. (See Section 112.312(4), Florida Statutes, and Section 2-452(b), Orange County Code.)

Employee means any person who receives remuneration from an employer for the performance of any work or service while engaged in any employment under any appointment or contract for hire or apprenticeship, express or implied, oral or written, whether lawfully or unlawfully employed, and includes, but is not limited to, aliens and minors. (See Section 440.02(15), Florida Statutes.)

Relative means an individual who is related to a public officer or employee as father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, son-in-law, daughter-in-law, brother-in-law, sister-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, great grandparent, grandchild, great grandchild, step grandparent, step great grandparent, step grandchild, step great grandchild, person who is engaged to be married to the public officer or employee or who otherwise holds himself or herself out as or is generally known as the person whom the public officer or employee intends to marry or with whom the public officer or employee intends to form a household, or any other natural person having the same legal residence as the public officer or employee. (See Section 112.312(21), Florida Statutes.)

DOES THE RELATIONSHIP DISCLOSURE FORM NEED TO BE UPDATED IF INFORMATION CHANGES?

Yes. It remains a continuing obligation of the applicant to update this form whenever any of the information provided on the initial form changes.

WHERE DO THE RELATIONSHIP DISCLOSURE FORM AND ANY SUBSEQUENT UPDATES NEED TO BE FILED?

For a development-related item, the Relationship Disclosure Form and any update need to be filed with the County Department or County Division where the applicant filed the application. For a procurement item, the Relationship Disclosure Form and any update need to be filed with the Procurement Division.

WHEN DO THE RELATIONSHIP DISCLOSURE FORM AND ANY UPDATES NEED TO BE FILED?

In most cases, the initial form needs to be filed when the applicant files the initial development-related project application or initial procurement-related forms. However, with respect to a procurement item, a response to a bid will not be deemed unresponsive if this form is not included in the initial packet submitted to the Procurement Division.

If changes are made after the initial filing, the final, cumulative Relationship Disclosure Form needs to be filed with the appropriate County Department or County Division processing the application not less than seven (7) days prior to the scheduled BCC agenda date so that it may be incorporated into the BCC agenda packet. When the matter is a discussion agenda item or is the subject of a public hearing, and an update has not been made at least 7 days prior to BCC meeting date or is not included in the BCC agenda packet, the applicant is obligated to verbally present such update to the BCC when the agenda item is heard or the public hearing is held. When the matter is a consent agenda item and an update has not been made at least 7 days prior to the BCC meeting or the update is not included in the BCC agenda packet, the item will be pulled from the consent agenda to be considered at a future meeting.

WHO WILL REVIEW THE INFORMATION DISCLOSED ON THE RELATIONSHIP DISCLOSURE FORM AND ANY UPDATES?

The information disclosed on this form and any updates will be a public record as defined by Chapter 119, Florida Statutes, and may therefore be inspected by any interested person. Also, the information will be made available to the Mayor and the BCC members. This form and any updates will accompany the information for the applicant's project or item.

However, for development-related items, if an applicant discloses the existence of one or more of the relationships described above and the matter would normally receive final consideration by the Concurrency Review Committee or the Development Review Committee, the matter will be directed to the BCC for final consideration and action following committee review.

CONCLUSION:

We hope you find this FAQ useful to your understanding of the Relationship Disclosure Form. Please be informed that if the event of a conflict or inconsistency between this FAQ and the requirements of the applicable ordinance or law governing relationship disclosures, the ordinance or law controls.

Also, please be informed that the County Attorney's Office is not permitted to render legal advice to an applicant or any other outside party. Accordingly, if the applicant or an outside party has any questions after reading this FAQ, he/she is encouraged to contact his/her own legal counsel.

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E VERIFICATION CERTIFICATION

IFB NO. Y15-750-CH

NAME OF CONTRACTOR: _____ (referred to herein as “Contractor”)

ADDRESS OF CONTRACTOR:

The undersigned does hereby certify that the above named contractor:

- 1. Is registered and is using the E-Verify system; or
- 2. Does not have any employees and does not intend to hire any new employees during the period of time that the contractor will be providing services under the contract and consequently is unable to register to use the E-Verify system; or
- 3. Employs individuals that were hired prior to the commencement of providing labor on the contract and does not intend to hire any new employees during the period of time that the contractor will be providing labor under the contract, and consequently is unable to use the E-Verify system.

The undersigned acknowledges the use of the E-Verify system for newly hired employees is an ongoing obligation for so long as the contractor provides labor under the contract and that the workforce eligibility of all newly hired employees will be properly verified using the E-Verify system.

In accordance with Section 837.06, Florida Statutes, Contractor acknowledges that whoever knowingly makes a false statement in writing with the intent to mislead a public servant in the performance of his or her official duties shall be guilty of a misdemeanor in the second degree, punishable as provided in Section 775.082 or Section 775.083, Florida Statutes.

AUTHORIZED SIGNATURE: _____

NAME: _____

TITLE: _____

DATE: _____

BID BOND

BOND NUMBER _____

STATE OF FLORIDA)
SS
COUNTY OF ORANGE)

KNOW ALL MEN BY THESE PRESENTS, that we, _____, as Principal, and _____, as Surety, are held firmly bound unto Orange County, Florida, in the penal sum of: \$ _____ Dollars **(Ten percent {10%} of base bid if no amount entered)**
(Total Sum Written in Words)

lawful money of the United States, for the payment of which sum well and truly to be made, we bound ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the attached Bid, dated the _____ day of _____, **20**__, for a Contract entitled: **INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH), IFB Y15-750-CH.**

NOW THEREFORE, if the Principal shall withdraw said Bid prior to the date of opening the same, or shall within ten (10) days after the prescribed forms are presented to him for signature, enter in a written Contract with Orange County, Florida, in accordance with the Bid as accepted, and give a Performance Bond and a Payment Bond with good and sufficient Surety or sureties as may be required, for the faithful performance and proper fulfillment of such Contract and for prompt payment of all persons furnishing labor or materials in connection therewith, or in the event of the failure to enter into such Contract and give such Bonds within the time specified, if the Principal shall pay the County the difference between the amount specified in said Bid and the amount for which the County may procure the required work and/or supplies, provided the latter amount to be in excess of the former, then the above obligations shall be void and of no effect; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above written parties have executed this instrument under their several seals this the _____ day of _____, **20**__, the name and corporate seal of each corporate party being affixed and these presents duly signed by its undersigned, pursuant to authority of its governing body.

CONTRACTOR-PRINCIPAL:

SURETY:

NAME OF BUSINESS ENTITY

NAME OF SURETY

SIGNATURE
(SEAL)

SIGNATURE: SURETY AGENT
(SEAL)

TYPE NAME AND TITLE

TYPE NAME AND TITLE

BUSINESS ADDRESS

BUSINESS ADDRESS

TELEPHONE

TELEPHONE

NAIC NUMBER: _____

Licensed Florida Insurance Agent? Yes _____ No _____

License Number: _____

STATE OF _____)

COUNTY OF _____) SS

CITY OF _____)

Before me, a Notary Public duly commissioned, qualified and acting personally, appeared:

to me well known, who being by me first duly sworn upon oath says that he is Attorney-in-Fact for

as Surety, and that he has been authorized by said Surety to execute the foregoing Bid Bond on behalf of the Principal (Contractor) named therein in favor of the owner.

Subscribed and sworn to before me this the _____ day of _____, 20__.

Notary Public

(Print, Type or Stamp Commissioned Name of Notary Public)

Personally Known _____ or Produced Identification _____

Type of Identification: _____

In accordance with Part C, Section 19 and Part F Article 8 of the Invitation for Bids, if applicable, list the Lead Surety.

LEAD SURETY

AGENT FOR SURETY

Signature

BY: _____

AGENCY ADDRESS: _____

SURETY ADDRESS: _____

PHONE _____

**BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA
UNIT PRICE CONSTRUCTION CONTRACT**

CONTRACT:

Made between the Board of County Commissioners, Orange County, Florida (hereinafter called County), represented by the Manager of the Procurement Division executing this Contract, and:

>

Federal Identification Number: >

A Corporation formed under the laws of the State of Florida, hereinafter called Contractor.

The Contractor shall perform all the Work required by the Contract Documents for the proper execution and completion of **INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)** in full accordance with the drawings and as elaborated in the specifications of **Invitation for Bids No. Y15-750-CH** which is made a part of this Contract as completely as if set forth herein.

I

AMOUNT OF CONTRACT:

The County shall pay the Contractor in current funds, and in accordance with the progress payment schedule as stated herein, for the performance of the Work, subject to additions and deductions by Change Order as provided in the Contract Documents, the Estimated Contract Amount of (\$>) at the unit prices set forth in the Invitation for Bid Official Bid Form, Part D.

MAXIMUM CONTRACT AMOUNT:

The Contractor shall provide written notification to the County's Project Manager when 90% of the total contract amount has been reached. The Contractor shall not proceed beyond 100% of the total contract amount unless duly authorized by a written change order.

ESTIMATED QUANTITIES:

This Contract is based on estimated quantities. The contractor shall only be paid for materials installed in the work in accordance with the applicable unit prices for the specific work element (line item). No payment shall be made for excess materials delivered to the jobsite and not incorporated into the work. Therefore, it shall be the contractor's responsibility to determine the quantities of materials necessary to perform the project to its completion.

II
ASBESTOS FREE MATERIALS:

Project is to be constructed with asbestos free materials. A written, notarized statement on company letterhead is to be submitted with the final payment request. Final payment shall be withheld until such statement is submitted. Contractor shall agree that if materials containing asbestos are subsequently discovered at any future time to have been included in the construction done by the Contractor or any of its Subcontractors or agents and were not specified in the design or required by the Contract document, Contractor shall be liable for all costs related to the abatement of such asbestos and damages or claims against the County.

III
ADMINISTRATIVE DATA:

Progress Payments: Based upon Applications for Payment submitted to the Project Manager by the Contractor and Certificates for Payment issued by the Project Manager the County shall make progress payments on account of the Contract Amount to the Contractor as provided in the Contract Documents as follows:

Not later than 30 days following approval of an application for Payment, ninety percent (90%) of the portion of the Contract Amount properly allocable to labor, materials and equipment incorporated in the Work and ninety percent (90%) of the portion of the Contract Amount properly allocable to materials and equipment suitably stored at the site or at some other location agreed upon in writing, for the period covered by the application for payment, less the aggregate of previous payments made by the Owner.

When the completion of the Work ascertained as payable exceeds fifty percent (50%) of the total contract amount the retainage percentage withheld shall be reduced to 5%. Upon Final completion of the entire Work, a sum sufficient to increase the total payments to one hundred percent (100%) of the Contract Amount, less such amounts as the Owner shall determine for all incomplete work and unsettled claims as provided in the Contract Documents.

Should the Contractor fail to substantially complete all Work under this Contract and make the project available for beneficial use on or before the date stipulated for Substantial Completion (or such later date as may result from extension of time granted by County), he shall pay and/or the County may retain from the compensation otherwise to be paid to the Contractor, as liquidated damages, the sum of **\$3,300.00** for each consecutive calendar day that terms of the Contract remain unfulfilled beyond date allowed by the Contract, which sum is agreed upon as a reasonable and proper measure of damages which County will sustain per diem by failure of Contractor to complete work within time as stipulated; it being recognized by County and Contractor that the injury to County which could result from a failure of Contractor to complete on schedule is uncertain and cannot be computed exactly. In no way shall costs for liquidated damages be construed as a penalty on the Contractor. For each consecutive calendar day that the work remains incomplete after the date established for Final Completion, the County will retain from the compensation otherwise to be paid to the Contractor the sum of **\$3,300.00**. This amount is the mutually agreed upon minimum measure of damages the County will sustain by failure of the Contractor to complete all

remedial work, correct deficient work, clean up the project and other miscellaneous tasks as required to complete all Work specified and this amount of liquidated damages is in addition to the liquidated damages prescribed above for failure to timely achieve Substantial Completion.

IV
CONTRACT DOCUMENTS:

This Contract entered into this date by the Board of County Commissioners hereinafter called the County, represented by the Manager of the Procurement Division executing this Contract and the individual, partnership or corporation named above, hereinafter called the Contractor. Witnesseth that the parties hereto do mutually agree as follows:

The Contractor shall furnish all labor, equipment and materials and perform the Work described for the amount stated above in strict accordance with the General Conditions, Supplementary Conditions/Special Provisions, Plans and Specifications and other Contract Documents, all of which are made a part hereof and designated as follows:

- a. Orange County Invitation for Bids/Project Manual, **IFB No. Y15-750-CH dated February 10, 2015**, (which contains the Invitation for Bids, Notice, Instruction to Bidders, Bid Form and Attachments, this Contract, General Conditions, Supplementary Conditions / Special Provisions, and Specifications);
- b. Drawings bearing the title "**Construction Plans, INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)**".
- c. Addendum No.> dated >;
- d. >'s Bid Proposal dated **March 12, 2015**;
- e. Payment/Performance Bond;
- f. Certificates of Insurance;

V
PRIORITY OF DOCUMENTS:

The order of precedence of items and documents is as follows:

Construction Contract
Permits
Supplemental Conditions/Special Provisions
General Conditions
Specifications/Technical Provisions
Drawings/Plans
Road Design, Structures, and Traffic Operations Standards (If applicable)
Florida Department of Transportation Standard Specifications for Road and Bridge Construction (If applicable)
Bid Proposal
Instructions to Bidders

VI
TIME OF COMMENCEMENT AND FINAL COMPLETION:

- a. Work to commence within fourteen (14) days of Official Notice to Proceed date and shall be completed, unless amended by written Change Order or Amendment executed by both parties to this Contract.
- b. Substantial Completion of the Work shall be achieved not later than **600** consecutive calendar days from date of Official Notice to Proceed.
- c. Final Completion of the Work shall be achieved not later than **660** consecutive calendar days from date of Official Notice to Proceed.

VII
COMPLIANCE WITH M/WBE CONTRACT REQUIREMENTS:

By entering into this Contract, the Contractor affirmatively commits to comply with the MWBE subcontracting requirements submitted with his/her bid. The failure of the Contractor to comply with this commitment during the Contract's performance period may be considered a breach of Contract.

The County may take action up to and including termination for default if this condition is not remedied within the time period specified by the Manager, Procurement Division.

VIII
MISCELLANEOUS PROVISIONS:

- a. Terms used in this Contract that are defined in the General Conditions shall have the meanings designated in those conditions.
- b. No price adjustments shall be made on this contract to the bid price of any products or materials including but not limited to gasoline, diesel or other fuels, and bituminous materials, including asphalt due to fluctuations in market prices, changes in suppliers or any other reason.
- c. County and Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto, his partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

- d. The laws of the State of Florida shall govern this Contract. Any and all legal action necessary to enforce the provisions of this Contract will be held in Orange County, Florida. Venue for any litigation involving this Contract shall be the Ninth Circuit Court in and for Orange County, Florida.

**BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA**

BY _____ BY _____
Johnny M. Richardson, CPPO, CFCM **Signature**
Manager, Procurement Division

DATE _____
(For County use only) **Type or Print Name**

**Corporate
Seal**

PERFORMANCE BOND

BOND NUMBER _____

KNOW ALL MEN BY THESE PRESENTS that

Name of Contractor _____

Address _____

Phone Number _____

Corporation, Partnership or Individual _____

hereinafter referred to as the Contractor, as Principal, and

Name of Surety _____

Address _____

Phone Number _____

hereinafter called SURETY, as SURETY, are held and firmly bound unto Orange County, 400 East South Street, Orlando, FL 32801, (407)836-5635 a Political Subdivision of the State of Florida as Obligee, hereinafter referred to as Owner, in the full and just sum of \$ _____, lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Contractor and SURETY bind themselves, their representatives, and each of their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Contractor has entered into **Contract No. Y15-750** with the "County", also referred to herein as the OWNER, for the project entitled: **INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH), International Drive, Orlando, Florida** with conditions and provisions as are further described in the aforementioned Contract, which Contract is by reference made a part hereof for the purpose of explaining this bond.

General description of the Work: The project consists of widening an existing segment of International Drive from a four-lane urban section to a six-lane divided urban section from south of Westwood Boulevard South to north of Westwood Boulevard North in southwest Orange County, Commission District 1.

NOW, THEREFORE, the condition of this obligation is such that if Contractor shall fully, promptly and faithfully perform said Contract and all obligations thereunder, including all obligations imposed by the Contract documents (which includes the Notice to Bidders, Instruction to Bidders, Proposal and Bid Form, General and Supplementary Conditions, Detail Specifications, Form(s) of Contract Bond(s), Plans and Specifications and such amendments thereof as may be made as provided for therein), then this obligation shall be void; otherwise it shall remain in full force and effect.

1. The undersigned shall indemnify and save harmless said Owner against and from all costs, expenses and damages, including litigation costs and attorney's fees arising out of, or in connection with the neglect, default or want of care or skill, including patent infringement on the part of said Contractor, his agents, servants or employees in the execution or performance of said Contract.

The applicable provisions of Section 255.05 and 713.01 Florida Statutes apply to this bond.

2. Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations thereunder, the SURETY may promptly remedy the default or shall promptly:
 - A. Complete the Contract in accordance with its terms and conditions; or
 - B. Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by SURETY of the lowest responsible bidder, or, if the Owner elects, upon determination by the Owner and the SURETY jointly of the lowest responsible bidder, arrange for a Contract between such bidder and the Owner. SURETY shall make available as the work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this Paragraph) sufficient funds to pay the costs of completion, including other costs and damages for which the SURETY may be liable hereunder, the amount set forth in the first paragraph hereof.
3. Any changes in or under the Contract Documents and compliance or noncompliance with any formalities connected with the Contract or the changes shall not affect SURETY'S obligation under this bond. Any increase in the total Contract amount as authorized by the Owner shall accordingly increase the SURETY'S obligation by the same dollar amount of said increase. The Principal shall be responsible for notification to SURETY of all such changes.
4. The undersigned expressly acknowledges its obligations and liabilities for liquidated damages suffered by the Owner under the provisions of the Contract Documents.
5. The undersigned, covenant and agree that no change, extension of time, exercise of options for Contract renewals, changes to Contract amounts, alterations or additions to the terms of the Contract or the work to be performed thereunder, or the specifications accompanying the same shall in any way affect their obligation on this bond, and the SURETY does hereby expressly waive notice of any such change, extension of time, change to Contract amount, alteration, or addition. Moreover, no alterations or additions to this bond form shall be binding unless specifically agreed to in writing by the parties.
6. The Contractor shall save the Owner harmless from any and all damages, expenses and costs which may arise by virtue of any defects in said work or materials within a period of one (1) year from the date of Final Completion of the Project.

Signed and sealed this the _____ day of _____, 20__.

CONTRACTOR, AS PRINCIPAL

WITNESS:

 BY: _____
 Firm Name
 Signature
 Type Name and Title

SURETY

AGENT FOR SURETY

NAIC Number: _____

Signature

BY: _____ AGENCY ADDRESS: _____

SURETY ADDRESS: _____

PHONE _____

Licensed Florida Insurance Agent? Yes _____ No _____

License Number: _____

STATE OF _____)

COUNTY OF _____) SS

CITY OF _____)

Before me, a Notary Public duly commissioned, qualified and acting personally, appeared:

to me well known, who being by me first duly sworn upon oath says that he is Attorney-in-Fact for

as Surety, and that he has been authorized by said Surety to execute the foregoing Performance Bond on behalf of the Principal (Contractor) named therein in favor of the owner.

Subscribed and sworn to before me this the _____ day of _____, 20__.

Notary Public

(Print, Type or Stamp Commissioned Name of Notary Public)

Personally Known _____ or Produced Identification _____

Identification: _____ Type of _____

In accordance with Part C, Section 19 and Part F Article 8 of the Contract, if applicable, list the Lead Surety.

LEAD SURETY

AGENT FOR SURETY

Signature

BY: _____ AGENCY ADDRESS: _____

SURETY ADDRESS: _____

PHONE _____

P A Y M E N T B O N D

BOND NUMBER _____
KNOW ALL MEN BY THESE PRESENTS that

Name of Contractor _____

Address _____

Phone Number _____

Corporation, Partnership or Individual _____

Thereinafter called Contractor, as Principal, and

Name and Address of Surety _____

hereinafter called SURETY, as SURETY, are held and firmly bound unto Orange County, 400 East South Street, Orlando, FL 32801, (407) 836-5635 a Political Subdivision of the State of Florida as Obligee, in the full and just sum of \$_____, lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Contractor and SURETY bind themselves, their representatives, and each of their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Contractor has entered into **Contract No. Y15-750** with the "County", also referred to herein as the OWNER, for the project entitled: **INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH), International Drive, Orlando, Florida** with conditions and provisions as are further described in the aforementioned Contract, which Contract is by reference made a part hereof for the purpose of explaining this bond.

General description of the Work: The project consists of widening an existing segment of International Drive from a four-lane urban section to a six-lane divided urban section from south of Westwood Boulevard South to north of Westwood Boulevard North in southwest Orange County, Commission District 1.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS such that if Contractor shall promptly make payments to all claimants for any and all labor and material used or reasonably required for use or furnished in connection with the performance of said Contract, and shall perform all other covenants and obligations of this bond, then this obligation shall be void; otherwise it shall remain in full force and effect.

1. The undersigned shall promptly make payment to all persons supplying services, labor, material or supplies used directly or indirectly by said Contractor, or any subcontractor(s) or sub-subcontractor(s), in the prosecution of the work provided for in said Contract.
2. Subject to the Owner's priority, claimants covered by Section 713.01 of the Florida Statutes shall have a direct right of action against the Principal and SURETY under this obligation, after written notice of the performance of labor or delivery of materials or supplies, and non-payment therefore. Any claimant who seeks to recover against the Principal or SURETY under this obligation must also satisfy the notice requirement and time limitations of Section 255.05 of the Florida Statutes, as amended.
3. The undersigned, covenant and agree that no change, extension of time, exercise of options for Contract renewals, change to Contract amounts, alterations or additions to terms of the Contract or the work to be performed thereunder, or the specifications accompanying the same shall in any way affect their obligation on this bond and the SURETY does hereby expressly waive notice of any such change, extension of time, exercise of options for Contract renewal, changes to Contract amount, alternations or additions. Moreover, no alterations or additions to this bond form shall be binding unless specifically agreed to in writing by the parties.

The applicable provisions of Sections 255.05 and Florida Statutes apply to this bond.

4. Any changes in or under the Contract Documents and compliance or noncompliance with any formalities connected with the Contract or the changes shall not affect SURETY'S obligation under this bond. Any increase in the total Contract amount as authorized by the Owner shall accordingly increase the SURETY'S obligation by the same dollar amount of said increase. The Principal shall be responsible for notification to SURETY of all such changes.

Signed and sealed this the _____ day of _____, 20_____

CONTRACTOR, AS PRINCIPAL:

WITNESS: _____
Firm Name

Signature _____ BY: _____
Signature

Type Name and Title

SURETY: _____ AGENT FOR SURETY:

NAIC Number: _____ BY: _____
Signature

BY: _____ AGENCY ADDRESS: _____

SURETY ADDRESS _____

PHONE NO. _____

Licensed Florida Insurance Agent? Yes _____ No _____

License Number: _____

STATE OF _____)

COUNTY OF _____) SS

CITY OF _____)

Before me, a Notary Public duly commissioned, qualified and acting personally, appeared:

to me well known, who being by me first duly sworn upon oath says that he is Attorney-in-Fact for

as Surety, and that he has been authorized by said Surety to execute the foregoing Payment Bond on behalf of the Principal (Contractor) named therein favor of the owner.

Subscribed and sworn to before me this the _____ day of _____, 20_____.

Notary Public

(Print, Type or Stamp Commissioned Name of Notary Public)

Personally Known _____ or Produced Identification (Type) _____

In accordance with Part C, Section 19 and Part F Article 8 of the Contract, if applicable, list the Lead Surety.

_____	_____
LEAD SURETY	AGENT FOR SURETY
_____	_____
	Signature
BY: _____	AGENCY ADDRESS: _____
SURETY ADDRESS: _____	_____
_____	PHONE _____

(THIS FORM MUST BE UTILIZED IN ALL FINAL PAY APPLICATIONS)

FINAL RELEASE OF LIEN

KNOW ALL MEN BY THESE PRESENTS, that for and in consideration of the sum of monies, set out in the accompanying Estimate Statement No. _____, final, which quantity, the receipt of which is hereby acknowledged, is accepted as full and complete compensation for all work done, materials furnished and damages or claims arising under Orange County Contract No. Y15-750, entitled:

INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD. SOUTH TO WESTWOOD BLVD. NORTH)

By:

Contractor

(SEAL)

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before this _____ day of

_____ 20_____, by _____.

Personally Known _____ OR Produced Identification _____

Type of identification Produced _____

**CHANGE ORDER REQUEST
PURCHASE ORDER / DELIVERY ORDER / CONTRACT**

*Vendor Code: _____ *Vendor Name: _____ *Date: _____

*Change Order Request No.: _____ *Document No.: _____ Contract No. _____

*Department: _____ *Contact/Phone No.: _____

ACCOUNTING LINE CHANGE ONLY:

Accounting Line From: _____ Amount: _____

Accounting Line To: _____ Amount: _____

COMMODITY LINE NUMBER ADD:

Comm. Line No.: _____ Commodity Code: _____ Quantity: _____ Unit of Measure: _____

Unit Cost: _____ Description: _____ MA Line No. _____

Accounting Line: _____ Amount: _____

COMMODITY LINE NUMBER INCREASE / DECREASE / DELETE:

Comm. Line No. _____ Increase Qty By: _____ Decrease Qty By: _____ Increase Unit Cost By: _____

Decrease Unit Cost By: _____ Accounting Line: _____

Delete: _____ (check only if you want to delete this line number).

CANCELLATION:

_____ Please cancel Purchase Order / Delivery Order

Original sent to vendor: _____ Yes _____ No

***JUSTIFICATION (Required for all transactions):** _____

Enter Retainage for line number(s) _____ in the amount of _____ %

*Original PO/DO/Contract Award/Encumbrance <u>circle one</u>	Contract Amount	Encumbered/De-Encumbered Amount
	\$ _____	\$ _____
*Net Dollars for Previous Change Orders (Addition/Subtraction) <u>circle one</u>	\$ _____	\$ _____
*Net Dollars for This Change Order (Addition/Subtraction) <u>circle one</u>	\$ _____	\$ _____
*Total Dollars	\$ _____	\$ _____

By signing this agreement, the Contractor hereby releases the County, its agents, and employees from any and all liabilities under this contract for further equitable adjustments and/or claims associated with this change order.

*Vendor/Contractor Authorization: _____ Date: _____

*Departmental Approval: _____ Date: _____

*Purchasing & Contracts Approval: _____ Date: _____

For Purchasing Use Only Track Change Order: Yes No Change Award Amount to: \$ _____

Add the following text to the PO/DO: _____

CHANGE ORDER REQUEST CONTINUATION SHEET Document No.: _____
PURCHASE ORDER / DELIVERY ORDER / CONTRACT

ACCOUNTING LINE CHANGE ONLY:

Accounting Line From: _____ Amount: _____
Accounting Line To: _____ Amount: _____
Accounting Line Add: _____ Amount: _____
Accounting Line From: _____ Amount: _____
Accounting Line To: _____ Amount: _____
Accounting Line Add: _____ Amount: _____

COMMODITY LINE NUMBER ADD:

Comm. Line No.: _____ Commodity Code: _____ Quantity: _____ Unit of Measure: _____
Unit Cost: _____ Description: _____ MA Line No. _____
Accounting Line: _____ Amount: _____
Comm. Line No.: _____ Commodity Code: _____ Quantity: _____ Unit of Measure: _____
Unit Cost: _____ Description: _____ MA Line No. _____
Accounting Line: _____ Amount: _____
Comm. Line No.: _____ Commodity Code: _____ Quantity: _____ Unit of Measure: _____
Unit Cost: _____ Description: _____ MA Line No. _____
Accounting Line: _____ Amount: _____

COMMODITY LINE NUMBER INCREASE / DECREASE / DELETE:

Comm. Line No. ____ Increase Qty By: _____ Decrease Qty By: _____ Increase Unit Cost By: _____
Decrease Unit Cost By: _____ Accounting Line: _____
Delete: ____ (check only if you want to delete this line number).
Comm. Line No. ____ Increase Qty By: _____ Decrease Qty By: _____ Increase Unit Cost By: _____
Decrease Unit Cost By: _____ Accounting Line: _____
Delete: ____ (check only if you want to delete this line number).
Comm. Line No. ____ Increase Qty By: _____ Decrease Qty By: _____ Increase Unit Cost By: _____
Decrease Unit Cost By: _____ Accounting Line: _____
Delete: ____ (check only if you want to delete this line number).

*Departmental Approval: _____	Date: _____
Purchasing & Contracts Approval: _____	Date: _____

CONSENT OF SURETY AND INCREASE OF PENALTY

BOND NUMBER _____

1.CONTRACT#	2.MODIFICATION#	3.DATED
4.The Surety consents to the foregoing Contract notification and agrees that its bond or bonds shall apply and extend to the Contract as modified or amended. The principal and Surety further agree that on or after the execution of this consent, the penalty of the performance bond or bonds is increased by _____ dollars (\$ _____) and the penalty of the payment bond or bonds is increased by _____ dollars (\$ _____). However, the increase of the liability of each co-Surety resulting from this consent shall not exceed the sums shown below.		
5.NAME OF SURETY	6.INCREASE IN LIABILITYLIMIT UNDER PERFORMANCE BOND	7.INCREASE IN LIABILITYLIMIT UNDER PAYMENT BOND
a. SURETY ADDRESS	b. SIGNATURE c. TYPED NAME AND TITLE d. DATE THIS CONSENT EXECUTED	

SURETY

FLORIDA RESIDENT AGENT FOR SURETY

Signature

BY: _____ AGENCY

ADDRESS: _____

SURETY ADDRESS: _____

_____ PHONE _____

Signature

Type Name and Title

Business Address

License Number

Telephone Number (Include Area Code)

STATE OF _____)

COUNTY OF _____) SS

CITY OF _____)

Before me, a Notary Public duly commissioned, qualified and acting personally, appeared:

to me well known, who being by me first duly sworn upon oath says that he is Attorney-in-Fact for

as Surety, and that he has been authorized by said Surety to execute the foregoing Performance Bond on behalf of the Principal (Contractor) named therein in favor of the owner.

Subscribed and sworn to before me this the _____ day of _____, 20__.

Notary Public

(Print, Type or Stamp Commissioned Name of Notary Public)

Personally Known _____ or Produced Identification _____

DRUG-FREE WORKPLACE FORM

The undersigned vendor, in accordance with Florida Statute 287.087 hereby certifies that _____ does:

Name of Business

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Informs employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, employee assistance programs and the penalties that may be imposed upon employees for drug abuse violations.
3. Gives each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in Paragraph 1.
4. In the statement specified in Paragraph 1, notifies the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any State, for a violation occurring in the workplace no later than five (5) days such conviction.
5. Imposes a sanction on, or requires the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
6. Makes a good faith effort to continue to maintain a drug-free workplace through implementation of Paragraphs 1 thru 5.

As the person authorized to sign this statement, I certify that this firm complies fully with the above requirements.

Bidder's Signature

Date

PART F

GENERAL CONDITIONS

ARTICLE 1 - THE CONTRACT

The Contract Documents are identified in the Contract, Part E. Titles, Subtitles, Headings, Running Headlines, Table of Contents, and Indexes are printed in the Contract Documents merely for convenience.

ARTICLE 2 - DEFINITIONS

The words and expressions (or pronouns used in their stead) defined in this Article shall, wherever they appear in the Contract Documents, be construed as follows unless a different meaning is clear from the context.

"Addenda" shall mean any additional Contract provisions issued in writing by the County prior to receipt of Bid.

"Bid Proposal" shall mean the offer or proposal of the Bidder submitted on the Official Bid Form and Attachments setting forth the prices for the Work to be performed.

"Bidder" shall mean any person, firm or corporation submitting a Bid for the Work.

"Board of County Commissioners" shall mean the Board of County Commissioners, Orange County, Florida, or their duly authorized representative(s).

"Change Order" shall mean a written order to the Contractor, signed by the County, authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Amount or the Contract Time issued after execution of the Contract.

"Contract" shall mean the written agreement between the County and the Contractor covering the Work to be performed; the Contract will be attached to and made a part of the Contract Documents.

"Contractor" shall mean successful bidder (and vice versa), whether a corporation, firm, individual or any combination thereof, and its (or their) successors, personal representatives, executors, administrators and assigns.

"Contract Amount" shall mean the total monies payable to the Contractor under the Contract Documents. The term "Contract Price" where used in the Contract Documents refers to the Contract Amount.

"Contract Float" shall mean the number of days that an activity or a sequence of activities does not necessarily have to start or end on the scheduled dates to maintain the schedule, or as a minimum, the number of days that an activity may be delayed from its early start date without delaying completion of the Work beyond the Contract Time for Substantial Completion or Final Acceptance.

"Contract Time" will mean the number of calendar days stated in the Agreement for the completion of the Work.

"County" shall mean the Board of County Commissioners, Orange County, Florida, or their duly authorized representative(s), for whom the Work is being performed.

"Day " shall mean one calendar day when used in the Contract Documents.

"Defective Work" shall mean (a) Work that is unsatisfactory, deficient or damaged, does not conform to the Contract Documents, or does not meet the requirements of any inspection, test or approval, or (b) Work associated with punch list items that the Contractor fails to complete within a reasonable time after issuance of the punch list by the Project Manager.

"Drawings" shall mean only those drawings specifically referred to as such in these documents or in any Addenda. Drawings issued after the execution of the Contract to explain further, to illustrate, or to show changes in the Work will be known as "Supplementary Drawings" and shall be binding upon the Contractor with the same force as the Drawings.

"Final Acceptance" shall mean acceptance of the Work by the County upon the expiration of the correction period required by the Contract Documents.

"Final Completion" shall mean acceptance of the Work by the County as evidenced by its signature upon Final Certificate of Completion and approval thereof by the Board of County Commissioners. The Final Certificate of Completion shall be signed only after the County has assured itself by tests, inspection or otherwise that all of the provisions of the Contract have been carried out to its satisfaction.

"Notice" shall mean written Notice. Notice shall be served upon the Contractor either personally or by leaving the said Notice at his residence or with his Agency in charge of the Work, or addressed to the Contractor at the residence or place of business given in the Bid and deposited in a postpaid wrapper in any post box regularly maintained by the United States Post Office.

"Notice of Award" shall mean the written notice of award of the Contract given by the County to the apparent successful Bidder.

"Notice to Proceed" shall mean the written notice given by the County to Contractor fixing the date the Contract Times will commence to run.

"Professional" shall mean the professional independent Architectural/Engineering firm designated to assist the County in the work by a prior agreement entered into by the County and the said firm. The terms "Engineer" and "Architect", where used in the Contract Documents, refer to the Professional.

"Project" shall mean the entire improvement of which this Contract forms a part.

"Project Manager" shall be the duly authorized representative of the County during the construction period.

“Record Schedule” shall mean the time table of predicted tasks, milestones, task durations, deadlines and the start and end dates of the Work indicated in a Progress Schedule accepted by the County and provided to the County prior to the first progress payment. County acceptance of a revised and/or updated Progress Schedule will result in a revised Record Schedule, if so noted in the County’s written acceptance, that will be used to evaluate progress and delays occurring after the acceptance of the revised Record Schedule.

"Shop Drawings" shall mean all drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, a Subcontractor, a manufacturer, supplier or distributor and which illustrate the equipment, material and/or some portion of the Work.

"Site" shall mean the area upon or in which the Contractor's operations are carried on and such other areas adjacent thereto as may be designated as such by the Project Manager.

"Specifications" shall mean parts of the Contract Documents identified as "Specifications" and organized into Divisions. The specifications include general requirements and technical descriptions of materials, equipment, construction systems, standards and workmanship. The term "Technical Provisions" where used in the Contract Documents refers to the Specifications.

"Subcontractor" shall mean any person, firm or corporation other than employees of the Contractor who or which contracts with the Contractor to furnish, or actually furnishes labor, materials and/or equipment for the Work.

"Substantial Completion" shall mean the completion of the Work by the Contractor to the point where the County may make beneficial use of the Work.

"Surety" shall mean any corporation that executes, as Surety, the Contractor's Bid Bond, Payment Bond and Performance Bonds securing the performance of this Contract.

"Work" shall mean any and all obligations, duties and responsibilities necessary to the successful completion of the construction assigned to or undertaken by the Contractor under the Contract Documents, including the furnishing of all labor, materials, equipment, and other incidentals.

ARTICLE 3 -ASSIGNMENT OF CONTRACT

The Contractor may not make any assignment of the contractual agreement between the parties, in whole or in part, without prior written authorization as may be given by the County, at its sole discretion.

No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without written consent of the party sought to be bound; and specifically but without limitation, monies that may become due and monies that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the

contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

ARTICLE 4 - QUALIFICATIONS OF SUBCONTRACTORS AND SUPPLIERS

The Project Manager will notify the Contractor in writing if the Project Manager, after due investigation, has reasonable objection to any Subcontractor or Supplier on the Subcontractor or Supplier Page, Bid Form Attachment C-2. If the Project Manager has reasonable objection to any Subcontractor or Supplier, the Contractor shall submit another acceptable one to the County. No increase in Contract Amount or Contract Time will be allowed under this article, unless Contractor can prove substantial increase due to the change, in which case Contractor may request an equitable adjustment to the Contract Amount or Contract Time. If Contractor requests an equitable adjustment as a result of a requested change, Contractor shall make available to the County all documents necessary, as requested by the County, to substantiate such adjustment.

The failure of the Project Manager to make objections to any Subcontractor or Supplier on the list shall not constitute a waiver of any right of the County to reject defective Work, material or equipment; or work, material or equipment not in conformance with the requirements of the Contract Documents. Should the Contractor desire to add, change or delete a Subcontractor or Supplier previously listed, the Contractor shall submit written justification for said change to the Project Manager for approval prior to the new Subcontractor or Supplier performing any Work on the Project.

ARTICLE 5 - STARTING THE WORK

The Contractor will start the Work within **fourteen (14)** calendar days of the official "Notice to Proceed" date. The Contract Time shall commence on the effective date of the "Notice to Proceed."

Preconstruction Conference: Within 20 days after the effective date of the Contract, but before Contractor starts the Work at the site, a conference attended by Contractor, Project Manager, Professional and others as appropriate will be held to discuss such topics as may include, but not limited to; schedules, procedures for handling Shop Drawings and other submittals and for processing Applications for Payment, maintenance of traffic, initiation of coordination with affected utilities, agreement upon the Notice to Proceed date, and to establish a working understanding among the parties as to the Work.

ARTICLE 6 - INTERPRETATION AND INTENT OF THE CONTRACT DOCUMENTS

It is the intent of the Specifications and Drawings to describe the complete Work to be constructed in accordance with the Contract Documents. However, the County makes no representation or warranty of any nature whatsoever to the Contractor concerning such documents. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. If the Contractor finds a conflict, error or discrepancy in the Contract Documents, he will call it to the Project Manager's attention in writing before proceeding with the Work affected thereby. Any work that may reasonably be inferred from the Specifications or Drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. Work, materials or equipment described in words which so applied have a well known technical or trade meaning shall be deemed to refer to such recognized standards. In case of conflict, the more stringent requirements shall take precedence and govern.

Written clarifications or interpretations (which shall be consistent with or reasonably inferable from the Contract Documents) will be issued in response to a Contractor Request for Interpretation (RFI) or as the Project Manager or Professional may otherwise determine necessary. If the Contractor believes a written clarification or interpretation justifies an increase in Contract Amount or Contract Time, the Contractor shall make a claim for such increase in accordance with Article 13 of the General Conditions. If the Contractor is authorized by the County to proceed with the Work involved before full agreement is reached on (a) whether any increases are due at all, or (b) the extent of any such increases (if any are determined to be due), the Contractor shall furnish daily to the Project Manager, or Professional, actual cost records.

ARTICLE 7 - REFERENCE POINTS

Availability of Lands: The County will furnish, as indicated in the Contract Documents and not later than the date when needed by the Contractor, the lands upon which the Work is to be done, rights-of-way for access thereto and such other lands which are designated for the use of the Contractor. Easements for permanent structures or permanent changes in existing facilities will be obtained by the County unless otherwise specified in the Contract Documents. If the Contractor believes that any delay in the County's furnishing these lands or easements entitles him to an extension of the Contract Time, he may make a claim therefore as provided in Article 13. The Contractor will provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment. The Project Manager will, upon request, furnish to the Contractor copies of all available boundary surveys and subsurface test.

Unforeseen Subsurface Conditions: The Contractor will promptly notify the Project Manager in writing of any subsurface or latent physical conditions at the site which may differ materially from those indicated in the Contract Documents. The Project Manager will promptly investigate those conditions and advise the Contractor in writing if further surveys or subsurface tests are necessary. Promptly thereafter, if needed, the Project Manager will obtain the necessary additional surveys and tests and furnish copies to the Contractor. If the Project Manager finds that the results of such surveys or tests indicate subsurface or latent physical conditions differing significantly from those indicated in the Contract Documents, a Change Order shall be issued incorporating the necessary revisions, in accordance with Article 12.

Reference Points: The Contractor shall be responsible for all field survey work coincidental with completion of this Work as specified herein. All survey work shall be done under the supervision of a Registered Professional Surveyor and Mapper. The County shall furnish, one time, a set of permanent reference markers along the line of work to form the basis for the above Contractor's survey.

All **Section Corners** and **Quarter Section** corners falling within the limits of this Work shall be perpetuated by a Florida Registered Surveyor and Mapper.

- A. All such corners falling within or on the boundaries of this project shall have reference ties made, certified to and submitted to the County Surveyor, Orange County, Florida, prior to the commencing of construction.

- B. Upon completion of construction and prior to Final Completion, certified corner records shall be submitted to the Department of Natural Resources in compliance with Florida Statutes, Chapter 177.507 and a copy of said certified corner record shall also be submitted to the Orange County Surveyor. Said corner records shall reflect the corner as perpetuated and which shall meet these minimum standards.
1. If the corner falls in asphalt or concrete construction, the corner shall be a 2 1/4" metal disc marked according to standard government practices and set in concrete no less than 18" in depth and shall be encased in an adjustable 5 1/4" diameter or larger valve box raised to the finished surface of construction.
 2. If the corner falls at any other location, it shall be a 4" x 4" concrete monument no less than 23" long with a 2 1/4" metal disc marked according to standard government practices. The top of said monument shall be set flush with the ground ($\pm 0.5'$ depending on conditions).
- C. Any U.S.C. and G.S. monument within limits of construction are to be protected. If monuments are in danger of damage, the Contractor shall contact the Project Manager and the Orange County Surveyor prior to the commencing of construction.
- D. Payment for all necessary survey work shall be included in the bid as part of other items of work.

ARTICLE 8 – BONDS, INSURANCE AND INDEMNIFICATION

Payment and Performance Bonds: The CONTRACTOR shall execute and deliver to the County the Payment and Performance Bonds (see Part C, 2-h) included herein as security for the faithful performance and completion of the Work and payment for all materials and labor furnished or supplied in connection with all Work included in the Contract Documents. These Bonds shall be in amounts at least equal to the Contract Amount, shall name the County as obligee and shall be in such form and by sureties of financial standing having a rating from A.M. Best Company (or other equivalent rating company) equal to or better than A- VI and must be included on the approved list of sureties issued by the United States Department of Treasury. Prior to execution of the Contract Documents the County may require the Contractor to furnish such other Bonds, in such form and with such sureties as it may require. If such Bonds are required by written instructions given prior to opening of Bids, the premium shall be paid by the Contractor. If the Contract Amount is increased by Change Order, it shall be the Contractor's responsibility to insure that the Payment and Performance Bonds be amended accordingly and a copy of the amendment is forwarded to the County.

If the Surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any State where any part of the Work is located or it ceases to meet the requirements imposed by the Contract Documents, the Contractor shall within five (5) days thereafter substitute another Bond with another Surety both of which shall be acceptable to the County.

Insurance Requirements:

Contractor agrees to maintain on a primary basis and at its sole expense, at all times throughout the duration of this Contract the following types of insurance coverage with limits and on forms (including endorsements) as described herein. These requirements, as well as the County's review or acceptance of insurance maintained by Contractor is not intended to and shall not in any manner limit or qualify the liabilities assumed by Contractor under this Contract. Contractor is required to maintain any coverage required by federal and state workers' compensation or financial responsibility laws including but not limited to Chapter 324 and 440, Florida Statutes, as may be amended from time to time. Insurance carriers providing coverage shall be authorized and/or eligible to do business in the State of Florida and shall possess a current A.M. Best's Financial Strength Rating of A- Class VIII.

The Contractor shall require and ensure that each of its subcontractors maintain insurance until the completion of their work under any contract associated with this Contract. Failure of the Contractor to maintain insurance coverage for itself or for any other persons or entities for whom it is responsible or to ensure that its subcontractors maintain coverage shall not relieve the Contractor of any contractual responsibility, obligation or liability.

If the CONTRACTOR intends to bid on this Contract as a Joint Venture then all insurance coverage required herein shall include the Joint Venture as "named insured". If the Joint Venture has no employees then this requirement is waived for workers' compensation. The Joint Venture shall also purchase discontinued completed operations coverage for any claims made after the dissolution of the Joint Venture. This coverage shall be for a period of two years following final completion of the project or continuing service contract.

The minimum types and amounts of insurance inclusive of any amount provided by an umbrella or excess policy, shall be as follows:

- Workers' Compensation – The Contractor shall maintain coverage for its employees with statutory workers' compensation limits, and no less than the limits indicated in the Schedule of Limits (see below) for Employers' Liability. Said coverage shall include a waiver of subrogation in favor of the County. The County will not accept elective exemptions. Any contractor using an employee leasing company shall complete the Leased Employee Affidavit (Exhibit A).

Required Endorsements:

- Waiver of Subrogation- WC 00 03 13 or its equivalent (Exhibit G)
- Commercial General Liability – The Contractor shall maintain coverage issued on an ISO form CG 00 01 or its equivalent, with a limit of liability of not less than the limits indicated in the Schedule of Limits (see below). Contractor further agrees coverage shall not contain any endorsement(s) excluding or limiting Product/Completed Operations, Independent Contractors, Contractual Liability, or Separation of Insureds. The General Aggregate limit shall either apply separately to this Contract or shall be at least twice the required occurrence limit.

All projects with a Contract Amount greater than \$20,000,000 shall be written on a Designated Premises or Projects basis (Exhibit B). Commercial umbrella and excess coverage shall include liability coverage for damage to the Contractor's completed work equivalent to that provided under ISO Form CG 00 01 04 13.

Required Endorsements:

- Additional Insured- CG 20 10 04 13 and CG 20 37 04 13 or its equivalent (Exhibits E and F)
- Waiver of Subrogation- CG 24 04 05 09 or its equivalent

Note: If blanket endorsements are being submitted please include the entire endorsement. The policy number to which the endorsement applies shall be indicated directly on the endorsement.

- Business Automobile Liability - The Contractor shall maintain coverage for all owned; non-owned and hired vehicles issued on ISO form CA 00 01 or its equivalent, with limits of not less than the limits indicated in the Schedule of Limits (see below). In the event the Contractor does not own automobiles the Contractor shall maintain coverage for hired and non-owned auto liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

Required Endorsements:

- MCS-90- for operations governed under Sections 29 & 30 of the Motor Carrier Act of 1980

Schedule of Limits:

Contract Amount	Workers' Comp/ Employers' Liability	General Liability	Automobile Liability
Up to \$10 million	Statutory/\$500,000	\$1,000,000	\$1,000,000
\$10 - \$20 million	Statutory/\$1,000,000	\$5,000,000	\$5,000,000
Over \$20 million	To Be Determined by the County		

- Pollution Legal Liability - The Contractor agrees to maintain Contractor's Pollution Legal Liability with a limit of not less than one million (\$1,000,000) per occurrence on a per-project basis.
- Builders' Risk - If this Contract includes: (1) construction of a new above-ground structure or structures, (2) any addition, improvement, alteration, or repair to an existing structure or structures, or (3) the installation of machinery or equipment into an existing structure or structures, the Contractor shall maintain builders' risk insurance providing coverage to equally protect the interests of the County, the Professional, the Contractor and subcontractors of any tier. Coverage shall be written on a completed value form (Exhibit C) in an amount at least equal to 100% of the estimated completed value of the project plus any subsequent modifications of that sum.

The coverage shall be written on an “all-risk” basis and shall, at a minimum cover the perils insured under the ISO CP 10 30 Special Causes of Loss Form (Exhibit D) and shall include property in transit and property stored on or off premises, which shall become part of the project. The Contractor agrees not to maintain a wind or flood sub-limit less than 25% of the estimated completed value of the project. The Contractor agrees any flat deductible(s) shall not exceed \$25,000, and any wind percentage deductible (when applicable) shall not exceed five-percent (5%). The coverage shall not be subject to automatic termination of coverage in the event the project/building is occupied in whole or in part, or put to its intended use, or partially accepted by the County. If such restriction exists the Contractor shall request that the carrier endorse the policy to amend the automatic termination clause to only terminate coverage if the policy expires, is cancelled, the County’s interest in the project ceases, or the project is accepted and insured by the County.

- Professional Liability- If the construction method is “design-build” the Contractor agrees to maintain Professional Liability on a per-project basis. The Contractor agrees to provide coverage with limits and deductibles as prescribed below.

<u>Project Cost</u>	<u>Minimum Limit</u>	<u>Maximum Deductible</u>
\$0-1,000,000	50% of project cost subject to a minimum of \$100,000/occurrence	10% of project cost or \$25,000, whichever is smaller
\$1,000,000-5,000,000	\$1,000,000	\$100,000
over \$5,000,000	Determined by the County	

When a self-insured retention or deductible exceeds \$100,000 the County reserves the right to request a copy of the Contractor’s most recent annual report or audited financial statement. For policies written on a “Claims-Made” basis the Contractor agrees to maintain a retroactive date prior to or equal to the effective date of this contract. In the event the policy is canceled, non-renewed, switched to occurrence form, or any other event which triggers the right to purchase a Supplemental Extended Reporting Period (SERP) during the life of this contract the Contractor agrees to purchase the SERP with a minimum reporting period of not less than two years. Purchase of the SERP shall not relieve the Contractor of the obligation to provide replacement coverage.

The Contractor shall be responsible for all risk of loss whether insured or not until final acceptance of the project by the County. The Contractor agrees to be fully and solely responsible for any costs or expenses resulting from a coverage deductible, co-insurance penalty, or self-insured retention; including any loss not covered because of the application of said deductible, co-insurance penalty, self-insured retention, or coverage exclusion or limitation. The County has the right to request that the Contractor procure and maintain a surety bond for any deductible amounts that exceed any amount stated herein in such amount and on such form that are acceptable to the County.

The County reserves the right, but not the responsibility to periodically review any and all policies of insurance and to reasonably adjust the limits and/or types of coverage required herein, from time to time throughout the term of this Contract. In such event, the County shall provide the Contractor written notice of such adjustments and the Contractor shall comply within thirty (30) days of receipt thereof. Any request for an exception to these insurance requirements must be submitted in writing to the County for approval.

The Contractor agrees to specifically include the County as an Additional Insured on the Commercial General Liability policy with a CG 20 37 – Additional Insured - Owners, Lessees or Contractors-Completed Operations (Exhibit E) or CG 20 10 – Additional Insured-Owners, Lessees or Contractors-Scheduled Person or Organization Endorsement, or their equivalent (Exhibit F). The Contractor shall also specifically include the County as an Additional Insured on any Commercial Umbrella or Excess policies unless the County is automatically defined under the policy as an Additional Protected Person. Additionally, the Contractor agrees to specifically include the County as an Additional Insured under the Contractor’s Pollution Liability coverage (when applicable). The name of the organization identified in each Additional Insured endorsement’s schedule shall read Orange County Board of County Commissioners.

The Contractor agrees by entering into this written Contract to provide a Waiver of Subrogation in favor of the County, Contractor, Professional, and sub-contractors of any tier for each required policy providing coverage during the life of this Contract. When required by the insurer, or should a policy condition not permit an endorsement, the Contractor agrees to notify the insurer and request that the policy(ies) be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or an equivalent endorsement. This Waiver of Subrogation requirement shall not apply to any policy, which includes a condition that specifically prohibits such an endorsement or voids coverage should the Contractor enter into such an agreement on a pre-loss basis.

Before execution of this Contract by the County and the start of any Work and for the duration of this Contract, the Contractor shall provide the COUNTY with current certificates of insurance evidencing all required coverage. The certificates shall clearly indicate that the Contractor has obtained insurance of the type, amount and classification as required for strict compliance with this insurance section. No material change or cancellation of the insurance shall be effective without thirty (30) days prior written notice to the COUNTY. Certificates shall specifically reference the project title and contract number. The certificate holder shall read:

Orange County Board of County Commissioners
c/o Procurement Division
400 E. South Street
Orlando, Florida 32801

Prior to commencement of any Work performed by subcontractors (if any), the Contractor shall obtain certificates of insurance evidencing coverage from each of its subcontractors and shall furnish within five days, copies of said certificates upon request by the County. In addition to the certificate(s) of insurance the Contractor shall also provide a blanket or specific additional insured endorsement and all waivers of subrogation or transfer of rights of recovery endorsements for each policy.

Failure of the County to demand such certificate or other evidence of full compliance with these insurance requirements or failure of the County to identify a deficiency from evidence provided will not be construed as a waiver of the Contractor's obligation to maintain such insurance.

Indemnification:

Subject to the limitations in the third paragraph under this heading, the Contractor will defend, indemnify and hold harmless the County, its agents and employees from and against all liabilities, claims, damages, losses, costs and expenses (including attorney's fees) arising out of or resulting from the performance of the Work, provided that any such liability, claim, damage, loss, cost or expense:

- is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting there from and,
- is caused in whole or in part by any act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in whole or in part by a party indemnified hereunder.

The Contractor hereby acknowledges receipt of One Hundred Dollars (\$100) and other good and valuable consideration from the County as consideration for the indemnification provisions in this Contract.

In any and all claims against the County, its agents or employees; employees of the Contractor and subcontractor; all persons directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under the previous paragraph shall not be limited in any way as to the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

The indemnification obligations of the Contractor under this section shall not extend to the liability of the Professional and its agents or employees arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or the giving or the failure to give requested interpretations by the Professional and their agents or employees, provided such giving or failure to give is the primary cause of injury or damage.

The Contractor will defend, indemnify and hold harmless the County and anyone directly or indirectly employed by it from and against all claims, damages, losses and expenses (including attorney's fees) arising out of any infringement of patent rights or copyrights held by others during or after completion of the Work, and shall defend all such claims in connection with any alleged infringement of such rights.

Provided however, if this Contract is deemed by a court of competent jurisdiction to be a construction contract under Section 725.06, Florida Statutes, any obligation of the Contractor to defend, indemnify or hold harmless the County, its officers and employees shall be limited to an obligation to indemnify and hold harmless to the extent caused by the negligence, recklessness or intentionally wrongful conduct of the Contractor and persons employed or utilized by the Contractor in the performance of the Contract.

The indemnification provisions contained herein shall survive the termination of this Contract.

ARTICLE 9 - CONTRACTOR'S RESPONSIBILITIES

Supervision and Superintendence - The Contractor will supervise and direct the work efficiently and with his best skill and attention. He will be solely responsible for the means, methods, techniques, sequences and procedure of construction, unless otherwise specified. The Contractor will be responsible to see that the finished Work complies accurately with the Contract Documents. The Contractor will keep on the site at all times during its progress a competent, resident superintendent who shall not be replaced without written notice to the Project Manager. The superintendent will be the Contractor's representative at the site and shall have authority to act on behalf of the Contractor. All communications given to the superintendent shall be as binding as if given to the Contractor.

The Project Manager may require in writing that the Contractor remove from the Work any of Contractor's personnel that the Project Manager determines to be incompetent, careless or otherwise objectionable.

No claims for an increase in Contract Amount or Contract Time based on the Project Manager's use of this provision will be valid. Contractor shall indemnify and hold the County harmless from and against any claim by Contractor's personnel on account of the use of this provision.

Labor, Materials and Equipment - The Contractor will provide competent, suitable, qualified personnel to lay out the Work and perform construction as required by the Contract Documents. He will at all times maintain good discipline and order at the site. The Contractor will furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities and incidentals necessary for the execution, testing, initial operation and completion of the Work.

All materials and equipment will be new except as otherwise provided in the Contract Documents. If required by the Project Manager, the Contractor will furnish satisfactory evidence as to the kind and quality of materials and equipment furnished.

All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processors except as otherwise provided in the Contract Documents.

Substitute Material or Equipment - If it is indicated in the Specifications that the Contractor may furnish or use a substitute that is equal to any material or equipment specified, and if the Contractor wishes to furnish or use a proposed substitute, he will within thirty (30) days after the award of the Contract make written application to the Project Manager for acceptance of such a substitute, certifying in writing that the proposed substitute will perform adequately the duties imposed by the general design, be similar and of equal substance to that specified and be suited to the same use and capable of performing in an efficient and economic manner as that specified. The application will include sufficient information to allow the Project Manager to evaluate the substitutions.

The application will state the extent, if any, to which the review, acceptance, furnishing and installation of the proposed substitute will prejudice Contractor's completion of the Work within the Contract Time(s). If the cost of the review of the substitution is greater than that of the originally specified item, the Contractor will reimburse the County for all costs. County may require Contractor to furnish at Contractor's expense a special performance guarantee or other Surety with respect to any substitute. The benefit of lower cost items shall be shared between the County and Contractor as specified in the Instructions to Bidders. No substitute shall be ordered or installed without the written acceptance of the Project Manager who shall be the sole judge of acceptability.

Concerning Subcontractors - The Contractor will not employ any Subcontractor, other person or organization of the types referred to in Article 4 (whether initially or as a substitute) against whom the County or the Project Manager may have reasonable objections, nor will the Contractor be required to employ any Subcontractor against whom he has reasonable objection.

The Contractor will not make any substitution for any Subcontractor who has been accepted by the Project Manager, unless the County and the Project Manager determine that there is good cause for doing so.

The Contractor will be fully responsible for all acts and omissions of his Subcontractors and of persons directly or indirectly employed by them and of persons for whose acts any of them may be liable to the same extent that they are employed by him. Nothing contained in the Contract Documents shall create, nor be interpreted to create, privity or any other contractual relationship whatsoever between the County and any Subcontractor or any person except the Contractor, or any obligation on the part of the County to pay or to see to the payment of any monies due any Subcontractor, except as may otherwise be required by law. The County may furnish to any Subcontractor, to the extent practicable, evidence of amounts paid to the Contractor on account of specific Work done. The divisions and sections of the Specifications and the identifications of any Drawings shall not control the Contractor in dividing the Work among Subcontractors or delineating the Work to be performed by any specific trade.

The Contractor agrees to bind specifically every Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the County.

All Work performed for the Contractor by Subcontractors shall be pursuant to an appropriate agreement between the Contractor and the Subcontractor which shall contain provisions that waive all rights the contracting parties may have against one another for damages caused by fire or other perils covered by insurance held by the County as trustee. The Contractor will pay each Subcontractor a share of any insurance monies received by the Contractor under this insurance.

Patent Fees And Royalties - The Contractor will pay all license fees and royalties and assume all costs incident to the use of any invention, design, process or device which is the subject of patent rights or copyrights held by others.

Permits - The Contractor will secure and pay for all construction permits and licenses and will pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of his Bid except those as may be identified in the Specifications. The Contractor will also pay all public utility charges except as provided for in the Contract Documents.

Laws and Regulations - The Contractor will give all notices and comply with all laws, ordinances, rules and regulations applicable to the work. If the Contractor observes that the Specifications or Drawings are at variance therewith, he will give the Project Manager prompt written notice thereof, and any necessary changes shall be adjusted by an appropriate Change Order. If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations and without such notice to the Project Manager, he will bear all costs arising therefrom; however, it shall not be his primary responsibility to make certain that the Drawings and Specifications are in accordance with such laws, ordinances, rules and regulations.

Use Of Premises - The Contractor will confine his equipment, the storage of materials and equipment, and the operations of his workers to the areas permitted by law, ordinances, permits or the requirements of the Contract Documents and shall not unreasonably encumber the premises with materials or equipment.

The Contractor shall confine the operation of workmen and equipment, and the storage of materials and equipment to the County's property or to other non-County property or in public right-of-way areas indicated on the Contract Drawings as including work to be done pursuant to the Contract documents. In the event the Contractor desires to have access to the project site, or perform work or operations pertaining to the Contract on, over or from non-County property adjacent to the project site, the Contractor shall obtain written authorization to do so from the respective adjacent property owner(s) prior to using such property. Such written authorization shall include a provision whereby the property owner agrees to hold the County harmless, and to defend the County, in the event of any liability,

loss, injury, or claim incurred as a result of the Contractors work or operations involving the use of the adjacent non-County property.

The County shall be provided with a notarized, certified copy of such written authorization(s) before the Contractor commences work or operations or use of such property in connection with work or operations pursuant to this Contract.

Record Drawings - The Contractor will keep one record copy of all Specifications, Drawings, Addenda, Change Orders and Shop Drawings at the site in good order, and annotated and/or marked on a current basis to indicate the progress of the work done and to show all changes made during the construction process or conditions varying from the Bid Documents. These shall be available to the Project Manager for inspection throughout construction and shall be delivered to the Project Manager upon completion of the Work, but prior to final payment.

Safety And Protection - The Contractor will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. He will take all necessary precautions for the safety of and will provide the necessary protection to prevent damage, injury or loss to:

- A. All employees on the Project and other persons who may be affected thereby:
- B. All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site; and

- C. Other property at the site or adjacent thereto including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

The Contractor will comply with all applicable laws, ordinances, rules, regulations and orders of any public body or public or private utility service organization having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. He will erect and maintain, as required by the conditions and the progress of the Work, all necessary safeguards for safety and protection and, in addition, he will comply with all applicable recommendations of the Manual of Accident Prevention in Construction of the Associated General Contractors of America, Inc., and the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) and subsequent revisions and addenda as published by the U.S. Department of Transportation, Federal Highway Administration and adopted by the Florida Department of Transportation. He will notify owners of adjacent utilities when prosecution of the Work may affect them.

All damage, injury or loss to any property or all damage, disruption, discontinuance or other loss to any utility system or roadways referred to in Paragraph B. and C. caused directly or indirectly, in whole or in part by the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, will be remedied by the Contractor, except damage or loss attributable to the fault of the Drawings or the Specifications or to the acts or omissions of the County, and not attributable, directly or indirectly, in whole or in part, to the fault of negligence of the Contractor. The Contractor must also comply with the guidelines set forth in the Orange County Safety & Health Manual. The manual can be accessed online at the address below:

<http://www.orangecountyfl.net/VendorServices/OrangeCountySafetyandHealthManual.asp>

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The Contractor will designate a responsible member of his organization whose duty shall be the prevention of accidents at the site. **This person shall be the Contractor's superintendent unless otherwise designated in writing by the Contractor to the Project Manager.**

Emergencies - In emergencies affecting the safety of persons, the Work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the Project Manager, is obligated to act at his discretion to prevent threatened damage, injury or loss. He will give the Project Manager prompt written notice of any significant changes in the Work or deviations from the Contract Documents caused thereby, and a Change Order shall thereupon be issued covering the changes and deviations involved. If the Contractor believes that additional Work done by him in an emergency which arose from causes beyond his control entitles him to an increase in the Contract Amount or an extension of the Contract Time, he may make a claim therefore as provided in Article 13.

Shop Drawing and Samples - After checking and verifying all field measurements, the Contractor will submit to the Project Manager for review, in accordance with the accepted schedule of Shop Drawing submission, five copies (or at the Project Manager's option, one reproducible copy) of all Shop Drawings, which shall have been checked by and stamped with the approval of the Contractor and identified as the Project Manager may require. The data shown on the Shop Drawings will be complete with respect to dimensions, design criteria, materials of construction and the like to enable the project manager to review the information as required.

The Contractor will also submit to the Project Manager for review with such promptness as to cause no delay in the Work, all samples required by the Contract Documents. All samples shall be checked by and stamped with the approval of the Contractor, identified clearly as to material, manufacturer, any pertinent numbers and the use for which intended.

At the time of each submission, the Contractor will in writing call to the Project Manager's attention to any deviations that the Shop Drawing or sample may have from the requirements of the Contract documents.

The Project Manager will review with reasonable promptness and take appropriate action with regard to Shop Drawings and samples, but its review shall be only for general conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The acceptance of a separate item as such will not indicate approval of the assembly in which the item functions.

The Contractor will make any corrections required by the Project Manager and will return the required number of corrected copies of Shop Drawings and re-submit new samples until accepted.

The Contractor's stamp of approval on any Shop Drawing or sample shall constitute a representation to the Project Manager that the Contractor has either determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers and similar data or he assumes full responsibility for doing so, and that he has reviewed or coordinated each Shop Drawing or sample with the requirements of the Work and Contract Documents.

No Work requiring a Shop Drawing or sample submission shall be commenced until the submission has been accepted by the Project Manager. A copy of each accepted Shop Drawing and each accepted sample shall be kept in good order by the Contractor at the site and shall be available to the Project Manager.

The Project Manager's acceptance of Shop Drawings or samples shall not relieve the Contractor from his responsibility for any deviations from the requirements of the Contract Documents, unless the Contractor has in writing called the Project Manager's attention to such deviation at the time of submission and the County and the Project Manager have given written acceptance to the specific deviation; nor shall any acceptance by the Project Manager relieve the Contractor from responsibility for errors or omissions in the Shop Drawing.

Each Shop Drawing or sample submittal or substitution request by the Contractor shall contain a reference identifying the applicable, specific Section of the Specifications to which it pertains. Submittals failing to comply with this provision shall be rejected and returned to the Contractor without review.

Each Shop Drawing or sample submittal or substitution request shall include the following stamped certification by the Contractor:

"The General Contractor has reviewed the Shop Drawing, sample or substitution submitted herewith and has determined and hereby certifies that in all respects this submittal is in full compliance and conformance with the Contract specifications, drawings and all other Contract requirements pertaining thereto".

Failure of the Contractor to include the above stated specification reference number or certification of compliance shall result in the rejection of the submittal. The Contractor will also submit within five (5) days of Contract Award to the Project Manager for acceptance all samples required by the Contract Documents. All samples will have been checked by and stamped with the approval of the Contractor, identified clearly as to material, manufacturer, any pertinent numbers and the use for which intended.

In the event that the Contractor, or anyone working for or on behalf of the Contractor on this project, should commence or do any work requiring submission of a Shop Drawing or sample, or involving a substitution or an "or-equal" request without having such submittal accepted by the County in writing, then the Contractor is advised that any and all such work will be done at its risk and is subject to rejection and/or removal at the Contractor's expense and at no additional cost to the County if applicable Shop Drawing, sample, substitution, "or-equal" or other submittal is not accepted.

Further, the Contractor will not receive "progress" or "final" payment for any and all work commenced or done which requires, but has not received acceptance of Shop Drawings, samples, substitution requests, or "or-equal" requests or any other required submittal, nor will the Contractor receive "progress" or "final" payment for any and all work that has been determined by the Professional or the County's Project Manager not to be in compliance or conformance with the established Contract requirements, Contract change orders, written directives, written clarifications provided to the Contractor, or accepted Shop Drawings, accepted samples, accepted substitutions, or accepted "or-equals".

Cleaning Up - The Contractor will keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work; at the completion of the Work he will remove all waste materials, rubbish and debris from and about the premises as well as all tools, construction equipment and machinery, and surplus materials, and will leave the site clean and ready for occupancy by the County. The Contractor will restore to their original condition those portions of the Site not designated for alteration by the Contract Documents. If at any time during construction of this project, the Contractor fails to clean up on a daily basis, the County may do so. All costs associated with the County's cleanup activities on behalf of the Contractor shall be deducted from amounts due to the Contractor.

ARTICLE 10 – WORK BY OTHERS AND UTILITY COORDINATION

Work by Others – The County may perform additional work related to the project by itself, or it may let other direct contracts which shall contain general conditions similar to these. The Contractor will afford the other contractors who are parties to such direct contracts (or the County, if it is performing the additional work itself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of work, and shall properly connect and coordinate his Work with theirs.

Should the contract entail relocation of facilities not a part of this Contract, the Contractor will coordinate and cooperate with the applicable entity responsible for this portion of the work.

If any part of the Contractor's Work depends (for proper execution of results) upon work of any such other Contractor (or the County), the Contractor will inspect and promptly report to the Project Manager in writing any defects, deficiencies or delays in such work that render it unsuitable for such proper execution and results.

The Contractor's failure to report shall constitute an acceptance of the other work, except as to defects, deficiencies and delays which may appear in the other work after the execution of the work.

The Contractor will do all cutting, fitting and 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 such other work. The Contractor will not endanger any work of others by cutting, excavating or otherwise altering such other work and will only cut or alter such other work with the written consent of the Project Manager.

If the performance of additional work by other Contractors or the County is not noted in the contract documents prior to the execution of the Contract, written notice thereof shall be given to the Contractor prior to starting any such additional work. If the Contractor believes that the performance of such additional work by the County or others involves him in additional expense or entitles him to an extension of the Contract Time, he may make a claim therefore as provided in Article 13.

Utility Coordination – Section 337.401 (1), Florida Statutes and other applicable law allows utility owners to install and maintain along, above, under, across or on any road or right-of-way any electric transmission or distribution facilities, telephone, telegraph, pole lines, poles, railway structures, ditches, sewers, water, heat, gas mains, pipelines, fences, gasoline tanks and pumps, waterlines, gas lines, wire lines, utility service connections, water and gas meter boxes, valve boxes, light standards, cable lines, cable ways, signals, signal boxes, and all other utility installations, improvements and utility appurtenances to be installed and maintained in the right-of-way.

The Contractor understands and agrees that the lands upon which the Work is to be performed consists of prior existing right-of-way, as well as, recently acquired right-of-way. The Contractor acknowledges and agrees that utility installations and appurtenances are located within the limits of the planned construction Work. The utility installations and appurtenances may be in conflict with the Contractor's Work or require relocation or adjustments. All utility conflict resolutions, relocations, or adjustments are to be moved by the utility owners at their expense, unless otherwise provided in the Contract documents.

The Contractor, by submission of a bid, agrees that prior to bid he has studied, performed field inspections, and evaluated all potential utility conflicts, the locations of permanent and temporary utility appurtenances in their present and relocated positions as may be shown on the plans. The Contractor acknowledges and agrees that the Contractor's bid has considered all potential utility conflicts, the locations of permanent and temporary utility appurtenances in their present and relocated positions including those shown on the plans, not shown on the plans, and those identified during the

Contractor's pre-bid study or that should have been identified during the Contractor's field inspections, and evaluation of the limits of the planned construction Work.

The design Professional may show surface or subsurface utility conflicts, relocations, or adjustments in the drawings and plans. The surface and subsurface utility information shown in the drawings and plans was obtained and used by the design Professional to establish design criteria for the design plans. The accuracy as to location and the identification of all surface or subsurface utility information is not warranted or guaranteed and is not to be construed as part of the construction plans governing the construction Work. The Contractor shall solely make his own determinations as to surface and subsurface conditions.

The Contractor shall be solely responsible for utility coordination including all utility conflict resolutions, relocations, and adjustments. The concept of "utility coordination" means that the Contractor shall, at a minimum:

- A. Investigate both subsurface and aboveground conditions to identify potential conflicts far enough in advance of his planned construction operations to allow the Contractor to coordinate with utility owners and responsible parties any necessary conflict resolutions, relocations, or adjustments such that they can occur without delay to the Contractor's operations and Progress Schedule.
- B. Conduct regularly scheduled Utility Coordination Meetings with all affected utilities, and shall maintain detailed minutes of the discussions.
- C. Contact all utility owners in advance of any needed conflict resolutions, relocations, or adjustments.
- D. Contact the Project Manager as to all Contractor scheduled utility conflict resolutions, relocations, or adjustments.
- E. Schedule all work to be performed by the utility owners related to utility conflict resolutions, relocations, or adjustments.
- F. Schedule all work to be performed by the utility owners so as not to delay or disrupt in any way the Contractor's own performance of the Contractor's Performance Schedule.
- G. Assure the proper connection of the Contractor's Work with the work of the utility owners.
- H. Assure that the schedule, contacts, and proper connections between the Contractor's Work and the utility owner's work harmonize the work of both in a common action to achieve resolution of utility conflicts, relocations, and adjustments.
- I. Contractor shall, at no cost to the County, adjust the project schedule to allow the work to proceed in such a manner that delays to the progress of the work are minimized.

As discussed more fully in Article 17, delays to the Contractor's Progress Schedule resulting from the resolution of utility conflicts, relocations, and adjustments to utilities will not be considered as the basis for granting a change in Contract Amount or Contract Time.

ARTICLE 11 - PROJECT OWNER STATUS DURING CONSTRUCTION

The Contractor shall provide the following information to all subcontractors and suppliers:

County's Representatives - The Project Owner shall be the Board of County Commissioners. The Board shall be represented by the Project Manager listed below during the construction period:

Manager, Highway Construction Division, or designee
Address: 4200 South John Young Parkway, Orlando, Florida 32839
Phone: 407-836-7998
Email: Julie.Naditz@ocfl.net

ARTICLE 12 - CHANGES IN THE WORK

Without invalidating the Contract, the County may, at any time or from time to time, order additions, deletions or revisions in the Work authorized by written Change Orders or directive. Upon receipt of a Change Order, the Contractor will proceed with the work involved. All such work shall be executed under the applicable conditions of the Contract documents. If any Change Order causes an increase or decrease in the Contract Amount or any extension or shortening of the Contract Time, an equitable adjustment will be made as provided in Article 13.

Additional Work performed by the Contractor without authorization of a Change Order will not entitle him to an increase in the Contract Amount or any extension of the Contract Time, except in the case of an emergency as provided in Article 9.

It is the Contractor's responsibility to notify his Surety of any changes affecting the general scope of the Work or change of the Contract Amount and the amount of the applicable bonds shall be adjusted accordingly, and an amended bond document furnished to the County.

In the event the County directs the Contractor to make a change in the Work, and if the County and the Contractor do not arrive at a mutually acceptable increase or decrease in the Contract Amount, the Contractor shall not use any such lack of mutual acceptance as a basis or cause to stop or otherwise delay the progress or the execution and completion of any of the work ordered, directed or required pursuant to the Contract Documents.

If the Contractor believes an event or situation has occurred which justifies a change in the Contract Amount or Contract Time, he shall deliver a written notice to the Project Manager. Each such written notice shall be delivered promptly, and in any event no later than 15 days after the Contractor first discovered the occurrence. The Contractor shall be deemed to have waived the right to collect any and all costs incurred more than 15 days prior to the date of delivery of the written notice, and shall be deemed to have waived the right to seek an extension of the Contract Time with respect to any delay in the Progress Schedule which accrued more than 15 days prior to the date of delivery of the written notice.

Any such notice shall include sufficient detail to explain the basis of entitlement to a claim for an adjustment to the Contract Amount or Contract Time. When requested by the Project Manager, the Contractor shall furnish any additional information and details as may be required to determine the facts or allegations involved, which shall be provided within fifteen (15) days of the request unless a longer time period is allowed by the Project Manager.

The Contractor shall prepare proposals detailing proposed adjustments to Contract Amount and/or Contract Time in accordance with Article 13 and submit them to the Project Manager within 15 days of the County's issuance of a proposed Change Order or the Contractor's submitting a written notice of a change or claim for an adjustment to the Contract Amount or Contract Time. Contractor's proposals shall be irrevocable for a period of at least sixty (60) days after receipt by the County. Any delay in the submittal of a complete, adequate and acceptable proposal will not justify an increase in Contract Amount or Contract Time. Contractor agrees that it shall give the County access to any and all of Contractor's and Subcontractors' books, records and other materials relating to proposed Change Orders and other claims for adjustment to Contract Amount or Contract Time.

ARTICLE 13 - CHANGE OF CONTRACT AMOUNT AND CONTRACT TIME

Contract Amount - The Contract Amount constitutes the total compensation payable to the Contractor for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by the Contractor shall be at his expense without change in the Contract Amount. The Contract Amount may only be changed by written Change Order issued by the County. Any claim for an increase in the Contract Amount shall be in writing and delivered to the Project Manager within fifteen (15) days of the occurrence of the event giving rise to the claim.

All claims for adjustment in the Contract Amount shall be determined by the Project Manager. However, no claim for an adjustment to the Contract Amount will be considered for unforeseeable causes that were beyond the fault or negligence of the Contractor or his Subcontractors or supplier such as acts of God, floods, riots, etc. This restriction does not restrict submission of claims for additional Contract Time due to events of this nature. Any change in the Contract Amount shall be incorporated in a Change Order.

Proposals or Claims Substantiating Adjustments; Limitations:

- A. Contractor proposals or claims shall cover all aspects of the Work involved and shall be fully documented and itemized as to all costs, quantities and charges for overhead and profit. Amounts for Subcontractors or Suppliers at any tier shall be similarly supported. When determining Subcontractors' costs, the methods to be Used shall be those used for the Contractor's costs, except that the term "Subcontractor" shall replace the term "Contractor," context permitting.
- B. Where the change in Contract Amount arises from changes in the time required to perform any Work, or where a change in Contract Time is sought, the Contractor's itemized estimates shall detail all productivity and production data, and include an analysis of the Record Schedule demonstrating the schedule status just before and after the occurrence of events on which the request is

based (thereby showing the extent of delay resulting from the event involved) and any measures taken or planned to mitigate the impacts.

- C. Neither the Contract Time nor Contract Amount shall be changed due to a delay in Contractor's early completion date until all the corresponding Contract Float available in the Record Schedule at the start of the delay is used and performance of the specified Work extends necessarily beyond that Contract Time. The Contractor shall not recover from the County (a) acceleration costs incurred to overcome delays which warrant extensions in Contract Time but exclude changes in Contract Amount, (b) escalation costs for any part of the Work having Contract Float or not delayed beyond the late dates in the Record Schedule, or (c) delay costs not expressly allowed in General Conditions Article 13 as supplemented.
- D. Changes in Contract Amount for extensions in Contract Time shall exclude costs that are unaffected or do not relate to the extension in Contract Time, such as: (a) operating costs of construction equipment assigned to the Work on a continuing basis, (b) operating costs and owned/rental costs of construction equipment (crane used for specific lifts, concrete pump used for specific pours, etc.), and (c) fully paid site facilities, tools, etc.

The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Amount shall be determined in one of the following ways:

- A. Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved. If the quantities originally contemplated are so changed in a proposed Change Order, that application of the Unit Prices to the quantities proposed will cause substantial inequity to the County or the Contractor, the applicable unit price(s) shall be equitably adjusted by mutual agreement.
- B. By mutual acceptance of a lump sum.
- C. By cost and mutually acceptable fixed amount for overhead and profit.
- D. If the value of work covered by a Change Order cannot be established or mutually agreed to utilizing any of the above three methods, the value shall be determined by the County on the basis of an estimate of the out-of-pocket cost and percentages that are acceptable to the County for overhead and profit. The out-of-pocket cost shall only include those direct costs which are needed to perform the work such as labor (including payroll taxes, fringe benefits, labor burden and workers' insurance), materials, equipment, and other incidental out-of-pocket construction costs directly involved in the work, including but not limited to small tools, expendables and material costs but shall not include project management or project supervisory costs unless the Change Order includes an increase in the Contract time.

Methods for Determining Adjustments in Contract Amount:

- A. If the County directs the Contractor to proceed with the Work involved pursuant to actual out-of-pocket costs plus contractual allowances for overhead and profit and states a Not-to-exceed price, Contractor claims for costs, overhead or profit beyond the Not-to-exceed price shall be invalid, unless, prior to incurring those costs, overhead or profit Contractor provides written notice and County increases the Not-to-exceed price in writing..
- B. If payment for the Work involved is to be determined by a court of law, it is agreed by the Contractor that the actual out-of-pocket cost and overhead and profit method contained in the General and Supplemental Conditions shall represent an appropriate method for determining the cost and overhead and profit for the Work involved.
- C. In computing Cost of the Work involved in a Change Order or claim, costs shall be allowable only to the extent costs (a) are consistent with those prevailing in the Orlando Metropolitan Statistical Area (which includes Orange, Seminole, Lake and Osceola Counties) and with applicable criteria set forth in 48 CFR Part 31 (federal contract cost principles and procedures), (b) include only the appropriate items for labor, material or equipment, construction equipment and special cost items specified in General Conditions Articles 13.

In such case, the Contractor will submit in the form prescribed by the County an itemized cost breakdown together with supporting data.

The amount of credit to be allowed by the Contractor to the County for any such change which results in a net decrease in cost, will be the amount of the actual net decrease as determined by the County. When both additions and credits are involved in any one change, the combined overhead and profit shall be figured on the basis of the net increase, if any.

To be eligible for consideration, the Contractor's written claim for a change in the Contract price, including claim(s) from sub-contractors, shall include an itemized cost breakdown with supporting data as described below:

- A. For labor: Provide written documentation from the Contractor and Subcontractors or others as appropriate in the form of a detailed breakdown by each labor classification involved indicating the number of hours of Work involved and the hourly payroll rate applicable to each to substantiate the basis and amount of the direct labor cost. The direct labor cost may be increased to provide an allowance for indirect payroll costs (labor burden), such as payroll taxes, fringe benefits, and workers insurance after all premium discounts, rebates and other appropriate reductions have been taken.

Allowable labor costs shall be limited to craft labor (including foremen) in the direct employ of the Contractor (or Subcontractor) assigned to the site and engaged in furnishing and incorporating materials or equipment in the Work involved in the Change Order or Claim.

When determining actual payroll costs, daily time sheets certified by the Contractor and verified by the Project Manager along with certified payroll records shall be the valid records.

- B. For material, supplies, equipment, furnishings, etc., to be installed or included in the Work: Provide written documentation from the Contractor and Subcontractors, suppliers, etc., to substantiate the basis and amount of the various cost items involved. Material costs shall reflect the Contractor's reasonably anticipated net actual cost after consideration of trade discounts and volume rebates.
- C. For construction equipment: Provide written documentation in the form of a detailed breakdown by each construction equipment category indicating, the applicable unit rates (i.e., \$'s per hour, \$'s per day etc.) and the number of hours, days, etc. to substantiate the basis and amount of the construction equipment out-of-pocket costs.
- D. Special cost items (any out-of-pocket cost items not considered to be material, labor or construction equipment as set forth above including but not limited to small tools and expendables): Provide written documentation in the form of a detailed breakdown or itemization of the costs, fees, charges, hours, hourly rates, etc., to clarify, document and substantiate the basis and amount of the out-of-pocket cost. Special cost items due to the Work or a delay involved in a Change Order or Claim may include a proportion of the following indirect costs, to the extent those indirect costs increase or decrease on account of (a) the Cost of the Work involved for labor, Subcontractor or Supplier furnished materials or equipment, or (b) an extension in Contract Time as follows (provided that no cost shall be paid for holidays or weather days during the delay):
 - 1. Payroll costs for the Contractor's full-time superintendent and payroll costs for other personnel in the employ of the Contractor resident (engaged in activities) at the site if those costs arise solely from an extension in Contract Time;
 - 2. Costs of small tools and expendables (less market value if not consumed) of items individually valued at less than \$1,000.00 that are not owned by the workers, if the Contractor provides an itemized list of items required for the performance of the Work involved; however, no such costs shall be allowed over 4% of the direct labor costs, unless the Contractor furnishes detailed data sufficient to allow verification that a higher percentage is appropriate for the Work involved;
 - 3. Costs of office and temporary facilities at the site, including utilities, fuel and sanitary facilities, telephone and internet service at the site, materials, supplies, equipment, other minor expenses (e.g. expressage and petty cash), if those costs arise solely from an extension in Contract Time;
 - 4. Costs of consultants not in the direct employ of the Contractor, if those costs are or were authorized by the County before proceeding with the Work involved;

5. Taxes on the Work involved, and for which the Contractor is liable; and royalty payments and charges and fees for permits, if any of them relate solely to the Work involved;
6. Physical losses, damages and expenses to the Work, not compensated by property insurance, or otherwise to be sustained by the Contractor in the prosecution of the Work (except losses and damages within the deductible amounts of property insurance, if any), but only if the losses, damages and expenses result from the fault or negligence of the County, or
7. Bond premiums and insurance premiums not included as part of the indirect labor cost, if they relate solely to the Work involved.

E. Construction Equipment Costs:

1. For equipment owned by Contractor (or Subcontractor) or rented or leased from lessors associated with or owned by them, allowable costs shall be limited to equipment required for the Work involved in a Change Order or claim with individual replacement values exceeding \$1,000.00. Transportation, loading/unloading, installation, dismantling and removal costs shall be allowed only if prior written consent is obtained from the Project Manager, and if the equipment is, or was, transported to the site solely for the Work involved. Shipping costs will be allowed only if the equipment is not available in the Orlando Metropolitan Statistical Area.

Contractor shall be entitled to ownership and operation costs of the equipment based on the Contractor's normal accounting practices, but in no event shall equipment ownership or operation costs exceed the applicable hourly rates listed in the "Cost Reference Guide," published by Prism Business Media. For multiple shifts, the equipment rate shall not exceed the shift Work adjustments recommended in the referenced Cost Guide.

Equipment costs shall be computed using the same accounting and estimating rules and prices, whether related to added or deleted Work, and shall cease when the equipment is no longer needed for the Work involved.

2. For equipment rented or leased from lessors not associated with or owned by the Contractor (or Subcontractor), the Contractor shall be entitled to rental or lease rates, but in no event shall the rates or hourly operating costs exceed applicable rates in the Rental Rate "Blue Book" published by Prism Business Media. The equipment rate for second or third shifts shall not exceed fifty percent (50%) of the base rate. Hourly rates for equipment previously in use at the site for at least a month shall be based on the monthly rate divided by 176 hours. Equipment previously in use for only one week or not previously in use at the site shall not be invoiced to the County at rates higher than the following schedule correlating equipment usage to payment category:

Less than 8 hours	Hourly Rate
1 day but less than 7 days	Daily Rate
1 week but less than 30 days	Weekly Rate
30 days or more (when in use)	Monthly Rate

3. Rented (or owned) equipment idled by actions of the County *for* reasons under the sole control of the County shall be paid as rented equipment (or as one-half of owned equipment), provided the idle period exceeds what is normal for such equipment and occurs during normal working hours.

When determining actual construction equipment costs, daily logs of the equipment, operators and actual usage, verified by the Project Manager, shall be the valid records.

With respect to the allowances for overhead and profit the following schedule shall be used in determining the total cost of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract price:

- A. For the Contractor, for Work (i.e., the cost of labor, materials and construction equipment as described above) performed by the Contractor's own forces; 15% of the cost.
- B. For the Contractor, for the Work performed by the Contractor's Subcontractor; 7 ½% of the amount due the Subcontractor.
- C. For each Subcontractor involved, for Work performed by that Subcontractor's own forces 7 ½% of the cost.
- D. For each Subcontractor, for Work performed by the Subcontractor's Sub-Subcontractor's 5% of the amount due the Sub-Subcontractor.
- E. Cost to which overhead and profit is to be applied shall be determined in accordance with provisions of this Article 13.
- F. The Cost of the Work involved in a Change Order or claim shall not include any of the following costs (considered administrative costs or contingencies covered by the overhead and profit):
 1. Payroll costs and other compensation of (a) executives, general and administrative managers, estimators, claim consultants, attorneys, accountants, labor relation coordinators, contract and subcontract administrators, purchasers, expeditors and other administrative staff, whether employed at the site or in the Contractor's (or Subcontractor's) principal or branch offices; and (b) project managers, construction managers, engineers, architects, schedulers, detailers, safety personnel, clerks and other administrative staff employed in his principal or branch offices;
 2. Costs in the preparation of Change Orders or claims (whether or not ultimately authorized by the County);

3. Costs of engineers, architects, accountants, consultants, attorneys and others, in the direct employ of the Contractor or otherwise, utilized for services related to a controversy or claim about the acceptability of the Work;
4. Any part of the Contractor's capital expenses, including interest on capital for the Work involved, lost interest on unpaid retainage, and charges for delinquent payments;
5. Any other expenses of the Contractor's principal and branch offices, including storage and yard facilities; and any costs not specifically and expressly allowed in General Conditions Article 13 as supplemented.

If deemed necessary, the overhead and profit allowance schedule shown above may be adjusted by the Project Manger.

Cash Allowances - It is understood that the Contractor has included in the Contract Amount any allowances so named in the Contract Documents and shall cause the Work so covered to be done by such Suppliers or Subcontractors and for such sums within the limit of the allowances as the County may accept. Prior to final payment, the Contract Amount shall be adjusted as required and an appropriate Change Order issued. The Contractor agrees that the original Contract amount includes such sums as he deems proper for cost and profit on account of cash allowances. No demand for additional cost or profit in connection therewith will be allowed.

Change of Contract Time - The Contract Time may only be changed by written Change Order. Any claim for an extension in the Contract Time shall be in writing and include an analysis of the Progress Schedule as further described in the Specifications, and shall be delivered to the Project Manager within fifteen (15) days of the occurrence of the event giving rise to the claim.

All claims for adjustment in the Contract Time shall be determined by the Project Manager. Any change in the Contract Time resulting from any such claim shall be incorporated in a Change Order.

The Contract Time may be extended for an amount equal to time lost due to unforeseeable causes beyond the control of the Contractor (and his Subcontractors and Suppliers) if he makes a claim therefore. Such delays shall include, but not be restricted to, acts or neglect by any separate Contractor employed by the County; fires; floods; labor disputes; epidemics or acts of God.

All time limits stated in the Contract Documents are of the essence to the Contract. The stated time limits are agreed to be adequate to complete the work, including the procurement, manufacture and delivery of all material and equipment required, and account for any and all potential impact, delays, disruptions and costs that may be expected.

ARTICLE 14 - CONDITION OF MATERIALS AND PACKAGING:

In instances where the Specifications, (Part H) make this subject applicable (and unless otherwise indicated), all goods and items offered for sale and/or shipped by the Contractor pursuant to the requirements imposed upon said Contractor by this bid package,

will be new and in first class condition; all related containers being new and suitable for storage and shipment; all prices including the cost of standard commercial packaging. Contractors will be solely responsible for making any and all claims against carriers as concerns missing or damaged items.

ARTICLE 15 - ASBESTOS FREE MATERIALS:

Project is to be constructed with asbestos free materials. A written, notarized statement on company letterhead is to be submitted with the final payment request. Final payment shall be withheld until such statement is submitted.

Contractor shall agree that if materials containing asbestos are subsequently discovered at any future time to have been included in the construction done by the Contractor or any of its Subcontractors or agents and were not specified in the design or required by the Contract document, Contractor shall be liable for all costs related to the abatement of such asbestos and damages or claims against the County.

ARTICLE 16 – WARRANTY AND GUARANTEE, ACCEPTANCE OF DEFECTIVE WORK

Warranty and Guarantee - The Contractor warrants and guarantees to the County that all materials and equipment will be new unless otherwise specified and that all Work will be of good quality, free from faults or defects and in accordance with the requirements of the Contract Documents including any required inspections, tests or approvals. All unsatisfactory Work, all faulty Work, and all Work not conforming to the requirements of the Contract Documents or such inspections, tests or approvals shall be considered defective. Prompt notice of all defects shall be given to the Contractor. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article. All warranty and guarantee coverage periods shall commence from the Final Completion date of the project as determined by the Project Manager. The coverage commencement date of warranties and guarantees shall, in accordance with the provisions stated above, be entered on each warranty or guarantee document.

However, in the event the coverage commencement date entered on the warranty or guarantee document is not in accordance with the provisions stated above, the coverage commencement date shall nonetheless be the date determined by applying the provisions stated above.

Tests and Inspections - If the Contract Documents, laws, ordinances, rules, regulations or order of any public authority having jurisdiction require any Work to specifically be inspected, tested or approved by someone other than the Contractor, the Contractor will give the Project Manager timely notice of readiness therefore. The Contractor will furnish the Project Manager with the required certificates of inspection, testing or approval. All such tests will be in accordance with the methods prescribed by the American Society for Testing Materials or such other applicable organizations as may be required by law or the Contract Documents.

If any such Work required to be inspected, tested or approved is covered without written approval of the Project Manager, it must, if requested by the Project Manager, be uncovered for observation at the Contractor's expense. The cost of all such inspections,

tests and approvals shall be borne by the Contractor unless otherwise provided. Neither observations by the Contractor nor inspections, tests or approvals by persons other than the Contractor shall relieve the Contractor from his obligations to perform the Work in accordance with the requirements of the Contract Documents.

Access To The Work - The Project Manager and his representative and other representatives of the County and the Professional will at all times have access to the Work. The Contractor will provide proper facilities for such access and observation of the Work and also for any inspection or testing thereof by others.

Uncovering Work - If any Work is covered contrary to the request of the Project Manager it must, if requested by the Project Manager be uncovered for observation and replaced at the Contractor's expense. If any Work has been covered which the Project Manager has not specifically requested to observe prior to its being covered, or if the Project Manager considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, at the Project Manager's request, will uncover, expose or otherwise make available for observation, inspection or testing as the Project Manager may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, the Contractor will bear all the expense of such uncovering, exposure, observation, inspection and testing, and of satisfactory reconstruction. If, however, such Work is not found to be defective, the Contractor will be allowed an increase in the Contract amount or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and re-construction, if he makes a claim therefore as provided in Article 13.

Notice to Cure - If the County determines the Work is defective or deficient; if the Contractor fails to supply sufficient skilled workers or suitable materials or equipment; if the Contractor fails to make prompt payments to Subcontractors for labor, materials or equipment; if the work is not progressing in a safe, orderly or well coordinated manner; or if the general progress and/or quality of the work is not adequate to ensure continuation or completion of the work in accordance with the Contract completion time requirements, then the Procurement Division Manager shall issue a notice to cure, giving the Contractor a specific period of time

(1) in which to submit to the Project Manager a written Plan of Action including a schedule setting forth a plan by which the deficiencies will be corrected, and (2) a specific period of time in which to correct the deficiencies. If the Contractor does not submit a Plan of Action to indicate how and when the deficiencies indicated in the notice to cure will be cured within the specified time frame that is acceptable to the Project Manager, and if those deficiencies are not corrected within that time frame, then the County shall take further action, up to and including Contract termination. The Contractor shall not be entitled to any delay claims as a result of the County's issuance of the notice to cure.

Correction or Removal of Defective Work - If required by the Project Manager prior to approval of final payment, the Contractor will, promptly, without cost to the County and as specified by the Project Manager, either correct any defective Work whether or not fabricated, installed or completed or, if the Work has been rejected by the Project Manager, remove it from the Site and replace it with non-defective Work.

If the Contractor does not correct such defective Work or remove and replace such rejected work within a reasonable time, or as specified in a written notice from the Project Manager, the County may have the deficiency corrected or the rejected work removed and replaced. All direct and indirect costs of such correction or removal and replacement shall be paid by the Contractor. The Contractor will also bear the expense of making good all work of others destroyed or damaged by this correction, removal or replacement of his defective Work.

One (1) Year Correction Period - The Contractor shall be responsible for the timely correction of any deficiencies in the work for a period of one (1) year after final acceptance or such longer period of time as may be prescribed by law or by any other terms required by the Contract. The Contractor will promptly without cost to the County and in accordance with the Project Manager's written instructions either correct such defective Work or, if it has been rejected by the Project Manager, remove it from the site and replace it with non-defective Work. If the Contractor does not promptly comply with the terms of such instructions, the Project Manager may have the defective Work corrected or the rejected Work removed and replaced. All direct and indirect costs of such removal and replacement will be paid by the Contractor.

Acceptance Of Defective Work - If, instead of requiring correction or removal and replacement of defective Work, the Project Manager prefers to accept it, then he may do so. In such case, if acceptance occurs prior to approval of final payment, a Change Order shall be issued incorporating the necessary revisions in the Contract Documents including an appropriate reduction in the Contract amount. If the acceptance occurs after approval of final payment, the appropriate amount shall be paid by the Contractor to the County.

Neglected Work By Contractor - If the Contractor should neglect to prosecute the Work in accordance with the Contract Documents, including any requirements of the progress schedule, the County may, after reasonable written notice to the Contractor and without prejudice to any other remedy it may have, make good such deficiency and the cost thereof shall be charged against the Contractor. A Change Order shall be issued incorporating the necessary revision in the Contract Documents including an appropriate reduction in the Contract Amount. If the payments then or therefore due the Contractor are not sufficient to cover such amount, the Contractor will pay the difference to the County.

Notice is hereby given that the County will retain and pay for an independent materials testing laboratory to perform certain tests as follows:

- a. Initial concrete test cylinder making and testing (concrete mix design will be by Contractor).
- b. Initial earthwork compaction.
- c. Initial in-place testing of sub-grade, sub-base and base for roadways including thickness and compaction (soil cement design will be by Contractor). The County reserves the right to perform any other tests it deems necessary to ensure that any all construction is adequate for the purposes intended and meets all applicable criteria.

- d. Subsequent tests required after the initial tests to verify compliance with the Contract Documents in areas failing the initial tests shall be paid for by the Contractor by back charge to subsequent applications for payment.

The Contractor will perform and pay for all material testing and other testing specified in the Contract Documents and as stated in paragraphs a. through e. above. The purpose of performing these tests is to verify compliance with the specifications as set forth in the Contract Documents.

ARTICLE 17 – DELAYS AND EXTENSION OF TIME

County Obligation – The County owes no duty, obligation, damages, change in Contract Amount, or liability to Contractor as a result of any delay, interference, suspension or other event which may impact Contractor’s progress schedule of its contract.

Extension of Time Sole Remedy – Should Contractor’s performance, in whole or in part, be interfered with, delayed, re-sequenced, disrupted, or be suspended in the commencement, prosecution or completion, for reasons beyond Contractor’s control, and without any fault or negligence on its part contributing thereto, Contractor’s sole remedy shall be an extension of Contract Time in which to complete the Contract.

Contract Time Extension – The County may grant an extension of Contract Time when a controlling item of work on the critical path of Contractor’s progress schedule is delayed by factors not reasonably anticipated or foreseeable at the time of bid. Such time extension may be allowed only for delays occurring during the time for performance set forth in the progress schedule. Extensions of Contract Time will not be granted for delays due, in whole or in part, to the fault or negligence of Contractor or any entity or person for whom Contractor is responsible.

Utility Conflicts, Relocation, and Adjustment Delays – The Contractor is solely responsible for the coordination and resolution of all utility conflicts, relocations, and adjustments. Delays resulting from the resolution of utility conflicts, relocations, and adjustments to utilities will not be considered as the basis for granting a change in Contract Amount or Contract Time.

Limitation on Damages – In the event the provision regarding an extension of time as being the sole remedy, see above, is not legally enforceable and Contractor is not limited to the sole remedy of an extension of time, Contractor shall not under any circumstances be allowed to recover any of the following items of damage against the County: (1) profit; (2) loss of profit; (3) work inefficiencies; (4) loss of productivity; (5) overtime premiums; (6) escalation; (7) home office overhead, including but not limited to costs of any kind for home office personnel; (8) indirect damages; and (9) consequential damages, including but not limited to loss of bonding capacity, loss of bidding opportunities, and insolvency.

ARTICLE 18 - PAYMENT AND COMPLETION

Schedule of Values – The Contractor shall submit a schedule of values of the Work including quantities and unit prices totaling the Contract Amount no later than twenty (20) days after receipt of the Notice to Proceed and prior to commencing Work on the project. The schedule of values shall be in a form satisfactory to the County.

The schedule of values shall subdivide the Work into sufficient detail to serve as the basis for progress payments during construction. Upon acceptance of the schedule of values by the Project Manager, it may be incorporated into the form of application for payment prescribed by the County.

The Contractor shall not imbalance its schedule of values nor artificially inflate any element thereof. The violation of this provision by the Contractor shall constitute a material breach of this contract.

Progress Schedule – The Contractor’s Progress Schedule shall utilize the Critical Path Method (“CPM”). The Contractor’s Progress Schedule shall be prepared using Primavera P-6 or other software approved by the County; the software shall be specifically intended for the preparation of construction schedules incorporating a critical path. The software used by the Contractor must be approved in advance by the County. The Contractor shall submit a Progress Schedule CPM (both in hard printed copy with network diagrams and electronic disc files) no later than twenty (20) days after receipt of the Notice to Proceed, and prior to commencing Work on the project. The Progress Schedule CPM shall clearly identify all controlling items of Work and activities defined as the critical path, which if delayed or prolonged, will delay the time of completion of the Contract. The critical path shall include a minimum 10% float time as part of the Contract Time for unforeseen conditions. Contractor shall provide additional float time above the required minimum 10% based on his experience, understanding of the scope, and inspection of the site.

Progress Payment Update Schedules CPM – The Contractor shall submit an Update Schedule CPM to the Project Manager concurrent with each Application for Progress Payment. The Update Schedule CPM shall focus on the period from the last Update Schedule CPM to the current Update Schedule CPM submitted with the Application for Progress Payment. Activities that have either started or finished shall be reported as they actually occurred and designated as complete, if actually completed. For activities in progress that are forecasted to complete longer than planned, the remaining durations shall be revised, not the original durations. All out of sequence activities are to be reviewed and their relationships either verified or changed.

The Contractor’s failure to submit a Progress Payment Schedule CPM and Progress Payment Narrative Report as described herein with an Application for Progress Payment shall be sufficient reason for rejection of the Progress Payment request. If the Project Manager rejects the Progress Payment Update Schedule CPM or the Progress Payment Narrative Report, the entire Progress Payment request shall be rejected and must be resubmitted with the corrected Progress Payment Update Schedule CPM and Progress Payment Narrative Report.

Progress Payment Narrative Report – Each Update Schedule CPM shall be accompanied by a written Narrative Report. The Narrative Report shall describe the physical progress during the report period, plans for continuing the Work during the forthcoming report period, actions planned to correct any delays, and a detailed explanation of potential delays or problems and their estimated impact on performance, milestone completion dates, the forecasted completion date, and the forecasted substantial completion date. In addition, alternatives for possible schedule recovery to mitigate any potential delays shall be discussed.

The Contractor's Progress Payment Narrative Report shall include a detailed list of all outstanding Contract Claims with a detailed description of each Contract Claim. The Narrative Report shall follow the outline set forth below:

Contractor's Narrative Report Outline:

- (1) Contractor's dated transmittal letter.
- (2) Work completed during the report period.
- (3) Description of the current critical path.
- (4) Description of problem areas.
- (5) Current and anticipated delays:
 - a. Cause of the delay
 - b. Corrective action and schedule adjustments to correct the delay.
- (6) Impact of the delay on other activities, milestones, and completion dates. Changes in construction sequences.
- (7) Pending items and status thereof:
 - a. Permits.
 - b. Change orders.
 - c. Time extensions.
- (8) A list of all outstanding Contract Claims and a detailed description of each Contract Claim.
- (9) Contract completion date status:
 - a. Ahead of schedule and number of days.
 - b. Behind schedule and number of days.

Schedule and Report Format – The Contractor shall submit the Progress Schedule CPM, Progress Payment Update Schedules CPM, and the Progress Payment Narrative Report to the Project Manager on both: (1) electronic disc files; and, (2) printed copies of the network diagrams and narrative reports.

Project Manager Review – The Project Manager shall review the Contractor's Progress Schedule CPM, Progress Payment Update Schedules CPM, and Progress Payment Narrative Reports. The Project Manager may accept or reject Update Schedule CPMs or Narrative Reports. Rejected Update Schedule CPMs and Narrative Reports shall be corrected and re-submitted to the Project Manager.

Final Schedule Update – The Contractor within fifteen (15) days after substantial completion shall submit a final update of the schedule with actual start and actual finish dates for all activities and controlling items of Work identified as the critical path. The Final Schedule Update shall be accompanied by a certification signed by the Contractor stating, "To the best of my knowledge, the enclosed final update of the project schedule reflects the actual start and completion dates of the activities and controlling items of Work on the critical path."

Application For Progress Payment – Applications for payments shall be processed in accordance with Florida Statute 218.735, Part VII, "Local Government Prompt Payment Act".

The Project Manager shall provide written notice to the Contractor identifying the name, address, phone number and email address of the agent or employee the Contractor is required to submit payment requests or invoices to. This notice will be provided no later than ten (10) days after issuance of the Notice to Proceed.

Not more often than once a month, on a date established at the Project Pre-Construction Conference, the Contractor may submit to the Project Manager for review the County's standard application for payment form filled out and signed by the Contractor covering the Work completed as of the date of the Application and supported by such data as the Project Manager may reasonably require. Also, if payment is requested on the basis of materials and equipment not incorporated in the work but delivered and suitably stored at the site or at another location agreed to in writing, the application for payment shall also be accompanied by such supporting data, satisfactory to the Project Manager, as will establish the County's title to the material and equipment and protect its interest therein, including applicable insurance, partial Consent of Surety, and detailed inventory listing of stored material. Each such request shall include the submittal by the Contractor of (1) a detailed, itemized inventory listing the material stored at the site for which payment is requested, (2) documentation to indicate and substantiate the cost or value attributed to the items included in the stored material inventory list, and (3) the County's "Responsibility And Liability For Materials And Equipment Not Included In The Work" form executed by the Contractor. Failure to provide proper supporting documentation may subject the Progress Payment application to rejection. All progress payments will be subject to the retainage percentage specified in the Contract Documents that will be issued in the final payment after acceptance by the County of the Work.

Based upon Applications for Payment submitted to the Project Manager by the Contractor and Certificates for Payment issued by the Project Manager the County shall make progress payments on account of the Contract Amount to the Contractor as provided in the Contract Documents as follows:

In the timeframes outlined in FS 218.735, Section 2, ninety percent (90%) of the portion of the Contract Amount properly allocable to labor, materials and equipment incorporated in the Work and ninety percent (90%) of the portion of the Contract Amount properly allocable to materials and equipment suitably stored at the site or at some other location agreed upon in writing, for the period covered by the application for payment, less the aggregate of previous payments made by the Owner. When the completion of the Work ascertained as payable exceeds fifty percent (50%) of the total contract amount the retainage percentage withheld shall be reduced to 5%.

Upon Final completion of the entire Work, a sum sufficient to increase the total payments to one hundred percent (100%) of the Contract Amount, less such amounts as the Owner shall determine for all incomplete work and unsettled claims as provided in the Contract Documents.

The Contractor may, at the discretion of the County's Project Manager, be required to have applications for Progress Payments accompanied by legally effective partial releases or waivers of liens executed by all Subcontractors which performed services and suppliers of material or equipment for the Contractor for services or supplies which were included in the previous Application for Progress Payment, or, in the alternative, Consent of Surety to Partial Payment. The Contractor shall include the following certification on each Application for Progress Payments and the Application for Final Payment:

"The undersigned Contractor certifies that the work covered by this application for payment has been done, or completed in accordance with the Contract documents, that all amounts have been paid by Contractor for work, supplies, material or equipment for which previous Certificates for Payment were issued and that the current payment shown herein is now due".

Contractor's Warranty Of Title - The Contractor warrants and guarantees that title to all work, materials and equipment covered by an application for payment, whether incorporated in the Project or not, will have passed to the County prior to the making of the application for payment, free and clear of all liens, claims, security interests and encumbrances; and that no work, materials or equipment covered by an application for payment will have been acquired by the Contractor or by any other person performing the work at the site or furnishing materials and equipment for the Project subject to an agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

Approval of Payments - The Project Manager will, within twenty (20) business days after receipt of each application for payment, either indicate his approval of payment or return the Application to the Contractor indicating in writing the reason for refusing to approve payment. In the latter case, the Contractor may make the necessary corrections and re-submit the Application. The County will pay the Contractor the amount approved within the time frame set forth in the Local Government Prompt Payment Act.

In the event the Contractor and the Project Manager do not achieve mutual agreement on the basis or amount of the payment, and should the Contractor be unwilling to make the necessary corrections or modifications, and re-submit the Application, then the County, to avoid delay in paying the Contractor the amount the County has determined the Contractor is entitled to receive, shall approve and process the Application by making such adjustments thereto as the County deems appropriate so that the Contractor receives, without delay, payment of the amount the County has determined to have been earned and owing to the Contractor.

In the event a dispute arises involving payments or invoices that have been rejected by the Project Manager and resubmitted by the Contractor and that cannot be resolved in accordance with F.S. 218.735 (3) the Orange County Payment/Invoice Disputes Resolution Process Procedures shall be used to resolve the dispute. The procedures can be obtained by contacting the Procurement Division at (407)-836-5635.

The Project Manager's approval of any payment requested in an application for payment shall constitute a representation by him to the County, based on the Project Manager's on-site observations of the Work in progress and on his review of the application for payment and the supporting data, that the Work has progressed to the point indicated; that, to the best of his knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning Project upon Substantial Completion, to the results of any subsequent tests called for in his approval); and that the Contractor is entitled to payment of the amount approved. However, by approving any such payment, the Project Manager shall not thereby be deemed to have represented that he made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, that he has reviewed the means, methods, techniques, sequences and procedures of construction nor that he has made

any examination to ascertain how or for what purpose the Contractor has used the moneys paid or to be paid to him on account of the Contract Amount.

The Project Manager's approval of final payment shall constitute an additional representation by him to the County that the conditions precedent to the Contractor's belief being entitled to final payment as set forth in this Article have been fulfilled.

The Project Manager may refuse to approve the whole or any part of any payment if in his opinion he is unable to make such representations to the County. He may then refuse to approve any such payment because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously approved, to such extent as may be necessary in his opinion to protect the County from loss because:

- A. The Work is defective;
- B. Claims have been filed or there is reasonable evidence indicating the probable filing thereof;
- C. The Contract Amount has been reduced because of Change Order(s);
- D. The County has been required to correct defective Work or complete the Work in accordance with Article 16; or
- E. Of unsatisfactory prosecution of the Work, including failure to clean up as required by Article 9.

Substantial Completion - Prior to final payment, the Contractor shall certify in writing to the Project Manager that the entire Work is Substantially Complete and request that the Project Manager issue a certificate of Substantial Completion. Within a reasonable time thereafter, the Project Manager and Contractor will make an inspection of the Work to determine the status of completion. If the Project Manager does not consider the Work Substantially Complete, the Contractor will be notified in writing giving the reasons therefore. If the Project Manager considers the Work Substantially complete, a tentative certificate of Substantial Completion will be issued. This Certificate shall fix the date of Substantial Completion and the responsibilities between the County and the Contractor for maintenance, heat and utilities.

There shall be attached to the Certificate a single punch list of items to be completed or corrected by the Contractor. The punch list must specify a date, not to exceed five (5) days after the punch list has been developed and reviewed, in which the delivery of the punch list to the Contractor must be made. Items not included on the punch list cannot be used as a basis to withhold final payment for retainage. In addition, the final contract completion date shall be at least thirty (30) days after the delivery of the punch list to the Contractor. Punch lists not provided to the Contractor by the date agreed upon for delivery will cause the contract time for completion to be extended by the number of days the local government exceeded the delivery date. Damages may only be assessed against the Contractor in the event the Contractor fails to complete the project within the contract period as was extended by the guidelines set forth in this provision.

The final undisputed retainage payment must be made within twenty (20) business days after receipt of a proper payment request. This would be less any amount withheld in accordance with the contract provisions for incomplete or uncorrected work unless otherwise provided for by written notice to the Contractor specifying the failure of the Contractor to meet contract requirements in the development of the punch list.

The County shall have the right to exclude the Contractor from the Work after achievement of Substantial Completion, but the County will allow the Contractor reasonable access to complete items on the punch list.

Partial Utilization - Prior to Substantial Completion, the Project Manager may request the Contractor to permit the use of a specified part of the Work which it believes it may use without significant interference with construction of other parts of the Work. If the Contractor agrees, he will certify to the Project Manager that said part of the Work is Substantially Complete and request the Project Manager issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time thereafter, the Project Manager and Contractor will make an inspection of that part of the Work to determine its status of completion.

If the County and the Project Manager consider that part of the Work to be Substantially Complete, the Project Manager will deliver to the Contractor a certificate to that effect, fixing the date of Substantial Completion as to that part of the Work, attaching thereto a punch list of items to be completed or corrected before final payment and fixing the responsibility between the County and Contractor for maintenance, heat and utilities as to that part of the Work.

The County shall have the right to exclude the Contractor from any part of the Work which is so certified to be Substantially Complete but the County will allow the Contractor reasonable access to complete or correct items on the punch list.

Final Inspection - Upon written notice from the Contractor that the Work is complete, including the "punch" listed deficiencies, the Project Manager will make a final inspection with the Contractor and will notify the Contractor in writing of any particulars in which this inspection reveals that the Work is defective. The Contractor shall immediately make such corrections as are necessary to remedy such defects and to complete all the required work.

Final Inspection For Payment - After the Contractor has completed any such corrections to the satisfaction of the Project Manager and delivered all maintenance and operating instructions, schedules, guarantees, bonds, Certificates of Inspection and other documents as required by the Contract Documents, he may make application for final payment following the procedure for progress payments. The final application for payment shall be accompanied by legally effective final releases or waivers of liens from the Contractor and all Subcontractors which performed services for the Contractor and all suppliers of material and/or equipment to the Contractor and the consent of Surety to final payment. The Final Release of Lien, Form E-12, must be utilized in all Final Pay Applications.

Approval Of Final Payment - If, on the basis of its observations and review of the Work during construction, its final inspection and its review of the final application for payment (all as required by the Contract Documents), the Project Manager is satisfied that the Work

has been completed and the Contractor has fulfilled all of his obligations under the Contract Documents, it will, within twenty (20) business days after receipt of the final application for payment, indicate in writing its approval of payment. Otherwise, it will return the Application to the Contractor, indicating in writing its reason for refusing to approve final payment, in which case the Contractor will make the necessary corrections and re-submit the Application.

The County will, in accordance with the Local Government Prompt Payment Act, pay the Contractor the amount approved by the County and issue a Certificate of Final Completion.

If after Substantial Completion of the Work, Final Completion is materially delayed through no fault of the Contractor, and the Project Manager so confirms, the County shall, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than the retainage stipulated in the Contract, the written consent of the Surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Project Manager prior to certification of such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

Contractor's Continuing Obligation - The Contractor's obligation to perform the Work and complete the Work in accordance with the Contract Documents shall be absolute. Neither approval of any progress or final payment by the County, the issuance of Certificate of Completion, any payment by the County to the Contractor under the Contract Documents, any use or occupancy of the Work or any part thereof by the County, any act of acceptance by the County, any failure to do so, nor any correction of defective Work by the County shall constitute an acceptance of Work not in accordance with the Contract Documents.

Waiver Of Claims - The making and acceptance of final payment shall constitute:

- A. A waiver of all claims by the County against the Contractor other than those arising from unsettled liens, from defective Work appearing after final payment or from failure to comply with the requirements of the Contract Documents, or from the terms of any special guarantees specified therein, and,
- B. A waiver of all claims by the Contractor against the County other than those previously made in writing and still unsettled.

Progress Schedule Updates – Contractor shall submit a progressed version of the Progress Schedule with each Application for Payment, showing actual progress up to the date of the application. If the update calculations result in dates for completion of the Work, or a part thereof, beyond the Contract Time or Milestone, Contractor shall revise the schedule to show how the Work can be completed within the remaining time, or requests an extension of Contract Time if Contractor believes he is entitled to additional time under Article 13.

The Contractor shall be required to have applications for Progress Payments accompanied by legally effective partial releases or waivers of liens executed by all Subcontractors which performed services and suppliers of material or equipment for the Contractor for services or supplies which were included in the previous Application for Progress Payment and Consent of Surety to Partial Payment. (This is not optional.)

ARTICLE 19 - SUSPENSION OF WORK AND TERMINATION

County May Suspend Work - The County may at any time and without cause suspend the Work or any portion thereof by notice in writing to the Contractor. The Project Manager shall fix the date on which Work shall be resumed and the Contractor will resume the Work on the date so fixed.

For unreasonable delays, the Contractor will be allowed an increase in the Contract Amount, an extension of the Contract Time or both, if directly attributable to any suspension and if he makes a claim therefore provided in Article 13. However, no profits will be allowed on claims for suspended work. Also, during any period of suspension, the Contractor shall take all available measures to mitigate costs such as taking on new work, reassigning resources to other Contracts, etc.

County May Terminate for Cause - If the Contractor is adjudged bankrupt or insolvent; if he makes a general assignment for the benefit of his creditors without County approval; if a trustee or receiver is appointed for the Contractor or for any of his property; if he files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or similar laws; if he fails to prosecute and complete the Work in accordance with the established Project schedule or within the Contract Time allowed; if he repeatedly fails to supply sufficient skilled workers or suitable materials or equipment; if he repeatedly fails to make prompt payment to Subcontractors for labor, materials or equipment; if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction; if he disregards the authority of the Project Manager; or if he otherwise substantially violates any provisions of the Contract Documents, then the County may, without prejudice to any other right or remedy and after giving the Contractor and his Surety if applicable seven (7) days written notice, terminate the services of the Contractor and take possession of the Work and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor and assign the completion of the Work to the Surety, or finish the Work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the Work is finished.

If the unpaid balance of the Contract Amount exceeds the direct and indirect cost of completing the Work, including compensation for additional professional services, such excess shall be paid to the Contractor. If such cost exceeds the unpaid balance, the Contractor shall pay the difference to the County within fifteen (15) days after notification.

If the contractor fails to provide such payment to the County, the County at its sole discretion may deduct the balance owed from payments due the Contractor on any other contracts between the Contractor and the County. Such cost incurred by the County will be determined by the County and incorporated in a Change Order.

If the County elects to assign the completion of the Work to the Surety, and the Surety tenders a replacement contractor, then Surety shall provide performance, payment and other surety bonds as may be required in accordance with the Contract Documents.

Where the Contractor's services have been so terminated by the County, said termination shall not affect any rights of the County against the Contractor then existing or which may thereafter accrue. Any retention or payment of monies by the County due the Contractor will not release the Contractor from liability.

Upon Termination for Cause, the Contractor shall not be entitled to payment for any anticipated supplemental costs, administrative expenses and/or profit for uncompleted Work.

If the Contractor's failure to perform the contract arises from causes beyond the control and without the fault or negligence of the Contractor the contract shall not be terminated for default. Examples of such causes include (1) acts of God or the public enemy, (2) acts of a government in its sovereign capacity, (3) fires, (4) floods, (5) epidemics, (6) strikes and (7) unusually severe weather.

If after notice of termination of the services of the Contractor for cause, it is determined that the Contractor was not in default, the termination shall be deemed to have been for the convenience of the County. In such event the Contractor may recover from the County payment for Work completed and reasonable termination costs as provided in the following paragraph.

Termination for Convenience: Upon seven (7) days written notice to the Contractor and the Surety, or sooner if reasonable under the circumstances, the County may, without cause and without prejudice to any other right or remedy, elect to terminate any part of the Work, or the Contract in whole or in part, as the County may deem appropriate. In any termination for convenience, the Contractor shall be paid for Work completed by the Contractor, Subcontractors and Suppliers at the time of termination provided the Work has been inspected and accepted by the County. However, the payment to the Contractor will exclude any and all anticipated supplemental costs, administrative expenses and profit for uncompleted Work. Upon termination for convenience, the County shall have full power and authority to take possession of the Work, assume any sub-agreements with Subcontractors and suppliers that the County selects, and prosecute the Work to completion by Contract or as the County may deem expedient. A termination for convenience may apply to individual delivery orders, purchase orders or to the contract in its entirety.

Authority to Terminate: The authority to terminate this Contract including all notices thereto is the sole responsibility of the Manager, Procurement Division.

ARTICLE 20 - MAINTENANCE AND EXAMINATION OF RECORDS

The Contractor shall keep adequate records and supporting documents applicable to this Contract. Said records and documentation shall be retained by the Contractor for a minimum of five (5) years after the date of final payment on this contract. If any litigation, claim or audit is commenced prior to the expiration of the five (5) year period, the records shall be maintained until all litigation, claims or audit findings involving the records have been resolved.

If applicable, time records and cost data shall be maintained in accordance with generally accepted accounting principles. This includes full disclosure of all transactions associated with the contract.

Contractor's "records and supporting documents" as referred to in this Contract shall include any and all information, materials and data of every kind and character, including without limitation, records, books, papers, documents, subscriptions, recordings, agreements, purchase orders, invoices, leases, contracts, commitments,

arrangements, notes, daily diaries, superintendent reports, drawings, receipts, vouchers and memoranda, and any and all other agreements, sources of information and matters that may in the County's judgment have any bearing on or pertain to any matters, rights, duties or obligations under or covered by any Contract document. Such records and documents shall included (hard copy, as well as computer readable data, written policies and procedures; time sheets; payroll registers; cancelled checks; subcontract files (including proposals of successful and unsuccessful bidders, bid recaps, etc.); original estimates; estimating worksheets; correspondence; change order files (including pricing data used to price change proposals and documentation covering negotiated settlements); back-charge logs and supporting documentation; general ledger entries detailing cash and trade discounts earned, insurance rebates and dividends; and any other contractor records which may have a bearing on matters of interest to the County in connection with the Contractor's dealings with the County (all foregoing hereinafter referred to as "records and supporting documents") to the extent necessary to adequately permit evaluation and verification of:

- a) Contractor compliance with contract requirements; or
- b) Compliance with provisions for pricing change orders; or
- c) Compliance with provisions for pricing invoices; or
- d) Compliance with provisions regarding pricing of claims submitted by the Contractor or his payees; or
- e) Compliance with the County's business ethics; or
- f) Compliance with applicable state statutes and County Ordinances and regulations.

Records and documents subject to audit shall also include those records and documents necessary to evaluate and verify direct and indirect costs, (including overhead allocations) as they may apply to costs associated with this Contract. In those situations where Contractor's records have been generated from computerized data (whether mainframe, mini-computer, or PC based computer systems), Contractor agrees to provide the County's representatives with extracts of data files in computer readable format on data disks or suitable alternative computer exchange formats.

The County and its authorized agents shall have the right to audit, inspect and copy records and documentation as often as the County deems necessary throughout the term of this contract and for a period of five (5) years after final payment. Such activity shall be conducted during normal business hours. The County, or any of its duly authorized representatives, shall have access within forty-eight (48) hours to such books, records, documents, and other evidence for inspection, audit and copying.

The County, during the period of time defined by the preceding paragraph, shall have the right to obtain a copy of and otherwise inspect any audit made at the direction of the Contractor as concerns the aforesaid records and documentation. Records and documents shall be made accessible at the Contractor's local place of business. If the records are unavailable locally, it shall be the Contractor's responsibility to insure that all required records are provided at the Contractor's expense including payment of travel and maintenance costs incurred by the County's authorized representatives or designees in accessing records maintained out of the county. The direct costs of copying records, excluding any overhead cost, shall be at the County's expense.

Contractor shall require all payees (examples of payees include subcontractors, insurance agents, material suppliers, etc.) to comply with the provisions of this article by including the requirements hereof in a written contract agreement between contractor and payee. Such requirements include a flow-down right of audit provisions in contracts with payees, which shall also apply to Subcontractors and Sub-subcontractors, material suppliers, etc. Contractor shall cooperate fully and shall cause all aforementioned parties and all of Contractor's subcontractors (including those entering into lump sum subcontracts and lump sum major material purchase orders) to cooperate fully in furnishing or in making available to the County from time to time whenever requested in an expeditious manner any and all such records, documents, information, materials and data.

The County's authorized representatives or designees shall have reasonable access to the Contractor's facilities, shall be allowed to interview all current or former employees to discuss matters pertinent to the performance of this Contract and shall have adequate and appropriate work space, in order to conduct audits in compliance with this article.

Even after a change order proposal has been approved, Contractor agrees that if the County later determines the cost and pricing data submitted was inaccurate, incomplete, not current or not in compliance with the terms of the contract regarding pricing of change orders, then an appropriate contract price reduction will be made. Such post-approval contract price adjustment will apply to all levels of contractors and/or subcontractors and to all types of change order proposals specifically including lump sum change orders, unit price change orders, and cost-plus change orders.

If an audit inspection or examination by the County, or its designee, in accordance with this article discloses overpricing or overcharges (of any nature) by the Contractor to the County in excess of one-half of one percent (.5%) of the total contract billings, the reasonable actual cost of the County's audit shall be reimbursed to the County by the Contractor. Any adjustments and /or payments that must be made as a result of any such audit or inspection of the contractor's invoices and /or records and supporting documents shall be made within a reasonable amount of time (not to exceed 90 days) from presentation of the County's findings to the Contractor.

ARTICLE 21 - MINORITY/WOMEN OWNED BUSINESS ENTERPRISE REQUIREMENTS AND SMALL BUSINESS PROVISIONS

The Contractor will comply with all requirements of Orange County's Minority/Women Owned Business Enterprise Ordinance No. 94-01, as amended by Ordinance No. 2009-21. In summary, the ordinances establish a goal of 25% of the County's annual monetary value of contracts be awarded to minority/women owned business enterprises meeting Contract specifications.

The goals for work force employment levels are 18% minority and 6% women. Other provisions of the Ordinance as it pertains to construction projects may be found in Part C of this document.

To facilitate monitoring for compliance with the Ordinance, the Contractor shall:

- A. Provide to the County's Business Development Division all subcontracts and/or purchase orders, fully executed by both parties, with each Subcontractor and supplier listed on Attachment C-2 in the Prime Contractor's bid (M/WBE's and non-M/WBE's). **The prime Contract will not be executed by the County until these documents are on file in the Business Development Division.** Prime Contractor should include in the subcontract / purchase order a statement that makes the legality of the document contingent upon execution of the prime Contract by the County.
- B. The Contractor shall include a **Prompt Payment Clause** and payment schedule in all subcontracts and purchase orders (including those with non-M/WBE's) stating that payment will be made to the Subcontractor/suppliers within 72 hours of receipt of payment from the County. The Contractor shall pay each Subcontractor and supplier for all work covered under an Application for Payment within the 72 hour timeframe.

This provision in no way creates any contractual relationship between any Subcontractor and Orange County or any liability on Orange County for the Contractor's failure to make timely payments. The timeliness of such payments may be evaluated by the Business Development Division in considering compliance with the Ordinance.

- C. The Contractor shall submit:
 - 1) A Monthly Workforce Report (Current Field Employment Data). Contractor shall also ensure that all Subcontractors/suppliers with contracts over \$50,000 supply a Monthly Workforce Report; and
 - 2) A Monthly Prime Contractor's Report including M/WBE Utilization Reports

The Contractor shall furnish written documentation evidencing actual dollars paid to each Subcontractor/supplier listed and/or utilized by the Contractor. This will include, but not be limited to: copies of canceled checks, approved invoices, and signed, sworn affidavits certifying the accuracy of payments so that the County may determine actual participation achieved by the Contractor prior to issuance of final payment.

The required reports are to be submitted to the Business Development Division no later than the fifth day of each month beginning one month after the Work begins and to continue until Final Completion. Contractor's Progress Payments may be delayed if reports are not submitted in a timely manner.

The final Prime Contractor's Report-M/WBE Utilization Report shall be signed by the Contractor's authorized agent certifying that all information contained therein is a true and accurate account of M/WBE utilization per the bid and contract documents. Approval of the final Application for Payment is contingent upon receipt of this certification.

- D. Contractor shall not substitute, replace or terminate any M/WBE firm without **prior written authorization of the County**, nor shall the Contractor reduce the scope of work or monetary value of a subcontract without prior written authorization of the County. All modifications, additions and deletions to any and all Contracts issued to said M/WBE's shall also have prior written authorization of the County.
- E. The Contractor shall expeditiously advise all M/WBE's and the Business Development Division of all Change Orders, contract modifications, additions and deletions to any and all contracts issued to said M/WBE's.
- F. Failure of the Contractor to adhere to the provisions of the Ordinance may subject the Contractor to penalties as outlined in Sec. 17-326 of the Ordinance. The penalties include:
 - 1) Liquidated damages up to 10% of the Contract;
 - 2) Suspension or permanent debarment from bidding;
 - 3) Termination of any present contracts;
 - 4) Withholding retainage;
 - 5) A negative evaluation of good-faith effort on future bids;
 - 6) Withholding of payments.

ARTICLE 22 - FEDERAL REQUIREMENTS

In the event this Contract is paid in whole or in part from any federal government agency or source, the specific terms, regulations and requirements governing the disbursement of these funds shall be specified herein and become a part of this clause.

All Contracts in excess of one hundred thousand dollars (\$100,000) shall comply with all the requirements of Section 114 of the Clean Air Act (42 USC 7401 et seq.) as amended and Section 308 of the Federal Water Pollution Control Act (33 USC 1251 et seq.) as amended.

ARTICLE 23 – VERBAL ORDERS

The Project Manager under the following conditions may issue verbal change orders to the contract:

- A. To address bona fide emergency requirements. Emergency requirements are described as those requiring immediate action due to (1) an imminent or existing threat to the health, safety or welfare of persons or property and (2) conditions which poses serious economic damage to the County.
- B. To ensure the continuity of critical elements of contract performance.

Any such verbal direction shall be confirmed in writing by the Project Manager to the contractor within five (5) calendar days after issuance. Concurrently, a copy of the written direction shall be provided to the Manager, Procurement Division with documentation in the form of an emergency justification to support the action taken.

A formal change order and associated contract amendment, if applicable, will be negotiated in conjunction with the Procurement Division and shall succeed the written confirmation not later than thirty (30) calendar days after issuance of the verbal direction.

Board approval, as applicable, shall be obtained.

ARTICLE 24 – MISCELLANEOUS

Whenever any provision of the Contract Documents requires the giving of written notice, it shall be deemed to have been validly given if delivered in person to the individual, to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail (postage prepaid) to the last business address known to the County.

All Specifications, Drawings and copies thereof furnished by the County shall remain its property. They shall not be used on another Project and, with the exception of those sets which have been signed in connection with the execution of the Contract, shall be returned to the County upon completion of the Work.

The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon the Contractor and the rights and remedies available to the County thereunder shall be in addition to and not a limitation of any otherwise imposed or available by law, by special guarantee or other provisions of the Contract Documents.

Should the County or the Contractor suffer injury or damage to its person or property because of any error, omission or act of the other or of any of his employees, agents or others for whose acts he is legally liable, claim should be made in writing to the other party within a reasonable time of the first observance of such injury or damage.

This Contract shall be governed by the laws of the State of Florida. Any and all legal action necessary to enforce the provisions of this Contract will be held in Orange County, Florida. Venue for any litigation involving this Contract shall be the Ninth Circuit Court in and for Orange County, Florida.

The obligations of Orange County under this award are subject to the availability of funds lawfully appropriated for its purpose by the State of Florida and the Board of County Commissioners, or other specified funding source for this contract.

For construction Contracts valued at \$10,000,000, or lesser amounts as determined by the County, the County may, at its discretion, use the direct purchase method for large dollar value equipment and materials. Direct purchases will be negotiated with the

Contractor based on those items identified by the Professional. The final determination as to whether to direct purchase any materials or equipment shall be made by the Manager of the Procurement Division after consultation with the County's Project Manager.

The County will be represented on site by one or more Inspectors who are employed by the County or by a Construction Engineering and Inspection (CEI) firm under contract to the County. The Contractor is to follow all directions provided by these Inspectors. Provided, however, that any such directions shall not be construed to:

- a. Authorize any deviation from the Contract Documents that:
 - Requires a change in the Contract Price or Contract Time;
 - Materially changes any aspect of the work covered by a permit to the extent that the regulatory agency having jurisdiction would require modification of the permit;
 - Materially changes any aspect of the work to the extent that the intent of the design is compromised;
- b. Approve any substitute materials or equipment;
- c. Undertake any of the responsibilities of Contractor, subcontractors or Contractor's superintendent, or expedite the Work; Direct the Contractor as to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the Contract Documents;
- d. Advise on or issue directions as to safety precautions and programs in connection with the Work.

ARTICLE 25 – CONTRACT CLAIMS

"Claim" as used in this provision means a written demand or written assertion by one of the contracting parties seeking as a matter of right, the payment of a certain sum of money, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract.

Claims made by a Contractor against the County relating to a particular contract shall be submitted to the Procurement Division Manager in writing clearly labeled "Contract Claim" requesting a final decision.

"Claim" as used in this provision applies after failure of the parties to agree to an adjustment as provided in Article 13, Change of Contract Amount and Contract Time.

The Contractor also shall provide with the claim a certification as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the County is liable; and that I am duly authorized to certify the claim on behalf of the Contractor."

Failure to document a claim in this manner shall render the claim null and void. Moreover, no claim shall be accepted after final payment of the contract.

The decision of the Procurement Division Manager shall be issued in writing and shall be furnished to the Contractor. The decision shall state the reasons for the decision reached. The Procurement Division Manager shall render the final decision within sixty (60) days after receipt of Contractor's written request for a final decision. The Procurement Division Manager's decision shall be final and conclusive.

The Contractor shall proceed diligently with performance of this contract pending final resolution of any request for relief, claim, appeal or action arising under the contract and shall comply with any final decision rendered by the Manager of the Procurement Division.

ARTICLE 26 - VALUE ENGINEERING

- A. Intent and Objective:** This Section applies to any cost reduction proposal (hereinafter referred to as a Value Engineering Change Proposal or VECP) initiated and developed by the CONTRACTOR for the purpose of refining the Contract Documents so as to contribute to design cost effectiveness or significantly improve the quality of the Work. This Section does not, however, apply to any such proposal unless it is identified by the CONTRACTOR, at the time of its submission to the COUNTY, as a proposal submitted pursuant to this Section.

VECPs contemplated are those that would result in net savings to the COUNTY by providing either: (A) a decrease in the cost of performance of the Work, or; (B) a reduction in cost of ownership (hereinafter referred to as collateral costs) of the Work, regardless of acquisition costs. VECPs must result in savings without impairing essential functions and characteristics such as safety, service, life, reliability, economy of operation, ease of maintenance, aesthetics and necessary standard design features. However, nothing herein prohibits the submittal of VECPs where the required functions and characteristics could be combined, reduced or eliminated as being nonessential or excessive. Plan errors which are identified by the CONTRACTOR and which result in a cost reduction, will not qualify for submittal as a VECP.

The COUNTY reserves the right to reject at its discretion any VECP submitted. Substitution of another design alternate, which is detailed in the Plans, for the one on which the CONTRACTOR bid, will not be allowed under this Section. Pending execution of a formal supplemental Agreement, implementing an approved VECP, the CONTRACTOR shall remain obligated to perform in accordance with the terms of the existing Contract. No time extensions will be granted due to the time required to review a VECP.

- B. Subcontractors:** The CONTRACTOR is encouraged to include the provisions of this Section in contracts with subcontractors. The CONTRACTOR shall encourage submission of VECPs from subcontractors, however, it is not mandatory that VECPs be submitted nor is it mandatory that the CONTRACTOR accept or transmit to the COUNTY VECPs proposed by his subcontractors.

C. Data Requirements: As a minimum, the following information shall be submitted by the CONTRACTOR with each VECP;

- (1) A description of the difference between the existing requirements and the proposed change, and the comparative advantages and disadvantages.
- (2) Separate detailed cost estimates for both the existing requirements and the proposed change. The cost estimates shall be broken down by item numbers indicating quantity increases or decreases and deleted pay items.

Additional proposed Work, now covered by the Contract Documents, shall be identified by current COUNTY pay item numbers. In preparing the estimates, the CONTRACTOR shall include overhead, profit and bond. No separate pay item(s) for these costs will be allowed.

- (3) An itemization of plan details, plan sheets, design standards and Specifications that must be changed or added if the VECP is adopted. Preliminary plan drawings must be sufficient to describe the proposed changes.
- (4) An estimate of the effects the VECP would have on collateral costs to the COUNTY.
- (5) Engineering Incentive or other analysis in sufficient detail to identify and describe specific features of the Contract Documents which must be changed if the VECP is accepted, with a proposal as to how these changes can be accomplished and an assessment of their effect on other Project elements. The COUNTY may require that Engineering Incentive analyses be performed by a prequalified consultant in the applicable class of Work. Any design changes which result from the VECP must be supported by computations sealed by a Professional registered in the State of Florida.
- (6) A statement of the time by which approval of the VECP must be issued by the COUNTY to obtain the total estimated cost reduction during the remainder of this Contract noting any effect on the Contract completion time or delivery schedule.

D. Processing Procedures: Two copies of each VECP shall be submitted to the County's Project Manager, or his/her duly authorized representative, VECPs will be processed expeditiously; however, the COUNTY will not be liable for any delay in acting upon a VECP submitted pursuant to this Section. The CONTRACTOR may withdraw, in whole or in part, a VECP not accepted by the COUNTY within the period specified in the VECP.

The COUNTY shall not be liable for any VECP development cost in the case where a VECP is rejected or withdrawn.

The COUNTY shall be the sole judge of the acceptability of a VECP and of the estimated net savings in construction and/or collateral costs from the adoption of all or any part of such proposal. In determining the estimated net savings, the right is reserved to disregard the Contract prices if, in the judgment of the COUNTY, such prices do not represent a fair measure of the value of Work to be performed or to be deleted. Prior to approval, the COUNTY may modify a VECP, with the concurrence of the CONTRACTOR, to make it acceptable. If any modification increases or decreases the net savings resulting from the VECP, the CONTRACTOR'S fair share will be determined upon the basis of the VECP modified and upon determination of final quantities. The net savings shall be computed by subtracting the revised total cost of all bid items affected by the VECP design from the total cost of the same bid items as represented in the Contract Documents. Prior to approval of the VECP, which initiates the supplemental Contract, the CONTRACTOR shall provide acceptable contract quality Plan sheets revised to show all details consistent with the VECP design.

- E. Computations for Change in Contract Cost of Performance:** CONTRACTOR development and implementation costs for the VECP will not be recoverable. If the VECP is adopted, the CONTRACTOR'S share of the net savings as defined hereinafter shall be considered full compensation to the CONTRACTOR for the VECP. COUNTY costs of processing or implementation of a VECP will not normally be considered in the estimate.

However, the COUNTY reserves the right, where it deems such action appropriate, to require the CONTRACTOR to pay the COUNTY'S cost of investigating and implementing a VECP submitted by the CONTRACTOR as a condition of considering such proposal. Where such a condition is imposed, the CONTRACTOR shall indicate his acceptance thereof in writing, and such acceptance shall constitute full authority for the COUNTY to deduct amounts payable to the COUNTY from any monies due or that may become due to the CONTRACTOR under the Contract.

- F. Computations for Collateral Costs:** When collateral cost savings are sought by the CONTRACTOR, separate estimates must be prepared for collateral costs of both the existing Contract requirement and the proposed change. Each estimate shall consist of an itemized breakdown of all costs and the basis for the data used in the estimate. Cost benefits to the COUNTY include, but are not limited to: reduced costs of operation, maintenance or repair, and extended useful service life. Increased collateral costs include the converse of such factors. Computations shall be as follows:

- (1) Costs shall be calculated over a 20-year period on a uniform basis for each estimate.

- (2) If the difference in the estimates as approved by the COUNTY indicate a savings, the CONTRACTOR shall divide the resultant amount by 20 to arrive at the average annual net collateral savings. The resultant savings shall be shared as stipulated in paragraph G below.

G. Sharing Arrangements: If a VECP is approved by the COUNTY, the CONTRACTOR may be entitled to share in both construction savings and collateral savings to the full extent provided for in this subsection. Except for innovative ideas, the CONTRACTOR and COUNTY shall each receive 50 percent of net reduction in the cost of performance of this Contract. For innovative ideas, the reduction in the cost of performance shall be shared as follows:

ACCRUED NET SAVINGS	CONTRACTOR'S SHARE %	COUNTY'S SHARE %
Less than \$25,000	85	15
\$25,000 to \$50,000	75	25
Over \$50,000	50	50

If an approved change is identical or similar to a previously submitted VECP or an idea previously utilized by the COUNTY it will not be considered an innovative idea, thus, will only qualify for a 50 percent sharing of savings. When collateral savings occur, the CONTRACTOR shall receive 20 percent of the average one year's net collateral savings. The CONTRACTOR shall not receive construction savings or collateral savings on optional Work listed in this Contract until the COUNTY exercises its option to obtain that Work.

ARTICLE 27 – PATENTS AND ROYALTIES

Unless otherwise provided, the bidder shall be solely responsible for clearing the right to use any patented or copyrighted materials in the performance of the contract.

The Contractor, without exception, shall indemnify and save harmless the County and its employees from liability of any nature or kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process, or article manufactured or supplied by the Contractor. In the event of any claim against the County of copyright or patent infringement, the County shall promptly provide written notification to the Contractor. If such a claim is made, the Contractor shall use its best efforts to promptly purchase for the County any infringing products or services or procure a license, at no cost to the County, which will allow continued use of the service or product. If none of the alternatives are reasonably available, the County agrees to return the article on request to the Contractor and receive reimbursement, if any, as may be determined by a court of competent jurisdiction

**EXHIBIT A
LEASED EMPLOYEE AFFIDAVIT**

CONTRACT #Y_____

I affirm that an employee leasing company provides my workers' compensation coverage. I further understand that my contract with the employee leasing company limits my workers' compensation coverage to enrolled worksite employees only. My leasing arrangement does not cover un-enrolled worksite employees, independent contractors, uninsured sub-contractors or casual labor exposure.

I hereby certify that 100% of my workers are covered as worksite employees with the employee leasing company. I certify that I do not hire any casual or uninsured labor outside the employee leasing arrangement. I agree to notify the County in the event that I have any workers not covered by the employee leasing workers' compensation policy. In the event that I have any workers not subject to the employee leasing arrangement, I agree to obtain a separate workers' compensation policy to cover these workers. I further agree to provide the County with a certificate of insurance providing proof of workers' compensation coverage prior to these workers entering any County jobsite.

I further agree to notify the County if my employee leasing arrangement terminates with the employee leasing company and I understand that I am required to furnish proof of replacement workers' compensation coverage prior to the termination of the employee leasing arrangement.

I certify that I have workers' compensation coverage for all of my workers through the employee leasing arrangement specified below:

Name of Employee Leasing Company: _____

Workers' Compensation Carrier: _____

A.M. Best Rating of Carrier: _____

Inception Date of Leasing Arrangement: _____

I further agree to notify the County in the event that I switch employee-leasing companies. I recognize that I have an obligation to supply an updated workers' compensation certificate to the County that documents the change of carrier.

Name of Contractor: _____

Signature of Owner/Officer: _____

Title: _____ Date: _____

EXHIBIT B

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY

CG 25 03 03 97

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**DESIGNATED CONSTRUCTION PROJECT(S)
GENERAL AGGREGATE LIMIT**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Designated Construction Projects:

“Any person or organization on whose behalf you are required to obtain a Designated Construction Project under a written contract or agreement”

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

- A. For all sums which the insured becomes legally obligated to pay as damages caused by “occurrences” under COVERAGE A (SECTION I), and for all medical expenses caused by accidents under COVERAGE C (SECTION I), which can be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:
 - 1. A separate Designated Construction Project General Aggregate Limit applies to each designated construction project, and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations.
 - 2. The Designated Construction Project General Aggregate Limit is the most we will pay for the sum of all damages under COVERAGE A, except damages because of “bodily injury” or “property damage” included in the “products-completed operations hazard”, and for medical expenses under COVERAGE C regardless of the number of:
 - a. Insureds;
 - b. Claims made or “suits” brought or
 - c. Persons or organization making claims or bringing “suits”
 - 3. Any payments made under COVERAGE A for damages or under COVERAGE C for medical expenses shall reduce the Designated Construction Project General Aggregate Limit for that designated construction project. Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Designated Construction Project General Aggregate Limit for any other designated construction project shown in the Schedule above.
- 4. The limits shown in the Declarations for Each Occurrence, Fire Damage and Medical Expense continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Designated Construction Project General Aggregate Limit.
- B. For all sums which the insured becomes legally obligated to pay as damages caused by “occurrences” under COVERAGE A (SECTION I), and for all medical expenses caused by accidents under COVERAGE C (SECTION I), which cannot be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:
 - 1. Any payments made under COVERAGE A for damages or under COVERAGE C for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-Completed Operations Aggregate Limit, whichever is applicable; and
 - 2. Such payments shall not reduce any Designated Construction Project General Aggregate Limit.
- C. When coverage for liability arising out of the “products- completed operations hazard” is provided, any payments for damages because of “bodily injury” or “property damage” included in

the “products-completed operations hazard” will reduce the Products-Completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Designated Construction Project General Aggregate Limit.

- D.** If the applicable designated construction project has been abandoned, delayed, or abandoned and then restarted, or if the authorized contracting parties deviate from plans, blueprints, designs,

specifications or timetables, the project will still be deemed to be the same construction project.

- E.** The provisions of Limits of Insurance (SECTION **III**) not otherwise modified by this endorsement shall continue to apply as stipulated.

EXHIBIT B

BUILDERS RISK COVERAGE FORM

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this policy the words “you” and “your” refer to the Named Insured shown in the Declarations. The words “we”, “us” and “our” refer to the Company providing this insurance.

Other words and phrases that appear in quotation marks have special meaning. Refer to Section G., Definitions.

A. Coverage

We will pay for direct physical loss of or damage to Covered Property at the premises described in the Declarations caused by or resulting from any Covered Cause Loss.

1. Covered Property

Covered Property as used in this Coverage Part, means the type of property described in this section, **A.1.**, and limited in **A.2.**, Property Not Covered, If a Limit of Insurance is shown in the Declarations for that type of property.

Building Under Construction, meaning the building or structure described in the Declarations while in the course of construction, including:

a. Foundations;

b. The following property:

- (1) Fixtures and machinery;
- (2) Equipment used to service the building; and
- (3) Your building materials and supplies used for construction;

Provided such property is intended to be permanently located in or on the building or structure described in the Declarations or within 100 feet of its premises;

c. If not covered by other insurance, temporary structures built or assembled on site, including cribbing, scaffolding and construction forms.

2. Property Not Covered

Covered Property does not include:

a. Land (including land on which the property is located) or water;

(b) Subject to **(a)** above, the amount we will pay for debris removal expense is limited to 25% of the sum of the deductible plus

b. The following property when outside of buildings:

- (1) Lawns, trees, shrubs or plants;
- (2) Radio or television antennas (including satellite dishes) and their lead-in wiring, master or towers; or
- (3) Signs (other than signs attached to buildings)

3. Covered Causes of Loss

See applicable Causes Of Loss Form as shown in the Declarations.

4. Additional Coverages

a. Debris Removal

(1) Subject to Paragraphs (3) and (4), we will pay your expense to remove debris of Covered Property caused by or resulting from a Covered Cause of Loss that occurs during the policy period. The expenses will be paid only if they are reported to us in writing within 180 days of the date of direct physical loss or damage.

(2) Debris Removal does not apply to costs to:

- (a)** Extract “pollutants” from land or water; or
- (b)** Remove, restore or replace polluted land or water.

(3) Subject to the exceptions in paragraph (4), the following provisions apply:

(a) The most we will pay for the total of direct physical loss or damage plus debris removal expense is the Limit of Insurance applicable to the Covered Property that has sustained loss or damage.

the amount that we pay for direct physical loss or damage to the Covered Property that has sustained loss or damage.

(4) We will pay up to an additional \$10,000 for debris removal expense, for each location, in any one occurrence of physical loss or damage to Covered Property if one or both of the following circumstances apply:

(a) The total of the actual debris removal expense plus the amount we pay for direct physical loss or damage exceeds the Limit of Insurance on the Covered Property that has sustained loss or damage.

(b) The actual debris removal expense exceeds 25% of the sum of the deductible plus the amount that we pay for direct physical loss or damage to the Covered Property that has sustained loss or damage.

Therefore if (4)(a) and/or (4)(b) apply, our total payment for direct physical loss or damage and debris removal expense may reach but will never exceed the Limit of Insurance on the Covered Property that has sustained loss or damage, plus \$10,000.

(5) Examples

The following examples assume that there is no Coinsurance penalty.

Example #1

Limit or Insurance:	\$90,000
Amount of Deductible:	\$ 500
Amount of Loss:	\$50,000
Amount of Loss Payable:	\$49,500
	(\$50,000 - \$500)
Debris Removal Expense:	\$10,000
Debris Removal Expense Payable:	\$10,000
	(\$10,000 is 20% of \$50,000.)

The debris removal expense is less than 25% of the sum of the loss payable plus the deductible. The sum of the loss payable and the debris removal expense (\$49,500 + \$10,000 = \$59,500.) is less than the Limit of Insurance. Therefore, the full amount of debris removal expense is payable in accordance with the terms of Paragraph (3).

Example #2

Limit of Insurance:	\$90,000
Amount of Deductible:	\$ 500
Amount of Loss:	\$80,000
Amount of Los Payable:	\$79,500
	(\$80,000 - \$500)
Debris Removal Expense:	\$30,000
Debris Removal Expense Payable	
Basic Amount:	\$10,500
Additional Amount:	\$10,000

The basic amount payable for debris removal expense under the terms of Paragraph (3) is calculated as follows: \$80,000 (\$79,500 + \$500) x .25 = \$20,000; capped at \$10,500. The cap applies because the sum of the loss payable (\$79,500) and the basic amount payable for debris

removal expense (\$10,500) cannot exceed the Limit of Insurance (\$90,000).

The additional amount payable for debris removal expense is provided in accordance with the terms of Paragraph (4), because the debris removal expense (\$30,000) exceeds 25% of the loss payable plus the deductible (\$30,000 is 37.5% of \$80,000), and because the sum of loss payable and debris removal expense (\$79,500 + \$30,00 = \$109,500) would exceed the Limit of Insurance (\$90,000). The additional amount of covered debris removal expense is \$10,000, the maximum payable under Paragraph (4). Thus the total payable for debris removal expense in this example is \$20,500; \$9,500 of the debris removal expense is not covered.

b. Preservation Of Property

If it is necessary to move Covered Property from the described premises to preserve it from loss or damage by a Covered Cause of Loss, we will pay for any direct physical loss or damage to that property:

- (1) While it is being moved or while temporarily stored at another location; and
- (2) Only if the loss or damage occurs within 30 days after the property is first moved.

c. Fire Department Service Charge

When the fire department is called to save or protect Covered Property from a Covered Cause of Loss, we will pay up to \$1,000, unless a higher limit is shown in the Declarations, for your liability for fire department service charges:

- (1) Assumed by contract or agreement prior to loss; or
- (2) Required by local ordinance.

No Deductible applies to this Additional Coverage.

d. Pollutant Clean-up And Removal

We will pay your expense to extract "pollutants" from land or water at the described premises if the discharge, dispersal, seepage, migration, release or escape of the "pollutants" is caused by or results from a Covered Cause of Loss that occurs during the policy period. The expense will be paid only if they are reported to us in writing within 180 days of the date on which the Covered Cause of Loss occurs.

This Additional Coverage does not apply to costs to test for, monitor or assess the existence, concentration or effects of "pollutants". But we will pay for testing which is performed in the course of extracting the "pollutants" from the land or water.

The most we will pay under this Additional Coverage for each described premises is \$10,000 for the sum of all covered expenses arising out of Covered Causes of

Loss occurring during each separate 12 month period of this policy.

5. Coverage Extensions

a. Building Materials And Supplies Of Others

- (1) You may extend the insurance provided by this Coverage Form to apply to building materials and supplies that are:
 - (a) Owned by others;
 - (b) In your care, custody or control;
 - (c) Located in or on the building described in the Declarations, or within 100 feet of its premises; and
 - (d) Intended to become a permanent part of the building.
- (2) The most we will pay for loss or damage under this Extension is \$5,000 at each described premises, unless a higher Limit of Insurance is specified in the Declarations. Our payment for loss of or damage to property of others will only be for the account of the owner of the property.

b. Sod, Trees, Shrubs And Plants

You may extend the insurance provided by this Coverage Form to apply to loss or damage to sod, trees, shrubs and plants outside of buildings on the described premises, if the loss or damage is caused by or results from any of the following causes of loss:

- (1) Fire;
- (2) Lightning;
- (3) Explosion;
- (4) Riot or Civil Commotion; or
- (5) Aircraft.

The most we will pay for loss or damage under this Extension is \$1,000, but not more than \$250 for any one tree, shrub or plant. These limits apply to any one occurrence, regardless of the types or number of items lost or damaged in that occurrence.

B. Exclusions And Limitations

See applicable Causes Of Loss From as shown in the Declarations.

C. Limits Of Insurance

The most we will pay for loss or damage in any one occurrence is the applicable Limit of Insurance shown in the Declarations.

The most we will pay for the loss or damage to outdoor signs attached to buildings is \$2,500 per sign in any one occurrence.

The limits applicable to the Coverage Extensions and the Fire Department Service Charge and Pollutant Clean-up And Removal Additional Coverage are in addition to the Limit of insurance.

Payments under the Preservation Of Property Additional Coverage will not increase the applicable Limit of insurance.

D. Deductible

In any one occurrence of loss or damage (hereinafter referred to as loss), we will first reduce the amount of

loss if required by Additional Condition – Need For Adequate Insurance. If the adjusted amount of loss is less than or equal to the Deductible, we will not pay for that loss. If the adjusted amount of loss exceeds the Deductible, we will then subtract the Deductible from the adjusted amount of loss, and will pay the resulting amount or the Limit of Insurance, whichever is less.

When the occurrence involves loss to more than one item of Covered Property and separate Limits of Insurance apply, the losses will not be combined in determining application of the Deductible But the Deductible will be applied only once per occurrence.

Example #1

(This example assumes there is no penalty for underinsurance.)

Deductible:	\$ 1,000
Limit of Insurance – Building #1:	\$ 60,000
Limit of Insurance – Building #2:	\$ 80,000
Loss to Building #1:	\$ 60,100
Loss to Building #2:	\$ 90,000

The amount of loss to Building #1 (\$60,100) is less than the sum (\$61,000) of the Limit of Insurance applicable to Building #1 plus the Deductible.

The Deductible will be subtracted from the amount of loss in calculating the loss payable for Building #1:

\$60,100
<u> - 1,000</u>
\$59,100 Loss Payable – Building #1

The Deductible applies once per occurrence and therefore is not subtracted in determining the amount of loss payable for Building #2. Loss payable for Building #2 is the Limit of Insurance of \$80,000.

Total amount of loss payable: \$59,100 + \$80,000 = \$139,100.

Example #2

(This example, too, assumes there is no penalty for underinsurance.)

The Deductible and Limits of Insurance are the same as those in Example #1

Loss to Building #1:	\$ 70,000
(Exceeds Limit of Insurance plus Deductible)	
Loss to Building # 2	\$ 90,000
(Exceeds Limit of Insurance plus Deductible)	
Loss Payable - Building #1:	\$ 60,000
(Limit of Insurance)	
Loss Payable – Building #2	\$ 80,000
(Limit of Insurance)	
Total amount of loss payable:	\$140,000

E. Loss Conditions

The following conditions apply in addition to the Common Policy Conditions and the Commercial Property Conditions.

1. Abandonment

There can be no abandonment of any property to us.

2. Appraisal

If we and you disagree on the value of the property or the amount of loss, either may make written demand for an appraisal of the loss. In this event, each party will select a competent and impartial appraiser. The two appraisers will select and umpire. If they cannot agree, either may request that selection be made by a judge of a court having jurisdiction. The appraiser will state separately the value of the property and amount of loss. If they fail to agree, they will submit their differences to the umpire. A decision agreed to by any two will be binding. Each party will:

- a. Pay its chosen appraiser; and
- b. Bear the other expenses of the appraisal and umpire equally.

If there is an appraisal, we will still retain our right to deny claim.

3. Duties In The Event Of Loss Or Damage

a. You must see that the following are done in the event of loss or damage to Covered Property:

- (1) Notify the police if a law may have been broken.
- (2) Give us prompt notice of the loss or damage. Include a description of the property involved.
- (3) As soon as possible, give us a description of how, when and where the loss or damage occurred.
- (4) Take all reasonable steps to protect the Covered Property from further damage, and keep a record of your expenses necessary to protect the Covered Property, for consideration in the settlement of the claim. This will not increase the Limit of Insurance. However, we will not pay for any subsequent loss or damage resulting from cause of loss that is not a Covered Cause of Loss. Also if feasible, set the damaged property aside and in the best possible order for examination.
- (5) At our request, give us complete inventories of the damaged and undamaged property. Include quantities, costs, values and amount of loss claimed.
- (6) As often as may be reasonably required, permit us to inspect the property proving the loss or damage and examine your books and records. Also permit us to take samples of damaged and undamaged property for inspection, testing and analysis, and permit us to make copies from your books and records
- (7) Send us a signed, sworn proof of loss containing the information we request to investigate the claim. You must do this within 60 days after our request. We will supply you with the necessary forms.
- (8) Cooperate with us in the investigation or settlement of the claim.

b. we may examine any insured under oath while not in the presence of any other insured and at such times as may be reasonably required, about any

matter relating to this insurance or the claim, including an insured's books and records. In the event of an examination, an insured's answer must be signed.

4. Loss Payment

a. In the event of loss or damage covered by this Coverage Form, at our option, we will either:

- (1) Pay the value of lost or damaged property;
- (2) pay the cost of repairing or replacing the lost or damaged property, subject to b. below;
- (3) Take all or any part of property at an agreed or appraised value; or
- (4) Repair, rebuild or replace the property with other property of like kind and quality, subject to b. below.

We will determine the value of lost or damaged property, or the cost of its repair or replacement, in accordance with the applicable terms of the Valuation Condition in this Coverage Form or any applicable provision which amends or supersedes the Valuation Condition.

b. The cost to repair, rebuild or replace does not include the increased cost attributable to enforcement of any ordinance or law regulating the construction, use or repair of any property.

c. We will give notice of our intentions within 30 days after we receive the sworn proof of loss.

d. We will not pay you more than your financial interest in the Covered Property.

e. We may adjust losses with the owners of lost or damaged property if other than you. If we pay the owners, such payments will satisfy your claims against us for the owners' property. We will not pay the owners more than their financial interest in the Covered Property.

f. We may elect to defend you against suits arising from claims of owners of property. We will do this at our expense.

g. We will pay for covered loss or damage within 30 days after we receive the sworn proof of loss, if you have complied with all of the terms of this Coverage Part and:

- (1) We have reached agreement with you on the amount of loss; or
- (2) An appraisal award has been made.

h. A party wall is a wall that separates and is common to adjoining buildings that are owned by different parties. In settling covered losses involving a party wall, we will pay a portion of the loss to the party wall based on your interest in the wall in proportion to the interest of the owner of the adjoining building. However, if you elect to repair or replace your building and the owner of the adjoining building elects not to repair or replace the building, we will pay you the full value of the loss to the party wall, subject to all applicable policy

provisions including Limits of Insurance, the Valuation and Coinsurance Conditions and all other provisions of this Loss Payment Condition. Our payment under the provision of this paragraph does not alter any right of subrogation we may have against any entity, including the owner or insurer of the adjoining building, and does not alter the terms of the Transfer Of Rights Of Recovery Against Others To Us Condition in this policy.

5. Recovery Property

If either you or we recover any property after loss settlement, that party must give the other prompt notice. At your option, the property will be returned to you. You must then return to us the amount we paid to you for the property. We will pay recovery expenses and the expenses to repair the recovered property, subject to the Limit of Insurance.

6. Valuation

We will determine the value of Covered Property at actual cash value as of the time of loss or damage.

F. Additional Conditions

The following conditions apply in addition to the Common Policy Conditions and the Commercial Property Conditions.

1. Mortgageholders

- a. The term mortgageholder includes trustee.
- b. We will pay for covered loss of or damage to buildings or structures to each mortgageholder shown in the Declarations in their order of precedence, as interests may appear.
- c. The mortgageholder has the right to receive loss payment even if the mortgageholder has started foreclosure or similar action on the building or structure.
- d. If we deny your claim because of your acts or because you have failed to comply with the terms of this Coverage Part, the mortgageholder will still have the right to receive loss payment if the mortgageholder:
 - (1) Pays any premium due under this Coverage Part at our request if you have failed to do so;
 - (2) Submits a signed, sworn proof of loss within 60 days after receiving notice from us of your failure to do so; and
 - (3) Has notified us of any change in ownership, occupancy or substantial change in risk known to the mortgageholder.

All of the terms of this Coverage Part will then apply directly to the mortgageholder.

- e. If we pay the mortgageholder for any loss or damage and deny payment to you because of your acts or because you have failed to comply with the terms of this Coverage Part:
 - (1) The mortgageholder's rights under the mortgage will be transferred to us to the extent of the amount we pay; and

- (2) The mortgageholder's right to recover the full amount of the mortgageholder's claim will not be impaired.

At our option, we may pay to the mortgageholder the whole principal on the mortgage plus any accrued interest. In this event, your mortgage and note will be transferred to us and you will pay your remaining mortgage debt to us.

- f. If we cancel this policy, we will give written notice to the mortgageholder at least:
 - (1) 10 days before the effective date of cancellation if we cancel for your nonpayment of premium; or
 - (2) 30 days before the effective date of cancellation if we cancel for any other reason.
- g. If we elect not to renew this policy, we will give written notice to the mortgageholder at least 10 days before the expiration date of this policy.

2. Need for Adequate Insurance

We will not pay a greater share of any loss than the portion that the Limit of Insurance bears to the value on the date of completion of the building described in the Declarations.

EXAMPLE #1 (UNDERINSURANCE)

When: The value of the building on the date of completion is: \$200,000
The Limit of Insurance for it is: \$100,000
The Deductible is: \$ 500 The amount of loss is: \$ 80,000

Step (1): $\$100,000 \div \$200,000 = .50$

Step (2): $\$80,000 \times .50 = \$40,000$

Step (3): $\$40,000 - \$500 = \$39,500$.

We will pay no more than \$39,500. The remaining \$40,500 is not covered.

EXAMPLE #2 (ADEQUATE INSURANCE)

When: The value of the building on the date of completion is: \$200,000
The Limit of Insurance for it is: \$200,000
The Deductible is: \$ 1,000
The amount of loss is: \$ 80,000

The limit of Insurance in the example is adequate and therefore no penalty applies. We will pay no more than \$79,000 (\$80,000 amount of loss minus the deductible of \$1,000).

3. Restriction Of Additional Coverage – Collapse

If the Causes Of Loss – Broad Form is applicable to this Coverage Form, Paragraph C.2.f. of the Additional Coverage – Collapse does not apply to this Coverage Form.

If the Cause Of Loss – Special Form is applicable to this Coverage Form, Paragraphs D.2.c. and D.2.d of the Additional Coverage Collapse do not apply to this Coverage Form.

4. When Coverage Ceases

The insurance provided by this Coverage Form will end when one of the following first occurs:

- a. This policy expires or is cancelled.
- b. The property is accepted by the purchaser;
- c. Your interest in the property ceases;
- d. You abandon the construction with no intention to complete it;
- e. Unless we specify otherwise in writing.
 - (1) 90 days after construction is complete or;
 - (2) 60 days after any building described in the Declarations is:
 - (a) Occupied in whole or in part; or
 - (b) Put to its intended use.

G. Definitions

“Pollutants” means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.

CAUSES OF LOSS – SPECIAL FORM

Words and phrases that appear in quotation marks have special meaning. Refer to Section **G.**, Definitions.

A. Covered Causes Of Loss

When Special is shown in the Declarations, Covered Causes of Loss means Risk of Direct Physical Loss unless the loss is:

1. Excluded in Section **B.**, Exclusions; or
2. Limited in Section **C.**, limitations; that follow.

B. Exclusions

1. We will not pay for loss or damage caused directly or indirectly by any of the following. Such loss or damage is excluded regardless of any other cause or event that contributes concurrently or in any sequence to the loss.

a. Ordinance or Law

The enforcement of any ordinance or law:

- (1) Regulating the construction, use or repair of any property; or
- (2) Requiring the tearing down of any property, including the cost of removing its debris.

This exclusion, Ordinance Or Law applies whether the loss results from:

- (a) An ordinance or law that is enforced even if the property has not been damaged; or
- (b) The increased costs incurred to comply with an ordinance or law in the course of construction, repair, renovation, remodeling or demolition of property, or removal of its debris, following a physical loss to that property.

b. Earth movement

- (1) Earthquake, including any earth sinking, rising or shifting related to such event;
- (2) Landslide including any earth sinking, rising or shifting related to such event.
- (3) Mine subsidence, meaning subsidence of a man-made mine, whether or not mining activity has ceased;
- (4) Earth sinking (other than sinkhole collapse), rising or shifting including soil conditions which cause settling, cracking or other disarrangement of foundations or other parts

or realty. Soil conditions include contraction, expansion, freezing, thawing, erosion, improperly compacted soil and the action of water under the ground surface.

But if Earth Movement, as described in **b.(1)** through **(4)** above, results in fire or explosion, we will pay for the loss or damage caused by that fire or explosion.

- (5) Volcanic eruption, explosion or effusion. But if volcanic eruption, explosion or effusion results in fire, building glass breakage or Volcanic Action, we will pay for the loss or damage caused by that fire, building glass breakage or Volcanic Action.

Volcanic Action means direct loss or damage resulting from the eruption of a volcano when the loss or damage is caused by:

- (a) Airborne volcanic blast or airborne shock waves;
- (b) Ash, dust or particulate matter; or
- (c) Lava flow.

All volcanic eruptions that occur within any 168-hour period will constitute a single occurrence.

Volcanic Action does not include the cost to remove ash, dust or particulate matter that does not cause direct physical loss or damage to the described property.

c. Governmental Action

Seizure or destruction of property by order of governmental authority.

But we will pay for loss or damage caused by or resulting from acts of destruction ordered by governmental authority and taken at the time of a fire to prevent its spread, if the fire would be covered under this Coverage Part.

d. Nuclear Hazard

Nuclear reaction or radiation, or radioactive contamination, however caused.

But if nuclear reaction or radiation, or radioactive contamination, results in fire, we

will pay for the loss or damage caused by that fire.

e. Utility Services

The failure of power, communication, water or other utility service supplied to the described premises, however caused, if the failure:

- (1) Originates away from the described premises; or
- (2) Originates at the described premises but only if such failure involves equipment used to supply the utility service to the described premises from a source away from the described premises.

Failure of any utility service includes lack of sufficient capacity and reduction in supply. Loss or damage caused by a surge of power is also excluded, if the surge would not have occurred but for an event causing failure of power.

But if the failure or surge of power, or the failure of communication, water or other utility service, results in Covered Cause of loss, we will pay for the loss or damage caused by that Covered Cause of Loss.

Communication services include but are not limited to service relating to Internet access or access to any electronic, cellular or satellite network.

f. War And Military Action

- (1) War, including undeclared or civil war;
- (2) Warlike action by military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

g. Water

- (1) Flood, surface water, waves, tides, tidal waves, overflow of any body of water or their spray, all whether driven by wind or not;
- (2) Mudslide or mudflow;
- (3) Water that backs up or overflows from a sewer, drain or sump; or
- (4) Water under the ground surface pressing on, or flowing or seeping through:

- (a) Foundations, walls, floors or paved surfaces;

- (b) Basements, whether paved or not; or

- (c) Doors, windows or other openings.

But if Water, as described in **g.(1)**. Through **g.(4)**. above, results in fire, explosion or sprinkler leakage, we will pay for the loss or damage caused by that fire explosion or sprinkler leakage.

h. "Fungus", Wet Rot, Dry Rot And Bacteria

Presence, growth, proliferation, spread or any activity of "fungus", wet or dry rot or bacteria.

But if "fungus", wet or dry rot or bacteria results in a "specified cause of loss", we will pay for the loss or damage caused by that "specified cause of loss".

This exclusion does not apply:

- 1. When "fungus", wet or dry rot or bacteria results from fire or lightning; or
- 2. To the extent that coverage is provided in the Additional Coverage – Limited Coverage For "Fungus", Wet Rot, Dry Rot And Bacteria with respect to loss or damage by a cause of loss other than fire or lightning.

Exclusions **B.1.a.** through **B.1h.** apply whether or not the loss event results in widespread damage or affects a substantial area.

2. We will not pay for loss or damage caused by or resulting from any of the following:

- a. Artificially generated electrical, magnetic or electromagnetic energy that damages, disturbs, disrupts or otherwise interferes with any:

- (1) Electrical or electronic wire, device, appliance, system or network; or
- (2) Device, appliance, system or network utilizing cellular or satellite technology.

For the purpose of this exclusion, electrical, magnetic or electromagnetic energy includes but is not limited to:

- (a) Electrical current, including arcing;
- (b) Electrical charge produced or conducted by a magnetic or electromagnetic field;
- (c) Pulse of electromagnetic energy; or
- (d) Electromagnetic waves or microwaves.

But if fire results, we will pay for the loss or damage caused by the fire.

b. Delay, loss of use or loss of market.

c. Smoke, vapor or gas from agricultural smudging or industrial operations

- d. (1) Wear and tear;**
- (2) Rust or other corrosion, decay, deterioration, hidden or latent defect or any quality in property that causes it to damage or destroy itself;**
- (3) Smog;**
- (4) Setting, cracking, shrinking or expansion;**
- (5) Nesting or infestation, or discharge or release of waste products or secretions, by insects, birds, rodents or other animals.**
- (6) Mechanical breakdown, including rupture or bursting caused by centrifugal force. But if mechanical breakdown results in elevator collision, we will pay for the loss or damage caused by the elevator collision.**
- (7) The following causes of loss to personal property:**
 - (a) Dampness or dryness of atmosphere;**
 - (b) Changes in or extremes of temperature; or**
 - (c) Marring or scratching.**

But if an excluded cause of loss that is listed in **2.d.(1).** through **(7)** results in a “specified cause of loss” or building glass breakage, we will pay for the loss or damage caused by that “specified cause of loss” or building glass breakage.

- e. Explosion of steam boilers, steam pipes, steam engines or steam turbines owned or leased by you, or operated under your control. But if explosion of steam boilers, steam pipes, steam engines or steam turbines result in fire or combustion explosion, we will pay for the loss or damage caused by that fire or combustion explosion. We will also pay for loss or damage caused by or resulting from explosion of gases or fuel within the furnace of any fired vessel or within the flues or passages through which the gases of combustion pass.**
- f. Continuous or repeated seepage or leakage of water, or the presence or condensation of humidity, moisture or vapor, that occurs over period of 14 days or more.**
- g. Water, other liquids, powder or molten material that leaks or flows from plumbing, heating, air conditioning or other equipment (except fire protective systems) caused by or resulting from freezing, unless:**
 - (1) You do your best to maintain heat in the building or structure; or**
 - (2) You drain the equipment and shut off the supply if the heat is not maintained.**

- h. Dishonest or criminal act by you, any of your partners, members, officers, managers, employees (including leased employees), directors, trustees, authorized representatives or anyone to whom you entrust the property for any purpose.**

- (1) Acting alone or in collusion with others; or**
- (2) You drain the equipment and shut off the supply if the heat is not maintained.**

This exclusion does not apply to acts of destruction by your employees (including leased employees); but theft by employees (including leased employees) is not covered.

- i. Voluntary parting with any property by you or anyone else to whom you have entrusted the property if induced to do so by any fraudulent scheme, trick, device or false pretense.**
- j. rain, snow, ice or sleet to personal property in the open.**
- k. Collapse, including any of the following conditions of property or any part of the property:**
 - (1) An abrupt falling down or caving in;**
 - (2) Loss of structural integrity, including separation of parts of the property or property in danger of falling down or caving in; or**
 - (3) Any cracking, bulging, sagging, bending, leaning, setting, shrinkage or expansion as such condition relates to (1) or (2) above.**

But if collapse results in a Covered Cause of Loss at the described premises, we will pay for the loss or damage caused by that Covered Cause of Loss.

The exclusion, **k.**, does not apply:

 - (a) To the extent that coverage is provided under the Additional Coverage – Collapse; or**
 - (b) To collapse caused by one or more of the following:**
 - (i) The “specified cause of loss”;**
 - (ii) Breakage of building glass;**
 - (iii) Weight of rain that collects on a roof; or**
 - (iv) Weight of people or personal property.**
- l. Discharge, dispersal, seepage, migration, release or escape of “pollutants” unless the discharge, dispersal, seepage, migration, release or escape is itself caused by any of the “specified causes of loss”. But if the discharge, dispersal, seepage, migration, release or escape of “pollutants” results in “specified cause of loss”, we will pay**

for the loss or damage caused by that “specified cause of loss”.

The exclusion, **L.**, does not apply to damage to glass caused by chemicals applied to glass.

m. Neglect of an insured to use all reasonable means to save and preserve property from further damage at and after the time loss.

3. We will not pay for loss or damage caused by or resulting from any of the following, **3.a.** through **3.c.** But if an excluded cause of loss that is listed in **3.a.** through **3.c.** results in a Covered Cause of Loss, we will pay for the loss or damage caused by that Covered Cause of Loss.

a. Weather conditions. But this exclusion only applies if weather conditions contribute in any way with a cause or event excluded in Paragraph **1.** above to produce the loss or damage.

b. Acts or decisions, including the failure to act or decide, of any person, group, organization or governmental body.

c. Faulty, inadequate or defective:

(1) Planning, zoning, development, surveying, siting;

(2) Design, specifications, workmanship, repair, construction, renovation, remodeling, grading, compaction;

(3) Materials used in repair, construction renovation or remodeling; or

(4) Maintenance;

of part or all of any property on or off the described premises.

4. Special Exclusions

The following provisions apply only to the specified Coverage Forms.

a. Business Income (And Extra Expense) Coverage Form, Business Income (Without Extra Expense) Coverage Form, Or Extra Expense Coverage Form

We will not pay for:

(1) Any loss caused by or resulting from:

(a) Damage or destruction of “finished stock”;
or

(b) The time required to reproduce “finished stock”.

This exclusion does not apply to Extra Expense.

(2) Any loss caused by or resulting from direct physical loss or damage to radio or television antennas (including satellite dishes) and their lead in-wiring, masts or towers.

(3) Any increase of loss caused by or resulting from:

(a) Delay in rebuilding, repairing or replacing the property or resuming “operations”, due to interference at the location of the rebuilding, repair or replacement by strikers or other persons; or

(b) Suspension, lapse or cancellation of any license, lease or contract. But if the suspension, lapse or cancellation is directly caused by the “suspension” of “operations”, we will cover such loss that affects your Business Income during the “period of restoration” and any extension of the “period of restoration” in accordance with the terms of the Extended business Income Additional Coverage and the Extended Periods Of Indemnity Optional Coverage or any variation of these.

(4) Any Extra Expense caused by or resulting from suspension, lapse or cancellation of any license, lease or contract beyond the “period of restoration”.

(5) Any other consequential loss.

b. Leasehold interest Coverage Form

(1) Paragraph **B.1.a.**, Ordinance Or Law, does not apply to insurance under this Coverage Form.

(2) We will not pay for any loss caused by:

(a) Your cancelling the lease;

(b) The suspension lapse or cancellation of any license; or

(c) Any other consequential loss.

c. Legal liability Coverage Form

(1) The following exclusions do not apply to insurance under this Coverage Form:

(a) Paragraph **B.1.a.**, Ordinance Or Law;

(b) Paragraph **B.1.c.**, Governmental Action

(c) Paragraph **B.1.d.**, Nuclear Hazard;

(d) Paragraph **B.1.e.**, Utility Services; and

(e) Paragraph **B.1.f.**, War And Military Action

(2) The following additional exclusions apply to insurance under this Coverage Form:

(a) **Contractual Liability**

We will not defend any claim or “suit”, or pay damages that you are legally liable to pay solely by reason of your assumption of liability in a contract or

agreement. But this exclusion does not apply to a written lease agreement in which you have assumed liability for building damage resulting from an actual or attempted burglary or robbery, provided that:

- (i) Your assumption of liability was executed prior to accident; and
- (ii) The building is Covered Property under this Coverage Form.

(b) Nuclear Hazard

We will not defend any claim or “suit”, or pay any damages, loss, expense or obligation, resulting from nuclear reaction or radiation, or radioactive contamination, however caused.

5. Additional Exclusion

The following provisions apply only to the specified property.

LOSS OR DAMAGE TO PRODUCTS

We will not pay for loss or damage to any merchandise, goods or other product caused by or resulting from error or omission by any person or entity (including those having possession under an arrangement where work or a portion of the work is outsourced) in any stage of the development, production or use of the product, including planning, testing, processing, packaging, installation, maintenance or repair. This exclusion applies to any effect that compromises the form, substance or quality of the product. But if such error or omission results in a Covered Cause loss, we will pay for the loss or damage caused by that Covered Cause of Loss.

C. Limitations

The following limitations apply to all policy forms and endorsements, unless otherwise stated.

- 1. We will not pay for loss of or damage to property, as described and limited in the section. In addition, we will not pay for any loss that is a consequence of loss or damage as described and limited in this section.
 - a. Steam boilers, steam pipes steam engines or steam turbines caused by or resulting from any condition or event inside such equipment. But we will pay for loss of or damage to such equipment caused by or resulting from an explosion of gases or fuel within the furnace of any fired vessel or

within the flues or passages through which the gases of combustion pass.

- b. Hot water boilers or other water heating equipment caused by ore resulting from any condition or event inside such boilers or equipment, other than an explosion.
- c. The interior of any building or structure or to personal property in the building or structure, caused by or resulting from rain, snow, sleet, ice, sand or dust, whether driven by wind or not, unless:
 - (1) The building or structure first sustains damage by a Covered Cause of Loss to its roof or walls through which the rain, snow, sleet, ice, sand or dust enters; or
 - (2) The loss or damage is caused by or results from thawing of snow, sleet or ice on the building or structure.

- d. Building materials and supplies not attached as part of the building or structure caused by or resulting from theft.

However, this limitation does not apply to:

- (1) Building materials and supplies held for sale by you, unless they are insured under the Builders Risk Coverage Form; or
- (2) Business Income Coverage or Extra Expense Coverage.

- e. Property that is missing, where the only evidence of the loss or damage is a shortage disclosed on taking inventory, or other instances where there is no physical evidence to show what happened to the property.

- f. Property that has been transferred to a person or to a place outside the described premises on the basis of unauthorized instructions.

- 2. We will not pay for loss of or damage to the following types of property unless caused by the “specified causes of loss” or building glass breakage:
 - a. Animals, and then only if they are killed or their destruction is made necessary.
 - b. Fragile articles such as statuary, marbles, chinaware and porcelains, if broken. This restriction does not apply to:
 - (1) Glass; or
 - (2) Containers of property held for sale.

c. Builders' machinery, tools and equipment owned by you or entrusted to you, provided such property is Covered Property.

- (1) If the property is located on or within 100 feet of the described premises, unless the premises is insured under the Builders Risk Coverage Form; or
- (2) To Business Income Coverage or to Extra Expense Coverage.

3. The special limit shown for each category, a. through d., is the total limit for loss of or damage to all property in that category. The special limit applies to any one occurrence of theft, regardless of the types or number of articles that are lost or damaged in that occurrence. The special limits are:

- a. \$2,500 for furs, fur garments and garments trimmed with fur.
- b. \$2,500 for jewelry, watches, watch movements, jewels, pearls, precious and semiprecious stones, bullion, gold, silver, platinum, and other precious alloys or metals. This limit does not apply to jewelry and watches worth \$100 or less per item.
- c. \$2,500 for patterns, dies, molds and forms.
- d. \$250 for stamps, tickets, including lottery tickets held for sale, and letters for credit.

These special limits are part of, not in addition to, the Limit of Insurance applicable to the Covered Property.

This limitation, C.3., does not apply to Business Income Coverage or Extra Expense Coverage.

4. We will not pay the cost to repair any defect to a system or appliance from which water, other liquid, powder or molten material escapes. But we will pay the cost to repair or replace damaged parts of fire-extinguishing equipment if the damage:

- a. Results in discharge of any substance from an automatic fire protection system; or
- b. Is directly caused by freezing.

However, this limitation does not apply to Business Income Coverage or to Extra Expense Coverage.

D. Additional Coverage – Collapse

The coverage provided under this Additional Coverage – Collapse applies only to an abrupt collapse as described and limited in D.1., through D.7.,

1. For the purpose of this Additional Coverage – Collapse, abrupt collapse means an abrupt falling down or caving in of a building or any part of a building with the result that building or part of

the building cannot be occupied for its intended purpose.

2. We will pay for direct physical loss or damage to Covered Property, caused by abrupt collapse of building or any part of a building that is insured under this Coverage Form or that contains Covered Property insured under this Coverage Form, if such collapse is caused by one or more of the following.

- a. Building decay that is hidden from view unless the presence of such decay is known to an insured prior to collapse;
- b. Insect or vermin damage that is hidden from view, unless the presence of such damage is known to an insured prior to collapse;
- c. Use of defective material or methods in construction, remodeling or renovation if the abrupt collapse occurs during the course of the construction, remodeling or renovation.
- d. Use of defective material or methods in construction, remodeling or renovation if the abrupt collapse occurs after the construction, remodeling or renovation is complete but only if the collapse is caused in part by:
 - (1) A cause of loss listed in 2.a. or 2.b.;
 - (2) One or more of the “specified causes of loss”;
 - (3) Breakage of building glass;
 - (4) Weight of people or personal property; or
 - (5) Weight of rain that collects on a roof.

3. This **Additional Coverage – Collapse** does not apply to:

- a. A building or any part of a building that is in danger of falling down or caving in;
- b. A part of a building that is standing, even if it has a separated from another part of the building; or
- c. A building that is standing or any part of a building that is standing even if it shows evidence of cracking, bulging, sagging, bending, leaning, setting, shrinkage or expansion.

4. With respect to the following property:

- a. Outdoor radio or television antennas (including satellite dishes) and their lead-in wiring, masts or towers;
- b. Awnings, gutters and downspouts;
- c. Yard fixtures;
- d. Outdoor swimming pools;
- e. Fences;

- f. Piers, wharves and docks;
 - g. Beach or diving platforms or appurtenances;
 - h. Retaining walls; and
 - i. Walks, roadways and other paved surfaces;
- if an abrupt collapse is caused by cause of loss listed in **2.a.** through **2.d.**, we will pay for loss or damage to that property only if:

- (1) Such loss or damage is a direct result of the abrupt collapse of a building insured under this Coverage Form.
- (2) The property is Covered Property under this Coverage Form.

5. If personal property abruptly falls down or caves in and such collapse is **not** the result of abrupt collapse of a building, we will pay for loss or damage to Covered property caused by such collapse of personal property only if:

- a. The collapse of personal property was caused by a cause of loss listed in **2.a.** through **2.d.**;
- b. The personal property which collapses is inside a building; and
- c. The property which collapses is not of a kind listed in **4.**, regardless of whether that kind of property is considered to be personal property or real property.

The coverage stated in the Paragraph **5.** does not apply to personal property if marring and/or scratching is the only damage to that personal property caused by the collapse.

6. This Additional Coverage – Collapse does not apply to a personal property that has not abruptly fallen down or caved in, even if the personal property shows evidence of cracking, bulging, sagging, bending, leaning, settling, shrinkage or expansion.

7. This Additional Coverage – Collapse will not increase the Limits of Insurance provided in this Coverage Part.

8. The term Covered Cause of Loss includes the Additional Coverage – Collapse as described and limited in **D.1.** through **D.7.**

E. Additional Coverage – Limited Coverage For “Fungus”, Wet Rot, Dry Rot And Bacteria

1. The coverage described in **E.2.** and **E.6.** only applies when the “fungus”, wet or dry rot or bacteria is the result of one or more of the following causes that occurs during the policy period and only if all reasonable means were used to save and preserve the property from further damage at the time of and after that occurrence.

a. A “specified cause of loss” other than fire or lightning; or

b. Flood, if Flood Coverage Endorsement applies to the affected premises.

2. We will pay for loss or damage by “fungus” wet or dry rot or bacteria. As used in this Limited Coverage, the term loss or damage means:

a. Direct physical loss or damage to Covered Property caused by “fungus”, wet or dry rot or bacteria including the cost of removal of the “fungus”, wet or dry rot or bacteria;

b. The cost to tear out and replace any part of the building or other property as needed to gain access to the “fungus”, wet or dry rot or bacteria; and

c. The cost of testing performed after removal, repair, replacement or restoration of the damaged property is completed, provided there is a reason to believe that “fungus”, wet or dry rot or bacteria are present.

3. The coverage described under **E.2.** of this Limited Coverage is limited to \$15,000. Regardless of the number of claims, this limit is the most we will pay for the total of all loss or damage arising out of all occurrences of “specified cause of loss” (other than fire or lightning) and Flood which take place in a 12 month period (starting with the beginning of the present annual policy period). With respect to a particular occurrence of loss which results in “fungus”, wet or dry rot or bacteria, we will not pay more than a total of \$15,000 even if the “fungus”, wet or dry rot or bacteria continues to be present or active, or recurs, in a later policy period.

4. The coverage provided under this Limited Coverage does not increase the applicable Limit of Insurance on any Covered Property. If a particular occurrence results in loss or damage by “fungus”, wet or dry rot or bacteria, and other loss or damage, we will not pay more, for the total of all loss or damage, than the applicable Limit of Insurance on the affected Covered Property.

If there is covered loss or damage to Covered Property, not caused by “fungus”, wet or dry rot or bacteria, loss payment will not be limited by the terms of this Limited Coverage, except to the extent that “fungus”, wet or dry rot or bacteria causes an increase in the loss. Any such increase

in the loss will be subject to the terms of this Limited Coverage.

5. The terms of this Limited Coverage do not increase or reduce the coverage provided under Paragraph F.2. (Water Damage, Other Liquids, Powder Or Molten Material Damage) of this Causes Of Loss Form or under the Additional Coverage – Collapse.

6. The following, 6.a or 6.b., applies only if Business Income and/or Extra Expense Coverage applies to the described premises and only if the “suspension” of “operations” satisfies all terms and conditions of the applicable Business Income and/or Extra Expense Coverage Form.

a. If the loss which resulted in “fungus”, wet rot or dry rot or bacteria does not in itself necessitate a “suspension” of “operations”, but such “suspension” is necessary due to loss or damage to property caused by “fungus” wet or dry rot or bacteria, then our payment under Business Income and/or Extra Expense is limited to the amount of loss and/or expense sustained in a period of not more than 30 days. The days need not be consecutive.

b. If a covered “suspension” of “operations” was caused by loss or damage other than “fungus”, wet or dry rot or bacteria but remediation of “fungus”, wet or dry rot or bacteria but remediation of “fungus”, wet or dry rot or bacteria prolongs the “period of restoration”, we will pay for loss and/or expense sustained during the delay (regardless of when such delay occurs during the “period of restoration”), but such coverage is limited to 30 days. The days need not be consecutive.

F. Additional Coverage Extensions

1. Property In Transit

This Extension applies only to your personal property to which this form applies.

a. You may extend the insurance provided by this Coverage Part to apply to your personal property (other than property in the care, custody or control of your salespersons) in transit more than 100 feet from the described premises. Property must be in or on a motor vehicle you own, lease or operate while between points in the coverage territory.

b. Loss or damage must be caused by or result from one of the following causes of loss:

(1) Fire, lightning, explosion, windstorm or hail riot or civil commotion, or vandalism.

(2) Vehicle collision, upset or overturn. Collision means accidental contact of your vehicle with another vehicle or object. It does not mean your vehicle’s contact with the roadbed.

(3) Theft of an entire bale, case or package by forced entry into a securely locked body or compartment of the vehicle. There must be visible marks of the forced entry.

c. The most we will pay for loss or damage under this Extension is \$5,000.

This Coverage Extension is additional insurance. The Additional Condition, Coinsurance, does not apply to this Extension.

2. Water Damage, Other Liquids, Powder Or Molten Material Damage

If loss or damage caused by or resulting from covered water or other liquid, powder or molten material damage loss occurs, we will also pay the cost to tear out and replace any part of the building or structure to repair damage to the system or appliance from which the water or other substance escapes. This Coverage Extension does not increase the Limit of Insurance.

3. Glass

a. We will pay for expenses incurred to put up temporary plates or board up openings if repair or replacement of damaged glass is delayed.

b. We will pay for expenses incurred to remove or replace obstructions when repairing or replacing glass that is part of a building. This does not include removing or replacing window displays.

The Coverage Extension, F.3., does not increase the Limit of Insurance.

G. Definitions

1. “Fungus” means type or form of fungus, including mold or mildew, and any mycotoxins, spores, scents or by-products produced or released by fungi.

2. “Specified cause of loss” means the following: fire; lightning; explosion; windstorm or hail; smoke; aircraft or vehicles; riot or civil commotion; vandalism; leakage from fire-extinguishing equipment; sinkhole collapse; volcanic action; falling objects; weight of snow, ice or sleet; water damage.

a. Sinkhole collapse means sudden sinking or collapse of land into underground empty spaces

created by the action of water on limestone or dolomite. This cause of loss does not include:

- (1) The cost of filling sinkholes; or
- (2) Sinking or collapse of land into manmade underground cavities.

b. Falling objects does not include loss or damage to:

- (1) Personal property in the open; or
- (2) The interior of a building or structure, or property inside a building or structure, unless the roof or an outside wall of the

building or structure is first damaged by a falling object.

c. Water damage means accidental discharge or leakage of water or steam as the direct result of the breaking apart or cracking of a plumbing, heating, air conditioning or other system or appliance (other than a sump system including its related equipment and system including its related equipment and parts), that is located on the described premises and contains water or steam.

EXHIBIT E

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 20 37 04 13

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS
SCHEDULED PERSON – COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) and Description Of Completed Operations
Orange County Board of County Commissioners Procurement Division 400 E. South Street Orlando, FL 32801	
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule but only with respect to liability for “bodily injury”, or “property damage” caused, in whole or in part by “your work” at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the “products-completed operations hazard”.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by laws; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required

by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to Section III-Limits of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable Limits of Insurance shown in the Declarations; Whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

EXHIBIT F

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 20 10 04 13

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS-
SCHEDULE PERSON OR ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) Of Covered Operations
Orange County Board of County Commissioners Procurement Division 400 E. South Street Orlando, FL 32801	
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

<p>A. Section II – Who is An Insured is amended to include as an additional insured the person(s) or organizations(s) shown in the Schedule, but only with respect to liability for “bodily injury”, “property damage” or “personal and advertising injury” caused, in whole or in part, by:</p> <ol style="list-style-type: none"> 1. Your acts omissions; or 2. The acts or omissions of those acting on your behalf; <p>In the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.</p> <p>However:</p> <ol style="list-style-type: none"> 1. The insurance afforded to such additional insured only applies to the extent permitted by law; and 2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured. 	<p>B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:</p> <p>This insurance does not apply to “bodily injury” or property damage occurring after::</p> <ol style="list-style-type: none"> 1. All work , including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured (s) at the location of the covered operations has been completed; or 2. That portion of “your work” out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project. <p>C. With respect to the insurance afforded to these additional insureds, the following is added to Section III- Limits of Insurance:</p> <p>If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:</p> <ol style="list-style-type: none"> 1. Required by the contract or agreement; or 2. Available under the applicable Limits of Insurance shown in the Declarations; whichever is less. <p>This endorsement shall not increase the applicable Limits of</p>
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EXHIBIT G

WORKERS COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY WC 00 03 13
(Ed. 4-84)

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

Name of Person or Organization:

ORANGE COUNTY BOARD OF COUNTY COMMISSIONERS
PROCUREMENT DIVISION
400 E. SOUTH STREET
ORLANDO, FL 32801

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective Policy No. Endorsement No.

Insured

Insurance Company Countersigned by _____

WC 00 03 13

EXHIBIT H

POLICY NUMBER: _____

COMMERCIAL GENERAL LIABILITY
CG 24 04 0509

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies Insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:

ORANGE COUNTY BOARD OF COUNTY COMMISSIONERS
PROCUREMENT DIVISION
400 E. SOUTH STREET
ORLANDO, FL 32801

(Information required to complete this Schedule, if not shown above, will be shown in the Declarations.)

The following is added to Paragraph 8, Transfer of rights of Recovery Against Others To Us of Section IV – Conditions:

We waive any right to recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or “your work” done under a contract with that person or organization and included in the “Products-completed operations hazard”. This waiver applies only to the person or organization shown in the Schedule above.

IFB NO. Y15-750-CH

ISSUED: February 10, 2015

INVITATION FOR BIDS

FOR

**INTERNATIONAL DRIVE IMPROVEMENT PROJECT (FROM WESTWOOD BLVD.
SOUTH TO WESTWOOD BLVD. NORTH)**

PART G- SUPPLEMENTAL CONDITIONS/SPECIAL PROVISIONS

PERMITS

AND

PART H - TECHNICAL PROVISIONS (ROADWAY)

Volume II

PART G

SUPPLEMENTAL CONDITIONS / SPECIAL PROVISIONS

International Drive Roadway Improvements Project (Westwood Blvd. S. to Westwood Blvd. N.)
C.I.P. No 5107

SUPPLEMENTAL CONDITIONS

ARTICLE 1 – CONTRACT

GENERAL CONDITION, PART F, ARTICLE 1, CONTRACT, is appended as follows:

All specifications, drawings and copies thereof furnished by the COUNTY shall remain the property of the COUNTY. They shall not be used on another project and, with the exception of those sets, which have been signed in connection with execution of the Agreement, shall be returned to the COUNTY upon completion of the project.

Duties and obligations imposed by these General Conditions and the rights and remedies available hereunder, and, in particular but without limitation, the warrants, guarantees and obligations imposed upon the CONTRACTOR and the rights and remedies available to the COUNTY thereunder shall be in addition to and not a limitation of any otherwise imposed or available by law, by special guarantee or other provisions of Contract Documents.

This is a Unit Price Contract, and the base bid is the sum of all pay item totals. The COUNTY reserves the right to correct errors in the pay item totals arising from incorrect extensions. See Part C, Paragraph 5, "Bid Errors".

ARTICLE 2 - DEFINITIONS

GENERAL CONDITION, PART F, ARTICLE 2, DEFINITIONS, "**Specifications**", is appended as follows:

"**Specifications**" or "**Standard Specifications**" shall mean the 2013 edition of the Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction, and supplements thereto (unless otherwise noted), and the Orange County Road Construction Specifications latest edition as specified in the contract and/or contract documents and modified herein. In the event of a conflict between the FDOT Standard Specifications and the General Conditions or Supplemental Conditions provided in the Contract Documents, the Contract Documents shall prevail.

When reference is made to a Division, Section, or Article, it shall mean a Division, Section, or Article of said "Specifications" or "Orange County Road Construction Specifications", but shall not be construed to include the Division, Section or Article in its entirety unless so directed by the ENGINEER.

Each reference to Basis of Payment in said "Specifications" is superseded by the conditions contained in the Technical Provisions and all other conditions related to Basis of Payment contained in these specifications, unless otherwise directed by the Engineer.

GENERAL CONDITION, PART F, ARTICLE 2, DEFINITIONS, "**Project Manager**", is appended as follows:

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When references are made to PROJECT MANAGER, other terms that may be substituted / used are PROJECT ENGINEER, ENGINEER, PROJECT ADMINISTRATOR, and RESIDENT PROJECT REPRESENTATIVE.

ARTICLE 3 – NO ASSIGNMENT OF CONTRACT

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 4 – QUALIFICATIONS OF SUBCONTRACTORS AND SUPPLIERS

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 5 – STARTING THE WORK

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 6 – INTERPRETATION AND INTENT OF THE CONTRACT DOCUMENTS

GENERAL CONDITION, PART F, ARTICLE 6, INTERPRETATION AND INTENT OF THE CONSTRUCTION DOCUMENTS, is appended as follows:

The project shall be constructed in accordance with these Supplemental Conditions, Special Provisions and the Florida Department of Transportation (FDOT) "Standard Specifications for Road and Bridge Construction," 2013 edition, the "Supplemental Specifications for Road and Bridge Construction," 2013 edition, and the "Orange County Road Construction Specifications," latest edition, hereafter referred to as the "Specifications".

Wherever the terms "APPROVE", "APPROVED", "APPROVAL", "ACCEPT", "ACCEPTED", "ACCEPTANCE" or other derivations of these terms are used within these specification or references therein in the context of actions to be taken by the COUNTY or its representatives with respect to submittals made by, or work performed by the CONTRACTOR, they shall mean that the COUNTY or its representative finds no exception with the submittal or the work provided/performed by the CONTRACTOR. Acceptance or approval by the COUNTY or its representative shall NOT relieve the CONTRACTOR of any responsibility for conformance to the intent of the plans and specifications, for the accuracy of dimensions and details, for conformity of dimensions and details, or for adherence to generally accepted engineering and construction practices.

ARTICLE 7 – REFERENCE POINTS

GENERAL CONDITION, PART F, ARTICLE 7, REFERENCE POINTS, "Reference Points" is appended as follows:

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General: The CONTRACTOR shall employ a Professional Surveyor and Mapper (PS&M), registered in the State of Florida and satisfactory to the COUNTY, to lay out the work for bench marks, points and lines noted on the Contract Documents, established at the site, or supplied by the COUNTY. The CONTRACTOR shall provide to the COUNTY at the pre-construction conference, the name of the Professional Surveyor and Mapper to perform Project survey work. All work of every description shall be laid out and checked by the CONTRACTOR who will be held solely responsible for its correctness.

Work may be checked by the PROJECT MANAGER and, in the event of a discrepancy, the PROJECT MANAGER'S decision shall be final.

No special compensation will be made to the CONTRACTOR to defray costs of surveys and measurements, but such costs shall be considered as having been included in the price stipulated for the several items of work to be done under this contract.

Prior to the beginning of any construction the CONTRACTOR shall submit to the COUNTY a set of field notes verifying the existing benchmark elevations relative to the reference benchmarks shown on the construction plans. The CONTRACTOR shall also verify ties from project control points to reference points as shown on the construction plans. A set of field notes for all additional benchmark and reference point ties shall be submitted to the PROJECT MANAGER. All submittals shall be signed and sealed by a Professional Surveyor and Mapper registered in the State of Florida.

Within twenty-one (21) calendar days after receiving the Notice to Proceed, the CONTRACTOR shall have a licensed Professional Surveyor and Mapper establish in the field the proposed roadway centerline, right-of-way and construction easements using wooden 1" X 4" X 4'0" stakes at a maximum spacing of 100 feet. Stations shall be marked on each stake and shall be of sufficient size and clarity that they can be easily read by the unaided eye at a distance of 150 feet. Right-of-way and construction easement staking shall be maintained by the CONTRACTOR throughout construction. No invoice for payment will be processed until the right-of-way has been staked to the satisfaction of the ENGINEER. Payment is included in the price for bid item number 101-1 "Mobilization". The CONTRACTOR shall pay all expenses in connection with this work.

All survey work shall comply with Chapter 5J-17, Florida Administrative Code (F.A.C.), regarding minimum technical standards for land surveying in the State of Florida.

The CONTRACTOR shall perform all calculations required, and set all stakes needed such as grade stakes, offset stakes, reference point stakes, slope stakes, and other reference marks or points necessary to provide lines and grades for construction of all roadway, bridge, and miscellaneous items.

When performing utility construction as part of the project, the CONTRACTOR will establish all horizontal and vertical controls necessary to carry out such work.

Specific Staking Requirements: When performing new base construction as part of the project, the CONTRACTOR shall set stakes to establish lines and grades for subgrade, base, curb, and related items at intervals along the line of the work no greater than 50 feet on tangents and 25 feet on curves. The CONTRACTOR shall set grade stakes at locations that the Engineer

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directs to facilitate checking of subgrade, base, and pavement elevations in crossovers, intersections, and irregular shaped areas.

For bridge construction stakes and other control, the CONTRACTOR shall set references at sufficiently frequent intervals to ensure construction of all components of a structure in accordance with the lines and grades shown in the plans.

For projects where the plans do not show a centerline or other survey control line for construction of the work (resurfacing, safety modifications, etc.), the CONTRACTOR shall provide only such stakes as necessary for horizontal and vertical control of work items.

For resurfacing and resurfacing-widening type projects, the CONTRACTOR shall establish horizontal controls adequate to ensure that the asphalt mix added matches with the existing pavement. In tangent sections, set horizontal control points at 100 foot intervals by an instrument survey. In curve sections, set horizontal control points at 25 foot intervals by locating and referencing the centerline of the existing pavement.

The CONTRACTOR shall establish by an instrument survey, and mark on the surface of the finished pavement at 25 foot intervals, the points necessary for striping of the finished roadway. As an exception, for resurfacing and resurfacing/widening projects, the CONTRACTOR shall establish these points in the same manner as used for horizontal control of paving operations. The CONTRACTOR shall mark the pavement with white paint. If performing striping, the PROJECT MANAGER may approve an alternate method for layout of striping provided that the CONTRACTOR achieves an alignment equal to or better than the alignment that would be achieved using an instrument survey.

For projects that include temporary or permanent striping of "no passing zones", the CONTRACTOR shall provide the location and length of these zones as shown in the plans, except projects where the vertical or horizontal alignment is new or altered from the preconstruction alignment. For projects that consist of new or altered vertical or horizontal alignment, the COUNTY will provide the location and length of the "no passing zones" during construction. For these projects, the CONTRACTOR shall notify the PROJECT MANAGER not less than 21 calendar days prior to beginning striping.

Benchmarks: During construction the CONTRACTOR shall provide a Control Point Metal Disk set in concrete (e.g. in headwalls, back of sidewalks, back of inlets, etc.) at the beginning and end of the project and at a maximum of 1100 feet between existing or established benchmarks along the project alignment. The CONTRACTOR'S Professional Surveyor and Mapper (PS&M) shall conduct a three wire leveling run through the benchmarks based on Orange County Datum NAVD88 (or other datum as specified on the Engineering plans). The level work will be performed to Second Order, Class II standards (or better) and the maximum allowable error will be no more than 8 mm times the square root of "K", where "K" is the total distance in kilometers. This is also approximately equivalent to 0.035 feet times the square root of "K", where "K" is the total distance in miles. The level run will be performed with a geodetic automatic level or better whose three wires will be read to 0.001 meters or 0.001 feet. Invar rods are preferred but not required. Digital automatic levels with associated bar code rods are also acceptable. Prior to the issuance of final completion, the CONTRACTOR shall submit a copy of

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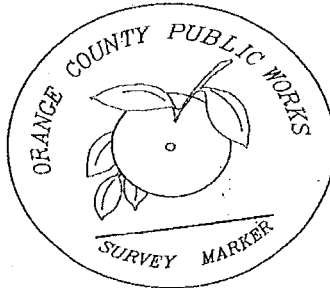
SUPPLEMENTAL CONDITIONS / SPECIAL PROVISIONS

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the field notes certified by the PS&M to the PROJECT MANAGER. Benchmark elevations shall be expressed in English units.

Orange County survey monuments shall be aluminum or brass stamped as shown on the attached sketch. The contractor shall procure the monuments from any commercial supplier of survey monuments. The contractor is advised that the County obtains its monuments from Berntsen International, Inc.; www.berntsen.com Berntsen disc no. C35D-(3-1/2" domed) Logo no. B9119 (800-356-7388).



Control Points: At the end of construction, all permanent control points as shown on the construction plans survey control sheet shall be set along the centerline of construction. Permanent control points that fall on a hard surface such as pavement or concrete shall be set as p.k. nails and discs or other form of monumentation that is both durable and identifiable and must be approved by the County Surveyor or authorized agent. All others shall be 4" x 4" concrete monuments having a minimum of 24" in length. All points shall be marked with a cap or disk bearing the surveyor's registration number.

Property Corners: Property corners shall be set at intersections of right-of-way lines and property lines (at all corners that have been destroyed during construction for all Orange County construction projects). Monumentation meeting the requirements described above under "Control Points" shall be set at all breaks in right-of-way lines, P.C.'s, P.T.'s, curve intersections and at least every 1,000 feet along the right-of-way line and shall bear the registration number of the surveyor.

Public Land Corners: All public land corners within the limits of construction shall be protected. If a corner monument is in danger of being destroyed or disturbed, the CONTRACTOR shall notify the PROJECT MANAGER, and the COUNTY SURVEYOR, without delay, by telephone. The CONTRACTOR shall provide written follow-up confirmation within forty-eight (48) hours of telephone notification. In the event that a land corner is disturbed or damaged it will be reset with a 4" x 4" concrete monument, which shall be protected in a cast iron valve box, if in pavement.

Prior to the issuance of final completion, the CONTRACTOR shall submit certified corner records, prepared by a Professional Surveyor and Mapper, for all altered, reset and/or relocated

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public land corners to the Florida Department of Environmental Protection, Bureau of Survey and Mapping, in accordance with the requirements of Chapter 177.507 of the Florida Statutes. A certified copy shall also be provided to the PROJECT MANAGER. Furthermore, the Professional Surveyor and Mapper will note on the AS-BUILT PLANS the location of all corners set or found and submit copies of all field notes to the County Surveyor or his/her agent.

National Geodetic Survey (N.G.S.) / United States Coast & Geodetic Survey (U.S.C. & G.S.) Monuments: The CONTRACTOR shall immediately notify the PROJECT MANAGER of any N.G.S. / U.S.C. & G.S. monuments which may be in danger of being disturbed. For instructions on how to relocate any N.G.S. monuments the CONTRACTOR shall notify in writing:

State Geodetic Advisor
Bureau of Surveying and Mapping
3900 Commonwealth Blvd., Suite 105
Tallahassee, FL 32399-3000
Phone: (850) 245-2606
Fax: (850) 245-2645

Orange County Surveyor
Engineering Division, Public Works Dept
4200 S. John Young Parkway
Orlando, FL 32839-9205
Phone: (407) 836-7941
Fax: (407) 836-8024

The CONTRACTOR shall bear all costs of establishing, relocating or re-establishing all disturbed N.G.S. monuments, public land corners, property corners, or right-of-way monuments.

The complete survey field book shall be submitted to the County Surveyor concurrently with the submission of the CONTRACTOR'S requisition for final payment. When a data collector is used, the CONTRACTOR shall submit a paper copy of the raw data files bound in a book, together with the electronic copy on a disk.

ARTICLE 8 – BONDS, INSURANCE AND INDEMNIFICATION

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 9 – CONTRACTOR'S RESPONSIBILITIES

GENERAL CONDITION, PART F, ARTICLE 9, CONTRACTOR'S RESPONSIBILITIES, "Supervision and Superintendence", second paragraph, is appended as follows:

The CONTRACTOR shall provide a competent superintendent at the site at all times while work is in progress to act as the CONTRACTOR'S agent. The superintendent shall be capable of properly interpreting the Contract Documents, have sufficient experience in highway/street construction, and be able to speak and understand English. The superintendent shall have full authority to receive instructions from the PROJECT MANAGER and to execute the orders or directions of the PROJECT MANAGER, including promptly supplying any materials, tools, equipment, labor, and incidentals that may be required. The CONTRACTOR shall furnish the

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qualifications of the proposed superintendent to the PROJECT MANAGER at the preconstruction conference. The COUNTY shall be the sole determiner of whether or not the experience of the superintendent is sufficient for the purposes of this paragraph. At least one other responsible person who speaks and understands English shall be on the project during all working hours.

GENERAL CONDITION, PART F, ARTICLE 9, CONTRACTOR'S RESPONSIBILITIES, "**Supervision and Superintendence**", is appended as follows:

Supervision for Emergencies: A responsible person, who speaks and understands English, shall be available at or reasonably near the worksite on a 24 hour basis, seven days a week. This person shall be designated as the point of contact for emergencies and in cases that require immediate action to maintain traffic or to resolve any other problem that might arise. A list of the phone numbers and names of personnel designated to be contacted in cases of emergency, along with a description of the project location, shall be submitted, by certified mail, to the Florida Highway Patrol and all other local law enforcement agencies.

GENERAL CONDITION, PART F, ARTICLE 9, CONTRACTOR'S RESPONSIBILITIES, "**Permits**", is appended as follows:

Certifications/Permit Compliance: The CONTRACTOR shall prepare and submit all certifications required by regulatory agencies having jurisdiction over the project, including engineer's certifications and as-built drawings required by the Water Management District(s) and Florida Department of Transportation. The final 5 percent retainage shall not be released, and/or the final pay request shall not be accepted until all required certifications have been submitted and accepted by the regulatory agencies.

GENERAL CONDITION, PART F, ARTICLE 9, CONTRACTOR'S RESPONSIBILITIES, "**Record Drawings**", is appended as follows:

As-Built Plans: AS-BUILT PLANS shall be used for no other purpose than recording changes, shall be updated at least once weekly, and stored separate and apart from plans used on a routine basis. They shall show locations and elevations of paving, swales, ditches, pipes and structures constructed and all relocated or reset property corners, section corners and ¼ section corners. The AS-BUILT PLANS shall be available to the PROJECT MANAGER upon request. Upon the completion of the project the CONTRACTOR shall submit to the PROJECT MANAGER three sets of signed and sealed AS-BUILT PLANS and PDF file on CD. These AS-BUILT PLANS shall delineate all revised information in bold notation.

DELIVERABLES AS FOLLOWS:

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- A paper copy of the plans available at all times at the job site during the entire duration of the project marked up in red by the CONTRACTOR, and showing all deviations from the design locations and elevations.
- The CONTRACTOR shall submit an updated copy (paper or pdf file on CD) of the red line As-Built Plan concurrent with each application for progress payment. The update red line As-Built Plan shall focus on the period from the last red line As-Built Plan to the current red line As-Built Plan submitted with the application for progress payment. The updated red line As-Built Plan shall be reviewed and approved by the Orange County Inspector prior to the CONTRACTOR'S submittal. The CONTRACTOR'S failure to submit an updated copy (paper or pdf file on CD) of the red line As-Built Plan as described herein with an application for progress payment shall be sufficient reason for rejection of the progress payment request. Should the Project Manager reject the updated red line As-Built Plan submitted, the entire progress payment request shall be rejected and must be resubmitted.
- A PDF file of the "As-Built Plans" prepared by an appropriately licensed professional on a CD of the construction drawings showing the design horizontal location and elevation of all facilities constructed or incorporated into the project with changed values struck through with a single line to maintain legibility and the new value added. Facilities constructed in a modified fashion from that shown on the construction plans shall be shown and identified in their originally designed and final as-constructed configurations. Facilities added shall be shown and identified.
- One (1) paper copies of the "As-Built Plans", as described below, signed and sealed by the appropriately licensed professional that prepared them

Upon the completion of the project the CONTRACTOR shall submit the AS-BUILT PLANS as an electronic file in PDF format and (1) One, (see above) - 24"x36" paper Full Size Drawings which shall have Statements of Certification certifying that the project was constructed according to the Construction Plans and Specifications, and that the AS-BUILT PLANS are a correct representation of what was constructed. The CONTRACTOR shall include the Statement of Certification on either the cover sheets of the AS-BUILT PLANS certifying all of the sheets or certify each individual sheet. The Statements of Certification shall be signed and sealed by a Professional Engineer and/or a Professional Surveyor and Mapper, both registered in the State of Florida.

The CONTRACTOR'S failure to maintain current and accurate AS-BUILT PLANS may result in withholding payments to cover costs of obtaining and recording information sufficient to fully document construction varying from the bid documents. The COUNTY'S cost, including consultant fees, of obtaining as-built information will be deducted from the contract amount. The CONTRACTOR'S request for final payment shall be accompanied by one complete, legible set of AS-BUILT PLANS and PDF file on disc. The cost of the AS-BUILT PLANS and pdf file shall be included in the pay item 900-1, As Built Plans – Lump Sum. This cost covers roadway

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bid items only and does not cover the Orange County Utilities or other third party AS-BUILT PLANS.

GENERAL CONDITION, PART F, ARTICLE 9, CONTRACTOR'S RESPONSIBILITIES, "**Safety And Protection**", is appended as follows:

Protection of Property: The CONTRACTOR shall be responsible for any damage whatsoever whether occurring within or outside of the boundaries of the PROJECT including any property adjacent to the PROJECT when such damage is caused in whole or in part by any act of the CONTRACTOR or any employee, agent or subcontractor working under, with or in privity to the CONTRACTOR. The CONTRACTOR and all the aforementioned parties shall stay off private property adjacent to the PROJECT unless the CONTRACTOR receives from the affected property owner a written release, which specifically releases the COUNTY from any liability for any damage to such property caused by any acts other than those of the COUNTY. This written release must be acceptable in form to the PROJECT MANAGER and delivered to and accepted by the PROJECT MANAGER before the CONTRACTOR makes any entry upon such private property. The CONTRACTOR shall also obtain all necessary permits and approvals from all regulatory agencies for all activities to be conducted by the CONTRACTOR on the private property. Necessary approvals may include, but are not limited to the United States Army Corps of Engineers, the United States Environmental Protection Agency, the Florida Department of Environmental Protection, the Florida Department of Transportation, the applicable Water Management District, the Orange County Environment Protection Division (EPD), and applicable municipal agencies for properties located within incorporated areas. The CONTRACTOR shall provide written documentation to the PROJECT MANAGER of the necessary approvals and permits having been obtained.

At the preconstruction conference, CONTRACTOR shall submit to the PROJECT MANAGER a current aerial map (11" x 17" minimum size) depicting at a minimum the temporary staging area including property lines, easement lines, and right-of-way lines. The PROJECT MANAGER will submit the aerial map to the Manager of the Orange County Environmental Protection Division (EPD) with a request to perform a cursory review of the CONTRACTOR'S proposed temporary staging area. Within 30 calendar days of receipt of the request, EPD will provide a summary to the PROJECT MANAGER of any natural resource issues or concerns that occur on the site for the CONTRACTOR'S consideration. CONTRACTOR is hereby notified that the proposed temporary staging area shall not be utilized until such time as EPD completes their cursory review and all other items within the contract documents pertaining to the temporary staging area are satisfied. No additional time or special compensation will be made to the CONTRACTOR to defray costs of any of the work or delays for complying with the requirements of the above.

GENERAL CONDITION, PART F, ARTICLE 9, CONTRACTOR'S RESPONSIBILITIES, is appended as follows:

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Site Investigation: The CONTRACTOR shall be responsible for satisfactorily determining, prior to the submission of a bid, the nature and location of the work, the conformation of the ground, the character and quality of the substrata, the types and quantity of materials to be encountered, the nature of the groundwater conditions and all other matters which can in any way affect the work under this contract. The prices established for the work to be done will reflect all costs pertaining to the work. Any claims for extras based on substrata or groundwater table conditions will not be allowed.

Information available to the COUNTY on subsoil conditions is available to bidders as information only and solely for the convenience of bidders. The COUNTY does not warrant or guarantee the accuracy or correctness of this information with respect to actual subsurface conditions. The CONTRACTOR agrees that he will make no claims against the COUNTY if, in carrying out the work, he finds that actual conditions encountered do not conform to those indicated.

Information shown on the plans as to the location of existing utilities has been prepared from the most reliable data available to the Engineer. This information is not guaranteed, however, and it shall be the CONTRACTOR'S responsibility to determine the location, character and depth of any existing utilities and to assist the utility companies, by every means possible, to determine said locations. Extreme caution shall be exercised to eliminate any possibility of any damage to utilities resulting from the CONTRACTOR'S activities.

Unless otherwise noted, the CONTRACTOR will take ownership of all materials encountered which are designated to be removed or not incorporated into the Work, such as paving materials, paving brick, asphalt block, RAP/Milled material, concrete slab, sidewalk, curb and gutter, pipe materials, etc., excavated in the removal of existing pavements, and dispose of them outside of the right-of-way. Payment for this item shall be included in Pay Item No. 110-1 Clearing and Grubbing.

GENERAL CONDITION, PART F, ARTICLE 9, CONTRACTOR'S RESPONSIBILITIES, "Use of Public Roads and Streets", is added as follows:

Use of Public Roads and Streets: Use of public streets shall be such as to provide a minimum of inconvenience to the public and to traffic. Any earth or excavated material spilled from trucks shall be removed by the CONTRACTOR and streets cleaned to the satisfaction of the PROJECT MANAGER. Cleaning may include street sweeping and/or washing, if so directed by the PROJECT MANAGER.

The CONTRACTOR shall provide vehicular access to each residence, subdivision and other public roads at all times.

GENERAL CONDITION, PART F, ARTICLE 9, CONTRACTOR'S RESPONSIBILITIES, "Care of trees, Shrubs and Grass", is added as follows:

Care of trees, Shrubs and Grass: The CONTRACTOR shall be fully responsible for maintaining in good condition all cultivated grass plots, trees and shrubs beyond the grading

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limits of this Contract. After completion of the work, the CONTRACTOR shall replace or restore to the original condition all destroyed or damaged shrubbery or grass areas. Tree limbs, which interfere with equipment operation and are approved for pruning, shall be neatly trimmed and the tree cut coated with tree paint.

GENERAL CONDITION, PART F, ARTICLE 9, CONTRACTOR'S RESPONSIBILITIES, "Use of Explosives", is added as follows:

Use of Explosives: No blasting shall be done except upon approval by the COUNTY and the governmental agency or political subdivision having jurisdiction. When the use of explosives is approved by the COUNTY as necessary for the execution of the work, the CONTRACTOR shall use the utmost care so as not to endanger life or property, and assume responsibility for any such damage resulting from his blasting operations, and whenever directed, the number and size of the charges shall be reduced.

All explosives shall be stored in a secure manner and all such storage places shall be clearly marked, "DANGER EXPLOSIVES" and shall be in care of competent watchmen. All permits required for the use of explosives shall be obtained by the CONTRACTOR at his expense. All requirements of the governmental agency issuing permit shall be observed.

GENERAL CONDITION, PART F, ARTICLE 9, CONTRACTOR'S RESPONSIBILITIES, "Damage to Existing Structures and Utilities", is added as follows:

Damage to Existing Structures and Utilities: The CONTRACTOR shall be responsible for and make good all damage resulting from his activities, both within and beyond the limits of this contract, to buildings, telephone, power or other cables, water pipes, storm sewer facilities, sanitary pipes, gas lines, traffic signalization, or other utilities or structures, which may be encountered, whether or not shown on the plans.

GENERAL CONDITION, PART F, ARTICLE 9, CONTRACTOR'S RESPONSIBILITIES, "Cleaning Up", is appended as follows:

Final Clean Up: The entire street shall be cleaned by sweeping or washing, as determined by the PROJECT MANAGER, prior to final acceptance.

ARTICLE 10 – WORK BY OTHERS AND UTILITY COORDINATION

GENERAL CONDITION, PART F, ARTICLE 10, WORK BY OTHERS, is appended as follows:

The CONTRACTOR shall cooperate with owners of any underground or overhead utilities in their removal and relocation operations, in order that these operations may progress in a timely, reasonable and orderly manner and that service rendered by these parties will not be interrupted.

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Excavators shall comply with Florida Statutes, Chapter 553.851, regarding notification of existing gas and oil pipeline company owners prior to excavating. **Evidence of such notice shall be furnished to the PROJECT MANAGER prior to excavating.** During the period of this contract the CONTRACTOR shall coordinate all utility relocations and adjustments necessary for the project. The CONTRACTOR shall conduct meetings weekly or at a frequency approved by the Engineer with all affected Utility Owners, and the minutes of those meetings shall be distributed to each Utility owner, the PROJECT MANAGER, and any other affected entity. The CONTRACTOR shall incorporate the durations listed in the Utility Relocation Schedules into his Contract Schedule, and transmit copies of that schedule to each Utility owner. The CONTRACTOR shall constantly communicate the status of the progress of the project to the Utility Owners, and advise them of any potential impacts to the progress due to the presence of the utilities. The CONTRACTOR shall keep the COUNTY and the County's PROJECT MANAGER apprised of all developments related to Utility Relocation and job progress. The CONTRACTOR shall coordinate during the period of this contract with the applicable lighting facility owners for the installation of roadway lighting facilities for the project. CONTRACTOR shall not be entitled to additional compensation from COUNTY as a result of failure of any utility to remove, relocate, or install their facilities within any particular time frame.

ARTICLE 11 – PROJECT OWNER STATUS DURING CONSTRUCTION

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 12 – CHANGES IN THE WORK

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 13 – CHANGE OF CONTRACT AMOUNT AND CONTRACT TIME

GENERAL CONDITION, PART F, ARTICLE 13, CHANGE OF CONTRACT AMOUNT AND CONTRACT TIME, is appended as follows:

The number of days of any change to the contract time incorporated by Change Order shall be applied to both the Substantial Completion time and the Final Completion time, unless otherwise established by the COUNTY in these specifications.

ARTICLE 14 – CONDITION OF MATERIALS AND PACKAGING

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 15 – ASBESTOS FREE MATERIALS

No changes. See PART F GENERAL CONDITIONS.

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ARTICLE 16 – WARRANTY AND GUARANTEE, ACCEPTANCE OF DEFECTIVE WORK

GENERAL CONDITION, PART F, ARTICLE 16, WARRANTY AND GUARANTEE, ACCEPTANCE OF DEFECTIVE WORK, “**Tests and Inspections**”, is appended as follows:

The cost of laboratory testing routinely performed on the job site or subsequent to samples typically retrieved from the job site, shall be borne by the COUNTY, except for testing called for in the Technical Provisions to be provided by the CONTRACTOR. Concrete and Soil-Cement mix design, and groundwater testing costs shall be borne by the CONTRACTOR.

All testing, except Soil-Cement testing, shall be in accordance with the applicable portions of Division I, Section 6 of the STANDARD SPECIFICATIONS. Soil-Cement testing shall be in accordance with Part H, Technical Provision 270 (TP-270).

The Record Laboratory is the testing laboratory contracted by the COUNTY. Only results of testing by the Record Laboratory shall be considered in evaluating the CONTRACTOR'S compliance with contract requirements.

The CONTRACTOR may be required to reimburse the COUNTY for the cost of all failed tests, including consultant fees, when the percentage of failed tests exceeds 15% of all tests taken. At the COUNTY'S discretion these costs may be deducted from the contract amount.

ARTICLE 17 – DELAYS AND EXTENSION OF TIME

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 18 – PAYMENT AND COMPLETION

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 19 – SUSPENSION OF WORK AND TERMINATION

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 20 – MAINTENANCE AND EXAMINATION OF RECORDS

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 21 – MINORITY/WOMEN OWNED BUSINESS ENTERPRISE REQUIREMENTS AND SMALL BUSINESS PROVISIONS

No changes. See PART F GENERAL CONDITIONS.

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ARTICLE 22 – FEDERAL REQUIREMENTS

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 23 – VERBAL ORDERS

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 24 – MISCELLANEOUS

GENERAL CONDITION, PART F, ARTICLE 24, MISCELLANEOUS, is appended as follows:

Whenever any provision of the Contract Documents requires giving of notice by the COUNTY, it shall be deemed to have been validly given if delivered in person to the individual, to a member of the firm or to an officer of the corporation for whom it is intended, or if sent by registered or certified mail (postage prepaid) and delivered to the last business address known to the COUNTY.

ARTICLE 25 – CONTRACT CLAIMS

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 26 – VALUE ENGINEERING

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 27 – PATENTS AND ROYALTIES

No changes. See PART F GENERAL CONDITIONS.

ARTICLE 28, PROSECUTION AND PROGRESS OF WORK, is added as follows:

ARTICLE 28 - PROSECUTION AND PROGRESS OF WORK

Submission of Working Schedule: The CONTRACTOR shall provide a schedule that shows the various activities of work in sufficient detail to demonstrate a reasonable and workable plan to complete the project within the established Contract Time. The order and interdependence of activities and the sequence for accomplishing the work shall be shown. All activities shall be described in sufficient detail so that the COUNTY can readily identify the planned work and measure the progress of each activity. Each activity will be shown with a beginning work date, duration, and monetary value.

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Activities for the procurement, fabrication, and/or delivery of materials, batch plants, and equipment shall be included.

Activities for the review of shop drawings and submittals shall be included.

Activities indicating coordination with utility owners that have facilities within the limits of construction requiring adjustment or relocation shall be included.

Milestone activities, when required by the Contract Documents, shall be included.

In a project with more than one phase, each phase and its completion date shall be adequately identified. Activities will not be allowed to span more than one phase.

The CONTRACTOR shall submit a narrative with the schedule, consisting of a concise written description of the construction plan.

An updated Work Progress Schedule shall be submitted monthly to the COUNTY. All changes in the planned order start or finish dates, or duration of an activity will be applied.

A revised Work Progress Schedule shall be submitted to the COUNTY for acceptance when significant changes are made to the logic or durations of the activities. The COUNTY will review the corrected schedule and respond within 7 calendar days of receipt.

The COUNTY will return inadequate schedules to the CONTRACTOR for corrections. A corrected schedule will be resubmitted within 15 calendar days from the date of the COUNTY's return transmittal. By acceptance of the schedule, the COUNTY does not endorse or otherwise certify the validity or accuracy of the activity durations or sequencing of activities.

The COUNTY will use the initially accepted schedule as the baseline against which to measure progress and identify critical activities that are controlling items of work.

If the CONTRACTOR fails to finalize either the initial or a revised schedule in the time specified, the COUNTY will withhold all Contract payments until the schedule is accepted.

Work Hours: Project work hours shall be between 7:00 AM and 6:00 PM Monday through Friday, exclusive of normal Orange County holidays, unless approved otherwise by the PROJECT MANAGER. The CONTRACTOR shall request approval from the PROJECT MANAGER at least 72 hours in advance for work outside those hours. Work before 7:00AM or after 3:30PM, or on days other than the above described normal work days, and requiring the presence of the COUNTY'S RESIDENT PROJECT REPRESENTATIVE shall require that the CONTRACTOR reimburse the COUNTY for the salary and overtime cost of the RESIDENT PROJECT REPRESENTATIVE. Reimbursement shall be made by the CONTRACTOR at the rate of \$44.00 per hour by check payable to the Board of County Commissioners accompanying each monthly pay request. Each pay request shall include a tabulation of the overtime dates, times, hours and costs for the preceding month. The amount of the check must agree with the tabulated total. In the event the CONTRACTOR chooses to not submit a pay request when normally due for work he has completed, the CONTRACTOR shall submit a pay request showing that no payment is due to him, and shall include the tabulation of the overtime worked during the preceding month. Payment must be made for overtime work performed to address emergencies outside the above described normal working hours, unless the RESIDENT PROJECT REPRESENTATIVE determines, at his or her sole discretion that the emergency is the result of actions by third parties.

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Compliance with Time Requirements: The CONTRACTOR shall commence work in accordance with the accepted Work Progress Schedule and provide sufficient labor, materials and equipment to complete the work within the time limit(s) set forth. Should the CONTRACTOR fail to furnish sufficient and suitable equipment, forces, and materials, as necessary to prosecute the work in accordance with the accepted schedule, the COUNTY may withhold all estimates that are, or may become due, and/or suspend the work until the CONTRACTOR corrects such deficiencies.

Video Survey: The CONTRACTOR shall submit a quality video documenting before and after construction field conditions for the entire project. The PROJECT MANAGER will approve all views.

Payment for this item will be included in other items of work.

Project Progress Aerial Photographs: The CONTRACTOR shall submit aerial photographic prints monthly with progress payment requests. The first set of aerial photographic prints must be taken prior to any clearing and grubbing. The aerial photographs shall be in color and at least 11" x 14" (280 mm x 356 mm) in size. Exposures shall be made at 10 per mile (10 per 1.6 km) minimum plus one exposure for each offsite construction area. The PROJECT MANAGER will approve all views.

Payment for this item will be included in other items of work.

ARTICLE 29, METHOD OF MEASUREMENT, is added as follows:

ARTICLE 29 - METHOD OF MEASUREMENT

All measurements for payment shall be based on the completed work performed in strict accordance with Contract Documents. All work completed under this contract shall be measured by the CONTRACTOR or his representatives in the presence of the PROJECT MANAGER.

THIS ENDS THE SUPPLEMENTAL CONDITIONS

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1. **ROADWAY IMPROVEMENTS:** This project consists mainly of the widening of International Drive from south of Westwood Boulevard South to north of Westwood Boulevard North. Other improvements include drainage, signalization and signing upgrades. Roadway improvements are also being conducted on Central Florida Parkway, Sea Harbor Drive, Westwood Boulevard North and the SR 528 Eastbound on ramp.
2. **CONSTRUCTION SCHEDULE / LIQUIDATED DAMAGES:** This work requires Substantial Completion in 600 days from the date of the Delivery Order with Final Completion in 660 days. If substantial and final completion is not met by the required time, liquidated damages will be applied at the rate of \$3300.00 per day as per the provisions in the Contract governing liquidated damages.
3. **UTILITY IMPROVEMENTS:** This project is being constructed alongside Orange County Utilities project. Refer to the Separate Utilities Plans for additional information. Orange County Utilities will provide the CONTRACTOR with the Florida Department of Environmental Protection utilities permit at the Pre-Construction conference.
4. **UTILITY COORDINATION:** The CONTRACTOR is to coordinate any utility improvements and / or relocations for this project. The CONTRACTOR shall not use utility delays as a basis for additional compensation or time. Contractor shall be responsible for all coordination with utilities and shall cooperate fully with utility companies in the relocation of their facilities.
5. **RIGHT-OF-WAY / PARCEL CONSIDERATIONS:** The CONTRACTOR shall exercise utmost care to ensure that no construction activities occur outside the County's existing right-of-way. Certain restrictions and/or considerations apply to the use of the following parcels:
 - The CONTRACTOR shall obtain a Right-of-Entry from the property owner or request one from the County prior to working on these parcels. If the CONTRACTOR is not permitted to enter the property then the CONTRACTOR will match grade and/or cease work at the right-of-way line in the areas identified as Temporary Construction Easements at the locations listed below.
 - Sta. 313+80LT, (Parcel 7028A),
 - Sta. 315+50LT, (Parcel 7028B),
 - Sta. 315+80LT, (Parcel 7029),
 - Sta. 76+80RT, (Parcel 7037), and
 - Sta. 71+20RT (Parcel 7039)

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- No special compensation will be made to CONTRACTOR to defray the costs of complying with the above mentioned right-of-way/parcel considerations as such costs shall be considered to have been included in the price stipulated for the several items of work to be done under this contract.
- 6. MAINTENANCE OF TRAFFIC:** At the pre-construction conference the CONTRACTOR shall submit a detailed Maintenance of Traffic plan approved by Orange County, Traffic Engineering to the Orange County Highway Construction Division. The Maintenance of Traffic plan shall address the maintenance of vehicular and pedestrian traffic between the limits of construction, as well as providing business signage for all businesses along the corridor, and must be signed and sealed by a Professional Engineer registered in the State of Florida. The cost of preparing this plan shall be included in Pay Item 102-1, Maintenance of Traffic. The attached Maintenance of Traffic plans provided by the COUNTY is for reference and guidance only. CONTRACTOR shall not be entitled to any additional compensation or time as a result of the Maintenance of Traffic plan he/she chooses to use, whether or not he/she prepared such plan.
- The CONTRACTOR shall provide uniformed off-duty law enforcement officer(s) for all night time lane closures. The Cost shall be included in pay item number 102-1, Maintenance of Traffic.
- The construction plans prepared by the Orange County Utilities (OCU) include Maintenance of Traffic (MOT) plans required for construction of their facilities. All the MOT costs related to the OCU's work shall be included in the pay item number OCU-57 (Utility Maintenance of Traffic).
- 7. PEDESTRIAN WALKWAY:** The CONTRACTOR shall provide and maintain a safe walkway for pedestrians along the limits of the project and for the entire project duration. The cost will be included under Pay Item 102-1 Maintenance of Traffic.
- 8. LANDSCAPE ESTABLISHMENT AND MAINTENANCE:** The Landscape CONTRACTOR shall begin daily maintenance immediately after each item is planted and continue daily maintenance through the 12-month maintenance period as defined in the specifications of the Contract. The Landscape Contractor shall provide Landscape Maintenance in accordance with the attached "Landscape Establishment and Maintenance", which is part of this contract. The 12-month maintenance period shall begin immediately after Final Inspection and Acceptance is completed. The cost of maintaining the landscape including all work and incidental costs shall be included in the price stipulated for in Pay Item 580-3-1, Landscape Items.
- 9. LANDSCAPE AND MITIGATION RETAINAGE:** Retainage held for the roadway construction portion of the project (excluding landscaping maintenance costs and

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mitigation) shall be released upon issuance of final completion for the roadway construction and submittal of a final pay request for the roadway construction. The final pay request shall provide all documentation identified within the contract documents. Retainage shall be held for the work completed under the landscaping maintenance item and the Mitigation Monitoring/Reporting pay items through the prescribed maintenance and monitoring period respectively. Upon successful completion of the landscaping maintenance work and the mitigation monitoring, the retainage shall be released upon receipt of a final pay request for landscape maintenance and mitigation monitoring along with all required documentation identified in the contract documents.

10. DEWATERING.

- A. General:** The CONTRACTOR is responsible to obtain or modify, as necessary, any and all dewatering permits required by the STATE and COUNTY agencies. No special compensation will be made to the CONTRACTOR to defray the cost of dewatering; to obtain a permit to treat and discharge the contaminated ground water; to provide water quality treatment or to abide by any dewatering permits, as such costs shall be considered to have been included in the price stipulated for the several items of work to be done under this contract. During construction, the CONTRACTOR is responsible to take corrective action and to make necessary schedule adjustments without additional compensation, to adequately address dewatering activities, regardless of storm or rain event so that the project is not delayed and dewatering water is disposed of in accordance with the permit. The CONTRACTOR is responsible to comply with the conditions of the dewatering permit, and submit any required reports to the appropriate agencies.
- B. Florida Department of Environmental Protection:** The CONTRACTOR shall be responsible for compliance with the FDEP Generic Permit for the Discharge of Produced Ground Water from Any Non-Contaminated Site Activity, including its testing and monitoring requirements. The following is a link to the above permit: [http://www.dep.state.fl.us/legal/Rules/shared/62-621\(2\).doc](http://www.dep.state.fl.us/legal/Rules/shared/62-621(2).doc). If it is determined that the disposal or discharge of the dewatering effluent is not authorized by this generic permit, the CONTRACTOR shall diligently pursue further required permit(s) from FDEP or other agencies. The COUNTY has performed groundwater sampling within the project limits. The results of the groundwater sampling can be found in a National Pollutant Discharge Elimination System (NPDES) Sampling Report dated **May 23, 2014**, from **Environmental Consulting & Technology, Inc.**, which can be accessed via the Public Works FTP site under John Young Parkway Sampling Report. The link is as follows;

ftp://ftp.ocfl.net/divisions/Public_Works/pub/Engineering%20Design/INTERNATIONAL%20DRIVE%20-%20S%20WESTWOOD%20TO%20N%20WESTWOOD/

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The CONTRACTOR shall review the results of the samples to identify the parameters exceeding the allowable concentrations levels listed in FDEP's Generic Permit for the Discharge of Produced Ground Water from Any Non-Contaminated Site Activity. This information is made available to the CONTRACTOR for informational purposes only. The COUNTY makes no representation or guarantees that the information in the Sampling Report is accurate, complete, or that it identifies all locations within the project limits where the concentrations of certain parameters may exceed allowable regulatory levels. Prior to submitting their bid, each prospective CONTRACTOR has the opportunity to perform his/her own water sampling to determine the extent, if any, of groundwater exceedences beyond the allowable levels listed in FDEP's Generic Permit for the Discharge of Produced Ground Water from Any Non-Contaminated Site Activity within the PROJECT boundaries. All sampling shall be performed under COUNTY supervision, and in conformance with applicable Best Management Practices (BMP) and any and all applicable STATE and COUNTY permits. It is the intent of this paragraph to provide each prospective CONTRACTOR with an opportunity to investigate the water quality in the vicinity of the PROJECT in order to base his/her bid on means and methods of dewatering.

If, prior to or during the dewatering, it is determined that the disposal or discharge of the dewatering effluent is not authorized by the FDEP's Generic Permit for the Discharge of Produced Ground Water from Any Non-Contaminated Site Activity, the CONTRACTOR shall diligently pursue further required permit(s) from FDEP or other agencies without resort to delay claims or recompense from the COUNTY for either permit application activities or the time required to obtain such permits.

The CONTRACTOR shall be responsible for all costs for water quality monitoring, treatment, storage, and disposal of the groundwater in a manner acceptable to the COUNTY and to all applicable regulatory agencies to reduce the concentration of parameters with exceedences to acceptable levels. The CONTRACTOR will be responsible for obtaining any additional permits required by regulatory agencies to implement the CONTRACTOR's chosen method of disposal and discharge of the groundwater. No additional compensation will be made to CONTRACTOR for permitting. The CONTRACTOR shall comply with Water Quality Requirements of the Special Provisions, related to the National Pollutant Discharge Elimination System (NPDES).

The CONTRACTOR is responsible for meeting all general conditions of all FDEP permits and for submitting any required reports to the appropriate agencies.

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Treatment, disposal and monitoring for water quality compliance shall be paid under Pay Item TP-900-3. No other separate payment shall be made to the CONTRACTOR to cover any costs related to dewatering.

Because the CONTRACTOR'S means and methods of dewatering could lead to potential liability to third parties for damages resulting from the means and methods of dewatering, at the COUNTY'S discretion the means and methods for the dewatering plans are subject to a prior cursory review by the COUNTY where issues and concerns may be submitted for the CONTRACTOR'S consideration.

The CONTRACTOR shall be deemed fully responsible for the means and method of the dewatering. Should the CONTRACTOR decide to modify or revise the means and method for the dewatering plan, another cursory review will have to be conducted by the COUNTY. Please note that containment on site of dewatering effluent is not considered treatment and disposal for purposes of payment under the above described pay item.

CONTRACTOR is responsible to include in his bid all cost for treatment and disposal of dewatering effluent. Should it become necessary for the CONTRACTOR to treat and dispose off site of dewatering effluent Orange County will only compensate the CONTRACTOR for those activities at the unit price bid. No additional compensation will be paid to the CONTRACTOR for treatment and disposal of dewatering effluent, regardless of the actual cost incurred by the CONTRACTOR.

- C. The CONTRACTOR shall be responsible for compliance with all applicable requirements of Rule 40E-20.302(3), Florida Administrative Code (F.A.C.), for a No-Notice Short-Term Dewatering Permit. If the CONTRACTOR's proposed work is expected to exceed 90 days in duration, or does not meet any of the other requirements listed with the requirements of Rule 40E-20.302(3), the CONTRACTOR must apply for and obtain a Dewatering General Water Use Permit (Chapter 40E-20.302(2) F.A.C.), or such other Water Use Permit that may be required by the Water Management District, at no cost to the COUNTY.

The CONTRACTOR is responsible to obtain a dewatering permit as necessary to meet the construction needs of the project, see general condition 13 of the Environmental Resource Permit 48-00052-S-44. The CONTRACTOR is responsible for all surface water flowing through the site and shall be responsible for all costs associated with such activities at no additional cost to the COUNTY. During construction, the CONTRACTOR is responsible to take corrective action and to make necessary schedule adjustments without additional compensation, to adequately address dewatering activities, regardless of storm or rain event so that

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the project is not delayed and dewatering water is disposed of in accordance with the No-Notice Short-Term Dewatering Permit.

- 11. SITE CONTAMINATION:** The CONTRACTOR is advised, based on the report provided by Environmental Consulting & Technology, Inc. dated May 23, 2014 that no known contamination exists. If the CONTRACTOR discovers contamination within the project no additional compensation will be provided in the event the CONTRACTOR is required to modify his means and methods or construction schedule in order to comply with the requirements of any regulatory agency with regard to any endangered species which may be encountered within or in proximity to the project limits during construction. The CONTRACTOR may be granted non-compensable days to the extent the critical path of the project is impacted by temporary work stoppages that may be required to address the presence of endangered species.
- 12. SEPTIC TANKS & WELLS:** The CONTRACTOR is responsible for the inspection, removal and disposal of septic tanks, drain fields and potable wells within the right-of-way. The cost will be included under Pay Item 110-1, Clearing & Grubbing.
- 13. PAY ITEMS:** The cost of all equipment, materials and labor for temporary or permanent facilities necessary to construct the improvements identified in the plans, specifications, or other Contract Documents shall be deemed to be included in the various items making up the Contract Price. No separate payment shall be made to the CONTRACTOR for any such equipment, materials and labor for which a separate Pay Item has not been provided. No adjustments shall be made on this contract to the bid price of any product or material, including gasoline, diesel or other fuels, and bituminous materials, including asphalt, due to fluctuations in market prices, changes in suppliers, or any other reasons.
- 14. COORDINATION:** The CONTRACTOR is hereby notified that there will be utility work to be done by others. The CONTRACTOR shall be responsible to coordinate all activities of this project with those improvements to be done by others so as not to delay the construction project.
- 15. ENVIRONMENTAL CONCERNS:**
 - a. THREATENED AND ENDANGERED SPECIES:** No additional compensation will be provided in the event the CONTRACTOR is required to modify his means and methods or construction schedule in order to comply with the requirements of any regulatory agency with regard to any endangered species which may be encountered within or in proximity to the project limits during construction. The CONTRACTOR may be granted non-compensable days to the extent the critical path of the project is impacted by temporary work stoppages

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C.I.P. No 5107

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that may be required to address the presence of endangered species as mentioned above.

- i. The CONTRACTOR is informed that limited suitable upland habitat has been identified adjacent to International Drive for the gopher tortoise (*Gopherus polyphemus*), a species listed as a Species of Special Concern by the Florida Fish and Wildlife Conservation Commission. No gopher tortoises or their burrows were observed during the field review. Although the likelihood of occurrence of this species within the proposed project limits is low, contractor shall conduct a population census in accordance with Florida Fish and Wildlife Conservation Commission (FFWCC) guidelines prior to construction activities.
- ii. The CONTRACTOR is informed that limited suitable habitat has been identified for the Eastern indigo snake (*Drymarchon corais couperi*), listed as state and federally protected as a threatened species. No indigo snakes were observed during field reviews. Although the likelihood of occurrence of this species within the proposed project limits is low, contractor shall work accordance with FFWCC and the U.S. Fish & Wildlife Service if the species is observed within the project limits.
- iii. The CONTRACTOR is informed that a number of regionally common, but state and/or federally listed birds including but not limited to, the tricolored heron (*Egretta tricolor*), snowy egret (*Egretta thula*), white ibis (*Eudocimus albus*), little blue heron (*Egretta caerulea*), and wood stork (*Mycteria americana*) are expected to utilize the areas within the project limits. All of the species expected to occur are listed as a Species of Special Concern by the State of Florida with the exception of wood stork, which is state and federally listed as endangered.

16. REQUEST FOR ADDITIONAL INFORMATION (RAI): The COUNTY will require a reasonable amount of time, at least 10 business days, to respond to any RAI submitted by the CONTRACTOR. Any delay in responding to the RAI cannot be used as a reason to reimburse for any additional compensation, including delay claims.

17. EARTHWORK: The CONTRACTOR is notified that the soil survey shown in the plans is based on limited geotechnical investigation. The CONTRACTOR is to field verify and test all excavated earthwork material to determine if the soil is classified as a Select soil and suitable for embankment utilization. In the event that any excavated earthwork material is not suitable for embankment utilization, the CONTRACTOR shall replace the unsuitable material with Select soil to furnish and install the required embankment at no additional cost to the COUNTY. The CONTRACTOR shall be responsible for the disposal of the unsuitable material at a COUNTY approved site at no additional cost to the COUNTY.

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18. ORANGE COUNTY INSPECTOR'S OFFICE: The CONTRACTOR shall furnish equipment and maintain an office trailer for the sole use of the Owner/Inspector, with secure entrance doors and one key per occupant. All equipment furnished by the CONTRACTOR for this field office will remain the CONTRACTOR'S property and shall be removed from the site upon completion of the project. The cost of this office shall be included in TP-101, Item No. 101-1, Mobilization. Installation shall be completed before the first partial payment for Mobilization will be made. A minimum of four (4) parking spaces adjacent to the field office shall be provided for use by the COUNTY staff. The following criteria shall be used:

1. Area:

- a. 400 square feet (37 M²) minimum with minimum width dimension of 12 feet (3.6 M).
- b. Trailer to have an office on each end (10' x 12' minimum dimension) with a conference room located in the middle and provide a partitioned washroom (5' x 6' (1.5 M x 1.8 M) minimum dimension) and a coat & storage closet.
- c. Obtain prior approval of Owner/Inspector of floor plan. Each room shall have doors with integral locks, keyed alike.
- d. Doors should have bars for safety.

2. Windows:

- a. Minimum of 3, with a minimum total area of 10 percent of the floor area.
- b. Operable sash and insect screens.
- c. Provide operable Venetian blinds for all windows.
- d. Windows should have bars for safety.

3. Furniture:

- a. Two (2) standard size desks 3' x 5' (0.9 M x 1.5 M), with desk chair and three drawers (per office).
- b. One drafting table: 39" x 72" x 36" (1 M x 1.8 M x 0.9 M) high with one equipment drawer.
- c. Two (2) folding tables 3' x 6' (0.9 m x 1.8 m) with eight (8) folding chairs.
- d. One plan rack to hold a minimum of six (6) sets of project plans.
- e. Two (2) standard four (4) drawer legal size filing cabinets with locks & keys (one key per occupant).
- f. Two (2) swivel armchairs (per office).
- g. One (1) drafting table stool (adjustable, with back rest).
- h. One (1) wastebasket per desk and washroom.

4. Equipment:

- a. Photocopy and fax machine (may be combined).

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- b. One (1) separate phone line with answering machine.
- c. DSL internet access (if available at the location) or one (1) separate phone line (and I.S.P. service) for internet access if DSL service is not available.
- d. Computer Hardware: (This computer shall be maintained by Orange County ISS and shall become the property of Orange County upon completion of the project.)

1. Hardware

New Dell Desktop minitower and/or small form factor (SFF) PC

- ◆ Dell GX960
 - ◆ Energy Smart system enabled
 - ◆ Intel Core 2 Duo processor or better
 - ◆ Minimum 2 Gb of Memory
 - ◆ Maximum 4 Gb Memory
 - ◆ USB Keyboard and Mouse
 - ◆ 160 GB SATA Hard drive
 - ◆ DVD+/- RW
 - ◆ 4 Year Basic Limited Warranty and 4 year Onsite Service
 - ◆ Intel vPro enabled

OR New Dell Laptop

- ◆ Dell Latitude e6510
- ◆ Intel Core 2 Duo processor or better
- ◆ Minimum 2 Gb of Memory
- ◆ CD-RW/DVD
- ◆ 80 GB Hard Drive
- ◆ 4 Year Limited Warranty and 4 year Onsite Service
- ◆ Intel vPro enabled, or

OR Dell Latitude e4300

- ◆ Intel Centrino Core 2 Duo processor
- ◆ Minimum 2 Gb memory
- ◆ CD-RW/DVD
- ◆ 80 Gb Hard Drive
- ◆ 4 Year Limited Warranty
- ◆ Intel vPro enabled

- ◆ *All PCs with 4yr limited warranty*

2. Operating Systems and Protocols

Desktop/Laptop

- ◆ Microsoft Windows 7 Professional with IE 8 (for new PCs)

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- ◆ Microsoft Windows XP Service Pack 3 (for existing PCs)
 - ◆ Internet Explorer 8.0- IE8 is current County Standard included with Windows 7. IE7 is available for backwards compatibility.
 - ◆ *Application software may specifically require a certain Internet Explorer version. Contact ISS for assistance as needed. ServiceCenter@ocfl.net*
 - ◆ Microsoft Office 2003 or greater (Standard or Professional Suite)
Network Connectivity
 - ◆ Cisco Wireless Access Points, Cisco 802.11 LAN Card
 - ◆ TCP/IP
 - ◆ Sprint Wireless AirCard
- 3. Client Databases**
Desktop/Workstations Only, Single User Only
- ◆ Microsoft Access (user databases not supported)
 - ◆ Oracle Client
 - ◆ SQL Server Client
- 4. Peripherals and Accessories**
- ◆ HP LaserJet series
 - ◆ Black and White LaserJet
 - ◆ P1606dn < 4 users
 - ◆ P3015dn (supports secure printing – PIN)
 - ◆ P4015dn 8+ users (supports secure printing – PIN)
 - ◆ Or Color LaserJet
 - ◆ CP2025dn
 - ◆ CP4525dn 7+ users (supports secure printing – PIN)
 - ◆ 5550dn 15+ users (supports secure printing – PIN)
 - ◆ *Desktop Copier and combo unit purchases directly connected to the PC must be reviewed and approved by ISS. Contact ServiceCenter@ocfl.net for more information and assistance.*

Unsupported Products

- 1. Hardware**
 - ◆ Pre-Pentium class desktop systems
 - ◆ Non-Dell PCs
 - ◆ Non-Blackberry Smartphones
- 2. Operating systems and Protocols**
 - ◆ Microsoft Windows 2000

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- ◆ Microsoft Windows NT 4.0
- ◆ Microsoft Windows 3.x, Windows 95 and 98
- ◆ MAC OS
- 3. **Client Databases**
 - ◆ Dbase
 - ◆ RBASE
 - ◆ Paradox
 - ◆ FOXPRO
- 4. **Desktop Applications**
Desktop/Workstation
 - ◆ MS Office platforms prior to Office 2000
 - ◆ ProComm
 - ◆ Microsoft Internet Explorer, 4.x, 5.x
 - ◆ McAfee Viruscan **Trend Micro is OCGOV standard*
 - ◆ WordPerfect
 - ◆ Quattro
 - ◆ Hotmetal
 - ◆ Freelance
 - ◆ Harvard Graphics
 - ◆ Lotus Suite
 - ◆ Netscape, Opera, Firefox Browsers
 - ◆ Rumba
 - ◆ LAN Workplace
 - ◆ Exceed
 - ◆ Visio 3.x and older
 - ◆ SHL Vision & Vision Express, WIN9x/WINNT/UNIX
 - ◆ McAfee Remote Desktop32
 - ◆ Reflection version 9 or lower
 - ◆ PC Anywhere
- 5. **Peripherals and Accessories**
 - ◆ HP LaserJet Series 4 and older printers
 - ◆ Inkjet printers

Prohibited Products

1. **Hardware**
 - ◆ Personal (non-County) PCs
 - ◆ Any network (voice or data) device not operated, administered or expressly approved by Orange County ISS.

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SPECIAL PROVISIONS

- ◆ Any internet access device not operated, administered or expressly approved by Orange County ISS.
 - 2. **Operating System and Protocols**
 - ◆ Windows 9x
 - ◆ Windows Vista
 - ◆ 64 bit operating systemsNetwork Protocols
 - ◆ NETBUI
 - ◆ AppleTalk
 - ◆ Token Ring
 - ◆ Any network (voice or data) software or service not operated, administered or expressly approved by Orange County ISS.
 - ◆ Any internet access service not operated, administered or expressly approved by Orange County ISS.
 - 3. **Applications**
 - ◆ Any Alpha/Beta Software not operated, administered or expressly approved by Orange County ISS
 - ◆ Anti-virus products other than Trend Micro
 - ◆ Personal firewall products
 - ◆ Network scanning tools
 - ◆ Remote access software other than ISS authorized VPN
 - ◆ User installed screen savers
 - ◆ Games
 - ◆ 3rd Party Desktops
 - ◆ Disk Compression
 - ◆ Non-Static BITMAP Backgrounds or screen savers
 - ◆ iTunes (or other content sharing applications)
 - ◆ P2P software
 - 4. **Peripherals and Accessories**
 - ◆ Portable music devices
 - ◆ Personal (non-County) mass storage devices (hard drives, thumb drives, etc)
 - ◆ Webcams
- e. All software to be licensed to “Orange County Public Works.” All documentation and CD’s to be given to Orange County.
5. **Services:**
- a. Lighting: 50 foot-candles at desk top height.
 - b. Exterior lighting at entrance door.

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- c. Automatic heating and mechanical cooling equipment sufficient to maintain comfort conditions.
- d. Minimum four (4) 110-volt duplex electrical convenience outlets, at least one (1) on each wall.
- e. Electric distribution panel: two (2) circuits minimum, 110-volt, 60-hertz service.
- f. Equipment washroom with flush toilet, wash basin with two (2) faucets, medicine cabinet with supplies, toilet tissue holder, 10-gallon capacity automatic electric water heater, and paper towel holder.
- g. One electric bottle water cooler and bottled water.
- h. Small refrigerator.
- i. Telephone: One direct line with instruments with local access and long distance service to cover the Central Florida area.
- j. Provide potable water service to all trailer fixtures.
- k. Provide a single waste discharge to sanitary disposal system.
- l. Provide cleaning service one time per week.
- m. Provide toilet tissue and paper towels.

19. PAY ITEM 527-1 – This pay item only includes the cost of detectable warnings to be placed on the existing curb ramps that will not have to be replaced. However, the cost of detectable warnings on the reconstructed curb ramps will be included in the pay item 522-1.

20. PERMITS

1. South Florida Water Management District Permit

The CONTRACTOR shall be responsible for complying with all the General Conditions (except no – 10 & 16) and Special Conditions (except no – 3) of the South Florida Water Management District Permit No. 48-00052-S-44 issued on November 21, 2011. Specifically, the CONTRACTOR is responsible for such aforementioned obligations of the permits.

No special compensation will be made to the CONTRACTOR to defray costs of any of the work or delays for complying with the requirements of South Florida Water Management District Permit No. 48-00052-S-44, but such costs shall be considered as having been included in the price stipulated for the several items of work to be done under this contract.

2. National Pollutant Discharge Elimination System (NPDES) Stormwater Construction permit

The Contractor shall be responsible to prepare and submit the Notices of Intent (NOI) and the Notice of Termination (NOT) to the Florida Department of Environmental Protection (FDEP). The Contractor shall be responsible to adhere to the construction plan sheet

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documents addressing the Stormwater Pollution Prevention Plan (SWPPP) and shall identify and incorporate any and all additional needs to prevent, control and reduce erosion and water pollution, meeting the requirements or special conditions of all permits authorizing project construction. The SWPPP, NOI and NOT forms, attached to this document, must be completed and submitted by the CONTRACTOR to the COUNTY prior to the preconstruction meeting.

- The NOI should be submitted at least two days prior to commencement of construction (permit fees are the responsibility of the CONTRACTOR).
- The NOT should be submitted within 14 days of final completion of the project (permit fees, if any, are the responsibility of the CONTRACTOR).

The CONTRACTOR shall be responsible for compliance with the EPA's NPDES Stormwater Construction permit, the Stormwater Pollution Prevention Plan and the FDEP Generic Permit for Stormwater Discharge from Construction Activities that Disturb One or More Acres of Land. Copies of the Generic Permit Conditions and the Final Modification of the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Construction Activities are attached. Furthermore, the Contractor shall also comply with the FDEP Generic Permit for the discharge of produced ground water from any non-contaminated site activity due to the dewatering operation. The Contractor shall comply with the testing and monitoring requirements indicated in the above reference document.

The cost of this work will be included under pay item No 104-14 - Prevention, Control and Abatement of Erosion and Water Pollution.

3. Valencia Water Control District Permit

The following permit has been obtained for this project and is attached to the bid documents for adherence:

- Valencia Water Control District Permit No. 0454 dated December 13, 2011.

The CONTRACTOR shall adhere to all applicable terms (except no – 10) in the permit package.

No special compensation will be made to the CONTRACTOR to defray costs of any of the work or delays for complying with the requirements of Valencia Water Control District Permit No. 0454, but such costs shall be considered as having been included in the price stipulated for the several items of work to be done under this contract.

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4. General Use Permit of Florida Turnpike Enterprise

The Contractor shall comply with all the requirements in the General Provisions, Conditions and Special Provisions (Attachment A) as well as Special Conditions specified in the General Use Permit issued by the Florida Turnpike Enterprise.

5. Drainage Connection Permit of Florida Turnpike Enterprise

To be included in the Addendum.

6. WILDCARD DATES FOR CONSTRUCTION BY SEA WORLD

The CONTRACTOR shall adjust their construction schedule to include (5) five single or consecutive wildcard days that can be used by the Sea World with a 14 calendar days' written notice. During each of these periods the CONTRACTOR shall completely cease working within the project construction limits. No additional costs shall be paid to the CONTRACTOR for these single or consecutive (5) five wildcard days.

21. REPORTS

The following Documents are being provided for informational purposes only and can be accessed at website:

ftp://ftp.ocfl.net./divisions/Public_Works/pub/Engineering%20Design/I%20DIRVE-%20SOUTH%20WESTWOOD%20TO%20NORTH%20WESTWOOD%20FINAL%20SOIL%20REPORT/

1. Final Soil Survey Report International Drive Roadway Improvements Project
2. Stormwater Pollution Prevention Plan (SWPPP)
3. Notice of Intent (NOI)
4. Notice of Termination (NOT)

THIS ENDS THE SPECIAL PROVISIONS

International Drive Roadway Improvements Project (Westwood Blvd. S. to Westwood Blvd. N.)
C.I.P. No 5107

SCOPE OF WORK

This project consists of widening an existing segment of International Drive from a four-lane urban section to a six-lane divided urban section from south of Westwood Boulevard South to north of Westwood Boulevard North in southwest Orange County, Commission District 1. The intent of the proposed widening is to alleviate traffic congestion and provide additional linkage of the transportation network in the International Drive tourist corridor. The proposed roadway will include curb and gutter, raised medians and traffic separators, gravity wall, closed drainage system, landscaping and modifying existing signals at the intersections of International Drive and Westwood Blvd. South, Central Florida Parkway, Aquatica Driveway, Sea Harbor Drive, Westwood Blvd. North; and new mast-arm traffic signals at the intersection of International Drive and Avenida Vista. Utility improvements are also included on this project. The total length of this project is approximately 13,020 linear feet (2.466 miles).

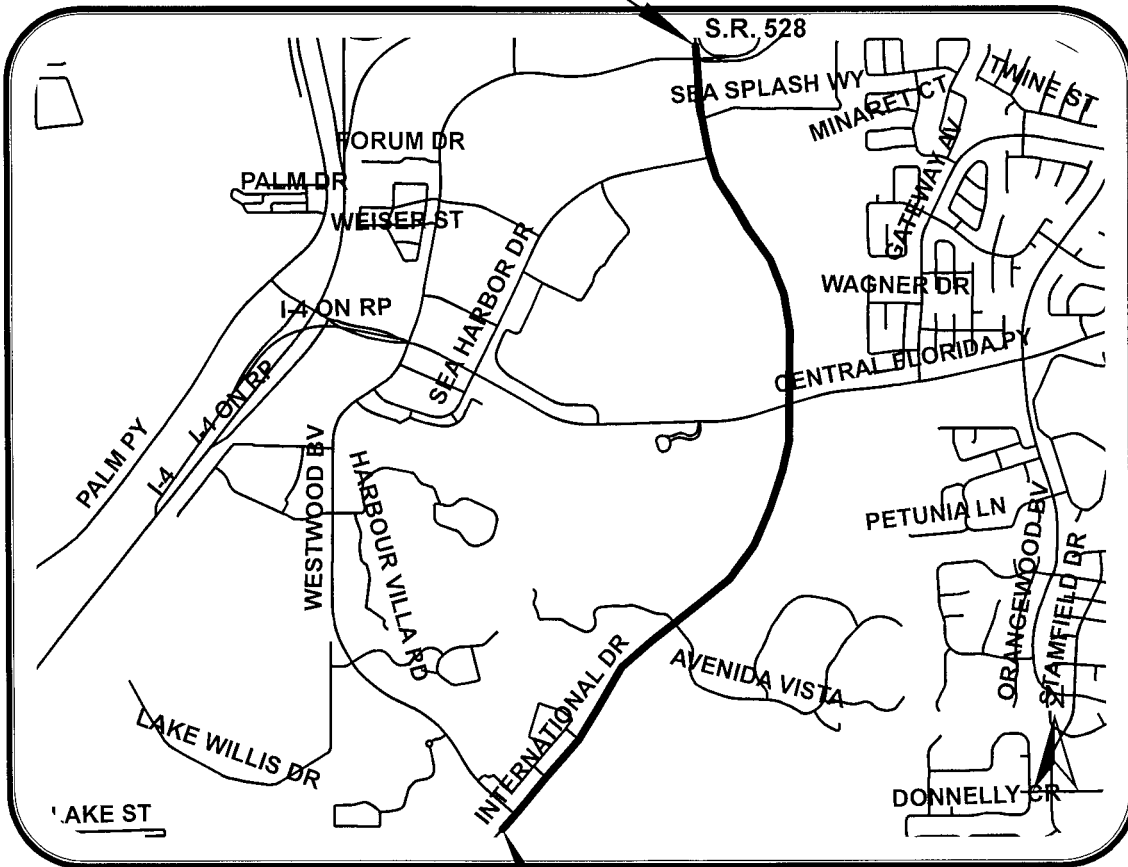
The major items of work include:

- Construction of approximately 44,500 +/- square yards of Type-B Stabilization.
- Construction of 34,000 +/- square yards of Soil Cement Base (Primed).
- Milling approximately 8,900 +/- square yards of existing roadway pavement.
- Construction of approximately 139,600 +/- square yards of Superpave Asphaltic Concrete (Type C).
- Construction of approximately 140,000 +/- square yards of Friction Course - FC 12.5, Rubber (1.5").
- Construction of approximately 99,900 +/- square yards of cold in-place recycle (8.5" depth), and 209,400 +/- gallons of asphalt emulsion.
- Construction of approximately 6,400 +/- linear feet of storm water pipes, approximately 70 drainage inlets and 35 manholes.
- Construction of approximately 1,250 +/- linear feet of underdrains.
- Construction of approximately 38,000 +/- square yards of sodding.
- Roadway signing & pavement markings.
- Modifying existing signals at six intersections within the project corridor and installing new signals at one intersection.
- Utility improvements by Orange County Utilities include - construction of approximately 1,360 LF of 24" and 50 LF of 12" DIP potable water main, approximately 7,950 LF of 24" DIP reclaimed water main; approximately 210 LF of 12" PVC sanitary sewer, 1 new sanitary manhole, CIPP lining of approximately 1,370 LF of 18" and 3,320 LF of 15" sanitary sewer main and rehabilitation of 2 existing manholes; and approximately 550 LF of 12" PVC force main, 4 - 12" conflict transitions (including line stops) and other related wastewater system components.
- Various other miscellaneous construction items as required to complete the project.

**INTERNATIONAL DRIVE
ROADWAY IMPROVEMENTS
PROJECT
CIP. 5107**

LOCATION MAP

**END PROJECT
WESTWOOD BLVD. NORTH**



**BEGIN PROJECT
WESTWOOD BLVD. SOUTH**

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT'S
PERMIT**



**SOUTH FLORIDA WATER MANAGEMENT DISTRICT
 ENVIRONMENTAL RESOURCE
 STANDARD GENERAL PERMIT NO. 48-00052-S-44
 DATE ISSUED: November 21, 2011**

Form #0941
08/95

PERMITTEE: ORANGE COUNTY BOARD OF COUNTY
 COMMISSIONERS
 PUBLIC WORKS DEPARTMENT
 4200 S JOHN YOUNG PARKWAY
 ORLANDO, FL 32839

WESTWOOD LAKES PROPERTY
 OWNERS ASSOCIATION INC
 7512 DR PHILLIPS BLVD STE 50-513
 ORLANDO, FL 32819

PROJECT DESCRIPTION: Modification of an Environmental Resource Permit to authorize construction and operation of a surface water management system to serve 26.6 acres of a roadway project known as International Drive Roadway Improvements.

PROJECT LOCATION: ORANGE COUNTY, SEC 7,18 TWP 24S RGE 29E
 SEC 12,13,24 TWP 24S RGE 28E

PERMIT DURATION: See Special Condition No:1. Pursuant to Rule 40E-4.321, Florida Administrative Code.

This is to notify you of the District's agency action concerning Notice of Intent for Permit Application No. 110608-11, dated June 8, 2011. This action is taken pursuant to Rule 40E-1.603 and Chapter 40E-40, Florida Administrative Code (F.A.C.).

Based on the information provided, District rules have been adhered to and an Environmental Resource General Permit is in effect for this project subject to:

1. Not receiving a filed request for a Chapter 120, Florida Statutes, administrative hearing.
2. the attached 19 General Conditions (See Pages : 2 - 4 of 6),
3. the attached 14 Special Conditions (See Pages : 5 - 6 of 6) and
4. the attached 3 Exhibit(s)

Should you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights," we will assume that you concur with the District's action.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a "Notice of Rights" has been mailed to the Permittee (and the persons listed in the attached distribution list) no later than 5:00 p.m. on this 21st day of November, 2011, in accordance with Section 120.60(3), Florida Statutes.

BY: Anita R. Bain

Anita R. Bain
 Bureau Chief - Environmental Resource Permitting
 Regulation Division

GENERAL CONDITIONS

1. All activities authorized by this permit shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit and Part IV, Chapter 373, F.S.
2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.
3. Activities approved by this permit shall be conducted in a manner which does not cause violations of State water quality standards. The permittee shall implement best management practices for erosion and pollution control to prevent violation of State water quality standards. Temporary erosion control shall be implemented prior to and during construction, and permanent control measures shall be completed within 7 days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. All practices shall be in accordance with the guidelines and specifications described in Chapter 6 of the Florida Land Development Manual; A Guide to Sound Land and Water Management (Department of Environmental Regulation, 1988), incorporated by reference in Rule 40E-4.091, F.A.C. unless a project-specific erosion and sediment control plan is approved as part of the permit. Thereafter the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.
4. The permittee shall notify the District of the anticipated construction start date within 30 days of the date that this permit is issued. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District an Environmental Resource Permit Construction Commencement Notice Form Number 0960 indicating the actual start date and the expected construction completion date.
5. When the duration of construction will exceed one year, the permittee shall submit construction status reports to the District on an annual basis utilizing an annual status report form. Status report forms shall be submitted the following June of each year.
6. Within 30 days after completion of construction of the permitted activity, the permittee shall submit a written statement of completion and certification by a professional engineer or other individual authorized by law, utilizing the supplied Environmental Resource/Surface Water Management Permit Construction Completion/Certification Form Number 0881A, or Environmental Resource/Surface Water Management Permit Construction Completion Certification - For Projects Permitted prior to October 3, 1995 Form No. 0881B, incorporated by reference in Rule 40E-1.659, F.A.C. The statement of completion and certification shall be based on onsite observation of construction or review of as-built drawings for the purpose of determining if the work was completed in compliance with permitted plans and specifications. This submittal shall serve to notify the District that the system is ready for inspection. Additionally, if deviation from the approved drawings are discovered during the certification process, the certification must be accompanied by a copy of the approved permit drawings with deviations noted. Both the original and revised specifications must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawings. All surveyed dimensions and elevations shall be certified by a registered surveyor.
7. The operation phase of this permit shall not become effective: until the permittee has complied with the requirements of condition (6) above, and submitted a request for conversion of Environmental Resource Permit from Construction Phase to Operation Phase, Form No. 0920; the District determines the system to

GENERAL CONDITIONS

be in compliance with the permitted plans and specifications; and the entity approved by the District in accordance with Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, accepts responsibility for operation and maintenance of the system. The permit shall not be transferred to such approved operation and maintenance entity until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall initiate transfer of the permit to the approved responsible operating entity if different from the permittee. Until the permit is transferred pursuant to Section 40E-1.6107, F.A.C., the permittee shall be liable for compliance with the terms of the permit.

8. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the initiation of the permitted use of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of the phase or portion of the system to a local government or other responsible entity.
9. For those systems that will be operated or maintained by an entity that will require an easement or deed restriction in order to enable that entity to operate or maintain the system in conformance with this permit, such easement or deed restriction must be recorded in the public records and submitted to the District along with any other final operation and maintenance documents required by Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit applications within the South Florida Water Management District, prior to lot or units sales or prior to the completion of the system, whichever comes first. Other documents concerning the establishment and authority of the operating entity must be filed with the Secretary of State, county or municipal entities. Final operation and maintenance documents must be received by the District when maintenance and operation of the system is accepted by the local government entity. Failure to submit the appropriate final documents will result in the permittee remaining liable for carrying out maintenance and operation of the permitted system and any other permit conditions.
10. Should any other regulatory agency require changes to the permitted system, the permittee shall notify the District in writing of the changes prior to implementation so that a determination can be made whether a permit modification is required.
11. This permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any activity approved by this permit. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40E-4 or Chapter 40E-40, F.A.C..
12. The permittee is hereby advised that Section 253.77, F.S. states that a person may not commence any excavation, construction, or other activity involving the use of sovereign or other lands of the State, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.
13. The permittee must obtain a Water Use permit prior to construction dewatering, unless the work qualifies for a general permit pursuant to Subsection 40E-20.302(3), F.A.C., also known as the "No Notice" Rule.
14. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities

GENERAL CONDITIONS

which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any system authorized by the permit.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding, unless a specific condition of this permit or a formal determination under Section 373.421(2), F.S., provides otherwise.
16. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of a permitted system or the real property on which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rules 40E-1.6105 and 40E-1.6107, F.A.C.. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations prior to the sale, conveyance or other transfer of the system.
17. Upon reasonable notice to the permittee, District authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with the plans and specifications approved by the permit.
18. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the appropriate District service center.
19. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.

SPECIAL CONDITIONS

1. The construction phase of this permit shall expire on November 21, 2016.
2. Operation of the roadway surface water management (secondary) system shall be the responsibility of ORANGE COUNTY. Operation of the surface water management ponds serving the roadway improvements shall be the responsibility of Westwood Lake Property Owners Association.
3. Discharge Facilities:

Through previously permitted facilities.
4. The permittee shall be responsible for the correction of any erosion, shoaling or water quality problems that result from the construction or operation of the surface water management system.
5. Measures shall be taken during construction to insure that sedimentation and/or turbidity violations do not occur in the receiving water.
6. The District reserves the right to require that additional water quality treatment methods be incorporated into the drainage system if such measures are shown to be necessary.
7. Facilities other than those stated herein shall not be constructed without an approved modification of this permit.
8. A stable, permanent and accessible elevation reference shall be established on or within one hundred (100) feet of all permitted discharge structures no later than the submission of the certification report. The location of the elevation reference must be noted on or with the certification report.
9. The permittee shall provide routine maintenance of all of the components of the surface water management system in order to remove all trapped sediments/debris. All materials shall be properly disposed of as required by law. Failure to properly maintain the system may result in adverse flooding conditions.
10. If prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee, should contact the Florida Department of State, Division of Historical Resources, Review and Compliance Section at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.
11. The permittee acknowledges that, pursuant to Rule 40E-4.101(2), F.A.C., a notice of Environmental Resource or Surface Water Management Permit may be recorded in the county public records. Pursuant to the specific language of the rule, this notice shall not be considered an encumbrance upon the property.
12. Minimum road crown elevation: Consistent with previous permits.
13. The exhibits and special conditions in this permit apply only to this application. They do not supersede or delete any requirements for other applications covered in Permit No. 48-00052-S unless otherwise specified herein.
14. Prior to any future construction, the permittee shall apply for and receive a permit modification. As part of the permit application, the applicant for that phase shall provide documentation verifying that the proposed

SPECIAL CONDITIONS

construction is consistent with the design of the master surface water management system, including the land use and site grading assumptions.

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.

Last Date For Agency Action: December 3, 2011

GENERAL ENVIRONMENTAL RESOURCE PERMIT STAFF REPORT

Project Name: International Drive Roadway Improvements

Permit No.: 48-00052-S-44

Application No.: 110608-11

Application Type: Environmental Resource (General Permit Modification)

Location: Orange County, S12,13,24/T24S/R28E
S7,18/T24S/R29E

Permittee : Orange County Board Of County Commissioners
Westwood Lakes Property Owners Association Inc

Operating Entity : Orange County

Project Area: 26.60 acres

Project Land Use: Roadway

Drainage Basin: SHINGLE CREEK

Receiving Body: Existing Master Surface Water Management Systems **Class:** CLASS III

Special Drainage District: Valencia Water Control District

Conservation Easement To District : No

Sovereign Submerged Lands: No

PROJECT PURPOSE

Modification of an Environmental Resource Permit to authorize construction and operation of a surface water management system to serve 26.6 acres of a roadway project known as International Drive Roadway Improvements. Approval is granted with conditions.

PROJECT EVALUATION:

PROJECT SITE DESCRIPTION

The site is located within the International Drive roadway right-of-way for approximately 2.39 miles from Avenida Vista Boulevard to Sea Harbor Drive within the Orangewood DRI in Orange County.

The master surface water management system has been previously approved. The facilities within or immediately adjacent to the project area that this project will discharge into were permitted as follows; 1) Permit No. 48-00052-S, Application No. 02171-C-B12, Orangewood - Road Network in Neighborhood #2, 2) Permit No. 48-00052-S, Application No. 110310-6, Aquatica Parking Lot Expansion, 3) Permit No. 48-00052-S-39, Application No. 101117-13, Orchid Bay Orangewood N-2 Parcel 15 Phase 2, and 4) Permit No. 48-00055-S, Application No. 990909-15, International Drive & Back of House Road (SPOND). The site contains an existing 4-lane urban typical section roadway.

All of the proposed work is to occur within the existing median. There are no wetlands or other surface waters located within or affected by the proposed project.

PROPOSED PROJECT

Works proposed consists of the construction of two additional thru-lanes to be built in the median of the existing 4-lane typical section of the roadway along with corresponding intersection improvements and necessary turn lanes for a project known as International Drive Roadway Improvements.

The master surface water management system was designed to include an ultimate six-lane configuration for International Drive. Calculations have been provided to verify that the existing systems have adequate storage capacity to accommodate the new impervious area proposed in this application; please see Table 1.1, Exhibit 3. Since the system was previously designed to accommodate the ultimate six lanes no changes were required to any of the existing pond control structures and no changes resulted to any of the pond peak stages or discharge rates. Accordingly, this application is consistent with the intent of the master permits listed in the "Project Site Description" section of this staff report. Segment 2 of the improvements (from Sea Harbor Drive to S.R. 528) proposes only construction of a turn lane and sidewalk improvements and are exempt from permitting but are included in the plans for the improvements in this corridor.

Westwood Lakes Property Owners Association is a co-applicant to this application to establish the operation and maintenance entity of the existing surface water management ponds corresponding to 18.90 acres (Lakes 1A, 1B and Conservation Area 1) that will serve the added impervious area proposed in this application.

LAND USE

**Construction:
Project:**

	This Phase	
Pavement	18.30	acres
Pervious	8.30	acres
Total:	26.60	

WATER QUANTITY**Discharge Rate :**

The proposed project is consistent with the land use and site grading assumptions from the design of the existing surface water management systems. Therefore, the surface water management system for this project has not been designed to limit discharge for the design event to a specified rate.

WATER QUALITY

No adverse water quality impacts are anticipated as a result of the proposed project. Water quality required for the proposed 6-laning or additional impervious area was added to previously-permitted required water quality amounts for the revised totals which are all provided by the existing ponds as previously permitted.

Basin	Treatment Method		Vol Req.d (ac-ft)	Vol Prov'd
2 & 3	Treatment	Wet Detention	1.43	1.43
1B	Treatment	Wet Detention	.78	.79
1A	Treatment	Wet Detention	1.02	1.38
15	Treatment	Wet Detention	2.15	2.15
C-5 Canal & SPOND	Treatment	Wet Detention	.55	.55

CERTIFICATION AND MAINTENANCE OF THE WATER MANAGEMENT SYSTEM

It is suggested that the permittee retain the services of a Professional Engineer registered in the State of Florida for periodic observation of construction of the surface water management (SWM) system. This will facilitate the completion of construction completion certification Form #0881 which is required pursuant to Section 10 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, and Rule 40E-4.361(2), Florida Administrative Code (F.A.C.).

Pursuant to Chapter 40E-4 F.A.C., this permit may not be converted from the construction phase to the operation phase until certification of the SWM system is submitted to and accepted by this District. Rule 40E-4.321(7) F.A.C. states that failure to complete construction of the SWM system and obtain operation phase approval from the District within the permit duration shall require a new permit authorization unless a permit extension is granted.

For SWM systems permitted with an operating entity who is different from the permittee, it should be noted that until the permit is transferred to the operating entity pursuant to Rule 40E-1.6107, F.A.C., the permittee is liable for compliance with the terms of this permit.

The permittee is advised that the efficiency of a SWM system will normally decrease over time unless the system is periodically maintained. A significant reduction in flow capacity can usually be attributed to partial blockages of the conveyance system. Once flow capacity is compromised, flooding of the project may result. Maintenance of the SWM system is required to protect the public health, safety and the natural resources of the state. Therefore, the permittee must have periodic inspections of the SWM system performed to ensure performance for flood protection and water quality purposes. If deficiencies are found, it is the responsibility of the permittee to correct these deficiencies in a timely manner.

RELATED CONCERNS:

Water Use Permit Status:

The applicant has indicated that dewatering is not required for construction of this project.

This permit does not release the permittee from obtaining all necessary Water Use authorization(s) prior to the commencement of activities which will require such authorization, including construction dewatering and irrigation.

CERP:

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

Right-Of-Way Permit Status:

A District Right-of-Way Permit is not required for this project.

DRI Status:

This project is not a DRI.

Historical/Archeological Resources:

No information has been received that indicates the presence of archaeological or historical resources or that the proposed activities could cause adverse impacts to archaeological or historical resources.

DCA/CZM Consistency Review:

The issuance of this permit constitutes a finding of consistency with the Florida Coastal Management Program.

Third Party Interest:

No third party has contacted the District with concerns about this application.

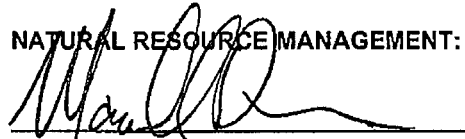
Enforcement:

There has been no enforcement activity associated with this application.

STAFF REVIEW:

DIVISION APPROVAL:


NATURAL RESOURCE MANAGEMENT:



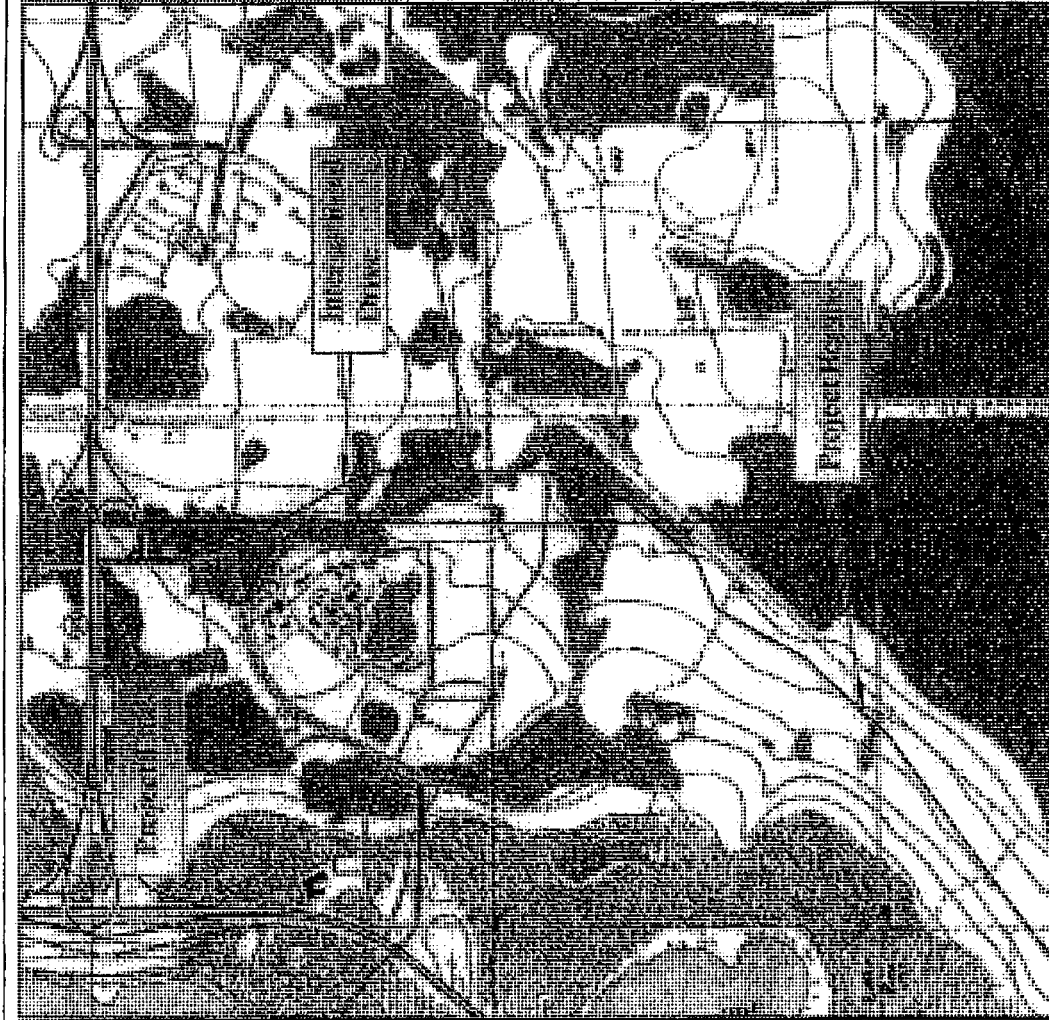
Marc S. Ady

DATE: 11-21-11

SURFACE WATER MANAGEMENT:

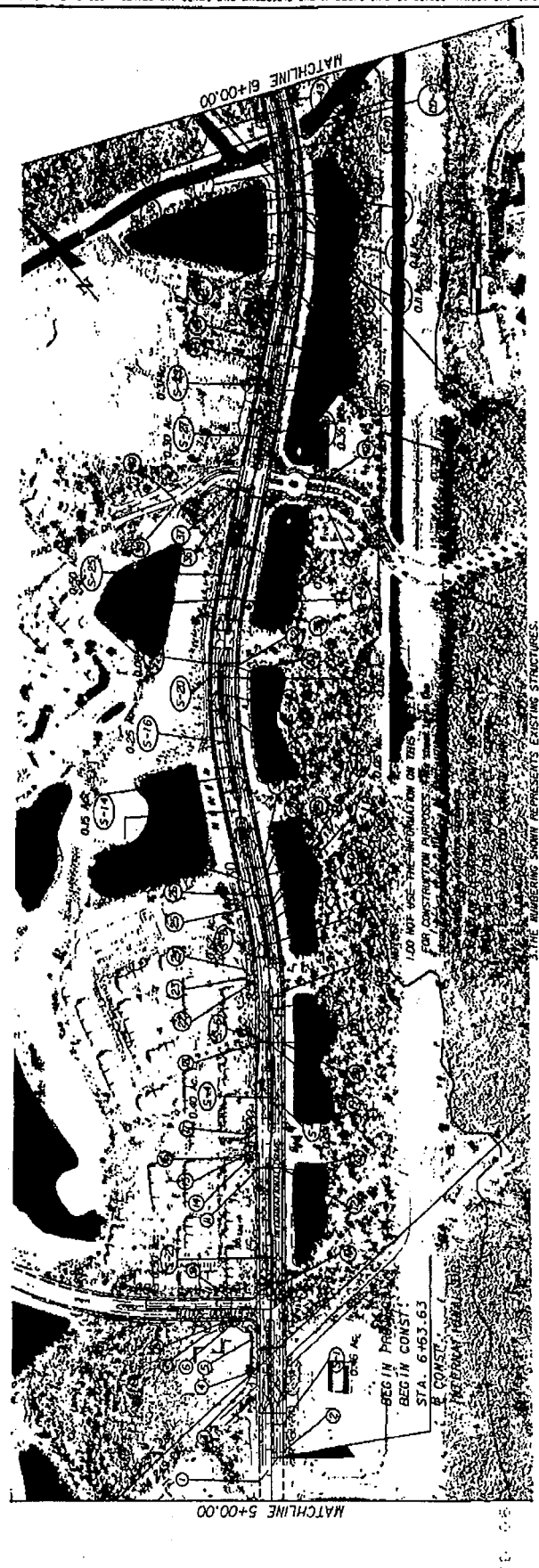
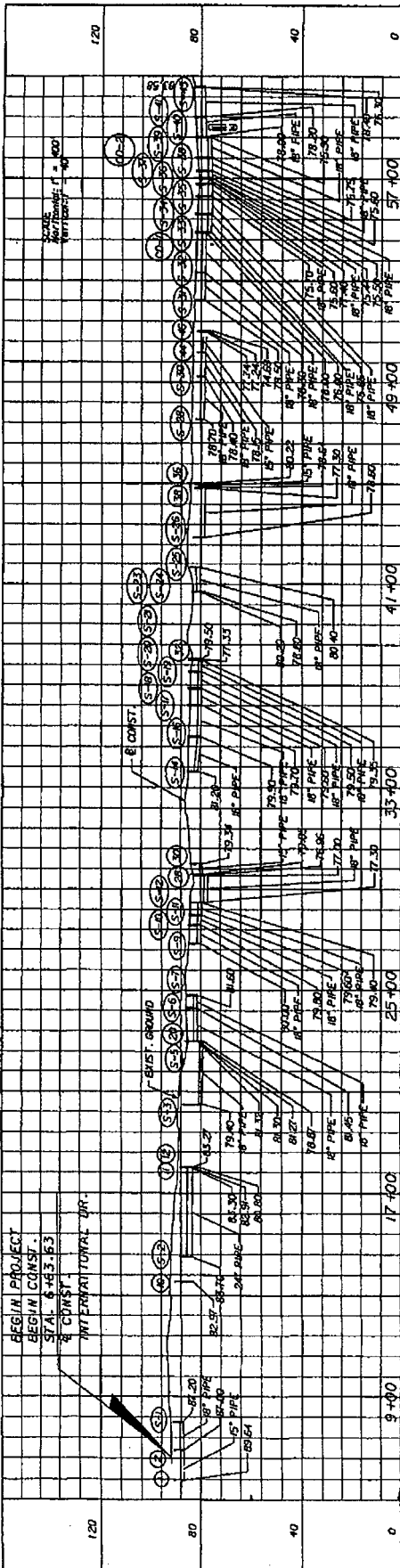

Mark S. Daron, P.E.


DATE: 11-21-11



PROJECT BCH-018	BORING LOCATION 571.111111111111	U.S.G.S QUADRANGLE MAP LAKE JESSAMINE	ISSUED PHOTO REVISIONS 1903 1980	PROJECT NAME: TOPOGRAPHIC MAP INTERNATIONAL DRIVE (S. Westwood Blvd. N. Westwood Blvd.)		NES PROJECT NO. R10003
				COUNTY ORANGE	PROJECT NO. -	FIGURE 2
 Civil Geotechnical Environmental Consulting Engineering				ORANGE COUNTY PUBLIC WORKS FLORIDA		
				 SCALE: NOT TO SCALE DATE: 07-14-2010		

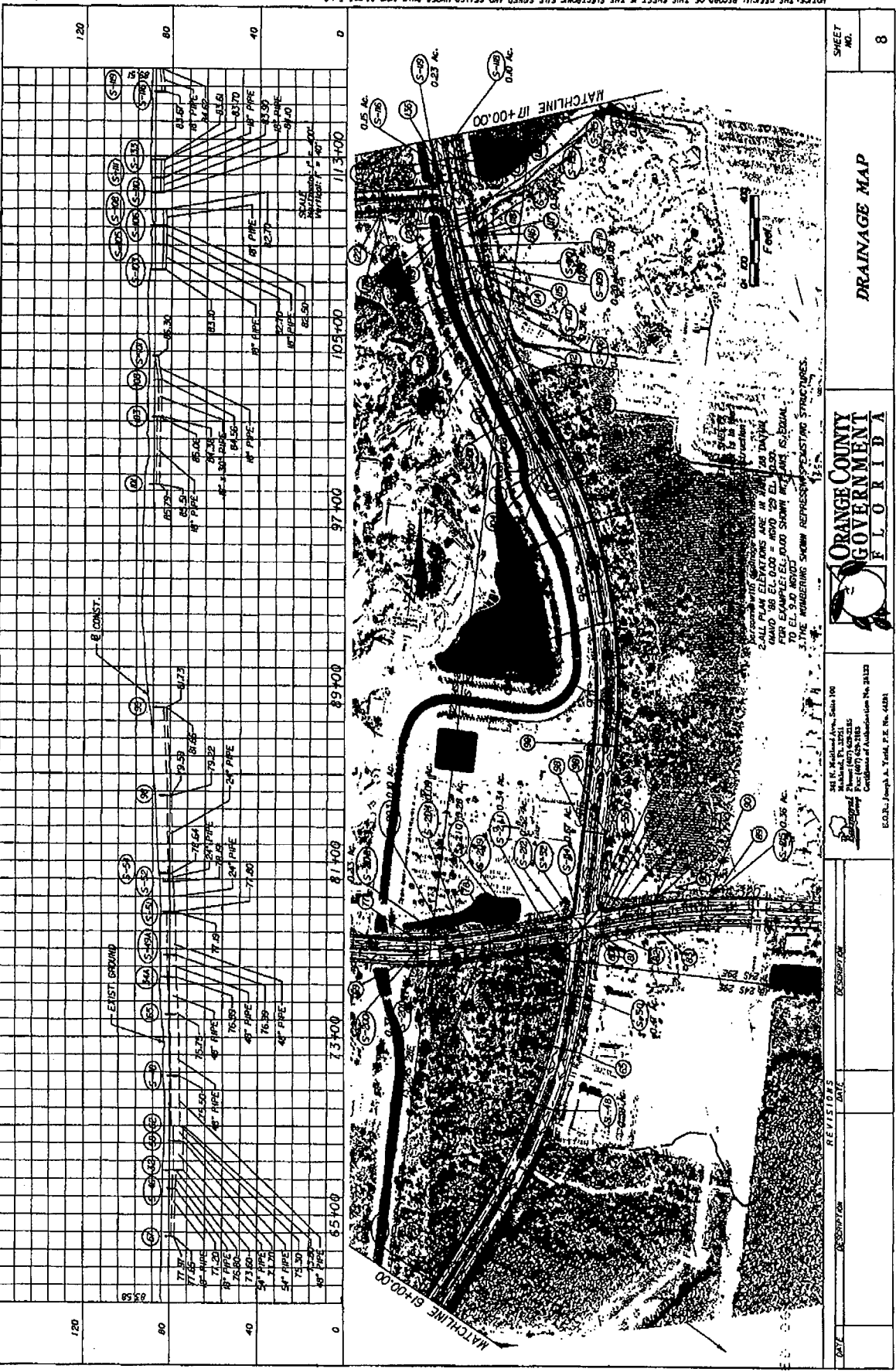
Figure 6



DATE	REVISIONS	DESCRIPTION	 <p>ORANGE COUNTY GOVERNMENT FLORIDA</p>	<p>DRAINAGE MAP</p>	SHEET NO. 7

241 N. Holladay Ave., Suite 100
 Orange, Florida 32805
 Phone: (407) 878-2345
 Fax: (407) 878-2128
 E.O.R.: Joseph A. York, P.E. No. 44281

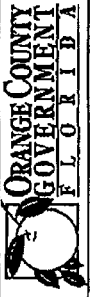
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NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE STORED AND SEALED UNDER RULE 605-21.001, F.A.C.

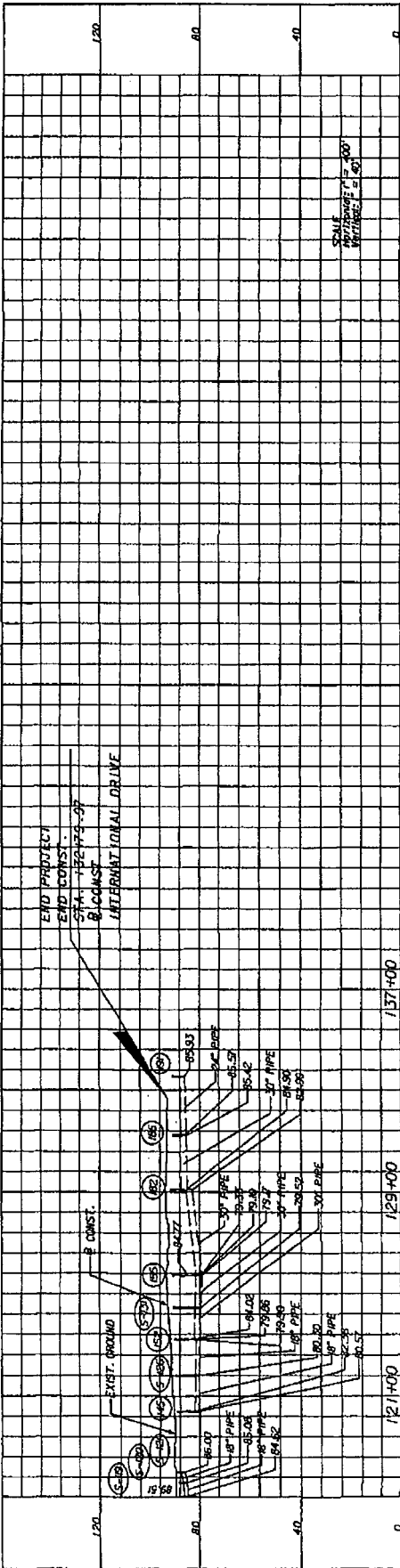
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DRAINAGE MAP

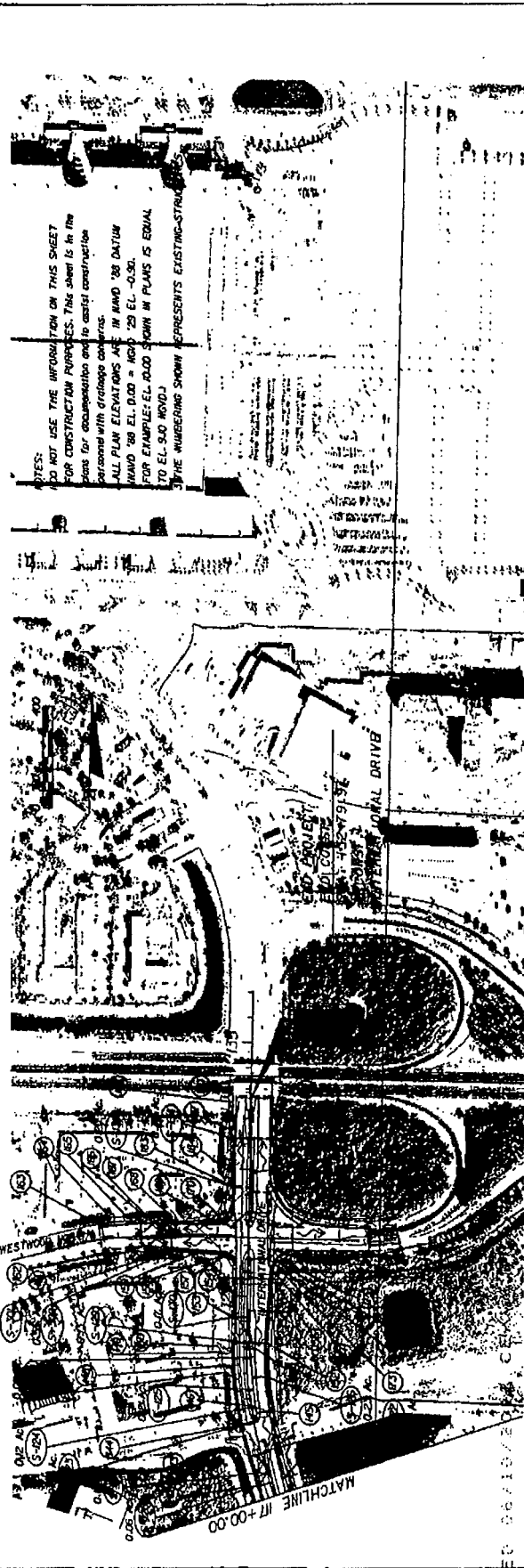


811 E. Mitchell Ave., Suite 100
 Orlando, FL 32811
 (407) 836-2115
 Fax: (407) 836-2115
 Certificate of Accreditation No. 24123
 E.O.L. Joseph A. York, P.E. No. 4481


DATE	DESCRIPTION	REVISIONS
06/25/2017	DATE	



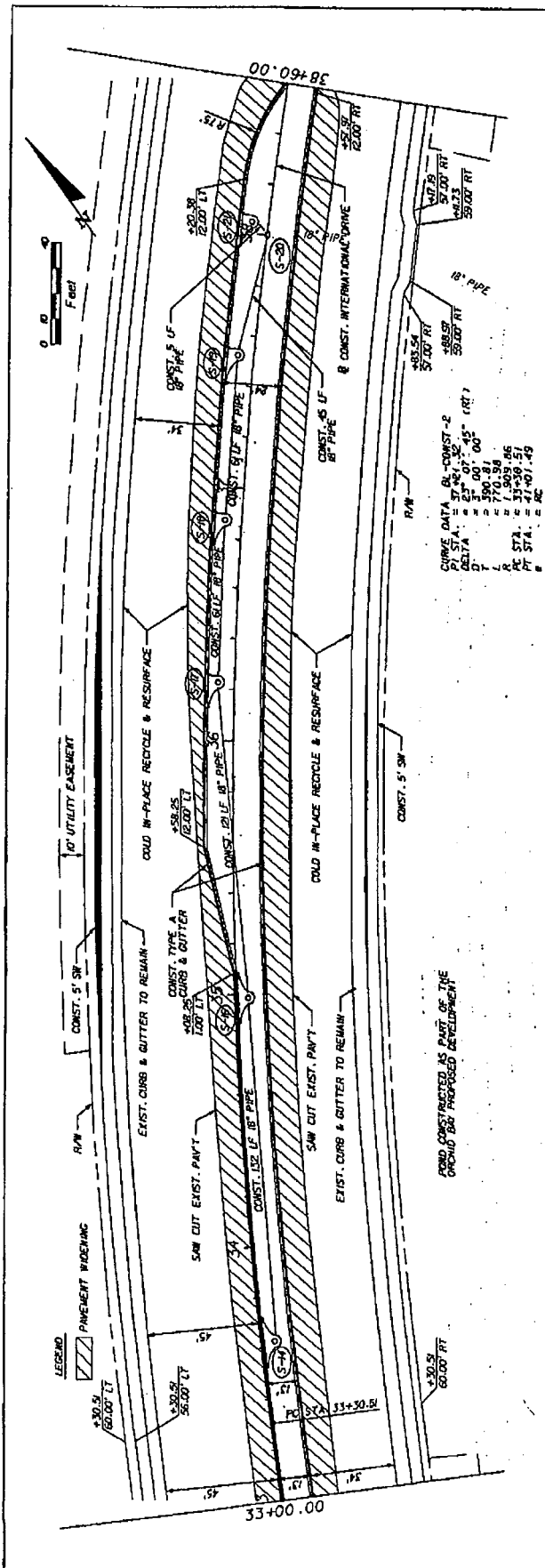
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 VERTICAL = 1" = 10'



NOTES:
 DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. This sheet is in the plans for occupation and to assist construction personnel with drainage addresses.
 ALL PLAN ELEVATIONS ARE IN MWD '88 DATUM
 MWD '88 EL. 0.00 = MGD '28 EL. -0.50
 FOR EXAMPLE EL. 0.00 FOUR IN PLANS IS EQUAL TO EL. -0.50 MWD.
 THE NUMBERING SHOWN REPRESENTS EXISTING-STRAINS

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 ORANGE COUNTY GOVERNMENT FLORIDA					
DRAINAGE MAP					
SHEET NO. 9					

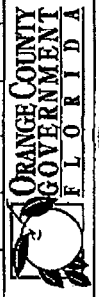
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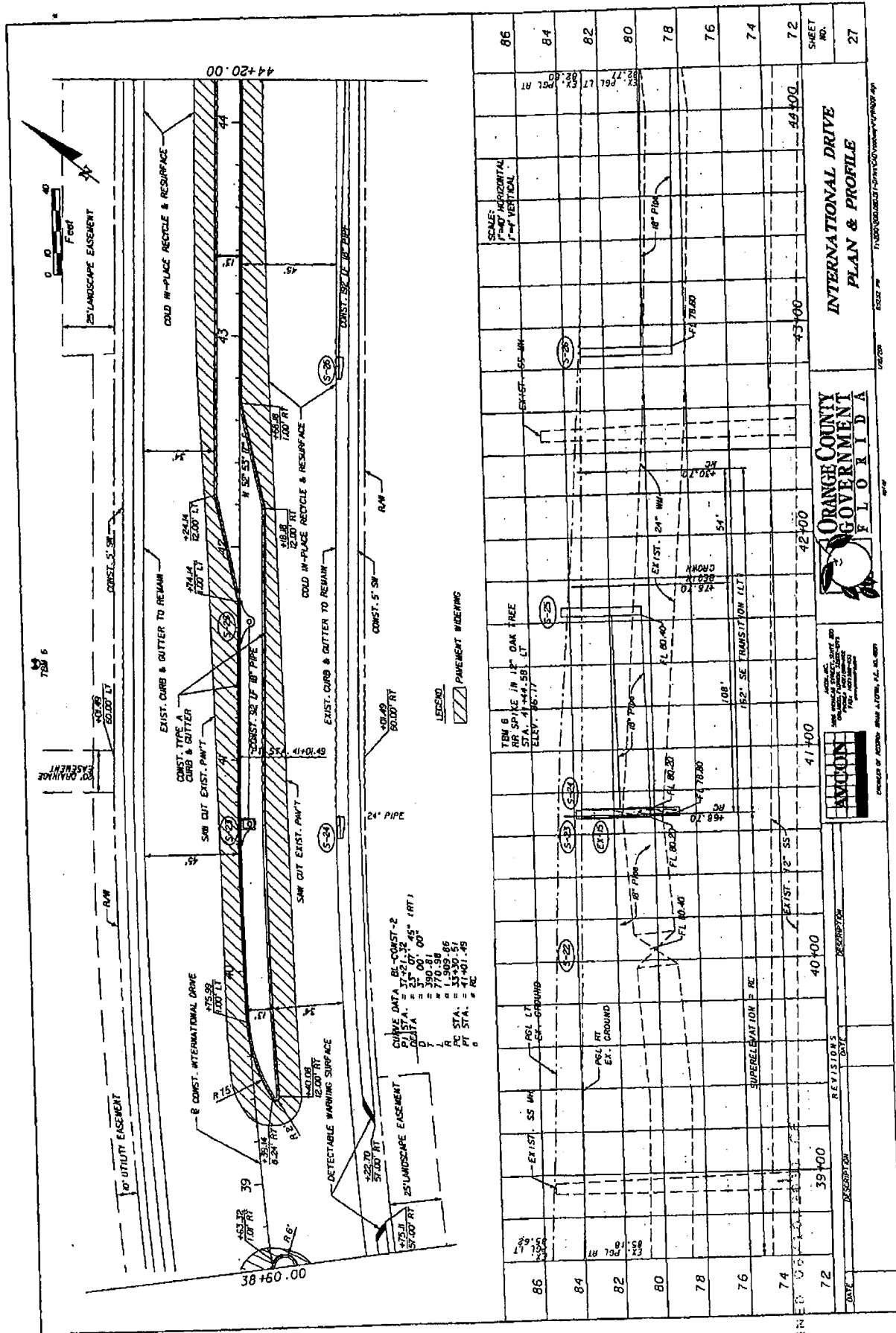
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84				
86				

INTERNATIONAL DRIVE
 PLAN & PROFILE



AMCON
 THE AMERICAN CONSULTING ENGINEERS AND ARCHITECTS
 1000 N. GULF BLVD., SUITE 200
 ORLANDO, FLORIDA 32801
 (407) 851-1111

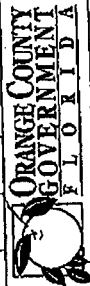


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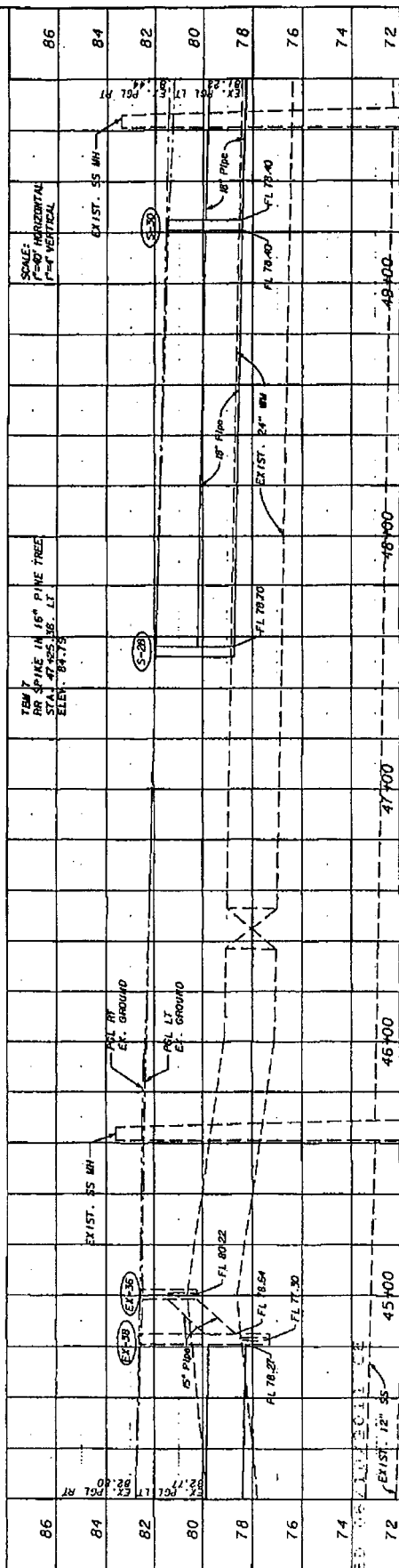
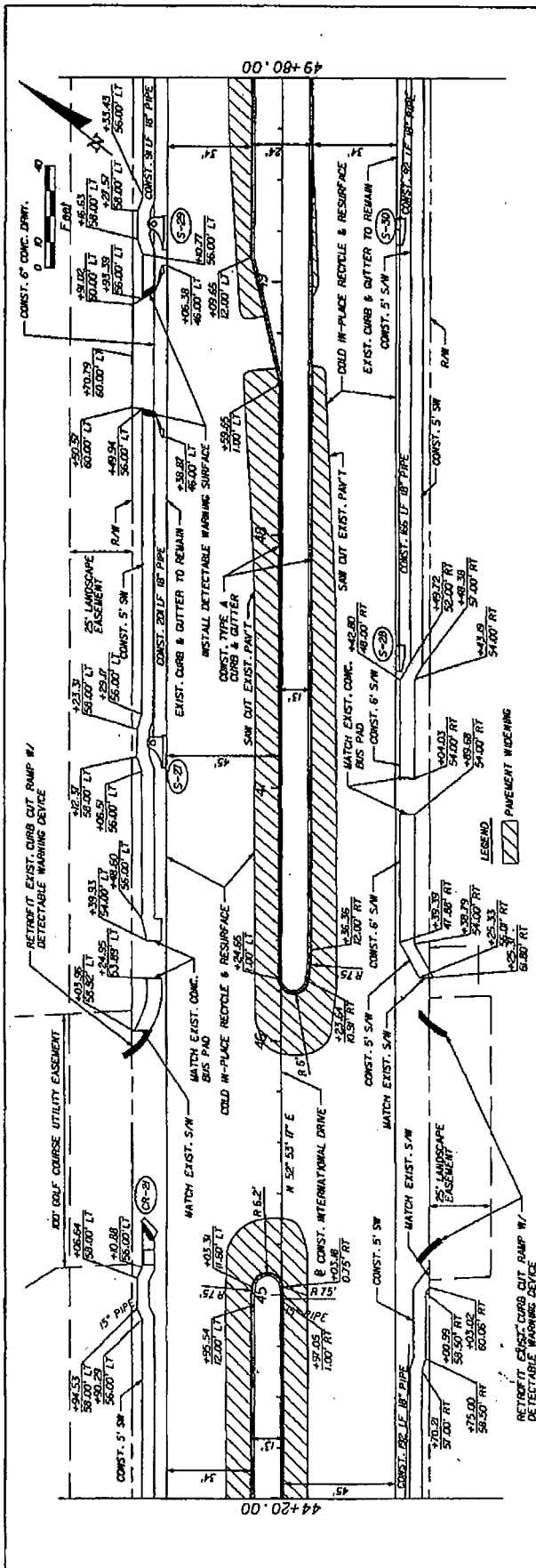
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84				
86				


INTERNATIONAL DRIVE
 PLAN & PROFILE



AMODIN
 ENGINEERING
 1000 N. GARDNER ST., SUITE 100
 ORANGE, FL 32813
 (407) 841-1111
 www.amodin.com

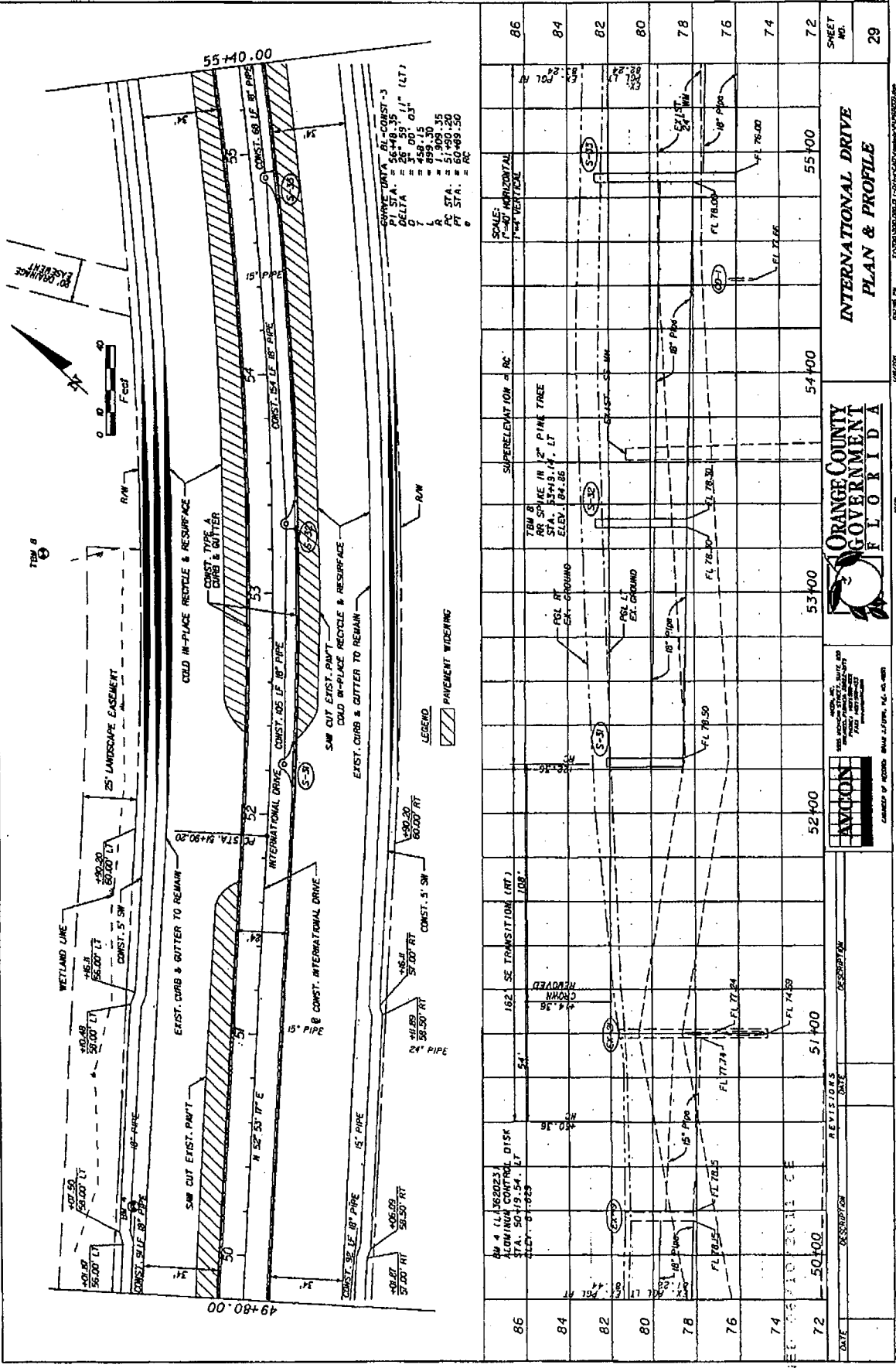


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 ORANGE COUNTY
 GOVERNMENT
 FLORIDA

INTERNATIONAL DRIVE
 PLAN & PROFILE

SHEET NO. 28



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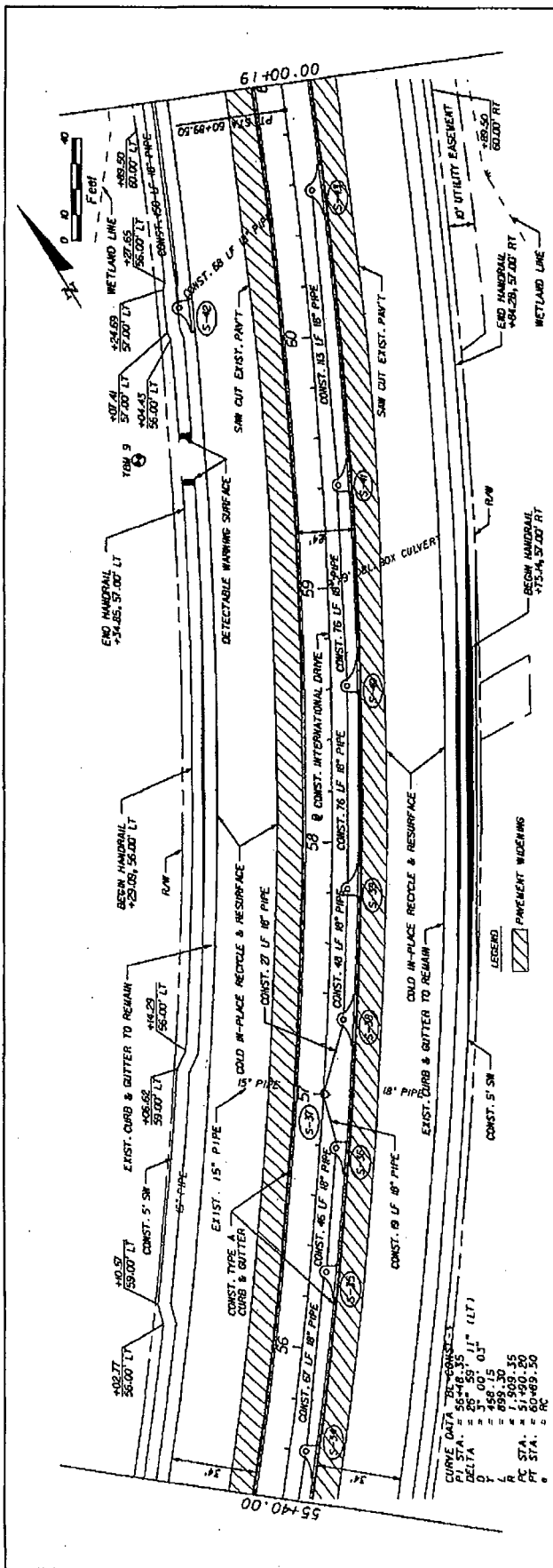
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ORANGE COUNTY
 GOVERNMENT
 FLORIDA

INTERNATIONAL DRIVE
 PLAN & PROFILE

SHEET
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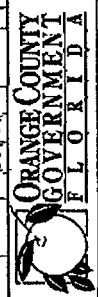


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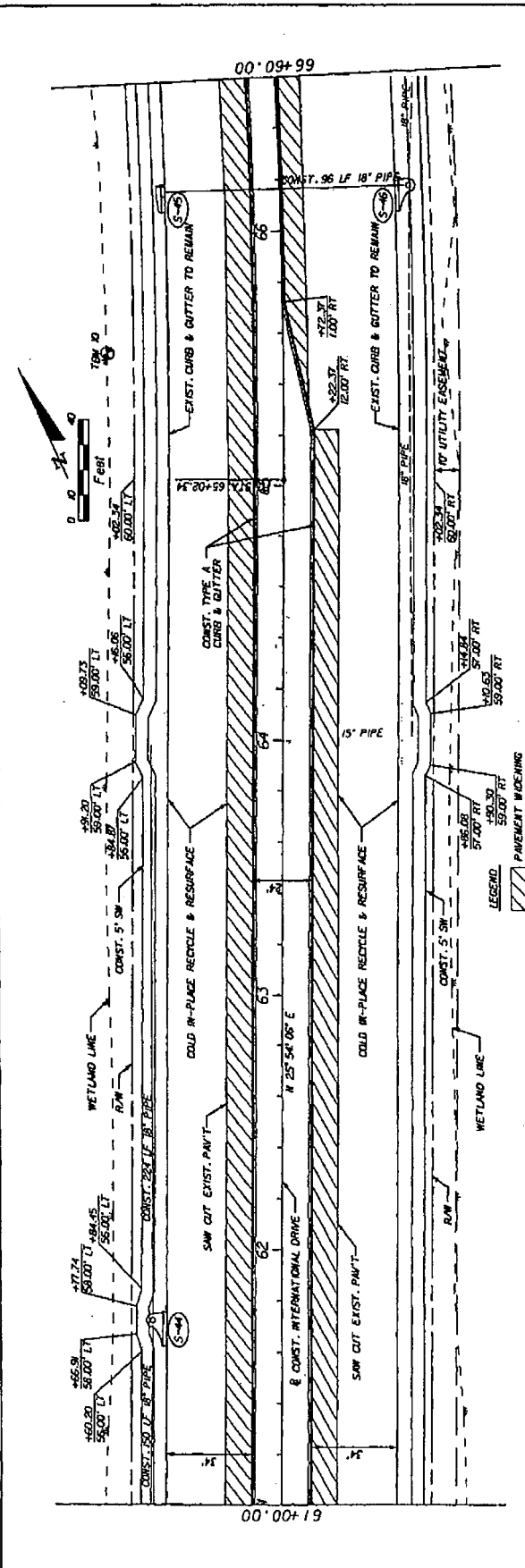
INTERNATIONAL DRIVE
PLAN & PROFILE



AMCON
1000 W. UNIVERSITY AVENUE, SUITE 100
ORLANDO, FLORIDA 32817
PH: 407.261.1111
FAX: 407.261.1112
WWW.AMCON.COM

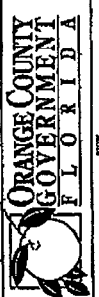
DESIGNED BY: [Name]
CHECKED BY: [Name]
DATE: [Date]

DATE: [Date]
SHEET NO.: 30



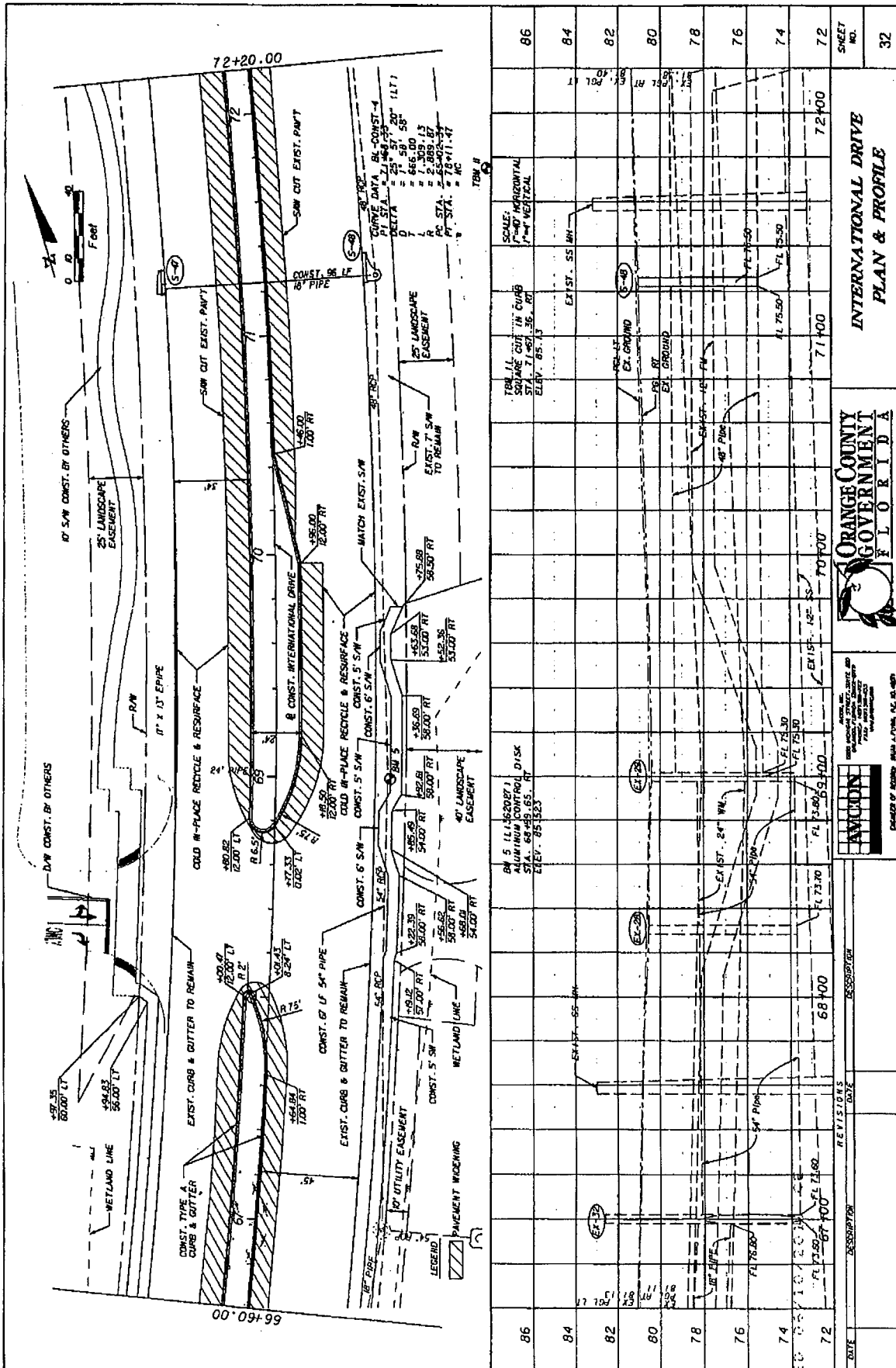
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INTERNATIONAL DRIVE
PLAN & PROFILE

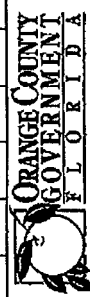


ANCON
ENGINEERS & ARCHITECTS, P.A.
1000 N. W. 10th Street, Suite 200
West Palm Beach, Florida 33411
TEL: 561-833-1111
FAX: 561-833-1112
WWW.ANCON.COM

NO.	DATE	DESCRIPTION
1	05/10/2011	ISSUE FOR PERMIT
2	07/21/10	REVISED PER CITY COMMENTS
3	07/21/10	REVISED PER CITY COMMENTS
4	07/21/10	REVISED PER CITY COMMENTS
5	07/21/10	REVISED PER CITY COMMENTS
6	07/21/10	REVISED PER CITY COMMENTS
7	07/21/10	REVISED PER CITY COMMENTS
8	07/21/10	REVISED PER CITY COMMENTS
9	07/21/10	REVISED PER CITY COMMENTS
10	07/21/10	REVISED PER CITY COMMENTS
11	07/21/10	REVISED PER CITY COMMENTS
12	07/21/10	REVISED PER CITY COMMENTS
13	07/21/10	REVISED PER CITY COMMENTS
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27	07/21/10	REVISED PER CITY COMMENTS
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31	07/21/10	REVISED PER CITY COMMENTS



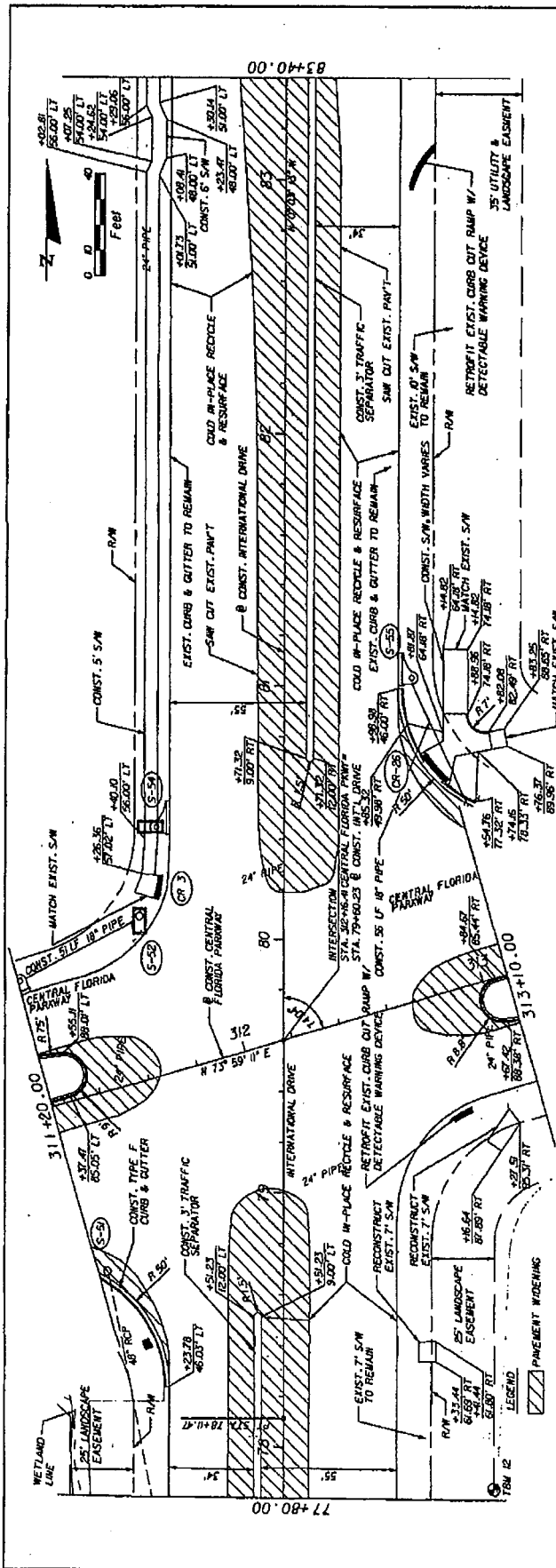
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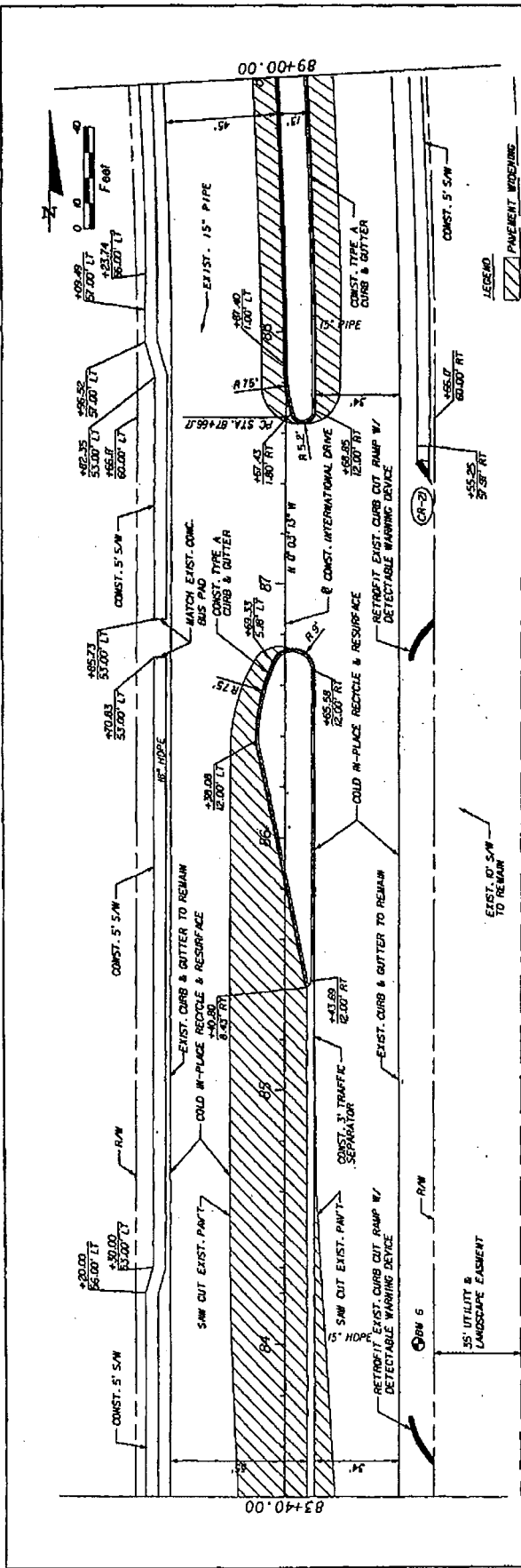
AMULIN
 1000 W. UNIVERSITY AVENUE, SUITE 100
 ORANGE, FLORIDA 32801
 (407) 841-1111
 WWW.AMULIN.COM

INTERNATIONAL DRIVE
 PLAN & PROFILE

DATE: 05/20/2014
 TIME: 10:00 AM
 DRAWN BY: J. W. [unreadable]
 CHECKED BY: [unreadable]
 PROJECT NO.: 110608-11



DATE	DESCRIPTION	REVISOR	DATE	STATION	SCALE:	SHEET NO.
86	TBM 12 CUT IN BASE OF LIGHTPOLE SQUARE STA. 77+83.51 RT ELEV. 85.11			78+00	HORIZONTAL 1"=40'	86
84				79+00	VERTICAL 1"=4'	84
82				80+00		82
80				81+00		80
78				82+00		78
76				83+00		76
74						74
72						72
INTERNATIONAL DRIVE						
PLAN & PROFILE						
ORANGE COUNTY GOVERNMENT						
FLORIDA						



DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION	STATION	SCALE	SHEET NO.
					84+00	FL 79.57 FL 79.22 FL 79.19	89+0076
					85+00		89+0076
					87+00		89+0076
					88+00		89+0076
					86		89+0076
					84		89+0076
					82		89+0076
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**INTERNATIONAL DRIVE
PLAN & PROFILE**



ORANGE COUNTY GOVERNMENT
FLORIDA

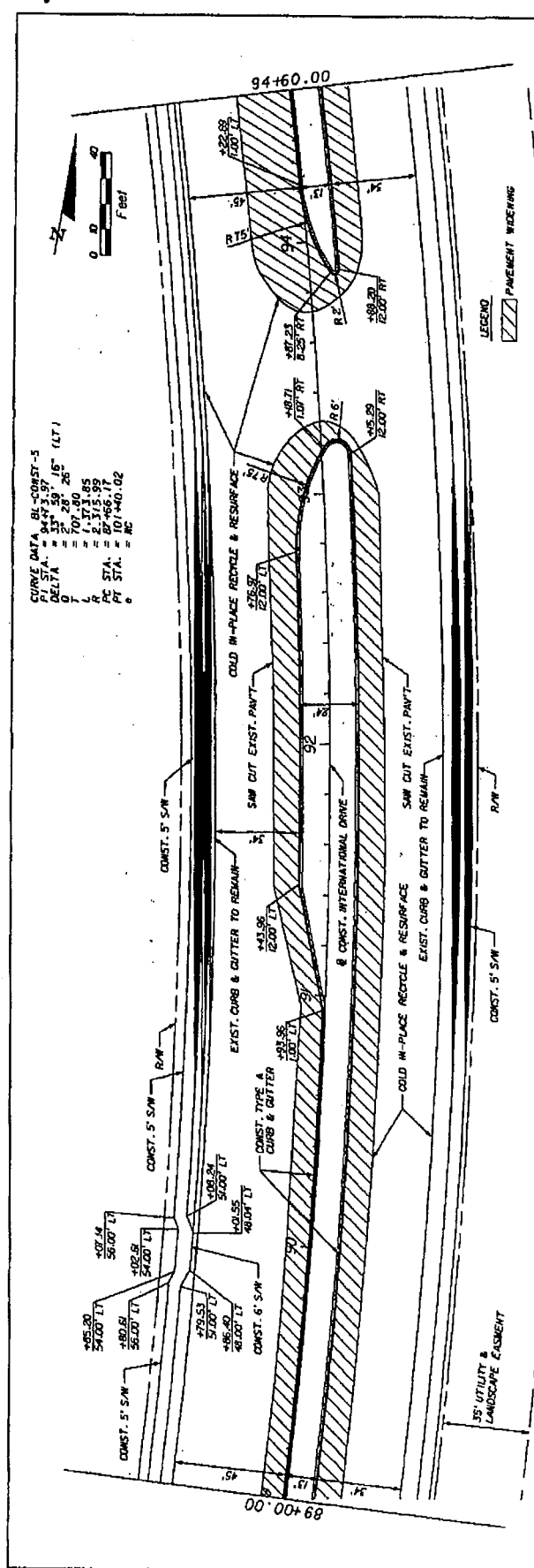
ENGINEERS, ARCHITECTS AND PLANNERS

AMECON ENGINEERS, INC.

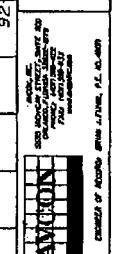
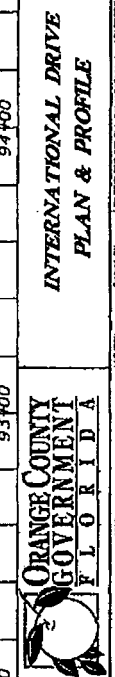
1500 UNIVERSITY BLVD., SUITE 200
ORANGE, FL 32801
TEL: 407/261-1111
FAX: 407/261-1112

REGISTERED PROFESSIONAL ENGINEER
NO. 12800
STATE OF FLORIDA

CURVE DATA BL-CONST-5
 PI STA. = 94+73.97
 DELTA = 29° 26' 06" (LT)
 T = 707.80
 L = 5171.85
 R = 297466.17
 PC STA. = 101+46.02
 PT STA. = 101+46.02
 C = MC

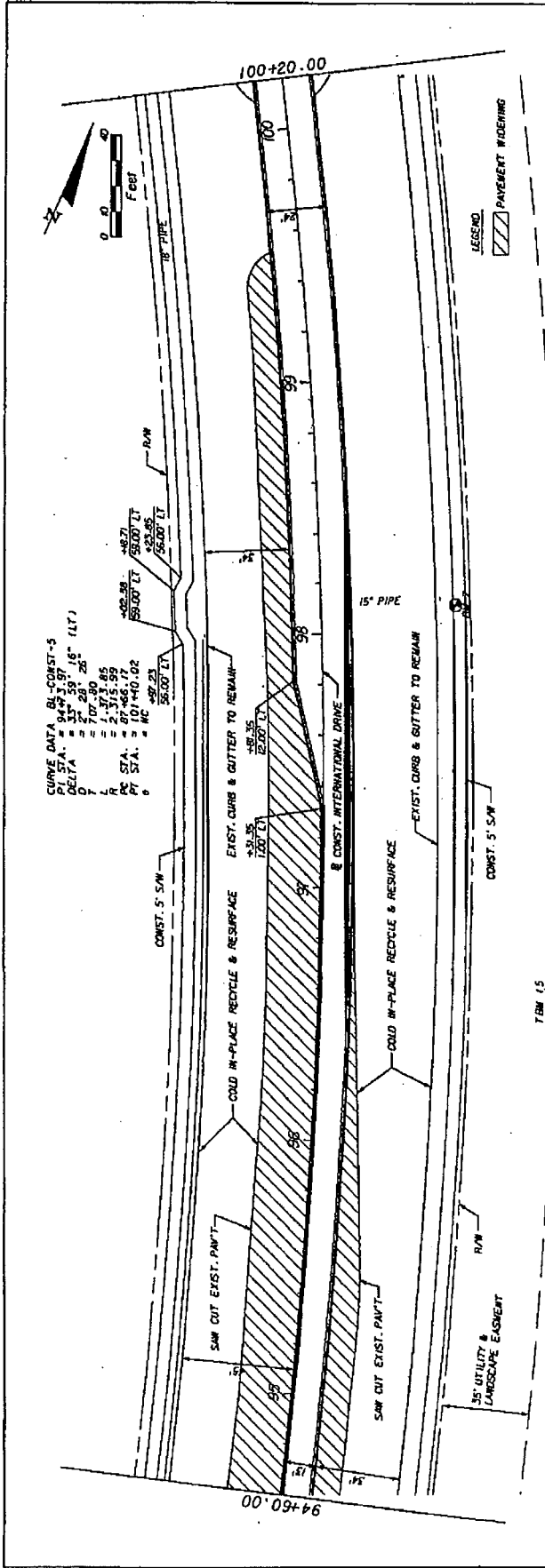
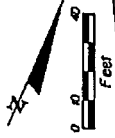


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88								84
86								86
90								90
92								92
94								94
8089+00 CARRIED OVER TO SHEET 81 90+00 91+00 92+00 93+00 94+00								80
8089+00 90+00 91+00 92+00 93+00 94+00								80
8089+00 90+00 91+00 92+00 93+00 94+00								80



INTERNATIONAL DRIVE
 PLAN & PROFILE

CURVE DATA BL CONST-5
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 DELTA = 23° 29' 16" (LT)
 T = 707.80
 L = 1,373.85
 PC STA. = 87+46.97
 PT STA. = 101+40.02
 MC = 58.00 LT
 58.00 LT
 58.00 LT
 58.00 LT
 58.00 LT



STATION	DESCRIPTION	DATE	REVISIONS
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92			
90			
88			
86			
84			
82			
80			
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96+00			
97+00			
98+00			
99+00			
100+00			

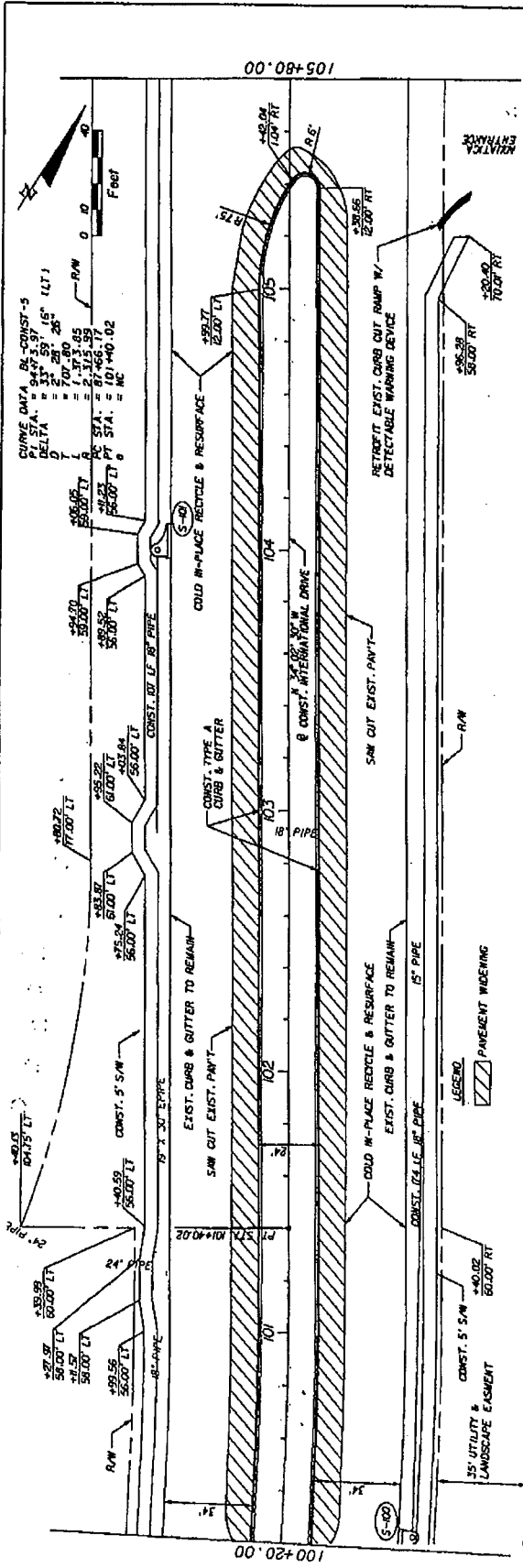
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STATION	DESCRIPTION	DATE	REVISIONS
94			
92			
90			
88			
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84			
82			
80			



INTERNATIONAL DRIVE
 PLAN & PROFILE

DATE: 06/10/2011
 TIME: 11:58:00 AM
 PROJECT: 110608-11

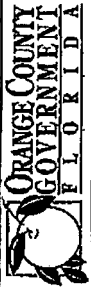
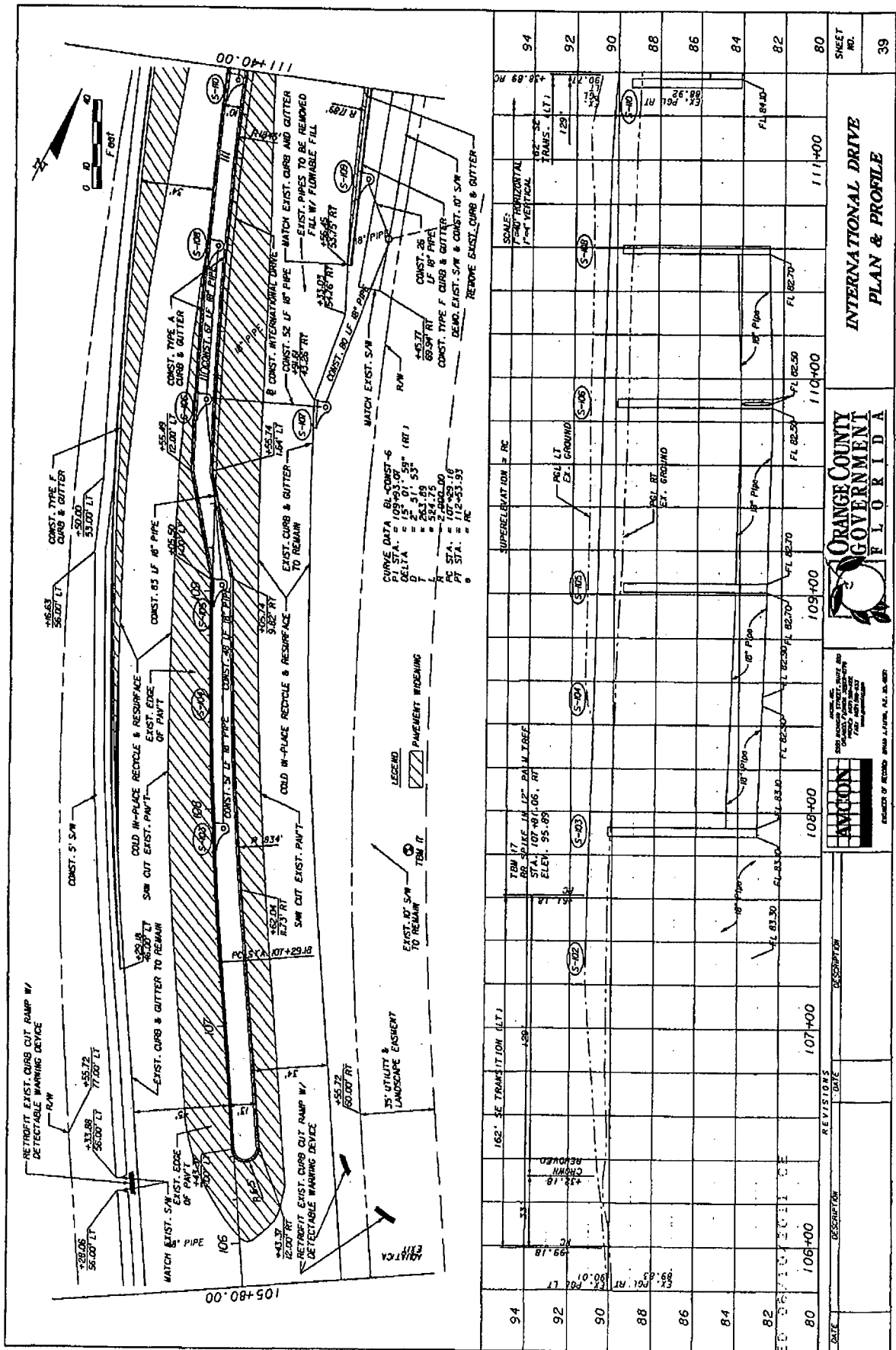


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INTERNATIONAL DRIVE
PLAN & PROFILE



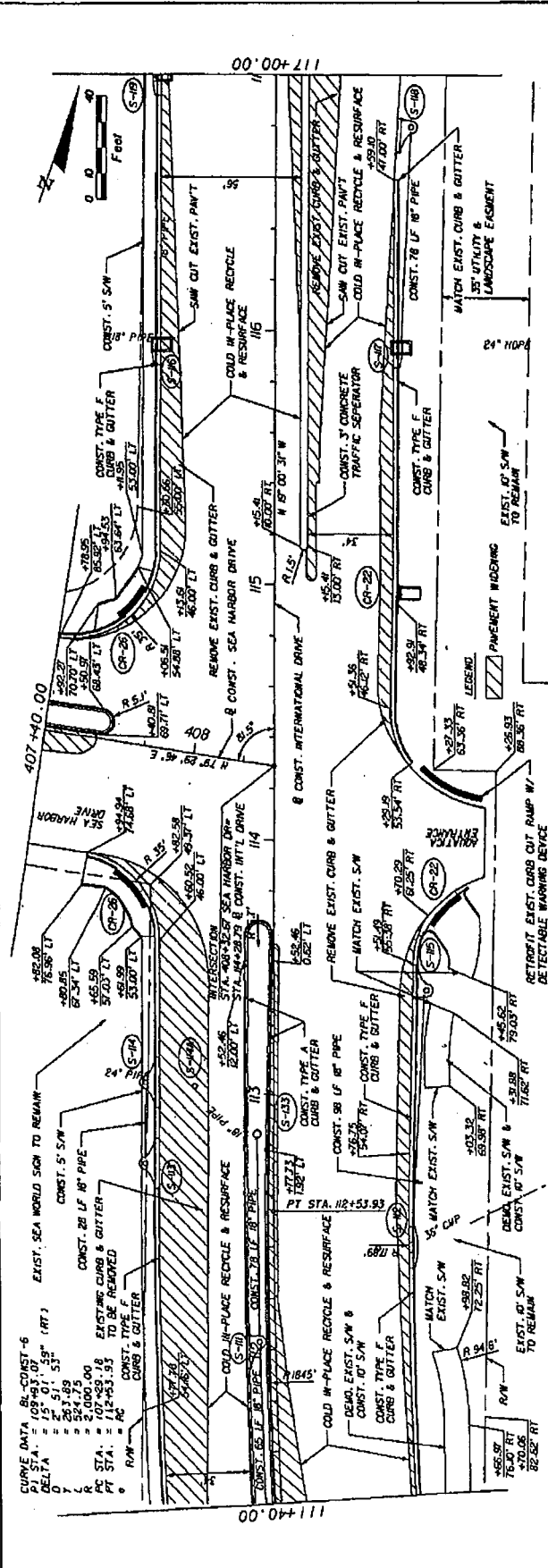
AVICON
CORPORATION
1000 AVICON DRIVE, SUITE 100
ORANGE, FLORIDA 32837
TEL: 407/841-1111
WWW.AVICONCORP.COM



AVICION
 CIVIL ENGINEERING
 1000 W. UNIVERSITY AVENUE, SUITE 200
 ORANGE, FLORIDA 32817
 PHONE: (407) 266-1111
 FAX: (407) 266-1112
 LICENSE NO. 12578
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF FLORIDA

DATE	DESCRIPTION	REVISIONS
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107+00		
108+00		
109+00		
110+00		
111+00		

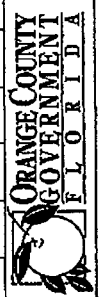
INTERNATIONAL DRIVE
 PLAN & PROFILE
 SHEET NO. 39



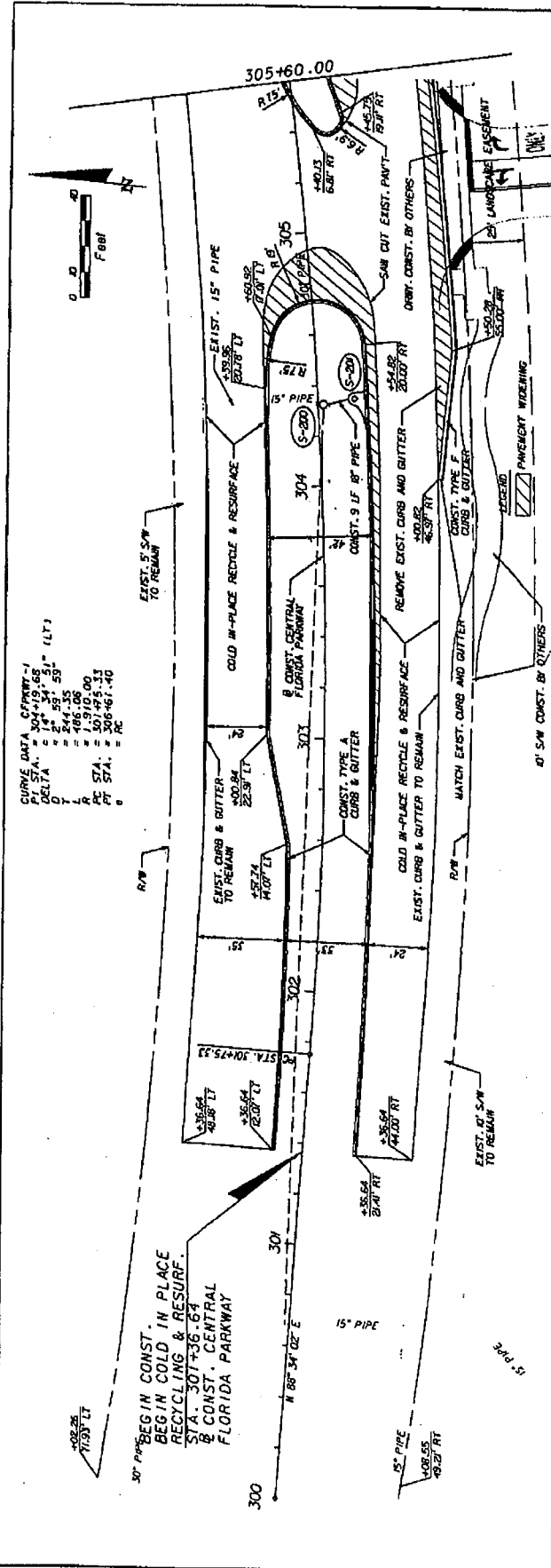
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113+00			
114+00			
115+00			
116+00			
117+00			
117+00.78			

STATION	DESCRIPTION	REVISION DATE	REVISION
92	162' SE TRANSITION (LT)		
90	129		
88	131		
86	133		
84	135		
82	137		
80	139		
78	141		

**INTERNATIONAL DRIVE
PLAN & PROFILE**



AVCHON
INCORPORATED
1000 AVCHON DRIVE, SUITE 200
ORANGE, FLORIDA 32839
TEL: 407.266.1111
FAX: 407.266.1112
WWW.AVCHON.COM



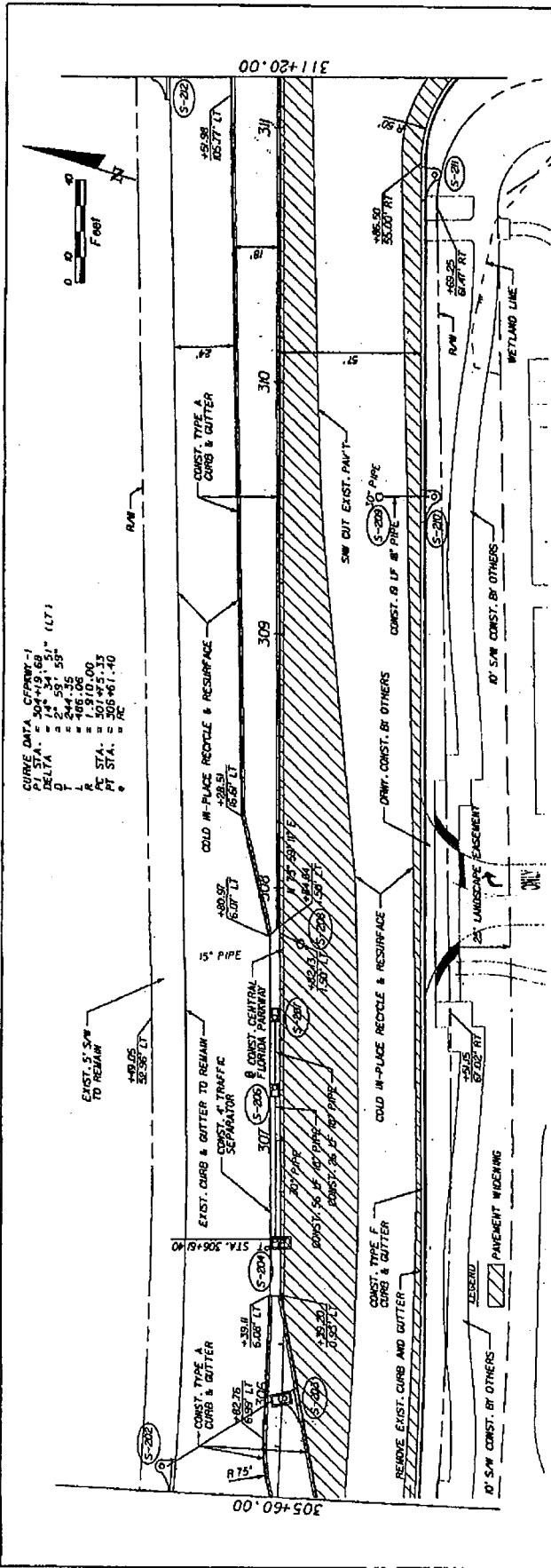
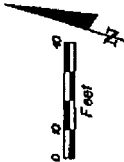
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 PC STA. = 301+75.33
 PT STA. = 306+67.40
 P = PC

DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION	DATE	STATION	SCALE	SHEET NO.
76300+00	BEGIN CONST. STA. 301+35.64 & CONST. CENTRAL FLORIDA PARKWAY					301+00		76
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80						303+00		80
82						304+00		82
84						305+00		84
86						305+60.00		86
88								88
90								90

ORANGE COUNTY GOVERNMENT
FLORIDA

CENTRAL FLORIDA PARKWAY
PLAN & PROFILE

CURVE DATA C/PKWT-1
 P.I. STA. = 304+19.69
 D = 244.55
 L = 466.06
 P.T. STA. = 307+47.33
 P.C. STA. = 306+61.40
 R = 244.55
 ELEV. = 466.06
 CHORD BEARING = 155° 15' 55"



STATION	DESCRIPTION	DATE	REVISIONS
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307+00	EXIST. 10\"/>		
308+00	EXIST. 55\"/>		
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310+00	EXIST. 10\"/>		
311+00	EXIST. 10\"/>		

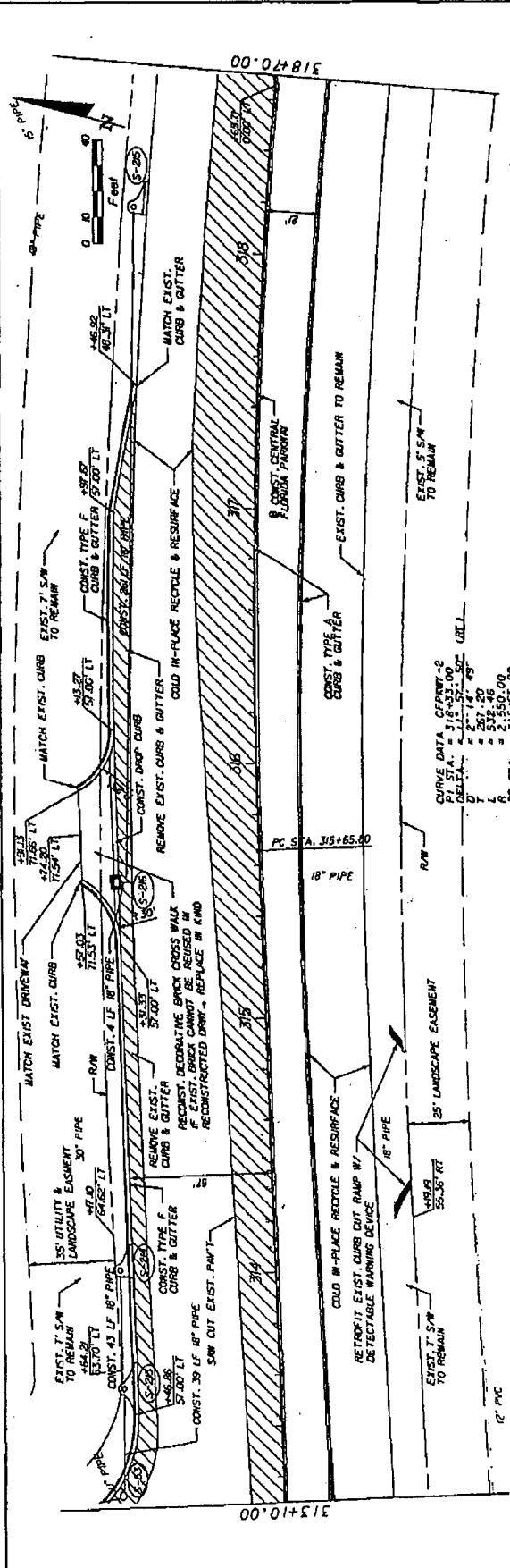
SHEET NO.	DATE	DESCRIPTION
74		
76		
78		
80		
82		
84		
86		
88		

ORANGE COUNTY GOVERNMENT
 FLORIDA
 COUNTY OF RECORD, MAP A-P-104, P.C. 10-107



SCALE:
 PLAN: 1" = 40'
 VERTICAL: 1" = 10'

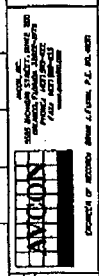
CENTRAL FLORIDA PARKWAY
 PLAN & PROFILE



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 PT STA. = 318+31.86
 CURVE LENGTH = 76.86
 RADIUS = 257.20
 CHORD BEARING = 255.00
 PC STA. = 315+65.80
 PT STA. = 320+58.25
 CHORD LENGTH = 49.50
 CHORD BEARING = 90.00

DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION
88				
86				
84				
82				
80				
78				
76				
74				

CENTRAL FLORIDA PARKWAY
 PLAN & PROFILE



ORANGE COUNTY
 GOVERNMENT
 FLORIDA

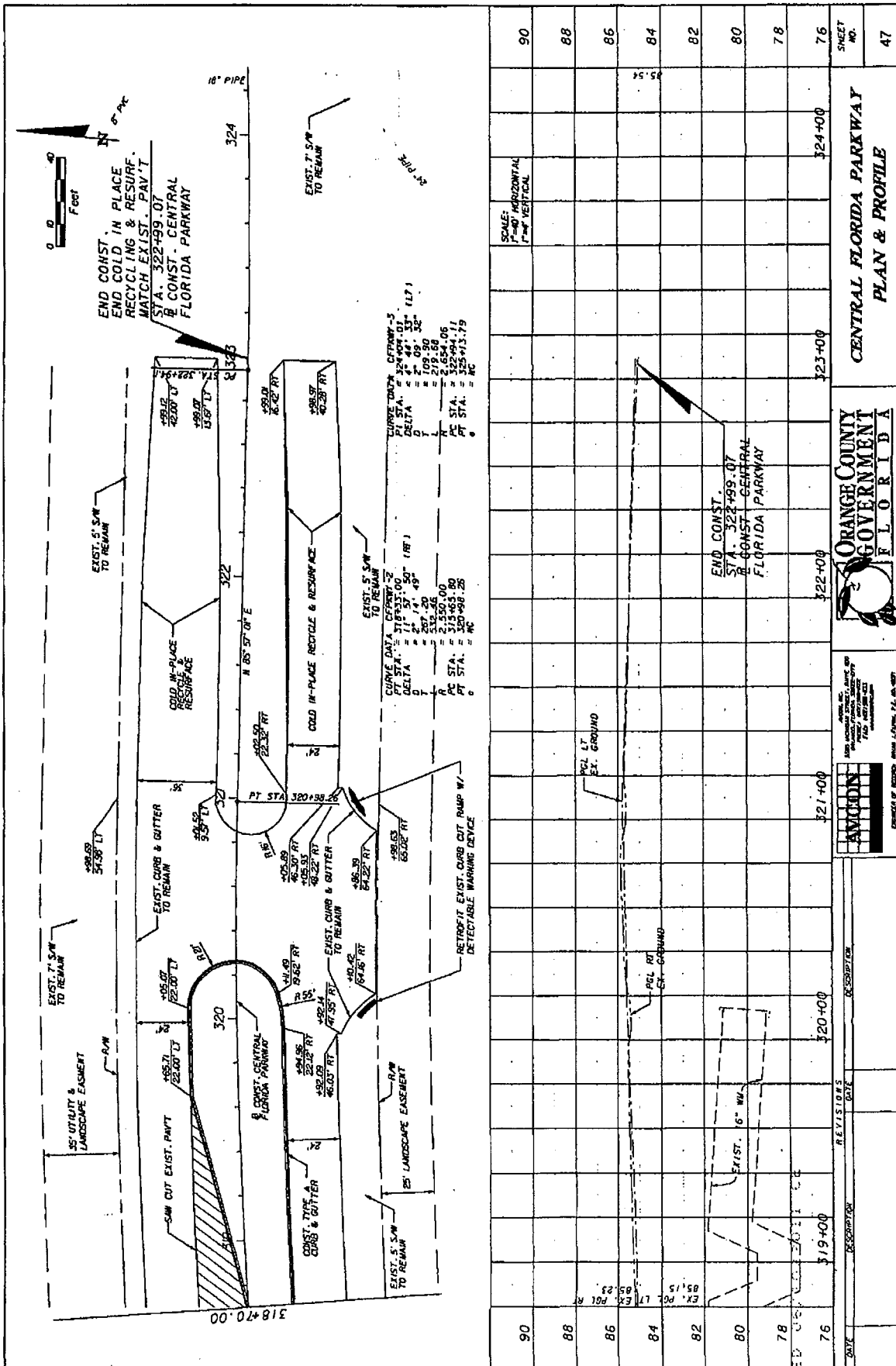


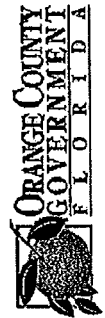
Table 1.1 Summaries of Master Drainage Plan/I-Drive/Central Florida Parkway Construction

*M.P. Basins	*M.P. Basin Area (ac.)	Roadway Sta. (based on orig. const. plans)	Existing Imp. Area (ac.) (Roadway)	Additional Imp. Area (ac.) (Roadway)	Total Proposed Imp. Area (ac.) (Roadway)	Original Treatment Req.*/Total Treatment Required (ac.-ft.)	Treatment Provided (ac.-ft.)	Comments
2 & 3	53.4	Sta. 10+40 - Sta. 38+00	4.22	1.43	5.65	1.01**/1.43	1.43	Total treatment to be provided in Orchid Bay Permit Mod.
1B	7.6	Sta. 38+00 - Sta. 45+00 (1.9 acres)	0.99	0.35	1.34	0.71/0.78	0.79	Total treatment provided in Lake 1B - No modification req.
1A	12.2	Sta. 45+00 - Sta. 60+00 (C-1 Canal) (4.1 acres)	1.98	0.72	2.70	0.87/1.02	1.38	Total treatment provided in Lake 1A - No modification req.
15	21.6	I-Drive from Sta. 60+00 (C-1 Canal) to Sta. 93+23 CFP from Sta. 301+36.64 to Sta. 322+99.07 (14.8 acres)	7.33	2.84	10.17	1.58/2.15	2.15	Total treatment provided in Lake 15 - No modification req.
C-5 Canal & SPOND	N/A	Sta. 93+23 - Sta. 114+25 (5.8 acres)	2.89	1.20	4.09	0.308/0.548	0.548	Treatment to existing swale, Aquatica and/or SPOND
SPOND & C-4 / C-5	N/A	Sta. 114+25 - Sta. 132+79 (C-1 Canal)	5.24	1.13	6.37	N/A	N/A	Exemption due to the addition of only turn lanes and sidewalks
Total		26.60***			18.3***			

*Info from the Master Plan for the Orangewood DRI dated 1975.

**Original treatment required taken from Modification to Permit for Orchid Bay, Parcel 15. The Permitted Impervious Area (1.01 ac.) is less than the Actual Proposed Impervious Area (1.43 ac.) for the I-Drive Widening. Extra treatment volume is available in Ponds 2A + 2B and Ponds 2C + 3. See Water Quality/Water Quantity Calculations, Appendix D for calculations to demonstrate that permit criteria is met.

***Project Areas for which permit is sought. (18.3 ac Pavement Area & 8.3 acres Pervious Area)



**International Drive Widening
Project Y-10-800**

STAFF REPORT DISTRIBUTION LIST

INTERNATIONAL DRIVE ROADWAY IMPROVEMENTS

Application No: 110608-11

Permit No: 48-00052-S-44

INTERNAL DISTRIBUTION

- X Annette V. Burkett
- X Susan C. Elfers
- X Marc S. Ady
- X Mark S. Daron, P.E.
- X A. Lee
- X ERC Engineering
- X ERC Environmental
- X Permit File

EXTERNAL DISTRIBUTION

- X Permittee - Orange County Board Of County Commissioners
- X Permittee - Westwood Lakes Property Owners Association Inc
- X Engr Consultant - The Balmoral Group

GOVERNMENT AGENCIES

- X Div of Recreation and Park - District 6 - FDEP
- X Orange County Engineer Public Works Division Dvlpmnt Engineering Dept.
- X Valencia Water Control District

**VALENCIA WATER CONTROL DISTRICT'S (VWCD)
PERMIT**

FAX COVER SHEET

VALENCIA WATER CONTROL DISTRICT

10365 Orangewood Blvd.
Orlando, FL 32821

PH: (407) 355-5741
FX: (407) 355-5743

RECEIVED
FEB 14 2012

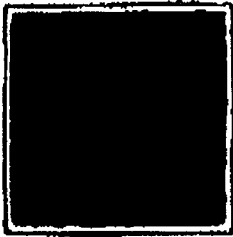
BY:.....

SEND TO Company name <i>Board of County Commis.</i> Attention <i>Mark Massaio</i> Office location	From <i>Nardo Parker</i> Date <i>2-14-12</i> Office location
Fax number <i>629-2183</i>	Phone number
<input type="checkbox"/> Urgent <input type="checkbox"/> Reply ASAP <input type="checkbox"/> Please comment <input type="checkbox"/> Please review <input type="checkbox"/> For your information	

Total pages, including cover: 4

COMMENTS

Here is a fully Executed Copy
 of our Permit #0454 for
 International Drive Roadway
 Improvements



VALENCIA WATER CONTROL DISTRICT

10365 Orangewood Blvd. • Orlando, Florida 32821
Tel: (407) 355-5741 • Fax: (407) 355-5743

December 13, 2011

Mark V. Massaro, P.E. Public Works Dir.
Board of County Commissioners
4200 S. John Young Parkway
Orlando, FL 32839-9205

Subject: Permit #0454

Dear Mr. Massaro:

The Board of County Commissioners is hereby granted a construction permit to build stormwater appurtenances in conjunction with International Drive Roadway Improvements. Approval is granted in accordance with approved plans and hydraulic calculations and the following **GENERAL AND SPECIFIC CONDITIONS:**

GENERAL CONDITIONS:

1. That the District or their agents may at any time make such inspections as they may deem necessary to insure that the construction or work is performed in accordance with the conditions of this permit.
2. That the permittee will maintain the work authorized herein during construction and thereafter in good condition in accordance with the approved plans.
3. That the permittee shall comply promptly with any lawful regulations, conditions, or instructions affecting the structure or work authorized herein if and when issued by the U.S. Environmental Protection Agency, the South Florida Water Management District and the Florida Department of Environmental Protection and/or any county or city environmental protection agency having jurisdiction to abate or prevent water pollution, including thermal or radiation pollution. Such regulations, conditions, or instructions in effect or hereafter prescribed by the federal, state, county and city agencies have hereby made a condition of this permit.
4. It is understood and agreed that the rights and privileges herein set out are granted only to the extent of the District's right, title and interest in the land to be entered upon and used by the permittee, and the permittee will at all times, assume all risk and indemnify, defend, and save harmless the Valencia Water Control District from and against any and all loss, damage, cost or expense arising in any manner on account of the exercise or attempted exercises by the permittee of the aforesaid rights and privileges.

5. The permittee and/or their agents will use every measure to prevent the run-off of turbid water into the District's facilities including, but not limited to, the use of temporary ponds, silt barriers, chemical additives and temporary grassing during construction.
6. If discharge of water by permittee should at any time raise the level of pollutants in District's water management facility to the point where the District is in violation of a statute or regulation, permittee will either: (a) immediately cease such discharge, (b) remove pollutants from the water before discharging into District facilities, and pay all costs which the District must incur in order to reduce pollution in the District's facilities to acceptable levels.
7. That all the provisions of this permit shall be binding on any assignee or successor in interest of the permittee.
8. That any modification, suspension or revocation of this permit shall not be the basis for a claim for damages against the Valencia Water Control District.
9. The Valencia Water Control District agrees that the issuance of this permit allows the passage of water through their canals but in so doing, does not assume any responsibility for damage to any persons or property.
10. That the engineer of record certify that the facilities as constructed comply with the submitted hydraulic calculations and approved drawings.
11. That the permittee agrees not to modify or alter the constructed facilities at any future time without the express consent of the District.
12. This permit is valid for 5 years from date of approval or runs concurrently with the SFWMD permit, if required, whichever expires first.
13. That this permit must be executed within 30 days of Board approval or must be brought back to the Board for reconsideration.

END OF GENERAL CONDITIONS

SPECIFIC CONDITIONS

1. That drawings Sheet 1 thru 197, dated 11/18/2011, by Avcon, Inc. titled International Drive Roadway Improvements, as recommended for approval by the District Engineer on 12/13/2011, become a part of this permit.

Attest:

A. Aziz
 Abdul Aziz, P.E.
 Senior Engineer
 Orange County Public Works
 Engineering Division

Signature:

Mark V. Massaro
 Mark V. Massaro, Public Works Dir.
 Board of County Commissioners

Attest:

Nanda Parker

Granted by:

Valencia Water Control District

By:

William Tew
 William Tew, President

On this 10th day of February, 2012.

**U.S. ARMY CORPS OF ENGINEERING'S (USACOE)
PERMIT**



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
COCOA REGULATORY FIELD OFFICE
400 HIGH POINT DRIVE, SUITE 600
COCOA, FLORIDA 32926

North Permits Branch
Cocoa Section
SAJ-2011-01729 (NPR-MAM)

DEC 08 2011

Orange County Public Works Department
c/o. Ghulam Qadir
4200 S. John Young Pkwy.
Orlando, FL 32839

DEC 13 2011

Dear Mr. Qadir:

Reference is made to the application received on June 10, 2011, and completed on December 1, 2011, for the International Drive Roadway Improvement project. The project is located within International Drive's 120-foot right-of-way, from Westwood Boulevard to State Road 528 (Beach Line), Orlando (Sections 7, 12, 13, 18, and 24; Township 24 South; Ranges 28 and 29 East), in Orange County, Florida.

The project as proposed will not require a Department of the Army permit in accordance with Section 10 of the Rivers and Harbors Act of 1899 as it is not located within the navigable waters of the United States. Furthermore, a permit will not be required in accordance with Section 404 of the Clean Water Act as it will not involve the discharge of dredged or fill material into waters of the United States. Provided the work is done in accordance with the enclosed drawings, Department of the Army authorization will not be required.

This letter contains an approved jurisdictional determination for your subject site. If you object to this determination/decision, you may request an administrative appeal under Corps' regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination/decision, you must submit a completed RFA form to the South Atlantic Division Office at the following address:

Mr. Jason Steele
South Atlantic Division
U.S. Army Corps of Engineers
CESAD-CM-CO-R, Room 9M15
60 Forsyth St., SW.
Atlanta, Georgia 30303-8801.

Mr. Steele can be reached by telephone number at 404-562-5137, or by facsimile at 404-562-5138.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division office within 60 days of the date of the RFA. It is not necessary to submit an RFA form to the Division office, if you do not object to the determination/decision in this letter.

This determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work. Please be advised this determination reflects current policy and regulations and is valid for a period of no longer than 5 years from the date of this letter unless new information warrants a revision of the determination before the expiration date. If after the 5-year period, the Corps has not specifically revalidated this determination, it will automatically expire. Any reliance upon this determination beyond the expiration date may lead to possible violation of current Federal laws and/or regulation.

Additionally, your project site may contain species protected by the Endangered Species Act (ESA) of 1972, as amended. You should contact your local U.S. Fish and Wildlife Service (FWS) office to determine if Federally listed species or their habitat are present on your project site. If it is determined that Federally listed species may be affected by the proposed project, authorization for "incidental take" may be

required. FWS offices can be contacted by the following telephone numbers: Jacksonville at 904-232-2580, Panama City at 850-769-0552, St. Petersburg at 727-570-5398, or Vero Beach at 772-562-3909.

This letter does not obviate the requirement to obtain any other Federal, State, or local permits that may be necessary for your project. Should you have any questions, please contact the assigned project manager, Miguel Mozdzen, at the letterhead address, by telephone at 321-504-3771 ext. 26, or by email at Miguel.A.Mozdzen@usace.army.mil.

Thank you for your cooperation with our permit program. The Corps Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to take a few minutes to visit the following link and complete our automated Customer Service Survey: <http://per2.nwp.usace.army.mil/survey.html>. Your input is appreciated - favorable or otherwise.

Sincerely,



Miguel Mozdzen
Project Manager

Copy:

Consultant:
The Balmoral Group
c/o. Joseph A. Yarid
341 North Maitland Avenue, Suite 100
Maitland, FL 32751

Applicant: Orange County Public Works Department c/o. Ghulam Qadir		File Number: SAJ-2011-01729(NPR-MAM)	Date: DEC 08 2011
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** *If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.*
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** *If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.*
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** *You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.*
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

If you have questions regarding this decision and/or the appeal process you may contact:

Project Manager as noted in letter

If you only have questions regarding the appeal process you may also contact:

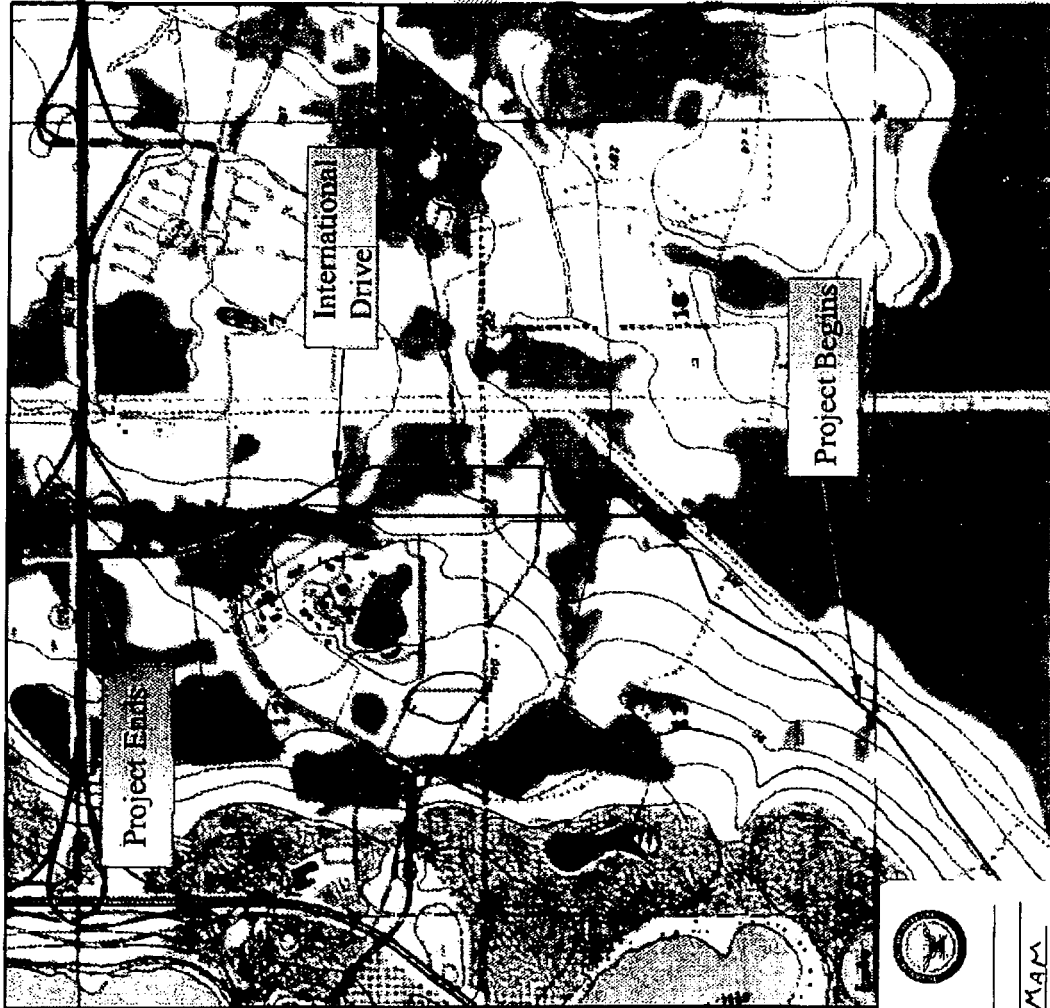
**Jason Steele
404-562-5137**

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date:

Telephone number:



U.S. Army Corps
of Engineers

Appl.# SAJ-2011-01729

Date 12/02/11

Drawing # 1 of 23 Initials MAM

PROJECT	BORING LOCATION	U.S.G.S QUADRANGLE MAP	ISSUED (PHOTO REVISER)
BEGINS-ENDS	S7,12,13M 18 T4S 12429E	LAKE JESSAMINE	1933 1980

NES Civil
Geotechnical
Environmental
Consulting Engineering

SCALE: NOT TO SCALE
DATE: 07-14-2010

ORANGE COUNTY
PUBLIC WORKS
FLORIDA

PROJECT NAME:
TOPOGRAPHIC MAP
INTERNATIONAL DRIVE
(S. Westwood Blvd. N. Westwood Blvd)

COUNTY:
ORANGE

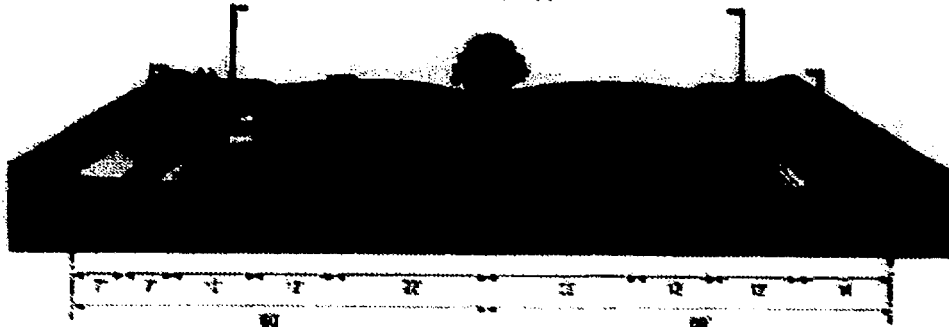
PROJECT NO.:
-

NES PROJECT NO.
R 10003

FIGURE #

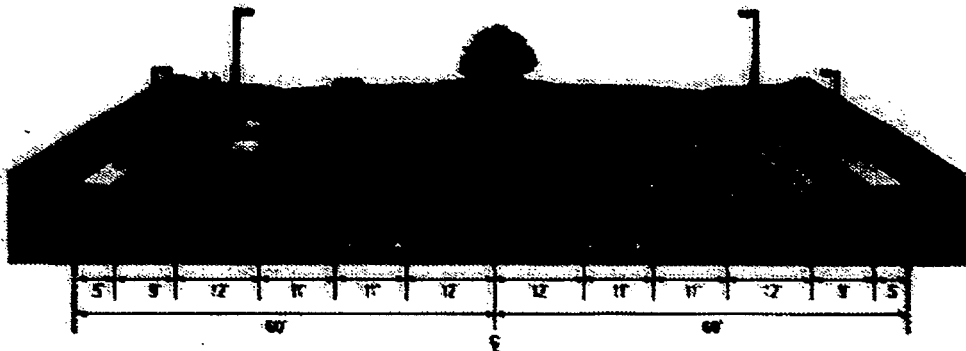
Figure 6

Figure 3-1 – Existing Typical Section



Existing Typical Section (from Concept Report)

Figure 4-1 – Proposed International Drive Typical Section



Proposed Typical Section (from Concept Report)

Figure 2 – Existing & Proposed Typical Sections



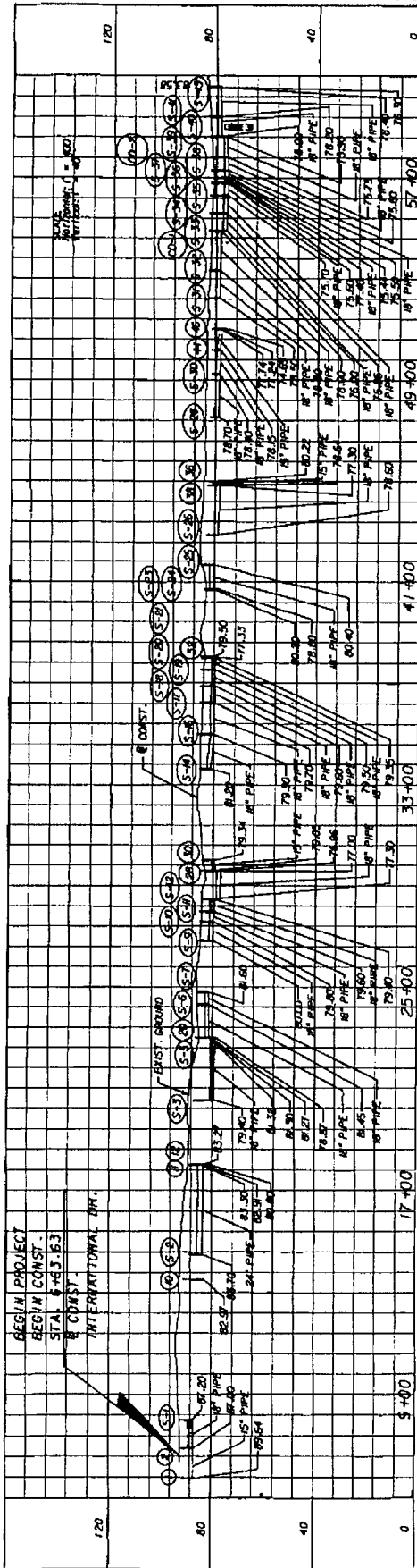
U.S. Army Corps
of Engineers



Appl.# SAT-2011-01729

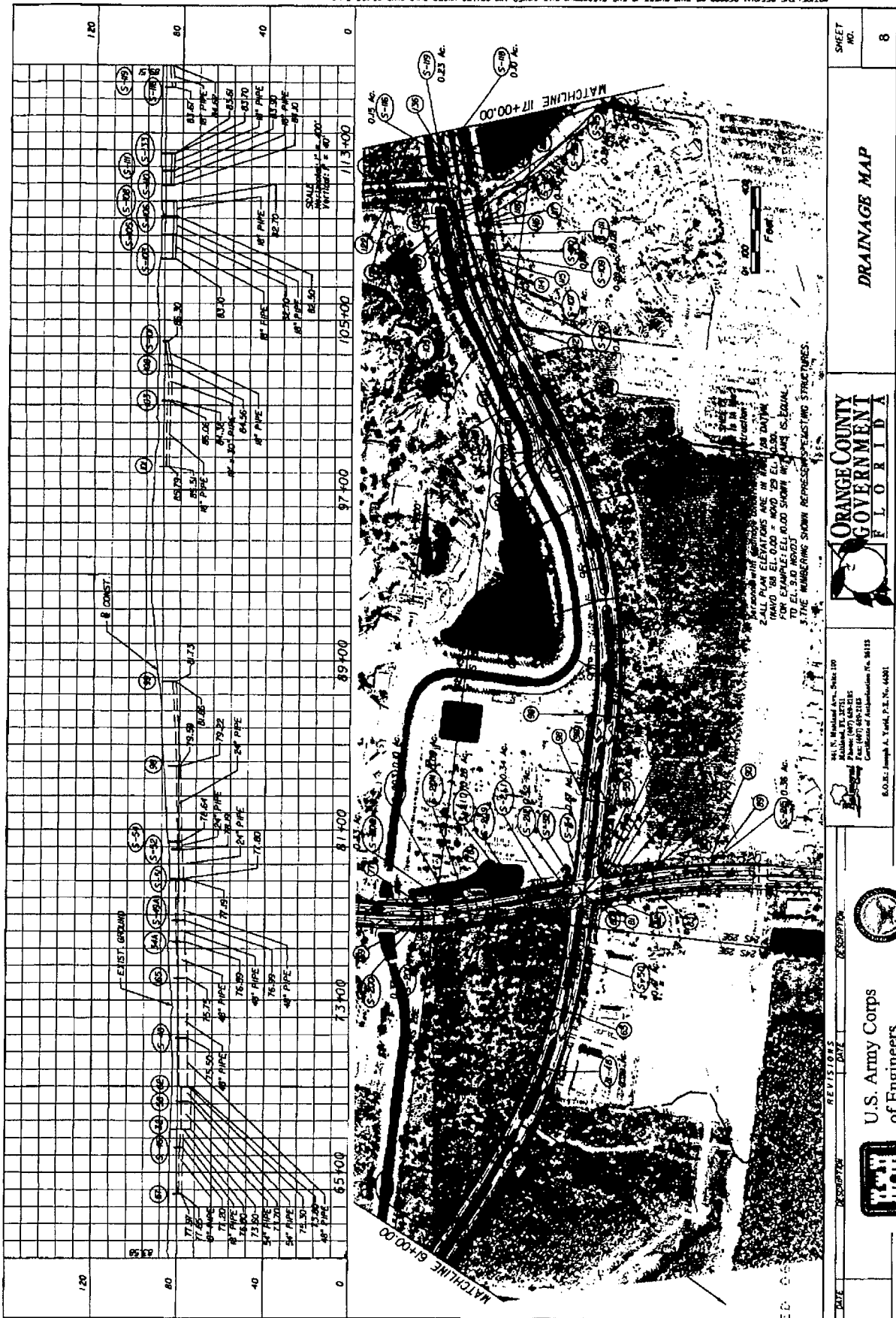
Date 12/02/11

Drawing # 2 of 23 Initials MAM



NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 605-23.003, F.A.C.

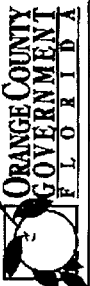
				SHEET NO. 7	
U.S. Army Corps of Engineers		ORANGE COUNTY GOVERNMENT FLORIDA		DRAINAGE MAP	
App.# SAJ-2011-01720 Date 12/02/11 Drawing # 3 of 23 Initials <i>nan</i>		31 N. Michigan Ave., Suite 100 Orlando, FL 32806 Phone: (407) 836-3250 Fax: (407) 836-3133 E.O.B.E.: Joseph A. York, P.E., No. 4480		12/02/11 12:08 PM 12/02/11	
DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION	DATE



NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE STORED AND SEALED UNDER RULE 69S-23.005, F.A.C.

SHEET NO. 8

DRAINAGE MAP



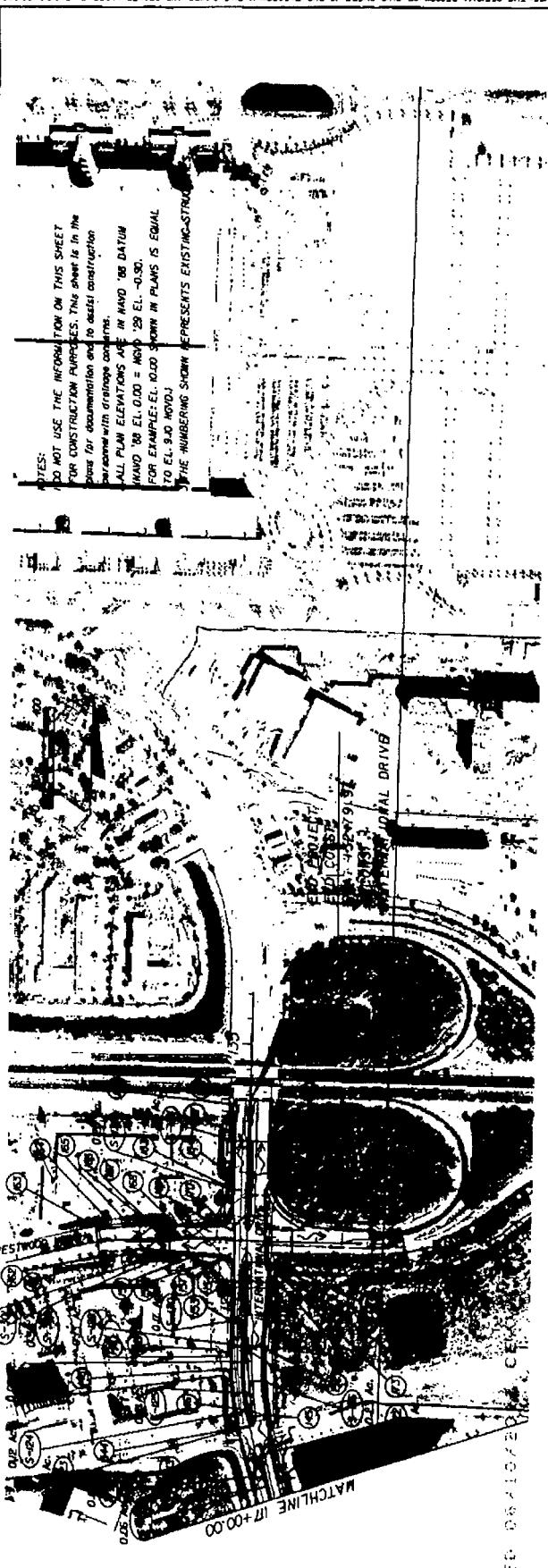
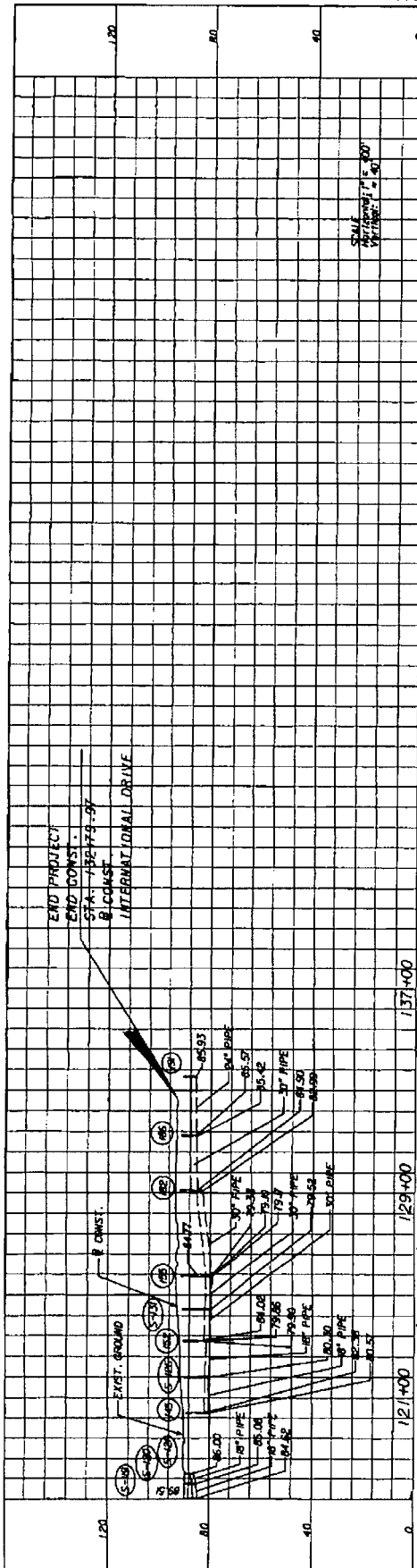
341 N. Westland Ave., Suite 100
 Orlando, FL 32815
 Phone: (407) 485-2125
 Fax: (407) 485-2128
 Certificate of Accreditation No. W115
 E.O.C.E. - Joseph A. Tavel, P.E., No. 4481



**U.S. Army Corps
 of Engineers**

App.# SAJ-2011-01729
 Date 12/02/11
 Drawing # 4 of 23 Initials MAM

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 600-23.003, F.A.C.




NOTES:
 DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. This sheet is in the same for documentation and to assist construction personnel with drainage concerns.
 ALL PLAN ELEVATIONS ARE IN HAND '88 DATUM FOR EXAMPLE: EL. 10.00 SHOWN IN PLANS IS EQUAL TO EL. 9.10 NAVD.
 THE NUMBERING SHOWN REPRESENTS EXISTING STRUCTURES.

SCALE
 HORIZONTAL: 1" = 100'
 VERTICAL: 1" = 50'


END PROJECT
 END CONST.
 STA. 138+75.97
 @ POINT
 INTERMITTENT DRIVE

DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION



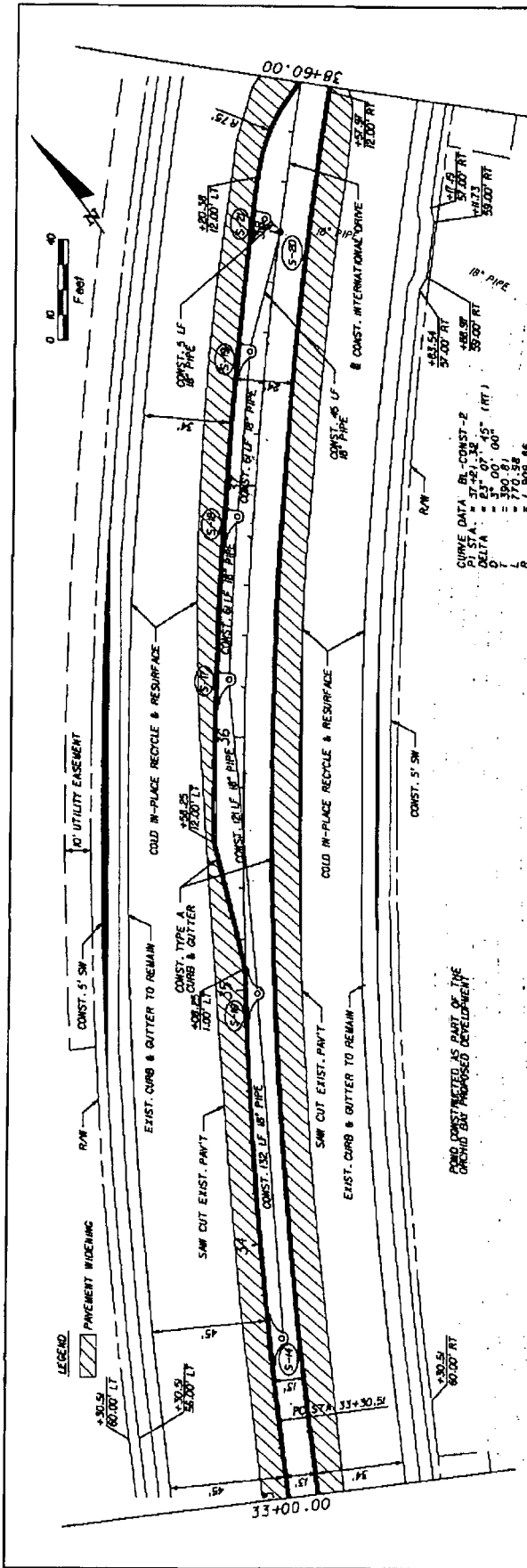
 U.S. Army Corps of Engineers

Appl.# SAT-2011-01729
 Date 12/02/11
 Drawing # 5 of 23 Initials KAM



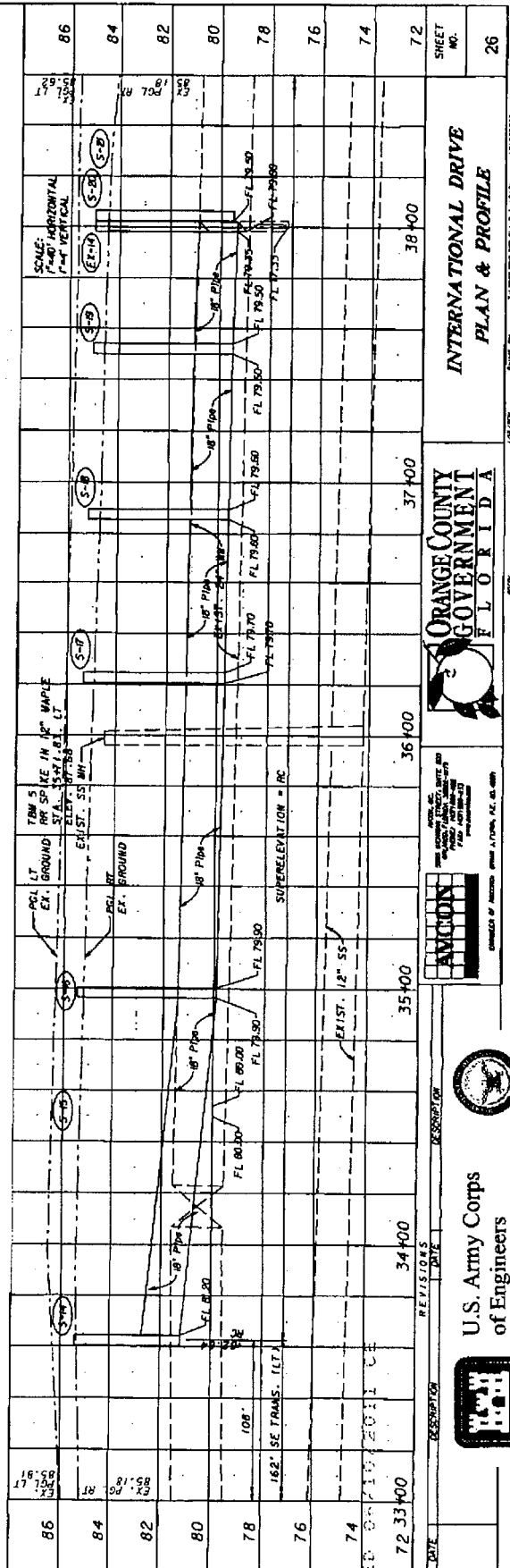
 ORANGE COUNTY GOVERNMENT FLORIDA

SHEET NO. 9



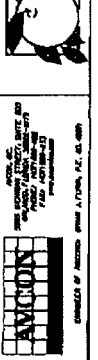
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 DELTA = 57° 00' 00" (RT)
 R = 390.81
 PC STA. = 33+30.81
 PT STA. = 41+01.49

POND, DEMONSTRATED AS PART OF THE ORCHARD BAY PROPOSED DEVELOPMENT



SCALE: HORIZONTAL 1" = 40'
 VERTICAL 1" = 4'

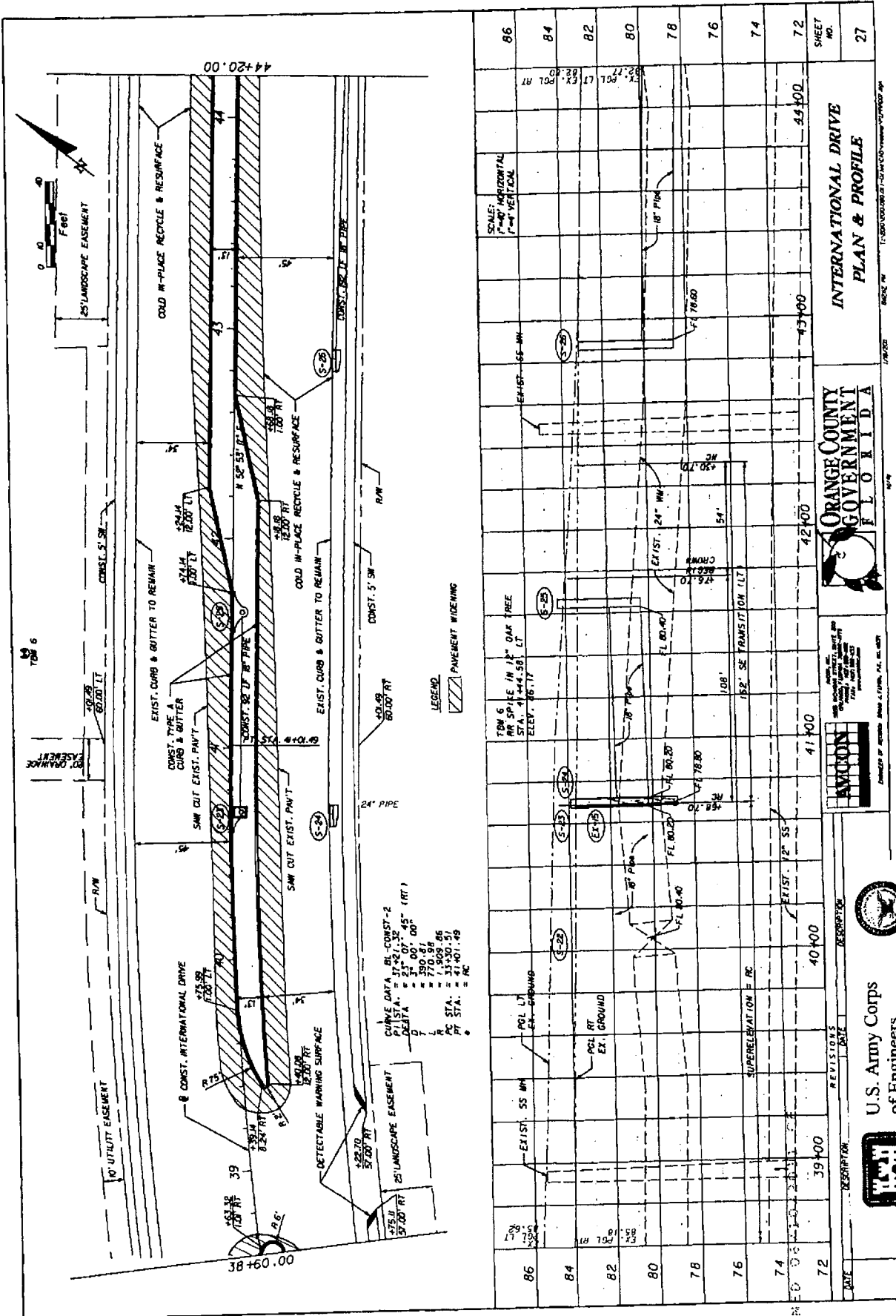
ORANGE COUNTY
 GOVERNMENT
 FLORIDA



U.S. Army Corps
 of Engineers

App.# SAI-2011-01729
 Date 12/02/11
 Drawing # 6 of 23 Initials KAM

DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION



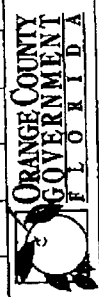
CURVE DATA BL-CURST-2
 DELTA A = 21° 07' 45" (RT)
 DELTA B = 3° 00' 00"
 DELTA C = 350' 81'
 R = 1,508.86
 PC STA. = 33+30.51
 PT STA. = 41+01.49

LEGEND
 PAVEMENT WIDENING

DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION
03-03-11	39+00			
03-03-11	40+00			
03-03-11	41+00			
03-03-11	42+00			
03-03-11	43+00			
03-03-11	44+00			

STATION	DATE	DESCRIPTION	SCALE	SHEET NO.
86	03-03-11	EXIST. 55 MM POL LT EX. PAVING	7'-0" HORIZONTAL 1'-0" VERTICAL	27
84	03-03-11	EXIST. 55 MM POL LT EX. PAVING	7'-0" HORIZONTAL 1'-0" VERTICAL	27
82	03-03-11	EXIST. 55 MM POL LT EX. PAVING	7'-0" HORIZONTAL 1'-0" VERTICAL	27
80	03-03-11	EXIST. 55 MM POL LT EX. PAVING	7'-0" HORIZONTAL 1'-0" VERTICAL	27
78	03-03-11	EXIST. 55 MM POL LT EX. PAVING	7'-0" HORIZONTAL 1'-0" VERTICAL	27
76	03-03-11	EXIST. 55 MM POL LT EX. PAVING	7'-0" HORIZONTAL 1'-0" VERTICAL	27
74	03-03-11	EXIST. 55 MM POL LT EX. PAVING	7'-0" HORIZONTAL 1'-0" VERTICAL	27
72	03-03-11	EXIST. 55 MM POL LT EX. PAVING	7'-0" HORIZONTAL 1'-0" VERTICAL	27

ORANGE COUNTY
 GOVERNMENT
 FLORIDA

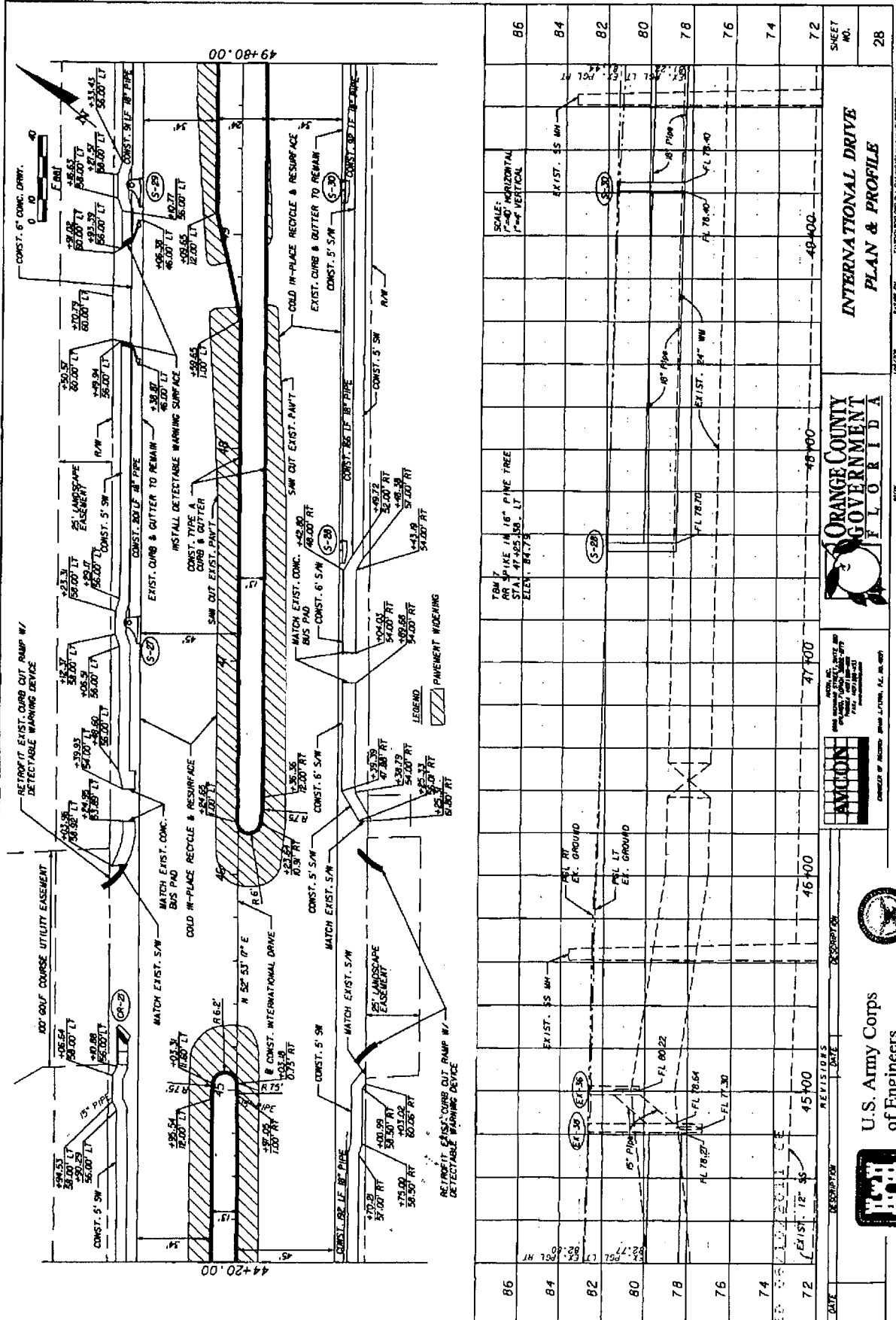


AMCON
 CONSULTING ENGINEERS
 1100 S. UNIVERSITY AVENUE, SUITE 200
 ORLANDO, FLORIDA 32811
 TEL: 407-831-1111
 FAX: 407-831-1112



U.S. Army Corps
 of Engineers

Appl. # SAJ-2011-01729
 Date 12/22/11
 Drawing # 7 of 33 Initials RAM



DATE	DESCRIPTION	REVISOR'S NAME	DATE	DESCRIPTION
72	EXIST. 12' S/S		45+00	
74				
76				
78				
80				
82				
84				
86				

SHEET NO.	INTERNATIONAL DRIVE PLAN & PROFILE
28	

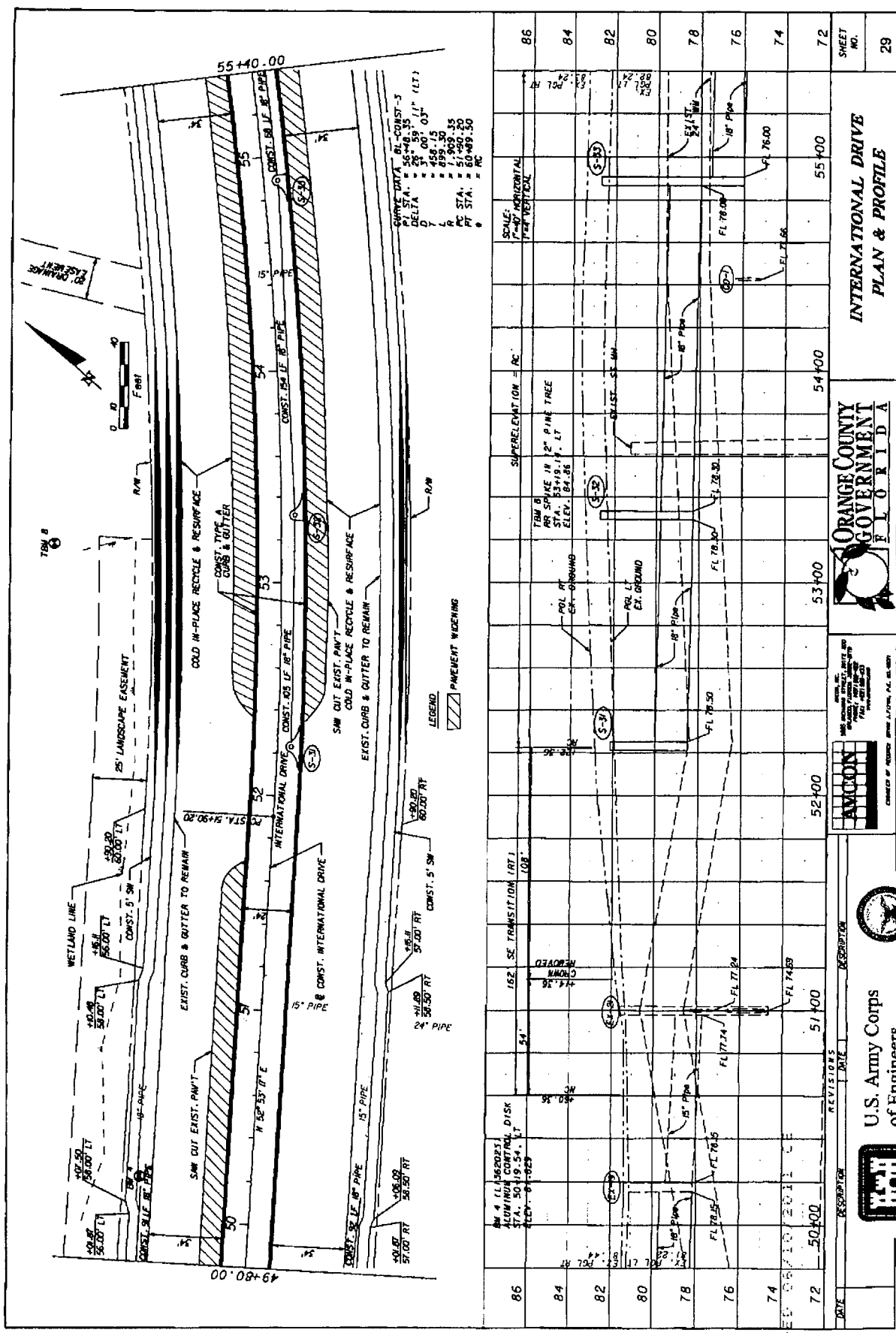
U.S. Army Corps
of Engineers

AMCON
AMERICAN MUNICIPAL CONSULTANTS
CORPORATION
CORPORATE HEADQUARTERS, A.C. IN. OFF.
1000 PINE BLVD., SUITE 200
DALLAS, TEXAS 75201
(214) 420-1000

Appl.# SA1-2011-01729
Date 12/02/11
Drawing # 8 of 23 Initials RAN



SCANNED FOR DIGITAL ACCESS

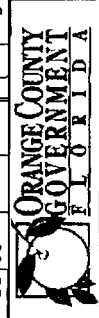


SWAY DATA BL CONST-5
 STA. 55+00.00
 DELTA = 20° 59' 11" (LT)
 D = 3' 00' 03"
 L = 456.12
 A = 1,309.35
 PC STA. = 51+90.20
 PT STA. = 60+49.50
 P = RC

LEGEND
 [Hatched Box] PAVEMENT WIDENING

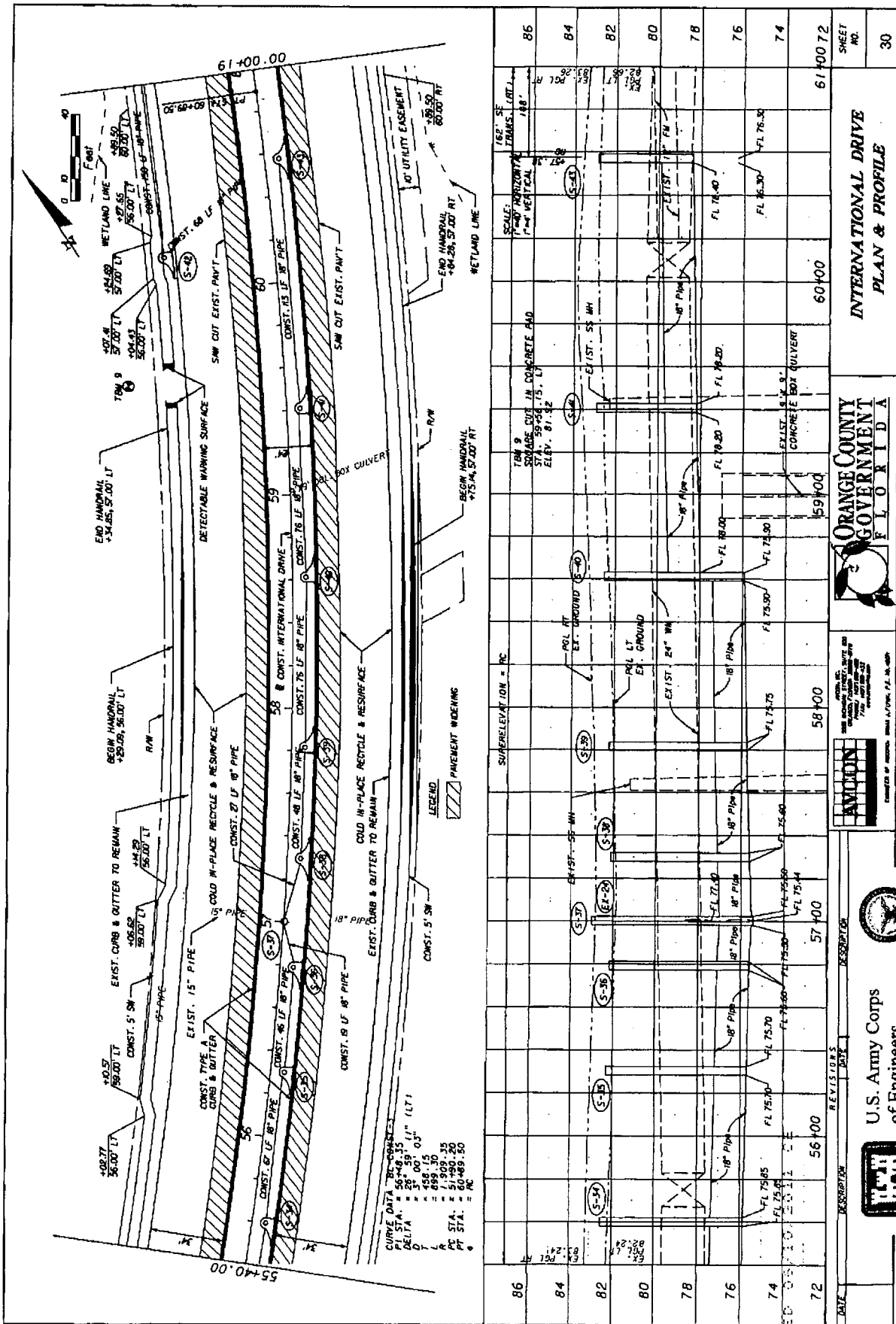
STATION	DESCRIPTION	DATE	REVISIONS	DESIGNER	SCALE	VERTICAL	HORIZONTAL	PC	PT	STATION
86	86									86
84	84									84
82	82									82
80	80									80
78	78									78
76	76									76
74	74									74
72	72									72

INTERNATIONAL DRIVE
 PLAN & PROFILE



U.S. Army Corps
 of Engineers

Appl.# SAJ-2011-01729
 Date 12/02/11
 Drawing # 9 of 23 Initials MAM



CURVE DATA
 BC-CORNER = 55+48.35
 PI STA. = 56+48.35
 DELTA = 57° 00' 00"
 D = 158.15
 L = 899.30
 PC STA. = 51+29.20
 PT STA. = 60+48.50

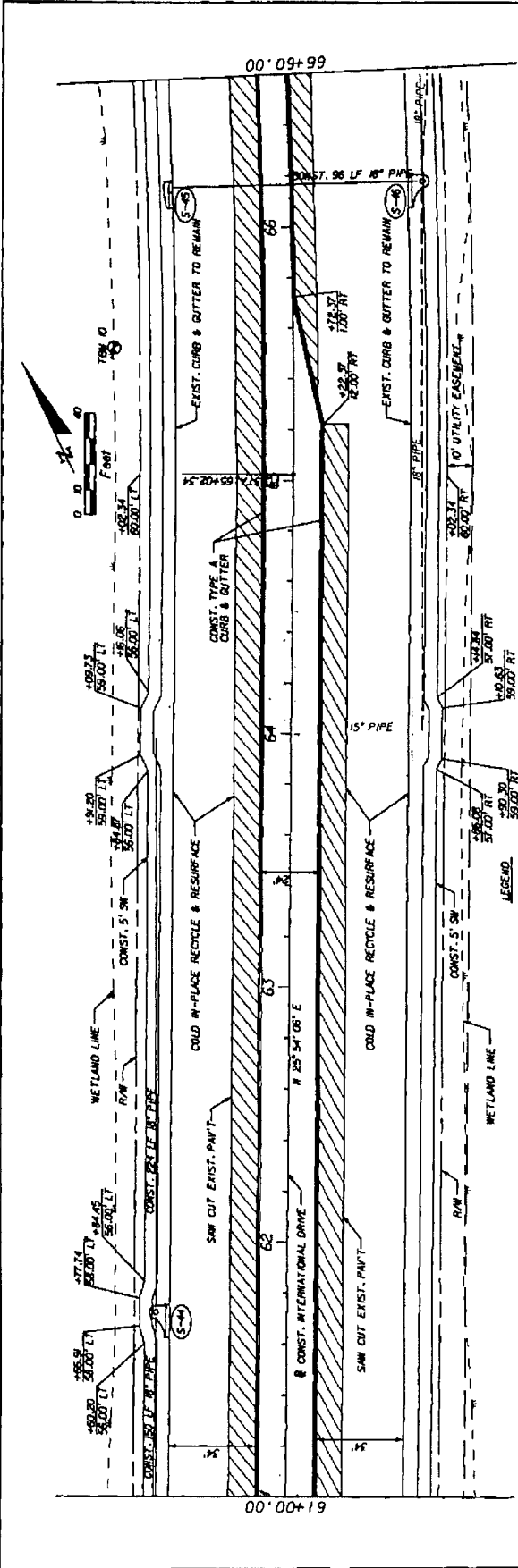
DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION
72	56+00		57+00	
74	FL 75.05		FL 75.00	
76	FL 75.70		FL 75.75	
78	FL 77.40		FL 77.45	
80	FL 75.70		FL 75.75	
82	FL 75.70		FL 75.75	
84	FL 75.70		FL 75.75	
86	FL 75.70		FL 75.75	

INTERNATIONAL DRIVE
 PLAN & PROFILE



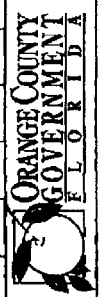
U.S. Army Corps
 of Engineers

Appl.# SAJ-2011-01729
 Date 12/02/11
 Drawing # 10 of 23 Initials MAM



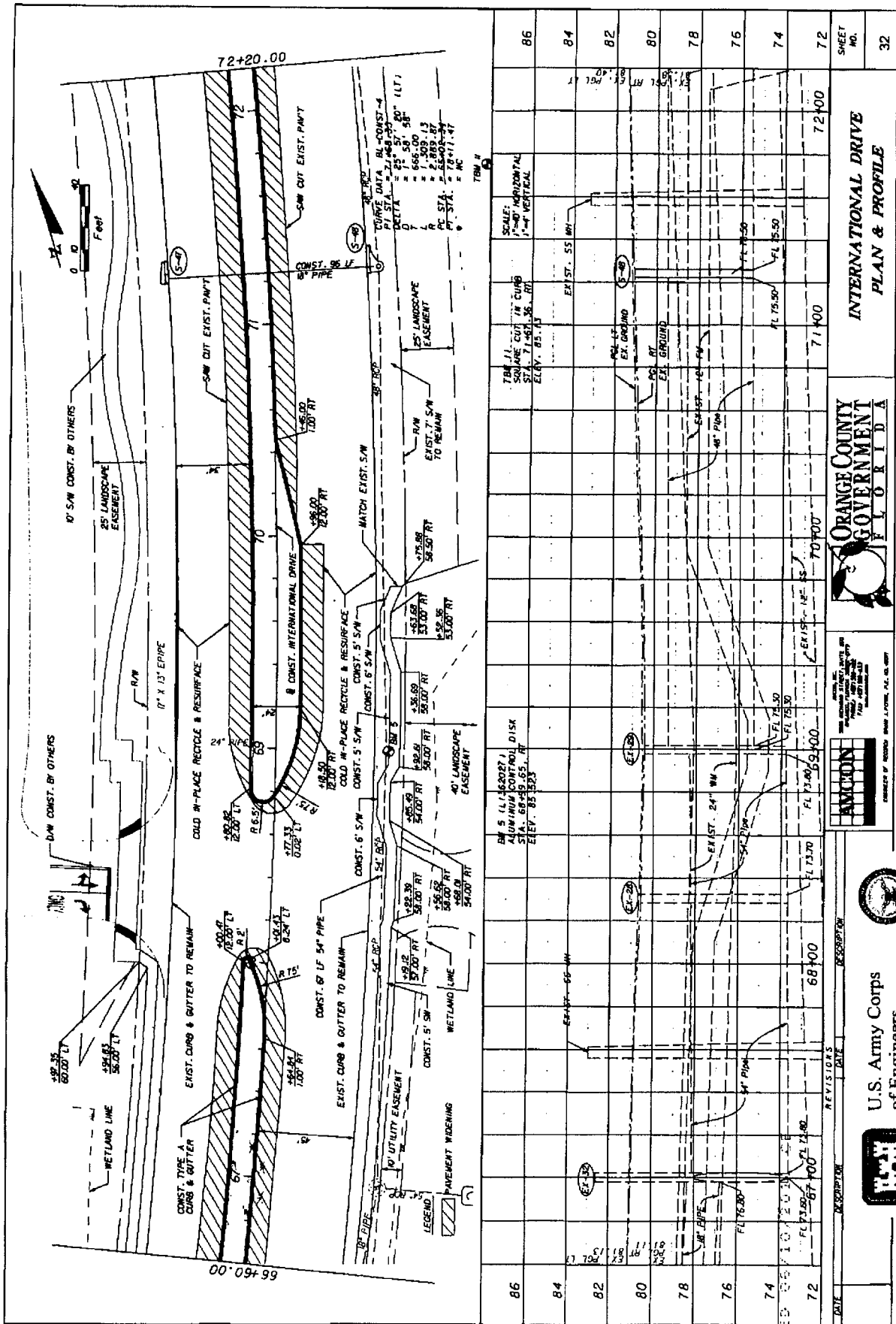
DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION
7/21/00			52+00	
7/4			63+00	
7/6			64+00	
7/8			65+00	
80			66+00	
82				
84				
86				

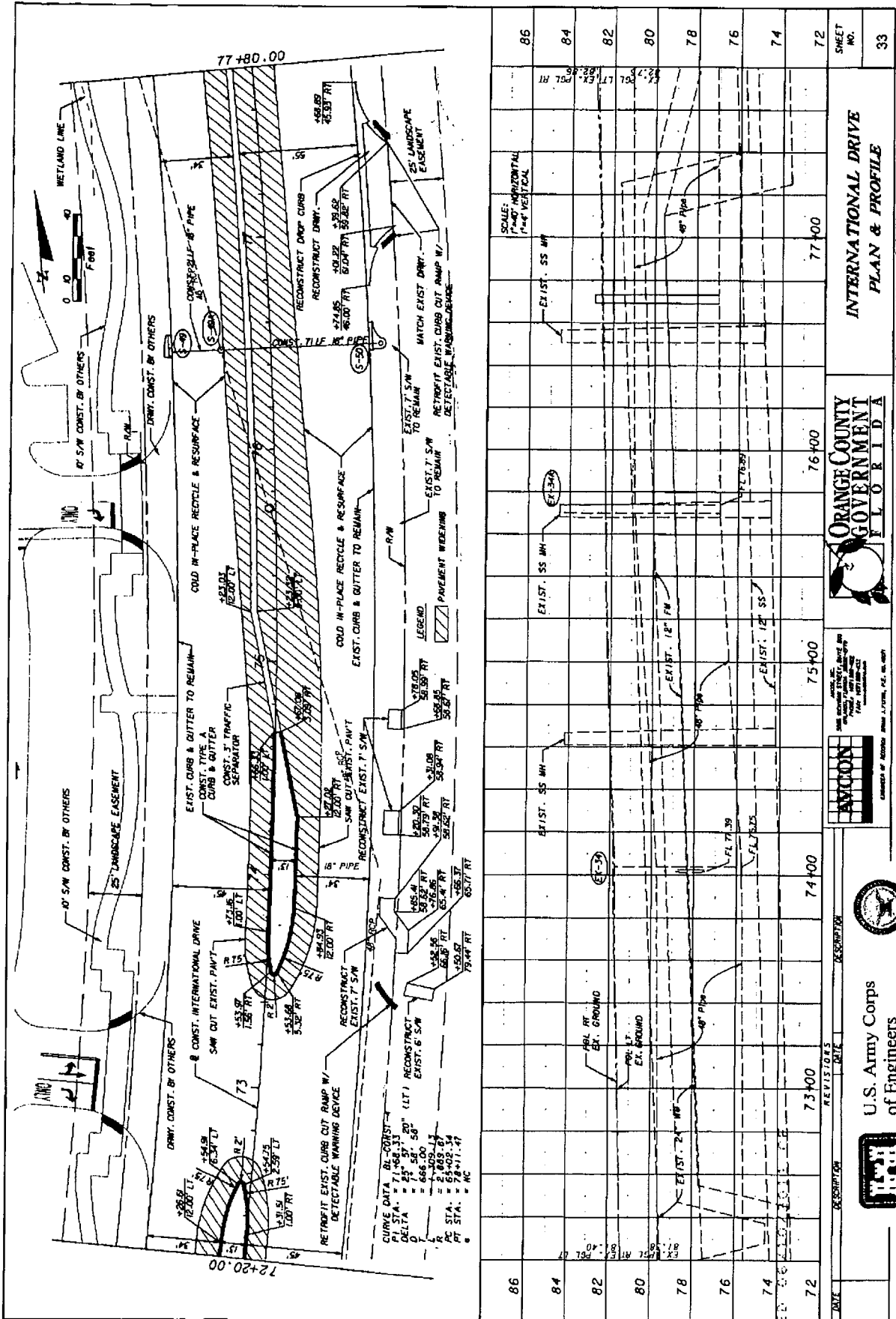
INTERNATIONAL DRIVE
PLAN & PROFILE



U.S. Army Corps
of Engineers

Appl.# SAJ-2011-01729
Date 12/22/11
Drawing # 11 of 23 Initials MAM





STATION	DESCRIPTION	REVISIONS	DATE
72			
74			
76			
78			
80			
82			
84			
86			

ORANGE COUNTY GOVERNMENT
FLORIDA

INTERNATIONAL DRIVE
PLAN & PROFILE

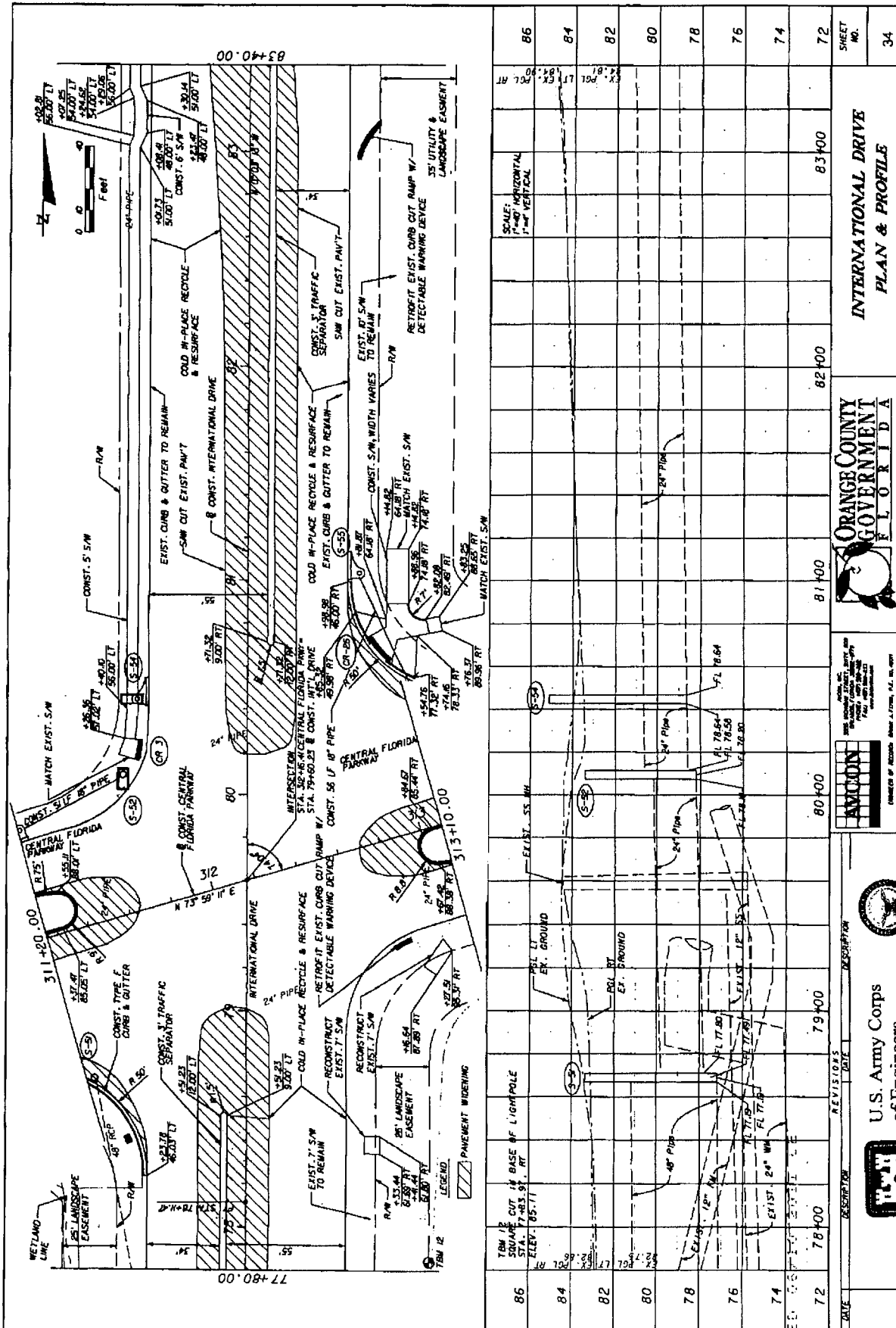
SHEET NO. 33



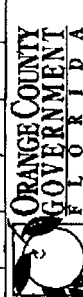
U.S. Army Corps
of Engineers



App.# SAO-2011-01729
Date 12/02/11
Drawing # 13 of 23 Initials M.A.R.



INTERNATIONAL DRIVE
PLAN & PROFILE



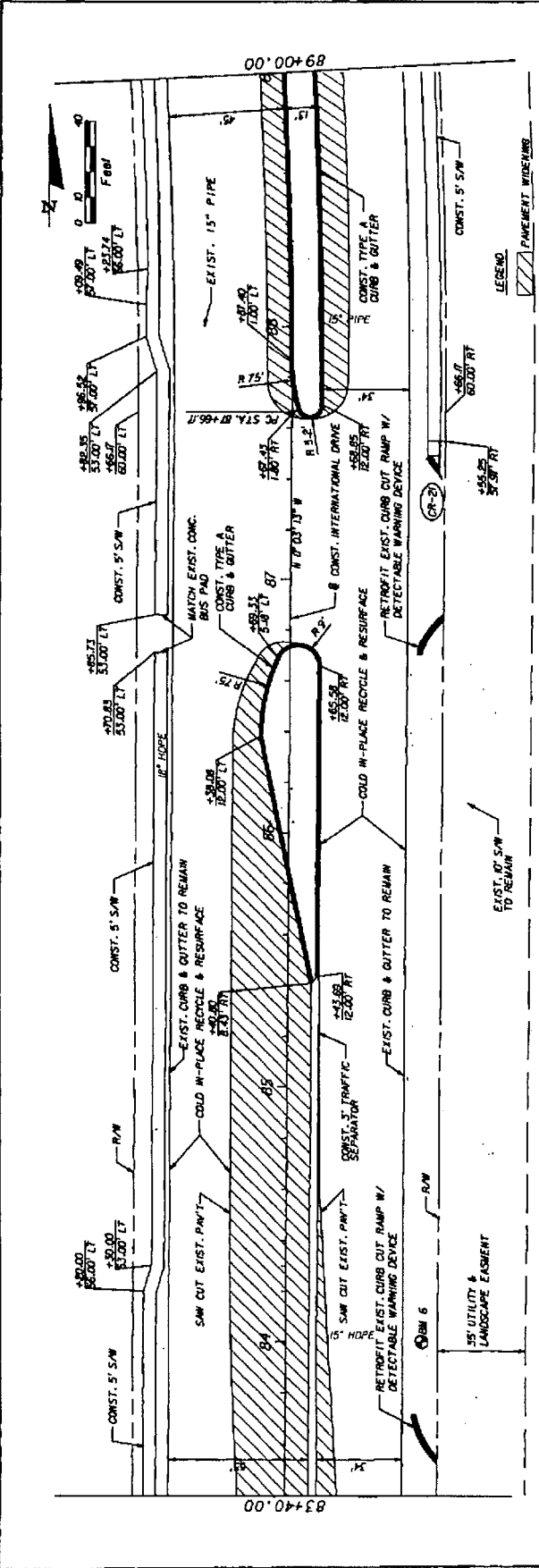
AMCON
CONSULTING ENGINEERS, P.A.
1100 S. FEDERAL AVENUE, SUITE 200
ORANGE, FLORIDA 32811
TEL: (407) 261-1111
FAX: (407) 261-1112



U.S. Army Corps
of Engineers

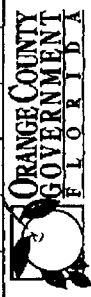
App.# SA1-2011-01729
Date 12/02/11
Drawing # 14 of 23 Initials MAM

DATE	REVISION	DESCRIPTION



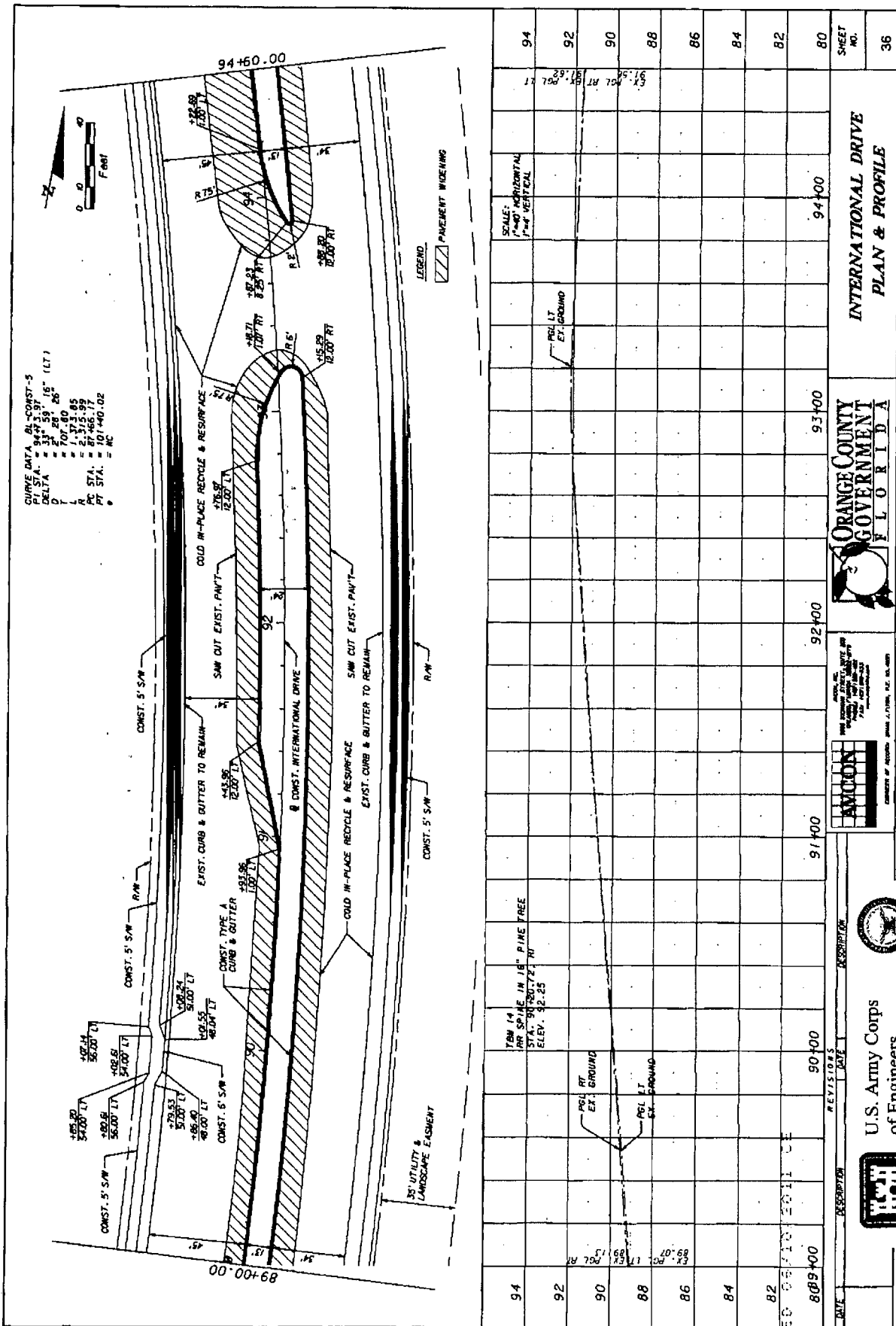
DATE	REVISIONS	DESCRIPTION	DATE	DESCRIPTION
90		TBM 13 SQUARE CUT IN CURB STA. 83+24.78, RT ELEV. 86.51		
88		B.M. 6 (151) 230021 MLET ALUMINUM CONTROL DISK STA. 83+85.98, RT ELEV. 80.915		
86				
84				
82				
80				
78				
76				
			84+00	
			85+00	
			86+00	
			87+00	
			88+00	
			89+00	

INTERNATIONAL DRIVE
PLAN & PROFILE



U.S. Army Corps
of Engineers

App'l # SAJ-2011-01729
Date 12/02/11
Drawing # 15 of 23 Initials MAM



AMCON
 CONSULTING ENGINEERS
 1100 S. UNIVERSITY AVENUE, SUITE 100
 ORANGE, FLORIDA 32668
 (407) 266-1100

ORANGE COUNTY GOVERNMENT
 FLORIDA

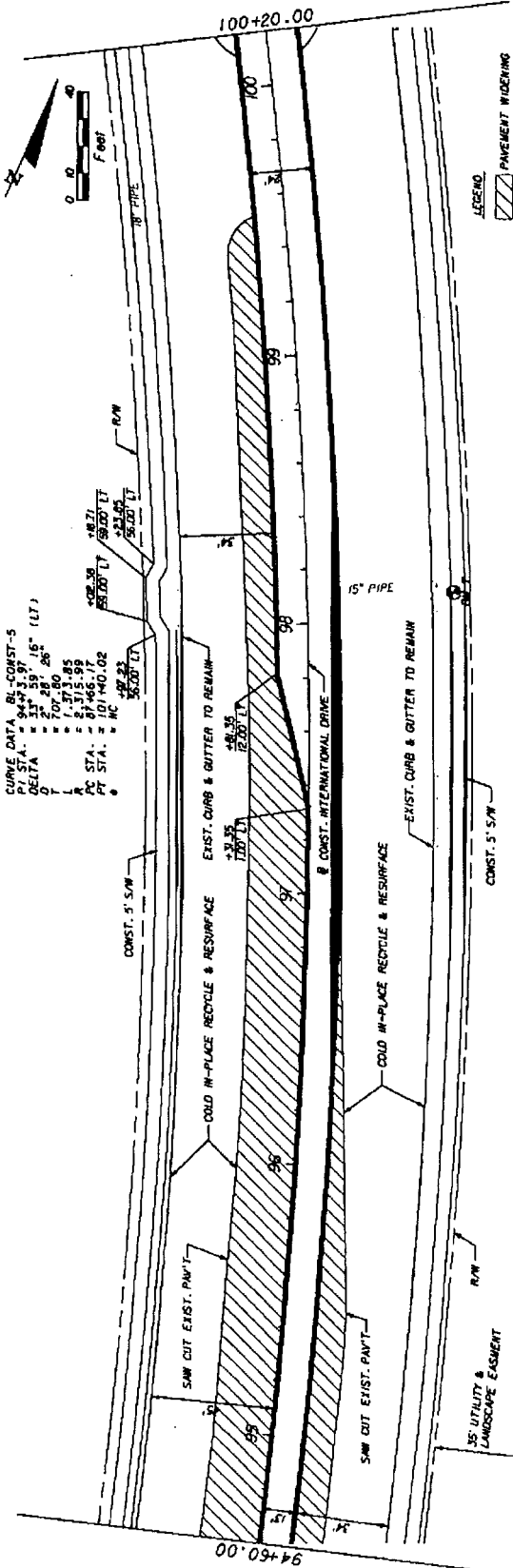
INTERNATIONAL DRIVE
PLAN & PROFILE

U.S. Army Corps of Engineers
 Date 12/02/11
 Drawing # 16 of 23 Initials MAM

APPROVED FOR CONSTRUCTION



CURVE DATA - R1 - CONST-5
 P1 STA. = 94+33.97
 DELTA = 33° 59' 16" (LT)
 L = 707.80
 R = 1,973.85
 A = 2,315.99
 PC STA. = 81+40.62
 PT STA. = 101+40.62
 ΔE = 20.23
 ΔC = 35.00 LT
 ΔS = 35.00 LT
 ΔT = 35.00 LT



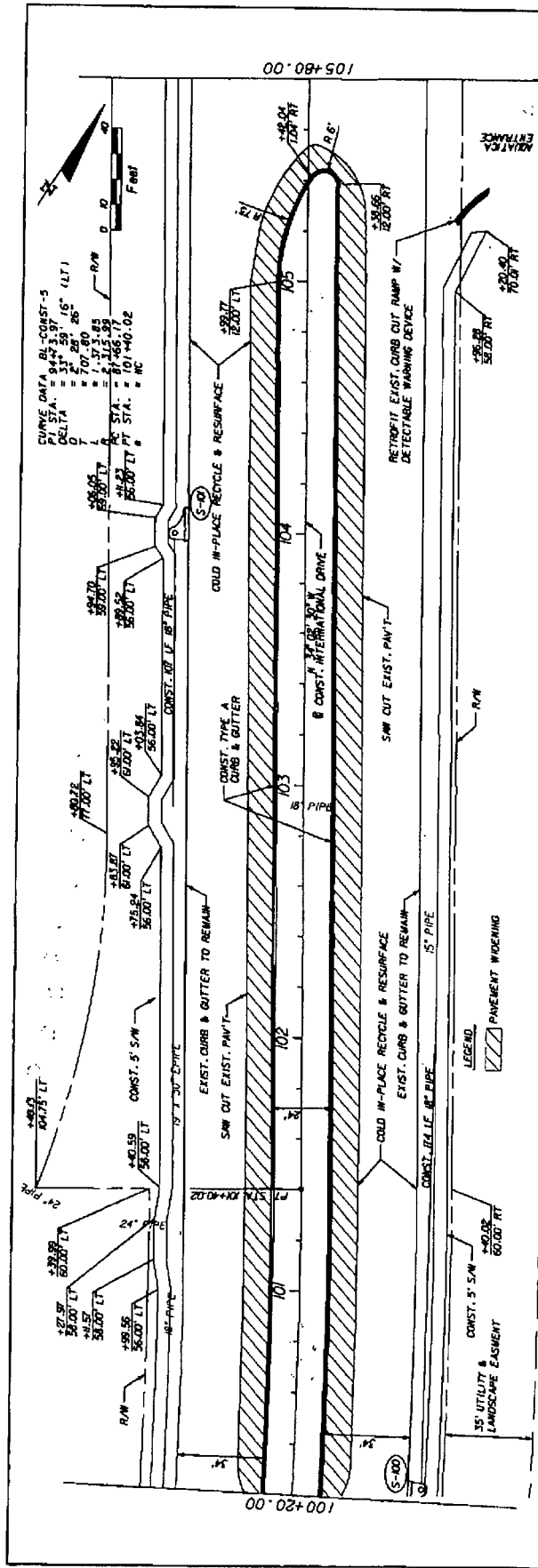
STATION	DESCRIPTION	REVISION DATE	DATE
94	TBM 15 RR SPIKE IN 16" PINE TREE STA. 96+55.167, RT ELEV. 93.34		
92	TBM 7 (5130 0061) ALUMINUM CONTROL DISK STA. 98+09.19, RT ELEV. 90.84		
90	EX-50 POL RT EX. GROUND		
88	EX-50 POL RT EX. GROUND		
86	EX-50 POL RT EX. GROUND		
84	EX-50 POL RT EX. GROUND		
82	EX-50 POL RT EX. GROUND		
80	EX-50 POL RT EX. GROUND		

AMCORN
INCORPORATED IN FLORIDA
1740 W. STATE ROAD 100, SUITE 201
 WEST PALM BEACH, FL 33411
 (561) 861-1111

ORANGE COUNTY
 GOVERNMENT
 FLORIDA

INTERNATIONAL DRIVE
 PLAN & PROFILE

U.S. Army Corps
of Engineers
App.# SAJ-2011-01729
Date 12/02/11
Drawing # 17 of 23 Initials RAM

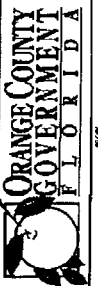


CURVE DATA BL-CONST-5
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 DELTA = 21° 29' 28" (LT)
 T = 707.60
 L = 1,373.85
 AC STA. = 84,565.79
 PC STA. = 81,466.79
 PT STA. = 101+40.02

LEGEND:
 [Symbol] 35" UTILITY & LANDSCAPE EASMENT
 [Symbol] CONST. 5" S.W.
 [Symbol] 40.00' 60.00' RT
 [Symbol] PAVEMENT WIDENING
 [Symbol] 15" PIPE
 [Symbol] 18" PIPE
 [Symbol] 19" 30" PIPE

DATE	DESCRIPTION	REVISOR	DATE	REVISIONS
92				
90				
88				
86				
84				
82				
80				
78				

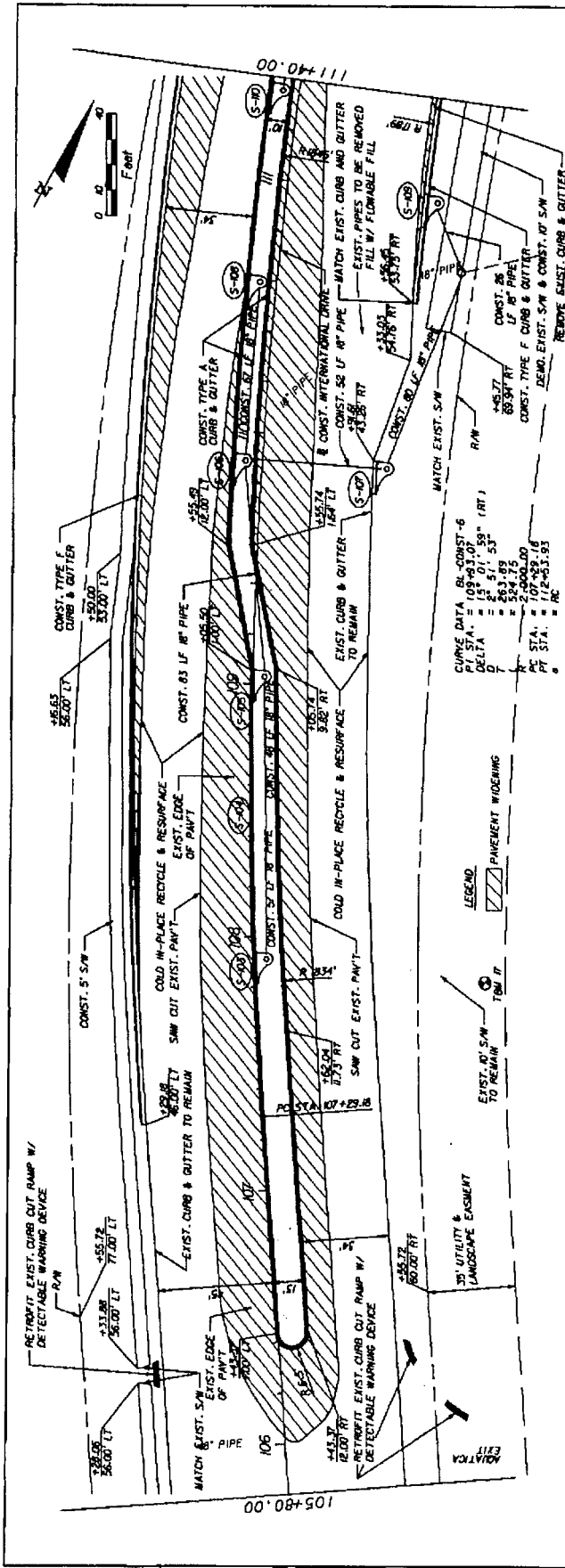
STATION	SCALE: HORIZONTAL 1"=40'	VERTICAL 1"=4'
102+00		
103+00		
104+00		
105+00		



U.S. Army Corps of Engineers

App.# SAJ-2011-01729
 Date 12/02/11
 Drawing # 18 of 23 Initials KAM





STATION	DESCRIPTION	REVISIONS	DATE
94	162' SE TRANSITION (L.T.)		
92	REMOVE EXIST. CURB & GUTTER		
90	REMOVE EXIST. SW & CONST. OF SW		
88	REMOVE EXIST. CURB & GUTTER		
86	REMOVE EXIST. CURB & GUTTER		
84	REMOVE EXIST. CURB & GUTTER		
82	REMOVE EXIST. CURB & GUTTER		
80	REMOVE EXIST. CURB & GUTTER		

ORANGE COUNTY GOVERNMENT
FLORIDA

INTERNATIONAL DRIVE
PLAN & PROFILE

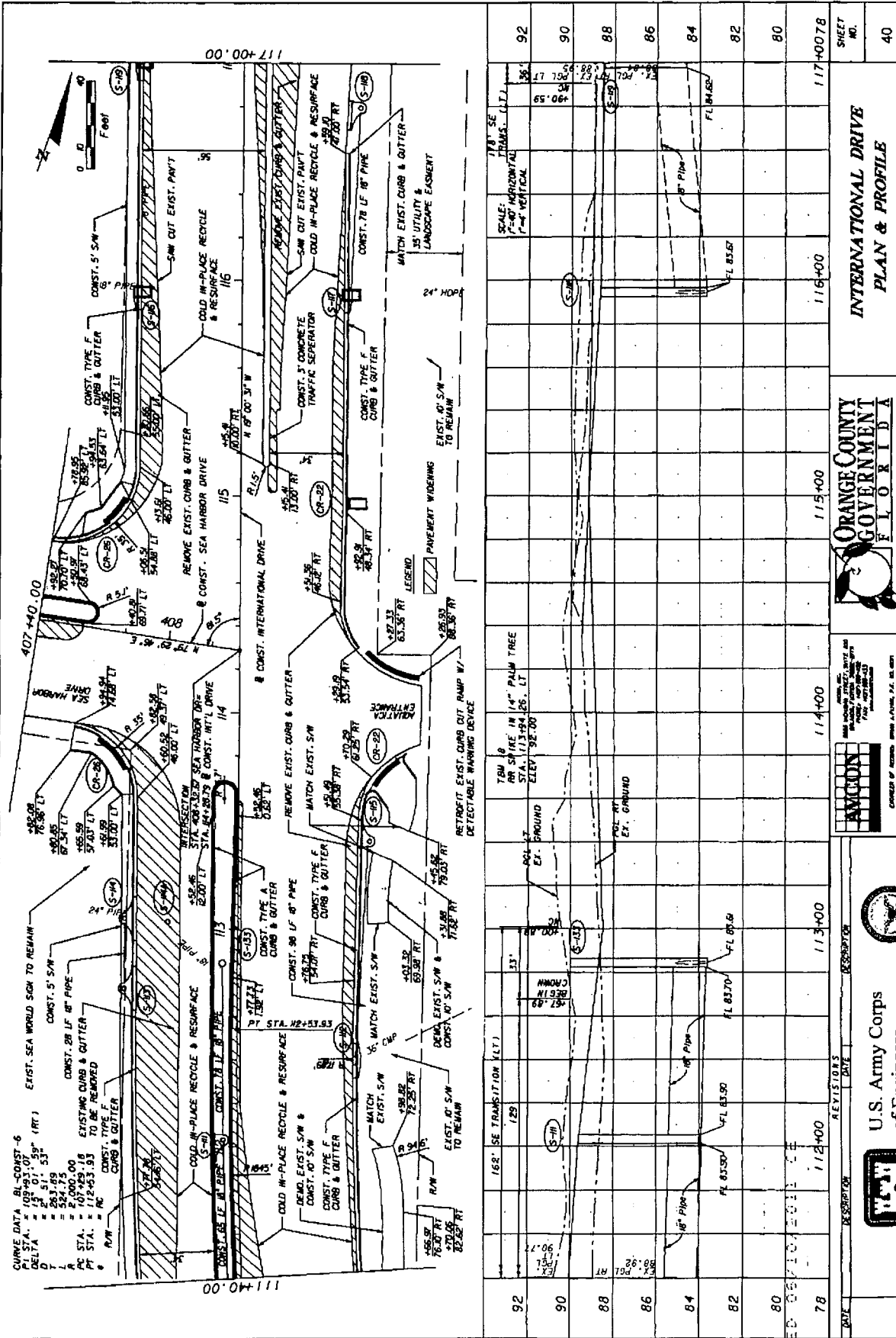
SCALE: 1" = 40' HORIZONTAL
1" = 4' VERTICAL

SHEET NO. 39

AMCON
CONSULTING ENGINEERS
1100 N. UNIVERSITY AVENUE, SUITE 100
ORANGE, FLORIDA 32817
TEL: 407-261-1111
WWW.AMCONENGINEERS.COM

U.S. Army Corps of Engineers
of Engineers

App# SAJ-2011-01729
Date 12/03/11
Drawing # 19 of 23 Initials *AMM*



CURVE DATA

- BL. CONST. - 6
- 108+99.51' - 59' (RT)
- DELTA = 19° 01' 59"
- D = 51.53'
- L = 554.73'
- PC STA. = 2+000.00
- PE STA. = 107+49.16
- PT STA. = 122+43.93
- PI STA. = 122+43.93
- R/W = 12

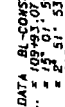
REVISIONS

NO.	DATE	DESCRIPTION
1	12/02/11	ISSUED FOR PERMITS

DATE: 12/02/11
 REVISIONS: 1
 DESCRIPTION: ISSUED FOR PERMITS

U.S. Army Corps of Engineers
 of Engineers

App'l. # SAJ-2011-01729
 Date: 12/02/11
 Drawing # 19 of 23 Initials: HAA



ORANGE COUNTY
 GOVERNMENT
 FLORIDA

INTERNATIONAL DRIVE
 PLAN & PROFILE

SHEET NO. 40

111+40.00 112+400 113+400 114+400 115+400 116+400 117+00.78

117+00.00

407+40.00

SEA HARBOR DRIVE

SEA HARBOR DRIVE

INTERNATIONAL DRIVE

INTERNATIONAL DRIVE

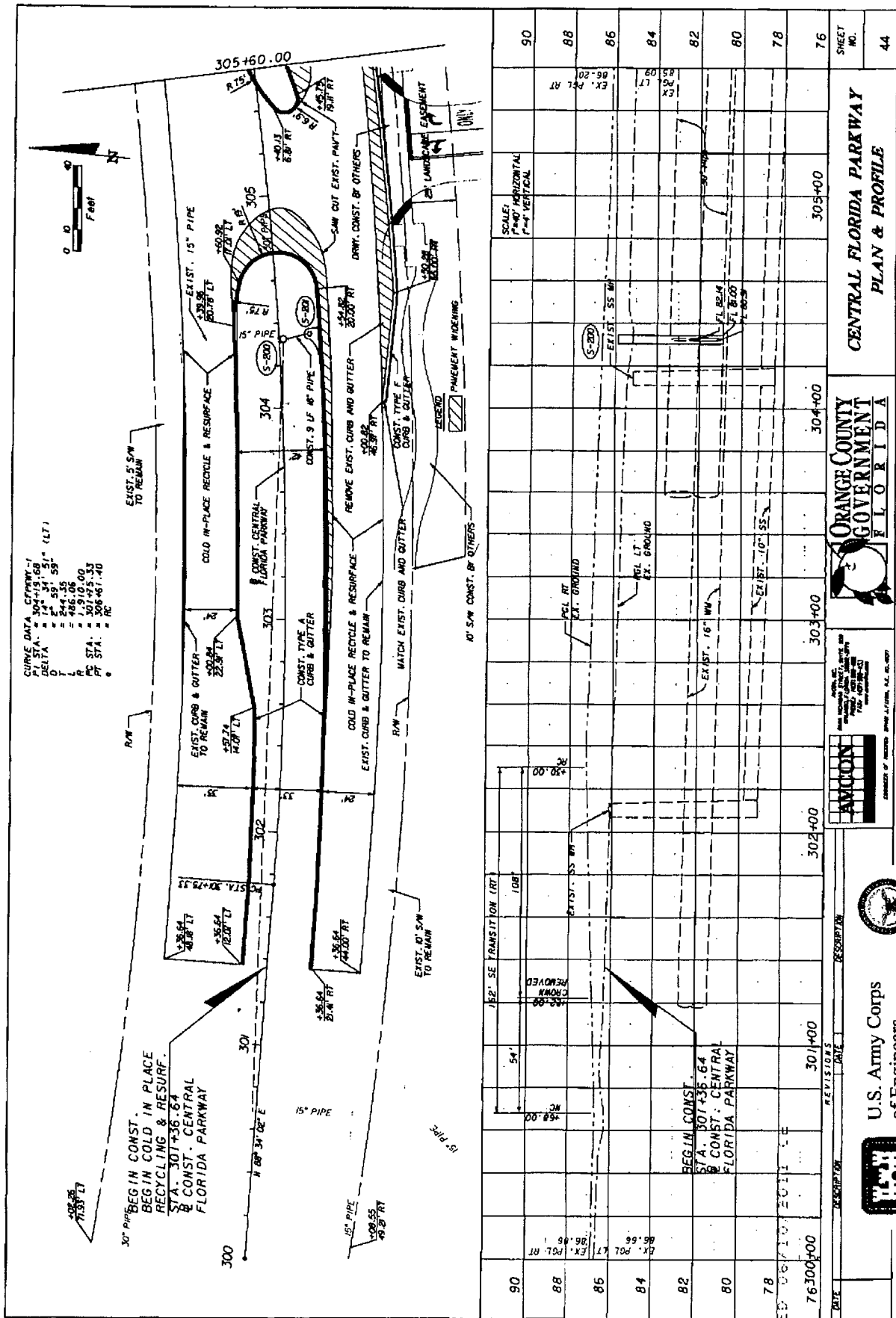
INTERNATIONAL DRIVE

INTERNATIONAL DRIVE

Application No. 110608-11

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Exhibit 2



CURVE DATA: CHIRPKY-1
 P.I. STA. = 304+19.69
 DELTA = 14° 34' 51" (LT)
 L = 51.59'
 E = 486.06'
 R. STA. = 301+10.00
 P.C. STA. = 301+25.33
 P.T. STA. = 306+41.40
 R.C. = RC

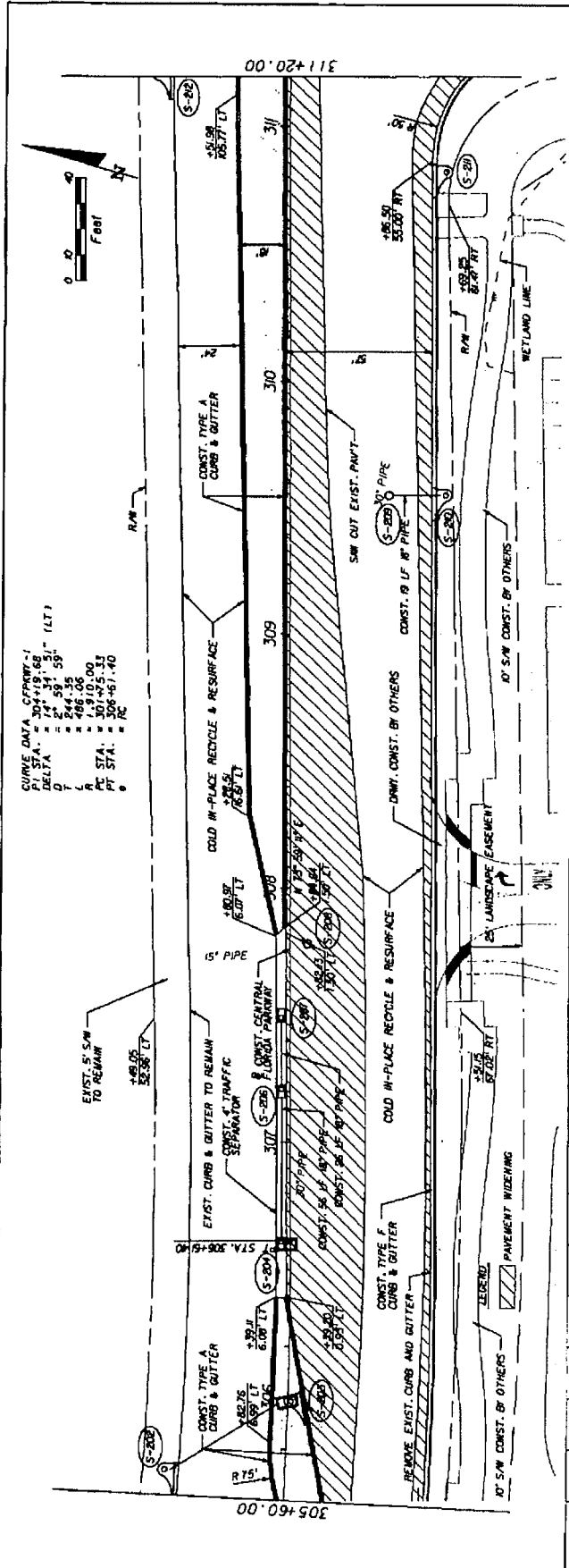
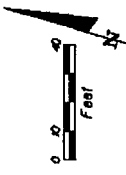
ORANGE COUNTY GOVERNMENT
 FLORIDA
 CENTRAL FLORIDA PARKWAY
 PLAN & PROFILE



U.S. Army Corps of Engineers

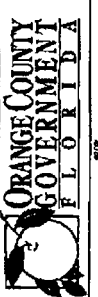
Appl. # SAJ-2011-01729
 Date 12/02/11
 Drawing # 20 of 23 Initials MAM

CURVE DATA C/PKWT-1
 P.I. STA. = 304+19.68
 D. DELTA = 27° 53' 53" (LT)
 T = 244.35
 L = 486.06
 P.C. STA. = 301+45.33
 P.T. STA. = 306+61.40
 R = 306

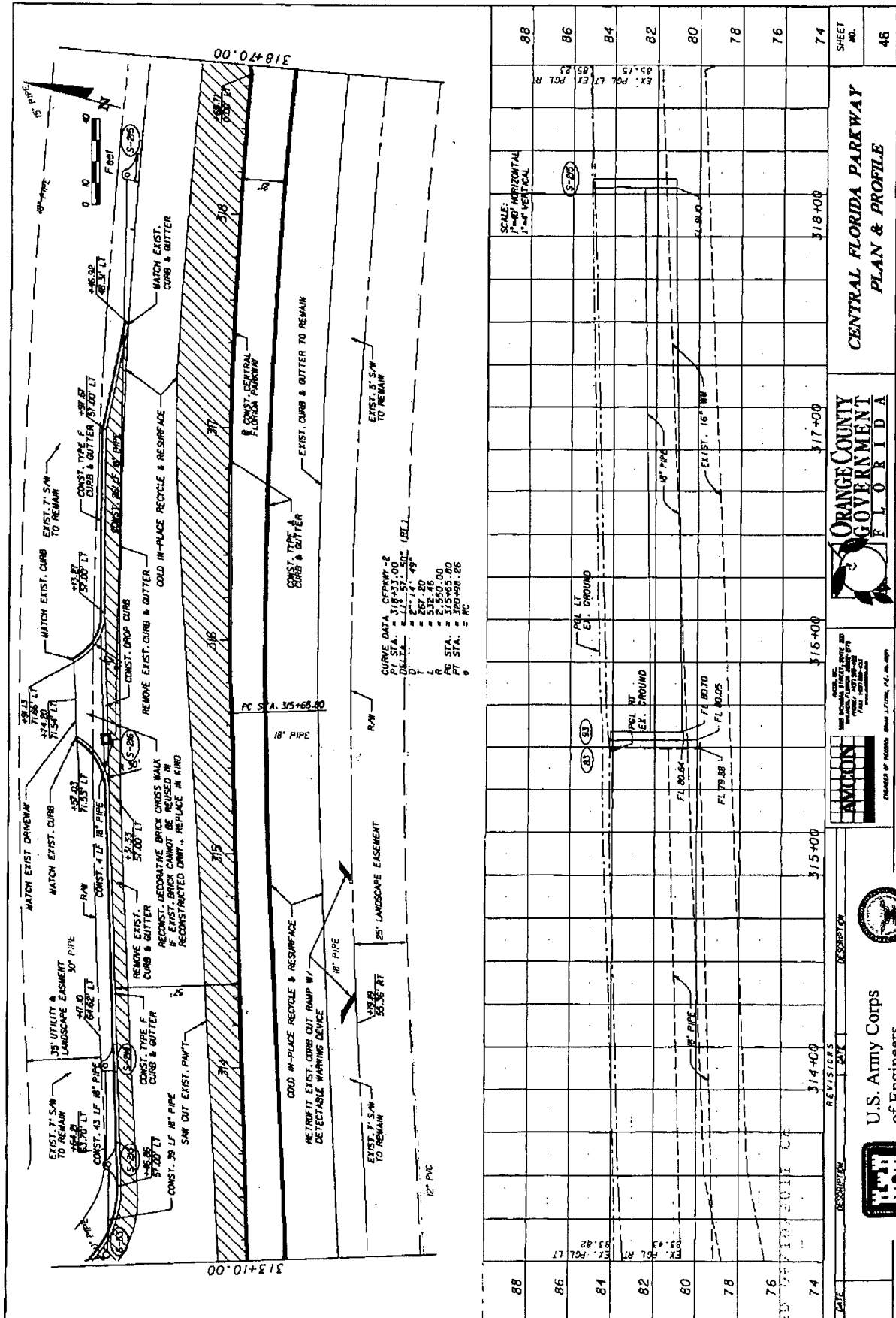


DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION	NO.
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86	EX. PCL RT				86
84	EX. PCL RT				84
82	EX. PCL RT				82
80	EX. PCL RT				80
78	EX. PCL RT				78
76	EX. PCL RT				76
74	EX. PCL RT				74

SCALE: HORIZONTAL 1" = 40' VERTICAL 1" = 4'





U.S. Army Corps of Engineers
 Appl. # SAJ-2011-01729
 Date 12/02/11
 Drawing # 21 of 23 Initials MGA



CURVE DATA GROUP 2
 DELTA = 119.37150° (BEL)
 D = 271.4149'
 L = 267.80'
 R = 2550.00'
 PC STA. = 315+65.80
 PT STA. = 320+98.26

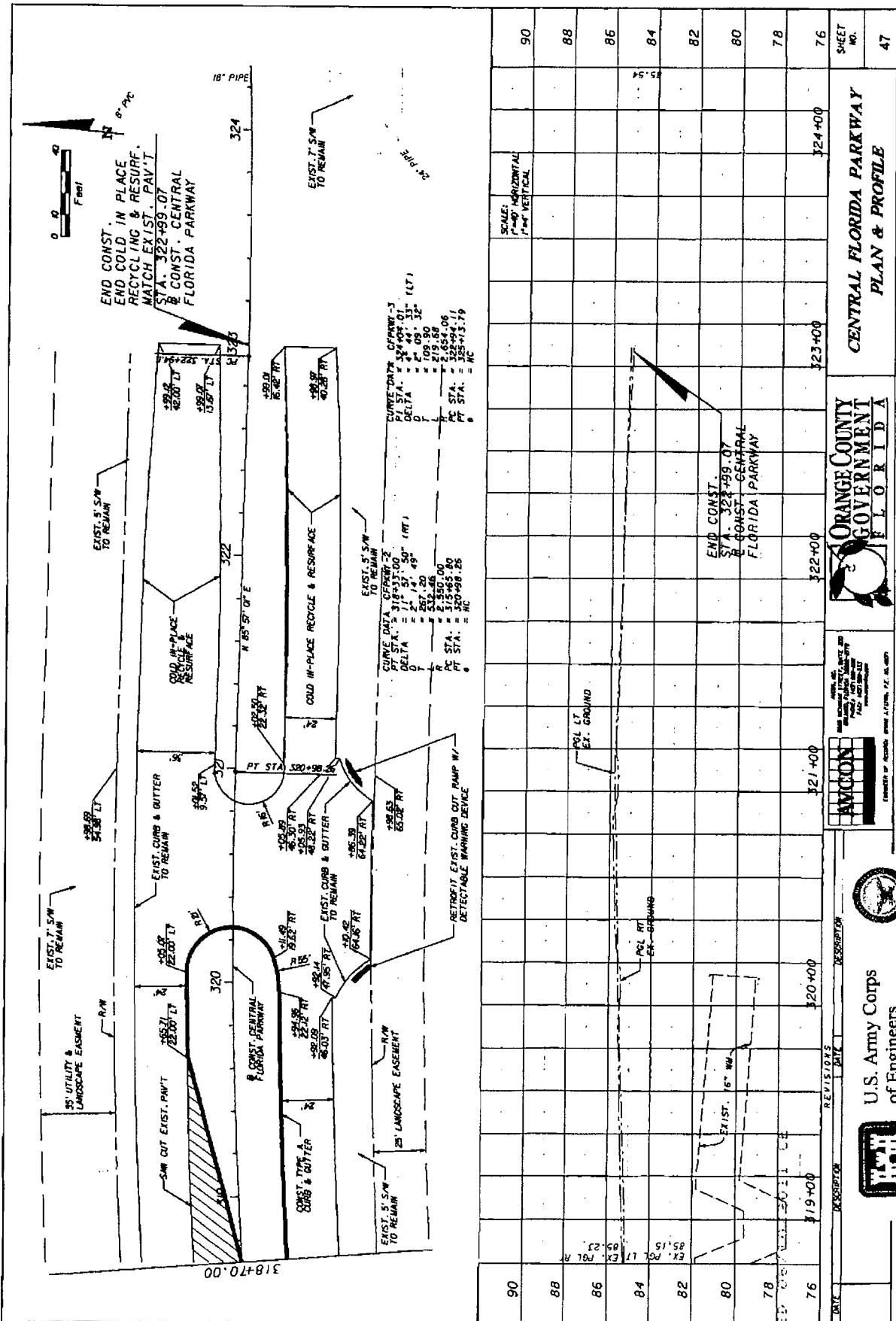
DATE	DESCRIPTION	BY	REVISIONS	STATION	VERTICAL	HORIZONTAL	SHEET NO.
88				318+00			46
86				317+00			46
84				316+00			46
82				315+00			46
80				314+00			46
78				313+00			46
76				312+00			46
74				311+00			46


ORANGE COUNTY GOVERNMENT
 FLORIDA


U.S. Army Corps of Engineers

PLAN & PROFILE
CENTRAL FLORIDA PARKWAY

Appl# SAJ-2011-01739
 Date 12/23/11
 Drawing # 22 of 23 Initials MAM



**CENTRAL FLORIDA PARKWAY
PLAN & PROFILE**

**ORANGE COUNTY
GOVERNMENT
FLORIDA**

JANCON
INCORPORATED 1988
MEMBER OF JACOBS GROUP

U.S. Army Corps
of Engineers

App.# **SAD-3011-01729**
Date **12/03/11**
Drawing # **22** of **23** Initials **MM**

DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION
76	319+00			
78				
80				
82				
84				
86				
88				
90				

SHEET NO. 47

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 12/02/11

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CESAJ-RD-NC, Orange County Public Works / International Drive Roadway Improvements, SAJ-2011-01729 (NPR-MAM)

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: FL County/parish/borough: Orange County City: Orlando
Center coordinates of site (lat/long in degree decimal format): Lat. 28.4068 ° Long. -81.4559 °
Universal Transverse Mercator:

Name of nearest waterbody: Shingle Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: NA

Name of watershed or Hydrologic Unit Code (HUC):

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date:

Field Determination. Date(s): 12/01/2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.

Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on:

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: The project area consist of maintained roadway median within uplands.

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: [REDACTED]

Drainage area: [REDACTED]

Average annual rainfall: inches

Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [REDACTED] tributaries before entering TNW.

Project waters are [REDACTED] river miles from TNW.

Project waters are [REDACTED] river miles from RPW.

Project waters are [REDACTED] aerial (straight) miles from TNW.

Project waters are [REDACTED] aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵:

Tributary stream order, if known:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) **General Tributary Characteristics (check all that apply):**

- Tributary is: Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: feet
Average depth: feet
Average side slopes: ██████████

Primary tributary substrate composition (check all that apply):

- | | | |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts | <input type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Vegetation. Type/% cover: | |
| <input type="checkbox"/> Other. Explain: | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: ██████████

Tributary gradient (approximate average slope): %

(c) **Flow:**

Tributary provides for: ██████████

Estimate average number of flow events in review area/year: ██████████

Describe flow regime:

Other information on duration and volume:

Surface flow is: ██████████. Characteristics:

Subsurface flow: ██████████. Explain findings:

- Dye (or other) test performed:

Tributary has (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Bed and banks | |
| <input type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input type="checkbox"/> clear, natural line impressed on the bank | <input type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input type="checkbox"/> the presence of wrack line |
| <input type="checkbox"/> vegetation matted down, bent, or absent | <input type="checkbox"/> sediment sorting |
| <input type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> scour |
| <input type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input type="checkbox"/> abrupt change in plant community |
| <input type="checkbox"/> other (list): | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: | |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input checked="" type="checkbox"/> High Tide Line indicated by: | <input checked="" type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): | |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain:

Identify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: [REDACTED]. Explain:

Surface flow is: [REDACTED]

Characteristics:

Subsurface flow: [REDACTED]. Explain findings:

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain:

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are [REDACTED] river miles from TNW.

Project waters are [REDACTED] aerial (straight) miles from TNW.

Flow is from: [REDACTED].

Estimate approximate location of wetland as within the [REDACTED] floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: [REDACTED]

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
------------------------------	------------------------	------------------------------	------------------------

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
 Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

Tributary waters: linear feet width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

Tributary waters: linear feet width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

Demonstrate that impoundment was created from "waters of the U.S.," or

Demonstrate that water meets the criteria for one of the categories presented above (1-6), or

Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

which are or could be used by interstate or foreign travelers for recreational or other purposes.

from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

which are or could be used for industrial purposes by industries in interstate commerce.

Interstate isolated waters. Explain:

Other factors. Explain:

Identify water body and summarize rationale supporting determination: .

⁸See Footnote # 3.

⁹To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

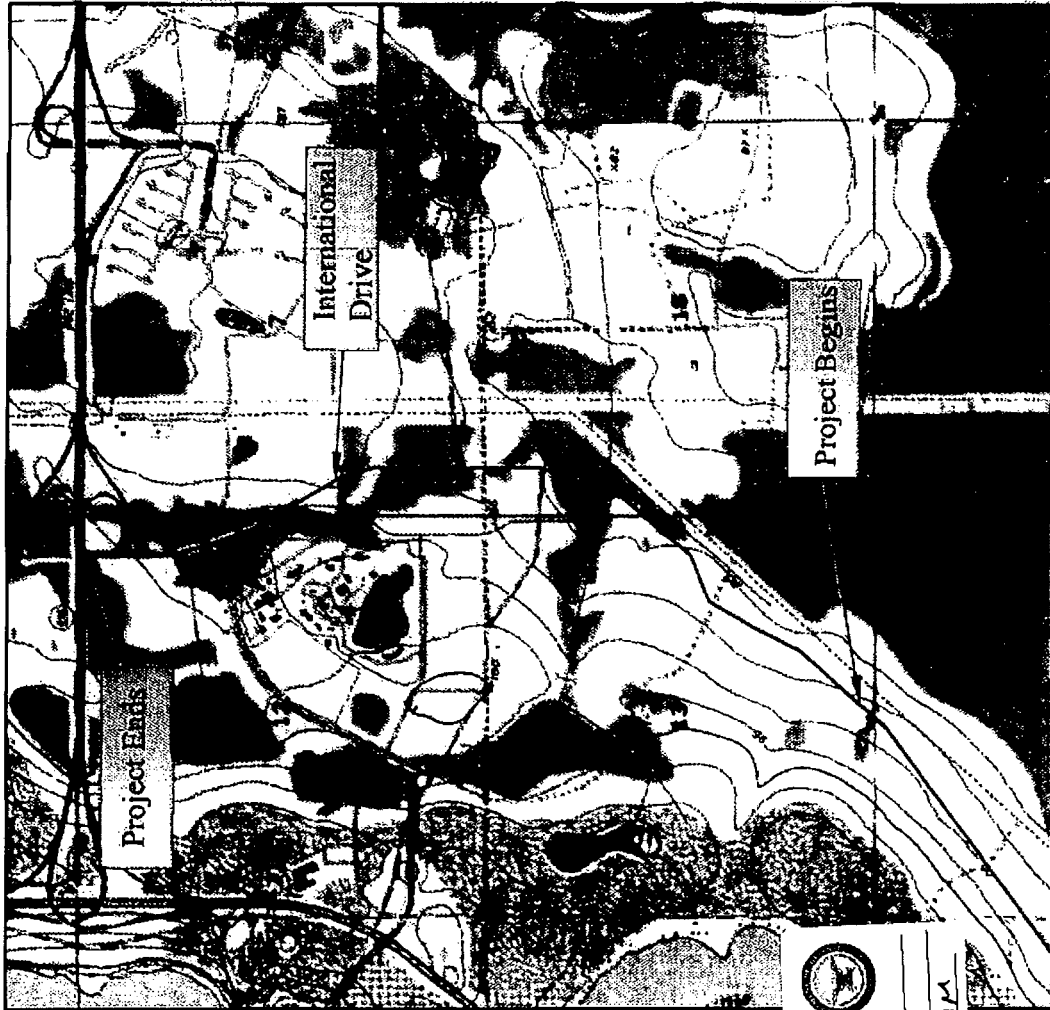
- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: The Balmoral Group.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
 - Corps navigable waters' study:
 - U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
 - U.S. Geological Survey map(s). Cite scale & quad name: .
 - USDA Natural Resources Conservation Service Soil Survey. Citation: .
 - National wetlands inventory map(s). Cite name: .
 - State/Local wetland inventory map(s): .
 - FEMA/FIRM maps:
 - 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
 - Photographs: Aerial (Name & Date): FDEP GIS, 2007.
 - or Other (Name & Date): Google Earth Pro, 2009.
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): USGS NHD Geodatabase.

B. ADDITIONAL COMMENTS TO SUPPORT JD:



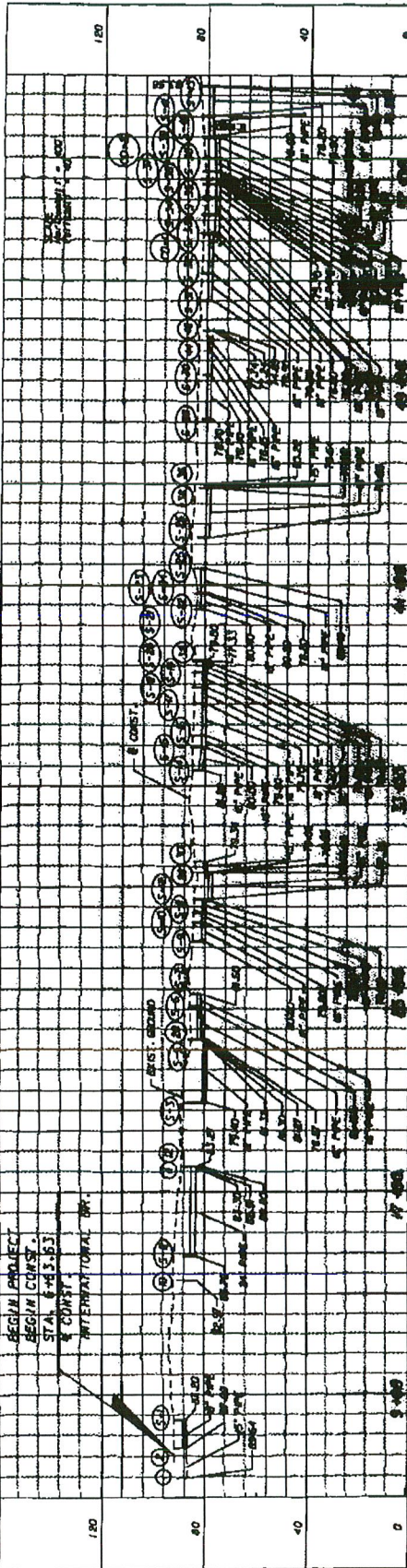
U.S. Army Corps
of Engineers

Appl. # SAT-2011-01729
Date 12/02/11
Drawing # 1 of 5 Initials MAM



PROJECT BEGIN-ENDS	BORING LOCATION S11212481145 4242796	U.S.G.S QUADRANGLE MAP LAKE JESSAMINE	ISSUED PHOTO/REVISER 1953	1960	PROJECT NAME: TOPOGRAPHIC MAP INTERNATIONAL DRIVE (S. Westwood Blvd. N. Westwood Blvd)	PROJECT NO. R.10003
						COUNTY ORANGE
 Civil Geotechnical Environmental Consulting Engineering				ORANGE COUNTY PUBLIC WORKS FLORIDA		
				SCALE: NOT TO SCALE DATE: 07-14-2010		

Figure 6



 U.S. Army Corps of Engineers	 BRIDGES MAP	9
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Appl. # SAT-201-01729
 Date 12/02/11
 Drawing # 2 of 5 Initials MAM

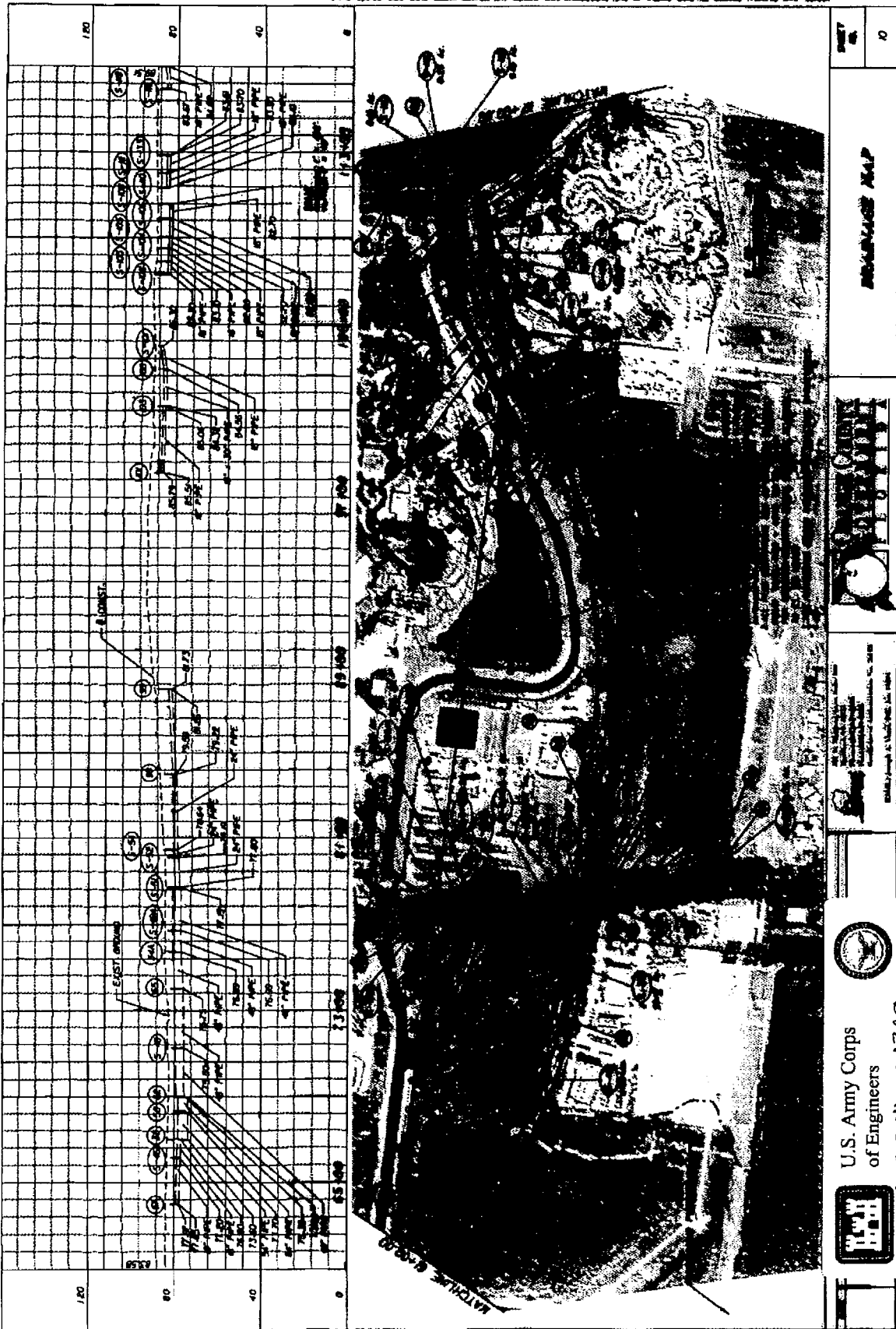



Figure 3.2

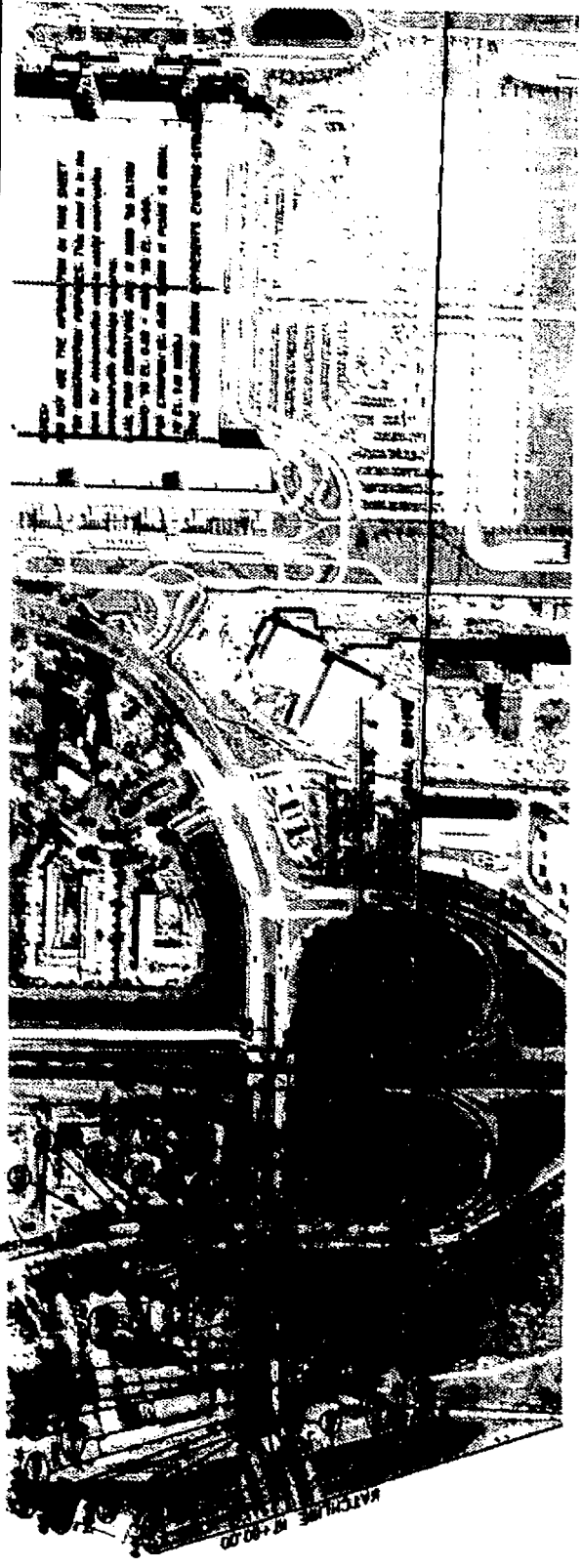
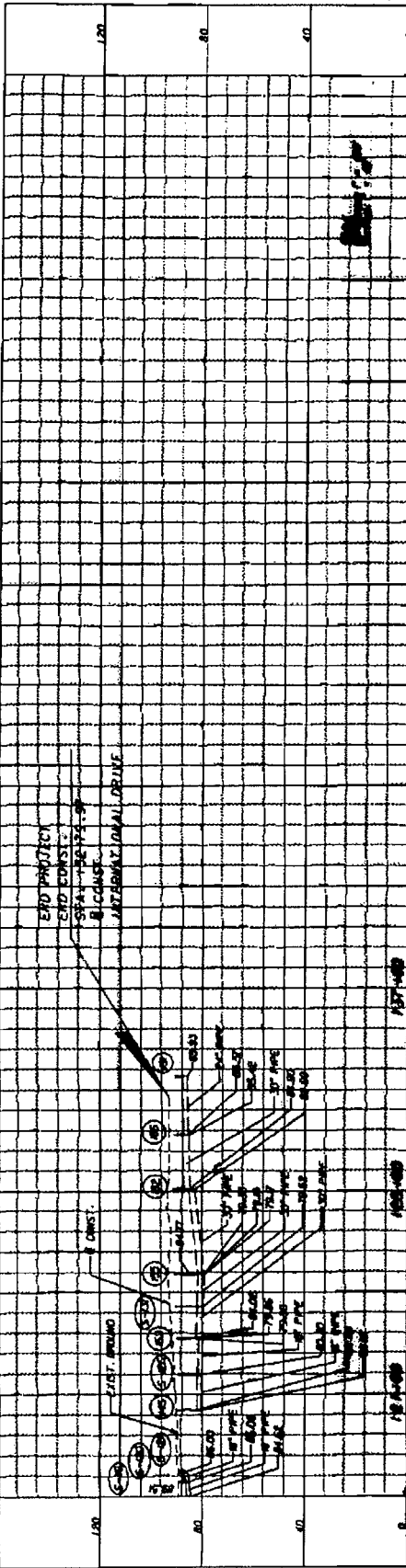


 U.S. Army Corps
 of Engineers

Appl. # SAT-201-01729
 Date 12/02/11
 Drawing # 3 of 8 Initials KMM



MATCHLINE 61+00.00
 MATCHLINE 61+00.00




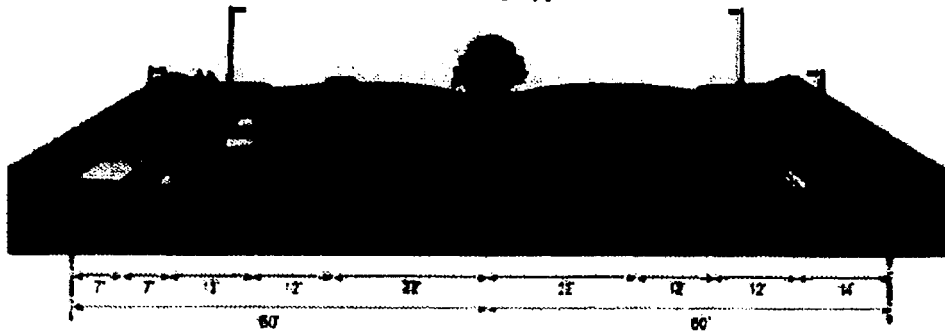
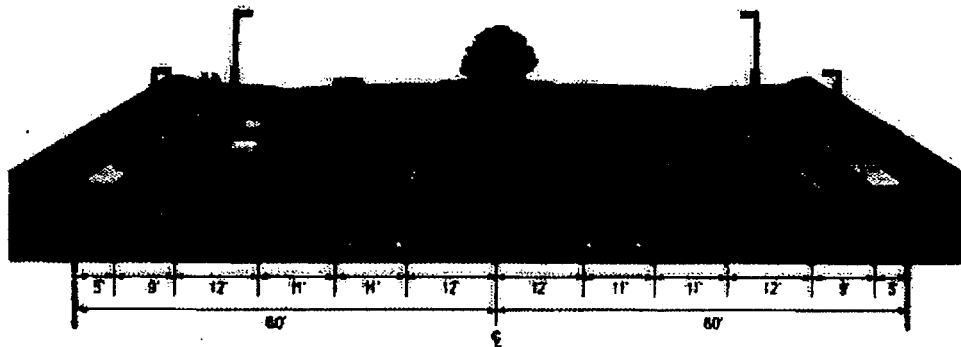
ADVANCE MAP	
U.S. ARMY CORPS OF ENGINEERS	ENGINEERING
 U.S. Army Corps of Engineers 1215 G Street, N.W. Washington, D.C. 20315 (202) 755-1000	Figure 3.3 1215 G Street, N.W. Washington, D.C. 20315 (202) 755-1000
U.S. Army Corps of Engineers Appl. # <u>SAJ-2011-01729</u> Date <u>12/02/11</u> Drawing # <u>4</u> of <u>5</u> Initials <u>MAM</u>	Figure 3.3 1215 G Street, N.W. Washington, D.C. 20315 (202) 755-1000

Figure 2-1 – Existing Typical Section



Existing Typical Section (from Concept Report)

Figure 4-1 – Proposed International Drive Typical Section



Proposed Typical Section (from Concept Report)

Figure 2 – Existing & Proposed Typical Sections



U.S. Army Corps
of Engineers



Appl.# S&J-2011-01729
Date 12/03/11
Drawing # 5 of 5 Initials MAN

**FLORIDA TURNPIKE DISTRICT'S
DRAINAGE CONNECTION PERMIT**

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
DRAINAGE CONNECTION PERMIT

To be completed by DOT

Drainage Connection Permit No. TP-75-DC-107-14/2014-D-853-004 (CMS#437047) Date _____

Received By DAN ERBACK Maintenance Unit 853

State Road No. 528 Work Program Project No. _____

Section No. 471 Construction Project No. _____

Milepost 0.8 Station _____

Instructions for Drainage Connection Permit

Pursuant to 14-86.004(6), F.A.C. "The Drainage Connection Permit form serves as the application. Once approved by the Department, the form and supporting documents become the Drainage Connection Permit."

The applicant shall submit four completed permit packages with original signatures. Each package shall include all required attachments. All required signed and sealed plans and supporting documentation shall be submitted on no larger than (11" X 17") multipurpose paper, unless larger plan sheets are requested by the reviewer. The package will include the following items. If an item does not apply to your project, indicate "Not Applicable" or "N/A."

Included	Part	Title	Completed by:	Special Instructions
	1	Permit Information Sheet	Applicant	
	2	Certification by a Licensed Professional	Licensed Professional	Signed and Sealed
	3	Certification	Applicant	Signature
	4	Owner's Authorization of a Representative	Owner	Signature
	5	Affidavit of Ownership or Control and Statement of Contiguous Interest	Owner	Signature
	6	Permit General Conditions	FDOT	
	7	Permit Special Conditions	FDOT	
	8	As-Built Certification	Licensed Professional	Signed and Sealed – Submit within 15 working days of completion of construction
	Attachment	Legal Description		
	Attachment	Photographs of Existing Conditions		
	Attachment	Location Map		
	Attachment	Grading Plan		
	Attachment	Soil Borings	Licensed Professional	Signed and Sealed
	Attachment	Water Table / Percolation		
	Attachment	Calculations		
	Attachment	CD with Electronic Files of all Submittal Items		Scanned Images in pdf format

Note: Different Licensed Professionals may complete parts of the permit package. For example the Licensed Professional signing and sealing the as-built certification may be different from the Licensed Professional who signed and sealed the calculations for the permit package.

EXCEPTIONS: Activities that qualify for an Exception are listed in Rule 14-86, F.A.C. A permit application to the Department is NOT required. However, if you desire verification whether the work qualifies for an exception, send a completed copy of this permit package with its requested information to the applicable FDOT District Office.

PART 1 – Permit Information Sheet

Select one: Permit Exception

Pursuant to 14-86.002(2), F.A.C. "Applicant means the owner of the adjacent property or the owner's authorized representative."

Applicant

Select one: Property Owner Owner's Representative (Complete Part 4)

Name: Mr. Ghulam Qadir, P.E.

Title and Company: Chief Engineer, Orange County Public Works Department

Address: 4200 S. John Young Parkway

City: Orlando State: Florida Zip: 32839

Telephone: (407) 836-7950 FAX: (407) 836-8024 Email: _____

Property Owner (If not applicant)

Name: _____

Title and Company: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____ FAX: _____ Email: _____

Applicant's Licensed Professional

Name: GREGORY S. SEIDER, P.E. Florida License Number: 47571

Title and Company: Senior Drainage Engineer, The Balmoral Group

Address: 165 Lincoln Avenue

City: Winter Park State: Florida Zip: 32789

Telephone: (407) 629-2185 FAX: (407) 629-2183 Email: gseidel@balmoralgroupp.us

Project Information:

Project Name: International Drive Roadway Improvements, From Westwood Blvd. South to Westwood Blvd. North

STREET	SR. NO.	US HWY NO.	CITY
<u>International Drive</u>			<u>Williamsburg</u>
<u>Orange</u>	<u>12, 13 & 7, 18</u>	<u>245</u>	<u>28E & 29E</u>
COUNTY	SECTION(S)	TOWNSHIP(S)	RANGE(S)

*Geographic Coordinates: Latitude (DMS.SSS): 28°25'09.496" N Longitude (DMS.SSS): 81°27'35.683" W

Horizontal Datum: (NAD 83 / _____ Adj.)

* State Plane Coordinates: Northing 1485432.806 Easting: 508335.250

Projection Zone: Florida North Florida East Florida West

Coordinate shall be the center of the driveway intersection with FDOT R/W, or, if there is no driveway connection, near the center of the property line nearest the state highway.

*Check with the FDOT Office for requirement.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
DRAINAGE CONNECTION PERMIT

Brief description of facility and proposed connection: Orange County is widening International Drive from Westwood Blvd. South to Westwood Blvd. North. This activity will require the relocation, replacement, and addition of drainage structures to connect to the existing storm sewer system, which will continue to follow in the existing drainage patterns. Replacement includes converting existing manholes to curb inlets, to decrease spread for the additional proposed impervious area.

Briefly describe why this activity requires a Drainage Connection Permit (Include where the stormwater will discharge to FDOT right of way):

The existing drainage pattern includes discharging to a pond that overflows into a wetland. The increased impervious area should not increase the existing permitted flow rates to the wetland. Nor should the addition of drainage structures to the existing storm sewer system decrease performance of said system.

PART 2 – Certification by a Licensed Professional

In accordance with Rule 14-86, Florida Administrative Code (F.A.C.), I hereby certify that the following requirements are and/or will be met.

This project has been designed in compliance with all applicable water quality design standards as required by state governmental agencies.

14-86.004(3)(f) (F.A.C.): Certification by a Licensed Professional that the complete set of plans and computations complies with one of the following Rules Sections:

14-86.003(2)(a) (F.A.C.), or 14-86.003(2)(b) (F.A.C). (check one)

I further certify that a National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges associated with industrial activity from construction sites

is required is not required. (check one)

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

This certification shall remain valid for any subsequent revision or submittal of plans, computation or other project documents by me.

Name of Licensed Professional: Gregory S. Seidel, P.E.

Florida License Number: 47571

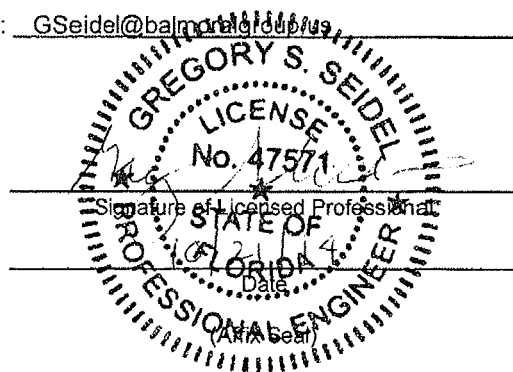
Company Name (if applicable): The Balmoral Group

Certificate of Authorization Number (if applicable): 26123

Address: 165 Lincoln Avenue

City: Winter Park State: Florida Zip: 32789

Telephone: (407) 629-2185 Fax: (407) 629-2183 Email: GSeidel@balmoraldesign.com



PART 3 – Certification by Applicant

I hereby certify that the information in this submittal is complete and accurate to the best of my knowledge.

Applicant's Signature: *Ghulam Qadir* Date: 10/13/2014

Name (Printed): Ghulam Qadir, P.E.

Title and Company: Orange County Public Works Department – Engineering Division

Address: 4200 S. John Young Parkway, Orlando, FL 32839

Phone Number: (407) 836-7950 E-mail address: ghulam.qadir@ocfl.net

PART 4 – Owner's Authorization of a Representative

I (we), the owner, Ghulam Qadir, P.E., do hereby authorize the following person, or entity, as my representative:

Name (Printed): Gregory S. Seidel, P.E.

Title and Company: Senior Drainage Engineer, The Balmoral Group

Address: 165 Lincoln Avenue

Phone Number: (407) 629-2185 E-mail address: GSeidel@balmoralgroup.us

Part 5 – Affidavit of Property Ownership or Control and Statement of Contiguous Interest

I, Orange County By Ghulam Qadir, certify that I own or lawfully control the following described property: International Drive and its corresponding Right-of-Way property.

Does the property owner own or have any interests in any adjacent property?

No Yes If yes, please describe. _____

Owner's Signature required for Parts 4 and/or 5

We will not begin on the drainage connection until I receive the Permit and I understand all the conditions of the Permit. When work begins on the connection, I am accepting all conditions listed in the Permit.

Name Ghulam Qadir, P.E. (Printed):

Address: 4200 S. John Young Parkway, Orlando FL, 32839

Phone 407-836-7950 Number:

Signature: *Ghulam Qadir* Date: 10/13/2014

PART 6 – Permit General Conditions

1. This permit is a license for permissive use only and does not convey any property rights either in real estate or material, or any exclusive privilege and it does not authorize any injury to private property or invasion of private rights, or any infringement of Federal, State or local laws, rules or regulations; nor does it obviate the necessity of obtaining any required state or local approvals.
2. The drainage connection as authorized herein shall be constructed and thereafter maintained in accordance with the documents attached hereto and incorporated by reference herein. All work performed in the Department's right of way shall be done in accordance with the most current Department standards, specifications and the permit provisions. Such construction shall be subject to the inspection and approval of the Department, and the Department may at any time make such inspections as it deems necessary to assure that the drainage connection is in compliance with this permit.
3. The entire expense of construction within the Department right of way, including replacement of existing pavement or other existing features, shall be borne by the permittee.
4. The permittee shall maintain that portion of the drainage connection authorized herein located on permittee's property in good condition. The Department shall maintain that portion of the drainage connection authorized herein located within its right of way.
5. If the drainage connection is not constructed, operated or maintained in accordance with this permit, the permit may be suspended or revoked. In this event modification or removal of any portion of the drainage connection from the Department's right of way shall be at the permittee's expense.
6. The Department reserves the right to modify or remove the drainage connection to prevent damage or in conjunction with road improvements.
7. It is understood and agreed that the rights and privileges herein set out are granted only to the extent of the Department's right, title, and interest in the land to be entered upon and used by the permittee, and the permittee will, at all times, assume all risk of and indemnify, defend and save harmless the Department from and against any and all loss, damage, cost or expense arising in any manner on account of the exercise or attempted exercises by said permittee of these rights and privileges, regardless of the respective degrees of fault of the parties.
8. Utilities, including gas lines, may exist within the right of way. Prior to beginning work the permittee shall contact Sunshine State One Call of Florida, Inc at 811 or 800-432-4770, who will notify all utility owners near the scheduled project. The utility owners have two (2) full business days to provide locations of their respective facilities. The permittee shall be solely responsible for any damage to or conflicts with gas lines, utilities and/or third persons.
9. The permittee shall notify the Department of Transportation Maintenance Office located at MP 65
Phone 954-934-1205 48 hours in advance of starting any work on the drainage connection authorized by this permit and also 24 hours prior to any work within the Department's right of way. Construction of any work on the right of way shall be completed within 365 days after such notification. If such construction is not completed within 365 days after such notification, the permittee shall notify the Department of the anticipated completion date.
10. This permit shall expire if construction on the drainage connection is not begun within one year from the date of approval and if construction on the drainage connection is not completed by (Date) 11-4-2015.
11. A permittee may request an extension of the Drainage Connection Permit expiration date by filing a written request for a permit time extension. All requests for time extensions must be received by the Department 15 working days prior to the expiration date.
12. All the provisions of this permit shall be binding on any assignee or successor in interest of the permittee.

PART 7 – Permit Special Conditions – To be completed by FDOT

The above request has been reviewed and has been found to meet the regulations as prescribed in Rule 14-86, F.A.C., and is hereby approved, subject to the following special conditions:

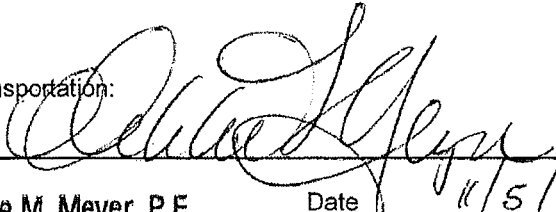
SEE ATTACHMENT A

**Permit Not Valid
Without Attachments**

Not recommended for Approval *D. J. ELL*
Dan Ekback, P.E.
Florida's Turnpike Enterprise
Permits Engineer 11-5-2014

Department of Transportation:

Signature _____



Title _____

Debbie M. Meyer, P.E.
Eng. of Maintenance Operations
Florida's Turnpike Enterprise

Date _____

11/5/14

PART 8 – As-Built Certification

Within 15 working days of completion of construction, you must send this certification to the Department office in which you filed your DOT Drainage Permit.

1. STORM WATER FACILITY INFORMATION

Permit		No.:
Source	(Project)	Name:
Source	Location:	Street
City: _____		County: _____
Source Owner: _____		
Owner Address: _____		

2. AS-BUILT CERTIFICATION

I hereby certify that this storm water facility has been built substantially in accordance with the certified design plans, and that any substantial deviations (noted below) will not prevent the facility from functioning in compliance with the requirements of Chapter 14-86 F.A.C. when properly maintained and operated. These determinations have been based upon on-site observation of construction, scheduled and conducted by me or by a project representative under my direct supervision.

Name	of	Licensed	Professional:
Florida		License	Number:
Company	Name	(if	applicable):
Certificate	of	Authorization	Number
			(if applicable):
Address: _____			
City: _____	State: _____	Zip: _____	
Telephone: _____	Fax: _____	Email: _____	

Signature of Licensed Professional

Date

(Affix Seal)

Substantial deviations from the approved plans and specifications (attach additional sheets if required).

ATTACHMENT "A"

Permit # 2014-D-853-004 (TP-75-DC-107-14)

Project Description: SR-528, MP 0.8

The Balmoral Group on behalf of Orange County Public Works prepared plans and drainage calculations for widening of International Drive.

The following apply:

1. **The Applicant shall be responsible to make sure the Contractor abides by all FDOT Standard Specifications and Design Standards.**
2. **The Applicant shall be contacted by the Florida's Turnpike Enterprise contact person Bernard Mills or his designee within five (5) working days from the date of the permit approval to schedule a pre-work meeting.** At the pre-work meeting, the permit and attachment conditions will be discussed, and the Applicant shall provide emergency contact names and numbers and a schedule for the proposed work.
3. Commencement of this work by the Applicant shall act as acknowledgment and acceptance of the terms and conditions of this Permit and Special Conditions.

The permit is good for 365 days starting with the approval date. We are asking that the applicant submit an E-mail requesting an extension, 30 days prior to the expiration date, if they want to keep the permit valid and open past the expiration date. If an E-mail is not received or an extension is not granted, the permit will be closed and a new permit submittal will be required to continue work. The extension will be up to the discretion of the Permits Engineer, Dan Ekback, P.E.

E-mail: Daniel.ekback@dot.state.fl.us

cc: Erin Yao, Kevin Stewart, Pam Nagot, File

Special Conditions

Permit # 2014-D-853-004 (TP-75-DC-107-14)

The following apply:

1. **The Applicant shall be required to obtain necessary permits from all other agencies having jurisdiction in the areas of this permitted work.**
2. Prior to the start of work, the Applicant shall place the necessary erosion control devices to prevent unlawful discharge of sediments and other pollutants from entering the Turnpike's drainage system or impacting the adjacent areas.
3. No access from the SR 528 will be allowed. All access will be from the Applicant's property.
4. As per Florida Statute 556.105, the Applicant shall call Sunshine State One Call of Florida, Inc., not less than two business days to beginning any excavation.
5. Protection of Existing Work. Areas where fencing, signing, lighting, guardrail, paving, grassing and/or sodding have been completed by others shall be given maximum protection while work under this permit is in progress. Any damaged work shall be completely restored to original or better condition at the expense of the Applicant. Any conflicts with existing work shall be brought to the immediate attention of the Turnpike Enterprise Permits Office.
6. The Applicant shall be responsible for the protection of all Turnpike facilities and structures within the area of this work, including, but not limited to existing drainage structures, concrete ditch protection, signs, delineators and fencing. Any damage to Turnpike facilities or structures shall be reported to the Permits office within 24 hours and repaired or replaced to the satisfaction of the Turnpike, and in compliance with current F.D.O.T. standards and specifications.
7. The Applicant shall restore any area of the Turnpike right-of-way disturbed by this work. This shall include, but not be limited to the grading of areas to original grade and placement of sod in all areas disturbed by this work. All work shall be in accordance with *Standard Specifications for Road and Bridge Construction*, as well as the *FDOT Design Standards*.

8. If the temporary removal of the fence is required to facilitate the work, at the end of each workday, a temporary fence must be placed at the Applicant's access points. When the work is completed, the fence must be replaced in accordance with *FDOT Design Standards*, Index Numbers 801 or 802.
9. Within sixty (60) days of completion of the permitted work, and acceptance by the Turnpike, the Applicant shall submit two sets of as-built plans showing the drainage characteristics of the finished site, the stormwater pipe network, pond cross sections and outfall structure details. These as-built plans shall reflect substantial compliance with the plans submitted to the Turnpike, upon which this permit was authorized. In addition, these as-built plans shall verify construction of the drainage connection to the Turnpike right-of-way to be in compliance with FDOT Rule Chapter 14-86, FAC, and any applicable National Pollutant Discharge Elimination System permit conditions.
10. The Applicant shall submit a "Certification of Completion" letter to the Turnpike Permits Office within fifteen (15) days of Turnpike acceptance of the completed work, stating that all work has been completed in substantial compliance with the Drainage Connection Permit, as required by Rule Chapter 14-86.005(3).
11. Commencement of this work by the Applicant shall act as acknowledgment and acceptance of the terms and conditions of this Permit and Special Conditions.

cc: Erin Yao, Kevin Stewart, Pam Nagot, File

**FLORIDA TURNPIKE DISTRICT'S
GENERAL USE PERMIT**

Permit Applicant Statement of Certification of Completed Permit Work

FDOT Permit Number: _____ - _____ - 853 - _____

Turnpike Permit Number: TP - _____ - _____ - _____ - _____

Applicant: _____

Address: _____

E-Mail Address: _____ Phone: _____

I certify by my signature below that the work performed under this referenced Florida Department of Transportation Permit has been completed in accordance with the permit provisions and that minor deviations (as noted in accompanying drawings) will not prevent the permitted work from functioning safely and as intended at the time of permit approval. This statement is based upon the site observation of the performance of the work, scheduled and conducted by myself or by my representative under my direct supervision. All reasonable inspections, tests, and physical measurements have been made to determine that this permitted work has been done in accordance with all the provisions of the approved permit and applicable Florida Department of Transportation standards.

- A complete set of as-built plans, with all post approval revisions, are enclosed with and accompanying this statement.
- The permitted record drawings represent the "as-built" condition. No deviations were made.

The work was completed on: _____ / _____ / _____.

Under penalties of perjury, I declare that I have read the foregoing and that the facts stated in it are true.

PRINTED NAME OF APPLICANT'S PROJECT MANAGER

P.E. LICENSE NUMBER IF APPLICABLE

SIGNATURE

DATE

FOR FLORIDA DEPARTMENT OF TRANSPORTATION ACCEPTANCE OF THE APPLICANT'S STATEMENT OF
CERTIFICATION AND ACCOMPANYING AS-BUILT PLANS

NAME OF PERSON RECOMMENDING ACCEPTANCE

SIGNATURE

DATE

NAME OF PERMITS ENGINEER ACCEPTING

SIGNATURE

DATE

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
GENERAL USE PERMIT

OMS # 432475

TP-75-SP-087-14

Permit No.: 2014-K-853-042

Date: 8/1/14

Name of Applicant or Authorized Agent: Ghulam Qadir, P.E.

Entity (if applicable): Orange County Public Works

(If entity, furnish contact information for responsible representative)

Address: 4200 S. John Young Parkway Zip Code: 32839

City/State: Orlando, FL Telephone No.: 407-836-7900

Email Address: ghulam.qadir@ocfl.net

Activity / Project Site

County: Orange State Road: 528 Section: 75471000

From Mile Post: 0.9 to Mile Post: 1.0

Construction Proposed or Underway: Yes No FM Project No.: 406090-5

Name of Municipality if Work is within Limits: City of Orlando

Description of Work Activity: Orange County is proposing roadway improvements along Internation Drive from S. Westwood Blvd. to N. Westwood Blvd. A small portion at the north end of the project is located within SR 528 FTE RW. Impoverments at this location included addition of sidewalk, pedestrain features and updated signage. A small portion of the SR 528 eastbound on / off ramp will also be milled and resurfaced.

General Provisions

1. Attach any pertinent plans or drawings.
2. Attach notification letters sent to any Utilities both aerial and underground that will be potentially impacted.
3. The designated FDOT Engineer shall be notified 48 hours prior to beginning of work. Contact Dan Ekback at (954) 934-1205.
4. All work, materials and equipment shall be subject to inspection and approval by FDOT. Applicants certification of work at completion is required.
5. The permittee shall be responsible to place and display safety devices and proper maintenance of traffic in accordance with the latest version of the Department's Design Standards, index series 600, or an alternative plan signed and sealed by a professional Engineer and attached with the permit.
6. All FDOT property shall be restored to its original condition. Any damage to FDOT property as a result of this work shall be repaired and restored in a manner acceptable to the FDOT at the sole expense of the permittee.

RECEIVED
SEP 10 2014
BY: [Signature]

Special Provisions	9-16-2014
SEE ATTACHMENT A	<i>D.J. Ekback</i>
Permit Not Valid Without Attachments	Dan Ekback, P.E. Florida's Turnpike Enterprise Permits Engineer

Conditions
1. In the event the permittee fails to meet any of the requirements of this permit by the FDOT, the permitted activity must cease until brought into compliance. If compliance can not be met, then the permit will be rendered void and said work shall be removed from the right of way at no cost to the FDOT.
2. Work shall commence within <u>180-270</u> days of permit approval. Work shall be completed by <u>4/1/2018</u> . (Date)
3. The rights and privileges herein set out are granted only to the extent of the State's right, title and interest in the land to be entered upon and used by the permittee, and the permittee will, at all times, and to the extent permitted by law, assume all risk of and indemnify, defend and save harmless the State of Florida and the FDOT from and against any and all loss, damage, cost or expense arising in any manner on account of the exercise or attempted exercises by said permittee of the aforesaid rights and privileges.

Applicant		
I hereby agree to comply with all terms and conditions set forth and described in this permit.		
Ghulam Qadir, P.E.	<i>Ghulam Qadir</i>	8/4/14
Printed or Typed Name and Title	Signature	Date

Debbie M. Meyer, P.E. Eng. of Maintenance Operations Florida's Turnpike Enterprise	FDOT	
Approved By: _____	<i>Debbie Meyer</i>	9/17/14
Print Designated Engineer	Signature	Date

Title		

RECEIVED
SEP 10 2014
BY: *J.S.*

ATTACHMENT "A"

Permit #2014-K-853-042 (TP-75-SP-087-14)

Project Description: SR-528, MP 0.9-1.0

Orange County is proposing roadway improvements along I Drive from S. Westwood Blvd. to N. Westwood Blvd. A small portion at the north end of the project within FTE R/W will have additions of sidewalk, pedestrian features, and updated signage. In addition, a small portion of the SR 528 eastbound on/off ramp will be milled and resurfaced.

The following apply:

1. **The Applicant shall be responsible to make sure the Contractor abides by all FDOT Standard Specifications and Design Standards.**
2. **The Applicant shall be contacted by the Florida's Turnpike Enterprise contact person Bernard Mills or his designee within five (5) working days from the date of the permit approval to schedule a pre-work meeting.** At the pre-work meeting, the permit and attachment conditions will be discussed, and the Applicant shall provide emergency contact names and numbers and a schedule for the proposed work.
3. Orange County will be responsible for maintaining all improvements constructed as part of this project as well as features previously maintained by Orange County.
4. This permit does Not allow Lane Closures. Lane Closures requests must be submitted 2 weeks prior to implementation.

Permit is good through 9-16-2015. We are asking that the applicant submit an E-mail requesting an extension, 10 days prior to the expiration date, if they want to keep the permit valid and open past the expiration date. If an E-mail is not received or an extension is not granted, the permit will be closed and a new permit submittal will be required to continue work. The extension will be up to the discretion of the Permits Engineer, Dan Ekback, P.E.

E-mail: Daniel.ekback@dot.state.fl.us

CC: Robert Wierz, Kyle Bianchi, Matt Lewis, Ademola Adelekan, File

Special Conditions

Permit #2014-K-853-042 (TP-75-SP-087-14)

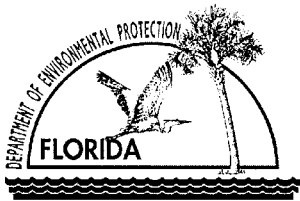
The following apply:

1. Any Traffic Management Plan shall be in accordance with the current edition of the *F.D.O.T. Roadway and Traffic Design Standards*, Index Series 600 through 670, and the *M.U.T.C.D.* as minimum criteria. Certified personnel representing the Applicant must supervise any Maintenance of Traffic setup.
2. While work is in progress, all vehicles shall be parked as far off the roadway as possible. All vehicles must be clearly marked with a company name and/or logo, and be equipped with working amber strobe lights. In addition, all workers shall wear ANSI approved apparel (safety vests) while on Turnpike property.
3. The overnight storage of any vehicles, equipment or materials within the Turnpike right-of-way shall be prohibited without prior approval by the Turnpike Permits Office. Definitely NO overnight storage of vehicles in the median.
4. The Applicant's attention is directed to the fact that the Applicant will be required to pay tolls, as applicable to the general public.
5. Protection of Existing Work. Areas where fencing, signing, lighting, guardrail, paving, grassing and/or sodding have been completed by others shall be given maximum protection while work under this permit is in progress. Any damaged work shall be completely restored to original or better condition at the expense of the Applicant. Any conflicts with existing work shall be brought to the immediate attention of the Turnpike Enterprise Permits Office.
6. The Permittee shall be required to obtain necessary permits from all other agencies having jurisdiction in the areas of this permitted work, if applicable.
7. The Permittee shall be prohibited from driving or parking within the clear zone in a direction opposite the flow of traffic.
8. The Applicant shall be responsible for the protection of all Turnpike facilities and structures within the area of this work, including, but not limited to existing drainage structures, concrete ditch protection, irrigation systems, signs, delineators and fencing. Any damage to Turnpike facilities or structures shall be reported to the Permits office within 24 hours and repaired or replaced to the satisfaction of the Turnpike, and in compliance with current F.D.O.T. standards and specifications.

9. In case of extreme traffic or weather conditions, the Applicant may be required to remove their operation from the roadway and/or right-of-way, at the discretion of the Engineer or the Florida Highway Patrol, Troop "K", who has jurisdiction on this roadway.
10. The Applicant agrees to coordinate its work at all times so as not to
 - (a) Delay, interfere with, or cause increased costs to the Department's construction or maintenance contractor that may be working in the area,
 - (b) Take any action that might be the basis for a claim for delay, interference, or increased costs by the contractor.
 - (c) In the event that the Applicant or its agents or employees receive any information, either express or implied, and either directly from the contractor or otherwise, which indicates delay, interference, or increased costs have been or might be caused as a result of the Applicant's work, the Applicant shall immediately cease all work and shall immediately notify the Permits Office of the circumstances so an investigation can be made and steps can be taken to avoid any delay, interference, or increased costs. The Applicant agrees to be responsible and pay for all damages that are caused by the Applicant's breach of the provisions of this Permit or by the Applicant's negligence.
11. The Applicant shall notify the Turnpike Permits Representative within two weeks of completion of this work. **At that time, a final inspection will be scheduled prior to final acceptance of the work, with participation from the Turnpike, the Applicant, and the Contractor.**
12. The Applicant shall submit a "Certification of Permit Completion" within 30 days after "Final Acceptance" of the work by the Turnpike.
13. Commencement of this work by the Permittee shall act as acknowledgment and acceptance of the terms and conditions of this Permit and Special Conditions.

CC: *Robert Wierz, Kyle Bianchi, Matt Lewis, Ademola Adelekan, File*

NOTICE OF INTENT (NOI)



NOTICE OF INTENT TO USE MULTI-SECTOR GENERIC PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY (RULE 62-621.300(5), F.A.C.)

This form is to be completed and submitted to the Department before use of the Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity (MSGP) provided in subsection 62-621.300(5), F.A.C. The type of facility or activity that qualifies for use of this generic permit, the conditions of the permit and additional requirements to request coverage are specified in paragraph 62-621.300(5)(a), F.A.C. Note that additional requirements for requesting coverage include submittal of the applicable generic permit fee pursuant to Rule 62-4.050, F.A.C. Familiarize yourself with the generic permit and the attached instructions before completing this form. **Please print or type information in the appropriate areas below.**

I. IDENTIFICATION NUMBER: Facility ID _____

II. APPLICANT INFORMATION:

A. Operator Name:	B. Operator Status:	
C. Address:		
D. City:	E. State:	F. Zip Code:
G. Responsible Authority:		
H. Responsible Authority's Phone No.:		
I. Responsible Authority's Fax No.:		
J. Responsible Authority's E-mail Address:		

III. FACILITY LOCATION INFORMATION:

A. Facility Name:		
B. Street Address:		
C. City:	D. State:	E. Zip Code:
F. County:	G. Latitude: ° ' "	Longitude: ° ' "
H. Is the facility located on Indian Country Lands? <input type="checkbox"/> Yes <input type="checkbox"/> No		I. Water Management District:
J. Facility Contact:		K. Phone No.:
L. Fax No.:	M. E-mail Address:	

IV. FACILITY ACTIVITY INFORMATION:

A. SIC or Designated Activity Code(s)		Primary:	Secondary:
B. Monitoring code (1, 2, 3, or 4):		C. Will construction be conducted for stormwater controls? <input type="checkbox"/> Yes <input type="checkbox"/> No	
D. Other Existing Permits		ERP No.:	Wastewater Permit No.:
Other (specify):			

V. DISCHARGE INFORMATION

A. MS4 Operator Name:							
B. Discharge Location(s):							
Outfall No.	Latitude			Longitude			Receiving Water Name
	Deg.	Min.	Sec.	Deg.	Min.	Sec.	

VI. CERTIFICATION¹:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Responsible Authority Name and Official Title (Type or Print):
--

Responsible Authority Signature: _____

Date Signed: _____

¹ Signatory requirements are contained in Rule 62-620.305, F.A.C.

INSTRUCTIONS – DEP FORM 62-621.300(5)(b)
NOTICE OF INTENT (NOI) TO USE MULTI-SECTOR GENERIC PERMIT FOR STORMWATER
DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY (MSGP)

Who Must File an NOI:

Federal law at 40 CFR Part 122 prohibits point source discharges of stormwater associated with industrial activity to waters of the United States without a National Pollutant Discharge Elimination System (NPDES) permit. Under the State of Florida's delegated authority to administer the NPDES program, operators that have stormwater discharge associated with industrial activity to surface waters of the State must file for and obtain either coverage under an appropriate generic permit contained in Chapter 62-621, Florida Administrative Code (F.A.C.), or an individual permit issued pursuant to Chapter 62-620, F.A.C.

Where to File an NOI:

The Department encourages the electronic submission of NOIs for coverage under this generic permit through the NPDES Stormwater Program's electronic permitting application available at <http://www.dep.state.fl.us/water/stormwater/npdes/>. As an alternative, NOIs may be submitted by paper copy to the following address:

NPDES Stormwater Notices Center, MS #2510
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Part I – Identification Number:

Enter the facility's DEP identification number (generic permit coverage number) if known. If an ID number has not yet been assigned to this facility, leave this item blank.

Part II – Applicant Information:

Item A.: Provide the legal name of the person, firm, public organization or any other entity that operates the facility described in this application. The operator of the facility is the legal entity which controls the facility's operation rather than the plant or site manager. The name of the operator may or may not be the same as the name of the facility.

Items B.: Enter the appropriate one letter code from the list below to indicate the legal status of the operator of the facility:

F = Federal; S = State; P = Private; M = Public (other than federal or state); O = Other

Items C.– F.: Provide the complete mailing address of the facility operator, including city, state and zip code.

Items G. – J.: Provide the name, telephone and fax number (including area code) and e-mail address of the person authorized to submit this application on behalf of the facility operator. This should be the same person as indicated in the certification in Part VI.

Part III – Facility Location Information:

Items A. – E.: Enter the facility's official or legal name and complete street address, including city, state and zip code. Do not provide a P.O. Box number as the street address.

Item F.: Enter the county in which the facility is located.

Item G.: Enter the latitude and longitude of the approximate center of the facility.

Item H.: Indicate whether the facility is located on Indian Country Lands.

Item I.: Enter the appropriate five or six letter code from the list below to indicate the Water Management District the facility is located within:

- NFWWMD = Northwest Florida Water Management District
- SRWMD = Suwannee River Water Management District
- SFWMD = South Florida Water Management District
- SFWWMD = Southwest Florida Water Management District
- SJRWMD = St. John's River Water Management District

Items J. – M.: Give the name, telephone and fax number (including area code) and e-mail address of the person who is thoroughly familiar with the operation of the facility, with the facts reported in this application and who can be contacted by the Department if necessary.

Part IV – Facility Activity Information:

Item A.: List, in descending order of significance, up to two 4-digit standard industrial classification (SIC) codes that best describe the principal products or services provided at the facility identified in Part III. For industrial activities defined in 40 CFR 122.26(b)(14)(i)-(xi) that do not have SIC codes that accurately describe the principal products produced or services provided, use the appropriate two letter code from the list below:

- HZ = Hazardous waste treatment, storage or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA [40 CFR 122.26(b)(14)(iv)].
- LF = Landfills, land application sites and open dumps that receive or have received any industrial wastes, including those that are subject to regulation under subtitle D of RCRA [40 CFR 122.26(b)(14)(v)].
- SE = Steam electric power generating facilities, including coal handling sites [40 CFR 122.26(b)(14)(vii)].
- TW = Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system used in the storage, treatment, recycling and reclamation of municipal or domestic sewage [40 CFR 122.26(b)(14)(ix)].

Item B.: Enter the appropriate 1-digit monitoring code for the facility from the list below. The monitoring requirements for the facility are contained in the MSGP.

- 1 = Not subject to monitoring requirements under the conditions of the permit.
- 2 = Subject to monitoring requirements and required to submit data.
- 3 = Subject to monitoring requirements but not required to submit data.
- 4 = Subject to monitoring requirements but submitting certification for monitoring exclusion.

Item C.: Indicate whether any construction will be conducted to install or develop stormwater controls.

Item D.: Provide the permit number for any existing state, federal or local environmental permit(s) issued to the facility, including any environmental resource permit (ERP) issued by the DEP or the Water Management District; any DEP wastewater facility permit; and any EPA-issued NPDES permit.

Part V – Discharge Information:

Item A.: If the facility discharges stormwater associated with industrial activity to a municipal separate storm sewer system (MS4), enter the name of the operator of the MS4 (e.g., municipality name, county name). (See Chapter 62-624, F.A.C. for the definition of an MS4.)

Item B.: If the facility discharges stormwater associated with industrial activity directly to receiving water(s), list each outfall; the receiving water of each outfall; and the latitude and longitude of each outfall, if available.

Part VI – Certification:

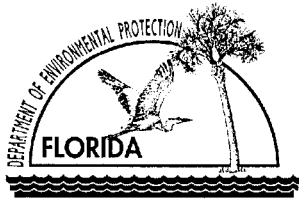
Type or print the name and official title of the person signing the certification. Sign and date the certification.

Section 403.161, F.S., provides severe penalties for submitting false information on this application (NOI) or any reports or records required by a permit. There are both civil and criminal penalties, in addition to the revocation of permit coverage for submitting false information.

Rule 62-620.305, F.A.C., requires that the application (NOI) and any reports required by the permit to be signed as follows:

- A. For a corporation, by a responsible corporate officer as described in Rule 62-620.305, F.A.C.;
- B. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- C. For a municipality, state, federal or other public facility, by a principal executive officer or elected official.

NOTICE OF TERMINATION (NOT)



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER NOTICE OF TERMINATION (RULE 62-621.300(6), F.A.C.)

This form is to be completed and submitted to the Department to terminate coverage under the Generic Permit for Stormwater Discharge from Large and Small Construction Activities provided in subsection 62-621.300(4), F.A.C., the Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity provided in subsection 62-621.300(5), F.A.C. as well as the conditional exclusion for “no exposure” of industrial activities and materials to stormwater provided in paragraph 62-620.100(2)(o), F.A.C.

All information provided on this form shall be typed or printed in ink.

I. TERMINATION INFORMATION:

A. Facility ID/Project Number:	
B. Reason for Termination:	
<input type="checkbox"/>	No longer operator of the facility/project.
<input type="checkbox"/>	Final stabilization criteria is met and all stormwater discharges associated with construction activity have ceased (for construction activity only) .
<input type="checkbox"/>	All stormwater discharges associated with industrial activity have ceased (for industrial activity only) .
<input type="checkbox"/>	No longer meet the condition of “no exposure” (for industrial activity only) .

II. OPERATOR INFORMATION:

A. Operator Name:		
B. Address:		
C. City:	D. State:	E. Zip Code:
F. Responsible Authority:		G. Responsible Authority’s Phone No.:
H. Responsible Authority’s E-mail Address:		I. Responsible Authority’s Fax No.:

III. FACILITY/PROJECT INFORMATION:

A. Name:		
B. Address/Location:		
C. City:	D. State:	E. Zip Code:
F. County:		

IV. CERTIFICATION¹:

I certify under penalty of law that all stormwater discharges associated with industrial or construction activity from the identified facility or project that are authorized by the referenced State of Florida generic permit have been eliminated; the facility no longer meets the conditional exclusion for "no exposure" outlined in paragraph 62-620.100(2)(o), F.A.C.; or that I am no longer the operator of the facility or project. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge stormwater associated with industrial or construction activity under a generic permit, and that discharging pollutants in stormwater associated with industrial or construction activity to surface waters of the State is unlawful unless authorized by a permit issued pursuant to Section 403.0885, F.S. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violations of their generic permit or conditional exclusion for "no exposure" from NPDES stormwater permitting for industrial activities.

Responsible Authority Name and Official Title (Type or Print):
--

Responsible Authority Signature: _____

Date Signed: _____

¹ Signatory requirements are contained in Rule 62-620.305, F.A.C.

**INSTRUCTIONS – DEP FORM 62-621.300(6)
NPDES STORMWATER NOTICE OF TERMINATION (NOT)**

Who May File an NOT:

Permittees who presently are covered under the Generic Permit for Stormwater Discharge from Large and Small Construction Activities provided in subsection 62-621.300(4), F.A.C., the Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity provided in subsection 62-621.300(5), F.A.C. or the conditional exclusion for “no exposure” of industrial activities and materials to stormwater provided in paragraph 62-620.100(2)(o), F.A.C. shall submit a Notice of Termination (NOT) when their facility or project no longer has any stormwater discharges associated with industrial activity as defined in Rule 62-620.200 F.A.C.; stormwater discharge associated with construction activity as defined in DEP Document 62-621.300(4)(a); no longer meets the condition of “no exposure” defined in paragraph 62-620.100(2)(o), F.A.C.; or when they are no longer the operator of the facility or project.

For construction activities, elimination of all stormwater discharges associated with industrial activity occurs when disturbed soils at the construction site have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time, and all stormwater discharges associated with construction activity from the construction site that are authorized under the generic permit have been eliminated. Final stabilization means that all soil-disturbing activities at the site have been completed and that a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of at least 70% for all unpaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures (e.g., geotextiles) have been employed.

Where to File an NOT:

The Department encourages the electronic submission of NOTs through the NPDES Stormwater Program’s electronic permitting application, available at <http://www.dep.state.fl.us/water/stormwater/npdes/>. As an alternative, NOTs may be submitted by paper copy to the following address:

NPDES Stormwater Notices Center, MS #2510
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

NOT Application Fee:

There is no application fee for submitting an NOT.

Additional Notification:

If stormwater associated with industrial or construction activity discharged to a Municipal Separate Storm Sewer System (MS4), a copy of the completed NOT shall be provided to the operator of the MS4.

For construction activities, if other contractors/subcontractors are covered under the permittee’s Notice of Intent (NOI) and/or Stormwater Pollution Prevention Plan (SWPPP), a copy of the completed NOT shall be provided to each additional contractor/subcontractor known to the permittee to be covered or claiming coverage under the permittee’s NOI and/or SWPPP. Contractors/subcontractors claiming coverage under a permittee’s NOI must assure proper permit coverage for the duration of their regulated activity. Failure of the permittee to provide a copy of the NOT as provided herein shall not relieve the contractor/subcontractor relying upon the permittee’s NOI from the required permit coverage or any potential enforcement action arising from the regulated activity.

Part I – Termination Information:

Item A.: Enter the DEP Facility ID/Project Number for the facility/project.

Item B.: Indicate the reason for termination of coverage.

Part II – Operator Information:

Item A.: Provide the legal name of the entity (operator) to which coverage was granted.

Items B. – E.: Provide the complete mailing address of the operator, including city, state and zip code.

Items F. – G.: Provide the name and telephone number (including area code) of the person authorized to submit this NOT on behalf of the operator. This should be the same person as indicated in the certification in Part IV.

Items H.-I.: Provide the email address and fax number (including area code) of the person authorized to submit this NOT on behalf of the operator.

Part III – Facility/Project Information:

Items A. – E.: Enter the official or legal name and complete street address, including city, state and zip code of the facility/project site. Do not provide a P.O. Box number as the street address. If the facility/project lacks a street address, describe the location (e.g., intersection of State Road 1 and Smith Street).

Item F.: Enter the county in which the facility/project site is located.

Part IV – Certification:

Type or print the name and official title of the person signing the certification. Sign and date the certification.

Section 403.161, F.S., provides severe penalties for submitting false information on this NOT or any reports or records required by a permit. There are both civil and criminal penalties for submitting false information.

Rule 62-620.305, F.A.C., requires that the NOT be signed as follows:

- A. For a corporation, by a responsible corporate officer as described in Rule 62-620.305, F.A.C.;
- B. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- C. For a municipality, state, federal or other public facility, by a principal executive officer or elected official.

**STORMWATER POLLUTION PREVENTION PLAN
(SWPPP)**



STORMWATER POLLUTION PREVENTION PLAN

Project: International Drive Roadway Improvements Project

Prepared by:

Professional Engineer
Fla. Reg. No _____

I. PROJECT IDENTIFICATION

a. Project Name:

Orange County, Florida

Contractor:

Name _____
Mailing Address _____
Telephone No. _____
Fax No. _____
Contact Person / Agent _____

b. Applicable Regulatory Agencies:

Orange County Environmental Protection Division (OCEPD)

800 Mercy Drive, Suite 4

Orlando, FL 32808

Contact: Robert van der Akker (407) 836-1430

Florida Department of Environmental Protection (FDEP)

Twin Towers Office Building

2600 Blair Stone Road

Tallahassee, FL 32399-2400

(850) 297-1232

II. SITE DESCRIPTION

A. Nature of Construction Activities

This Project entails the construction of a ___-lane roadway with a curb and gutter urban typical section/rural section and associated stormwater treatment facilities in Orange County, Florida. The Project length is _____ft. (_____ miles) of new construction/reconstruction/pavement & drainage improvements, located in Orange County, Section ____, T____, R____ and Section ____, T____, R____. The project will be constructed within the public right-of-way and maintenance or construction easements.

The Stormwater Management Systems will consist of/ collecting stormwater runoff via curb inlets and conveying it to detention ponds/ collecting stormwater runoff via side ditches and ditch bottom inlets/ before outfalling into historic discharge locations.

B. Major Soil Disturbing Activities

Soil disturbing activities will generally be associated with clearing and grubbing of the site, placement of embankment for roadway construction, construction of the stormwater conveyance system, and excavation of the stormwater treatment facilities.

The roadway construction, stormwater conveyance system, and stormwater treatment facilities will be constructed in phases to limit the amount of exposed soil on the project.

The proposed storm water treatment facilities shall be excavated, graded, shaped and dressed to the greatest extent possible prior to any roadway construction. The Contractor shall stabilize, seed and mulch, and sod disturbed areas as construction activities progress to limit the amount of erosion, and fugitive soils leaving the site. After completion of the roadway construction and stormwater conveyance system, the proposed stormwater treatment facilities shall be cleaned, de-silted, and the final sodding placed. The Contractor will be responsible for providing temporary seed and water for areas that have been cleared and will remain inactive for a period greater than 14 calendar days.

C. Area Estimates

Total Project Area: _____ Acres.

Total Area to be Disturbed: _____ Acres.

D. Runoff Data

(1) Runoff Coefficient Before, During, and After Construction:

Pre-construction: _____

During Construction: _____

Post-Construction: _____

(2) Description of Soil or Quality of Discharge:

(3) Estimates of Size of Drainage Area for Each Outfall:

Pond _____	Drainage Area	_____ ac.
Pond _____	Drainage Area	_____ ac.
Pond _____	Drainage Area	_____ ac.
Pond _____	Drainage Area	_____ ac.
_____	_____	_____

E. Site Map

The Construction Plans are being used as the site maps. The location of the required information is described below. The sheet numbers for all the items discussed below are identified on the Key Sheet of the Construction Plans.

- (1) Drainage patterns: The drainage basin divides and flow directions are shown on the Drainage Maps. The arrows on the drainage maps indicate stormwater flow patterns. Arrows pointing to the alignment represent offsite flow to the project corridor, while arrows pointing away from the alignment indicate runoff flowing away from the project corridor.
- (2) Approximate slopes: The slopes of the site can be seen in the Cross Sections, the Plan and Profile Sheets of the Construction Plans, and the Pond cross-sections.
- (3) Areas of soil disturbance: The areas to be disturbed are indicated on the Plan and Profile, the Cross Sections, and the Pond Details Sheets. Any areas, where permanent features are shown to be constructed above or below ground, will be disturbed.

- (4) Areas not to be disturbed (List of areas of the project that are not to be disturbed during construction if any).
- (5) Location of permanent controls: The Plan and Profile Sheets, and Pond detail Sheets indicate the locations of permanent controls.
- (6) Areas to be stabilized: Permanent stabilization is shown on the Typical Section, the Plan and Profiles and the Pond Detail Sheets.

F. Discharge points to surface waters: The Plan and Profile Sheets and Pond Detail Sheets indicate the discharge points. The following are the locations of the outfalls:

Pond ___ outfall/ Lat. ___ ° ___ ' ___ ", Long. ___ ° ___ ' ___ " Receiving waters _____
 Pond ___ outfall/ Lat. ___ ° ___ ' ___ ", Long. ___ ° ___ ' ___ " Receiving waters _____
 Pond ___ outfall/ Lat. ___ ° ___ ' ___ ", Long. ___ ° ___ ' ___ " Receiving waters _____
 Pond ___ outfall/ Lat. ___ ° ___ ' ___ ", Long. ___ ° ___ ' ___ " Receiving waters _____

III. CONTROLS

Description of appropriate controls, BMPs, and measures that will be implemented at the construction site. Clearly describe for each major activity identified in II.B appropriate control measures and timing during the construction process that measures will be implemented.

Activity	Controls/BMPs	Timing
Clearing and grubbing	_____ _____	_____ _____
Excavation	_____ _____	_____ _____
Embankment	_____ _____	_____ _____
_____	_____	_____

IV. EROSION AND SEDIMENT CONTROLS

(1) Stabilization Practices

Stabilization measures shall be initiated as soon as practical in portions of the site where construction activities have ceased temporarily or permanently, but in no case shall the time be greater than fourteen (14) days after construction activity has temporarily or permanently ceased. Unless otherwise specified in the contract documents, areas disturbed during construction are to be seeded and mulched.

(2) Structural Practices

Staked Silt Fence (_____ Linear Feet)
Staked Turbidity Barrier (_____ Linear Feet)
Baled Hay or Straw (_____ bales) (Each)
Other structural practices

All erosion control devices shall be installed according to the contract documents, Orange County Specifications, and FDOT Roadway and Traffic Design Standards.

- (3) The project will be constructed in increments to minimize disturbed soil. The contractor is advised that for areas of disturbed soil greater than 10 acres, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, shall be provided where attainable until the final stabilization of the site. For drainage locations which serve more than 10 disturbed acres at one time and where a temporary sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent controls is not attainable, smaller sediment basins and/or sediment traps should be used according to EPA FRL 5987-2.
- (4) For locations serving less than 10 acres sediment basins and/ or sediment traps are recommended but not required. At a minimum, silt fences or equivalent sediment controls are required for all sideslopes and downslope boundaries of the construction area.

V. STORMWATER MANAGEMENT

- (1) Once the roadway is constructed, stormwater runoff will be collected, conveyed and treated by the storm sewer system described and shown in the contract documents in accordance with the provisions of the _____ Water Management District (Permit # _____). BMPs to be installed during the construction process are described in Sections III and IV above, and in the contract

documents.

- (2) Velocity dissipation devices shall be placed during construction at discharge locations and along the length of any outfall channel for the purpose of providing a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected.

VI. CONTROLS FOR OTHER POTENTIAL POLLUTANTS

- (1) Waste Disposal

The Contractor will provide litter control and collection within the project boundaries during construction activities. All fertilizer, hydrocarbon, or other chemical containers shall be disposed of by the Contractor according to EPA's standard practices as detailed by the manufacturer. No solid materials including building and construction materials shall be discharged to wetlands or buried on-site.

- (2) Offsite Vehicle Tracking

Will be controlled by the following methods:

- Loaded haul trucks to be covered with tarpaulin
- Excess dirt on road removed daily
- Stabilized construction entrance (see attached details)
- Other – excess dirt on the roads shall be removed daily. The contractor will provide pollution control by implementing dust control during dust generating activities such as excavation and milling operations. This will be accomplished by using street or vacuum sweepers. Excess dirt shall be prevented from entering existing inlets.

The Contractor shall be responsible for constructing and maintaining stabilized construction entrances when entering or exiting a public road for on-site and off-site locations of stockpiled materials. The Contractor shall be responsible for modifying the system or procedures as needed, and as directed by County.

- (3) Sanitary Waste

All sanitary waste will be collected from portable units by a licensed Sanitary Waste Management Contractor, as required by the state regulations.

- (4) Fertilizer and Pesticides

Fertilizers and soil sterilizers will be used on this project in accordance with "FDOT Standard Specifications for Road and Bridge Construction, Section 570 or 577," at

the discretion of the Contractor and coordination with the Project Engineer.

(5) Toxic Substances

Contractor will be responsible for properly handling, storage and disposal of toxic materials in accordance with all applicable EPA environmental regulations. Application, generation and migration of toxic substances shall be limited.

VII. APPROVED STATE OR LOCAL PLANS

Water Management District Permit # _____
Army Corps of Engineers Permit # _____

- (1) This SWPPP is hereby certified to reflect requirements applicable to protecting surface water resources in the construction plans as permitted by the _____ Water Management District.
- (2) The SWPPP shall be amended to reflect any change applicable to protecting surface water resources in sediment and erosion plan or permit approved State, regional, or local officials for which written notices are received. Where such written notice of change is received, a re-certification shall be included in the SWPPP that the plan has been modified to address such changes.

VIII. MAINTENANCE

The contractor will be responsible for the maintenance and repairs of erosion and sediment control devices, and removal of temporary erosion and sediment control devices after the Notice of Termination.

The following practices will be used to maintain erosion and sediment controls:

(1) General

The Contractor shall install and maintain rain gauges on the project site and record weekly rainfall in accordance with the NPDES Permit No. _____. All control measures will be maintained by the Contractor daily.

All measures will be maintained in good working order. If a repair is necessary, it will be initiated within 24 hours of the report.

(2) Structural practices Controls

Built up sediment will be removed from staked silt fences when it reaches one-half

the height of the fence.

Seeding, sodding, and planting will be inspected for bare spots, washouts, and healthy growth.

Stabilized construction entrances shall be maintained to prevent clogging of rock bedding which may impede the usefulness of the structure.

Hay bales shall be replaced every three months or when they have served their usefulness so as not to block or impede storm flow or drainage.

ITEM	MAINTENANCE	PROPOSED REPLACEMENT INTERVAL
Silt Fence	Sediment build-up will be removed when the sediment build up reaches ½ the silt fence height.	1 year
Hay Bales	Remove sediment when it reaches ½ height of bales.	3 months
Turbidity Barriers	In accordance with Specification Section 104	N/A
Detention Areas and Temp. Sediment Basins	Remove sediment when it becomes 16” deep.	N/A

IX. INSPECTION

(1) Inspection Areas:

Locations of areas to be inspected may include:

- Discharge points to “Waters of the United States”
- Discharge points to MS4 facilities
- Areas not meeting the “Final Stabilization” criteria
- Materials storage / stockpiles
- Sedimentation facilities

- Structural control facilities
- Vehicle entrances / exits
- On-site stormwater management systems

Qualified personnel shall inspect the above items at least once every seven calendar days and within 24 hours of the end of a storm that is 0.25 inches or greater. Where sites have been finally stabilized, inspections shall be conducted at least once every month. Inspections shall check for evidence of, or the potential for pollutants entering the stormwater system.

- (2) Based on the results of the inspection, all maintenance operations required to assure proper operation of all controls; BMPs, practices, or measures identified in the SWPPP shall be done in a timely manor, but in no case later than 7 days following the inspection. If needed, the pollution prevention controls, BMPs, and measures identified shall be revised as appropriate, but in no case later than 7 days following the inspection.
- (3) The Contractor shall submit a weekly report to the Orange County documenting the daily inspections and maintenance or repairs to the erosion and sediment control devices. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date, major observations relating to the implementation of the stormwater pollution prevention plan, and required maintenance actions taken shall be made and retained as a part of the SWPPP for at least three years from the date that the site is finally stabilized. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the project is in compliance the SWPPP and the Generic Permit for Stormwater Discharge.
- (4) The Contractor's Superintendent shall be authorized and have the responsibility for ensuring compliance with the SWPPP.
- (5) All erosion and water pollution abatement and control measures will be inspected by the Contractor.
- (6) Contractor shall maintain copies of all required reports and shall complete all SWPPP inspection report forms required for the NPDES permit.
- (7) The Contractor shall use the Construction Inspection Report form for inspections. Also, the contractor is responsible for documenting this portion of the SWPPP. If contaminated soil or groundwater is encountered, contact the appropriate Orange County Environmental Protection and Florida Department of Environmental Protection officials.

Orange County Environmental Protection Division– Waste Management
Mr. Dennis Weatherford - Phone (407) 836-1404

Florida Department of Environmental Protection – Central District Emergency Response - Phone (407) 893-3337

X. NON-STORM WATER DISCHARGES

Except for flows from fire fighting activities, sources of non-stormwater listed in Part IIV.A.3 of the FDEP-Generic Permit for Stormwater Discharge from Construction Activities that Disturb Five or More Acres of Land that are combined with stormwater discharges associated with construction activity must be clearly identified in this plan by the Contractor. The Contractor is responsible for the implementation of the appropriate pollution prevention and treatment measures for the non-stormwater component(s) of the discharge.

XI. CONTRACTORS

The Prime Contractor must clearly identify for each measure identified in the SWPPP, the contractor(s) and/or subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the plan must sign a copy of the certification statement in Part V.E.2 of the FDEP-Generic Permit for Stormwater Discharge from Construction Activities that Disturb Five or More Acres of Land that is attached to this plan as Appendix “A”. All certifications must be included in the SWPPP. All contractors and subcontractors identified shall sign a copy of the certification statement before conduction any professional service identified in the SWPPP.

XII. NOTICE OF TERMINATION

Contractor shall file Notices of Termination of construction with all applicable regulatory agencies.

APPENDIX "A"

ORANGE COUNTY HIGHWAY CONSTRUCTION DIVISION

CONTRACTOR CERTIFICATION

**NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES
FROM**

PROJECT NAME

"I certify under penalty of law that I understand the terms and conditions of the generic stormwater permit issued pursuant to Section 403.0885, F.S., that authorizes the stormwater discharges associated with industrial activity from the construction site identified as part of this certification."

Signature

Date

Name and Title

Address or Post Office Box (Construction Site)

City

State

Zip Code

Telephone

Area Code

Number

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TECHNICAL PROVISIONS
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TP 101

MOBILIZATION

Mobilization shall include all items detailed in Article 101 of the Standard Specifications, the Special Provisions and on the plans, except as directed by the Engineer.

Preservation of Property Corners including all items detailed in Section 7-11 of the Standard Specifications shall be included in the contract price for mobilization.

Basis of Payment

The work and incidental costs covered under Mobilization will be paid for at the contract lump sum price and will be paid in partial payments in accordance with the following:

Percent of Original Contract Amount	Allowable Percent of the Lump Sum Earned Price for the Items*
5	25
0	50
25	75
50	100

*Partial payments as detailed above will be limited to 10% of the original Contract amount for the roadway pay items. Any amount of mobilization in excess of 10% of the roadway pay items will be paid upon completion of all work.

Payment shall be made under:

Pay Item:

101-1 MOBILIZATION

LS

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TP 102

MAINTENANCE OF TRAFFIC

All Maintenance of Traffic work shall conform to the requirements of Section 102 of the Standard Specifications, Index 600 of the FDOT Design Standards, the plans, and/or as herein modified, except as directed by the Engineer.

The road shall be kept open to two-way traffic on a paved surface during construction except when full closures are allowed by the plans or by the Engineer. The Contractor shall not be permitted to isolate residences or places of business. Access shall be provided to all residences and all places of business whenever construction interferes with the existing means of access.

The Contractor shall furnish, erect and maintain all necessary traffic control devices, including flagmen and pilot cars, in accordance with the *Manual of Uniform Traffic Control Devices for Streets and Highways*, published by the U.S. Department of Transportation, Federal Highway Administration. The Contractor shall provide and maintain in a safe condition the entire project limits included, but not limited to pre-existing conditions, driving lanes, temporary approaches, crossings, and intersections with trails, roads, streets, business parking lots, residences, garages and completed work. The Contractor shall take all necessary precautions for the protection of the work and the safety of the public in accordance with Section 102.

The Contractor shall present his signed and sealed Maintenance of Traffic Plan to the Engineer at the preconstruction conference, and shall be fully and solely responsible for the adequacy of the Maintenance of Traffic plan regardless of the source. The plan shall be signed and sealed by a professional engineer licensed in the State of Florida.

The Contractor shall be responsible for installation of signs for all business along the project corridor. Signs should be manufactured and installed in accordance with FDOT design standards. No special compensation will be made to the contractor to defray costs of any of the work or delays for complying with the requirements of installing business signs, but such costs shall be considered as having been included in the price stipulated for the Maintenance of Traffic pay item.

Basis of Payment

All materials, work and incidental costs related to Maintenance of Traffic will be paid for at the contract lump sum price. All material, labor and equipment necessary for the construction and maintenance of the entire project limits included, but not limited to pre-existing conditions, driving lanes, temporary approaches, crossings, intersections with trails, roads, streets, business parking lots, residences, garages, temporary driving lanes, side streets, driveway connections, and completed work, as may be directed by the Engineer shall be included in the contract price.

Payment will be made under:

Pay Item:

102-1 MAINTENANCE OF TRAFFIC

LS

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TP 104

PREVENTION, CONTROL and ABATEMENT of EROSION and WATER POLLUTION

Prevention, control and abatement of erosion and water pollution shall conform to the requirements of Section 104 of the Standard Specifications, National Pollution Discharge Elimination System (NPDES) requirements, except as modified by these Technical Provisions or as directed by the Engineer.

The Contractor shall present at the Preconstruction Conference its Storm Water Pollution Prevention Plan (SWPPP) and a separate schedule to manage erosion and water pollution. This schedule shall include a complete outline of the proposed construction of all erosion and pollution control and abatement items required.

The Contractor shall be responsible for the preparation and submittal of the Notice of Intent (NOI) and Notice of Termination (NOT) to the Florida Department of Environmental Protection (FDEP) and shall obtain the FDEP Generic Permit for Stormwater Discharge from Large and Small Construction Activities.

Basis of Payment

All work and incidental costs required to comply with the articles of this specification will be paid at the contract lump sum price for Prevention, Control and Abatement of Erosion and Water Pollution.

Payment will be made under:

Pay Item:

104-14	PREVENTION, CONTROL & ABATEMENT OF EROSION & WATER POLLUTION	LS
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TP 110

CLEARING AND GRUBBING

All clearing and grubbing shall be performed in accordance with the requirements of Section 110 of the Standard Specifications, except as directed by the Engineer.

Scope of work to include but not be limited to, the removal of all rigid, asphalt pavement, Portland cement concrete pavement, curb, curb and gutter, ditch pavement, sidewalk, driveway aprons, concrete slabs, concrete structures, brick, fences, gravity walls, retaining walls, pipes, etc.

Clearing and Grubbing shall also include the removal of existing pavement and base course and backfilling with suitable material, as shown in the construction plans. Seeding and mulching of the backfilled area shall be paid under the seeding and mulching items. Removal of the existing roadway shall also include the proper disposal of the removed materials as specified above.

Basis of Payment

All work and incidental costs required to perform clearing and grubbing as herein specified will be paid for at the contract lump sum price.

Payment shall be made under:

Pay Item:

110-1-1	CLEARING & GRUBBING	LS
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TP 120

EXCAVATION, EMBANKMENT AND GRADING

All excavation and embankment work shall conform to the requirements of Section 120 of the "Standard Specifications", and the provisions of this section, except as directed by the Engineer.

Basis of Payment

Subsoil Excavation will be paid for at the contract price per cubic yard.

Payment shall constitute full compensation for all work described herein and in the Special Provisions and shall include the excavation and disposal of muck, clay, rock, or any other material that is unsuitable in its original position and that is excavated below the finished grading template. Work under this pay item shall also include the excavation of all suitable material within the specified limits as necessary to excavate the unsuitable material. The bottom of the finished grading template shall be considered to be the top of the finished base, shoulders, and slopes for stabilized bases and the finished shoulder and slope lines and bottom of base or rigid pavement for rigid pavement or all other bases. Payment shall also include the provision, placement, shaping, and compaction of suitable backfill material to replace the removed unsuitable material up to the original grade line or to the bottom of the proposed roadway base material, whichever is lower.

The limits of Subsoil Excavation indicated in the construction plans are considered to be particularly variable, in accordance with field conditions actually encountered.

Excavation, Embankment and Grading will be paid for at the contract lump sum price.

Payment shall constitute full compensation for all work described herein and in the Special Provisions and shall include grading of shoulders, graded road connections, slopes, compaction, final dressing, subsoil excavation, replacement material and all work required for completing the project that is not paid for under the other pay items. Also included are removals and off-site disposal or on-site utilization of all materials, structures, abandoned utilities and obstructions as directed by the Engineer.

Payment shall be made under:

120-7	REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL	CY
120-9	EXCAVATION, EMBANKMENT, & GRADING	LS

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TP 160

STABILIZED SUBGRADE

All work shall be performed in accordance with the requirements of Section 160 of the Standard Specifications (Stabilizing) and shall be constructed to the limits, thickness, and specified limerock bearing ratio as shown on the plans, except as directed by the Engineer.

Method of Measurement

Quantities of stabilized subgrade measured for payment under this Section shall be the actual area in square yards of satisfactorily installed stabilized subgrade.

Basis of Payment

Stabilized subgrade will be paid for at the contract unit price per square yard installed and accepted and shall include the cost of furnishing and hauling additional stabilizing materials required, and all mixing, shaping and compacting of the stabilized area. The increased thickness of the Type B stabilization under curb and gutter sections shall be considered incidental and included in the contract unit price.

Payment shall be made under:

Pay Item:

160-4	TYPE B STABILIZATION (MIN. LBR 40) (12")	SY
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TECHNICAL PROVISIONS
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TP 285

SOIL-CEMENT BASE (PRIMED)

Construction of a Soil Cement Base shall consist of soil, water, and portland cement uniformly mixed, moistened, compacted, finished and cured in accordance with these specifications and shall conform to the lines, grades, thicknesses and typical cross-sections shown on the plans. Soil cement base that is not finished and cured within (36) hours after compaction has been achieved may be rejected and subject to removal and replacement if so directed by the Engineer.

Testing

- A. The Contractor shall submit a mix design prepared by an independent Geotechnical Engineer to the Engineer for acceptance before using the material for road construction. Processing of the base shall proceed after the design mix is accepted by the Engineer. A modified Portland Cement Association (PCA) Short Cut Procedure for sand soil test method may be used in lieu of the wet-dry/freeze-thaw test method. However, a 7-day minimum laboratory compressive strength of 300 psi shall be used to determine the cement content when using the modified PCA test method.
- B. Construction of the soil cement base shall proceed only after 48 hours prior notice has been received by the Engineer and the County's geotechnical engineer. The geotechnical engineer shall be present during construction. The following is the minimum information/test data to be obtained during construction:
1. Area & Date of Construction
 2. Average Cement Content
 3. Uniformity of Mix
 4. Moisture Content at Time of Compaction
 5. Percent Compaction
 6. Compacted Thickness
 7. 7-Day Compressive Strength Tests

The geotechnical engineer will prepare and submit to the Engineer a signed report documenting all field tests and observations.

Materials

A. Portland Cement

Portland Cement shall be Type I, II, III, or Type I-S or Type I-P and shall comply with FDOT Standard Specification Section 921. Portland Cement shall also comply with ASTM C-150 and/or AASHTO M-85 and be produced in the United States. Cement which is partially set, lumpy or caked shall not be used. One cubic foot of Portland Cement shall be

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considered to weigh 94 lbs.

B. Water

Water shall be clean and free from substances deleterious to the hardening of the soil cement mixture.

C. Soil

Only soils which have proven themselves to produce a high quality soil cement base shall be acceptable. New sources of soil cement material shall be accepted by the County prior to use.

Specific Requirements for Soil:

Organic Material (As per FM 1-T267)	Maximum 5%
Total Clay and Silt Content (minus No. 200 [75µm sieve) (As per AASHTO T 88, no hydrometer test)	Maximum 25%
Plastic Index (As per AASHTO T 90)	Maximum 10%
Liquid Limit (As per AASHTO T 89)	Maximum 25%
Gradation: (As per AASHTO T 88)	
Passing 2 inch [50 mm] sieve	Minimum 100%
Passing No. 4 [4.75 mm] sieve	Minimum 55%
Passing No. 10 [2.00 mm] sieve	Minimum 37%

As an exception to the above requirements, the Contractor may use any material meeting the requirements for Limerock in Section 911 of the FDOT Standard Specifications.

D. Prime Coat

The prime coat shall be emulsified Asphalt Grades SS-1 or SS-1H, or Special MS-Emulsion, diluted per the manufacturer's recommendations.

Equipment

Soil Cement may be constructed with any machine, combination of machines or equipment that will produce the results meeting the requirements for soil pulverization, cement application, mixing, uniform depth control, water application, incorporation of materials, compaction, finishing and curing as required to comply with these specifications.

Construction Methods

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A. General

The Soil-Cement base shall be placed under the supervision of a competent superintendent having a minimum of two (2) years experience in the construction of soil-cement base courses. Soil-Cement base proportioning and construction shall only be performed when ambient temperatures measured in the shade are at 45°F and rising and that temperatures are not forecast to fall below 35°F for 48 hours following placement of the material. All mixing, shaping, finishing and compaction shall be completed within four hours starting from the time mixing commences.

B. Mix Proportioning

The Soil-Cement base shall be proportioned using Strength Design criteria. Proportioning of the soil, cement and water shall be performed in a pugmill at a central mix plant. Mixing shall be sufficiently achieved to prevent cement balls from forming when water is added. The Contractor shall continuously monitor plant batching and mixing of the materials and submit to the Engineer reports of the gradation, cement content and moisture content prepared by the independent Geotechnical Engineer. The County's Geotechnical Engineer shall monitor the installation and conduct applicable tests and inspections as outlined in this Section.

C. Preparation

Before construction operations are begun, the area to be paved shall be graded and shaped as required to receive the spread of soil-cement mixture delivered from the plant and allow construction in conformance with the grades, lines, thicknesses and typical cross sections shown on the plans. Additional soil needed, if any, shall be placed as directed. Unsuitable soil or materials shall be removed and replaced with acceptable soil. The subgrade shall be compacted to the density, thickness, lines, grades, and typical sections shown on the plans. The contractor shall maintain the required density until the base is placed on the subgrade.

D. Pulverization

The soil to be used in mixing shall be so pulverized that, at the completion of moist-mixing, 100 percent by dry weight passes a 1" sieve, and a minimum of 80% passes a No. 4 sieve, exclusive of gravel or stone retained on these sieves.

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E. Application of Cement

The specified quantity of Portland Cement required for full depth treatment shall be metered out at the plant in accurate proportion in accordance with the mix design. The percentage of moisture in the soil, at the time of cement application at the plant, shall not exceed the quantity that will permit a uniform and intimate mixture of soil and cement during proportioning and shall not exceed 2% below the optimum moisture content for the soil cement mixture.

F. Mixing

After the cement has been applied, it shall be thoroughly mixed with the soil at the pugmill. Mixing shall continue until the cement has been thoroughly blended with the soil in order to prevent the formation of cement balls when water is applied. Any uncompacted soil and cement mixture that has not been compacted and finished shall not remain undisturbed for more than thirty (30) minutes.

G. Application of Water and Moist Mixing

Immediately after and/or during the mixing of soil and cement, the moisture content of the soil cement mixture shall be determined by the laboratory. Water shall be applied uniformly in quantities required to obtain the proper design moisture content within the range provided by the contractor's geotechnical engineer. After the final application of water, mixing shall continue until a uniform and intimate mixture of soil, cement and water is obtained.

When water application and mixing have been completed, the percentage of moisture in the mixture, based on oven-dry weights, shall be no more than two percentage points above the specified optimum moisture content, and shall be less than that quantity which will cause the soil cement mixture to become unstable during compaction and finishing.

H. Spreading

The mixed base material shall be hauled to the placement site in trucks equipped with protective covers and immediately placed on top of the prepared subgrade. The material shall be graded to conform to the lines and grades of the finished pavement section as shown on the project drawings and shall be placed in a sufficient thickness to assure the minimum required compacted thickness free from high and low spots. No more than 60 minutes will be allowed between placement of adjacent passes of the spreader at any location, except at construction joints.

I. Compaction

The material shall be placed in a single, uniformly thick, loose layer and evenly compacted to a density not less than 97% of the modified maximum density determined by AASHTO T-134 on representative samples of soil cement mixture obtained from the roadway at the time compaction

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begins. Not more than four hours shall elapse from the time of batching to final compaction and the material shall not remain undisturbed for more than two hours. The surface of the base course may require the addition of water during the final rolling and shaping operation to prevent excessive surface moisture losses prior to sealing the base.

J. Finishing

After the mixture has been initially compacted, the surface of the soil cement shall be shaped to the required lines, grades and cross-section. During the shaping operations, the surface shall be lightly scarified to loosen any imprints left by the compacting or shaping equipment, when deemed necessary. The resulting surface shall then be compacted to the specified density with a pneumatic tire roller. Rolling shall be supplemented by broom-dragging, if required.

The moisture content of the surface material must be maintained at not less than its specified optimum moisture content during finishing operations. Surface compaction and finishing shall be done in such a manner as to produce a smooth, dense surface, free of surface compaction planes, cracks, ridges, or loose material. Surface-finishing methods may vary, provided a smooth, dense surface free of surface compaction planes is produced. The moisture and density requirements shall be determined by the methods prescribed in AASHTO T-134.

K. Surface Requirements (Scalping or Hard-Planing)

After completing compaction and finishing but not later than the beginning of the next calendar day after constructing any section of the base, the surface shall be tested with a template cut to the required crown and/or with a 15 foot straight-edge laid parallel to the centerline. All irregularities greater than 1/4 inch shall be immediately corrected with a blade adjusted to the lightest cut which will insure a surface that does not contain depressions greater than 1/4 inch under the template or the straight-edge. The material removed shall be wasted. Additional wetting during and after that final shaping operation shall be provided to keep the base continuously moist.

L. Prime/Curing

After finishing the soil cement it shall be protected against drying for 7 days by applying a bituminous curing material as soon as possible after completing finishing operations. The finished soil cement shall be kept continuously wet until the curing material is placed. Curing material shall consist of a mixture of 60% grade SS-1 and 40% water applied at the rate of 0.15 to 0.20 gallons per square yard.

The prime coat bituminous material specified shall be uniformly applied to the surface of the completed soil cement. The exact rate and temperature of application to give complete coverage without excessive runoff will be accepted by the Engineer. At the time the bituminous material is applied, the soil cement surface shall be dense, free of all loose and extraneous material, and contain sufficient moisture to prevent penetration of the bituminous material. Water shall be applied in sufficient quantity to fill the surface voids of the soil cement immediately before the

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bituminous curing material is applied. The bituminous material shall be sanded using a sufficient amount of clean sand to prevent bleeding or traffic pick-up.

M. Construction Joints

Prior to the beginning of each day's construction, a straight transverse construction joint shall be formed by cutting back into the completed work to form a true vertical face.

N. Thickness

During various stages of construction test holes or trenches shall be dug in the mixture to determine the thickness. After completing the base, test holes shall be dug or drilled at intervals of not more than 300 feet (closer intervals if necessary) and the thickness of the base shall be determined from measurements made in these test holes.

Where the base is deficient in thickness by more than 1/2 inch, the area of deficient base shall be removed and replaced with base of the required thickness at the Contractor's sole expense. At the Engineer's option such deficient thickness base may be left in place, provided the deficiency is not more than one inch. This deficiency shall be made up in asphaltic concrete, provided the control grades can be maintained. Payment will be made on the basis of full depth soil-cement. No additional payment will be made for asphaltic concrete required to make up deficiencies in soil-cement base thicknesses.

Opening To Traffic

The Contractor will not be permitted to drive heavy equipment over the completed sections, but light weight pneumatic-tired equipment may be permitted after 24 hours, provided the surface has hardened sufficiently to prevent the equipment's marking the surface and provided the protection and curing specified are not impaired.

Maintenance

The Contractor shall maintain the base to a true and satisfactory surface until the wearing surface is constructed. Should any repairs or patching be necessary, they shall extend to the full depth of the base and shall be made in a manner that will assure restoration of a uniform base course conforming to the requirements of these specifications. The bituminous curing coating shall be maintained until the wearing surface is constructed.

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Inspection

The Engineer, Geotechnical Engineer and Contractor shall inspect the base for deficiencies after a minimum of seven 7 days have elapsed and prior to applying the asphalt wearing surface. All deficiencies shall be corrected and accepted by the Engineer 48 hours prior to commencing paving operations.

Method of Measurement

Quantities measured for payment under this Section shall be the actual area in square yards of soil cement base constructed to limits, thicknesses, lines and grades shown on the plans, completed and accepted.

Basis of Payment

Soil Cement Base will be paid for at the contract unit price per square yard completed and accepted. The cost of the cement, prime coat and cover material, including the spreading of each, shall be included in the contract unit price.

Payment shall be made under:

<u>Item No</u>		
285-707	SOIL CEMENT BASE (PLANT MIX) (PRIMED) (300 PSI) (10")	SY

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International Drive Roadway Improvements
TECHNICAL PROVISIONS

TP 327

MILLING OF EXISTING ASPHALT PAVEMENT

Milling of existing asphalt pavement shall be performed in accordance with the requirements of Sections 327 and 300 of the “Standard Specifications”, except as amended herein. The work specified in this Section consists of removing existing asphaltic concrete pavement by milling to lower the finished grade adjacent to existing curb prior to resurfacing, except as directed by the Engineer.

Milled material becomes the property of the Contractor.

Equipment

The milling machine shall be capable of maintaining a depth of cut and cross slope that achieves the results specified in the plans and specifications. The overall length of the machine (out to out measurements excluding the conveyor) shall be a minimum of 18 feet. The minimum cutting width shall be 6 feet.

The milling machine shall be equipped with a built-in automatic grade control system that controls the transverse slope and the longitudinal profile to produce the specified results.

Any commercially manufactured milling machine meeting the above requirements shall be accepted prior to starting the project. If after milling has started the milling machine cannot consistently produce the specified results, the milling machine will be rejected for further use.

Equipment permitted when milling adjacent to existing curbs or other areas. Use of a smaller milling machine will be subject to the Engineer’s acceptance, where it is impractical to use the above-described equipment.

The milling machine shall be equipped with means to effectively limit the amount of dust escaping the removal operation.

Construction

The Contractor shall remove the existing raised reflective pavement markers prior to milling. Include the cost of removing existing pavement markers in the price for milling.

The milling machine shall be operated to minimize the amount of dust being emitted from the machine. Pre-wetting of the pavement may be required.

Where traffic will be maintained on the milled surface prior to placing the new asphaltic concrete, the striation patterns shall produce an acceptable riding surface. The Engineer will accept the traveling speed of the milling machine to produce an acceptable riding surface.

Before opening a milled area to traffic, the pavement shall be thoroughly swept with power broom or other acceptable equipment to remove, to the greatest extent practicable, fine material, which will dust under traffic. This operation shall be conducted in such a manner that will minimize the potential of creating a traffic hazard and minimize air pollution.

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Sweeping the milled surface with a power broom is required before placing asphaltic concrete.

The sweeping operation shall be performed immediately after the milling to prevent milled material infiltrating into the storm sewer system when the milling operation is near a municipal curb and gutter or a closed drainage system.

This operation shall include thoroughly removing all milled material from the gutter to prevent it from being swept into inlet openings or grates. Curbs shall not be damaged during the removal operation. The Engineer may require the equipment and/or methods be changed to achieve satisfactory results.

Milled Surface

Milled surfaces shall have a reasonably uniform texture, shall be within ¼ inch of a true profile grade and shall have no deviation in excess of ¼ inch from a straightedge applied to the pavement perpendicular to the centerline. Variations of the longitudinal joint between multiple cut areas shall not exceed ¼ inch. Areas varying from a true surface in excess of the above stated tolerance may be accepted without correction if the Engineer determines that they were caused by a pre-existing condition, which could not have reasonably been corrected by the milling operations. Any unsuitable texture or profile, as determined by the Engineer, shall be corrected by the Contractor at no additional compensation.

The Engineer may require re-milling of any area where a surface lamination causes a non-uniform texture to occur.

Method of Measurement

Quantities measured for payment under this Section shall be square yards, of milling acceptably completed.

Basis of Payment

Milling Existing Asphalt Pavement will be paid for at the contract unit price per square yard. Payment shall be full compensation for all work specified in this Section, including hauling off or otherwise disposing of the milled material.

Payment shall be made under:

327-70-6	MILLING EXISTING ASPHALT PAVEMENT (1 1/2" AVG. DEPTH)	SY
327-70-8	MILLING EXISTING ASPHALT PAVEMENT (2 1/2" AVG. DEPTH)	SY

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SUPERPAVE ASPHALTIC CONCRETE PAVING

334-1 GENERAL

Work specified in this Provision consists of the application of Asphaltic Concrete structural courses properly produced and laid upon a prepared and accepted base in accordance with these specifications and in conformity with the lines, grades, thicknesses and cross-sections provided in the plans. Base preparation and Asphaltic Concrete Friction Courses are covered under separate provisions.

This Provision is intended to stand alone for the production and placement of structural course asphalt and replaces Sections 330 and 334 of the FDOT Standard Specifications for Road and Bridge Construction except when specific references are made to these or other Sections. Any references to FDOT Specification Sections shall mean the latest FDOT Standard Specifications for Road and Bridge Construction, including Supplements. Any incorrect references to or conflicts with the FDOT specifications, test methods, or standards shall be brought to the attention of the Engineer for clarification.

The Engineer will have the right to disapprove of any material or process that does not conform to these specifications.

The Contractor shall document all QC procedures, Process Control, inspection, and all test results and make them available for review by the Engineer throughout the Contract duration.

All test methods designated as FM refer to the FDOT Florida Sampling and Testing Methods.

334-2 CONTRACTOR QUALITY CONTROL REQUIREMENTS

334-2.1 GENERAL: The Contractor shall be responsible for the overall quality of the materials and workmanship of the work covered under this Provision.

Ensure that the qualifications and certifications of personnel and laboratories are maintained throughout the Contract duration. Provide proof of qualifications and all applicable certifications to the County prior to construction operations commencing. Notify the County immediately when there is a change in any qualification or certification during the Contract duration.

334-2.2 PERSONNEL: Provide personnel who are both qualified and certified in all activities related to asphalt mix production at the plant and placement on the roadway, especially for the sampling, testing and inspection of materials and construction activities. At a minimum, a certified Paving Level II technician shall be present on site at all times during paving operations. Provide documentation to the Engineer that the personnel responsible for the production and placement of asphalt products under the Contract are qualified and certified.

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334-2.3 TESTING LABORATORY: Furnish or have furnished a fully equipped asphalt laboratory (permanent or portable) at the production site. Provide documentation to the Engineer that any Laboratory used is FDOT qualified and certified.

334-2.4 EQUIPMENT: Provide equipment and methods conforming to Section 320 of the FDOT Standard Specifications for Road and Bridge Construction. Provide a sufficient number of trucks to transport the asphalt mixture from the plant to the job site such that paving of each lane can proceed in one smooth uninterrupted operation. In determining the number of trucks required the Contractor shall consider the capacity of the trucks, the length of the approved haul route from the plant to the job site, traffic conditions, weather conditions, and any other factors that could impact the round trip travel time. Stopping the paver to wait for trucks bringing the asphalt mixture will not be acceptable. In addition to meeting the requirements in Section 320-5, the paving machine shall be capable of pushing the asphalt truck as it dumps the asphalt mixture into the hopper. Stopping the paving machine to allow the next asphalt truck to back up to it to fill the hopper is not an acceptable procedure, and shall not be allowed.

Unless otherwise approved by the Engineer, the paving machine shall weigh a minimum of 26,000 pounds.

334-2.5 MINIMUM QUALITY CONTROL REQUIREMENTS: Perform the following activities necessary to maintain quality and process control and meet specification requirements:

Stockpiles: Ensure each aggregate component is placed in an individual stockpile, and separated from adjacent stockpiles, either by space or by a system of bulkheads. Prevent the intermingling of different materials in stockpiles. Form and maintain stockpiles in a manner that will prevent separation, contamination, segregation, etc. Identify each individual stockpile, including RAP, as shown on the mix design.

Incoming Aggregate: Obtain gradations and bulk specific gravity (Gsb) values from aggregate supplier for reference; determine the gradation of all component materials; routinely compare gradations and Gsb values to mix design.

Cold Bins: Calibrate the cold gate/feeder belt for each material; determine cold gate/feeder belt settings; observe operation of cold feeder for uniformity.

Dryer: Observe pyrometer for aggregate temperature control; observe efficiency of the burner.

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For Batch Plants: Determine percent used and weight to be pulled from each bin to assure compliance with Mix Design, check mixing time, and check operations of weigh bucket and scales.

For Drum Mixer Plants: Determine aggregate moisture content, and calibrate the weigh bridge on the charging conveyor.

Control Charts: Plot and keep charts updated daily for all Quality Control Sampling and Testing and post in the asphalt lab where they can be seen. Maintain the following charts:

1. Sample test results for the following: No. 8 sieve, No. 200 sieve, asphalt binder content, air voids, and density.
2. Gradation of incoming aggregate.
3. Gradation and asphalt content of RAP.
4. Any other test result or material characteristic (as determined by the Contractor) necessary for process control.

The above listed minimum activities are to be considered normal activities necessary to control the production of hot mix asphalt at an acceptable quality level. It is recognized, however, that depending on the type of process or materials, some of the activities listed may not be necessary and in other cases, additional activities may be required. The frequency of these activities will also vary with the process and the materials. When the process varies from the defined process average and variability targets, the frequency of these activities will be increased until the proper conditions have been restored.

334-2.6 MINIMUM PROCESS CONTROL TESTING REQUIREMENTS:

Asphalt Plant

1. Hot Mix Asphalt: Determine the asphalt binder content; mix gradation and volumetric properties at a minimum frequency of one per day. In the event that the daily production exceeds 1,000 tons, perform these tests a minimum of two times per day.
2. Aggregate (Including RAP): One sample per 1,000 tons of incoming material as it is stockpiled for gradation. The testing of RAP material shall include the determination of asphalt binder content and gradation of extracted aggregate.

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3. Monitor the mix temperature for the first five loads and every fifth load thereafter.
4. Monitor the aggregate moisture content from stockpiles or combined cold feed aggregate - one per day.
5. Other tests (as determined necessary by the Contractor) for process control.

Roadway

1. Monitor the mix temperature for the first five loads and every fifth load thereafter.
2. Monitor the prime/tack spread rate as needed to control operations and ensure that it meets or exceeds the target spread rate.
3. Monitor the pavement cross slope at a frequency necessary to fulfill the requirements of the plans and section 334-3.10.3 below, and identify a system to control the cross slope of each pavement layer during construction.
4. Monitor the mix spread rate at the beginning of each day's production, and as needed to control the operations, at a minimum of once per 200 tons placed to ensure that the spread rate meets or exceeds the target spread rate. When determining the spread rate, use an average of five truckloads of mix.
5. Monitor mat placement thickness every 25' to ensure the minimum design thickness is met.
6. Monitor the pavement temperature with an infrared temperature device. Monitor the roadway density with either 6 inch diameter roadway cores, a nuclear density gauge, or other density measuring device, at a minimum frequency of once per 1,500 feet of pavement. When the layer thickness is greater than or equal to 1 inch (or the spread rate is greater than or equal to 105 lb/yd²) and an approved rolling pattern may be used in lieu of density testing, monitor the density (for informational purposes only) by cutting and testing a 6 inch diameter core at a minimum frequency of three cores per day. Maintain daily records of the testing results and make them available for review by the Engineer throughout the life of the Contract.
7. Monitor the pavement smoothness with a 15-foot rolling straightedge as required by section 334-3.10.4 below.

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334-3 GENERAL CONSTRUCTION REQUIREMENTS

334-3.1 DESCRIPTION

Construct plant-mixed hot bituminous pavements. Establish and maintain a quality control system in accordance with section 334-2 above that provides assurance that all materials, products and completed construction submitted for acceptance meet Contract requirements.

334-3.2 LIMITATIONS OF OPERATIONS

334-3.2.1 Weather Limitations: Do not transport asphalt mix from the plant to the roadway unless all weather conditions are suitable for the laying operations.

334-3.2.2 Limitations of Laying Operations:

334-3.2.2.1 General: Spread the mixture only when the surface upon which it is to be laid has been previously prepared, is intact, firm, and properly cured, and is substantially dry. Do not place friction course until the adjacent shoulder area has been dressed and grassed.

334-3.2.2.2 Temperature: Spread the mixture only when the air temperature in the shade and away from artificial heat is at least 40°F and rising for layers greater than 1 inch in thickness and at least 45°F and rising for layers 1 inch or less in thickness (including leveling courses). The minimum temperature requirement for leveling courses with a spread rate of 50 lb/yd² or less is 50°F and rising.

334-3.2.2.3 Wind: Do not spread the mixture when the wind is blowing to such an extent that proper and adequate compaction cannot be maintained or when sand, dust, etc., are being deposited on the surface being paved to the extent that the bond between layers will be diminished.

334-3.2.2.4 Night Paving: Provide sufficient lighting for night operations.

334-3.3 ROADWAY SURFACE PREPARATION

334-3.3.1 Cleaning: Prior to the laying of the mixture, clean the surface of the base or pavement to be covered of all loose and deleterious material by the use of a vacuum truck. Power brooms or blowers may be used when the use of a vacuum truck is impractical, supplemented by hand brooming where necessary.

334-3.3.2 Patching and Leveling Courses: Where an asphalt mix is to be placed on an existing pavement or old base which is irregular, or wherever the plans indicate, bring the existing surface to proper grade and cross-section by the application of patching or leveling courses. Wherever a patch is required, the width shall be taken out to the full width of each lane affected and the length shall

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extend far enough longitudinally to fully encompass the affected area. The existing pavement receiving a patch or leveling course shall be milled as shown on the plans or as required by the Engineer.

334-3.3.3 Application Over Surface Treatment: Where an asphalt mix is to be placed over a newly constructed surface treatment, sweep and dispose of all loose material from the paving area.

334-3.3.4 Coating Surfaces of Contacting Structures: Paint all structures which will be in actual contact with the asphalt mixture, with the exception of the vertical faces of existing pavements and curbs or curb and gutter, with a uniform coating of asphalt cement to provide a closely bonded, watertight joint.

334-3.3.5 Tack Coat:

334-3.3.5.1 Tack Coat Required: Apply a tack coat, meeting the requirements of Section 300 in the FDOT Standard Specifications for Road and Bridge Construction, on existing pavement structures that are to be overlaid with an asphalt mix and between successive layers of all asphalt mixes. The use of Trackless Polymer Modified Asphalt Emulsion Tack Coat (MTSS-1HM) is not allowed unless approved by the Engineer.

334-3.3.5.2 Tack Coat at Engineer's Option: Apply a tack coat on the following surfaces only when so directed by the Engineer:

1. Freshly primed bases.
2. Surface treatment.

334-3.4 ASPHALT PLANT PREPARATION

Ensure the following requirements are met at the asphalt plant:

Asphalt Cement

- Asphalt cement is delivered to the asphalt plant at a temperature not to exceed 370°F.
- Asphalt cement is maintained in storage within a range of 230 to 370°F in advance of mixing operations.
- Constant heating is maintained within these limits, and that high fluctuations in temperature during a day's production is avoided.

Aggregate Blending:

- All aggregates to be blended or proportioned are placed in separate bins at the cold hopper.
- Proportioning is performed by means of securely positioned calibrated gates or other approved devices.

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Aggregate Cold Bins:

- Bin compartments are constructed to prevent any spilling or leakage of aggregate from one bin to another.
- Bin compartments have the capacity and design to permit a uniform flow of aggregates.
- Bin compartments are mounted over a feeder of uniform speed, which will deliver the specified proportions of aggregate to the drier.
- Bins are equipped with vibrators to ensure a uniform flow of aggregate at all times.
- Each bin compartment is provided with a gate which is adjustable in the vertical direction.
- Gates can be held securely at any specified vertical opening.
- Gates are equipped with a measuring device for measuring the vertical opening of the gates from a horizontal plane level with the bottom of the feeder.

Mineral Filler:

Mineral filler (if required in the mix design) is fed or weighed in separately from the other aggregates.

Aggregate Heating and Drying:

- Aggregates are heated and dried before screening.
- The temperature of the aggregates is controlled so that the temperature of the completed mixture at the plant falls within the permissible range allowed by this Section.

Aggregate Screening:

- Oversized pieces of aggregate are removed by the use of a scalping screen.
- Oversized material is not returned to the stockpile for reuse unless it has been crushed

and reprocessed into sizes that will pass the scalping screen.

- The quantity of aggregates being discharged onto the screens does not exceed the capacity of the screens to actually separate the aggregates into the required sizes.
- A maximum of 10% plus-10 material in the minus-10 bin is maintained.

334-3.5 MIXTURE PREPARATION

Ensure the following requirements are met:

334-3.5.1 Batch Mixing: The dried aggregates and mineral filler (if required), prepared as specified and proportioned to meet the verified mix design, shall be

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conveyed to the empty mixer. The accurately measured hot asphalt binder shall be introduced into the mixer simultaneously with, or after, the hot aggregates. The blended materials shall be continuously mixed until thoroughly uniform with all particles fully coated. The mixing time begins when the measuring devices for both the asphalt and the aggregates indicate that all the material is in the mixer, and continues until the material begins to leave the mixing unit. In no case will the mixing time be less than 35 seconds.

334-3.5.2 Continuous Mixing: The dried aggregates and mineral filler (if required), prepared as specified and proportioned to meet the verified mix design, shall be introduced into the mixer in synchronization with the accurate feeding of the hot asphalt cement. The blended materials shall be sufficiently mixed until thoroughly uniform with all particles fully coated.

334-3.5.3 Mix Temperature: The ingredients of the mix shall be heated and combined in such a manner as to produce a mixture with a temperature, when discharged from the pugmill or surge bin, which is within the master range as defined below.

The temperature of the completed mixture shall be determined using a quick-reading thermometer through a hole in the side of the loaded truck immediately after loading. A 1/4 inch hole on both sides of the truck body within the middle third of the length of the body, and at a distance from 6 to 10 inches above the surface supporting the mixture shall be provided.

The normal frequency for taking asphalt mix temperatures will be for each day, for each design mix on the first five loads and once every five loads thereafter. The temperature of the asphalt mix at the plant and at the roadway shall be taken at the normal frequency before the mix is placed. The temperature shall be recorded on the front of the respective delivery ticket. The Engineer shall review the plant and roadway temperature readings and may take additional temperature measurements at any time.

The master range for all mix designs will be the established temperature from the mix design $\pm 30^{\circ}\text{F}$. Reject for use on the project any load or portion of a load of asphalt mix at the plant or at the roadway with a temperature outside of this master range. The Engineer will be immediately notified of the rejection.

If any single load at the plant or at the roadway is within the master range but differs from the established mix temperature by more than $\pm 25^{\circ}\text{F}$ or if the average difference of

the temperature measurements from the established mix temperature for five loads exceeds $\pm 15^{\circ}\text{F}$, the temperature of every load will be monitored until the temperature falls within the specified tolerance range in Table 334-1; at this time the normal frequency may be resumed.

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Table 334-1

Temperature Tolerance From Verified Mix Design

Any Single Measurement

±25°F

Average of Any Five Consecutive Measurements

±15°F

334-3.5.4 Maximum Period of Storage: The maximum time that any mix may be kept in a hot storage or surge bin shall be 72 hours.

334-3.5.5 Contractor's Responsibility for Mixture Requirements: Produce a homogeneous mixture, free from moisture and with no segregated materials, that meets all specification requirements. Also apply these requirements to all mixes produced by the drum mixer process and all mixes processed through a hot storage or surge bin, both before and after storage.

334-3.6 MIXTURE TRANSPORT

Transport the mixture in tight vehicles previously cleaned of all foreign material. After cleaning, thinly coat the inside surface of the truck bodies with soapy water or an asphalt release agent as needed to prevent the mixture from adhering to the beds. Do not allow excess liquid to pond in the truck body. Do not use diesel fuel or any other hazardous or environmentally detrimental material as a coating for the inside surface of the truck body. Cover each load during cool and cloudy weather and at any time there is a probability of rain.

334-3.7 MIXTURE PLACEMENT

334-3.7.1 Requirements Applicable to All Mixture Types:

334-3.7.1.1 Alignment of Edges: Lay all asphalt concrete mixtures, including leveling courses, other than the pavement edge just adjacent to curb and gutter or other true edges, by the stringline method to obtain an accurate, uniform alignment of the pavement edge. Control the unsupported pavement edge to ensure that it will not deviate more than ±1.5 inches from the stringline.

334-3.7.1.2 Temperature of Spreading: Maintain the temperature of the mix at the time of spreading within the master range as defined in 334-3.5.3.

334-3.7.1.3 Rain and Surface Conditions: Immediately cease transportation of asphalt mixtures from the plant when rain begins at the roadway. Do not place asphalt mixtures while rain is falling, or when there is standing water on the surface to be covered. Once the rain has stopped and water has been removed from the tacked surface to the satisfaction of the Engineer and the temperature of the mixture caught in transit still meets the requirements as

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specified in 334-3.7.1.2, the Contractor may then place the mixture caught in transit.

334-3.7.1.4 Speed of Paver: Establish the forward speed of the asphalt paver based on the rate of delivery of the mix to the roadway but not faster than the optimum speed needed to adequately compact the pavement.

334-3.7.1.5 Number of Crews Required: For each paving machine operated, use a separate crew, each crew operating as a full unit. The technician who will be in charge of all paving operations shall be state approved and properly certified as deemed appropriate by the Engineer. The Contractor's technician in charge of the paving operations may be responsible for more than one crew but must be physically accessible to the Engineer at all times when placing mix.

334-3.7.1.6 Checking Depth of Layer: Check the depth of each layer at frequent intervals, and make adjustments when the thickness deviates from the design thickness. When making an adjustment, allow the paving machine to travel a minimum distance of 32 feet to stabilize before the second check is made to determine the effects of the adjustment.

334-3.7.1.7 Hand Spreading: In limited areas where the use of the spreader is impossible or impracticable, the Contractor may spread and finish the mixture by hand.

334-3.7.1.8 Straightedging and Back-patching: Straightedge and backpatch after obtaining initial compaction and while the material is still hot.

334-3.7.2 Requirements Applicable to Courses Other Than Leveling:

334-3.7.2.1 Spreading and Finishing: Upon arrival, dump the mixture in the approved mechanical spreader, and immediately spread and strike-off the mixture to the full width required, and to such loose depth for each course that, when the work is completed, the required specified thickness is placed. Carry a uniform amount of mixture ahead of the screed at all times.

334-3.7.2.2 Thickness of Layers: Construct each course of Type SP mixture in layers of thickness as shown in Section 334-4.1.3.

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334-3.7.2.3 Laying Width: For regular roadways, pave to the full lane width, except in areas where physically constrained. For other applications such as sidewalks, provide a spreader capable of placing and screeding to the plan width. If necessary due to the traffic requirements, lay the mixture in strips in such a manner as to provide for the passage of traffic. As an option, where the road is closed to traffic, lay the mixture to the full width with machines traveling in echelon. Plan longitudinal joints such that they are not placed where a permanent wheel path will occur.

334-3.7.2.4 Correcting Defects: Before starting any rolling, check the surface. Correct any irregularities; remove all drippings, fat sandy accumulations from the screed, and fat spots from any source; and replace them with satisfactory material. Do not skin patch. When correcting a depression while the mixture is hot, scarify the surface and add fresh mixture.

334-3.7.3 Requirements Applicable Only to Leveling Courses:

334-3.7.3.1 Patching Depressions: Before spreading any leveling course, fill all depressions in the existing surface more than 1 inch deep by spot patching with leveling course mixture, and then compact them thoroughly.

334-3.7.3.2 Spreading Leveling Courses: Place all courses of leveling by the use of two motor graders, equip one with a spreader box. Other types of leveling devices may be used if approved by the Engineer.

334-3.7.3.3 Rate of Application: When using Type SP-9.5 (fine graded) for leveling, do not allow the average spread of a layer to be less than 50 lb/yd² or more than 75 lb/yd². The quantity of mix for leveling shown in the plans represents the average for the entire project.

334-3.8 MIXTURE COMPACTION

334-3.8.1 Equipment and Sequence: For each paving or leveling train in operation, furnish a separate set of rollers, with their operators.

Select equipment, sequence, and coverage of rolling to meet the specified mix design density. The coverage is the number of times the roller passes over a given area of pavement.

Regardless of the rolling procedure used, complete the final rolling before the surface temperature of the pavement drops to the extent that effective compaction may not be achieved or the rollers begin to damage the pavement.

334-3.8.2 Standard Rolling Procedure: Meet the following equipment, sequence, and coverage requirements:

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1. Seal Rolling: Provide two coverages with a tandem steel-wheeled roller, weighing 5 to 12 tons, following as close behind the spreader as possible without pick-up, undue displacement, or blistering of the material. Use static mode only for all compaction. No vibration will be allowed.
2. Intermediate rolling: Provide five coverages with a self-propelled pneumatic-tired roller, following as close behind the seal rolling operation as the mix will permit.
3. Final rolling: Provide one coverage with a tandem steel-wheeled roller (static mode only), weighing 5 to 12 tons, after completing the seal rolling and intermediate rolling, but before the surface pavement temperature drops to the extent that effective compaction may not be achieved or the rollers begin to damage the pavement.

For patching and leveling courses, the first structural layer placed on a milled surface, and on the first overbuild course, use only a self-propelled pneumatic-tired roller.

The Contractor may use equipment, sequences, or coverages other than those specified in the standard rolling procedure if so authorized by the Engineer.

334-3.8.3 Compaction at Crossovers, Intersections, etc.: When using a separate paving machine to pave the crossovers, compact the crossovers with one, 8 to 12 ton tandem steel roller (static mode only). If placing crossovers, intersections, and acceleration and deceleration lanes with the main run of paving, also use a traffic roller to compact these areas.

334-3.8.4 Rolling Procedures: Ensure that the initial rolling is longitudinal.

Where the lane being placed is adjacent to a previously placed lane, pinch or roll the center joint prior to the rolling of the rest of the lane.

Roll across the mat, overlapping the adjacent pass by at least 6 inches. Roll slowly enough to avoid displacement of the mixture, and correct any displacement at once by the use of rakes and the addition of fresh mixture if required.

Continue final rolling to eliminate all roller marks.

334-3.8.5 Number of Pneumatic-tired Rollers Required: Use a sufficient number of self-propelled pneumatic-tired rollers to ensure that the rolling of the surface for the required number of passes does not delay any other phase of the laying operation and does not result in excessive cooling of the mixture before completing the rolling. In the event that the rolling falls behind, discontinue the laying operation until the rolling operations are sufficiently caught up.

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334-3.8.6 Compaction of Areas Inaccessible to Rollers: Use hand tamps or other satisfactory means to compact areas which are inaccessible to a roller, such as areas adjacent to curbs, headers, gutters, bridges, manholes, etc.

334-3.8.7 Correcting Defects: Do not allow the rollers to deposit gasoline, oil, or grease onto the pavement. Remove and replace any areas damaged by such deposits as directed by the Engineer. While rolling is in progress, test the surface continuously, and correct all discrepancies to comply with the surface requirements.

Remove and replace all drippings, fat or lean areas, and defective construction of any description. Remedy depressions that develop before completing the rolling by loosening the mixture and adding new mixture to bring the depressions to a true surface. Should any depression remain after obtaining the final compaction, remove the full depth of the mixture, and replace it with sufficient new mixture to form a true and even surface.

Correct all high spots, high joints, and honeycombing as directed by the Engineer.

Remove and replace any mixture remaining unbonded after rolling. Correct all defects prior to laying the subsequent course.

334-3.9 JOINTS

334-3.9.1 General: When laying fresh mixture against the exposed edges of joints (trimmed or formed as provided below), place it in close contact with the exposed edge to produce an even, well-compacted joint after rolling.

334-3.9.2 Transverse Joints: Place the mixture as continuously as possible. Do not pass the roller over the unprotected end of the freshly laid mixture except when discontinuing the laying operation long enough to permit the mixture to become chilled.

When thus interrupting the laying operation, construct a transverse joint by cutting back on the previous run to expose the full depth of the mat.

334-3.9.3 Longitudinal Joints: For all layers of pavement except the leveling course, place each layer so that longitudinal construction joints are offset 6 to 12 inches laterally between successive layers. The Engineer may waive this requirement where offsetting is not feasible due to the sequence of construction.

334-3.10 SURFACE REQUIREMENTS

334-3.10.1 General: Construct a smooth pavement with good surface texture and the proper cross-slope.

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334-3.10.2 Texture of the Finished Surface of Paving Layers: Produce a finished surface of uniform texture and compaction with no pulled, torn, raveled, crushed or loosened portions and free of segregation, bleeding, flushing, sand streaks, sand spots, or ripples. Correct any area of the surface that does not meet the foregoing requirements in accordance with 334-3.10.5.

Do not use asphalt concrete mixtures containing aggregates that cause a different color appearance in the final wearing surface in sections less than 1 mile in length and across the full width of the roadway unless approved by the Engineer.

334-3.10.3 Cross Slope: Construct a pavement surface with cross slopes in compliance with the requirements of the Contract Documents. Furnish a level with a minimum length of 4 feet or a digital measuring device approved by the Engineer for the control of cross slope. Make this level or measuring device available at the jobsite at all times during paving operations. Utilize electronic transverse screed controls on the paving machine (unless directed otherwise by the Engineer) to obtain an accurate transverse slope of the pavement surface.

334-3.10.3.1 Quality Control Checks: Measure the cross slope of the pavement surface by placing the measuring device perpendicular to the roadway centerline. Report the cross slope to the nearest 0.1%. Record all the measurements on an approved form and submit to the Engineer for documentation.

Measure the cross slope at a minimum frequency of one measurement every 100 feet during paving operations to ensure that the cross slope is uniform and in compliance with the design cross slope. When the difference between the measured cross slope and the design cross slope exceeds $\pm 0.2\%$ for travel lanes (including turn lanes) or $\pm 0.5\%$ for shoulders, make all corrections immediately to bring the cross slope into the acceptable range.

When the cross slope is consistently within the acceptable range, upon the approval of the Engineer, the frequency of the cross slope measurements can be reduced to one measurement every 250 feet during paving operations.

For intersections, tapers, crossovers, transitions at beginning and end of project and similar areas, adjust the cross slope to match the actual site conditions or as directed by the Engineer.

334-3.10.4 Pavement Smoothness: Construct a smooth pavement meeting the requirements of this Specification. The County will provide a representative to be present when smoothness testing is performed.

334-3.10.4.1 General: Furnish a 15 foot manual and a 15 foot rolling straightedge meeting the requirements of FM 5-509. Make them available at the job site at all times during paving operations. Obtain a smooth surface on

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all pavement courses placed, and then straightedge all final structural and friction course layers in accordance with 334-3.10.4.5.

334-3.10.4.2 Test Method: Perform all straightedge testing in accordance with FM 5-509 with one pass of the rolling straightedge operated along the outside wheel path of each lane being tested. The Engineer may require additional testing at other locations within the lane.

334-3.10.4.3 Traffic Control: Provide traffic control in accordance with 334-3.2 and FDOT Design Standard Indices (600 series as applicable) during all testing. When traffic control cannot be provided in accordance with the applicable indices, submit an alternative Traffic Control Plan. The cost of this traffic control is included in the Contract bid prices for other pay items.

334-3.10.4.5 Quality Control Checks:

334-3.10.4.5.1 General: Straightedge the final Type SP structural layer and friction course layer with a rolling straightedge. Test all pavement lanes and ramps where the width is constant using a rolling straightedge and document all deficiencies on a form approved by the Engineer. Notify the Engineer of the location and time of all straightedge checks a minimum of 48 hours before beginning. Testing shall be conducted by a certified Paving Level I or higher technician. Maintain a field record during testing on a form approved by the Engineer identifying the areas tested and listing the location and degree of all deficiencies found. The field record shall be signed by the technician conducting the test and the Engineer or Engineer's Representative observing the test.

334-3.10.4.5.2 Rolling Straightedge Exceptions: Testing with the rolling straightedge will not be required in the following areas: intersections, tapers, crossovers, parking lots and similar areas. In addition, testing with the rolling straightedge will not be performed on the following areas when they are less than 50 feet in length: turn lanes, acceleration/deceleration lanes and side streets. However, correct any individual surface irregularity in these areas that deviates from the plan grade in excess of 3/8 inch as determined by a 15 foot manual straightedge, and that the Engineer deems to be objectionable, in accordance with 334-3.10.5.

In addition, the Engineer may also waive the straightedging requirements on ramps and superelevated sections where the geometrical orientation of the pavement results in an inaccurate measurement with the rolling straightedge.

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334-3.10.4.5.3 Intermediate Layers: Straightedge all intermediate Type SP layers (structural and overbuild) as necessary to construct a smooth pavement.

On roadways with a design speed 50 miles per hour or greater, when an intermediate Type SP layer will be opened to traffic, straightedge the pavement with a rolling straightedge and correct all deficiencies in excess of 3/8 inch within 72 hours of placement, unless directed otherwise by the Engineer. Correct all deficiencies in accordance with 334-3.10.5.

334-3.10.4.5.4 Final Type SP Structural Layer: Straightedge the final Type SP structural layer with a rolling straightedge, either behind the final roller of the paving train or as a separate operation. The Engineer will verify the straightedge testing by observing the Quality Control straightedging operations. Correct all deficiencies in excess of 3/16 inch in accordance with 334-3.10.5, and retest the corrected areas prior to placing the friction course.

For bicycle paths, straightedge the final structural layer with a rolling straightedge, either behind the final roller of the paving train or as a separate operation. Correct all deficiencies in excess of 5/16 inch in accordance with 334-3.10.5. Retest all corrected areas. If the Engineer determines that the deficiencies on the bicycle path are due to field geometrical conditions, the Engineer will waive corrections.

334-3.10.4.5.5 Friction Course Layer: Acceptance for pavement smoothness will be based on verified Quality Control measurements using the rolling straightedge. The Engineer will verify the straightedge testing by observing the Quality Control straightedging operations.

At the completion of all paving operations, straightedge the friction course as a separate operation. As an exception, if approved by the Engineer, straightedge the friction course behind the final roller of the paving train. Correct all deficiencies in excess of 3/16 inch in accordance with 334-3.10.5. Recheck all corrected areas.

334-3.10.5 Correcting Unacceptable Pavement: Correct all areas of unacceptable pavement at no cost to the County. Correct deficiencies in the Type SP structural layers or in the friction course by removing and replacing the full depth of the layer, extending for a distance on either side of the defective area as determined by the Engineer, but in no case less than 50 feet on either side of the defective area for the full width of the paving lane. At the discretion of the Engineer, removal and replacement of the entire limits of the new pavement may be required.

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334-3.11 FINISHED SURFACE PROTECTION

Keep sections of newly compacted asphalt concrete, which are to be covered by additional courses, clean until the successive course is laid.

Do not dump embankment or base material directly on the pavement. Dress shoulders before placing the friction course on adjacent pavement.

Equip blade graders operating adjacent to the pavement during shoulder construction with a 2 by 8 inch or larger board, or other attachment providing essentially the same results, attached to their blades in such manner that it extends below the blade edge in order to protect the pavement surface from damage by the grader blade.

To prevent rutting or other distortion, protect sections of newly finished dense graded friction course and the last structural layer prior to the friction course from traffic until the surface temperature has cooled below 160°F.

The Contractor may use artificial methods to cool the pavement to expedite paving operations. The County may direct the Contractor to use artificial cooling methods when maintenance of traffic requires opening the pavement to traffic at the earliest possible time.

334-3.12 STRIPING

Following final cooling and compaction of the mat and prior to opening to traffic, place temporary painted traffic stripes in accordance with TP-710 and Standard Specification 710 on each paved surface that will receive traffic, including intermediate structural courses, final structural courses that will serve as the surface course, and friction courses. Following thirty (30) days after placement of the final surface course, structural or friction, place thermoplastic striping in accordance with TP-711 and Standard Specification 711 and place raised reflective pavement markers. Final pavement markings are subject to a 180 day observation period under normal traffic. The observation period shall begin with the satisfactory completion and acceptance of the work. The pavement markings shall show no signs of failure due to blistering, excessive cracking, chipping, discoloration, poor adhesion to the pavement, loss of reflectivity or vehicular damage. The County reserves the right to check the color and retroreflectivity within 30 days prior to the end of the observation period. Replace, at no additional expense to the County, any pavement markings that do not perform satisfactorily under traffic during the 180 day observation period.

334-4 SUPERPAVE ASPHALTIC CONCRETE

334-4.1 DESCRIPTION

334-4.1.1 General: Construct a Superpave Asphaltic Concrete pavement using the type of mixture specified in the Contract on a properly prepared and accepted base. Superpave mixes are identified as Type SP-9.5, Type SP-12.5 or Type SP-19.0.

Meet the requirements of 334-2 for personnel, plant, methods and equipment. Meet the general construction requirements of 334-3.

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334-4.1.2 Traffic Levels: The requirements for Type SP Asphaltic Concrete mixtures are based on the design traffic level of the project, expressed in 18-Kip Equivalent Single Axle Loads (ESAL's). The traffic levels applicable for this specification are as shown in Table 1.

Table 1 Superpave Traffic Levels		
Traffic Level	Million ESAL's	Typical Applications
A	<0.3	Local roads, county roads, and city streets where truck traffic is light or prohibited
B	0.3 to <3	Arterial roads, Collector roads, access streets, medium duty city streets and the majority of county roadways
C	3 to < 10	

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, up to a Traffic Level C mix, may be substituted at no cost to the County. In situations where the design traffic level is not specified in the Contract, a Traffic Level C mix shall be used.

334-4.1.3 Layers: Use only fine graded Superpave mixes.

334-4.1.3.1 Layer Thickness: The allowable structural layer thicknesses for fine Type SP Asphaltic Concrete mixtures are as follows:

Type SP-9.5.....	3/4 – 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-12.5 - May not be used in the first layer of courses over 3 1/2 inches thick, nor in the first layer of courses over 2 3/4 inches thick on limited access facilities.
- Type SP-19.0 - May not be used in the final (top) structural layer.

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334-4.1.3.2 Additional Requirements: The following requirements also apply to fine Type SP Asphaltic Concrete mixtures:

334-4.1.3.2.1 When construction includes the paving of adjacent shoulders (≤ 5 feet wide), the layer thickness for the upper pavement layer and shoulder shall be the same and paved in a single pass, unless called for differently in the contract documents.

334-4.1.3.2.2 All overbuild layers shall be 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 1/4 inch, and the maximum allowable thickness may be increased 1/2 inch, unless called for differently in the contract documents.

334-4.2 MIX COMPOSITION

334-4.2.1 General: Compose the asphalt mixture using a combination of aggregates (coarse, fine or mixtures thereof), mineral filler, if required, and asphalt binder material. Size, grade and combine the aggregate proportions to meet the grading and physical properties of the approved mix design. Aggregates from various sources may be combined.

334-4.2.2 Mix Design: Submit to the Engineer the proposed mix design and proof that this mix design is on the FDOT District 5 accepted list. The Engineer will verify with the FDOT District 5 Bituminous Engineer that the mix is on the approved list. No mix design revisions will be allowed. A new design mix will be required for any substitution of an aggregate product, binder, or other design component unless approved by the Engineer. The Engineer will consider any marked variations from mix design parameters 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 that mix design. Provide certification from the plant (either in a statement on the delivery ticket or on a separate sheet) that the mix provided is in conformance with the design mix.

334-4.2.3 Additional Information: Provide the following information to the Engineer with each FDOT approved mix design submitted for use:

- The approved FDOT Mix Design Number.
- The design traffic level and the design number of gyrations (N_{design}).
- The source and description of the materials to be used.

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- The FDOT source number product code of the aggregate components furnished from an FDOT approved source.
- 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 in handling and processing as necessary.
- A single percentage of the combined mineral aggregate passing each specified sieve. Degradation of the aggregate due to processing (particularly -No. 200 [-75 µm]) should be accounted for and identified for the applicable sieves.
- The bulk specific gravity value for each individual aggregate (and RAP) component, as identified in the FDOT aggregate control program.
- 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%.
- A target temperature at which the mixture is to be discharged from the plant and a target roadway temperature. Do not exceed a target temperature of 340°F for modified asphalts and 315°F for unmodified asphalts.
- 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.
- The ignition oven calibration factor.

334-4.3 MATERIALS

334-4.3.1 General Requirements: Meet the material requirements specified in Division III of the FDOT Standard Specifications for Road and Bridge Construction. Specific references are as follows:

Coarse Aggregate: Stone, Slag, Crushed Gravel, Crushed Reclaimed Portland Cement Concrete Pavement, Crushed Glass.....	Section 901
Fine Aggregate.....	Section 902
Superpave PG Asphalt Binder	Section 916-1

334-4.3.2 Superpave Asphalt Binder: Unless specified otherwise in the Contract, use a PG 67-22 asphalt binder unless the use of a different binder or recycling agent has been approved by the Florida Department of Transportation and the Engineer for a particular mix design.

334-4.3.3 Use of Reclaimed Asphalt Pavement (RAP) Material:

334-4.3.3.1 General Requirements: Reclaimed Asphalt Pavement (RAP) may be used as a component material of the asphalt mixture, with the exception of Friction Course mixes, subject to the following requirements:

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- Assume responsibility for the production and placement of asphalt mixes which incorporate RAP as a component material.
- Use only RAP that has been approved by the FDOT. Provide documentation of the FDOT approval.
- Limit the amount of RAP material used in the mix to less than 20% by weight of total aggregate, unless otherwise approved the Engineer.
- Use any suitable means to prevent oversized RAP material from showing up in the completed recycled mixture. Take immediate corrective action if oversized RAP material appears in the completed recycled mix.
- Provide stockpiled RAP material that is reasonably consistent in characteristics and contains no aggregate particles which are soft or conglomerates of fines.
- Provide RAP having a minimum average asphalt content of 4.0% by weight. The Engineer may sample the stockpile to verify that this requirement is met.

334-4.4 ACCEPTANCE

334-4.4.1 General: The asphalt mixture will be accepted based on one of the following methods as determined by the Engineer and/or the Contract Documents:

- 1) Certification, Contractor Process Control Testing, and Acceptance Testing by the Engineer
- 2) Other method(s) as determined by the Contract

334-4.4.2 Certification by the Contractor: Submit a Notarized Certification of Specification Compliance letter by an officer of the company who is in responsible charge of paving operations. The letter shall be submitted on company letterhead to the Engineer and shall state that all material produced and placed on the project was in substantial compliance with the Specifications.

334-4.4.3 Contractor Process Control Testing: Provide supporting test data documenting all quality and process control testing as described in 334-2 above. A pre-qualified Independent Laboratory as approved by the Engineer may be utilized for the Process Control testing.

334-4.4.4 Acceptance Testing by the Engineer: The Engineer may employ the use of a pre-qualified Independent Geotechnical Engineering firm and/or

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Laboratory to perform acceptance testing. For every 500 feet of pavement placed per lane per day, take a set of three (3) randomly placed cores, at least two (6") inches in diameter, for determining density and thickness. A minimum of two sets of three cores will be taken per roadway. Acceptance will be based on the following:

334-4.4.4.1 Density: The minimum acceptable average density for each course of asphaltic concrete placed shall be ninety-two (92%) percent of the design unit weight (G_{mm}) of the job mix, with no test lower than ninety and eight tenths (90.8%) percent or higher than ninety-five (95%) percent.

334-4.4.4.2 Thickness: Meet the minimum design thickness on all cores. When a deficiency in thickness is found, the Engineer may require additional cores to be taken to determine the extent of the thickness deficiency. For any thickness that is less than the design thickness, remove and replace the full depth of the layer, extending for a distance on either side of the defective area as determined by the Engineer, but in no case less than 50 feet on either side of the defective area for the full width of the paving lane. At the discretion of the Engineer, removal and replacement of the entire limits of the new pavement may be required. For any thickness that is greater than the design thickness, the Engineer will make a determination about acceptance.

334-4.4.4.3 Surface Tolerance: The asphalt mixture will be accepted on the roadway with respect to surface tolerance in accordance with the applicable requirements of 334-3.10.

334-4.4.4.4 Additional Tests: The County reserves the right to run any test at any time for informational purposes and for determining the effectiveness of the Contractor's quality control and process control.

334-4.5 METHOD OF MEASUREMENT

For the work specified under this Section the quantity to be paid for shall be the actual area in Square Yards (SY) of asphaltic concrete placed and accepted within the limits of the contract.

334-4.6 BASIS OF PAYMENT

Type SP Asphaltic Concrete will be paid for at the contract unit price per square yard, completed and accepted. No additional payment will be made for thickness of asphalt greater than the design thickness.

The bid price for the asphalt mix will include the cost of the liquid asphalt or the asphalt recycling agent. There will be no separate payment for the asphalt binder material in the asphalt mix.

SECTION 334
COLD IN-PLACE RECYCLED BITUMINOUS MATERIAL

334-5 Description - This work is the in-place construction of a Cold Recycled Bituminous Base Course, using either reclaimed asphalt pavement (RAP) material and/or reclaimed aggregate material (RAM), combined with virgin aggregates and/or bituminous material. It is the intent of this contract to recycle 100% of the existing asphalt pavement to ensure that the completed recycled base course will be of a consistent material and thickness throughout. This will include, but is not limited to, all existing asphalt pavement adjacent to all concrete curbing, storm sewer inlets, manholes, sanitary sewer manholes, and all utility valve boxes. The existing asphalt pavement in the above- described locations must be included in the recycling process in order to construct a bituminous base course with a uniform thickness throughout 100% of the proposed area. All work on this contract must also conform to specifications per AASHTO-AGC- ARTBA Task Force 38 Report (available from American Association of State Highway and Transportation Officials, 444 North Capital Street NW, Suite 249, Washington, DC 20001). The intent of this contract is to utilize the specified process which is clearly defined in Task Force 38 as being a completely separate discipline from Full Depth Reclamation. Therefore Full Depth Reclamation or any variation of Full Depth Reclamation will not be accepted.

334-6 Materials

334-6.1 Asphalt Emulsion - The type of asphalt emulsion to be used shall be determined by the mixture design. Bituminous material shall conform to the applicable requirements of the *2010 FDOT Standard Specifications for Road and Bridge Construction, Section 916*. A representative from the asphalt emulsion supplier will be at the job site at the beginning of the project to monitor the characteristics and performance of the asphalt emulsion. Throughout the job, the representative will monitor the project and make adjustments to the asphalt emulsion formulation as required.

334-6.2 Cold Pulverized Material - The cold pulverized recycled asphalt pavement (hereinafter referred to as RAP) material shall meet the following gradation requirement prior to the addition of the asphalt emulsion.

STANDARD		METRIC	
Sieve Size	%Passing	Sieve Size	%Passing
2"	95	51 mm	95

334-6.3 Mixture Design

A preconstruction mix design(s) shall be submitted to the County Engineer by the CIR contractor using materials obtained directly from the project site prior to construction. Mix design formulations shall be conducted in accordance with the guidelines located in *Appendix 1- Mix Design Procedures for CIR.* Permission to obtain materials from roadway must first be obtained from the County Engineer. All core holes must be immediately patched with cold patch. The mix design testing shall be conducted by an AASHTO Materials Reference Laboratory (AMRL) accredited laboratory. Based on RAP consistency throughout project limits, more than one mix design may be required. The mix design(s) shall meet the Mix Design Performance Criteria of *Table 1* and be approved by the County Engineer prior to construction.

Table 1 – Mix Design Performance Criteria		
<i>100 mm specimens shall be prepared in a Superpave Gyratory compactor. The mixture should meet the following criteria at the selected design asphalt emulsion content:</i>		
Property	Criteria	Purpose
Compaction effort, Superpave Gyratory Compactor AASHTO T312	1.25° angle, 600 kPa stress, 30 gyrations	Density Indicator
Density, ASTM D2726 or equivalent	Report	Compaction Indicator
Gradation for Design Millings, ASTM C117	Report	
*Marshall stability, ASTM D6926, D6927, 40°C	1,250 lb min.	Stability Indicator
**Resistance of Compacted Bituminous Mixture to Moisture Induced Damage AASHTO T283 -Retained stability based on cured stability	70 % min.	Ability to withstand moisture damage
* Cured stability tested on compacted specimens after 60°C (140°F) curing to constant weight.		
**Vacuum saturation of 55 to 75 percent, water bath 25°C 23 hours, last hour at 40°C water bath		

334-6.4 Other Additives – If necessary, additives may be used to meet the requirements in Table 1. In the case that an additive is used, the type and allowable usage percentage must be described in the submitted design recommendation.

334-6.5 Addition of Imported Crushed Reclaimed Asphalt Pavement (RAP) material If available, imported RAP material may be added at the discretion of the County Engineer if the RAP material meets the requirements in *Table 2*. The crushed RAP shall be free from vegetation and all other deleterious materials, including silt and clay balls. It shall meet the requirements for Deleterious Materials given in *Table 2*. The crushed RAP shall not exceed the maximum size requirement in Section 334-6.2 and when blended with the design millings, shall produce a product which meets the specifications given in *Table 1*.

<i>Table 2 - Imported Crushed RAP Criteria</i>		
<i>Property</i>	<i>Method</i>	<i>Limit</i>
Deleterious Materials: Clay Lumps and Friable Particles in Aggregate, %	ASTM C 142 or AASHTO T112	0.2% maximum
Maximum size and Distribution	ASTM C 136 or AASHTO T 27	Section 334-6.2

334-6.6 Additional Aggregate - Based on the results of mix design testing or other requirements, the CIR contractor shall determine if additional aggregate is required to comply with mix design performance criteria specified in *Table 1*. Any additional aggregate shall meet the criteria specified in *Table 3*, and it shall be graded to produce a pavement layer which meets the mix design performance criteria specified in *Table 1*.

<i>Table 3 - Additional Aggregate Criteria</i>		
<i>Property</i>	<i>Method</i>	<i>Limit</i>
Los Angeles abrasion value, % loss	AASHTO T96	40% maximum
Sand Equivalent, %	ASTM D2419	60% minimum
Maximum size and Distribution	ASTM C 136 or AASHTO T 27	Section 334-6.2
Water absorption %	AASHTO T 85	5%_ maximum

334-7 Equipment

Maintain all equipment in a satisfactory operating condition and in accordance with the *2107 FDOT Standard Specifications for Road and Bridge Construction, Section 100-2*. The Cold In-Place Recycling shall be conducted with the equipment specified herein.

334-7.1 Milling Machine - A self-propelled, bi-directional cold milling machine that is capable of pulverizing the existing bituminous material in a single pass to the depth shown on the plans. The machine must have a 10.5 foot minimum width cutting mandrel with the ability to accommodate a 12.5 foot mandrel as specified by the engineer. The machine shall have automatic depth controls to maintain the cutting depth to within $\pm \frac{1}{4}$ in (6 mm) of that shown on the plans, and shall have a positive means for controlling cross slope elevations. A 30 foot none contact averaging beam must be used on the mill. The use of a heating device to soften the pavement will not be permitted. Up-cutting machines shall not be permitted unless secondary crushing is conducted in-place prior to mixing and the introduction of bituminous material.

The milling machine must be equipped with a liquid metering device capable of adjusting the flow of asphalt emulsion to compensate for any variation in the speed of the machine. The metering device shall deliver the amount of asphalt emulsion to within ± 0.2 percent of the required design amount by weight of pulverized bituminous material (for example, if the design requires 3.0 percent, the metering device shall maintain the emulsion amount between 2.8 percent and 3.2 percent). The asphalt emulsion pump should be of sufficient capacity to allow emulsion contents up to 3.5% by weight of pulverized bituminous material. Also, automatic digital readings will be displayed for both the flow

rate and total amount of pulverized bituminous material and asphalt emulsion in appropriate units of weight and time.

334-7.2 Bituminous Paver - A self-propelled conventional bituminous paver having electronic grade and cross slope control for the screed shall be utilized. The equipment shall be of sufficient size and power to spread and lay the mixture in one smooth continuous pass to the specified section and according to the plans. A 30 foot none contact averaging beam must be used on the bituminous paver. To reduce material segregation, the bituminous paver must utilize a hopper insert.

334-7.3 Rollers - All rollers shall be self-propelled. The number, weight and types of rollers shall be as necessary to obtain the required compaction. At least one pneumatic-tired roller shall have a minimum gross operating weight of not less than 50,000 lbs. (22,600 kg). Pneumatic rollers must have properly working scrapers and water spraying systems. At least one double drum vibratory steel-wheeled roller shall have a gross operating weight of not less than 20,000 lbs. (9,000 kg) and a width of 78 inches (1980 mm). Double drum vibratory rollers must have properly working scrapers and water spraying systems.

334-8 Construction Methods

334-8.1 Removal of Vegetation - Grass and other vegetation shall be removed from the edge of the existing pavement to prevent contamination of the pulverized bituminous material during the milling operation.

334-8.2 Milling - The existing pavement shall be milled to the required depth and width as indicated on the plans. Recycling shall be in a manner that does not disturb the underlying material in the existing roadway. The milling operation shall be conducted so that the amount of fines occurring along the vertical faces of the cut will not prevent bonding of the cold recycled materials. Use a small milling machine, if necessary, to mill longitudinally to the required depth as indicated on the plans along all curbs and gutters, radius returns, utilities, inlets, around all manholes and any other structures not accessible or practical to be milled by the milling/mixing machine utilities. The millings produced by the small mill will be the same as the large mill and of equal gradation to produce a uniform recycled pavement layer. Inlets/Catch Basins must be covered during the milling and recycling operation to prevent milled material from entering the catch basin area where it could contaminate and/or block the storm water system.

334-8.3 Processing - When a paving fabric is encountered during the CIR operation, the Contractor shall make the necessary adjustments in equipment or operations so that at least ninety percent (90%) of the shredded fabric in the recycled material is no more than 5 in² (3200 mm²). Additionally, no fabric piece shall have any dimension exceeding a length of 4 inches (100 mm). These changes may include, but not be limited to, adjusting the milling rate and adding or removing screens in order to obtain a specification recycled material. The Contractor shall be required to waste material containing over-sized pieces of paving fabric as directed by the Engineer. When the Contractor is aware that paving

fabric exists, such as indicated on the plans, the Contractor will not receive additional payment. However, if the Contractor is not made aware of the paving fabric, than the Contractor shall receive additional payment for any necessary adjustments in equipment and operations.

334-8.4 Spreading - The material shall be spread using a self-propelled paver meeting the requirements under *2010 FDOT Standard Specifications for Road and Bridge Construction, Section 320-5*. Heating of the paver screed will not be permitted. The recycled material shall be spread in one continuous pass, without segregation and to the lines and grades established by the Engineer.

334-8.5 Compaction – Compaction of the recycled mix shall be completed using rollers meeting the requirements of the *2010 FDOT Standard Specifications for Road and Bridge Construction Section 330-10*. During initial construction, rolling patterns and sequences shall be established through the construction of a control strip produced with the CIR equipment and within the pavement section, to determine the target wet density, using a nuclear moisture-density gauge in accordance with ASTM D2950, backscatter measurement mode. In all cases, the longitudinal joint must first be rolled followed by the rolling pattern established by the test strip. The initial pass for the rolling pattern established by the test strip should begin on the low side and progress to the high side by overlapping of longitudinal passes parallel to the pavement centerline. Initial rolling should not begin until the emulsion has started to break. Rollers shall be operated at speeds appropriate for the type of roller and necessary to obtain the required degree of compaction and prevent defects in the mat. Rolling shall be continued until no displacement is occurring or until the pneumatic roller(s) is (are) walking out of the mixture. Final rolling to eliminate pneumatic tire marks and to achieve density shall be done by double drum steel roller(s), either operating in a static or vibratory mode. Vibratory mode should only be operated at a speed, frequency and amplitude shown not to damage the pavement. The selected rolling pattern shall be followed unless changes in the recycled mix or placement conditions occur and the established rolling pattern is causing damage to the mat or the required degree of compaction is unachievable. These circumstances require the establishment of new rolling patterns and sequences through the construction of a control strip produced with the CIR equipment and within the pavement section. Rolling shall start no more than 30 minutes behind the paver. Finish rolling shall be completed no more than one hour after milling is completed. When possible, rolling shall not be started or stopped on uncompacted material but with rolling patterns established so that they begin or end on previously compacted material or the existing pavement.

334-8.6 Return of Traffic - After the completion of compaction of the recycled pavement layer, no traffic shall be permitted on the completed recycled material for at least one (1) hour. After one hour rolling traffic may be permitted on the recycled material. This time may be adjusted by the Engineer to allow establishment of sufficient cure so traffic will not initiate raveling. After opening to traffic, the surface of the recycled pavement layer shall be maintained in a condition suitable for the safe movement of traffic.

334-8.7 Protection and Damage – Protect the recycled pavement layer in accordance with the *2010 FDOT Standard Specifications for Road and Bridge Construction, Section 330-13*. Prime and sand the recycled pavement layer prior to opening the roadway to traffic. Any damage to the completed Cold In Place Recycled bituminous material shall be repaired by the contractor prior to the placement of the hot mix asphalt concrete surface course, or other applicable surface treatment, and as directed by the Engineer. Damage unrelated to contractor construction procedures or quality of work, such as due to poor base conditions, shall be paid for under the pay item, “Recycled Material Patching.”

334-8.8 Finished Recycled Pavement Layer Smoothness - The completed cold recycled pavement layer surface shall not vary more than ½ in (12 mm) from the lower edge of a 10-foot (3-meter) straight edge placed on the surface parallel and transversely to the centerline at locations selected by the County Engineer. Irregularities exceeding the specified limit shall be corrected at the expense of the contractor by grinding/cold milling or leveling with cold or hot mix asphalt. The corrected areas shall be retested to determine compliance with smoothness.

334-8.9 – Curing – Prior to placing the hot mix asphalt concrete surface course, or other applicable surface treatment, the recycled pavement layer shall be allowed to cure until the moisture of the material is reduced to 2.0 percent or less, or until approval of the County Engineer. Under dry conditions, the Cold In-Place Recycled pavement layer should meet the moisture requirements within 48 hours.

334-9 Quality Control

334-9.1 Contractor Responsibility - The contractor shall be responsible for providing field and laboratory quality control testing of materials during construction. The County or its subconsultant may conduct sampling and testing whenever or as often as desired for verification purposes. The contractor shall acquire an adequate amount of material for each sample to be tested in the laboratory so that an ample amount of material is left over in case of the need for resolution testing. Resolution testing will be required and provided at the expense of the contractor if similar laboratory samples tested by the contractor and the County do not coincide within reasonable values as determined by the County Engineer. The resolution laboratory will be selected by the County and the testing results provided by this lab will be used for materials acceptance purposes. All materials testing laboratories shall be accredited by the AASHTO Materials Reference Laboratory (AMRL) or Construction Materials Engineering Council (CMEC). The contractor shall submit all documentation of field inspection and laboratory testing results required herein to the County Engineer prior to payment and upon request. Copies of all delivery tickets and notes regarding any materials brought to the project site shall be given to the County upon delivery to the project site. These tickets shall be signed by an approved representative of the Contractor at the time of delivery.

334-9.2 Crushed RAP Material Sizing - A sample shall be obtained from the receiving hopper of the paver each ½ mile or as specified by engineer (0.8 km) and screened using a 2 in. (51mm) sieve (or smaller sieve if required) to determine maximum particle size requirement compliance. The resulting gradations shall be compared to the mix design gradations to determine any necessary changes to emulsion content. Gradation results shall be shared with the County Engineer by the end of the following day. Sampling procedures shall be in accordance with ASTM D979 or AASHTO T168.

334-9.3 Asphalt Emulsion – The asphalt emulsion shall be received on the job site within the temperature ranges specified by the emulsion supplier. The emulsion supplier shall provide testing results for each shipment indicating the emulsion is in compliance with the criteria specified in *Table 4*. The County Engineer may require the contractor to obtain emulsion samples from each shipping trailer prior to unloading into the contractor’s storage units for quality control testing if desired. The testing shall meet the following requirements:

<i>Table 4 – Emulsion Criteria</i>		
<i>Property</i>	<i>Method</i>	<i>Limit</i>
*Residue from distillation, %	ASTM D244	64.0 to 66.0 %
*Oil distillate by distillation, %	ASTM D244	0.5% maximum
Sieve Test, %	ASTM D244	0.1% maximum
**Residue Penetration, 25°C, dmm	ASTM D5	-25 to +25%
<i>*Modified ASTM D244 procedure – distillation temperature of 177°C with 20 minute hold.</i>		
<i>*To be determined during CIR design phase prior to emulsion formulation and manufacture for project. Penetration value range will be determined and submitted to the County Engineer for approval prior to project start</i>		

334-9.4 Asphalt Emulsion Content and Yield – Total emulsion quantity and yield shall be monitored and recorded daily and for each segment in which the target emulsion percentage is adjusted. This information shall be gathered from the calibrated emulsion metering device. Emulsion content adjustments shall be made appropriately when multiple and specific mix designs for different road segments of varying composition exist.

334-9.5 Water Content and Yield – Total water quantity and yield shall be monitored and recorded daily and for each segment in which the target water percentage is adjusted. This information shall be gathered from the water metering device. Water content adjustments shall be made appropriately when multiple and specific mix designs for different road segments of varying composition exist. Water content adjustments shall also be made based on mixture consistency, coating, and dispersion of the recycled materials.

334-9.6 Mixture Testing – At the discretion of the County Engineer and if the recycled pavement layer quality and workmanship seem suspect, the contractor may be required to sample, in accordance with ASTM D3665 and D979, the recycled mixture for

determining compliance with design criteria specified in *Table 1*. If samples of the recycled asphalt pavement mixture are taken after the addition of additives and emulsion, the specimens must be compacted within 15 minutes of sampling and tested as required in *Table 1*. If the recycled mixture is sampled prior to the addition of additives and emulsion, the sample must immediately be transferred to air-tight plastic container to prohibit loss of moisture. Samples must be mixed in the laboratory with the field additives and emulsion within 24 hours and tested as required in *Table 1*.

334-9.7 Depth of Pulverization (Milling) - The depth shall be checked and recorded daily and every 1/8 mile (0.2 km) on both outside vertical faces of the cut. Measure depth by placing a rigid measuring device perpendicular to the bottom of the milled surface and near the vertical faces of the cut.

334-9.8 Compacted Density – Degree of compaction of the recycled pavement layer shall be monitored for compliance with target wet density established during the initial control strip construction. Wet density shall be determined every 1/4 mile (0.4 km) using a nuclear moisture-density gauge in accordance with ASTM D2950, backscatter measurement mode. Ensure that all nuclear gauges are operated by licensed individuals and have been calibrated within the last 12 months. The acceptable degree of compaction shall be 96 to 98 percent of target wet density. Care shall be taken not to over-roll the mat based on visual observations of check cracking or shoving. A new control strip and target density shall be established if the consistency of the material being recycled changes. The County Engineer shall be notified prior to the construction of a new control strip.

334-9.9 Cross-Slope and Smoothness - The recycled pavement layer cross slope shall be checked regularly during spreading. A minimum 2 % Cross-Slope shall be maintained through the length of the project. The recycled pavement layer shall be checked for smoothness regularly behind the paver and after rolling. The smoothness shall not vary more than ½ in (12 mm) from the lower edge of a 10-foot (3-meter) straight edge placed on the surface parallel and transversely to the centerline after rolling is completed. The edge of the mat should be rolled first and progress to the center or high side to prevent excessive edge sloughing.

<i>Table 5 – Quality Control Testing and Inspection Criteria</i>		
<i>Property</i>	<i>Method</i>	<i>Limit</i>
RAP Maximum Particle Size	ASTM C 136 or AASHTO T27	Section 334-6.2
RAP Particle Size Distribution	ASTM C 136 or AASHTO T27	Determined by Mix Design(s)
Emulsion and Water Yield	Calibrated Metering Device	Determined by Mix Design(s)
*Mixture Testing	Table 1	Table 1
**Depth of Milling	Section 334-9.7	Determined by Mix Design(s)
Compacted Density	ASTM D2950	96 to 98% of target density
Cross-Slope	FM 5-509	Minimum 2%
Smoothness	FM 5-509	Maximum 0.5 in (12 mm) deviation from planeness
<i>*Mixture Testing frequency shall be at the County Engineer's discretion</i>		
<i>**Depth of Milling may need to be adjusted for localized unexpected pavement conditions</i>		

334-10 Weather Limitations

Cold In-Place recycling operations shall be completed when the atmospheric temperature measured in the shade and away from artificial heat is 50⁰ F (10°C) and rising. Also, the weather shall not be foggy or rainy. The weather forecast shall not call for freezing temperature within 48 hours after placement of any portion of the project.

334-11 Measurement

Work as described for “Cold In-Place Recycling” will be measured by the square yard of the completed sections for the depth specified. The asphalt emulsion will be measured by the ton or gallon. Additional items for cement by the ton and hot mix paving by the square yard are also included. Water used in this operation will not be paid for directly but shall be considered incidental to this bid item.

334-12 Documentation

Delivery Tickets - All delivery tickets and notes regarding any materials brought to the project site to complete this item shall be given to the County upon delivery. Tickets shall be signed by an approved representative of the Contractor at the time of delivery.

FDOT Pre-Qualification - The contractor must be Florida Department of Transportation pre-qualified in the area of flexible paving.

Previous Experience - The contractor must provide references from five previous, successfully completed CIR projects in the State of Florida within the past five years with the bid.

334-13 Basis of Payment

The work performed and materials furnished as provided under Section 334-11 will be paid for at the unit prices bid for "Cold In-Place Recycling of Bituminous Material". Prices shall be full compensation for the removal and processing of the existing pavement; for preparing, hauling, and placing all materials; for all freight involved; for all manipulations, including rolling and prime and sand for all labor, tools, equipment, quality control testing and incidentals necessary to complete the work. Asphalt emulsion shall be paid for separately at the unit price in the "Cold In-Place Recycling of Bituminous Material" bid. An emulsion content of 3% by weight of the milled bituminous material shall be used for bidding purposes prior to the completed design. The actual emulsion content will be adjusted based on the quantity necessary to meet the design criteria requirements in *Table 1*.

Payment shall be made under:

334-70-100	Cold In-Place Recycle (8.5" Depth)	- SY
334-70-200	Asphalt Emulsion	- GA

APPENDIX 1

Mix Design Procedures for CIR (Cold In-place Recycling) Material

1. Sampling and Processing

Prior to materials sampling in the roadway, obtain approval from the County Engineer. Obtain 6" minimum inside diameter cores from the areas to be recycled. If cores show significant differences in various areas, such as different type or thickness of layers between cores, then separate mix designs shall be performed for each of these pavement segments. It is recommended to take, at a minimum, one core for each 1000' per lane mile and where visual differences in the pavement are noticed. Immediately patch all core holes neatly with asphalt cold patch. Cores shall be cut in the laboratory to the depth specified for the CIR project. Cores shall be crushed in the laboratory.

The mix design shall be performed on these crushed millings. Gradation of the millings after crushing shall be determined by ASTM C117 and C136 (dried at no greater than 40°C)

Samples shall be prepared with a sample splitter. An alternative method is to dry, screen and recombine millings in the laboratory to target gradation.

2. Mixing

Calculate the amount of RAP required to produce a 61.0 mm to 66.0 mm (2.4 to 2.6 inch) tall specimen by determining the maximum specific gravity of the RAP in accordance with ASTM D2041.

Number of specimens: 4 per emulsion content for a total of 4 for long-term stability and 4 for moisture testing for the 3 emulsion contents. Two specimens are required for Rice specific gravity; test at the highest emulsion content in the design and back calculate for the lower emulsion contents.

Recommended emulsion contents: 2.0%, 2.5%, 3.0%, 3.5%. Choose three emulsion contents that bracket the estimated recommended emulsion content.

Add moisture that is expected to be added at the milling head, typically 1.5 to 2.5 percent.

If any additives are in the mixture, introduce the additives in a similar manner that they will be added during field production.

Mixing of test specimens shall be performed with a mechanical bucket mixer. Mix the CIR RAP millings thoroughly with water first, then mix with emulsion. Mixing shall occur at ambient temperature. One specimen shall be mixed at a time. Mixing time with emulsion should not exceed 60 seconds.

3. Compaction

Specimens shall be compacted immediately after mixing. Place paper disks on the top and bottom of the specimen before compaction.

Specimens shall be compacted with a Superpave gyratory compactor (SGC) in a 100 mm mold at 1.25° angle, 600 kPa ram pressure, and 30 gyrations. The mold shall not be heated.

4. Curing after compaction

Extrude specimens from molds immediately after compaction. Carefully remove paper disks.

Place specimens in 60°C forced draft oven with ventilation on sides and top. Place each specimen in a small container to account for material loss from the specimens.

Specimens for maximum specific gravity determination should be dried to constant weight (less than 0.05% weight loss in 2 hours). Care should be taken not to over-dry the specimens.

Cure compacted specimens to constant weight but no more than 48 hours and no less than 16 hours. Constant weight is defined here as 0.05% change in weight in 2 hours. After curing, cool specimens at ambient temperature a minimum of 12 hours and a maximum of 24 hours.

5. Measurements

Determine bulk specific gravity (density) of each compacted (cured and cooled) specimen according to ASTM D2726.

Determine specimen heights according to ASTM D3549 or equivalent. Alternatively, the height can be obtained from the SGC readout.

Determine Rice (maximum theoretical) specific gravity, ASTM D2041, except as noted in Item 4 of this procedure, and do not break any agglomerates which will not easily reduce with a flexible spatula. Perform the supplemental dry-back procedure to adjust for uncoated particles.

Determine percent air voids in accordance with ASTM D3203 for each design emulsion content.

Determine corrected Marshall Stability by ASTM D1559 at 40°C after 2 hour temperature conditioning in a forced draft oven.

6. Moisture Susceptibility

Perform same conditioning and volumetric measurements on moisture-conditioned specimens as on other specimens. Vacuum saturate to 55 to 75 percent, soak in a 25°C water bath for 23 hours, followed by a one hour soak at 40°C. Determine corrected Marshall Stability. The average moisture conditioned specimen strength divided by the average dry specimen strength is referred to as retained stability.

7. Emulsion Content Selection

The properties of the specimens at design emulsion content shall meet the properties in Table 1.

8. Report

The report shall contain the following minimum information: Gradation of RAP; amount and gradation of virgin aggregate or additional RAP, if any; recommended water content range as a percentage of dry RAP; optimum emulsion content as a percentage of dry RAP and corresponding density; air void percentage; absorbed water percentage; Marshall Stability and Retained Stability at design moisture and emulsion contents; Raveling percentage; and Thermal Cracking initiation temperature. Include the mix design emulsion designation, supplier name, plant location, and emulsion testing results detailed in *Table 4*.

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SUPERPAVE ASPHALTIC CONCRETE FRICTION COURSE 337-

1 DESCRIPTION

337-1.1 General: Construct a Superpave Asphaltic Concrete Friction Course pavement using the type of mixture specified in the Contract. Superpave Friction Course mixes are identified as Type FC-5, FC-9.5 and FC-12.5. Meet the requirements of TP 334-2 for personnel, plant, methods and equipment. Meet the general construction requirements of TP 334-3.

337-1.2 Thickness: The thickness of the friction course layer will be the plan thickness as shown in the plans per mix type. FC-9.5 will be 1", FC-12.5 will be 1-1/2", and FC-5 will be 3/4".

337-1.3 Contractor's Process Control: Provide the necessary quality and process control of the friction course mix production and placement in accordance with the applicable provisions of TP 334-2 and TP 334-3. The contractor will monitor the spread rate periodically to ensure uniform thickness. Provide quality control procedures for daily monitoring and control of spread rate. If the spread rate drops below the target value, immediately make all corrections necessary to bring the spread rate into the acceptable range.

337-2 MIX COMPOSITION

337-2.1 General: Compose the asphalt mixture using a combination of aggregates (coarse, fine, or a mixture thereof) and asphalt binder. Some mixtures may require fibers and/or hydrated lime. Size, grade and combine the aggregate proportions to meet the grading and physical properties of the approved mix design and the requirements of this Section.

337-2.2 Mix Design: Any submitted mix design must be pre-approved by the FDOT. Submit to the Engineer the proposed mix design and proof that the mix design is on the FDOT District 5 accepted list. No mix design revisions will be allowed. A new design mix will be required for any substitution of an aggregate product, aggregate gradation, binder, or other design component unless approved by the Engineer. The Engineer will consider any marked variations from mix design parameters 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 that mix design. Provide certification from the plant (either in a statement on the delivery ticket or on a separate sheet) that the mix provided is in conformance with the design mix.

337-2.3 Asphalt Binder: Meet the requirements of Article 336 of the FDOT Standard Specifications for Road and Bridge Construction. Use PG 76-22 asphalt binder meeting the requirements of Article 916-1 of the FDOT Standard Specifications for Road and Bridge Construction. ARB-5 and ARB-12 shall not be used as the asphalt rubber binder unless otherwise approved by the Engineer. Reclaimed Asphalt Pavement (RAP) material shall not be used for superpave asphaltic concrete friction courses.

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337-2.4 Additional Information: Provide the following information to the Engineer with each FDOT approved mix design submitted for use:

The approved FDOT Mix Design Number.

The design traffic level and the design number of gyrations (N_{design}).

The source and description of the materials to be used.

The FDOT source number product code of the aggregate components furnished from an FDOT approved source.

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 in handling and processing as necessary.

A single percentage of the combined mineral aggregate passing each specified sieve. Degradation of the aggregate due to processing (particularly -No. 200 [-75 μm]) should be accounted for and identified for the applicable sieves.

The bulk specific gravity value for each individual aggregate (and RAP) component, as identified in the FDOT aggregate control program.

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%.

A target temperature at which the mixture is to be discharged from the plant and a target roadway temperature. Do not exceed a target temperature of 340°F for modified asphalts and 315°F for unmodified asphalts.

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.

The ignition oven calibration factor.

337-3 PECIAL CONSTRUCTION REQUIREMENTS

337-3.1 FC-9.5 and FC-12.5:

337-3.1.1 Temperature:

337-3.1.1.1 Air Temperature at Laydown: Spread the mixture only when the air temperature (the temperature in the shade away from artificial heat) is at 45°F and rising.

337-3.1.1.2 Temperature of the mix: Heat and combine the asphalt binder and aggregate in a manner to produce a mix having a temperature, when discharged from the plant and at the time of spreading on the roadway, meeting the requirements of TP 334-3.5.3.

337-3.1.2 Prevention of Adhesion: To minimize adhesion to the drum during the rolling operations, the Contractor may add a small amount of liquid detergent to the water in the roller.

At intersections and in other areas where the pavement may be subjected to cross-traffic before it has cooled, spray the approaches with water to wet the tires of the approaching vehicles before they cross the pavement.

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337-3.1.3 Transportation Requirements of Friction Course Mixtures: Cover all loads of friction course mixtures with a tarpaulin.

337-3.2 FC-5:

337-3.2.1 Hot Storage: When using surge or storage bins in the normal production of FC-5, do not leave the mixture in the surge or storage bin for more than one hour.

337-3.2.2 Longitudinal Grade Controls for Open-Graded Friction Courses: Use either longitudinal grade control (skid, ski or traveling stringline) or a joint matcher.

337-3.2.3 Temperature:

337-3.2.3.1 Air Temperature at Laydown: Spread the mixture only when the air temperature (the temperature in the shade away from artificial heat) is at 65°F and rising. As an exception, place the mixture at temperatures lower than 65°F, only when approved by the Engineer based on the Contractor's demonstrated ability to achieve a satisfactory surface texture and appearance of the finished surface. In no case shall the mixture be placed at temperatures lower than 60°F.

337-3.2.3.2 Temperature of the Mix: Heat and combine the asphalt binder and aggregate in a manner to produce a mix having a temperature, when discharged from the plant and at the time of spreading on the roadway, meeting the requirements of TP 334-3.5.3. The target mixing temperature shall be established at 320°F.

337-3.2.4 Compaction: Provide two, static steel-wheeled rollers, with an effective compactive weight in the range of 135 to 200 PLI, determined as follows:

Total Weight of Roller (pounds)
PLI = -----
Total Width of Drums (inches)

(Any variation of this equipment requirement must be approved by the Engineer.) Establish an appropriate rolling pattern for the pavement in order to effectively seat the mixture without crushing the aggregate. In the event that the roller begins to crush the aggregate, reduce the number of coverages or the PLI of the rollers. If the rollers continue to crush the aggregate, use a tandem steel-wheel roller weighing not more than 135 lb/in (PLI) of drum width.

337-3.2.5 Special Equipment

337-3.2.5.1 Fiber Supply System: Use a separate feed system to accurately proportion the required quantity of mineral fibers into the mixture in such a manner that uniform distribution is obtained. Interlock the proportioning device with the aggregate feed or weigh system to maintain the correct proportions for all rates of production and batch sizes. Control the proportion of fibers to within plus or minus 10% of the amount of fibers required. Provide flow indicators or sensing

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devices for the fiber system, interlocked with plant controls so that the mixture production will be interrupted if introduction of the fiber fails.

When a batch plant is used, add the fiber to the aggregate in the weigh hopper or as approved and directed by the Engineer. Increase the batch dry mixing time by 8 to 12 seconds, or as directed by the Engineer, from the time the aggregate is completely emptied into the pugmill. Ensure that the fibers are uniformly distributed prior to the addition of asphalt binder into the pugmill.

When a drum-mix plant is used, add and uniformly disperse the fiber with the aggregate prior to the addition of the asphalt binder. Add the fiber in such a manner that it will not become entrained in the exhaust system of the drier or plant.

337-3.2.5.2 Hydrated Lime Supply System: For FC-5 mixes containing granite, use a separate feed system to accurately proportion the required quantity of hydrated lime into the mixture in such a manner that uniform coating of the aggregate is obtained prior to the addition of the asphalt. Add the hydrated lime in such a manner that it will not become entrained in the exhaust system of the drier or plant. Interlock the proportioning device with the aggregate feed or weigh system to maintain the correct proportions for all rates of production and batch sizes and to ensure that all mixture produced is properly treated with hydrated lime. Control the proportion of hydrated lime to within plus or minus 10% of the amount of hydrated lime required. Provide and interlock flow indicators or sensing devices for the hydrated lime system with plant controls so that the mixture production will be interrupted if introduction of the hydrated lime fails. The addition of the hydrated lime to the aggregate may be accomplished by Method (A) or (B) as follows:

337-3.2.5.2.1 Method (A) - Dry Form: Add hydrated lime in a dry form to the mixture according to the type of asphalt plant being used.

When a batch plant is used, add the hydrated lime to the aggregate in the weigh hopper or as approved and directed by the Engineer. Increase the batch dry mixing time by eight to twelve seconds, or as directed by the Engineer, from the time the aggregate is completely emptied into the pugmill. Uniformly distribute the hydrated lime prior to the addition of asphalt binder into the pugmill.

When a drum-mix plant is used, add and uniformly disperse the hydrated lime to the aggregate prior to the addition of the asphalt. Add the hydrated lime in such a manner that it will not become entrained in the exhaust system of the drier or plant.

337-3.2.5.2.2 Method (B) - Hydrated Lime/Water Slurry: Add the required quantity of hydrated lime (based on dry weight) in a hydrated lime/water slurry form to the aggregate. Provide a solution consisting of hydrated lime and water in concentrations as directed by the Engineer. Use a plant equipped to blend and maintain the hydrated lime in suspension and to mix it with the aggregates uniformly in the proportions specified.

337-3.2.5.3 Hydrated Lime Pretreatment: For FC-5 mixes containing granite, pretreat the aggregate with hydrated lime prior to incorporating the aggregate into the mixture. Use a feed system to accurately proportion the aggregate and required quantity of hydrated lime, and mix them in such a manner that uniform coating of the aggregate is obtained. Control the proportion

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of hydrated lime to within $\pm 10\%$ of the amount required. Aggregate pretreated with hydrated lime in this manner shall be incorporated into the asphalt mixture within 45 days of pretreatment.

337-3.2.5.3.1 Hydrated Lime Pretreatment Methods: Pretreat the aggregate using one of the following two methods:

Pretreatment Method A – Dry Form: Add the required quantity of hydrated lime in a dry form to the aggregate. Assure that the aggregate at the time of pretreatment contains a minimum of 3% moisture over saturated surface dry (SSD) conditions. Utilize equipment to accurately proportion the aggregate and hydrated lime and mix them in such a manner as to provide a uniform coating.

Pretreatment Method B – Hydrated Lime/Water Slurry: Add the required quantity of hydrated lime (based on dry weight) in a hydrated lime/water slurry form to the aggregate. Provide a solution consisting of hydrated lime and water in a concentration to provide effective treatment. Use equipment to blend and maintain the hydrated lime in suspension, to accurately proportion the aggregate and hydrated lime/water slurry, and to mix them to provide a uniform coating.

337-3.2.5.3.2 Blending Quality Control Records: Maintain adequate Quality Control records for the Engineer's review for all pretreatment activities. Include as a minimum the following information (for each batch or day's run of pretreatment): pretreatment date, aggregate certification information, certified test results for the hydrated lime, aggregate moisture content prior to blending, as-blended quantities of aggregate and hydrated lime, project number, customer name, and shipping date.

337-3.2.5.3.3 Certification: In addition to the aggregate certification, provide a certification with each load of material delivered to the HMA plant, that the material has been pretreated in conformance with these specifications. Include also the date the material was pretreated.

337-4 ACCEPTANCE

337-4.1 FC-9.5 and FC-12.5: Meet the requirements of TP 334-4.4.

337-4.2 FC-5: Meet the requirements of TP 334-4, excluding TP 334-4.4.4.

337-5 FAILING MATERIAL

Assume responsibility for removing and replacing all defective material placed on the project, at no cost to the County.

337-6 METHOD OF MEASUREMENT

For the work specified under this Section the quantity to be paid for shall be the actual area in Square Yards (SY) of asphaltic concrete friction course placed and accepted within the limits of the contract.

The bid price for the asphalt mix will include the cost of the asphalt binder, asphalt cement, ground tire rubber, anti-stripping agent, blending and handling and the tack coat application as directed in Article 300-8 of the FDOT Standard Specifications for Road and

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Bridge Construction, as well as fiber stabilizing additive and hydrated lime (if required). There will be no separate payment or unit price adjustment for the asphalt binder material in the asphalt mix.

337-7 BASIS OF PAYMENT

Price and payment will be full compensation for all the work specified under this Section (including the applicable requirements of Articles 300 and 320 of the FDOT Standard Specifications for Road and Bridge Construction.

Payment shall be made under:

337-7-42	ASPHALTIC CONC. FRICTION COURSE (TRAFFIC C) (FC-12.5) (PG 76-22)
(1.5")	- SY

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TP 425

INLETS, MANHOLES, AND JUNCTION BOXES

Construction of Inlets, Manholes and Junction Boxes shall conform to the requirements of Section 425 of the "Standard Specifications" and applicable FDOT Design Standards and Details contained in the plans, except as directed by the Engineer.
Precast inlet tops shall not be used for any type of inlet.

Method of Measurement

The quantities measured for payment under this Section shall be the number of inlets, manholes, junction boxes, yard drains, special end walls, and shallow ditch drains satisfactorily completed and accepted, including drainage structure under drains where required.

Basis of Payment

Structures included in this Section will be paid for at the contract unit price each, completed and accepted. Payments shall constitute full compensation for furnishing all materials and completing all work described herein or shown on the plans, including all excavation; dewatering; subsoil excavation and replacement material; backfilling and compacting around structures; disposal of surplus material; and furnishing and placing of all concrete; reinforcing steel; gratings; frames; covers, and any other necessary fittings as shown in the plans, required for acceptable construction, or as directed by the Engineer. Where required, drainage structure underdrains shall be included in the unit price for inlets and manholes. Any alteration of pipe grades up to one (1) foot to clear utilities shall be made and connections to structures made at no additional cost to the County or utility.

Payment shall be made under:

425-1-311	INLETS, CURB, TYPE P-1, <10'	EA
425-1-321	INLETS, CURB, TYPE P-2, <10'	EA
425-1-411	INLETS, CURB TYPE J-1, <10'	EA
425-1-421	INLETS, CURB, TYPE J-2, <10'	EA
425-1-711	INLETS, GUTTER, TYPE V, <10'	EA
425-2-41	INLETS, P-7, <10'	EA
425-2-61	MANHOLES, P-8, <10'	EA
425-2-63	MANHOLES, P-8, PARTIAL	EA
425-2-91	MANHOLES, J-8, <10'	EA
425-2-93	MANHOLES, J-8, PARTIAL	EA

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PIPE CULVERTS AND STORM SEWERS

Construction of Pipe Culverts, Storm Sewers and Mitered End Sections shall conform to the requirements of Section 430 of the Standard Specifications, except as modified herein or as directed by the Engineer. All round and elliptical pipes shall be steel reinforced concrete pipe (SRCP).

Lifting holes in reinforced concrete pipe are prohibited.

Proposed storm sewer pipe to be connected to existing structures shall have openings cut into the existing structure without permanently damaging the structure. All structure openings shall be grouted watertight, with non-shrink grout, after pipe installation, and the structure shall be restored as approved by the Engineer.

The cost of connections to existing structures shall be included in the price bid for the pipe.

Final pipe inspection requirements shall conform to Section 430-4.8 of the Standard Specifications. All culverts and storm sewer pipes shall be videoed by the contractor and inspected and approved by the Engineer prior to final paving.

The only acceptable repair method shall be remove and relay / replace, or as otherwise directed by the Engineer. The repair cost shall be borne solely and completely by the Contractor.

Concrete Pipe Joints

Each joint in a concrete pipe culvert or storm sewer shall be wrapped on the exterior of the pipe with a band of filter fabric measuring 3 feet wide centered on the joint and lapped a minimum of 2 feet. The filter fabric shall meet the requirements of Section 985 of the Standard Specifications and shall be secured against the outside of the pipe by stainless metal or plastic strapping or by other methods approved by the Engineer. These costs shall be included in the per linear foot price for the pipe.

Method of Measurement

Quantities measured for payment under this Section shall be the length in linear feet of pipe culvert or storm sewer measured in place, completed and accepted. Measurements shall be from the inside face of structure wall to inside face of structure wall.

For mitered end sections the quantity measured for payment shall be the number completed and accepted.

Basis of Payment

Pipe Culverts and Storm Sewers will be paid for at the contract unit price completed and accepted. The unit price shall include connection of proposed pipes to existing structures and the replacement of the backfill, base course, and pavement removed for pipe trenching. Payment shall be full compensation for all work and materials described herein, including excavation (in whatever material is encountered), dewatering, removing unsuitable material and replacing with select bedding material, backfilling, compaction, furnishing and installing all pipe, disposing of surplus materials, and other work as may be required for an acceptable installation.

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Payment shall be made under:

<u>Item No</u>		
430-94-1	DESILTING EXISTING PIPE (0" - 24")	LF
430-94-2	DESILTING EXISTING PIPE (25" - 36")	LF
430-94-3	DESILTING EXISTING PIPE (37" - 48")	LF
430-94-4	DESILTING EXISTING PIPE (49" - 60")	LF
430-94-5	DESILTING EXISTING PIPE (> 61")	LF
430-95	DESILTING EXISTING 2 - 10' X 5' CULVERTS	LF
430-174-118	PIPE CULV, STEEL REINF. CONC. PIPE, ROUND, 18"	LF
430-174-124	PIPE CULV, STEEL REINF. CONC. PIPE, ROUND, 24"	LF
430-174-130	PIPE CULV, STEEL REINF. CONC. PIPE, ROUND, 30"	LF
430-174-218	PIPE CULV, STEEL REINF. CONC. PIPE, ELLIP. 14"x23" (18" EQ)	LF

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UNDERDRAINS

Roadway under drain and underdrain cleanout structures shall be constructed in the locations indicated on the plans or as directed by the Engineer and shall conform to the requirement herein. Roadway under drain pipe shall have a diameter of six (6) inches, unless indicated otherwise on the plans.

Materials

Materials used for this Section shall conform to the following requirements:

A. Filter Fabric:

Filter fabric shall meet or exceed the following minimum properties:

<u>Fabric Property</u>	<u>Test Method</u>	<u>Unit</u>	<u>Typical Value</u>
Grab Tensile Strength	ASTM D-1682	lb	120
Grab Tensile Elongation	ASTM D-1682	%	55
Trapezoidal Tear Strength	ASTM D-1117	lb	50
Mullen Burst Strength	ASTM D-3786	psi	210
Puncture Strength	ASTM D-3787	lb	70
Water Flow Rate	CFMC-GET-2	gal/min/sf	285
EOS	COE-DW-02215	US Std Sieve	100+

The following filter fabrics are approved for use:

- Mirafi 140-N
- Typar 3401
- Trevira 1114

B. Pipe Wrap:

The filter fabric pipe wrap shall be an approved strong tough porous nylon, polyester, polypropylene or other approved fabric which completely covers and is secured to the perforated plastic tubing pipe underdrain in such a way as to prevent infiltration of trench backfill material.

The filter enveloping shall weigh a minimum of (4) four ounces per square yard and shall retain soil particles larger than 212 microns (No. 70 sieve). When tested in accordance with ASTM D-1682, the grab strength (wet) of the filter wrap shall not be less than 100 lbs. and the grab elongation shall not be less than 60 percent.

Storage and handling of filter envelope shall be in accordance with the manufacturer's recommendations. Torn or punctured filter wrap shall not be used.

C. Filter Aggregate (Fine Aggregate):

Sand: Sand used for backfilling trenches under, around, and over underdrain pipe shall consist of hard, durable, clean quartz sand; shall be reasonably well graded, from coarse to fine; and when tested by means of laboratory sieves, it shall meet the following requirements, in percent of total weight.

Total Retained on:

<u>Sieve</u>	<u>Percent</u>
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No. 4	0 to 5
No. 8	0 to 15
No. 16	3 to 35
No. 30	30 to 75
No. 50	65 to 95
No. 100	93 to 100

Stone: When stone is used for filter aggregate, it shall be composed of clean durable rock that is noncementous when exposed to water for extended periods and shall be so certified by a geotechnical engineer.

Slag: Slag shall be clean, tough and durable. It may be either air-cooled blast-furnace slag or phosphate slag. It shall be reasonably uniform in density and quality and shall be so certified by a geotechnical engineer.

Gradation: The gradations of stone and slag filter aggregates shall be designed and certified by a geotechnical engineer and approved by the Engineer.

D. Pipe

Corrugated Polyethylene Tubing: Corrugated Polyethylene Tubing for use as underdrain shall conform to the requirements of AASHTO M-252, latest edition. Polyethylene Tubing shall be delivered in twenty (20) foot lengths (minimum) and shall be fitted, prior to installation, with a filter fabric wrap.

Procedures

Construction procedures shall conform to the following:

Excavation Trench:

The trench shall be excavated carefully to such depth as is required to permit the pipe to be laid to the grade designed and to the dimensions shown in the plans.

The underdrain trench shall be constructed in a dry condition. This shall be accomplished by the use of a positive dewatering method.

Placing Filter Fabric:

After the trench has been excavated, the filter fabric shall be rolled out over the trench and walked into the trench. Care shall be taken to prevent the excavated material from entering the trench after the fabric has been installed.

Laying Pipe:

After the filter fabric has been placed in the trench, approximately four (4) inches of filter aggregate shall be placed in the trench. The pipe shall be bedded firmly in the filter in the aggregate to the correct line and grade. The upper end of the run of roadway underdrain pipe shall terminate at the underdrain cleanout to prevent any filter aggregate from entering the pipe.

Placing and Compacting Filter Aggregate:

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After the pipe has been laid to grade, the pipe shall be firmly held in place by mechanical means while the filter aggregate is placed to a maximum height of five (5) inches plus one (1) inch (compacted) above the top of the pipe. After the first lift is placed and compacted to the satisfaction of the Engineer, the remainder of the filter aggregate shall be placed. The excavation of the trench, the placement of the filter fabric, the installation of the pipe, and the placement and compaction of the first lift of filter aggregate shall be accomplished in a single continuous operation.

Special care shall be taken to avoid displacement or damage to the pipe or filter fabric.

Backfill above Filter Aggregate:

After the filter aggregate has been placed to the required height above the pipe, as shown on the plans, the filter fabric shall be lapped full width of trench from both sides. The portion of the trench above the filter aggregate shall be filled with fine filter aggregate which shall be placed and tamped in layers not thicker than twelve (12) inches to the proposed grade.

Method of Measurement

Quantities measured for payment under this Section shall be the length in feet of underdrains measured in place, along the center line and gradient of the underdrain, completed and accepted. The measurement shall include the portion of the pipe extending into the walls or junction boxes, etc.

Basis of Payment

Underdrains will be paid for at the contract unit price per linear foot of underdrain, completed and accepted. Payment shall be full compensation for all work described herein, including dewatering, excavation, filter aggregate, filter fabric, pipe, backfilling, compacting, and disposal of surplus material, connections to structures and cleanouts.

Underdrains included in the contract price of other pay items will not be included in this Section for payment.

Payment shall be made under:

Pay Item:

440-1-20	UNDERDRAIN TYPE II, 6", FDOT INDEX 286	LF
440-70	UNDERDRAIN INSPECTION BOX, FDOT INDEX 245	EA
440-73-1	UNDERDRAIN OUTLET PIPE, 6", FDOT INDEX 286	LF

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TP 515

PIPE GUIDERAIL

Construction of pipe guiderail shall conform to the requirements of FDOT Index 870, 880, and this Technical Provision, except as directed by the Engineer.

Method of Measurement

Quantities measured for payment under this Section shall be the linear feet of two-rail or three rail guiderail measured in place along the length of the top rail and shall include rails, posts, thickened edge sidewalk, rail splice assemblies, base plates, anchor bolts, nuts, washers, resilient or neoprene pads and all incidental materials and labor required to complete installation.

Basis of Payment

Pipe Guiderail will be paid for at the contract unit price per linear foot completed and accepted.

Payment shall be made under:

Pay Item:

515-2-201	PEDESTRIAN/ BICYCLE RAILING, STEEL, 42", PICKET RAIL (FDOT Index 852)	LF
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TP 520

CONCRETE GUTTER, CURB ELEMENTS, AND TRAFFIC SEPARATOR

Construction of concrete curb and gutter, concrete traffic separator, and concrete valley gutter shall conform to the requirements of Section 520 of the Standard Specifications, except as directed by the Engineer.

Foundation

Foundation material upon which the concrete is to be placed shall be compacted to meet the specified densities and shall be thoroughly wetted but free of standing water just prior to placing concrete.

Contraction Joints

Contraction joints shall be sawed to a minimum depth of 1 1/2 inches. Sawing shall begin as soon as the concrete has hardened to the degree that excessive raveling will not occur. Sawing shall progress in the same direction and sequence as the concrete placement. Every third joint shall be sawed first, then saw intermediate joints.

For concrete placed before noon, all joints shall be sawed the same day of placement. For concrete placed after noon, all third joints shall be sawed the day of placement; all other joints prior to noon the following day.

Curing

Concrete shall be cured as provided in Section 520-8, except as modified herein or as approved by the Engineer. Curing material shall be applied to the concrete surfaces after finishing as soon as the concrete has hardened sufficiently to prevent marring the surface or within one hour after finishing is completed, whichever occurs first. Applying curing materials shall not be held up due to other activities on the project. Contractor shall schedule and provide manpower necessary to conform to these requirements.

Spraying equipment, including spray tip and nozzle, shall be as recommended by manufacturer's printed literature, or an acceptable equal. Suggested equivalent spraying equipment is:

Pump Sprayer: Model No. 1949, Chapin Mfg., (800) 444-3140
Drum Pump Sprayer: 12 Volt DC # 6061, Chapin Mfg.

Equipment shall be maintained and nozzles replaced as required to provide consistent uniform spray pattern.

A uniform coating meeting the manufacturer's recommended minimum application rate shall be applied. Areas appearing to have insufficient curing compound, as determined solely by the Engineer, shall be re-coated immediately to provide required uniform coverage.

Storage containers having greater than a five gallon capacity may be utilized only with prior approval by the Engineer. The contractor shall submit the manufacturer's descriptive literature

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describing the placement, storage and mixing requirements for storage containers exceeding five gallons. The contractor shall provide and utilize mechanical mixers for all containers larger than five gallons. The mixers shall be equivalent to the manufacture's requirements. The contractor shall conform to all storage, mixing and application requirements.

Repairs

Where replacement is necessary, complete sections between existing contraction joints shall be removed and replaced.

Method of Measurement

For curb or curb and gutter, the quantity to be paid will be plan quantity, in linear feet, measured along the face of the completed and accepted curb or curb and gutter.

For valley gutter or shoulder gutter, the quantity to be paid will be plan quantity, in linear feet, measured along the gutter line of the completed and accepted valley gutter or shoulder gutter.

For concrete traffic separator of constant width, the quantity to be paid will be plan quantity, in linear feet, measured along the center of its width, completed and accepted, including the length of the nose.

For concrete traffic separator of varying width, the quantity to be paid will be plan quantity, in square yards, completed and accepted.

Basis of Payment

Items covered by this Section will be paid for at the contract unit price. Payment shall constitute full compensation for all work described herein, including all labor, equipment, materials and incidentals necessary to complete each item of work.

Payment shall be made under:

Pay Item:

520-1-7	CONCRETE CURB AND GUTTER (TYPE E)	LF
520-1-10	CONCRETE CURB AND GUTTER (TYPE F)	LF
520-2-1	CONCRETE CURB (TYPE A)	LF
520-2-2	CONCRETE CURB (TYPE B)	LF
520-3	CONCRETE VALLEY GUTTER	LF
520-5-11	TRAFFIC SEPARATOR TYPE I (4' WIDE)	LF
520-5-12	TRAFFIC SEPARATOR TYPE I (6' WIDE)	LF
520-70	TRAFFIC SEPARATOR (SPECIAL)	SY

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CONCRETE SIDEWALKS, 4 INCH AND 6 INCH THICKNESS

Construction of 4-inch and 6-inch thick concrete sidewalk shall conform to the requirements of Section 522 of the Standard Specifications, and Indexes 304 and 310 of the FDOT Design Standards, except as directed by the Engineer.

Foundation

Foundation material shall meet the specified densities and shall be thoroughly wetted but free of standing water just prior to placing concrete.

Contraction Joints

Contraction joints shall be sawed. All joints shall be straight lines oriented at 90 degrees to the edge of sidewalk, radially if in a curve, or as directed otherwise. The minimum depth of joints shall be 1 1/2 inches or 1/4 the nominal thickness of concrete placed, whichever is greater.

Joint installation shall proceed in the same direction and sequence as the concrete placement. Sawing shall begin as soon as the concrete has hardened to the degree that excessive raveling will not occur. Every third transverse joint and all longitudinal joints shall be sawcut within 8 hours after finishing. Remaining transverse joints, shall be sawcut by noon the following day.

Construction Joints

Construction joints shall be constructed at the end of all pours and at other locations where the concrete placement operations are stopped for as long as 30 minutes. They shall be placed at least 10 feet from any other transverse construction joint or end of pavement section.

Metal keyways shall be installed at all construction joints in sidewalks 6-inches and greater in thickness. Concrete thickness shall be increased by 2-inches for a minimum distance of 6-inches either side of construction joints.

Curing

Concrete shall be cured as provided in Section 520-8, except as modified herein. Curing material shall be applied to the concrete surfaces after finishing as soon as the concrete has hardened sufficiently to prevent marring the surface or within one hour after finishing is completed, whichever occurs first. Applying curing materials shall not be held up due to other activities on the project. Contractor shall schedule and provide manpower necessary to conform to these requirements.

Spraying equipment, including spray tip and nozzle, shall be as recommended by the manufacturers' printed literature, or an acceptable equal. Suggested equivalent spraying equipment is as follows:

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Pump Sprayer: Model No. 1949, Chapin Mfg., (800) 444-3140
Drum Pump Sprayer: 12 Volt DC # 6061, Chapin Mfg.

Equipment shall be maintained and nozzles replaced as required to provide a consistently uniform spray pattern.

A uniform coating meeting the manufacturer's recommended minimum application rate shall be applied. Areas appearing to have insufficient curing compound, as determined solely by the County, shall be re-coated immediately to provide the required uniform coverage.

Storage containers having greater than a five gallon capacity may be utilized only with prior approval of the Engineer. The Contractor shall submit the manufacturer's descriptive literature describing the placement, storage and mixing requirements for storage exceeding five gallons. The Contractor shall provide and utilize mechanical mixers for all containers larger than five gallons. The mixers shall be equivalent to or exceed the manufacture's requirements.

The Contractor shall conform to all storage, mixing and application requirements.

Replacement

Where 6-inch concrete has to be replaced due to cracks, it shall be replaced with a uniform thickness of 8-inch concrete covering no less than 40 square feet and extending to existing sawed contraction joints. Replacement concrete shall extend at least 3-inches beneath existing concrete at a minimum thickness of 3-inches.

Method of Measurement

Quantities measured for payment under this Section shall be the actual area in square yards of concrete constructed in place.

Basis of Payment

Concrete Sidewalk including ramps, detectable warning surfaces (armor tiled domes) and driveways will be paid for at the contract unit prices, completed and accepted. Payment shall constitute full compensation for all work described herein, and shall include all labor, equipment, materials, clearing and grubbing, excavation, grading, compaction, expansion material (asphalt impregnated), and all incidentals necessary to complete the work to the lines, grades, and thickness indicated on the plans.

Subgrade preparation and additional concrete required for thickened slabs as indicated on the plans or as directed by the Engineer shall be included in the contract unit price for 6-inch Concrete Sidewalk.

Payment shall be made under:

Pay Item:

522-1	CONCRETE SIDEWALK, 4" THICK	SY
522-2	CONCRETE SIDEWALK, 6" THICK	SY

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TP 527

DETECTABLE WARNINGS on WALKING SURFACES

The work specified in this Section consists of the furnishing and installing of detectable warnings on walking surfaces in accordance with Section 527 of the Standard Specifications except as directed by the Engineer.

Method of Measurement

Quantities to be paid for under this Section shall be as set forth in Section 527 of the Standard Specifications.

Basis of Payment

The basis of payment shall be as set forth in Section 527 of the Standard Specifications. This pay item only includes the cost of detectable warnings to be placed on the existing curb ramps that will not have to be replaced.

Payment shall be made under:

Pay Item:

527-1	DETECTABLE WARNINGS ON WALKING SURFACES	EA
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TP 570 - Performance Turf

PERFORMANCE TURF

The Contractor shall establish a stand of grass in all areas designated on the plans and disturbed by construction in accordance with Chapter 15, Environmental Control, Article XVII, Fertilizer Management Ordinance of the Orange County Code; Sections 162 and 570 of the Standard Specifications, except as directed by the Engineer.

Work under this Section shall include all seeding, mulching, sodding, fertilizing and watering necessary to provide routine maintenance of the grassed area until the work is accepted by the Engineer.

There must be at least 90% coverage of healthy grass prior to acceptance by the Engineer. The Engineer, at any time, may require replanting of any areas in which the establishment of the grass stand does not appear to be developing satisfactorily.

The Contractor shall mow grassed areas twice monthly, or as required by the Engineer, until final acceptance of the work.

Seeding and Mulching

Grass seed shall be common Bermuda and Bahia. In addition, brown top-millet will be included during summer months and annual rye in the winter months. All seed shall meet the requirements of the State Department of Agriculture.

Sodding

Sodding shall be Bahia. It may be placed in rolls or as individual pieces. In established areas, replacement sod shall be of the same type as the existing sod, unless otherwise approved by the Engineer.

Fertilizers

Fertilize as necessary based on soil testing performed in accordance with Section 162. For fertilizer rates and application times follow Chapter 15 Environmental Control, Article XVII Fertilizer Management Ordinance of the Orange County Code.

Method of Measurement

Payment shall be calculated based on the quantity in square yards as specified in the completed and accepted plans. The cost of establishing grass in other areas disturbed by construction activities shall be borne by the Contractor.

Basis of Payment

Payment shall be paid for at the contract unit price per square yard. Payment shall constitute full compensation for furnishing all materials and completing all the work specified herein, including

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ground preparation, fertilizing, seeding, mulching, sodding, watering, mowing and complete maintenance of the grassed area until final completion and acceptance by the Engineer.

Payment shall be made under:

Pay Item:

570-1-2	PERFORMANCE TURF (SOD) (BAHIA OR MATCH EXISTING)	- SY
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TP 580

LANDSCAPE INSTALLATION

The Landscape Installation includes all items detailed in Section 580 of the Standard Specifications, the Special Provisions and on the plans, except as directed by the Engineer.

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. All applicable provisions of the Bidding and Contract Requirements, and Division 1 - General Requirements shall govern the work under this section.

1.2 WORK INCLUDED

- A. Provide all labor, materials, necessary equipment and services to complete the Trees work, as indicated on the drawings, as specified herein or both. In addition, the work shall include the maintenance of all trees and planting areas during the maintenance period as described in section 3.10.

1.3 QUALITY ASSURANCE

A. Inspection

- 1. Furnish plant materials inspected by State Department of Agriculture at the growing site and tagged or otherwise accepted for delivery by Orange County Representative.
 - 2. Inspection at growing site does not preclude right of rejection at project site.
- B. Furnish plant materials certified by State Department of Agriculture to be free from harmful insects or apparent disease. Submit verification that all plant material is free of harmful insects and disease.
 - C. All plant material shall meet or exceed the minimum grade of Florida No.1 in accordance with "Grades and Standards for Nursery Plants" published by the State of Florida Department of Agriculture.
 - D. Plant material shall be shade or sun grown, and/or acclimatized depending on planting location.
 - E. Any plants that do not conform to these plans, specifications, or approved trees shall be rejected.

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1.4 SUBMITTALS

A. Certificate of Inspection of plant material by State Authorities.

B. Test Reports

Analyses of samples from planting soil supply areas (i.e., signed original copy by testing laboratory only). If contractor elects to divide the project area into incremental substantial completion areas, soil samples and test reports shall be required for each increment 14 days prior to beginning each increment.

C. Maintenance Instruction

Prior to the end of the maintenance period, furnish three copies of written maintenance records and instructions to the Orange County Representative for maintenance and care of installed plants throughout their full growing season.

D. Plant Photographs

Contractor shall provide representative photographs of all plant materials with a measuring rod included in photograph. Contractor shall coordinate with Orange County Representative one tagging trip to cover all larger plant materials at contractor's cost.

E. Project Schedule

Provide five (5) copies of a comprehensive project schedule indicating contractors proposed work and installation schedule. Schedule shall include breakdown for site preparation and grading, irrigation, trees, sod restoration, and final clean up. Contractor shall also include project "milestones" for designated project areas within the total project area as required including substantial completion dates.

F. All certificates, reports, and samples shall be submitted by the Contractor to the Orange County Representative a minimum of one week prior to the installation of any of the materials. Contractor shall not begin work until all submittals have been verified by the Orange County Representative. Submittals required but not limited to the following:

1. Existing soil analysis and sample
2. Prepared soil analysis and sample
3. Mulch sample
4. Erosion control fabric sample and product sheet
5. Pre- and post-emergent herbicide
6. Weed eradication treatment for lawn grass

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7. Foliar spray fertilizer(s)
8. Sod certification(s)
9. Plant photographs
10. Plant schedule with quantities
11. List of Personnel, qualifications, and schedule
12. Guying methodologies
13. Leaf antidessicent spray
14. Drainage gravel
15. Maintenance manual

1.5 DELIVERY, STORAGE AND HANDLING

A. Inventory

Verify that plant species, quantity, and quality of plants in the Contractor's plant schedule is consistent with that on plant list and drawings.

B. Preparation for delivery

- 1 Prune head and/or roots of all trees only under direction of Orange County Representative, and as required to assure safe loading, shipment and handling without damaging the natural form and health of the plant.
- 2 Stabilize all trees in containers and prepare tree for shipping.

C. Delivery

- 1 Deliver soil conditioners (pesticides, herbicides, fumigants, and fertilizers) to site in original unopened containers bearing manufacturer's guaranteed chemical analysis, name, trade name, trademark, and conformance to state law. Store in designated areas only.
- 2 Deliver planting soil mixes and mulch in bulk with manufacturer's guaranteed mix, name, and conformance to State law. Store in designated areas only.
- 3 Deliver plant with legible identification labels.
 - a. Label groups of trees of the same species.
 - b. State correct plant name and size indicated on Plant List.
 - c. Use durable waterproof labels with water-resistant ink, which will remain legible for at least 60 days.

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4. Protect all plant materials during transport/ delivery with shade cloth or other acceptable means to prevent wind burn.
5. Protect all plant material during delivery to prevent damage or desiccation to root ball or desiccation of crown and leaves.
6. Mist periodically each day all tree/palm root balls and crowns/tops during delivery, handling, and storing on site to ensure against drying.
7. Notify Orange County Representative of delivery schedule in advance so plant material may be inspected upon arrival at job site.
8. Remove unacceptable plant material immediately from job site.
9. Delivery of fluid applied membrane waterproofing shall be to the job site in sealed undamaged containers. Each container shall be identified with material name, date of manufacture and lot number.

D. Storage

- 1 Container grown plants: Deliver direct from nursery.
- 2 Protect roots of all plant material from drying or other possible injury with shade cloths, tarps or other means. Keep plant root ball and crown moist at all times.
- 3 Store plants in shade and protect from weather. Heel in palms in a vertical position as required. Irrigate all stored plants as required.
- 4 Maintain and protect plant material not to be planted within four hours. Plant palms upon delivery.

E. Handling

- 1 Do not drop plants.
- 2 Do not pick up container or balled plants by stems or trunks.
- 3 Do not use chains or cables on any trees or palms. Handle using nylon straps, 2" width minimum on root ball or container only.

1.6 JOB CONDITIONS

A. Planting Season

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Perform actual planting only when weather and soil conditions are suitable in accordance with locally accepted practice.

- B. Locate all underground utilities and other non-readily visible structures prior to digging. Utility drawings will be available at the job site or from Orange County Representative. Landscape Contractor shall repair all damage to underground utilities, and/or construction caused by utility damage, at no cost to Orange County.
- C. Verify that all existing trees to remain are properly identified and barricaded to prevent damage under this and future construction. Landscape Contractor shall be responsible for maintaining adequate identification and barricading of all existing plant material to remain throughout the installation and required maintenance period.

1.7 GUARANTEE

- A. Guarantee all trees and palms for a period of 12 months after date of Final Inspection and Acceptance by Orange County. Replacement plants under this guarantee shall be replaced within (2) two weeks of rejection and guaranteed for 12 months from date of installation.
- B. Repair damage to other plants, lawn or construction work during plant replacement at no cost to Orange County (this includes, but is not limited to, damage to curbs, walks, roads, fences site furnishings, etc.).

1.8 SCHEDULING

- A. Coordinate work and installation as required with other contractors within the project area that may be in progress.
- B. Install trees, then restore lawns.
- C. Notify Orange County Representative of anticipated installation date at least (2) two weeks in advance.

PART 2 - PRODUCTS

2.1 PLANT MATERIAL

- A. Well formed and shaped, true to type, and free from disease, insects, and defects such as knots, sun scald, windburn, injuries, abrasion or disfigurement.
- B. True to botanical and common name and variety: *American Joint Committee on Horticultural Nomenclature, Standardized Plant Names*, latest edition.

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- C. Minimum grade of Florida No. 1 in accordance with "*Grades and Standards for Nursery Plants*" published by the State of Florida Department of Agriculture and Consumer Services.

All plants not listed in "*Grades and Standards for Nursery Plants*", published by the Division of Plant Industry, shall conform to a minimum grade of Florida No. 1 as to:

1. Health and vitality
2. Condition of foliage
3. Root system
4. Freedom from pests or mechanical damage
5. Heavily branched and densely foliated according to the accepted normal shape
6. Freedom of low and/or tight "V" shaped crotches

- D. Nursery Grown: ANSI Z60.1-1969

1. Grown under climatic conditions similar to those in locality of project.
2. Container grown stock:
 - a. Growing in container for minimum 180 days before delivery, with sufficient root system for container size.
 - b. Not root bound or with root systems hardened off.
3. Use only groundcover plants well established in removable containers.
4. Trees shall be nursery/tree farm grown. Collected and Grow Bag trees will not be accepted.

- E. Minimum root ball sizes for all palms shall be as specified in "*Grades and Standards for Nursery Plants*", published by the State of Florida Department of Agriculture and Consumer Services.

2.2 SOD

- A. Sod to restoration of all disturbed areas shall be of the variety found in the immediate area. Where grasses do not cover the entire area Argentine bahia grass, *Paspalum notatum* 'Argentine,' shall be used.
- B. Sod shall be free of weeds and other grasses, insects and diseases.
- C. Sod shall be delivered to the site in sizes typical of the industry and shall be placed within two days of having been lifted from the field.

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2.3 PLANTING SOIL

- A. Soil for back filling planting areas and plant pits shall be the existing surface soil, free from subsoil, objectionable weeds, litter, sod, stiff clay, stones, stumps, roots, trash, toxic substances, mortar, cement, or any other material which may be deleterious to plant growth or hinder planting operations. Poorly drained soil shall not be accepted.
- B. Soil amendments shall be added to the soil in the amount and manner prescribed by soil analysis to achieve optimum growth for each plant type. Results from soil analysis and a list of prescribed amendments shall be submitted to the Orange County Representative prior to being incorporated in the soil.
- C. If additional soil is required, it shall be furnished by the Landscape Contractor and shall be a natural, friable soil representative of productive, well-drained soils in the vicinity. It shall be obtained from well-drained areas, which have never been stripped before; and shall be free of any material deleterious to plant growth.
- D. The Landscape Contractor shall submit to Orange County Representative the following information on imported soils: Specific location from which topsoil will be stripped, test results showing topsoil composition and analysis, and amendments required.
- E. A qualified soils laboratory, in accordance with "Methods of Soils Analysis Agronomy #9 as published by the American Society of Agronomy, shall perform soil test at the Landscape Contractor's expense.

2.4 SOIL CONDITIONERS

- A. Soil conditioners shall be as specified.
 - 1. As a fertilizer supplement to Palms, a foliar spray shall be applied one week after installation (excluding summer months) and repeated 3 months after first application. The chemical designation shall be 20-20-20 with the primary plant nutrient sources derived from Urea, Ammonium Phosphate, and Potassium Nitrate add chelated iron mix per manufacturer's recommendation.
 - 2. Apply foliar spray with a wetting agent.
 - 3. Peterson's General Purpose 20-20-20 liquid fertilizer or acceptable equal.

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- B. It shall be the responsibility of the contractor to supply and transport water to all landscape areas during construction and maintenance periods. Care shall be exercised to assure that water is kept free of harmful substances to plant growth.

2.5 FERTILIZER

- A. Commercial fertilizer shall be 14-14-14 formulation of slow release fertilizer, 3-4 months release of which 60 percent of the nitrogen is in urea-formaldehyde and shall conform to the applicable state fertilizer laws. Fertilizer shall be uniform in composition, dry and free flowing. (Osmocote brand or approved equal)

2.6 DOLOMITIC LIMESTONE

- A. Dolomitic limestone shall be a natural limestone, designed for agriculture use, shall contain no less than 85 percent of total carbonates, and shall be ground so that 50 percent will pass a 100 mesh sieve and 90 percent will pass a 20 mesh sieve.

2.7 ANTIDESICCANT

- A. Antidesiccant shall be an emulsion type, film-forming agent designed to permit transpiration, but retard excessive loss of moisture from plants, such as Dowax by Dow Chemical Co. or acceptable equal. The antidesiccant shall be delivered in the manufacturer's fully identified containers and shall be mixed and applied per manufacturer's recommendation.

2.8 BORICIDE

- A. Boricide shall be Lindane as manufactured by Platt, or acceptable equal.

2.9 TOP MULCH

- A. Pine bark, shredded and not larger than 1 ½" in any dimension, loose, 100 percent organic, substantially free of mineral waste materials, and showing an acid reaction.
- B. Minimum organic matter by weight on an oven dry basis: 85%.
- C. Processed specifically for use as top mulch around plant beds.

2.10 GUYING AND STAKING MATERIAL

- A. Stakes for tree support:
 - 1. Construction grade lumber, pressure treated pine or lodge poles.

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2. Vertical Stakes: Nominal 2"x 4"x 8' long pressure treated pine and pointed at one end.
3. Braces for Palm Trees: Nominal 2"x 4"x 8' long pressure treated pine.
4. Stakes: Nominal 2"x 4"x 3' long pressure treated pine and pointed at one end.
5. All above grade, 2"x 4" stakes and braces shall be painted with one coat of Olympic stain. Stain and color to be accepted by the Orange County Representative.

B. Guying Wires

Annealed, galvanized iron or galvanized steel not less than 12 gauge wire. Wire shall be flagged with white surveyor tape minimum 2 per guy wire, (one flag near ground level and one flag near the middle of the length of wire, above turnbuckle if used). Nylon tape systems manufactured for guying trees may be used.

C. Hose

1. Type: New 1/2" diameter 2-ply reinforced black rubber or plastic hose.
2. Minimum length: 6"

D. Turnbuckles

1. Turnbuckles are required. Landscape Contractor shall be responsible for keeping taut all guyed plant material and for keeping flagging in place. One turnbuckle per guy wire is required.
2. Guying to be tightened as needed, but always within one day of when found necessary.
3. Install hand tensioner when nylon tape systems are used.

2.11 SLOPE STABILIZATION

- A. Landscape contractor shall be responsible to stabilize grades by approved methods where necessary.
- B. Contractor shall stabilize all sloped areas greater than 3 to 1 and areas found to be required to reduce surface erosion by the Orange County Representative with erosion control fabric. Contractor shall install erosion control fabric according to the manufacturer's instructions.

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2.12 SOIL SEPARATOR

- A. Soil separator material shall be used to cover the gravel layer in tree or palm pits where percolation may not be adequate (see part 3.03, "Preparation", within this section).
- B. The soil separator in tree planting pits shall consist of a sheet of structure composed entirely of preferentially oriented isotactic polypropylene continuous filaments thermally bounded mostly at the crossover points.
 - 1. "Typar" style 3341, by Dupont, as manufactured by REEMAY, Inc. or approved equal.
 - 2. Soil Separator Installation:
 - a. Roll, size and overlap as required and indicated, and complete installation as per manufacturer's standard printed specifications, inspections and recommendations.
 - b. Contractor shall be responsible for securing top edges of soil separator by an approved method.

2.13 DRAINAGE GRAVEL

- A. Gravel shall be river gravel and shall be of graduated sizes.
- B. River gravel shall be no smaller than 3/4" nor larger than 1 1/2" in any dimension.
- C. Gravel shall be installed as shown on drawings or to a minimum of 4" depth.
- D. Gravel shall be washed clean and contain no chemical elements harmful to plant growth.
- E. Drainage gravel shall be provided and installed in the bottom of tree/palm planting pits where percolation may not be adequate (see Part 3.03 "Preparation", within this section).

2.14 DRAINAGE MAT

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- A. Drainage mat shall be Enka-Drain #3120 as manufactured by BASF Corporation (704/677-7713) or acceptable equal installed as per manufacturer's recommendations where shown on details.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Verify that final grades and drainage have been established prior to the beginning of the planting operation.
- B. Inspect trees for injury, insect infestation, and trees and shrubs for improper pruning.
- C. Do not begin planting of trees until deficiencies are corrected, or plants replaced.

3.2 LOCATION/STAKING

- A. Stake out locations for plants and outline of planting beds on ground.
- B. Do not begin excavation until stake out of plant locations and plant beds are acceptable to the Orange County Representative.
- C. The location of all plant materials shall be field staked prior to installation for Orange County Representative's acceptance.

3.3 PREPARATION

- A. Pits shall be circular with vertical sides and flat bottom. Tree/palm pits shall have mounded bottoms to improve drainage as detailed. The depth of all plant pits shall be enough to accommodate the ball or roots. Pits to be 2-3 times root ball diameter.
- B. Disposal of Excess Soil
 - 1. Use acceptable excess excavated topsoil to form watering berms around the plants.
 - 2. Dispose of additional excess soil at direction of Orange County Representative.
 - 3. Dispose of unacceptable or unused excess soil in designated staging area as directed by the Orange County Representative
 - 4. All spoilage shall be deposited, spread and fine graded to a maximum 2" layer as directed by the Orange County Representative.

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- C. Test fill all plant beds and tree pits with water before planting to assure that proper drainage and percolation is available (twice in succession). Condition permitting the retention of more than 6" of water in 1 hour shall be brought to the attention of Orange County Representative. Pits, which are not adequately draining, shall be excavated to a depth sufficient for additional drainage and backfilling with gravel. No allowances will be made for lost plants due to improper drainage. Landscape Contractor shall replace with same species size and specification at no cost to Orange County.

3.4 PLANTING

A. General

1. Center plant in pit.
2. Face for best effect, or as directed by Orange County Representative.
3. Set plants plumb and hold rigidly in position until soil has been tamped firmly around planting ball.
4. Use only planting soil backfill as specified.
5. Place sufficient planting soil under plant to bring top of planting ball to finish grade (top of tree/ palm root balls shall not be set below finished grade).
6. Backfill pit or trench with planting soil in 9" layers and water each layer thoroughly to settle soil and work soil completely around roots and planting ball.
7. After soil settles fill pit with planting soil, water, and leave pit surface even with finish grade.
8. Topsoil Berm:
 - a. Construct a topsoil berm 6" above finish grade forming a watering basin with a level bottom around each palm or tree.
 - b. Size: 12" greater than diameter of planting ball. Maintain 4-ft. diameter grass circle around all trees in sod areas.
 - c. Construct a topsoil berm 6" above finished grade for all planting beds on slopes per planting details.
 - d. Leave saucer for 3 months or as directed by Orange County Representative. At the end of 3 months, regrade area and re-mulch planting circle (or planting

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bed) for all plantings. Remove excess from basin and clean area. Replace any damaged plant material or sod at no cost to Orange County.

B. Container Grown Plants

1. Can/container removal

- a. Carefully remove plants without injury or damage to planting ball.
- b. After removing plant: Superficially cut edge roots with knife on three sides. Note: Rootbound plants shall not be accepted.

2. Do not cover top of root ball.

3.5 FERTILIZER APPLICATIONS

- A. Apply granular fertilizer at time of planting and repeat 3 months from first application. Schedule time of fertilization with Orange County Representative to verify compliance of fertilization of plant materials. Apply fertilizer per manufacture's recommendation to all plant material.
- B. Broadcast under foliage canopy and incorporate into soil.
- C. Water immediately until root structure of plant is wet. Assure protection from fertilizer burn.
- D. Apply foliar nutrient spray to all Palm species at time of planting and repeat 3 months from first application. Do not apply foliar sprays in summer months (i.e., June through August). Schedule fertilization with Orange County Representative. Drench palm leaves with foliar nutrient spray at the manufacturer's recommended rate to all palm species.

3.6 WEED AND INSECT CONTROL

- A. Apply post-emergent herbicide, "Roundup" as manufactured by Monsanto Corp. or approved equal, per manufacturer's rate and method of application to all landscape areas as necessary.
- B. Provide viable application of pre-emergent herbicide Dow Elanco "Snapshot" in accordance with manufacturer's recommendations before mulching and again as necessary throughout required maintenance period to prevent weed seed germination.
 - 1. Contractor shall schedule application with Orange County Representative to verify compliance with specifications.

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- C. The Landscape Contractor shall verify that the herbicide and application technique will not damage plant material prior to application, and shall replace, and/or damage to any plant injured by herbicide application at not cost to Orange County.
- D. Provide written certification that all plant materials including palms have been specifically treated for insect control.

3.7 TOP MULCHING

- A. Top mulch planting pits within two days after planting.
- B. Cover water basin or bed evenly with 2" compacted depth of top mulch material.
- C. Water thoroughly, immediately after mulching.
- D. "Cut in" mulch at plant pit/sod line.
- E. Hose down tree canopy with fine spray to wash leaves of plants at least twice a week or as required.

3.8 GUYING AND STAKING OF TREES

- A. Guy trees as shown on the drawings except where they are planted in special locations where guying is not feasible. Staking and guying of trees shall be done immediately after they are planted. It shall be the Contractor's responsibility to ensure that all trees are plumb and secure after planting.
 - 1. Stake installation (See planting detail)
 - a. Drive stakes perpendicularly, 3 ft. into ground at edge of root ball. Do not drive stake through soil separator or drainage gravel if present. Do not drive stakes through root ball.
 - b. Number of stakes as shown.
 - 2. Tying and Cross-bracing:(See planting detail)
 - a. For trees 4" or greater in caliper:
 - (1) Stake and tie firmly with guy wire as shown.
 - (2) Separate guy wire from bark by hose section.

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- B. Stake palm trees as shown. Contractor shall not deepen the burial of trees and palms for stabilization in lieu of staking. The clear trunk height shall be required as specified on plans after installation. The Contractor shall be responsible for and guarantee the installation against toppling and be responsible for any and all damage incurred by toppling over of palms.
- C. Contractor shall leave all guying and staking in place and maintain in good repair until project is substantially complete, or as directed by Orange County Representative. Ensure no guys or stakes occur in grassed areas.

3.9 PRUNING

- A. Prune minimum necessary to remove injured twigs and branches, deadwood, and suckers. Pruning shall be done with regard to natural form of tree or as directed by the Orange County Representative.
 - 1. Prune trees prior to delivery to site only under direction of Orange County Representative. (Note: Pruning is required for collected palms as specified in "Grades and Standards for Nursery Plants.)
- B. Do not paint cuts unless directed by Orange County Representative.
- C. Pruning cuts shall be monitored to ensure proper healing and to prevent insect/disease infestation.
- D. Landscape Contractor shall perform all pruning as directed by the Orange County Representative and as shown on the drawings at no additional cost to Orange County.

3.10 MAINTENANCE

- A. Landscape Contractor shall begin biweekly maintenance immediately after each item is planted and ~~continue biweekly~~ maintenance through the 12-month maintenance period for each designated portion of the project as defined in the specifications of the Contract. The 12-month maintenance period shall begin immediately after Final Inspection and Acceptance is completed.
- B. Maintain a healthy growing condition by pruning, watering, cultivating, weeding, mowing, mulching, tightening, and repairing of guys, resetting plants to proper grades or upright position, restoration of plant saucer, and furnishing and applying such sprays as necessary to keep planting free of insects and diseases.
- C. The root system of plants shall be watered by the Contractor as often as conditions require at such intervals as will keep the surrounding soil in best condition for

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promotion of root growth and plant life. Watering is the responsibility of the contractor until the end of the maintenance period and final acceptance.

- D. Keep planting saucers and beds free of weeds, grass, and other undesired vegetation growth. All areas must be 98% weed free upon final acceptance by Orange County Representative.
- E. Protect planting areas and plants against trespassing and damage of any kind for the duration of the maintenance period.
- F. Inspect plants at least once a week and perform maintenance promptly. Replace impaired or dead plants promptly. Do not wait until near the end of the guarantee period to make replacements of plants that have become unacceptable.
- G. Maintain guying/staking and water basins unless otherwise directed by the Orange County Representative until substantially complete.
- H. Water following schedule and when soil moisture is below optimum level for best plant growth. It is the Contractor's responsibility to provide water as may be required above until all trees and palms are well established or to the end of the maintenance period.
- I. Contractor shall be responsible to protect all cold sensitive approved trees stored or planted on-site by approved methods from cold or freeze damage as may be required. Contractor shall use approved horticultural practices typical for the Central Florida area and shall submit intended methods, schedules and plans of protection with required submittals for review and approval. In the event the Orange County Representative verifies that non-protected materials were damaged during a cold period or freeze, the damaged materials shall be replaced by the Contractor at no additional cost to Orange County. The Contractor shall use reasonable measures to protect all cold sensitive plant materials.
- J. The Contractor shall mow performance turf/sod, and maintain all landscaping work for ~~the entire contract duration and a maintenance period of 12 months~~ from right-of-way to right-of-way (including medians) along International Drive and all side streets per the construction limits shown on the plans. The cost of mowing turf/sod, edging and litter removal during the 12 months maintenance period shall be included under pay item 580-3-1 Landscape Maintenance (12 Months).

3.11 CLEANUP

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- A. When appropriate, fill all pits/depressions in holding area and rough grade to meet surrounding elevations. Remove any organic or other debris resulting from the plant relocation process.
- B. Sweep and pressure wash all paved surfaces.
- C. Remove planting debris from project site and holding area.
- D. Remove soil conditioners, soil mixes, gravel, etc. from project site and holding area.
- E. All areas outside of the limits of work that are disturbed by the Contractor's construction activities shall be repaired and replanted to its original condition.

3.12 SUBSTANTIAL COMPLETION, FINAL INSPECTION AND ACCEPTANCE

- A. Inspection of the entire project or designated portions thereof shall be made upon written request of the Contractor. At that time, if all work is satisfactory and complete according to the conditions of the Contract, the Orange County Representative shall declare the work substantially complete.
- B. Contractor's written request for review of the work or any designated portion thereof shall be received by Orange County Representative at least five (5) days before anticipated date of inspection.
- C. Plants that have died or are in unhealthy or badly impaired condition on inspection shall be treated or replaced within 14 days at no additional cost to Orange County. The same warranty applies to replace plant material.
- D. Replace rejected plants within two weeks of inspection.
- E. Acceptance of the work for the entire project or designated portions thereof shall constitute the beginning of Maintenance period.
- F. Contractor's responsibility for maintenance (exclusive of replacement within guarantee period) shall terminate after the 12-month maintenance period described in section 3.10. The contractor shall supply Orange County with three (3) copies of written maintenance records and instructions as required under Paragraph 1.04 of this section.

BASIS OF PAYMENT

All work and incidental costs required to perform the following items as herein specified will be paid for at the contract unit price.

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Payment shall be made under:

Pay Item:

580-1-1A	SMALL PLANTS - (BHJ) DWARF 'HELEN JOHNSON' BOUGAINVILLEA (3 GAL)	EA
580-1-1B	SMALL PLANTS - (RIA) COMPACT INDIAN HAWTHORNE (3 GAL)	EA
580-1-1C	SMALL PLANTS - MULCH, PINE STRAW, 3" DEPTH	SF
580-1-2A	LARGE PLANTS - (PS) SYLVESTRIS PALM (14' C.T.)	EA
580-1-2B	LARGE PLANTS - (WR) WASHINGTONIA PALM (14' C.T.)	EA
580-3-1	LANDSCAPE ESTABLISHMENT AND MAINTENANCE	MO

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IRRIGATION SLEEVE

Landscape Irrigation Sleeve shall include all the items detailed in Sections 555 and 630 of the “Standard Specifications” and all the requirements of FDOT Design Standards – Index No 591, except as directed by the Engineer.

Basis of Payment

Prices and payments shall be full compensation for all the work specified in Sections 555 and 630 as well as FDOT Index No 591, including all the work and incidentals necessary to complete the work.

Payment shall be made under:

Item No. 591-1-1	Irrigation Sleeve, 3” Diameter (Schedule 40)	- LF
Item No. 591-1-2	Irrigation Sleeve, 6” Diameter (Schedule 40)	- LF

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SIGNALIZATION

The signalization shown on the plans shall be constructed in accordance with Sections 603, 620, 630, 632, 634, 635, 639, 641, 649, 650, 653, 660, 665, 670, 671, 676, 678, 690, 699, 780, 782, 783, 785, and 786 of the Standard Specifications, except where noted on the plans and indicated by the following Technical Provisions. All traffic signal equipment shall be listed on the Florida Department of Transportation's Approved Products List or Qualified Products List.

SHOP DRAWINGS

The Contractor shall provide shop drawings for all signalization equipment and installation. These shop drawings will be reviewed and approved by the Engineer prior to the Contractor placing orders for the signalization equipment and beginning construction.

CONDUIT

Conduit shall be furnished and installed according to Section 630 of the "Standard Specifications", the Special Provisions and the plans. The work may include furnishing and installing conduit aboveground, underground, under pavement, underground jacked, and bridge mounted.

SIGNAL AND INTERCONNECT CABLE

Signal and Interconnect Cable shall conform to the requirements of Section 632 of the "Standard Specifications". Interconnect Cable shall consist of a minimum of 36 and a maximum of 72 strands of fiber optic trunk cable. The actual number and type of fiber optic strands will be as shown on the plans. Drop cable shall be 12 fiber optic strands.

SPAN WIRE ASSEMBLIES

Span wire assemblies shall be furnished and installed according to Section 634 of the "Standard Specifications", the Special Provisions and the plans. The work may include furnishing and installing span wire assemblies in diagonal, box or suspended box configurations, and furnishing and installing fiberglass insulators and messenger wire.

PULL AND JUNCTION BOXES

Pull and Junction Boxes shall conform to the requirements of Section 635 of the "Standard Specifications" and shall be listed on the FDOT's Approved Product List (APL). Pull and Junction Boxes shall be marked in accordance with Section 603.

Pull Box Installation

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Pull Boxes shall be installed in accordance with the Roadway and Traffic Design Standards, Index No. 17721. The Pull Box cover shall be flush with the finished grade or sidewalk. Pull Boxes shall not be installed in roadways, driveways, parking areas, ditches, or public sidewalk curb ramps.

General Requirements

Signal or interconnect cables shall not be pulled through a pull box used for loop termination. Use separate pull boxes for signal and interconnect cables.

Ground all metal covers in accordance with Section 620.

Special pull boxes shall be 24" diameter and shall have cable hangers/racks and be capable of storing slack fiber optic cable while maintaining the minimum bend radius of the cable and house the appropriate fiber splice enclosure equipment.

ELECTRICAL POWER SERVICE

Electrical power service assemblies shall be furnished and installed according to Section 639 of the "Standard Specifications", the Special Provisions and the plans. The work may include furnishing and installing overhead and underground electrical power service, electrical service wire, and electrical service disconnects.

PRESTRESSED CONCRETE POLES

Prestressed concrete poles shall be furnished and installed according to Section 641 of the "Standard Specifications", the Special Provisions and the plans. The work may include guying, furnishing and/or installing concrete strain poles.

WOOD STRAIN POLES

Wood strain poles shall be furnished and installed according to the plans and Special Provisions. Wood strain poles shall be treated with preservative as per Section 955 of the "Standard Specifications". The work may include guying, furnishing and/or installing wood strain poles.

MAST ARM/POLE ASSEMBLIES

Mast arm/pole assemblies and foundations shall be designed and installed according to the Florida Department of Transportation's Standard Mast Arm Assemblies drawings and specifications and the plans.

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Mast arm/pole assemblies shall have a galvanized finish in accordance with ASTM A 123 and ASTM A 153, or have a triglycidyl isocyanurate or urethane polyester powder finish coating equivalent in color to Federal Standard FS 27038 (semi gloss black) over the galvanized surface. The finish powder coating shall be electrostatically applied and cured by heating.

Mast arm/pole assemblies shall include all hardware, anchor bolts and foundations necessary for a complete installation.

VEHICULAR SIGNAL ASSEMBLIES

Vehicular signal assemblies shall conform to Section 650 of the standard specifications, except as modified in this technical provision.

All vehicular signal displays (red, amber, green, ball-type and arrow-type) shall have light emitting diode (LED) lamps. Signal heads and LED lamps must be listed on the Florida Department of Transportation's Approved Products List.

PEDESTRIAN SIGNAL ASSEMBLIES

Pedestrian signal assemblies shall conform to Section 653 of the standard specifications, except as modified in this technical provision.

All displays shall be light emitting diode (LED) type with integrated LED countdown displays showing remaining pedestrian clearance time.

Pedestrian signal assemblies must be listed on the Florida Department of Transportation's Approved Products List.

SIGNAL HEAD AUXILIARIES

Signal head auxiliaries shall be furnished and installed according to the plans, standard specifications and Special Provisions. Aluminum and steel pedestal poles installed as part of a signalized intersection shall have a finish to match the steel strain poles or mast arm/poles.

INDUCTIVE LOOP DETECTORS AND LOOP ASSEMBLIES

Inductive loop detectors and loop assemblies shall be furnished and installed according to Section 660 of the "Standard Specifications", the Special Provisions and the plans.

Each loop assembly shall include loop lead-in cable to connect the loop to the loop detector in the controller cabinet.

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VEHICLE DETECTOR ASSEMBLIES

Vehicle Detector Assemblies shall include furnishing and installing Opticom type traffic signal pre-emption equipment or video detection systems.

The traffic signal pre-emption equipment shall be compatible with the Opticom system used by Orange County Fire Rescue. This item shall include all equipment necessary to provide a complete and functioning traffic signal pre-emption system at an intersection.

Video detection systems shall include video cameras and equipment necessary to provide traffic signal vehicle detection at an intersection. Video detection systems must be listed on the Florida Department of Transportation's Approved Products List. All equipment, including supports and methods for mounting video cameras, must be pre-approved by Orange County Traffic Engineering. Video camera supports installed on mast arms shall have a finish similar to the mast arms.

PEDESTRIAN DETECTOR ASSEMBLIES

Pedestrian detector assemblies shall be furnished and installed according to Section 665 of the "Standard Specifications", the Special Provisions and the plans.

DETECTOR CABINET

Detector cabinets shall be furnished and installed according to the plans and Special Provisions. The cabinets shall meet the requirements of FDOT's Minimum Specifications for Traffic Control Signal Devices.

TRAFFIC CONTROLLER ASSEMBLY

Traffic Controller Assemblies shall conform to the requirements of Section 670 of the Standard Specifications and shall be compatible with Orange County's traffic signal system which utilizes Siemens Eagle EPAC controllers and TS 2 Type 1 or 2 cabinets with MMU and fiber optic module. The controllers shall be Nema compatible and be capable of being programmed with up to 6 pre-emption phase movements.

Two types of Traffic Controller Assemblies shall be provided; a Type 5 base mounted cabinet with a minimum of 14 load bays and 16 detector channels, or a Type 4 pole mounted cabinet with 8 load bays and 8 detector channels.

All Controller Assemblies shall include foundations except pole mounted cabinets.

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SYSTEM AUXILIARIES

Microwave radar vehicular detection unit assemblies shall be used for detection of vehicular traffic and shall be installed as shown on the plans and as directed by the Engineer. The detection unit shall be listed on FDOT's Approved Products List.

Aerial cable storage devices (Sno-Shoe) shall be used to store additional lengths of fiber optic cable along the aerial support wire for later use. They shall be designed to protect the minimum bend radius of the fiber optic cable and shall store a minimum of 100' of excess cable.

Aerial cable tree guards shall be used to protect fiber optic cables from mechanical abrasion caused by tree limbs. They shall be applied around the cable and taped at each end. Tree guards shall be 6' in length and constructed of high impact black polyethylene.

REMOVAL OF EXISTING SIGNAL EQUIPMENT

Removal of existing traffic signal equipment shall be done according to Section 690 of the "Standard Specifications", the Special Provisions and the plans. Equipment which is removed shall be delivered to Orange County's Traffic Operations building at 4200 South John Young Parkway, except for those items shown in the plans or required by the Engineer to be removed and disposed of by the Contractor.

INTERNALLY ILLUMINATED SIGNS

Internally illuminated signs shall be furnished and installed according to Section 699 of the "Standard Specifications", the Special Provisions and the plans. Internally illuminated signs shall be double sided and attached to the traffic signal mast arm (using a two point mounting assembly) or attached to a separate clamp-on sign arm attached to a traffic signal pole. The signs shall be illuminated by white LED lamps.

Signs attached to traffic signal mast arms shall include hardware to mount the signs on the mast arms.

Signs attached to sign arms shall include all hardware required to attach the sign and arm to traffic signal poles. The sign arms shall be designed to support the dead load and wind load of the internally illuminated sign without deflecting, and shall have the same finish as the traffic signal pole to which they are attached.

ITS ELECTRICAL POWER SERVICE

ITS electrical power service assemblies shall be furnished and installed according to Section 639 and Section 780 of the "Standard Specifications", the Special Provisions and the

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plans. The work shall include furnishing and installing overhead and underground electrical power service assemblies for ITS devices.

ITS CCTV CAMERA

The CCTV camera assembly shall include a closed-circuit television (CCTV) color camera enclosed in a domed, environmental housing with an integral motorized lens, a camera positioner, an integral receiver/driver, any and all mounting hardware and power supplies, a local control panel (video interface panel), an image encoding device, a control data transceiver, and the required network communication interface device. The camera assembly shall be capable of individual, or local, camera site control by way of a personal digital assistant (PDA) device or a laptop computer. The camera assembly shall conform to Section 782 of the standard specifications.

The camera assembly shall include, but not be limited to, the following components and features:

- A Color CCTV camera with auto focus zoom lens;
- A positioner with the pan-and-tilt unit (PTU) feature;
- A domed, non-pressurized, watertight, environmental housing;
- Domed mounting hardware shall be adapted for retrofit mounting to existing mast arm support poles or existing signal strain poles;
- Coaxial, power, and data/video cables (composite cable) for power supply, images, and camera controls;
- Transient voltage suppression and protection;
- Network communication device patch cords and/or cables;

The camera assembly shall be permanently mounted by way of a vertical mounting hardware arm that attaches the camera assembly directly to an existing mast arm or strain pole. The mounting arm shall be sealed to prohibit moisture and insects from entering the camera assembly.

The pole location and mounting height for each camera assembly shall be approved by the Engineer. Each mounting location shall be selected based on the desired field of view with the least amount of obstructions, and mounting height requirements for the camera assembly.

Each camera assembly installation shall also include multiple lightning transient voltage protection devices, one ahead of the network electronic device assembly and one behind the network electronic device assembly.

The image from each camera site and the control data being transmitted to the camera assembly from the Orange County TMC central computer shall be transmitted over an Ethernet network. The image shall be encoded in the Moving Picture Experts Group's (MPEG) standard

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MPEG-4 digital format at the camera site and decoded with the Orange County TMC head end equipment.

The camera image sensor shall be a 1/4-inch color interline transfer charge coupled device (CCD) that is capable of digital signal processing (DSP) with a 10-bit analog/digital converter. The sensor shall have a composite video of 1.0 volt peak-to-peak (Vp-p). The image sensor shall include a day (color)/night (monochrome) switchover and iris control, both with manual or automatic control capabilities.

The image sensor shall have a minimum resolution of 480 horizontal and 350 vertical television (TV) lines, as required by the NTSC. The sensor's picture elements shall be 768,000 by 494,000 pixels. The sensor shall have full color video sensitivity at a minimum 0.2 Lux faceplate illumination. At a minimum of 0.02 Lux minimum faceplate illumination, the device shall produce an illuminated and useable black and white image with the infra-red (IR) filter removed.

The image sensor shall have selectable automatic gain control that is peak-average adjustable at a 0- to 30-decibel (dB) range, with a minimum signal-to-noise ratio of 50 dB, weighted at 4.5 megahertz (MHz). The image sensor shall have automatic color balance that references the white areas of the scene through the lens and gamma correction with a 0.45 contrast setting. The image sensor shall have an electronic shutter that is selectable from 1/60 to 1/30,000 of a second in eight steps. The image sensor shall have an operating voltage of 24 volts.

The camera lens shall have a minimum 22x optical zoom and a minimum 10x digital zoom. The device shall have the ability to be automatically or manually focused with a focal length of 0.14 to 3.26 inches. The minimum focusing distance shall be a distance of 4 feet. The lens shall also have a minimum aperture of f/1.6 – 3.6mm to 88mm lens and a 1/4- inch with 10 preset position points.

A dome-type environmental housing enclosure shall have an ambient operating temperature of 40 to 122 degrees Fahrenheit (°F) with 95 percent relative humidity. The dome-type environmental housing enclosure shall have a sustained wind load rating of 120 miles per hour (MPH) with a 30 percent gust factor. The dome-type housing's lower section shall be site-coated with Rain-X or an equivalent product prior to final acceptance. The non-pressurized dome shall be vented with a thermostat-controlled, 24-volt heater and blower for moisture control and shall comply with NEMA 4/IP-66 requirements.

The positioner shall be capable of a 360° continuous pan with a 90° tilt. The device shall have a 100° per second manual pan speed and a 100° per second manual tilt speed. The positioner shall have a minimum preset speed/auto pan of 220° per second and a present position return accuracy of 0.3°, or less than 0.10 percent, with a minimum of 64 presets. The positioner shall have a minimum 8 tours, each with a minimum of 32 presets. The positioner shall have a minimum of 8 programmable blackout zones and have an operating voltage of 24 volts.

PART H
TECHNICAL PROVISIONS
International Drive Roadway Improvements
TP 603 – Signalization

ITS FIBER OPTIC CABLE, FIBER OPTIC SPLICE ENCLOSURE, FIBER OPTIC SPLICE TRAY, FIBER OPTIC PATCH PANEL, FIBER OPTIC PATCH CORD/JUMPER CABLE, MULTI-CONDUCTOR COMMUNICATIONS CABLE

Fiber Optic Cable shall conform to the requirements of Section 783 of the Standard Specifications. The number and type of fibers shall be as specified on the plans.

Fiber optic splice enclosures shall employ a complete fiber management system consisting of splice trays and stress relief system. The enclosures shall conform to Section 783 of the standard specifications and be constructed from galvanized steel and designed to accommodate future expansion and contain modular splice organizers/trays capable of handling splices in a neat and distinguishable fashion. All materials and devices necessary (i.e., sealant or gasket set, strain relief hardware, splice tray support, mounting hardware, etc.) to complete the closure / splice system shall be provided.

The fiber optic splice enclosure shall be mounted to the wall of the special pull box, fiber pull box, or aerially as approved by Orange County and designed to be easily accessible for testing and maintenance. The fiber optic splice enclosure shall be capable of accommodating splice trays, organizers and accept up to a maximum of 36 fusion splices and accommodate a minimum of two (2) cable entries at each end allowing for pass through fibers.

In addition to the above, enclosures for aerial splices shall be equipped with a minimum of two (2) sealable drop ports and provide ultraviolet light protection. The fiber optic splice enclosure shall be moisture-tight (non-filled / no encapsulate), fungus resistant (ASTM 21), re-enterrable for system expansion and repair, provide cable storage support, place no stress on finished splices within the trays, provide cable strain-relief, allow for individual splice tray access, and require only ordinary tools and no chemicals for installation and maintenance. The enclosure end caps shall be factory-drilled to the proper diameter to accept and seal the fiber optic cable entries without jeopardizing its waterproof characteristics. The enclosure and all cable entries shall utilize a water-blocking technique that permits total immersion in water for a period of seven (7) continuous days without compromise. Water penetration within the compartment containing the splices constitutes a failure and replacement of the enclosure will be at the Contractor's expense.

Fiber optic splice trays shall be used to secure and manage the optical fibers. They shall have internal routing features that prevent the fibers from bending with a radius smaller than its operating design limits.

Fiber optic patch panels shall be used to terminate fiber optic cables in cabinets as shown on the plans and as directed by the Engineer. The fiber optic patch panels shall conform to Section 783 of the standard specifications. The Contractor shall obtain approval from Orange County Traffic Engineering for the specific panel to be used.

PART H
TECHNICAL PROVISIONS
International Drive Roadway Improvements
TP 603 – Signalization

Fiber optic patch cord/jumper cable shall be used to connect fiber optic equipment in cabinets as shown on the plans and as directed by the Engineer.

The fiber optic patch cord/jumper cable shall conform to Section 783 of the standard specifications. The Contractor shall obtain approval from Orange County Traffic Engineering for the specific patch cord/jumper cable to be used.

The patch cord/jumper cables required may include but are not limited to duplex in ST to ST, SC to SC, or SC to LC connectors, with strain relief, 900 um buffering of each fiber after initial 250 um buffering, ceramic ferrels, aramid yarn strength member, and a minimum bend radius of 12 inches.

Single mode patch cord/jumper cables shall have yellow sheathing. Single mode patch cord/jumper cables shall have yellow sheathing. All patch cord/jumper cables shall be 3 meters in length unless specified otherwise.

Multi-conductor communications cable shall be Category 5e, used primarily for communications and incidental low voltage device power.

ITS FIELD CABINET

ITS field cabinets shall provide an environmentally secure enclosure to house ITS field device equipment, subsystems and systems. The cabinets shall be pole or ground mounted.

The ITS field cabinets shall conform to Section 785 of the standard specifications.

ITS VEHICLE DETECTION SYSTEM

Wireless magnetometer vehicle detection systems shall be used for detection of vehicular traffic and shall be installed as shown on the plans and as directed by the Engineer. The detection system shall be listed on FDOT's Approved Products List.

The detection system shall consist of wireless sensors flush mounted with the roadway surface, access point devices that receive, process and relay sensor data, repeaters that relay data between sensors and access points, and contact closure cards that convert the detection signals to contact closure signals in the traffic signal controller.

PART H
TECHNICAL PROVISIONS
International Drive Roadway Improvements
TP 603 – Signalization

METHOD OF MEASUREMENT

Quantities measured for payment under this Section shall be for each complete traffic control signal system installed at an intersection.

BASIS OF PAYMENT

Signalization will be paid for at the contract lump sum prices for each traffic control signal system installed at an intersection, completed and accepted. The cost of the signal communication system between signals shall be included in the contract price for each intersection signalization. Payment shall constitute full compensation for all work described herein and shown in the plans.

Payment shall be made under:

- 603-1 SIGNALIZATION AT THE INTERSECTION OF INTERNATIONAL DRIVE & S.
WESTWOOD BLVD. - LS
- 603-2 SIGNALIZATION AT THE INTERSECTION OF INTERNATIONAL DRIVE &
AVENIDA VISTA - LS
- 603-3 SIGNALIZATION AT THE INTERSECTION OF INTERNATIONAL DRIVE &
CENTRAL FL. PKWY. - LS
- 603-4 SIGNALIZATION AT THE INTERSECTION OF INTERNATIONAL DRIVE &
AQUATICA DRIVEWAY 1 - LS
- 603-5 SIGNALIZATION AT THE INTERSECTION OF INTERNATIONAL DRIVE &
AQUATICA DRIVEWAY 2 - LS
- 603-6 SIGNALIZATION AT THE INTERSECTION OF INTERNATIONAL DRIVE & SEA
HARBOR DR. - LS
- 603-7 SIGNALIZATION AT THE INTERSECTION OF INTERNATIONAL DRIVE & N.
WESTWOOD BLVD. - LS

PART H
TECHNICAL PROVISIONS
International Drive Roadway Improvements
TP 700

HIGHWAY SIGNING

The furnishing and installing of all Highway Signing as shown on the plans shall conform to the requirements of Section 700 of the Standard Specifications, except as amended herein or as directed by the Engineer. All highway signs shall be of the type specified and installed at the locations shown on the plans.

The materials and methods shall comply with Sections 700-3 through 700-6 of the Standard Specifications and shall be accepted by the Orange County Traffic Engineering Division prior to installation.

Sign posts for single column signs shall be a minimum of 14 gauge 2"x2" square welded steel with 3/8" knockouts on 1" centers on all four sides. The posts shall be listed on the FDOT's Qualified Products List and shall be galvanized and sealed with a polymer topcoat.

Method of Measurement

The quantities measured for payment under this Section shall be in accordance with Article 700-11 of the Standard Specifications.

Basis of Payment

Payment for furnishing and installing highway signs shall be in accordance with Section 700-12 of the Standard Specifications.

Payment shall be made under:

<u>Pay Item:</u>		
700-20-11	SINGLE POST SIGN, F&I, LESS THAN 12 SF	AS
700-20-12	SINGLE POST SIGN, F&I, 12-20 SF	AS
700-20-14	SINGLE POST SIGN, F&I, 21-30 SF	AS
700-20-40	SINGLE POST SIGN, RELOCATE	AS
700-20-60	SINGLE POST SIGN, REMOVE	AS
700-21-11	MULTI- POST SIGN, F&I, 50 SF OR LESS	AS
700-21-12	MULTI- POST SIGN, F&I, 50-100 SF	AS
700-21-60	MULTI- POST SIGN, REMOVE	AS
700-48-38	SIGN PANELS, OVERLAY, 15 OR LESS	EA
700-48-58	SIGN PANEL, REPLACE, 15 OR LESS	EA

PART H
TECHNICAL PROVISIONS
International Drive Roadway Improvements
TP 705 - Object Markers and Delineators

OBJECT MARKERS AND DELINEATORS

The furnishing and installing of all Object Markers and Delineators as shown on the plans shall conform to the requirements of Section 705 of the Standard Specifications, except as amended herein or as directed by the Engineer.

Method of Measurement

The quantities measured for payment under this Section shall be in accordance with Article 705-4 of the Standard Specifications.

Basis of Payment

Payment for furnishing and installing object markers and delineators shall be in accordance with Section 705-5 of the Standard Specifications.

Payment shall be made under:

Pay Item:

705-11-1	DELINEATOR, FLEXIBLE TUBULAR	EA
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PART H
TECHNICAL PROVISIONS
International Drive Roadway Improvements
TP 706 - Raised Retro-Reflective Pavement Markers
and Bituminous Adhesive

RAISED RETRO-REFLECTIVE PAVEMENT MARKERS and BITUMINOUS ADHESIVE

The furnishing and installing of all retro-reflective pavement markers as shown on the plans shall conform to the requirements of Section 706 of the Standard Specifications, except as amended herein or as directed by the Engineer. All retro-reflective pavement markers shall be Class B and the type shall be as shown on the plans.

Method of Measurement

The quantities measured for payment under this Section shall be in accordance with Article 706-6 of the Standard Specifications.

Basis of Payment

Section 706-7 of the Standard Specifications is deleted and the following is substituted:

The quantity for the furnishing and installing of retro-reflective pavement markers shall be paid for at the contract unit price per each.

Payment shall be made under:

<u>Pay Item:</u>		
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	EA

PART H
TECHNICAL PROVISIONS
International Drive Roadway Improvements
TP 711

THERMOPLASTIC TRAFFIC STRIPES AND MARKINGS

The placing of thermoplastic traffic stripes and markings as shown on the plans shall conform to the requirements of Section 711 of the Standard Specifications, except as amended herein or as directed by the Engineer.

Materials

The materials to be used under this Section shall be in accordance with Article 711-2 of the Standard Specifications.

Method of Measurement

The quantities to be paid for under this Section shall be the length measured in linear feet, net miles of Thermoplastic Solid Traffic Stripe or the per each quantity of messages and directional arrows as measured and accepted by the Engineer. The payment shall include all labor and material for the placing of all pavement markings as shown on the plans, including removal of existing pavement markings.

Basis of Payment

The quantity for the placing of the thermoplastic pavement markings shall be paid for at the contract unit price.

Payment shall be made under:

Pay Item:

711-11-111	THERMOPLASTIC, STANDARD, WHITE, SOLID, 6"	NM
711-11-122	THERMOPLASTIC, STANDARD, WHITE, SOLID, 8"	LF
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12"	LF
711-11-124	THERMOPLASTIC, STANDARD, WHITE, SOLID, 18"	LF
711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24"	LF
711-11-131	THERMOPLASTIC, STANDARD, WHITE, 10-30 SKIP, 6"	GM
711-11-151	THERMO., STD, WHITE, DOT/GUIDE/ 6-10 GAP, 6"	LF
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE	EA
711-11-170	THERMOPLASTIC, STANDARD, WHITE, ARROW	EA
711-11-180	THERMO., STANDARD, WHITE, YIELD LINE (SMALL)	LF
711-11-211	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 6"	NM
711-11-251	THERMO, STD, YELLOW, DOT/GUIDE/ 6-10 GAP, 6"	LF

PART H
TECHNICAL PROVISIONS
International Drive Roadway Improvements
TP 783

ITS FIBER OPTIC CABLE, FIBER OPTIC SPLICE ENCLOSURE, FIBER OPTIC SPLICE TRAY, FIBER OPTIC PATCH PANEL, FIBER OPTIC PATCH CORD/JUMPER CABLE, MULTI-CONDUCTOR COMMUNICATIONS CABLE

Fiber Optic Cable shall conform to the requirements of Section 783 of the Standard Specifications. The number and type of fibers shall be as specified on the plans.

Fiber optic splice enclosures shall employ a complete fiber management system consisting of splice trays and stress relief system. The enclosures shall conform to Section 783 of the standard specifications and be constructed from galvanized steel and designed to accommodate future expansion and contain modular splice organizers/trays capable of handling splices in a neat and distinguishable fashion. All materials and devices necessary (i.e., sealant or gasket set, strain relief hardware, splice tray support, mounting hardware, etc.) to complete the closure / splice system shall be provided.

The fiber optic splice enclosure shall be mounted to the wall of the special pull box, fiber pull box, or aerially as approved by Orange County and designed to be easily accessible for testing and maintenance. The fiber optic splice enclosure shall be capable of accommodating splice trays, organizers and accept up to a maximum of 36 fusion splices and accommodate a minimum of two (2) cable entries at each end allowing for pass through fibers.

In addition to the above, enclosures for aerial splices shall be equipped with a minimum of two (2) sealable drop ports and provide ultraviolet light protection. The fiber optic splice enclosure shall be moisture-tight (non-filled / no encapsulate), fungus resistant (ASTM 21), re-entable for system expansion and repair, provide cable storage support, place no stress on finished splices within the trays, provide cable strain-relief, allow for individual splice tray access, and require only ordinary tools and no chemicals for installation and maintenance. The enclosure end caps shall be factory-drilled to the proper diameter to accept and seal the fiber optic cable entries without jeopardizing its waterproof characteristics. The enclosure and all cable entries shall utilize a water-blocking technique that permits total immersion in water for a period of seven (7) continuous days without compromise. Water penetration within the compartment containing the splices constitutes a failure and replacement of the enclosure will be at the Contractor's expense.

Fiber optic splice trays shall be used to secure and manage the optical fibers. They shall have internal routing features that prevent the fibers from bending with a radius smaller than its operating design limits.

Fiber optic patch panels shall be used to terminate fiber optic cables in cabinets as shown on the plans and as directed by the Engineer. The fiber optic patch panels shall conform to Section 783 of the standard specifications. The Contractor shall obtain approval from Orange County Traffic Engineering for the specific panel to be used.

PART H

TECHNICAL PROVISIONS
International Drive Roadway Improvements
TP 900-1

AS-BUILT PLANS

The As-Built Plans shall incorporate all the changes made to the red line As-Built plans. They shall show locations and elevations of paving, swales, ditches, pipe inverts and structures constructed and all relocated or reset property corners, section corners and 1/4 section corners.

Upon the completion of the project, the Contractor shall submit to the County one (1) set of 24"x36" paper Full Size Drawings with Statement of Certifications, certifying that the project was constructed according to the Construction Plans and Specifications, and that the AS BUILT PLANS are correct representation of what was constructed. The plans shall delineate all red line information contained on the As-Built Plans.

The Contractor shall include the Statement of Certification on either the cover sheet certifying all of the sheets or certify each individual sheet. The Statement of Certifications shall be signed and sealed by a Professional Engineer and/or a Professional Surveyor and Mapper, both registered in the State of Florida.

Basis of Payment

As-Built Plans will be paid for at the contract lump sum price, completed and accepted.

Payment shall be made under:

Pay Item:

900-1	As-Built Plans	Lump Sum
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PART H
**TECHNICAL
PROVISIONS**
TP 900-2

INDEMNIFICATION

The Contractor shall indemnify, defend, and hold harmless the COUNTY and all its officers, agents, and employees, from all claims, losses, damages, costs, charges, or expenses arising out of any acts, action, neglect, or omission by the Contractor during the performance of the Contract, whether direct or indirect, and whether to any person or property to which the COUNTY or said parties may be subject, except that neither the Contractor nor any of its subcontractors are liable under this Section for damages arising out of the injury or damage to persons or property directly caused or resulting from the sole negligence of the COUNTY or any of its officers, agents, or employees.

Payment shall be made under:

Pay Item:

900-2

Indemnification

Lump Sum \$100.00

PART H
TECHNICAL PROVISIONS
International Drive Roadway Improvements
TP 900-3 – Groundwater Treatment and Disposal

GROUNDWATER TREATMENT AND DISPOSAL

General

If concentrations of tested groundwater quality parameters exceed those allowable in the Florida Department of Environmental Protection (FDEP) Generic Permit for the Discharge of Produced Groundwater from any Non-Contaminated Site Activity (62-621.300(2), F.A.C.), treatment may be required under this technical provision.

The term treatment as used in this technical provision means the application of all FDEP approved techniques and/or methods available to remove the exceedances out of dewatering effluent except impounding. Impounding is not considered a treatment method for purposes of compensation under this technical provision.

The CONTRACTOR shall include in his/her bid all applicable costs, including monitoring, resulting from treatment and disposal of contaminated groundwater with concentration levels that exceed the allowable limits of the FDEP generic permit, and shall not be entitled to any adjustment in the Contract Price as a result of any change in the permit fees or unanticipated treatment and disposal costs.

Prior to any work commencing, and for the duration of the work, the CONTRACTOR is responsible for meeting all the conditions of the applicable permits and submitting any required reports to the appropriate agencies.

The CONTRACTOR shall dewater only in relation to the location and relocation of facilities owned by the COUNTY. No compensation shall be provided for dewatering performed for facilities that are not owned by the COUNTY.

Permitting

If exceedances are found in the dewatering effluent, the CONTRACTOR will be required to:

1. Immediately notify the COUNTY and report the exceedances that are encountered.
2. Meet with the FDEP to determine any and all alternatives that are acceptable.
3. Obtain prior COUNTY approval of treatment and disposal alternatives.
4. Obtain prior written COUNTY authorization to use pay item TP 900-3-1.
5. Apply and obtain any and all permits and/or treatment approvals that FDEP requires including, but not limited to:
 - a. Generic Permit for Discharges from Petroleum Contaminated Sites (62-621.300(1), F.A.C.). Allows discharges from sites with automotive gasoline, aviation gasoline, jet fuel, or diesel fuel contamination.

PART H
TECHNICAL PROVISIONS
International Drive Roadway Improvements
TP 900-3 – Groundwater Treatment and Disposal

- b. Permit for all Other Contaminated Sites (62-04; 62-302; 62-620 & 62-660, F.A.C.). The coverage is available only through the individual NPDES permit issued by FDEP. Allows discharges from sites with general contaminant issues, i.e. ground water and/or soil contamination other than petroleum fuel contamination.
 - c. Generic Permit for the Discharge of Produced Ground Water from Any Non-Contaminated Site Activity (62-621.300(2), F.A.C.).
 - d. Generic Permit for Stormwater Discharge from Large or Small Construction Activities (62-621.300(4) (a), F.A.C.).
6. Apply and obtain any and all permits and/or treatment approvals that the Water Management District requires including, but not limited to:
- a. No-Notice Short-Term Dewatering Permit (40E-20.302(3), F.A.C.) If the CONTRACTOR'S proposed work is expected to exceed 90 days in duration, or does not meet any of the other requirements listed with the requirements of Rule 40E-20.302(3), the CONTRACTOR must apply for and obtain a Dewatering General Water Use Permit (40E-20.302(2) F.A.C.)

The CONTRACTOR shall not be entitled to file, or recover under, any delay claim based on preparation of permit applications and the time required for obtaining the applicable permits. If, prior to or during the dewatering, it is determined that the disposal or discharge of the dewatering effluent is not authorized by the FDEP's Generic Permit for the Discharge of Produced Ground Water from Any Non-Contaminated Site Activity, the CONTRACTOR shall diligently pursue further required permit(s) from FDEP or other agencies without resort to delay claims or recompense from the COUNTY for either permit application activities or the time required to obtain such permits.

The CONTRACTOR shall consider and anticipate the potential need to obtain the herein discussed permits in developing his schedule, and shall make every effort to avoid or minimize potential impacts to his critical path that might result from delays in dewatering activities due to the time necessary for the CONTRACTOR to obtain the necessary permits. The CONTRACTOR shall make every effort to schedule activities requiring dewatering as late as possible during his schedule, and shall schedule activities not impacted by dewatering as early as possible. For each day, up to a maximum of one hundred eighty (180) days that the CONTRACTOR diligently pursues such permit(s) and is unable to avoid adversely impacting his critical path, a day will be added to the time allotted to the CONTRACTOR to complete performance of the Project.

PART H
TECHNICAL PROVISIONS
International Drive Roadway Improvements
TP 900-3 – Groundwater Treatment and Disposal

Treatment

The CONTRACTOR shall implement the appropriate treatment that is acceptable to FDEP, COUNTY, and, if necessary, the Water Management District to attain compliance for all exceedances encountered during dewatering activities. Treatments may include, but are not limited to: chemical treatment, ion exchange treatment, filtration, and disposal of discharged groundwater in a properly permitted facility.

The CONTRACTOR shall:

1. Make every effort to minimize the spread of contamination into uncontaminated areas;
2. 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;
3. Ensure such provisions adhere to all applicable laws, rules or regulations covering hazardous conditions in a manner commensurate with the level of severity of the conditions;
4. If necessary, provide contamination assessment and remediation personnel to handle site assessment, determine the course of action necessary for site security, and perform the necessary steps under applicable laws, rules, and regulations for additional assessment and/or remediation work to resolve the contamination issue;
5. Delineate the contamination area(s), any staging or holding area required, and develop a work plan that will provide the schedule of projected completion dates for the final resolution of the contamination issue;
6. Maintain jurisdiction over activities inside any delineated contamination areas and any associated staging or holding areas;
7. Be responsible for the health and safety of workers within the delineated areas; and
8. Provide continuous access to representatives of regulatory or enforcement agencies having jurisdiction.

Method of Measurement

Quantities to be paid for under this Section shall be the actual number of calendar days, when Groundwater Treatment & Disposal occurs. This does not include preparation of permit application(s) or time to obtain the permit(s).

Basis of Payment

Groundwater Treatment & Disposal will be paid for at the contract unit price per day. The price and payment for groundwater treatment and disposal shall constitute full compensation for cost of permitting and providing all labor, materials, tools, equipments, monitoring, reporting, treating and disposing of groundwater produced from dewatering systems.

PART H
TECHNICAL PROVISIONS
International Drive Roadway Improvements
TP 900-3 – Groundwater Treatment and Disposal

900-3 GROUNDWATER TREATMENT & DISPOSAL DA