



**INVITATION FOR BID
IFB # 15- 2259CD
44th AVENUE EAST ROADWAY PROJECT- FROM 19TH STREET
COURT EAST TO 30TH STREET EAST**

Manatee County, a political subdivision of the State of Florida, (hereinafter "Owner") will receive sealed bids from individuals, corporations, partnerships, and other legal entities organized under the laws of the State of Florida or authorized to conduct business in the State of Florida.

NON-MANDATORY INFORMATION CONFERENCE

In order to ensure all prospective bidders have sufficient information and understanding of Owner's needs, an Information Conference will be held at: **1:30 PM on August 14, 2015** at the **Manatee County Public Works Complex, 1022 26th Avenue East, Bradenton, FL 34208, Conference Room "A-B"**.. Attendance is not mandatory, but is highly encouraged.

DEADLINE FOR CLARIFICATION REQUESTS: **5:00 PM on August 27, 2015**
Reference Bid Article A.06

BID OPENING TIME AND DATE DUE: **3:00 PM on September 8, 2015**

FOR INFORMATION CONTACT:
Chris Daley, CPPO, CPPB, Contract Specialist
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Manatee County Financial Management Department
Purchasing Division

AUTHORIZED FOR RELEASE: 

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SECTION A
INFORMATION TO BIDDERS

A.01 OPENING LOCATION

Sealed bids will be **publicly opened** at the **Manatee County Purchasing Division, 1112 Manatee Avenue West, Suite 803, Bradenton, Florida 34205** in the presence of Owner officials at the time and date stated, or soon thereafter. All bidders or their representatives are invited to attend the sealed bid opening.

Any bids received after the stated time and date will not be considered. It shall be the sole responsibility of the bidder to have their bid **delivered to the Manatee County Purchasing Division** for receipt on or before the stated time and date. Bidder shall be solely and strictly responsible for its timely delivery to the Purchasing Division. Bids delayed by mail, courier, or bids delayed for any other reason, shall not be considered, shall not be opened at the public opening, and arrangements shall be made for their return at the bidder's request and expense.

A.02 SEALED & MARKED

Bids shall be submitted in **triplicate, one original (marked Original) and two copy/copies (marked Copy)** of your **signed bid** shall be submitted in one **sealed package**, clearly marked on the outside **"Sealed Bid #15-2259CD- 44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East"** along with your company name.

For your convenience, a mailing label is provided with this Invitation for Bid (IFB) package. Or, you may address the package as follows:

Manatee County Purchasing Division
1112 Manatee Avenue West, Suite 803
Bradenton, Florida 34205
Sealed Bid # _____, Title _____

All blank spaces on the bid form must be filled in as noted with amounts extended and totaled and no changes shall be made in the wording of the forms or in the items thereupon. In the event a change is made in your submittal, the bidder shall write its initials by the change. Any bid may be rejected which contains any omissions, alterations, irregularities of any kind, or which shall in any manner fail to conform to the requirements of this IFB.

A bid made by an individual, either in his/her own or proper person or under a trade or firm name, shall be executed under the individual's signature. If made by a partnership, the bid shall be executed by two or more of the general partners. If made by a corporation, the bid shall be executed by its President or other legally authorized corporate officer or agent.

A.03 SECURING BID DOCUMENTS

IFB's and related documents are available on <http://www.mymanatee.org/purchasing> for download in a portable document format (.PDF) file by clicking on "Bids and Proposals" from the Purchasing Division's web page. You may view and print these files using Adobe Reader software. If necessary, you may download a free copy of Adobe Reader from the link provided on the "Bids and Proposals" page.

Additionally, Manatee County collaborates with the Manatee Chamber of Commerce by announcing solicitation opportunities to the Chamber which are then passed to its members.

Manatee County may also use DemandStar to distribute bids. On the DemandStar website, <http://www.DemandStar.com>, click on the tab titled "My DemandStar" for more information regarding this service. Participation in the DemandStar system is not a requirement for doing business with Manatee County.

Complete copies of the IFB and all related documents are available for public inspection at the Manatee County Purchasing Division, 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205, or by calling (941) 749-3014. Appointments are encouraged. Documents are available between the hours of 9:00 AM and 4:00 PM Monday through Friday, with the exception of holidays. A complete set of the IFB documents must be used in preparing bids. Owner assumes no responsibility for errors and misinterpretations resulting from the use of incomplete sets of bid documents.

A.04 EXAMINATION OF BID DOCUMENTS AND SITE(S)

It is the responsibility of each bidder before submitting a bid, to (a) examine the IFB documents thoroughly; (b) visit the Project Site(s) to become familiar with local conditions that may affect cost, progress, performance, or furnishing of the Work; (c) consider federal, state, and local codes, laws, and regulations that may affect costs, progress, performance, or furnishing of the Work; (d) study and carefully correlate bidder's observations with the IFB documents; and (e) notify Owner of all conflicts, errors, or discrepancies in the IFB documents.

Each bidder may, at bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests and studies, and obtain any additional information and data which pertain to the physical conditions at or contiguous to the Project Site(s) or otherwise which may affect cost, progress, performance or furnishing of the Work and which bidder deems necessary to determine his bid for performing and furnishing the Work in accordance with the time, price and other terms and conditions of the IFB documents. Owner will provide each bidder access to the site(s) to conduct such explorations and tests.

Bidder shall fill all holes, clean up and restore the Project Site(s) to its former condition upon completion of such explorations. The lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and other lands designated for use by successful bidder in performing the Work are identified in the IFB documents.

All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by successful bidder. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by Owner unless otherwise provided in the IFB documents.

Inspection of the Project Site(s) is **a requirement** to be considered for award of this bid. Prior to submitting a bid, each bidder shall examine the Project Site(s) and all conditions thereon fully familiarizing themselves with the full scope of the Work. Failure to become familiar with Project Site conditions will in no way relieve the successful bidder from the necessity of furnishing any materials or performing any Work that is required to complete the Project in accordance with the Project Plans and Specifications. Bidder shall acknowledge inspection of the Project Site(s) on his/her signed, submitted Bid Form.

A.05 MODIFICATION OF BID DOCUMENTS

If a bidder wishes to recommend changes to the IFB documents, the bidder shall furnish, in writing, data and information necessary to aid Owner in evaluating the request to modify the IFB documents. Owner is not obligated to make any changes to the IFB documents. Unless an addendum is issued, the IFB documents shall remain unaltered. **Bidders must fully comply with the IFB documents in their entirety.**

A.06 CLARIFICATION & ADDENDA

Each bidder shall examine all IFB documents and shall judge all matters relating to their adequacy and accuracy. Any inquiries, suggestions or requests concerning interpretation, clarification or additional information pertaining to this IFB shall be made through the Manatee County Purchasing Division. Owner shall not be responsible for oral interpretations given by any Owner employee, representative, or others.

5:00 PM on August 27, 2015 shall be the deadline to submit to the Purchasing Division, in writing, all inquiries, suggestions, or requests concerning interpretation, clarification or additional information pertaining to this IFB.

This deadline has been established to maintain fair treatment of all potential bidders, while maintaining progression of the Work.

If any addenda are issued to this IFB, Owner will post the documents on the Purchasing Division's web page at <http://www.mymanatee.org/purchasing>, and then by clicking on "Bids and Proposals". If the original solicitation was broadcast via DemandStar, the addenda will also be broadcast on the DemandStar distribution system to "Planholders" on this web service.

The issuance of a written addendum is the only official method whereby interpretation, clarification or additional information can be given.

It shall be the **responsibility of each bidder, prior to submitting a bid**, to contact the Purchasing Division (see contact information on the cover page) to **determine if any addenda were issued** and to make such addenda a part of their bid.

A.07 LOBBYING

After the issuance of any IFB, prospective bidders or their agents, representatives or persons acting at the request of such bidder shall not contact, communicate with or discuss any matter relating to the IFB with any officer, agent or employee of Manatee County other than the Purchasing Official or the contact identified in this IFB, pursuant to the Manatee County Code of Laws. This prohibition includes copying such persons on all written communication, including email correspondence. This requirement begins with the issuance of an IFB and ends upon execution of the final Agreement or when the IFB has been cancelled. Violators of this prohibition shall be subject to sanctions as provided in the Manatee County Code of Laws.

A.08 UNBALANCED BIDDING PROHIBITED

Owner recognizes that large and/or complex projects will often result in a variety of methods, sources, and prices. However, where in the opinion of Owner such variation does not appear to be justified, given bid requirements and industry and market conditions, the bid will be presumed to be unbalanced. Examples of unbalanced bids will include:

- a. Bids showing omissions, alterations of form, additions not specified, or required conditional or unauthorized alternate bids.
- b. Bids quoting prices that substantially deviate, either higher or lower, from those included in the bids of competitive bidders for the same line item unit costs.
- c. Bids where the unit costs offered are in excess of or below reasonable cost analysis values.

In the event Owner determines that a bid is presumed unbalanced, it will request the opportunity to and reserves the right to, review all source quotes, bids, price lists, letters of intent, etc., which the bidder obtained and upon which the bidder relied upon to develop its bid. Owner reserves the right to reject as nonresponsive any presumptive unbalanced bids where the bidder is unable to demonstrate the validity and/or necessity of the unbalanced unit costs.

A.09 FRONT LOADING OF BID PRICING PROHIBITED

Prices offered for performance and/or acquisition activities which occur early in the Project Schedule, such as mobilization; clearing and grubbing; or maintenance of traffic; that are substantially higher than pricing of competitive bidders within the same portion of the Project Schedule, will be presumed to be front loaded. Front loaded bids could reasonably appear to be an attempt to obtain unjustified early payments creating a risk of insufficient incentive for the bidder to complete the Work or otherwise creating an appearance of an undercapitalized bidder.

In the event Owner determines that a bid is presumed to be front loaded, it will request the opportunity to, and reserves the right to, review all source quotes, bids, price lists, letters of intent, etc., which the bidder obtained and upon which the bidder relied upon to develop the pricing or acquisition timing for these bid items. Owner reserves the right to reject as nonresponsive any presumptive front loaded bids where the bidder is unable to demonstrate the validity and/or necessity of the front loaded costs.

A.10 WITHDRAWAL OF BIDS

Bidders may withdraw bids as follows:

- a. Mistakes discovered before the public bid opening may be withdrawn by written notice from the bidder submitting the bid. This request must be received in the Purchasing Division prior to the time set for delivery and opening of the bids. A copy of the request shall be retained and the unopened bid returned to the bidder; or
- b. After the bids are opened or a selection has been determined, but before an Agreement is signed, a bidder alleging a material mistake of fact may be permitted to withdraw their bid if:
 1. The mistake is clearly evident in the solicitation document; or
 2. Bidder submits evidence which clearly and convincingly demonstrates that a mistake was made. Request to withdraw a bid must be in writing and approved by the Purchasing Official.

A.11 IRREVOCABLE OFFER

Any bid may be withdrawn up until the time and date set for opening of the bid. Any bid not so withdrawn shall, upon opening, constitute an irrevocable offer for a period of ninety (90) days to sell to Manatee County the goods or services set forth in the attached IFB until one or more of the bids have been duly accepted by Owner.

A.12 BID EXPENSES

All expenses for making bids to Owner are to be borne by the bidder.

A.13 RESERVED RIGHTS

Owner reserves the right to accept or reject any and/or all bids, to waive irregularities and technicalities, and to request resubmission. Also, Owner reserves the right to accept all or any part of the bid and to increase or decrease quantities to meet additional or reduced requirements of Owner. Any sole response received by the first submission date may or may not be rejected by Owner depending on available competition and current needs of Owner. For all items combined, the bid of the lowest, responsive, responsible bidder will be accepted, unless all bids are rejected.

The lowest, responsible bidder shall mean that bidder who makes the lowest bid to sell goods and/or services of a quality which meets or exceeds the quality of goods and/or services set forth in the IFB documents or otherwise required by Owner.

To be responsive, a bidder shall submit a bid which conforms in all material respects to the requirements set forth in the IFB.

To be a responsible bidder, the bidder shall have the capability in all respects to perform fully the bid requirements, and the tenacity, perseverance, experience, integrity, reliability, capacity, facilities, equipment, and credit which will assure good faith performance.

Also, Owner reserves the right to make such investigation as it deems necessary to determine the ability of any bidder to furnish the service requested. Information Owner deems necessary to make this determination shall be provided by the bidder. Such information may include, but shall not be limited to current financial statements, verification of availability of equipment and personnel, and past performance records.

A.14 APPLICABLE LAWS

Bidder must be authorized to transact business in the State of Florida. All applicable laws and regulations of the State of Florida and ordinances and regulations of Manatee County will apply to any resulting Agreement. Any involvement with the Manatee County Purchasing Division shall be in accordance with the Manatee County Purchasing Ordinance as amended.

A.15 COLLUSION

By submitting a bid to this IFB, bidder certifies that it has not divulged, discussed or compared its bid with any other bidder, and has not colluded with any other bidder or parties to this bid whatsoever. Also, bidder certifies, and in the case of a joint bid each party thereto certifies as to their own organization, that in connection with this bid:

- a. any prices and/or cost data submitted have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices and/or cost data, with any other bidder or with any competitor;
- b. any prices and/or cost data quoted for this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder, prior to the scheduled opening, directly or indirectly to any other bidder or to any competitor;
- c. no attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition;

- d. the only person or persons interested in this bid, principal or principals is/are named therein and that no person other than therein mentioned has any interest in this bid or in the resulting Agreement to be entered into; and
- e. no person or agency has been employed or retained to solicit or secure the resulting Agreement upon an agreement or understanding or a commission, percentage, brokerage, or contingent fee except bona fide employees or established commercial agencies maintained by bidder for purpose of doing business.

A.16 CODE OF ETHICS

With respect to this bid, if any bidder violates, directly or indirectly, the ethics provisions of the Manatee County Purchasing Ordinance and/or Florida criminal or civil laws related to public procurement, including but not limited to Chapter 112, Part III, Code of Ethics for Public Officers and Employees, Florida Statutes, such bidder will be disqualified from eligibility to perform the Work described in this IFB, and may also be disqualified from furnishing future goods or services to, and from submitting any future bids to supply goods or services to, Manatee County.

By submitting a bid, the bidder represents to Owner that all statements made and materials submitted are truthful, with no relevant facts withheld. If a bidder is determined to have been untruthful in their bid or any related presentation, such bidder will be disqualified from eligibility to perform the Work described in this IFB, and may also be disqualified from furnishing future goods or services to, and from submitting any future bids to supply goods or services to, Manatee County.

A.17 PUBLIC CONTRACTING AND ENVIRONMENTAL CRIMES

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime, as that term is defined in Section 287.133, Florida Statutes, may not submit a bid to provide any goods or services to a public entity; may not submit a bid 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 consultant under an agreement with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, Florida Statutes, for CATEGORY TWO for a period of thirty-six (36) months following the date of being placed on the convicted list.

In addition, the Manatee County Code of Laws prohibits the award of any bid to any person or entity who/which has, within the past five (5) years, been convicted of, or admitted to in court or sworn to under oath, a public entity crime or of any environmental law that, in the reasonable opinion of the Purchasing Official, establishes reasonable grounds to believe the person or business entity will not conduct business in a responsible matter.

To ensure compliance with the foregoing, the Code requires all persons or entities desiring to do business with Owner to execute and file with the Purchasing Official an

affidavit, executed under the pain and penalties of perjury, confirming that person, entity and any person(s) affiliated with the entity, does not have such a record and is therefore eligible to seek and be awarded business with Owner. In the case of a business entity other than a partnership or a corporation, such affidavit shall be executed by an authorized agent of the entity. In the case of a partnership, such affidavit shall be executed by the general partner(s). A Public Contracting and Environmental Crimes Certification form is attached herein for this purpose.

A.18 BID FORMS

Bids must be submitted on the provided forms, although additional pages may be attached. **Bidders must fully complete all pages of the Bid Forms. Bid Forms must be executed by an authorized signatory who has the legal authority to make the bid and bind the company. Bidders must fully comply with all requirements of this IFB in its entirety.** Failure to comply shall result in bidder being deemed nonresponsive.

A.19 AGREEMENT FORMS

The Agreement resulting from the Acceptance of a bid shall be in the form of the Agreement stated in this IFB, which is attached herein.

A written notice confirming award or recommendation thereof will be forwarded to the successful bidder accompanied by the required number of unsigned counterparts of the Agreement. Within ten (10) days thereafter, successful bidder shall sign and deliver the required number of counterparts of the Agreement with any other required documents to Owner. (Note: Agreement must be approved in accordance with Chapter 2-26 of the Manatee County Code of Laws and the Administrative Standards and Procedures Manual approved by the County Administrator).

A.20 LEGAL NAME

Bids shall clearly indicate the legal name, address and telephone number of the bidder on the Bid Form. Bid Forms shall be signed above the typed or printed name and title of the signer. The signer must have the authority to bind the bidder to the submitted bid.

When bidder is a partnership, the Bid Form shall be signed in the name of the firm and by all partners required under the terms of the partnership agreement. When a corporation is a bidder, the authorized corporate officers shall sign.

Bidders who are corporations or limited partnerships shall provide a certified copy of their permit to transact business in the State of Florida, preferably along with the Bid Form, or within forty-eight (48) hours after request by Owner.

When submitting a bid as a joint venture, it must have filed paper documents with the Division of Profession's Construction Industry Licensing Board prior to submitting a bid.

A.21 DISCOUNTS

Any and all discounts must be incorporated in the prices contained in the bid and not shown separately. The prices indicated on the Bid Form shall be the prices used in determining award.

A.22 TAXES

Manatee County is exempt from Federal Excise and State Sales Taxes. (F.E.T. Cert. No. 59-78-0089K; Florida Sales Tax Exempt Cert. No. 85-8012622206C-6); therefore, the bidder is prohibited from delineating a separate line item in his bid for any sales or service taxes. Nothing herein shall affect the bidder's normal tax liability.

The Contractor shall be responsible for the payment of taxes of any kind and character, including, but not limited to sales, consumer, use, and other similar taxes payable on account of the work performed and materials furnished under the award in accordance with the laws and Regulations of the place of the project which are applicable during the performance of the work. Nothing herein shall affect the bidder's normal tax liability.

A.23 DESCRIPTIVE INFORMATION

Unless otherwise specifically provided in the IFB documents, all equipment, materials and articles provided shall be new and of the most suitable grade for the purpose intended. Unless otherwise specifically provided in the IFB documents, reference to any equipment, material, article or patented process, by trade name, brand name, make or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition.

A.24 AUTHORIZED PRODUCT REPRESENTATION

The bidder, by virtue of submitting the name and specifications of a manufacturer's product, will be required to furnish the named manufacturer's product. Failure to perform accordingly may, in Owner's sole discretion, be deemed a material breach of the resulting Agreement, and shall constitute grounds for Owner's immediate termination of the resulting Agreement.

A.25 ROYALTIES AND PATENTS

The successful bidder shall pay all royalties and license fees for equipment or processes in conjunction with the equipment and/or services being furnished. Successful bidder shall defend all suits or claims for infringement of any patent, trademark or copyright, and shall save Owner harmless from loss on account thereof, including costs and attorney's fees.

A.26 AMERICANS WITH DISABILITIES ACT

Owner does not discriminate upon the basis of any individual's disability status. This non-discrimination policy involves every aspect of Owner's functions including one's access to, participation, employment, or treatment in its programs or activities. Anyone requiring **reasonable accommodation** for an Information Conference or Bid Opening should contact the person named on the cover page of this IFB document at least twenty-four (24) hours in advance of either activity.

A.27 EQUAL EMPLOYMENT OPPORTUNITY CLAUSE

In accordance with the provisions of Title VI of the Civil Rights Act of 1964 and Title 15, Part 8 of the Code of Federal Regulations, Owner hereby notifies all bidders that they will affirmatively ensure minority business enterprises will be afforded full opportunity to participate in response to this advertisement and will not be discriminated against on the grounds of race, color or national origin in consideration for bid award.

A.28 MBE/DBE

The State of Florida Office of Supplier Diversity provides the certification process and the database for identifying certified MBE/DBE firms. This service may be directly accessed at: <http://www.osd.dms.state.fl.us/iframe.htm>. If you have any questions regarding this State service, please contact their office at (850) 487-0915.

A.29 MATHEMATICAL ERRORS

Bid Forms without mathematical formulas:

In the event of multiplication/extension error(s), the unit price shall prevail. In the event of addition error(s) the extension totals will prevail. In the event the dollar amount for contract contingency is omitted, it will be added to the total price of the bid.

Bid Forms with mathematical formulas:

Interactive Bid Forms that contain mathematical formulas may be used for automating lengthy and complex bid forms. In the event these forms are used and a multiplication/extension error(s) is discovered, the unit price entered by the vendor shall prevail. The vendor shall assume the responsibility and accuracy of the information input in the bid form and therefore shall verify that the calculations are correct before submitting their bid.

Regardless of which type of bid form is used, all bids shall be reviewed mathematically and corrected, if necessary, using these standards, prior to additional evaluation.

A.30 SUBCONTRACTORS, SUPPLIERS AND OTHERS

The identity of Subcontractors, suppliers, and other persons and organizations (including those who are to furnish the principal items of material and equipment) may be requested by Owner for each bid item from any of the bidders; and the bidder shall respond within five (5) days after the date of such request. Such list shall be accompanied by an experience statement with pertinent information regarding similar Work and other evidence of qualification for each such Subcontractor, supplier, persons or organization if requested by Owner. If Owner, after due investigation, has reasonable objection to any proposed Subcontractor, supplier, other person or organization, Owner may, before the notice of intent to award is given, request the successful bidder to submit an acceptable substitute without an increase in Contract Sum or Contract Time.

If successful bidder declines to make any such substitution, Owner may award the resulting Agreement to the next lowest qualified bidder that proposes to use acceptable Subcontractors, suppliers, and other persons who Owner does not make written objection to. Successful bidder shall not be required to employ any Subcontractor,

supplier, other person or organization who successful bidder has reasonable objection to.

Subcontractors shall be bound by the terms and conditions of the resulting Agreement insofar as it applies to their Work, but this shall not relieve the successful bidder from the full responsibility to Owner for the proper completion of all Work to be executed under the resulting Agreement.

A.31 DISCLOSURE

Upon receipt, all inquiries and responses to inquiries related to this IFB become "Public Records", and shall be subject to public disclosure consistent with Florida Statutes, Chapter 119.

Bids become subject to disclosure thirty (30) days after the opening or if a notice of intent to award decision is made earlier than this time as provided by Florida Statutes § 119.071(1)(b). No announcement or review of the bid shall be conducted at the public bid opening.

Based on the above, Owner will receive bids at the time and date stated and will make public at the opening the names of the business entities of all that submitted a bid and any amount presented as a total offer without any verification of the mathematics or the completeness of the bid.

If Owner rejects all bids and concurrently notices its intent to reissue the solicitation, the rejected bids are exempt from public disclosure until such time as Owner provides notice of an intended decision concerning the reissued solicitation or until Owner withdraws the reissued solicitation. A bid is not exempt for longer than twelve (12) months after the initial notice rejecting all bids.

Pursuant to Section 119.0701, Florida Statutes, in any Agreement entered into by Owner wherein the successful bidder is acting on behalf of Owner, successful bidder must:

- a. Keep and maintain public records that ordinarily and necessarily would be required by Owner in order to perform the service.
- b. Provide the public with access to public records on the same terms and conditions that Owner would provide and at a cost that does not exceed the cost provided in Florida Statutes, Chapter 119, or as otherwise provided by law.
- c. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law.

- d. Meet all requirements for retaining public records and transfer, at no cost, to Owner all public records in possession of successful bidder upon termination of the awarded Agreement and/or PO and destroy any duplicate public records that are exempt or confidential from public records disclosure requirements. All records stored electronically must be provided to Owner in a format that is compatible with Owner's information technology systems.

A.32 LOCAL PREFERENCE

Local business is defined as a business legally authorized to engage in the sale of the goods and/or services to be procured, and which certifies within its bid that for at least six (6) months prior to the announcement of the solicitation of bids it has maintained a physical place of business in Manatee, Desoto, Hardee, Hillsborough, Pinellas or Sarasota County with at least one full-time employee at that location.

Local preference shall not apply to the following categories of Agreements:

1. Purchases or Agreements which are funded, in whole or in part, by a governmental or other funding entity, where the terms and conditions of receipt of the funds prohibit the preference.
2. Any bid announcement which specifically provides that the general local preference policies set forth in this section are suspended due to the unique nature of the goods or services sought, the existence of an emergency as found by either the County Commission or County Administrator, or where such suspension is, in the opinion of the County Attorney, required by law.

To qualify for local preference under this section, **a local business must certify to Owner** by completing an **"Affidavit as to Local Business Form"**, which is available for download at www.mymanatee.org/vendor. Click on "Affidavit for Local Business" to access and print the form. Complete, notarize, and mail the notarized original to the following address: Manatee County Purchasing Division, 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205.

It is the responsibility of the bidder to ensure accuracy of the Affidavit as to Local Business and notify Owner of any changes affecting same.

A.33 VENDOR REGISTRATION

Registering your business with Manatee County will enhance our opportunities to identify sources for goods and services, plus identify local businesses. This information is used for soliciting quotations up to \$250,000.00 and for competitive solicitations of larger purchases.

Our staff can assist you with your registration as needed. Our office hours are 8:00 A.M. to 5:00 P.M., Monday through Friday on regular business days. Please call (941) 749-3014 if you wish to have a Purchasing staff member assist you.

Quick steps to registration: www.mymanatee.org/purchasing

A link to Vendor Registration is listed on the Purchasing Division's web page under "Register as a Vendor". Click on "Vendor Registration Form" for on-line input.

Registration is not mandatory; however, by taking the time to register, you are helping Owner to provide timely notification of quotation, bid and proposal opportunities to your business.

A.34 BE GREEN

All bidders are encouraged to use as many **environmentally preferable** "green" products, materials, supplies, etc. as possible in order to promote a safe and healthy environment. **Environmentally preferable are products or services that have a reduced adverse effect on the environment.** Where all other evaluative factors, including local preference policies, are otherwise equal, such policies and practices will be a determinative factor in the award decision.

Provide detail of your organization's initiative and its ability to meet the goal of environmental sustainability.

A.35 ePAYABLES

Manatee County and Clerk of the Circuit Court have partnered to offer the ePayables program, which allows payments to be made to vendors via credit cards. The Clerk will issue a unique credit card number to each vendor; the card has a zero balance until payments have been authorized.

After goods are delivered or services rendered, vendors submit invoices to the remit to address on the purchase order according to the current process. When payments are authorized, an email notification is sent to the vendor. The email notification includes the invoice number(s), invoice date(s), and amount of payment. There is no cost for vendors to participate in this program; however, there may be a charge by the company that processes your credit card transactions.

If you are interested in participating in this program, please complete the ePayables Application attached herein and return the completed form via email to Ms. Lori Bryan, Supervisor at lori.bryan@manateeclerk.com.

NOTE: ANY OR ALL STATEMENTS CONTAINED IN THE FOLLOWING SECTIONS: SCOPE OF WORK, BID SUMMARY, CONSTRUCTION AGREEMENT FOR STIPULATED SUM, AND GENERAL CONDITIONS OF THE CONSTRUCTION AGREEMENT, WHICH VARY FROM THE INFORMATION TO BIDDERS, SHALL HAVE PRECEDENCE.

END OF SECTION A

SECTION B
SCOPE OF WORK

B.01 SCOPE OF WORK

The Work included in this Bid consists of constructing a four (4) lane road on 44th Avenue East from 19th Street Court East to 30th Street East to include drainage, sidewalks, curbs, gutters, and signalization per the plans and specifications.

The Work for this project shall be done in accordance with Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction (2014 Edition), and all Supplemental Specifications thereto except as amended under this Invitation for Bid. The Work shall follow the most current Manatee County Public Works Utility Standards and Specifications for all water main, reclaimed water main, sanitary sewer, and force main work.

The successful Bidder shall furnish all Shop Drawings, working drawings, labor, materials, equipment, tools, services and incidentals necessary to complete all Work required by the Invitation for Bids documents.

The successful Bidder shall perform the Work complete, in place and ready for continuous service and shall include any repairs, replacements, and/or restoration required as a result of damages caused prior to acceptance by County.

The successful Bidder shall furnish and install all materials, equipment and labor which is reasonably and properly inferable and necessary for the proper completion of the Work, whether specifically indicated in the Bid Documents or not.

B.02 COMPLETION OF WORK

The Work will be completed and ready for final inspection within the specified calendar days from the date the contract time commences to run. Two bids shall be considered, **Bid "A"** based on **450 calendar days** and **Bid "B"** based on **630 calendar days**. County has the sole authority to select the bid based on the completion time which is in the best interest of County. **Only one award shall be made.**

B.03 LIQUIDATED DAMAGES

If the successful bidder fails to achieve Substantial Completion of the Work within the Contract Time and as otherwise required by the Contract Documents, the Owner shall be entitled to retain or recover from the successful bidder, as liquidated damages and not as a penalty, the sum of **\$4,624.00** per calendar day, commencing upon the first day following expiration of the Contract Time and continuing until the actual date of Substantial Completion. Such liquidated damages are hereby agreed to be a reasonable estimate of damages the Owner will incur as a result of delayed completion of the Work. The Owner may deduct liquidated damages as described in this paragraph from any unpaid amounts then or thereafter due the successful bidder under this Agreement. Any liquidated damages not so deducted from any unpaid amounts due the successful bidder shall be payable to the Owner at the demand of the Owner, together with interest from the date of the demand at the maximum allowable rate.

B.04 CONTRACT CONTINGENCY WORK

Contract contingency is a monetary allowance used solely at Owner's discretion to handle unexpected conditions as required to satisfactorily complete the Work in accordance with the IFB documents. A Field Directive must be issued by an authorized Owner representative to authorize use of contract contingency funds.

The percentage for contract contingency is listed on the Bid Form. Bidder shall enter the dollar amount for contract contingency based on the percentage of the total base bid. The total contract award will include contract contingency.

Appropriate uses of contract contingency include increases to existing bid item quantities that do not change the initial scope of Work, which may be directed by staff; modification items not originally bid which were unforeseen yet necessary during the Work to provide a safe, complete Project and that do not change the initial scope of Work; and unanticipated conflicts and/or design changes required during construction which are necessary to provide a safe, complete Project and that do not change the initial scope of Work.

Inappropriate uses of contract contingency include anything that changes the initial scope of Work, including the Contract Sum and Contract Time, and adding bid items not previously contemplated that change the initial scope of Work.

END OF SECTION B

SECTION C **BID SUMMARY**

C.01 MINIMUM QUALIFICATIONS OF BIDDERS

No person who is not certified or registered as a General Contractor pursuant to Chapter 489, Florida Statutes, on the day the bid is submitted, and who has continuously held that certification or registration for a period of at least three (3) consecutive years immediately prior to the day the bid is submitted, may be qualified to bid on this Work. In the event that a bidder is a business organization, including a partnership, corporation, business trust or other legal entity as set forth in Section 489.119(2), Florida Statutes, then the bidder shall only be qualified to bid on this Work if: 1) the bidder (the business organization) is on the day the bid is submitted, and for at least three (3) consecutive years immediately prior to the day the bid is submitted has been, in continuous existence, properly licensed and registered as required by Florida law; and 2) the bidder, on the day the bid is submitted, has a certified or registered Qualifying Agent, as required by Section 489.119, Florida Statutes, and that Qualifying Agent has been the same Qualifying Agent of the bidder for a period of at least three (3) consecutive years immediately prior to the day the bid is submitted.

The Bidding Contractor (company supplying the Bid) shall have a minimum of three (3) years' experience in roadway construction, which is the subject of this Invitation for Bid, to be considered for award.

C.02 BASIS OF AWARD

Award shall be to the lowest, responsive, responsible bidder having the lowest total offer for **Bid "A"**, or the lowest total offer for **Bid "B"**, for the requirements listed on the Bid Form for the Work as set forth in this IFB. Bid prices shall include costs for furnishing all labor, equipment and/or materials for the completion of the Work in accordance with and in the manner set forth and described in the IFB documents to County's satisfaction within the prescribed time.

Two schedules for completion of Work shall be considered. Each bid for completion by the specified stated time shall be offered as a separate "total offer". County has the sole authority to select the bid based on the completion time which is in the best interest of County. Only one award shall be made.

NOTE: Inspection of the site is a pre-requisite to be considered for award of this bid.

In evaluating bids, Owner shall consider the qualifications of the bidders; and if required, may also consider the qualifications of the Subcontractors, suppliers, and other persons and organizations proposed. Owner may also consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the Work.

Whenever two or more bids are equal with respect to price, the bid received from a local business shall be given preference in award.

Whenever two or more bids are equal with respect to price, and all other evaluative factors are otherwise equal, including local preference policies, if the company provides documented environmentally preferable “green” products, materials, or supplies, they shall be given preference in award.

Whenever two or more bids which are equal with respect to price are received, and neither of these bids are from a local business, and neither of these bids provides documented “green” products, the award shall be determined by a chance drawing, coin toss, or similar tie-breaking method conducted by the Purchasing Division and open to the public.

END OF SECTION C

SECTION D

INSURANCE AND BONDING REQUIREMENTS

The successful bidder will not commence Work under the resulting Agreement until all insurance under this section, and such insurance coverage as might be required by Owner, has been obtained. The successful bidder shall obtain, and submit to the Purchasing Division within ten (10) calendar days from the date of notice of intent to award, at his expense, the following minimum amounts of insurance (inclusive of any amounts provided by an umbrella or excess policy):

Insurance / Bond Type	Required Limits
1. <input checked="" type="checkbox"/> Automobile Liability:	Bodily Injury and Property Damage, Owned/Non-Owned/Hired; Automobile included \$ <u>1,000,000</u> each occurrence/ \$ <u>2,000,000</u> aggregate <i>This policy shall contain severability of interests' provisions.</i>
2. <input checked="" type="checkbox"/> Commercial General Liability: (Occurrence Form - patterned after the current ISO form)	Bodily Injury and Property Damage \$ <u>1,000,000</u> single limit per occurrence; \$ <u>2,000,000</u> aggregate This shall include Premises and Operations; Independent Contractors; Products and Completed Operations and Contractual Liability. <i>This policy shall contain severability of interests' provisions.</i>
3. <input checked="" type="checkbox"/> Employer's Liability:	\$ <u>100,000</u> single limit per occurrence
4. <input checked="" type="checkbox"/> Worker's Compensation:	Statutory Limits of Chapter 440, Florida Statutes, and all Federal Government Statutory Limits & Requirements
5. <input type="checkbox"/> Other Insurance, as noted:	<p>a. <input type="checkbox"/> Aircraft Liability \$ _____ per occurrence Coverage shall be carried in limits of not less than \$5,000,000 each occurrence if applicable to the completion of the services under this Agreement.</p> <p>b. <input type="checkbox"/> Installation Floater \$ _____ If the resulting Agreement does not include construction of or additions to above ground building or structures, but does involve the installation of machinery or equipment, successful bidder shall provide an "Installation Floater" with the minimum amount of insurance to be 100% of the value of such addition(s), building(s), or structure(s).</p> <p>c. <input type="checkbox"/> Maritime Coverage (Jones Act) \$ _____ per occurrence Coverage shall be maintained where applicable to the completion of the Work.</p>

Insurance / Bond Type	Required Limits
	<p>d. <input type="checkbox"/> Pollution \$ _____ per occurrence</p> <p>e. <input type="checkbox"/> Professional Liability \$ _____ per claim and in the aggregate</p> <ul style="list-style-type: none"> • \$1,000,000 per claim and in the aggregate • \$2,000,000 per claim and in the aggregate <p>f. <input type="checkbox"/> Project Professional Liability \$ _____ per occurrence</p> <p>g. <input type="checkbox"/> Property Insurance \$ _____</p> <p>If the resulting Agreement includes construction of or additions to above ground buildings or structures, bidder shall provide “Builder’s Risk” insurance with the minimum amount of insurance to be 100% of the value of such addition(s), building(s), or structure(s).</p> <p><i>To the extent that property damage is covered by commercial insurance, Owner and successful bidder agree to waive all subrogation rights against each other, except such rights as they may have to the proceeds of such insurance. Successful bidder shall require a similar waiver of subrogation from each of its bidder personnel and sub-consultants, to include Special Consultants; successful bidder shall provide satisfactory written confirmation to Owner of these additional waivers.</i></p> <p>h. <input type="checkbox"/> U.S. Longshoreman’s and Harborworker’s Act Coverage shall be maintained where applicable to the completion of the Work.</p> <p>i. <input type="checkbox"/> Valuable Papers Insurance \$ _____ per occurrence</p> <p>j. <input type="checkbox"/> Watercraft \$ _____ per occurrence</p>
6. <input checked="" type="checkbox"/> Bid Bond:	Bid bond shall be submitted by bidder for 5% of the total amount of the bid.
7. <input checked="" type="checkbox"/> Payment and Performance Bond:	Payment and Performance Bond shall be submitted by bidder for 100% of the award amount. \$ _____

Reviewed by Risk: SRK

INSURANCE REQUIREMENTS

The amounts and types of insurance coverage shall conform to the minimum requirements set forth in this Exhibit, with the use of Insurance Services Office (ISO) forms and endorsements or their equivalents. If successful bidder has any self-insured retentions or deductibles under any of the listed minimum required coverage, successful bidder must identify on the certificate of insurance the nature and amount of such self-insured retentions or deductibles and provide satisfactory evidence of financial responsibility for such obligations. All self-insured retentions or deductibles will be successful bidder's sole responsibility.

Nothing herein shall in any manner create any liability of Owner in connection with any claim against the successful bidder for labor, services, or materials, or of Subcontractors; and nothing herein shall limit the liability of the successful bidder or successful bidder's sureties to Owner or to any workers, suppliers, material men or employees in relation to the resulting Agreement.

Builder's Risk Coverage. The successful bidder shall procure and maintain during the entire course of the Work a builder's risk policy, completed value form, insured to provide coverage on an all risk basis, including coverage for off-site stored materials and including coverage for theft. This coverage shall not be lapsed or cancelled because of partial Acceptance by the Owner prior to final Acceptance of the Project. Successful bidder shall recommend to Owner any additions to the Project Costs resulting from any casualty described in Article XII General Conditions of the Construction Agreement, including those costs, expenses and other charges (including normal and ordinary compensation to the successful bidder) necessary for reconstruction of the Project substantially in accordance with the Project Plans and Specifications. The nature, level and type of builder's risk coverage (including completed value or replacement cost coverage) shall be determined by Owner through insurers selected by successful bidder and approved by Owner.

Excess Policy or Umbrella. An excess policy or umbrella may be used to cover limits over and above Commercial General Liability.

Subcontractor's Public Liability and Property Damage Insurance. The successful bidder shall require each Subcontractor to procure and maintain during the term of the subcontract, insurance of the type specified above, or insure the activities of Subcontractors in its policy, as approved by Owner prior to performance of any services. The levels of coverage as set forth in the table above may be adjusted to require a reduced level of coverage consistent with the scope of Work to be provided by that particular Subcontractor. Any reduction in the levels of insurance coverage required by the successful bidder's standard form of subcontract shall be approved by the Owner.

Waiver of Subrogation. Owner and successful bidder waive against each other and the Owner's separate Vendors, Contractors, Design Consultants, Subcontractors agents and employees of each and all of them, all damages covered by property insurance provided herein, except such rights as they may have to the proceeds of such insurance. The successful bidder and Owner shall, where appropriate, require similar waivers of subrogation from the Owner's separate Vendors, Design Consultants and Subcontractors and shall require each of them to include similar waivers in their contracts.

Worker's Compensation Insurance. The successful bidder shall procure and maintain during the term of the Contract Documents, workers' compensation insurance for all its employees connected with the Work and shall require all Subcontractors similarly to provide workers' compensation insurance for all their employees unless such employees are covered by the protection afforded by successful bidder. Such insurance shall comply with the Florida Workers' Compensation Law. The successful bidder shall provide adequate insurance, satisfactory to Owner, for the protection of employees not otherwise protected.

By way of its submission of a bid hereto, bidder:

- a. Represents that bidder maintains, and will maintain during the term of any Agreement arising from this solicitation, all insurance coverage required herein from responsible companies duly authorized to do business under the laws of the State of Florida that hold a rating of "A-" or better by Best's Key Guide, latest edition, and are deemed acceptable to Owner as set forth in this solicitation.
- b. Agrees that insurance, as specified herein, shall remain in force and effect without interruption from the date of commencement of the Work throughout the duration of the Project, and shall remain in effect for at least two (2) years after the termination of the Contract Documents.
- c. Agrees that if the initial or any subsequently issued certificate of insurance expires prior to completion of the Work, successful bidder shall furnish to Owner renewal or replacement certificate(s) of insurance no later than ten (10) calendar days after the expiration date on the certificate. Failure of successful bidder to provide Owner with such renewal certificate(s) shall be considered justification for Owner to terminate any and all Agreements.
- d. Agrees that bidder and/or its insurance carrier shall provide thirty (30) days written notice to Owner of policy cancellation or non-renewal on the part of the insurance carrier or the successful bidder. Successful bidder shall also notify Owner, in a like manner, within twenty-four (24) hours after receipt, of any notices of expiration, cancellation, non-renewal or material change in coverage or limits received by successful bidder from its insurer and nothing contained herein shall relieve successful bidder of this requirement to provide notice. In the event of a reduction in the aggregate limit of any policy to be provided by successful bidder hereunder, successful bidder shall immediately take steps to have the aggregate limit reinstated to the full extent permitted under such policy.
- e. Agrees that failure of successful bidder to obtain and maintain proper amounts of insurance at all times as called for herein shall constitute a material breach of the resulting Agreement, which may result in immediate termination.
- f. Agrees that, should at any time the successful bidder not maintain the insurance coverage(s) required herein, Owner may terminate the Agreement or at its sole discretion shall be authorized to purchase such coverage(s) and charge successful bidder for such coverage(s) purchased. If successful bidder fails to reimburse Owner for such costs within thirty (30) days after demand, Owner has the right to offset these costs from any amount due successful bidder under this Agreement or any other agreement between Owner and successful bidder. Owner shall be under no obligation to purchase such insurance, nor shall it be responsible for the coverage(s) purchased or the insurance companies used. The decision of Owner to purchase such insurance coverage(s) shall in no way be construed to be a waiver of any of its rights under the Contract Documents.
- g. Agrees to provide, upon request, the entire and complete insurance policies required herein.

- h. The payment of deductibles for insurance required of the successful bidder by the Contract Documents shall be the sole responsibility of the successful bidder.

Certificate of Insurance Requirements:

- a. Certificates of insurance in duplicate evidencing the insurance coverage specified herein shall be filed with the Purchasing Division before operations are begun. The required certificates of insurance shall name the types of policy, policy number, date of expiration, amount of coverage, companies affording coverage, and also shall refer specifically to the bid number and title of the Project, and must read: For any and all work performed on behalf of Manatee County.
- b. **Additional Insured:** The Automobile Liability and Commercial General Liability policies provided by the successful bidder to meet the requirements of this IFB shall name Manatee County, Board of County Commissioners, as an additional insured as to the operations of the successful bidder under this IFB and shall contain severability of interests provisions.
- c. In order for the certificate of insurance to be accepted it **must** comply with the following:
1. The "Certificate Holder" shall be:
**Manatee County
Board of County Commissioners
Bradenton, FL
IFB# 15-2259CD, 44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East
For any and all work performed on behalf of Manatee County.**
 2. Certificate shall be mailed to:
**Manatee County Purchasing Division
1112 Manatee Avenue West, Suite 803
Bradenton, FL 34205
Attn: Chris Daley, CPPO, CPPB, Contract Specialist**

BONDING REQUIREMENTS

Bid Bond/Certified Check. By submitting a bid to this IFB, the bidder agrees should the bidder's bid be accepted, **to execute the form of Agreement and present the same to Manatee County for approval within ten (10) calendar days after notice of intent to award.** The bidder further agrees that failure to execute and deliver said form of Agreement **within ten (10) calendar days** will result in damages to Manatee County and as guarantee of payment of same a bid bond/certified check shall be enclosed within the submitted sealed bid in the amount of five (5%) percent of the total amount of the bid. The bidder further agrees that in case the bidder fails to enter into an Agreement, as prescribed by Manatee County, the bid bond/certified check accompanying the bid shall be forfeited to Manatee County as agreed liquidated damages. If Owner enters into an Agreement with a bidder, or if Owner rejects any and/or all bids, accompanying bond will be promptly returned.

Payment and Performance Bonds. Prior to commencing Work, the successful bidder shall obtain, for the benefit of and directed to Owner, a Payment and Performance Bond satisfying the requirements of Section 255.05, Florida Statutes, covering the faithful performance by the successful bidder of its obligation under the Contract Documents, including but not limited to the construction of the Project on the Project Site and the payment and obligations arising thereunder, including all payments to Subcontractors, laborers, and materialmen. The surety selected by the successful bidder to provide the Payment and Performance Bond shall be approved by Owner prior to issuance of such Bond, which approval shall not be unreasonably withheld or delayed provided that surety is rated A- or better by Best's Key Guide, latest edition.

Failure to provide the required bonds on the prescribed form may result in successful bidder being deemed nonresponsive. Bonds must be in the form prescribed in Section 255.05, Florida Statutes, and must not contain notice, demand or other terms and conditions, including informal pre-claim meetings, not provided for in Section 255.05, Florida Statutes.

Surety of such bonds shall be in an amount equal to 100% of the Contract Price issued by a duly authorized and nationally recognized surety company, authorized to do business in the State of Florida, satisfactory to Owner. Surety shall be rated as "A-" or better by Best's Key Guide, latest edition. The attorney-in-fact who signs the bonds must file with the bonds, a certificate and effective dated copy of power-of-attorney. Payment and Performance Bonds shall be issued to Manatee County, a political subdivision of the State of Florida, **within ten (10) calendar days after notice of intent to award.**

In addition, pursuant to Section 255.05(1)(b), Florida Statutes, prior to commencing Work, the successful bidder shall be responsible and bear all costs associated to record the Payment and Performance Bond with the Manatee County Clerk of the Circuit Court. A certified copy of said recording shall be furnished to the Purchasing Division upon filing. Pursuant to Section 255.05(1)(b), Florida Statutes, Owner will make no payment to the successful bidder until the successful bidder has complied with this paragraph.

Furnishing Payment and Performance Bonds shall be requisite to execution of an Agreement with Owner. Said Payment and Performance Bonds will remain in force for the duration of the Agreement with the premiums paid by the successful bidder. Failure of the successful bidder to execute such Agreement and to supply the required bonds shall be just cause for cancellation of the award. Owner may then contract with the next lowest, responsive and responsible bidder or re-advertise this IFB. If another bidder is accepted, and notice given within ninety (90) days after the opening of the bids, this Acceptance shall bind the bidder as though they were originally the successful bidder.

Failure of Owner at any time to require performance by the successful bidder of any provisions set out in the resulting Agreement will in no way affect the right of Owner, thereafter, to enforce those provisions.

BIDDER'S INSURANCE STATEMENT

THE UNDERSIGNED hereto have read and understand the aforementioned insurance requirements of this IFB and note that the evidence of insurability shall be required within ten (10) days from the date of notice of intent to award.

Bidder Name: _____ Date: _____

Bidder's Signature: _____

Print Name: _____

Insurance Agency: _____

Agent Name: _____ Agent Phone: _____

Please return this completed and signed statement with your bid.

BID FORM
(Submit in duplicate)

For: 15-2259CD- 44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East

Total Offer (Bid "A"): _____
Based on a completion time of 450 calendar days
Total Offer (Bid "B"): _____
Based on a completion time of 630 calendar days

We, the undersigned, hereby declare that we have carefully reviewed the IFB Documents in their entirety and with full knowledge and understanding of the aforementioned herewith submit this bid, completely meeting each and every specification, term, and condition contained therein.

Two schedules for completion of the Work shall be considered. Each bid for completion by the specified stated time shall be offered as a separate "total offer". County has the sole authority to select the bid based on the completion time which is in the best interest of County. Only one award shall be made.

As bidder, we understand that the IFB documents, in its entirety, shall be made a part of any resulting Agreement between Manatee County and the successful bidder. Failure to enter into an Agreement shall result in default, whereupon, the defaulting successful bidder shall be required to pay for any and all re-procurement costs, damages, and attorney fees as incurred by County, and agrees to forfeit his/her bid bond.

Communications concerning this bid shall be addressed as follows: **(Complete all fields)**

Bidder's Name: _____

Mailing Address: _____

Telephone: () _____ Fax: () _____

Email Address: _____

I, _____ on [date(s)] _____ attest that I have visited the project site(s) to familiarize myself with the full scope of work required for the bid.

Acknowledge Addendum No. ____ Dated: _____ Acknowledge Addendum No. ____ Dated: _____

Acknowledge Addendum No. ____ Dated: _____ Acknowledge Addendum No. ____ Dated: _____

Acknowledge Addendum No. ____ Dated: _____ Acknowledge Addendum No. ____ Dated: _____

Authorized Signature(s): _____

Name and Title of Above Signer(s): _____

Date: _____

BID FORM

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East
Bid "A" Based on Completion Time of 450 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
ROADWAY						
1.	0101-1	Mobilization (MOB)	1.00	LS	\$ _____	\$ _____
2.	0102-1	Maintenance of Traffic (MOT)	1.00	LS	\$ _____	\$ _____
3.	102-3	Commercial Matl for Drwy Maint	100.00	CY	\$ _____	\$ _____
4.	104-10-3	Sediment Barrier	19,973.00	LF	\$ _____	\$ _____
5.	104-11	Floating Turbidity Barrier	1,707.00	LF	\$ _____	\$ _____
6.	104-15	Soil Tracking Prevention Device	2.00	EA	\$ _____	\$ _____
7.	104-18	Inlet Protection System	36.00	EA	\$ _____	\$ _____
8.	110-1-1	Clearing & Grubbing	45.00	AC	\$ _____	\$ _____
9.	120-1	Regular Excavation	61,480.00	CY	\$ _____	\$ _____
10.	120-6	Embankment	113,493.00	CY	\$ _____	\$ _____
11.	160-4	Type B Stabilization	64,452.00	SY	\$ _____	\$ _____
12.	285-701	Optional Base, Group 1	9,274.00	SY	\$ _____	\$ _____
13.	285-709	Optional Base, Group 9	55,362.00	SY	\$ _____	\$ _____
14.	286-1	Turnout Construction	1,018.00	SY	\$ _____	\$ _____
15.	327-70-6	Milling Existing Asphalt Pavement (1-1/2" Avg. Depth)	11,829.00	SY	\$ _____	\$ _____
16.	327-70-15	Milling Existing Asphalt Pavement (2-3/4" Avg. Depth)	20,655.00	SY	\$ _____	\$ _____
17.	327-70-19	Milling Existing Asphalt Pavement (3/4" Avg. Depth)	3,590.00	SY	\$ _____	\$ _____
18.	334-1-13	Superpave Asphaltic Conc, Traffic C, (3")	8,112.00	TN	\$ _____	\$ _____
19.	334-1-12	Superpave Asphaltic Conc, Traffic D, (1")	132.00	TN	\$ _____	\$ _____
20.	334-1-12	Superpave Asphaltic Conc, Traffic D, (4")	1,561.00	TN	\$ _____	\$ _____
21.	337-7-24	Asphalt Concrete Friction Course, Traffic D, FC-5, Rubber (3/4")	1,459.00	TN	\$ _____	\$ _____
22.	337-7-43	Asphalt Concrete Friction Course, Traffic C, FC-12.5, Rubber (1-1/2")	5,054.00	TN	\$ _____	\$ _____
23.	339-1	Misc. Asphalt	17.00	TN	\$ _____	\$ _____
24.	425-1-361	Inlets (Curb) (Type P-6) (<10')	13.00	EA	\$ _____	\$ _____
25.	425-1-501	Inlet (Dt Bot) (Type A) (<10')	6.00	EA	\$ _____	\$ _____
26.	425-1-521	Inlet (Dt Bot) (Type C) (<10')	1.00	EA	\$ _____	\$ _____
27.	425-1-541	Inlet (Dt Bot) (Type D) (<10')	6.00	EA	\$ _____	\$ _____
28.	425-1-701	Inlet (Gutter) (Type S) (<10')	4.00	EA	\$ _____	\$ _____
29.	425-2-61	Manholes (P-8) (<10')	6.00	EA	\$ _____	\$ _____
30.	430-174-118	Pipe Culv (RCP)(18")	6.00	LF	\$ _____	\$ _____
31.	430-174-124	Pipe Culv (RCP)(24")	2,033.00	LF	\$ _____	\$ _____

Bidder Name: _____

Authorized Signature: _____

BID FORM

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East
Bid "A" Based on Completion Time of 450 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
32.	430-174-130	Pipe Culv (RCP)(30")	1,052.00	LF	\$ _____	\$ _____
33.	430-174-215	Pipe Culv (ERCP) (12"x18")	18.00	LF	\$ _____	\$ _____
34.	430-174-218	Pipe Culv (ERCP) (14"x23")	1,334.00	LF	\$ _____	\$ _____
35.	430-174-224	Pipe Culv (ERCP) (19"x30")	967.00	LF	\$ _____	\$ _____
36.	430-174-230	Pipe Culv (ERCP) (24"x38")	247.00	LF	\$ _____	\$ _____
37.	430-984-125	MES (Round) (18" SD)	18.00	EA	\$ _____	\$ _____
38.	430-984-129	MES (Round) (24" SD)	8.00	EA	\$ _____	\$ _____
39.	430-984-625	MES (Round) (14"x23" SD)	5.00	EA	\$ _____	\$ _____
40.	430-984-629	MES (Ellip) (19"x30") (SD)	3.00	EA	\$ _____	\$ _____
41.	430-984-633	MES (Ellip) (24"x38") (SD)	3.00	EA	\$ _____	\$ _____
42.	520-1-MC	Manatee County Type A Curb & Gutter	942.00	LF	\$ _____	\$ _____
43.	520-1-7	Type E Curb & Gutter	6,636.00	LF	\$ _____	\$ _____
44.	520-1-10	Type F Curb & Gutter	8,164.00	LF	\$ _____	\$ _____
45.	520-2-1	Type D Curb	1,303.00	LF	\$ _____	\$ _____
46.	520-6	Shoulder Gutter, Concrete	945.00	LF	\$ _____	\$ _____
47.	522-1	Concrete Sidewalk and Driveways, 4" Thick	5,696.00	SY	\$ _____	\$ _____
48.	522-2	Concrete Sidewalk and Driveways, 6" Thick	531.00	SY	\$ _____	\$ _____
49.	524-3	Concrete Core Ditch Blocks	5.00	CY	\$ _____	\$ _____
50.	527-2	Detectable Warnings	500.00	SF	\$ _____	\$ _____
51.	550-10-222	Fencing, Type B, 5.1-6.0, w/ Vinyl Coat	996.00	EA	\$ _____	\$ _____
52.	570-1-2	Sodding (Performance Turf) (Incl. Litter Removal, Mowing, Fert. And Water)	108,668.00	SY	\$ _____	\$ _____
53.	571-1-13	Plastic Erosion Mat, Turf Reinforced Mat, Type 3	485.00	SY	\$ _____	\$ _____
54.	WMS-1	Wetland Mitigation Site	1.00	LS	\$ _____	\$ _____
SUBTOTAL (ROADWAY ONLY)						\$ -

Bidder Name: _____

Authorized Signature: _____

BID FORM

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East
Bid "A" Based on Completion Time of 450 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
SIGNING AND MARKINGS						
55.	700-20-11	Sign Single Post, F&I, Less than 12 SF	95.00	AS	\$ _____	\$ _____
56.	700-20-12	Sign Single Post, F&I, 12-20 SF	8.00	AS	\$ _____	\$ _____
57.	700-20-14	Sign Single Post, F&I, 21-30 SF	4.00	AS	\$ _____	\$ _____
58.	700-20-40	Sign Single Post, (Relocate)	2.00	AS	\$ _____	\$ _____
59.	700-20-60	Sign Single Post, (Remove)	22.00	AS	\$ _____	\$ _____
60.	700-21-11	Multi-Post Sign, F&I, 50 SF or Less	2.00	AS	\$ _____	\$ _____
61.	700-21-60	Multi-Post Sign, Remove	2.00	AS	\$ _____	\$ _____
62.	705-11-3	Delineator, Flexible High Visibility Median	2.00	EA	\$ _____	\$ _____
63.	706-3	Retro-Reflective Pavement Markers	1,785.00	EA	\$ _____	\$ _____
64.	710-11-290	Painted Pavt Mark, Std, Yellow, Island Nose	1,552.00	SF	\$ _____	\$ _____
65.	711-11-111	Thermoplastic, Std, White, Solid, 6"	5.73	NM	\$ _____	\$ _____
66.	711-11-122	Thermoplastic, Std, White, Solid, 8"	1,126.00	LF	\$ _____	\$ _____
67.	711-11-123	Thermoplastic, Std, White, Solid, 12"	2,897.00	LF	\$ _____	\$ _____
68.	711-11-124	Thermoplastic, Std, White, Solid, 18"	2,790.00	LF	\$ _____	\$ _____
69.	711-11-125	Thermoplastic, Std, White, Solid, 24"	571.00	LF	\$ _____	\$ _____
70.	711-11-131	Painted Pavt Mark, Std, White, Skip, 6", 10-30	2.33	GM	\$ _____	\$ _____
71.	711-11-151	Painted Pavt Mark, Std, White, Dotted, 6", 2-4, 6-10	2,344.00	LF	\$ _____	\$ _____
72.	711-11-160	Thermoplastic, Std, White, Message	38.00	EA	\$ _____	\$ _____
73.	711-11-170	Thermoplastic, Std, White, Arrows	82.00	EA	\$ _____	\$ _____
74.	711-11-180	Thermoplastic, Std, White, Yield Line	60.00	LF	\$ _____	\$ _____
75.	711-11-211	Thermoplastic, Std, Yellow, Solid, 6"	5.61	NM	\$ _____	\$ _____
76.	711-11-224	Thermoplastic, Std, Yellow, Solid, 18"	2,733.00	LF	\$ _____	\$ _____
77.	711-11-231	Thermoplastic, Std, Yellow, Skip, 6", 10-30	115.00	LF	\$ _____	\$ _____
78.	711-11-160	Pavement Messages, Thermoplastic (Bike Lane Markings)	14.00	EA	\$ _____	\$ _____
SUBTOTAL (SIGNING AND MARKINGS ONLY)						\$ -

Bidder Name: _____

Authorized Signature: _____

BID FORM

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East
Bid "A" Based on Completion Time of 450 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
SIGNALIZATION						
79.	630-2-11	Conduit (F&I) (Open Trench)	5,145.00	LF	\$ _____	\$ _____
80.	630-2-12	Conduit (F&I) (Directional Bore)	1,578.00	LF	\$ _____	\$ _____
81.	632-7-1	Signal Cable (New or Reconstructed Intersection-F&I)	3.00	PI	\$ _____	\$ _____
82.	633-1-121	FO Cable (F&I) (Underground) (2-12 Fibers)	505.00	LF	\$ _____	\$ _____
83.	633-1-122	FO Cable (F&I) (Underground) (13-48 Fibers)	6,355.00	LF	\$ _____	\$ _____
84.	633-2-31	FO Cable Conn (Insall) (Splice)	12.00	EA	\$ _____	\$ _____
85.	633-2-32	FO Cable Conn (Insall) (Termination)	48.00	EA	\$ _____	\$ _____
86.	633-3-11	FO Cable Conn Hardware (F&I) (Splice Enclosure)	5.00	EA	\$ _____	\$ _____
87.	633-3-12	FO Cable Conn Hardware (F&I) (Splice Tray)	6.00	EA	\$ _____	\$ _____
88.	633-3-15	FO Cable Conn Hardware (F&I) (Patch Panel) (Preterm)	3.00	EA	\$ _____	\$ _____
89.	635-2-11	Pull and Splice Box (F&I) (Standard Size)	34.00	EA	\$ _____	\$ _____
90.	635-2-12	Pull and Splice Box (F&I) (24"x36")	12.00	EA	\$ _____	\$ _____
91.	635-2-13	Pull and Splice Box (F&I) (30"x60")	4.00	EA	\$ _____	\$ _____
92.	639-1-122	Electrical Power Service (F&I) (Underground) (Meter Purchased by Contractor)	4.00	AS	\$ _____	\$ _____
93.	639-2-1	Electrical Service Wire (F&I)	2,445.00	LF	\$ _____	\$ _____
94.	639-3-11	Electrical Service Disconnect (F&I)	2.00	EA	\$ _____	\$ _____
95.	641-2-12	Prestressed Concrete Pole (F&I) (P-II Service) (12')	6.00	EA	\$ _____	\$ _____
96.	646-1-11	Aluminum Signal Pole (F&I) (Pedestal)	24.00	EA	\$ _____	\$ _____
97.	649-31-204	Steel Mast Arm Assemble (F&I) (130 mph) (70.5)	1.00	EA	\$ _____	\$ _____
98.	649-31-205	Steel Mast Arm Assemble (F&I) (130 mph) (78)	1.00	EA	\$ _____	\$ _____
99.	649-31-219	Steel Mast Arm Assemble (F&I) (130 mph) (70.5-70.5)	1.00	EA	\$ _____	\$ _____
100.	649-31-299	Steel Mast Arm Assemble (F&I) (130 mph) (Custom)	5.00	EA	\$ _____	\$ _____
101.	650-1-311	Traffic Signal (F&I)(3 Sect.) (1-Way) (Aluminum)	34.00	AS	\$ _____	\$ _____
102.	650-1-511	Traffic Signal (F&I)(5 Sect.) (1-Way) (Aluminum)	5.00	AS	\$ _____	\$ _____
103.	653-191	Pedestrian Signal (F&I) (LED Countdown) (1 Directional)	24.00	AS	\$ _____	\$ _____
104.	660-4-11	Vehicle Detection System-Video (F&I) (Cabinet Equipment)	12.00	EA	\$ _____	\$ _____
105.	660-4-12	Vehicle Detection System-Video (F&I) (Above Ground Equipment)	12.00	EA	\$ _____	\$ _____
106.	665-1-11	Pedestrian Detector (F&I) (Standard)	24.00	EA	\$ _____	\$ _____
107.	670-5-112	Traffic Controller Assembly (F&I) (NEMA) (2 Preemptions)	3.00	AS	\$ _____	\$ _____
108.	685-106	System Auxiliaries (F&I) (UPS)	3.00	EA	\$ _____	\$ _____

Bidder Name: _____

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BID FORM

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East
Bid "A" Based on Completion Time of 450 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
109.	690-10	Traffic Signal Head Assembly, Removal	10.00	EA	\$ _____	\$ _____
110.	690-20	Signal Pedestrian Assembly, Removal	4.00	EA	\$ _____	\$ _____
111.	690-31	Signal Pedestal Remove	4.00	EA	\$ _____	\$ _____
112.	690-34-1	Pole Removal - Deep - Direct Burial	2.00	EA	\$ _____	\$ _____
113.	690-60	Vehicle Detector Assembly, Remove	12.00	EA	\$ _____	\$ _____
114.	690-70	Pedestrian Detector Assembly Remove	4.00	EA	\$ _____	\$ _____
115.	690-80	Span Wire Assembly Remove	1.00	EA	\$ _____	\$ _____
116.	690-90	Remove Conduit & Cabling	1.00	PI	\$ _____	\$ _____
117.	690-100	Miscellaneous Signal Equipment Remove	1.00	PI	\$ _____	\$ _____
118.	700-3-602	Sign Panel (Remove) (12-20 SF)	4.00	EA	\$ _____	\$ _____
119.	700-5-22	Internally Illuminated Sign (F&I) (12-18 SF)	12.00	EA	\$ _____	\$ _____
120.	784-1-1	ITS Managed Field Ethernet Switch (F&I)	3.00	EA	\$ _____	\$ _____
SUBTOTAL (SIGNALIZATION ONLY)						\$ -
LIGHTING						
121.	630-2-11	Conduit (F&I) (Open Trench)	15,705.00	LF	\$ _____	\$ _____
122.	630-2-12	Conduit (F&I) (Directional Bore)	900.00	LF	\$ _____	\$ _____
123.	635-2-11	Pull & Splice Boxes (F&I) (13"x24")	84.00	EA	\$ _____	\$ _____
124.	715-1-12	Lighting - Conductor (F&I) (No. 6)	25,159.00	LF	\$ _____	\$ _____
125.	715-1-13	Lighting - Conductor (F&I) (No. 4)	24,853.00	LF	\$ _____	\$ _____
126.	715-4-123	Light Pole Complete (130 MPH) (50')	63.00	EA	\$ _____	\$ _____
127.	715-7-11	Load Center (F&I) (Secondary Voltage)	2.00	EA	\$ _____	\$ _____
128.	715-500-1	Light Pole Cable Distribution System	70.00	EA	\$ _____	\$ _____
129.	715-511-135	Light Pole Complete (F&I) (Special) (130 MPH) (35')	7.00	EA	\$ _____	\$ _____
SUBTOTAL (LIGHTING ONLY)						\$ -

Bidder Name: _____

Authorized Signature: _____

BID FORM

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East
Bid "A" Based on Completion Time of 450 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
POTABLE WATER MAIN						
130.	W1	Furnish & Install C900 DR18 8-inch PVC Water Main	4,650.00	LF	\$ _____	\$ _____
131.	W2	Furnish & Install Class 350 8-inch Ductile Iron Water Main	400.00	LF	\$ _____	\$ _____
132.	W3	Jack & Bore 18" x 3/8" Steel Casing Pipe	385.00	LF	\$ _____	\$ _____
133.	W4	Furnish & Install 12" x 3/16" Steel Casing Pipe	520.00	LF	\$ _____	\$ _____
134.	W5	Furnish & Install 8-inch Gate Valve Assembly	15.00	EA	\$ _____	\$ _____
135.	W6	Furnish & Install Fire Hydrant Assembly	10.00	EA	\$ _____	\$ _____
136.	W7	Furnish & Install Automatic Air Release Assembly	1.00	EA	\$ _____	\$ _____
137.	W8	Furnish & Install 24" x 8" Tapping Sleeve and Valve	2.00	EA	\$ _____	\$ _____
138.	W9	Furnish & Install 8" x 8" Tapping Sleeve and Valve	2.00	EA	\$ _____	\$ _____
139.	W10	Furnish & Install 8-inch Bell Restraints	135.00	EA	\$ _____	\$ _____
140.	W11	Furnish & Install Restrained Ductile Iron Mechanical Joint Fittings	6.00	TN	\$ _____	\$ _____
141.	W12	Furnish and Install Water Meter, Backflow Preventer, and Water Service Line	1.00	LS	\$ _____	\$ _____
142.	W13	Grout Fill Existing 8-inch Water Main	4.00	CY	\$ _____	\$ _____
143.	W14	Adjust Existing Manhole to Final Grade	2.00	EA	\$ _____	\$ _____
SUBTOTAL (POTABLE WATER MAIN ONLY)						\$ -
TOTAL BASE BID "A" - Based on Completion Time of <u>450</u> Calendar Days						\$ -
CONTRACT CONTINGENCY WORK (USED ONLY WITH COUNTY APPROVAL)						10%
TOTAL OFFER FOR BID "A" with Contract Contingency - Based on Completion Time of <u>450</u> Calendar Days						\$ -

Bidder Name: _____

Authorized Signature: _____

BID FORM

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East
Bid "B" Based on Completion Time of 630 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
ROADWAY						
1.	0101-1	Mobilization (MOB)	1.00	LS	\$ _____	\$ _____
2.	0102-1	Maintenance of Traffic (MOT)	1.00	LS	\$ _____	\$ _____
3.	102-3	Commercial Matl for Drwy Maint	100.00	CY	\$ _____	\$ _____
4.	104-10-3	Sediment Barrier	19,973.00	LF	\$ _____	\$ _____
5.	104-11	Floating Turbidity Barrier	1,707.00	LF	\$ _____	\$ _____
6.	104-15	Soil Tracking Prevention Device	2.00	EA	\$ _____	\$ _____
7.	104-18	Inlet Protection System	36.00	EA	\$ _____	\$ _____
8.	110-1-1	Clearing & Grubbing	45.00	AC	\$ _____	\$ _____
9.	120-1	Regular Excavation	61,480.00	CY	\$ _____	\$ _____
10.	120-6	Embankment	113,493.00	CY	\$ _____	\$ _____
11.	160-4	Type B Stabilization	64,452.00	SY	\$ _____	\$ _____
12.	285-701	Optional Base, Group 1	9,274.00	SY	\$ _____	\$ _____
13.	285-709	Optional Base, Group 9	55,362.00	SY	\$ _____	\$ _____
14.	286-1	Turnout Construction	1,018.00	SY	\$ _____	\$ _____
15.	327-70-6	Milling Existing Asphalt Pavement (1-1/2" Avg. Depth)	11,829.00	SY	\$ _____	\$ _____
16.	327-70-15	Milling Existing Asphalt Pavement (2-3/4" Avg. Depth)	20,655.00	SY	\$ _____	\$ _____
17.	327-70-19	Milling Existing Asphalt Pavement (3/4" Avg. Depth)	3,590.00	SY	\$ _____	\$ _____
18.	334-1-13	Superpave Asphaltic Conc, Traffic C, (3")	8,112.00	TN	\$ _____	\$ _____
19.	334-1-12	Superpave Asphaltic Conc, Traffic D, (1")	132.00	TN	\$ _____	\$ _____
20.	334-1-12	Superpave Asphaltic Conc, Traffic D, (4")	1,561.00	TN	\$ _____	\$ _____
21.	337-7-24	Asphalt Concrete Friction Course, Traffic D, FC-5, Rubber (3/4")	1,459.00	TN	\$ _____	\$ _____
22.	337-7-43	Asphalt Concrete Friction Course, Traffic C, FC-12.5, Rubber (1-1/2")	5,054.00	TN	\$ _____	\$ _____
23.	339-1	Misc. Asphalt	17.00	TN	\$ _____	\$ _____
24.	425-1-361	Inlets (Curb) (Type P-6) (<10')	13.00	EA	\$ _____	\$ _____
25.	425-1-501	Inlet (Dt Bot) (Type A) (<10')	6.00	EA	\$ _____	\$ _____
26.	425-1-521	Inlet (Dt Bot) (Type C) (<10')	1.00	EA	\$ _____	\$ _____
27.	425-1-541	Inlet (Dt Bot) (Type D) (<10')	6.00	EA	\$ _____	\$ _____
28.	425-1-701	Inlet (Gutter) (Type S) (<10')	4.00	EA	\$ _____	\$ _____
29.	425-2-61	Manholes (P-8) (<10')	6.00	EA	\$ _____	\$ _____
30.	430-174-118	Pipe Culv (RCP)(18")	6.00	LF	\$ _____	\$ _____
31.	430-174-124	Pipe Culv (RCP)(24")	2,033.00	LF	\$ _____	\$ _____

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BID FORM

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**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East
Bid "B" Based on Completion Time of 630 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
32.	430-174-130	Pipe Culv (RCP)(30")	1,052.00	LF	\$ _____	\$ _____
33.	430-174-215	Pipe Culv (ERCP) (12"x18")	18.00	LF	\$ _____	\$ _____
34.	430-174-218	Pipe Culv (ERCP) (14"x23")	1,334.00	LF	\$ _____	\$ _____
35.	430-174-224	Pipe Culv (ERCP) (19"x30")	967.00	LF	\$ _____	\$ _____
36.	430-174-230	Pipe Culv (ERCP) (24"x38")	247.00	LF	\$ _____	\$ _____
37.	430-984-125	MES (Round) (18" SD)	18.00	EA	\$ _____	\$ _____
38.	430-984-129	MES (Round) (24" SD)	8.00	EA	\$ _____	\$ _____
39.	430-984-625	MES (Round) (14"x23" SD)	5.00	EA	\$ _____	\$ _____
40.	430-984-629	MES (Ellip) (19"x30") (SD)	3.00	EA	\$ _____	\$ _____
41.	430-984-633	MES (Ellip) (24"x38") (SD)	3.00	EA	\$ _____	\$ _____
42.	520-1-MC	Manatee County Type A Curb & Gutter	942.00	LF	\$ _____	\$ _____
43.	520-1-7	Type E Curb & Gutter	6,636.00	LF	\$ _____	\$ _____
44.	520-1-10	Type F Curb & Gutter	8,164.00	LF	\$ _____	\$ _____
45.	520-2-1	Type D Curb	1,303.00	LF	\$ _____	\$ _____
46.	520-6	Shoulder Gutter, Concrete	945.00	LF	\$ _____	\$ _____
47.	522-1	Concrete Sidewalk and Driveways, 4" Thick	5,696.00	SY	\$ _____	\$ _____
48.	522-2	Concrete Sidewalk and Driveways, 6" Thick	531.00	SY	\$ _____	\$ _____
49.	524-3	Concrete Core Ditch Blocks	5.00	CY	\$ _____	\$ _____
50.	527-2	Detectable Warnings	500.00	SF	\$ _____	\$ _____
51.	550-10-222	Fencing, Type B, 5.1-6.0, w/ Vinyl Coat	996.00	EA	\$ _____	\$ _____
52.	570-1-2	Sodding (Performance Turf) (Incl. Litter Removal, Mowing, Fert. And Water)	108,668.00	SY	\$ _____	\$ _____
53.	571-1-13	Plastic Erosion Mat, Turf Reinforced Mat, Type 3	485.00	SY	\$ _____	\$ _____
54.	WMS-1	Wetland Mitigation Site	1.00	LS	\$ _____	\$ _____
SUBTOTAL (ROADWAY ONLY)						\$ -
SIGNING AND MARKINGS						

Bidder Name: _____

Authorized Signature: _____

BID FORM

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East
Bid "B" Based on Completion Time of 630 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
55.	700-20-11	Sign Single Post, F&I, Less than 12 SF	95.00	AS	\$ _____	\$ _____
56.	700-20-12	Sign Single Post, F&I, 12-20 SF	8.00	AS	\$ _____	\$ _____
57.	700-20-14	Sign Single Post, F&I, 21-30 SF	4.00	AS	\$ _____	\$ _____
58.	700-20-40	Sign Single Post, (Relocate)	2.00	AS	\$ _____	\$ _____
59.	700-20-60	Sign Single Post, (Remove)	22.00	AS	\$ _____	\$ _____
60.	700-21-11	Multi-Post Sign, F&I, 50 SF or Less	2.00	AS	\$ _____	\$ _____
61.	700-21-60	Multi-Post Sign, Remove	2.00	AS	\$ _____	\$ _____
62.	705-11-3	Delineator, Flexible High Visibility Median	2.00	EA	\$ _____	\$ _____
63.	706-3	Retro-Reflective Pavement Markers	1,785.00	EA	\$ _____	\$ _____
64.	710-11-290	Painted Pavt Mark, Std, Yellow, Island Nose	1,552.00	SF	\$ _____	\$ _____
65.	711-11-111	Thermoplastic, Std, White, Solid, 6"	5.73	NM	\$ _____	\$ _____
66.	711-11-122	Thermoplastic, Std, White, Solid, 8"	1,126.00	LF	\$ _____	\$ _____
67.	711-11-123	Thermoplastic, Std, White, Solid, 12"	2,897.00	LF	\$ _____	\$ _____
68.	711-11-124	Thermoplastic, Std, White, Solid, 18"	2,790.00	LF	\$ _____	\$ _____
69.	711-11-125	Thermoplastic, Std, White, Solid, 24"	571.00	LF	\$ _____	\$ _____
70.	711-11-131	Painted Pavt Mark, Std, White, Skip, 6", 10-30	2.33	GM	\$ _____	\$ _____
71.	711-11-151	Painted Pavt Mark, Std, White, Dotted, 6", 2-4, 6-10	2,344.00	LF	\$ _____	\$ _____
72.	711-11-160	Thermoplastic, Std, White, Message	38.00	EA	\$ _____	\$ _____
73.	711-11-170	Thermoplastic, Std, White, Arrows	82.00	EA	\$ _____	\$ _____
74.	711-11-180	Thermoplastic, Std, White, Yield Line	60.00	LF	\$ _____	\$ _____
75.	711-11-211	Thermoplastic, Std, Yellow, Solid, 6"	5.61	NM	\$ _____	\$ _____
76.	711-11-224	Thermoplastic, Std, Yellow, Solid, 18"	2,733.00	LF	\$ _____	\$ _____
77.	711-11-231	Thermoplastic, Std, Yellow, Skip, 6", 10-30	115.00	LF	\$ _____	\$ _____
78.	711-11-160	Pavement Messages, Thermoplastic (Bike Lane Markings)	14.00	EA	\$ _____	\$ _____
SUBTOTAL (SIGNING AND MARKINGS ONLY)						\$ -
SIGNALIZATION						

Bidder Name: _____

Authorized Signature: _____

BID FORM

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East
Bid "B" Based on Completion Time of 630 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
79.	630-2-11	Conduit (F&I) (Open Trench)	5,145.00	LF	\$ _____	\$ _____
80.	630-2-12	Conduit (F&I) (Directional Bore)	1,578.00	LF	\$ _____	\$ _____
81.	632-7-1	Signal Cable (New or Reconstructed Intersection-F&I)	3.00	PI	\$ _____	\$ _____
82.	633-1-121	FO Cable (F&I) (Underground) (2-12 Fibers)	505.00	LF	\$ _____	\$ _____
83.	633-1-122	FO Cable (F&I) (Underground) (13-48 Fibers)	6,355.00	LF	\$ _____	\$ _____
84.	633-2-31	FO Cable Conn (Insall) (Splice)	12.00	EA	\$ _____	\$ _____
85.	633-2-32	FO Cable Conn (Insall) (Termination)	48.00	EA	\$ _____	\$ _____
86.	633-3-11	FO Cable Conn Hardware (F&I) (Splice Enclosure)	5.00	EA	\$ _____	\$ _____
87.	633-3-12	FO Cable Conn Hardware (F&I) (Splice Tray)	6.00	EA	\$ _____	\$ _____
88.	633-3-15	FO Cable Conn Hardware (F&I) (Patch Panel) (Preterm)	3.00	EA	\$ _____	\$ _____
89.	635-2-11	Pull and Splice Box (F&I) (Standard Size)	34.00	EA	\$ _____	\$ _____
90.	635-2-12	Pull and Splice Box (F&I) (24"x36")	12.00	EA	\$ _____	\$ _____
91.	635-2-13	Pull and Splice Box (F&I) (30"x60")	4.00	EA	\$ _____	\$ _____
92.	639-1-122	Electrical Power Service (F&I) (Underground) (Meter Purchased by Contractor)	4.00	AS	\$ _____	\$ _____
93.	639-2-1	Electrical Service Wire (F&I)	2,445.00	LF	\$ _____	\$ _____
94.	639-3-11	Electrical Service Disconnect (F&I)	2.00	EA	\$ _____	\$ _____
95.	641-2-12	Prestressed Concrete Pole (F&I) (P-II Service) (12')	6.00	EA	\$ _____	\$ _____
96.	646-1-11	Aluminum Signal Pole (F&I) (Pedestal)	24.00	EA	\$ _____	\$ _____
97.	649-31-204	Steel Mast Arm Assemble (F&I) (130 mph) (70.5)	1.00	EA	\$ _____	\$ _____
98.	649-31-205	Steel Mast Arm Assemble (F&I) (130 mph) (78)	1.00	EA	\$ _____	\$ _____
99.	649-31-219	Steel Mast Arm Assemble (F&I) (130 mph) (70.5-70.5)	1.00	EA	\$ _____	\$ _____
100.	649-31-299	Steel Mast Arm Assemble (F&I) (130 mph) (Custom)	5.00	EA	\$ _____	\$ _____
101.	650-1-311	Traffic Signal (F&I)(3 Sect.) (1-Way) (Aluminum)	34.00	AS	\$ _____	\$ _____
102.	650-1-511	Traffic Signal (F&I)(5 Sect.) (1-Way) (Aluminum)	5.00	AS	\$ _____	\$ _____
103.	653-191	Pedestrian Signal (F&I) (LED Countdown) (1 Directional)	24.00	AS	\$ _____	\$ _____
104.	660-4-11	Vehicle Detection System-Video (F&I) (Cabinet Equipment)	12.00	EA	\$ _____	\$ _____
105.	660-4-12	Vehicle Detection System-Video (F&I) (Above Ground Equipment)	12.00	EA	\$ _____	\$ _____
106.	665-1-11	Pedestrian Detector (F&I) (Standard)	24.00	EA	\$ _____	\$ _____
107.	670-5-112	Traffic Controller Assembly (F&I) (NEMA) (2 Preemptions)	3.00	AS	\$ _____	\$ _____
108.	685-106	System Auxiliaries (F&I) (UPS)	3.00	EA	\$ _____	\$ _____
109.	690-10	Traffic Signal Head Assembly, Removal	10.00	EA	\$ _____	\$ _____
110.	690-20	Signal Pedestrian Assembly, Removal	4.00	EA	\$ _____	\$ _____

Bidder Name: _____

Authorized Signature: _____

BID FORM

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East
 Bid "B" Based on Completion Time of 630 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
111.	690-31	Signal Pedestal Remove	4.00	EA	\$ _____	\$ _____
112.	690-34-1	Pole Removal - Deep - Direct Burial	2.00	EA	\$ _____	\$ _____
113.	690-60	Vehicle Detector Assembly, Remove	12.00	EA	\$ _____	\$ _____
114.	690-70	Pedestrian Detector Assembly Remove	4.00	EA	\$ _____	\$ _____
115.	690-80	Span Wire Assembly Remove	1.00	EA	\$ _____	\$ _____
116.	690-90	Remove Conduit & Cabling	1.00	PI	\$ _____	\$ _____
117.	690-100	Miscellaneous Signal Equipment Remove	1.00	PI	\$ _____	\$ _____
118.	700-3-602	Sign Panel (Remove) (12-20 SF)	4.00	EA	\$ _____	\$ _____
119.	700-5-22	Internally Illuminated Sign (F&I) (12-18 SF)	12.00	EA	\$ _____	\$ _____
120.	784-1-1	ITS Managed Field Ethernet Switch (F&I)	3.00	EA	\$ _____	\$ _____
SUBTOTAL (SIGNALIZATION ONLY)						\$ -
LIGHTING						
121.	630-2-11	Conduit (F&I) (Open Trench)	15,705.00	LF	\$ _____	\$ _____
122.	630-2-12	Conduit (F&I) (Directional Bore)	900.00	LF	\$ _____	\$ _____
123.	635-2-11	Pull & Splice Boxes (F&I) (13"x24")	84.00	EA	\$ _____	\$ _____
124.	715-1-12	Lighting - Conductor (F&I) (No. 6)	25,159.00	LF	\$ _____	\$ _____
125.	715-1-13	Lighting - Conductor (F&I) (No. 4)	24,853.00	LF	\$ _____	\$ _____
126.	715-4-123	Light Pole Complete (130 MPH) (50')	63.00	EA	\$ _____	\$ _____
127.	715-7-11	Load Center (F&I) (Secondary Voltage)	2.00	EA	\$ _____	\$ _____
128.	715-500-1	Light Pole Cable Distribution System	70.00	EA	\$ _____	\$ _____
129.	715-511-135	Light Pole Complete (F&I) (Special) (130 MPH) (35')	7.00	EA	\$ _____	\$ _____

Bidder Name: _____

Authorized Signature: _____

BID FORM

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East
Bid "B" Based on Completion Time of 630 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
SUBTOTAL (LIGHTING ONLY)						\$ -
POTABLE WATER MAIN						
130.	W1	Furnish & Install C900 DR18 8-inch PVC Water Main	4,650.00	LF	\$ _____	\$ _____
131.	W2	Furnish & Install Class 350 8-inch Ductile Iron Water Main	400.00	LF	\$ _____	\$ _____
132.	W3	Jack & Bore 18" x 3/8" Steel Casing Pipe	385.00	LF	\$ _____	\$ _____
133.	W4	Furnish & Install 12" x 3/16" Steel Casing Pipe	520.00	LF	\$ _____	\$ _____
134.	W5	Furnish & Install 8-inch Gate Valve Assembly	15.00	EA	\$ _____	\$ _____
135.	W6	Furnish & Install Fire Hydrant Assembly	10.00	EA	\$ _____	\$ _____
136.	W7	Furnish & Install Automatic Air Release Assembly	1.00	EA	\$ _____	\$ _____
137.	W8	Furnish & Install 24" x 8" Tapping Sleeve and Valve	2.00	EA	\$ _____	\$ _____
138.	W9	Furnish & Install 8" x 8" Tapping Sleeve and Valve	2.00	EA	\$ _____	\$ _____
139.	W10	Furnish & Install 8-inch Bell Restraints	135.00	EA	\$ _____	\$ _____
140.	W11	Furnish & Install Restrained Ductile Iron Mechanical Joint Fittings	6.00	TN	\$ _____	\$ _____
141.	W12	Furnish and Install Water Meter, Backflow Preventer, and Water Service Line	1.00	LS	\$ _____	\$ _____
142.	W13	Grout Fill Existing 8-inch Water Main	4.00	CY	\$ _____	\$ _____
143.	W14	Adjust Existing Manhole to Final Grade	2.00	EA	\$ _____	\$ _____
SUBTOTAL (POTABLE WATER MAIN ONLY)						\$ -
TOTAL BASE BID "B" - Based on Completion Time of <u>630</u> Calendar Days						\$ -
CONTRACT CONTINGENCY WORK (USED ONLY WITH COUNTY APPROVAL)					10%	\$ -
TOTAL OFFER FOR BID "B" with Contract Contingency - Based on Completion Time of <u>630</u> Calendar Days						\$ -

Bidder Name: _____

Authorized Signature: _____

ATTACHMENT A
BIDDER'S QUESTIONNAIRE
(Submit in Duplicate)

The bidder warrants the truth and accuracy of all statements and answers herein contained. (Attach additional pages if necessary.)

THIS QUESTIONNAIRE MUST BE COMPLETED AND SUBMITTED WITH YOUR BID

1. Contact Information:

FEIN #: _____
License #: _____
License Issued to: _____
Date License Issued (MM/DD/YR): _____
Company Name: _____
Physical Address: _____
City: _____ State of Incorporation: _____ Zip Code: _____
Phone Number: () _____ Fax Number: () _____
Email address: _____

2. Bidding as: an individual __; a partnership __; a corporation __; a joint venture __

3. If a partnership, list names and addresses of partners; if a corporation, list names of officers, directors, shareholders, and state of incorporation; if joint venture, list names and address of ventures' and the same if any venture are a corporation for each such corporation, partnership, or joint venture:

4. Bidder is authorized to do business in the State of Florida: Yes No

For how many years? _____

5. Your organization has been in business (under this firm's name) as a

Is this firm in bankruptcy? _____

6. Attach a list of projects where this specific type of Work was performed.

BIDDER: _____

7. Is this firm currently contemplating or in litigation? Provide summary details.

8. Have you ever been assessed liquidated damages under a contract during the past five (5) years? If so, state when, where (contact name, address and phone number) and why.

9. Have you ever failed to complete Work awarded to you? Or failed to complete projects within contract time? If so, state when, where (contact name, address, phone number) and why.

10. Have you ever been debarred or prohibited from providing a bid to a governmental entity? If yes, name the entity and describe the circumstances.

11. Will you subcontract any part of this Work? If so, describe which portion(s) and to whom.

BIDDER: _____

12. If any, list MBE/DBE (with Agreement amount) to be utilized:

13. What equipment do you own to accomplish this Work? (A listing may be attached)

14. What equipment will you purchase/rent for the Work? (Specify which)

15. List the following in connection with the surety which is providing the bond(s):

Surety's Name: _____
Address: _____

Name, address, phone number and email of surety's resident agent for service of process in Florida:

Agent's Name: _____
Address: _____

Phone: _____
Email: _____

BIDDER: _____

ATTACHMENT B
PUBLIC CONTRACTING AND ENVIRONMENTAL CRIMES CERTIFICATION

SWORN STATEMENT PURSUANT TO ARTICLE V,
MANATEE COUNTY PROCUREMENT CODE

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

This sworn statement is submitted to the Manatee County Board of County Commissioners by

_____ [Print individual's name and title]

_____ for _____ [Print name of entity submitting sworn statement]

whose business address is _____

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

I understand that no person or entity shall be awarded or receive an Owner's Agreement for public improvements, procurement of goods or services (including professional services) or an Owner's lease, franchise, concession or management agreement, or shall receive a grant of Owner's monies unless such person or entity has submitted a written certification to Owner that it has not:

(1) been convicted of bribery or attempting to bribe a public officer or employee of Manatee County, the State of Florida, or any other public entity, including, but not limited to the Government of the United States, any state, or any local government authority in the United States, in that officer's or employee's official capacity; or

(2) been convicted of an agreement or collusion among bidders or prospective bidders in restraint of freedom of competition, by agreement to bid a fixed price, or otherwise; or

(3) been convicted of a violation of an environmental law that, in the sole opinion of Owner's Purchasing Official, reflects negatively upon the ability of the person or entity to conduct business in a responsible manner; or

(4) made an admission of guilt of such conduct described in items (1), (2) or (3) above, which is a matter of record, but has not been prosecuted for such conduct, or has made an admission of guilt of such conduct, which is a matter of record, pursuant to formal prosecution. An admission of guilt shall be construed to include a plea of nolo contendere; or

(5) where an officer, official, agent or employee of a business entity has been convicted of or has admitted guilt to any of the crimes set forth above on behalf of such an entity and pursuant to the direction or authorization of an official thereof (including the person committing the offense, if he is an official of the business entity), the business shall be chargeable with the conduct herein above set forth. A business entity shall be chargeable with the conduct of an affiliated entity, whether wholly owned, partially owned, or one which has common ownership or a common Board of Directors. For purposes of this Form, business entities are affiliated if, directly or indirectly, one business entity controls or has the power to control another business entity, or if an individual or group of individuals controls or has the power to control both entities. Indicia of control shall include, without limitation, interlocking management or ownership, identity of interests among family members, shared organization of a business entity following the ineligibility of a business entity under this Article, or using substantially the same management, ownership or principles as the ineligible entity.

ATTACHMENT B
PUBLIC CONTRACTING AND ENVIRONMENTAL CRIMES CERTIFICATION

(Continued)

Any person or entity who claims that this Article is inapplicable to him/her/it because a conviction or judgment has been reversed by a court of competent jurisdiction shall prove the same with documentation satisfactory to Owner's Purchasing Official. Upon presentation of such satisfactory proof, the person or entity shall be allowed to contract with Owner.

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR MANATEE COUNTY IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT ANY AGREEMENT OR BUSINESS TRANSACTION SHALL PROVIDE FOR SUSPENSION OF PAYMENTS, OR TERMINATION, OR BOTH, IF THE CONTRACTING OFFICER OR COUNTY ADMINISTRATOR DETERMINES THAT **SUCH PERSON OR ENTITY HAS MADE FALSE CERTIFICATION.**

[Signature]

STATE OF FLORIDA
COUNTY OF _____

Sworn to and subscribed before me this ____ day of _____, 20____ by _____

Personally known _____ OR Produced identification _____
[Type of identification]

Notary Public Signature My commission expires _____

[Print, type or stamp Commissioned name of Notary Public]

Signatory Requirement - In the case of a business entity other than a partnership or a corporation, this affidavit shall be executed by an authorized agent of the entity. In the case of a partnership, this affidavit shall be executed by the general partner(s). In the case of a corporation, this affidavit shall be executed by the corporate president.

**ATTACHMENT C
SWORN STATEMENT
THE FLORIDA TRENCH SAFETY ACT**

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR BY AN OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This Sworn Statement is submitted with **IFB NO. 15-2259CD**
2. This Sworn Statement is submitted by _____ whose business address is _____ and, if applicable, its Federal Employer Identification Number (FEIN) is _____. If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement _____.
3. Name of individual signing this Sworn Statement is: _____, Whose relationship to the above entity is: _____.
4. The Trench Safety Standards that will be in effect during the construction of this project shall include, but are not limited to: Laws of Florida, Chapters 90-96, TRENCH SAFETY ACT, and OSHA RULES AND REGULATIONS 29 CFR 1926.650 Subpart P, effective October 1, 1990.
5. The undersigned assures that the entity will comply with the applicable Trench Safety Standards and agrees to indemnify and hold harmless Owner and Engineer, and any of their agents or employees from any claims arising from the failure to comply with said standard.
6. The undersigned has appropriated the following costs for compliance with the applicable standards:

<u>Trench Safety Measure (Description)</u>	<u>Units of Measure (LF, SY)</u>	<u>Unit Quantity</u>	<u>Unit Cost</u>	<u>Extended Cost</u>
a. _____	_____	_____	\$ _____	_____
b. _____	_____	_____	\$ _____	_____
c. _____	_____	_____	\$ _____	_____
d. _____	_____	_____	\$ _____	_____

7. The undersigned intends to comply with these standards by instituting the following procedures:

THE UNDERSIGNED, in submitting this bid, represents that they have reviewed and considered all available geotechnical information and made such other investigations and tests as they may deem necessary to adequately design the trench safety system(s) to be utilized on this project.

(AUTHORIZED SIGNATURE / TITLE)

SWORN to and subscribed before me this _____ day of _____, 20_____.

(Impress official seal)

Notary Public, State of Florida: _____

My commission expires: _____



R. B. "Chips" Shore

CLERK OF THE CIRCUIT COURT AND COMPTROLLER OF MANATEE COUNTY

1115 Manatee Avenue West, Bradenton, Florida 34205 - Phone (941) 749-1800 – Fax (941) 741-4082
P.O. Box 25400, Bradenton, Florida 34206 - www.manateeclerk.com

ATTACHMENT D: E PAYABLES APPLICATION

Company name _____

Contact person _____

Phone number _____

Email Address _____

FINANCE USE ONLY

Open orders: YES or NO

PEID _____

CREATE DATE _____

CONFIRMED WITH _____

Name and phone number

IFAS _____

BANK _____

INITIALS _____

Return completed form to:

Via email to: lori.bryan@manateeclerk.com

Via fax to: (941) 741-4011

Via mail:

PO Box 1000

Bradenton, FL 34206

Revised: June 26, 2013

“Pride in Service with a Vision to the Future”

Clerk of the Circuit Court – Clerk of Board of County Commissioners – County Comptroller – Auditor and Recorder

MAILING LABEL

Cut along the outside border and affix this label to your sealed bid envelope to identify it as a "Sealed Bid". Be sure to include the name of the company submitting the bid and the bid due date and time where requested.

MAILING LABEL TO AFFIX TO OUTSIDE OF SEALED BID PACKAGE:

SEALED BID - DO NOT OPEN

BIDDER: _____

SEALED BID NO: 15-2259CD

BID TITLE: 44th Avenue East Roadway Project- from 19th Street Court East
to 30th Street East

DUE DATE/TIME: _____ @ _____

SPECIAL PROVISIONS

FOR

44TH AVENUE EAST

FROM 19TH STREET COURT EAST

TO 30TH STREET EAST

COUNTY PROJECT No. 6045660



Prepared by:



**380 Park Place Boulevard, Suite 300
Clearwater, Florida 33759**

July 2015

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GENERAL

This Section amends or enhances the Utility Technical Specifications, Standard Specifications and Contract Plans.

CONTRACT PLANS

The Contract Plans will include the following plan sets:

1. Roadway Plans for 44th Avenue East from 19th Street Court East to 30th Street East
2. Signalization Plans for 44th Avenue East from 19th Street Court East to 30th Street East
3. Lighting Plans for 44th Avenue East from 19th Street Court East to 30th Street East
4. Potable Water Main Plans for 44th Avenue East from 19th Street Court East to 30th Street East

STANDARD SPECIFICATIONS

The standard Specifications to be used for this work shall be Division II and III of the Florida Department of Transportation (FDOT) *Standard Specifications for Road and Bridge Construction (2014 Edition)*, and all Supplemental Specifications thereto, hereinafter referred to as the *Standard Specifications*, for roadway construction, except as amended under this Contract, or as noted on the construction plans meeting the Manatee County Highway, Traffic & Stormwater Standards (dated 2007).

The Contractor's work shall follow the Manatee County Public Works Utility Standards and Specifications (dated 2011) for the water main work, reclaimed water main, sanitary sewer, and force main work.

These specifications cover the usual construction requirements for work specified by the County Public Works Department; however, in the event it is determined that the specific work to be done is of such a nature that the method of construction, type and/or kind of material is not defined by the *Standard Specifications*, such work shall be performed in accordance with the Special Provisions.

The apparent silence of the Specifications as to any detail of the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used. Interpretation of these specifications shall be made upon that basis.

PRIORITY

In any instance where there is an apparent conflict between these special provisions, utility technical specifications, and the corresponding terms of the "Standard Specifications", and contract plans, these special provisions followed by the utility technical specifications, followed by the technical special provisions, followed by the standard specifications, followed by the contract plans

shall be controlling.

NO SEPARATE PAYMENT FOR SPECIAL PROVISIONS

No separate payment will be made for the Contractor to execute Special Provisions. All expenses borne by the Contractor shall be included in the individual unit prices for the particular pay item, applicable pay item or as part of the lump sum quantity for Mobilization.

CONSTRUCTION HOURS

No work shall be done between 7:00 p.m. and 7:00 a.m., or on weekends or legal holidays without written permission of the County, except emergency work.

CONSTRUCTION STAKING

All construction staking and survey work shall be completed prior to Clearing and Grubbing activities and shall be performed by a Registered Land Surveyor. The right-of-way shall be staked and shall include any easements (TCE or permanent) and maintained through the duration of construction. Right-of-way stakes shall be placed at all right-of-way corners and a maximum of 200 feet between corners, and shall be visible for contractor personnel, utility companies, and County representatives.

MATERIALS

- a. **Delivery Tickets:** It will be necessary to submit a copy of all delivery tickets for materials used on the project, regardless of the basis of payment.
- b. **Job Mix Formula for Asphaltic Concrete:** Attention is directed to the requirement that job mix formulas for asphaltic concrete, of the type specified, be submitted at least 14 days before plant operations begin. The submitted formula should be derived, or approved, by the laboratory approved by the County Representative to make test on the Project. Costs for such job mix formulation will be paid by the Contractor directly to the assigned laboratory.
- c. **Job Mix Formula for Portland Cement Concrete:** Attention is directed to the requirement that job mix design formulas for all Portland Cement Concrete, of the type specified, be submitted at least 14 days prior to use on the project. The submitted formulas shall be derived or approved by the County Representative and/or its agents. All concrete mix designs shall meet FDOT Concrete Class mix guidelines, except as follows: when approved, in writing by the County Representative, an Alternate Class I Concrete mix design formula, for concrete curb and gutter to be placed by automated curb machines, may show, as a substitution for #57 aggregate, an amount of #89 aggregate not to exceed 33 percent, by weight, of the #57 aggregate.

LABORATORY TESTING

Quality Assurance Testing for the Work shall be performed at no expense to the Contractor. However, any test that fails or is not performed, as a result of the Contractor's action will, in turn, be back-charged to the Contractor, including the cost of all re-testing due to defective materials or construction. The testing laboratory shall be approved by the County Representative.

The samples and tests used for determining the quality and acceptability of the materials and workmanship, which have been or are to be incorporated in the Work, shall conform to the requirements of the State of Florida Department of Transportation Materials Sampling, Testing and Reporting Guide, latest edition.

Testing shall also be in accordance with the applicable portions of the *FDOT Standard Specifications, latest version* and these special provisions.

MEASUREMENT PAYMENT

- a. All work completed under the terms of this contract shall be measured according to United States Standard Measures.
- b. All measurements shall be taken horizontally or vertically unless specifically provided otherwise.
- c. Whenever any change, or combination of changes, on the plants results in an increase or decrease in the original contract quantities, and the work added or decreased/eliminated is of the same

general character as that called for on the plans, the Contractor shall accept payment in full at the original contract unit prices for the actual quantity of work performed, with no allowance for any loss of anticipated profits.

- d. Any quantity item not indicated in the Bid Form but shown on the Plans shall be included as part of the lump sum quantity **Mobilization. FDOT Item No. 101-1.**
- e. It is the Contractor's responsibility to perform detailed quantity take-off from the plans to determine actual quantities for ordering and delivery purposes. The County Representative will not be responsible for quantities ordered in excess of those installed and constructed. The Contractor should be aware that some of the pay items may have contingency quantities. Payment shall be made only for final in-place quantities.
- f. No payment shall be made for contingency quantities or additional work unless otherwise directed and approved in writing by the County Representative.
- g. The Contractor shall submit a Schedule of Values within 30 days of Award of Contract.

RESTORATION

Payment for restoration shall be covered under the applicable restoration Pay Items as specified in the Bid Form. If a specific restoration Pay Item is not listed in the Bid Form, the cost of such work shall be included in the applicable Pay Item unless otherwise provided under separate restoration section or pay quantity of these Specifications.

COOPERATION WITH OTHERS

The Contractor shall cooperate with the owner of any underground or overhead utility lines in their removal and rearrangement operations, in order that these operations may progress in a reasonable manner and that service rendered by these parties will not be interrupted. The County shall not be responsible for costs associated with delays, disruptions and remobilizations attributed to utility agency scheduling.

SITE INVESTIGATION

The Contractor acknowledges that he has satisfied himself as to the nature and location of the work; the general and local conditions, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials; availability of labor, water, electric power, roads; and uncertainties of weather, water stages, tides or similar physical conditions at the site; the conformation and conditions of the ground; the character of equipment and facilities needed preliminary to and during prosecution of the work.

The Contractor further acknowledges that he has satisfied himself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered, insofar as this information presented by the drawings and Specifications made a part of this contract.

The Contractor shall carefully review and adhere to conditions and recommendations made in the project geotechnical report.

Any failure by the Contractor to acquaint himself with the available information will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the work.

The County assumes no responsibility for any conclusions or interpretations made by the Contractor on the basis of the information made available by the County. The County also assumes no responsibility for any understanding or representations made by its officers or agents during or prior to the execution of this Contract, unless (1) such understanding or interpretations are made in writing by the County or are expressly stated in the Contract and (2) the Contract expressly provides that the responsibility therefore is assumed by the County.

CONTRACTOR'S SUPERVISION

- a. **Prosecution of Work:** The Contractor shall give the work the constant attention necessary to assure the scheduled progress. He shall cooperate fully with the County Representative and with other Contractors at work in the vicinity.
- b. **Contractor's Superintendent:** The Contractor shall at all times have on the work site as his agent, a competent superintendent capable of thoroughly interpreting the plans and specifications and thoroughly experienced in the type of work being performed, who shall receive the instructions from the County Representative or his authorized representatives. The superintendent shall have full authority to execute the orders or directions of the County Representative and to supply promptly any materials, tools, equipment, labor and incidentals that may be required. Such superintendence shall be furnished regardless of the amount of work sublet.
- c. **The Contractor's superintendent shall speak and understand English, and at least one responsible person who speaks and understands English shall be on the project during all working hours.**
- d. **Supervision for Emergencies:** The Contractor shall have a responsible person available at or reasonably near the work site on a 24-hour basis, 7 days a week; in order that he may be contacted for emergencies and in cases where immediate action must be taken to maintain traffic or to handle any other problem that may arise. The Contractor's responsible person for supervision for emergencies shall speak and understand English. The Contractor shall submit, by certified mail, phone numbers and names of personnel designated to be contacted in cases of emergencies along with a description of the project location to the Florida Highway Patrol and all other local law enforcement agencies.

LIST OF EMERGENCY CONTACT NUMBERS & UTILITY SERVICE MAINTENANCE

The Contractor shall obtain and maintain a list of emergency contact phone numbers for all utilities during the course of the project. The Contractor shall maintain utility service during the project except for interruptions authorized by the utility owner. If interruptions are required, the Contractor shall notify the utility owner 48 hours in advance.

MAINTENANCE AND RESTORATION OF JOB SITE

The Contractor shall conduct his operations in such a manner as will result in a minimum of inconvenience to occupants of adjacent homes and business establishments and shall provide temporary access as directed or as may be required by the Project Manager. All final restoration must be performed to an equal or better condition than that which existed prior to construction.

Good housekeeping on this project is extremely important and the Contractor will be responsible for keeping the construction site neat and clean, with debris being removed daily as the work progresses or as otherwise directed by the Project Manager. Good housekeeping at the job site shall include: Removing all tools and temporary structures, dirt, rubbish, etc.; hauling all excess dirt, rock, etc., from excavations to a dump provided by the Contractor; and all clean up shall be accomplished to the satisfaction of the Project Manager. Dust will be controlled daily as may be required. Immediately after construction completion in an area or part thereof (including restoration), barricades, construction equipment and surplus and discarded materials shall be removed by the Contractor.

In the event that the timely clean up and restoration of the job site is not accomplished to the satisfaction of the Project Manager, the Project Manager shall make arrangements to affect the necessary clean up by others. The Contractor shall be charged for these costs through deductions in payment due the contractor. If such action becomes necessary on the part of and in the opinion of the Project Manager, the County shall not be responsible for the inadvertent removal from the work site of materials which the Contractor would not normally have disposed of had he affected the required clean up.

REQUIREMENTS FOR CONTROL OF THE WORK

Prior to the start of the Work described in this contract, a pre-construction conference shall be held by the Project Manager to be attended by the Contractor and representatives of the various utilities and others as required, for the purpose of establishing a schedule of operations which will coordinate the work to be done under this contract with all related work to be done by others within the limits of the project.

All items of work in this contract shall be coordinated so that progress of each related item will be continuous from week to week. The progress of the work will be reviewed by the Project Manager at the end of each week, and if the progress of any item of work during that week is found to be unsatisfactory, the Contractor shall be required to adjust the rate of progress on that item or other items as directed by the Project Manager without additional compensation. The Contractor will continuously control the work until completed.

PROJECT SCHEDULE

The Contractor shall submit a detailed Critical Path Method (CPM) schedule within 10 days of the pre-construction meeting for the County to review. The submittal shall meet the following requirements:

- A CPM Schedule will be submitted on 11-inch by 17-inch paper.
- The time scale (horizontal) shall be in weeks. The activities shall be listed on the left

- hand side (vertical).
- Activities shall show most Work activities. The listing from top to bottom shall be in a logical sequence of how the Work will be accomplished. Space shall be provided between activities or within bars to allow for marking of actual progress.
 - The submittal shall show the order and interdependence of activities and the sequence for accomplishing the work. All activities shall be described in sufficient detail so that the Engineer can readily identify the work and measure the progress on of each activity. The submittal shall show each activity with a beginning work date, duration, and a monetary value. Include activities for procurement fabrication, and deliver of materials, plant, and equipment, and review time for shop drawings and submittals. Include milestone activities when milestones are required by the Contract Documents. In a project with more than one phase, adequately identify each phase and its completion date, and do not allow activities to span more than one phase.
 - The Contractor shall conduct sufficient liaison and provide sufficient information to indicate coordination activities with utility owners that have facilities within the limits of construction have been resolved. Incorporate in the schedule any utility adjustment schedules included in the Contract Documents unless the utility company and Manatee County mutually agree to changes to the utility schedules shown in the Contract. Submit a working plan with the schedule, consisting of a concise written description of the construction plan.
 - The Project Manager will return inadequate schedules to the Contractor for corrections. Resubmit a corrected schedule within 15 calendar days from the date of the Project Manager's return transmittal.
 - The Contractor shall submit an updated Work Progress Schedule, for Project Manager's acceptance, if there is a significant change in the planned order or duration of an activity. The Project Manager will review the corrected schedule and respond within 7 calendar days of receipt.

A copy of the schedule, clearly showing progress made, shall be submitted on a monthly basis during the progress of the work at the monthly meeting. Review or acceptance will neither impose on the County responsibility for the progress or scheduling of the Work, nor relieve the Contractor from full responsibility therefore.

By acceptance of the schedule, the Project Manager does not endorse or otherwise certify the validity or accuracy of the activity durations or sequencing of activities. The Project Manager will use the accepted schedule as the baseline against which to measure the progress.

The Contractor shall provide a revised Work schedule if, at any time, the County considers the completion date to be in jeopardy because of "activities behind schedule". An activity that cannot be completed by its original or latest completion date shall be deemed to be behind schedule. The revised Work schedule is designed to show how the Contractor intends to accomplish the Work to meet the contractual completion date. The form and method employed by the Contractor shall be the same as for the original Work schedule.

If the Contractor fails to finalize either the initial or a revised schedule in the time specified, the Project Manager will withhold all Contract payments until the Project Manager accepts the schedule.

The cost to prepare and revise the schedule is considered incidental to the Work.

USE OF PRIVATE PROPERTY

All construction activities required to complete this project in accordance with the Contract Documents shall be confined to public right-of-way, easements of record or temporary construction easements, unless the Contractor makes specific arrangements with private property owners for his use of their property. Written authorization from the granting property owner shall be placed on file with the Project Manager prior to utilization of said private properties. The County assumes no responsibility for damage to private property in such instances. The Contractor is responsible for protection of private property abutting all work areas on this project. Adequate equipment storage and material storage shall also be accomplished outside the County's right-of-way. Pipe and other materials shall not be strung out along the right-of-way, but will be delivered in quantities adequate for one day's installation. The County will coordinate with the Contractor to identify possible storage sites.

PRE-CONSTRUCTION AND CONSTRUCTION PROGRESS PHOTOGRAPHY

General

The Contractor shall employ a competent photographer to take construction record digital photos and perform video recording, including providing all labor, materials, equipment and incidentals necessary to obtain photos and/or video recordings of all areas within the project limits or as otherwise specified in the Contract specifications.

The word "Photo" includes standard photographic methods involving digital photography and production of hard copies for photos and saving photos as jpg files on diskettes and CD-ROMs.

Qualifications

A competent camera operator who is fully experienced and qualified with the specified equipment shall do all photography.

For the video recording, the audio portion should be done by a person qualified and knowledgeable in the specifics of the Contract, who shall speak with clarity and diction so as to be easily understood.

Project Photos for Construction Progress

Provide photos of the entire work area during construction for the purpose of records of completed work. Photos should be spaced at approximately 100-foot intervals. Three prints of each standard photograph shall be provided to the County. In addition to the CD_ROM media, one print of each digital photograph shall be provided to the County.

The Contractor shall pay all costs associated with the required photographs and prints. Any parties requiring additional photography or prints will pay the photographer directly.

Each print shall have clearly marked on the back the name of the project, the orientation of view, the date and time of exposure, name and address of photographer and the photographers numbered

identification of exposure.

All project photographs shall be a single weight, color image. All finishes shall be smooth surface and glossy, and all prints shall be 8 inches by 10 inches.

All project photos shall be taken from locations to adequately illustrate conditions prior to construction, or conditions of construction and state of progress. The Contractor shall consult with the County Representative at each period of photography for instructions concerning views required.

The Contractor shall deliver photos in conformance with the above requirements to the County Representative. No construction shall begin until pre-construction photo are completed and submitted to the County Representative.

Record Photos

The Contractor shall require that photographer maintain digital copies of photos for a period of two years from date of Substantial Completion of the Project.

Photographer shall agree to furnish additional prints to the County Representative at commercial rates applicable at the time of purchase. Photographer shall also agree to participate as required in any litigation requiring the photographer as expert witness.

Video Recording for Pre-Construction

Video recording shall be used in lieu of photos for pre-construction. It shall be of sufficient quality to fully illustrate details of conditions and construction, including special features

Video recording shall be accomplished along all routes that are scheduled for construction.

The video recording shall, when viewed, depict an image with $\frac{1}{4}$ of the image being the roadway fronting of property and $\frac{3}{4}$ of the image being of the property. The video recording shall be done so as to show the roadway and property in an oblique view (30 degrees).

A complete view, in sufficient detail, of all driveways, with audio description of the exact location shall be provided. The Engineering plans shall be used as a reference for stationing in the audio portion of the video recording for easy location identifications. If visible, house numbers shall be mentioned on the audio.

Two complete sets of video recording shall be delivered to the Owner for the permanent and exclusive use of the Owner prior to the start of any construction on the project. All video recording shall contain the name of the project, the date and time of the video recording the name and address of the photographer and any other identifying information required.

Payment for this item shall be included under the pay item for Mobilization.

PROJECT IDENTIFICATION SIGN

The Contractor shall be responsible for furnishing, installing and maintaining two (2) County project

identification signs and removal of same upon completion of the construction. Project identification sign shall be constructed and maintained at the project site as directed by the County Representative. The Contractor shall erect, maintain and relocate the sign as directed for the duration of the Project.

The Contractor shall mount the sign using 4-inch pressure treated lumber or as approved by the County Representative, and other supports as required, at a location mutually agreed by the County Representative and the Contractor.

The identification signs shall not be less than 32 square feet in area. The Contractor shall coordinate with the County Representative for the sign verbiage before fabrication. The signs shall be painted with graphic content to include:

- Title of Project
- Name of Owner
- Names and Titles of authorities, as directed by the County Representative
- Prime Contractor
- Construction Cost

The following page illustrates the required sign verbiage. Signs will be required at the beginning of the project and at each end construction, a total of six.

The signs shall be erected prior to commencement of work at a lighted location of high public visibility, adjacent to the main entrance at each end of the project, as approved by the County Representative.

The signs shall be a minimum of 8 feet wide and 4 feet high. The signs shall be constructed of high density 3/4-inch exterior plywood without waves or buckles, mounted and braced with pressure treated lumber as necessary and maintained in a presentable condition for the duration of the project. Hardware shall be galvanized. The surface of the sign shall be of exterior softwood plywood with medium density overlay.

Painting shall be constructed with materials to resist weathering and fading during the construction period. Experienced professionals shall perform painting. Graphic design and style shall be in accordance with the following:

- The signs will be placed in accordance with Manatee County Development Code, Ordinance 90-01, Section 724, Signs and Section 713, Visibility Triangles.

Payment for installing and maintaining the project identification signs shall be included as part of the lump sum quantity under Pay Item Number 1 (101-1) for Mobilization. The sign will remain the property of the County upon completion of the Project unless otherwise directed.



ENTER PROJECT NAME

Board of County Commissioners

BETSY BENAC

CHAIRMAN

JOHN CHAPPIE

CHARLES B. SMITH

CAROL WHITMORE

VANESSA BAUGH

ROBIN DiSABATINO

LARRY BUSTLE

CONSTRUCTION COST

\$Enter Amount

PRIME CONTRACTOR

Enter Contractor Name

SOIL EROSION AND SILTATION

The Contractor shall plan and control the Work to minimize all soil erosion and the siltation of drains and canals resulting from such erosion.

At the pre-construction meeting, the Contractor shall present his proposed plan and schedule, which shall specifically indicate the proposed used of temporary erosion control features.

SHOP DRAWINGS

The Contractor shall be required to submit shop drawings and maintain a logbook that clearly defines the submittals for the project.

The Contractor shall submit to the County Project Manager for distribution and approval, all working drawings and shop drawings with descriptive specifications and engineering calculations necessary for the successful completion of the Work. The shop drawing shall be submitted in pdf format, along with a submittal log and the number of the submittals should follow the number on the submittal log. Each shop drawing shall have a cover sheet and reference the submittal log number, following the sample format provided in the contact documents.

The Contractor is responsible for maintaining a Submittal Activity Record (Logbook) on this project. The Contractor shall submit all shop drawings to the Roadway Engineer of Record for processing to the appropriate Area of Practice EOR for review. The Area of Practice EOR will complete the review and return the shop drawing to the Roadway Engineer of Record for logging and processing back to the Contractor and to the County Representative.

The logbook shall be updated each day that any Shop Drawing submittal activity occurs.

The following minimum data shall be entered in the logbook for each submittal:

- County Project Number
- Submittal Number
- Description of Submittal
- Number of Sheets in the Submittal
- Number of Pages of Calculations, in Reports, in Manuals, etc.
- Date Transmitted by Contractor to the Roadway Engineer of Record
- Date Transmitted by Roadway EOR to the Area of Practice EOR
- Date Roadway EOR Receives Shop Drawing Back From Area of Practice EOR Date
- Roadway EOR Sends Shop Drawing Back to Contractor
- Disposition as either "A" (Approved), "AN" (Approved as Noted), "R" (Resubmit) or "NA" (Not Approved).

The Logbook is a historical record of the activity devoted to an individual submittal as well as that for the project as a whole. It can serve as a verification of review time, to respond to inquiries of a particular submittal's status and as a record of manpower effort to aid in estimating and allocating future workload.

SAMPLE

Shop Drawing Submittal Cover Sheet
(IFB) # 14-3257CD

Project Name: Project Name Goes Here – Group or Phase 3

Specification Title Number: 2620

Specification No.: Part 2, 2.01.A

Page(s): 141

Date: _____

Submittal No. _____

Description: *Plastics Polyethylene PE 3608 DIPS Potable Water Pipe HDPE*

SHOP DRAWING REVIEW	
RESPONSE NOT REQUIRED	RESPONSE REQUIRED
<input type="checkbox"/> NO EXCEPTIONS TAKEN <input type="checkbox"/> NOTE MARKINGS	<input type="checkbox"/> NOTE MARKINGS, CONFIRM <input type="checkbox"/> NOTE MARKINGS, RESUBMIT <input type="checkbox"/> REJECTED, RESUBMIT
<p>Engineer's review is for general conformance with the design concept and contract documents. Markings or comments shall not be construed as relieving the Contractor from compliance with the project drawings and specifications, nor departure therefrom. The Contractor remains responsible for details and accuracy, for confirming and correlating all quantities and dimensions, for selecting fabrication processes, for techniques of assembly, and for performing his work in a safe manner.</p> <p>MANATEE COUNTY PUBLIC WORKS DEPARTMENT</p> <p>By: _____ Date: _____</p>	



John Doe
 Project Manager
 Manatee County
 1022 26th Ave E.] (941) 08-7450] (941) 708-7431
email@email.com

Approval Signature: _____ Approved: 10/26/

SUBSOIL EXCAVATION

The Contractor shall detect and remove all unsuitable material such as muck and organic materials, plastic soils, debris, trash, rock fragments and dense soil, etc. within project limit, following FDOT Design Standard Index 500, latest version. Payment for subsoil excavation shall be included in the subsoil excavation pay items unless separate pay items are specified.

TEMPORARY PAVEMENT

Temporary pavement shall consist of a minimum of Optional Base Group 04 and one (1) inch of Type SP structural course (Traffic C) asphalt over a firm, unyielding, well-compacted subgrade. The Contractor shall immediately repair all potholes that develop within the project limits and shall maintain a supply of cold mix on the project site to expedite these repairs.

The temporary by-pass road shall provide adequate cover and protection of existing utilities. It is the Contractors responsibility to coordinate with utility companies to repair all damages to the existing utilities during the construction at no additional cost to the County or owner.

Payment for the temporary pavement and maintenance of this pavement shall be under Maintenance of Traffic.

DEWATERING, SHEETING AND BRACING

The Contractor shall determine the need of dewatering, sheeting and bracing to facilitate the construction, conforming to current SWFMWD/FDEP rule and OSHA safety criteria. Payment for dewatering, sheeting and bracing shall be included in the applicable pay item for earthwork, unless separate pay items are specified.

Approval of Dewatering Plan:

At least 10 days prior to the commencement of any dewatering activity, the Contractor shall obtain the approval from SWFMWD/FDEP (if water needs to be discharged offsite into the state surface water) and submit to the Project Manager, a detailed description of the proposed dewatering system. This plan shall include design computations, layout, type, and spacing of dewatering devices, number and size of pumps and other equipment, with a description of the installation and operating procedures.

CALCULATIONS OF EARTHWORK

Quantities included on cross-section sheets, if any, represent estimated in-place quantities and do not include shrinkage and expansion factors. The quantities were calculated by the method with average end areas between the station-to-station limits. Payment for Earthwork shall be made based on average end area method calculations. Contractor shall provide supporting survey data (before and after cross-sections) and calculations for payment purposes.

MAINTENANCE OF TRAFFIC AND CONSTRUCTION PHASING

The Contractor shall prepare and submit a Maintenance of Traffic plan and submit it to the County Representative for review prior to implementation. The Maintenance of Traffic Plan will require the seal of a Florida licensed Professional Engineer with a current FDOT Advance Work Zone certification if any change is made to the FDOT Index 600 Series. The primary goals for the Maintenance of Traffic Plan are as follows:

1. No roadway closure shall be allowed unless coordinated with Manatee County Traffic Representative in advance.
2. Comply with all FDOT safety criteria, FDOT Design Standards 600 Series Indexes, FHWA and MUTCD standards, and allow for traffic to operate in daytime or nighttime.
3. Comply with the FDOT Connection Permit for the US 301 improvements as shown in the roadway plans.
4. Business Entrance signs per FDOT Index 17355 (FTP-59) shall be placed at all business entrance points and maintained during all phases of construction.
5. Provide access to businesses and local residents at all times.

Payment for all items related to maintenance of traffic shall be included under the appropriate pay item for Maintenance of Traffic. This shall include, but not be limited to, preparation of the signed and sealed maintenance of traffic plan for all segments of roadway construction, all maintenance of traffic signs including business signs and advance warning signs for side streets, all barricades and drums, temporary concrete barrier wall, all warning lights, temporary pavement if required, removal of existing pavement markings, temporary pavement markings, temporary RPM's, portable changeable message signs, advance warning arrow panels, shoulder treatment for drop off conditions, off duty police officer, temporary asphalt aprons around utility and storm manholes and valve boxes located within the pavement area, and any other items required to comply with safety and design standards.

MAINTENANCE OF STORM DRAINAGE SYSTEM

The Contractor shall be responsible at all times to maintain the operation of existing stormwater facilities, or, when existing stormwater facilities are removed, to provide equivalent capacity. Temporary drainage systems should be of adequate size to prevent upstream flooding in excess of existing conditions. This responsibility shall include the installation of temporary connections, bypass pumping, or other temporary means necessary until the new drainage system is fully operational. No separate payment shall be made for maintaining existing stormwater facility.

FINAL STORM SYSTEM CLEANUP

The Contractor shall televise culverts, clean and remove/dispose all siltation and debris from all proposed storm culverts, structures, swales and ponds. No separate payment shall be made for system cleanup.

POST-CONSTRUCTION STORM PIPE TESTING

The Contractor shall inspect and televise all newly constructed storm pipes on the project. The purpose is to assure the pipes are properly constructed and do not leak at the joints. Laser profile, Video DVD, and report shall be provided for those pipes whose diameters are equal or smaller than 48 inch, following FDOT Specifications. Laser profile is, only, required for all ADS/HDPE stormwater pipes.

For pipes 48 inches or less in diameter, provide the Engineer a video DVD and report using low barrel distortion video equipment with laser profile technology, non-contact micrometer and associated software (or approved equal) that provides:

1. Actual recorded length and width measurements of all cracks within the pipe.
2. Actual recorded separation measurements of all pipe joints.
3. Pipe ovality report.
4. Deflection measurements and graphical diameter analysis report in terms of x and y axis.
5. Flat analysis report.
6. Representative diameter of pipe.
7. Pipe deformation measurements, leaks, debris, or other damage or defects.
8. Deviation in pipe line and grade, joint gaps, and joint misalignment.

No separate payment shall be made for post-construction storm pipe testing.

SIDEWALKS TO REMAIN OPEN

Existing sidewalks and proposed sidewalks completed during construction shall remain open at all times unless otherwise by the County Representative. Temporary sidewalk may be required to maintain pedestrian movement. No separate Payment shall be made for maintaining existing sidewalks.

EXISTING SIDEWALK

If the Contractor, in the process of performing his contract operations, breaks any of the existing sidewalks that are to remain in place, replacement of this sidewalk will be at the Contractor's expense.

PEDESTRIAN ACCESS

The Contractor shall provide access and make provisions to maintain school zones during construction. The Contractor is to facilitate pedestrian traffic whether for school or public transportation. Any pedestrian detours needed shall comply with FDOT Design Standards Index 660.

DUST CONTROL

The Contractor shall control dust resulting from construction operations at all times. The

locations and frequencies of applications shall be as directed by the County Representative. Dust control is required to be in accordance with the FDOT *Standard Specifications*. Payment for Dust Control shall be made under Mobilization unless separate pay item for Dust Control is specified.

UNDERGROUND UTILITY LOCATIONS

The Contractor shall field verify by means of subsurface locating or other approved method all existing utilities to remain and conditions as may be required for the work area. This shall include all areas of potential conflicts with proposed storm, sanitary, force main and water main. The Contractor shall locate all existing utilities to remain at potential conflict locations prior to construction activities and before ordering any proposed structures. The Contractor shall contact and coordinate with Sunshine State One Call 811 as well the individual utilities prior to and during construction for utility locations, relocation and assistance while installing in potential conflict areas. All utility coordination and relocations shall be factored into the Contractor's construction schedule at no additional cost to the County.

The cost of all labor, materials and incidentals required for the performance of any survey and utility location work shall be included under the pay item for Mobilization. A Florida registered land surveyor shall perform all survey work.

UTILITY CONFLICTS

It shall be the Contractor's responsibility to avoid conflicts with other utilities. The County will not be responsible for additional costs incurred by the Contractor for incorrect installations, relocations and breaks due to service conflicts.

The Contractor's equipment shall maintain minimum clearance distance to the power line (10 feet for voltage up to 50kv, 15 feet for voltage over 50kv to 200kv, 20 feet for voltage over 200kv to 350kv, 25 feet for voltage over 350kv to 500kv, 35 feet for voltage over 500kv to 750kv, 45 feet for voltage over 750kv to 1000kv.), following new OSHA Rule (29 CFR Part 1926) and FDOT Roadway Design Bulletin 11-03 DCE Memorandum 02-11.

UTILITY COORDINATION

The Contractor shall be responsible for coordination of the work with all affected utility owners. The Contractor must take into consideration the required utility adjustments and relocations in development of his schedule for completing the work including construction of temporary work to allow phased construction of the permanent facilities.

The Contractor shall coordinate and schedule utility relocations and/or adjustments with the utility owners along the project in order to avoid delays. The work includes remobilization if required after utility relocation is complete. The intent is to coordinate utility construction activities so the project construction continues and is not stopped or delayed at any time due to utility work being done. Once Notice to Proceed is issued, the Contractor shall contact the affected utilities to discuss the Contractor's anticipated means and methods so temporary and permanent

relocation plans can be implemented as needed to meet OSHA safety requirements.

The Contractor shall hold a utility owners meeting every two weeks / or alternate time schedule agreed to by the Owner at 1022 26th Avenue East. The meeting shall review current and upcoming activities for the project. Written meeting minutes will be prepared by the Contractor and distributed to the meeting participants within 3 calendar days of the meeting.

During the design phase of this project the Engineer performed research to obtain the best information available for the existing utilities located within the project limits. The information found from this research has been illustrated on the project plans or provided back to the County in electronic format on CD. The following information is offered to assist the Contractor in understanding the extent of the utility investigations and coordination.

1. Atlas maps for County owned water and sewer utilities were obtained from the County. The existing water and sewer information from the atlas maps were transferred to the plans.
2. A topographic survey was performed for the project and used to prepare the mapping for the project plans. This topographic survey obtained location information for above ground utilities including fire hydrants, valve box tops, manhole tops, and manhole inverts.
3. Subsurface utility engineering survey was performed at specific locations where the Engineer determined there may be potential utility conflicts. The mast arm pole foundation locations shown on the plans were surveyed to verify these specific locations were clear of any existing underground utilities. Potential utility conflicts between proposed water utility improvements and storm sewer or other existing utilities were evaluated by obtaining field verified horizontal and vertical locations of the existing utilities. The field verified locations of existing utilities are at specific points where the conflicts were shown to occur on the drawings.
4. Utility coordination was provided during the design process with all known utility owners. This included submitting plans to the utility owners at the 60%, 90% and 100% design development phases. Marked plans were received from utility owners showing the disposition of their existing or proposed utilities. This information has been transferred to the Utility Adjustment Plans.

DAILY CLEAN-UP REQUIREMENTS

The Contractor shall clean up the job site at the end of each workday. Clean-up will include the elimination of rubble and waste material on public and private property. Driveways shall remain accessible by residents. Each Friday, the Contractor shall prepare the road surface and barricades in an acceptable manner for weekend traffic use.

RECORD DRAWINGS AND PROJECT CERTIFICATION

The County Representative will furnish the Contractor copies of the bid plans to be used for the record drawings. A Florida Registered Surveyor shall perform a field survey and any differences between the plan elevations or dimensions shall be marked through and the as-built elevation or

dimension legibly entered. All elevations and dimensions that are correct shall have a check mark placed beside it.

The Contractor shall keep a complete set of surveyed ‘As-built’ records. These records shall show all items of Work and existing features of utilities revealed by excavation work. The records shall be kept in a professional manner, in a form that shall be approved by the County prior to the Work. These results shall be available at all times during construction for reference by the County Representative and shall be delivered to the County Representative upon completion of the Work. All completed “As-Builts” must be certified by a Florida Licensed Surveyor or Engineer per chapter 61 G 17-6, Florida Administrative Code, pursuant to Sec. 47207, Florida Statutes.

The following information is required on the “Record Drawings”:

The “Record Drawings” shall, at a minimum, include the following:

- A. Roadway centerline profile [100-foot maximum interval]
- B. Roadway cross sections [100-foot maximum interval]
- C. Swale or ditch cross sections [100-foot maximum interval] and at all grade breaks (vertical and horizontal)
- D. Drainage structures including all plan dimensions, structure top and bottom elevations, weir elevations, skimmer dimensions/elevations and culvert invert elevations
- E. Side bank, underdrain filters or exfiltration trenches. Provide dimensions and elevations of all including clean-outs, pipes and connections to other structures.
- F. Flow line on all pipes and ditch breaks.
- G. Stormwater ponds and treatment swales with cross sections [25-foot maximum interval] (sufficient to calculate volumes). Also limits of planted littoral shelves.
- H. Wetland mitigation or restoration areas. Provide cross-sections [50-foot maximum interval], number and location/elevation of all plantings.
- I. All underground piping with elevations and dimensions, changes to piping locations, horizontal and vertical locations of underground utilities and appurtenances referenced to permanent surface improvements. Actual installed pipe material, class, etc. Dimensions at these locations shall indicate distance from the centerline of construction.
- J. Field changes of dimensions and details.
- K. Details not on original contract drawings.
- L. Bench marks and elevation datum shall be indicated.
- M. Additional elevations or dimensions as required by the County Representative

Following completion of construction and prior to final payment, the Contractor shall submit a Certification by the Contractor and Manufacturer including test data that the materials (filter fabric, filter media, etc.) installed meet plan specifications and regulatory requirements.

Upon completion of the work, four (4) sets of draft “Record Drawings” shall be submitted to the County Representative for review. Such drawings shall accurately show all approved field changes

to the original Construction Drawings, including actual locations, dimensions and elevations and shall be subjected to a field review in the presence of the County Representative. The drawings are to be prepared by competent personnel, neatly drafted and certified, signed and sealed by a Florida Registered Surveyor.

The Contractor shall incorporate any comments from the County Representative and shall submit two write-only CD-ROMs (showing changes in AutoCAD format), one set of 24-inch by 36-inch Mylar record drawings, and four sets of 24 by 36-inch certified prints with the Surveyor's certification.

All Digital Drawings shall be identical to those submitted as hard copy. The Digital Drawing files shall be AutoCAD format (Release 2010 or later) and shall include all external reference drawings, text fonts, shape files and all other files necessary to make use of the drawings.

The County Representative will review and approve the "Record Drawings within 30 days unless additional information is required. No final payment shall be made until such time as the "Record Drawings" have been approved and accepted by SWFWMD for Maintenance and Operation Phase Transfer. Unless there is a separate pay item for Record Drawings, payment shall be included as part of the lump sum quantity for Mobilization.

CURE TIME BEFORE THERMOPLASTIC APPLICATION

The Contractor shall allow minimum 30 days cure time before applying the thermoplastic pavement striping and markings. Necessary re-mobilization for this purpose shall be included under the Pay Item for mobilization. Provide temporary pavement markings during the interim period if the road is open to traffic. The price of temporary pavement marking shall be included in the Maintenance of Traffic.

MAILBOX TEMPORARY REMOVAL

The Contractor shall remove, store and replace all existing mailboxes within the project right-of-way. This work shall include:

- a. Coordinating with each County Representative or resident regarding removal of the existing mailboxes from the right-of-way.
- b. Working with the Local Postmaster to develop a method of temporary mail service for the period between removal and completion of construction activities.
- c. Storing the mailboxes.
- d. Replacing the mailboxes in the right-of-way.

Payment for mailbox temporary removal, storage and replacement shall be included under the pay item for Mailbox (Furnish & Install).

EXISTING TREES

All existing trees located within Right-of-way and Easement limits shall be removed unless otherwise noted in the construction plans. Extra attention shall be given for oak trees that are to remain when the excavation is close to the trees and cutting of the roots is unavoidable. Any roots over 1-inch diameter shall have clean cut. The Certified Arborist shall be present during any

root pruning process. The payment for tree removal shall be included under Clearing and Grubbing pay item.

OTHER PERMITS

The Contractor shall comply and adhere to conditions stipulated in other project related permits. It is the Contractor's responsibility to request or obtain a listing of available required permits for this project.

CONTRACTOR TO EXECUTE NPDES “NOTICE OF INTENT”

Prior to proceeding with construction, the Contractor shall prepare and submit a “Notice of Intent to Use Generic Permit for Stormwater Discharge from Construction Activities that Disturb One or More Acres of Land” to the Florida Department of Environmental Protection (FDEP). The Contractor shall monitor the site at all times and take appropriate action to prevent erosion including the use of BMPs. No pumping of ground or surface water shall be performed without approval from the Water Management District. Following completion of construction, Contractor shall prepare and submit a “Notice of Termination of Generic Permit Coverage” to FDEP. Payment for this item shall be included under the pay item for Mobilization.

WORKSITE TRAFFIC SUPERVISOR

- a. The Contractor shall have a Worksite Traffic Supervisor who will be responsible for initiating, installing and maintaining all traffic control devices as described in Section 102 of the *FDOT Standard Specifications for Road and Bridge Construction* and in the Plans. The Worksite Traffic Supervisor shall have at least one year of experience directly related to work site traffic control in a supervisory or responsible capacity and shall be certified by the American Traffic Safety Services Association Worksite Traffic Supervisor Certification Program or an equal approved by FDOT. Approved alternate Worksite Traffic Supervisors may be used when necessary.
- b. The Worksite Traffic Supervisor shall be available on a 24-hour per day basis and shall review the project on a day-to-day basis as well as being involved in all changes to traffic control. The Worksite Traffic Supervisor shall have access to all equipment and materials needed to maintain traffic control and handle traffic related situations. The Worksite Traffic Supervisor shall ensure that routine deficiencies are corrected within a 24-hour period.
- c. The Worksite Traffic Supervisor shall be available on the site within 45 minutes after notification of an emergency situation, prepared to positively respond to repair the work zone traffic control or to provide alternate traffic arrangements.
- d. Failure of the Worksite Traffic Supervisor to comply with the provisions of the Sub-article may be grounds for decertification or removal from the project or both. Failure to maintain a designated Worksite Traffic Supervisor or failure to comply with these provisions will result in temporary suspension of all activities except traffic and erosion control and such other activities deemed to be necessary for project maintenance.
- e. Payment for Worksite Traffic Supervisor shall be included under the pay item for Maintenance of Traffic.

COMPLIANCE WITH THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD) STORMWATER MANAGEMENT AND DISCHARGE PERMIT REQUIREMENTS AND/OR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) DREDGE AND FILL PERMIT REQUIREMENTS

Southwest Florida Water Management District Stormwater Management and Discharge permits or exemptions, if any, and/or a Department of Environmental Protection Dredge and Fill permit, if any, required for this project have been obtained by the County Representative. The Contractor shall comply with the stipulations of the Permits or Exemptions as stated herein.

The Contractor shall allow periodic inspection of the work by authorized representatives of the Department of Environmental Protection, the Southwest Florida Water Management District, as well as other duly authorized law enforcement officers of the State.

The County Representative will furnish the Contractor a copy of the Permit Document, which shall be posted in a conspicuous location at the work site during the entire period of the work. The permit document shall be readily available at the project site to any duly authorized representative of DEP, SWFWMD or other duly empowered law enforcement agency who may wish to enter the work area for ascertaining compliance with the terms of this permit.

The Contractor shall not remove and/or emplace more material or exceed the limits of construction authorized by the Permit. Any unauthorized deviation from the approved drawings, Specifications and conditions of the permit shall constitute grounds for permit revocation and enforcement action by DEP and/or SWFWMD. Any conflicts between the Permit and construction plans or Specifications shall be pointed out to the County Representative in writing.

The Contractor shall exercise extreme care during construction activities to avoid damaging or adversely affecting the personal or property rights of others.

The Contractor shall assume and accept all responsibility and liability for and agrees to save DEP, SWFWMD and all their employees harmless from all claims of damage arising out of operations conducted pursuant to the permit.

The Contractor shall not violate the Water Quality Standards as specified in Chapter 62-302, 62-4 and 62-25 Florida Administrative Codes, including but not limited to:

62-302.500 Minimum Conditions of All Waters, Times and Places

The Contractor shall not allow the turbidity to exceed 29 Nephelometric Turbidity Units (NTU's) (unless otherwise stated in the project permits) as related to standard candle turbidimeter above background or exceed turbidity limits as dictated by the Department of Environmental Protection (DEP). The Contractor is required to have a functional turbidity meter on the job site at all times along with personnel to operate this meter. Turbidity samples will be taken as directed by the County Representative or his representative.

When a turbidity violation is noted, the Contractor shall be required to implement sampling after corrective actions have been taken. The samples shall be taken in the same manner as routine

monitoring is done. If samples indicate that the water quality standard for turbidity is still being violated, sampling shall continue at two-hour intervals until the samples indicate no violation is present. In no case shall operations resume until a set of samples has been taken which indicates that the water quality standard for turbidity is no longer being violated.

All turbidity monitoring data shall be submitted as soon as possible after collection. The County Representative will allow a maximum of a one-week period for submittal of data which indicates no violations of the standard.

Monitoring data shall normally be submitted within one week of analysis with documents containing the following information as a minimum: (1) permit number; (2) dates of sampling and analysis; (3) a statement describing the methods used in collection, handling, storage and analysis of the samples; (4) a map indicating the sampling locations and (5) a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data.

Monitoring reports shall include, but not be limited to, the following information for each sample that is taken:

- (1) time of day samples taken;
- (2) depth of water body;
- (3) depths of samples;
- (4) antecedent weather conditions;
- (5) tidal stage and direction of flow; and
- (6) wind direction and velocity.

If monitoring reveals apparent violations of the state water quality standard for turbidity, dredging activities shall cease immediately and not resume until corrective measures have been taken, turbidity has returned to acceptable levels, and a compliance inspection by DEP Department personnel has been conducted.

The Contractor shall not disturb any wetland species until after all desirable species have been relocated by others as directed by the County Representative.

The Contractor shall be required to use silt barriers upstream and downstream of the project. Construction of silt barriers shall be in accordance with plans and Specifications.

The Contractor shall use a qualified testing lab to perform the required monitoring as stipulated in the permit conditions. The Contractor shall be required to cooperate with the testing lab performing the monitoring and shall provide adequate space for storage of any testing equipment, which may be needed at the job site.

If the above-mentioned monitoring reveals apparent violations of the State Water Quality Standards for turbidity, construction activities shall cease immediately as directed by the County Representative.

The Contractor shall perform all work in strict accordance with the permit, plans and Specifications.

Any violation of or failure by the Contractor to comply with this permit will subject the Contractor to liability for damages caused to the waters or property, including animal, plant and aquatic life of the State, restoration of the waters and property to their former condition, and civil penalties in the amount of ten thousand dollars (\$10,000) for each day for which the violation occurs.

Copies of the DEP License or Exemption and/or a Dredge and Fill permit issued to the County Representative are available to the Contractor upon request by contacting the County Representative.

CRUSHED CONCRETE BASE

Crushed Concrete Base shall follow FDOT Standard Specifications 2007 (rev 8-07) except that the Lime Rock Bearing Ratio (LBR) shall be minimum 150. The layer coefficient of 0.18 with LBR minimum 150 is allowed to calculate the base thickness.

Only FDOT certified piles are acceptable to this project. The producing process certified by FDOT without the actual pile certified is not considered solid enough for the acceptance of the material. The contract shall send the engineer the deliver tickets with FDOT certified pile number, pile location, project name and manufactory contact information shown.

Additional tests and pile inspections will be required for the quality control and the contractor will be responsible for the cost of the initial ten tests and any re-tests when needed. The material will be rejected by the County if the initial test fails. The rejected material shall be completely removed from the project site.

1) Regarding structural number on Crushed Concrete Base, Manatee County to approve SN 0.18 if following criteria is met and maintained:

- A) Limerock Bearing Ratio value of 150 or greater, 10" compacted thickness in place.
- B) Gradation conforms to FDOT Specifications 2007 (rev 8-07).
- C) Deleterious materials conform to FDOT Specifications 2007 (rev 8-07).
- D) Delivery ticket indicates FDOT approved source, actual lot allocated to a particular project.
- E) Piles or lots to be inspected by Manatee County representative prior to acceptance.

2) Regarding Limerock Bearing Ratio value:

- A) No Limerock Bearing Ratio value less than 150, with no under tolerance.

3) Regarding source approval:

- A) FDOT approved source, allocated lot sufficient to serve project's needs, delivery tickets stating FDOT approved source, project name, FDOT preapproved lot or pile number.

4) Regarding deleterious materials:

- A) Deleterious material content in addition to the FDOT Specifications 2007 (rev 8-07) should state that no construction debris such as Styrofoam insulation, telephone

wire, lumber, shingles, aluminum window or door frames etc., or household trash i.e.: bottles, cans, paper goods etc. is acceptable.

5) Material source inspection:

A) Prior to acceptance of base product, a representative of Manatee County will visit the Producer's location and obtain a sample of the proposed base for the specified project. In addition to sampling, the pile will be visually inspected for deleterious materials, substantial segregation, or any other undesirable characteristics. The pile shall have a traceable identification by pile number or lot number and an accurate quality assessment.

6) Import and placement of base product:

A) During import of base product, a county inspector or duly designated representative of the county will be onsite monitoring incoming loads, making visual assessments of the product and checking load tickets for verification of materials.

7) Import and placement of base product:

A) After spreading out, prior to compacting, samples of the base product will be obtained by Manatee County approved testing lab, every 500 LF staggering right, left, center of the roadway for Limerock Bearing Ratio, gradation and deleterious material testing.

8) Rejection of materials:

A) Material not meeting above requirements will subject to rejection and be removed from the project site. Any three (3) concurrent rejections will require immediate shut down of imported material and require review and remedies prior to restart.

9) Compaction of materials:

A) In place material should be a minimum of 10" in compacted thickness and achieve 98% of AASHTO T-180 compaction.

CLARIFICATION OF SPECIFIC LINE ITEMS

Clarification of the County's expectations of work to be performed as it relates to specific line items and/or item No. listed on the Bid Form is included in the FDOT Basis of Estimate Manual version 2014. Where such item number is not available, the description shown herein will prevail.

- Line item #8,"Clearing & Grubbing" shall follow FDOT Specifications 2014, and shall also include the removal of existing underdrains, trees and bushes, concrete structures, existing concrete pavement, ripraps, and the plugging of the artesian wells.
- Line item #9, Regular Excavation; the quantity shall be "in place" value.

- Line item #10, Embankment; the quantity shall be “in place” value.
- Line items #42 “Manatee County Concrete Curb and Gutter, Type A”, #43 “Concrete Curb and Gutter, Type E”, #44 “Concrete Curb and Gutter, Type F”, #45 “Concrete Curb, Type D”, #46 “Concrete, Shoulder Gutter”, #47 “Sidewalk Concrete 4” thick” and #48 “Sidewalk Concrete 6” thick” shall include the removal and replacement of existing sidewalks, driveways and curbs.
- Line item #42, “Manatee County Concrete Curb and Gutter, Type A”, shall follow Manatee County’s Highway, Traffic & Stormwater Standards 2007.
- Line items #47, “Sidewalk Concrete 4” Thick” and #48 “Sidewalk Concrete 6” Thick”, shall include detectable warnings.
- Line item #47, “Sidewalk Concrete 4” Thick” shall follow Manatee County’s Highway, Traffic & Stormwater Standards 2007.
- Line item #48, “Sidewalk Concrete 6” Thick”, shall follow Manatee County’s Highway, Traffic & Stormwater Standards 2007. The payment shall include reinforcement.
- Line item #51, “Fencing, Type B, 5.1-6.0 with Vinyl Coat”, shall include the removal of existing fencing.
- Line item #52, “Sodding, Performance Turf”, shall include litter removal, mowing, fertilizer and watering for the duration of construction.
- Line item #54, “Wetland Mitigation Site”, shall include plantings, maintenance and mitigation monitoring for the duration of construction.

**LIST OF PERMIT
DOCUMENTS
IFB#15-2259CD**

**Note: Permits listed below which are a part of the Invitation for Bid
CD shall be provided to the successful bidder**

Document Number	Permit Name	Notes
1	Environmental Resource General Const. Permit Permit Number 44020046.001 – SWFWMD	Issued 05/18/2011 This permit has been modified.
2	ERP Minor Modification Permit Number 43035341.003 – SWFWMD	Issued 07/21/2014
3	ERP Minor Modification Permit Number 43035341.004 – SWFWMD	Issued 06/09/2015
4	Department of the Army (DA) Permit Number – SAJ-2009-04373 (SP-MEP)	Issued 12/03/2013
5	FDOT Connection Permit Permit Number – 2010-A-194-22	Issued 04/30/2014
6	FDOT Drainage Connection Permit Permit Number – 2010-D-194-16	Issued 04/30/2014
7	FDOT Utility Permit Permit Number – 2010-H-194-119	Issued 05/13/2014
8	FDEP General Permit Permit No. 0133068-1110-DSGP/02	Issued 01/14/2015



An Equal Opportunity Employer

Southwest Florida Water Management District

2379 Broad Street, Brooksville, Florida 34604-6899
(352) 796-7211 or 1-800-423-1476 (FL only)
TDD only: 1-800-231-6103 (FL only)
On the Internet at WaterMatters.org

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

Sarasota Service Office
6750 Fruitville Road
Sarasota, Florida 34240-9711
(941) 377-3722 or
1-800-320-3503 (FL only)

Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
(813) 985-7481 or
1-800-836-0797 (FL only)

Tampa Bay Engineering, Inc. / CLW, FL
File: 00193 00118
G F P CO PR C

RECVD MAY 20 2011

HERE TO FILE
Scan Permit N+BK

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- David L. Moore**
Executive Director
- William S. Bilenky**
General Counsel

May 18, 2011

Manatee County Board of County Commissioners
Manatee County Public Works Department
1022 26th Avenue East
Bradenton, FL 34208

Subject: **Final Agency Action Transmittal Letter**
ERP General Construction
Permit No.: 44035341.000
Project Name: Manatee County - 44th Avenue East from 19th Street Court East to 30th Street East
County: Manatee
Sec/Twp/Rge: 05, 06, 07, 08/35S/18E

Dear Permittee:

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

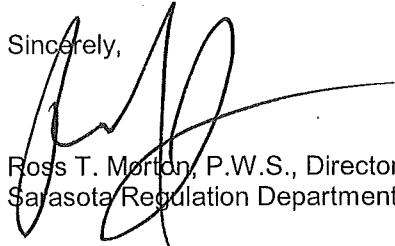
You or any person whose substantial interests are affected by the District's action regarding a permit may request an administrative hearing in accordance with Sections 120.569 and 120.57, Florida Statutes, (F.S.), and Chapter 28-106, Florida Administrative Code, (F.A.C.), of the Uniform Rules of Procedure.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

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

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

If you have questions concerning the permit, please contact Steven J. Lopes, P.E., at the Sarasota Service Office, extension 6506. For assistance with environmental concerns, please contact David W. Jenkins, extension 6545.

Sincerely,



Ross T. Morton, P.W.S., Director
Sarasota Regulation Department

RTM:SXL:DWJ:AJR

Enclosures: Approved Permit w/Conditions Attached
 Approved Construction Drawings
 Statement of Completion
 Notice of Authorization to Commence Construction
 Noticing Packet (42.00-039)
 Sections 28-106.201 and 28-106.301, F.A.C.

cc/enc: File of Record 44035341.000
 Hamid R. Faraji, P.E., Cardno TBE
 Terri L. Behling, Southwest Florida Water Management District

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
GENERAL CONSTRUCTION
PERMIT NO. 44035341.000

Expiration Date: May 18, 2016

PERMIT ISSUE DATE: May 18, 2011

This permit is issued under the provisions of Chapter 373, Florida Statutes, (F.S.), and the Rules contained in Chapters 40D-4 and 40, Florida Administrative Code, (F.A.C.). The permit authorizes the Permittee to proceed with the construction of a surface water management system in accordance with the information outlined herein and shown by the application, approved drawings, plans, specifications, and other documents, attached hereto and kept on file at the Southwest Florida Water Management District (District). Unless otherwise stated by permit specific condition, permit issuance constitutes certification of compliance with state water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. 1341. All construction, operation and maintenance of the surface water management system authorized by this permit shall occur in compliance with Florida Statutes and Administrative Code and the conditions of this permit.

PROJECT NAME: Manatee County - 44th Avenue East from 19th Street Court East to 30th Street East

GRANTED TO: Manatee County Board of County Commissioners
Manatee County Public Works Department
1022 26th Avenue East
Bradenton, FL 34208

ABSTRACT: This permit authorizes the construction of a surface water management system to serve a 1.81 mile roadway project known as Manatee County - 44th Avenue East from 19th Street Court East to 30th Street East. The surface water management system has been designed to provide water quality treatment and peak attenuation storage for the development. The method of water quality treatment is wet detention and on-line retention. Information regarding the surface water management system, 100-year floodplain, wetlands and/or surface waters is stated below and on the permitted construction drawings for the project.

OP. & MAINT. ENTITY: Manatee County Public Works Department

COUNTY: Manatee

SEC/TWP/RGE: 05, 06, 07, 08/35S/18E

**TOTAL ACRES OWNED
OR UNDER CONTROL:** 36.91

PROJECT SIZE: 36.91 Acres

LAND USE: Road Project

DATE APPLICATION FILED: December 4, 2009

AMENDED DATE: N/A

I. Water Quantity/Quality

POND NO.	AREA ACRES @ TOP OF BANK	TREATMENT TYPE
Pond 1-4	3.58	Wet Detention
Pond 5	1.77	Wet Detention
Pond 6	0.39	Wet Detention
Pond 7-8	0.44	Wet Detention
Pond 9-10	0.67	Wet Detention
Pond 11	0.16	On-line Retention
Pro-Out-W	1.61	N/A
TOTAL	8.62	

Comments: The project consists of 0.89 miles of proposed roadway extension of 44th Avenue East (from 19th Street Court East to 30th Street East); 0.38 miles of proposed roadway widening improvements along 30th Street East (from 45th Avenue East to 38th Avenue East); 0.54 miles of proposed roadway widening improvements along 38th Avenue East (from 30th Street East to U.S. 301); and includes associated intersection improvements. Pond Pro-Out-W provides attenuation storage and conveyance only. The engineer of record has provided reasonable assurance Chapter 3.3.1.4 of the District's Basis of Review has been addressed for nutrients in WBID 1896 (Bowlees Creek).

This permit (ERP No. 44035341.000) also approves modifications to the permitted surface water management system for ERP No. 44012067.002 entitled Team Edition Off-Street Parking, issued March 20, 1997; specifically, Pond Southwest-Retention-Area effluent filtration treatment system previously permitted under ERP No. 44012067.002 is to be replaced by proposed Pond 11. This permit (ERP No. 44035341.000) also approves modifications to the permitted surface water management system for MSSW No. 48012067.000 entitled Manasota Industrial Park, issued June 6, 1994; specifically, Lake C (aka Pond D) attenuation pond previously permitted under ERP No. 44012067.000 is to be replaced by proposed Pond Pro-Out-W.

A mixing zone is not required.
 A variance is not required.

II. 100-Year Floodplain

Comments: According to FEMA floodplain determinations the project lies within flood Zone X; no floodplain impacts are proposed.

III. Environmental Considerations

Wetland/Surface Water Information

Count of Wetlands: 5

Wetland Name	Total Acres	Not Impacted Acres	Permanent Impacts		Temporary Impacts	
			Acres	Functional Loss*	Acres	Functional Loss*
SW-1A	0.75	0.01	0.75	0.00	0.00	0.00
SW 5	0.01	0.00	0.01	0.00	0.00	0.00
SW 6	0.01	0.00	0.01	0.00	0.00	0.00
SW X	0.01	0.00	0.01	0.00	0.00	0.00
W 2	0.28	0.00	0.28	0.08	0.00	0.00
Total:	1.06	0.01	1.06	0.08	0.00	0.00

* For impacts that do not require mitigation, their functional loss is not included.

Wetland/Other Surface Water Comments:

There is one (1) wetland with a total of 0.28 acre located within the project area. Wetland W2 is a freshwater marsh system that extends offsite to the north. Permanent impacts to 0.28 acre of Wetland W2 will occur for roadway construction. In addition to the above mentioned wetlands, there are four (4) surface water features totaling 0.78 acre consisting of three (3) upland-cut ditches and one (1) upland-cut pond located within the project area. Permanent surface water impacts of 0.78 acre are proposed, comprising 0.03 acre of filling impacts to upland-cut ditches for roadway construction and 0.75 acre of filling impacts to an upland-cut pond for roadway construction. Permanent filling impacts to 0.28 acres of qualifying wetlands and surface waters were evaluated using the Uniform Mitigation Assessment Method (UMAM) as required pursuant to Chapter 62-345, F.A.C. The results of the UMAM analysis indicate a functional loss of 0.08 units due to the permanent impacts proposed.

Mitigation Information

Count of Mitigation: 1

Mitigation Name	Creation/Restoration		Enhancement		Preservation		Other	
	Acres	Functional Gain	Acres	Functional Gain	Acres	Functional Gain	Acres	Functional Gain
Mitigation Area 1	0.34	0.00	0.00	0.08	0.00	0.00	0.00	0.00
Total:	0.34	0.00	0.00	0.08	0.00	0.00	0.00	0.00

Mitigation Comments:

Wetland mitigation for permanent impacts will be provided by the onsite creation of 0.34 acre of Wetland W2. The results of the UMAM analysis indicate a functional gain of 0.08 units which offsets the 0.08 units of functional loss proposed to wetland habitat. Wetland mitigation is not required for impacts to ditches and ponds constructed in uplands pursuant to Subsection 3.2.2.2 of the Basis of Review (B.O.R.). Under this subsection, wetland mitigation is not required for impacts to drainage ditches, not constructed to divert natural stream flow, and ponds, which are less than one acre in area, constructed in uplands that do not provide significant habitat for threatened or endangered species.

A regulatory conservation easement is not required.

A proprietary conservation easement is not required.

SPECIFIC CONDITIONS

1. If the ownership of the project area covered by the subject permit is divided, with someone other than the Permittee becoming the owner of part of the project area, this permit shall terminate, pursuant to Section 40D-1.6105, F.A.C. In such situations, each land owner shall obtain a permit (which may be a modification of this permit) for the land owned by that person. This condition shall not apply to the division and sale of lots or units in residential subdivisions or condominiums.
2. Unless specified otherwise herein, two copies of all information and reports required by this permit shall be submitted to:

Sarasota Regulation Department
 Southwest Florida Water Management District
 6750 Fruitville Road
 Sarasota, FL 34240-9711

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

3. The Permittee shall retain the design engineer, or other professional engineer registered in Florida, to conduct on-site observations of construction and assist with the as-built certification requirements of this project. The Permittee shall inform the District in writing of the name, address and phone number of the professional engineer so employed. This information shall be submitted prior to construction.
4. Within 30 days after completion of construction of the permitted activity, the Permittee shall submit to the Sarasota Service Office a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1.659, F.A.C., and signed, dated and sealed as-built drawings. The as-built drawings shall identify any deviations from the approved construction drawings.
5. The District reserves the right, upon prior notice to the Permittee, to conduct on-site research to assess the pollutant removal efficiency of the surface water management system. The Permittee may be required to cooperate in this regard by allowing on-site access by District representatives, by allowing the installation and operation of testing and monitoring equipment, and by allowing other assistance measures as needed on site.
6. **WETLAND MITIGATION SUCCESS CRITERIA - MITIGATION AREA**

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

- a. The mitigation area can reasonably be expected to develop into a freshwater marsh as determined by the Florida Land Use and Cover and Forms Classification System (third edition; January 1999).
- b. Topography, water depth and water level fluctuation in the mitigation area are characteristic of the wetlands/ surface water type specified in criterion "a".
- c. Planted or recruited herbaceous or shrub species (or plant species providing the same function) shall meet the criteria specified:

Zone	Stratum	Percent Cover	Dominant Species ¹	Subdominant Species
Zone A	Groundcover	85	<i>Sagittaria lancifolia</i> <i>Scirpus validus</i> <i>Juncus effuses</i> <i>Ludwegia repens</i>	Any desirable wetland species as listed in 62-340 F.A.C.
Zone B	Groundcover	85	<i>Panicum hemitomon</i> <i>Spartina bakeri</i>	Any desirable wetland species as listed in 62-340 F.A.C.

¹Plant species providing the same function as those listed may also be considered in determining success.

- d. Species composition of recruiting desirable wetland vegetation is indicative of the wetland type specified in criterion "a".

- e. Coverage by nuisance or exotic species does not exceed **5 %** percent at any location in the mitigation site and **5 %** percent for the entire mitigation site.
- f. The wetland mitigation area can be determined to be a wetland or other surface water according the Chapter 62-340, F.A.C.

This criterion must be achieved within **3** years of mitigation area **construction**. The Permittee shall complete any activities necessary to ensure the successful achievement of the mitigation requirements by the deadline specified. Any request for an extension of the deadline specified shall be accompanied with an explanation and submitted as a permit letter modification to the District for evaluation.

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

- 7. The Permittee shall monitor and maintain the wetland mitigation areas until the criteria set forth in the Wetland Mitigation Success Criteria Conditions above are met. The Permittee shall perform corrective actions identified by the District if the District identifies a wetland mitigation deficiency.
- 8. The Permittee shall undertake required maintenance activities within the wetland mitigation areas as needed at any time between mitigation area construction and termination of monitoring, with the exception of the final year. Maintenance shall include the manual removal of all nuisance and exotic species, with sufficient frequency that their combined coverage at no time exceeds the Wetland Mitigation Success Criteria Conditions above. Herbicides shall not be used without the prior written approval of the District.
- 9. A Wetland Mitigation Completion Report shall be submitted to the District within 30 days of completing construction and planting of the wetland mitigation areas. Upon District inspection and approval of the mitigation areas, the monitoring program shall be initiated with the date of the District field inspection being the construction completion date of the mitigation areas. Monitoring events shall occur between March 1 and November 30 of each year. An Annual Wetland Monitoring Report shall be submitted upon the anniversary date of District approval to initiate monitoring.

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

Monitoring Data shall be collected semi-annually.

- 10. Termination of monitoring for the wetland mitigation areas shall be coordinated with the District by:
 - a. notifying the District in writing when the criteria set forth in the Wetland Mitigation Success Criteria Conditions have been achieved;
 - b. suspending all maintenance activities in the wetland mitigation areas including, but not limited to, irrigation and addition or removal of vegetation; and
 - c. submitting a monitoring report to the District one year following the written notification and suspension of maintenance activities.

Upon receipt of the monitoring report, the District will evaluate the wetland mitigation sites to determine if the Mitigation Success Criteria Conditions have been met and maintained. The District will notify the Permittee in writing of the evaluation results. The Permittee shall perform corrective actions for any portions of the wetland mitigation areas that fail to maintain the criteria set forth in the Wetland Mitigation Success Criteria Conditions.

11. Following the District's determination that the wetland mitigation has been successfully completed, the Permittee shall operate and maintain the wetland mitigation areas such that they remain in their current or intended condition for the life of the surface water management facility. The Permittee must perform corrective actions for any portions of the wetland mitigation areas where conditions no longer meet the criteria set forth in the Wetland Mitigation Success Criteria Conditions.
12. The Permittee shall, within 90 days of initial wetland impact and prior to beneficial use of the site, complete all aspects of the mitigation plan, including the grading, mulching, and planting, in accordance with the design details in the final approved construction drawings.
13. The following boundaries, as shown on the approved construction drawings, shall be clearly delineated on the site prior to initial clearing or grading activities:
 - wetland and surface water areas
 - wetland buffers
 - limits of approved wetland impacts

The delineation shall endure throughout the construction period and be readily discernible to construction and District personnel.
14. Wetland W-2, SW01A, SW-X, SW-5, SW-6 boundaries shown on the approved construction drawings shall be binding upon the Permittee and the District.
15. All construction is prohibited within the permitted project area until the Permittee acquires legal ownership or legal control of the project area as delineated in the permitted construction drawings.
16. The operation and maintenance entity shall submit inspection reports in the form required by the District, in accordance with the following schedule.

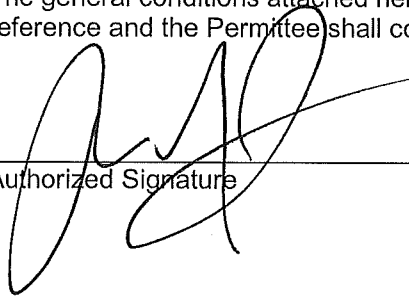
For systems utilizing retention or wet detention, the inspections shall be performed two (2) years after operation is authorized and every two (2) years thereafter.
17. The removal of littoral shelf vegetation (including cattails) from wet detention ponds is prohibited unless otherwise approved by the District. Removal includes dredging, the application of herbicide, cutting, and the introduction of grass carp. Any questions regarding authorized activities within the wet detention ponds shall be addressed to the District's Surface Water Regulation Manager, Sarasota Service Office.
18. For dry bottom detention systems, the detention areas shall become dry within 72 hours after a rainfall event. If a detention area is regularly wet, this situation shall be deemed to be a violation of this permit.
19. Certification of compliance with state water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. 1341 is waived.
20. The District, upon prior notice to the Permittee, may conduct on-site inspections to assess the effectiveness of the erosion control barriers and other measures employed to prevent violations of state water quality standards and avoid downstream impacts. Such barriers or other measures should control discharges, erosion, and sediment transport during construction and thereafter. The District will also determine any potential environmental problems that may develop as a result of leaving or removing the barriers and other measures during construction or after construction of the project has been completed. The Permittee must provide any remedial measures that are needed.

21. This permit is issued based upon the design prepared by the Permittee's consultant. If at any time it is determined by the District that the Conditions for Issuance of Permits in Rules 40D-4.301 and 40D-4.302, F.A.C., have not been met, upon written notice by the District, the Permittee shall obtain a permit modification and perform any construction necessary thereunder to correct any deficiencies in the system design or construction to meet District rule criteria. The Permittee is advised that the correction of deficiencies may require re-construction of the surface water management system and/or mitigation areas.
22. 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 Permittee shall cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The Permittee shall contact the Florida Department of State, Division of Historical Resources (DHR), Review and Compliance Section at (850) 245-6333 or (800) 847-7278 and the District. Project activities shall not resume without verbal and/or written authorization from the DHR. In the event that unmarked human remains are encountered during permitted activities, all work shall cease immediately and the proper authorities shall be notified in accordance with Section 872.05, F.S.
23. Construction is prohibited in the U.S. 301 right-of-way until the Permittee acquires legal control or authorization from the Florida Department of Transportation (FDOT) to construct the portion of the project area located in the right-of-way as depicted on the permitted construction drawings.
24. Prior to commencing any dewatering activities, a plan shall be submitted and approved by the District in writing. The Permittee shall submit two (2) sets of dewatering plans, with supporting calculations, signed and sealed by a Florida Professional Engineer.

GENERAL CONDITIONS

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

Authorized Signature







Southwest Florida Water Management District

2379 Broad Street, Brooksville, Florida 34604-6899
(352) 796-7211 or 1-800-423-1476 (FL only)
SUNCOM 628-4150 TDD only 1-800-231-6103 (FL only)
On the Internet at: WaterMatters.org

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Bartow, Florida 33830-7700
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Sarasota Service Office
6750 Fruitville Road
Sarasota, Florida 34240-9711
(941) 377-3722 or
1-800-320-3503 (FL only)

Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
(813) 985-7481 or
1-800-836-0797 (FL only)

July 21, 2014

Manatee County
Attn: Sia Mollanazar, P.E.
1022 26th Ave. E.
Bradenton, FL 34208

Subject: **Notice of Intended Agency Action
ERP Minor Modification**

Project Name: 44th Avenue East from 19th Street Court East to 30th Street East -
Permit Mod
App ID/Permit No: 699334 / 43035341.003
County: MANATEE
Letter Received: July 18, 2014
Expiration Date: July 21, 2019
Sec/Twp/Rge: S6/T35S/R18E, S7/T35S/R18E

Dear Permittee(s):

Your request to modify Construction Permit No. 44035341.000 by minor modification has been approved. This modification authorizes:

1. ERP 44035341.000 previously permitted the removal and replacement of an existing offsite effluent filtration system (ERP 44012067.002 entitled Team Edition Apparel Off-Street Parking and issued March 20, 1997) with proposed online retention Pond 11 located within the right-of-way. With this modification the existing offsite effluent filtration system (ERP 44012067.002) is to remain, and previously proposed Pond 11 will not be constructed.
2. Realignment and reconfiguration of proposed 44th Avenue East in the vicinity of the existing Team Edition Apparel site as shown on the construction plans.
3. All other terms and conditions of Construction Permit No. 44035341.000 issued May 18, 2011 entitled Manatee County - 44th Avenue East from 19th Street Court East to 30th Street East apply.

Your Environmental Resource Permit modification has been approved contingent upon no objection to the District's action being received by the District within the time frames described in the enclosed Notice of Rights.

If approved construction plans are part of the permit, construction must be in accordance with these plans. These drawings are available for viewing or downloading through the District's Application and Permit Search Tools located at www.WaterMatters.org/permits.

The District's action in this matter only becomes closed to future legal challenges from members of the public if such persons have been properly notified of the District's action and no person objects to the District's action within the prescribed period of time following the notification. The District does not publish notices of intended agency action. If you wish to limit the time within which a person who does not receive actual written notice from the District may request an administrative hearing regarding this action, you are strongly encouraged to publish, at your own expense, a notice of intended agency action in the legal

advertisement section of a newspaper of general circulation in the county or counties where the activity will occur. Publishing notice of intended agency action will close the window for filing a petition for hearing. Legal requirements and instructions for publishing notice of intended agency action, as well as a noticing form that can be used is available from the District's website at www.WaterMatters.org/permits/noticing. If you publish notice of intended agency action, a copy of the affidavit of publishing provided by the newspaper should be sent to the District's Tampa Service Office, for retention in the File of Record for this agency action.

If you have questions regarding this modification, please contact Steven Lopes, at the Tampa Service Office, extension 6506.

Sincerely,

David Kramer, P.E.
Manager
Environmental Resource Permit Bureau
Regulation Division

Enclosures: Notice of Rights

cc: Hamid R. Faraji, P.E., Cardno TBE Group, Inc.

Notice of Rights

ADMINISTRATIVE HEARING

1. You or any person whose substantial interests are or may be affected by the District's intended or proposed action may request an administrative hearing on that action by filing a written petition in accordance with Sections 120.569 and 120.57, Florida Statutes (F.S.), Uniform Rules of Procedure Chapter 28-106, Florida Administrative Code (F.A.C.) and District Rule 40D-1.1010, F.A.C. Unless otherwise provided by law, a petition for administrative hearing must be filed with (received by) the District within 21 days of receipt of written notice of agency action. "Written notice" means either actual written notice, or newspaper publication of notice, that the District has taken or intends to take agency action. "Receipt of written notice" is deemed to be the fifth day after the date on which actual notice is deposited in the United States mail, if notice is mailed to you, or the date that actual notice is issued, if sent to you by electronic mail or delivered to you, or the date that notice is published in a newspaper, for those persons to whom the District does not provide actual notice.
2. Pursuant to Subsection 373.427(2)(c), F.S., for notices of intended or proposed agency action on a consolidated application for an environmental resource permit and use of state-owned submerged lands concurrently reviewed by the District, a petition for administrative hearing must be filed with (received by) the District within 14 days of receipt of written notice.
3. Pursuant to Rule 62-532.430, F.A.C., for notices of intent to deny a well construction permit, a petition for administrative hearing must be filed with (received by) the District within 30 days of receipt of written notice of intent to deny.
4. Any person who receives written notice of an agency decision and who fails to file a written request for a hearing within 21 days of receipt or other period as required by law waives the right to request a hearing on such matters.
5. Mediation pursuant to Section 120.573, F.S., to settle an administrative dispute regarding District intended or proposed action is not available prior to the filing of a petition for hearing.
6. A request or petition for administrative hearing must comply with the requirements set forth in Chapter 28-106, F.A.C. A request or petition for a hearing must: (1) explain how the substantial interests of each person requesting the hearing will be affected by the District's intended action or proposed action, (2) state all material facts disputed by the person requesting the hearing or state that there are no material facts in dispute, and (3) otherwise comply with Rules 28-106.201 and 28-106.301, F.A.C. Chapter 28-106, F.A.C. can be viewed at www.flrules.org or at the District's website at www.WaterMatters.org/permits/rules.
7. A petition for administrative hearing is deemed filed upon receipt of the complete petition by the District Agency Clerk at the District's Tampa Service Office during normal business hours, which are 8:00 a.m. to 5:00 p.m., Monday through Friday, excluding District holidays. Filings with the District Agency Clerk may be made by mail, hand-delivery or facsimile transfer (fax). The District does not accept petitions for administrative hearing by electronic mail. Mailed filings must be addressed to, and hand-delivered filings must be delivered to, the Agency Clerk, Southwest Florida Water Management District, 7601 Highway 301 North, Tampa, FL 33637-6759. Faxed filings must be transmitted to the District Agency Clerk at (813) 987-6746. Any petition not received during normal business hours shall be filed as of 8:00 a.m. on the next business day. The District's acceptance of faxed petitions for filing is subject to certain conditions set forth in the District's Statement of Agency Organization and Operation, available for viewing at www.WaterMatters.org/about.

JUDICIAL REVIEW

1. Pursuant to Sections 120.60(3) and 120.68, F.S., a party who is adversely affected by District action may seek judicial review of the District's action. Judicial review shall be sought in the Fifth District Court of Appeal or in the appellate district where a party resides or as otherwise provided by law.
2. All proceedings shall be instituted by filing an original notice of appeal with the District Agency Clerk within 30 days after the rendition of the order being appealed, and a copy of the notice of appeal, accompanied by any filing fees prescribed by law, with the clerk of the court, in accordance with Rules 9.110 and 9.190 of the Florida Rules of Appellate Procedure (Fla. R. App. P.). Pursuant to Fla. R. App. P. 9.020(h), an order is rendered when a signed written order is filed with the clerk of the lower tribunal.



Southwest Florida Water Management District

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1-800-320-3503 (FL only)

Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
(813) 985-7481 or
1-800-836-0797 (FL only)

June 09, 2015

Manatee County BCC
Attn: Sia Mollanazar
1022 26th Ave. E
Bradenton, FL 34208

Subject: **Notice of Intended Agency Action - Approval
ERP Minor Modification**

Project Name: 44th Avenue East from 19th Street Court East to 30th Street East
App ID/Permit No: 711576 / 43035341.004
County: MANATEE
Letter Received: May 27, 2015
Expiration Date: June 09, 2020
Sec/Twp/Rge: S08/T35S/R18E

Dear Permittee(s):

The Southwest Florida Water Management District (District) has completed its review of the application for Environmental Resource Permit modification. Based upon a review of the information you have submitted, the District hereby gives notice of its intended approval of the application.

The File of Record associated with this application can be viewed at <http://www18.swfwmd.state.fl.us/erp/erp/search/ERPSearch.aspx> and is also available for inspection Monday through Friday, except for District holidays, from 8:00 a.m. through 5:00 p.m. at the District's Tampa Service Office, 7601 U.S. Highway 301 North, Tampa, Florida 33637.

If you have any questions or concerns regarding the application or any other information, please contact the Environmental Resource Permit Bureau in the Tampa Service Office.

Sincerely,

Michelle K. Hopkins, P.E.
Bureau Chief
Environmental Resource Permit Bureau
Regulation Division

cc: Hamid R. Faraji, P.E., Cardno TBE



Southwest Florida Water Management District

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Attn: Sia Mollanazar
1022 26th Ave. E
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App ID/Permit No: 711576 / 43035341.004
County: MANATEE
Letter Received: May 27, 2015
Expiration Date: June 09, 2020
Sec/Twp/Rge: S08/T35S/R18E

Dear Permittee(s):

Your request to modify Environmental Resource Permit (ERP) No. 44035341.000 by Minor Modification has been approved. This modification authorizes:

1. Reconfiguration of wet detention Pond 5 as shown on the construction plans. Pond 5 area at top of bank is increased from 1.77 acres to 1.78 acres.
2. All other terms and conditions of ERP No. 44035341.000 dated May 18, 2011 entitled Manatee County - 44th Avenue East from 19th Street Court East to 30th Street East apply.

The Southwest Florida Water Management District (District) is in receipt of your application for the Environmental Resource Permit modification. Based upon a review of the information you submitted, the application is approved. Please refer to the attached Notice of Rights to determine any legal rights you may have concerning the District's agency action on the permit application described in this letter.

If approved construction plans are part of the permit, construction must be in accordance with these plans. These drawings are available for viewing or downloading through the District's Application and Permit Search Tools located at www.WaterMatters.org/permits.

The District's action in this matter only becomes closed to future legal challenges from members of the public if such persons have been properly notified of the District's action and no person objects to the District's action within the prescribed period of time following the notification. The District does not publish notices of agency action. If you wish to limit the time within which a person who does not receive actual written notice from the District may request an administrative hearing regarding this action, you are strongly encouraged to publish, at your own expense, a notice of agency action in the legal advertisement section of a newspaper of general circulation in the county or counties where the activity will occur. Publishing notice of agency action will close the window for filing a petition for hearing. Legal requirements and instructions for publishing notices of agency action, as well as a noticing form that can be used, are available from the District's website at www.WaterMatters.org/permits/noticing. If you publish notice of agency action, a copy of the affidavit of publication provided by the newspaper should be sent to the District's Tampa Service Office for retention in this permit's File of Record.

If you have any questions or concerns regarding your permit or any other information, please contact the Environmental Resource Permit Bureau in the Tampa Service Office.

Sincerely,

Michelle K. Hopkins, P.E.
Bureau Chief
Environmental Resource Permit Bureau
Regulation Division

Enclosures: Notice of Rights
cc: Hamid R. Faraji, P.E., Cardno TBE

Notice of Rights

ADMINISTRATIVE HEARING

1. You or any person whose substantial interests are or may be affected by the District's intended or proposed action may request an administrative hearing on that action by filing a written petition in accordance with Sections 120.569 and 120.57, Florida Statutes (F.S.), Uniform Rules of Procedure Chapter 28-106, Florida Administrative Code (F.A.C.) and District Rule 40D-1.1010, F.A.C. Unless otherwise provided by law, a petition for administrative hearing must be filed with (received by) the District within 21 days of receipt of written notice of agency action. "Written notice" means either actual written notice, or newspaper publication of notice, that the District has taken or intends to take agency action. "Receipt of written notice" is deemed to be the fifth day after the date on which actual notice is deposited in the United States mail, if notice is mailed to you, or the date that actual notice is issued, if sent to you by electronic mail or delivered to you, or the date that notice is published in a newspaper, for those persons to whom the District does not provide actual notice.
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JUDICIAL REVIEW

1. Pursuant to Sections 120.60(3) and 120.68, F.S., a party who is adversely affected by District action may seek judicial review of the District's action. Judicial review shall be sought in the Fifth District Court of Appeal or in the appellate district where a party resides or as otherwise provided by law.
2. All proceedings shall be instituted by filing an original notice of appeal with the District Agency Clerk within 30 days after the rendition of the order being appealed, and a copy of the notice of appeal, accompanied by any filing fees prescribed by law, with the clerk of the court, in accordance with Rules 9.110 and 9.190 of the Florida Rules of Appellate Procedure (Fla. R. App. P.). Pursuant to Fla. R. App. P. 9.020(h), an order is rendered when a signed written order is filed with the clerk of the lower tribunal.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
10117 PRINCESS PALM AVENUE, SUITE 120
TAMPA, FLORIDA 33610

December 3, 2013

Tampa Permits Section
SAJ-2009-04373 (SP-MEP)

Manatee County Public Works
c/o Mr. Sia Mollanazar, P.E.
Deputy Director, Public Works
1022 26th Avenue East
Bradenton, Florida 34208-3926

Dear Mr. Mollanazar:

The U.S. Army Corps of Engineers (Corps) is pleased to enclose the Department of the Army permit, which should be available at the construction site. Work may begin immediately but the Corps must be notified of:

- a. The date of commencement of the work,
- b. The dates of work suspensions and resumptions of work, if suspended over a week, and
- c. The date of final completion.

This information should be mailed to the Special Projects and Enforcement Branch of the Regulatory Division of the Jacksonville District at 10117 Princess Palm Avenue, Suite 120, Tampa, Florida 33610. The Special Projects and Enforcement Branch is also responsible for inspections to determine whether Permittees have strictly adhered to permit conditions.

Sincerely,

Donald W. Kinard
Chief, Regulatory Division

Enclosures

Copy Furnished:
CESAJ-RD-PE

RECEIVED

DEC 06 2013

PUBLIC WORKS
ENGINEERING DIVISION

DEPARTMENT OF THE ARMY PERMIT

Permittee: Manatee County Board Of County Commissioners
Manatee County Public Works Department
1022 – 26th Avenue East
Bradenton, Florida 34208

Permit No: SAJ-2009-04373(SP-MEP)

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

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

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

Project Description: Construct a 0.89 mile roadway extension of 44th Avenue East from 19th Street Court East to 30th Street East. Widen 0.38 miles of 30th Street East between 45th Avenue East and 38th Avenue East. Widen 0.54 miles of 38th Avenue East from 30th Street East to U.S. 301. The project will result in 0.277 acres of impacts to Corps jurisdictional wetlands, and 0.019 acres of impacts to other Corps jurisdictional waters. Compensatory mitigation for permanent, unavoidable impacts to herbaceous wetlands and waters of the U.S. will be provided on-site.

The work described above is to be completed in accordance with the 7 pages of drawings and 6 attachments affixed at the end of this permit instrument.

Project Location: The project is located in Sections 6, Township 35 South, Range 18 East, Bradenton, Manatee County, Florida. The project falls entirely within the Manatee River Watershed.

Directions to site: From I-75, take exit 217 toward Bradenton. Merge onto FL-70 W/Oneco-Myakka City Rd. and drive 4.2 miles to US-301 N. Turn right onto US-301 N and drive 1.3 mi to 38th Ave E. Turn left at 38th Ave E and drive 0.5 mi., taking the 1st left onto 19th St Ct E. Drive 0.3 mi and take the 1st left onto 44th Ave E. The eastern limit of the project is on the right.

Approximate Central Coordinates:

Begin Project: Latitude 27.4621°, Longitude -82.5400°

End Project: Latitude 27.4612°, Longitude -82.5260°

On-Site Mitigation: Latitude 27.4610°, Longitude - 82.5279°

PERMIT NUMBER: SAJ-2009-04373(SP-MEP)
PERMITTEE: Manatee County Board Of County Commissioners
PAGE 2 of 13

Permit Conditions

General Conditions:

1. The time limit for completing the work authorized ends on **October 28, 2018**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature and the mailing address of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. **Reporting Address:** All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following address: U.S. Army Corps of Engineers, Regulatory Division, Enforcement Section, 10117 Princess Palm Avenue, Suite 120, Tampa, FL 33610. The Permittee shall reference this permit number, SAJ-2009-04373(SP-MEP), on all submittals.

PERMIT NUMBER: SAJ-2009-04373(SP-MEP)
PERMITTEE: Manatee County Board Of County Commissioners
PAGE 3 of 13

2. Commencement Notification: Within 10 days from the date of initiating the authorized work, the Permittee shall provide to the Corps a written notification of the date of commencement of work authorized by this permit.

3. Erosion Control: Prior to the initiation of any work authorized by this permit, the Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material outside the work area. Immediately after completion of the final grading of the land surface, all slopes, land surfaces, and filled areas shall be stabilized using sod, degradable mats, barriers, or a combination of similar stabilizing materials to prevent erosion. The erosion control measures shall remain in place and be maintained until all authorized work has been completed and the site has been stabilized.

4. Cultural Resources/Historic Properties:

a. No structure or work shall adversely affect impact or disturb properties listed in the National Register of Historic Places (NRHP) or those eligible for inclusion in the NRHP.

b. If during the ground disturbing activities and construction work within the permit area, there are archaeological/cultural materials encountered which were not the subject of a previous cultural resources assessment survey (and which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes, evidence of structures or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work and ground-disturbing activities within a 100-meter diameter of the discovery and notify the Corps within the same business day (8 hours). The Corps shall then notify the Florida State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) to assess the significance of the discovery and devise appropriate actions.

c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with the above Special Condition ; and if deemed necessary by the SHPO, THPO(s), or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.

d. In the unlikely event that unmarked human remains are identified on non-federal lands, they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO and THPO(s). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the

PERMIT NUMBER: SAJ-2009-04373(SP-MEP)
PERMITTEE: Manatee County Board Of County Commissioners
PAGE 4 of 13

permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the State Archeologist and from the Corps.

5. Compensatory Mitigation: Within 12 months from the date of initiating the authorized work the Permittee shall complete the following onsite mitigation objectives in accordance with the approved compensatory mitigation plan (Attachment 4):

Wetland Creation: Provide 0.34 acres of herbaceous wetland creation as depicted in Attachment 4 of this permit.

This compensatory mitigation area shall be preserved in perpetuity in accordance with the **Perpetual Conservation** Special Condition of this permit.

6. Performance Standards: To meet the objectives of the approved compensatory mitigation plan, the Permittee shall achieve the following performance standards:

- a. At least 80 percent cover by appropriate wetland species (i.e., FAC or wetter).
- b. Cover of Category I and II invasive exotic plant species, pursuant to the most current list established by the Florida Exotic Pest Plant Council at <http://www.fleppc.org>, and the nuisance species, dogfennel (*Eupatorium capillifolium*), Bermudagrass (*Cynodon* spp.), Bahiagrass (*Paspalum notatum*), cattail (*Typha* spp.), and Brazilian pepper (*Schinus terebinthifolius*), shall total less than 5 percent.
- c. Less than 20 percent mortality of planted wetland species.

The Permittee shall achieve the above performance standards by the end of the 5-year monitoring period, with no maintenance during the 5th year of monitoring. In the event that the above performance standards have not been achieved, the Permittee shall undertake a remediation program approved by the Corps in accordance with the **Remediation** Special Condition of this permit.

7. Monitoring and Reporting Timeframes: To show compliance with the performance standards the Permittee shall complete the following:

- a. Perform a time-zero monitoring event of the wetland mitigation area(s) within 60 days of completion of the compensatory mitigation objectives identified in the **Compensatory Mitigation** Special Condition of this permit.
- b. Submit the time-zero report to the Corps within 60 days of completion of the monitoring event. The report will include at least one paragraph depicting baseline conditions of the mitigation site(s) prior to initiation of the compensatory mitigation objectives and a detailed plan view drawing of all created, enhanced and/or restored mitigation areas.

PERMIT NUMBER: SAJ-2009-04373(SP-MEP)
PERMITTEE: Manatee County Board Of County Commissioners
PAGE 5 of 13

c. Subsequent to completion of the compensatory mitigation objectives, perform semi-annual monitoring of the wetland mitigation areas for the first 3 years and annual monitoring thereafter for a total of no less than 5 years of monitoring.

d. Submit annual monitoring reports to the Corps within 60 days of completion of the monitoring event. Semi-annual monitoring will be combined into one annual monitoring report.

e. Monitor the mitigation area(s) and submit annual monitoring reports to the Corps until released in accordance with the **Mitigation Release** Special Condition of this permit.

8. Reporting Format: Annual monitoring reports shall follow a 10-page maximum report format for assessing compensatory mitigation sites. The Permittee shall submit all documentation to the Corps on 8½-inch by 11-inch paper, and include the following:

a. Project Overview (1 Page):

(1) Department of the Army Permit Number

(2) Name and contact information of Permittee and consultant

(3) Name of party responsible for conducting the monitoring and the date(s) the inspection was conducted

(4) A brief paragraph describing the purpose of the approved project, acreage and type of aquatic resources impacted, and mitigation acreage and type of aquatic resources authorized to compensate for the aquatic impacts.

(5) Written description of the location, any identifiable landmarks of the compensatory mitigation project including information to locate the site perimeter(s), and coordinates of the mitigation site (expressed as latitude, longitudes, UTM's, state plane coordinate system, etc.).

(6) Dates compensatory mitigation commenced and/or was completed

(7) Short statement on whether the performance standards are being met

(8) Dates of any recent corrective or maintenance activities conducted since the previous report submission

(9) Specific recommendations for any additional corrective or remedial actions.

b. Requirements (1 page): List the monitoring requirements and performance standards, as specified in the approved mitigation plan and special conditions of this permit, and evaluate

whether the compensatory mitigation project site is successfully achieving the approved performance standards or trending towards success. A table is a recommended option for comparing the performance standards to the conditions and status of the developing mitigation site.

c. **Summary Data (maximum of 4 pages):** Summary data should be provided to substantiate the success and/or potential challenges associated with the compensatory mitigation project. Photo documentation may be provided to support the findings and recommendations referenced in the monitoring report and to assist the PM in assessing whether the compensatory mitigation project is meeting applicable performance standards for that monitoring period. Submitted photos should be formatted to print on a standard 8 ½" x 11" piece of paper, dated, and clearly labeled with the direction from which the photo was taken. The photo location points should also be identified on the appropriate maps.

d. **Maps and Plans (maximum of 3 pages):** Maps shall be provided to show the location of the compensatory mitigation site relative to other landscape features, habitat types, locations of photographic reference points, transects, sampling data points, and/or other features pertinent to the mitigation plan. In addition, the submitted maps and plans should clearly delineate the mitigation site perimeter(s). Each map or diagram should be formatted to print on a standard 8 ½" x 11" piece of paper and include a legend and the location of any photos submitted for review. As-built plans may be included.

e. **Conclusions (1 page):** A general statement shall be included that describes the conditions of the compensatory mitigation project. If performance standards are not being met, a brief explanation of the difficulties and potential remedial actions proposed by the Permittee or sponsor, including a timetable, shall be provided. The District Commander will ultimately determine if the mitigation site is successful for a given monitoring period.

9. Remediation: If the compensatory mitigation fails to meet the performance standards 5 years after completion of the compensatory mitigation objectives, the compensatory mitigation will be deemed unsuccessful. Within 60 days of notification by the Corps that the compensatory mitigation is unsuccessful, the Permittee shall submit to the Corps an alternate compensatory mitigation proposal sufficient to create the functional lift required under this permit. The alternate compensatory mitigation proposal may be required to include additional mitigation to compensate for the temporal loss of wetland function associated with the unsuccessful compensatory mitigation activities. The Corps reserves the right to fully evaluate, amend, and approve or reject the alternate compensatory mitigation proposal. Within 120 days of Corps approval, the Permittee will complete the alternate compensatory mitigation proposal.

10. Mitigation Release: The Permittee's responsibility to complete the required compensatory mitigation, as set forth in the **Compensatory Mitigation** Special Condition of this permit will not be considered fulfilled until mitigation success has been demonstrated and written verification has been provided by the Corps. A mitigation area which has been released will

PERMIT NUMBER: SAJ-2009-04373(SP-MEP)
PERMITTEE: Manatee County Board Of County Commissioners
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require no further monitoring or reporting by the Permittee; however the Permittee, Successors and subsequent Transferees remain perpetually responsible to ensure that the mitigation area(s) remain in a condition appropriate to offset the authorized impacts in accordance with General Condition 2 of this permit.

11. **As-Builts:** Within 60 days of completion of the authorized work or at the expiration of the construction authorization of this permit, whichever occurs first, the Permittee shall submit as-built drawings of the authorized work and a completed As-Built Certification Form (Attachment 5) to the Corps. The drawings shall be signed and sealed by a registered professional engineer and include the following:

a. A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) with an overlay of the work as constructed in the same scale as the attached permit drawings (8½-inch by 11-inch). The drawing should show all "earth disturbance," including wetland impacts, water management structures, and any on-site mitigation areas.

b. List any deviations between the work authorized by this permit and the work as constructed. In the event that the completed work deviates, in any manner, from the authorized work, describe on the As-Built Certification Form the deviations between the work authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings any deviations that have been listed. Please note that the depiction and/or description of any deviations on the drawings and/or As-Built Certification Form does not constitute approval of any deviations by the U.S. Army Corps of Engineers.

c. The Department of the Army Permit number.

d. Include pre- and post-construction aerial photographs of the project site, if available.

12. **Notice of Permit:** The Permittee shall complete and record the Notice of Department of the Army Permit (Attachment 6) with the Clerk of the Circuit Court, Registrar of Deeds or other appropriate official charged with the responsibility of maintaining records of title to or interest in real property within the county of the authorized activity. Within 90 days from the effective date of this permit the Permittee shall provide a copy of the recorded Notice of Permit to the Corps clearly showing a stamp from the appropriate official indicating the book and page at which the Notice of Permit is recorded and the date of recording.

13. **Perpetual Conservation:** The Permittee shall maintain the areas referenced in the **Compensatory Mitigation** Special Condition in their natural state in perpetuity. The Permittee agrees that the only future utilization of these areas will be as a purely natural area and the following uses and/or activities will be prohibited except as required or authorized by this permit:

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- a. Construction or placing buildings, roads, signs, billboards or other advertising, utilities or other structures on or above the ground. Elevated boardwalks, hiking trails and camping areas will be permitted as long as they do not involve any of the other prohibited uses listed below:
- b. Dumping or placing soil or other substance or material as landfill or dumping or placing of trash, waste or unsightly or offensive material.
- c. Removal or destruction of trees, shrubs, or other vegetation.
- d. Excavation, dredging or removal of loam, peat, gravel, soil, rock, or other material substance in such a manner as to affect the surface.
- e. Surface use, except for purposes that permit the land or water area to remain predominantly in its natural condition.
- f. Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation.
- g. Acts or uses detrimental to such retention of land or water areas.
- h. Acts or uses detrimental to the preservation of the structural integrity or the physical appearance of sites or properties of historical, architectural, or cultural significance.

14. Eastern Indigo Snake Protection Measures: The Permittee shall comply with U.S. Fish and Wildlife Service's "Standard Protection Measures for the Eastern Indigo Snake" dated February 12, 2004 and provided in Attachment 3 of this permit."

15. Fill Material: The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.

16. Regulatory Agency Changes: Should any other regulatory agency require changes to the work authorized or obligated by this permit, the Permittee is advised that a modification to this permit instrument is required prior to initiation of those changes. It is the Permittee's responsibility to request a modification of this permit from the Tampa Regulatory Office.

End of Special Conditions

PERMIT NUMBER: SAJ-2009-04373(SP-MEP)
PERMITTEE: Manatee County Board Of County Commissioners
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Further Information:

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

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

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

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

2. Limits of this authorization.

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

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

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

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

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

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

PERMIT NUMBER: SAJ-2009-04373(SP-MEP)
PERMITTEE: Manatee County Board Of County Commissioners
PAGE 10 of 13

4. **Reliance on Applicant's Data:** The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. **Reevaluation of Permit Decision:** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

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

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

PERMIT NUMBER: SAJ-2009-04373(SP-MEP)
PERMITTEE: Manatee County Board Of County Commissioners
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Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.



(PERMITTEE)

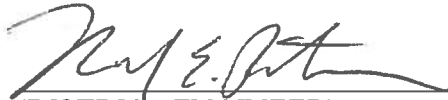
Sia Mollanazar, P.E.

11-22-13

(DATE)

Sia Mollanazar, P.E., Deputy Director-Engineering Svcs.
(PERMITTEE NAME-PRINTED)

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



(DISTRICT ENGINEER)

Alan M. Dodd,
Colonel, U.S. Army
District Commander

for

12/3/2013

(DATE)

PERMIT NUMBER: SAJ-2009-04373(SP-MEP)
PERMITTEE: Manatee County Board Of County Commissioners
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When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE-SIGNATURE)

(DATE)

(NAME-PRINTED)

(ADDRESS)

(CITY, STATE, AND ZIP CODE)

PERMIT NUMBER: SAJ-2009-04373(SP-MEP)
PERMITTEE: Manatee County Board Of County Commissioners
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*Attachments to Department of the Army
Permit Number SAJ-2009-04373(SP-MEP)*

1. PERMIT DRAWINGS: 7 pages
2. WATER QUALITY CERTIFICATION: Specific Conditions of the water quality permit/certification in accordance with General Condition number 5 on page 2 of this DA permit.
3. EASTERN INDIGO SNAKE CONDITIONS: 1 page
4. MITIGATION PROCEDURES: 3 pages
5. AS-BUILT CERTIFICATION FORM: 2 pages
6. RECORD PERMIT FORM: 2 pages

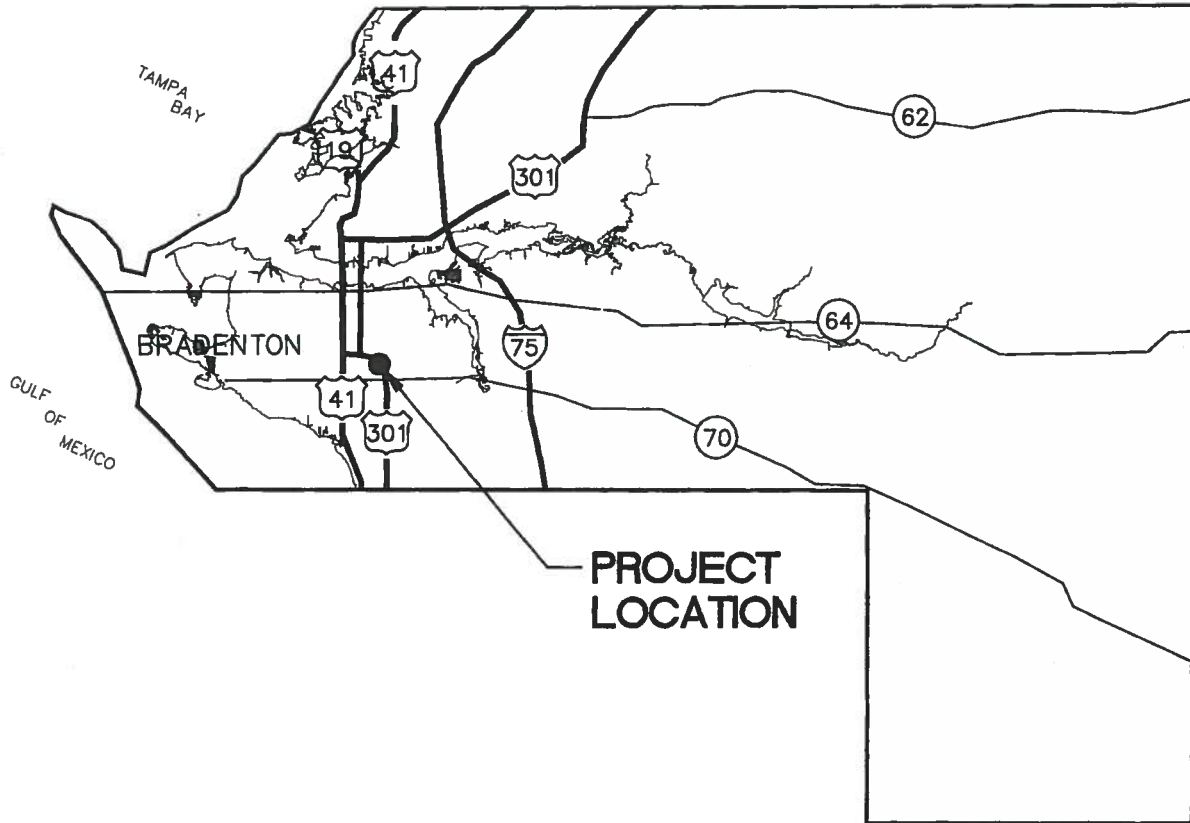
ATTACHMENT 1: PERMIT DRAWINGS

7 PAGES

Manatee County Public Works
1022 – 26th Avenue East
Bradenton, Florida 34208

SAJ-2009-04373(SP-MEP)

44th Avenue E,
19th Street Court East to
30th Street East



MANATEE COUNTY

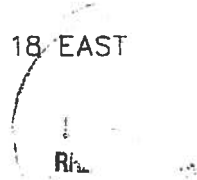
SECTION 5,6,7,8

TOWNSHIP 35 SOUTH

RANGE 18 EAST

VICINITY MAP

NTS



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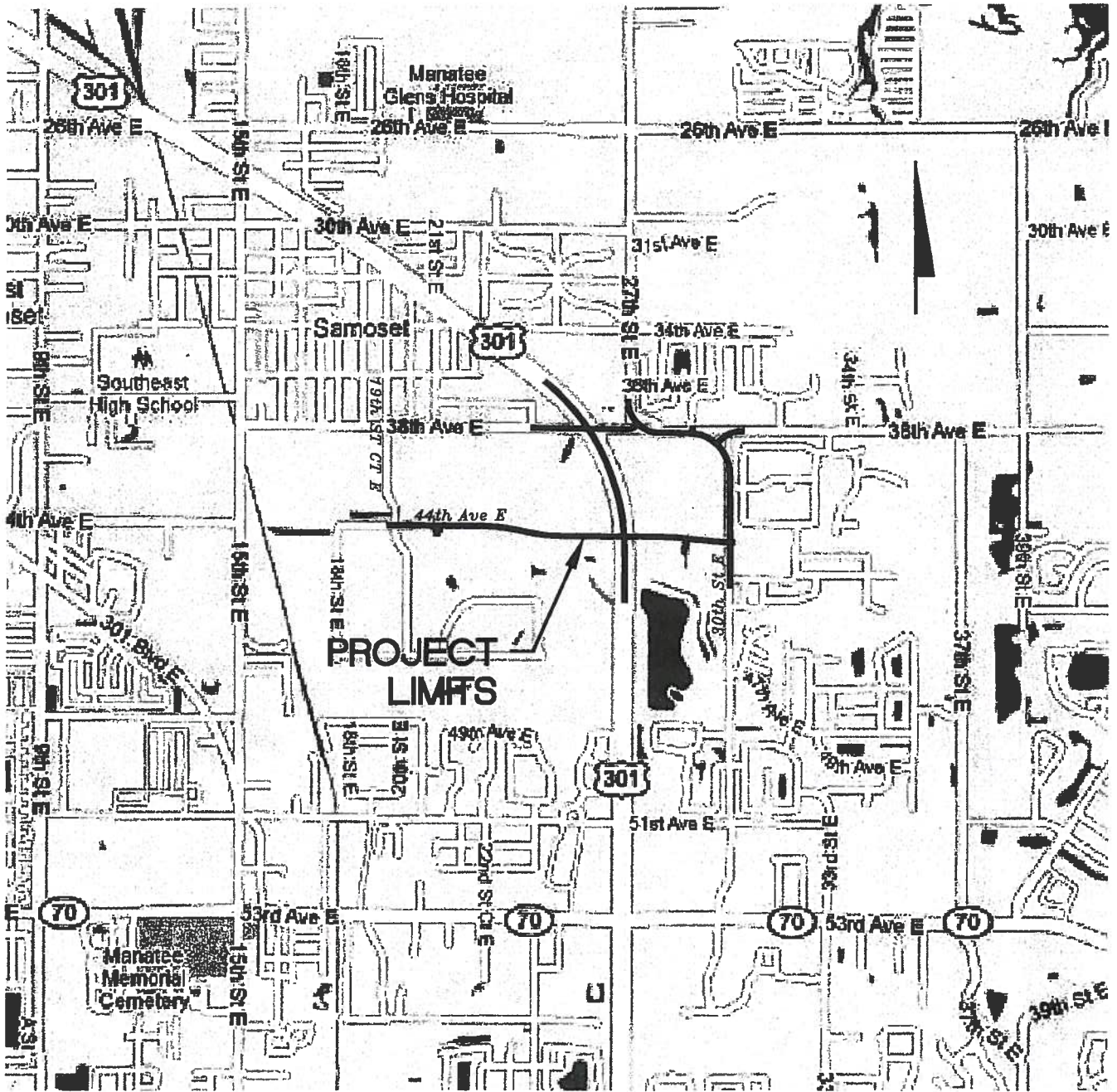
SAJ-2009-04373(SP-MEP)
 03-DECEMBER-2013
 PAGE 1 OF 7

PROJECT: 44TH AVENUE EAST

APPLICANT: MANATEE COUNTY

COUNTY: MANATEE

SHEET: 1



SECTIONS 5,6,7,8

TOWNSHIP 35 SOUTH

RANGE 18 EAST

LOCATION MAP

NTS

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SAJ-2009-04373(SP-MEP)
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PAGE 2 OF 7

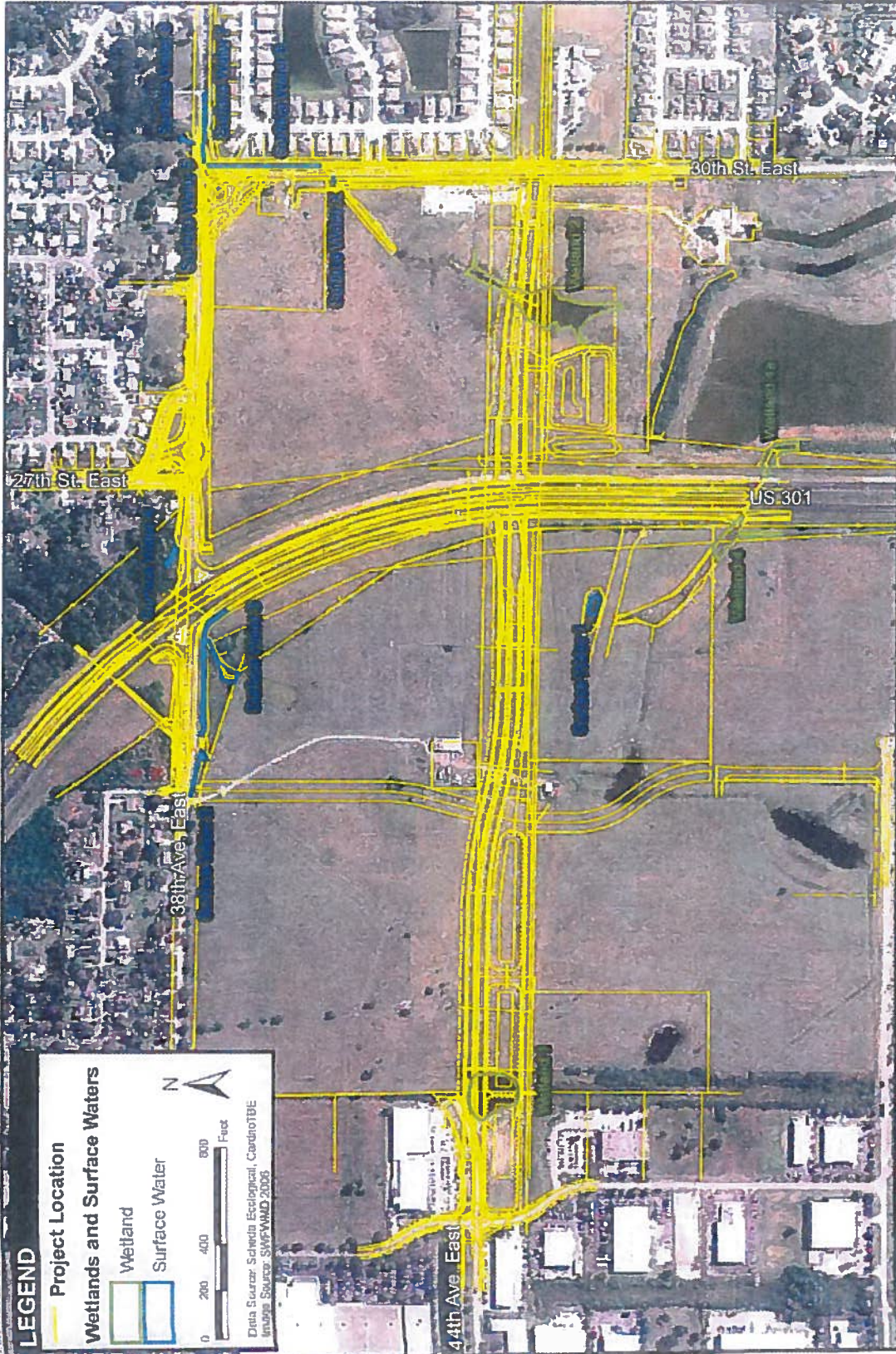
PROJECT: 44TH AVENUE EAST

APPLICANT: MANATEE COUNTY

COUNTY: MANATEE

SHEET: 2

G:\PROJECTS\091510_10.C - Minutes County -4th Ave East\mxd\figure 5 wetland and surface water location map.mxd



LEGEND

Project Location

Wetlands and Surface Waters

Wetland

Surface Water

0 200 400 800 Feet

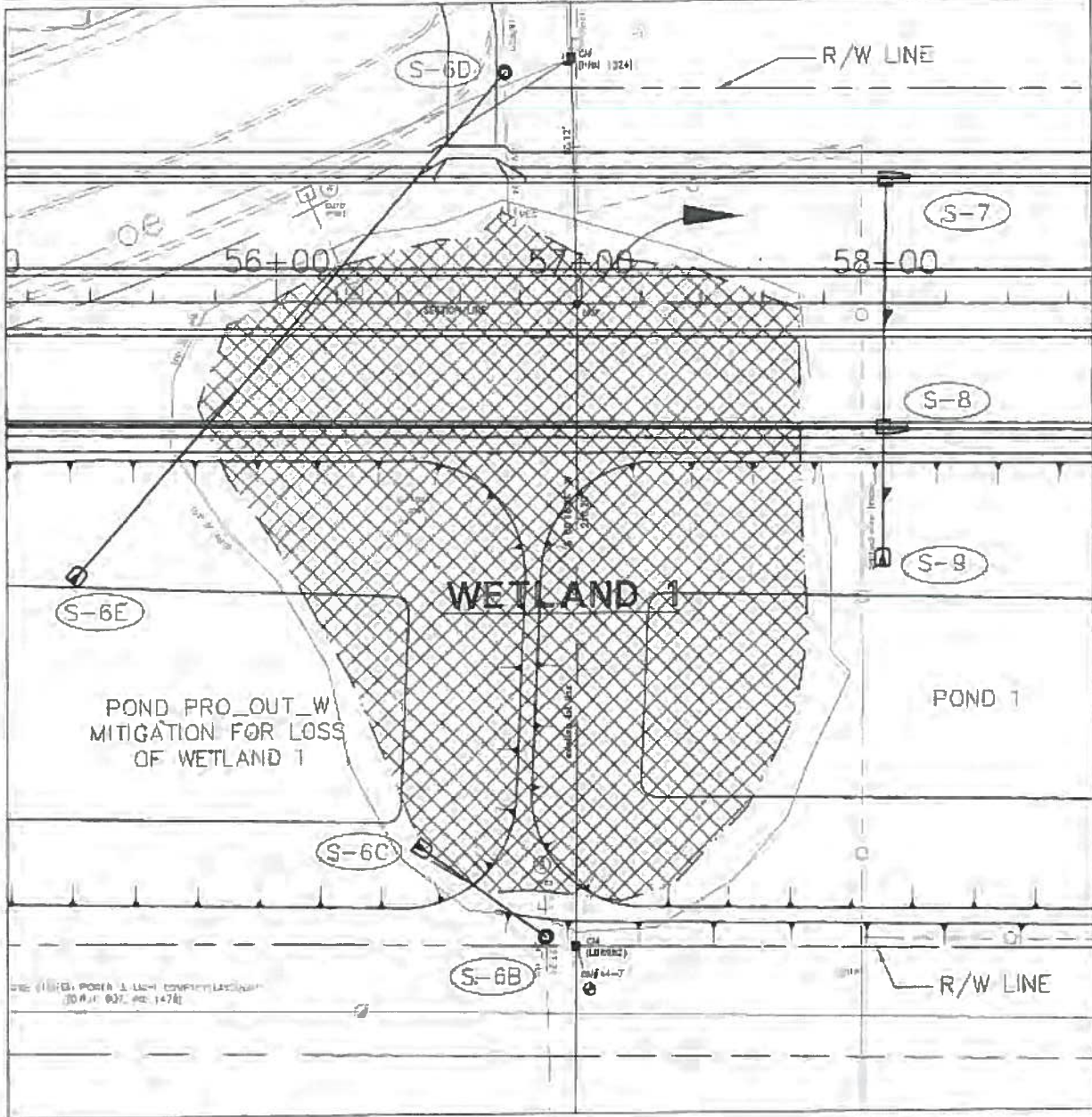
Data Source: Schwab Ecological, CordovaTBE
Image Source: SVP/WMD, 2006

44th
Front
Main
Coal

SAJ-2009-04373(SP-MEP)
03-DECEMBER-2013
PAGE 3 OF 7

**LOCATION OF WETLANDS AND
SURFACE WATERS**

Figure 5



SECTIONS 5,6,7,8

TOWNSHIP 35 SOUTH

RANGE 18 EAST

LEGEND

 WETLAND FILL



WETLAND IMPACTS	FILL (AC)
* 1A	0.745
2	0.277
X	0.005
5	0.003
6	0.011
TOTAL	0.296

WETLAND 1A PLAN SHEET

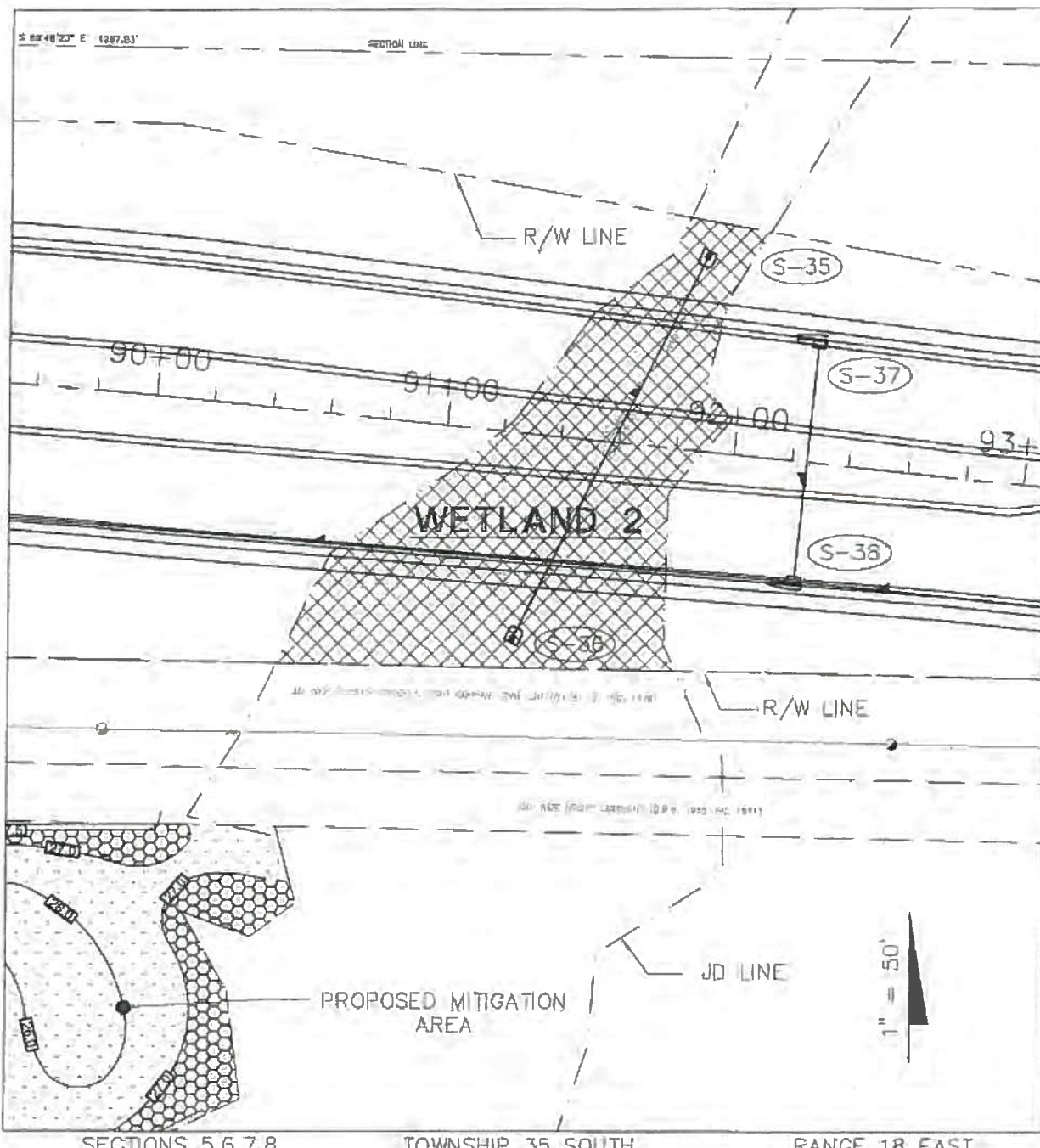
* NOT A USAGE JURISDICTIONAL WETLAND



SAJ-2009-04373(SP-MEP)
03-DECEMBER-2013
PAGE 4 OF 7

PROJECT:	44TH AVENUE EAST
APPLICANT:	MANATEE COUNTY
COUNTY:	MANATEE
SHEET:	1

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LEGEND

 WETLAND FILL

WETLAND 2 PLAN SHEET



SAJ-2009-04373(SP-MEP)
03-DECEMBER-2013
PAGE 5 OF 7

Planning
 A
 on Drive
 0048

PROJECT: 44TH AVENUE EAST

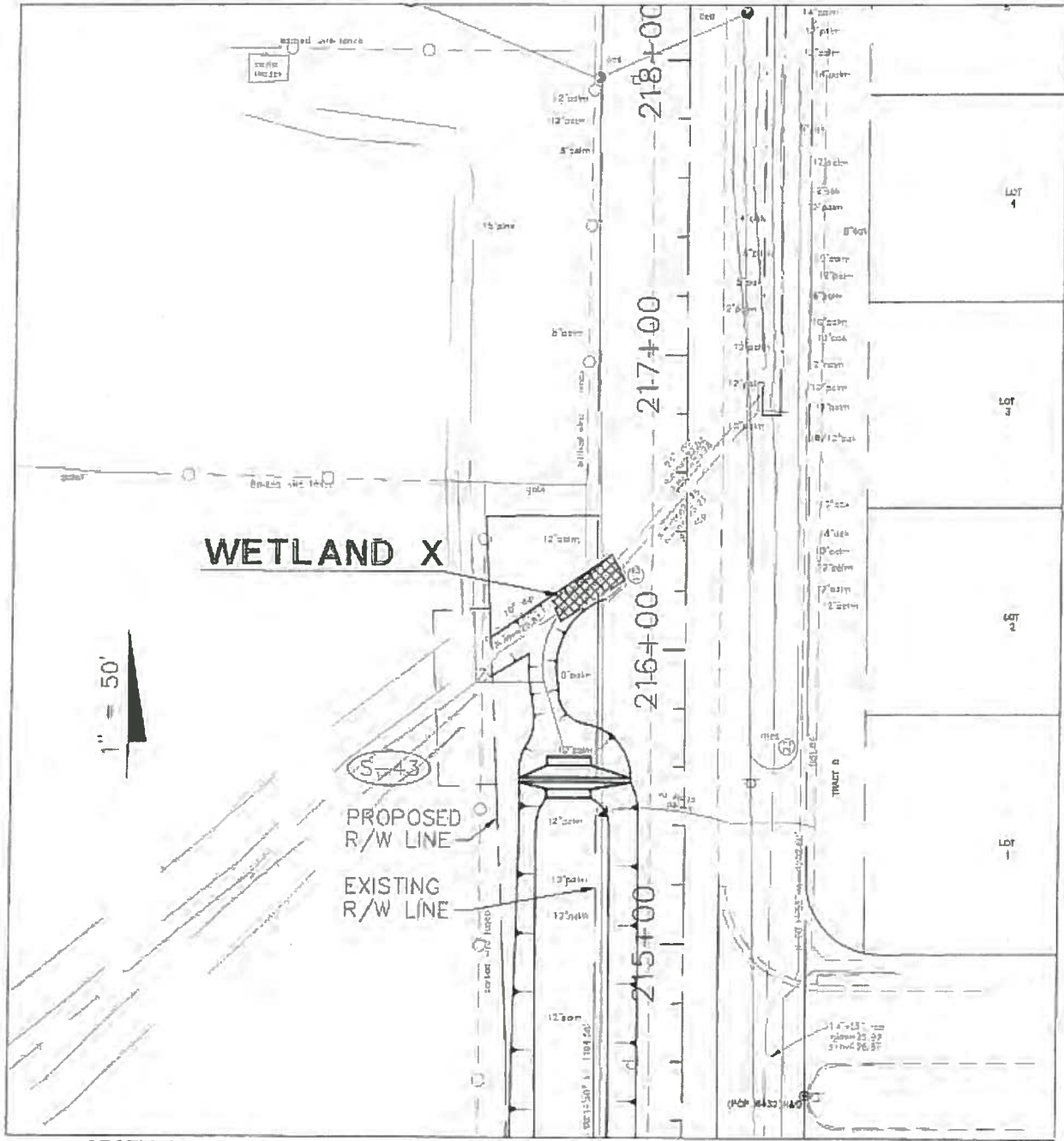
APPLICANT: MANATEE COUNTY

COUNTY: MANATEE

SHEET: 2

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SECTIONS 5,6,7,8 TOWNSHIP 35 SOUTH RANGE 18 EAST

LEGEND

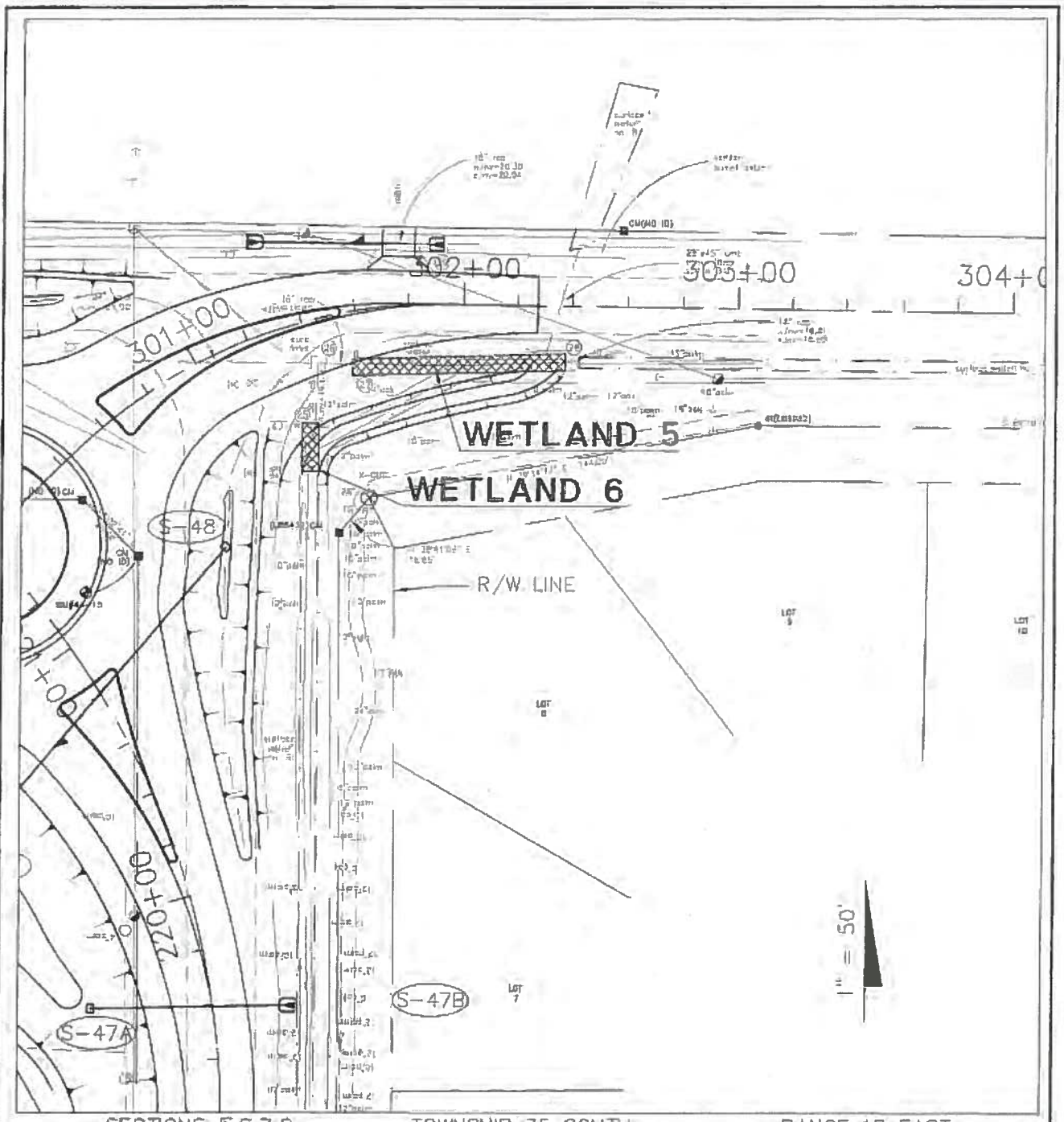
 WETLAND FILL

WETLAND X



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03-DECEMBER-2013
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PROJECT: 44TH AVENUE EAST	
APPLICANT: MANATEE COUNTY	
COUNTY: MANATEE	SHEET: 3



SECTIONS 5,6,7,8 TOWNSHIP 35 SOUTH RANGE 18 EAST

LEGEND

 WETLAND FILL

WETLAND 5 & 6

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03-DECEMBER-2013
PAGE 7 OF 7

PROJECT: 44TH AVENUE EAST	
APPLICANT: MANATEE COUNTY	
COUNTY: MANATEE	SHEET: 4

ATTACHMENT 2: WATER QUALITY

7 PAGES DATED 18-MAY-2011

Manatee County Public Works
1022 – 26th Avenue East
Bradenton, Florida 34208

SAJ-2009-04373(SP-MEP)

44th Avenue E,
19th Street Court East to
30th Street East

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
GENERAL CONSTRUCTION
PERMIT NO. 44035341.000

Expiration Date: May 18, 2016

PERMIT ISSUE DATE: May 18, 2011

This permit is issued under the provisions of Chapter 373, Florida Statutes, (F.S.), and the Rules contained in Chapters 40D-4 and 40, Florida Administrative Code, (F.A.C.). The permit authorizes the Permittee to proceed with the construction of a surface water management system in accordance with the information outlined herein and shown by the application, approved drawings, plans, specifications, and other documents, attached hereto and kept on file at the Southwest Florida Water Management District (District). Unless otherwise stated by permit specific condition, permit issuance constitutes certification of compliance with state water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. 1341. All construction, operation and maintenance of the surface water management system authorized by this permit shall occur in compliance with Florida Statutes and Administrative Code and the conditions of this permit.

PROJECT NAME: Manatee County - 44th Avenue East from 19th Street Court East to 30th Street East

GRANTED TO: Manatee County Board of County Commissioners
Manatee County Public Works Department
1022 26th Avenue East
Bradenton, FL 34208

ABSTRACT: This permit authorizes the construction of a surface water management system to serve a 1.81 mile roadway project known as Manatee County - 44th Avenue East from 19th Street Court East to 30th Street East. The surface water management system has been designed to provide water quality treatment and peak attenuation storage for the development. The method of water quality treatment is wet detention and on-line retention. Information regarding the surface water management system, 100-year floodplain, wetlands and/or surface waters is stated below and on the permitted construction drawings for the project.

OP. & MAINT. ENTITY: Manatee County Public Works Department

COUNTY: Manatee

SEC/TWP/RGE: 05, 06, 07, 08/35S/18E

**TOTAL ACRES OWNED
OR UNDER CONTROL:** 36.91

PROJECT SIZE: 36.91 Acres

LAND USE: Road Project

DATE APPLICATION FILED: December 4, 2009

AMENDED DATE: N/A

I. Water Quantity/Quality

POND NO.	AREA ACRES @ TOP OF BANK	TREATMENT TYPE
Pond 1-4	3.58	Wet Detention
Pond 5	1.77	Wet Detention
Pond 6	0.39	Wet Detention
Pond 7-8	0.44	Wet Detention
Pond 9-10	0.67	Wet Detention
Pond 11	0.16	On-line Retention
Pro-Out-W	1.61	N/A
TOTAL	8.62	

Comments: The project consists of 0.89 miles of proposed roadway extension of 44th Avenue East (from 19th Street Court East to 30th Street East); 0.38 miles of proposed roadway widening improvements along 30th Street East (from 45th Avenue East to 38th Avenue East); 0.54 miles of proposed roadway widening improvements along 38th Avenue East (from 30th Street East to U.S. 301); and includes associated intersection improvements. Pond Pro-Out-W provides attenuation storage and conveyance only. The engineer of record has provided reasonable assurance Chapter 3.3.1.4 of the District's Basis of Review has been addressed for nutrients in WBID 1896 (Bowlees Creek).

This permit (ERP No. 44035341.000) also approves modifications to the permitted surface water management system for ERP No. 44012067.002 entitled Team Edition Off-Street Parking, issued March 20, 1997; specifically, Pond Southwest-Retention-Area effluent filtration treatment system previously permitted under ERP No. 44012067.002 is to be replaced by proposed Pond 11. This permit (ERP No. 44035341.000) also approves modifications to the permitted surface water management system for MSSW No. 48012067.000 entitled Manasota Industrial Park, issued June 6, 1994; specifically, Lake C (aka Pond D) attenuation pond previously permitted under ERP No. 44012067.000 is to be replaced by proposed Pond Pro-Out-W.

A mixing zone is not required.
 A variance is not required.

II. 100-Year Floodplain

Comments: According to FEMA floodplain determinations the project lies within flood Zone X; no floodplain impacts are proposed.

III. Environmental Considerations

Wetland/Surface Water Information

Count of Wetlands: 5

Wetland Name	Total Acres	Not Impacted Acres	Permanent Impacts		Temporary Impacts	
			Acres	Functional Loss*	Acres	Functional Loss*
SW-1A	0.75	0.01	0.75	0.00	0.00	0.00
SW 5	0.01	0.00	0.01	0.00	0.00	0.00
SW 6	0.01	0.00	0.01	0.00	0.00	0.00
SW X	0.01	0.00	0.01	0.00	0.00	0.00
W 2	0.28	0.00	0.28	0.08	0.00	0.00
Total:	1.06	0.01	1.06	0.08	0.00	0.00

* For impacts that do not require mitigation, their functional loss is not included.

Wetland/Other Surface Water Comments:

There is one (1) wetland with a total of 0.28 acre located within the project area. Wetland W2 is a freshwater marsh system that extends offsite to the north. Permanent impacts to 0.28 acre of Wetland W2 will occur for roadway construction. In addition to the above mentioned wetlands, there are four (4) surface water features totaling 0.78 acre consisting of three (3) upland-cut ditches and one (1) upland-cut pond located within the project area. Permanent surface water impacts of 0.78 acre are proposed, comprising 0.03 acre of filling impacts to upland-cut ditches for roadway construction and 0.75 acre of filling impacts to an upland-cut pond for roadway construction. Permanent filling impacts to 0.28 acres of qualifying wetlands and surface waters were evaluated using the Uniform Mitigation Assessment Method (UMAM) as required pursuant to Chapter 62-345, F.A.C. The results of the UMAM analysis indicate a functional loss of 0.08 units due to the permanent impacts proposed.

Mitigation Information

Count of Mitigation: 1

Mitigation Name	Creation/Restoration		Enhancement		Preservation		Other	
	Acres	Functional Gain	Acres	Functional Gain	Acres	Functional Gain	Acres	Functional Gain
Mitigation Area 1	0.34	0.00	0.00	0.08	0.00	0.00	0.00	0.00
Total:	0.34	0.00	0.00	0.08	0.00	0.00	0.00	0.00

Mitigation Comments:

Wetland mitigation for permanent impacts will be provided by the onsite creation of 0.34 acre of Wetland W2. The results of the UMAM analysis indicate a functional gain of 0.08 units which offsets the 0.08 units of functional loss proposed to wetland habitat. Wetland mitigation is not required for impacts to ditches and ponds constructed in uplands pursuant to Subsection 3.2.2.2 of the Basis of Review (B.O.R.). Under this subsection, wetland mitigation is not required for impacts to drainage ditches, not constructed to divert natural stream flow, and ponds, which are less than one acre in area, constructed in uplands that do not provide significant habitat for threatened or endangered species.

A regulatory conservation easement is not required.

A proprietary conservation easement is not required.

SPECIFIC CONDITIONS

1. If the ownership of the project area covered by the subject permit is divided, with someone other than the Permittee becoming the owner of part of the project area, this permit shall terminate, pursuant to Section 40D-1.6105, F.A.C. In such situations, each land owner shall obtain a permit (which may be a modification of this permit) for the land owned by that person. This condition shall not apply to the division and sale of lots or units in residential subdivisions or condominiums.
2. Unless specified otherwise herein, two copies of all information and reports required by this permit shall be submitted to:

Sarasota Regulation Department
 Southwest Florida Water Management District
 6750 Fruitville Road
 Sarasota, FL 34240-9711

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

3. The Permittee shall retain the design engineer, or other professional engineer registered in Florida, to conduct on-site observations of construction and assist with the as-built certification requirements of this project. The Permittee shall inform the District in writing of the name, address and phone number of the professional engineer so employed. This information shall be submitted prior to construction.
4. Within 30 days after completion of construction of the permitted activity, the Permittee shall submit to the Sarasota Service Office a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1.659, F.A.C., and signed, dated and sealed as-built drawings. The as-built drawings shall identify any deviations from the approved construction drawings.
5. The District reserves the right, upon prior notice to the Permittee, to conduct on-site research to assess the pollutant removal efficiency of the surface water management system. The Permittee may be required to cooperate in this regard by allowing on-site access by District representatives, by allowing the installation and operation of testing and monitoring equipment, and by allowing other assistance measures as needed on site.
6. WETLAND MITIGATION SUCCESS CRITERIA - MITIGATION AREA

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

- a. The mitigation area can reasonably be expected to develop into a freshwater marsh as determined by the Florida Land Use and Cover and Forms Classification System (third edition; January 1999).
- b. Topography, water depth and water level fluctuation in the mitigation area are characteristic of the wetlands/ surface water type specified in criterion "a".
- c. Planted or recruited herbaceous or shrub species (or plant species providing the same function) shall meet the criteria specified:

Zone	Stratum	Percent Cover	Dominant Species ¹	Subdominant Species
Zone A	Groundcover	85	<i>Sagittaria lancifolia</i> <i>Scirpus validus</i> <i>Juncus effuses</i> <i>Ludwegia repens</i>	Any desirable wetland species as listed in 62-340 F.A.C.
Zone B	Groundcover	85	<i>Panicum hemitomon</i> <i>Spartina bakeri</i>	Any desirable wetland species as listed in 62-340 F.A.C.

¹Plant species providing the same function as those listed may also be considered in determining success.

- d. Species composition of recruiting desirable wetland vegetation is indicative of the wetland type specified in criterion "a".

- e. Coverage by nuisance or exotic species does not exceed 5 % percent at any location in the mitigation site and 5 % percent for the entire mitigation site.
- f. The wetland mitigation area can be determined to be a wetland or other surface water according the Chapter 62-340, F.A.C.

This criterion must be achieved within 3 years of mitigation area **construction**. The Permittee shall complete any activities necessary to ensure the successful achievement of the mitigation requirements by the deadline specified. Any request for an extension of the deadline specified shall be accompanied with an explanation and submitted as a permit letter modification to the District for evaluation.

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

- 7. The Permittee shall monitor and maintain the wetland mitigation areas until the criteria set forth in the Wetland Mitigation Success Criteria Conditions above are met. The Permittee shall perform corrective actions identified by the District if the District identifies a wetland mitigation deficiency.
- 8. The Permittee shall undertake required maintenance activities within the wetland mitigation areas as needed at any time between mitigation area construction and termination of monitoring, with the exception of the final year. Maintenance shall include the manual removal of all nuisance and exotic species, with sufficient frequency that their combined coverage at no time exceeds the Wetland Mitigation Success Criteria Conditions above. Herbicides shall not be used without the prior written approval of the District.
- 9. A Wetland Mitigation Completion Report shall be submitted to the District within 30 days of completing construction and planting of the wetland mitigation areas. Upon District inspection and approval of the mitigation areas, the monitoring program shall be initiated with the date of the District field inspection being the construction completion date of the mitigation areas. Monitoring events shall occur between March 1 and November 30 of each year. An Annual Wetland Monitoring Report shall be submitted upon the anniversary date of District approval to initiate monitoring.

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

Monitoring Data shall be collected semi-annually.

- 10. Termination of monitoring for the wetland mitigation areas shall be coordinated with the District by:
 - a. notifying the District in writing when the criteria set forth in the Wetland Mitigation Success Criteria Conditions have been achieved;
 - b. suspending all maintenance activities in the wetland mitigation areas including, but not limited to, irrigation and addition or removal of vegetation; and
 - c. submitting a monitoring report to the District one year following the written notification and suspension of maintenance activities.

Upon receipt of the monitoring report, the District will evaluate the wetland mitigation sites to determine if the Mitigation Success Criteria Conditions have been met and maintained. The District will notify the Permittee in writing of the evaluation results. The Permittee shall perform corrective actions for any portions of the wetland mitigation areas that fail to maintain the criteria set forth in the Wetland Mitigation Success Criteria Conditions.

11. Following the District's determination that the wetland mitigation has been successfully completed, the Permittee shall operate and maintain the wetland mitigation areas such that they remain in their current or intended condition for the life of the surface water management facility. The Permittee must perform corrective actions for any portions of the wetland mitigation areas where conditions no longer meet the criteria set forth in the Wetland Mitigation Success Criteria Conditions.
12. The Permittee shall, within 90 days of initial wetland impact and prior to beneficial use of the site, complete all aspects of the mitigation plan, including the grading, mulching, and planting, in accordance with the design details in the final approved construction drawings.
13. The following boundaries, as shown on the approved construction drawings, shall be clearly delineated on the site prior to initial clearing or grading activities:

- wetland and surface water areas
- wetland buffers
- limits of approved wetland impacts

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

14. Wetland W-2, SW01A, SW-X, SW-5, SW-6 boundaries shown on the approved construction drawings shall be binding upon the Permittee and the District.
15. All construction is prohibited within the permitted project area until the Permittee acquires legal ownership or legal control of the project area as delineated in the permitted construction drawings.
16. The operation and maintenance entity shall submit inspection reports in the form required by the District, in accordance with the following schedule.

For systems utilizing retention or wet detention, the inspections shall be performed two (2) years after operation is authorized and every two (2) years thereafter.
17. The removal of littoral shelf vegetation (including cattails) from wet detention ponds is prohibited unless otherwise approved by the District. Removal includes dredging, the application of herbicide, cutting, and the introduction of grass carp. Any questions regarding authorized activities within the wet detention ponds shall be addressed to the District's Surface Water Regulation Manager, Sarasota Service Office.
18. For dry bottom detention systems, the detention areas shall become dry within 72 hours after a rainfall event. If a detention area is regularly wet, this situation shall be deemed to be a violation of this permit.
19. Certification of compliance with state water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. 1341 is waived.

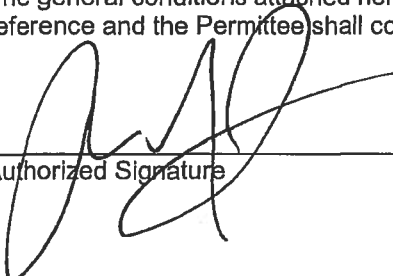
20. The District, upon prior notice to the Permittee, may conduct on-site inspections to assess the effectiveness of the erosion control barriers and other measures employed to prevent violations of state water quality standards and avoid downstream impacts. Such barriers or other measures should control discharges, erosion, and sediment transport during construction and thereafter. The District will also determine any potential environmental problems that may develop as a result of leaving or removing the barriers and other measures during construction or after construction of the project has been completed. The Permittee must provide any remedial measures that are needed.

21. This permit is issued based upon the design prepared by the Permittee's consultant. If at any time it is determined by the District that the Conditions for Issuance of Permits in Rules 40D-4.301 and 40D-4.302, F.A.C., have not been met, upon written notice by the District, the Permittee shall obtain a permit modification and perform any construction necessary thereunder to correct any deficiencies in the system design or construction to meet District rule criteria. The Permittee is advised that the correction of deficiencies may require re-construction of the surface water management system and/or mitigation areas.
22. 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 Permittee shall cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The Permittee shall contact the Florida Department of State, Division of Historical Resources (DHR), Review and Compliance Section at (850) 245-6333 or (800) 847-7278 and the District. Project activities shall not resume without verbal and/or written authorization from the DHR. In the event that unmarked human remains are encountered during permitted activities, all work shall cease immediately and the proper authorities shall be notified in accordance with Section 872.05, F.S.
23. Construction is prohibited in the U.S. 301 right-of-way until the Permittee acquires legal control or authorization from the Florida Department of Transportation (FDOT) to construct the portion of the project area located in the right-of-way as depicted on the permitted construction drawings.
24. Prior to commencing any dewatering activities, a plan shall be submitted and approved by the District in writing. The Permittee shall submit two (2) sets of dewatering plans, with supporting calculations, signed and sealed by a Florida Professional Engineer.

GENERAL CONDITIONS

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

Authorized Signature



ATTACHMENT 3: EASTERN INDIGO

1 PAGES DATED 1-FEB-2004

Manatee County Public Works
1022 – 26th Avenue East
Bradenton, Florida 34208

SAJ-2009-04373(SP-MEP)

44th Avenue E,
19th Street Court East to
30th Street East

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE

1. An eastern indigo snake protection/education plan shall be developed by the applicant or requestor for all construction personnel to follow. The plan shall be provided to the Service for review and approval at least 30 days prior to any clearing activities. The educational materials for the plan may consist of a combination of posters, videos, pamphlets, and lectures (*e.g.*, an observer trained to identify eastern indigo snakes could use the protection/education plan to instruct construction personnel before any clearing activities occur). Informational signs should be posted throughout the construction site and along any proposed access road to contain the following information:
 - a. a description of the eastern indigo snake, its habits, and protection under Federal Law;
 - b. instructions not to injure, harm, harass or kill this species;
 - c. directions to cease clearing activities and allow the eastern indigo snake sufficient time to move away from the site on its own before resuming clearing; and,
 - d. telephone numbers of pertinent agencies to be contacted if a dead eastern indigo snake is encountered. The dead specimen should be thoroughly soaked in water and then frozen.
2. If not currently authorized through an Incidental Take Statement in association with a Biological Opinion, only individuals who have been either authorized by a section 10(a)(1)(A) permit issued by the Service, or by the State of Florida through the Florida Fish Wildlife Conservation Commission (FWC) for such activities, are permitted to come in contact with an eastern indigo snake.
3. An eastern indigo snake monitoring report must be submitted to the appropriate Florida Field Office within 60 days of the conclusion of clearing phases. The report should be submitted whether or not eastern indigo snakes are observed. The report should contain the following information:
 - a. any sightings of eastern indigo snakes and
 - b. other obligations required by the Florida Fish and Wildlife Conservation Commission, as stipulated in the permit.

Revised February 12, 2004

ATTACHMENT 4: MITIGATION

3 PAGES

**Manatee County Public Works
1022 – 26th Avenue East
Bradenton, Florida 34208**

SAJ-2009-04373(SP-MEP)

**44th Avenue E,
19th Street Court East to
30th Street East**

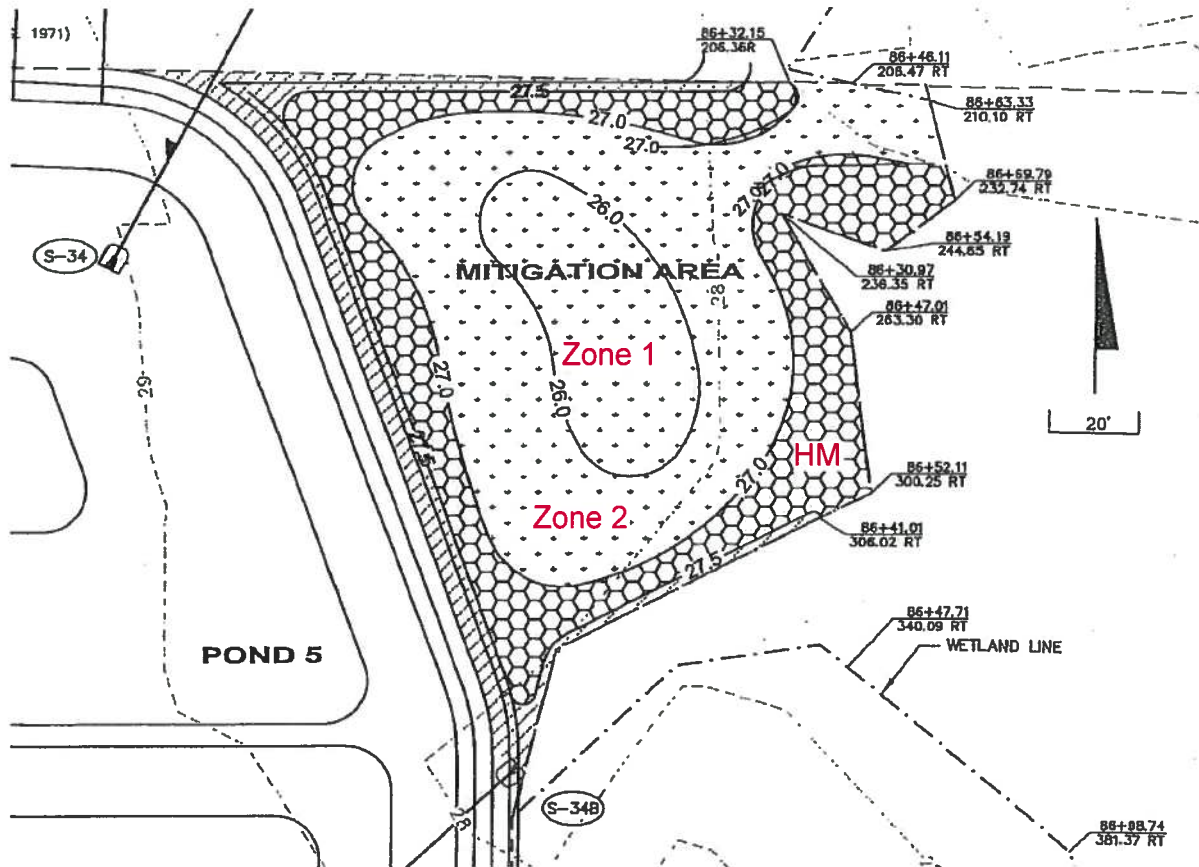
ON-SITE MITIGATION PLAN

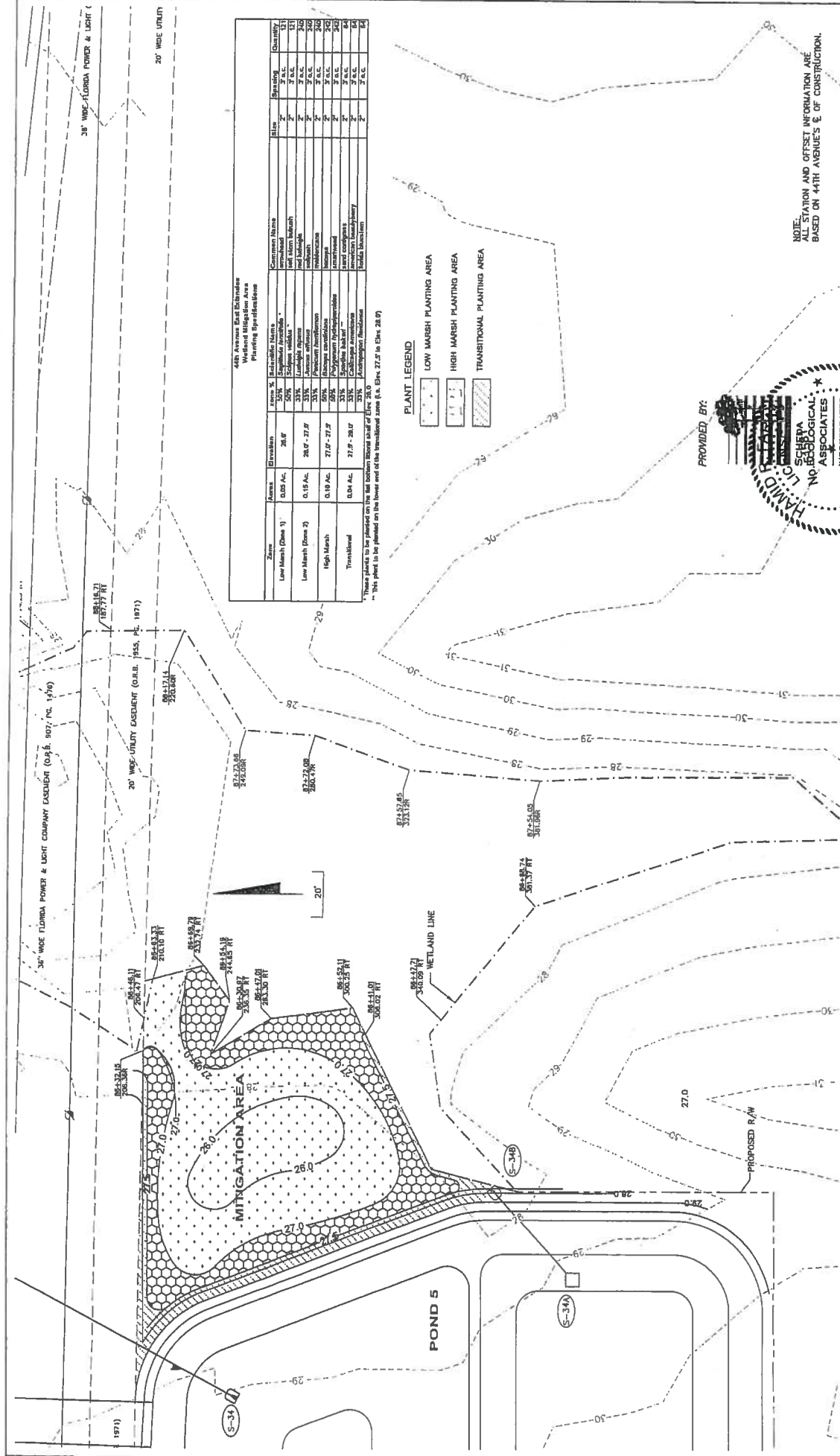
PLANTING PLAN

Zone	Acres	Elevation (ft)	Zone %	Scientific Name	Size	Spacing	Quantity
Low Marsh (Zone 1)	0.05	26.0'	50%	<i>Sagittaria lancifolia</i> *	2"	3' o.c.	121
			50%	<i>Scirpus validus</i>	2"	3' o.c.	121
Low Marsh (Zone 2)	0.15	26.0'-27.0'	33%	<i>Juncus effusus</i>	2"	3' o.c.	240
			33%	<i>Ludwigia repens</i>	2"	3' o.c.	240
			33%	<i>Panicum hemitomon</i>	2"	3' o.c.	240
High Marsh	0.10	27.0'-27.5'	50%	<i>Bacopa caroliniana</i>	2"	3' o.c.	242
			50%	<i>Polygonum hydropiperoides</i>	2"	3' o.c.	242
Transitional	0.04	27.5'-29.0'	33%	<i>Spartina bakeri</i> **	2"	3' o.c.	64
			33%	<i>Callicarpa americana</i>	2"	3' o.c.	64
			33%	<i>Andropogon floridanus</i>	2"	3' o.c.	64

*Planted on the bottom littoral shelf at elevation 26.0'

** Planted on the lower end of the transitional zone (27.5' – 28.0')





44th Avenue East Extension
Wetland Mitigation Area
Planting Specifications

Zone	Area	Species	Area, %	Planting Notes	Planting	Quantity
Low Marsh (Zone 1)	0.08 Ac.	50%	50%	Scrublive Shrub	2"	151
		33%	33%	Scrublive Shrub	2"	151
		17%	17%	Scrublive Shrub	2"	151
Low Marsh (Zone 2)	0.15 Ac.	50%	50%	Scrublive Shrub	2"	240
		33%	33%	Scrublive Shrub	2"	240
		17%	17%	Scrublive Shrub	2"	240
High Marsh	0.10 Ac.	50%	50%	Scrublive Shrub	2"	240
		33%	33%	Scrublive Shrub	2"	240
		17%	17%	Scrublive Shrub	2"	240
Transition	0.04 Ac.	50%	50%	Scrublive Shrub	2"	64
		33%	33%	Scrublive Shrub	2"	64
		17%	17%	Scrublive Shrub	2"	64

PLANT LEGEND

- LOW MARSH PLANTING AREA
- HIGH MARSH PLANTING AREA
- TRANSITIONAL PLANTING AREA

NOTE:
ALL STATION AND OFFSET INFORMATION ARE
BASED ON 44TH AVENUE'S E OF CONSTRUCTION.



PROJECT NO. 00180-001-10		DATE: 12-23-2009	
SHEET NO. 33		APPROVED: [Signature]	
MANATEE COUNTY		44TH AVENUE EAST ROADWAY EXTENSION	
SAJ-2009-04373(SP-MEP)		03-DECEMBER-2013	
PAGE 2 OF 3		DATE: 12/23/09	
NO.	DESCRIPTION	BY	DATE



ZNS ENGINEERING

ENGINEERS | PLANNERS | SURVEYORS | LANDSCAPE ARCHITECTS | ENVIRONMENTAL CONSULTANTS
EB 0027478 LS 0006982 LC 0000365

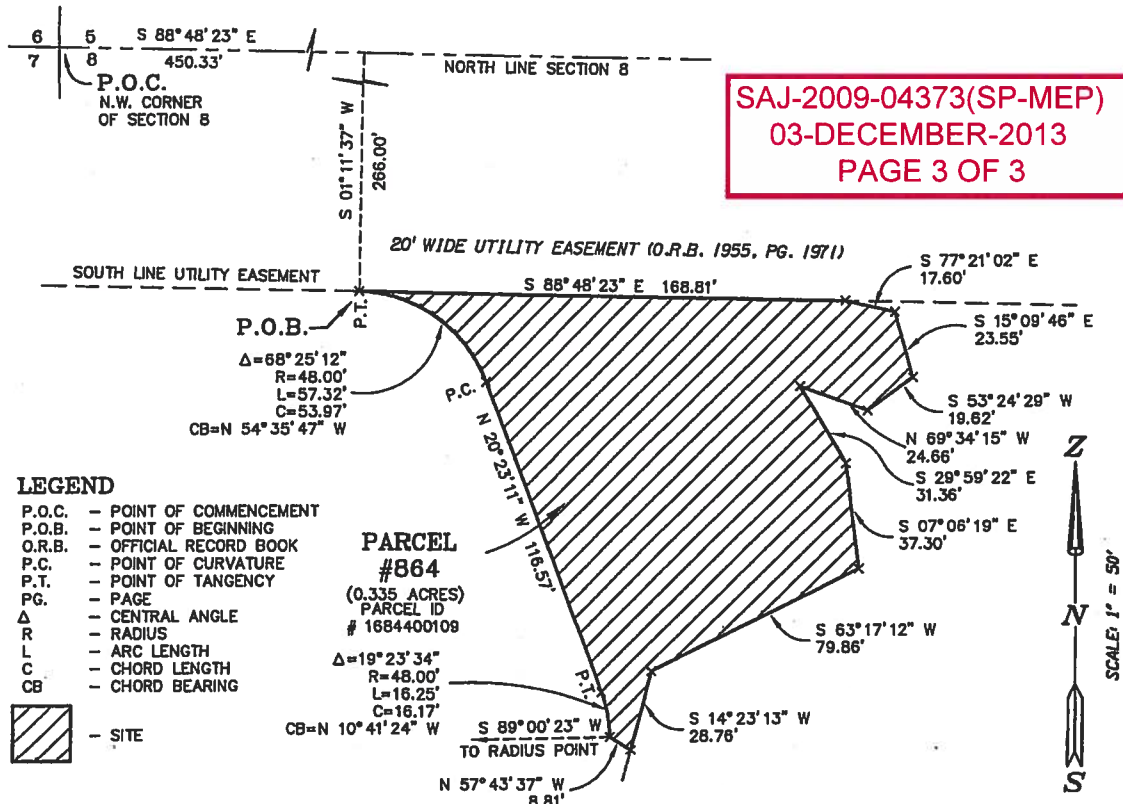
CERTIFICATE OF AUTHORIZATION LB # 6982
201 5th AVENUE DRIVE EAST
POST OFFICE BOX 9448
BRADENTON, FLORIDA 34206
(941) 748-8080
FAX (941) 748-3747

DESCRIPTION:

A PARCEL OF LAND LYING IN SECTION 8, TOWNSHIP 35 SOUTH, RANGE 18 EAST, MANATEE COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 8; THENCE S 88°48'23" E, ALONG THE NORTH LINE OF SAID SECTION 8, A DISTANCE OF 450.33 FEET; THENCE S 01°11'37" W, A DISTANCE OF 266.00 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF A 20 FOOT WIDE UTILITY EASEMENT AS RECORDED IN OFFICIAL RECORD BOOK 1955, PAGE 1971 OF THE PUBLIC RECORDS OF MANATEE COUNTY, FLORIDA; THENCE S 88°48'23" E, ALONG SAID SOUTH LINE, A DISTANCE OF 168.81 FEET; THENCE S 77°21'02" E, A DISTANCE OF 17.60 FEET; THENCE S 15°09'46" E, A DISTANCE OF 23.55 FEET; THENCE S 53°24'29" W, A DISTANCE OF 19.62 FEET; THENCE N 69°34'15" W, A DISTANCE OF 24.66 FEET; THENCE S 29°59'22" E, A DISTANCE OF 31.36 FEET; THENCE S 07°06'19" E, A DISTANCE OF 37.30 FEET; THENCE S 63°17'12" W, A DISTANCE OF 79.86 FEET; THENCE S 14°23'13" W, A DISTANCE OF 28.76 FEET; THENCE N 57°43'37" W, A DISTANCE OF 8.81 FEET TO A POINT ON THE ARC OF A CURVE TO THE LEFT WHOSE RADIUS POINT BEARS S 89°00'23" W, AT A DISTANCE OF 48.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 19°23'34", A DISTANCE OF 16.25 FEET AND A CHORD BEARING OF N 10°41'24" W TO THE POINT OF TANGENCY; THENCE N 20°23'11" W, A DISTANCE OF 116.57 FEET TO A POINT OF CURVATURE OF A CURVE TO THE LEFT HAVING A RADIUS OF 48.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 68°25'12", A DISTANCE OF 57.32 FEET AND A CHORD BEARING OF N 54°35'47" W TO THE POINT OF TANGENCY AND THE POINT OF BEGINNING.

CONTAINING 0.335 ACRES, MORE OR LESS.



**PERMANENT EASEMENT
PARCEL # 864
PROJECT No. 8045560**

BY: *J. N. Gatch*
JAMES N. GATCH JR. P.S.M.
FLORIDA CERTIFICATE No. LS 4295
DATE OF CERTIFICATION: 08/10/11

ATTACHMENT 5: AS-BUILTS

2 PAGES

Manatee County Public Works
1022 – 26th Avenue East
Bradenton, Florida 34208

SAJ-2009-04373(SP-MEP)

44th Avenue E,
19th Street Court East to
30th Street East

AS-BUILT CERTIFICATION BY PROFESSIONAL ENGINEER

Submit this form and one set of as-built engineering drawings to the U.S. Army Corps of Engineers, Special Projects and Enforcement Branch, 10117 Princess Palm Avenue, Suite 120, Tampa, Florida 33610-8300. If you have questions regarding this requirement, please contact the Special Projects and Enforcement Branch at 904-232-3131.

1. Department of the Army Permit Number: SAJ-2009-04373 (SP-MEP)

2. Permittee Information:

Name _____

Address _____

3. Project Site Identification:

Physical location/address _____

4. As-Built Certification:

I hereby certify that the authorized work, including any mitigation required by Special Conditions to the permit, has been accomplished in accordance with the Department of the Army permit with any deviations noted below. This determination is based upon on-site observation, scheduled and conducted by me or by a project representative under my direct supervision. I have enclosed one set of as-built engineering drawings.

Signature of Engineer

Name (Please type)

(FL, PR or VI) Reg. Number

Company Name

Address

City State ZIP

(Affix Seal)

Date

Telephone Number

ATTACHMENT 6: RECORD PERMIT

2 PAGES

Manatee County Public Works
1022 – 26th Avenue East
Bradenton, Florida 34208

SAJ-2009-04373(SP-MEP)

44th Avenue E,
19th Street Court East to
30th Street East

Prepared by:

Permittee: _____

Address: _____

Phone: _____

NOTICE OF DEPARTMENT OF THE ARMY PERMIT

TAKE NOTICE that the United States Army Corps of Engineers has issued Department of the Army Permit SAJ- - - to (Permittee) on , 201 , authorizing impacts to waters of the United States (including wetlands) in accordance with Section 404 of the Clean Water Act on a parcel of land known as Folio/Parcel ID: _____ encompassing _____ acres located within a portion of Section _____, Township _____ South, Range _____ East, _____, _____ County, Florida.

Within thirty (30) days of any transfer of interest or control of that portion of the premises containing the area authorized to be filled (or any portion thereof), the Permittee must notify the U.S. Army Corps of Engineers in writing of the property transfer by submitting the completed permit transfer page of the permit. Notification of the transfer does not by itself constitute a permit transfer. Therefore, purchasers of that portion of the premises containing the area authorized to be filled (or any portion thereof) are notified that it is unlawful for any person to construct, alter, operate, maintain, remove or abandon any works, including dredging or filling, without first having obtained a permit from the Corps of Engineers in the purchaser's name.

The subject Permit concerns only that portion of the property determined to fall within the jurisdiction of the U.S. Army Corps of Engineers and this notice is applicable only to those portions of the subject property containing areas authorized to be filled and wetland mitigation/conservation areas subject to the Permit.

Conditions of the Permit: The Permit is subject to General Conditions and Special Conditions which may affect the use of the subject property. Accordingly, interested parties should closely examine the entire Permit, all associated applications, and any subsequent modifications.

To obtain a copy of the permit in its entirety submit a written request to:
U.S. Army Corps of Engineers
Regulatory Division - Special Projects & Enforcement Branch
Post Office Box 4970
Jacksonville, Florida 32232-0019

Questions regarding compliance with these conditions should be directed to:
U.S. Army Corps of Engineers
Enforcement Section
Post Office Box 4970
Jacksonville, Florida 32232-0019

Conflict Between Notice and Permit

This Notice of Permit is not a complete summary of the Permit. Provisions in this Notice of Permit shall not be used in interpreting the Permit provisions. In the event of conflict between this Notice of Permit and the Permit, the Permit shall control.

This Notice is Not an Encumbrance

This Notice is for informational purposes only. It is not intended to be a lien, encumbrance, or cloud on the title of the premises.

Release

This Notice may not be released or removed from the public records without the prior written consent of the U.S. Army Corps of Engineers.

This Notice of Permit is executed on this _____ day of _____, 20____.

This document is being submitted for recordation in the Public Records of _____ County, Florida as part of the requirement imposed by Department of the Army Permit No SAJ- - issued by the United States Army Corps of Engineers.

Permittee: _____

Address: _____

Phone: _____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, by _____, who is personally known to me or has produced _____ as identification.

(seal)

Notary Public

Print

My Commission Expires _____

PERMIT VOID UNLESS DOT OPERATIONS
CENTER IS NOTIFIED 48 HRS IN
ADVANCE OF STARTING WORK
PHONE 941-359-2300
VERIFICATION NO _____

Rule 14-96, F.A.C.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
**DRIVEWAY/CONNECTION PERMIT
FOR ALL CATEGORIES**

ALL CONTRACTORS AND
SUBCONTRACTORS SHALL
BE RESPONSIBLE FOR
COMPLIANCE WITH
PERMITTED NOT
PLAN.

850-040-18
SYSTEMS PLANNING
06/06
Page 1 of 3

Permittee

PART 1: PERMIT INFORMATION

Application Number: 2010-A-194-22
Permit Category: Government Entity J Access Classification: Class 1
Project: 44th Avenue Extension from 19th Street Court East to 30th Street East
Permittee: Manatee County
Section/Mile Post: Section 13121000, MP 4.880 State Road: US 301 / SR 683
Section/Mile Post: 13121 5.496 State Road: _____

PART 2: PERMITTEE INFORMATION

Permittee Name: Manatee County
Permittee Mailing Address: 1022 26th Avenue East
City, State, Zip: Bradenton, FL 34206
Telephone: 941-708-7400, x7476
Engineer/Consultant/or Project Manager: Cardno TBE / Tom Fulton, PE
Engineer responsible for construction inspection: Tom Fulton, PE 39722
NAME P.E. #
Mailing Address: 380 Park Place Blvd
City, State, Zip: Clearwater, FL 33759
Telephone: 727-431-1595 Mobile Phone: 727-235-8053



CALL BEFORE YOU DIG
1-800-432-4770
IT'S THE LAW IN FLORIDA

PART 3: PERMIT APPROVAL

The above application has been reviewed and is hereby approved subject to all Provisions as attached.

Permit Number: 2010-A-194-22
Department of Transportation
Signature: [Signature] Title: Maintenance Manager
Department Representative's Name: Philip Catalano
Temporary Permit: YES NO (If temporary, this permit is only valid for 6 months)
Special provisions attached: YES NO
Date of Issuance: 4-30-14

If this is a normal (non-temporary) permit it authorizes construction for one year from the date of issuance. This can only be extended by the Department as specific in 14-96.007(6).

See following pages for General and Special Provisions

See All Portions of Disturbed
Right-Of-Way.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
**DRIVEWAY/CONNECTION PERMIT
FOR ALL CATEGORIES****PART 4: GENERAL PROVISIONS**

1. Notify the Department of Transportation Maintenance Office at least 48 hours in advance of starting proposed work.
Phone: 941-359-7300 , Attention: Valerie A. Everts
2. A copy of the approved permit must be displayed in a prominent location in the immediate vicinity of the connection of construction.
3. Comply with Rule 14-96.008(1), F.A.C., Disruption of Traffic.
4. Comply with Rule 14-96.008(7), F.A.C., on Utility Notification Requirements.
5. 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.
6. The permittee shall not commence use of the connection prior to a final inspection and acceptance by the Department.
7. Comply with Rule 14-96.003(3)(a), F.A.C., Cost of Construction.
8. If a Significant Change of the permittee's land use, as defined in Section 335.182, Florida Statutes, occurs, the Permittee must contact the Department.
9. Medians may be added and median openings may be changed by the Department as part of a Construction Project or Safety Project. The provision for a median might change the operation of the connection to be for right turns only.
10. All conditions in NOTICE OF INTENT WILL APPLY unless specifically changed by the Department.
11. All approved connection(s) and turning movements are subject to the Department's continuing authority to modify such connection(s) or turning movements in order to protect safety and traffic operations on the state highway or State Highway System.
12. **Transportation Control Features and Devices in the State Right of Way.** Transportation control features and devices in the Department's right of way, including, but not limited to, traffic signals, medians, median openings, or any other transportation control features or devices in the state right of way, are operational and safety characteristics of the State Highway and are not means of access. The Department may install, remove or modify any present or future transportation control feature or device in the state right of way to make changes to promote safety in the right of way or efficient traffic operations on the highway.
13. The Permittee for him/herself, his/her heirs, his/her assigns and successors in interest, binds and is bound and obligated to save and hold the State of Florida, and the Department, its agents and employees harmless from any and all damages, claims, expense, or injuries arising out of any act, neglect, or omission by the applicant, his/her heirs, assigns and successors in interest that may occur by reason of this facility design, construction, maintenance, or continuing existence of the connection facility, except that the applicant shall not be liable under this provision for damages arising from the sole negligence of the Department.
14. The Permittee shall be responsible for determining and notify all other users of the right of way.
15. Starting work on the State Right of Way means that I am accepting all conditions on the Permit.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
**DRIVEWAY/CONNECTION PERMIT
 FOR ALL CATEGORIES**

PART 5: SPECIAL PROVISIONS

NON-CONFORMING CONNECTIONS: YES NO

If this is a non-conforming connection permit, as defined in Rule Chapters 14-96 and 14-97, then the following shall be a part of this permit.

1. The non-conforming connection(s) described in this permit is (are) not permitted for traffic volumes exceeding the Permit Category on page 1 of this permit, or as specified in "Other Special Provisions" below.
2. All non-conforming connections will be subject to closure or relocation when reasonable access becomes available in the future.

OTHER SPECIAL PROVISIONS:

PART 6: APPEAL PROCEDURES

You may petition for an administrative hearing pursuant to sections 120.569 and 120.57, Florida Statutes. If you dispute the facts stated in the foregoing Notice of Intended Department Action (hereinafter Notice), you may petition for a formal administrative hearing pursuant to section 120.57(1), Florida Statutes. If you agree with the facts stated in the Notice, you may petition for an informal administrative hearing pursuant to section 120.57(2), Florida Statutes. You must file the petition with:

Clerk of Agency Proceedings
 Department of Transportation
 Haydon Burns Building
 605 Suwannee Street, M.S. 58
 Tallahassee, Florida 32399-0458

The petition for an administrative hearing must conform to the requirements of Rule 28-106.201(2) or Rule 28-106.301(2), Florida Administrative Code, and be filed with the Clerk of Agency Proceedings by 5:00 p.m. no later than 21 days after you received the Notice. The petition must include a copy of the Notice, be legible, on 8 1/2 by 11 inch white paper, and contain:

1. Your name, address, telephone number, any Department of Transportation identifying number on the Notice, if known, the name and identification number of each agency affected, if known, and the name, address, and telephone number of your representative, if any, which shall be the address for service purposes during the course of the proceeding.
2. An explanation of how your substantial interests will be affected by the action described in the Notice;
3. A statement of when and how you received the Notice;
4. A statement of all disputed issues of material fact. If there are none, you must so indicate;
5. A concise statement of the ultimate facts alleged, including the specific facts you contend warrant reversal or modification of the agency's proposed action, as well as an explanation of how the alleged facts relate to the specific rules and statutes you contend require reversal or modification of the agency's proposed action;
6. A statement of the relief sought, stating precisely the desired action you wish the agency to take in respect to the agency's proposed action.

If there are disputed issues of material fact a formal hearing will be held, where you may present evidence and argument on all issues involved and conduct cross-examination. If there are no disputed issues of material fact an informal hearing will be held, where you may present evidence or a written statement for consideration by the Department.

Mediation, pursuant to section 120.573, Florida Statutes, may be available if agreed to by all parties, and on such terms as may be agreed upon by all parties. The right to an administrative hearing is not affected when mediation does not result in a settlement.

Your petition for an administrative hearing shall be dismissed if it is not in substantial compliance with the above requirements of Rule 28-106.201(2) or Rule 28-106.301(2), Florida Administrative Code. If you fail to timely file your petition in accordance with the above requirements, you will have waived your right to have the intended action reviewed pursuant to chapter 120, Florida Statutes, and the action set forth in the Notice shall be conclusive and final.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
**DRIVEWAY/CONNECTION APPLICATION
 FOR ALL CATEGORIES**

OFFICE USE ONLY	
Application Number: <u>2010-A-194-22</u> Category: <u>J- Gout.</u> Section/Mile Post: <u>13121 / 4.880</u> Section/Mile Post: <u>5.496</u>	Received By: <u>Valerie Events</u> <small>FDOT STAFF (TYPE OR PRINT)</small> Date: <u>8-11-10</u> State Road: <u>683 / US 301</u> State Road: _____

Instructions – To Applicant

- Contact the Department of Transportation to determine what plans and other documents you are required to submit with your application.
- Complete this form (some questions may not apply to you) and attach all necessary documents and submit it to the Department of Transportation.
- For help with this form contact your local Maintenance or District Office.
 - Or visit our website at www.dot.state.fl.us/onestoppermitting for the contact person and phone number in your area.
 - You may also email – driveways@dot.state.fl.us
 - Or call your District or local Florida Department of Transportation Office and ask for Driveway Permits.

Please print or type

APPLICANT:

Check one:
 Owner Lessee Contract to Purchase

Name: Manatee County Government, Engineering Services

Responsible Officer or Person: Siamak Mollanazar, PE, Deputy Director, Manatee County Engineering Services

If the Applicant is a Company or Organization, Name: _____

Address: 1022 26th Avenue East

City, State: Bradenton, FL

Zip: 34208 Phone: 941-708-7487 Fax: 941-708-7500

Email: sia.mollanazar@MyManatee.org

LAND OWNER: (If not applicant)

Name: same as Applicant

If the Applicant is a Company or Organization, Name: _____

Address: _____

City, State: _____

Zip: _____ Phone: _____ Fax: _____

Email: _____

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
**DRIVEWAY/CONNECTION APPLICATION
 FOR ALL CATEGORIES**

AUTHORIZED REPRESENTATIVE: If specified by Applicant to handle, represent, sign, and file the application –
NOTE: A notarized letter of authorization must be provided with the Application.

Name: N/A
 Company Name: _____
 Address: _____
 City, State: _____
 Zip: _____ Phone: _____ Fax: _____
 Email: _____

Address of property to be served by permit (if known):

If address is not known, provide distance from nearest intersecting public street (such as, 500 feet south of Main St.)
 1,500 feet south of 38th Avenue West on US 301 in Manatee County

Check here if you are requesting a

new driveway temporary driveway modification to existing driveway safety upgrade

Does the property owner own or have any interests in any adjacent property?

No Yes, if yes – please describe:

Are there other existing or dedicated public streets, roads, highways or access easements bordering or within the property?

No Yes, if yes – list them on our plans and indicate the proposed and existing access points.

Local Government Development Review or Approval Information:

Local Government Contact: _____
 Name: _____
 Government Agency: _____
 Phone #: _____

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
**DRIVEWAY/CONNECTION APPLICATION
 FOR ALL CATEGORIES**

If you are requesting commercial or industrial access, please indicate the types and number of businesses and provide the floor area square footage of each. Use additional sheets if necessary.

Business (Name and Type)	Square Footage	Business (Name and Type)	Square Footage
1. N/A		3.	
2.		4.	

If you are requesting a residential development access, what is the type (single family, apartment, townhouse) and number of units?

Type	Number of Units
N/A	

Provide an estimate of the daily traffic volume anticipated for the entire property at build out. (An individual single family home, duplex, or quad-plex is not required to complete this section).

Daily Traffic Estimate = 26,660 ADT (Use the latest Institute of Transportation Engineers (ITE) Trip Generation Report)

If you used the ITE Trip Generation Report, provide the land use code, independent variable, and reference page number.

ITE Land Use Code N/A	Independent Variable S	ITE Report page number reference N/A
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Check with the Florida DOT Office where you will return this form to determine which of the following documents are required to complete the review of your application.

Plans should be 11" x 17" (scale 1" x 50') Note: No plans larger than 24" x 36" will be accepted a) Highway and driveway plan profile b) Drainage plan showing impact to the highway right-of-way c) Map and letters detailing utility locations before and after Development in and along the right of way d) Subdivision, zoning, or development plans e) Property map indicating other access, bordering roads and streets	f) Proposed access design g) Parcel and ownership maps including easements (Boundary Survey) h) Signing and striping plans i) Traffic Control/Maintenance of Traffic plan j) Proof of liability insurance k) Traffic Impact Study l) Cross section of roadway every 100' if exclusive turn lanes are required
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Important Notices to Applicant Before Signing Application

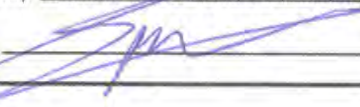
The Department Reserves The Right To Change Traffic Features And Devices In Right Of Way At Any Time
 Proposed traffic control features and devices in the right of way, such as median openings and other traffic control devices, are not part of the connection(s) to be authorized by a connection permit. The Department reserves the right to change these features and devices in the future in order to promote safety in the right of way or efficient traffic operations on the highway. Expenditure by the applicant of monies for installation or maintenance of such features or devices shall not create any interest in the maintenance of such features or devices.

Significant Changes In Property Use Must Undergo Further Review
 If an access permit is issued to you it will state the terms and conditions for its use. Significant changes in the use as defined in Section 335.182(3), Florida Statutes, of the permitted access not consistent with the terms and conditions listed on the permit may be considered a violation of the permit.

All Information I Give Is Accurate
 I certify that I am familiar with the information contained in this application and that to the best of my knowledge and belief, such information is true, complete and accurate.

Starting Work On The Driveway Connection After I Get My Permit Means I Accept All the Conditions In My Permit
 I will not begin work on the connection until I receive my Permit and I understand all the conditions of the Permit. When I begin work on the connection, I am accepting all conditions listed in my Permit.

Applicant Name (Printed): Siamak Mollanazar, PE, Deputy Director, Manatee County Engineering Services

Applicant's signature:  Date: 8/11/10

Permittee

To be completed by DOT

Drainage Connection Permit No. 2010-D-194-16 Date 12-27-2010

Received By Valerie Everts Maintenance Unit 194

State Road No. 683 Work Program Project No. _____

Section No. 13121 Construction Project No. _____

Milepost 4.880-5.496 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.

PERMIT VOID UNLESS DOT OPERATIONS CENTER IS NOTIFIED 48 HRS IN ADVANCE OF STARTING WORK
 PHONE 941-359-7300
 VERIFICATION NO _____

ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH PERMITTED NOT PLAN

CALL BEFORE YOU DIG
1-800-432-4770
 IT'S THE LAW IN FLORIDA

Soil All Portions of Disturbed Right-Of-Way.

Brief description of facility and proposed connection:

The project includes construction of the proposed 44th Avenue extension across US 301. The proposed 44th Avenue extensions include construction of 4-lane divided facility at the intersection of US 301. The proposed intersection improvements will include adding auxiliary (left and right) turn lanes for both north and southbound traffic on US 301. The proposed construction includes pavement widening on US 301. There is no curb and gutter or sidewalks are proposed along US 301. There is proposed mast arm, signal boxes and pedestrian features to be located in this area. The most significant widening will be on Northbound inside turn lanes with the addition of a double left turn lane heading west.

Briefly describe why this activity requires a Drainage Connection Permit (Include where the stormwater will discharge to FDOT right of way):

The proposed 44th Ave from 19th Street Ct to US 301 is located approximately at the basin boundary of Pearce Drain and Sugar House Creek basins. The existing runoff convey to the south and north through the ditch along the US 301. Linear treatment facility will provide treatment and attenuation for the proposed roadway and ultimately discharge to the ditch along US 301 southbound. Also the proposed auxiliary lane and median opening discharge to the US 301 ditches. Existing and proposed conditions are modeled in ICPR and demonstrate that the proposed condition mimic the existing condition and there is no adverse impact nor increase discharge to FDOT R/W

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: Hamid Faraji, PE

Florida License Number: 51581

Company Name (if applicable): Cardno TBE

Certificate of Authorization Number (if applicable): 3843

Address: 380 Park Place Blvd

City: Clearwater State: FL Zip: 33759

Telephone: 727-431-1596 Fax: _____ Email: Hamid.Faraji@Cardno.com



Hamid Faraji
Signature of Licensed Professional

12/20/09
Date

(Affix Seal)

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: [Signature] Date: 12/20/2010

Name (Printed): Sia Mollanazar, PE

Title and Company: Manatee County

Address: 1022 26th Avenue East, Bradenton, FL, 34206

Phone Number: (941) 708-7400 Ext 7487

E-mail address: Sia.Mollanazar@mymanatee.org

PART 4 – Owner's Authorization of a Representative

I (we), the owner, Sia Mollanazar, PE, of Manatee County, do hereby authorize the following person, or entity, as my representative:

Name (Printed): Hamid Faraji, PE.

Title and Company: Senior Drainage Engineer, Cardno TBE

Address: 380 Park Place Blvd, Cleawater, FL, 33759

Phone Number: 727-431-1596 E-mail address: Hamid.faraji@cardno.com

Part 5 – Affidavit of Property Ownership or Control and Statement of Contiguous Interest

I, Sia Mollanazar of Manatee County at 1022 26th Avenue East, Bradenton, FL, 34206, certify that I own or lawfully control the following

described property: 44th Avenue East at the Intersection of US 301

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 (Printed): Sia Mollanazar, PE

Address: 1022 26th Avenue East, Bradenton, FL, 34206

Phone Number: (941) 708-7400 Ext 7487

Signature: [Signature] Date: 12/27/10

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 1840 61st Street, Sarasota, FL, 34243
Phone 941-359-5666 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 36.5 days after such notification. If such construction is not completed within 36.5 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) 4-30-15.
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:

Department of Transportation:

Signature Philip Cato

Title Maintenance Manager Date 4-30-14

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).

PERMIT VOID UNLESS DOT OPERATIONS CENTER IS NOTIFIED 48 HRS IN ADVANCE OF STARTING WORK PHONE (941) 359-7300 VERIFICATION NO _____

Soil All Portions of Disturbed Right-Of-Way

ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH PERMITTED MOT PLAN

710-010-85 UTILITIES OGC - 08/10

RULE 144.05

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

UTILITY PERMIT

PERMIT NO.: 2014-H-194-72	SECTION NO.: 13121	STATE ROAD 683	COUNTY Manatee
FDOT construction is proposed or underway.		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Is this work related to an approved Utility Work Schedule?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
PERMITTEE:	Manatee County Utilities		
ADDRESS:	1022 26 th Ave. East	TELEPHONE NUMBER: (941) 708 - 7487	
CITY/STATE/ZIP:	Bradenton, FL 34208		
The above PERMITTEE requests permission from the State of Florida Department of Transportation, hereinafter called the FDOT, to construct, operate and maintain the following: Construction of approximately 335 linear feet of 8-inch PVC potable water main crossing the north side of the US 301 right-of-way at proposed 44 th Ave. E (Station 81+26 to Station 84+51, MP 5.06), 290 linear feet of which will be encased in an 18-inch by 3/8-inch steel casing pipe installed by jack and bore.			
FROM:	M.P. 5.085	TO:	M.P. 5.085
Submitted for the PERMITTEE by: Name and Company (Typed or Printed Legibly)	Contact Information Address/Telephone/E-Mail (if applicable)	Signature	Date
Sia Mollanazar, PE, Deputy Director Engineering Services	1022 26 th Ave. E, Bradenton, FL 34208 941-708-7487, Sia.Mollanazar@MyManatee.org		5-13-14

- The Permittee declares that prior to filing this application, the location of all existing utilities that it owns or has an interest in, both aerial and underground, are accurately shown on the plans and a letter of notification was mailed on 07/22/09 and 08/31/10 to the following utilities known to be involved or potentially impacted in the area of the proposed installation: Brighthouse Networks Manatee; Florida Power & Light; Manatee County Utilities Department; Manatee County Traffic; Verizon Florida, Inc.; and City of Bradenton
- The local Maintenance or Resident Engineer, hereafter referred to as the FDOT Engineer, shall be notified a minimum of forty eight (48) hours in advance prior to starting work and again immediately upon completion of work. The FDOT's Engineer is Ed Ciddens ALBERT ROSENSTEIN, P.E. located at 1840 61st Street Sarasota, FL 34243, Telephone Number 941-359-7343 359-7300. The Permittee's employee responsible for MOT is to be provided after bid Telephone Number _____ (This name may be provided at the time of the forty eight (48) hour advance notice prior to starting work).
- All work, materials, and equipment shall be subject to inspection and approval by the FDOT Engineer.
- All plans and installations shall conform to the requirements of the FDOT's UAM in effect as of the date this permit is approved by FDOT, and shall be made a part of this permit. This provision shall not limit the authority of the FDOT under Paragraph 8 of this Permit.
- This Permittee shall commence actual construction in good faith within 120 days after issuance of permit, and shall be completed within 365 days after the permitted work has begun. If the beginning date is more than sixty (60) days from the date of permit approval, the Permittee must review the permit with the FDOT Engineer to make sure no changes have occurred to the Transportation Facility that would affect the permitted construction.
- The construction and maintenance of such utility shall not interfere with the property and rights of a prior Permittee.
- It is expressly stipulated that this permit is a license for permissive use only and that the placing of utilities upon public property pursuant to this permit shall not operate to create or vest any property right in said holder, except as provided in executed subordination and Railroad Utility Agreements.
- Pursuant to Section 337.403, Florida Statutes, any utility placed upon, under, over, or along any public road or publicly owned rail corridor that is found by FDOT to be unreasonably interfering in any way with the convenient, safe, or continuous use, or maintenance, improvement, extension, or expansion, of such public road or publicly owned rail corridor shall, upon thirty (30) days written notice to the utility or its agent by FDOT, be removed or relocated by such utility at its own expense except as provided in Section 337.403(1), Florida Statutes, and except for reimbursement rights set forth in previously executed subordination and Railroad Utility Agreements, and shall apply to all successors and assigns for the permitted facility.
- It is agreed that in the event the relocation of said utilities are scheduled to be done simultaneously with the FDOT's construction work, the Permittee will coordinate with the FDOT before proceeding and shall cooperate with the FDOT's contractor to arrange the sequence of work so as not to delay the work of the FDOT's contractor, defend any legal claims of the FDOT's contractor due to delays caused by the Permittee's failure to comply with the approved schedule, and shall comply with all provisions of the law and the FDOT's current UAM. The Permittee shall not be responsible for delay beyond its control.
- In the case of non-compliance with the FDOT's requirements in effect as of the date this permit is approved, this permit is void and the facility will have to be brought into compliance or removed from the RAW at no cost to the FDOT, except for reimbursement rights set forth in previously executed subordination and Railroad Utility Agreements. This provision shall not limit the authority of the FDOT under Paragraph 8 of this Permit.
- It is understood and agreed that 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.
- During construction, all safety regulations of the FDOT shall be observed and the Permittee must take measures, including placing and the display of safety devices that may be necessary in order to safely conduct the public through the project area in accordance with the Federal MUTCD, as amended by the UAM.
- Should the Permittee be desirous of keeping its utilities in place and out of service, the Permittee, by execution of this permit acknowledges its present and continuing ownership of its utilities located between not applicable and _____ within the FDOT's RAW as set forth above. Whenever the Permittee removes its facilities, it shall be at the Permittee's sole cost and expense. The Permittee, at its sole expense, shall promptly remove said out of service utilities whenever the FDOT determines said removal is in the public interest.
- In the event contaminated soil is encountered by the Permittee or anyone within the permitted construction limits, the Permittee shall immediately cease work and notify the FDOT. The FDOT shall notify the Permittee of any suspension or revocation of the permit to allow contamination

NOTE: ALL ABOVE GROUND APPURTENANCES ARE TO BE LOCATED AT RAW LINE.




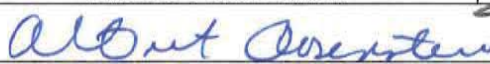
UTILITY PERMIT

assessment and remediation. Said suspension or revocation shall remain in effect until otherwise notified by FDOT

- 15. For any excavation, construction, maintenance, or support activities performed by or on behalf of the FDOT, within its R/W, the Permittee may be required by the FDOT or its agents to perform the following activities with respect to a Permittee's facilities: physically expose or direct exposure of underground facilities, provide any necessary support to facilities and/or cover, de-energize or alter aerial facilities as deemed necessary for protection and safety.
- 16. Pursuant to Section 337.401(2), Florida Statutes, the permit shall require the permit holder to be responsible for damage resulting from the issuance of the permit. The FDOT may initiate injunctive proceedings as provided in s.120.69 to enforce provisions of this subsection or any rule or order issued or entered into pursuant thereto.
- 17. Pursuant to Section 337.402, Florida Statutes, when any public road or publicly owned rail corridor is damaged or impaired in any way because of the installation, inspection, or repair of a utility located on such road or publicly owned rail corridor, the owner of the utility shall, at his or her own expense, restore the road or publicly owned rail corridor to its original condition before such damage. If the owner fails to make such restoration, the authority is authorized to do so and charge the cost thereof against the owner under the provisions of s.337.404.
- 18. The Permittee shall comply with all provisions of Chapter 556, Florida Statutes, Underground Facilities Damage Prevention and Safety Act.
- 19. Special FDOT instructions: This utility work was previously permitted under Permit No. 2010-H-194-119, which expired. The intersection is proposed and being permitted separately.

It is understood and agreed that commencement by the Permittee is acknowledgment and acceptance of the binding nature of all the above listed permit conditions and special instructions.

- 20. By receipt of this permit, the Permittee acknowledges responsibility to comply with Section 119.07, Florida Statutes.
- 21. By the below signature, the Permittee hereby represents that no change to the FDOT's standard Utility Permit form, as incorporated by reference into Rule 14-46.001, for this Utility Permit has been made which has not been previously called to the attention of the FDOT (and signified to by checking the appropriate box below) by a separate attached written document showing all changes and the written and dated approval of the FDOT Engineer. Are there attachments reflecting change/s to the standard form? NO YES If Yes, ___ pages are attached.

PERMITTEE	Sia Mollanazar, PE, Deputy Director of Engineering Services	SIGNATURE		DATE:	
	Name & Title of Authorized Permittee or Agent (Typed or Printed Legibly)				5-13-14
APPROVED BY:				ISSUE DATE:	6-2-14
	District Maintenance Engineer or Designee				

UTILITY PERMIT FINAL INSPECTION CERTIFICATION

DATE:	
DATE WORK STARTED:	
DATE WORK COMPLETED:	
INSPECTED BY:	
	(Permittee or Agent)
CHANGE APPROVED BY:	DATE:
	District Maintenance Engineer or Designee

I the undersigned Permittee do hereby CERTIFY that the utility construction approved by the above numbered permit was inspected and installed in accordance with the approved plans made a part of this permit and in accordance with the FDOT's current UAM. All plan changes have been approved by the FDOT's Engineer and are attached to this permit. I also certify that the work area has been left in as good or better condition than when the work was begun.

PERMITTEE:	SIGNATURE:	DATE:
Name & Title of Authorized Permittee or Agent (Typed or Printed Legibly)		

CC: District Permit Office
Permittee



Shaping the Future

May 20, 2014

Ed Giddens
Permit Manager
FDOT Sarasota Operations Center
1840 61st Street
Sarasota, FL 34243

RE: Manatee County
44th Avenue East from 19th Street Court East
To 30th Street East
FDOT Utility Permit

Cardno TBE

380 Park Place Blvd
Suite 300
Clearwater, FL 33759
USA
Phone 727 531 3505
Phone 800 861 8314
Fax 727 539 1294
Email tbe@CardnoTBE.com

www.CardnoTBE.com

Dear Mr. Giddens:

Per our telephone conversation today enclosed please find four revised signed and sealed sheets W-7 for the County utility work associated with the extension of 44th Avenue from 19th Street Court East to 30th Street East.

If you have any questions please feel free to contact me at 727-431-1546.

Sincerely,

A handwritten signature in cursive script that reads 'Don McCullers'.

Don McCullers
Manager of Municipal Services
For Cardno TBE
Direct Line 727 431-1546

DRM:hs

Enc.

cc: Dorian Modjeski, Cardno TBE
Jason Yam, Cardno TBE



Public Works Department
Project Management Division
1022 26th Avenue East
Bradenton, FL 34208-3926
Phone: (941) 708-7450
www.mymanatee.org

May 12, 2014

Mr. Ed Giddens
Permit Manager
FDOT Sarasota Operations Center
1840 61st Street
Sarasota, FL 34243

RE: Manatee County 44th Avenue Extension
FDOT Utility Permit

Dear Mr. Giddens:

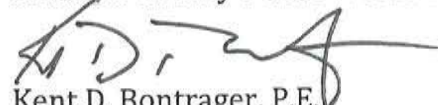
Manatee County is proposing to extend 44th Avenue from 19th Street Court East to 30th Street East. The roadway connection permit has been submitted and approved separately under Permit No. 2010-A-194-22. In order to provide water service along this route, an 8-inch potable water main encased in an 18-inch by 3/8-inch steel casing pipe is proposed for the crossing under U.S. 301. The method of construction will be by jacking and boring. The utility permit was previously approved in 2010 under Permit No. 2010-H-194-119, and has since expired.

Enclosed please find a Florida Department of Transportation (FDOT) Utility Permit package for your review and processing. This package includes:

- Two original signed permit applications
- Two original signed and sealed plan and profile sheets
- Two copies of the signed Permit application
- Two copies of signed and sealed plan and profile sheets

If you have any questions please contact Don McCullers of Cardno TBE at 727-431-1546.

Sincerely,
Manatee County Public Works Department



Kent D. Bontrager, P.E.
Project Manager

KB/kc

Enclosures

cc: Don McCullers, Cardno TBE
Dorian Modjeski, Carno TBE

FLORIDA DEPARTMENT OF TRANSPORTATION
Stormwater Pollution Control Reminder

- *Stormwater Management*

Contact your local municipality and/or the Southwest Florida Management District.

Bartow (863) 534-1448
Venice (Sarasota) (941) 278-7396
Fort Myers (Sarasota) (941) 278-7396

- Fort Myers is also part of South Florida Water Management District (800) 432-2045.

- *Used Oil recycling*

Contact the Florida Department of Environmental Protection at (813) 744-6100 or your local automotive parts store.

- *Hazardous Waste Disposal*

Contact the Florida Department of Environmental Protection at (813) 744-6100.

- *Spill Reporting*

State Warning Point (800) 320-0519
Federal Response Center (800) 424-8802

- *Pesticides & Fertilizers*

Contact your Local County Agricultural Extension Service.

Charlotte	(941) 764-4340
Collier	(239) 353-4244
Desoto	(863) 993-4846
Glades	(863) 946-0244
Hardee	(863) 773-2164
Hendry	(863) 674-4094
Highlands	(863) 402-6540
Lee	(239) 461-7500
Manatee	(941) 722-4524
Okeechobee	(863) 763-6469
Polk	(863) 519-8677
Sarasota	(941) 316-1000

LET'S WORK TOGETHER TO KEEP OUR ENVIRONMENT CLEAN...

AND INVEST IN FLORIDA'S FUTURE



LAST REVISION 07/01/07

REVISION DESCRIPTION:

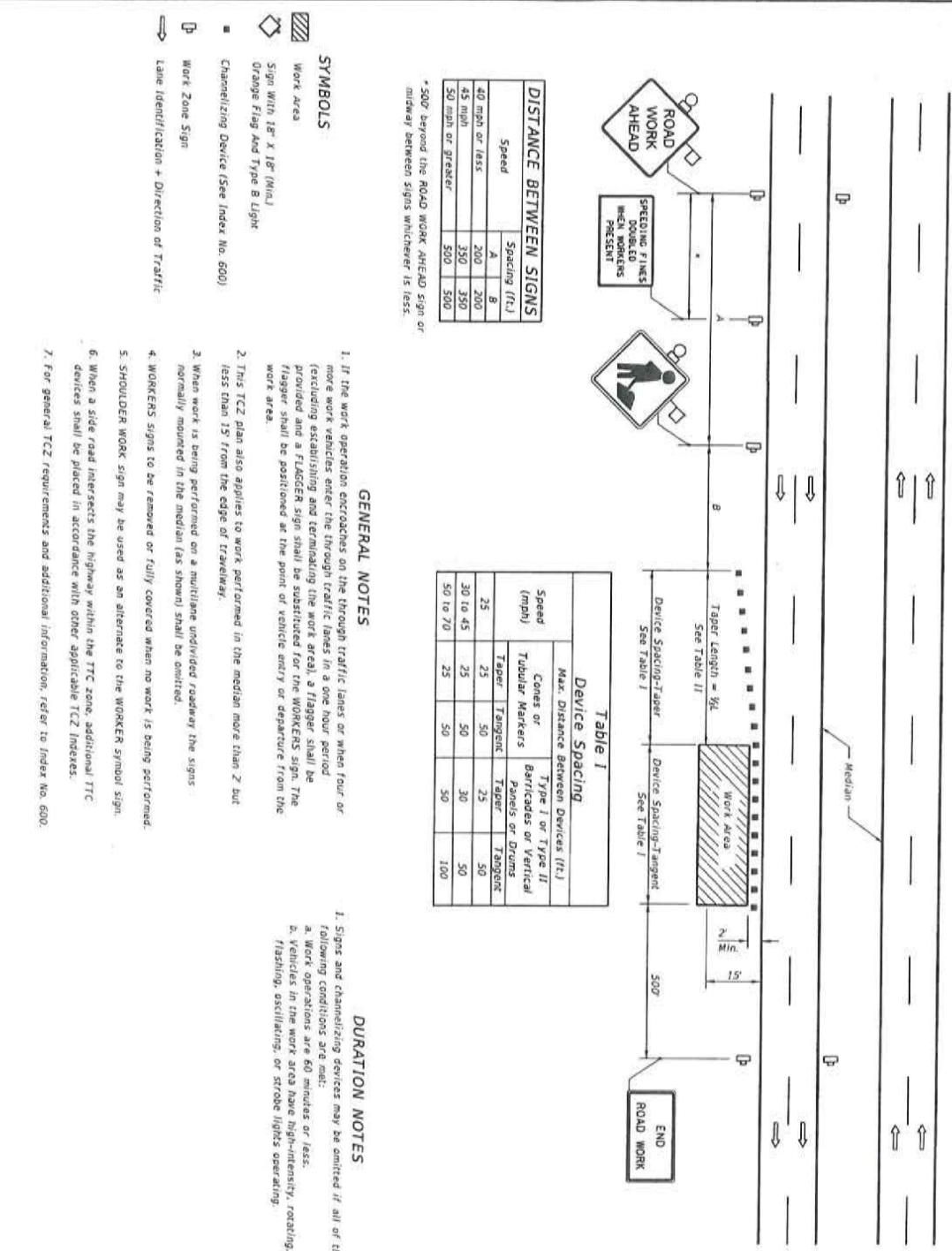


FDOT 2014 DESIGN STANDARDS

MULTILANE, WORK ON SHOULDER

INDEX NO. 612

SHEET NO. 1 of 1



DISTANCE BETWEEN SIGNS

Speed	Spacing (ft.)	
	A	B
40 mph or less	200	200
45 mph	350	350
50 mph or greater	500	500

* 500' beyond the ROAD WORK AHEAD sign or midway between signs whichever is less.

Table I

Speed (mph)	Device Spacing			
	Cones or Tubular Markers	Type I or Type II Barricades or Vertical Panels or Drums	Taper	Tangent
25	25	50	25	50
30 to 45	25	50	30	50
50 to 70	25	50	50	100

Table II

Speed (mph)	K _s (ft.)			Notes
	8'	10'	12'	
25	28	35	42	L=WS
30	40	50	60	
35	55	68	82	L=MS
40	72	90	107	
45	120	150	180	L=MS
50	133	167	200	
55	147	183	220	L=MS
60	160	200	240	
65	173	217	260	L=MS
70	187	233	280	

SYMBOLS

- Work Area
- Sign with 18" x 18" (Min.) Orange Flag and Type B Light
- Channelizing Device (See Index No. 600)
- Work Zone Sign
- Lane Identification + Direction of Traffic

GENERAL NOTES

1. If the work operation encroaches on the through traffic lanes or when four or more work vehicles enter the through traffic lanes in a one hour period (excluding establishing and terminating the work area), a flagger shall be provided and a FLAGGER sign shall be substituted for the WORKERS sign. The flagger shall be positioned at the point of vehicle entry or departure from the work area.
2. This TCZ plan also applies to work performed in the median more than 2' but less than 15' from the edge of travelway.
3. When work is being performed on a multilane undivided roadway the signs normally mounted in the median (as shown) shall be omitted.
4. WORKERS signs to be removed or fully covered when no work is being performed.
5. SHOULDER WORK sign may be used as an alternate to the WORKER symbol sign.
6. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TCZ indexes.
7. For general TCZ requirements and additional information, refer to Index No. 600.

DURATION NOTES

1. Signs and channelizing devices may be omitted if all of the following conditions are met:
 - a. Work operations are 60 minutes or less.
 - b. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCLOSED THE AREA CLOSER THAN 15' BUT NOT CLOSER THAN 2' TO THE EDGE OF TRAVEL WAY.

K_s = Length of shoulder taper in feet
 W = Width of total shoulder in feet
 (combine paved and unpaved width)
 S = Posted speed limit (mph)

LAST REVISION 07/01/09	DESCRIPTION:	FDOT 2014 DESIGN STANDARDS	MULTILANE, WORK WITHIN TRAVEL WAY MEDIAN OR OUTSIDE LANE	INDEX NO. 613	SHEET NO. 1 of 2
---------------------------	--------------	-------------------------------	---	------------------	---------------------

- SYMBOLS**
- Work Area
 - Sign with 18x18 (A) and 18x18 (B) Light Orange Flag and Type B Light
 - Channelizing Device (See Index No. 600)
 - Work Zone Sign
 - Advance Warning Arrow Board

- When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TTC indexes.
- When a paved shoulder having a width of 8 ft. or more are closed, channelizing devices shall be used to close the shoulder in advance of the taper to direct vehicular traffic to remain within the travel way. See Index No. 612 for shoulder taper formulas.
- When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TTC indexes.
- This TCZ plan does not apply when work is being performed in the middle lane(s) of a six or more lane highway. See Index No. 614.
- For general TTC requirements and additional information, refer to Index No. 600.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENDOURCH ON THE LANE ADJACENT TO EITHER SHOULDER AND THE AREA 2' OUTSIDE THE EDGE OF TRAVEL WAY.

DISTANCE BETWEEN SIGNS

Speed	Spacing (ft.)		
	A	B	C
40 mph or less	200	200	200
45 mph	350	350	350
50 mph	500	500	500
*5 mph or greater	2540	1640	1000

- GENERAL NOTES**
- Work operations shall be confined to one traffic lane, leaving the adjacent lane open to traffic.
 - On undivided highways the median signs as shown are to be omitted.
 - When work is performed in the median lane on divided highways, the channelizing device plan is inverted and left lane closed and lane ends signs substituted for the right lane closed and lane end signs.
 - The same applies to undivided highways with the following exceptions:
 - Work shall be confined within one median lane.
 - Additional barricades, cones, or drums shall be placed along the centerline abutting the work area and across the trailing end of the work area.
 - When work on undivided highways occurs across the centerline so as to encroach on both median lanes, the inverted plan is applied to the approach of both roadways.
 - Signs and traffic control devices are to be modified in accordance with **INTERMITTENT WORK STOPPAGE** details (Sheet 2 of 2) when no work is being performed and the highway is open to traffic.
 - The two channelizing devices directly in front of the work area may be omitted provided vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.
 - When paved shoulders having a width of 8 ft. or more are closed, channelizing devices shall be used to close the shoulder in advance of the taper to direct vehicular traffic to remain within the travel way. See Index No. 612 for shoulder taper formulas.
 - When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TTC indexes.
 - This TCZ plan does not apply when work is being performed in the middle lane(s) of a six or more lane highway. See Index No. 614.
 - For general TTC requirements and additional information, refer to Index No. 600.

Table I

Speed (mph)	Device Spacing			
	Max. Distance Between Devices (ft.)	Cones or Barricades or Vertical Panels or Drums	Taper/Tangent	Tangent
25	25	50	25	50
30 to 45	25	50	30	50
50 to 70	25	50	50	100

- DURATION NOTES**
- Temporary white edgeline may be omitted for work operations less than 3 consecutive calendar days.
 - For work operations up to approximately 15 minutes, signs, channelizing devices, arrow board, and buffer space may be omitted if all of the following conditions are met:
 - Speed limit is 45 mph or less.
 - No sight obstructions to vehicles approaching the work area for a distance equal to the buffer space and the taper length combined.
 - Volume and complexity of the roadway has been considered.
 - The closed lane is occupied by a class 3 or larger, medium duty truck(s) with a minimum gross weight vehicle rating (GVWR) of 16,001 lb with high-intensity rotating, flashing, oscillating, or strobe lights mounted above the cab height and operating.
 - For work operations up to 60 minutes, arrow board and buffer space may be omitted if conditions a, b, and c in DURATION NOTE 2 are met, and vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.

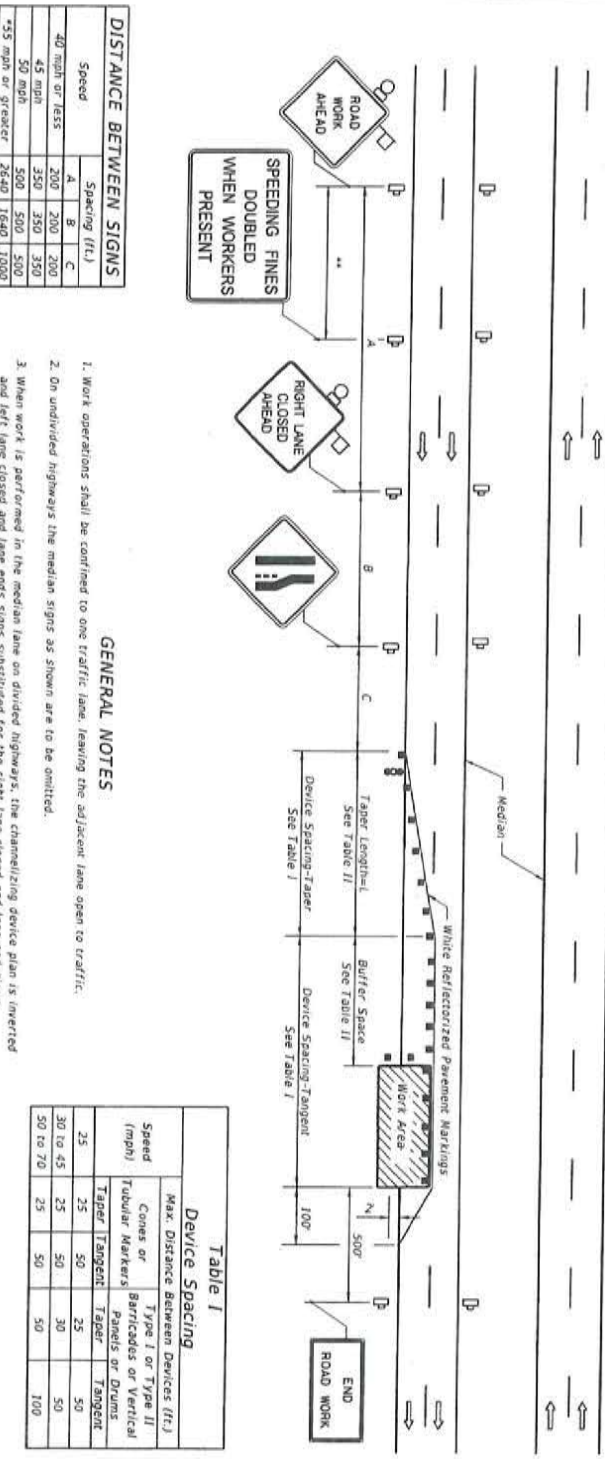


Table II

Speed (mph)	Buffer Space (ft.)	Taper Length (12' Lateral Transition) (ft.)	Notes (ft.)
25	155	125	W.S. = L = 60'
30	200	180	
35	250	245	L = WS
40	305	320	
45	360	540	L = WS
50	425	600	
55	495	660	L = WS
60	570	720	
65	645	780	L = WS
70	730	840	

When Buffer Space cannot be attained due to geometric constraints, the greatest attainable length shall be used, but not less than 200 ft.

For lateral transitions other than 12', use where:

L = Length of taper in feet
 W = Width of lateral transition in feet
 S = Posted speed limit (mph)

PERMIT VOID UNLESS DOT SARASOTA OPERATIONS OFFICE NOTIFIED 48 HOURS IN ADVANCE OF STARTING WORK.
PHONE: (941) 359-7300

IF A LANE CLOSURE IS WITHIN THE PROJECT LIMITS, THE PERMITTEE MUST NOTIFY THE DEPARTMENT 7 DAYS PRIOR TO A LANE CLOSURE TO ALLOW THE DEPARTMENT TO INFORM THE MOTORING PUBLIC. FAILURE TO CALL MAY RESULT IN A DELAY TO BEGIN WORK.

IF NO CLOSURES ARE REQUIRED THE SARASOTA OPERATIONS OFFICE MUST BE NOTIFIED 48 HOURS IN ADVANCE OF STARTING WORK. FAILURE TO CALL MAY RESULT IN A DELAY TO BEGIN WORK.

LANE CLOSURES AND OTHER WORK MAY BE RESTRICTED BY THE FDOT DUE TO HEAVY TRAFFIC AND POTENTIAL BACKUPS CAUSED BY THIS CONSTRUCTION. NIGHT WORK MAY BE REQUIRED.

APPLICANT IS RESPONSIBLE FOR NOTIFYING OWNERS OF ALL EXISTING AERIAL AND BURIED UTILITIES OF PROPOSED DRIVEWAY AND RESOLVING ANY CONFLICTS BEFORE CONSTRUCTION BEGINS.

IN ACCORDANCE WITH FLORIDA STATUS 335.18 PERMITTEE SHALL BE REQUIRED TO BEAR THE COST OF FUTURE ACCESS MODIFICATIONS, TRAFFIC CONTROL DEVICES OR OTHER IMPROVEMENTS, WHEN DETERMINED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION TO BE IN CONJUNCTION WITH ACCEPTED ENGINEERING PRACTICES.

ALL CONSTRUCTION AND/OR MAINTENANCE ON THE DEPARTMENT'S RIGHT-OF-WAY SHALL CONFORM TO THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) THE DEPARTMENT'S ROADWAY AND TRAFFIC DESIGN STANDARDS AND BRIDGE CONSTRUCTION.

PERMITTEE/CONTRACTOR MUST WAIT 30 DAYS TO ALLOW ASPHALT FRICTION COURSE TO CURE BEFORE PLACING THERMOPLASTIC STRIPING.

OUR REVIEW COMMENTS ARE NOT INCLUDED TO BE INCLUSIVE OF ALL ERRORS AND OMISSIONS. OUR COMMENTS ARE ALSO NOT INTENDED TO AFFECT THE SCOPE OF WORK OR TO BE CONTRARY TO FHWA POLICY, FDOT DESIGN CRITERIA OR SOUND ENGINEERING PRACTICE. THE CONSULTANT/ENGINEER IS SOLELY RESPONSIBLE FOR THE TECHNICAL ACCURACY, ENGINEERING JUDGEMENT, AND QUALITY OF HIS WORK.

ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH PERMITTED M.O.T. PLAN.

SOD ALL PORTIONS OF DISTURBED RIGHT-OF-WAY.

NOTE: ALL ABOVE GROUND APPURTENANCES TO BE LOCATED AT RIGHT-OF-WAY LINE.

DENSITY REPORTS ARE TO BE SUBMITTED PRIOR TO PLACEMENT OF PAVEMENT.

"PRIOR TO EXCAVATING CONTACT THE CLERK OF THE CIRCUIT COURT FOR POSSIBLE GASOLINE CONFLICT."

THE APPLICANT SHALL NOT, DURING AND AFTER COMPLETION OF PERMITTED CONSTRUCTION, INTRODUCE ANY FORM OR METHOD OF SITE DRAINAGE DISCHARGE INTO THE DRAINAGE FACILITIES ON THE DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY OR EASEMENT. ANY DISCHARGE SHALL BE IN VIOLATION OF THIS PERMIT.

"PERMITTEE IS CAUTIONED THAT UTILITIES MAY BE LOCATED WITHIN THE CONSTRUCTION AREA."

IT IS THE RESPONSIBILITY OF THE PERMITTEE TO DETERMINE AND COMPLY WITH ALL COUNTY AND MUNICIPAL ORDINANCES THAT ARE RELATIVE TO THE CONSTRUCTION OR OTHER ACTIVITY DESCRIBED ON THIS PERMIT AND ARE MORE STRINGENT THAN DEPARTMENT OF TRANSPORTATION REQUIREMENTS.

N.P.D.E.S. REQUIRES THAT STORM WATER CONTROL MEASURES BE IMPLEMENTED ON ANY PROJECT ON PUBLIC TRANSPORTATION FACILITY RIGHTS-OF-WAY INCLUDING, BUT NOT LIMITED TO MEASURES DESCRIBED IN F.D.O.T. STANDARD DESIGN INDEX DRAWING NUMBERS 102, 103 AND 104.

"IF CONSTRUCTION, RECONSTRUCTION, REPAIR OR MAINTENANCE ACTIVITY NECESSITATES THE CLOSING OF ONE OR MORE TRAVEL LANES OF ANY ROAD ON THE STATE PRIMARY, COUNTY ROAD OR CITY STREET SYSTEM, FOR A PERIOD OF TIME EXCEEDING TWO HOURS, THE PARTY PERFORMING SUCH WORK WILL BE RESPONSIBLE TO GIVE NOTICE TO THE APPROPRIATE LOCAL LAW ENFORCEMENT AGENCY WHICH HAS JURISDICTION WHERE SUCH ROAD IS LOCATED PRIOR TO COMMENCING WORK ON THIS PROJECT"

335.15 F.S.91, 336.048 F.S.91





CONTRACT DRAWINGS

**44TH AVENUE EAST
FROM 19TH STREET COURT EAST TO 30TH STREET EAST
FOR
MANATEE COUNTY, FLORIDA
COUNTY PROJECT NUMBER: 6045660
POTABLE WATER MAIN PLANS**

RELATED STANDARDS AND SPECIFICATIONS

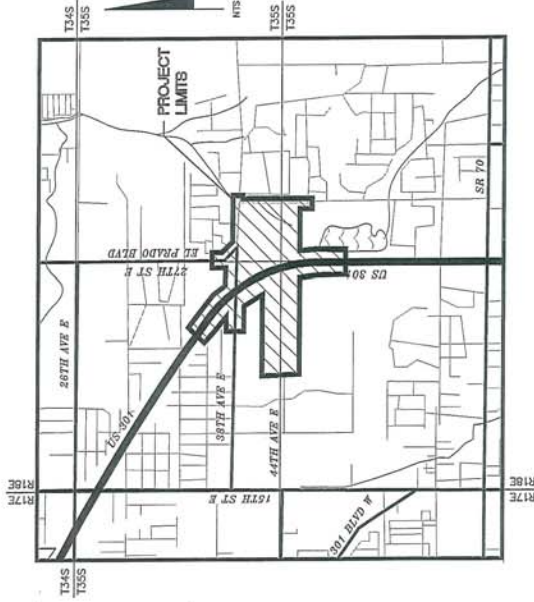
- DESCRIPTION
- A. FOOT PROJECT TRAFFIC FORECASTING HANDBOOK (SUPPLEMENT TO FOOT PROJECT TRAFFIC FORECASTING PROCEDURE, TOPIC NO. 525-030-120), (2000).
 - B. MANUAL ON UNIFORM TRAFFIC STUDIES, (MUTS) FOOT MANUAL NUMBER 750-020-007, (JANUARY 2000).
 - C. MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS, FLORIDA DEPARTMENT OF TRANSPORTATION, (FOOT GREEN BOOK), (MAY 2007).
 - D. FOOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, (JANUARY 2005).
 - E. AASHTO, GUIDE FOR PLANNING, DESIGN, AND OPERATION OF PEDESTRIAN FACILITIES, (2004).
 - F. FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD), (2003).
 - G. CHAPTER 14-36 AND 14-97, FLORIDA ADMINISTRATIVE CODE RULE FOR FOOT CONNECTION PERMIT.
 - H. FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2007
 - I. FOOT PLANS PREPARATION MANUAL, 2008

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

UTILITY WARNING NOTE

ABOVE GROUND AND / OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - THE CONTRACTOR SHALL CALL SUNSHINE STATE "ONE CALL" AT 1-800-432-4770 AND THE UTILITY OWNERS IN ADVANCE OF BEGINNING WORK, IN ACCORDANCE WITH CHAPTER 555, FLORIDA STATUTES.

SUMMARY OF REVISIONS	
DATE	DESCRIPTION



COMPONENTS OF CONTRACT PLANS SET
ROADWAY PLANS
SIGNALIZATION PLANS
LIGHTING PLANS
POTABLE WATER MAIN PLANS

INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
W-1	COVER SHEET
W-2	PLAN AND PROFILE
W-9	GENERAL NOTES
W-10	DETAILS
W-11 - W-16	



48 HOURS BEFORE RECORD
CALL SUNSHINE
1-800-432-4770

PLANS PREPARED BY:

TBE GROUP, INC.
Civil Engineering & Surveying
CLEARANCE
1001 TAMPA
FL 33602
(813) 221-0400

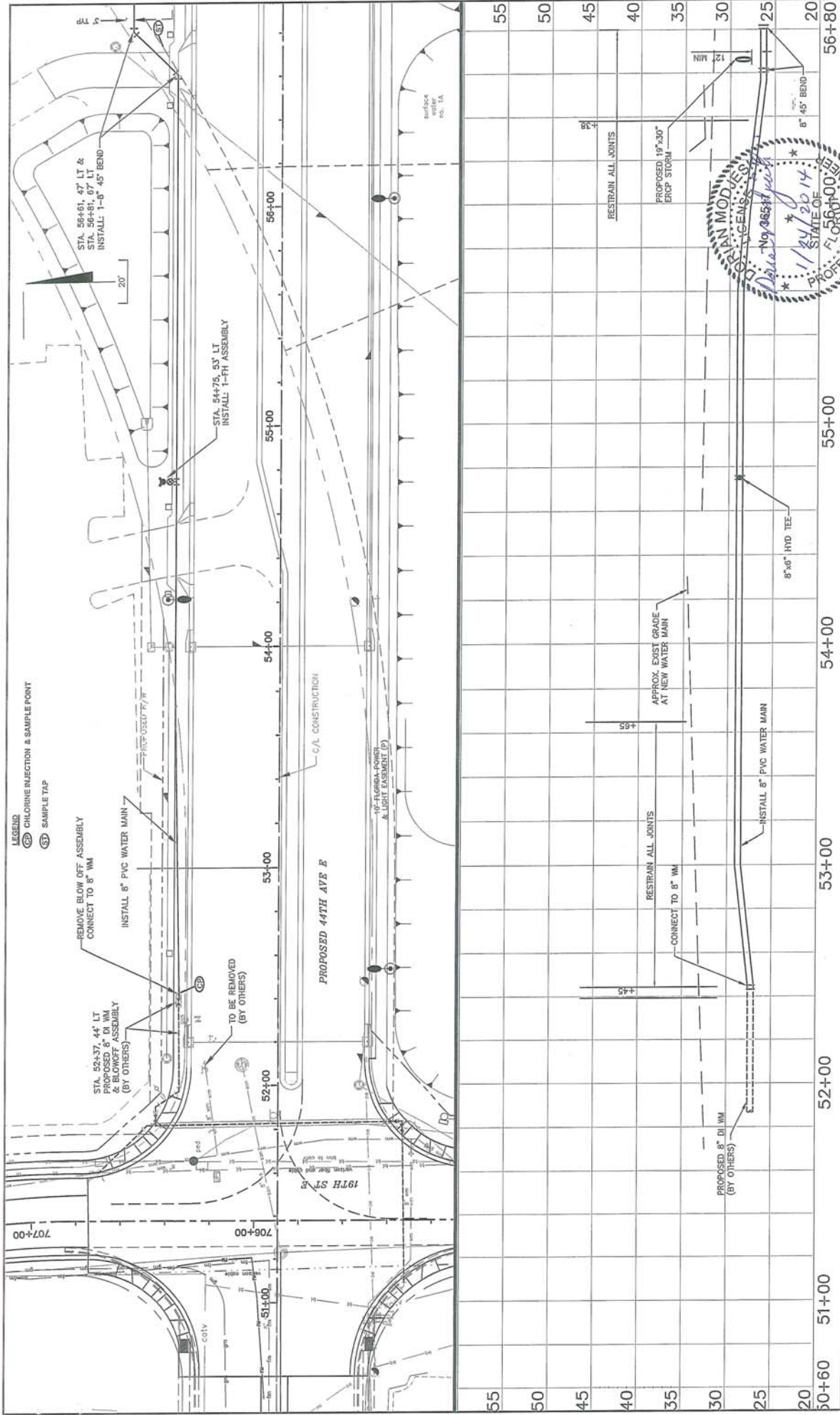
ENGINEER OF RECORD

DORIAN MODJESKI, PE FL LICENSE NO 35517

DATE



DATE: 12-2010
SCALE: NONE
SHEET: W-1



LEGEND
 (CI) CHLORINE INJECTION & SAMPLE POINT
 (ST) SAMPLE TAP

REMOVE BLOW OFF ASSEMBLY
 CONNECT TO 8" WM

STA. 52+37.44' LT
 PROPOSED 8" DI WM
 & BLOWOFF ASSEMBLY
 (BY OTHERS)

TO BE REMOVED
 (BY OTHERS)

PROPOSED 44TH AVE E

C/A CONSTRUCTION

10" FLORIDA-POWER
 & LIGHT EXHIBIT (P)

RESTRAIN ALL JOINTS

RESTRAIN ALL JOINTS
 CONNECT TO 8" WM

APPROX. EXIST GRADE
 AT NEW WATER MAIN

PROPOSED 8" DI WM
 (BY OTHERS)

INSTALL 8" PVC WATER MAIN

8" x 6" HYD TEE

PROPOSED 19" x 30"
 ERCP STORM



NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY	44TH AVENUE EAST ROADWAY EXTENSION	DESIGNED BY: WMC	DATE: 02/15/2017
		DRAWN BY: LCV	DATE: 02/15/2017
		C.C. BY: E.C.	DATE: 02/15/2017
		APPROVED BY: [Signature]	DATE: 02/15/2017

PROJECT NO. 0015001-18	DATE 12-2010
SHEET NO. 142	

PROJECTING: 0015001-18	DATE: 12-2010
SHEET NO. 142	

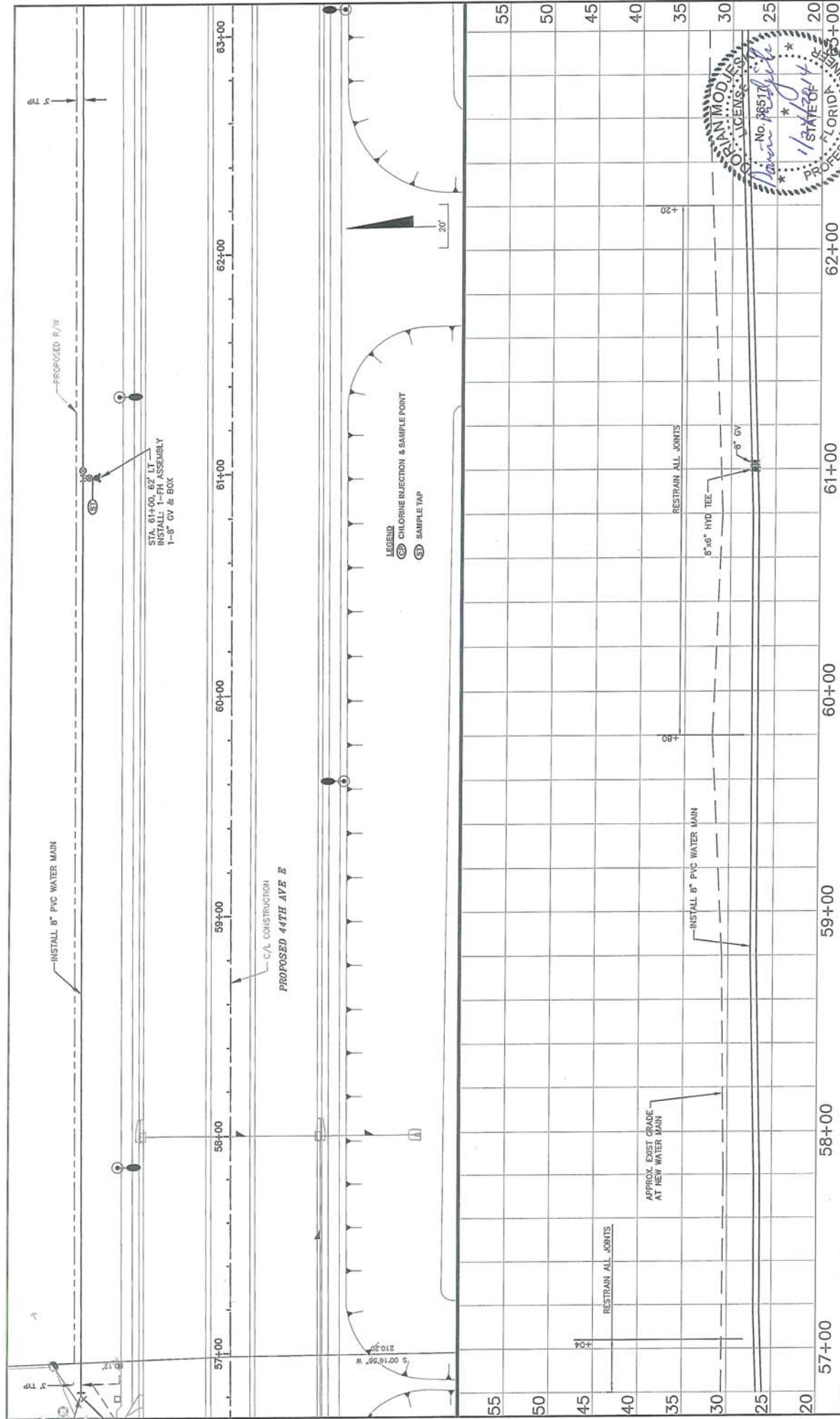
TBE GROUP
 Civil Engineering • Transportation
 Environmental • Planning
 300 Park Place Blvd., Suite 300
 www.tbe-group.com • 727.531.3505
 License No. 3843

TBE GROUP

44TH AVENUE EAST ROADWAY EXTENSION

MANATEE COUNTY

WATER PLAN & PROFILE
 44TH AVENUE EAST



NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY
 44TH AVENUE EAST
 ROADWAY EXTENSION

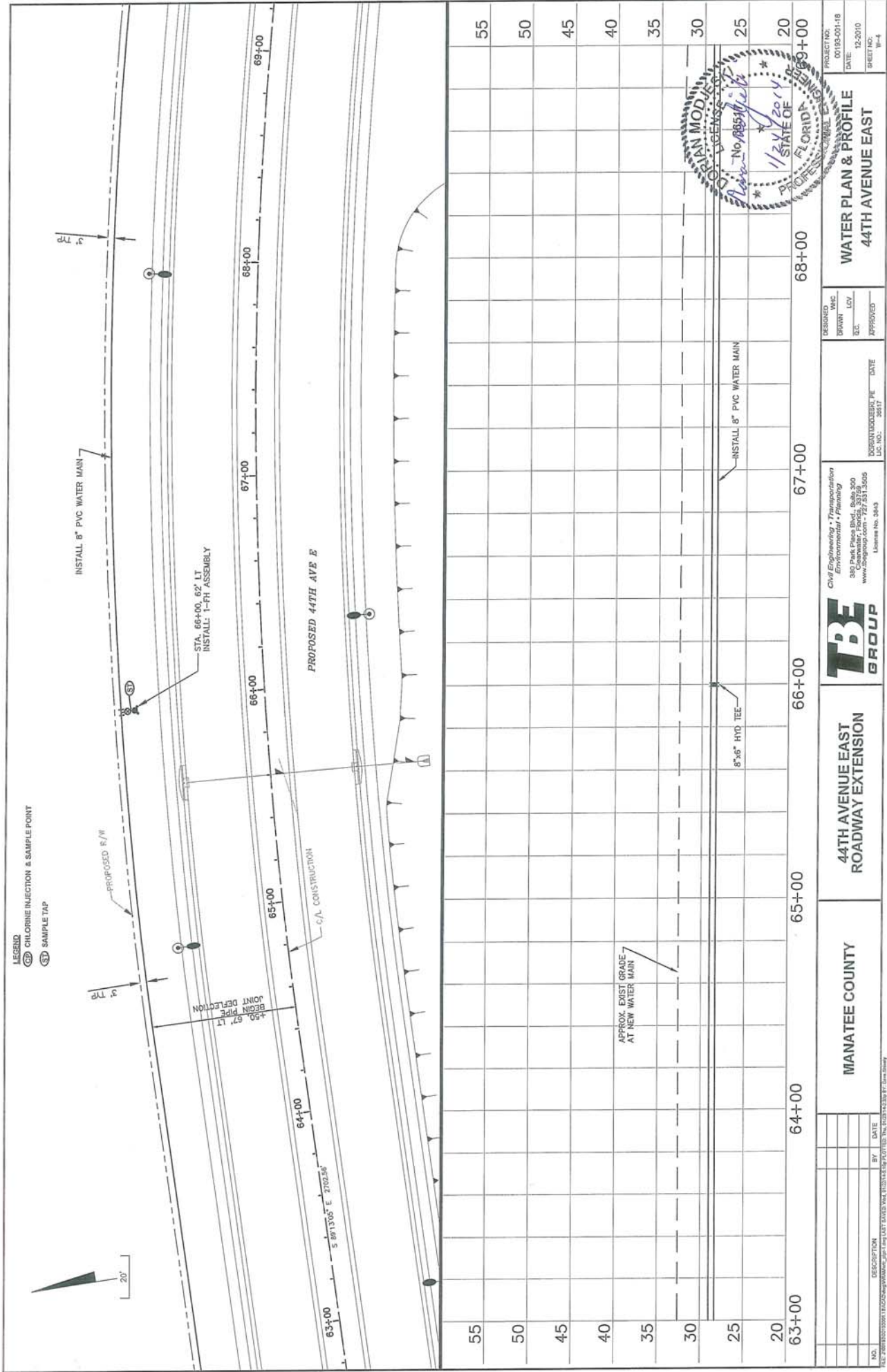
TBE GROUP
 Civil Engineering • Transportation
 Environmental • Planning
 380 Park Place Blvd., Suite 300
 www.tbegrp.com • 727.531.5505
 License No. 3543

DESIGNED: MAC
 DRAWN: LOV
 CHECKED: [Signature]
 APPROVED: [Signature]

PROJECT NO.: 0018-001-18
 DATE: 12/2010
 SHEET NO.: 1-3
WATER PLAN & PROFILE
44TH AVENUE EAST



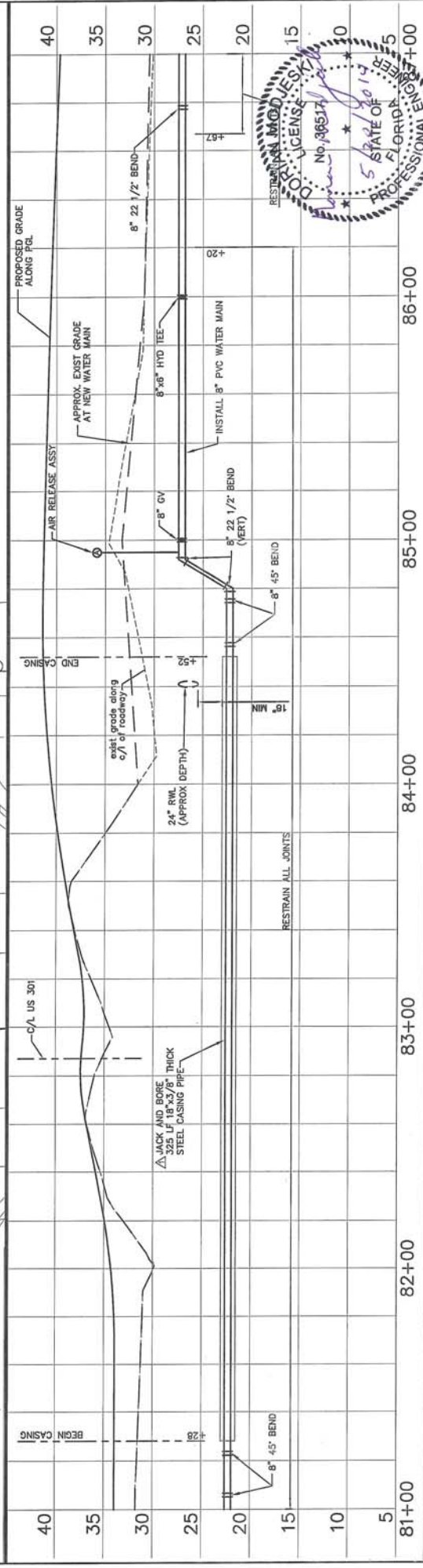
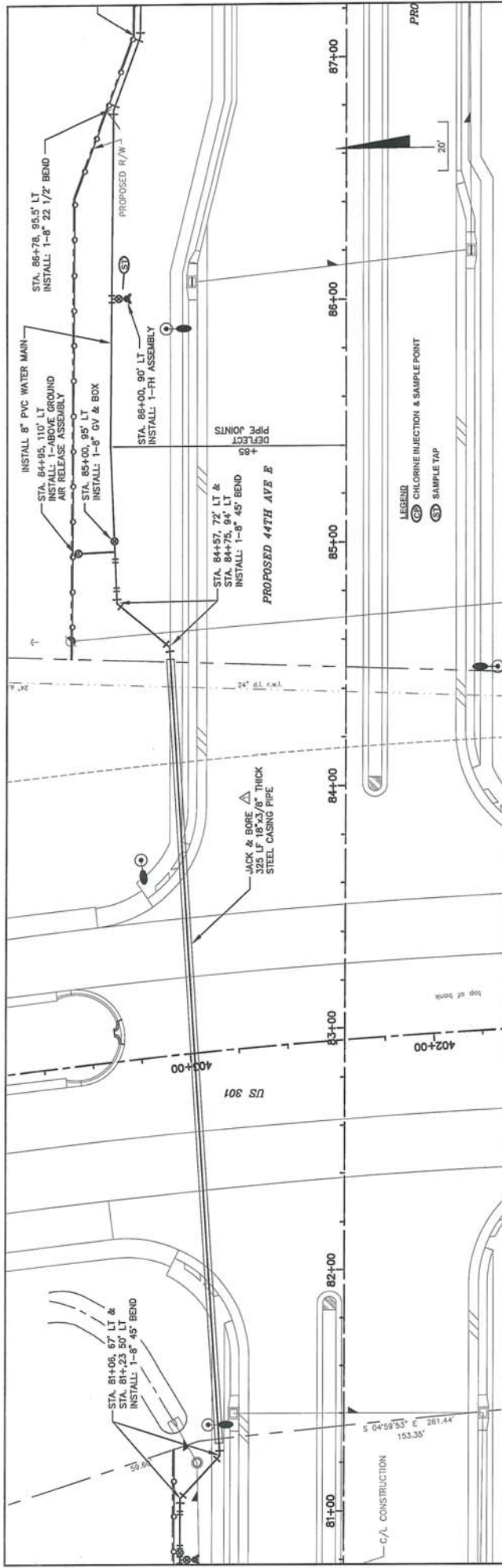
FILE: F:\0018001\0018-001-18\0018-001-18-01-01.dwg (12/20/10) 11:58:44 AM



LEGEND
 (C) CHLORINE INJECTION & SAMPLE POINT
 (S) SAMPLE TAP



PROJECT NO. 00190-001-H8	DATE 12-2010	SHEET NO. 84-4
WATER PLAN & PROFILE 44TH AVENUE EAST		
DESIGNED BY KAC	DRAWN BY LUY	APPROVED BY
DATE 12/20/10	DATE 12/20/10	DATE 12/20/10
Civil Engineering • Transportation Environmental • Planning TBE GROUP 380 Park Plaza Blvd., Suite 300 Tallahassee, Florida 32309 www.tbegroup.com • 772.531.3505 License No. 3443		
MANATEE COUNTY	44TH AVENUE EAST ROADWAY EXTENSION	WATER PLAN & PROFILE
NO.	DESCRIPTION	BY DATE



REVISIONS		DESIGNED		DRAWN		CHECKED		APPROVED	
NO.	DESCRIPTION	BY	DATE	NO.	DATE	NO.	DATE	NO.	DATE

PROJECT NO.	00193-001-18
DATE	12-2010
SHEET NO.	107

DESIGNED		DATE	
DRAWN		DATE	
CHECKED		DATE	
APPROVED		DATE	

DESIGNED BY	
DRAWN BY	
CHECKED BY	
APPROVED BY	

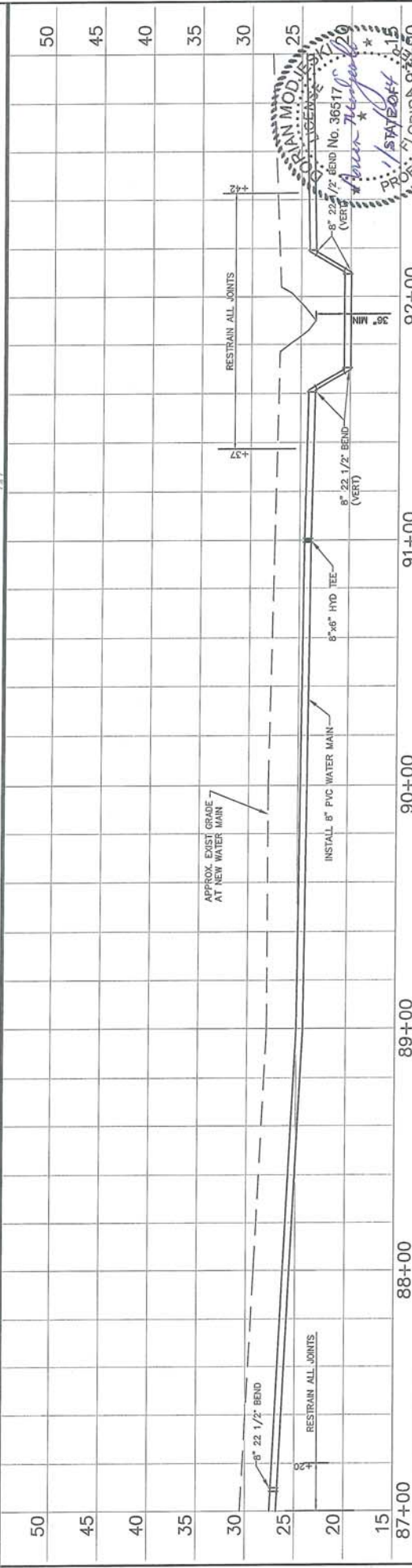
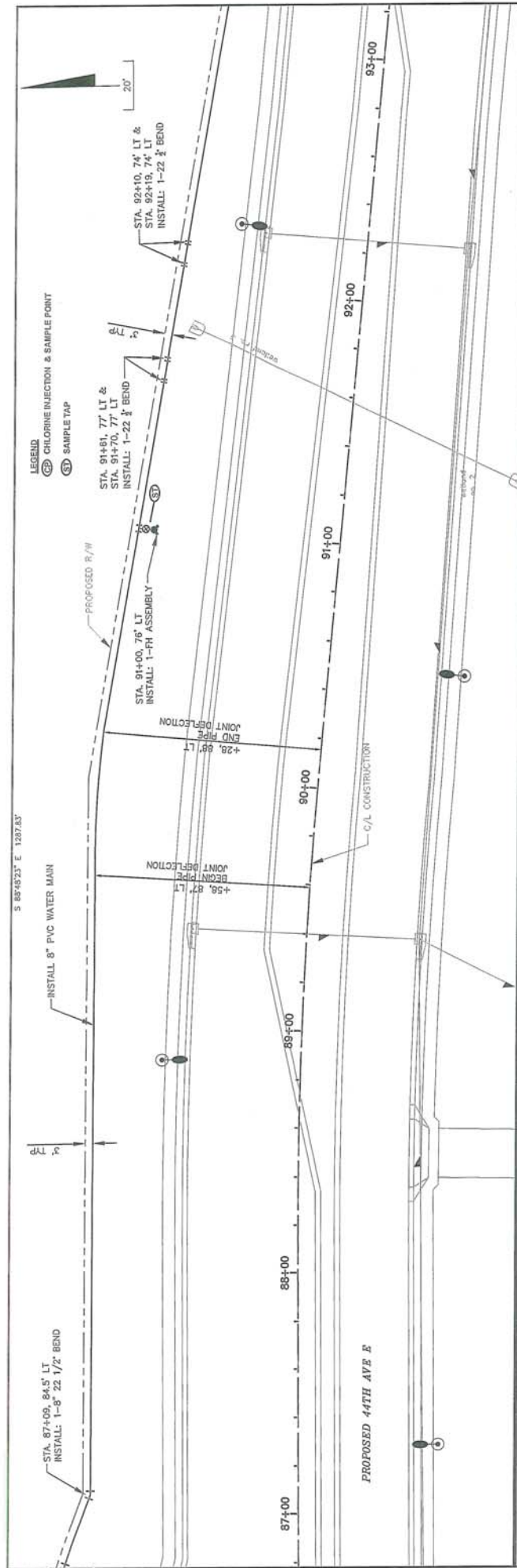
DESIGNED BY		DATE	
DRAWN BY		DATE	
CHECKED BY		DATE	
APPROVED BY		DATE	

MANATEE COUNTY
44TH AVENUE EAST ROADWAY EXTENSION
WATER PLAN & PROFILE
44TH AVENUE EAST



Civil Engineering • Transportation
 Environmental • Planning
 380 Park Plaza Blvd., Suite 300
 Clearwater, Florida 34619
 www.tbegroup.com
 License No. 5848

PROJECT NO. 00193-001-18
 DATE 12-2010
 SHEET NO. 107



NO. _____ DESCRIPTION _____ BY _____ DATE _____		MANATEE COUNTY 44TH AVENUE EAST ROADWAY EXTENSION		TBE GROUP Civil Engineering • Transportation Environmental • Planning 340 Park Place Blvd., Suite 300 www.tbegrp.com • 772.751.5005 License No. 3643		DESIGNED: DAC DRAWN: LCV CHECKED: _____ APPROVED: _____ DATE: 08/11/11		PROJECT NO.: 00183-01-18 DATE: 12-20-10 SHEET NO.: 10-010 OF 10	
WATER PLAN & PROFILE 44TH AVENUE EAST		MANATEE COUNTY 44TH AVENUE EAST ROADWAY EXTENSION		TBE GROUP Civil Engineering • Transportation Environmental • Planning 340 Park Place Blvd., Suite 300 www.tbegrp.com • 772.751.5005 License No. 3643		DESIGNED: DAC DRAWN: LCV CHECKED: _____ APPROVED: _____ DATE: 08/11/11		PROJECT NO.: 00183-01-18 DATE: 12-20-10 SHEET NO.: 10-010 OF 10	

PROFESSIONAL ENGINEER
 STATE OF FLORIDA
 LICENSE NO. 12515
 DATE: 12-20-10
 PROJECT NO.: 00183-01-18

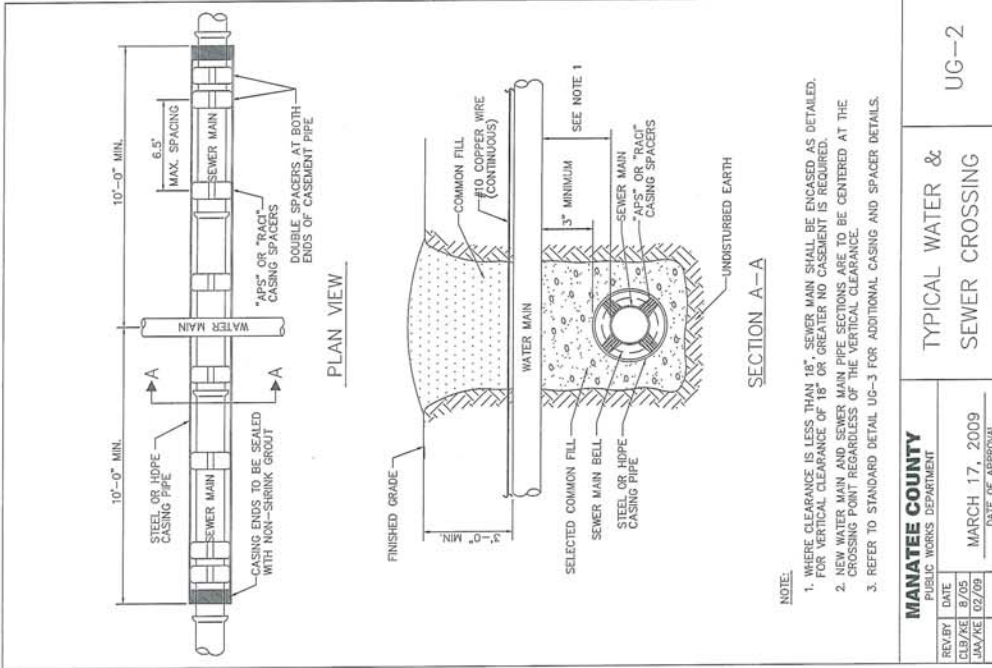
GENERAL NOTES

1. ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST EDITION OF THE MANATEE COUNTY PUBLIC WORKS UTILITY STANDARDS FOR GENERAL CONSTRUCTION AND WATER DISTRIBUTION SYSTEM.
2. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA AND WHICH HAVE BEEN INSTALLED AND CONSTRUCTED SINCE THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) AFFECTING HIS WORK.
3. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
4. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THERE MAY BE SOME UTILITY CONFLICTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ANY AND ALL EXISTING UTILITIES ON THE PROJECT.
5. FIELD CONDITIONS MAY NECESSITATE SLIGHT ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES. THE CONTRACTOR SHALL USE ADDITIONAL SETTINGS, OFFSETS OR BENDS AS DIRECTED TO AVOID CONFLICTS, MAKE ADJUSTMENTS AND MAINTAIN CLEARANCES AS DIRECTED BY THE ENGINEER.
6. THE CONTRACTOR SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES IN ORDER TO PERMIT THE LOCATION OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION. CONTACT UTILITIES NOTIFICATION CENTER AT 1-800-432-4770.
7. CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR SURFACE WATER, DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION.
8. CONTRACTOR SHALL PROVIDE WARNING SIGNALS, SIGNS, LIGHTS AND FLAGMEN AS REQUIRED BY F.D.O.T. IN THE "MANUAL ON TRAFFIC CONTROL & SAFE PRACTICES."
9. CONTRACTOR SHALL MAINTAIN AT LEAST ONE ACCESS ENTRANCE TO COMMERCIAL PROPERTIES AT ALL TIMES.
10. CONTRACTOR SHALL MAINTAIN A SET OF PLANS WITH CURRENT FIELD CHANGES MARKED THERE-ON AND SHALL DELIVER THESE PLANS TO THE ENGINEER UPON COMPLETION OF CONSTRUCTION.
11. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED.
12. ONLY MANATEE COUNTY PERSONNEL SHALL OPERATE VALVES.
13. ALL ROAD CROSSINGS ARE OPEN CUT UNLESS OTHERWISE NOTED ON THE DRAWINGS.
14. ALL ROADWAY CONSTRUCTION WORK (WIDENING, ALIGNMENT, CURBING, DRIVES, UTILITY ADJUSTMENTS, STORMWATER COLLECTION SYSTEM, ETC.) IS NOT PART OF THE WATER UTILITY IMPROVEMENTS DEPICTED IN THESE PLANS. NEITHER SHOULD THESE PLANS BE USED FOR ROADWAY CONSTRUCTION.
15. ALL MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES BELOW FINISH GRADE UNLESS OTHERWISE NOTED.
16. ALL TEES, CROSSES, BENDS (HORIZONTAL AND VERTICAL), PLUGS, VALVES AND OTHER APPURTENANCES, SHALL BE RESTRAINED AS SHOWN ON THE PLANS.

17. ALL PIPE FITTINGS AND APPURTENANCES USED TO PROVIDE CONNECTIONS TO THE WATER SYSTEM OR USED TO PROVIDE DEAD END FUTURE CONNECTIONS SHALL BE RESTRAINED.
18. ALL TEST POINTS AND CHLORINATION POINT DRIPING SHALL BE CUT LOOSE FROM THE CORPORATION STOP AND COMPLETELY REMOVED AND DISPOSED OF BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE. THE CORPORATION STOP SHALL BE CAPPED AND REMAIN IN PLACE.
19. WHERE IT IS NECESSARY TO DEFLECT PIPE EITHER HORIZONTALLY OR VERTICALLY, PIPE JOINT DEFLECTION SHALL NOT EXCEED 80% OF THE MANUFACTURER'S RECOMMENDED DEFLECTION ANGLE.
20. SHOP DRAWINGS SHALL BE FURNISHED TO THE ENGINEER FOR APPROVAL OF ALL PIPE CONNECTIONS, TRANSITIONS AND SPECIALS PRIOR TO FABRICATION OR DELIVERY TO THE JOB SITE.
21. STATIONING FOR ALL FIRE HYDRANT ASSEMBLIES, ISOLATION VALVES, FITTINGS AND OTHER APPURTENANCES IS APPROXIMATE. THE CONTRACTOR SHALL LOCATE AIR RELEASE VALVES IN THE FIELD AT THE HIGHEST POINT BEFORE THE DOWNWARD BREAK IN THE VICINITY OF THE STATION INDICATED.
22. ALL LOCATIONS FOR FIRE HYDRANTS, ISOLATION VALVES AND AIR RELEASE VALVES SHALL BE APPROVED BY THE ENGINEER.
23. MAINTAIN 6 FEET HORIZONTAL CLEARANCE BETWEEN EXISTING OR PROPOSED WATER MAINS AND SANITARY SEWERS. WHEN MAINS ARE CLOSER THAN 6 FEET, ENCASE TITLE IRON PIPE FOR BOTH MAINS WITH STAGGERED JOINTS OR CONCRETE ENCASE TITLE IRON PIPE FOR CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL CLEARANCE OF 12 INCHES BELOW THE INSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER WHERE THE 12 INCHES VERTICAL DISTANCE CANNOT BE MAINTAINED. THE SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR PUSH ON JOINTS. FOR A DISTANCE OF AT LEAST 10 FEET ON EITHER SIDE OF THE CROSSING OR ENCASED IN CONCRETE FOR A MINIMUM DISTANCE OF 10 FEET ON EITHER SIDE OF THE CROSSING. WATER MAINS CROSSING STORM SEWERS SHALL HAVE A MINIMUM SEPARATION OF 12 INCHES.
24. THE CONTRACTOR SHALL COORDINATE ALL TIE-INS WITH MANATEE COUNTY.
25. CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE ENGINEER FOR ANY DEVIATION FROM THE DRAWINGS OR TECHNICAL SPECIFICATIONS.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL OF THE COUNTY'S EXISTING FACILITIES PRIOR TO CONSTRUCTION.



PROJECT NO. 00193-001-18			Civil Engineering • Transportation Environmental • Planning 380 Park Place Blvd., Suite 300 www.tbegrp.com • 787.531.3505 License No. 3443	REGISTERED WAC BROWN WAC S.C. LCV	DATE 03/20/10
GENERAL NOTES WATER				APPROVED _____	DATE 03/20/10
44TH AVENUE EAST ROADWAY EXTENSION		MANATEE COUNTY		PROJECT NO. 00193-001-18	
NO.	DESCRIPTION	BY	DATE		



MANATEE COUNTY
PUBLIC WORKS DEPARTMENT

REV BY	DATE
CLB/AEL	8/05
JAM/AEL	02/09

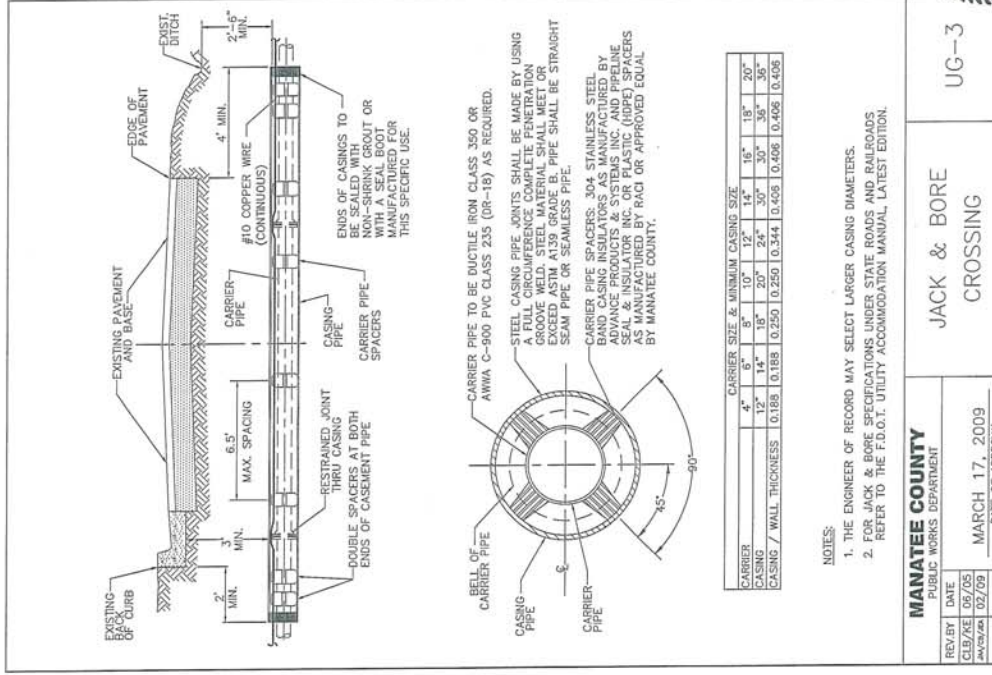
MARCH 17, 2009
DATE OF APPROVAL

TYPICAL WATER &
SEWER CROSSING

UG-2

NOTE:

1. WHERE CLEARANCE IS LESS THAN 18", SEWER MAIN SHALL BE ENCASED AS DETAILED. FOR VERTICAL CLEARANCE OF 18" OR GREATER NO ENCASEMENT IS REQUIRED.
2. NEW WATER MAIN AND SEWER MAIN PIPE SECTIONS ARE TO BE CENTERED AT THE CROSSING POINT REGARDLESS OF THE VERTICAL CLEARANCE.
3. REFER TO STANDARD DETAIL UG-3 FOR ADDITIONAL CASING AND SPACER DETAILS.



CARRIER SIZE & MINIMUM CASING SIZE	4"	6"	8"	10"	12"	14"	15"	18"	20"
CARRIER	4"	6"	8"	10"	12"	14"	15"	18"	20"
CASING	12"	14"	18"	20"	24"	30"	36"	36"	36"
CASING / WALL THICKNESS	0.188	0.188	0.250	0.250	0.344	0.406	0.406	0.406	0.406

NOTES:

1. THE ENGINEER OF RECORD MAY SELECT LARGER CASING DIAMETERS.
2. FOR JACK & BORE SPECIFICATIONS UNDER STATE ROADS AND RAILROADS REFER TO THE F.O.D.T. UTILITY ACCOMMODATION MANUAL, LATEST EDITION.

MANATEE COUNTY
PUBLIC WORKS DEPARTMENT

REV BY	DATE
CLB/AEL	8/05
JAM/AEL	02/09

MARCH 17, 2009
DATE OF APPROVAL

JACK & BORE
CROSSING

UG-3



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License No. 3643

DESIGNED	WFL
DRAWN	D.C.
LOC.	LOC.
APPROVED	APPROVED

KORAN MODJESKI, P.E.
DATE
LIC. NO. 36517

44TH AVENUE EAST
ROADWAY EXTENSION

MANATEE COUNTY

WATER DETAILS

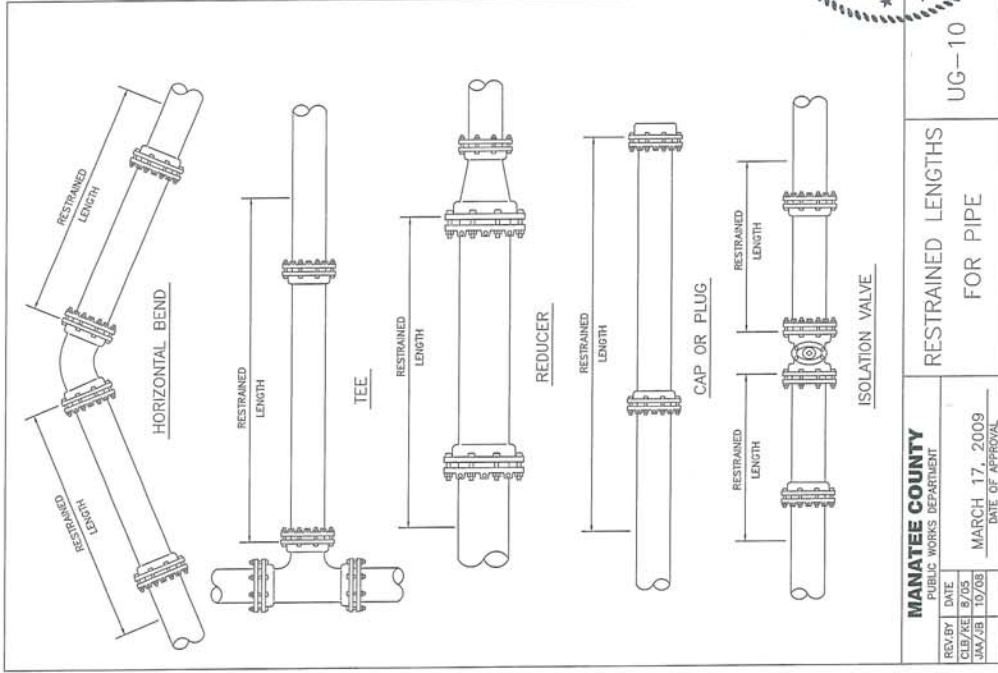
PROJECT NO.	00193-001-18
DATE	12-2010
SHEET NO.	W-11

REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DR-18 PVC PIPE

MAIN PIPE SIZE	HORIZ. BENDS	TEES		REDUCERS		PLUGS	VALVES
		SIZE	LENGTH	SIZE	LENGTH		
24	90°	45°	22.5°	X20, X16, X12, X10, X8	X20, X16, X12, X10, X8	214	107
20	78	32	16	X20, X16, X12, X10, X8	X18, X15, X12, X10, X8	184	92
16	66	27	13	X18, X15, X12, X10, X8	X16, X12, X10, X8, X6	151	76
12	52	22	10	X16, X12, X10, X8, X6	X14, X10, X8, X6, X4	118	59
10	44	18	9	X14, X10, X8, X6, X4	X12, X8, X6, X4, X3	100	50
8	37	15	7	X12, X8, X6, X4	X10, X8, X6, X4, X3	83	42
6	29	12	6	X10, X8, X6, X4	X8, X6, X4, X3	63	32
4	21	8	4	X8, X6, X4	X6, X4, X3	45	23

NOTES:

- 1.) RESTRAIN 11.25' BENDS 50% OF LENGTH FOR 22.5° BENDS.
- 2.) ALL VALVES AND FITTINGS SHALL BE RESTRAINED TO THE CONNECTING SECTIONS OF PIPE.
- 3.) ALL ISOLATION VALVES MUST BE PROPERLY ANCHORED OR RESTRAINED TO RESIST A 180 PSI TEST PRESSURE IN EITHER DIRECTION.
- 4.) PIPE SIZES ARE GIVEN IN INCHES.
- 5.) RESTRAINED PIPE LENGTHS ARE GIVEN IN FEET.
- 6.) LENGTHS SHOWN ARE FOR A TEST PRESSURE OF 180 PSI.
- 7.) THE RESTRAINED LENGTHS SHOWN IN THESE TABLES ARE BASED ON SOIL CONDITIONS OF 100 LB PER SQ FT COVER AND 1.5 FACTOR OF SAFETY. ACTUAL BURIED CONDITIONS MUST BE DETERMINED BY THE ENGINEER OF RECORD AND THE RESTRAINED LENGTHS MODIFIED ACCORDINGLY.
- 8.) SEE RESTRAINED LENGTHS FOR PIPE STD. DETAIL UG-10.



MANATEE COUNTY PUBLIC WORKS DEPARTMENT		RESTRAINED LENGTHS FOR PIPE		UG-10
REV BY	DATE	DATE OF APPROVAL		
CLB/EE	8/05	MARCH 17, 2009		
JAM/JB	10/08			

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		RESTRAINED LENGTHS FOR PVC PIPE		UG-8
REV BY	DATE	DATE OF APPROVAL		
CLB/EE	2/05	MARCH 17, 2009		
JAM/JB	10/08			



**44TH AVENUE EAST
ROADWAY EXTENSION**

MANATEE COUNTY

PROJECT NO:	00193-001-18
DATE:	12-2010
SHEET NO.:	W-12

DESIGNED:	MIC
DRAWN:	LCV
CHECKED:	LCV
APPROVED:	

WATER DETAILS

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

MANATEE COUNTY

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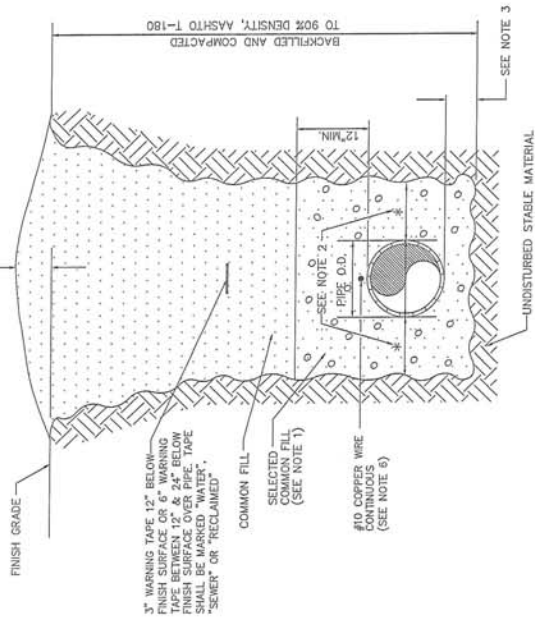
MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

MANATEE COUNTY

NOTES:

- 1.) USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 2.) 10" MAX. FOR PIPE DIAMETER LESS THAN 24"; 12" MAX. FOR PIPE DIAMETER 24" AND LESS THAN 42"; 24" MAX. FOR PIPE DIAMETER 42" AND OVER.
- 3.) 4" MAX. FOR PIPE 16" DIAMETER & LESS; 6" MAX. FOR PIPE 18" TO 36" DIAMETER; AND 9" MAX. FOR PIPE 42" DIAMETER AND LARGER.
- 4.) PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 5.) BACKFILL AASHTO M-145 SHALL BE PLACED IN LAYERS NOT TO EXCEED 6 INCHES FOR SELECTED COMMON FILL AND NOT TO EXCEED 12 INCHES FOR COMMON FILL. EACH LAYER SHALL BE THOROUGHLY TAMPED AND/OR ROLLED TO 98% AASHTO 1-100 DENSITY.
- 6.) TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.



MANATEE COUNTY
PUBLIC WORKS DEPARTMENT

REVISION DATE
 01/05/09
 02/05/09
 10/09/09
 02/09/09

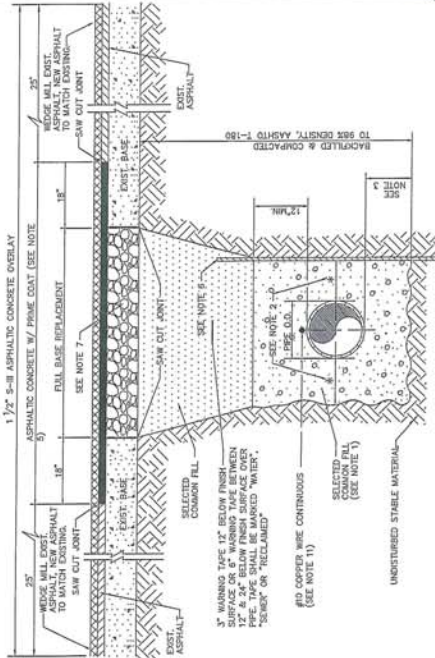
MARCH 17, 2009
DATE OF APPROVAL

TRENCH WITH UNIMPROVED SURFACE
TYPE A-1 PIPE BEDDING

UG-11

NOTES:

- 1.) USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 2.) 10" MAX. FOR PIPE DIAMETERS LESS THAN 24"; 12" MAX. FOR PIPE DIAMETER 24" AND LESS THAN 42"; 24" MAX. FOR PIPE DIAMETER 42" AND OVER.
- 3.) 4" MAX. FOR PIPE 16" DIAMETER & LESS; 6" MAX. FOR PIPE 18" TO 36" DIAMETER; AND 9" MAX. FOR PIPE 42" DIAMETER AND LARGER.
- 4.) PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 5.) ASPHALTIC CONCRETE FRICTION COURSE WITH PRIME COAT SHALL BE THE SAME DEPTH AND TYPE AS EXISTING OR A MINIMUM OF ONE INCH, WHICHEVER IS GREATER.
- 6.) FINISHED GRADE OR 12" BELOW SLOGRADE.
- 7.) BASE SHALL BE 8" MINIMUM THICKNESS CRUSHED CONCRETE, SAND ASPHALT OR BACKFILL AASHTO M-145 SHALL BE PLACED IN LAYERS NOT TO EXCEED 6 INCHES. EACH LAYER SHALL BE THOROUGHLY TAMPED AND/OR ROLLED TO 98% AASHTO 1-100 DENSITY.
- 8.) TEMPORARY PATCHES WILL BE INSTALLED TO PROVIDE A SMOOTH ALL WEATHER SURFACE AT ALL TIME. PERMANENT REPLACEMENT TO BE MADE AS SOON AS POSSIBLE.
- 9.) TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.
- 10.) TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.
- 11.) TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.
- 12.) NOTES 5), 6), 7), 11) ARE MINIMUM REQUIREMENTS. REFER TO MANATEE COUNTY HIGHWAY AND TRAFFIC STANDARDS FOR ADDITIONAL REQUIREMENTS.



MANATEE COUNTY
PUBLIC WORKS DEPARTMENT

REVISION DATE
 07/05/09
 10/09/09
 02/09/09

MARCH 17, 2009
DATE OF APPROVAL

TRENCH WITH ASPHALT PAVEMENT SURFACE
TYPE A-1 PIPE BEDDING

UG-12

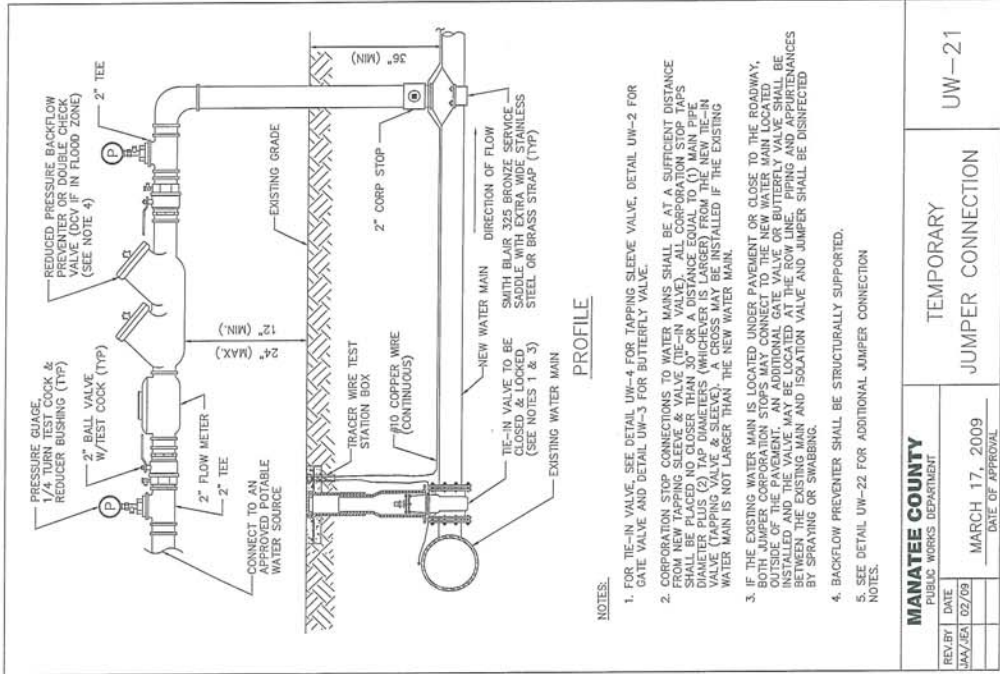


PROJECT NO. 00195-001-18	DATE 12.2010	SHEET NO. 14-15
DESIGNED WAC	DRAWN LCY	CHECKED DATE
APPROVED	DATE	DATE
WATER DETAILS		
MANATEE COUNTY		
44TH AVENUE EAST ROADWAY EXTENSION		
MANATEE COUNTY		
UG-11		
UG-12		

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License No. 3843

MANATEE COUNTY
PUBLIC WORKS DEPARTMENT

NO.	DESCRIPTION	BY	DATE



- NOTES:**
- FOR TIE-IN VALVE, SEE DETAIL UW-4 FOR TAPPING SLEEVE VALVE, DETAIL UW-2 FOR GATE VALVE AND DETAIL UW-3 FOR BUTTERFLY VALVE.
 - CORPORATION STOP CONNECTIONS TO WATER MAINS SHALL BE AT A SUFFICIENT DISTANCE FROM NEW TAPPING SLEEVE & VALVE (TIE-IN VALVE). ALL CORPORATION STOP TAPS SHALL BE PLUGGED NO CLOSER THAN 30" OR A DISTANCE EQUAL TO (1) MAIN PIPE DIAMETER PLUS 6" (WHICHEVER IS GREATER). ALL CORPORATION STOP TAPS TO THE WATER MAIN IS NOT LARGER THAN THE NEW WATER MAIN.
 - IF THE EXISTING WATER MAIN IS LOCATED UNDER PAVEMENT OR CLOSE TO THE ROADWAY, BOTH JUMPER CORPORATION STOPS MAY CONNECT TO THE NEW WATER MAIN LOCATED OUTSIDE OF THE PAVEMENT. AN ADDITIONAL GATE VALVE OR BUTTERFLY VALVE SHALL BE INSTALLED AND THE VALVE MAY BE LOCATED AT THE ROW LINE. PIPING AND APPURTENANCES TO BE INSTALLED SHALL BE STRUCTURALLY SUPPORTED AND ISOLATION VALVE AND JUMPER SHALL BE DISINFECTED BY SPRAYING OR SWABBING.
 - BACKFLOW PREVENTER SHALL BE STRUCTURALLY SUPPORTED.
 - SEE DETAIL UW-22 FOR ADDITIONAL JUMPER CONNECTION NOTES.

MANATEE COUNTY		TEMPORARY	
PUBLIC WORKS DEPARTMENT		JUMPER CONNECTION	
REV./BY	DATE	MARCH 17, 2009	UW-21
JAA/SEA	02/09	DATE OF APPROVAL	

- A temporary jumper connection is required at all connections between existing active potable water mains and proposed new water main improvements with the following exceptions:
 - Projects that include a permanent backflow preventer at the right-of-way which is adjacent to the existing water main;
 - Projects that include new water mains that are less than or equal to 18 linear feet in length; or
 - Other proposed cases that are approved by Manatee County and the construction drawings specifically state that a temporary jumper connection is not required.
- A temporary jumper shall be used and be connected to an approved potable water source (e.g., existing fire hydrant, existing water main, or approved temporary jumper detail UW-21). A temporary jumper shall be used for filling any new water main of any size, for water main flushing (3.5 gpm per 100 ft pipe minimum velocity, preferably 3.5 gpm) and for disinfection of any new main of any size. Water mains with a pipe diameter greater than or equal to 6 inches shall be plugged in lieu of preliminary flushing. The jumper connection shall be maintained until after the filling, flushing, testing and disinfection of the new main has been successfully completed and clearance for use from the Florida Department of Environmental Protection (FDEP) or the Florida Department of Health (FDOH) has been obtained.
- Locations and orientation of jumpers associated with connections to existing water mains that are located under the existing pavement shall be approved on a case-by-case basis.
- Piping for the new pipe to the existing pipe shall be disinfected prior to installation in accordance with AWWA C651, latest edition. Under no circumstances shall the piping be disinfected by spraying or swabbing prior to installation. The piping shall be disinfected in accordance with Section 4.6 of AWWA C651. Unless approved otherwise, the remainder of the new main shall be disinfected in accordance with Section 4.4.3.3 of AWWA C651. The use of tablets is prohibited.
- A separate and successful hydrostatic test on the new system shall occur between the tie-in valve and the closest downstream gate valve or butterfly valve before performing a hydrostatic test on the remainder of the newly-constructed water main. The tie-in valve and the closest downstream gate valve or butterfly valve shall be closed during the hydrostatic test of the remainder of the newly constructed water main.
- The test shall include a flow meter to ensure that the flow from the supply source is at a constant measured rate while chlorinating the new main. The flow meter shall be checked at regular intervals to ensure that it is set at a constant rate of not less than 25 milligrams per liter (mg/L) of free chlorine.
- After preliminary flushing (water mains with diameters less than 6 inches) and pigging (water mains with diameters greater than or equal to 6 inches) of the new water main, a minimum feed concentration of 25 mg/L of free chlorine is required. The chlorinated water shall be retained in the main for at least 24 hours and all portions of the main shall have a residual of not less than 10 mg/L of free chlorine at the end of this 24-hour period. The Contractor shall provide the Inspector documentation that the aforementioned concentrations have been achieved. Final flushing of the mains shall occur prior to performing bacteriological evaluations and the total chlorine residual in the mains shall be no more than 4.0 mg/L. In any bacteriological sample, if the chlorine residual exceeds 4.0 mg/L, a sample shall be obtained at the test cock located downstream of the backflow preventer, to ensure that the total chlorine residual of the new main does not exceed the residual of the existing system.
- The jumper connection shall also be used to maintain a minimum pressure of 20 psi in the new mains continuously after disinfection and until FDEP/FDOH clearance letter is obtained.
- All temporary backflow devices or "jumpers" utilized during pipeline construction must show certification that they have been tested annually according to the Florida Building Code, Plumbing Section, Chapter 3, Section 312.9.1, 312.9.2, Chapter 6, Section 606, and Resolution R87-125. Annual certification must be valid at time of installation and provided to the Manatee County Inspector upon request.
- Except as required to flush lines greater than 6 inches in diameter, the lockable tie-in valve shall remain closed and shall be locked until the new main is ready for use by FDEP/FDOH. The tie-in valve shall remain closed and locked until the new system has been accepted for use by FDEP/FDOH. The contractor shall be responsible for ensuring that the tie-in valve is locked and shall be kept locked for clearance for use by FDEP/FDOH. Manatee County shall be notified in writing of any other pertinent approvals. The Contractor shall remove the temporary jumper connection. The corporation stops are to be closed and plugged with 2-inch brass or PVC stops.
- All installation and maintenance of the temporary jumper connection and associated backflow prevention device, flow meter, fittings, valves, etc., shall be the responsibility of the Contractor.
- If the water main to receive final flushing is greater than 6 inches in diameter or such length that a full pipe flush at the minimum velocity cannot be accomplished, the following procedure shall be utilized:
 - Check the pressure on the upstream side of the jumper to ensure that there is adequate pressure on the existing water main.
 - Open downstream valves in the new system prior to flush.
 - Partially open the tie-in valve and maintain a lower pressure on the downstream side of the jumper than the pressure on the upstream side of the jumper while flushing/pigging the new water main.
 - Manatee County personnel shall operate the tie-in valve to ensure that a pressure differential is maintained.
 - Close tie-in valve and then close all downstream valves in the new system.
- The tie-in valve shall remain closed if the potable water source is a tank truck.

MANATEE COUNTY		TEMPORARY	
PUBLIC WORKS DEPARTMENT		JUMPER CONNECTION	
REV./BY	DATE	MARCH 17, 2009	UW-22
JAA/SEA	02/09	DATE OF APPROVAL	



MANATEE COUNTY		TEMPORARY	
PUBLIC WORKS DEPARTMENT		JUMPER CONNECTION	
REV./BY	DATE	MARCH 17, 2009	UW-21
JAA/SEA	02/09	DATE OF APPROVAL	



MANATEE COUNTY
44TH AVENUE EAST
ROADWAY EXTENSION

MANATEE COUNTY
44TH AVENUE EAST
ROADWAY EXTENSION

NO.	DESCRIPTION	BY	DATE



FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

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

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

JONATHAN P. STEVERSON
SECRETARY

Notification of Acceptance of Use of a General Permit

Permittee:

Manatee County Utilities Department
Sia Mollanazar, P.E., Deputy Director of
Engineering Services
1022 26th Avenue East
Bradenton, FL 34208
sia.mollanazar@mymanatee.org

Permit Number: 0133068-1110-DSGP/02

Issue Date: January 14, 2015

Expiration Date: January 13, 2020

County: Manatee

Project Name: 44th Avenue East from 19th
Street Court East to 30th Street East

Water Supplier: Manatee County Utilities

PWS ID: 641-1132

Dear Mr. Mollanazar:

On January 13, 2015, the Florida Department of Environmental Protection received a “*Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs*” [DEP Form No. 62-555.900(7)], under the provisions of Rule 62-4.530 and Chapter 62-555, Florida Administrative Code (F.A.C.). The proposed project includes the construction of new eight-inch diameter water mains along 19th Street Court, 44th Avenue East, and 30th Street East, to serve nine commercial facilities and replace existing water mains.

Based upon the submitted Notice and accompanying documentation, this correspondence is being sent to advise that the Department does not object to the use of such general permit at this time. Please be advised that the permittee is required to abide by Rule 62-555.405, F.A.C., all applicable rules in Chapters 62-4, 62-550, 62-555, F.A.C., and the General Conditions for All General Drinking Water Permits (found in 62-4.540, F.A.C.).

The permittee shall comply with all sampling requirements specific to this project. These requirements are attached for review and implementation.

Pursuant to Rule 62-555.345, F.A.C., the permittee shall submit a certification of construction completion [DEP Form No. 62-555.900(9)] to the Department and obtain approval, or clearance, from the Department before placing any water main extension constructed under this general permit into operation for any purpose other than disinfection or testing for leaks.

Within 30 days after the sale or legal transfer of ownership of the permitted project that has not been cleared for service in total by the Department, both the permittee and the proposed permittee shall sign and submit an application for transfer of the permit using Form 62-555.900(8), F.A.C., with the appropriate fee. The permitted construction is not authorized past the 30-day period unless the permit has been transferred.

Permittee: DEP File No.: 0133068-1110-DSGP/02
Manatee County Utilities Department
Project: 44th Avenue East from 19th Street Court East to 30th Street East

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This permit will expire five years from the date of issuance. If the project has been started and not completed by that time, a new permit must be obtained before the expiration date in order to continue work on the project, per Rule 62-4.030, F.A.C.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION



for _____
Kelley M. Boatwright
Program Administrator
Permitting & Waste Cleanup Program
Southwest District

Enclosures: A. General Permit Conditions
B. Clearance Requirements/Utilities Separation Requirements

cc: Kelly S. Wehner, P.E., Cardno, kelly.wehner@cardno.com
Andy Fischer, Manatee County Public Works Dept., andy.fisher@mymanatee.org

A. General Permit Conditions

The permittee shall be aware of and operate under the Permit Conditions below. These applicable conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes. [F.A.C. Rule 62-555.533(1)]

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times (reasonable time may depend on the nature of the concern being investigated), access to the premises where the permitted activity is located or conducted to:
 - a. Have access to and copy any records that must be kept under conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of noncompliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:

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- a. Determination of Best Available Control Technology (BACT)
 - b. Determination of Prevention of Significant Deterioration (PSD)
 - c. Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
 - d. Compliance with New Source Performance Standards
14. The permittee shall comply with the following:
- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - i. the date, exact place, and time of sampling or measurements;
 - ii. the person responsible for performing the sampling or measurements;
 - iii. the dates analyses were performed;
 - iv. the person responsible for performing the analyses;
 - v. the analytical techniques or methods used;
 - vi. the results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

B. CLEARANCE REQUIREMENTS

Requirements for clearance upon completion of projects are as follows:

1) Clearance Form

Submission of a fully completed Department of Environmental Protection (DEP) Form 62-555.900(9) *Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components into Operation.*

2) Record Drawings, If Deviations Were Made

Submission of the portion of record drawings showing deviations from the DEP construction permit, including preliminary design report or drawings and specifications, if there are any deviations from said permit (Note that it is necessary to submit a copy of only the portion of record drawings showing deviations and not a complete set of record drawings.).

3) Bacteriological Results

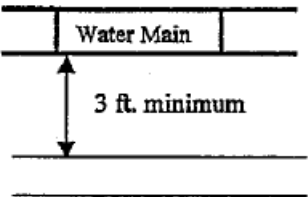
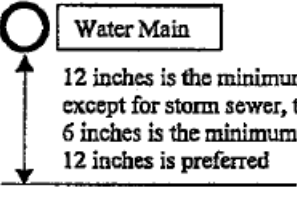
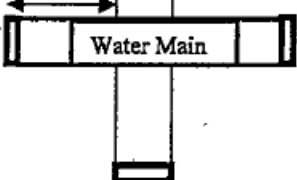
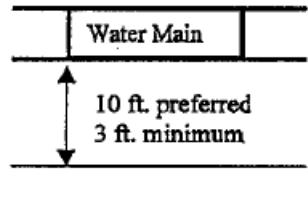
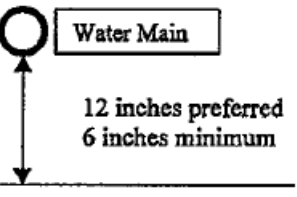
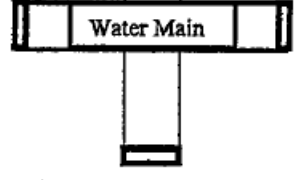
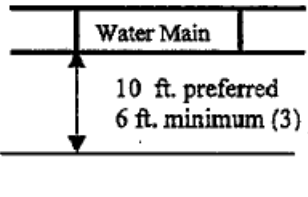
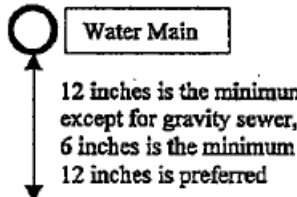
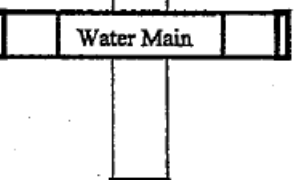
Copies of satisfactory bacteriological analysis (a.k.a. Main Clearance), taken within sixty (60) days of completion of construction, from locations within the distribution system or water main extension to be cleared, in accordance with Rules 62-555.315(6), 62-555.340, and 62-555.330, F.A.C. and American Water Works Association (AWWA) Standard C 651-92, as follows:

- *The endpoint of the proposed addition;*
- *Any water lines branching off a main extension;*
- *Every 1,200 feet of water main;*
- *Each location shall be sampled on two separate days (at least 6 hours apart) with sample point locations and chlorine residual readings clearly indicated on the report and/or drawings.*
- *Bacteriological sample results will be considered unacceptable if the tests were completed more than 60 days before the Department receives the results.*

4) Pressure Test Results

Copy of satisfactory pressure test results demonstrating compliance with AWWA Standard requirements.

LOCATION OF PUBLIC WATER SYSTEMS MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

Other Pipe	Horizontal Separation	Crossings (1)	Joint Spacing @ Crossings (Full Joint Centered)
Storm Sewer, Stormwater Force Main, Reclaimed Water (2)	 <p align="center">3 ft. minimum</p>	 <p align="center">12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred</p>	<p align="center">Alternate 3 ft. minimum</p> 
Vacuum Sanitary Sewer	 <p align="center">10 ft. preferred 3 ft. minimum</p>	 <p align="center">12 inches preferred 6 inches minimum</p>	<p align="center">Alternate 3 ft. minimum</p> 
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)	 <p align="center">10 ft. preferred 6 ft. minimum (3)</p>	 <p align="center">12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred</p>	<p align="center">Alternate 6 ft. minimum</p> 
On-Site Sewage Treatment & Disposal System	<p align="center">10 ft. minimum</p>	<p align="center">---</p>	<p align="center">---</p>

- (1) Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches.
 (2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.
 (3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.
 (4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

Disclaimer -- This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.

UTILITY TECHNICAL SPECIFICATIONS
FOR
44TH AVENUE EAST
FROM 19TH STREET COURT TO 30TH STREET EAST
POTABLE WATER MAIN

PROJECT # 6045660

July 2015

PROJECT OWNER:

County of Manatee, Florida
c/o Manatee County Purchasing Division
1112 Manatee Avenue West
Bradenton, Florida 34205
(941) 748-4501

PREPARED BY:

Cardno
380 Park Place Boulevard
Suite 300
Clearwater, Florida 33759
(727) 531-3505
Certificate of Authorization No. 29915

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This specification includes by reference the Manatee County Utility Standards approved May 2011.

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01005 GENERAL REQUIREMENTS

PART 1 GENERAL

1.01 SCOPE AND INTENT

A. Description

The work to be done consists of the furnishing of all labor, materials and equipment, and the performance of all work included in this Contract.

B. Work Included

The Contractor shall furnish all labor, superintendence, materials, fuel, water, tools, appliances, equipment, supplies, shop drawings, working drawings and other means of construction necessary or proper for performing and completing the work. He shall obtain and pay for all required permits necessary for the work, other than those permits such as the DEP permit which may have already been obtained. He shall perform and complete the work in the manner best calculated to promote rapid construction consistent with safety of life and property and to the satisfaction of the County, and in strict accordance with the Contract Documents. The Contractor shall clean up the work and maintain it during and after construction, until accepted, and shall do all work and pay all incidental costs. He shall repair or restore all structures and property that may be damaged or disturbed during performance of the work.

The cost of incidental work described in these General Requirements, for which there are no specific Contract Items, shall be considered as part of the general cost of doing the work and shall be included in the prices for the various Contract Items. No additional payment will be made.

The Contractor shall be solely responsible for the adequacy of his workmanship, materials and equipment.

C. Public Utility Installations and Structures

Public utility installations and structures shall be understood to include all poles, tracks, pipes, wires, conduits, house service connections, vaults, manholes and all other appurtenances and facilities pertaining thereto.

The Contractor shall protect all installations and structures from damage during the work. Access across any buried public utility installation or structure shall be made only in such locations and by means approved by the County. All required protective devices and construction shall be provided by the Contractor at his expense. All existing public utilities damaged by the Contractor which are shown on the Plans or have been located in the field by the utility shall be repaired by the Contractor, at his expense, as approved by the County. No separate payment shall be made for such protection or repairs to public utility installations or structures.

Public utility installations or structures owned or controlled by the County or other governmental body, which are required by this contract to be removed, relocated, replaced or rebuilt by the Contractor not identified in any separate bid item shall be considered as a part of the general cost of doing the work and shall be included in the prices bid for the various contract items. No separate payment shall be made.

Where public utility installations or structures owned or controlled by the County or other governmental body are encountered during the course of the work, and are not indicated on the Plans or in the Specifications, and when, in the opinion of the County, removal, relocation, replacement or rebuilding is necessary to complete the work under this Contract, such work shall be accomplished by the utility having jurisdiction, or such work may be ordered, in writing by the County, for the contractor to accomplish. If such work is accomplished by the utility having jurisdiction, it will be carried out expeditiously and the Contractor shall give full cooperation to permit the utility to complete the removal, relocation, replacement or rebuilding as required. If such work is accomplished by the Contractor, it will be in accordance with the General and Supplemental General Conditions.

The Contractor shall give written notice to County and other governmental utility departments and other owners of public utilities of the location of his proposed construction operations, at least forty-eight hours in advance of breaking ground in any area or on any unit of the work. This can be accomplished by making the appropriate contact with the "Sunshine State One-Call of Florida, Inc. Call Center ("Call Sunshine") and per all requirements provided for in the Florida Underground Facilities Damage Prevention and Safety Act (Florida Statutes, Title XXXIII, Chapter 556).

The maintenance, repair, removal, relocation or rebuilding of public utility installations and structures, when accomplished by the Contractor as herein provided, shall be done by methods approved by the County.

1.02 PLANS AND SPECIFICATIONS

A. Plans

When obtaining data and information from the Plans, figures shall be used in preference to scaled dimensions, and large scale drawings in preference to small scale drawings.

B. Copies Furnished to Contractor

The Contractor shall furnish each of the subcontractors, manufacturers, and material men such copies of the Contract Documents as may be required for their work. Additional copies of the Plans and Specifications, when requested, may be furnished to the Contractor at cost of reproduction.

C. Supplementary Drawings

When, in the opinion of the County, it becomes necessary to explain more fully the work to be done or to illustrate the work further or to show any changes which may be required, drawings known as Supplementary Drawings, with specifications pertaining thereto, will be prepared by the County and five paper prints thereof will be given to the Contractor.

D. Contractor to Check Plans and Data

The Contractor shall verify all dimensions, quantities and details shown on the Plans, Supplementary Drawings, Schedules, Specifications or other data received from the County, and shall notify him of all errors, omissions, conflicts, and discrepancies found therein. Failure to discover or correct errors, conflicts or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory work, faulty construction or improper operation resulting therefrom nor from rectifying such conditions at his own expense. He will not be allowed to take advantage of any errors or omissions, as full instructions will be furnished by the County, should such errors or omissions be discovered. All schedules are given for the convenience of the County and the Contractor and are not guaranteed to be complete. The Contractor shall assume all responsibility for the making of estimates of the size, kind, and quality of materials and equipment included in work to be done under the Contract.

E. Specifications

The Technical Specifications consist of three parts: General, Products and Execution. The General Section contains General Requirements which govern the work. Products and Execution modify and supplement these by detailed requirements for the work and shall always govern whenever there appears to be a conflict.

F. Intent

All work called for in the Specifications applicable to this Contract, but not shown on the Plans in their present form, or vice versa, shall be of like effect as if shown or mentioned in both. Work not specified in either the Plans or in the Specifications, but involved in carrying out their intent or in the complete and proper execution of the work, is required and shall be performed by the Contractor as though it were specifically delineated or described.

The apparent silence of the Specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used, and interpretation of these Specifications shall be made upon that basis.

The inclusion of the Related Requirements (or work specified elsewhere) in the General part of the specifications is only for the convenience of the Contractor, and shall not be interpreted as a complete list of related Specification Sections.

1.03 MATERIALS AND EQUIPMENT

A. Manufacturer

All transactions with the manufacturers or subcontractors shall be through the Contractor, unless the Contractor shall request, in writing to the County, that the manufacturer or subcontractor deal directly with the County. Any such transactions shall not in any way release the Contractor from his full responsibility under this Contract.

Any two or more pieces or material or equipment of the same kind, type or classification, and being used for identical types of services, shall be made by the same manufacturer.

B. Delivery

The Contractor shall deliver materials in ample quantities to insure the most speedy and uninterrupted progress of the work so as to complete the work within the allotted time. The Contractor shall also coordinate deliveries in order to avoid delay in, or impediment of, the progress of the work of any related Contractor.

C. Tools and Accessories

The Contractor shall, unless otherwise stated in the Contract Documents, furnish with each type, kind or size of equipment, one complete set of suitably marked high grade special tools and appliances which may be needed to adjust, operate, maintain or repair the equipment. Such tools and appliances shall be furnished in approved painted steel cases, properly labeled and equipped with good grade cylinder locks and duplicate keys.

Spare parts shall be furnished as specified.

Each piece of equipment shall be provided with a substantial nameplate, securely fastened in place and clearly inscribed with the manufacturer's name, year of manufacture, serial number, weight and principal rating data.

D. Installation of Equipment.

The Contractor shall have on hand sufficient proper equipment and machinery of ample capacity to facilitate the work and to handle all emergencies normally encountered in work of this character.

Equipment shall be erected in a neat and workmanlike manner on the foundations at the locations and elevations shown on the Plans, unless directed otherwise by the County during installation. All equipment shall be correctly aligned, leveled and adjusted for satisfactory operation and shall be installed so that proper and necessary connections can be made readily between the various units.

The Contractor shall furnish, install and protect all necessary anchor and attachment bolts and all other appurtenances needed for the installation of the devices included in the equipment specified. Anchor bolts shall be as approved by

the County and made of ample size and strength for the purpose intended. Substantial templates and working drawings for installation shall be furnished.

The Contractor shall furnish all materials and labor for, and shall properly bed in non-shrink grout, each piece of equipment on its supporting base that rests on masonry foundations.

Grout shall completely fill the space between the equipment base and the foundation. All metal surfaces coming in contact with concrete or grout shall receive a coat of coal tar epoxy equal to Koppers 300M or provide a 1/32-inch neoprene gasket between the metal surface and the concrete or grout.

E. Service of Manufacturer's Engineer

The Contract prices for equipment shall include the cost of furnishing (as required by equipment specifications sections) a competent and experienced engineer or superintendent who shall represent the manufacturer and shall assist the Contractor, when required, to install, adjust, test and place in operation the equipment in conformity with the Contract Documents. After the equipment is placed in permanent operation by the County, such engineer or superintendent shall make all adjustments and tests required by the County to prove that such equipment is in proper and satisfactory operating condition, and shall instruct such personnel as may be designated by the County in the proper operation and maintenance of such equipment.

1.04 INSPECTION AND TESTING

A. General

Inspection and testing of materials will be performed by the County unless otherwise specified.

For tests specified to be made by the Contractor, the testing personnel shall make the necessary inspections and tests and the reports thereof shall be in such form as will facilitate checking to determine compliance with the Contract Documents. Three (3) copies of the reports shall be submitted and authoritative certification thereof must be furnished to the County as a prerequisite for the acceptance of any material or equipment.

If, in the making of any test of any material or equipment, it is ascertained by the County that the material or equipment does not comply with the Contract, the Contractor will be notified thereof and he will be directed to refrain from delivering said material or equipment, or to remove it promptly from the site or from the work and replace it with acceptable material, without cost to the County.

Tests of electrical and mechanical equipment and appliances shall be conducted in accordance with recognized test codes of the ANSI, ASME, or the IEEE, except as may otherwise be stated herein.

The Contractor shall be fully responsible for the proper operation of equipment during tests and instruction periods and shall neither have nor make any claim for

damage which may occur to equipment prior to the time when the County formally takes over the operation thereof.

B. Costs

All inspection and testing of materials furnished under this Contract will be performed by the County or duly authorized inspection engineers or inspections bureaus without cost to the Contractor, unless otherwise expressly specified.

The cost of shop and field tests of equipment and of certain other tests specifically called for in the Contract Documents shall be borne by the Contractor and such costs shall be deemed to be included in the Contract price.

Materials and equipment submitted by the Contractor as the equivalent to those specifically named in the Contract may be tested by the County for compliance. The Contractor shall reimburse the County for the expenditures incurred in making such tests on materials and equipment which are rejected for non-compliance.

C. Inspections of Materials

The Contractor shall give notice in writing to the County, at least two weeks in advance of his intention to commence the manufacture or preparation of materials especially manufactured or prepared for use in or as part of the permanent construction. Such notice shall contain a request for inspection, the date of commencement and the expected date of completion of the manufacture or preparation of materials. Upon receipt of such notice, the County will arrange to have a representative present at such times during the manufacture as may be necessary to inspect the materials or he will notify the Contractor that the inspection will be made at a point other than the point of manufacture, or he will notify the Contractor that inspection will be waived. The Contractor must comply with these provisions before shipping any material. Such inspection shall not release the Contractor from the responsibility for furnishing materials meeting the requirements of the Contract Documents.

D. Certificate of Manufacture

When inspection is waived or when the County so requires, the Contractor shall furnish to him authoritative evidence in the form of Certificates of Manufacture that the materials to be used in the work have been manufactured and tested in conformity with the Contract Documents. These certificates shall be notarized and shall include copies of the results of physical tests and chemical analyses, where necessary, that have been made directly on the product or on similar products of the manufacturer.

E. Shop Tests of Operating Equipment

Each piece of equipment for which pressure, duty, capacity, rating, efficiency, performance, function or special requirements are specified shall be tested in the shop of the maker in a manner which shall conclusively prove that its characteristics comply fully with the requirements of the Contract Documents. No such equipment shall be shipped to the work until the County notifies the Contractor, in writing, that the results of such tests are acceptable.

The cost of shop tests and of furnishing manufacturer's preliminary and shop test data of operating equipment shall be borne by the Contractor.

F. Preliminary Field Tests

As soon as conditions permit, the Contractor shall furnish all labor, materials, and instruments and shall make preliminary field tests of equipment. If the preliminary field tests disclose any equipment furnished under this Contract which does not comply with the requirements of the Contract Documents, the Contractor shall, prior to the acceptance tests, make all changes, adjustments and replacements required. The furnishing Contractor shall assist in the preliminary field tests as applicable.

G. Final Field Tests

Upon completion of the work and prior to final payment, all equipment and piping installed under this Contract shall be subjected to acceptance tests as specified or required to prove compliance with the Contract Documents.

The Contractor shall furnish labor, fuel, energy, water and all other materials, equipment and instruments necessary for all acceptance tests, at no additional cost to the County. The Supplier shall assist in the final field tests as applicable.

H. Failure of Tests

Any defects in the materials and equipment or their failure to meet the tests, guarantees or requirements of the Contract Documents shall be promptly corrected by the Contractor. The decision of the County as to whether or not the Contractor has fulfilled his obligations under the Contract shall be final and conclusive. If the Contractor fails to make these corrections or if the improved materials and equipment, when tested, shall again fail to meet the guarantees of specified requirements, the County, notwithstanding its partial payment for work, and materials and equipment, may reject the materials and equipment and may order the Contractor to remove them from the site at his own expense.

In case the County rejects any materials and equipment, then the Contractor shall replace the rejected materials and equipment within a reasonable time. If he fails to do so, the County may, after the expiration of a period of thirty (30) calendar days after giving him notice in writing, proceed to replace such rejected materials and equipment, and the cost thereof shall be deducted from any compensation due or which may become due the Contractor under his Contract.

I. Final Inspection

During such final inspections, the work shall be clean and free from water. In no case will the final pay application be prepared until the Contractor has complied with all requirements set forth and the County has made his final inspection of the entire work and is satisfied that the entire work is properly and satisfactorily constructed in accordance with the requirements of the Contract Document.

1.05 TEMPORARY STRUCTURES

A. Temporary Fences

If, during the course of the work, it is necessary to remove or disturb any fence or part thereof, the Contractor shall, at his own expense, if so ordered by the County, provide a suitable temporary fence which shall be maintained until the permanent fence is replaced. The County shall be solely responsible for the determination of the necessity for providing a temporary fence and the type of temporary fence to be used.

1.06 TEMPORARY SERVICES

A. First Aid

The Contractor shall keep upon the site, at each location where work is in progress, a completely equipped first aid kit and shall provide ready access thereto at all times when people are employed on the work.

1.07 LINES AND GRADES

A. Grade

All work under this Contract shall be constructed in accordance with the lines and grades shown on the Plans, or as given by the County. The full responsibility for keeping alignment and grade shall rest upon the Contractor.

B. Safeguarding Marks

The Contractor shall safeguard all points, stakes, grade marks, monuments and bench marks made or established on the work, bear the cost of reestablishing them if disturbed, and bear the entire expense of rectifying work improperly installed due to not maintaining or protecting or removing without authorization such established points, stakes and marks.

The Contractor shall safeguard all existing and known property corners, monuments and marks adjacent to but not related to the work and, if required, shall bear the cost of reestablishing them if disturbed or destroyed.

C. Datum Plane

All elevations indicated or specified refer to the Mean Sea Level Datum of the NGVD 1929 Datum and/or NAVD 1988.

1.08 ADJACENT STRUCTURES AND LANDSCAPING

A. Responsibility

The Contractor shall also be entirely responsible and liable for all damage or injury as a result of his operations to all other adjacent public and private property, structures of any kind and appurtenances thereto met with during the progress of the work. The cost of protection, replacement in their original locations and conditions or payment of damages for injuries to such adjacent public and private property and structures affected by the work, whether or not shown on the Plans,

and the removal, relocation and reconstruction of such items called for on the Plans or specified shall be included in the various Contract Items and no separate payments will be made therefore. Where such public and private property, structures of any kind and appurtenances thereto are not shown on the Plans and when, in the opinion of the County, additional work is deemed necessary to avoid interference with the work, payment therefore will be made as provided for in the General Conditions.

Contractor is expressly advised that the protection of buildings, structures, tunnels, tanks, pipelines, etc. and related work adjacent and in the vicinity of his operations, wherever they may be, is solely his responsibility. Conditional inspection of buildings or structures in the immediate vicinity of the project which may reasonably be expected to be affected by the Work shall be performed by and be the responsibility of the Contractor.

Contractor shall, before starting operations, make an examination of the interior and exterior of the adjacent structures, buildings, facilities, etc., and record by notes, measurements, photographs, etc., conditions which might be aggravated by open excavation and construction. Repairs or replacement of all conditions disturbed by the construction shall be made to the satisfaction of the County. This does not preclude conforming to the requirements of the insurance underwriters. Copies of surveys, photographs, reports, etc., shall be given to the County.

Prior to the beginning of any excavations, the Contractor shall advise the County of all buildings or structures on which he intends to perform work or which performance of the project work will affect.

B. Protection of Trees

1. All trees and shrubs shall be adequately protected by the Contractor with boxes and otherwise and in accordance with ordinances governing the protection of trees. No excavated materials shall be placed so as to injure such trees or shrubs. Trees or shrubs destroyed by negligence of the Contractor or his employees shall be replaced by him with new stock of similar size and age, at the proper season and at the sole expense of the Contractor.
2. Beneath trees or other surface structures, where possible, pipelines may be built in short tunnels, backfilled with excavated materials, except as otherwise specified, or the trees or structures carefully supported and protected from damage.
3. The County may order the Contractor, for the convenience of the County, to remove trees along the line or trench excavation. If so ordered, the County will obtain any permits required for removal of trees. Such tree removal ordered shall be paid for under the appropriate Contract Items.

C. Lawn Areas

Lawn areas shall be left in as good condition as before the starting of the work. Where sod is to be removed, it shall be carefully removed, and later replaced, or the area where sod has been removed shall be restored with new sod.

D. Restoration of Fences

Any fence, or part thereof, that is damaged or removed during the course of the work shall be replaced or repaired by the Contractor and shall be left in as good a condition as before the starting of the work. The manner in which the fence is repaired or replaced and the materials used in such work shall be subject to the approval of the County. The cost of all labor, materials, equipment, and work for the replacement or repair of any fence shall be deemed included in the appropriate Contract Item or items, or if no specific Item is provided therefore, as part of the overhead cost of the work, and no additional payment will be made therefore.

1.09 PROTECTION OF WORK AND PUBLIC

A. Barriers and Lights

During the prosecution of the work, the Contractor shall put up and maintain at all times such barriers and lights as will effectually prevent accidents. The Contractor shall provide suitable barricades, red lights, "danger" or "caution" or "street closed" signs and watchmen at all places where the work causes obstructions to the normal traffic or constitutes in any way a hazard to the public, in accordance with state and local requirements.

B. Smoke Prevention

A strict compliance with ordinances regulating the production and emission of smoke will be required. No open fires will be permitted.

C. Noise

The Contractor shall eliminate noise to as great an extent as practicable at all times. Air compressing plants shall be equipped with silencers and the exhaust of all engines or other power equipment shall be provided with mufflers. In the vicinity of hospitals and schools, special care shall be used to avoid noise or other nuisances. The Contractor shall strictly observe all local regulations and ordinances covering noise control.

D. Access to Public Services

Neither the materials excavated nor the materials or plant used in the construction of the work shall be so placed as to prevent free access to all fire hydrants, valves or manholes.

E. Dust prevention

The Contractor shall prevent dust nuisance from his operations or from traffic by keeping the roads and/or construction areas sprinkled with water at all times.

1.10 CUTTING AND PATCHING

The Contractor shall do all cutting, fitting or patching of his portion of the work that may be required to make the several parts thereof join and coordinate in a manner satisfactory to the County and in accordance with the Plans and Specifications. The work must be done by competent workmen skilled in the trade required by the restoration.

1.11 CLEANING

A. During Construction

During construction of the work, the Contractor shall, at all times, keep the site of the work and adjacent premises as free from material, debris and rubbish as is practicable and shall remove the same from any portion of the site if, in the opinion of the County, such material, debris, or rubbish constitutes a nuisance or is objectionable. The Contractor shall remove from the site all of his surplus materials and temporary structures when no further need therefore develops.

B. Final Cleaning

At the conclusion of the work, all equipment, tools, temporary structures and materials belonging to the Contractor shall be promptly taken away, and he shall remove and promptly dispose of all water, dirt, rubbish or any other foreign substances.

The Contractor shall thoroughly clean all equipment and materials installed by him and shall deliver such materials and equipment undamaged in a bright, clean, polished and new operating condition.

1.12 MISCELLANEOUS

A. Protection Against Siltation and Bank Erosion

1. The Contractor shall arrange his operations to minimize siltation and bank erosion on construction sites and on existing or proposed water courses and drainage ditches.
2. The Contractor, at his own expense, shall remove any siltation deposits and correct any erosion problems as directed by the County which results from his construction operations.

B. Protection of Wetland Areas

The Contractor shall properly dispose of all surplus material, including soil, in accordance with Local, State and Federal regulations. Under no circumstances shall surplus material be disposed of in wetland areas as defined by the Florida

Department of Environmental Protection or Southwest Florida Water Management District.

C. Existing Facilities

The work shall be so conducted to maintain existing facilities in operation insofar as is possible. Requirements and schedules of operations for maintaining existing facilities in service during construction shall be as described in the Special Provisions.

D. Use of Chemicals

All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant, or of other classification, must show approval of either EPA or USDA. Use of all such chemicals and disposal of residues shall be in strict conformance with instructions.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01010 SUMMARY OF WORK

PART 1 GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS/REQUIREMENTS INCLUDED

- A. The work included in this contract consists of installation of water utilities as part of the 44th Avenue East from 19th Street Court East to 30th Street East Roadway project. The Contractor performing the utility work covered by this contract shall be qualified by the County to perform utility work. The work covered by these specifications includes the furnishing of all labor, equipment, materials and performing all operations in connection with the water main work associated with the roadway improvements of 44th Avenue East and indicated in the Potable Water Main Plans. Work includes installation of approximately 4,650 linear feet of 8-inch PVC and 400 linear feet of 8-inch ductile iron potable water main and appurtenances in compliance with the drawings, specifications and Contract Documents. The water main shall be installed by open cut and jack and bore.
- B. The Contractor shall furnish all shop drawings, working drawings, labor, materials, equipment, tools, services and incidentals necessary to complete all work required by these Specifications and as shown on the Contract Drawings.
- C. The Contractor shall perform the work complete, in place and ready for continuous service and shall include any repairs, replacements, and/or restoration required as a result of damages caused prior to acceptance by the County.
- D. The Contractor shall furnish and install all materials, equipment and labor which is reasonably and properly inferable and necessary for the proper completion of the work, whether specifically indicated in the Contract Documents or not.

1.02 CONTRACTS

Construct all the Work under a single contract.

1.03 WORK SEQUENCE

- A. All work done under this Contract shall be done with a minimum of inconvenience to the users of the system or facility. The Contractor shall coordinate his work with private property owners such that existing utility services are maintained to all users to the maximum extent possible.
- B. The Contractor shall, if necessary and feasible, construct the work in stages to accommodate the County's use of the premises during the construction period; coordinate the construction schedule and operations with the County's Representative.
- C. The Contractor shall, where feasible, construct the Work in stages to provide for public convenience and not close off public use of any facility until completion of construction to provide alternative usage.

1.04 CONSTRUCTION AREAS

- A. The Contractor shall: Limit his use of the construction areas for work and for storage, to allow for:
 - 1. Work by other Contractors.
 - 2. County's Use.
 - 3. Public Use.
- B. Coordinate use of work site under direction of County's Representative.
- C. Assume full responsibility for the protection and safekeeping of products under this Contract, stored on the site.
- D. Move any stored products under the Contractor's control, which interfere with operations of the County or separate contractor.
- E. Obtain and pay for the use of additional storage of work areas needed for Contractor operations.

1.05 COUNTY OCCUPANCY

- A. It is assumed that portions of the Work will be completed prior to completion of the entire Work. Upon completion of construction of each individual facility, including testing, if the County, at its sole discretion, desires to accept the individual facility, the Contractor will be issued a dated certificate of completion and acceptance for each individual facility. The County will assume ownership and begin operation of the individual facility on that date and the three-year guaranty period shall commence on that date. The County has the option of not accepting the entire work as a whole until it is completed, tested and approved by the County.

1.06 PARTIAL COUNTY OCCUPANCY

The Contractor shall schedule his operations for completion of portions of the Work, as designated, for the County's occupancy prior to substantial completion of the entire work.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01015 CONTROL OF WORK

PART 1 GENERAL

1.01 WORK PROGRESS

The Contractor shall furnish personnel and equipment which will be efficient, appropriate and adequately sized to secure a satisfactory quality of work and a rate of progress which will insure the completion of the work within the time stipulated in the Contract. If at any time such personnel appears to the County to be inefficient, inappropriate, or insufficient for securing the quality of work required for producing the rate of progress aforesaid, he may order the Contractor to increase the efficiency, change the character, or increase the personnel and equipment and the Contractor shall conform to such order. Failure of the County to give such order shall in no way relieve the Contractor of his obligations to secure the quality of the work and rate of progress required.

1.02 PRIVATE LAND

The Contractor shall not enter or occupy private land outside of easements, except by permission of the affected property owner.

1.03 WORK LOCATIONS

Work shall be located substantially as indicated on the drawings, but the County reserves the right to make such modifications in locations as may be found desirable to avoid interference with existing structures or for other reasons.

1.04 OPEN EXCAVATIONS

- A. All open excavations shall be adequately safeguarded by providing temporary barricades, caution signs, lights and other means to prevent accidents to persons and damage to property. The Contractor shall, at his own expense, provide suitable and safe bridges and other crossings for accommodating travel by pedestrians and workmen. Bridges provided for access to private property during construction shall be removed when no longer required. If the excavation becomes a hazard, or if it excessively restricts traffic at any point, the County may require special construction procedures such as limiting the length of open trench, prohibiting stacking excavated material in the street and requiring that the trench shall not remain open overnight.
- B. The Contractor shall take precautions to prevent injury to the public due to open trenches. All trenches, excavated material, equipment, or other obstacles which could be dangerous to the public shall be barricaded and well lighted at all times when construction is not in progress.

1.05 DISTRIBUTION SYSTEMS AND SERVICES

- A. The Contractor shall avoid interruptions to water, telephone, cable TV, sewer, gas, or other related utility services. He shall notify the County and the appropriate

agency well in advance of any requirement for dewatering, isolating, or relocating a section of a utility, so that necessary arrangements may be made.

- B. If it appears that utility service will be interrupted for an extended period, the County may order the Contractor to provide temporary service lines at the Contractor's expense. Inconvenience of the users shall be kept to the minimum, consistent with existing conditions. The safety and integrity of the systems are of prime importance in scheduling work.

1.06 PROTECTION AND RELOCATION OF EXISTING STRUCTURES AND UTILITIES

- A. The Contractor shall assume full responsibility for the protection of all buildings, structures and utilities, public or private, including poles, signs, services to building utilities, gas pipes, water pipes, hydrants, sewers, drains and electric and telephone cables and other similar facilities, whether or not they are shown on the Drawings. The Contractor shall carefully support and protect all such structures and utilities from injury of any kind. Any damage resulting from the Contractor's operation shall be repaired by the Contractor at his expense.
- B. The Contractor shall bear full responsibility for obtaining locations of all underground structures and utilities (including existing water services, drain lines and sewers). Services to buildings shall be maintained and all costs or charges resulting from damage thereto shall be paid by the Contractor.
- C. Protection and temporary removal and replacement of existing utilities and structures as described in this Section shall be a part of the work under the Contract and all costs in connection therewith shall be included in the unit prices established in the Bid.
- D. If, in the opinion of the County, permanent relocation of a utility owned by the County is required, he may direct the Contractor, in writing, to perform the work. Work so ordered will be paid for at the Contract unit prices, if applicable, or as extra work as classified in the General Conditions. If relocation of a privately owned utility is required, the County will notify the utility to perform the work as expeditiously as possible. The Contractor shall fully cooperate with the County and utility and shall have no claim for delay due to such relocation. The Contractor shall notify public utility companies in writing at least 48 hours (excluding Saturdays, Sundays and legal holidays) before excavating near their utilities.

1.07 TEST PITS

Test pits for the purpose of locating underground pipeline or structures in advance of the construction shall be excavated and backfilled by the Contractor immediately after the utility location and the surface shall be restored in a manner equal or better than the original condition. No separate payment will be made.

1.08 CARE AND PROTECTION OF PROPERTY

- A. The Contractor shall be responsible for the preservation of all public and private property and shall use every precaution necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account

of any act, omission, neglect, or misconduct in the execution of the work on the part of the Contractor, such property shall be restored by the Contractor, at his expense, to a condition equal or better to that existing before the damage was done, or he shall make good the damage in another manner acceptable to the County.

- B. All sidewalks which are disturbed by the Contractor's operations shall be restored to their original or better condition by the use of similar or comparable materials. All curbing shall be restored in a condition equal to the original construction and in accordance with the best modern practice.
- C. Along the location of this work, all fences, walks, bushes, trees, shrubbery and other physical features shall be protected and restored in a thoroughly workmanlike manner unless otherwise shown on the drawings. Fences and other features removed by the Contractor shall be replaced in the location indicated by the County as soon as conditions permit. All grass areas beyond the limits of construction which have been damaged by the Contractor shall be regraded and sodded to equal or exceed original conditions.
- D. Trees close to the work which drawings do not specify to be removed, shall be boxed or otherwise protected against injury. The Contractor shall trim all branches that are liable to damage because of his operations, but in no case shall any tree be cut or removed without prior notification to the County. All injuries to bark, trunk, limbs and roots of trees shall be repaired by dressing, cutting and painting according to approved methods, using only approved tools and materials.
- E. The protection, removal and replacement of existing physical features along the line of work shall be a part of the work under the Contract and all costs in connection therewith shall be included in the unit and/or lump sum prices established under the items in the Bid.

1.09 MAINTENANCE OF TRAFFIC

- A. Open pits, trenches, unpaved streets, debris, or other obstructions due to construction that will prevent the normal flow of traffic during an extended construction stoppage, for any reason, shall be minimized. In the event an extended construction stoppage is found to be necessary, Contractor shall, at his own expense, provide normal traffic flow during extended construction stoppage. Extended stoppage will be defined by the County.
- B. All excavated material shall be placed so that vehicular and pedestrian traffic may be maintained at all times. If the Contractor's operations cause traffic hazards, he shall repair the road surface, provide temporary roadways, erect wheel guards or fences, or take other safety measures which are satisfactory to the County.
- C. Any changes to the traffic pattern require a Traffic Control Plan as detailed in section 01570 of this specification..

1.10 WATER FOR CONSTRUCTION PURPOSES

- A. In locations where public water supply is available, the Contractor may purchase water for all construction purposes.
- B. The Contractor shall be responsible for paying for all water tap fees incurred for the purpose of obtaining a potable water service or temporary use meter.

1.11 MAINTENANCE OF FLOW

The Contractor shall at his own cost, provide for the flow of sewers, drains and water courses interrupted during the progress of the work and shall immediately cart away and remove all offensive matter. The entire procedure of maintaining existing flow shall be fully discussed with the County well in advance of the interruption of any flow.

1.12 CLEANUP

During the course of the work, the Contractor shall keep the site of his operations in as clean and neat a condition as is possible. He shall dispose of all residue resulting from the construction work and at the conclusion of the work, he shall remove and haul away any surplus excavation, broken pavement, lumber, equipment, temporary structures and any other refuse remaining from the construction operations and shall leave the entire site of the work in a neat and orderly condition.

1.13 COOPERATION WITHIN THIS CONTRACT

- A. All firms or person authorized to perform any work under this Contract shall cooperate with the General Contractor and his subcontractors or trades and shall assist in incorporating the work of other trades where necessary or required.
- B. Cutting and patching, drilling and fitting shall be carried out where required by the trade or subcontractor having jurisdiction, unless otherwise indicated herein or directed by the County.

1.14 PROTECTION OF CONSTRUCTION AND EQUIPMENT

- A. All newly constructed work shall be carefully protected from injury in any way. No wheeling or walking or placing of heavy loads on it shall be allowed and all portions injured shall be reconstructed by the Contractor at his own expense.
- B. All structures shall be protected in a manner approved by the County. Should any of the floors or other parts of the structures become heaved, cracked, or otherwise damaged, all such damaged portions of the work shall be completely repaired and made good by the Contractor, at his own expense and to the satisfaction of the County. If, in the final inspection of the work, any defects, faults, or omissions are found, the Contractor shall cause the same to be repaired or removed and replaced by proper materials and workmanship without extra compensation for the materials and labor required. Further, the Contractor shall be fully responsible for the satisfactory maintenance and repair of the construction and other work undertaken herein, for at least the warranty period described in the Contract.

- C. Further, the Contractor shall take all necessary precautions to prevent damage to any structure due to water pressure during and after construction and until such structure is accepted and taken over by the County.

1.15 CONSTRUCTION WITHIN RIGHT-OF-WAY

Where pipe lines are installed within FDOT right-of-way, all excavation backfill and compaction for the purpose of reconstructing roadways and/or adjacent slopes contiguous thereto shall be in accordance with FDOT or Manatee County Standards and Specifications, whichever is applicable. Contractor shall satisfy the authorized representative of the FDOT with respect to proper safety procedures, construction methods, required permitting, etc., within the FDOT right-of-way.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01030 SPECIAL PROJECT PROCEDURES

PART 1 GENERAL

1.01 PERMITS

Upon notice of award, the Contractor shall immediately apply for all applicable permits not previously obtained by the County to do the work from the appropriate governmental agency or agencies. No work shall commence until all applicable permits have been obtained and copies delivered to the County. The costs for obtaining all permits shall be borne by the Contractor.

1.02 CONNECTIONS TO EXISTING SYSTEM

The Contractor shall perform all work necessary to locate, excavate and prepare for connections to the existing systems all as shown on the Drawings or where directed by the County. The cost for this work and for the actual connection shall be included in the price bid for the project and shall not result in any additional cost to the County. The termination point for each contract shall be as shown on the Contract Drawings.

1.03 RELOCATIONS

The Contractor shall be responsible for the coordination of the relocation of structures, including but not limited to light poles, power poles, signs, sign poles, fences, piping, conduits and drains that interfere with the positioning of the work as set out on the Drawings. No relocation of the items under this Contract shall be done without approval from the County.

1.04 EXISTING UNDERGROUND PIPING, STRUCTURES AND UTILITIES

- A. The attention of the Contractor is drawn to the fact that during excavation, the possibility exists of the Contractor encountering various utility lines not shown on the Drawings. The Contractor shall exercise extreme care before and during excavation to locate and flag these lines as to avoid damage to the existing lines.
- B. It is the responsibility of the Contractor to ensure that all utility or other poles, the stability of which may be endangered by the close proximity of excavation, are temporarily stayed in position while work proceeds in the vicinity of the pole and that the utility or other companies concerned be given reasonable advance notice.
- C. The existing utility locations are shown without express or implied representation, assurance, or guarantee that they are complete or correct or that they represent a true picture of underground piping to be encountered. The Contractor shall be responsible for notifying the various utility companies to locate their respective utilities in advance of construction in conformance with all requirements provided for in the Florida Underground Facilities Damage Prevention and Safety Act (Florida Statutes, Title XXXIII, Chapter 556).
- D. The existing piping and utilities that interfere with new construction shall be rerouted as shown, specified, or required. Before any piping and utilities not shown

on the Drawings are disturbed, the Contractor shall notify the County and shall provide suggestions on how best to resolve the issue.

- E. The Contractor shall exercise care in any excavation to locate all existing piping and utilities. All utilities which do not interfere with complete work shall be carefully protected against damage. Any existing utilities damaged in any way by the Contractor shall be restored or replaced by the Contractor at his expense as directed by the County.
- F. It is intended that wherever existing utilities such as water, sewer, gas, telephone, electrical, or other service lines must be crossed, deflection of the pipe within recommended limits and cover shall be used to satisfactorily clear the obstruction unless otherwise indicated in the Drawings. However, when in the opinion of the County this procedure is not feasible, he may direct the use of fittings for a utilities crossing as detailed on the Drawings. No deflections will be allowed in gravity sanitary sewer lines or in existing storm sewer lines.

1.05 SUSPENSION OF WORK DUE TO WEATHER

Refer to FDOT Standards and Specifications Book, Section 8.

1.06 HURRICANE PREPAREDNESS PLAN

- A. Within 30 days of the date of Notice to Proceed, the Contractor shall submit to the County a Hurricane Preparedness Plan. The plan should outline the necessary measures which the Contractor proposes to perform at no additional cost to the County in case of a hurricane warning.
- B. In the event of inclement weather, or whenever County shall direct, Contractor shall insure that he and his Subcontractors shall carefully protect work and materials against damage or injury from the weather. If, in the opinion of the County, any portion of work or materials is damaged due to the failure on the part of the Contractor or Subcontractors to protect the work, such work and materials shall be removed and replaced at the expense of the Contractor.

1.07 POWER SUPPLY

Electricity as may be required for construction and permanent power supply shall be secured and purchased by the Contractor.

1.08 SALVAGE

Any existing equipment or material, including, but not limited to, valves, pipes, fittings, couplings, etc., which is removed or replaced as a result of construction under this project may be designated as salvage by the County and if so shall be protected for a reasonable time until picked up by the County. Any equipment or material not worthy of salvaging, as directed by the County, shall be disposed of by the Contractor at no additional cost.

1.09 DEWATERING

- A. The Contractor shall do all groundwater pumping necessary to prevent flotation of any part of the work during construction operations with his own equipment.
- B. The Contractor shall pump out water and wastewater which may seep or leak into the excavations for the duration of the Contract and with his own equipment. He shall dispose of this water in an appropriate manner.

1.10 ADDITIONAL PROVISIONS

- A. Before commencing work on any of the existing pipelines, structures or equipment, the Contractor shall notify the County, in writing, at least 10 calendar days in advance of the date he proposes to commence such work.
- B. The Contractor shall provide, at his own expense, all necessary temporary facilities for access to and for protection of, all existing facilities. The County's personnel must have ready access at all times to the existing facilities. The Contractor is responsible for all damage to existing structures, equipment and facilities caused by his construction operations and must repair all such damage when and as ordered by the County.

1.11 CONSTRUCTION CONDITIONS

The Contractor shall strictly adhere to the specific requirements of the governmental unit(s) and/or agency(ies) having jurisdiction over the work. Wherever there is a difference in the requirements of a jurisdictional body and these Specifications, the more stringent shall apply.

1.12 PUBLIC NUISANCE

- A. The Contractor shall not create a public nuisance including but not limited to encroachment on adjacent lands, flooding of adjacent lands, excessive noise or dust.
- B. Sound levels must meet Manatee County Ordinance #87-34, (which amends Ordinance 81-3, The Manatee County Noise Control Ordinance). Sound levels in excess of such ordinance are sufficient cause to have the work halted until equipment can be quieted to these levels. Work stoppage by the County for excessive noise shall not relieve the Contractor of the other portions of this specification.
- C. No extra charge may be made for time lost due to work stoppage resulting from the creation of a public nuisance.

1.13 WARRANTIES

- A. All material supplied under these Specifications shall be warranted by the Contractor and the manufacturers for a period of three (3) years. Warranty period shall commence on the date of County acceptance.

- B. The material shall be warranted to be free from defects in workmanship, design and materials. If any part of the system should fail during the warranty period, it shall be replaced at no expense to the County. All material and installation costs shall be 100% borne by the Contractor.
- C. The manufacturer's warranty period shall run concurrently with the Contractor's warranty or guarantee period. No exception to this provision shall be allowed. The Contractor shall be responsible for obtaining warranties from each of the respective suppliers or manufacturers for all the material specified under these contract specifications,
- D. In the event that the manufacturer is unwilling to provide a three-year warranty commencing at the time of County acceptance, the Contractor shall obtain from the manufacturer a four (4) year warranty starting at the time of equipment delivery to the job site. This four-year warranty shall not relieve the Contractor of the three-year warranty starting at the time of County acceptance of the equipment.

1.14 FUEL STORAGE & FILLING

- A. If the contractor is storing fuel on site, or doing his own fuel filling of portable equipment (other than hand-held equipment), he is responsible for any required response, clean-up or reporting required, at no additional cost to the county.
- B. The Contractor shall prepare and submit a fuel storage / spill abatement plan prior to start of construction if required.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01150 MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SCOPE

- A. The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Form section of the Contract Documents. Payment will be made based on the specified items included in the description in this section for each bid item.

- B. All contract prices included in the Bid Form section will be full compensation for all shop drawings, working drawings, labor, materials, tools, equipment and incidentals necessary to complete the construction as shown on the Drawings and/or as specified in the Contract Documents to be performed under this Contract. Actual quantities of each item bid on a unit price basis will be determined upon completion of the construction in the manner set up for each item in this section of the Specifications. Payment for all items listed in the Bid Form will constitute full compensation for all work shown and/or specified to be performed under this Contract.

1.02 ESTIMATED QUANTITIES

The quantities shown are approximate and are given only as a basis of calculation upon which the award of the Contract is to be made. The County does not assume any responsibility for the final quantities, nor shall the Contractor claim misunderstanding because of such estimate of quantities. Final payment will be made only for satisfactorily completed quantity of each item.

1.03 WORK OUTSIDE AUTHORIZED LIMITS

No payment will be made for work constructed outside the authorized limits of work.

1.04 MEASUREMENT STANDARDS

Unless otherwise specified for the particular items involved, all measurements of distance shall be taken horizontally or vertically.

1.05 AREA MEASUREMENTS

In the measurement of items to be paid for on the basis of area of finished work, the lengths and/or widths to be used in the calculations shall be the final dimensions measured along the surface of the completed work within the neat lines shown or designated.

1.06 LUMP SUM ITEMS

Where payment for items is shown to be paid for on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum items. Lump sum contracts shall be complete, tested and fully operable prior to request for

final payment. Contractor may be required to provide a break-down of the lump sum totals.

1.07 UNIT PRICE ITEM

Separate payment will be made for the items of work described herein and listed on the Bid Form. Any related work not specifically listed, but required for satisfactory completion of the work shall be considered to be included in the scope of the appropriate listed work items.

No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work. Final payments shall not be requested by the Contractor or made by the County until as-built (record) drawings have been submitted and approved by the County.

1. Shop Drawings, Working Drawings.
2. Clearing, grubbing and grading except as hereinafter specified.
3. Trench excavation, including necessary pavement removal and rock removal, except as otherwise specified.
4. Dewatering and disposal of surplus water.
5. Structural fill, backfill, and grading.
6. Replacement of unpaved roadways, and shrubbery plots.
7. Cleanup and miscellaneous work.
8. Foundation and borrow materials, except as hereinafter specified.
9. Testing and placing system in operation.
10. Any material and equipment required to be installed and utilized for the tests.
11. Pipe, structures, pavement replacement, asphalt and shell driveways and/or appurtenances included within the limits of lump sum work, unless otherwise shown.
12. Maintaining the existing quality of service during construction.
13. Maintaining or detouring of traffic.
14. Appurtenant work as required for a complete and operable system.
15. Seeding and hydromulching.
16. As-built Record Drawings.

BID ITEM NO. 130 (FDOT ITEM NO. W1) - FURNISH AND INSTALL C900 DR-18 8-INCH PVC WATER MAIN

Description: This bid item describes measurement and payment for furnishing and installing C-900 DR-18 PVC pipe in open cut trenches.

Measurement: Measurement will be horizontally above the centerline of the pipe and includes the length of any valves or fittings.

Payment: Payment will be per linear foot according to the diameter, thickness, and type of joint, as set forth in the Proposal. The unit bid price includes furnishing and installing all pipe by open cut and materials above or below ground along the pipeline alignment; pavement or driveway removal and disposal, joints and jointing materials, couplings, sleeves, connections to existing mains, maintenance of service, clearing; sheeting, shoring and bracing; dewatering, excavation; erosion control; protection of culverts and drainage facilities, bedding and backfill;

compaction and testing; protection and adjusting of existing above ground and underground utilities and service connections; tracer wire including riser assemblies, identification tape, installation and removal of blow-off assemblies, issuance of boil water notices, disinfection, testing, bacteriological sampling, sampling fees, hydrostatic testing, flushing, pigging, disposal of unsuitable backfill materials, tamping, densities, clean-up, restoration, maintenance of traffic and temporary pavement replacement as required outside of roadway phasing plans, and all work and materials necessary to make a complete and working water main.

BID ITEM NO. 131 (FDOT ITEM NO. W2) - FURNISH AND INSTALL CLASS 350 8-INCH DUCTILE IRON WATER MAIN

Description: This bid item describes measurement and payment for cement mortar lined ductile iron pipe installed in open cut trenches.

Measurement: Measurement will be horizontally above the centerline of the pipe and includes the length of any valves or fittings.

Payment: Payment shall be the number of linear feet of the type and size of pipe specified in the applicable pay items, actually constructed and accepted. The unit bid price includes furnishing and installing all pipe by open cut and materials above or below ground along the pipeline alignment; jointing materials, adapters, pavement removal, making pipe connections, connections to existing mains; clearing; sheeting, shoring and bracing; dewatering, excavation; identification tape, marker poles and/or locating valve boxes, bedding and backfill; compaction and testing; constructing the specified protection and adjusting of existing above ground and underground utilities and service connections; disposal of soil; poly wrap; hydrostatic testing; flushing, pigging, disinfection and testing, issuance of boil water notices; bacteriological sampling fees, cleaning, erosion control; protection of culverts and drainage facilities and utilities, erosion and sedimentation control, surface restoration, maintenance of traffic and temporary pavement replacement as required outside of roadway phasing plans, and all other related and necessary materials, work and equipment required to construct a complete and operable pipeline.

BID ITEM NO. 132 (FDOT ITEM NO. W3) - JACK AND BORE (FDOT ITEMNO. W3) 18-INCH X 3/8-INCH STEEL CASING PIPE

Description: This bid describes measurement and payment for furnishing and installing the 18-inch casing by jack and bore method as shown on the Drawings. This includes furnishing all labor, materials, equipment and incidentals required to complete the jack and bore. No additional payment for jacking and receiving pits will be made.

Measurement: Steel casing pipe of the wall thickness and diameter specified will be measured by the linear foot of steel casing pipe installed.

Payment: Payment shall include full compensation for furnishing all labor, materials, equipment and incidentals required to complete the jack and bore as shown on the Contract Drawings and as specified in these Technical Specifications, excluding those items for which measurement and payments are separately specified. Payment shall include, but not be limited to, full compensation for all excavation, jacking and receiving pits, sheeting, shoring and bracing, steel casings, casing spacers, installation, settlement instrumentation and monitoring, contact grouting,

backfill, erosion and sedimentation control, protection of existing structures and utilities, pipe, fittings, pipe bedding, making and completing joints, drainage and dewatering, disposal of unsuitable backfill materials, compaction and grading, tamping, densities, clean-up, installation of plugs and bulkheads, saw cutting and removal of existing pavement, construction of temporary facilities, disposal of surplus excavated material and debris, restoration, maintenance of traffic and temporary pavement replacement as required outside of roadway phasing plans, and all work and materials necessary to make and install the steel casing complete. Payment for carrier pipe shall be paid for under other applicable unit prices.

BID ITEM NO. 133 (FDOT ITEM NO. W4) - FURNISH AND INSTALL 12-INCH X 3/16-INCH STEEL CASING PIPE

Description: This bid describes measurement and payment for furnishing and installing the 12-inch casing by open cut construction as shown on the Drawings. This includes furnishing all labor, materials, equipment and incidentals required to complete the installation.

Measurement: Steel casing pipe of the wall thickness and diameter specified will be measured by the linear foot of steel casing pipe installed.

Payment: Payment shall include full compensation for furnishing all labor, materials, equipment and incidentals required to complete the steel casing installation by open cut as shown on the Contract Drawings and as specified in these Technical Specifications, excluding those items for which measurement and payments are separately specified. Payment shall include, but not be limited to, full compensation for all excavation, sheeting, shoring and bracing, steel casings, installation, backfill, erosion and sedimentation control, protection of existing structures and utilities, pipe bedding, making and completing joints, drainage and dewatering, disposal of unsuitable backfill materials, compaction and grading, tamping, densities, clean-up, construction of temporary facilities, disposal of surplus excavated material and debris, restoration, maintenance of traffic and temporary pavement replacement as required outside of roadway phasing plans, and all work and materials necessary to make and install the steel casing complete.

BID ITEM NO. 134 (FDOT ITEM NO. W5) - FURNISH AND INSTALL 8-INCH GATE VALVE ASSEMBLY

Description: This bid item describes measurement and payment for furnishing and installing resilient seated gate valves with boxes complete and acceptably installed to final grade as shown on the Contract Drawings.

Measurement: Measurement will be on an individual basis for each size valve and box assembly acceptably installed.

Payment: Payment will be according to the size or type of gate valve assembly as set forth in the Proposal. The unit bid price includes all materials and installation, furnishing and installing valve, valve box, concrete pad, polywrap, piping, restraints, excavation, backfill, dewatering, sheeting, shoring, erosion and sedimentation control, testing, surface restoration, and all incidentals required for a complete valve assembly.

BID ITEM NO. 135 (FDOT ITEM NO. W6) - FURNISH AND INSTALL FIRE HYDRANT ASSEMBLY

Description: this bid item includes measurement and payment for furnishing and installing fire hydrant assemblies complete.

Measurement: Payment for furnishing and installing fire hydrants shall be on a per each basis, on the actual number of fire hydrants installed.

Payment: The unit price shall cover the cost for furnishing and installing all materials including hydrant lead piping, valves, valve boxes, concrete pad, tees, fittings, restraints, polyethylene encasement, coatings, equipment, trenching, disinfection, bacteriological sampling fees, testing, backfilling, backfill material, disposal of unsuitable backfill materials, tamping, densities, utility crossings, dewatering, trench stabilization, clean-up, restoration, maintenance of traffic and temporary pavement replacement, and all work and materials necessary to install the fire hydrant assemblies as indicated in the drawings.

BID ITEM NO. 136 (FDOT ITEM NO. W7) - FURNISH AND INSTALL AIR RELEASE ASSEMBLY

This bid item describes measurement and payment for furnishing and installing automatic air release valve assemblies complete and acceptably installed above ground to match the final grade indicated by the roadway improvement plans.

Measurement: Measurement will be on an individual basis for each automatic air release valve assembly installed as shown on the drawings or where directed by the Project Representative.

Payment: Payment will be according to the size or type of air release valve assembly, and the operation to be performed, as set forth on the Proposal. The unit bid price includes furnishing and installing the tap, isolation valve, reducers, automatic combination air release valve, restraining devices, tracer wire, piping, aboveground enclosure, concrete pads, fittings, clearing; sheeting, shoring and bracing; dewatering, excavation; tracer wire, bedding and backfill; compaction and testing; disposal of soil; hydrostatic testing; flushing, cleaning, erosion control; protection of culverts and drainage facilities and utilities, erosion and sedimentation control, surface restoration, maintenance of traffic and temporary pavement replacement as required outside of roadway phasing plans, and all other related and necessary materials, work and equipment required to construct a complete and operable air release valve assembly.

BID ITEM NOS. 137 AND 138 (FDOT ITEM NOS. W8 AND W9) - FURNISH AND INSTALL TAPPING SLEEVE AND VALVE

This bid item describes measurement and payment for furnishing and installing tapping sleeve and valve assemblies.

Measurement: Measurement will be on an individual basis for each size tapping sleeve and valve assembly including valve and valve box acceptably installed.

Payment: Payment will be according to the size and type of tapping sleeve and valve assembly as set forth on the Proposal. The unit bid price includes furnishing and

installing valves, sleeves, valve boxes and covers, extension stems, restraints, tracer wire, polywrap, excavation, dewatering, sheeting, shoring, erosion control, backfill and compaction, testing, issuance of boil water notices, disinfection, testing, bacteriological sampling fees, surface restoration, maintenance of traffic and temporary pavement replacement as required outside of roadway phasing plans, and any incidental items required for a complete tapping sleeve and valve assembly.

BID ITEM NO. 139 (FDOT ITEM NO. W10) - FURNISH AND INSTALL 8-INCH BELL RESTRAINTS

Description: This bid item describes measurement and payment for bell restraints used for installing restrained PVC and ductile iron pipe.

Measurement: The quantity to be paid for under this item shall be the number of each restraint device acceptably furnished and installed as shown on the drawings or where directed by the Project Representative.

Payment: Payment will be according to the number and size of restraints acceptably furnished and installed. The unit bid price includes furnishing and installing all restraining devices above or below ground along the pipeline alignment, excavation, shoring and sheeting; bracing; dewatering, clearing, grubbing, and stripping; trenching, bedding and backfill; adjusting of existing above ground and underground utilities and service connections; disposal of spoil; poly wrap; hydrostatic testing; sedimentation and erosion control, surface restoration and all other related and necessary materials, work and equipment required to construct a complete and operable restrained joint.

BID ITEM NO. 140 (FDOT ITEM NO. W11) - FURNISH AND INSTALL RESTRAINED DUCTIOLE IRON MECHANICAL JOINT FITTINGS

Description: This bid item describes measurement and payment for cement mortar lined ductile iron restrained mechanical joint fittings.

Measurement: The quantity to be paid for under this item shall be the weight in tons of restrained ductile iron mechanical joint fittings acceptably installed as shown on the drawings or where directed by the Project Representative. This bid item includes, but is not limited to, wyes, tees, bends, crosses, sleeves, plugs and caps, and reducers.

Payment: Payment will be according to the weight of each restrained mechanical joint fitting as denoted in the manufacturers' catalogs. The unit bid price includes furnishing and installing all fittings and materials above or below ground along the pipeline alignment; joints, and jointing materials; restraints; interior lining; shoring and sheeting; bracing; dewatering, clearing, grubbing, and stripping; trenching, bedding and backfill; adjusting of existing above ground and underground utilities and service connections; disposal of spoil; poly wrap; hydrostatic testing; erosion control, maintenance of flow, by-pass pumping (as required), surface restoration, maintenance of traffic and temporary pavement replacement as required outside of roadway phasing plans, and all other related and necessary materials, work and equipment required to construct a complete and operable pipeline fitting.

BID ITEM NO. 141 (FDOT ITEM NO. W12) - FURNISH AND INSTALL WATER METER, BACKFLOW PREVENTER, AND WATER SERVICE LINE

This bid item describes measurement and payment for furnishing all labor, equipment, and materials to install the water service line, water meter, water meter box, and backflow preventer at the location shown on the drawings or as directed by the Project Representative.

Measurement: Measurement for installing water service connections, water meters, boxes and backflow preventers shall be on a lump sum basis.

Payment: The unit price shall include the cost of all materials, labor and equipment for the removal and disposal of the existing water meter, box and backflow preventer, installation of the replacement water meter, water meter box, backflow preventer, and water service line at the location indicated on the Plans, adjustment to final grade, trenching, dewatering, sheeting, shoring, erosion control, disinfection, bacteriological sampling fees, backfilling, backfill material, disposal of unsuitable backfill materials, tamping, testing, densities, utility crossings, clean-up, surface restoration and all work and materials necessary for a complete water service connection with water meter, box, and backflow preventer.

BID ITEM NO. 142 (FDOT ITEM NO. W13) - GROUT FILL EXISTING 8-INCH WATER MAIN

This bid item describes measurement and payment for grout filling existing water mains that will be placed out of service at locations designated on the drawings. Grout shall be flowable fill in accordance with FDOT Standard Specifications.

Measurement: Measurement will be per cubic yard of grout acceptably installed.

Payment: Payment for grout fill shall be for all materials, labor, and equipment required to perform the work including excavation, sheeting, shoring, flushing, dewatering, grout, backfill, form work, protection of existing utilities; and incidental items required to complete the grouting work.

BID ITEM NO. 143 (FDOT ITEM NO. W14) - ADJUST EXISTING MANHOLE TO FINAL GRADE

This bid item describes measurement and payment for adjusting existing manhole rim and cover complete to the final grade indicated in the roadway improvement plans.

The quantity shall be per each manhole adjusted acceptably as shown on the drawings or where directed by the Project Representative.

Payment: Payment will be per each manhole adjusted as set forth on the Proposal. This bid item includes, but is not limited to manhole ring and cover; manhole adjustment rings; non-shrink grout and manhole interior coating; miscellaneous paint; clearing, sheeting, shoring and bracing, dewatering, excavation, backfill and compaction, sod, erosion and sedimentation control, protection of existing above ground and underground utilities and service connections, surface restoration, maintenance of traffic and temporary pavement replacement as required outside of roadway phasing plans, and incidental items required to adjust the manhole. The unit

bid price includes furnishing and installing all items required for a complete manhole adjustment except where such items are shown to be paid for under a separate item.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01340 SHOP DRAWINGS, PROJECT DATA AND SAMPLES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. The Contractor shall submit to the County for review and approval: working drawings, shop drawings, test reports and data on materials and equipment (hereinafter in this section called data), and material samples (hereinafter in this section called samples) as are required for the proper control of work, including, but not limited to those working drawings, shop drawings, data and samples for materials and equipment specified elsewhere in the Specifications and in the Contract Drawings.
- B. The Contractor is to maintain an accurate updated submittal log and will bring this log to each scheduled progress meeting with the County. This log should include the following items:
 - 1. Submittal description and number assigned.
 - 2. Date to County.
 - 3. Date returned to Contractor (from County).
 - 4. Status of Submittal (No exceptions taken, returned for confirmation or resubmittal, rejected).
 - 5. Date of Resubmittal and Return (as applicable).
 - 6. Date material released (for fabrication).
 - 7. Projected date of fabrication.
 - 8. Projected date of delivery to site.
 - 9. Projected date and required lead time so that product installation does not delay contact.
 - 10. Status of O&M manuals submitted.

1.03 CONTRACTOR'S RESPONSIBILITY

- A. It is the duty of the Contractor to check all drawings, data and samples prepared by or for him before submitting them to the County for review. Each and every copy of the Drawings and data shall bear Contractor's stamp showing that they have been so checked. Shop drawings submitted to the County without the Contractor's stamp will be returned to the Contractor for conformance with this requirement. Shop drawings shall indicate any deviations in the submittal from requirements of the contract Documents.
- B. Determine and verify:
 - 1. Field measurements.
 - 2. Field construction criteria.
 - 3. Catalog numbers and similar data.
 - 4. Conformance with Specifications and indicate all variances from the Specifications.
- C. The Contractor shall furnish the County a schedule of Shop Drawing submittals fixing the respective dates for the submission of shop and working drawings, the

beginning of manufacture, testing and installation of materials, supplies and equipment. This schedule shall indicate those that are critical to the progress schedule.

- D. The Contractor shall not begin any of the work covered by a drawing, data, or a sample returned for correction until a revision or correction thereof has been reviewed and returned to him, by the County, with No Exceptions Taken or Approved As Noted.
- E. The Contractor shall submit to the County all drawings and schedules sufficiently in advance of construction requirements to provide no less than twenty-one (21) calendar days for checking and appropriate action from the time the County receives them.
- F. All material & product submittals, other than samples, may be transmitted electronically as a pdf file. All returns to the contractor will be as a pdf file only unless specifically requested otherwise.
- G. The Contractor shall be responsible for and bear all cost of damages which may result from the ordering of any material or from proceeding with any part of work prior to the completion of the review by County of the necessary Shop Drawings.

1.04 COUNTY'S REVIEW OF SHOP DRAWINGS AND WORKING DRAWINGS

- A. The County's review of drawings, data and samples submitted by the Contractor shall cover only general conformity to the Specifications, external connections and dimensions which affect the installation.
- B. The review of drawings and schedules shall be general and shall not be construed:
 - 1. As permitting any departure from the Contract requirements.
 - 2. As relieving the Contractor of responsibility for any errors, including details, dimensions and materials.
 - 3. As approving departures from details furnished by the County, except as otherwise provided herein.
- C. If the drawings or schedules as submitted describe variations and show a departure from the Contract requirements which the County finds to be in the interest of the County and to be so minor as not to involve a change in Contract Price or time for performance, the County may return the reviewed drawings without noting any exception.
- D. When reviewed by the County, each of the Shop and Working Drawings shall be identified as having received such review being so stamped and dated. Shop Drawings stamped "REJECTED" and with required corrections shown shall be returned to the Contractor for correction and resubmittal.
- E. Resubmittals will be handled in the same manner as first submittals. On resubmittals, the Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, to revisions other than the corrections requested by the County on previous submissions. The Contractor shall make any corrections required by the County.

- F. If the Contractor considers any correction indicated on the drawings to constitute a change to the Contract Drawings or Specifications, the Contractor shall give written notice thereof to the County.
- G. The County shall review a submittal/resubmittal a maximum of three (3) times after which cost of review shall be borne by the Contractor. The cost of engineering shall be equal to the County's actual payroll cost.
- H. When the Shop and Working Drawings have been completed to the satisfaction of the County, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the County.
- I. No partial submittals shall be reviewed. Incomplete submittals shall be returned to the Contractor and shall be considered not approved until resubmitted.

1.05 SHOP DRAWINGS

- A. When used in the Contract Documents, the term "Shop Drawings" shall be considered to mean Contractor's plans for material and equipment which become an integral part of the Project. These drawings shall be complete and detailed. Shop Drawings shall consist of fabrication, drawings, setting drawings, schedule drawings, manufacturer's scale drawings and wiring and control diagrams. Cuts, catalogs, pamphlets, descriptive literature and performance and test data, shall be considered only as supportive to required Shop Drawings as defined above.
- B. Drawings and schedules shall be checked and coordinated with the work of all trades involved, before they are submitted for review by the County and shall bear the Contractor's stamp of approval and original signature as evidence of such checking and coordination. Drawings or schedules submitted without this stamp of approval and original signature shall be returned to the Contractor for resubmission.
- C. Each Shop Drawing shall have a blank area 3-1/2 inches by 3-1/2 inches, located adjacent to the title block. The title block shall display the following:
 - 1. Number and title of the drawing.
 - 2. Date of Drawing or revision.
 - 3. Name of project building or facility.
 - 4. Name of contractor and subcontractor submitting drawing.
 - 5. Clear identification of contents and location of the work.
 - 6. Specification title and number.
- D. If drawings show variations from Contract requirements because of standard shop practice or for other reasons, the Contractor shall describe such variations in his letter of transmittal. If acceptable, proper adjustment in the contract shall be implemented where appropriate. If the Contractor fails to describe such variations, he shall not be relieved of the responsibility of executing the work in accordance with the Contract, even though such drawings have been reviewed.

- E. Data on materials and equipment shall include, without limitation, materials and equipment lists, catalog sheets, cuts, performance curves, diagrams, materials of construction and similar descriptive material. Materials and equipment lists shall give, for each item thereon, the name and location of the supplier or manufacturer, trade name, catalog reference, size, finish and all other pertinent data.
- F. For all mechanical and electrical equipment furnished, the Contractor shall provide a list including the equipment name and address and telephone number of the manufacturer's representative and service company so that service and/or spare parts can be readily obtained.
- G. All manufacturers or equipment suppliers who proposed to furnish equipment or products shall submit an installation list to the County along with the required shop drawings. The installation list shall include at least five installations where identical equipment has been installed and have been in operation for a period of at least one (1) year.
- H. Only the County will utilize the color "red" in marking shop drawing submittals.

1.06 WORKING DRAWINGS

- A. When used in the Contract Documents, the term "working drawings" shall be considered to mean the Contractor's fabrication and erection drawings for structures such as roof trusses, steelwork, precast concrete elements, bulkheads, support of open cut excavation, support of utilities, groundwater control systems, forming and false work; underpinning; and for such other work as may be required for construction of the project.
- B. Copies of working drawings as noted above, shall be submitted to the County where required by the Contract Documents or requested by the County and shall be submitted at least thirty (30) days (unless otherwise specified by the County) in advance of their being required for work.
- C. Working drawings shall be signed by a registered Professional Engineer, currently licensed to practice in the State of Florida and shall convey, or be accompanied by, calculation or other sufficient information to completely explain the structure, machine, or system described and its intended manner of use. Prior to commencing such work, working drawings must have been reviewed without specific exceptions by the County, which review will be for general conformance and will not relieve the Contractor in any way from his responsibility with regard to the fulfillment of the terms of the Contract. All risks of error are assumed by the Contractor; the County and Engineer shall not have responsibility therefor.

1.07 SAMPLES

- A. The Contractor shall furnish, for the review of the County, samples required by the Contract Documents or requested by the County. Samples shall be delivered to the County as specified or directed. The Contractor shall prepay all shipping charges on samples. Materials or equipment for which samples are required shall not be used in work until reviewed by the County.
- B. Samples shall be of sufficient size and quantity to clearly illustrate:

1. Functional characteristics of the product, with integrally related parts and attachment devices.
 2. Full range of color, texture and pattern.
 3. A minimum of two samples of each item shall be submitted.
- C. Each sample shall have a label indicating:
1. Name of product.
 2. Name of Contractor and Subcontractor.
 3. Material or equipment represented.
 4. Place of origin.
 5. Name of Producer and Brand (if any).
 6. Location in project.
(Samples of finished materials shall have additional markings that will identify them under the finished schedules.)
 7. Reference specification paragraph.
- D. The Contractor shall prepare a transmittal letter in triplicate for each shipment of samples containing the information required above. He shall enclose a copy of this letter with the shipment and send a copy of this letter to the County. Review of a sample shall be only for the characteristics or use named in such and shall not be construed to change or modify any Contract requirements.
- E. Reviewed samples not destroyed in testing shall be sent to the County or stored at the site of the work. Reviewed samples of the hardware in good condition will be marked for identification and may be used in the work. Materials and equipment incorporated in work shall match the reviewed samples. If requested at the time of submission, samples which failed testing or were rejected shall be returned to the Contractor at his expense.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01370 SCHEDULE OF VALUES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. The Contractor shall submit to the County a Schedule of Values allocated to the various portions of the work, within 10 days after date of Notice to Proceed.
- B. Upon request of the County, the Contractor shall support the values with data which will substantiate their correctness.
- C. The Schedule of Values shall be used only as the basis for the Contractor's Applications for Payment.

1.02 FORM AND CONTENT OF SCHEDULE OF VALUES

- A. Schedule of Values will be considered for approval by County upon Contractor's request. Identify schedule with:
 - 1. Title of Project and location.
 - 2. Project number.
 - 3. Name and address of Contractor.
 - 4. Contract designation.
 - 5. Date of submission.
- B. Schedule of Values shall list the installed value of the component parts of the work in sufficient detail to serve as a basis for computing values for progress payments during construction.
- C. Follow the table of contents for the Contract Document as the format for listing component items for structures:
 - 1. Identify each line item with the number and title of the respective major section of the specification.
 - 2. For each line item, list sub values of major products or operations under item.
- D. Follow the bid sheets included in this Contract Documents as the format for listing component items for pipe lines.
- E. The sum of all values listed in the schedule shall equal the total Contract sum.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01510 TEMPORARY AND PERMANENT UTILITIES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

The Contractor shall be responsible for furnishing all requisite temporary utilities, i.e., power, water, sanitation, etc. The Contractor shall obtain and pay for all permits required as well as pay for all temporary usages. The Contractor shall remove all temporary facilities upon completion of work.

1.02 REQUIREMENTS OF REGULATORY AGENCIES

- A. Comply with National Electric Code.
- B. Comply with Federal, State and Local codes and regulations and with utility company requirements.
- C. Comply with County Health Department regulations.

PART 2 PRODUCTS

2.01 MATERIALS, GENERAL

Materials for temporary utilities may be "used". Materials for electrical utilities shall be adequate in capacity for the required usage, shall not create unsafe conditions and shall not violate requirements of applicable codes and standards.

2.02 TEMPORARY ELECTRICITY AND LIGHTING

Arrange with the applicable utility company for temporary power supply. Provide service required for temporary power and lighting and pay all costs for permits, service and for power used.

2.03 TEMPORARY WATER

- A. The Contractor shall arrange with Manatee County Utilities Customer Service office to provide water for construction purposes, i.e., meter, pay all costs for installation, maintenance and removal, and service charges for water used.
- B. The Contractor shall protect piping and fitting against freezing.

2.04 TEMPORARY SANITARY FACILITIES

- A. The Contractor shall provide sanitary facilities in compliance with all laws and regulations.
- B. The Contractor shall service, clean and maintain facilities and enclosures.

PART 3 EXECUTION

3.01 GENERAL

- A. The Contractor shall maintain and operate systems to assure continuous service.
- B. The Contractor shall modify and extend systems as work progress requires.

3.02 REMOVAL

- A. The Contractor shall completely remove temporary materials and equipment when their use is no longer required.
- B. The Contractor shall clean and repair damage caused by temporary installations or use of temporary facilities.

END OF SECTION

SECTION 01720 PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

A. Contractor shall maintain at the site for the County one record copy of:

1. Drawings.
2. Specifications.
3. Addenda.
4. Change Orders and other modifications to the Contract.
5. County's field orders or written instructions.
6. Approved shop drawings, working drawings and samples.
7. Field test records.
8. Construction photographs.

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

A. Store documents and samples in Contractor's field office apart from documents used for construction.

1. Provide files and racks for storage of documents.
2. Provide locked cabinet or secure storage space for storage of samples.

B. File documents and samples in accordance with CSI format.

C. Maintain documents in a clean, dry, legible, condition and in good order. Do not use record documents for construction purposes.

D. Make documents and samples available at all times for inspection by the County.

1.03 MARKING DEVICES

A. Provide felt tip marking pens for recording information in the color code designated by the County.

1.04 RECORDING

A. Label each document "PROJECT RECORD" in neat large printed letters.

B. Record information concurrently with construction progress.

C. Do not conceal any work until required information is recorded.

D. Drawings; Legibly mark to record actual construction:

1. All underground piping with elevations and dimensions. Changes to piping location. Horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements. Actual installed pipe material, class, etc. Locations of drainage ditches, swales,

water lines and force mains shall be shown every 200 feet (measured along the centerline) or alternate lot lines, whichever is closer. Dimensions at these locations shall indicate distance from centerline of right-of-way to the facility.

2. Field changes of dimension and detail.
3. Changes made by Field Order or by Change Order.
4. Details not on original contract drawings.
5. Equipment and piping relocations.
6. Locations of all valves, fire hydrants, manholes, water and sewer services, water and force main fittings, underdrain cleanouts, catch basins, junction boxes and any other structures located in the right-of-way or easement, shall be located by elevation and by station and offset based on intersection P.I.'s and centerline of right-of-way. For facilities located on private roads, the dimensioning shall be from centerline of paving or another readily visible baseline.
7. Elevations shall be provided for all manhole rim and inverts; junction box rim and inverts; catch basin rim and inverts; and baffle, weir and invert elevations in control structures. Elevations shall also be provided at the PVI's and at every other lot line or 200 feet, whichever is less, of drainage swales and ditches. Bench marks and elevation datum shall be indicated.
8. Slopes for pipes and ditches shall be recalculated, based on actual field measured distances, elevations, pipe sizes, and type shown. Cross section of drainage ditches and swales shall be verified.
9. Centerline of roads shall be tied to right-of-way lines. Elevation of roadway centerline shall be given at PVI's and at all intersections.
10. Record drawings shall show bearings and distances for all right-of-way and easement lines, and property corners.
11. Sidewalks, fences and walls, if installed at the time of initial record drawing submittal, shall be located every 200 feet or alternate lot lines, whichever is closer. Dimensions shall include distance from the right-of-way line and the back of curb and lot line or easement line.
12. Sanitary sewer mainline wyes shall be located from the downstream manhole. These dimensions shall be provided by on-site inspections or televising of the sewer following installation.
13. Elevations shall be provided on the top of operating nuts for all water and force main valves.
14. Allowable tolerance shall be ± 6.0 inches for horizontal dimensions. Vertical dimensions such as the difference in elevations between manhole inverts shall have an allowable tolerance of $\pm 1/8$ inch per 50 feet (or part thereof) of horizontal distance up to a maximum tolerance of ± 2 inch.
15. Properly prepared record drawings on mylar, together with two copies, shall be certified by a design professional (Engineer and/or Surveyor registered in the State of Florida), employed by the Contractor, and submitted to the County.

E. Specifications and Addenda; Legibly mark each Section to record:

1. Manufacturer, trade name, catalog number and supplier of each product and item of equipment actually installed.
2. Changes made by field order or by change order.

- F. Shop Drawings (after final review and approval):
 - 1. Five sets of record drawings for each process equipment, piping, electrical system and instrumentation system.

1.05 SUBMITTAL

- A. Prior to substantial completion and prior to starting the bacteria testing of water lines, deliver signed and sealed Record Documents and Record Drawings to the County. These will be reviewed and verified by the inspector. If there are any required changes or additions, these shall be completed and the entire signed and sealed set resubmitted prior to final pay application.
- B. The Contractor shall employ a Professional Engineer or Surveyor registered in the State of Florida to verify survey data and properly prepare record drawings. Record drawings shall be certified by the professional(s) (Engineer or Surveyor licensed in Florida), as stipulated by the Land Development Ordinance and submitted on signed and sealed paper drawings, signed and dated mylar drawings together with an AutoCAD version on a recordable compact disk (CD).
- C. The CD shall contain media in AutoCad Version 2004 or later, or in any other CAD program compatible with AutoCad in DWG or DXF form. All fonts, line types, shape files or other pertinent information used in the drawing and not normally included in AutoCad shall be included on the media with a text file or attached noted as to its relevance and use.
- D. Accompany submittal with transmittal letter, containing:
 - 1. Date.
 - 2. Project title and number.
 - 3. Contractor's name and address.
 - 4. Title and number of each Record Document.
 - 5. Signature of Contractor or his authorized representative.

Note: The data required to properly prepare these record drawings shall be obtained at the site, at no cost to the County by the responsible design professional or his/her duly appointed representative. The appointed representative shall be a qualified employee of the responsible design professional or a qualified inspector retained by the responsible design professional on a project-by-project basis.

PART 2 STANDARDS

2.01 MINIMUM RECORD DRAWING STANDARDS FOR ALL RECORD DRAWINGS SUBMITTED TO MANATEE COUNTY

- A. Record drawings shall be submitted to at least the level of detail in the contract documents. It is anticipated that the original contract documents shall serve as at least a background for all record information. Original drawings in CAD format may be requested of the County.
- B. Drawings shall meet the criteria of paragraph 1.04 D above.

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01740 WARRANTIES AND BONDS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Compile specified warranties and bonds.
- B. Compile specified service and maintenance contracts.
- C. Co-execute submittals when so specified.
- D. Review submittals to verify compliance with Contract Documents.
- E. Submit to County for review and transmittal.

1.02 SUBMITTAL REQUIREMENTS

- A. Assemble warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, suppliers and subcontractors.
- B. Number of original signed copies required: Two each.
- C. Table of Contents: Neatly typed, in orderly sequence. Provide complete information for each item.
 - 1. Product or work item.
 - 2. Firm, with name of principal, address and telephone number.
 - 3. Scope.
 - 4. Date of beginning of warranty, bond or service and maintenance contract.
 - 5. Duration of warranty, bond or service maintenance contract.
 - 6. Provide information for County's personnel:
 - a. Proper procedure in case of failure.
 - b. Instances which might affect the validity of warranty or bond.
 - 7. Contractor, name of responsible principal, address and telephone number.

1.03 FORM OF SUBMITTALS

- A. Prepare in duplicate packets.
- B. Format:
 - 1. Size 8-1/2 inch x 11 inch punched sheets for standard 3-ring binder. Fold larger sheets to fit into binders.
 - 2. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS". List:
 - a. Title of Project.
 - b. Name of Contractor.
- C. Binders: Commercial quality, three-ring, with durable and cleanable plastic covers.

1.04 TIME OF SUBMITTALS

- A. Make submittals within ten days after date of substantial completion and prior to final request for payment.
- B. For items of work, where acceptance is delayed materially beyond date of substantial completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

1.05 SUBMITTALS REQUIRED

- A. Submit warranties, bonds, service and maintenance contracts as specified in respective sections of Specifications.
- B. Approval by the County of all documents required under this section is a prerequisite to requesting a final inspection and final payment

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

DIVISION 2 SITE WORK

SECTION 02060 JACK AND BORE

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. The Work of this Section includes all labor, machinery, construction equipment and appliances required to perform in a workmanlike manner all boring and jacking of pipeline casings and installation of pipe therein.
 - 1. The overall work scope shall include, but not be limited to, boring and jacking pits and equipment, sheeting, steel casing pipe, casing spacers, coatings, location signs as required, installation of the carrier pipe within the casings, miscellaneous appurtenances to complete the entire WORK as shown on the CONTRACT DRAWINGS, and restoration. Boring and jacking operations shall be performed within the right-of-way and/or easements shown on the DRAWINGS.
- B. The equipment used in boring and jacking casings shall be of adequate commercial size and satisfactory working condition for safe operation, and may be subject to approval by the County at the discretion of the Engineer. Such approval, however, shall not relieve the Contractor of the responsibility for making a satisfactory installation meeting the criteria set forth herein. Only workmen experienced in boring and jacking operations shall be used in performing the Work.
- C. Provide all structures, safety equipment, and professional services required to provide for the health and safety of the general public and of personnel involved in pipe boring and jacking work in accordance with the requirements of the regulatory agencies having jurisdiction.
- D. Take all measures necessary to protect surrounding public and private property, adjacent buildings, roads, drives, sidewalks, drains, sewers, utilities, trees, structures, and appurtenances from damage due to pipe boring and jacking work. Responsibility and payment for correction of such damage shall be the sole responsibility of the CONTRACTOR.

1.2 REFERENCE DOCUMENTS

- A. American Society for Testing and Materials (ASTM).
- B. American Water Works Associations (AWWA).

1.3 RELATED WORK

- A. Section 02261 - Shaft Excavation and Support
- B. Section 02600 - Steel Casing Pipe
- C. Section 02445 - Settlement Instrumentation and Monitoring
- D. Section 03360 - Annular Space and Contact Grouting

PART 2 - PRODUCTS

2.1 PIPE CASING

- A. Steel casing pipe shall be 18-inch internal diameter, minimum wall thickness of 3/8-inch, welded steel pipe construction in accordance with AWWA C200 or press-fit connection pipe. Field welding of the casing pipe shall be in accordance with AWWA C206 and FDOT specifications.
- B. Pipe casing to be placed by jacking methods shall be of sufficient thickness and axial strength to withstand the forces to be encountered during the jacking process.

2.2 CARRIER PIPE

- A. The carrier pipe material shall be in accordance with the Contract Drawings and specifications and will be restrained with bell restraints.

2.3 CASING SPACERS

- A. All casing spacers on 16-inch and smaller carrier pipe shall have 8-inch wide 14 gauge steel bands, and those 18-inch and larger shall have 12-inch wide 14 gauge steel bands. The bands shall come with a pre-fitted .90-inch thick EPDM or polyvinyl chloride liner with durometer hardness of "A" 85-90.
- B. All casing spacers 12-inches and smaller shall have four 10 gauge MIG welded steel risers (2 top and 2 bottom) and those 14-inch thru 36-inch shall have six 10 gauge MIG welded steel risers (2 top and 4 bottom). The runners shall be attached to the risers by projection welding studs with all cavities in the runner filled with a non-conductive, corrosion resistant caulk. Exposed bolts and nuts used to attach the runner to the riser will not be accepted. Each runner shall be 2-inches in diameter and shall be made of glass reinforced plastic with a compression and tensile strength of no less than 18,000 psi and 17,600 psi, respectively.
- C. All bolts, nuts, and washers to attach spacer sections together shall be cadmium plated 5/16"-18 x 2½" studs with 5/16" hex nuts and 5/16" washers (SAE 2330). The finish coating on all exposed steel (excluding hardware) shall be a 10 to 16 mil factory applied fusion bonded polyvinyl chloride.
- D. All casing spacers shall be made of mild steel with the above PVC fusion bonded coating. All casing spacers shall be of the type manufactured by Pipeline Seal and Insulators, model C8G-2 16-inch and smaller, and model C12G-2 18-inch thru 36-inch, Cascade Waterworks Mfg. Co., or approved equal. Centered positioning within the casing will require the risers and runners to be dimensioned to center the carrier pipe in the casing with a top clearance of one-half inch minimum.
- E. End Seals shall be used to completely close both openings of all crossings. These end seals shall be of the model "C" or "W" as manufactured by PSI, or approved equal. End seals shall be no less than 1/8" thick and made of specially compounded synthetic rubber.

PART 3 - EXECUTION

3.1 GENERAL

- A. The installation of pipeline casings under the railroad or roadway as shown on the drawings shall be in accordance with all the requirements of the railway company, the Florida Department of Transportation, Manatee County, or other governing regulatory agency.

3.2 EXCAVATION

- A. A two-inch auger pilot hole shall first be attempted to determine if rock will prevent the installation of the casing. If the pilot hole is successfully made, the casing shall be installed. The leading section of casing shall be equipped with a jacking head securely anchored thereto to prevent any wobble or variation in alignment during the jacking operation. Excavation shall be performed entirely within the jacking head and no excavation in advance thereof shall be permitted. Every effort shall be made to avoid any loss of earth outside the jacking head. Excavated material shall be removed from the casing as excavation progresses, and no accumulation of such material within the casing will be permitted.

3.3 BORING AND JACKING

- A. The boring and jacking operations shall be done simultaneously with correct line and grade carefully maintained for the casing. Holes for casing shall be bored with an auger mounted inside the pipe with the auger extending a short distance beyond the lead end of the pipe to preclude caving. Excavating for jacking pits or shafts shall be in accordance with applicable sections of these specifications. Utility pipes shall have manufacturer's restrained joints and shall be supported to prevent damages to either utility pipe or casing pipe. The ends of the casing pipe shall be sealed with brick and mortar after installation of the utility pipe.
- B. The top of the casing shall maintain a minimum of 36-inch clearance under the roadway surface or as indicated on the Drawings. The invert elevation of the steel casing for the individual roadway crossings shall be set in the field by the Contractor and shall be based on the minimum vertical clearance between the top of the utility pipe, unless otherwise indicated on the Drawings, and the existing utilities on either side of the crossing site unless otherwise noted on the Drawings. Casing invert elevations which are proposed by the Contractor are subject to approval by the Engineer.

3.4 GROUND MOVEMENT MONITORING

- A. Carry out operations to minimize settlement and/or heave of the ground and be responsible for all damage due to settlement consolidation or heave from and construction induced activities.
- B. Submit a settlement surveying and monitoring plan for review prior to construction. Identify the location of settlement monitoring points, reference benchmarks, survey schedules and procedures and reporting formats.
- C. Utilize surface monitoring points established at the ground surface nails or other suitable markers suitably guarded and capable of withstanding HS-20 truck loading.

- D. Establish benchmarks sufficiently removed from the construction to avoid errors in readings due to ground movement
- E. In the event of objectionable movement (in excess of 0.75 inches) of the ground surface, structure or utility being monitored, stop, notify ENGINEER and secure the work. Before proceeding, correct any problems causing or resulting from such movement entirely at CONTRACTOR's own expense.
- F. Location and survey of settlement monitoring survey points shall include the following:
 - 1. Record the horizontal coordinates and elevations (with an accuracy of 0.01 feet) for each survey point location. Reference survey points so that they may be accurately re-established if lost or destroyed.
 - 2. Locate the following minimum survey points at crossings:
 - Roads - Centerline and each shoulder
 - Utility and pipelines - Directly above and 10 feet before and after the intersection.
 - Road Abutments and Other Structures - Install geotechnical monitoring devices such as inclinometers as requested and as directed by the CONSTRUCTION MANAGER.
 - 3. Commence taking readings when the jack and bore operation commences. Take readings daily. Continue monitoring for a least 1 week after completion of any drive section.
 - 4. Immediately report to the ENGINEER any movement, cracking, or settlement which is detected and take immediate remedial action. Assume full responsibility for any damage caused.

3.5 LOSS OF GROUND

- A. Should appreciable loss of ground occur during the jacking operation, the voids shall be filled promptly to the extent practicable with grout in accordance with Section 03360 - Annular Space and Contact Grouting.

3.6 TOLERANCES

- A. Extreme care shall be exercised by the Contractor to maintain line and grade during jacking operation, and the Contractor may be required to modify the manner in which he is conducting his jacking operation to correct any deviation when deemed necessary by the Engineer.

3.7 RESPONSIBILITY

- A. The Contractor shall be fully responsible for the placement of the casing. The details shown on the Contract Drawings are to be considered minimum only.

3.8 INSTALLATION OF PIPE

- A. The pipe shall be installed in the casing on casing spacers of sufficient thickness to prevent the pipe bells from resting directly on the casing and to align the pipe to meet the grade specified. Casing spacers shall be secured to the carrier pipe at all pipe joints and intermediate supports as necessary. Casing spacers shall have a non-slip ribbed PVC extrusion
- B. The pipe shall not be pushed into the casing. The pressure of sliding in the casing spacers and pipe shall be applied to the casing spacers, not the pipe.
- C. Adjust the pipe grade as required by changing the thickness of the skids or casing spacer runners to compensate for any grade variations of the casing.
- D. If the alignment of the casing is such that the pipe grade cannot be met, the grade of the pipe shall, if required by the Engineer, be adjusted. If realignment is not deemed feasible by the Engineer, another casing meeting the required grade shall be installed. The abandoned casing shall be filled with sand and the ends plugged with 12-inch thick masonry plugs. Realignment or replacement work shall in no way result in extra cost to the County.

3.9 INSURANCE REQUIREMENTS AND FEES

- A. With respect to railway line crossings, the Contractor shall provide insurance in accordance with the Railroad Company requirements.
- B. All work performed within the State of Florida Department of Transportation rights-of-way or within the Railroad property limits shall be in accordance with the requirements of those agencies which are hereby made a part of these specifications. It is the responsibility of the Contractor to determine all requirements of these agencies and to comply with said requirements including any necessary bonds, cash deposit, or insurance.
- C. The Contractor will not be permitted to commence work on the railroad or highway crossing until bonds, cash deposits, or insurance furnished pursuant to the above by the Contractor is to the satisfaction of the railroad company or Florida Department of Transportation.

3.10 DISPOSAL OF EXCAVATED MATERIAL

- A. The Contractor shall make adequate provisions for handling excess excavated material at the entry and exit pits.
- B. When the Contractor's provisions for storage of excess excavated material onsite are exceeded, these materials shall be hauled away to a suitable legal disposal site.

3.11 SUCCESSFUL COMPLETION

- A. The Contractor shall be considered as having completed the requirements of any one boring or jacking project when he has successfully completed the work to the satisfaction of the Engineer.

- B. The locations of any second or third attempts shall have the concurrence of the Engineer and shall be performed by the Contractor at no additional cost to the Owner. If, after three attempts, the Contractor is not able to complete a boring or jacking, he shall request authorization to use a trench. If such authorization is granted, the installation of the pipe and restoration of the surface shall be at no additional cost except that the Contractor shall be reimbursed for any casing abandoned in place at the unit price set forth in the Unit Price Schedule for Change Orders. If such authorization is not granted and the Contractor is required to utilize other approved methods, it shall be considered additional work. However, appropriate credit shall be given for not having performed the borings or trenching.

END OF SECTION

SECTION 02100 SITE PREPARATION

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. This Section covers clearing, grubbing and stripping of the project site and/or along the pipeline route.
- B. The Contractor shall clear and grub all of the area within the limits of construction or as required, which includes, but is not limited to utility easements. The width of the area to be cleared shall be reviewed by the County prior to the beginning of any clearing.
- C. The Contractor's attention is directed to any Soil Erosion and Sediment Control Ordinances in force in Manatee County. The Contractor shall comply with all applicable sections of these ordinances.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 CLEARING

The surface of the ground, for the area to be cleared and grubbed shall be completely cleared of all timber, brush, stumps, roots, grass, weeds, rubbish and all other objectionable obstructions resting on or protruding through the surface of the ground. However, trees shall be preserved as hereinafter specified unless otherwise designated by the County. Clearing operations shall be conducted so as to prevent damage to existing structures and installations and to those under construction, so as to provide for the safety of employees and others. Soil erosion control devices such as hay bales and silt fences shall be installed to satisfy all Federal, State and County requirements.

3.02 GRUBBING

Grubbing shall consist of the complete removal of all stumps, roots larger than 1-1/2 inches in diameter, matted roots, brush, timber, logs and any other organic or metallic debris not suitable for foundation purposes, resting on, under or protruding through the surface of the ground to a depth of 18 inches below the subgrade. All depressions excavated below the original ground surface for or by the removal of such objects, shall be refilled with suitable materials and compacted to a density conforming to the surrounding ground surface.

3.03 STRIPPING

In areas so designated, topsoil shall be stockpiled. Topsoil so stockpiled shall be protected until it is placed as specified. The County shall have the option to receive all excess topsoil materials. The Contractor shall pay all equipment and labor cost to deliver excess top soil material to a remote site chosen by the County within a five mile radius of the construction site. Should County not choose to receive any

or all excess topsoil materials, the Contractor shall dispose of said material at no additional cost to County.

3.04 DISPOSAL OF CLEARED AND GRUBBED MATERIAL

The Contractor shall dispose of all material and debris from the clearing and grubbing operation by hauling such material and debris off site. The cost of disposal (including hauling) of cleared and grubbed material and debris shall be considered a subsidiary obligation of the Contractor; the cost of which shall be included in the prices bid for the various classes of work.

3.05 PRESERVATION OF TREES

Those trees which are not designated for removal by the County shall be carefully protected from damage. The Contractor shall erect such barricades, guards and enclosures as may be considered necessary by him for the protection of the trees during all construction operation.

3.06 PRESERVATION OF DEVELOPED PRIVATE PROPERTY

- A. The Contractor shall exercise extreme care to avoid unnecessary disturbance of developed private property adjacent to proposed project site. Trees, shrubbery, gardens, lawns and other landscaping, which are not designated by the County to be removed, shall be replaced and replanted to restore the construction easement to the condition existing prior to construction.
- B. All soil preservation procedures and replanting operations shall be under the supervision of a nursery representative experienced in such operations.
- C. Improvements to the land such as fences, walls, outbuildings and other structures which of necessity must be removed, shall be replaced with equal quality materials and workmanship.
- D. The Contractor shall clean up the construction site across developed private property directly after construction is completed upon approval of the County.

3.07 PRESERVATION OF PUBLIC PROPERTY

The appropriate paragraphs of these Specifications shall apply to the preservation and restoration of public lands, parks, rights-of-way, easements and all other damaged areas. This includes, but is not limited to the trimming of trees damaged by contractor's equipment.

END OF SECTION

SECTION 02221 TRENCHING, BEDDING AND BACKFILL FOR PIPE

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. The Contractor shall furnish all labor, materials, equipment and incidentals necessary to perform all excavation, backfill, fill, grading, trench protection or other related work required to complete the piping work shown on the Drawings and specified herein. The work shall include, but not be limited to: vaults; duct conduit; pipe; roadways and paving; backfilling; required fill or borrow operations; grading; disposal of surplus and unsuitable materials; and all related work such as sheeting, bracing and dewatering.
- B. Prior to commencing work, the Contractor shall examine the site and review test borings if available, or undertake his own subsurface investigations and take into consideration all conditions that may affect his work.
- C. The Contractor is responsible for the protection of every tree which is scheduled to remain in the project area. This includes trees which may or may not be shown on the plans. Every tree shall be adequately protected in place at no additional cost to the County. This includes, but is not limited to protecting the root systems and adjusting grades as necessary for tree/root protection.

1.02 PROTECTION

- A. Sheeting and Bracing in Excavations:
 - 1. In connection with construction of underground structures, the Contractor shall properly construct and maintain cofferdams. These shall consist of: sheeting and bracing as required to support the sides of excavations, to prevent any movement which could in any way diminish the width of the excavation below that necessary for proper construction and to protect adjacent structures, existing yard pipe and/or foundation material from disturbance, undermining, or other damage. Care shall be taken to prevent voids outside of the sheeting, but if voids are formed, they shall be immediately filled and rammed.
 - 2. Trench sheeting for pipes: no sheeting is to be withdrawn if driven below, mid-diameter of any pipe and no wood sheeting shall be cut off at a level lower than one foot above the top of any pipe unless otherwise directed by the County. During the progress of the work, the County may direct the Contractor in writing to leave additional wood sheeting in place. If steel sheeting is used for trench sheeting, removal shall be as specified above, unless written approval is given for an alternate method of removal.
 - 3. All sheeting and bracing not left in place shall be carefully removed in such a manner as not to endanger the construction or other structures, utilities, existing piping, or property. Unless otherwise approved or indicated on the Drawings or in the Specification, all sheeting and bracing shall be removed after completion of the piping or structure, care being taken not to disturb or otherwise injure the pipeline or finished masonry. All voids left or caused by withdrawal of sheeting shall be immediately refilled with sand by

- ramming with tools specifically made for that purpose, by watering, or as may otherwise be directed.
4. The Contractor shall construct, to the extent he deems it desirable for his method of operation, the cofferdams and sheeting outside the neat lines of the pipeline trench or foundation unless otherwise indicated on the Drawings or directed by the County. Sheeting shall be plumb and securely braced and tied in position. Sheeting, bracing and cofferdams shall be adequate to withstand all pressures to which the pipeline or structure will be subjected. Pumping, bracing and other work within the cofferdam shall be done in a manner to avoid disturbing any construction of the pipeline or the enclosed masonry. Any movement or bulging which may occur shall be corrected by the Contractor at his own expense so as to provide the necessary clearances and dimensions.
 5. Drawings of the cofferdams and design computations shall be submitted to the County and approved prior to any construction. However, approval of these drawings shall not relieve the Contractor of the responsibility for the cofferdams. The drawings and computations shall be prepared and stamped by a Registered Professional Engineer in the State of Florida and shall be in sufficient detail to disclose the method of operation for each of the various stages of construction, if required, for the completion of the pipeline and substructures.

B. Dewatering, Drainage and Flotation

1. The Contractor shall construct and place all pipelines, concrete work, structural fill, bedding rock and limerock base course, in-the-dry. In addition, the Contractor shall make the final 24" of excavation for this work in-the-dry and not until the water level is a minimum of 6" below proposed bottom of excavation.
2. The Contractor shall, at all times during construction, provide and maintain proper equipment and facilities to remove promptly and dispose of properly all water entering excavation and keep such excavations dry so as to obtain a satisfactory undisturbed subgrade foundation condition until the fill, structure, or pipes to be built thereon have been completed to such extent that they will not be floated or otherwise damaged by allowing water levels to return to natural elevations.
3. Dewatering shall at all times be conducted in such a manner as to preserve the natural undisturbed bearing capacity of the subgrade soils at proposed bottom of excavation.
4. Wellpoints may be required for dewatering the soil prior to final excavation for deeper in-ground structures or piping and for maintaining the lowered groundwater level until construction has been completed to avoid the structure, pipeline, or fill from becoming floated or otherwise damaged. Wellpoints shall be surrounded by suitable filter sand and no fines shall be removed by pumping. Pumping from wellpoints shall be continuous and standby pumps shall be provided.
5. The Contractor shall furnish all materials and equipment to perform all work required to install and maintain the proposed drainage systems for handling groundwater and surface water encountered during construction of structures, pipelines and compacted fills.
6. Where required, the Contractor shall provide a minimum of two operating groundwater observation wells at each structure to determine the water

level during construction of the pipeline or structure. Locations of the observation wells shall be at structures and along pipelines as approved by the County prior to their installation. The observation wells shall be extended to 6 inches above finished grade, capped with screw-on caps protected by 24" x 24" wide concrete base and left in place at the completion of this Project.

7. Prior to excavation, the Contractor shall submit his proposed method of dewatering and maintaining dry conditions to the County for approval. Such approval shall not relieve the Contractor of the responsibility for the satisfactory performance of the system. The Contractor shall be responsible for correcting any disturbance of natural bearing soils for damage to pipeline or structures caused by an inadequate dewatering system or by interruption of the continuous operation of the system as specified.
8. As part of his request for approval of a dewatering system, the Contractor shall demonstrate the adequacy of the proposed system and wellpoint filter sand by means of a test installation. Discharge water shall be clear, with no visible soil particles in a one quart sample. Discharge water shall not flow directly into wetlands or Waters of the State as defined by FDEP and SWFWMD.
9. During backfilling and construction, water levels shall be measured in observation wells located as directed by the County.
10. Continuous pumping will be required as long as water levels are required to be below natural levels.

PART 2 PRODUCTS

2.01 MATERIALS

A. General

1. Materials for use as fill and backfill shall be described below. For each material, the Contractor shall notify the County of the source of the material and shall furnish the County, for approval, a representative sample weighing approximately 50 pounds, at least ten calendar days prior to the date of anticipated use of such material.
2. Additional materials shall be furnished as required from off-site sources and hauled to the site.

B. Structural Fill

1. Structural fill in trenches shall be used below spread footing foundations, slab-on-grade floors and other structures as backfill within three feet of the below grade portions of structures.
2. Structural fill material shall be a minimum of 60 percent clean sand, free of organic, deleterious and/or compressible material. Minimum acceptable density shall be 98 percent of the maximum density as determined by AASHTO T-180. Rock in excess of 2-1/2" in diameter shall not be used in the fill material. If the moisture content is improper for attaining the specified density, either water shall be added or material shall be permitted to dry until the proper moisture content for compaction is reached.

- C. Common Fill
 - 1. Common fill material shall be free from organic matter, muck or marl and rock exceeding 2-1/2" in diameter. Common fill shall not contain broken concrete, masonry, rubble or other similar materials. Existing soil may be used to adjust grades over the site with the exception of the construction area.
 - 2. Material falling within the above specification, encountered during the excavation, may be stored in segregated stockpiles for reuse. All material which, in the opinion of the County, is not suitable for reuse shall be spoiled as specified herein for disposal of unsuitable materials by the Contractor.

- D. Crushed Stone
 - 1. Crushed stone may be used for pipe bedding, manhole bases, as a drainage layer below structures with underdrains and at other locations indicated on the Drawings.
 - 2. Crushed stone shall be size No. 57 with gradation as noted in Table 1 of Section 901 of Florida Department of Transportation, Construction of Roads and Bridges.

PART 3 EXECUTION

3.01 TRENCH EXCAVATION AND BACKFILLING

- A. Excavation for all trenches required for the installation of pipes and electrical ducts shall be made to the depths indicated on the Drawings and in such manner and to such widths as will give suitable room for laying the pipe or installing the ducts within the trenches.

- B. Rock shall be removed to a minimum 6" clearance around the bottom and sides of all the pipe or ducts being laid.

- C. Where pipes or ducts are to be laid in limerock bedding or encased in concrete, the trench may be excavated by machinery to or just below the designated subgrade provided that the material remaining in the bottom of the trench is no more than slightly disturbed.

- D. Where the pipes or ducts are to be laid directly on the trench bottom, the lower part of the trenches shall not be excavated to grade by machinery. The last of the material being excavated manually, shall be done in such a manner that will give a flat bottom true to grade so that pipe or duct can be evenly supported on undisturbed material. Bell holes shall be made as required.

- E. Backfilling over pipes shall begin as soon as practicable after the pipe has been laid, jointed and inspected and the trench filled with suitable compacted material to the mid-diameter of the pipe.

- F. Backfilling over ducts shall begin not less than three days after placing concrete encasement.

- G. All backfilling shall be prosecuted expeditiously and as detailed on the Drawings.

- H. Any space remaining between the pipe and sides of the trench shall be packed full by hand shovel with selected earth, free from stones having a diameter greater than 2" and thoroughly compacted with a tamper as fast as placed, up to a level of one foot above the top of the pipe.
- I. The filling shall be carried up evenly on both sides with at least one man tamping for each man shoveling material into the trench.
- J. The remainder of the trench above the compacted backfill, as just described above, shall be filled and thoroughly compacted by rolling, ramming, or puddling, as the County may direct, sufficiently to prevent subsequent settling.

END OF SECTION

SECTION 02223 EXCAVATION BELOW GRADE AND CRUSHED STONE OR SHELL REFILL

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. If in the opinion of the County, the material at or below the normal grade of the bottom of the trench is unsuitable for pipe or structure foundation, it shall be removed to the depth directed by the County and replaced by crushed stone or washed shell.

PART 2 PRODUCTS (NOT USED)

PART 3 MATERIALS

3.01 EXCAVATION AND DRAINAGE

- A. Whatever the nature of unstable material encountered or the groundwater conditions, trench stabilization shall be complete and effective.
- B. Should the Contractor excavate below the grade shown on the Contract drawings because of negligence or for his own convenience; due to failure in properly dewatering the trench; disturbs the subgrade before dewatering is sufficiently complete; he shall be directed by the County to excavate below grade. The work of excavating below grade and furnishing and placing the approved refill material shall be performed at the Contractor's expense.

3.02 REFILL

- A. Should the material at the level of trench bottom consist of fine sand, sand and silt or soft earth, the subgrade material shall be removed as directed by the County and the excavation shall be refilled with crushed stone or washed shell.

END OF SECTION

SECTION 02260 FINISH GRADING

PART 1 GENERAL

1.01 WORK INCLUDED

- A. The Contractor shall finish grade sub-soil.
- B. The Contractor shall cut out areas to receive stabilizing base course materials for paving and sidewalks.
- C. The Contractor shall place, finish grade and compact top soil.

1.02 PROTECTION

The Contractor shall prevent damage to existing fencing, trees, landscaping, natural features, bench marks, pavement and utility lines. Damage shall be corrected at no cost to the County.

PART 2 PRODUCTS

- A. Topsoil: Shall be friable loam free from subsoil, roots, grass, excessive amount of weeds or other organics, stones, and foreign matter; acidity range (pH) of 5.5 to 7.5; containing a minimum of 4 percent and a maximum of 25 percent organic matter. The Contractor may use topsoil stockpiles on site if they conform to these requirements.

PART 3 EXECUTION

3.01 SUB-SOIL PREPARATION

- A. The Contractor shall rough grade sub-soil systematically to allow for a maximum amount of natural settlement and compaction. Uneven areas and low spots shall be eliminated. Debris, roots, branches or other organics, stones, and sub-soil shall be removed by the Contractor and disposed of in a manner consistent with the latest Manatee County Standards as well as any affected regulatory agency. Should contaminated soil be found, the Contractor shall notify the County.
- B. The Contractor shall cut out areas to sub-grade elevation to stabilize base material for paving and sidewalks.
- C. The Contractor shall bring sub-soil to required profiles and contour grades gradually; and blend slopes into level areas.
- D. The Contractor shall slope the structure grade a minimum of two (2) inches in ten (10) feet unless indicated otherwise on the Drawings.
- E. The Contractor shall cultivate sub-grade to a depth of 3 inches where the topsoil is to be placed. He shall repeat cultivation in areas where equipment use has compacted sub-soil.

- F. The Contractor shall not make grade changes which causes water to flow onto adjacent lands.

3.02 PLACING TOPSOIL

- A. The Contractor shall place topsoil in areas where seeding, sodding and planting is to be performed. He shall place from the following minimum depths, up to finished grade elevations:
 - 1. 6 inches for seeded areas
 - 2. 4-1/2 inches for sodded areas
 - 3. 24 inches for shrub beds
 - 4. 18 inches for flower beds
- B. The Contractor shall use topsoil in a dry state as determined by the County. He shall place the material during dry weather.
- C. The Contractor shall use fine grade topsoil eliminating rough and low areas to ensure positive drainage. He shall maintain levels, profiles and contours of the sub-grades.
- D. The Contractor shall remove stone, roots, grass, weeds, debris, and other organics or foreign material while spreading the material.
- E. The Contractor shall manually spread topsoil around trees, plants and structures to prevent damage which may be caused by grading equipment.
- F. The Contractor shall lightly compact and place the topsoil.

3.03 SURPLUS MATERIAL

- A. The Contractor shall remove surplus sub-soil and topsoil from site at his expense.
- B. The Contractor shall leave stockpile areas and entire job site clean and raked, ready for landscaping operations.

END OF SECTION

SECTION 02261 SHAFT EXCAVATION AND SUPPORT

PART 1 - GENERAL

1.01 SUMMARY

- A. This section provides the minimum requirements and acceptable construction methods for excavation and support of shaft excavations for boring and jacking pipeline installations as shown on the plans. The shafts will also be used to facilitate the construction of manholes and other structures.
- B. The Contractor shall design, furnish, install and maintain a system of supports, including all bracing and associated items, to retain excavations in a safe manner and to control ground movements. Provide compaction grouting (as specified in Section 03365 - Compaction Grouting) as necessary to improve soils for adequate jacking thrust reaction and to prevent loss of ground or subsidence at entry and exit locations. Upon completion of the required jack and bore construction, the support system shall be removed, as specified, and the shaft excavations backfilled as specified in Section 02221 - Trenching, Bedding, and Backfilling for Pipe.
- C. The Work shall include site grading, temporary access road construction, fencing and signage, construction staging areas, design and construction of shaft excavations and excavation support systems, material disposal, control and disposal of groundwater, surface water and construction water, and site restoration.
- D. The Contractor shall have sole responsibility for selection of shaft types, construction methods, and shaft excavation sizes. The size of the shafts shall be adequate to construct all jack and bores and structures indicated on the Contract Drawings. The Contractor should be aware that there may be high groundwater heads and potentially unstable soils.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02060 - Jack and Bore
- B. Section 02221 - Trenching, Bedding, and Backfilling for Pipe
- C. Section 02240 - Dewatering
- D. Section 02445 - Settlement Instrumentation and Monitoring
- E. Section 03360 - Annular Space and Contact Grouting

1.03 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. Where a date is given for referenced standards, that edition shall be used. Where no date is given for referenced standards, the latest edition available on the date of issue of Contract Documents shall be used.
 - 1. Commercial Standards:
 - a. AISC - Manual of Steel Construction

- b. ANSI/AWS D1.1 - Structural Welding Code
 - c. ASTM A 36 - Specification for Structural Steel
 - d. ASTM A 328 - Specification for Steel Sheet Piling
2. Codes:
- a. Florida/OSHA and other applicable construction safety codes mentioned in the State of Florida Administrative Code.
 - b. Occupational Safety and Health Administration (OSHA) Regulations, 29 CFR Part 1926 Subpart P - Excavations, and Subpart S - Underground Construction.
3. Limited Geotechnical Reports may be available for the roadway portion of this project.

1.04 DEFINITIONS

- A. Sheetpile Shaft: An excavation support system consisting of watertight interlocking steel sheetpiles driven or vibrated into place, with a concrete working slab designed to prevent groundwater inflows or heave.
- B. Settlement Point: A point with elevation and spatial location established by survey prior to construction. The point is re-surveyed periodically to monitor ground movements. The point may be a nail, pin, subsurface settlement rod, borehole extensometer, or other device that can be readily located and surveyed.

1.05 DESIGN CRITERIA

- A. General:
 - 1. The Contractor shall design all shafts to provide a continuous, dry, excavation support system. Shafts shall be designed to support earth and groundwater pressures, equipment, applicable traffic, and construction loads and pressures (i.e. annulus grouting pressures) and other surcharge loads in accordance with the site conditions, the geotechnical reports, and any other requirements described in these Drawings and Specifications. Design excavation support systems in accordance with AISC and ACI code provisions, as applicable. The shaft design shall allow the safe and expeditious construction of the permanent facilities without excessive movement or settlement of the ground and in a manner that will prevent damage to, or movement of, any adjacent structures, utilities, or other facilities.
 - 2. The shaft shall be of a size large enough to facilitate all necessary groundwater control, construction operations including boring and jacking, and pipeline connections to open cut reaches of the project
 - 3. The shaft shall have a concrete tremie slab and finished working slab that shall be designed to seal the shaft from groundwater inflows, prevent soil heave, and to resist uplift of the completed shaft. The minimum acceptable factor of safety for resistance to uplift shall be 1.1, under the most extreme loading condition. Appropriate safety factors shall be confirmed for each loading condition anticipated during construction and after completion.

4. The shaft shall be designed for staged installation and removal of all or portions of the upper 15 ft to accommodate construction of connections and backfill sequences.
5. Jacking and reception shaft seals shall be watertight. Seals shall be designed by the Contractor to resist or prevent passage or flow of soils, groundwater, lubricant and other materials into the shaft during jacking and boring activities. Supplemental compaction grouting shall be used where necessary to improve soils to prevent loss of ground or subsidence during entry/exit of the jack and bore machine.
6. The shaft floors shall be designed with a sump to remove any groundwater, rainwater, runoff, or construction water that enters the shaft. The Contractor shall not discharge groundwater inflows into storm sewers, sanitary sewers, water bodies, or streets. Contractor shall properly dispose of groundwater in accordance with permit requirements.
7. Safety fencing, consisting of six-foot high chain link fence, shall be installed completely around the shaft perimeter and shall have a lockable entry gate to prevent unauthorized access. Shafts shall be covered with safety netting during non-working hours.

B. Sheetpile Shafts:

1. Fully interlocking steel sheetpiles shall be used to construct the sheetpile shafts.
2. Sheetpile corners shall be installed with interlocks and bulbs properly engaged for full depth of sheetpiles. If interlocks and bulbs cannot be properly engaged for full depth, corner connections shall be welded continuously to seal all cracks and avoid inflows of groundwater and soils.
3. Sheetpiles shall be installed plumb to within 1% of vertical. Sheetpiles that do not meet plumb tolerances will be pulled and reinstalled by Contractor, at no additional cost to the Owner.
4. Internal supports, including wales, struts, and corner braces, shall be installed sequentially as the shaft is excavated. At no time shall the unsupported excavation depth exceed the design spacing of horizontal support members plus 2 feet, as shown on approved submittals. All internal supports shall be installed within +/- 3 inches of design locations shown on approved submittals.
5. Struts shall be installed after each level of wales are installed and preloaded by jacking to 50% of design capacity, before excavation resumes. Steel wedges, or shims, shall be installed and welded in place to lock in preloaded stresses and prevent excessive lateral deformations.
6. The sheetpiles shall extend not more than 5 feet and not less than 3 feet above natural ground surface, to prevent accidental or unauthorized entry.
7. The strength of any grout mixture used behind the steel sheetpiles shall be selected to allow the auger bore machine to excavate or advance through the grouted zone during both launch and retrieval.

- C. Safety: All materials and methods of construction shall meet the applicable requirements of the FDOT Standard Specifications, the Special Provisions, and the applicable requirements of the Construction Safety Orders of the State of Florida Administrative Code. Particular attention is called to Subpart P - Excavations and Subpart S - Underground Construction of the Standards (29 CFR 1926/1920, published as U.S. Department of Labor Publication 207, revised October 1, 1979, and revised again August 1, 1989. See the Federal Register dated June 2, 1989, for the revised standard and commentary).

1.06 QUALITY ASSURANCE

- A. Contractor Qualification and Experience: The Contractor who shall perform the Work specified herein shall have successfully completed at least one shaft utilizing each of the proposed shaft construction methods of similar size, depth, and complexity, and in similar soil conditions, within the past five years. In addition, the Superintendent(s) for the construction work shall have demonstrated successful experience with the proposed shaft construction method(s).
- B. The Contractor shall immediately notify the Engineer, in writing, when any problems are encountered with equipment or materials, or if the Contractor believes the conditions encountered are materially and significantly different from those represented within the Contract Documents. All work by the Contractor shall be done in the presence of the Engineer unless the Engineer grants prior written approval to perform such work in Engineer's absence.
- C. Construction Monitoring: Settlement of adjacent property and/or facilities will not be permitted. Settlement monitoring of adjacent facilities shall be conducted in accordance with Specification Section 02445 - Settlement Instrumentation and Monitoring, as shown on the Drawings.
- D. The Contractor shall allow access to the Engineer and shall furnish necessary assistance and cooperation to aid the Engineer in observations and data and sample collection.

1.07 SUBMITTALS

- A. Submittals shall be made in accordance with the required Special Provisions mentioned in the specifications. Provide sufficient detail to allow the Engineer to judge whether the proposed equipment, materials, and procedures will meet the Contract requirements. All drawings shall be legible with dimensions accurately shown and clearly marked in English. Drawings and photographs transmitted by a facsimile will not be accepted. The Engineer's review of submitted details and data will be based on consideration of requirements for the completed work, protection of existing utilities, and the possibility of unnecessary delays in the execution of the work to be constructed under this Contract. Review and acceptance of the Contractor's submittals by the Engineer shall not be construed in any way as relieving the Contractor of its responsibilities under this Contract.

B. Sheetpile Shafts:

1. Schedule and sequence of sheetpile shaft construction including major milestones such as driving of sheets, excavation, installation of wales/struts, tremie slab, working slab, and dewatering.
2. Description of equipment and procedures to be used to construct the sheetpile shafts, to execute the associated dewatering, and vertical and horizontal deformation monitoring, and to protect existing structures and utilities.
 - a. Describe procedure for installing sheetpiles.
 - b. Describe procedure for sealing corners.
 - c. Describe procedure for installing shoring and bracing including connection and preloading details.
 - d. Describe procedure for installing concrete tremie slab and working slab to the required thickness and at the correct elevation.
 - e. Describe procedures for providing control of groundwater and soil at launch/retrieval locations.
3. Scaled drawings (plan and section views with dimensions and sizes) showing the proposed shaft elements; adjacent and nearby existing structures and utilities; details of pipe penetrations; and staging areas for all sheetpile construction operations.
4. Design Calculations: Submit all calculations in a legible, comprehensible format. The calculations shall be signed and sealed by a Civil or Structural Engineer registered in the State of Florida.
 - a. Provide design calculations for the sheetpiles and bracing indicating it can withstand all earth and groundwater pressures, equipment, applicable traffic, and construction loads and other surcharge loads in accordance with the site conditions, the geotechnical reports, and any other requirements described in these Drawings and Specifications.
 - b. Provide design calculations indicating the structural design of the tremie slab and working slab and uplift resistance of the shaft. Confirm that tremie slab and working slab weight, structural connection to sheetpile walls, weight of casing, and any frictional resistance assumed along sidewalls of the shaft are adequate to resist uplift and that assumptions are reasonable and appropriate. Show that a minimum factor of safety against uplift failure of 1.1 is achieved under the most extreme loading conditions.
5. Methods and details of excavation, containment, hauling, and disposal of the excavated materials, all spoils, and other materials used in shaft construction. Written documentation signed by the disposal site owner or manager indicating that the site will accept the muck and that the site is in compliance with all applicable local, State, and Federal regulations. Submit muck transport plans including route to be used and measures to avoid spillage onsite or onto streets and highways.

6. Procedures for checking and maintaining plumb, and ensuring proper elevation is reached.
7. Details for dewatering the inside of the shafts following placement and curing of the tremie slab.
8. Concrete mix information and placement procedures for the tremie slab and working slab concrete.
9. Description of contingency plans for excessive movement of shaft elements, flooding, bottom heave, and inability to install the sheets to the required depth.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.01 GENERAL

- A. The Contractor shall construct the shaft wall support system in accordance with the approved jack and bore plan. Corrective measures shall be immediately taken where movement or deformation of support systems may in any way impair the integrity of such support system or that of adjacent facilities responsible for the safety and integrity of the shaft excavation.
- B. All excavated spoils, and other materials used during shaft construction, shall be completely contained when stockpiled on site, and shall be disposed of by the Contractor at a licensed landfill site at completion of the shaft construction. Any spills shall be completely contained and cleaned up promptly by the Contractor. Under no circumstances will spoils, groundwater inflows, or construction water be allowed to enter sanitary or storm sewers, or any water body. Contractor shall properly dispose of groundwater in accordance with permit requirements.
- C. Settling of adjacent property and/or facilities will not be permitted. Settlement monitoring of adjacent facilities shall be conducted in accordance with Specification Section 02445 - Settlement Instrumentation and Monitoring.

3.02 SHEETPILE SHAFT CONSTRUCTION

- A. Drive or vibrate sheetpiles in plumb position with each sheetpile interlocked with adjoining piles for its entire length to form a continuous diaphragm throughout the length of each run of wall, bearing tightly against original ground.
- B. Sheetpiles shall be installed to the depths indicated in approved submittals.
- C. All driving/vibrating, cutting, and splicing shall conform to the methods described in approved submittals.

- D. Care shall be taken to keep the sheetpiles plumb during construction. The deviation from plumb shall not exceed one (1) foot (12 inches) in 100 feet or 1%. Any correction of shaft deviation, and any construction and associated costs resulting from relocation of appurtenances inside the shaft, including the pipe connections and the launch and retrieval seals, caused by the shaft's deviation from plumb or other deficiencies in workmanship shall be accomplished at the Contractor's expense and shall not be cause for schedule extension.
- E. Provide watertight gasketed seals and compaction grouting, as necessary, at all locations where the jack and bore machine will enter or exit shafts.

3.03 SHAFT REMOVAL AND BACKFILL

- A. All shoring elements, including sheetpiles, wales, struts, lagging, and shores shall be removed from the excavation prior to restoration, to the extent practicable, but in no case shall any shoring or excavation support elements be left in place in the upper 15 feet below the ground surface. Shoring elements that remain in place shall be identified on the record drawings. Removal of the support system shall be performed in a manner that will not disturb or harm adjacent construction or facilities and only after backfill has been fully compacted. Any voids created or encountered during the removal of the support system shall be immediately filled with grout as specified in Section 03360 - Annular Space and Contact Grouting, or as approved in writing by the Engineer. The support system removed from the excavation shall remain the property of the Contractor and shall be removed from the site.
- B. The bottom concrete tremie and working slabs shall be broken up to allow the free movement of groundwater and minimize any uplift forces on the finished pipeline.
- C. The use of imported materials for shaft backfilling may be required. The backfill shall be placed in lifts not greater than 8 inches thick and compacted in accordance with the requirements of 02221 - Trenching, Bedding, and Backfilling for Pipe.

3.04 CLEANUP

- A. The Contractor shall remove all construction debris, spoil, slurry, oil, grease, and other materials from the shaft, pipeline, and all surface work areas upon completion of construction of the jack and bore. Cleanup will be incidental to the construction. No separate payment shall be made for the cleanup.

END OF SECTION

SECTION 02276 TEMPORARY EROSION AND SEDIMENTATION CONTROL

PART 1 GENERAL

1.01 DESCRIPTION

- A. The work specified in this Section consists of the design, provision, maintenance and removal of temporary erosion and sedimentation controls as necessary.
- B. Temporary erosion controls include, but are not limited to: grassing, mulching, netting, watering, and the reseeding of on-site surfaces and spoil and borrow area surfaces, interceptor ditches at ends of berms and other such work at those locations which will ensure that erosion during construction will be either eliminated or maintained within acceptable limits as established by the County.
- C. Temporary sedimentation controls include, but are not limited to: silt dams, traps, barriers, and appurtenances at the foot of sloped surfaces which shall ensure that sedimentation pollution will be either eliminated or maintained within acceptable limits as established by the County.
- D. The Contractor is responsible for providing effective temporary erosion and sediment control measures during construction or until final controls become effective.

1.02 REFERENCE DOCUMENTS

- A. Florida Building Code.
- B. FDEP/COE Dredge and Fill Regulations and/or Permit as applicable.
- C. SWFWMD Permit Regulations and/or Permit as applicable.
- D. Florida Stormwater, Erosion and Sedimentation Control Inspector's Manual.

PART 2 PRODUCTS

2.01 EROSION CONTROL

- A. Netting - fabricated of material acceptable to the County.
- B. Seed and sod.

2.02 SEDIMENTATION CONTROL

- A. Bales - clean, seed free cereal hay type.
- B. Netting - fabricated of material acceptable to the County.
- C. Filter stone - crushed stone conforming to Florida Dept of Transportation specifications.

- D. Concrete block - hollow, non-load-bearing type.
- E. Concrete - exterior grade not less than one inch thick.

PART 3 EXECUTION

3.01 EROSION CONTROL

- A. Minimum procedures for grassing shall be:
 - 1. Scarify slopes to a depth of not less than six inches and remove large clods, rock, stumps, roots larger than 1/2 inch in diameter and debris.
 - 2. Sow seed within twenty-four (24) hours after the ground is scarified with either mechanical seed drills or rotary hand seeders.
 - 3. Apply mulch loosely and to a thickness of between 3/4-inch and 1-1/2 inches.
 - 4. Apply netting over mulched areas on sloped surfaces.
 - 5. Roll and water seeded areas in a manner which will encourage sprouting of seeds and growing of grass. Reseed areas which exhibit unsatisfactory growth. Backfill and seed eroded areas.

3.02 SEDIMENTATION CONTROL

- A. The Contractor shall install and maintain silt dams, traps, barriers, and appurtenances as shown on the approved descriptions and working drawings. Deteriorated hay bales and dislodged filter stone shall be replaced by the Contractor at his expense.

3.03 PERFORMANCE

- A. The Contractor, at his own expense, shall immediately take whatever steps are necessary to correct any deficiencies of the temporary erosion and sediment control measures employed if they fail to produce results or do not comply with the requirements of the State of Florida or any other federal, governmental or regulatory agency.

END OF SECTION

SECTION 02325 ROAD AND RAILROAD CROSSINGS

PART 1 GENERAL

1.01 SCOPE OF WORK

The Contractor shall furnish all labor, equipment, materials and incidentals required to install road or railroad crossings as shown on the Drawings and as specified herein.

1.02 OPERATIONS ON MANATEE COUNTY OR STATE OF FLORIDA PROPERTY

- A. All work affecting Manatee County, Florida Department of Transportation, any other governmental agency's right-of-way or facilities, or railroad right-of-way shall be carried out to the full satisfaction of the applicable Department's authorized representative. The Contractor shall be responsible to meet any and all requirements of the Department of Transportation, railroad, or other agency pertaining to the specific project and shall conduct all his work accordingly.
- B. Prior to the start of the jacking operation, a detailed jacking plan shall be submitted to the County for review and approval. No work shall be permitted until the submittals are accepted. A Bore Path Report shall be submitted with in three (3) days of completion of the bore.
- C. Prior to construction, a minimum of three working days written notice prior to start of the actual work shall be given to the County and to the Florida Department of Transportation or other applicable agency.
- D. The Contractor shall install, maintain and leave in place any sheeting, underpinning, cribbing and other related items (other than that required for the jacking pits) to support any structures or facility on the right-of-way owned by either Manatee County, Florida Dept. of Transportation or other governmental agency or railroad entity. The Contractor, at his expense, may be directed by the Department of Transportation, other applicable agency, or the County, to leave sheeting in place.
- E. The Contractor shall perform all necessary soil test borings to determine actual soil conditions and shall utilize the results of said borings to determine the procedures required for each jack and bore operation, including, but not limited to, the presence of rock and necessary dewatering requirements.
- F. No wires, equipment, or other appurtenances shall be permitted to be placed across or pass across State property without the express written permission of the Department of Transportation's authorized representative.
- G. All equipment used by the Contractor on State property may be inspected by the State and shall not be used if it is deemed unsatisfactory by an authorized State representative. State highways shall be kept free of obstructions at all times.
- H. No blasting shall be permitted under or adjacent to any State highways.

- I. The Contractor shall be responsible for all damages arising from his negligence or failure to comply with any State or Manatee County regulations or requirements or deviations from the Contract Documents.
- J. All State highway crossings shall be performed and completed in a manner fully satisfactory to the Department of Transportation and Manatee County.
- K. Traffic control requirements and procedures are detailed in Section 01570 of this specification.

1.03 SHOP DRAWINGS

The Contractor shall furnish working drawings showing all fabrication and construction details for the jacked crossings.

1.04 SUBMITTALS

- A. Contractor shall submit a Jacking Plan that includes the following:
 - 1. Site layout plan for entry and exit pit locations, drawn to scale, depicting the position of all required equipment, access points, existing facilities to remain in place, existing traffic lanes to be maintained in operation, office trailers and storage sites.
 - 2. Qualification information on jack/bore contractor.
 - 3. Manufacturer's information on equipment to be used.
 - 4. Methods and materials for retaining walls for jacking and receiving pits.
- B. Bore Report that details final alignment, dimensions, and record documentation.

PART 2 PRODUCTS

2.01 MATERIALS

Sleeve, carrier pipe, skids, insulation, bulkheads, etc. shall be per contract plans.

PART 3 EXECUTION

3.01 JACKING SLEEVE

- A. The Contractor shall provide all labor, material, equipment and appurtenances required for jacking the sleeves beneath the roadway or railroad tracks. The steel sleeve shall be welded steel pipe and jacked in one continuous operation at the locations shown on the drawings. Once the operation starts, jacking shall not be discontinued. Proper alignment and elevation of the sleeves shall be consistently maintained throughout the jacking operation.
- B. The Contractor shall shore the jacking pits with sheeting or such other materials as required. Sheeting shall be driven to a sufficient depth below the invert of the steel sleeve to resist any pressure developed by the soil outside the jacking pit. Sheeting shall terminate not less than 3-feet, 6-inches above existing grade.

- C. The sections of steel sleeve shall be field welded in accordance with the applicable portions of AWWA C-206 for field welded water pipe joints. Steel sleeve shall receive one coat of Tnemec 46H-413 Hi-Build Tnemec-tar applied in accordance with manufacturer's recommendation.
- D. At the completion of the jacking operations, the Contractor shall have the option of leaving all sheeting in place. The top of the sheeting shall be cut off 36-inches below finished grade. No additional compensation shall be provided for sheeting left in place.
- E. The Contractor shall be responsible for preventing voids outside the steel sleeves. Should they occur, the Contractor may be directed to fill them with grout in a method approved by the County. The Contractor shall exercise care in the sleeve removal to prevent voids.
- F. The Contractor shall be responsible for furnishing, installing and removing the thrust block or restraint which was employed in driving the sleeve forward. No additional payment for the jacking restraint shall be made other than the unit price for this item. The entire jacking operation shall be discussed and accepted by the County prior to commencing jack and bore operation. After completion, the backup structures shall be removed in part or whole to permit construction of the pipeline in the sleeve.

3.02 INSTALLING PIPE IN SLEEVE

- A. The Contractor shall install the pipe in full conformity with the Contract Documents. The pipe shall be installed to the lines and grades required within the sleeve and placed to the approval of the County. The pipe shall be braced to the side and the top of the sleeve to prevent flotation or motion.
- B. A bulkhead shall be placed at the ends of the sleeve to keep the surrounding soil and material from migrating into the voids in the sleeve..

3.03 TESTING

The pipe shall be tested as provided in the Contract Document.

END OF SECTION

SECTION 02445 SETTLEMENT INSTRUMENTATION & MONITORING

PART 1 - GENERAL

1.01 SUMMARY

- A. The Work specified in this Section includes furnishing, installing, and monitoring settlement instrumentation to monitor ground movements around and above jack and bore operations, shafts and other operations. The work includes, but is not limited to: installing surface control points, furnishing monitoring equipment, and recording observations and measurements from the monitoring points on a periodic basis before, during, and after shaft construction and jack and bore operations.
- B. The Contractor is responsible for surveying the elevations of the surface control points in accordance with the requirements herein. Elevations shall be determined before operations begin to establish a baseline. Survey readings shall continue during and after shaft construction and jack and bore operations to monitor any movements related to the jack and bore and shaft construction. All monitoring points will be surveyed one week and one month after all jacking and boring has been completed to evaluate long-term settlements.
- C. It is anticipated that five (5) settlement monitoring points will be required for each crossing.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02060 – Jack and Bore
- B. Section 02261 - Shaft Excavation and Support
- C. Section 03360 - Annular Space and Contract Grouting

1.03 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS – NOT USED

1.04 DEFINITIONS

- A. Surface Control Points: Control points established as a reference for measuring elevation of the ground surface using optical survey methods.

1.05 QUALITY ASSURANCE

- A. Surveyor Qualifications: Surveying for monitoring surface control points shall be performed by a land surveyor licensed in the State of Florida with previous experience surveying for the detection of structural or surface deformations.
- B. All surface control points shall be established in the field. Additional surface control points shall be installed if directed by the Engineer.

1.06 SUBMITTALS

- A. Submittals shall be made in accordance with Special Provisions of the contract documents. Provide sufficient detail to allow the Engineer to judge whether the proposed equipment, materials, and procedures will meet the Contract requirements. All drawings shall be legible with dimensions accurately shown and clearly marked in English. Drawings and photographs transmitted by a facsimile will not be accepted. The Engineer's review of submitted details and data will be based on consideration of requirements for the completed work, protection of utilities and surface features, and the possibility of unnecessary delays in the execution of the work to be constructed under this Contract. Review and acceptance of the Contractor's submittals by the Engineer shall not be construed in any way as relieving the Contractor of its responsibilities under this Contract.
1. Qualifications: Submit surveying personnel qualifications in accordance with Paragraph 1.05 A.
 2. Submit the following, at least one (1) month before scheduled installation of monitoring points:
 - a. Proposed settlement monitoring locations.
 - b. Instrumentation Schedule: Submit the proposed schedule for installing the surface control points.
 - c. Description of methods and materials for installing surface control points.
 3. Reports and Records:
 - a. Provide reports of monitoring surface control point data to the Engineer by noon of the day following the shift for which the measurements were taken.
 - b. Within 72 hours following installation of the instruments, submit drawings showing the actual as-built location, the instrument identification number, the instrument type, the installation date and time, and the tip elevation and instrument length. Include details of installed instruments, accessories and protective measures including all dimensions and materials used.
 - c. Submit surveyed measurements of all monitoring points at least seven (7) days prior to commencing construction of shafts to establish baseline readings.
 - d. Submit surveyed measurements of monitoring points during and after construction in accordance with Paragraph 3.01 C.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Surface Control Points: Surface control points shall be established by an inscribed marking or approved surveyor's nail driven flush with the surface in asphalt or concrete paved areas. In landscaped areas, surface control points shall be established by driving a 2-inch by 2-inch by 18-inch long timber stake flush with

the ground. Each control point shall have a tag or marking indicating the tunnel station and offset from centerline.

PART 3 - EXECUTION

3.01 GENERAL REQUIREMENTS

- A. If required, instrumentation shall be installed at the locations shown on the Drawings, or as directed by the Engineer. Instruments shall be installed in accordance with the approved installation schedule.
- B. Contractor shall install and perform a baseline survey of all surface settlement monitoring devices at least seven (7) days prior to the commencement of jack and bore operations.
- C. Once jack and bore operation commences, settlement points located within 50 feet of the excavation face shall be surveyed once for every 10 feet of installed pipe, and once per day during shaft construction. Additionally, all settlement monitoring devices shall be surveyed once per day for a period of one week, once at 14 days, and once at 30 days, after jack and bore is complete.
- D. Contractor shall provide access and assistance to the Engineer for obtaining supplemental monitoring data, as requested by Engineer.

3.02 SURFACE CONTROL POINTS

- A. Establish system of surface control points and monitor in accordance with the appropriate Sections noted in Paragraph 1.02 and with the requirements herein.
- B. Surface control points shall be monitored by the Contractor in accordance with the appropriate Sections noted in Paragraph 1.02 with the requirements herein.
- C. Provide data from readings of surface control points to the Engineer within 24 hours of reading.

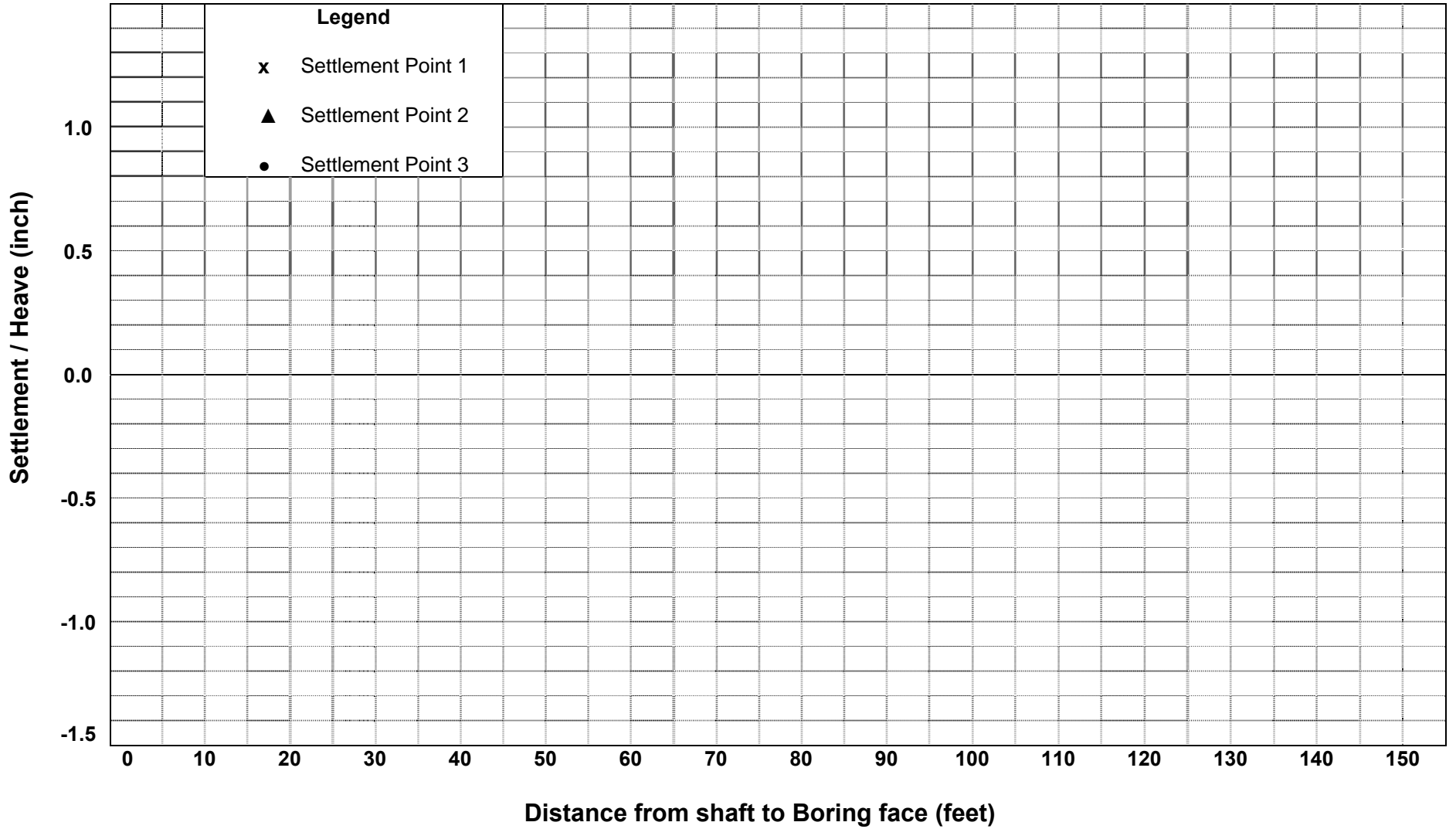
3.03 INSTRUMENT PROTECTION, MAINTENANCE, AND REPAIR

- A. Protect the instruments and surface control points from damage. Damaged installations shall be replaced or repaired prior to continuing shaft construction or jacking and boring, unless permitted otherwise in writing by the Engineer.

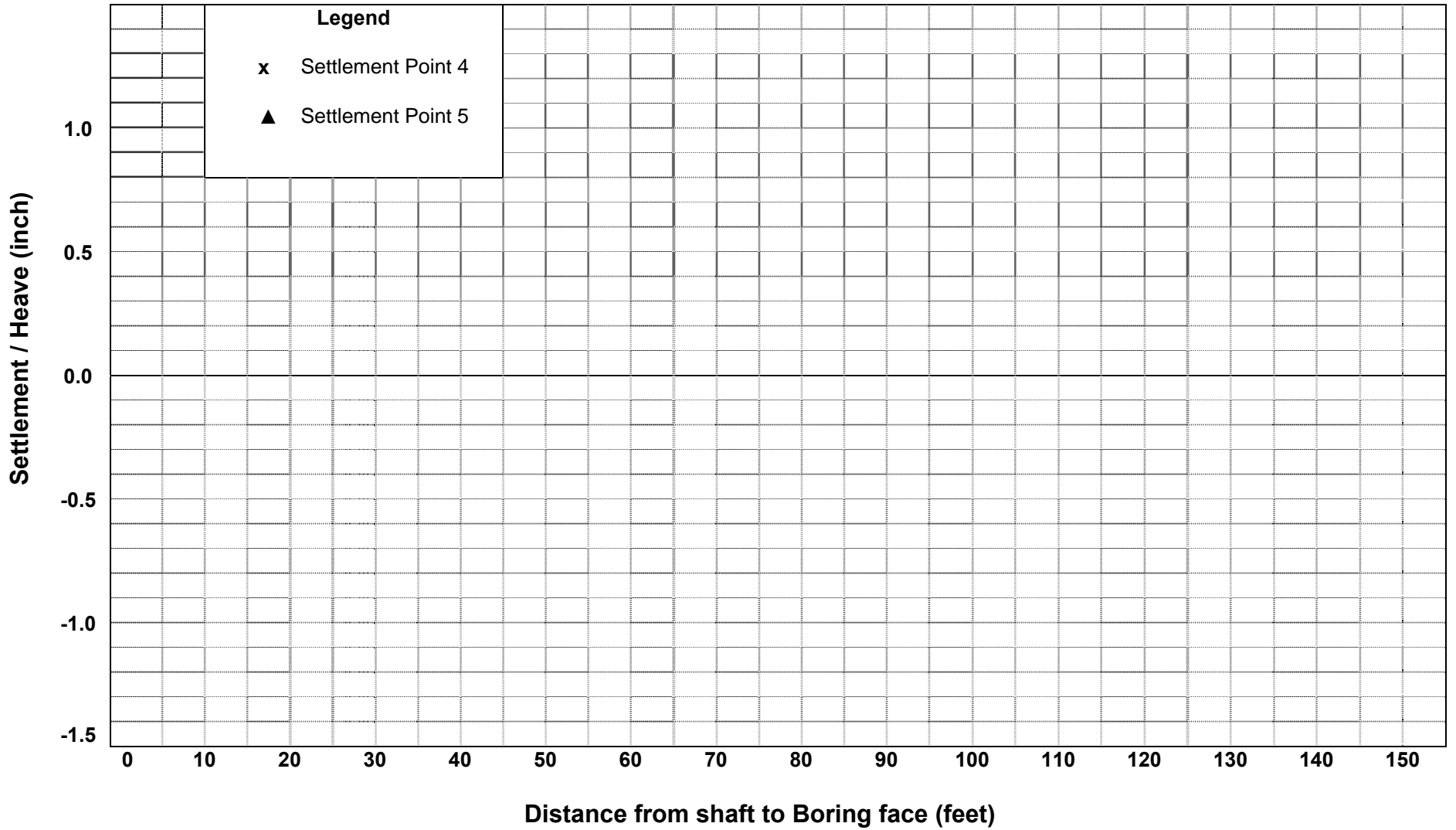
3.04 ABANDONMENT OF INSTRUMENTS

- A. Surface Control Points: All surface control points on public property shall remain in place at the completion of the Work. Remove all surface control points on private property during the cleanup and restoration work, or as required by the Engineer.

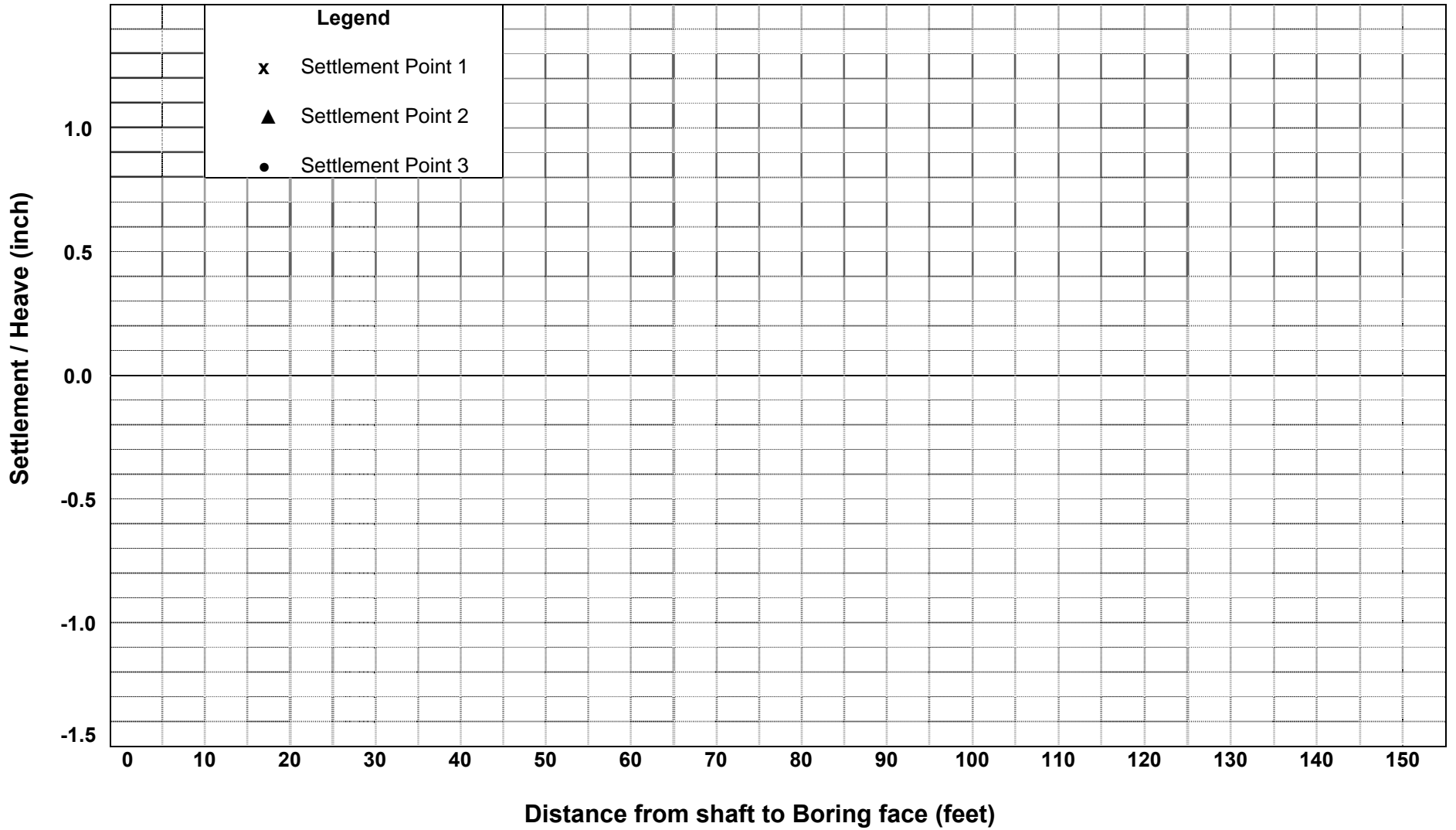
Daily Settlement Monitoring Form
Manatee County, Florida - 44th Avenue East
US 301 Jack and Bore Crossing - Settlement Monitoring Points



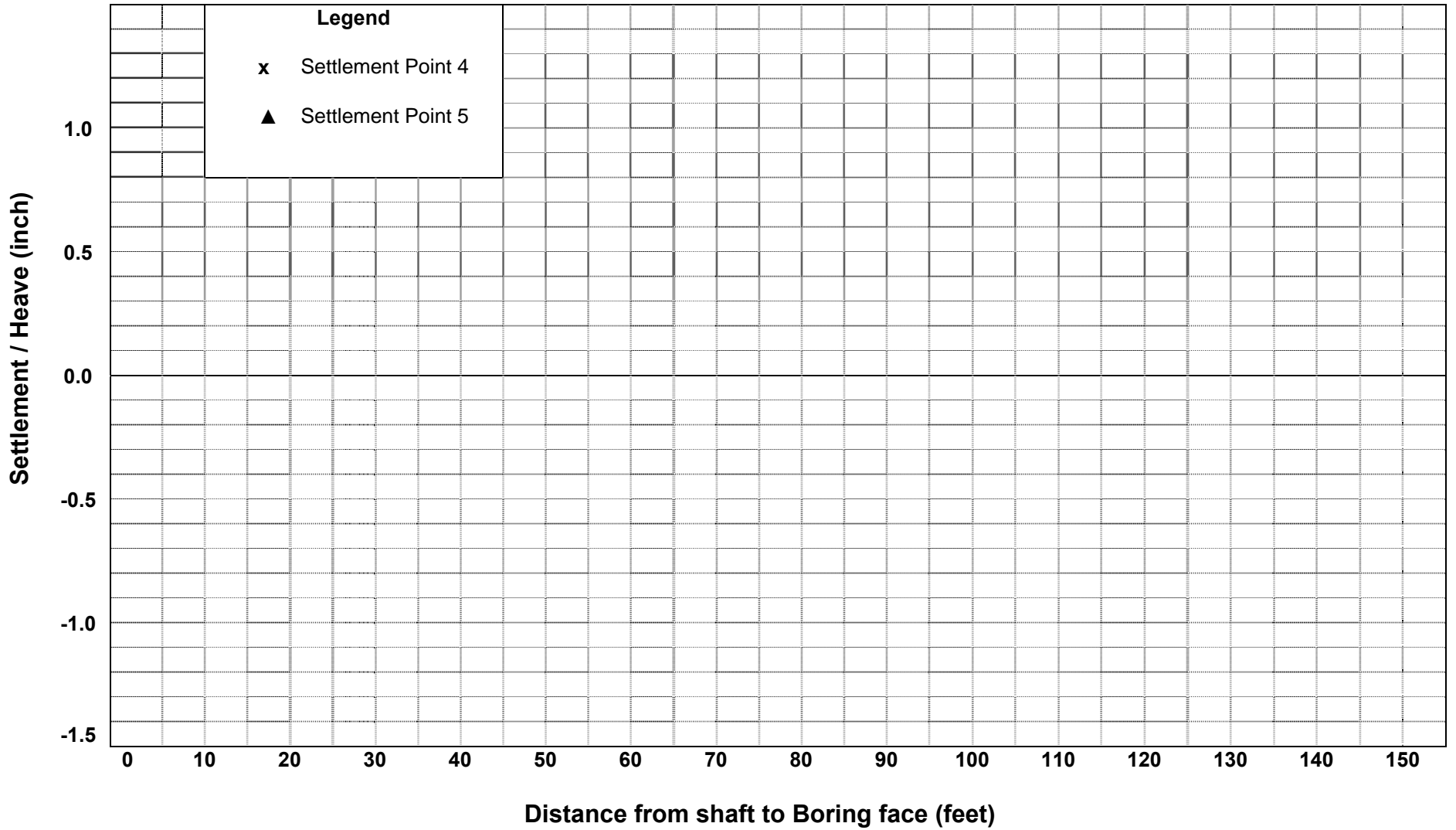
Daily Settlement Monitoring Form
Manatee County, Florida - 44th Avenue East
US 301 Jack and Bore Crossing - Settlement Monitoring Points



Daily Settlement Monitoring Form
Manatee County, Florida - 44th Avenue East
30th Street E Jack and Bore Crossing - Settlement Monitoring Points



Daily Settlement Monitoring Form
Manatee County, Florida - 44th Avenue East
30th Street E Jack and Bore Crossing - Settlement Monitoring Points



END OF SECTION

SECTION 02600 STEEL CASING PIPE

PART 1 - GENERAL

1.4 DESCRIPTION OF WORK

- A. This Section specifies the minimum requirements for the 18-inch steel casing pipe to be installed by jack and bore and 12-inch steel casing to be installed by open cut. The 18-inch steel casing pipe shall be installed to house the 8-inch diameter carrier pipe as shown on the drawings.

1.5 DEFINITIONS

- A. Terms used in this specification shall have the following meanings.

Carrier Pipe: Installed within the casing pipe for permanent and operational use.

Casing Pipe: A steel pipe with larger diameter than carrier pipe installed by jack and bore.

1.6 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. Where conflicts between these specifications and the referenced specification, code, or standard occur, the more restrictive specification shall govern. The publications are referenced in the text by basic designation only. Where a date is given for referenced standards, that edition shall be used. Where no date is given for referenced standards, the latest edition available on the date of issue of Contract Documents shall be used.

1. FDOT Standard Specifications
2. ASTM A 139 - Specification for Electric Fusion (Arc) Welded Steel Pipe (Sizes 4 inches and Over).
3. AWWA C200 - Specification for Steel Water Pipe (Sizes 6 inches and Over).
4. AWWA Manual M11 "Steel Pipe - A Guide for Design and Installation"

1.7 SUBMITTALS

- A. In accordance with the Submittals section, the CONTRACTOR shall submit the following and provide sufficient detail to allow the ENGINEER to determine whether or not the proposed steel casing pipe meets Contract requirements.

1. Provide sufficient detail for the ENGINEER to review the proposed equipment, materials, and procedures to meet the Contract requirements. All drawings shall be legible with dimensions accurately shown and clearly marked in English. Drawings and photographs transmitted by a facsimile will not be accepted. Review and acceptance of the CONTRACTOR's submittals by the ENGINEER shall not be construed in any way as relieving the CONTRACTOR of its responsibilities under this Contract.
2. Shop Drawings: The CONTRACTOR shall furnish shop drawings illustrating the details of the steel casing pipe, grout lubrication ports, joint details, and miscellaneous items to be furnished and fabricated for the pipe. Dimensions, tolerances, wall thickness,

material properties and strengths, and other pertinent information shall be shown. These items shall be submitted for review by the ENGINEER prior to purchase and fabrication.

3. Calculations (jack and bore installation only): Provide calculations confirming that pipe capacity is adequate to resist anticipated jacking loads with a minimum Factor of Safety (FOS) of 2.5, and all other associated design loads. The calculations shall be prepared, signed and sealed by a Professional ENGINEER registered in the State of Florida. Expected ground condition can be found in Report of Geotechnical Exploration attached to the Contract Documents.
4. Manufacturers' certification for the proposed steel casing pipes.

PART 2 - PRODUCTS

2.4 DESIGN CRITERIA

- A. Design of steel casing pipe shall be in accordance with the current FDOT Standard Specifications. The casing pipes shall be of leak proof construction.
- B. Steel casings shall be welded steel pipe construction in accordance with AWWA C200 or press-fit connection pipe. Field welding of the casing pipe shall be in accordance with AWWA C206. Casing pipes shall be as follows:
 1. 18-inch internal diameter steel casing pipe with minimum wall thickness of 3/8-inch installed by jack and bore.
 2. 12-inch internal diameter steel casing pipe with minimum wall thickness of 3/16-inch installed by open cut.
- C. Press-fit connection pipe shall be manufactured by Permalok or equal. Smooth steel casing pipe shall be of new material with a minimum yield point of 42,000 psi, unless higher strength is required to meet the requirements of the pipe jacking equipment where applicable.
- D. Steel casing pipe connections shall be achieved by full penetration field butt welding or an integral machine press-fit connection (Permalok or equal). Field butt welding a square end piece of steel pipe to a 35-degree beveled end of steel pipe is acceptable unless otherwise specified. Integral machined press-fit connections shall be installed in accordance with the manufacturer's installation procedures and recommendations.
- E. The CONTRACTOR is fully responsible for the design of steel casing pipe, including pipe joints, which meets or exceeds the design requirements of this Specification.
- F. Design of the jack and bore casing pipe, including joints, shall account for all installation and service loads including: (1) anticipated jacking loads; (2) external groundwater and earth loads; (3) handling, shipping, and other construction loads; (4) any other live or dead loads reasonably anticipated. The allowable jacking capacity shall not exceed 50% of the minimum steel yield stress.
- G. Design of jack and bore casing pipe shall be sealed and signed by a registered Professional ENGINEER licensed in the State of Florida.

- H. Steel casing pipe shall be new, smooth-wall, carbon steel pipe conforming to ASTM Specification A139, Grade B.
- I. Steel casing pipe shall be provided with inside diameters sufficient to efficiently install the internal diameter carrier pipe, spacers, grout lines and other accessories where applicable.
- J. Steel casing pipe shall be furnished in lengths between 5 and 20 feet, depending on the CONTRACTOR's installation requirements, available staging areas, shaft dimensions, and the shop practices of the pipe manufacturer.
- K. All materials, design, fabrication, handling, and testing of steel casing pipe shall conform to the requirements of ASTM A139, AWWA C200 and AWWA Manual M11 "Steel Pipe -A Guide for Design and Installation."
- L. Prior to delivery of the pipe, end/internal bracing shall be furnished and installed, as recommended by the manufacturer, for protection during shipping, storage, and handling.
- M. Dimensional Tolerances
 - 1. CONTRACTOR shall bear sole responsibility for furnishing and installing steel casing pipe with dimensional tolerances that are compatible with performance requirements and proposed installation methods that meet or exceed the specific requirements of below:
 - a. The minimum wall thickness at any point shall be at least 87.5% of the nominal wall thickness.
 - b. Steel pipe shall have an outside circumference that is within 1.0% or % inch of the nominal circumference, whichever is less.
 - c. The tolerance on the outside diameter of the pipe is -1/16 inch and greater than +1/8 inch on the nominal outside diameter.
 - d. Steel pipe shall have roundness such that the difference between the major and minor outside diameters shall not exceed 0.5% of the specified nominal outside diameter or % inch, whichever is less.
 - e. Steel pipe shall have a maximum allowable straightness deviation of 1/8 inch in any 10-foot length.
 - f. All steel pipes shall have square ends. The ends of pipe sections shall not vary by more than 1/8 inch at any point from a true plane perpendicular to the axis of the pipe and passing through the center of the pipe at the end.
 - g. When pipe ends have to be beveled for welding, the ends shall be beveled on the outside to an angle of 35° with a tolerance of ± 2° and with a width of root face 1/16 inch ± 1/32 inch.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Where indicated on the Drawings, steel casing pipe shall be installed in accordance with Section 02060, Jack and Bore.

END OF SECTION

SECTION 02616 DISINFECTING POTABLE WATER PIPE LINES

PART 1 GENERAL

1.01 SCOPE OF WORK

The Contractor shall furnish all labor, materials, equipment and incidentals required to clean and disinfect potable water pipe lines. This work is required to place all types of pipe into service as potable water lines.

1.02 CLEANING WATER MAINS

At the conclusion of the work, the Contractor shall thoroughly clean all of the new pipes to remove all dirt, stones, pieces of wood or other material which may have entered during the construction period per Section 02618.

1.03 DISINFECTING POTABLE WATER PIPE LINES

- A. All record drawing requirements must be submitted to the County prior to starting the bacteriological testing of the water lines.
- B. Prior to being placed in service, all potable water pipe lines shall be chlorinated in accordance with AWWA 651, "Standard Procedure for Disinfecting Water Main". The procedure shall meet Health Department requirements. The location of the chlorination and sampling points shall be determined by the County. Taps for chlorination and sampling shall be uncovered and backfilled by the Contractor as required.
- A. The general procedure for chlorination shall be to flush all dirty or discolored water from the lines, then introduce chlorine in approved dosages through a tap at one end while water is being withdrawn at the other end of the line. The chlorine solution shall remain in the pipe line for 24 hours.

Water for flushing, filling and disinfecting the new lines must be obtained without contaminating existing pipe lines. Water obtained from existing pipe lines for this purpose shall pass through an approved air gap or backflow prevention device.

- B. Following the chlorination period, all treated water shall be flushed from the lines at their extremities and replaced with water from the distribution system. Bacteriological sampling and analysis of the replacement water shall then be made by an approved laboratory or the Health Department in full accordance with the AWWA Manual C651. The line shall not be placed in service until the requirements of the State and County Public Health Department are met. Results of the bacteriological tests together with certified record drawings must be submitted to the Health Department (FDEP) within 30 days of the tests.
- C. Special disinfecting procedures when approved by the County, may be used where the method outlined above is not practical.

END OF SECTION

SECTION 02617 INSTALLATION AND TESTING OF PRESSURE PIPE

PART 1 GENERAL

1.01 INSTALLING PIPE AND FITTINGS

- A. The Contractor shall install all pipe in accordance with the recommendations of the pipe manufacturer and as specified herein.
- B. The Contractor shall take care in handling, storage and installation of pipe and fittings to prevent injury to the pipe or coatings. All pipe and fittings shall be examined before installation and pipe which is deemed to be defective by the County shall not be installed.
- C. The Contractor shall thoroughly clean and keep thoroughly clean, all pipe and fittings prior to during and after installation.
- D. The Contractor shall lay the pipe to the lines and grades shown on the Contract Drawings with bedding and backfill as shown on the Drawings or called out in the Contract Documents. Blocking under the pipe shall not be permitted except through casing sleeves.
- E. The Contractor shall keep the open ends of all pipe closed with a tightly fitting plug when installation is not in progress or the potential exists for dirt or debris to enter the pipe.
- F. The pipe or accessories shall not be dropped into the trench under any circumstances.
- G. The Contractor shall construct all water mains pursuant to the provisions of "Recommended Standards for Water Works", Part 8, incorporated by reference in Rule 17-555.330(3), F.A.C.
- H. As a marker for the Surveyor, a PVC pipe marker or 2" x 4" marker shall be inserted by the Contractor on the top of pipe for potable water mains, reclaimed water mains and sanitary force mains at intervals no greater than 200 feet apart and at locations where there is a substantial grade change. The pipe markers shall indicate the pipe diameter and shall be labeled PWM in "safety" blue, RWM in purple, and FM in green, for potable water mains, reclaimed water mains and sanitary force mains, respectively. As a marker for the Surveyor, a PVC pipe marker or 2" x 4" marker shall be inserted by the Contractor on the top of all pipe fittings (other than sanitary sewer service wyes, potable water saddles and reclaimed water saddles). The markers for fittings shall indicate the type of fitting and shall be labeled PWF in "safety" blue, RWF in purple, and FMF in green, for potable water fittings, reclaimed water fittings, and sanitary force main fittings, respectively. The Contractor is responsible for making the aforementioned markers available to the Surveyor. The Contractor shall field locate the mains and fittings when markers are not made available to the Surveyor.
- I. A PVC pipe marker or 2" x 4" marker shall be inserted by the Contractor at the beginning and end of each horizontal directional drill (HDD). The HDD Contractor shall provide a certified report and bore log indicating the horizontal and vertical location every 25 linear feet or less along the pipe.
- J. A 2" PVC pipe marker with a painted end cap shall be inserted by the Contractor at the ROW line indicating each individual new service location or stub out. The marker shall be a 6 foot length of PVC pipe inserted 2 feet into the ground and shall be painted "safety" blue for potable water, purple for reclaimed water, and green for sewer.

1.02 PROCEDURE FOR TESTING WATER LINES, FORCE MAINS AND RECLAIMED WATER LINES

- A. A 48-hour notice is needed prior to testing. A letter stating the reasons testing should be scheduled ahead of other jobs must accompany all emergency testing requests.
- B. County and Contractor must be present for all testing, except for testing tapping valves and sleeves.
- C. All pressure pipe lines shall remain undisturbed for 24 hours to develop complete strength at all joints. All pipe lines shall be subjected to a hydrostatic pressure test for two (2) hours at full working pressure, but not less than 180 psi for water/reclaimed (150 psi for force main). Maximum length of pipe to be tested at one time is 2,600 feet. If line is longer than 2,600 feet and cannot be sectioned in 2,600 feet (max.) lengths, the allowable leakage will be figured at 2,600 feet.
- D. Allowable leakage shall be determined by AWWA C600 table latest edition for hydrostatic tests. Leakage shall be defined as the quantity of water that must be supplied into the newly laid pipe, or any valved section thereof; to maintain the test pressure after the air in the pipe line has been expelled and the pipe has been filled with water.
- E. All digging on the job site in the right-of-way must be completed before any testing of water or sewer. Any digging or boring across water or sewer lines after they have been tested may result in a retest of the lines at the County's request.
- F. If any revisions or changes are made after initial testing, lines will be re-tested at the County's request.
- G. Disconnect water supply during test.
- H. All force mains will be tested from the valves in the valve vault at the lift station to the point of connection whether it be against a valve on another force main or into a manhole.
- I. All services to be aboveground during test. The services should be the correct length so they will be one (1) foot inside right-of-way line.
- J. All fire hydrant gate valves to be open during test.
- K. All visible leaks are to be repaired, regardless of the amount of leakage.
- L. Check gauge pressure periodically during test. If test pressure drops to 175 psi for water/reclaimed lines or to 145 psi for force mains during test, the line must be repumped back to 180 psi for water/reclaimed (150 psi force mains) and the amount of leakage measured. The test will continue on with the remaining time left. At the end of the test, the line must be repumped again back to 180 psi (150 psi for force main) and the amount of leakage measured and added to any previous leakage determined earlier in the test.
- M. After the line passes the test, the pressure will be blown off from the opposite end of line from the gauge location. Fire hydrants, services and end-of-line blow offs will be opened to demonstrate they were on line during the test.
- N. At end of test, the test gauge must return to zero. The pressure gauge must read 0 psi to a maximum of 300 psi in 5 psi increments.

- O. The section of line being tested must be identified on the charge sheet. The length and size of pipe, the exact area being tested and the valves being tested against, must be identified. Use Station numbers if available.
- P. A punch list must be made at the end of all tests.
- Q. A copy of the charge sheet will be given to the County and the Contractor at the end of the test.

1.03 INSPECTION/TESTING PROCEDURE COVERING BORED PIPE LINES OR CASING AND CONDUITS INSTALLED ACROSS PREVIOUSLY TESTED AND/OR COUNTY ACCEPTED WATER AND SEWER PIPE WITHIN DEVELOPMENT PROJECTS UNDER ACTIVE CONSTRUCTION

- A. Prior to testing water and sewer lines, every effort will be made to install sleeves for underground utilities that will cross these water and sewer lines or services.
- B. Where it has not been possible to pre-install sleeves prior to testing and bores or conduits are required, it is the responsibility of the utility company and/or their Contractor performing the work to provide Manatee County Utility Operations Department or the Engineer of Record with accurate horizontal and vertical as-built information of the sleeves, bores and conduits installed by said utility company. This applies to all bores and conduits crossing water and sewer lines.
- C. Procedures to be followed for installation of conduits, pipe lines and bores that will cross, or be closer than 5'-0" horizontally and 18 inches vertically to, previously tested water and sewer lines that are still under the ownership of the developer/contractor.
 1. Notify the County and obtain the best as-built information available. Allow sufficient time for the County to field locate the existing pipe lines.
 2. Submit drawings of proposed location to the County and Manatee County Utility Operations Dept. Utility Locations Section for review.
 3. Obtain a County Right-of-Way Use Permit if the work area is within a dedicated area of right-of-way.
 4. Perform installation in the presence of a County representative. Call (941) 792-8811, ext. 5061 or ext. 5069 with at least two (2) working days notice.
 5. Submit two (2) copies of as-built information to the County to incorporate into the record drawings to be submitted to the County.
 6. Failure to follow steps 2) thru 5) will result in additional charges for retesting the previously tested water and sewer lines.
- D. Procedures to be followed for installation of conduits, pipe lines and bores crossing or closer than 5'-0" horizontally and 18 inches vertically to previously tested water and sewer lines that have been previously accepted by Manatee County:
 1. Obtain record drawing information from the County.
 2. If roadway has been dedicated to Manatee County, obtain Right-of-Way Use Permit and copy the Project Management Department Locations Section with proposed location drawing.
 3. Follow procedures in "Sunshine State One-Call", paying special attention to the requirements of Section VII.

- E. Should water or sewer lines be damaged during the bore pipe line or casing installation, the cost of any repairs and retesting will be paid for by the utility company that installed the bore. The actual clearance between a bored casing crossing a water or sewer pipe should not be less than 18 inches.

1.04 DETECTION

- A. Direct buried pipe shall have 3" detectable metallic tape of the proper color placed directly above the pipe and 12" below finished grade or 6" detectable tape between 12" and 24" below finished grade.
- B. Direct buried or horizontal directional drilled non-metallic pipe shall also have tracer wire installed along the pipe alignment. The tracer wire to be used shall be a solid, 10 gauge, high strength, copper clad steel wire with a polyethylene jacket of appropriate color manufactured by Copperhead Industries or Manatee County approved equal.

END OF SECTION

SECTION 02618 PIPELINE CLEANING

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. The Contractor shall furnish all labor, materials, equipment and incidentals required to clean all new lines 4" and larger, and existing pipelines as specified in this specification and as indicated on the Drawings.
- B. This work shall include the furnishing and installation of all pig launching and retrieval devices and the appropriate pigs for the cleaning procedure, and all necessary excavations, shutdowns, fittings and valves required.

1.02 RELATED WORK

- A. The contractor is responsible for all necessary supply water.
- B. The contractor is responsible for all necessary bypass pumping.
- C. The contractor is responsible for the proper disposal of any materials removed from the pipe lines as a result of the cleaning procedure.

1.03 SUBMITTALS

- A. The Contractor shall submit prior to construction, a cleaning plan, Shop Drawings, and layout diagram for approval to the County.
- B. The Contractor shall submit to the County a list of materials to be furnished, and the names of suppliers.

1.04 QUALIFICATIONS

- A. The Contractor performing this work shall be fully qualified, experienced and equipped to complete this work expeditiously and in a satisfactory manner.
- B. The Contractor shall also be capable of providing crews as needed to complete this work without undue delay.
- C. The County reserves the right to approve or disapprove the Contractor, based on the submitted qualifications.

PART 2 PRODUCTS

2.01 GENERAL

- A. The contractor shall be responsible for furnishing pigs in sufficient numbers and sizes, of appropriate densities, coatings and configurations to properly clean the piping systems.
- B. All pigs used for the cleaning of sewer or reclaimed water lines shall not be used in the cleaning of potable water lines.

2.02 MATERIALS

- A. The pig launching and retrieval equipment shall be of the latest design and construction and shall include the means to maintain constant monitoring of the in-line flows and pressures of the system being cleaned and the constant location of the cleaning pigs in the system. Launching and retrieval systems shall be fabricated, designed and manufactured according to ANSI standards and capable of withstanding working pressures of 150 psi. Launching and receiving devices shall be sized one diameter larger than the system to which it will be attached with a minimum length of 2.5 times the diameter.
- B. The contractor shall have available for immediate use an electronic pig detector for use in the system being cleaned to provide a means of tracking the passage of the pig in the system to locate areas of potential or suspected blockage and other disparities in the system.
- C. The pig shall be constructed of elastomer polyurethane with an open cell construction and a density equal to or suitable for use in the piping system being cleaned. Pig configuration shall consist of a parabolic nose with a concave base and coated with a resilient surface material that will maintain a peripheral seal and will effectively clean the piping system without over abrading the interior pipe wall. Pig characteristics shall include the ability to navigate through 90 degree bends, 180 degree turns, bi-directional fittings, full port valves, reduce its cross sectional area and return to its original design configuration and be propelled by hydraulic pressure.

PART 3 EXECUTION

3.01 PIPELINE CLEANING

- A. The cleaning of the pipe line shall be done by the controlled and pressurized passage of a polyurethane pig of varying dimensions, coatings and densities as determined by the County through the piping system.
- B. A series of pigs shall be entered into the system at a point as near to the beginning as is logistically and mechanically feasible.
- C. A launching assembly shall be used as the entrance point for the pig. This assembly shall allow for the following:
 - 1. The entering of pigs into the system by providing the means to induce flow from an external source, independent of the flows and pressures immediately available from the system, on the back of the pig to develop sufficient pressure to force the pig through the system.
 - 2. A means to control and regulate the flow.
 - 3. A means to monitor the flows and pressures.
 - 4. A means to connect and disconnect from the system without any disruption to the operation of the system.
- D. The pig shall be removed or discharged from the system at a point as near to the end as is logistically and mechanically feasible.
- E. The contractor shall be responsible for the retrieval of the pig at the discharge point. This may include setting a trap that will not disrupt normal flow and operations but will capture the pig and any debris. A retrieval assembly may also be used but said assembly shall be

able to connect and disconnect from the system without any disruption to the operation of the system.

- F. Alternative launching and retrieval methods shall be done with the prior approval of the County.
- G. Any pig that cannot progress through the piping system shall be located by the contractor and removed by excavation of the pipe in order to remove the blockage. All pipe repairs shall be the responsibility of the contractor and shall be performed with as little disruption to the system as possible.
- H. Any increase in pressure that cannot be accounted for, i.e. fittings or valves or additional cleaning runs, shall be investigated, per the Engineers' approval, by locating the pig at the beginning of the increased pressure and excavating to determine the cause of the pressure increase. All pipe repairs shall be the responsibility of the contractor and shall be performed with as little disruption to the system as possible.
- I. Final flushing of the cleansed lines shall be performed after the last successful run of the pig as determined by the County. The contractor shall be responsible for all applicable flushing and disinfection requirements for potable water lines.

3.02 ACCEPTANCE

- A. The contractor shall maintain and provide a report at the end of the cleaning procedure containing the following:
 - 1. The pressures in the pipe during the pigging procedure.
 - 2. Any inline problems encountered during the procedure including all excavations with detailed locations, reason for the excavation and any corrective measures taken to the pipeline.
 - 3. A record of the pigs used, their sizes, styles and other pertinent information regarding what materials were used during the cleaning.
 - 4. An analysis of the condition of the pipeline before and after the cleaning procedure.

END OF SECTION

**SECTION 02622 POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS
(AWWA SPECIFICATIONS C-900 & C-905)**

PART 1 GENERAL

1.01 SCOPE OF WORK

The Contractor shall furnish all labor, materials, equipment and incidentals required to install the plastic piping, fittings and appurtenances complete and ready for use as specified in the Contract Documents and these Standards.

1.02 DESCRIPTION OF SYSTEM

The Contractor shall install the piping in the locations as shown on the Drawings.

1.03 QUALIFICATIONS

All plastic pipe, fittings and appurtenances shall be furnished by a single manufacturer who is fully experienced, reputable, qualified and specializes in the manufacture of the items to be furnished. The pipe and fittings shall be designed, constructed and installed in accordance with the best practices and methods and shall comply with these Specifications.

1.04 SUBMITTALS

- A. The Contractor shall submit shop drawings to the County including, but not limited to, dimensions and technical specifications for all piping.
- B. The Contractor shall submit to the County, samples of all materials specified herein.
- C. The Contractor shall submit and shall comply with pipe manufacturer's recommendation for handling, storing and installing pipe and fittings.
- D. The Contractor shall submit pipe manufacturer's certification of compliance with these Specifications.

1.05 TOOLS

The Contractor shall supply special tools, solvents, lubricants, and caulking compounds required for proper installation.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Pressure Class-Rated Polyvinyl Chloride (PVC) Pipe
 - 1. Pressure class-rated PVC pipe and accessories four to twelve inches (4"-12") in diameter, shall meet the requirements of AWWA Specification C-900 "Polyvinyl Chloride (PVC) Pressure Pipe". Pipe shall be Class 150, meeting requirements of Dimension Ratio (DR) 18 and shall have the dimension of ductile iron outside diameters. Each length of pipe shall be hydrotested to four (4) times its class pressure by the manufacturer in accordance with AWWA C-900.

2. PVC pipe shall not be used for potable and reclaim waterlines 16 inches and larger. Fourteen inch (14") thru 36" PVC pipe for sewer force mains shall meet AWWA C-905 requirements for dimension ratio (DR) 21. Each length of pipe shall be tested at twice the pressure rating (PR 200 psi) for a minimum dwell of five seconds in accordance with AWWA C-905.

Pipe shall be listed by Underwriters Laboratories. Provisions shall be made for expansion and contraction at each joint with an elastomeric ring, and shall have an integral thickened bell as part of each joint. PVC Class pipe shall be installed as recommended by the manufacturer. Pipe shall be furnished in nominal lengths of approximately 20 feet, unless otherwise directed by the County. Pipe and accessories shall bear the NSF mark indicating pipe size, manufacturer's names, AWWA and/or ASTM Specification number, working pressure, and production code.

3. Gaskets for 16" diameter and larger pipe used for potable water pipe shall be EPDM (Ethylene-Propylene Dine Monomer).
4. PVC pipe 3" and less in diameter may be constructed using pipe conforming to ASTM D2241 with push-on joints. Pipe shall be 200 psi pipe-SDR 21 unless otherwise specified by the County. This PVC pipe shall not be used for working pressures greater than 125 psi.
5. Pipe shall be blue for potable water mains, green for sewage force mains and purple for reclaimed water mains. All potable water pipe shall be NSF certified and copies of lab certification shall be submitted to the County.
6. Where colored pipe is unavailable, white PVC color coded spiral wrapped pipe shall be installed.

B. Joints

1. The PVC joints for pipe shall be of the push-on type unless otherwise directed by the County so that the pipe and fittings may be connected on the job without the use of solvent cement or any special equipment. The push-on joint shall be a single resilient gasket joint designed to be assembled by the positioning of a continuous, molded resilient ring gasket in an annular recess in the pipe or fitting socket and the forcing of the plain end of the entering pipe into the socket, thereby compressing the gasket radially to the pipe to form a positive seal. The gasket and annular recess shall be designed and shaped so that the gasket is locked in place against displacement as the joint is assembled.

The resilient ring joint shall be designed for thermal expansion or contraction with a total temperature change of at least 75 degrees F in each joint per length of pipe. The bell shall consist of an integral wall section with a solid cross section elastomeric ring which shall meet requirements of ASTM F-477. The thickened bell section shall be designed to be at least as strong as the pipe wall. Lubricant furnished for lubricating joints shall be nontoxic, shall not support the growth of bacteria, shall have no deteriorating effects on the gasket or pipe material, and shall not impart color, taste, or odor to the water. Gaskets shall be suitable for use with potable water, reclaimed water or sanitary sewer as applicable.

2. Restrained joints shall be provided at all horizontal and vertical bends and fittings, at casings under roads and railroads and at other locations shown on the Contract Drawings. PVC joints for pipe shall be restrained by the following methods: thrust

blocks, restraining glands such as Certa-Lok Restraining Joint Municipal Water Pipe by the Certain Teed Corporation of Valley Forge, PA, or approved equal. All Grip, Star Grip by Star Products, MJR by Tyler Pipe, Tyler, Texas. Restrained joint PVC pipe shall be installed in strict accordance with the manufacturer's recommendation.

C. Fittings

1. All fittings for class-rated PVC pipe shall be ductile iron with mechanical joints and shall conform to the specifications for ductile iron fittings, unless otherwise directed. Class 200, C-900 PVC fittings are allowable for sewage force main applications up to and including 12" diameter only. DR ratio shall be the same as the pipe.
2. The manufacturer of the pipe shall supply all polyvinyl chloride accessories as well as any adapters and/or specials required to perform the work as shown on the Drawings and specified herein. Standard double bell couplings will not be accepted where the pipe will slip completely through the coupling.

PART 3 EXECUTION

3.01 INSTALLATION

The Contractor shall install the plastic pipe in strict accordance with the manufacturer's technical data and printed instructions. Direct bury pipe shall have 3" detectable metallic tape of the proper color placed directly above the pipe 12" below finished grade or 6" detectable tape between 12" and 24" below grade.

3.02 INSPECTION AND TESTING

All pipe lines shall remain undisturbed for 24 hours to develop complete strength at all joints. All pipe lines shall be subjected to a hydrostatic pressure test for two (2) hours at full working pressure, but not less than 180 psi for water/reclaimed (150 psi for force main). All visible leaks shall be repaired and retested for approval by the County. Prior to testing, the pipe lines shall be supported in a manner approved by the County to prevent movement during tests.

END OF SECTION

SECTION 02627 SANITARY SEWER MANHOLE REHABILITATION

PART 1 GENERAL

1.01 DESCRIPTION

- A. This specification consists of all work, materials, labor and equipment required for manhole rehabilitation for the purpose of eliminating infiltration and exfiltration, providing corrosion protection, adjusting final grade of manhole top, repair of voids and restoration of the structural integrity of the manhole. All such work shall comply with these Specifications and the specific product manufacturer's recommendations. Any conflict between the product manufacturer's recommendations and any portion of the Contract Documents shall be resolved prior to beginning the work.

1.02 PRODUCT AND MANUFACTURER QUALIFICATION REQUIREMENTS

- A. Since sewer products are intended to have a 50 year design life, and in order to minimize the County's risk, only proven products with substantial successful long term track records will be allowed. At a minimum, products and installers must meet all of the following criteria to be deemed commercially acceptable:
1. For a Product to be considered commercially acceptable, the product must have a minimum of two (2) million square feet and ten (10) year history of successful wastewater collection system installations in the United States. In addition, products must provide Third Party Test Results supporting the long-term performance and structural strength of the product and such data shall be satisfactory to the Owner. No product will be allowed without Independent Third Party Testing verification.
 2. For an installing Contractor to be considered commercially acceptable, the installer must have a certification from the manufacturer as a licensed and fully trained installer of the product. The installer must also have a minimum of one (1) million square feet of successful wastewater collection system installations on underground concrete/masonry structures and ten (10) years of rehabilitation experience.

1.03 SUBMITTALS:

- A. Product
1. Technical data sheets showing the physical and chemical properties.
 2. Material Safety Data Sheets (MSDS).
 3. Third Party Testing results.
 4. Verification of minimum installation requirements set forth in section 1.02.A.1 above.
- B. Installer
1. Verification of "certified applicator" status.
 2. Verification of minimum installation requirements set forth in section 1.02.A.2 above.
- C. Written certification from the product manufacturer that each of the proposed rehabilitation products is compatible with each other.
- D. Submit with Each Project:
1. Description, layout, and application sequencing plan.

2. Rehabilitation system application requirements including material handling and storage requirements, mixing and proportioning requirements (as applicable), maximum pot life, film/coating thickness, curing, testing and certification requirements of all rehabilitation materials. Product Material Safety Data Sheets.
3. Detailed instructions and methodology for finishing all pipe and manhole connections to rehabilitated manholes to prevent infiltration and exfiltration.
4. Wastewater Flow Control/Bypassing Plan.
5. Confined Space Entry Plan/Permit.
6. Plan for capturing extraneous debris during rehabilitation processes and debris disposal.

1.04 MATERIALS

- A. Refer to the latest Manatee County Public Works Utility Standards Section 12 Precast Concrete Manholes and Wetwells for material requirements and details.

1.04.1 CEMENTITIOUS MORTAR

- A. Mortar shall be made of one part Portland cement and two parts clean sharp sand. Cement shall be Type 1 and shall conform to ASTM C 150. Sand shall meet the requirements of ASTM C 144.

1.04.2 PATCHING MATERIAL

- A. A quick setting fiber reinforced cementitious material shall be used as a patching material and is to be mixed and applied according to manufacturer's recommendations.

1.04.3 HYDRAULIC CEMENT

- A. A rapid setting, high-early-strength, cementitious product specifically formulated for leak control shall be used to stop water infiltration. The material shall be mixed and applied according to the manufacturer's recommendations.

1.04.4 CHEMICAL GROUT

- A. A chemical grout shall be used for stopping very active infiltration and filling voids.

1.04.5 LINER MATERIAL

A. CEMENTITIOUS MATERIAL

1. Cementitious liner products shall be used to form a structural monolithic liner covering all interior manhole surfaces and shall have the following minimum requirements:
 - a. Compressive Strength (ASTM C109): 7,000 psi, 28days
 - b. Tensile Strength (ASTM C496): 700 psi, 28 days
 - c. Flexural Strength (ASTM C293): 1,300 psi, 28 days
 - d. Shrinkage (ASTM C596): 0.02% at 28 days
 - e. Minimum Bond (ASTM C952): 200 psi, 28 days
2. Refer to Section 09920 Sewpercoat Surface System of the specifications.

When used as the final rehabilitation liner material (no epoxy liner), product shall be made with calcium aluminate cement. Calcium aluminate is not required when the

cementitious liner is used as the underlayment for a protective coating liner application.

B. PROTECTIVE COATING LINER MATERIAL

1. The protective coating liner is to be applied where corrosion is anticipated. The protective coating liner material shall be applied over the completed cementitious liner material (without the calcium aluminate). The liner shall be spray applied or spin cast. The manufacturer of the selected protective coating liner material shall approve in writing that their protective coating liner is compatible with cementitious repair and liner material.
2. The protective coating liner material shall conform to Section 09970 Surface Protection Spray Systems of the specifications.

C. WATER

1. Water shall be clean and potable.

1.04.6 INTERNAL MANHOLE CHIMNEY SEAL MATERIAL

A. An aromatic urethane rubber material or flexible epoxy mastic used to prevent leakage of water into the manhole through the frame joint area and the area above the manhole cone and shall have the following minimum requirements:

1. Elongation (ASTM D412): 600%
2. Tensile Strength (ASTM D412): 1,150 psi
3. Adhesive Strength (ASTM D903): 175 lb. /in.
4. Tear Resistance (ASTM D1004): 155 lb. /in.

The seal shall extend from the inside of the manhole frame down to the cone or corbel of the manhole.

1.04.7 EXTERNAL MANHOLE SEAL WRAP

A. External Manhole Seal Wrap: When work consists of adjusting manholes or cone replacements, an external seal wrap shall be installed to the outside of concrete risers, steel risers and joints of the precast manhole in order to eliminate infiltration. The external seal wrap shall conform with Manatee County Public Works Department Utility Standards Section 12 and be installed in accordance with the details of the Contract Documents and the manufacturer's recommendations.

1.05 PREPARATION

- A. Perform traffic control in accordance with the approved traffic control submittal.
- B. Store materials in accordance with manufacturer's recommendations.
- C. Schedule and perform the work in a manner that does not cause or contribute to overflows or spills of sewage from the sewer system.
- D. Install devices to prevent extraneous material from entering the sewer system and to prevent upstream line from flooding the manhole. If extraneous material or debris falls into a "live" manhole during adjustment operations, the Contractor shall remove debris at no cost to the Owner.

- E. Dispose of wastes in accordance with applicable regulations.
- F. Schedule and perform any bypass pumping that will be necessary to properly rehabilitate the manhole.

- G. If present in the manhole, Contractor shall remove all access steps. Removal shall consist of neatly cutting steps flush with the wall prior to any lining installation. Contractor shall be responsible for proper disposal of steps.

- H. For manholes that are located within pavement areas and require resetting or replacement of concrete riser rings, cones, and /or frames, the Contractor shall sawcut, remove, and replace a 6 ft. x 6 ft. square or round section of pavement and base for rehabilitation operations. Costs for removal and replacement of pavement and base beyond these limits shall be borne by the Contractor.

1.06 INSTALLATION

- A. Prior to any lining all other miscellaneous work must be complete.

- B. Prior to man entry into any structure to be rehabilitated, proper ventilation and strict confined space OSHA regulations shall be followed. Failure to do so shall be grounds for removal from the project.

1.06.1 CONE REPLACEMENT

- A. The Contractor shall replace existing deteriorated manhole cone section with new precast concrete cone section. A preformed rubber gasket shall be placed in all keyways between existing manhole riser section and cone joints. Prior to backfilling, rubber external seal wraps shall be applied to the cone and manhole section joint, riser rings and frame in accordance with Manatee County Public Works Department Utility Standards. If the existing manhole is of brick construction, the cone shall be set in a full bed of mortar on the top course of bricks.

1.06.2 RISER RINGS

- A. The Contractor shall replace existing, deteriorated riser rings with new precast concrete riser rings. All manholes designated to receive casting adjustment and/or alignment shall be adjusted to meet existing finished grade unless an alternative elevation is specified. A cementitious mortar shall be placed in between individual precast concrete riser rings, and precast concrete riser ring and cone joints. The mortar shall be struck smooth with the interior surface of the manhole and floated with a sponge float to a surface profile of 8-10 mils. Prior to backfilling, rubber external seal wraps shall be applied to the cone and manhole section joint, riser rings and frame in accordance with Manatee County Public Works Department Utility Standards.

1.06.3 MANHOLE FRAME AND COVER

- A. Existing frames and covers which must be removed to facilitate manhole rehabilitation, riser reconstruction, and/or casting alignment or grade adjustments shall be salvaged, cleaned and given two coats of an approved bituminous coating by the Contractor for replacement unless determined to be defective by Engineer. If manhole frame and/or cover are determined to be defective, Contractor shall replace with new frame and/or cover. Replacement frames and/or covers shall be furnished and installed in accordance with the Contract Documents. Frames shall be set in full mortar bed. The mortar shall be struck

smooth with the interior surface of the manhole and floated with a sponge float to a surface profile of 8-10 mils.

1.06.4 CEMENTITIOUS LINER

- A. Active leaks shall be stopped using hydraulic cement or chemical grout as necessary. Installation shall be in accordance with the manufacturer's recommendations.
- B. All manholes to be lined shall be cleaned and scarified with a minimum of 5,000 psi water jet at a minimum water temperature of 180 degrees F. The water jet shall hit the manhole wall surface at as near perpendicular angle as possible. Cleaning the manhole walls from the ground surface without the appropriate angled nozzles will not be accepted. Manhole surface build-up of debris and loose manhole construction materials shall be removed during the cleaning process.
- C. The intent of the surface preparation and cleaning work is to remove debris, films (oil, greases, etc or unsound, deteriorated concrete and to provide a structurally sound, clean surface that will enable lining materials to bond to the original substrate at adhesion strengths of that specified herein, a substrate pH of 8.3 is the minimum pH that will be considered acceptable to demonstrate that the surface preparation and cleaning have been properly performed.
- D. Additional aggressive surface preparation and cleaning methods may be necessary to remove carbonated cementitious lining concrete or contaminants that remain after the cleaning performed as described above. The Contractor shall test the pH of the cleaned manhole interior surface at various locations of the manhole and when the results indicate a pH less than 8.3 then additional surface preparations and cleaning will be required. As a minimum level of effort the Contractor shall either dry sand blasting or pneumatic jackhammering with a bushing bit followed by a minimum 5,000 psi water blast.
- E. Any bench, invert or service line repairs shall be made at this time using quick setting grout or repair mortar per the manufacturer's recommendations.
- F. Invert repair shall be performed on all inverts with visible damage or where infiltration is present. After blocking flow through the manhole and thoroughly cleaning the invert, quick setting patch material shall be applied to the invert in an expeditious manner. The finished invert surfaces shall have a smooth surface and form a continuous monolithic conduit with the sewer pipe entering and leaving the manhole. The bench and invert shall form a watertight seal with the manhole walls, base and pipe seal.
- G. Wastewater flow shall be controlled by methods which prevent contact with the new bench and invert for 6-8 hours after mortar placement. If 6-8 hours set time is not possible, a fast setting, high early strength mortar shall be used with provisions for flow control until concrete has set.
- H. Fill all cracks, holes and joints that have voids using non-shrink grouts in accordance with the manufacturer's recommendations.
- I. Apply Cementitious Liner Material per the Manufacturer's recommendations. Apply Cementitious Liner material so that the final thickness is 0.5-inch minimum or per the thickness required by the manufacturer's minimum specification, whichever is greater. The material shall start at the bottom of the manhole frame and extend to the water level of the invert.

- J. Finishing: Trowel the surface of the liner to create a uniform smooth finish. Caution shall be taken to prevent over working the material. Once the initial cure has taken place, the exposed surface area should be given a broom finish. Thickness may be verified at any point with a wet gage.
- K. If the cementitious lining material is not immediately coated with a protective coating liner, apply a seal coat compatible with the repair material to aid in curing and minimize recontamination of the substrate prior to application of the protective coating liner material.

1.06.5 PROTECTIVE COATING LINER

- A. Prior to any protective coating lining perform all work shown in Section 1.06.4 above.
- B. Remove any curing compounds, sealers or contaminates prior to protective coating lining.
- C. Apply protective coating lining material in accordance with the manufacturer's recommendations over the waterproofing/structural repair material shown in Section 1.06.4.
- D. Apply protective coating lining material in accordance to Section 09970 Surface Protection Spray System of the specifications.

1.06.6 INTERNAL MANHOLE CHINMEY SEALANT

- A. Perform all work shown in Sections 1.06.4 and 1.06.5 (if 1.06.5 is required) prior to any Internal Manhole Chimney Sealant.
- B. Clean all contaminates from manhole frame by sandblasting or mechanical methods as recommended by the chimney sealant manufacturer.
- C. Install Internal Manhole Chimney Sealant in accordance with the manufacturer's recommendations. The Contractor shall contact the manufacture for thickness recommendations however; the final liner material shall be made no less than 170 mils.

1.06.7 EXTERNAL MANHOLE SEAL WRAP

- A. When Work consists of adjusting sewer manholes or cone replacement, an external seal wrap shall be installed to the outside of concrete risers, steel risers and joints of the precast manhole in order to eliminate infiltration. Frame and cover shall be completely coated prior to installation of the external seal wrap. The external seal wrap shall be installed in accordance with the details of the Contract Documents and the manufacturer's recommendations.

1.06.8 MANHOLE INSERT

- A. If existing manhole is not equipped with a watertight manhole insert, Contractor shall furnish and install a new manhole insert per Manatee County Public Works Utility Standards Section 12 and in accordance with the manufacturer's recommendations.
- B. If existing manhole is equipped with a watertight manhole insert to prevent intrusion of storm water, the insert shall be cleaned and reinstalled by the Contractor, unless determined to be defective by the County. If insert is determined to be defective, Contractor shall furnish

a new watertight manhole insert and install in accordance with manufacturer's recommendations at the completion of manhole rehabilitation operations.

1.07 TESTING

- A. After completion of any rehabilitation operation and prior to backfilling (if required), the Contractor shall conduct the following tests on the manholes:
 - 1. Visual Inspection: The County and Contractor shall make a final visual inspection. Any deficiencies in the finished system shall be marked and repaired.
- B. If a protective coating liner is applied, the following additional tests will be required:
 - 1. Wet Film Thickness Gage: During application a wet film thickness gage, meeting ASTM D4414 - Standard Practice for Measurement of Wet Film Thickness of Organic Coatings by Notched Gages, shall be used to ensure a monolithic coating and uniform thickness during application.

1.08 WARRANTY

- A. The Contractor shall guaranteed the work to be free of defects in materials and workmanship for five-year period, unless otherwise stated, after completion and acceptance of the work. The Contractor shall repair defects in materials or workmanship, which may develop during the warranty period; and any damage to other work caused by such defects or discovered within the same period at no additional cost to the County.

1.08.1 WARRANTY INSPECTIONS

- A. Conduct visual inspection prior to expiration of warranty to determine integrity of rehabilitation materials and water-tightness.
 - 1. Complete post inspection during first high groundwater period (spring or fall) following acceptance of work.
 - 2. Contractor should accompany County on inspections.
 - 3. Inspect a minimum of 25 percent of the manholes rehabilitated at locations selected by County.
 - a. Infiltration and Inflow: None
 - b. Structural Repair: Sound
 - c. If more than one manhole fails warranty inspection, inspect all manholes with similar characteristics.
 - d. Repair defects in accordance with Warranty.

END OF SECTION

SECTION 02640 VALVES AND APPURTENANCES

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. The Contractor shall furnish all labor, materials, equipment and incidentals required and install complete and ready for operation all valves and appurtenances as shown on the Drawings and as specified herein.
- B. All valves and appurtenances shall be of the size shown on the Drawings and, to the extent possible, all equipment of the same type on the Project shall be from one manufacturer.
- C. All valves and appurtenances shall have the name of the manufacturer and the working pressure for which they are designed cast in raised letters upon some appropriate part of the body.
- D. All valves shall have a factory applied, fusion bonded epoxy coating on interior and exterior unless noted otherwise in the plans or this specification.
- E. The equipment shall include, but not be limited to, the following:
 - 1. Gate valves (Sec. 2.01)
 - 2. Pressure Sustaining and Check Valves (Sec. 2.02)
 - 3. Ball Valves for PVC Pipe (Sec. 2.03)
 - 4. Butterfly Valves (Sec. 2.04)
 - 5. Plug Valves (Sec. 2.05)
 - 6. Valve Actuators (Sec. 2.06)
 - 7. Air Release Valves (Sec. 2.07)
 - 8. Valves Boxes (Sec. 2.08)
 - 9. Corporation Cocks (Sec. 2.09)
 - 10. Flange Adapter Couplings (Sec. 2.10)
 - 11. Flexible Couplings (Sec. 2.11)
 - 12. Hose Bibs (Sec. 2.12)
 - 13. Slow Closing Air and Vacuum Valves (Sec. 2.13)
 - 14. Surge Anticipator Valve (Sec. 2.14)
 - 15. Check Valves (Sec. 2.15)
 - 16. Hydrants (Sec. 2.16)
 - 17. Restraining Clamps (Sec. 2.17)
 - 18. Tapping Sleeves and Tapping Valves (Sec. 2.18)
 - 19. Single Acting Altitude Valves (Sec. 2.19)

1.02 DESCRIPTION OF SYSTEMS

All of the equipment and materials specified herein are intended to be standard for use in controlling the flow of potable water, reclaim water, wastewater, etc., depending on the applications.

1.03 QUALIFICATIONS

All of the types of valves and appurtenances shall be products of well established reputable firms who are fully experienced and qualified in the manufacture of the particular equipment to be furnished. The equipment shall be designed, constructed and installed in accordance

with the best practices and methods and shall comply with these Specifications as applicable. Valves shall be as covered under mechanical devices in Section 8 of ANSI/NSF Standard 61.

1.04 SUBMITTALS

- A. Submit to the County within 30 days after execution of the contract a list of materials to be furnished, the names of the suppliers and the date of delivery of materials to the site.
- B. Complete shop drawings of all valves and appurtenances shall be submitted to the County for approval in accordance with the Specifications.

1.05 TOOLS

Special tools, if required for normal operation and maintenance shall be supplied with the equipment.

PART 2 PRODUCTS

2.01 GATE VALVES

- A. All buried valves shall have cast or ductile iron three (3) piece valve bodies.
- B. Where indicated on the drawings or necessary due to locations, size, or inaccessibility, chain wheel operators shall be furnished with the valves. Such operators shall be designed with adequate strength for the valves with which they are supplied and provide for easy operation of the valve. Chains for valve operators shall be galvanized.
- C. Where required, gate valves shall be provided with a box cast in a concrete slab and a box cover. Length of box shall include slab thickness. Box cover opening shall be for valve stem and nut. Valve wrenches and extension stems shall be provided by the manufacturer to actuate the valves. The floor box and cover shall be equal to those manufactured by Rodney Hunt Machine Company, Orange, Massachusetts, Clow, DeZurik or approved equal.
- D. Gate valves with 3"-20" diameters shall be resilient seated, manufactured to meet or exceed the requirements of AWWA C509 or C515 and UL/FM of latest revision and in accordance with the following specifications. Valves shall have an unobstructed waterway equal to or greater than the full nominal diameter of the valve.
- E. Wrench nut shall be provided for operating the valve.
- F. Valves shall be suitable for an operating pressure of 200 psi and shall be tested in accordance with AWWA C509 or C515. Mueller, Kennedy, M&H, and Clow are acceptable valves.
- G. All bonnet bolts, nuts and studs shall be stainless steel.

2.02 PRESSURE SUSTAINING AND CHECK VALVE

- A. Pressure sustaining and check valve shall be pilot operated diaphragm actuated valve with cast iron body, bronze trim, and 125-pound flanged ends. The valve shall be hydraulically operated, diaphragm type globe valve. The main valve shall have a single removable seat

and a resilient disc, of rectangular cross section, surrounded on three and a half sides. The stainless steel stem shall be fully guided at both ends by a bearing in the valve cover, and an integral bearing in the valve seat. It shall be sleeved at both ends with delrin. No external packing glands are permitted and there shall be no pistons operating the main valve or any controls. The valve shall be equipped with isolation cocks to service the pilot system while permitting flow if necessary. Main valve and all pilot controls shall be manufactured in the United States of America. Valve shall be single chamber type, with seat cut to 5 degrees taper.

- B. Valve shall maintain a minimum (adjustable) upstream pressure to a preset (adjustable) maximum. The pilot system shall consist of two direct acting, adjustable, spring loaded diaphragm valves.
- C. Valve shall be cast iron (ASTM A48) with main valve trim of brass (QQB-B-626) and bronze (ASTM B61). The pilot control valves shall be cast brass (ASTM B62) with 303 stainless steel trim. All ferrous surfaces inside and outside shall have a 2-part epoxy coating. Valve shall be similar in all respects to CLA-VAL Company, Model 692G-01ABKG, as manufactured by CLA-VAL Company, Winter Park, Florida, or similar pressure sustaining and check valve as manufactured by Golden Alderson; or approved equal.

2.03 BALL VALVES FOR PVC PIPE

- A. Ball valves for PVC pipe shall be of PVC Type 1 with union, socket, threaded or flanged ends as required. Ball valves shall be full port, full flow, all plastic construction, 150 psi rated with teflon seat seals and T-handles. PVC ball valves shall be as manufactured by Celanese Piping Systems, Inc., Wallace and Tiernan, Inc., Plastiline, Inc., or approved equal.
- B. All valves shall be mounted in such a position that valve position indicators are plainly visible when standing on the floor.

2.04 BUTTERFLY VALVES

- A. Butterfly valves shall conform to the AWWA Standard Specifications for Rubber Seated Butterfly Valves, Designated C504, except as hereinafter specified. Valves shall be Class 250 and equal to those manufactured by Henry Pratt Company, DeZurik, Mueller, or approved equal. M&H/Kennedy/Clow are not generally approved equals. Ductile iron conforming to ASTM A536, Grade 65-45-12 shall be provided for all Class 250 valves. All valves shall be leak tested at 200 psi.
- B. The face-to-face dimensions of flanged end valves shall be in accordance with Table 1 of above mentioned AWWA Specification for short-body valve. Adequate two-way thrust bearings shall be provided. Flange drilling shall be in accordance with ANSI B16.1.
- C. Valve seats shall be an EPDM elastomer. Valve seats 24 inches and larger shall be field adjustable and replaceable without dismounting operator disc or shaft and without removing the valve from the line. All retaining segments and adjusting devices shall be of corrosion resistant material with stainless Nylock screws and be capable of the 1/8-inch adjustment. Valves 20 inches and smaller shall have bonded or mechanically restrained seats as outlined in AWWA C 504. Where the EPDM seat is mounted on the valve body, the mating edge of the valve disc shall be 18-8 stainless steel or Nickel-Chrome, 80-20%. Where the EPDM seat is mounted on the valve disc, the valve body shall be fitted with an 18-8 stainless

steel seat offset from the shaft, mechanically restrained and covering 360 degrees of the peripheral opening or seating surface.

- D. The valve body shall be constructed of ductile iron or close grain cast iron per ASTM A126, Class B with integrally cast hubs for shaft bearing housings of the through boss-type. Butterfly valves of the "wafer" or "spool" type will not be accepted.
- E. The valve shaft shall be turned, ground, and polished constructed of 18-8, ASTM A-276, Type 304 stainless steel and designed for both torsional and shearing stresses when the valve is operated under its greatest dynamic or seating torque. Shaft shall be of either a one piece unit extending full size through the valve disc and valve bearing or it may be of a stub shaft design. Shaft bearings shall be teflon or nylon, self-lubricated type.
- F. All valves shall be subject to hydrostatic and leakage tests at the point of manufacture. The hydrostatic test for Class 250 valves shall be performed with an internal hydrostatic pressure equal to 500 psi applied to the inside of the valve body of each valve for a period of five minutes. During the hydrostatic test, there shall be no leakage through the metal, the end joints or the valve shaft seal. The leakage test for the Class 250 valves shall be performed at a differential pressure of 230 psi and against both sides of the valve. No adjustment of the valve disc shall be necessary after pressure test for normal operation of valve. The Class 150 valves shall be tested in conformance with AWWA C-504.
- G. In general, the butterfly valve operators shall conform to the requirements of Section 3.8 of the AWWA Standard Specifications for Rubber Seated Butterfly Valves, Designation C504, insofar as applicable, and as herein specified.
- H. Gearing for the operators shall be totally enclosed in a gear case in accordance with paragraph 3.8.3 of the above mentioned AWWA Standard Specification.
- I. Operators shall be capable of seating and unseating the disc against the full design pressure of velocity, as specified for each class, into a dry system downstream and shall transmit a minimum torque to the valve. Operators shall be rigidly attached to the valve body.
- J. The manufacturer shall certify that the required tests on the various materials and on the completed valves have been satisfactory and that the valves conform with all requirements of this Specification and the AWWA standard.
- K. Where indicated on the Drawings, extension stems, floor stands, couplings, stem guides, and floor boxes as required shall be furnished and installed.

2.05 PLUG VALVES

- A. All plug valves shall be eccentric plug valves capable of sustaining 150 psi in either direction without leaking.

Exception: Single direction plug valves may be used if it is clearly demonstrated they will never be required to resist pressure in both directions either in service or during pipe line testing.
- B. Plug valves shall be tested in accordance with current AWWA Standard C-504-80 Section 5. Each valve shall be performance tested in accordance with paragraph 5.2 and shall be

given a leakage test and hydrostatic test as described in paragraphs 5.3 and 5.4. Plug valves shall be Kennedy or Dezurik.

- C. Plug valves shall be of the non-lubricated eccentric type with resilient faced plugs and shall be furnished with end connections as shown on the Plans. Flanged valves shall be faced and drilled to the ANSI 150 lb. standard. Mechanical joint ends shall be to the AWWA Standard C111-72. Bell ends shall be to the AWWA Standard C100-55 Class B. Screwed ends shall be to the NPT standard.
- D. Plug valve bodies shall be of ASTM A126 Class B Semi-steel, 31,000 psi tensile strength minimum in compliance with AWWA Standard C507-73, Section 5.1 and AWWA Standard C504-70 Section 6.4. Plug valves shall have a minimum 100% circular cross sectional area and full port unless written approval is received from the County. All exposed nuts, bolts, springs, washers, etc. shall be zinc or cadmium plated. Resilient plug facings shall be of Hycar or Neoprene.
- E. Plug valves shall be furnished with permanently lubricated stainless steel or oil-impregnated bronze upper and lower plug stem bushings. These bearings shall comply with current AWWA Standards.

2.06 VALVE ACTUATORS

A. General

- 1. All valve actuators shall conform to Section 3.8 of the AWWA Standard Specification and shall be either manual or motor operated.
- 2. Actuators shall be capable of seating and unseating the disc against the full design pressure and velocity, as specified for each class, into a dry system downstream, and shall transmit a minimum torque to the valve. Actuators shall be rigidly attached to the valve body.
- 3. Butterfly valve actuators shall conform to the requirements of Section 3.8 of the AWWA Standard specifications for Rubber Seated Butterfly Valves, Designated C504, insofar as applicable and as herein specified.

B. Manual Actuators

- 1. Manual actuators shall have permanently lubricated, totally enclosed gearing with handwheel and gear ratio sized on the basis of actual line pressure and velocities. Actuators shall be equipped with handwheel, position indicator, and mechanical stop-limiting locking devices to prevent over travel of the disc in the open and closed positions. They shall turn counter-clockwise to open valves. Manual actuators shall be of the traveling nut, self-locking type and shall be designed to hold the valve in any intermediate position between fully open and fully closed without creeping or fluttering. Actuators shall be fully enclosed and designed to produce the specified torque with a maximum pull of 80 pounds on the handwheel or chainwheel. Actuator components shall withstand an input of 450 foot pounds for 30" and smaller and 300 foot pounds for larger than 30" size valves at extreme actuator positions without damage. Valves located above grade shall have handwheel and position indicator, and valves located below grade shall be equipped with a two inch (2") square AWWA operating nut located at ground level and cast iron extension type valve box. Valve actuators shall conform to AWWA C504, latest revision.

C. Motor Actuators (Modulating)

1. The motor actuated valve controller shall include the motor, actuator unit gearing, limit switch gearing, limit switches, position transmitter which shall transmit a 4-20 mA DC signal, control power transformer, electronic controller which will position the valve based on a remote 4-20 milliamp signal, torque switches, bored and keywayed drive sleeve for non-rising stem valves, declutch lever and auxiliary handwheel as a self-contained unit.
2. The motor shall be specifically designed for valve actuator service using 480 volt, 60 Hertz, three phase power as shown, on the electrical drawings. The motor shall be sized to provide an output torque and shall be the totally enclosed, non-ventilated type. The power gearing shall consist of helical gears fabricated from heat treated alloy steel forming the first stage of reduction. The second reduction stage shall be a single stage worm gear. The worm shall be of alloy steel with carburized threads hardened and ground for high efficiency. The worm gear shall be of high tensile strength bronze with hobbed teeth. All power gearing shall be grease lubricated. Ball or roller bearings shall be used throughout. Preference will be given to units having a minimum number of gears and moving parts. Spur gear reduction shall be provided as required.
3. Limit switches and gearing shall be an integral part of the valve control. The limit switch gearing shall be made of bronze and shall be grease lubricated, intermittent type and totally enclosed to prevent dirt and foreign matter from entering the gear train. Limit switches shall be of the adjustable type capable of being adjusted to trip at any point between fully opened valve and fully closed valve.
4. The speed of the actuator shall be the responsibility of the system supplier with regard to hydraulic requirements and response compatibility with other components within the control loop. Each valve controller shall be provided with a minimum of two rotor type gear limit switches, one for opening and one for closing. The rotor type gear limit switch shall have two normally open and two normally closed contacts per rotor. Gear limit switches must be geared to the driving mechanism and in step at all times whether in motor or manual operation. Provision shall be made for two additional rotors as described above, each to have two normally open and two normally closed contacts. Each valve controller shall be equipped with a double torque switch. The torque switch shall be adjustable and will be responsive to load encountered in either direction of travel. It shall operate during the complete cycle without auxiliary relays or devices to protect the valve, should excessive load be met by obstructions in either direction of travel. The torque switch shall be provided with double-pole contacts.
5. A permanently mounted handwheel shall be provided for manual operation. The handwheel shall not rotate during electric operations, but must be responsive to manual operation at all times except when being electrically operated. The motor shall not rotate during hand operation nor shall a fused motor prevent manual operation. When in manual operating position, the unit will remain in this position until motor is energized at which time the valve operator will automatically return to electric operation and shall remain in motor position until handwheel operation is desired. This movement from motor operation to handwheel operation shall be accomplished by a positive declutching lever which will disengage the motor and motor gearing mechanically, but not electrically. Hand operation must be reasonably fast. It shall be impossible to place the unit in manual operation when the motor is running. The gear limit switches and torque switches shall be housed in a single easily accessible compartment integral with the power compartment of the valve control. All wiring shall be accessible through this compartment. Stepping motor drives will not be acceptable.

6. The motor with its control module must be capable of continuously modulating over its entire range without interruption by heat protection devices. The system, including the operator and control module must be able to function, without override protection of any kind, down to zero dead zone.
7. All units shall have strip heaters in both the motor and limit switch compartments.
8. The actuator shall be equipped with open-stop-close push buttons, an auto-manual selector switch, and indicating lights, all mounted on the actuator or on a separate locally mounted power control station.
9. The electronics for the electric operator shall be protected against temporary submergence.
10. Actuators shall be Limitorque L120 with Modutronic Control System containing a position transmitter with a 4-20MA output signal or equal.

D. Motor Actuators (Open-Close)

1. The electronic motor-driven valve actuator shall include the motor, actuator gearing, limit switch gearing, limit switches, torque switches, fully machined drive sleeve, declutch lever, and auxiliary handwheel as a self-contained unit.
2. The motor shall be specifically designed for valve actuator service and shall be of high torque totally enclosed, nonventilated construction, with motor leads brought into the limit switch compartment without having external piping or conduit box.
 - (a) The motor shall be of sufficient size to open or close the valve against maximum differential pressure when voltage to motor terminals is 10% above or below nominal voltage.
 - (b) The motor shall be prelubricated and all bearings shall be of the anti-friction type.
3. The power gearing shall consist of helical gears fabricated from heat treated steel and worm gearing. The worm shall be carburized and hardened alloy steel with the threads ground after heat treating. The worm gear shall be of alloy bronze accurately cut with a hobbing machine. All power gearing shall be grease lubricated. Ball or roller bearings shall be used throughout.
4. Limit switches and gearing shall be an integral part of the valve actuator. The switches shall be of the adjustable rotor type capable of being adjusted to trip at any point between fully opened valve and fully closed valve. Each valve controller shall be provided with a minimum of two rotor type gear limit switches, one for opening and one for closing (influent valves require additional contacts to allow stopping at an intermediate position). The rotor type gear limit switch shall have two normally open and two normally closed contacts per toro. Additional switches shall be provided if shown on the control and/or instrumentation diagrams. Limit switches shall be geared to the driving mechanism and in step at all times whether in motor or manual operation. Each valve actuator shall be equipped with a double torque switch. The torque switch shall be adjustable and will be responsive to load encountered in either direction of travel. It shall operate during the complete cycle without auxiliary relays or devices to protect the valve should excessive load be met by obstructions in either direction of travel. Travel and thrusts shall be independent of wear in valve disc or seat rings.
5. A permanently mounted handwheel shall be provided for manual operation. The handwheel shall not rotate during electric operation except when being electrically operated. The motor shall not rotate during hand operation, nor shall a fused motor prevent manual operation. When in manual operating position, the unit will remain in this position until motor is energized at which time the valve actuator will automatically return to electric operation and shall remain in motor position until handwheel operation is desired. Movement from motor operation to handwheel

operation shall be accomplished by a positive declutching lever which will disengage the motor and motor gearing mechanically, but not electrically. Hand operation must be reasonably fast. It shall be impossible to place the unit in manual operation when the motor is running.

6. Valve actuators shall be equipped with an integral reversing controller and three phase overload relays, Open-Stop-Close push buttons, local-remote-manual selector switch, control circuit transformer, three-phase thermal overload relays and two pilot lights in a NEMA 4X enclosure. In addition to the above, a close coupled air circuit breaker or disconnect switch shall be mounted and wired to the valve input power terminals for the purpose of disconnecting all underground phase conductors.
7. The valve actuator shall be capable of being controlled locally or remotely via a selector switch integral with the actuator. In addition, an auxiliary dry contact shall be provided for remote position feedback.
8. Valve A.C. motors shall be designed for operation on a 480 volt, 3-phase service. Valve control circuit shall operate from a fuse protected 120 volt power supply.
9. Motor operators shall be as manufactured by Limitorque Corporation, Type L120 or approved equal.

2.07 AIR RELEASE VALVES

The air release valves for use in water or force mains shall be installed as shown on the Drawings. The valves shall have a cast iron body cover and baffle, stainless steel float, bronze water diffuser, Buna-N or Viton seat, and stainless steel trim. The fittings shall be threaded. The air release valves shall be Model 200A or 400A as manufactured by APCO Valve and Primer Corporation, Schaumburg, Illinois; or approved equal.

2.08 VALVE BOXES

- A. Buried valves shall have cast-iron three piece valve boxes or HDPE adjustable valve boxes. Cast iron valve boxes shall be provided with suitable heavy bonnets and shall extend to such elevation at or slightly above the finished grade surface as directed by the County. The barrel shall be two-piece, screw type, having a 5-1/4 inch shaft. The upper section shall have a flange at the bottom with sufficient bearing area to prevent settling and shall be complete with cast iron covers. Covers shall have WATER, SEWER, or RECLAIM, as applicable, cast into the top. Lids will be painted "safety" blue for potable, purple for reclaimed, and green for sanitary sewer.
- B. All valves shall have actuating nuts extended to within four (4) feet of the top of the valve box. All valve extensions will have a centering guide plate two (2) inches maximum below the actuating nut. The valve extension shall be fastened to the existing nut with a set screw. Valve boxes shall be provided with a concrete base and a valve nameplate engraved with lettering 1/8-inch deep as shown on the Drawings.
- C. HDPE adjustable valve boxes shall be one complete assembled unit composed of the valve box and extension stem. All moving parts of the extension stem shall be enclosed in a housing to prevent contact with the soil. Valve box assembly shall be adjustable to accommodate variable trench depths.
- D. The entire assembly shall be made of heavy wall high density polyethylene. All exterior components shall be joined with stainless steel screws. The valve box top section shall be adaptable to fit inside a valve box upper section.

- E. The stem assembly shall be of a telescoping design that allows for variable adjustment length. The stem material shall be of plated steel square tubing. The stem assembly shall have a built-in device that keeps the stem assembly from disengaging at its fully extended length. The extension stem must be torque tested to 1000 foot pounds. Covers shall have WATER, SEWER or RECLAIMED clearly and permanently impressed into the top surface.

2.09 CORPORATION COCKS

Corporation cocks for connections to cast-iron, ductile iron or steel piping shall be all brass or bronze suitable for 180 psi operating pressure and similar to Mueller Co. H-10046 or approved equal by Clow Corp., and shall be of sizes required and/or noted on the Drawings.

2.10 FLANGE ADAPTER COUPLINGS

Flange adapter couplings shall be of the size and pressure rating required for each installation and shall be suitable for use on either cast iron or ductile iron pipe. They shall be similar or approved equal to Dresser Company, Style 128. All couplings shall have a sufficient number of factory installed anchor studs to meet or exceed a minimum test pressure rating of 230 psi minimum.

2.11 FLEXIBLE COUPLINGS

Flexible couplings shall be either the split type or the sleeve type as shown on the Drawings.

1. Split type coupling shall be used with all interior piping and with exterior pipings noted on the Drawings. The couplings shall be mechanical type for radius groove piping. The couplings shall mechanically engage and lock grooved pipe ends in a positive couple and allow for angular deflection and contracting and expansion.
2. Couplings shall consist of malleable iron, ASTM Specification A47, Grade 32510 housing clamps in two or more parts, a single chlorinated butyl composition sealing gasket with a "C" shaped cross-section and internal sealing lips projecting diagonally inward, and two or more oval track head type bolts with hexagonal heavy nuts conforming to ASTM Specification A 183 and A194 to assemble the housing clamps. Bolts and nuts shall be hot dipped galvanized after fabrication.
3. Victaulic type couplings and fittings may be used in lieu of flanged joints. Pipes shall be radius grooved as specified for use with the Victaulic couplings. Flanged adapter connections at fittings, valves, and equipment shall be Victaulic Vic Flange Style 741, equal by Gustin-Bacon Group, Division of Certain-Teed Products, Kansas City, Kansas, or approved equal.
4. Sleeve type couplings shall be used with all buried piping. The couplings shall be of steel and shall be Dresser Style 38 or 40, as shown on the Drawings, or equal. The coupling shall be provided with hot dipped galvanized steel bolts and nuts unless indicated otherwise.
5. All couplings shall be furnished with the pipe stop removed.
6. Couplings shall be provided with gaskets of a composition suitable for exposure to the liquid within the pipe.
7. If the Contractor decides to use victaulic couplings in lieu of flanged joints, he shall be responsible for supplying supports for the joints.

2.12 HOSE BIBS

Hose bibs shall be 3/4" or 1" brass, polished chromium plated brass, with vacuum breaker as noted on the drawings.

2.13 SLOW CLOSING AIR AND VACUUM VALVES

- A. The Contractor shall furnish and install slow closing air and vacuum valves as shown on the Drawings which shall have two (2) independent valves bolted together. The air and vacuum valve shall have all stainless steel float, guided on both ends with stainless shafts. The air and vacuum valve seat shall be Buna-N to insure drop tight closure. The Buna-N seat shall be fastened to the cover stainless shoulder screws in a manner to prevent distortion of the seat. The float shall be guided at both ends with stainless steel bushings.
- B. The valve cover shall have a male lip designed to fit into the body register for accurate alignment of the float into the Buna-N seat. The valve cover shall have 250-pound class flanged outlet connection.
- C. The surge check valve shall be bolted to the inlet of the air and vacuum valve and consist of a body, seat, disc, and compression spring. A surge check unit shall operate on the interphase between the kinetic energy and relative velocity flows of air and water, so that after air passes through, and water rushes into the surge check, the disc starts to close, reducing the rate of flow of water into the air valve by means of throttling orifices in the disc to prevent water hammer in the air valves. The surge check orifices must be adjustable type for regulation in the field to suit operating conditions. Valve shall be rated for 250-pound class working pressure.
- D. The complete slow closing air and vacuum valve with air release valve shall have been flow tested in the field, substantiated with test data to show reduction of surge pressure in the valve. Flow test data shall be submitted with initial shop drawings for approval.
- E. Valve exterior to be painted Red Oxide, Phenolic TT-P86, Primer or approved equal for high resistance to corrosion.
- F. All materials of construction shall be certified in writing to conform to ASTM specifications as follows:

Air Valve Cover, Body, and Surge Check Body	Cast Iron	ASTM A48, Class 30
Float	Stainless Steel	ASTM A240
Surge Check Seat and Disc	Stainless Steel	ASTM A582
Air Valve Seat	Buna-N	
Spring	Stainless Steel	T302

2.14 SURGE ANTICIPATOR VALVES

- A. Surge anticipator valves shall be furnished for the pumping systems as shown on the Drawings. The valve shall be hydraulically operated, pilot controlled, and diaphragm or piston actuated. The main valve shall be cast iron conforming to ASTM A48 with bronze trim conforming to ASTM B61 and flanged ends conforming to ANSI B161.1. The main valve shall be globe type with a single removable seat and a resilient disc.
- B. The diaphragm actuated valve shall have a stainless steel stem guided at both ends by a bearing in the valve cover and an integral bearing surface in the seat. No external packing glands shall be permitted. The valve shall be fully serviceable without removing it from the line. The pilot system shall be of noncorrosive construction and provided with isolation cocks.
- C. The piston actuated valve shall operate on the differential piston principle. The valve piston shall be guided on its outside diameter. The valve shall be able to operate in any position and shall be fully serviceable without removing it from the line. The pilot system shall be provided with isolation cocks, and be of noncorrosive materials of construction.
- D. The valve shall be designed specifically to minimize the effects of water hammer, resulting from power failure at the pumping station, or from normal stopping and starting of pumping operators. The valve shall open hydraulically on a down surge, or low pressure wave created when the pump stops, remain open during the low pressure cycle in order to be open when the high pressure wave returns. The high pressure pilot shall be adjustable over a 20 to 200 psi range and the low pressure pilot shall be adjustable over a 15 to 75 psi range. The valve shall be the 250 Class.

2.15 CHECK VALVES

- A. Check valves for cast iron and ductile iron pipe lines shall be swing type and shall meet the material requirements of AWWA Specification C508. The valves shall be iron body, bronze mounted, single disc, 175 psi working water pressure and nonshock. Valves shall be as manufactured by Mueller, Clow, Kennedy, or M&H. Valves 8" and larger shall be air cushioned to reduce valve slam.
- B. When there is no flow through the line, the disc shall hang lightly against its seat in practically a vertical position. When open, the disc shall swing clear of the waterway.
- C. Check valves shall have bronze seat and body rings, extended bronze hinge pins and bronze nuts on the bolts of bolted covers. The interior and exterior of the valve body shall have a factory applied fusion bonded or 10 mil 2 part epoxy coating (Protecto 401 or approved equal).
- D. Valves shall be so constructed that disc and body seat may easily be removed and replaced without removing the valve from the line. Valves shall be fitted with an extended hinge arm with outside lever and weight. Weights provided and approved by the County shall be installed.

2.16 HYDRANTS

Hydrants shall be AVK Series 2780 Barrel (nostalgic style with stainless steel bolts) American Darling B-84-B or Mueller Super Centurian 250, or approved equal and shall conform to the "Standard Specification for Fire Hydrants for Ordinary Water Works Service",

AWWA C502, and UL/FM certified, and shall in addition meet the specific requirements and exceptions which follow:

1. Hydrants shall be according to manufacturer's standard pattern and of standard size, and shall have one 4-1/2" steamer nozzle and two 2-1/2" hose nozzles.
2. Hydrant inlet connections shall have mechanical joints for 6" ductile-iron pipe.
3. Hydrant valve opening shall have an area at least equal to that area of a 5-1/4" minimum diameter circle and be obstructed only by the valve rod. Each hydrant shall be able to deliver 500 gallons minimum through its two 2-1/2" hose nozzles when opened together with a loss of not more than 2 psi in the hydrants.
4. Each hydrant shall be designed for installation in a trench that will provide 5-ft. cover.
5. Hydrants shall be hydrostatically tested as specified in AWWA C502.
6. Hydrants shall be rated at 200 psi.
7. All nozzle threads shall be American National Standard.
8. Each nozzle cap shall be provided with a Buna N rubber washer.
9. Hydrants shall be so arranged that the direction of outlets may be turned 90 degrees without interference with the drip mechanism and without the mechanism obstructing the discharge from any outlet.
10. Hydrants must be capable of being extended without removing any operating parts.
11. Hydrants shall have bronze-to-bronze seatings as per AWWA C502-85.
12. Hydrant main valve closure shall be of the compression type opening against the pressure and closing with the pressure. The resilient seat material shall meet the requirements of AWWA C-509 and shall preferably be EPDM Elastomer.
13. Internal and below ground iron parts (bonnet, nozzle section and base) shall have a fusion bonded epoxy coating per AWWA C550. Aboveground external hydrant parts (cap, bonnet and nozzle section) shall be either epoxy coated together with a UV resistant polyester coating or have two shop coats of paint per AWWA C502. The lower stand pipe or barrel shall be protected with asphaltic coatings per AWWA C502.
14. Exterior nuts, bolts and washer shall be stainless steel. Bronze nuts may be used below grade.
15. All internal operating parts shall be removable without requiring excavation.

2.17 RESTRAINING CLAMPS

Restraining clamp assemblies as detailed in the drawings for use at hydrant connections to water mains, or at fittings where shown on the Drawings, shall be as manufactured by American Cast Iron Pipe, Star Pipe Products, U.S. Pipe; or approved equal.

2.18 TAPPING SLEEVES AND GATE VALVES

- A. Tapping valves shall meet the requirement of AWWA C500. The valves shall be flanged, shall be mechanical joint outlet with nonrising stem, designed for vertical burial and shall open left or counterclockwise. Stuffing boxes shall be the "O-ring" type. Operating nut shall be AWWA Standard 2" square for valves 2" and up. The valves shall be provided with an overload seat to permit the use of full size cutters. Gaskets shall cover the entire area of flange surfaces and shall be supplied with EPDM wedges up to 30" diameter.
- B. Tapping sleeves and saddles shall seal to the pipe by the use of a confined "O" ring gasket, and shall be able to withstand a pressure test of 180 psi for one hour with no leakage in accordance with AWWA C110, latest edition. A stainless steel 3/4" NPT test plug shall be provided for pressure testing. All bolts joining the two halves shall be stainless steel and shall be included with the sleeve or saddle. Sleeves and saddles shall be protected from

corrosion by being fusion applied epoxy coated, or be made of 18-8 Type 304 stainless steel. Saddle straps shall be 18-8 Type 304 stainless steel.

2.19 SINGLE ACTING ALTITUDE VALVES

A. Function

1. The altitude control valve shall be of the single acting type, closing off tightly when the water reaches the maximum predetermined level in the tank to prevent overflow; and opening to permit replenishing of the tank supply when the water level drops approximately 6" to 12" below the maximum level.
2. A hand operated valve in the power water line to the top of the piston shall permit adjustment of the speed of valve closing. The tank water level control shall be by means of a diaphragm operated, spring loaded, three way pilot which directs power water to or from the top of the main valve piston. The three way pilot shall be of bronze construction. The diaphragm surface exposed to the tank head shall be not less than 57 sq. inches. It shall be possible to adjust the spring above the diaphragm for water level control approximately 20% above or below the factory setting.

B. Description

1. The main valve shall operate on the differential piston principle such that the area on the underside of the piston is no less than the pipe area on the upper surface of the piston is of a greater area than the underside of the piston.
2. The valve piston shall be guided on its outside diameter by long stroke stationary Vee ports which shall be downstream of the seating surface to minimize the consequences of throttling. Throttling shall be done by the valve Vee ports and not the valve seating surfaces.
3. The valve shall be capable of operating in any position and shall incorporate only one flanged cover at the valve top from which all internal parts shall be accessible. There shall be no stems, stem guides, or spokes within the waterway. There shall be no springs to assist the valve operation.

C. Construction

1. The valve body shall be of cast iron ASTM A-126 with flanges conforming to the latest ANSI Standards. The valve shall be extra heavy construction throughout. The valve interior trim shall be bronze B-62 as well as the main valve operation.
2. The valve seals shall be easily renewable while no diaphragm shall be permitted within the main valve body.
3. All controls and piping shall be of non-corrosive construction.
4. A visual valve position indicator shall be provided for observing the valve piston position at any time.

D. Figure Number

The valves shall be the 20" Globe type (Fig. 3200-D) as manufactured by GA Industries of Mars, Pennsylvania, or approved equal.

PART 3 EXECUTION

3.01 INSTALLATION

- A. All valves and appurtenances shall be installed in the location shown, true to alignment and rigidly supported. Any damage occurring to the above items before they are installed shall be repaired to the satisfaction of the County.
- B. After installation, all valves and appurtenances shall be tested at least two hours at the working pressure corresponding to the class of pipe, unless a different test pressure is specified. If any joint proves to be defective, it shall be repaired to the satisfaction of the County.
- C. Install all floor boxes, brackets, extension rods, guides, the various types of operators and appurtenances as shown on the Drawings that are in masonry floors or walls, and install concrete inserts for hangers and supports as soon as forms are erected and before concrete is poured. Before setting these items, the Contractor shall check all plans and figures which have a direct bearing on their location and he shall be responsible for the proper location of these valves and appurtenances during the construction of the structures.
- D. Pipe for use with flexible couplings shall have plain ends as specified in the respective pipe sections.
- E. Flanged joints shall be made with high strength, low alloy Corten bolts, nuts and washers. Mechanical joints shall be made with mild corrosion resistant alloy steel bolts and nuts. All exposed bolts shall be painted the same color as the pipe. All buried bolts and nuts shall be heavily coated with two (2) coats of bituminous paint comparable to Inertol No. 66 Special Heavy.
- F. Prior to assembly of split couplings, the grooves as well as other parts shall be thoroughly cleaned. The ends of the pipes and outside of the gaskets shall be moderately coated with petroleum jelly, cup grease, soft soap or graphite paste, and the gasket shall be slipped over one pipe end. After the other pipe has been brought to the correct position, the gasket shall be centered properly over the pipe ends with the lips against the pipes. The housing sections then shall be placed. After the bolts have been inserted, the nuts shall be tightened until the housing sections are firmly in contact, metal-to-metal, without excessive bolt tension.
- G. Prior to the installation of sleeve-type couplings, the pipe ends shall be cleaned thoroughly for a distance of 8". Soapy water may be used as a gasket lubricant. A follower and gasket, in that order, shall be slipped over each pipe to a distance of about 6" from the end.
- H. Valve boxes with concrete bases shall be installed as shown on the Drawings. Mechanical joints shall be made in the standard manner. Valve stems shall be vertical in all cases. Place cast iron box over each stem with base bearing on compacted fill and the top flush with final grade. Boxes shall have sufficient bracing to maintain alignment during backfilling. Knobs on cover shall be parallel to pipe. Remove any sand or undesirable fill from valve box.

3.02 HYDRANTS

- A. Hydrants shall be set at the locations designated by the County and/or as shown on the Drawings and shall be bedded on a firm foundation. A drainage pit on crushed stone as shown on the Drawings shall be filled with gravel or crushed stone and satisfactorily compacted. During backfilling, additional gravel or crushed stone shall be brought up around and 6" over the drain port. Each hydrant shall be set in true vertical alignment and shall be properly braced. Concrete thrust blocks shall be placed between the back of the hydrant inlet and undisturbed soil at the end of the trench. Minimum bearing area shall be as shown on the plans. Felt paper shall be placed around the hydrant elbow prior to placing concrete. CARE MUST BE TAKEN TO INSURE THAT CONCRETE DOES NOT PLUG THE DRAIN PORTS. Concrete used for backing shall be as specified herein.
- B. When installations are made under pressure, the flow of water through the existing main shall be maintained at all times. The diameter of the tap shall be a minimum of 2" less than the inside diameter of the branch line.
- C. The entire operation shall be conducted by workmen thoroughly experienced in the installation of tapping sleeves and valves, and under the supervision of qualified personnel furnished by the manufacturer. The tapping machine shall be furnished by the Contractor if tap is larger than 12" in diameter.
- D. The Contractor shall determine the locations of the existing main to be tapped to confirm the fact that the proposed position for the tapping sleeve will be satisfactory and no interference will be encountered such as the occurrence of existing utilities or of a joint or fitting at the location proposed for the connection. No tap will be made closer than 30" from a pipe joint.
- E. Tapping valves shall be set in vertical position and be supplied with a 2" square operating nut for valves 2" and larger. The valve shall be provided with an oversized seat to permit the use of full sized cutters.
- F. Tapping sleeves and valves with boxes shall be set vertically or horizontally as indicated on the Drawings and shall be squarely centered on the main to be tapped. Adequate support shall be provided under the sleeve and valve during the tapping operation. Sleeves shall be no closer than 30" from water main joints. Thrust blocks shall be provided behind all tapping sleeves. Proper tamping of supporting earth around and under the valve and sleeve is mandatory. After completing the tap, the valve shall be flushed to ensure that the valve seat is clean.

3.03 SHOP PAINTING

Ferrous surfaces of valves and appurtenances shall receive a coating of rust-inhibitive primer. All pipe connection openings shall be capped to prevent the entry of foreign matter prior to installation.

3.04 FIELD PAINTING

All metal valves and appurtenances specified herein and exposed to view shall be painted.

All above ground potable water main valves shall be painted safety blue.

3.05**INSPECTION AND TESTING**

Completed pipe shall be subjected to hydrostatic pressure test for two hours at 180 psi. All leaks shall be repaired and lines retested as approved by the County. Prior to testing, the pipelines shall be supported in an approved manner to prevent movement during tests.

END OF SECTION

SECTION 03360 ANNULAR SPACE AND CONTACT GROUTING

PART 1 - GENERAL

1.01 SUMMARY

- A. This section includes requirements for contact grouting of all voids and annular space outside the jacking pipe after boring, around shafts as necessary to prevent surface settlements, and for abandonment grouting of boreholes for subsurface monitoring points after completion of jacking and boring.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02060 - Jack and Bore
- B. Section 02261 - Shaft Excavation and Support
- C. Section 02445 - Settlement Instrumentation and Monitoring
- D. Section 02600 - Steel Casing Pipe

1.03 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

- A. Commercial Standards:

ASTM C 31 Practice for Making and Curing Concrete Test Specimens in the Field.

ASTM C 39 Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.

ASTM C 94 Specifications for Ready Mix Concrete.

ASTM C 109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (using 2-inch or 50-mm cube specimens).

ASTM C 144 Specification for Aggregate for Masonry Mortar.

ASTM C 150 Specification for Portland Cement.

ASTM C 937 Standard Specification for Grout Fluidifier for Preplaced-Aggregate Concrete.

1.04 BASIS OF DESIGN

- A. Contact grout shall be used to fill any voids caused or encountered outside the jacking pipe, to fill any voids caused or encountered outside of shafts, and for abandonment or subsurface monitoring point boreholes.
- B. Grout Mixes: Develop one or more grout mixes designed to completely fill the voids outside the pipe and to provide acceptable strength. Make four (4) samples of each proposed grout mix and determine 24-hour and 28 day strength in accordance with ASTM C39 or C109. All grout mix proportions shall be subject to review and acceptance by the Engineer.
- C. Grout Composition: Grout shall consist of Portland cement, not more than 2% bentonite by weight of cement, fluidifier as necessary, and water in the proportions specified herein or as

approved by the Engineer. Sand may be added to the grout mix in instances of very high grout takes as approved by the Engineer. The addition of sand may require additional water or fluidifier to be added to the grout mix.

1. Grout mix (water/cement) ratios shall be expressed in cubic feet of water per cubic foot of cement (94 lb bag). The water-cement ratio by volume shall be varied as needed to fill the voids outside the pipe.
2. Compressive Strength: Minimum strength of 10 psi in 24 hours, 50 psi in 28 days. Maximum compressive strength of the cured grout shall be 150 psi. Maximum strength of grout injected at shaft entry and exit locations shall be compatible with excavation capabilities of machine.

1.05 QUALITY ASSURANCE

- A. Grout Strength Tests: Prepare samples for 24-hour and 28-day compressive strength tests according to ASTM C 31 for cylinders or ASTM C 109 for cubes. Cylinder molds shall be at least two inches in diameter and four inches long. Grout cubes shall be either two inches or 50 millimeters square. Test samples according to ASTM C 39 or C 109 as applicable. Grout for the cylinders or cubes shall be taken from the nozzle of the grout injection line. Provide at least one set of four (4) samples for each 100 cubic feet of grout injected but not less than one set for each grouting shift, unless directed otherwise by the Engineer.

1.06 SUBMITTALS

- A. Submittals shall be made in accordance with the special provisions mentioned in the contract documents. Provide sufficient detail to allow the ENGINEER to judge whether the proposed equipment, materials, and procedures will meet the Contract requirements. All drawings shall be legible with dimensions accurately shown and clearly marked in English. Drawings and photographs transmitted by a facsimile will not be accepted. The ENGINEER'S review of submitted details and data will be based on consideration of requirements for the completed work, protection of utilities and surface features, and the possibility of unnecessary delays in the execution of the work to be constructed under this Contract. Review and acceptance of the CONTRACTOR submittals by the ENGINEER shall not be construed in any way as relieving the CONTRACTOR of its responsibility under this Contract.
- B. Work Plan and Methods:
 1. Submit work plan, for each type of contact grouting required, including: contact grouting methods and details of equipment, grouting procedures and sequences, injection pressures, monitoring and recording equipment, pressure gauge calibration data, methods of controlling grout pressure, method of transporting grouting equipment and materials within the pipe, and provisions to protect interior of pipe and shaft supports.
 2. Submit details of grout mix proportions: admixtures, including manufacturers' literature, and laboratory test data verifying the strength of the proposed grout mix.

C. Reports and Records:

1. Maintain and submit daily logs of grouting operations, including grouting locations, pressures, volumes, and grout mix pumped, and time of pumping. Note any problems or unusual observations on logs.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Cement: Cement shall be Type II or Type V Portland cement conforming to ASTM C 150. Type II cement shall meet Table 4 false set requirements of ASTM C 150.
- B. Bentonite: Bentonite shall be a commercially processed powdered bentonite, Wyoming type, such as Baroid, Imacco-gel, Black Hills, or equal.
- C. Sand: Conform to ASTM C 144 except where modified in the following subparagraphs.
1. Fineness modulus: Between 1.50 and 2.00.
 2. Grading requirements:

Sieve Sizes	Percentage Passing by Weight
No. 8	100
No. 16	95 - 100
No. 30	60 - 85
No. 50	20 - 50
No. 100	10 - 30
No. 200	0 - 5

- D. Fluidifier: Fluidifiers shall hold the solid constituents of the grout in colloidal suspension, be compatible with the cement and water used in the grouting work, and comply with the requirements of ASTM C 937.
- E. Admixtures: Other admixtures may be used subject to the written approval of the Engineer to improve the pumpability, to control set time, to hold sand in suspension, and to prevent segregation and bleeding.

PART 3 - EXECUTION

3.01 GENERAL REQUIREMENTS

- A. The CONTRACTOR shall use contact grouting to fill any voids caused or encountered during the jacking and boring operations.
- B. The CONTRACTOR shall use contact grouting to fill any voids caused or encountered during shaft construction that could lead to shaft movements during jacking and boring

operations, or that could lead to settlement and damage of installed pipe, surface features, or subsurface utilities.

- C. The CONTRACTOR shall use contact grouting to fill and abandon boreholes for subsurface monitoring points as noted on the Drawings.
- D. All grouting operations are to be performed in the presence of the ENGINEER. Notify the ENGINEER at least 24 hours in advance of starting contact grouting operations.
- E. The CONTRACTOR shall take care to prevent the spill or escape of grout to the ground surface, into any water body, or into any sanitary or storm sewer. Any such spill shall be immediately contained and cleaned up by the CONTRACTOR at no additional cost to the OWNER.
- F. During grouting work, provide for adequate disposal of all waste and wastewater. Remove and properly dispose of all waste grout resulting from grouting operations. The contents of grout lines shall not be discharged into the shafts or pipes.

3.02 EQUIPMENT

- A. Equipment for mixing and injecting grout shall be adequate to satisfactorily mix and agitate the grout and force it into the grout holes, in a continuous flow at the desired pressure. Pumps shall be capable of continuously developing a sustained pressure of 15 pounds per square inch at the grout hole connection.
- B. Two pressure gauges shall be provided, one at the grout pump and one at the collar of each hole being grouted. The accuracy of the gauges shall be periodically checked with an accurately calibrated pressure gauge. A minimum of two spare pressure gauges shall be available on site at all times.
- C. The grouting equipment shall be provided with a meter to determine the volume of grout injected. The meter shall be calibrated in cubic feet to the nearest one-tenth of a cubic foot.
- D. The grouting equipment shall be maintained in satisfactory operating condition throughout the course of the work to ensure continuous and efficient performance during grouting operations.
- E. Suitable stop valves shall be provided at the collar of each hole for use in maintaining pressure as required until the grout has set.
- F. Grout hoses shall have an inside diameter not less than 1-1/4 inches nor greater than 2 inches and capable of withstanding the maximum water and grout pressures to be used.

3.03 MIXING AND INJECTION OF GROUT

- A. All materials shall be free of lumps when put into the mixer and the grout mix shall be constantly agitated. Grout shall flow unimpeded and shall completely fill all voids. Grout not injected after 90 minutes of mixing shall be wasted.
- B. The grouting process shall be operated and controlled so that the grout will be delivered uniformly and steadily.
- C. Recirculate grout mixes when any new mix is batched or after adding water, fluidifier, or sand to mix. Recirculate mix for at least 2 minutes prior to pumping grout into grout hole.

- D. In general, grouting will be considered completed when less than one cubic foot of grout of the accepted mix and consistency can be pumped in 5 minutes under the specified maximum pressure. After the grouting is finished, the valve shall be closed before the grout header is removed and remain closed until grout has set.
- E. The maximum sustained grouting pressure shall be 15 pounds per square inch (psi) or one-half (1/2) psi per foot of earth cover, whichever is less, at the grout hole collar connection unless otherwise approved in writing by the ENGINEER.

3.04 ANNULAR SPACE GROUTING OF BORED PIPELINES

- A. Commence contact grouting outside of the pipe following the completion of each bored drive performed in accordance with Section 02060 - Jack and Bore.
- B. Damaged or collapsed pipe, caused by CONTRACTOR'S excessive grouting pressures, shall be replaced by CONTRACTOR at no additional cost to the County, and without schedule extension.

END OF SECTION

SECTION 05550 AIR RELEASE ENCLOSURE

PART 1 GENERAL

1.01 SCOPE OF WORK

The Contractor shall furnish all labor, materials, equipment and incidentals required to install the above ground air release enclosure as listed in the specifications and as shown on the Drawings.

1.02 RELATED WORK

The contractor shall be responsible for any related work necessary for the proper installation of enclosure. This shall include, but is not limited to, any required bypass pumping, any required earthwork and any required concrete work.

1.03 SUBMITTALS

- A. Submit to the County shop drawings and schedules of all enclosure systems and appurtenances required. Submit design data and specification data sheets listing all parameters used in the enclosure system design.
- B. Submit to the County the name of the enclosure supplier and a list of materials to be furnished.

1.04 REFERENCE STANDARDS

- A. American Water Works Association (AWWA).
- B. American Society for Testing and Materials (ASTM).
- C. Where reference is made to the above standard, the revision in effect at the time of bid opening shall apply.

1.05 QUALITY ASSURANCE

The enclosure manufacturer shall be a company specializing in the manufacture of such enclosures with at least five (5) years of successful field experience and being lab certified as meeting A.S.S.E 1060 requirements.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Care shall be taken in shipping, handling and placing to avoid damaging. Any material damaged in shipment shall be replaced as directed by the County.
- B. Any material showing deterioration, or which has been exposed to any other adverse storage condition that may have caused damage, even though no such damage can be seen, shall be marked as rejected and removed at once from the work.

PART 2 PRODUCTS

2.01 GENERAL

All enclosures shall comply with the standard detail for shape and size and shall include a 24"W x 30"H access door with a hasp for a padlock. The enclosure shall be securely attached to a concrete base with anchor brackets installed on the interior of the enclosure, through the flange base of the enclosure itself or through a stainless steel anchor hinge.

2.02 ALUMINUM ENCLOSURE

- A. The roof, walls and access panels shall be constructed of mill finish aluminum, ASTM B209, solid sheet construction, with a wall thickness of one eighth inch.
- B. All structural members shall be aluminum. No wood or "particle board" shall be allowed in assembly.
- C. Multi-sectional enclosures shall fit together with overlapping "tongue and groove" joints and be secured internally with mechanical fasteners.
- D. All assembly fasteners shall be stainless steel or aluminum.

2.03 STAINLESS STEEL ENCLOSURE

- A. The roof, walls and access panels shall be constructed stainless steel, type 316, solid sheet construction, with a wall thickness of one eighth inch.
- B. All structural members shall be stainless steel. No wood or "particle board" shall be allowed in assembly.
- C. Multi-sectional enclosures shall fit together with overlapping "tongue and groove" joints and be secured internally with mechanical fasteners.
- C. All assembly fasteners shall be stainless steel.

2.04 FIBERGLASS ENCLOSURE

- A. Enclosure shall be a 1 piece molded fiberglass enclosure with a base flange for mounting to the concrete slab and a full recessed door opening with a lip. Enclosure shall be by Allied Molded Products, or approved equal. Color shall be as directed by the County.
- B. Full length piano style hinge, door latch, padlock hasp and all bolts and other hardware shall be of stainless steel.

PART 3 EXECUTION

3.01 INSTALLATION

Enclosure shall be assembled and mounted plumb, level and square on the concrete pad according to the manufacturer's instructions and the contract drawings.

END OF SECTION

44th Avenue East Roadway Project- from 19th Street Court
East to 30th Street East

CONSTRUCTION AGREEMENT

for

STIPULATED SUM

between

MANATEE COUNTY (AS OWNER)

and

_____ (AS CONTRACTOR)

**CONSTRUCTION AGREEMENT FOR
STIPULATED SUM**

Southeast Water Reclamation Facility (SEWRF) Septage / Grease Receiving Station Project

THIS AGREEMENT (“Agreement”) is made and entered into by and between Manatee County, a political subdivision of the State of Florida, referred to herein as “Owner”, and the firm of _____, incorporated in the State of _____ and registered and licensed to do business in the State of Florida (license # _____), referred to herein as “Contractor.”

WHEREAS, the Owner intends to construct **44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East**, the aforementioned improvements being hereinafter referred to and defined as the “Project”; and

WHEREAS, in response to Owner’s Invitation for Bid No. 15-2259CD (the “IFB”), Contractor has submitted its Bid (the “Contractor’s Bid”) to provide the aforementioned construction services.

NOW THEREFORE, the Owner and the Contractor, in consideration of the mutual covenants hereinafter set forth, the sufficiency of which is hereby acknowledged, agree as follows:

1. Contract Documents. The Contract Documents consist of this Agreement and attached Exhibits, the attached General Conditions of the Construction Agreement, Supplementary Conditions (if any), Special Conditions (if any), Drawings (the titles of which are attached hereto as Exhibit A), Specifications (the titles of which are attached hereto as Exhibit B), Addenda issued prior to execution of this Agreement, the Invitation for Bid (including any Instructions to Bidders, Scope of Work, Bid Summary, Supplements, and Technical Specifications), any interpretations issued pursuant to the Invitation for Bid, the Contractor’s Bid, permits, notice of intent to award, Notice to Proceed, purchase order(s), any other documents listed in this Agreement, and Modifications [to include written Amendment(s), Change Order(s), Work Directive Change(s) and Field Directive(s)] issued after execution of this Agreement. These form the Agreement, and are as fully a part of the Agreement as if attached or repeated herein. This Agreement represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. No other documents shall be considered Contract Documents.

2. Work. The Contractor shall fully execute the Work described in the Contract Documents, except to the extent specifically indicated in the Contract Documents to be the responsibility of others.

3. Date of Commencement and Substantial Completion.

A. Date of Commencement. The date of commencement of the Work shall be the date fixed in a Notice to Proceed issued by the Owner.

B. Contract Time. The Contract Time shall be measured from the date of commencement.

C. Substantial Completion. The Contractor shall achieve Substantial Completion of the entire Work not later than ____ days from the date of commencement.

Time is of the essence in the Contract Documents and all obligations thereunder. If the Contractor fails to achieve Substantial Completion of the Work within the Contract Time and as otherwise required by the Contract Documents, the Owner shall be entitled to retain or recover from the Contractor, as liquidated damages and not as a penalty, the sum of **\$4,624.00** per calendar day, commencing upon the first day following expiration of the Contract Time and continuing until the actual date of Substantial Completion. Such liquidated damages are hereby agreed to be a reasonable estimate of damages the Owner will incur as a result of delayed completion of the Work. The Owner may deduct liquidated damages as described in this paragraph from any unpaid amounts then or thereafter due the Contractor under this Agreement. Any liquidated damages not so deducted from any unpaid amounts due the Contractor shall be payable to the Owner at the demand of the Owner, together with interest from the date of the demand at the maximum allowable rate.

4. Contract Sum.

A. Payment. The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be _____ Dollars and Zero Cents (\$_____), subject to additions and deductions as provided in the Contract Documents.

B. Alternates. The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner.

C. Unit Prices. Unit prices, if any, are reflected in the Contractor's Bid.

5. Payments.

A. Progress Payments.

- (1) Based upon Applications for Payment submitted to the Architect/Engineer by the Contractor and Certificates for Payment issued by the Architect/Engineer, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.
- (2) The period covered by each Application for Payment shall be one calendar month ending on the last day of the month.
- (3) Payments shall be made by Owner in accordance with the requirements of Section 218.735, Florida Statutes.
- (4) Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum

among the various portions of the Work. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Architect/Engineer may require. This schedule, unless objected to by the Owner or Architect/Engineer, shall be used as a basis for reviewing the Contractor's Applications for Payment.

- (5) Applications for Payment shall indicate the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.
- (6) Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:
 - i. Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of ten percent (10.00%). Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute shall be included as provided in Section 3.3.B. of the General Conditions;
 - ii. Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), supported by paid receipts, less retainage of ten percent (10.00%);
 - iii. Subtract the aggregate of previous payments made by the Owner; and
 - iv. Subtract amounts, if any, for which the Architect/Engineer has withheld or nullified an Application for Payment, in whole or in part as provided in Section 3.3.C. of the General Conditions.
- (7) The progress payment amount determined in accordance with Section 5.A(6) shall be further modified under the following circumstances:
 - i. Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to the full amount of the Contract Sum, less such amounts as the Architect/Engineer shall determine for incomplete Work, retainage applicable to such work and unsettled claims.
 - ii. Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with Section 3.2.B. of the General Conditions.

- (8) Reduction or limitation of retainage, if any, shall be as follows:

Notwithstanding the foregoing, upon completion of at least 50% of the Work, as determined by the Architect/Engineer and Owner, the Owner shall reduce to five percent (5%) the amount of retainage withheld from each subsequent progress payment.

- (9) Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

B. Final Payment. Final Payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when:

- (1) The Contractor has fully performed the Work except for the Contractor's responsibility to correct Work as provided in Section 2.4.C. of the General Conditions, and to satisfy other requirements, if any, which extend beyond final payment; and
- (2) A final Application for Payment has been approved by the Architect/Engineer.

6. Termination or Suspension.

A. Termination. The Agreement may be terminated by the Owner or the Contractor as provided in Article XIV of the General Conditions.

B. Suspension by Owner. The Work may be suspended by the Owner as provided in Article XIV of the General Conditions.

7. Other Provisions.

A. Substantial Completion Defined. Substantial Completion shall be defined as provided in Article I of the General Conditions. In the event a temporary certificate of occupancy or completion is issued establishing Substantial Completion, the Contractor shall diligently pursue the issuance of a permanent certificate of occupancy or completion.

B. Project Meetings. There shall be a project meeting, at the jobsite or other location acceptable to the parties, on a regularly scheduled basis. The meeting will be attended by a representative of the Contractor, Architect/Engineer and Owner. These representatives shall be authorized to make decisions that are not otherwise contrary to the requirements of this Agreement.

C. Weather. Any rainfall, temperatures below 32 degrees Fahrenheit or winds greater than 25 m.p.h. which actually prevents Work on a given day, shall be considered

lost time and an additional day added to the Contract Time, provided no work could be done on site, and provided written notice has been submitted to the Owner by the Contractor documenting same.

D. Shop Drawings; Critical Submittals. In consideration of the impact of timely review of submittals and shop drawings on the overall progress of the Work, it is hereby agreed that the Owner shall cause his agents and design professionals to accomplish the review of any particular “critical” submittals and/or shop drawings and return same to the Contractor within fourteen (14) days.

E. Applications for Payment. Applications for Payment shall be submitted once monthly at regular intervals and shall include detailed documentation of all costs incurred.

F. Punch List. Within 30 days after obtainment of Substantial Completion, the Owner shall generate a “punch list” of all work items requiring remedial attention by the Contractor. Within 5 days thereafter the Architect/Engineer shall assign a fair value to the punch list items, which sum shall be deducted from the next scheduled progress payment to the Contractor. Upon satisfactory completion of the punch list items, as certified by the Architect/Engineer, the previously deducted sum shall be paid to the Contractor.

G. Closeout documentation. Within 30 days after obtainment of Substantial Completion and before final payment, Contractor shall gather and deliver to Owner all warranty documentation, all manufacturer’s product and warranty literature, all manuals (including parts and technical manuals), all schematics and handbooks, and all as-built drawings.

H. Governing Provisions; Conflicts. In the event of a conflict between this Agreement and the Specifications or as between the General Conditions and the Specifications, the Specifications shall govern.

I. E-Verify. The Contractor’s employment of unauthorized aliens is a violation of Section 274(e) of the Federal Immigration and Employment Act. The Contractor shall utilize the U.S. Department of Homeland Security E-Verify system to verify the employment eligibility of all new employees hired during the term of this Agreement, and shall require the same verification procedure of all Subcontractors.

8. Insurance and Bonding. If and to the extent required by the Invitation for Bid documents, the Contractor shall furnish insurance coverage for (but not necessarily limited to) workers’ compensation, commercial general liability, auto liability, excess liability, and builder’s risk. The Contractor shall furnish to the Owner all appropriate policies and Certificate(s) of Insurance. The Contractor shall also post a Payment and Performance Bond for the Contract Sum, within ten (10) days following notification of intent to award, and otherwise in accordance with the Invitation for Bid documents.

9. Independent Contractor. The Contractor acknowledges that it is functioning as an independent contractor in performing under the terms of this Agreement, and it is not acting as an employee of the Owner.

10. Entire Agreement. This Agreement (inclusive of the Contract Documents incorporated herein by reference) represents the full agreement of the parties.

11. Amendments; Waivers; Assignment.

A. Amendments. This Agreement may be amended only pursuant to an instrument in writing that has been jointly executed by authorized representatives of the parties hereto.

B. Waivers. Neither this Agreement nor any portion of it may be modified or waived orally. However, each party (through its governing body or properly authorized officer) shall have the right, but not the obligation, to waive, on a case-by-case basis, any right or condition herein reserved or intended for the benefit or protection of such party without being deemed or considered to have waived such right or condition for any other case, situation, or circumstance and without being deemed or considered to have waived any other right or condition. No such waiver shall be effective unless made in writing with an express and specific statement of the intent of such governing body or officer to provide such waiver.

C. Assignment. The rights and obligations of either party to this Agreement may be assigned to a third party only pursuant to a written amendment hereto.

12. Validity. Each of the Owner and Contractor represents and warrants to the other its respective authority to enter into this Agreement.

13. Covenant To Defend. Neither the validity of this Agreement nor the validity of any portion hereof may be challenged by any party hereto, and each party hereto hereby waives any right to initiate any such challenge. Furthermore, if this Agreement or any portion hereof is challenged by a third party in any judicial, administrative, or appellate proceeding (each party hereby covenanting with the other party not to initiate, encourage, foster, promote, cooperate with, or acquiesce to such challenge), the parties hereto collectively and individually agree, at their individual sole cost and expense, to defend in good faith its validity through a final judicial determination or other resolution, unless all parties mutually agree in writing not to defend such challenge or not to appeal any decision invalidating this Agreement or any portion thereof.

14. Disclaimer of Third-Party Beneficiaries; Successors and Assigns. This Agreement is solely for the benefit of the parties hereto, and no right, privilege, or cause of action shall by reason hereof accrue upon, to, or for the benefit of any third party. Nothing in this Agreement is intended or shall be construed to confer upon or give any person, corporation, partnership, trust, private entity, agency, or other governmental entity any right, privilege, remedy, or claim under or by reason of this Agreement or any provisions or conditions hereof. This Agreement shall be binding upon, and its benefits and advantages shall inure to, the successors and assigns of the parties hereto.

15. Construction.

A. Headings and Captions. The headings and captions of articles, sections, and paragraphs used in this Agreement are for convenience of reference only and are not intended to define or limit their contents, nor are they to affect the construction of or be taken into consideration in interpreting this Agreement.

B. Legal References. All references to statutory sections or chapters shall be construed to include subsequent amendments to such provisions, and to refer to the successor provision of any such provision. References to “applicable law” and “general law” shall be construed to include provisions of local, state and federal law, whether established by legislative action, administrative rule or regulation, or judicial decision.

16. Severability. The provisions of this Agreement are declared by the parties hereto to be severable. In the event any term or provision of this Agreement shall be held invalid by a court of competent jurisdiction, such invalid term or provision should not affect the validity of any other term or provision hereof; and all such terms and provisions hereof shall be enforceable to the fullest extent permitted by law as if such invalid term or provision had never been part of this Agreement; provided, however, if any term or provision of this Agreement is held to be invalid due to the scope or extent thereof, then, to the extent permitted by law, such term or provision shall be automatically deemed modified in order that it may be enforced to the maximum scope and extent permitted by law.

17. Governing Law; Venue. This Agreement shall be governed by the laws of the State of Florida. Venue for any petition for writ of certiorari or other court action allowed by this Agreement shall be in the Circuit Court of the Twelfth Judicial Circuit in and for Manatee County, Florida.

18. Attorney’s Fees and Costs. In any claim dispute procedure or litigation arising from this Agreement, each party hereto shall be solely responsible for paying its attorney’s fees and costs.

19. Notices. All notices, comments, consents, objections, approvals, waivers, and elections under this Agreement shall be in writing and shall be given only by hand delivery for which a receipt is obtained, or certified mail, prepaid with confirmation of delivery requested, or by electronic mail with delivery confirmation. All such communications shall be addressed to the applicable addressees set forth below or as any party may otherwise designate in the manner prescribed herein.

To the Owner:

Email: _____

To the Contractor:

Email: _____

Notices, comments, consents, objections, approvals, waivers, and elections shall be deemed given when received by the party for whom such communication is intended at such party's address herein specified, or such other physical address or email address as such party may have substituted by notice to the other.

20. Exhibits. Exhibits to this Agreement are as follows:

Exhibit A—Title(s) of Drawings

Exhibit B—Title(s) of Specifications

Exhibit C—Affidavit of No Conflict

Exhibit D—Certificate(s) of Insurance

Exhibit E—Payment and Performance Bond

Exhibit F—Standard Forms

- 1—Application for Payment
- 2—Certificate of Substantial Completion
- 3—Final Reconciliation / Warranty / Affidavit
- 4—Change Order

WHEREFORE, the parties hereto have executed this Agreement as of the date last executed below.

Name of Contractor

By: _____

Printed Name: _____

Title: _____

Date: _____

MANATEE COUNTY, a political subdivision
of the State of Florida

By: _____

Printed Name: _____

Title: _____

Date: _____

GENERAL CONDITIONS
of the
CONSTRUCTION AGREEMENT

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GENERAL CONDITIONS
ARTICLE I
DEFINITIONS

1.1 Definitions. For purposes of the Contract Documents, the following terms shall have the following meanings.

A. Acceptance: The acceptance of the Project into the Owner's operating public infrastructure.

B. Application for Payment: The form approved and accepted by the Owner, which is to be used by Contractor in requesting progress payments or final payment and which is to include such supporting documentation as is required by the Contract Documents.

C. Architect/Engineer: **Cardno, Inc.**, a **Delaware** corporation, registered and licensed to do business in the State of Florida.

D. Change Order: A written order signed by the Owner, the Architect/Engineer and the Contractor authorizing a change in the Project Plans and/or Specifications and, if necessary, a corresponding adjustment in the Contract Sum and/or Contract Time, pursuant to Article V.

E. Compensable Delay: Any delay beyond the control and without the fault or negligence of the Contractor resulting from Owner-caused changes in the Work, differing site conditions, suspensions of the Work, or termination for convenience by Owner.

F. Contractor's Personnel: The Contractor's key personnel designated by Contractor.

G. Construction Services: The Construction Services to be provided by Contractor pursuant to Section 2.4, in accordance with the terms and provisions of the Contract Documents.

H. Contract Sum: The total compensation to be paid to the Contractor for Construction Services rendered pursuant to the Contract Documents, as set forth in Contractor's Bid, unless adjusted in accordance with the terms of the Contract Documents.

I. Construction Team: The working team established pursuant to Section 2.1.B.

J. Contract Time: The time period during which all Construction Services are to be completed pursuant to the Contract Documents, to be set forth in the Project Schedule.

K. Days: Calendar days except when specified differently. When time is referred to in the Contract Documents by days, it will be computed to exclude the first and

include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or legal holiday, such day will be omitted from the computation.

L. Defective: When modifying the term “Work”, referring to Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or that does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or that has been damaged prior to Owner’s approval of final payment (unless responsibility for the protection thereof has been assumed by Owner).

M. Excusable Delay: Any delay beyond the control and without the negligence of the Contractor, the Owner, or any other contractor caused by events or circumstances such as, but not limited to, acts of God or of a public enemy, fires, floods, freight embargoes, acts of government other than Owner or epidemics. Labor disputes and above average rainfall shall give rise only to excusable delays.

N. Field Directive: A written order issued by Owner which orders minor changes in the Work not involving a change in Contract Time, to be paid from the Owner’s contingency funds.

O. Final Completion Date: The date upon which the Project is fully constructed and all Work required on the Project and Project Site is fully performed as verified in writing by the Owner.

P. Float or Slack Time: The time available in the Project Schedule during which an unexpected activity can be completed without delaying substantial completion of the Work.

Q. Force Majeure: Those conditions constituting excuse from performance as described in and subject to the conditions described in Article XII.

R. Inexcusable Delay: Any delay caused by events or circumstances within the control of the Contractor, such as inadequate crewing, slow submittals, etc., which might have been avoided by the exercise of care, prudence, foresight or diligence on the part of the Contractor.

S. Non-prejudicial Delay: Any delay impacting a portion of the Work within the available total Float or Slack Time and not necessarily preventing Substantial Completion of the Work within the Contract Time.

T. Notice to Proceed: Written notice by Owner (after execution of Contract) to Contractor fixing the date on which the Contract Time will commence to run and on which Contractor shall start to perform the Work.

U. Owner: Manatee County, a political subdivision of the State of Florida.

V. Owner’s Project Representative: The individual designated by Owner to perform those functions set forth in Section 7.8.

W. Payment and Performance Bond: The Payment and Performance Bond security posted pursuant to Section 2.4.Y to guarantee payment and performance by the Contractor of its obligations hereunder.

X. Permitting Authority: Any applicable governmental authority acting in its governmental and regulatory capacity which is required to issue or grant any permit, certificate, license or other approval which is required as a condition precedent to the commencement or approved of the Work, or any part thereof, including the building permit.

Y. Prejudicial Delay: Any excusable or compensable delay impacting the Work and exceeding the total float available in the Project Schedule, thus preventing completion of the Work within the Contract Time unless the Work is accelerated.

Z. Progress Report: A report to Owner that includes all information required pursuant to the Contract Documents and submitted in accordance with Section 2.4.EE, hereof.

AA. Project: The total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by Owner and by separate contractors. For the purposes of the Contract Documents, the term Project shall include all areas of proposed improvements and all areas which may reasonably be judged to have an impact on the Project.

BB. Project Costs: The costs incurred by the Contractor to plan, construct and equip the Project and included within, and paid as a component of, the Contract Sum.

CC. Project Manager: Subject to the prior written consent of Owner, the individual designated to receive notices on behalf of the Contractor, or such other individual designated by the Contractor, from time to time, pursuant to written notice in accordance with the Contract Documents.

DD. Project Plans and Specifications: The one hundred percent (100%) construction drawings and specifications prepared by the Architect/Engineer, and any changes, supplements, amendments or additions thereto approved by the Owner, which shall also include any construction drawings and final specifications required for the repair or construction of the Project, as provided herein.

EE. Project Schedule: The schedule and sequence of events for the commencement, progression and completion of the Project, developed pursuant to Section 2.3., as such schedule may be amended as provided herein.

FF. Project Site: The site depicted in the Project Plans and Specifications, inclusive of all rights of way, temporary construction easements or licensed or leased sovereign lands.

GG. Pre-operation Testing: All field inspections, installation checks, water tests, performance tests and necessary corrections required of Contractor to demonstrate that

individual components of the Work have been properly constructed and do operate in accordance with the Contract Documents for their intended purposes.

HH. Procurement Ordinance: The Manatee County Procurement Code, Chapter 2-26 of the Manatee County Code of Laws, as amended from time to time.

II. Punch List Completion Date: The date upon which all previously incomplete or unsatisfactory items, as identified by the Contractor, the Architect/Engineer and/or the Owner are completed in a competent and workmanlike manner, consistent with standards for Work of this type and with good building practices in the State of Florida.

JJ. Subcontractor: Any individual (other than a direct employee of the Contractor) or organization retained by Contractor to plan, construct or equip the Project pursuant to Article IV.

KK. Substantial Completion and Substantially Complete: The stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use; provided, however, that as a condition precedent to Substantial Completion, the Owner has received all certificates of occupancy or completion and other permits, approvals, licenses, and other documents from any governmental authority which are necessary for the beneficial occupancy of the Project.

LL. Substantial Completion Date: The date on which the Project is deemed to be Substantially Complete, as evidenced by receipt of (i) the Architect/Engineer's certificate of Substantial Completion, (ii) written Acceptance of the Project by the Owner, and (iii) approvals of any other authority as may be necessary or otherwise required.

MM. Unit Price Work: Work to be paid for on the basis of unit prices.

NN. Work: The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

OO. Work Directive Change: A written directive to Contractor, issued on or after the effective date of the Agreement pursuant to Section 5.8 and signed by Owner's Project Representative, ordering an addition, deletion or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed or responding to emergencies.

ARTICLE II RELATIONSHIP AND RESPONSIBILITIES

2.1 Relationship between Contractor and Owner. The Contractor accepts the relationship of trust and confidence established with Owner pursuant to the Contract Documents. The Contractor shall furnish its best skill and judgment and cooperate with Owner and Owner's Project Representative in furthering the interests of the Owner. The Contractor agrees to provide the professional services required to complete the Project consistent with the Owner's direction and the terms of the Contract Documents. All services provided hereunder by Contractor, either directly or through Subcontractors, shall be provided in accordance with sound construction practices and applicable professional construction standards.

A. Purpose. The purpose of the Contract Documents is to provide for the provision of construction services for the Project on the Project Site by the Contractor, and construction of the Project by the Contractor in accordance with the Project Plans and Specifications. The further purpose of the Contract Documents is to define and delineate the responsibilities and obligations of the parties to the Contract Documents and to express the desire of all such parties to cooperate together to accomplish the purposes and expectations of the Contract Documents.

B. Construction Team. The Contractor, Owner and Architect/Engineer shall be called the "Construction Team" and shall work together as a team commencing upon full execution of the Contract Documents through Substantial Completion. As provided in Section 2.2, the Contractor and Architect/Engineer shall work jointly through completion and shall be available thereafter should additional services be required. The Contractor shall provide leadership to the Construction Team on all matters relating to construction. The Contractor understands, acknowledges and agrees that the Architect/Engineer shall provide leadership to the Construction Team on all matters relating to design.

C. Response to Invitation for Bid. The Contractor acknowledges that the representations, statements, information and pricing contained in its Bid have been relied upon by the Owner and have resulted in the award of this Project to the Contractor.

2.2 General Contractor Responsibilities. In addition to the other responsibilities set forth herein, the Contractor shall have the following responsibilities pursuant to the Contract Documents:

A. Personnel. The Contractor represents that it has secured, or shall secure, all personnel necessary to perform the Work, none of whom shall be employees of the Owner. Primary liaison between the Contractor and the Owner shall be through the Owner's Project Representative and Contractor's Project Manager. All of the services required herein shall be performed by the Contractor or under the Contractor's supervision, and all personnel engaged in the Work shall be fully qualified and shall be authorized or permitted under law to perform such services.

B. Cooperation with Architect/Engineer. The Contractor's services shall be provided in conjunction with the services of the Architect/Engineer. In the performance of professional services, the Contractor acknowledges that time is critical for Project delivery. The

Contractor acknowledges that timely construction utilizing the services of an Architect/Engineer and a Contractor requires maximum cooperation between all parties.

C. Timely Performance. The Contractor shall perform all services as expeditiously as is consistent with professional skill and care and the orderly progress of the Work, in accordance with the Project Schedule. Verification of estimated Project Schedule goals will be made as requested by the Owner.

D. Duty to Defend Work. In the event of any dispute between the Owner and any Permitting Authority that relates to the quality, completeness or professional workmanship of the Contractor's services or Work, the Contractor shall, at its sole cost and expense, cooperate with the Owner to defend the quality and workmanship of the Contractor's services and Work.

E. Trade and Industry Terminology. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result will be supplied whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe Work, materials, or equipment, such words shall be interpreted in accordance with that meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or laws or regulations in effect at the time of opening of Bids, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of Owner or Contractor, or any of their agents or employees from those set forth in the Contract Documents. Computed dimensions shall govern over scaled dimensions.

2.3 Project Schedule. The Contractor, within ten (10) days after being awarded the Contract, shall prepare and submit for the Owner's and Architect/Engineer's information a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of Work.

A. The Project Schedule shall show a breakdown of all tasks to be performed, and their relationship in achieving the completion of each phase of Work, subject to review of Owner and Architect/Engineer and approval or rejection by Owner. The Project Schedule shall show, at a minimum, the approximate dates on which each segment of the Work is expected to be started and finished, the proposed traffic flows during each month, the anticipated earnings by the Contractor for each month and the approximate number of crews and equipment to be used. The Project Schedule shall include all phases of procurement, approval of shop drawings, proposed Change Orders in progress, schedules for Change

Orders, and performance testing requirements. The Project Schedule shall include a construction commencement date and Project Substantial Completion Date, which dates shall accommodate known or reasonably anticipated geographic, atmospheric and weather conditions.

- B. The Project Schedule shall serve as the framework for the subsequent development of all detailed schedules. The Project Schedule shall be used to verify Contractor performance and to allow the Owner's Project Representative to monitor the Contractor's efforts.
- C. The Project Schedule may be adjusted by the Contractor pursuant to Article V. The Owner shall have the right to reschedule Work provided such rescheduling is in accord with the remainder of terms of the Contract Documents.
- D. The Contractor shall prepare a submittal schedule, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, and shall submit the schedule(s) for the Architect/Engineer's approval. The Architect/Engineer's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect/Engineer reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.
- E. The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect/Engineer.

2.4 Construction Services. The Contractor shall provide the following Construction Services:

A. Construction of Project. The Contractor shall work from the receipt of a Notice to Proceed through the Substantial Completion of the Project in accordance with the terms of the Contract Documents to manage the construction of the Project. The Construction Services provided by the Contractor to construct the Project shall include without limitation (1) all services necessary and commensurate with established construction standards, and (2) all services described in the Invitation for Bid and the Bid.

B. Notice to Proceed. A Notice to Proceed may be given at any time within thirty (30) days after the effective date of the Agreement. Contractor shall start to perform the Work on the date specified in the Notice to Proceed, but no Work shall be done at the site prior to the issuance of the Notice to Proceed.

C. Quality of Work. If at any time the labor used or to be used appears to the Owner as insufficient or improper for securing the quality of Work required or the required rate of progress, the Owner may order the Contractor to increase its efficiency or to improve the character of its Work, and the Contractor shall conform to such an order. Any such order shall

not entitle Contractor to any additional compensation or any increase in Contract Time. The failure of the Owner to demand any increase of such efficiency or any improvement shall not release the Contractor from its obligation to secure the quality of Work or the rate of progress necessary to complete the Work within the limits imposed by the Contract Documents. The Owner may require the Contractor to remove such personnel as the Owner deems incompetent, careless, insubordinate or otherwise objectionable, or whose continued employment on the Project is deemed to be contrary to the Owner's interest. The Contractor shall provide good quality workmanship and shall promptly correct construction defects without additional compensation. Acceptance of the Work by the Owner shall not relieve the Contractor of the responsibility for subsequent correction of any construction defects.

D. Materials. All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by Architect/Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instruction of the applicable supplier except as otherwise provided in the Contract Documents.

E. Accountability for Work. The Contractor shall be solely accountable for its Work, including plans review and complete submittals. The Contractor shall be solely responsible for means and methods of construction.

F. Contract Sum. The Contractor shall construct the Project so that the Project can be built for a cost not to exceed the Contract Sum.

G. Governing Specifications. The Project shall be constructed in accordance with applicable Owner design standards and guidelines. In the absence of specified Owner design standards or guidelines, the Architect/Engineer shall use, and the Contractor shall comply with, the most recent version of the applicable FDOT or AASHTO design standards. In general, the Project shall be constructed by the Contractor in accordance with applicable industry standards. The Contractor shall be responsible for utilizing and maintaining current knowledge of any laws, ordinances, codes, rules, regulations, standards, guidelines, special conditions, specifications or other mandates relevant to the Project or the services to be performed.

H. Adherence to Project Schedule. The development and equipping of the Project shall be undertaken and completed in accordance with the Project Schedule, and within the Contract Time described therein.

I. Superintendent. The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project Site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

(1) The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect/Engineer the name and qualifications of the proposed superintendent. The Architect/Engineer may reply within 14 days to the Contractor in writing stating (1) whether the Owner or the Architect/Engineer has reasonable objection to the proposed superintendent or (2) that the Architect/Engineer requires additional time to review.

Failure of the Architect/Engineer to reply within 14 days shall constitute notice of no reasonable objection.

(2) The Contractor shall not employ a proposed superintendent to whom the Owner or Architect/Engineer has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not be unreasonably withheld or delayed.

J. Work Hours. Contractor shall provide competent, suitable qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular working hours, and Contractor shall not permit overtime work or the performance of Work on a Saturday, Sunday or legal holiday without Owner's written consent given after prior notice to Architect/Engineer (at least seventy-two (72) hours in advance).

K. Overtime-Related Costs. Contractor shall pay for all additional Architect/Engineering charges, inspection costs and Owner staff time for any overtime work which may be authorized. Such additional charges shall be a subsidiary obligation of Contractor and no extra payment shall be made by Owner on account of such overtime work. At Owner's option, such overtime costs may be deducted from Contractor's monthly payment request or Contractor's retainage prior to release of final payment.

L. Insurance, Overhead and Utilities. Unless otherwise specified, Contractor shall furnish and assume full responsibility for all bonds, insurance, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.

M. Cleanliness. The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials from and about the Project Site. Contractor shall restore to original conditions all property not designated for alteration by the Contract Documents. If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and Owner shall be entitled to reimbursement from Contractor.

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

O. Safety and Protection. Contractor shall comply with the Florida Department of Commerce Safety Regulations and any local safety regulations. Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in

connection with the Work. Contractor shall take all necessary precautions for the safety of and shall provide the necessary protection to prevent damage, injury or loss to:

- (1) All employees on the Work and other persons and organizations who may be affected thereby;
- (2) All the Work and materials and equipment to be incorporated therein, whether in storage on or off the Project Site; and
- (3) Other property at the Project Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and underground facilities not designated for removal, relocation or replacement in the course of construction.

Contractor shall comply with all applicable laws and regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss, and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall provide and maintain all passageways, guard fences, lights and other facilities for the protection required by public authority or local conditions. Contractor shall provide reasonable maintenance of traffic for the public and preservation of the Owner's business, taking into full consideration all local conditions. Contractor's duties and responsibilities for safety and protection with regard to the Work shall continue until such time as all the Work is completed.

P. Emergencies. In emergencies affecting the safety or protection of persons or the Work or property at the Project Site or adjacent thereto, Contractor, without special instruction or authorization from Architect/Engineer or Owner, shall act to prevent threatened damage, injury or loss. Contractor shall give Owner prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If Owner determines that a change in the Project is required because of the action taken in response to an emergency, a Work Directive Change or Change Order will be issued to document the consequences of the changes or variation.

Q. Substitutes. For substitutes not included with the Bid, but submitted after the effective date of the Contract Documents, Contractor shall make written application to Architect/Engineer for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified. The application will also contain an itemized estimate of all costs and delays or schedule impacts that will result directly or indirectly from review, acceptance and provisions of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which will be considered by the Architect/Engineer in evaluating the proposed substitute. Architect/Engineer may require Contractor to furnish at Contractor's expense, additional data about the proposed substitute. In rendering a decision, Owner, Architect/Engineer and Contractor shall have access to any available Float Time in the Project Schedule. In the event that substitute materials or equipment not included as part of the Bid, but proposed after the effective date of the Contract Documents, are accepted and are less costly than the originally specified materials or equipment, then the net difference in cost shall be credited to the Owner and an appropriate Change Order executed to adjust the Contract Sum.

- (1) If a specific means, method, technique, sequence of procedure of construction is indicated in or required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to Architect/Engineer if Contractor submits sufficient information to allow Architect/Engineer to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents.
- (2) Architect/Engineer will be allowed a reasonable time within which to evaluate each proposed substitute. Architect/Engineer will be the sole judge of acceptability and no substitute will be ordered, installed or utilized without Architect/Engineer's prior written acceptance which will be evidenced by either a Change Order or an approved shop drawing. Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- (3) Contractor shall reimburse Owner for the charges of Architect/Engineer and Architect/Engineer's Consultants for evaluating each proposed substitute submitted after the effective date of the Contract Documents and all costs resulting from any delays in the Work while the substitute was undergoing review.

R. Surveys and Stakes. The Contractor shall furnish, free of charge, all labor, stakes, surveys, batter boards for structures, grade lines and other materials and supplies and shall set construction stakes and batter boards for establishing lines, position of structures, slopes and other controlling points necessary for the proper prosecution of the Work. Where rights-of-way, easements, property lines or any other conditions which make the lay-out of the Project or parts of the Project critical are involved, the Contractor shall employ a competent surveyor who is registered in the State of Florida for lay-out and staking. These stakes and marks shall constitute the field control by and in accord with which the Contractor shall govern and execute the Work. The Contractor shall be held responsible for the preservation of all stakes and marks and if for any reason any of the stakes or marks or batter boards become destroyed or disturbed, they shall be immediately and accurately replaced by the Contractor.

S. Suitability of Project Site. The Contractor has, by careful examination, satisfied itself as to the nature and location of the Work and all other matters which can in any way affect the Work, including, but not limited to details pertaining to borings, as shown on the drawings. Such boring information is not guaranteed to be more than a general indication of the materials likely to be found adjacent to holes bored at the Project Site, approximately at the locations indicated. The Contractor has examined boring data, where available, made its own interpretation of the subsurface conditions and other preliminary data, and has based its Bid on its own opinion of the conditions likely to be encountered. Except as specifically provided in Sections 2.4.U., 5.4 and 5.5, no extra compensation or extension of time will be considered for any Project Site conditions that existed at the time of bidding. No verbal agreement or conversation with any officer, agent or employee of the Owner, before or after the execution of the Agreement, shall affect or modify any of the terms or obligations herein contained.

T. Project Specification Errors. If the Contractor, in the course of the Work, finds that the drawings, specifications or other Contract Documents cannot be followed, the Contractor shall immediately inform the Owner in writing, and the Owner shall promptly check the accuracy of the information. Any Work done after such discovery, until any necessary changes are authorized, will be done at the Contractor's sole risk of non-payment and delay.

U. Remediation of Contamination: Owner and Contractor recognize that remediation of subsurface conditions may be necessary due to potential hazardous materials contamination. Because the presence or extent of any contamination is not known, Contractor shall include no cost in the Contract Sum, and no time in the Project Schedule, for cost or delays that might result from any necessary remediation. The Project Schedule will provide a period of time between demolition activities and the start of the next activity to commence any remediation if needed. Contractor shall use all reasonable efforts in scheduling the Project to minimize the likelihood that remediation delays construction. Any hazardous materials remediation Work which Contractor agrees to perform shall be done pursuant to a Change Order or amendment consistent with the following:

- (1) The dates of Substantial Completion shall be equitably adjusted based on delays, if any, incurred in connection with remediation efforts.
- (2) Contractor, and any Subcontractors which have mobilized on the Project Site, shall be paid for demonstrated costs of overhead operations at the Project Site during any period of delay in excess of seven (7) days, except to the extent that Work proceeds concurrently with remediation. The categories of costs to be reimbursed are limited to those reasonably incurred at the jobsite during the delay period (such as trailers or offices, telephones, faxes, and the like); equipment dedicated to the Project and located at the Project Site; salaries and associated costs of personnel dedicated to the Project to the extent that they do not perform Work on other projects; and other jobsite costs that are reasonable and which are incurred during the delay period. Subcontractors and suppliers which have not mobilized are limited to the costs set forth in Section 2.4.U(3).
- (3) Contractor and any Subcontractor or supplier on the Project who is eligible for compensation shall be paid any demonstrated costs of escalation in materials or labor, and reasonable costs of off-site storage of materials identified to the Project, arising as a result of any delay in excess of seven (7) days. Such Contractor, Subcontractors and suppliers are obligated to take all reasonable steps to mitigate escalation costs, such as through early purchase of materials.
- (4) Contractor, for itself and all Subcontractors and suppliers on the Project, hereby agrees that the extension of time for delays under Section 2.4.U(1), and payment of the costs identified in Sections 2.4.U(2) and/or Section 2.4.U(3), are the sole remedies for costs and delays described in this Section, and waives all claims and demands for extended home office overhead (including, but not limited to, "Eichleay" claims), lost profit or lost opportunities, and any special, indirect, or consequential damages

arising as a result of delays described in this Section. The Contract Sum shall be adjusted to reflect payment of allowable costs.

- (5) If any delay described in this section causes the time or cost for the Project to exceed the Contract Time or the Contract Sum, then the Owner may terminate the Agreement pursuant to Section 14.2.
- (6) Contractor and any Subcontractor or supplier seeking additional costs under this Section 2.4.U. shall promptly submit estimates or any costs as requested by Owner, and detailed back-up for all costs when payment is sought or whenever reasonably requested by Owner. All costs are auditable, at Owner's discretion. Bid, estimate and pricing information reasonably related to any request for additional compensation will be provided promptly upon request.
- (7) Contractor shall include provisions in its subcontracts and purchase orders consistent with this Section.

V. Interfacing.

- (1) The Contractor shall take such measures as are necessary to ensure proper construction and delivery of the Project, including but not limited to providing that all procurement of long-lead items, the separate construction Subcontractors, and the general conditions items are performed without duplication or overlap to maintain completion of all Work on schedule. Particular attention shall be given to provide that each bid package clearly identifies the Work included in that particular separate subcontract, its scheduling for start and completion, and its relationship to other separate contractors.
- (2) Without assuming any design responsibilities of the Architect/Engineer, the Contractor shall include in the Progress Reports required under this Section 2.4 comments on overlap with any other separate subcontracts, omissions, lack of correlation between drawings, and any other deficiencies noted, in order that the Architect/Engineer may arrange for necessary corrections.

W. Job Site Facilities. The Contractor shall arrange for all job site facilities required and necessary to enable the Contractor and Architect/Engineer to perform their respective duties and to accommodate any representatives of the Owner which the Owner may choose to have present on the job.

X. Weather Protection. The Contractor shall provide temporary enclosures of building areas in order to assure orderly progress of the Work during periods when extreme weather conditions are likely to be experienced. The Contractor shall also be responsible for providing weather protection for Work in progress and for materials stored on the Project Site. A contingency plan shall be prepared upon request of the Owner for weather conditions that may affect the construction.

Y. Payment and Performance Bond. Prior to the construction commencement date, the Contractor shall obtain, for the benefit of and directed to the Owner, a Payment and Performance Bond satisfying the requirements of Section 255.05, Florida Statutes, covering the faithful performance by the Contractor of its obligations under the Contract Documents, including but not limited to the construction of the Project on the Project Site and the payment of all obligations arising thereunder, including all payments to Subcontractors, laborers, and materialmen. The surety selected by the Contractor to provide the Payment and Performance Bond shall be approved by the Owner prior to the issuance of such Bond, which approval shall not be unreasonably withheld or delayed provided that the surety is rated A or better by Best's Key Guide, latest edition.

Z. Construction Phase; Building Permit; Code Inspections. Unless otherwise provided, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work.

- (1) Building Permit. The Owner and Architect/Engineer shall provide such information to any Permitting Authority as is necessary to obtain approval from the Permitting Authority to commence construction prior to beginning construction. The Contractor shall pull any required building permit, and shall be responsible for delivering and posting the building permit at the Project Site prior to the commencement of construction. The cost of the building permit is included in the Contract Sum. The Owner and Architect/Engineer shall fully cooperate with the Contractor when and where necessary.
- (2) Code Inspections. The Project requires detailed code compliance inspection during construction in disciplines determined by any Permitting Authority. These disciplines normally include, but are not necessarily limited to, structural, mechanical, electrical, plumbing general building and fire. The Contractor shall notify the appropriate inspector(s) and the Architect/Engineer, no less than 24 hours in advance, when the Work is ready for inspection and before the Work is covered up. All inspections shall be made for conformance with the applicable ordinances and building codes. Costs for all re-inspections of Work found defective and subsequently repaired shall not be included as Project Costs and shall be borne by the Contractor or as provided in the contract between Contractor and Subcontractor.
- (3) Contractor's Personnel. The Contractor shall maintain sufficient off-site support staff and competent full-time staff at the Project Site authorized to act on behalf of the Contractor to coordinate, inspect, and provide general direction of the Work and progress of the Subcontractors. At all times during the performance of the Work, the Owner shall have the right to demand replacement of Contractor Personnel to whom the Owner has reasonable objection, without liability to the Contractor.

- (4) Lines of Authority. To provide general direction of the Work, the Contractor shall establish and maintain lines of authority for its personnel and shall provide this information to the Owner and all other affected parties, such as the code inspectors of any Permitting Authority, the Subcontractors, and the Architect/Engineer. The Owner and Architect/Engineer may attend meetings between the Contractor and his Subcontractors; however, such attendance is optional and shall not diminish either the authority or responsibility of the Contractor to administer the subcontracts.

AA. Quality Control. The Contractor shall develop and maintain a program, acceptable to the Owner and Architect/Engineer, to assure quality control of the construction. The Contractor shall be responsible for and supervise the Work of all Subcontractors, providing instructions to each when their Work does not conform to the requirements of the Project Plans and Specifications, and the Contractor shall continue to coordinate the Work of each Subcontractor to ensure that corrections are made in a timely manner so as to not affect the efficient progress of the Work. Should a disagreement occur between the Contractor and the Architect/Engineer over the acceptability of the Work, the Owner, at its sole discretion and in addition to any other remedies provided herein, shall have the right to determine the acceptability, provided that such determination is consistent with standards for construction projects of this type and generally accepted industry standards for workmanship in the State of Florida.

BB. Management of Subcontractors. All Subcontractors shall be compensated in accordance with Article IV. The Contractor shall solely control the Subcontractors. The Contractor shall negotiate all Change Orders and Field Orders with all affected Subcontractors and shall review the costs and advise the Owner and Architect/Engineer of their validity and reasonableness, acting in the Owner's best interest. When there is an imminent threat to health and safety, and Owner's Project Representative concurrence is impractical, the Contractor shall act immediately to remove the threats to health and safety and shall subsequently fully inform Owner of all such action taken. The Contractor shall also carefully review all shop drawings and then forward the same to the Architect/Engineer for review and actions. The Architect/Engineer will transmit them back to the Contractor, who will then issue the shop drawings to the affected Subcontractor for fabrication or revision. The Contractor shall maintain a suspense control system to promote expeditious handling. The Contractor shall request the Architect/Engineer to make interpretations of the drawings or specifications requested of him by the Subcontractors and shall maintain a business system to promote timely response. The Contractor shall inform the Architect/Engineer which shop drawings or requests for clarification have the greatest urgency, so as to enable the Architect/Engineer to prioritize requests coming from the Contractor. The Contractor shall advise the Owner and Architect/Engineer when timely response is not occurring on any of the above.

CC. Job Requirements.

- (1) The Contractor shall provide each of the following as a part of its services hereunder:
 - (a) Maintain a log of daily activities, including manpower records, equipment on site, weather, delays, major decisions, etc;
 - (b) Maintain a roster of companies on the Project with names and telephone numbers of key personnel;
 - (c) Establish and enforce job rules governing parking, clean-up, use of facilities, and worker discipline;
 - (d) Provide labor relations management and equal opportunity employment for a harmonious, productive Project;
 - (e) Provide and administer a safety program for the Project and monitor for subcontractor compliance without relieving them of responsibilities to perform Work in accordance with best acceptable practice;
 - (f) Provide a quality control program as provided under Section 2.4.C above;
 - (g) Provide miscellaneous office supplies that support the construction efforts which are consumed by its own forces;
 - (h) Provide for travel to and from its home office to the Project Site and to those other places within Manatee County as required by the Project;
 - (i) Verify that tests, equipment, and system start-ups and operating and maintenance instructions are conducted as required and in the presence of the required personnel and provide adequate records of same to the Architect/Engineer;
 - (j) Maintain at the job site orderly files for correspondence, reports of job conferences, shop drawings and sample submissions, reproductions of original Contract Documents including all addenda, change orders, field orders, additional drawings issued subsequent to the execution of the Agreement, Owner/Architect/Engineer's clarifications and interpretations of the Contract Documents, progress reports, as-built drawings, and other project related documents;

- (k) Keep a diary or log book, recording hours on the job site, weather conditions, data relative to questions of extras or deductions; list of visiting officials and representatives or manufacturers, fabricators, suppliers and distributors; daily activities, decisions, observations in general and specific observations in more detail as in the case of observing test procedures, and provide copies of same to Owner/Architect/Engineer;
 - (l) Record names, addresses and telephone numbers of all Contractors, Subcontractors and major suppliers of materials and equipment;
 - (m) Furnish Owner/Architect/Engineer periodic reports, as required, of progress of the Work and Contractor's compliance with the approved progress schedule and schedule of shop drawing submissions;
 - (n) Consult with Owner/Architect/Engineer in advance of scheduling major tests, inspections or start of important phases of the Work;
 - (o) Verify, during the course of the Work, that certificates, maintenance and operations manuals and other data required to be assembled and furnished are applicable to the items actually installed, and deliver same to Owner/Architect/Engineer for review prior to final Acceptance of the Work; and
 - (p) Cooperate with Owner in the administration of grants.
- (2) The Contractor shall provide personnel and equipment, or shall arrange for separate Subcontractors to provide each of the following as a Project Cost:
- (a) Services of independent testing laboratories, and provide the necessary testing of materials to ensure conformance to contract requirements; and
 - (b) Printing and distribution of all required bidding documents and shop drawings, including the sets required by Permitting Authority inspectors.

DD. As-Built Drawings. The Contractor shall continuously review as-built drawings and mark up progress prints to provide as much accuracy as possible. Prior to, and as a requirement for authorizing final payment to the Contractor due hereunder, the Contractor shall provide to the Owner an original set of marked-up, as-built Project Plans and Specifications and an electronic format of those records showing the location and dimensions of the Project as constructed, which documents shall be certified as being correct by the Contractor and the Architect/Engineer. Final as-built drawings shall be signed and sealed by a registered Florida surveyor.

EE. Progress Reports. The Contractor shall forward to the Owner, as soon as practicable after the first day of each month, a summary report of the progress of the various parts of the Work under the Contract, in fabrication and in the field, stating the existing status, estimated time of completion and cause of delay, if any. Together with the summary report, the Contractor shall submit any necessary revisions to the original schedule for the Owner's review and approval. In addition, more detailed schedules may be required by the Owner for daily traffic control.

FF. Contractor's Warranty. The Contractor warrants to the Owner and Architect/Engineer that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements will be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect/Engineer, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

- (1) Contractor shall use its best efforts and due diligence to ensure that during the warranty period, those entities or individuals who have provided direct warranties to the Owner as required by the Contract Documents perform all required warranty Work in a timely manner and at the sole cost and expense of such warranty providers. Any such cost or expense not paid by the warranty providers shall be paid by the Contractor, to include any costs and attorney's fees incurred in warranty-related litigation between Contractor and any Subcontractors.
- (2) The Contractor shall secure guarantees and warranties of Subcontractors, equipment suppliers and materialmen, and assemble and deliver same to the Owner in a manner that will facilitate their maximum enforcement and assure their meaningful implementation. The Contractor shall collect and deliver to the Owner any specific written guaranties or warranties given by others as required by subcontracts.
- (3) At the Owner's request, the Contractor shall conduct, jointly with the Owner and the Architect/Engineer, no more than two (2) warranty inspections within three (3) years after the Substantial Completion Date.

GG. Apprentices. If Contractor employs apprentices, their performance of Work shall be governed by and comply with the provisions of Chapter 446, Florida Statutes.

HH. Schedule of Values. Unit prices shall be established for this Contract by the submission of a schedule of values within ten (10) days of receipt of the Notice to Proceed. The schedule shall include quantities and prices of items equaling the Contract Sum and will subdivide the Work into components in sufficient detail to serve as the basis for

progress payments during construction. Such prices shall include an appropriate amount of overhead and profit applicable to each item of Work. Upon request of the County, the Contractor shall support the values with data which will substantiate their correctness.

II. Other Contracts. The Owner reserves the right to let other Contracts in connection with this Work. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and execution of their Work, and promptly connect and coordinate the Work with theirs.

ARTICLE III COMPENSATION

3.1 Compensation. The Contract Sum constitutes the total compensation (subject to authorized adjustments) payable to Contractor for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at Contractor's expense without change in the Contract Sum.

A. Adjustments. The Contract Sum may only be changed by Change Order or by a written amendment. Any claim for an increase or decrease in the Contract Sum shall be based on written notice delivered by the party making the claim to the other party. Notice of the amount of the claim with supporting data shall be delivered within fifteen (15) days from the beginning of such occurrence and shall be accompanied by claimant's written statement that the amount claimed covers all known amounts (direct, indirect and consequential) to which the claimant is entitled as a result of the occurrence of said event. Failure to deliver a claim within the requisite 15-day period shall constitute a waiver of the right to pursue said claim.

B. Valuation. The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Sum shall be determined in one of the following ways (at Owner's discretion):

- (1) In the case of Unit Price Work, in accordance with Section 3.1.C, below;
or
- (2) By mutual acceptance of lump sum; or
- (3) On the basis of the cost of the Work, plus a negotiated Contractor's fee for overhead and profit. Contractor shall submit an itemized cost breakdown together with supporting data.

C. Unit Price Work. The unit price of an item of Unit Price Work shall be subject to re-evaluation and adjustment pursuant to a requested Change Order under the following conditions:

- (1) If the total cost of a particular item of Unit Price Work amounts to 5% or more of the Contract Sum and the variation in the quantity of the particular item of Unit Price Work performed by Contractor differs by

more than 15% from the estimated quantity of such item indicated in the Agreement; and

- (2) If there is no corresponding adjustment with respect to any other item of Work; and
- (3) If Contractor believes that it has incurred additional expense as a result thereof; or
- (4) If Owner believes that the quantity variation entitles it to an adjustment in the unit price; or
- (5) If the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed.

3.2 Schedule of Compensation. All payments for services and material under the Contract Documents shall be made in accordance with the following provisions.

A. Periodic Payments for Services. The Contractor shall be entitled to receive payment for Construction Services rendered pursuant to Section 2.4 in periodic payments which shall reflect a fair apportionment of cost and schedule of values of services furnished prior to payment, subject to the provisions of this Section.

B. Payment for Materials and Equipment. In addition to the periodic payments authorized hereunder, payments may be made for material and equipment not incorporated in the Work but delivered and suitably stored at the Project Site, or another location, subject to prior approval and acceptance by the Owner on each occasion.

C. Credit toward Contract Sum. All payments for Construction Services made hereunder shall be credited toward the payment of the Contract Sum as Contractor's sole compensation for the construction of the Project.

3.3 Invoice and Payment. All payments for services and materials under the Contract Documents shall be invoiced and paid in accordance with the following provisions.

A. Invoices. The Contractor shall submit to the Owner periodic invoices for payment, in a form acceptable to the Owner, which shall include a sworn statement certifying that, to the best of the Contractor's knowledge, information and belief, the construction has progressed to the point indicated, the quality and the Work covered by the invoice is in accord with the Project Plans and Specifications, and the Contractor is entitled to payment in the amount requested, along with the cost reports required pursuant to Article II, showing in detail all monies paid out, Project Costs accumulated, or Project Cost incurred during the previous period. This data shall be attached to the invoice.

B. Additional Information; Processing of Invoices. Should an invoiced amount appear to exceed the Work effort believed to be completed, the Owner may, prior to processing of the invoice for payment, require the Contractor to submit satisfactory evidence to support the invoice. All progress reports and invoices shall be delivered to the attention of the

Owner's Project Representative. Invoices not properly prepared (mathematical errors, billing not reflecting actual Work done, no signature, etc.) shall be returned to the Contractor for correction.

C. Architect/Engineer's Approval. Payment for Work completed shall be subject to the Architect/Engineer approving the payment requested by the Contractor and certifying the amount thereof that has been properly incurred and is then due and payable to the Contractor, and identifying with specificity any amount that has not been properly incurred and that should not be paid. .

D. Warrants of Contractor with Respect to Payments. The Contractor warrants that (1) upon payment of any retainage, materials and equipment covered by a partial payment request will pass to Owner either by incorporation in construction or upon receipt of payment by the Contractor, whichever occurs first; (2) Work, materials and equipment covered by previous partial payment requests shall be free and clear of liens, claims, security interests, or encumbrances, hereinafter referred to as "liens"; and (3) no Work, materials or equipment covered by a partial payment request which has been acquired by the Contractor or any other person performing Work at the Project Site, or furnishing materials or equipment for the Project, shall be subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or any other person.

E. All Compensation Included. Contractor's compensation includes full payment for services set forth in the Contract Documents, including but not limited to overhead, profit, salaries or other compensation of Contractor's officers, partners and/or employees, general operating expenses incurred by Contractor and relating to this Project, including the cost of management, supervision and data processing staff, job office equipment and supplies, and other similar items.

ARTICLE IV SUBCONTRACTORS

4.1 Subcontracts. At the Owner's request, the Contractor shall provide Owner's Project Representative with copies of all proposed and final subcontracts, including the general and supplementary conditions thereof.

A. Subcontracts Generally. All subcontracts shall: (1) require each Subcontractor to be bound to Contractor to the same extent Contractor is bound to Owner by the terms of the Contract Documents, as those terms may apply to the portion of the Work to be performed by the Subcontractor, (2) provide for the assignment of the subcontracts from Contractor to Owner at the election of Owner, upon termination of Contractor, (3) provide that Owner will be an additional indemnified party of the subcontract, (4) provide that Owner will be an additional insured on all insurance policies required to be provided by the Subcontractor, except workers' compensation, (5) assign all warranties directly to Owner, and (6) identify Owner as an intended third-party beneficiary of the subcontract.

(1) A Subcontractor is a person or entity who has a direct contract with Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to

throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term “Subcontractor” does not include a separate contractor or subcontractors of a separate contractor.

(2) A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term “Sub-subcontractor” is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

B. No Damages for Delay. Except when otherwise expressly agreed to by Owner in writing, all subcontracts shall provide:

“LIMITATION OF REMEDIES – NO DAMAGES FOR DELAY. The Subcontractor's exclusive remedy for delays in the performance of the contract caused by events beyond its control, including delays claimed to be caused by the Owner or Architect/Engineer or attributable to the Owner or Architect/Engineer and including claims based on breach of contract or negligence, shall be an extension of its contract time and shall in no way involve any monetary claim.”

Each subcontract shall require that any claims by the Subcontractor for delay must be submitted to the Contractor within the time and in the manner in which the Contractor must submit such claims to the Owner, and that failure to comply with the conditions for giving notice and submitting claims shall result in the waiver of such claims.

C. Subcontractual Relations. The Contractor shall require each Subcontractor to assume all the obligations and responsibilities which the Contractor owes the Owner pursuant to the Contract Documents, by the parties to the extent of the Work to be performed by the Subcontractor. Said obligations shall be made in writing and shall preserve and protect the rights of the Owner and Architect/Engineer, with respect to the Work to be performed by the Subcontractor, so that the subcontracting thereof will not prejudice such rights. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with its sub-subcontractor.

D. Insurance; Acts and Omissions. Insurance requirements for Subcontractors shall be no more stringent than those requirements imposed on the Contractor by the Owner. The Contractor shall be responsible to the Owner for the acts and omissions of its employees, agents, Subcontractors, their agents and employees, and all other persons performing any of the Work or supplying materials under a contract to the Contractor.

4.2 Relationship and Responsibilities. Except as specifically set forth herein with respect to direct materials acquisitions by Owner, nothing contained in the Contract Documents or in any Contract Document does or shall create any contractual relation between the Owner or Architect/Engineer and any Subcontractor. Specifically, the Contractor is not acting as an agent of the Owner with respect to any Subcontractor. The utilization of any Subcontractor shall not relieve Contractor from any liability or responsibility to Owner, or obligate Owner to the payment of any compensation to the Subcontractor or additional compensation to the Contractor.

4.3 Payments to Subcontractors; Monthly Statements. The Contractor shall be responsible for paying all Subcontractors from the payments made by the Owner to Contractor pursuant to Article III, subject to the following provisions:

A. Payment. The Contractor shall, no later than ten (10) days after receipt of payment from the Owner, out of the amount paid to the Contractor on account of such Subcontractor's Work, pay to each Subcontractor the amount to which the Subcontractor is entitled in accordance with the terms of the Contractor's contract with such Subcontractor. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to sub-Subcontractors in a similar manner. After receipt of payment from Owner, if the need should arise to withhold payments to Subcontractors for any reason, as solely determined by Contractor, the Contractor shall promptly restore such monies to the Owner, adjusting subsequent pay requests and Project bookkeeping as required.

B. Final Payment of Subcontractors. The final payment of retainage to Subcontractors shall not be made until the Project has been inspected by the Architect/Engineer or other person designated by the Owner for that purpose, and until both the Architect/Engineer and the Contractor have issued a written certificate that the Project has been constructed in accordance with the Project Plans and Specifications and approved Change Orders. Before issuance of final payment to any Subcontractor without any retainage, the Subcontractor shall submit satisfactory evidence that all payrolls, material bills, and other indebtedness connected with the Project have been paid or otherwise satisfied, warranty information is complete, as-built markups have been submitted, and instruction for the Owner's operating and maintenance personnel is complete. Final payment may be made to certain select Subcontractors whose Work is satisfactorily completed prior to the completion of the Project, but only upon approval of the Owner's Project Representative.

4.4 Responsibility for Subcontractors. As provided in Section 2.4.BB, Contractor shall be fully responsible to Owner for all acts and omissions of the Subcontractors, suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect Contract with Contractor just as Contractor is responsible for Contractor's own acts and omissions.

4.5 Contingent Assignment of Subcontracts. Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that:

- (1) assignment is effective only after termination of the Contract by the Owner for cause pursuant to Article XIV and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor in writing; and
- (2) assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Agreement.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract. Upon such assignment, if the Work has been suspended for more than thirty (30) days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension. Upon such assignment to

the Owner, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

ARTICLE V CHANGES IN WORK

5.1 General. Changes in the Work may be accomplished after execution of the Agreement, and without invalidating the Agreement, by Change Order, Work Directive Change or order for a minor change in the Work, subject to the limitations stated in this Article V and elsewhere in the Contract Documents. A Change Order shall be based upon agreement among the Owner, Contractor and Architect/Engineer; a Work Directive Change requires agreement by the Owner and Architect/Engineer and may or may not be agreed to by the Contractor; an order for a minor change in the Work may be issued by the Architect/Engineer alone. Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Work Directive Change or order for a minor change in the Work.

5.2 Minor Changes in the Work. The Owner or Architect/Engineer shall have authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such change will be effected by written order signed by the Architect/Engineer and shall be binding on the Owner and Contractor. The Contractor shall abide by and perform such minor changes. Such changes shall be effected by a Field Directive or a Work Directive Change. Documentation of changes shall be determined by the Construction Team, and displayed monthly in the Progress Reports. Because such changes shall not affect the Contract Sum to be paid to the Contractor, they shall not require a Change Order pursuant to Section 5.6.

5.3 Emergencies. In any emergency affecting the safety of persons or property, the Contractor shall act at its discretion to prevent threatened damage, injury, or loss. Any increase in the Contract Sum or extension of time claimed by the Contractor on account of emergency Work shall be determined as provided in Section 5.6. However, whenever practicable, the Contractor shall obtain verbal concurrence of the Owner's Project Representative and Architect/Engineer where the act will or may affect the Contract Sum or Contract Time.

5.4 Concealed Conditions. If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect/Engineer before conditions are disturbed and in no event later than ten (10) days after first observance of the conditions. The Architect/Engineer will promptly investigate such conditions and, if the Architect/Engineer determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect/Engineer determines

that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect/Engineer shall promptly notify the Owner and Contractor in writing, stating the reasons. If either party disputes the Architect/Engineer's determination or recommendation, that party may proceed as provided in Article VIII.

5.5 Hazardous Materials. In the event the Contractor encounters on the Project Site material reasonably believed to be hazardous, petroleum or petroleum related products, or other hazardous or toxic substances, except as provided in Section 2.4.U, the Contractor shall immediately stop Work in the area affected and report the condition to the Owner and the Architect/Engineer in writing. The Work in the affected area shall not thereafter be resumed except by written amendment, if in fact the material or substance has not been rendered harmless. The Work in the affected area shall be resumed when the Project Site has been rendered harmless, in accordance with the final determination by the Architect/Engineer or other appropriate professional employed by Owner. The Contractor shall not be required to perform without its consent any Work relating to hazardous materials, petroleum or petroleum related products, or other hazardous or toxic substances. In the event the Contractor encounters on the Project Site materials believed in good faith to be hazardous or contaminated material, and the presence of such hazardous or contaminated material was not known and planned for at the time the Contractor submitted its Bid, and it is necessary for the Contractor to stop Work in the area affected and delays Work for more than a seven (7) day period, adjustments to the Contract Sum and/or Contract Time shall be made in accordance with this Article V.

5.6 Change Orders; Adjustments to Contract Sum.

A. Change Orders Generally. The increase or decrease in the Contract Sum resulting from a change authorized pursuant to the Contract Documents shall be determined:

- (1) By mutual acceptance of a lump sum amount properly itemized and supported by sufficient substantiating data, to permit evaluation by the Architect/Engineer and Owner; or
- (2) By unit prices stated in the Agreement or subsequently agreed upon; or
- (3) By any other method mutually agreeable to Owner and Contractor.

If Owner and Contractor are unable to agree upon increases or decreases in the Contract Sum and the Architect/Engineer certifies that the work needs to be commenced prior to any such agreement, the Contractor, provided it receives a written Change Order signed by or on behalf of the Owner, shall promptly proceed with the Work involved. The cost of such Work shall then be determined on the basis of the reasonable expenditures of those performing the Work attributed to the change. However, in the event a Change Order is issued under these conditions, the Owner, through the Architect/Engineer, will establish an estimated cost of the Work and the Contractor shall not perform any Work whose cost exceeds that estimated without prior written approval by the Owner. In such case, the Contractor shall keep and present in such form as the Owner may prescribe an itemized accounting, together with appropriate supporting data of the increase in overall costs of the Project. The amount of any decrease in the Contract Sum to be

allowed by the Contractor to the Owner for any deletion or change which results in a net decrease in costs will be the amount of the actual net decrease.

5.7 Unit Prices. If unit prices are stated in the Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in a proposed Change Order that application of the agreed unit prices to the quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices and Contract Sum shall be equitably adjusted.

5.8 Owner-Initiated Changes. Without invalidating the Agreement and without notice to any Surety, Owner may, at any time, order additions, deletions or revisions in the Work. These will be authorized by a written amendment, a Field Directive, a Change Order, or a Work Directive Change, as the case may be. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided). A Work Directive Change may not change the Contract Sum or the Contract Time; but is evidence that the parties expect that the change directed or documented by a Work Directive Change will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Sum or Contract Time.

5.9 Unauthorized Work. Contractor shall not be entitled to an increase in the Contract Sum or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents.

5.10 Defective Work. Owner and Contractor shall execute appropriate Change Orders (or written amendments) covering changes in the Work which are ordered by Owner, or which may be required because of acceptance of defective Work, without adjustment to the Contract Sum.

5.11 Estimates for Changes. At any time Architect/Engineer may request a quotation from Contractor for a proposed change in the Work. Within twenty-one (21) calendar days after receipt, Contractor shall submit a written and detailed proposal for an increase or decrease in the Contract Sum or Contract Time for the proposed change. Architect/Engineer shall have twenty one (21) calendar days after receipt of the detailed proposal to respond in writing. The proposal shall include an itemized estimate of all costs and time for performance that will result directly or indirectly from the proposed change. Unless otherwise directed, itemized estimates shall be in sufficient detail to reasonably permit an analysis by Architect/Engineer of all material, labor, equipment, subcontracts, overhead costs and fees, and shall cover all Work involved in the change, whether such Work was deleted, added, changed or impacted. Notwithstanding the request for quotation, Contractor shall carry on the Work and maintain the progress schedule. Delays in the submittal of the written and detailed proposal will be considered non-prejudicial.

5.12 Form of Proposed Changes. The form of all submittals, notices, Change Orders and other documents permitted or required to be used or transmitted under the Contract Documents shall be determined by the Owner. Standard Owner forms shall be utilized.

5.13 Changes to Contract Time. The Contract Time may only be changed pursuant to a Change Order or a written amendment to the Contract Documents. Any claim for an

extension or shortening of the Contract Time shall be based on written notice delivered by the party making the claim to the other party. Notice of the extent of the claim with supporting data shall be delivered within fifteen (15) days from detection or beginning of such occurrence and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. The Contract time will be extended in an amount equal to time lost due to delays beyond the control of Contractor. Such delays shall include, but not be limited to, acts or neglect by Owner or others performing additional Work; or to fires, floods, epidemics, abnormal weather conditions or acts of God. Failure to deliver a written notice of claim within the requisite 15-day period shall constitute a waiver of the right to pursue said claim.

ARTICLE VI ROLE OF ARCHITECT/ENGINEER

6.1 General.

A. Retaining. The Owner shall retain an Architect/Engineer (whether an individual or an entity) lawfully licensed to practice in Florida. That person or entity is identified as the Architect/Engineer in the Agreement and is referred to throughout the Contract Documents as if singular in number.

B. Duties. Duties, responsibilities and limitations of authority of the Architect/Engineer as set forth in the Contract Documents shall not be restricted, modified or extended without written consent of the Owner and Architect/Engineer. Consent shall not be unreasonably withheld.

C. Termination. If the employment of the Architect/Engineer is terminated, the Owner shall employ a successor Architect/Engineer as to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect/Engineer.

6.2 Administration. The Architect/Engineer will provide administration of the Agreement as described in the Contract Documents and will be an Owner's representative during construction until the date the Architect/Engineer approves the final Application for Payment. The Architect/Engineer will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

A. Site Visits. The Architect/Engineer will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work complete, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. Unless specifically instructed by Owner, the Architect/Engineer will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect/Engineer will not have control over, charge of, or responsibility for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs

in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.

B. **Reporting.** On the basis of the site visits, the Architect/Engineer will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and report to the Owner (1) known deviations from the Contract Documents and from the most recent construction schedule submitted by the Contractor, and (2) defects and deficiencies observed in the Work. The Architect/Engineer will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect/Engineer will not have control over or charge of and will not be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

6.3 Interpretation of Project Plans and Specifications. The Architect/Engineer will be the interpreter of the requirements of the Project Plans and Specifications. Upon receipt of comments or objections by Contractor or Owner, the Architect/Engineer will make decisions on all claims, disputes, or other matters pertaining to the interpretation of the Project Plans and Specifications.

6.4 Rejection of Non-Conforming Work. Upon consultation with Owner, the Architect/Engineer shall have the authority to reject Work which does not conform to the Project Plans and Specifications.

6.5 Correction of Work. The Contractor shall promptly correct all Work rejected by the Architect/Engineer for being defective or as failing to conform to the Project Plans and Specifications, whether observed before or after the Substantial Completion Date and whether or not fabricated, installed, or completed. The Contractor shall bear all costs of correcting such rejected Work, including compensation for Architect/Engineer's additional services made necessary thereby.

6.6 Timely Performance of Architect/Engineer. The Contractor shall identify which requests for information or response from the Architect/Engineer have the greatest urgency and those items which require prioritizing in response by the Architect/Engineer. The Contractor shall also identify the preferred time period for response and shall request a response time which is reasonably and demonstrably related to the needs of the Project and Contractor. In the event that Architect/Engineer claims that Contractor's expectations for a response are unreasonable, Owner shall require Architect/Engineer to communicate such claim to Contractor in writing together with the specific time necessary to respond and the date upon which such response will be made. In the event that Contractor believes that Architect/Engineer is not providing timely services or responses, Contractor shall notify Owner of same in writing not less than two (2) weeks before Contractor believes performance or response time from Architect/Engineer is required without risk of delaying the Project.

ARTICLE VII
OWNER'S RIGHTS AND RESPONSIBILITIES

7.1 Project Site; Title. The Owner shall provide the lands upon which the Work under the Contract Documents is to be done, except that the Contractor shall provide all necessary additional land required for the erection of temporary construction facilities and storage of his materials, together with right of access to same. The Owner hereby represents to the Contractor that it currently has and will maintain up through and including the Substantial Completion Date, good title to all of the real property constituting the Project Site. Owner agrees to resolve, at its expense, any disputes relating to the ownership and use of the Project Site which might arise during the course of construction.

7.2 Project Plans and Specifications; Architect/Engineer. The parties hereto acknowledge and agree that Owner has previously entered into an agreement with Architect/Engineer. Pursuant to the terms of such agreement, the Architect/Engineer, as an agent and representative of Owner, is responsible for the preparation of Project Plans and Specifications which consist of drawings, specifications, and other documents setting forth in detail the requirements for the construction of the Project. All of such Project Plans and Specifications shall be provided either by Owner or the Architect/Engineer, and Contractor shall be under no obligation to provide same and shall be entitled to rely upon the accuracy and completeness of the Project Plans and Specifications provided by the Architect/Engineer and all preliminary drawings prepared in connection therewith. The Contractor will be furnished a reproducible set of all drawings and specifications reasonably necessary for the performance of Contractor's services hereunder and otherwise ready for printing. The Contractor shall be notified of any written modification in the agreement between Owner and Architect/Engineer.

7.3 Surveys; Soil Tests and Other Project Site Information. Owner shall be responsible for providing a legal description and certified land survey of the Project Site in a form and content and with such specificity as may be required by the Architect/Engineer and Contractor to perform their services. To the extent deemed necessary by Owner and Architect/Engineer, and solely at Owner's expense, Owner may engage the services of a geotechnical consultant to perform test borings and other underground soils testing as may be deemed necessary by the Architect/Engineer or the Contractor. Contractor shall not be obligated to provide such surveys or soil tests and shall be entitled to rely upon the accuracy and completeness of the information provided; subject, however, to the provisions of Section 2.4.S hereof. Owner shall provide Contractor, as soon as reasonably possible following the execution of the Contract Documents, all surveys or other survey information in its possession describing the physical characteristics of the Project Site, together with soils reports, subsurface investigations, utility locations, deed restrictions, easements, and legal descriptions then in its possession or control. Upon receipt of all surveys, soils tests, and other Project Site information, Contractor shall promptly advise Owner of any inadequacies in such information and of the need for any additional surveys, soils or subsoil tests. In performing this Work, Contractor shall use the standard of care of experienced contractors and will use its best efforts timely to identify all problems or omissions. Owner shall not be responsible for any delay or damages to the Contractor for any visible or disclosed site conditions or disclosed deficiencies in the Project Site

which should have been identified by Contractor and corrected by Owner prior to the execution of the Contract Documents.

7.4 Information; Communication; Coordination. The Owner's Project Representative shall examine any documents or requests for information submitted by the Contractor and shall advise Contractor of Owner's decisions pertaining thereto within a reasonable period of time to avoid unreasonable delay in the progress of the Contractor's services. Contractor shall indicate if any such documents or requests warrant priority consideration. However, decisions pertaining to approval of the Project Schedule as it relates to the date of Substantial Completion, the Project Cost, Contractor's compensation, approving or changing the Contract Sum shall only be effective when approved by Owner in the form of a written Change Order or amendment to the Contract Documents. Owner reserves the right to designate a different Owner's Project Representative provided Contractor is notified in writing of any such change. Owner and Architect/Engineer may communicate with Subcontractors, materialmen, laborers, or suppliers engaged to perform services on the Project, but only for informational purposes. Neither the Owner nor the Architect/Engineer shall attempt to direct the Work of or otherwise interfere with any Subcontractor, materialman, laborer, or supplier, or otherwise interfere with the Work of the Contractor. Owner shall furnish the data required of Owner under the Contract Documents promptly.

7.5 Governmental Body. The Contractor recognizes that the Owner is a governmental body with certain procedural requirements to be satisfied. The Contractor has and will make reasonable allowance in its performance of services for such additional time as may be required for approvals and decisions by the Owner and any other necessary government agency.

7.6 Pre-Completion Acceptance. The Owner shall have the right to take possession of and use any completed portions of the Work, although the time for completing the entire Work or such portions may not have expired, but such taking possession and use shall not be deemed an acceptance of any Work not completed in accordance with the Contract Documents.

7.7 Ownership and Use of Drawings, Specifications and Other Instruments of Service.

- (1) The Architect/Engineer and the Architect/Engineer's consultants shall be deemed the authors and owners of their respective instruments of service, including the Project Plans and Specifications, and will retain all common law, statutory and other reserved rights, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers shall not own or claim a copyright in the instruments of service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the Architect/Engineer's or Architect/Engineer's consultants' reserved rights.
- (2) The Contractor, Subcontractors, Sub-subcontractors and material or equipment suppliers are authorized to use and reproduce the drawings and specifications provided to them solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright

notice, if any, shown on the Project Plans and Specifications or other instruments of service. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers may not use the drawings or specifications on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner, Architect/Engineer and the Architect/Engineer's consultants.

7.8 Owner's Project Representative. Owner's Project Representative is Owner's Agent, who will act as directed by and under the supervision of the Owner, and who will confer with Owner/Architect/Engineer regarding his actions. The Owner's Project Representative's dealings in matters pertaining to the on-site Work shall, in general, be only with the Owner/Architect/Engineer and Contractor and dealings with Subcontractors shall only be through or with the full knowledge of Contractor.

A. Responsibilities. Except as otherwise instructed in writing by Owner, the Owner's Project Representative will:

- (1) Attend preconstruction conferences; arrange a schedule of progress meetings and other job conferences as required in consultation with Owner/Architect/Engineer and notify those expected to attend in advance; and attend meetings and maintain and circulate copies of minutes thereof;
- (2) Serve as Owner/Architect/Engineer's liaison with Contractor, working principally through Contractor's superintendent, to assist in understanding the intent of the Contract Documents. As requested by Owner/Architect/Engineer, assist in obtaining additional details or information when required at the job site for proper execution of the Work;
- (3) Report to Owner/Architect/Engineer whenever he believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents;
- (4) Accompany visiting inspectors representing public or other agencies having jurisdiction over the project; record the outcome of these inspections and report to Owner/Architect/Engineer;
- (5) Review applications for payment with Contractor for compliance with the established procedure for their submission and forward them with recommendations to Owner/Architect/Engineer; and
- (6) Perform those duties as set forth elsewhere within the Contract Documents.

B. Limitations. Except upon written instructions of Owner, Owner's Project Representative shall not:

- (1) Authorize any deviation from the Contract Documents or approve any substitute materials or equipment;
- (2) Exceed limitations on Owner/Architect/Engineer's authority as set forth in the Contract Documents;
- (3) Undertake any of the responsibilities of Contractor, Subcontractors or Contractor's superintendent, or expedite the Work;
- (4) Advise on or issue directions relative to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the Contract Documents;
- (5) Advise on or issue directions as to safety precautions and programs in connection with the Work;
- (6) Authorize Owner to occupy the project in whole or in part; or
- (7) Participate in specialized field or laboratory tests.

**ARTICLE VIII
RESOLUTION OF DISAGREEMENTS;
CLAIMS FOR COMPENSATION**

8.1 Owner to Decide Disputes. The Owner shall reasonably decide all questions and disputes, of any nature whatsoever, that may arise in the execution and fulfillment of the services provided for under the Contract Documents, in accordance with the Procurement Ordinance.

8.2 Finality. The decision of the Owner upon all claims, questions, disputes and conflicts shall be final and conclusive, and shall be binding upon all parties to the Contract Documents, subject to judicial review as provided in Section 8.5 below.

8.3 No Damages for Delay. If at any time Contractor is delayed in the performance of Contractor's responsibilities under the Contract Documents as the result of a default or failure to perform in a timely manner by Owner or Owner's agents or employees, Contractor shall not be entitled to any damages except for compensation specifically authorized in Article III. Contractor's sole remedy will be a right to extend the time for performance. Nothing herein shall preclude Contractor from any available remedy against any responsible party other than Owner. Contractor shall be responsible for liquidated damages for delay pursuant to Section 3 of the Agreement.

8.4 Permitted Claims Procedure. Where authorized or permitted under the Contract Documents, all claims for additional compensation by Contractor, extensions of time affecting the Substantial Completion Date, for payment by the Owner of costs, damages or losses due to casualty, Force Majeure, Project Site conditions or otherwise, shall be governed by the following:

- (1) All claims must be submitted as a request for Change Order in the manner as provided in Article V.
- (2) The Contractor must submit a notice of claim to Owner's Project Representative and to the Architect/Engineer within fifteen (15) days of when the Contractor was or should have been aware of the fact that an occurrence was likely to cause delay or increased costs. Failure to submit a claim within the requisite 15-day period shall constitute a waiver of the right to pursue said claim.
- (3) Within twenty (20) days of submitting its notice of claim, the Contractor shall submit to the Owner's Project Representative its request for Change Order, which shall include a written statement of all details of the claim, including a description of the Work affected.
- (4) After receipt of a request for Change Order, the Owner's Project Representative, in consultation with the Architect/Engineer, shall deliver to the Contractor, within twenty (20) days after receipt of request, its written response to the claim.
- (5) In the event the Owner and Contractor are unable to agree on the terms of a Change Order, the Owner shall have the option to instruct the Contractor to proceed with the Work. In that event, the Owner shall agree to pay for those parts of the Work, the scope and price of which are not in dispute. The balance of the disputed items in the order to proceed will be resolved after completion of the Work, based upon completed actual cost.
- (6) The rendering of a decision by Owner with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment) will be a condition precedent to any exercise by Owner or Contractor of such right or remedies as either may otherwise have under the Contract Documents or by laws or regulations in respect of any such claim, dispute or other matter.

8.5 Contract Claims and Disputes. After completion of the process set forth in Section 8.4 above, any unresolved dispute under this Agreement shall be decided by the Purchasing Official in accordance with Section 2-26-63 of the Manatee County Code of Laws, subject to an administrative hearing process as provided in Section 2-26-64. The decision of the Board of County Commissioners in accordance with Section 2-26-64 of the Manatee County Code of Laws shall be the final and conclusive County decision subject to exclusive judicial review in circuit court by a petition for certiorari.

8.6 Claims for Consequential Damages. The Contractor and Owner waive claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes:

- (1) damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- (2) damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article XIV. Nothing contained in this Section 8.6 shall be deemed to preclude an award of liquidated direct damages, when applicable, in accordance with the requirements of the Contract Documents.

ARTICLE IX INDEMNITY

9.1 Indemnity.

A. Indemnification Generally. To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect/Engineer, Architect/Engineer's consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss 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), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor or anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section 9.1.

B. Claims by Employees. In claims against any person or entity indemnified under this Section 9.1 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section 9.1.A. shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

9.2 Duty to Defend. The Contractor shall defend the Owner in any action, lawsuit mediation or arbitration arising from the alleged negligence, recklessness or intentionally wrongful conduct of the Contractor and other persons employed or utilized by the Contractor in the performance of the Work. So long as Contractor, through its own counsel, performs its obligation to defend the Owner pursuant to this Section, Contractor shall not be required to pay the Owner's costs associated with the Owner's participation in the defense.

ARTICLE X
ACCOUNTING RECORDS; OWNERSHIP OF DOCUMENTS

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

10.2 Inspection and Audit. The Contractor's records shall be open to inspection and subject to examination, audit, and/or reproduction during normal working hours by the Owner's agent or authorized representative to the extent necessary to adequately permit evaluation and verification of any invoices, payments or claims submitted by the Contractor or any of its payees during the performance of the Work. These records shall include, but not be limited to, accounting records, written policies and procedures, Subcontractor files (including proposals of successful and unsuccessful bidders), original estimates, estimating worksheets, correspondence, Change Order files (including documentation covering negotiated settlements), and any other supporting evidence necessary to substantiate charges related to the Contract Documents. They shall also include, but not be limited to, those records necessary to evaluate and verify direct and indirect costs (including overhead allocations) as they may apply to costs associated with the Contract Documents. For the purpose of such audits, inspections, examinations and evaluations, the Owner's agent or authorized representative shall have access to said records from the effective date of the Contract Documents, for the duration of Work, and until three (3) years after the date of final payment by the Owner to the Contractor pursuant to the Contract Documents.

10.3 Access. The Owner's agent or authorized representative shall have access to the Contractor's facilities and all necessary records in order to conduct audits in compliance with this Article. The Owner's agent or authorized representative shall give the Contractor reasonable advance notice of intended inspections, examinations, and/or audits.

10.4 Ownership of Documents. Upon completion or termination of the Contract Documents, all records, documents, tracings, plans, specifications, maps, evaluations, reports, transcripts and other technical data, other than working papers, prepared or developed by the Contractor under the Contract Documents shall be delivered to and become the property of the Owner. The Contractor at its own expense may retain copies for its files and internal use.

ARTICLE XI
PUBLIC CONTRACT LAWS

11.1 Equal Opportunity Employment.

A. Employment. The Contractor shall not discriminate against any employee or applicant for employment because of race, creed, sex, color, national origin, disability or age, and will take affirmative action to insure that all employees and applicants are afforded equal employment opportunities without discrimination because of race, creed, sex, color, national origin, disability or age. Such action will be taken with reference to, but shall not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff or termination, rates of training or retraining, including apprenticeship and on-the-job training.

B. Participation. No person shall, on the grounds of race, creed, sex, color, national origin, disability or age, be excluded from participation in, be denied the proceeds of, or be subject to discrimination in the performance of the Agreement.

11.2 Immigration Reform and Control Act of 1986. Contractor acknowledges that it is responsible for complying with the provisions of the Immigration Reform and Control Act of 1986, located at 8 U.S.C. Section 1324, et seq., and regulations relating thereto. Failure to comply with the above statutory provisions shall be considered a material breach and shall be grounds for immediate termination of this Agreement.

11.3 No Conflict of Interest. The Contractor warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Contractor to solicit or secure the Contract Documents, and that it has not paid or agreed to pay any person, company, corporation, individual, or firm other than a bona fide employee working solely for the Contractor, any fee, commission, percentage, gift or any other consideration, contingent upon or resulting from the award or making of the Contract Documents.

A. No Interest in Business Activity. By accepting award of this Contract, the Contractor, which shall include its directors, officers and employees, represents that it presently has no interest in and shall acquire no interest in any business or activity which would conflict in any manner with the performance of services required hereunder, including without limitation as described in the Contractor's own professional ethical requirements. An interest in a business or activity which shall be deemed a conflict includes but is not limited to direct financial interest in any of the material and equipment manufacturers, suppliers, distributors, or contractors who will be eligible to supply material and equipment for the Project for which the Contractor is furnishing its services required hereunder.

B. No Appearance of Conflict. The Contractor shall not knowingly engage in any contractual or professional obligations that create an appearance of a conflict of interest with respect to the services provided pursuant to the Contract Documents. The Contractor has provided the Affidavit of No Conflict, incorporated into the Contract Documents as Exhibit "C", as a material inducement for Owner entering into the Contract Documents. If, in the sole discretion of the County Administrator or designee, a conflict of interest is deemed to exist or arise during the term of the County Administrator or designee may cancel this Agreement, effective upon the date so stated in a written notice of cancellation, without penalty to the Owner.

11.4 Truth in Negotiations. By execution of the Contract Documents, the Contractor certifies to truth-in-negotiations and that wage rates and other factual unit costs supporting the

compensation are accurate, complete and current at the time of contracting. Further, the original Contract Sum and any additions thereto shall be adjusted to exclude any significant sums where the Owner determines the Contract Sum was increased due to inaccurate, incomplete or non-current wage rates and other factual unit costs. Such adjustments must be made within one (1) year after final payment to the Contractor.

11.5 Public Entity Crimes. The Contractor is directed to the Florida Public Entity Crimes Act, Section 287.133, Florida Statutes, specifically section 2(a), and the Owner's requirement that the Contractor comply with it in all respects prior to and during the term of the Agreement.

ARTICLE XII FORCE MAJEURE, FIRE OR OTHER CASUALTY

12.1 Force Majeure.

A. Unavoidable Delays. Delays in any performance by any party contemplated or required hereunder due to fire, flood, sinkhole, earthquake or hurricane, acts of God, unavailability of materials, equipment or fuel, war, declaration of hostilities, revolt, civil strife, altercation or commotion, strike, labor dispute, or epidemic, archaeological excavation, lack of or failure of transportation facilities, or any law, order, proclamation, regulation, or ordinance of any government or any subdivision thereof, or for any other similar cause to those enumerated, beyond the reasonable control and which with due diligence could not have been reasonably anticipated, shall be deemed to be events of Force Majeure and any such delays shall be excused. In the event such party is delayed in the performance of any Work or obligation pursuant to the Contract Documents for any of the events of Force Majeure stated in this Section 12.1, the date for performance required or contemplated by the Contract Documents shall be extended by the number of calendar days such party is actually delayed

B. Concurrent Contractor Delays. If a delay is caused for any reason provided in 12.1.A. or as a result of an extension of time provided by Change Order, and during the same time period a delay is caused by Contractor, the date for performance shall be extended as provided in 12.1.A. but only to the extent the time is or was concurrent.

C. Notice; Mitigation. The party seeking excuse for nonperformance on the basis of Force Majeure shall give written notice to the Owner, if with respect to the Contractor, or to the Contractor if with respect to the Owner, specifying its actual or anticipated duration. Each party seeking excuse from nonperformance on the basis of Force Majeure shall use its best efforts to rectify any condition causing a delay and will cooperate with the other party, except that neither party shall be obligated to incur any unreasonable additional costs and expenses to overcome any loss of time that has resulted.

12.2 Casualty; Actions by Owner and Contractor. During the construction period, if the Project or any part thereof shall have been damaged or destroyed, in whole or in part, the Contractor shall promptly make proof of loss; and Owner and Contractor shall proceed promptly to collect, or cause to be collected, all valid claims which may have arisen against insurers or others based upon such damage or destruction. The Contractor shall diligently assess the

damages or destruction and shall prepare an estimate of the cost, expenses, and other charges, including normal and ordinary compensation to the Contractor, necessary for reconstruction of the Project substantially in accordance with the Project Plans and Specifications. Within fifteen (15) days following satisfaction of the express conditions described in subsections (1), (2) and (3) below, the Contractor covenants and agrees diligently to commence reconstruction and to complete the reconstruction or repair of any loss or damage by fire or other casualty to the Project to substantially the same size, floor area, cubic content, and general appearance as prior to such loss or damage:

- (1) Receipt by the Owner or the trustee of the proceeds derived from collection of all valid claims against insurers or others based upon such damage or destruction, and receipt of other sums from any source such that the funds necessary to pay the Project Cost and any additions to the Project Cost necessitated for repair or reconstruction are available;
- (2) Written agreement executed by the Contractor and the Owner, by amendment to the Contract Documents or otherwise, authorizing and approving the repair or reconstruction and any additions to the Project Cost necessitated thereby, including any required adjustment to the Contract Sum; and
- (3) Final approval by the Owner of the Project Plans and Specifications for such repair or reconstruction and issuance of any required building permit.

12.3 Approval of Plans and Specifications. The Owner agrees to approve the plans and specifications for such reconstruction or repair if the reconstruction or repair contemplated by such plans and specifications is economically feasible, and will restore the Project, or the damaged portion thereof, to substantially the same condition as prior to such loss or damage, and such plans and specifications conform to the applicable laws, ordinances, codes, and regulations. The Owner agrees that all proceeds of any applicable insurance or other proceeds received by the Owner or the Contractor as a result of such loss or damage shall be used for payment of the costs, expenses, and other charges of the reconstruction or repair of the Project.

12.4 Notice of Loss or Damage. The Contractor shall promptly give the Owner written notice of any significant damage or destruction to the Project, defined as loss or damage which it is contemplated by Contractor will increase the Contract Sum or extend the Substantial Completion Date, stating the date on which such damage or destruction occurred, the then expectations of Contractor as to the effect of such damage or destruction on the use of the Project, and the then proposed schedule, if any, for repair or reconstruction of the Project. Loss or damage which the Contractor determines will not affect the Contract Sum or Substantial Completion Date will be reported to Owner and Architect/Engineer immediately, and associated corrective actions will be undertaken without delay.

ARTICLE XIII
REPRESENTATIONS, WARRANTIES AND COVENANTS

13.1 Representations and Warranties of Contractor. The Contractor represents and warrants to the Owner that each of the following statements is presently true and accurate:

A. The Contractor is a construction company, organized under the laws of the State of _____, authorized to transact business in the State of Florida, with _____ as the primary qualifying agent. Contractor has all requisite power and authority to carry on its business as now conducted, to own or hold its properties, and to enter into and perform its obligations hereunder and under each instrument to which it is or will be a party, and is in good standing in the State of Florida.

B. Each Contract Document to which the Contractor is or will be a party constitutes, or when entered into will constitute, a legal, valid, and binding obligation of the Contractor enforceable against the Contractor in accordance with the terms thereof, except as such enforceability may be limited by applicable bankruptcy, insolvency, or similar laws from time to time in effect which affect creditors' rights generally and subject to usual equitable principles in the event that equitable remedies are involved.

C. There are no pending or, to the knowledge of the Contractor, threatened actions or proceedings before any court or administrative agency, within or without the State of Florida, against the Contractor or any partner, officer, or agent of the Contractor which question the validity of any document contemplated hereunder, or which are likely in any case, or in the aggregate, to materially adversely affect the consummation of the transactions contemplated hereunder, or materially adversely affect the financial condition of the Contractor.

D. The Contractor has filed or caused to be filed all federal, state, local, or foreign tax returns, if any, which were required to be filed by the Contractor, and has paid, or caused to be paid, all taxes shown to be due and payable on such returns or on any assessments levied against the Contractor.

E. Neither Contractor nor any agent or person employed or retained by Contractor has acted fraudulently or in bad faith or in violation of any statute or law in the procurement of this Agreement.

F. The Contractor shall timely fulfill or cause to be fulfilled all of the terms and conditions expressed herein which are within the control of the Contractor or which are the responsibility of the Contractor to fulfill. The Contractor shall be solely responsible for the means and methods of construction.

G. It is recognized that neither the Architect/Engineer, the Contractor, nor the Owner has control over the cost of labor, materials, or equipment, over a Subcontractor's

methods of determining bid prices, or over competitive bidding, market, or negotiating conditions.

H. During the term of the Contract Documents, and the period of time that the obligations of the Contractor under the Contract Documents shall be in effect, the Contractor shall cause to occur and to continue to be in effect those instruments, documents, certificates, and events contemplated by the Contract Documents that are applicable to, and the responsibility of, the Contractor.

I. The Contractor shall assist and cooperate with the Owner and shall accomplish the construction of the Project in accordance with the Contract Documents and the Project Plans and Specifications, and will not knowingly violate any laws, ordinances, rules, regulations, or orders that are or will be applicable thereto.

J. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective, and that Owner, representatives of Owner, governmental agencies with jurisdictional interests will have access to the Work at reasonable time for their observation, inspecting and testing. Contractor shall give Architect/Engineer timely notice of readiness of the Work for all required approvals and shall assume full responsibility, including costs, in obtaining required tests, inspections, and approval certifications and/or acceptance, unless otherwise stated by Owner.

K. If any Work (including Work of others) that is to be inspected, tested, or approved is covered without written concurrence of Architect/Engineer, it must, if requested by Architect/Engineer, be uncovered for observation. Such uncovering shall be at Contractor's expense unless Contractor has given Architect/Engineer timely notice of Contractor's intention to cover the same and Architect/Engineer has not acted with reasonable promptness in response to such notice. Neither observations by Architect/Engineer nor inspections, tests, or approvals by others shall relieve Contractor from Contractor's obligations to perform the Work in accordance with the Contract Documents.

L. If the Work is defective, or Contractor fails to supply sufficient skilled workers, or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof and terminate payments to the Contractor until the cause for such order has been eliminated. Contractor shall bear all direct, indirect and consequential costs for satisfactory reconstruction or removal and replacement with non-defective Work, including, but not limited to fees and charges of Architect/Engineers, architects, attorneys and other professionals and any additional expenses experienced by Owner due to delays to other Contractors performing additional Work and an appropriate deductive change order shall be issued. Contractor shall further bear the responsibility for maintaining schedule and shall not be entitled to an extension of the Contract time and the recovery of delay damages due to correcting or removing defective Work.

M. If Contractor fails within seven (7) days after written notice to correct defective Work, or fails to perform the Work in accordance with the Contract Documents, or fails to comply with any other provision of the Contract Documents, Owner may correct and remedy any such deficiency to the extent necessary to complete corrective and remedial action.

Owner may exclude Contractor from all or part of the site, take possession of all or part of the Work, Contractor's tools, construction equipment and machinery at the site or for which Owner has paid Contractor but which are stored elsewhere. All direct and indirect costs of Owner in exercising such rights and remedies will be charged against Contractor in an amount approved as to reasonableness by Architect/Engineer and a Change Order will be issued incorporating the necessary revisions.

N. If within three (3) years after the Substantial Completion Date or such longer period of time as may be prescribed by laws or regulations or by the terms of any applicable special guarantee required by the Contract Documents, any Work is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions, either correct such defective Work or if it has been rejected by Owner, remove it from the site and replace it with non-defective Work. If Contractor does not promptly comply with the terms of such instruction, Owner may have the defective Work corrected/removed and all direct, indirect and consequential costs of such removal and replacement will be paid by Contractor. Failing payment by the Contractor and notwithstanding any other provisions of the Contract Documents to the contrary, Owner shall have the right to bring a direct action in the Circuit Court to recover such costs.

13.2 Representations of the Owner. To the extent permitted by law, the Owner represents to the Contractor that each of the following statements is presently true and accurate:

A. The Owner is a validly existing political subdivision of the State of Florida.

B. The Owner has all requisite corporate or governmental power and authority to carry on its business as now conducted and to perform its obligations under the Contract Documents and each Contract Document contemplated hereunder to which it is or will be a party.

C. The Contract Documents and each Contract Document contemplated hereby to which the Owner is or will be a party has been duly authorized by all necessary action on the part of, and has been or will be duly executed and delivered by, the Owner, and neither the execution and delivery thereof nor compliance with the terms and provisions thereof or hereof: (a) requires the approval and consent of any other person or party, except such as have been duly obtained or as are specifically noted herein; (b) contravenes any existing law, judgment, governmental rule, regulation or order applicable to or binding on the Owner; or (c) contravenes or results in any breach of, default under, or result in the creation of any lien or encumbrance upon the Owner under any indenture, mortgage, deed of trust, bank loan, or credit agreement, the charter, ordinances, resolutions, or any other agreement or instrument to which the Owner is a party, specifically including any covenants of any bonds, notes, or other forms of indebtedness of the Owner outstanding on the date of the Contract Documents.

D. The Contract Documents and each document contemplated hereby to which the Owner is or will be a party constitutes, or when entered into will constitute, a legal, valid, and binding obligation of the Owner enforceable against the Owner in accordance with the terms thereof, except as such enforceability may be limited by applicable bankruptcy,

insolvency, or similar laws from time to time in effect which affect creditors' rights generally, and subject to usual equitable principles in the event that equitable remedies are involved.

E. There are no pending or, to the knowledge of the Owner, threatened actions or proceedings before any court or administrative agency against the Owner which question the validity of the Contract Documents or any document contemplated hereunder, or which are likely in any case or in the aggregate to materially adversely affect the consummation of the transactions contemplated hereunder or the financial or corporate condition of the Owner.

F. The Owner shall use due diligence to timely fulfill or cause to be fulfilled all of the conditions expressed in the Contract Documents which are within the control of the Owner or which are the responsibility of the Owner to fulfill.

G. During the pendency of the Work and while the obligations of the Owner under the Contract Documents shall be in effect, the Owner shall cause to occur and to continue to be in effect and take such action as may be necessary to enforce those instruments, documents, certificates and events contemplated by the Contract Documents that are applicable to and the responsibility of the Owner.

H. The Owner shall assist and cooperate with the Contractor in accomplishing the construction of the Project in accordance with the Contract Documents and the Project Plans and Specifications, and will not knowingly violate any laws, ordinances, rules, regulations, orders, contracts, or agreements that are or will be applicable thereto or, to the extent permitted by law, enact or adopt any resolution, rule, regulation, or order, or approve or enter into any contract or agreement, including issuing any bonds, notes, or other forms of indebtedness, that will result in the Contract Documents or any part thereof, or any other instrument contemplated by and material to the timely and effective performance of a party's obligations hereunder, to be in violation thereof.

ARTICLE XIV TERMINATION AND SUSPENSION

14.1 Termination for Cause by Owner. This Agreement may be terminated by Owner upon written notice to the Contractor should Contractor fail substantially to perform a material obligation in accordance with the terms of the Contract Documents through no fault of the Owner. In the event Owner terminates for cause and it is later determined by a court of competent jurisdiction that such termination for cause was not justified, then in such event such termination for cause shall automatically be converted to a termination without cause pursuant to Section 14.2.

A. Nonperformance. If the Contractor fails to timely perform any of his obligations under the Contract Documents, including any obligation the Contractor assumes to perform Work with his own forces, or if it persistently or repeatedly refuses or fails, except in case for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or fails, without being excused, to maintain an established schedule (failure to maintain schedule shall be defined as any activity that falls thirty (30) days or more behind schedule) which has been adopted by the Construction Team, or it fails to make prompt payment

to Subcontractors for materials or labor, or disregards laws, rules, ordinances, regulations, or orders of any public authority having jurisdiction, or otherwise is guilty of substantial violations of the Agreement the Owner may, after seven (7) days written notice, during which period the Contractor fails to perform such obligation, make good such deficiencies and perform such actions. The Contract Sum, or the actual Cost of the Project, whichever is less, shall be reduced by the cost to the Owner of making good such deficiencies, and the Contractor's compensation shall be reduced by an amount required to manage the making good of such deficiencies. Provided, however, nothing contained herein shall limit or preclude Owner from pursuing additional damages from Contractor as a result of its breach.

B. Insolvency. If the Contractor is adjudged bankrupt, or if it makes a general assignment for the benefit of its creditors, or if a receiver is appointed on account of its insolvency, then the Owner may, without prejudice to any other right or remedy, and after giving the Contractor and its surety, if any, fourteen (14) days written notice, and during which period the Contractor fails to cure the violation, terminate the Agreement. In such case, the Contractor shall not be entitled to receive any further payment. Owner shall be entitled to recover all costs and damages arising as a result of failure of Contractor to perform as provided in the Contract Documents, as well as reasonable termination expenses, and costs and damages incurred by the Owner may be deducted from any payments left owing the Contractor.

C. Illegality. Owner may terminate the Agreement if Contractor disregards laws or regulations of any public body having jurisdiction.

D. Rights of Owner. The Owner may, after giving Contractor (and the Surety, if there is one) seven (7) days written notice, terminate the services of Contractor for cause; exclude Contractor from the Project site and take possession of the Work and of all Contractor's tools, construction equipment and machinery at the Project site and use the same to the full extent they could be used (without liability to Contractor for trespass or conversion); incorporate in the Work all materials and equipment stored at the Project site or for which Owner has paid Contractor but which are stored elsewhere, and finish the Work as Owner may deem expedient. In such case, Contractor shall not be entitled to receive any further payment beyond an amount equal to the value of material and equipment not incorporated in the Work, but delivered and suitably stored, less the aggregate of payments previously made. If the direct and indirect costs of completing the Work exceed the unpaid balance of the Contract Sum, Contractor shall pay the difference to Owner. Such costs incurred by Owner shall be verified by Owner in writing; but in finishing the Work, Owner shall not be required to obtain the lowest quote for the Work performed. Contractor's obligations to pay the difference between such costs and such unpaid balance shall survive termination of the Agreement. In such event and notwithstanding any other provisions of the Contract Documents to the contrary, Owner shall be entitled to bring a direct action in the Circuit Court to recover such costs.

14.2 Termination without Cause by Owner. The Owner, through its County Administrator or designee, shall have the right to terminate the Agreement, in whole or in part, without cause upon sixty (60) calendar days written notice to the Contractor. In the event of such termination for convenience, the Owner shall compensate Contractor for payments due through the date of termination, and one subsequent payment to cover costs of Work performed through the date of termination, subject to the terms and conditions of Section 3.1. The Contractor shall not be entitled to any other further recovery against the Owner, including, but

not limited to, anticipated fees or profit on Work not required to be performed, or consequential damages or costs resulting from such termination.

A. Release of Contractor. As a condition of Owner's termination rights provided for in this subsection, Contractor shall be released and discharged from all obligations arising by, through, or under the terms of the Contract Documents, and the Payment and Performance Bond shall be released. Owner shall assume and become responsible for the reasonable value of Work performed by Subcontractors prior to termination plus reasonable direct close-out costs, but in no event shall Subcontractors be entitled to unabsorbed overhead, anticipatory profits, or damages for early termination.

B. Waiver of Protest. Contractor hereby waives any right to protest the exercise by Owner of its rights under this Section that may apply under the Procurement Ordinance.

14.3 Suspension without Cause. Owner may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety (90) days by written notice to Contractor, which will fix the date on which Work will be resumed. Contractor shall be allowed an increase in the Contract Sum or an extension of the Contract Time, or both, directly attributable to any suspension if Contractor makes an approved claim therefor.

14.4 Termination Based Upon Abandonment, Casualty or Force Majeure. If, after the construction commencement date (i) Contractor abandons the Project (which for purposes of this paragraph shall mean the cessation of all construction and other activities relating to the Project, excluding those which are necessary to wind down or otherwise terminate all outstanding obligations with respect to the Project, and no recommencement of same within one hundred twenty (120) days following the date of cessation), or (ii) the Project is stopped for a period of thirty (30) consecutive days due to an instance of Force Majeure or the result of a casualty resulting in a loss that cannot be corrected or restored within one hundred twenty (120) days (excluding the time required to assess the damage and complete the steps contemplated under Section 12.2), the Owner shall have the right to terminate the Agreement and pay the Contractor its compensation earned or accrued to date.

14.5 Vacation of Project Site; Delivery of Documents. Upon termination by Owner pursuant to Section 14.2 or 14.4, Contractor shall withdraw its employees and its equipment, if any, from the Project Site on the effective date of the termination as specified in the notice of termination (which effective date shall not be less than two (2) working days after the date of delivery of the notice), regardless of any claim the Contractor may or may not have against the Owner. Upon termination, the Contractor shall deliver to the Owner all original papers, records, documents, drawings, models and other material set forth and described in the Contract Documents.

14.6 Termination by the Contractor. If, through no act or fault of Contractor, the Work is suspended for a period of more than ninety (90) consecutive days by Owner or under an order of court or other public authority, or Owner fails to act on any Application for Payment or fails to pay Contractor any sum finally determined to be due; then Contractor may, upon fourteen (14) days written notice to Owner terminate the Agreement and recover from Owner payment for all Work executed, any expense sustained plus reasonable termination expenses. In lieu of

terminating the Agreement, if Owner has failed to act on any Application for Payment or Owner has failed to make any payment as aforesaid, Contractor may upon fourteen (14) days written notice to Owner stop the Work until payment of all amounts then due.

Exhibit A
Title(s) of Drawings

1. 44th Avenue East from 19th Street Court East to 30th Street East- Roadway Plans
2. 44th Avenue East from 19th Street Court East to 30th Street East- Signalization Plans
3. 44th Avenue East from 19th Street Court East to 30th Street East- Lighting Plans
4. 44th Avenue East from 19th Street Court East to 30th Street East- Potable Water Main Plans

Exhibit B
Title(s) of Specifications

1. Special Provisions for 44th Avenue East from 19th Street Court East to 30th Street east
2. 44th Avenue East from 19th Street Court East to 30th Street East Potable Water Main

Exhibit C
Affidavit of No Conflict

COUNTY OF _____

BEFORE ME, the undersigned authority, this day personally appeared,

_____, a principal with full authority to bind
_____ hereinafter the "Contractor ", who

being first duly sworn, deposes and says:

(a) is not currently engaged or will not become engaged in any obligations, undertakings or contracts that will require the Contractor to maintain an adversarial role against the County or that will impair or influence the advice, recommendations or quality of work provided to the County; and

(b) has provided full disclosure of all potentially conflicting contractual relationships and full disclosure of contractual relationships deemed to raise a question of conflict(s); and

(c) has provided full disclosure of prior work history and qualifications that may be deemed to raise possible question of conflict(s).

Affiant makes this affidavit for the purpose of inducing Manatee County, a political subdivision of the State of Florida, to enter into this Agreement for

Signature

SUBSCRIBED to and sworn before me this ____ day of _____, 2014.

Notary Public

My commission expires: _____

Personally Known _____ or Produced Identification _____

Type of Identification Produced _____

Exhibit D
Contractor's Certificate(s) of Insurance

Exhibit E
Contractor's Payment and Performance Bond

**MANATEE COUNTY GOVERNMENT
PUBLIC CONSTRUCTION BOND**

Bond No. _____
(Enter bond number)

BY THIS BOND, We _____, located at _____, as
(Name of Contractor) (Address)

Principal and _____, a corporation, whose address is
(Name of Surety)

are bound to Manatee County, a political subdivision of the State of Florida, herein called County, in the sum of \$ _____, for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

WHEREAS, the Contractor has entered into Contract No. 15-2259CD with the County for the project titled 44th Avenue East Roadway Project- from 19th Stret Court East to 30th Street East, with conditions and provisions as are further described in the aforementioned Contract, which Contract is by reference made a part hereof for the purposes of explaining this bond.

THE CONDITION OF THIS BOND is that if Principal:

1.# Performs Contract No. 15-2259CD, between Principal and County for construction of

44th Avenue East Roadway Project- from 19th Stret Court East to 30th Street East,
(Title of Project)

the Contract being made a part of this bond by reference, at the times and in the manner prescribed in the Contract; and

2.# Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the Work provided for in the Contract; and

3.# Pays County all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that County sustains because of a default by Principal under the Contract; and

4.# Performs the guarantee of all Work and materials furnished under the Contract for the time specified in the Contract, then this bond is void; otherwise it remains in full force.

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

Any changes in or under the Contract documents and compliance or noncompliance with any formalities connected with the Contract or the changes does not affect Surety's obligation under this bond.

DATED ON _____.

CONTRACTOR AS PRINCIPAL

SURETY

Company Name

Company Name

Signature

Signature

Print Name & Title

Print Name & Title

(Corporate Seal)

(Corporate Seal)

AGENT or BROKER

Company Name

Address

Telephone

Licensed Florida Insurance Agent? Yes No

License #: _____

State of: _____

County of: _____

City of: _____

Exhibit F
Standard Forms

- 1—Application for Payment
- 2—Certificate of Substantial Completion
- 3—Final Reconciliation / Warranty / Affidavit
- 4—Change Order

APPLICATION FOR PAYMENT

Request No.: _____ Project No.: _____
 Purchase Order No.: _____
 County Bid No.: _____
 Consultant: _____

Project: _____
 From: _____ To: _____

CONTRACT PAYMENT SUMMARY

Original Contract Amount:				\$	-
Change Order(s):				\$	-
Change order summary:					
Number	Date Approved	Additive	Deductive		
SUBTOTALS:		\$	-	\$	-
Net change order subtotal (Additive less Deductive):				\$	-
Current Contract Amount (CCA): (Original Amount + Change Order(s))				\$	-
	Previous Status	Total WIP			
Value of the Work in Place (WIP)	\$	-	\$	-	
Value of Stored Materials	\$	-	\$	-	
Total Earned (\$ and % of CCA)	\$	-	\$	-	
Retainage (\$ and % of CCA)	\$	-	\$	-	
Net Earned (Total earned minus retainage)				\$	-
TOTAL PREVIOUS PAYMENTS				\$	-
AMOUNT DUE THIS PAYMENT (Net Earned minus Previous Payments)				\$	-

CONTRACTOR'S AFFIDAVIT OF NOTICE

CERTIFICATE: The undersigned CONTRACTOR certifies that all items and amounts shown on this Application for Payment are on account of work performed, materials supplied and/or materials stored on site and paid for by Contractor in accordance with the Contract Documents with due consideration for previous Payment(s), if any, received by the Contractor from the County, and that the Amount Due this Payment shown is now due.

NOTARY:

CONTRACTOR:

State of Florida, County of _____

 Name of person authorized to sign Affidavit of Notice

Sworn to (or affirmed) and subscribed before me
 this _____ day of _____ by

 TITLE

 (Name of person giving notice)

Contractor name, address and telephone no.:

 (Signature of Notary Public - State of Florida)
 Print, Type or Stamp Commissioned Name of
 Notary Public:

Personally Known _____ or Produced Identification _____
 Type of Identification Produced: _____

VERIFICATION, RECOMMENDATION, CONCURRENCES AND APPROVALS

(Signatures)

(Date)

Quantities verified by: _____

Consultant/Engineer: _____

Project Management: _____

Department Head: _____

Payment approved by the
 Board of County Commissioners: _____

Attested to by the Clerk of Circuit Court: _____

**FINAL RECONCILIATION, WARRANTY PERIOD DECLARATION
AND CONTRACTOR'S AFFIDAVIT**

Project Title:	Date Submitted:
Contractor Data: Name: Address: City/State/Zip:	Project No:
	Warranty (months):

This Final Reconciliation is for the work performed for Manatee County by the above named contractor, hereinafter called CONTRACTOR, pursuant to the contract dated _____ as amended, and acts as an addendum thereto.

It is agreed that all quantities and prices in the attached Final Pay Estimate No. _____ are correct and that the amount of \$ _____ including retainage is due to the CONTRACTOR, that no claims are outstanding as between the parties, and that the above stated sum represents the entirety of monies owed the CONTRACTOR.

It is further agreed that the warranty period for CONTRACTOR'S work pursuant to the Contract is from _____ to _____

As (title) _____ for CONTRACTOR, I have authority to bind said CONTRACTOR, and as such make this final reconciliation, declaration and affidavit for the purpose of inducing Manatee County to make final payment to CONTRACTOR for work done at/upon _____ under said contract:

CONTRACTOR has paid all social security and withholding taxes accrued in connection with the construction project.

CONTRACTOR has paid all workers' compensation and other insurance premiums incurred in connection with this construction project.

CONTRACTOR has paid for all required permits in connection with this construction project.

All laborers, material, men, suppliers, subcontractors and service professionals who worked for and/or supplied materials, equipment and/or services to the CONTRACTOR under this construction contract have been paid in full.

(Affiant Signature)

NOTARY:
State of Florida, County of _____, Sworn to (or affirmed) and subscribed before me this _____ day of _____, _____, by _____ (person giving notice).

Signature of Notary Public - State of Florida: _____
Print, Type or Stamp Commissioned Name of Notary Public:

Personally Known or Produced Identification
Type of Identification Produced _____

CONTRACT CHANGE ORDER

(For Adjustment Amounts Less Than \$1,000,000.)

PROJECT:

Change Order No.:

**Contract Amount:
(Present Value)**

Project Number:

NO. OF ITEM	DESCRIPTION OF ITEM AND CHANGE	DECREASE	INCREASE
1	<p>BY EXECUTION OF THIS CHANGE ORDER THE CONTRACTOR AGREES THAT ALL CLAIMS FOR ADDITIONAL CONTRACT TIME AND FEES FOR THE ITEMS IN THIS CHANGE ORDER HAVE BEEN SATISFIED.</p>		

TOTAL DECREASE:

TOTAL INCREASE:

Contractor: _____
Address: _____
City / State: _____
Contractor Signature: _____ **Date** _____

THE NET CHANGE OF
 ADJUSTS THE CURRENT CONTRACT AMOUNT FROM
 _____ TO

 _____ CALENDAR DAYS ARE ADDED TO THE SCHEDULE
 WHICH CHANGES THE FINAL COMPLETION DATE TO
 MONTH, DAY, YEAR.

RECOMMENDATION, CONCURRENCES AND APPROVALS

SIGNATURES

DATE

Consultant / Engineer

Project Manager:

Division Manager:

Jeff Streitmatter III, P.E., Project Management Division Manager

Manatee County Purchasing

Melissa M. Wendel, CPPO, Purchasing Official

**Authority to execute this contract per Manatee County Code, Chapter 2-26,
 and per the delegation by the County Administrator effective 1/26/2009**

JUSTIFICATION FOR CHANGE

Change Order No :

Project Number:

1. NECESSITY FOR CHANGE:



2. Is change an alternate bid? (If yes, explain)

3. Does change substantially alter the physical size of the project? (If yes, explain)

4 Effect of this change on other "Prime" contractors?

5 Has the Surety and insurance company been notified, if applicable? **CONTRACTOR RESPONSIBILITY**

