

INVITATION FOR BIDS

FOR

**MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2,
MR3, MR5, AND MR-6 DRILLING AND TESTING**

Mail or Hand Deliver

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

BY 2:00 PM – July 14, 2015

To:

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

Bid Opening:

July 14, 2015 - 2:00 PM

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

**Non -Mandatory Pre-Bid Conference – June 19, 2015 1:00 P.M.
17498 McKinney Road , Winter Garden Florida 34787
Interested bidders are encouraged to attend.**

NOTICE TO BIDDERS/OFFERORS

To ensure that your bid/proposal is responsive, you are urged to request clarification or guidance on any issues involving this solicitation before submission of your response. Your point-of-contact for this solicitation is Patty Hobbs at (407) 836-5456 or Patty.Hobbs@ocfl.net.

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

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ISSUED: June 9, 2015

**NOTICE
INVITATION FOR BID NO. Y15-790-PH**

**MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2,
MR3, MR5, AND MR-6 DRILLING AND TESTING**

Sealed bid offers (Original Bid Form and three (3) complete copies) for furnishing the above will be accepted up to **2:00 PM, July 14, 2015** in the Procurement Division; Internal Operations Centre II, 400 E. South Street; 2nd Floor, Orlando, FL 32801. Bids will be opened shortly thereafter in the Procurement Division Conference Room, 2nd Floor; Internal Operations Centre II.

Bid Documents are available in the following formats:

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

A Non-Mandatory Pre-Bid Conference will be held on June 19, 2015, 1:00 P.M., 17498 McKinney Road , Winter Garden Florida 34787, Meet at Conserv II Administration Bldg. Interested bidders are encouraged to attend.

SCOPE OF WORK: Drilling and testing for five lower Floridan production wells.

PROJECT LOCATION: 16965 Malcolm Road, Winter Garden Florida 34787

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

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PART C - INSTRUCTIONS TO BIDDERS

1. GENERAL:

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

2. PREPARATION AND SUBMISSION OF BIDS:

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

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

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

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

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

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

Bidders should indicate on the sealed envelope the following:

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

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

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

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

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

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

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

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

3. **MINORITY/WOMEN OWNED BUSINESS ENTERPRISES:**

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

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

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

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

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

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

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

However, if the M/WBE Bidder will not be self-performing at least 51% percent of the project, then he/she must comply with the M/WBE participation goal, and good faith effort documentation required from non-M/WBE Bidders to receive M/WBE compliance consideration.

d. **Subcontracts/Purchase Orders**

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

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

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

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

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

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

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

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

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

If the Bidder fails to meet one of the first four good faith effort requirements (i – iv) then the Bidder will be permitted to substitute one good faith effort requirement with only one of the following with documentation showing that:

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

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

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

f. Sliding scale for enforcement of good faith effort requirements

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

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

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

- g. Letters of Intent **must** match **exactly the information provided on** Attachment C-2 to the Bid Forms D, Attachment C-3 and **must** be executed by the apparent low Bidder and all M/WBE Subcontractors and/or suppliers listed on Attachment C-2 **must** be submitted to the Business Development Division office before 5:00 P.M. on the second business day after bid opening.

- h. Bidders shall not reject an M/WBE as unqualified without sound reasons based on a thorough and documented investigation of that M/WBE's capabilities.
- i. Bidder's efforts will be evaluated considering the ability of other Bidders to meet the requirements relating to the use of M/WBE subcontractors.
- j. Bidders should make whatever additional efforts are necessary to achieve the goals and it is recommended that these efforts be documented. However, this documentation shall not replace the required documentation if the goals are not met. Bidders are encouraged to contact the Business Development Division for guidance and assistance. Additional efforts by Bidders may include but are not limited to the following:
 - i. Bidders should provide interested M/WBE's with assistance in reviewing the Contract plans and specifications.
 - ii Bidders should assist interested M/WBE's in obtaining required lines of credit, insurance or bonding.
 - iii. Bidders should solicit only types of work that match the capabilities of the M/WBE's and for which they are certified.
- k. All participating M/WBE's must be certified by Orange County. The Business Development M/WBE Directory is available by e-mail or through the Orange County web site at Orangecountyfl.net.

Only firms having established offices in the Orlando MSA (Orange, Lake, Seminole and Osceola Counties) are eligible for Orange County certification. All firms must be certified prior to bid opening and must be certified in the area(s) for which they will be used. If a firm claims to be certified, but is not listed in the Directory, Contractor should obtain a copy of their Certificate and/or contact the Business Development Division for verification of certification.

- l. The County has established a credit program whereby Contractors are awarded credits to be applied toward meeting the M/WBE goals on certain County bids. Emphasis will be placed on credits for Non-County Utilization and First-Time M/WBE Utilization. Bidders are encouraged to contact the Business Development Division for information on acquiring and applying the credits.
- m. Effective August 1, 2003, the County implemented a graduation program. Under this program, utilization of M/WBE firms designated as graduates shall count toward meeting M/WBE participation goals only on specified projects. All construction solicitations for which the County has determined the overall contract amount to be awarded to the prime in excess of \$10,000,000 for vertical construction, \$7,000,000 for horizontal construction and \$7,000,000 for all other construction are eligible for graduate M/WBE participation.

Vertical construction is any construction of a structure or building which requires a general or building contractor's license. Horizontal construction includes but is not limited to roadwork, site work, drainage or utilities work. Other construction is any construction other than what is defined as vertical or horizontal construction.

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

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

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

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

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

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

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

Also, in accordance with the County SDV Ordinance, preferences for registered service-disabled veteran business enterprises shall be applied on bid awards (sealed bids). The following bid preference scale shall apply to bids submitted by registered service-disabled veteran business enterprises as long as the bid does not exceed the low bid by more than 8% on bid awards up to \$100,000 ; 7% on bid awards from \$100,000.01 to \$500,000; 6% on bid awards from \$500,00.01 to \$750,000; 5% on bid awards from \$750,000.01 to \$2,000,000; 4% on contract awards from \$2,000,000.01 to \$5,000,000.00 and 3% on bid awards over \$5,000,000.01.

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

If a registered service-disabled veteran business enterprise, entitled to the vendor preference under this section, and one (1) or more other businesses also entitled to this preference, or another vendor preference provided by the Orange County Code, submit bids, proposals, or replies for procurement of commodities or contractual services which are otherwise equal with respect to all relevant considerations, including price, quality, and service, then the Procurement Division Manager shall award the procurement or contract to the business having the smallest net worth.

5. BID ERRORS:

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

6. DEVIATIONS:

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

7. SUBSTITUTE MATERIAL AND EQUIPMENT:

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

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

In the event that substitute materials or equipment are used and are less costly than the originally specified material or equipment, then the difference in cost of the item shall benefit the County and Contractor in equal proportions.

Applications for substitute materials and equipment shall only be evaluated after the Contract is executed. The Base Bid and Alternates shall reflect the costs for the materials and equipment named or specified only.

8. REQUESTED INFORMATION AND DESCRIPTIVE LITERATURE:

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

9. AWARD OF CONTRACT/REJECTION OF BIDS:

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

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

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

A. ADDITIVE/DEDUCTIVE BID ITEMS:

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

B. RECIPROCAL LOCAL PREFERENCE:

In the event the lowest responsive and responsible bid submitted in response to any invitation for bid is by a bidder whose principal place of business is in a county other than Orange County, and such county grants a bid preference for purchases to a bidder whose principal place of business is in such county, then Orange County may award a preference to the (next) lowest responsive and responsible bidder having a principal place of business within Orange County, Florida. Such preference shall be equal to the preference granted by the county in which the lowest responsive and responsible bidder has its principal place of business **except as provided below.**

Effective July 1, 2015 the reciprocal local preference shall not apply to construction services in which 50 percent or more of the cost will be paid from state-appropriated funds which have been appropriated at the time of the competitive solicitation.

10. POSTING OF RECOMMENDED AWARD AND PROTESTS:

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

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

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

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

11. CONTRACT DOCUMENTS:

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

12. MODIFICATION/ALTERATION OF SOLICITATION AND OR CONTRACT DOCUMENTS

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

13 LAWS AND REGULATIONS:

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

14. REQUIRED DISCLOSURE:

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

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

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

15. EXECUTION OF WRITTEN CONTRACT:

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

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

16. LICENSING REQUIREMENTS:

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

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

17. SECURITY FORFEITURE:

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

18. PERFORMANCE BONDS AND PAYMENT BONDS:

When the contract amount exceeds \$100,000 a Payment Bond and a Performance Bond issued in a sum equal to one hundred (100%) percent of the total awarded Contract amount by a Surety company considered satisfactory by the County according to the criteria in Section 19 will be required from the successful Bidder for purposes of protecting the County from lawsuits for non-payment of debts as might be incurred during the successful Bidder's performance under such Contract, and insuring the faithful performance of the obligations imposed by the resulting Contract.

The Payment Bond and the Performance Bond forms are included in the Contract Documents and said forms must be properly executed by the Surety Company and successful Bidder within ten (10) days after receipt of notification from the County of its award of the Contract. Awarded Bidders shall record bonds in the public records as required by Florida State Statutes, Chapter 255.05.

19. QUALIFICATIONS OF SURETY COMPANIES:

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

- a. Surety must be admitted to do business in the State of Florida and shall comply with the provisions of Florida Statute 255.05.
- b. Surety must be listed on the U.S. Department of Treasury Fiscal Service, Bureau of Government Financial Operations, Federal Register, Part V, latest revision, entitled: "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies".
- c. All bonds shall be originals and issued or countersigned by a producing agent with satisfactory evidence of the authority of the person or persons executing such bond shall be submitted with the bond. Attorneys-in-fact who sign bonds or other Surety instruments must attach with each bond or Surety instrument a signed, certified and effectively dated copy of their power of attorney. Agents of Surety companies must list their name, address and telephone number on all bonds.
- d. The life of the bonds shall extend twelve (12) months beyond the date of Final Completion and shall contain a waiver of alteration to the terms of the Contract, extensions of time and/or forbearance on the part of the County.
- e. **Surety must have financial standing having a rating from A.M. Best Company (or other equivalent rating company) equal to or better than A- Class VI.**
- f. Should the Bid, Payment and Performance Bonds be issued by co-sureties, each surety listed on the bond shall meet the requirements in paragraphs a. – e. above. In addition, each surety shall submit a power of attorney and all signatures of the co-sureties representatives shall be notarized. The "lead" surety shall be identified for the purposes of underwriting and claims management.

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

20. TRENCH SAFETY ACT:

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

21. DRUG-FREE WORKPLACE FORM:

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

22. BID TABULATION AND RECOMMENDED AWARD:

Bid files may be examined during normal working hours, thirty (30) days after bid opening, or upon recommendation for award, whichever occurs first. Bidders desiring to view these documents are urged to schedule an appointment. For information concerning this bid, please contact the Procurement Division at the address listed above or by calling (407) 836-5635. Please specify the bid number for which you are inquiring. Bid opening results will be available at <http://apps.ocfl.net/orangebids/bidresults/results.asp>. Unsuccessful bidders will not be notified, unless a request is submitted in accordance with this paragraph.

23. INDEMNIFICATION FOR TORT ACTIONS/LIMITATION OF LIABILITY:

The provisions of Florida Statute 768.28 applicable to Orange County, Florida apply in full to this Contract. Any legal actions to recover monetary damages in tort for injury or loss of property, personal injury, or death caused by the negligent or wrongful act or omission of any employee of the County acting within the scope of his/her office or employment are subject to the limitations specified in this statute. No officer, employee or agent of the County acting within the scope of his/her employment or function shall be held personally liable in tort or named as a defendant in any action for any or damage suffered as a result of any act, event, or failure to act.

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

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

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

25. PUBLIC ENTITY CRIME STATEMENT (FS 287.133):

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

26. SUBCONTRACTOR/SUPPLIER INFORMATION:

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

27. SUBCONTRACTOR'S PAST PERFORMANCE:

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

28. REFERENCES:

Bidder should supply (with the bid form) a list of four similar projects successfully completed **by the Bidder, as a Prime or Sub Contractor** within the last ten (10) years. Bidder shall submit as evidence of previous successful project experience that includes:

- Installation of a Lower Floridan Production Well with a minimum diameter of 12 inches. The Lower Floridan well must have been in the Central Florida area.

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

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

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

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

29. BID AND RELATED COSTS:

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

30. SOLICITATION CANCELLATIONS

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

31. LICENSES/PERMITS/FEES:

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

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

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

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

32. BID ACCEPTANCE PERIOD

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

33. EQUAL OPPORTUNITY

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

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

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

34. ETHICS COMPLIANCE

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

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

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

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

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

35. TOBACCO FREE CAMPUS

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

36. VERIFICATION OF EMPLOYMENT STATUS

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

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

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

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

37. PROPRIETARY INFORMATION

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

38. MOBILIZATION:

Mobilization is defined as construction start-up costs required for performance of preparatory work and operations in mobilizing for beginning work on the project. Such costs are necessary for the movement of personnel, equipment, supplies and incidentals to the project site and for the establishment of temporary offices, buildings, safety equipment, first aid supplies, sanitary and other facilities. Include the cost of bonds, insurance and any other preconstruction expense necessary for the start of work. Mobilization costs are not part of the physical construction.

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

The total cost of mobilization shall not exceed 5% of the Estimated Total Base Bid. For purposes of calculation of maximum allowable mobilization, the "Estimated Total Base Bid" is defined as the total of all line items specified to be included in the mobilization calculation, exclusive of any alternates or options, and exclusive of the Mobilization line item.

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

39. UNBALANCED PRICING

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

The greatest risk associated with unbalanced pricing occur when—

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

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

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

40. UNIT PRICES

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

The Contract resulting from this solicitation is based on estimated quantities. The contractor shall only be paid for materials installed in the work in accordance with the applicable unit prices for the specific work element (line item).

No payment shall be made for excess materials delivered to the jobsite and not incorporated into the work. Therefore, it shall be the contractor's responsibility to determine the quantities of materials necessary to perform the project to its completion.

IFB NO. Y15-790 - PH

ISSUED: June 9, 2015

OFFICIAL BID FORM

FOR

**MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2, MR3,
MR5, AND MR-6 DRILLING AND TESTING**

Mail or Hand Deliver

ORIGINAL BID FORM AND THREE (3) COMPLETE COPIES

BY 2:00 PM - July 14, 2015

To:

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

Bid Opening:

July 14, 2015, - 2:00 PM

**INTERNAL OPERATIONS CENTRE II
PROCUREMENT DIVISION CONFERENCE ROOM, 2nd FLOOR
ORLANDO, FLORIDA**

COMPANY NAME

COMPLETE MAILING ADDRESS

CITY, COUNTY, STATE, ZIP CODE

TELEPHONE NUMBER

FAX NUMBER

CONTACT PERSON

E-MAIL ADDRESS

TIN#: _____

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

PART D

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

The Undersigned, hereinafter called "Bidder", having visited the site of the proposed project and familiarized himself with the local conditions, nature and extent of the work, and having examined carefully the Contract Form, General Conditions, Supplementary Conditions, Plans and Specifications and other Contract Documents, with the Bond requirements herein, proposes to furnish all labor, materials, equipment and other items, facilities and services for the proper execution and completion of: **MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2, MR3, MR5, AND MR-6 DRILLING AND TESTING** in full accordance with the drawings and specifications prepared in accordance with the Contract Documents and, if awarded the Contract, to complete the said work within the time limits specified for the following ESTIMATED TOTAL BASE BID.

It is understood that this is a unit price Contract and the resultant Contract will contain estimated quantities, unit prices, extended totals and that the Estimated Total Base Bid is the sum of all pay item totals from the schedule of prices, Page D-3 through D-7.

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

ESTIMATED TOTAL BASE BID:

_____ DOLLARS
(In Words)

\$ _____

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

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

<u>Item No.</u>	<u>Description</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price (\$)</u>	<u>Item Total (\$)</u>
1	Mobilization, Demobilization and General Requirements	1	LS		
2	Indemnification	1	LS		
3	Perform 24 Hour Constant Rate Discharge Test	24	Hours		
Estimated total (Items 1 - 3)					

<u>Item No.</u>	<u>Description</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price (\$)</u>	<u>Item Total (\$)</u>
4	Drill 8-inch Pilot Hole	220	LF		
5	Drill Nominal 42-inch Borehole	110	LF		
6	Furnish and Install 36-inch Surface Casing	110	LF		
7	Cement Grout of 36-inch Surface Casing	614	94 lb. sack		
8	Drill Nominal 36-inch Borehole	110	LF		
9	Geophysical Logs 36-inch Borehole	1	EA		
10	Furnish and Install 30-inch Intermediate Casing	220	LF		
11	Cement Grout of 30-inch Intermediate Casing	952	94 lb. sack		
12	Drill 8-inch Pilot Hole	830	LF		
13	Drill Nominal 30-inch Borehole	830	LF		
14	Geophysical Logs 30-inch Borehole	1	EA		
15	Furnish and Install 24-inch Inner Casing	1050	LF		
16	Cement Grout of 24-inch Inner Casing	3506	94 lb. sack		
17	Drill Nominal 24-inch Borehole	830	LF		
18	Drill 8-inch Pilot Hole	250	LF		
19	Perform Plumbness and Alignment Test	1	EA		
20	Set Test Pump, Discharge Line, and Equipment	1	EA		
21	Well Development	48	Hours		
22	Perform Step Drawdown Test	10	Hours		
23	Final Geophysical Logging and Video Log	1	EA		
24	Install Protective Casing, Pad, and Bollards	1	EA		
25	Well Disinfection	1	EA		

26	Sand/Pea Gravel Well Cavity Fill	10	CY		
27	Dredging	120	Hours		
28	Stand-by Time	120	Hours		

Est. TOTAL FOR WELL MR-1

(Items 4 -28)

<u>Item No.</u>	<u>Description</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price (\$)</u>	<u>Item Total (\$)</u>
29	Drill 8-inch Pilot Hole	220	LF		
30	Drill Nominal 42-inch Borehole	110	LF		
31	Furnish and Install 36-inch Surface Casing	110	LF		
32	Cement Grout of 36-inch Surface Casing	614	94 lb. sack		
33	Drill Nominal 36-inch Borehole	110	LF		
34	Geophysical Logs 36-inch Borehole	1	EA		
35	Furnish and Install 30-inch Intermediate Casing	220	LF		
36	Cement Grout of 30-inch Intermediate Casing	952	94 lb. sack		
37	Drill 8-inch Pilot Hole	830	LF		
38	Drill Nominal 30-inch Borehole	830	LF		
39	Geophysical Logs 30-inch Borehole	1	EA		
40	Furnish and Install 24-inch Inner Casing	1050	LF		
41	Cement Grout of 24-inch Inner Casing	3506	94 lb. sack		
42	Drill Nominal 24-inch Borehole	830	LF		
43	Drill 8-inch Pilot Hole	250	LF		
44	Perform Plumbness and Alignment Test	1	EA		
45	Set Test Pump, Discharge Line, and Equipment	1	EA		
46	Well Development	48	Hours		
47	Perform Step Drawdown Test	10	Hours		
48	Final Geophysical Logging and Video Log	1	EA		
49	Install Protective Casing, Pad, and Bollards	1	EA		
50	Well Disinfection	1	EA		
51	Sand/Pea Gravel Well Cavity Fill	10	CY		

52	Dredging	120	Hours	_____	_____
53	Stand-by Time	120	Hours	_____	_____

EST TOTAL FOR WELL MR-2
(Items 29 -53)

<u>Item No.</u>	<u>Description</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price (\$)</u>	<u>Item Total (\$)</u>
54	Drill 8-inch Pilot Hole	220	LF	_____	_____
	Drill Nominal 42-inch				
55	Borehole	110	LF	_____	_____
	Furnish and Install 36-inch				
56	Surface Casing	110	LF	_____	_____
	Cement Grout of 36-inch				
57	Surface Casing	614	94 lb. sack	_____	_____
	Drill Nominal 36-inch				
58	Borehole	110	LF	_____	_____
	Geophysical Logs 36-inch				
59	Borehole	1	EA	_____	_____
	Furnish and Install 30-inch				
60	Intermediate Casing	220	LF	_____	_____
	Cement Grout of 30-inch				
61	Intermediate Casing	952	94 lb. sack	_____	_____
62	Drill 8-inch Pilot Hole	830	LF	_____	_____
	Drill Nominal 30-inch				
63	Borehole	830	LF	_____	_____
	Geophysical Logs 30-inch				
64	Borehole	1	EA	_____	_____
	Furnish and Install 24-inch				
65	Inner Casing	1050	LF	_____	_____
	Cement Grout of 24-inch				
66	Inner Casing	3506	94 lb. sack	_____	_____
	Drill Nominal 24-inch				
67	Borehole	830	LF	_____	_____
68	Drill 8-inch Pilot Hole	250	LF	_____	_____
	Perform Plumbness and				
69	Alignment Test	1	EA	_____	_____
	Set Test Pump, Discharge				
70	Line, and Equipment	1	EA	_____	_____
71	Well Development	48	Hours	_____	_____
	Perform Step Drawdown				
72	Test	10	Hours	_____	_____
	Final Geophysical Logging				
73	and Video Log	1	EA	_____	_____
	Install Protective Casing,				
74	Pad, and Bollards	1	EA	_____	_____
75	Well Disinfection	1	EA	_____	_____
	Sand/Pea Gravel Well				
76	Cavity Fill	10	CY	_____	_____
77	Dredging	120	Hours	_____	_____
78	Stand-by Time	120	Hours	_____	_____

EST TOTAL FOR WELL MR-3
(Items 54 -78)

<u>Item No.</u>	<u>Description</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price (\$)</u>	<u>Item Total (\$)</u>
79	Drill 8-inch Pilot Hole Drill Nominal 42-inch	220	LF		
80	Borehole	110	LF		
81	Furnish and Install 36-inch Surface Casing	110	LF		
82	Cement Grout of 36-inch Surface Casing	614	94 lb. sack		
83	Drill Nominal 36-inch Borehole	110	LF		
84	Geophysical Logs 36-inch Borehole	1	EA		
85	Furnish and Install 30-inch Intermediate Casing	220	LF		
86	Cement Grout of 30-inch Intermediate Casing	952	94 lb. sack		
87	Drill 8-inch Pilot Hole Drill Nominal 30-inch	830	LF		
88	Borehole	830	LF		
89	Geophysical Logs 30-inch Borehole	1	EA		
90	Furnish and Install 24-inch Inner Casing	1050	LF		
91	Cement Grout of 24-inch Inner Casing	3506	94 lb. sack		
92	Drill Nominal 24-inch Borehole	830	LF		
93	Drill 8-inch Pilot Hole Perform Plumbness and	250	LF		
94	Alignment Test	1	EA		
95	Set Test Pump, Discharge Line, and Equipment	1	EA		
96	Well Development Perform Step Drawdown	48	Hours		
97	Test	10	Hours		
98	Final Geophysical Logging and Video Log	1	EA		
99	Install Protective Casing, Pad, and Bollards	1	EA		
100	Well Disinfection	1	EA		
101	Sand/Pea Gravel Well Cavity Fill	10	CY		
102	Dredging	120	Hours		
103	Stand-by Time	120	Hours		

EST TOTAL FOR WELL MR-5
(Items 79- 103)

<u>Item No.</u>	<u>Description</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price (\$)</u>	<u>Item Total (\$)</u>
104	Drill 8-inch Pilot Hole	220	LF		
105	Drill Nominal 42-inch Borehole	110	LF		
106	Furnish and Install 36-inch Surface Casing	110	LF		
107	Cement Grout of 36-inch Surface Casing	614	94 lb. sack		
108	Drill Nominal 36-inch Borehole	110	LF		
109	Geophysical Logs 36-inch Borehole	1	EA		
110	Furnish and Install 30-inch Intermediate Casing	220	LF		
111	Cement Grout of 30-inch Intermediate Casing	952	94 lb. sack		
112	Drill 8-inch Pilot Hole	830	LF		
113	Drill Nominal 30-inch Borehole	830	LF		
114	Geophysical Logs 30-inch Borehole	1	EA		
115	Furnish and Install 24-inch Inner Casing	1050	LF		
116	Cement Grout of 24-inch Inner Casing	3506	94 lb. sack		
117	Drill Nominal 24-inch Borehole	830	LF		
118	Drill 8-inch Pilot Hole	250	LF		
119	Perform Plumbness and Alignment Test	1	EA		
120	Set Test Pump, Discharge Line, and Equipment	1	EA		
121	Well Development	48	Hours		
122	Perform Step Drawdown Test	10	Hours		
123	Final Geophysical Logging and Video Log	1	EA		
124	Install Protective Casing, Pad, and Bollards	1	EA		
125	Well Disinfection	1	EA		
126	Sand/Pea Gravel Well Cavity Fill	10	CY		
127	Dredging	120	Hours		
128	Stand-by Time	120	Hours		

**EST TOTAL FOR WELL MR-6
(Items 104 -128)**

ESTIMATED TOTAL (Item 1-128)

The Bidder hereby agrees that there is attached:

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

ACKNOWLEDGEMENT OF ADDENDA

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

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

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

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

1. Work shall start at the project site within fourteen (14) days of the effective date of the Notice to Proceed.
2. Substantially complete in **640** onsecutive calendar days from date of Official Notice to Proceed.
3. Final completion in **730** consecutive calendar days from date of Official Notice to Proceed.
4. Should the Successful Bidder fail to complete work as specified, the liquidated damage clause will apply (Part E, Contract).

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

FLORIDA CONSTRUCTION INDUSTRIES LICENSING BOARD CERTIFICATION:

(NAME OF HOLDER) (CERTIFICATE NO.)

(SIGNATURE OF BIDDER) (CERTIFICATE EXPIRATION DATE)

(NAME TYPED)

IDENTIFICATION OF BUSINESS ORGANIZATION

Complete and submit the following information:

Type of Organization

Sole Proprietorship Partnership

Joint Venture Corporation

State of Incorporation:_____

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

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

AUTHORIZED SIGNATORIES/NEGOTIATORS

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

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

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

BY _____(SEAL)

TITLE:_____

PRINT NAME AND TITLE

FEDERAL I.D.#_____

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NON-COLLUSION AFFIDAVIT

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

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

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

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

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

(Sole Owner, Partner, President, etc.)

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

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

(AFFIANT)

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

Notary Public (SEAL)

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

Personally Known _____ or Produced Identification _____ Type of Identification: _____

REQUIRED DISCLOSURE

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

BIDDER

IFB/RFP Number & Title: _____

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

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

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

The above reflects (Check One): _____ Orange County Workforce _____ Total Permanent Workforce (Outside Orange County)
 For Construction Projects Only: Do you intend to hire new employees for the project? ___ Yes ___ No If yes, how many approximately? _____

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

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

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

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PRIME CONTRACTOR/SUBCONTRACTOR/SUPPLIER INFORMATION

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

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

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

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

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

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

O.C. CERTIFIED

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

Signature of Bidder

Title

PRIME CONTRACTOR/SUBCONTRACTOR/SUPPLIER INFORMATION

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

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

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

IFB # _____ **PROJECT TITLE** _____

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

SUBCONTRACTOR/SUPPLIER

SPECIFIC SCOPES OF WORK/COMMODITY

SUBCONTRACT/PURCHASE ORDER PRICE

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

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

Authorized Agent of Prime Contractor

Authorized Agent, Subcontractor/Supplier

Printed Name & Title

Printed Name & Title

Date: _____

Date: _____

Phone Number

Fax Number

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

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

IFB # _____ **PROJECT TITLE** _____

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

SDV SUBCONTRACTOR/SUPPLIER

SPECIFIC SCOPES OF WORK/COMMODITY

SUBCONTRACT/PURCHASE ORDER PRICE

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

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

Authorized Agent of Prime Contractor

Authorized Agent, Subcontractor/Supplier

Printed Name & Title

Printed Name & Title

Date: _____

Date: _____

Phone Number

Fax Number

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M/WBE Survey

Company _____ Contact Name: _____

Contact's Phone Number: _____ IFB #: _____

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

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

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

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

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

If no, why not?

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

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

If no, why not?

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

If no, why not?

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

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

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

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

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

10. Please provide any additional comments:

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

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

IFB No/ Project Name

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

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

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

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

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

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

SIGNED: _____

TITLE: _____

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

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

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REFERENCES: Bidder should supply (with the bid form) a list of four similar projects successfully completed **by the Bidder, as a Prime or Sub Contractor** within the last ten (10) years. Bidder shall submit as evidence of previous successful project experience that includes:

- Installation of a Lower Floridan Production Well with a minimum diameter of 12 inches. The Lower Floridan well must have been in the Central Florida area.

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

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

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

1. Project Name _____

Owner _____

Contact _____

Address _____

Telephone Number/Email Address _____

Contract Number and Amount # _____ \$ _____

Change Orders \$ _____

Final Contract \$ _____

Completed on Schedule? Yes ___ No ___ Date: _____

Project Description _____

2. Project Name _____

Owner _____

Contact _____

ATTACHMENT E

Address _____

Telephone Number/Email Address _____

Contract Number and Amount # _____ \$ _____

Change Orders \$ _____

Final Contract \$ _____

Completed on Schedule? Yes _____ No _____ Date: _____

Project Description _____

3. Project Name _____

Owner _____

Contact _____

Address _____

Telephone Number/Email Address _____

Contract Number and Amount # _____ \$ _____

Change Orders \$ _____

Final Contract \$ _____

Completed on Schedule? Yes _____ No _____ Date: _____

Project Description _____

4. Project Name _____

Owner _____

Contact _____

Address _____

Telephone Number/Email Address _____

Contract Number and Amount # _____ \$ _____

Change Orders \$ _____

Final Contract \$ _____

Completed on Schedule? Yes ___ No ___ Date: _____

Project Description _____

5. Project Name _____

Owner _____

Contact _____

Address _____

Telephone Number/Email Address _____

Contract Number and Amount # _____ \$ _____

Change Orders \$ _____

Final Contract \$ _____

Completed on Schedule? Yes ___ No ___ Date: _____

Project Description _____

6. Project Name _____

Owner _____

Contact _____

Address _____

Telephone Number/Email Address _____

Contract Number and Amount # _____ \$ _____

Change Orders \$ _____

Final Contract \$ _____

Completed on Schedule? Yes ___ No ___ Date: _____

Project Description _____

For Staff Use Only:

Initially submitted on _____

Updated On _____

Specific Project Expenditure Report (Revised November 5, 2010)

For use as of March 1, 2011

**MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2, MR3,
MR5, AND MR-6 DRILLING AND TESTING**

Case or Bid No. **Y15-790 -PH**

ORANGE COUNTY SPECIFIC PROJECT EXPENDITURE REPORT

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

This is the initial Form: _____

This is a Subsequent Form: _____

Part I

Please complete all of the following:

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

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

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

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

For Staff Use Only:

Initially submitted on _____

Updated On _____

Specific Project Expenditure Report (Revised November 5, 2010)

For use as of March 1, 2011

MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2, MR3, MR5, AND MR-6 DRILLING AND TESTING

Case or Bid No. **Y15-790 -PH**

Company Name: _____

Part II

Expenditures:

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

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

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

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

For Staff Use Only:

Initially submitted on _____

Updated On _____

Specific Project Expenditure Report (Revised November 5, 2010)

For use as of March 1, 2011

MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2, MR3, MR5, AND MR-6 DRILLING AND TESTING

Case or Bid No. **Y15-790 -PH**

Company Name: _____

**Part III
ORIGINAL SIGNATURE AND NOTARIZATION REQUIRED**

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

Date: _____

Signature of Principal or Principal's Authorized Agent

(check appropriate box)

PRINT NAME AND TITLE: _____

STATE OF _____ :

COUNTY OF _____ :

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

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

Signature of Notary Public

(Notary Seal)

Notary Public for the State of _____

My Commission Expires: _____

Staff signature and date of receipt of form _____

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

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

Updated 3-1-11

WHAT IS A SPECIFIC PROJECT EXPENDITURE REPORT (SPR)?

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

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

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

WHO NEEDS TO FILE THE SPR?

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

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

HOW ARE THE KEY RELEVANT TERMS DEFINED?

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

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

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

DOES THE SPR NEED TO BE UPDATED IF INFORMATION CHANGES?

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

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

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

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

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

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

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

CONCLUSION:

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

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

For Staff Use Only:

OC CE FORM 2P

Date Submitted _____

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

For use after March 1, 2011

Bid Number **Y15-790 -PH**

RELATIONSHIP DISCLOSURE FORM

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

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

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

Part I

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

Legal Name of Applicant: _____

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

Business Phone () _____

Facsimile () _____

INFORMATION ON APPLICANT'S AUTHORIZED AGENT, IF APPLICABLE:

(Agent Authorization Form also required to be attached)

Name of Applicant's Authorized Agent:

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

Business Phone () _____

Facsimile () _____

For Staff Use Only:

OC CE FORM 2P

Date Submitted _____

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

For use after March 1, 2011

Bid Number **Y15-790 -PH**

Company Name: _____

Part II

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

___ YES ___ NO

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

___ YES ___ NO

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

___ YES ___ NO

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

(Use additional sheets of paper if necessary)

For Staff Use Only:

OC CE FORM 2P

Date Submitted _____

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

For use after March 1, 2011

Bid Number **Y15-790 -PH**

Company Name: _____

Part III

ORIGINAL SIGNATURE AND NOTARIZATION REQUIRED

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

Signature of Applicant

Date: _____

Print Name and Title of Person completing this form: _____

STATE OF _____ :
COUNTY OF _____ :

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

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

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

Staff signature and date of receipt of form

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

AGENT AUTHORIZATION FORM
FOR PROCUREMENTS IN ORANGE COUNTY, FLORIDA



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

_____, DO HEREBY AUTHORIZE TO ACT AS MY/OUR AGENT
(PRINT AGENT'S NAME), _____, TO EXECUTE ANY PETITIONS OR
OTHER DOCUMENTS NECESSARY TO AFFECT THE **CONTRACT APPROVAL PROCESS** MORE SPECIFICALLY
DESCRIBED AS FOLLOWS, **IFB NO. Y15- 790-PH, MALCOLM ROAD WATER SUPPLY FACILITY
PRODUCTION WELLS MR1, MR2, MR3, MR5, AND MR-6 DRILLING AND TESTING**, AND TO APPEAR
ON MY/OUR BEHALF BEFORE ANY ADMINISTRATIVE OR LEGISLATIVE BODY IN THE COUNTY CONSIDERING THIS
CONTRACT AND TO ACT IN ALL RESPECTS AS OUR AGENT IN MATTERS PERTAINING TO THIS CONTRACT.

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

STATE OF _____ :
COUNTY OF _____ :

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

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

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

My Commission Expires: _____

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

WHAT IS THE RELATIONSHIP DISCLOSURE FORM?

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

WHY ARE THERE TWO RELATIONSHIP DISCLOSURE FORMS?

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

WHO NEEDS TO FILE THE RELATIONSHIP DISCLOSURE FORM?

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

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

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

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

HOW ARE THE KEY RELEVANT TERMS DEFINED?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

CONCLUSION:

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

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

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E VERIFICATION CERTIFICATION

IFB NO. Y15-790-PH

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

ADDRESS OF CONTRACTOR:

The undersigned does hereby certify that the above named contractor:

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

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

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

AUTHORIZED SIGNATURE: _____

NAME: _____

TITLE: _____

DATE: _____

BID BOND

BOND NUMBER _____

STATE OF FLORIDA)
SS
COUNTY OF ORANGE)

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

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

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the attached Bid, dated the _____ day of _____, **20**____, for a Contract entitled: **MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2, MR3, MR5, AND MR-6 DRILLING AND TESTING, IFB Y15-790-PH.**

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

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

CONTRACTOR-PRINCIPAL:

SURETY:

NAME OF BUSINESS ENTITY

NAME OF SURETY

SIGNATURE
(SEAL)

SIGNATURE: SURETY AGENT
(SEAL)

TYPE NAME AND TITLE

TYPE NAME AND TITLE

BUSINESS ADDRESS

BUSINESS ADDRESS

TELEPHONE

TELEPHONE

NAIC NUMBER: _____

Licensed Florida Insurance Agent? Yes _____ No _____

License Number: _____

STATE OF _____)

COUNTY OF _____) SS

CITY OF _____)

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

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

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

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

Notary Public

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

Personally Known _____ or Produced Identification _____

Type of Identification: _____

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

LEAD SURETY

AGENT FOR SURETY

Signature

BY: _____

AGENCY ADDRESS: _____

SURETY ADDRESS: _____

PHONE _____

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

CONTRACT:

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

>

Federal Identification Number: >

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

The Contractor shall perform all the Work required by the Contract Documents for the proper execution and completion of **MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2, MR3, MR5, AND MR-6 DRILLING AND TESTING** in full accordance with the drawings and as elaborated in the specifications of **Invitation for Bids No. Y15-790-PH** which is made a part of this Contract as completely as if set forth herein.

I

AMOUNT OF CONTRACT:

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

MAXIMUM CONTRACT AMOUNT:

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

ESTIMATED QUANTITIES:

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

II
ASBESTOS FREE MATERIALS:

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

III
ADMINISTRATIVE DATA:

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

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

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

Should the Contractor fail to substantially complete all Work under this Contract and make the project available for beneficial use on or before the date stipulated for Substantial Completion (or such later date as may result from extension of time granted by County), he shall pay and/or the County may retain from the compensation otherwise to be paid to the Contractor, as liquidated damages, the sum of **\$500.00** for each consecutive calendar day that terms of the Contract remain unfulfilled beyond date allowed by the Contract, which sum is agreed upon as a reasonable and proper measure of damages which County will sustain per diem by failure of Contractor to complete work within time as stipulated; it being recognized by County and Contractor that the injury to County which could result from a failure of Contractor to complete on schedule is uncertain and cannot be computed exactly. In no way shall costs for liquidated damages be construed as a penalty on the Contractor. For each consecutive calendar day that the work remains incomplete after the date established for Final Completion, the County will retain from the compensation otherwise to be paid to the Contractor the sum of **\$500.00**. This amount is the mutually agreed upon minimum measure of damages the County will sustain by failure of the Contractor to complete all

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

IV
CONTRACT DOCUMENTS:

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

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

- a. Orange County Invitation for Bids/Project Manual, **IFB No. Y15-790-PH dated June 9, 2015**, (which contains the Invitation for Bids, Notice, Instruction to Bidders, Bid Form and Attachments, this Contract, General Conditions, Supplementary Conditions / Special Provisions, and Specifications);
- b. Drawings bearing the title "**Construction Plans, MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2, MR3, MR5, AND MR-6 DRILLING AND TESTING**".
- c. Addendum No.> dated >;
- d. >'s Bid Proposal dated **July 14, 2015**;
- e. Payment/Performance Bond;
- f. Certificates of Insurance;

V
PRIORITY OF DOCUMENTS:

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

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

VI
TIME OF COMMENCEMENT AND FINAL COMPLETION:

- a. Work to commence within fourteen (14) days of Official Notice to Proceed date and shall be completed, unless amended by written Change Order or Amendment executed by both parties to this Contract.
- b. Substantial Completion of the Work shall be achieved not later than **640** consecutive calendar days from date of Official Notice to Proceed.
- c. Final Completion of the Work shall be achieved not later than **730** consecutive calendar days from date of Official Notice to Proceed.

VII
COMPLIANCE WITH M/WBE CONTRACT REQUIREMENTS:

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

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

VIII
MISCELLANEOUS PROVISIONS:

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

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

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

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

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

**Corporate
Seal**

PERFORMANCE BOND

BOND NUMBER _____

KNOW ALL MEN BY THESE PRESENTS that

Name of Contractor _____

Address _____

Phone Number _____

Corporation, Partnership or Individual _____

hereinafter referred to as the Contractor, as Principal, and

Name of Surety _____

Address _____

Phone Number _____

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

WHEREAS, the Contractor has entered into **Contract No. Y15-790** with the "County", also referred to herein as the OWNER, for the project entitled: **MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2, MR3, MR5, AND MR-6 DRILLING AND TESTING**, 16965 Malcolm Road, Winter Garden Florida 34787 **address/legal description of the property** with conditions and provisions as are further described in the aforementioned Contract, which Contract is by reference made a part hereof for the purpose of explaining this bond.

General description of the Work: Installation of five new lower floridan wells.

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

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

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

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

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

CONTRACTOR, AS PRINCIPAL

WITNESS:

_____ BY: _____
 Firm Name
 Signature
 Type Name and Title

SURETY

AGENT FOR SURETY

NAIC Number: _____

Signature

BY: _____ AGENCY ADDRESS: _____

SURETY ADDRESS: _____

PHONE _____

Licensed Florida Insurance Agent? Yes _____ No _____

License Number: _____

STATE OF _____)

COUNTY OF _____) SS

CITY OF _____)

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

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

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

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

Notary Public

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

Personally Known _____ or Produced Identification _____

Identification: _____ Type of _____

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

LEAD SURETY

AGENT FOR SURETY

Signature

BY: _____

AGENCY ADDRESS: _____

SURETY ADDRESS: _____

PHONE _____

P A Y M E N T B O N D

BOND NUMBER _____

KNOW ALL MEN BY THESE PRESENTS that

Name of Contractor _____

Address _____

Phone Number _____

Corporation, Partnership or Individual _____

Thereinafter called Contractor, as Principal, and

Name and Address of Surety _____

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

WHEREAS, the Contractor has entered into **Contract No. Y15-790** with the "County", also referred to herein as the OWNER, for the project entitled: **MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2, MR3, MR5, AND MR-6 DRILLING AND TESTING**, 16965 Malcolm Road, Winter Garden Florida 34787 **address/legal description of the property** with conditions and provisions as are further described in the aforementioned Contract, which Contract is by reference made a part hereof for the purpose of explaining this bond.

General description of the Work: Installation of five new lower floridan wells.

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

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

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

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

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

CONTRACTOR, AS PRINCIPAL:

WITNESS: _____
Firm Name

Signature _____ BY: _____
Signature

Type Name and Title

SURETY: _____ AGENT FOR SURETY:

NAIC Number: _____ BY: _____
Signature

BY: _____ AGENCY ADDRESS: _____

SURETY ADDRESS _____

PHONE NO. _____

Licensed Florida Insurance Agent? Yes _____ No _____

License Number: _____

STATE OF _____)

COUNTY OF _____) SS

CITY OF _____)

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

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

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

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

Notary Public

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

Personally Known _____ or Produced Identification (Type) _____

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

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

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

FINAL RELEASE OF LIEN

KNOW ALL MEN BY THESE PRESENTS, that for and in consideration of the sum of monies, set out in the accompanying Estimate Statement No. _____, final, which quantity, the receipt of which is hereby acknowledged, is accepted as full and complete compensation for all work done, materials furnished and damages or claims arising under Orange County Contract No. Y15-790, entitled:

MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2, MR3, MR5, AND MR-6 DRILLING AND TESTING

By:

Contractor

(SEAL)

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before this _____ day of

_____ 20_____, by _____.

Personally Known _____ OR Produced Identification _____

Type of identification Produced _____

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

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

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

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

ACCOUNTING LINE CHANGE ONLY:

Accounting Line From: _____ Amount: _____

Accounting Line To: _____ Amount: _____

COMMODITY LINE NUMBER ADD:

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

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

Accounting Line: _____ Amount: _____

COMMODITY LINE NUMBER INCREASE / DECREASE / DELETE:

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

Decrease Unit Cost By: _____ Accounting Line: _____

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

CANCELLATION:

_____ Please cancel Purchase Order / Delivery Order

Original sent to vendor: _____ Yes _____ No

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

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

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

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

*Vendor/Contractor Authorization: _____ Date: _____

*Departmental Approval: _____ Date: _____

*Purchasing & Contracts Approval: _____ Date: _____

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

Add the following text to the PO/DO: _____

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

ACCOUNTING LINE CHANGE ONLY:

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

COMMODITY LINE NUMBER ADD:

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

COMMODITY LINE NUMBER INCREASE / DECREASE / DELETE:

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

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

CONSENT OF SURETY AND INCREASE OF PENALTY

BOND NUMBER _____

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

SURETY _____

FLORIDA RESIDENT AGENT FOR SURETY _____

Signature

BY: _____ AGENCY

ADDRESS: _____

SURETY ADDRESS: _____

PHONE _____

Signature

Type Name and Title

Business Address

License Number

Telephone Number (Include Area Code)

STATE OF _____)

COUNTY OF _____) SS

CITY OF _____)

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

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

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

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

Notary Public

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

Personally Known _____ or Produced Identification _____

DRUG-FREE WORKPLACE FORM

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

Name of Business

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

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

Bidder's Signature

Date

PART F

GENERAL CONDITIONS

ARTICLE 1 - THE CONTRACT

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

ARTICLE 2 - DEFINITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 3 -ASSIGNMENT OF CONTRACT

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

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

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

ARTICLE 4 - QUALIFICATIONS OF SUBCONTRACTORS AND SUPPLIERS

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

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

ARTICLE 5 - STARTING THE WORK

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

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

ARTICLE 6 - INTERPRETATION AND INTENT OF THE CONTRACT DOCUMENTS

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

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

ARTICLE 7 - REFERENCE POINTS

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

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

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

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

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

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

ARTICLE 8 – BONDS, INSURANCE AND INDEMNIFICATION

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

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

Insurance Requirements:

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

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

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

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

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

Required Endorsements:

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

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

Required Endorsements:

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

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

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

Required Endorsements:

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

Schedule of Limits:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Indemnification:

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

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

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

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

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

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

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

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

ARTICLE 9 - CONTRACTOR'S RESPONSIBILITIES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

X

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 10 – WORK BY OTHERS AND UTILITY COORDINATION

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

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

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

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

The Contractor will do all cutting, fitting and patching of his Work that may be required to make its several parts come together properly, and fit it to receive or be received by such other work. The Contractor will not endanger any work of others by cutting, excavating or otherwise altering such other work and will only cut or alter such other work with the written consent of the Project Manager.

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

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

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

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

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

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

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

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

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

ARTICLE 11 - PROJECT OWNER STATUS DURING CONSTRUCTION

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

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

Manager, Field Service Division, or designee
Address: 9150 Curry Ford Road, Orlando FL 32825

:

ARTICLE 12 - CHANGES IN THE WORK

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

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

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

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

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

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

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

ARTICLE 13 - CHANGE OF CONTRACT AMOUNT AND CONTRACT TIME

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

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

Proposals or Claims Substantiating Adjustments; Limitations:

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

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

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

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

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

Methods for Determining Adjustments in Contract Amount:

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

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

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

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

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

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

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

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

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

E. Construction Equipment Costs:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 14 - CONDITION OF MATERIALS AND PACKAGING:

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

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

ARTICLE 15 - ASBESTOS FREE MATERIALS:

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

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

ARTICLE 16 – WARRANTY AND GUARANTEE, ACCEPTANCE OF DEFECTIVE WORK

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

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

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

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

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

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

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

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

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

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

If the Contractor does not correct such defective Work or remove and replace such rejected work within a reasonable time, or as specified in a written notice from the Project Manager, the County may have the deficiency corrected or the rejected work removed and replaced. All direct and indirect costs of such correction or removal and replacement shall be paid by the

Contractor. The Contractor will also bear the expense of making good all work of others destroyed or damaged by this correction, removal or replacement of his defective Work.

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

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

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

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

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

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

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

ARTICLE 17 – DELAYS AND EXTENSION OF TIME

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

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

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

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

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

ARTICLE 18 - PAYMENT AND COMPLETION

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

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

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

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

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

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

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

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

Contractor's Narrative Report Outline:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 19 - SUSPENSION OF WORK AND TERMINATION

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 20 - MAINTENANCE AND EXAMINATION OF RECORDS

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

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

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

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

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

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

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

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

Contractor shall require all payees (examples of payees include subcontractors, insurance agents, material suppliers, etc.) to comply with the provisions of this article by

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

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

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

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

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

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

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

To facilitate monitoring for compliance with the Ordinance, the Contractor **must**:

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

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

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

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

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

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

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

ARTICLE 22 - FEDERAL REQUIREMENTS

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

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

ARTICLE 23 – VERBAL ORDERS

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

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

B. To ensure the continuity of critical elements of contract performance.

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

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

Board approval, as applicable, shall be obtained.

ARTICLE 24 – MISCELLANEOUS

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

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

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

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

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

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

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

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

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

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

ARTICLE 25 – CONTRACT CLAIMS

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

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

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

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

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

The decision of the Procurement Division Manager shall be issued in writing and shall be furnished to the Contractor.

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

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

ARTICLE 26 - VALUE ENGINEERING

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 27 – PATENTS AND ROYALTIES

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

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

**EXHIBIT A
LEASED EMPLOYEE AFFIDAVIT**

CONTRACT #Y_____

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

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

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

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

Name of Employee Leasing Company: _____

Workers' Compensation Carrier: _____

A.M. Best Rating of Carrier: _____

Inception Date of Leasing Arrangement: _____

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

Name of Contractor: _____

Signature of Owner/Officer: _____

Title: _____ Date: _____

EXHIBIT B

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY

CG 25 03 03 97

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

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

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Designated Construction Projects:

“Any person or organization on whose behalf you are required to obtain a Designated Construction Project under a written contract or agreement”

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

- A.** For all sums which the insured becomes legally obligated to pay as damages caused by “occurrences” under COVERAGE A (SECTION I), and for all medical expenses caused by accidents under COVERAGE C (SECTION I), which can be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:
1. A separate Designated Construction Project General Aggregate Limit applies to each designated construction project, and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations.
 2. The Designated Construction Project General Aggregate Limit is the most we will pay for the sum of all damages under COVERAGE A, except damages because of “bodily injury” or “property damage” included in the “products-completed operations hazard”, and for medical expenses under COVERAGE C regardless of the number of:
 - a. Insureds;
 - b. Claims made or “suits” brought or
 - c. Persons or organization making claims or bringing “suits”
 3. Any payments made under COVERAGE A for damages or under COVERAGE C for medical expenses shall reduce the Designated Construction Project General Aggregate Limit for that designated construction project. Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Designated Construction Project General Aggregate Limit for any other designated construction project shown in the Schedule above.
- 4.** The limits shown in the Declarations for Each Occurrence, Fire Damage and Medical Expense continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Designated Construction Project General Aggregate Limit.
- B.** For all sums which the insured becomes legally obligated to pay as damages caused by “occurrences” under COVERAGE A (SECTION I), and for all medical expenses caused by accidents under COVERAGE C (SECTION I), which cannot be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:
1. Any payments made under COVERAGE A for damages or under COVERAGE C for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-Completed Operations Aggregate Limit, whichever is applicable; and
 2. Such payments shall not reduce any Designated Construction Project General Aggregate Limit.
- C.** When coverage for liability arising out of the “products- completed operations hazard” is provided, any payments for damages because of “bodily injury” or “property damage” included in

the “products-completed operations hazard” will reduce the Products-Completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Designated Construction Project General Aggregate Limit.

- D.** If the applicable designated construction project has been abandoned, delayed, or abandoned and then restarted, or if the authorized contracting parties deviate from plans, blueprints, designs,

specifications or timetables, the project will still be deemed to be the same construction project.

- E.** The provisions of Limits of Insurance (SECTION **III**) not otherwise modified by this endorsement shall continue to apply as stipulated.

EXHIBIT B

BUILDERS RISK COVERAGE FORM

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this policy the words “you” and “your” refer to the Named Insured shown in the Declarations. The words “we”, “us” and “our” refer to the Company providing this insurance.

Other words and phrases that appear in quotation marks have special meaning. Refer to Section G., Definitions.

A. Coverage

We will pay for direct physical loss of or damage to Covered Property at the premises described in the Declarations caused by or resulting from any Covered Cause Loss.

1. Covered Property

Covered Property as used in this Coverage Part, means the type of property described in this section, **A.1.**, and limited in **A.2.**, Property Not Covered, If a Limit of Insurance is shown in the Declarations for that type of property.

Building Under Construction, meaning the building or structure described in the Declarations while in the course of construction, including:

a. Foundations;

b. The following property:

(1) Fixtures and machinery;

(2) Equipment used to service the building; and

(3) Your building materials and supplies used for construction;

Provided such property is intended to be permanently located in or on the building or structure described in the Declarations or within 100 feet of its premises;

c. If not covered by other insurance, temporary structures built or assembled on site, including cribbing, scaffolding and construction forms.

2. Property Not Covered

Covered Property does not include:

a. Land (including land on which the property is located) or water;

(b) Subject to **(a)** above, the amount we will pay for debris removal expense is limited to 25% of the sum of the deductible plus

b. The following property when outside of buildings:

(1) Lawns, trees, shrubs or plants;

(2) Radio or television antennas (including satellite dishes) and their lead-in wiring, master or towers; or

(3) Signs (other than signs attached to buildings)

3. Covered Causes of Loss

See applicable Causes Of Loss Form as shown in the Declarations.

4. Additional Coverages

a. Debris Removal

(1) Subject to Paragraphs (3) and (4), we will pay your expense to remove debris of Covered Property caused by or resulting from a Covered Cause of Loss that occurs during the policy period. The expenses will be paid only if they are reported to us in writing within 180 days of the date of direct physical loss or damage.

(2) Debris Removal does not apply to costs to:

(a) Extract “pollutants” from land or water; or

(b) Remove, restore or replace polluted land or water.

(3) Subject to the exceptions in paragraph (4), the following provisions apply:

(a) The most we will pay for the total of direct physical loss or damage plus debris removal expense is the Limit of Insurance applicable to the Covered Property that has sustained loss or damage.

the amount that we pay for direct physical loss or damage to the Covered Property that has sustained loss or damage.

(4) We will pay up to an additional \$10,000 for debris removal expense, for each location, in any one occurrence of physical loss or damage to Covered Property if one or both of the following circumstances apply:

(a) The total of the actual debris removal expense plus the amount we pay for direct physical loss or damage exceeds the Limit of Insurance on the Covered Property that has sustained loss or damage.

(b) The actual debris removal expense exceeds 25% of the sum of the deductible plus the amount that we pay for direct physical loss or damage to the Covered Property that has sustained loss or damage.

Therefore if **(4)(a)** and/or **(4)(b)** apply, our total payment for direct physical loss or damage and debris removal expense may reach but will never exceed the Limit of Insurance on the Covered Property that has sustained loss or damage, plus \$10,000.

(5) Examples

The following examples assume that there is no Coinsurance penalty.

Example #1

Limit or Insurance:	\$90,000
Amount of Deductible:	\$ 500
Amount of Loss:	\$50,000
Amount of Loss Payable:	\$49,500
	(\$50,000 - \$500)
Debris Removal Expense:	\$10,000
Debris Removal Expense Payable:	\$10,000
	(\$10,000 is 20% of \$50,000.)

The debris removal expense is less than 25% of the sum of the loss payable plus the deductible. The sum of the loss payable and the debris removal expense (\$49,500 + \$10,000 = \$59,500.) is less than the Limit of Insurance. Therefore, the full amount of debris removal expense is payable in accordance with the terms of Paragraph **(3)**.

Example #2

Limit of Insurance:	\$90,000
Amount of Deductible:	\$ 500
Amount of Loss:	\$80,000
Amount of Los Payable:	\$79,500
	(\$80,000 - \$500)
Debris Removal Expense:	\$30,000
Debris Removal Expense Payable	
Basic Amount:	\$10,500
Additional Amount:	\$10,000

The basic amount payable for debris removal expense under the terms of Paragraph **(3)** is calculated as follows: \$80,000 (\$79,500 + \$500) x .25 = \$20,000; capped at \$10,500. The cap applies because the sum of the loss payable (\$79,500) and the basic amount payable for debris

removal expense (\$10,500) cannot exceed the Limit of Insurance (\$90,000).

The additional amount payable for debris removal expense is provided in accordance with the terms of Paragraph **(4)**, because the debris removal expense (\$30,000) exceeds 25% of the loss payable plus the deductible (\$30,000 is 37.5% of \$80,000), and because the sum of loss payable and debris removal expense (\$79,500 + \$30,00 = \$109,500) would exceed the Limit of Insurance (\$90,000). The additional amount of covered debris removal expense is \$10,000, the maximum payable under Paragraph **(4)**. Thus the total payable for debris removal expense in this example is \$20,500; \$9,500 of the debris removal expense is not covered.

b. Preservation Of Property

If it is necessary to move Covered Property from the described premises to preserve it from loss or damage by a Covered Cause of Loss, we will pay for any direct physical loss or damage to that property:

- (1)** While it is being moved or while temporarily stored at another location; and
- (2)** Only if the loss or damage occurs within 30 days after the property is first moved.

c. Fire Department Service Charge

When the fire department is called to save or protect Covered Property from a Covered Cause of Loss, we will pay up to \$1,000, unless a higher limit is shown in the Declarations, for your liability for fire department service charges:

- (1)** Assumed by contract or agreement prior to loss; or
- (2)** Required by local ordinance.

No Deductible applies to this Additional Coverage.

d. Pollutant Clean-up And Removal

We will pay your expense to extract "pollutants" from land or water at the described premises if the discharge, dispersal, seepage, migration, release or escape of the "pollutants" is caused by or results from a Covered Cause of Loss that occurs during the policy period. The expense will be paid only if they are reported to us in writing within 180 days of the date on which the Covered Cause of Loss occurs.

This Additional Coverage does not apply to costs to test for, monitor or assess the existence, concentration or effects of "pollutants". But we will pay for testing which is performed in the course of extracting the "pollutants" from the land or water.

The most we will pay under this Additional Coverage for each described premises is \$10,000 for the sum of all covered expenses arising out of Covered Causes of

Loss occurring during each separate 12 month period of this policy.

5. Coverage Extensions

a. Building Materials And Supplies Of Others

- (1) You may extend the insurance provided by this Coverage Form to apply to building materials and supplies that are:
 - (a) Owned by others;
 - (b) In your care, custody or control;
 - (c) Located in or on the building described in the Declarations, or within 100 feet of its premises; and
 - (d) Intended to become a permanent part of the building.
- (2) The most we will pay for loss or damage under this Extension is \$5,000 at each described premises, unless a higher Limit of Insurance is specified in the Declarations. Our payment for loss of or damage to property of others will only be for the account of the owner of the property.

b. Sod, Trees, Shrubs And Plants

You may extend the insurance provided by this Coverage Form to apply to loss or damage to sod, trees, shrubs and plants outside of buildings on the described premises, if the loss or damage is caused by or results from any of the following causes of loss:

- (1) Fire;
- (2) Lightning;
- (3) Explosion;
- (4) Riot or Civil Commotion; or
- (5) Aircraft.

The most we will pay for loss or damage under this Extension is \$1,000, but not more than \$250 for any one tree, shrub or plant. These limits apply to any one occurrence, regardless of the types or number of items lost or damaged in that occurrence.

B. Exclusions And Limitations

See applicable Causes Of Loss From as shown in the Declarations.

C. Limits Of Insurance

The most we will pay for loss or damage in any one occurrence is the applicable Limit of Insurance shown in the Declarations.

The most we will pay for the loss or damage to outdoor signs attached to buildings is \$2,500 per sign in any one occurrence.

The limits applicable to the Coverage Extensions and the Fire Department Service Charge and Pollutant Clean-up And Removal Additional Coverage are in addition to the Limit of insurance.

Payments under the Preservation Of Property Additional Coverage will not increase the applicable Limit of insurance.

D. Deductible

In any one occurrence of loss or damage (hereinafter referred to as loss), we will first reduce the amount of

loss if required by Additional Condition – Need For Adequate Insurance. If the adjusted amount of loss is less than or equal to the Deductible, we will not pay for that loss. If the adjusted amount of loss exceeds the Deductible, we will then subtract the Deductible from the adjusted amount of loss, and will pay the resulting amount or the Limit of Insurance, whichever is less.

When the occurrence involves loss to more than one item of Covered Property and separate Limits of Insurance apply, the losses will not be combined in determining application of the Deductible But the Deductible will be applied only once per occurrence.

Example #1

(This example assumes there is no penalty for underinsurance.)

Deductible:	\$ 1,000
Limit of Insurance – Building #1:	\$ 60,000
Limit of Insurance – Building #2:	\$ 80,000
Loss to Building #1:	\$ 60,100
Loss to Building #2:	\$ 90,000

The amount of loss to Building #1 (\$60,100) is less than the sum (\$61,000) of the Limit of Insurance applicable to Building #1 plus the Deductible.

The Deductible will be subtracted from the amount of loss in calculating the loss payable for Building #1:

\$60,100
<u>- 1,000</u>
\$59,100 Loss Payable – Building #1

The Deductible applies once per occurrence and therefore is not subtracted in determining the amount of loss payable for Building #2. Loss payable for Building #2 is the Limit of Insurance of \$80,000.

Total amount of loss payable: \$59,100 + \$80,000 = \$139,100.

Example #2

(This example, too, assumes there is no penalty for underinsurance.)

The Deductible and Limits of Insurance are the same as those in Example #1

Loss to Building #1:	\$ 70,000
(Exceeds Limit of Insurance plus Deductible)	
Loss to Building # 2	\$ 90,000
(Exceeds Limit of Insurance plus Deductible)	
Loss Payable - Building #1:	\$ 60,000
(Limit of Insurance)	
Loss Payable – Building #2	\$ 80,000
(Limit of Insurance)	
Total amount of loss payable:	\$140,000

E. Loss Conditions

The following conditions apply in addition to the Common Policy Conditions and the Commercial Property Conditions.

1. Abandonment

There can be no abandonment of any property to us.

2. Appraisal

If we and you disagree on the value of the property or the amount of loss, either may make written demand for an appraisal of the loss. In this event, each party will select a competent and impartial appraiser. The two appraisers will select and umpire. If they cannot agree, either may request that selection be made by a judge of a court having jurisdiction. The appraiser will state separately the value of the property and amount of loss. If they fail to agree, they will submit their differences to the umpire. A decision agreed to by any two will be binding. Each party will:

- a. Pay its chosen appraiser; and
- b. Bear the other expenses of the appraisal and umpire equally.

If there is an appraisal, we will still retain our right to deny claim.

3. Duties In The Event Of Loss Or Damage

a. You must see that the following are done in the event of loss or damage to Covered Property:

- (1) Notify the police if a law may have been broken.
- (2) Give us prompt notice of the loss or damage. Include a description of the property involved.
- (3) As soon as possible, give us a description of how, when and where the loss or damage occurred.
- (4) Take all reasonable steps to protect the Covered Property from further damage, and keep a record of your expenses necessary to protect the Covered Property, for consideration in the settlement of the claim. This will not increase the Limit of Insurance. However, we will not pay for any subsequent loss or damage resulting from cause of loss that is not a Covered Cause of Loss. Also if feasible, set the damaged property aside and in the best possible order for examination.
- (5) At our request, give us complete inventories of the damaged and undamaged property. Include quantities, costs, values and amount of loss claimed.
- (6) As often as may be reasonably required, permit us to inspect the property proving the loss or damage and examine your books and records. Also permit us to take samples of damaged and undamaged property for inspection, testing and analysis, and permit us to make copies from your books and records
- (7) Send us a signed, sworn proof of loss containing the information we request to investigate the claim. You must do this within 60 days after our request. We will supply you with the necessary forms.
- (8) Cooperate with us in the investigation or settlement of the claim.

b. we may examine any insured under oath while not in the presence of any other insured and at such times as may be reasonably required, about any

matter relating to this insurance or the claim, including an insured's books and records. In the event of an examination, an insured's answer must be signed.

4. Loss Payment

a. In the event of loss or damage covered by this Coverage Form, at our option, we will either:

- (1) Pay the value of lost or damaged property;
- (2) pay the cost of repairing or replacing the lost or damaged property, subject to b. below;
- (3) Take all or any part of property at an agreed or appraised value; or
- (4) Repair, rebuild or replace the property with other property of like kind and quality, subject to b. below.

We will determine the value of lost or damaged property, or the cost of its repair or replacement, in accordance with the applicable terms of the Valuation Condition in this Coverage Form or any applicable provision which amends or supersedes the Valuation Condition.

b. The cost to repair, rebuild or replace does not include the increased cost attributable to enforcement of any ordinance or law regulating the construction, use or repair of any property.

c. We will give notice of our intentions within 30 days after we receive the sworn proof of loss.

d. We will not pay you more than your financial interest in the Covered Property.

e. We may adjust losses with the owners of lost or damaged property if other than you. If we pay the owners, such payments will satisfy your claims against us for the owners' property. We will not pay the owners more than their financial interest in the Covered Property.

f. We may elect to defend you against suits arising from claims of owners of property. We will do this at our expense.

g. We will pay for covered loss or damage within 30 days after we receive the sworn proof of loss, if you have complied with all of the terms of this Coverage Part and:

- (1) We have reached agreement with you on the amount of loss; or
- (2) An appraisal award has been made.

h. A party wall is a wall that separates and is common to adjoining buildings that are owned by different parties. In settling covered losses involving a party wall, we will pay a portion of the loss to the party wall based on your interest in the wall in proportion to the interest of the owner of the adjoining building. However, if you elect to repair or replace your building and the owner of the adjoining building elects not to repair or replace the building, we will pay you the full value of the loss to the party wall, subject to all applicable policy

provisions including Limits of Insurance, the Valuation and Coinsurance Conditions and all other provisions of this Loss Payment Condition. Our payment under the provision of this paragraph does not alter any right of subrogation we may have against any entity, including the owner or insurer of the adjoining building, and does not alter the terms of the Transfer Of Rights Of Recovery Against Others To Us Condition in this policy.

5. Recovery Property

If either you or we recover any property after loss settlement, that party must give the other prompt notice. At your option, the property will be returned to you. You must then return to us the amount we paid to you for the property. We will pay recovery expenses and the expenses to repair the recovered property, subject to the Limit of Insurance.

6. Valuation

We will determine the value of Covered Property at actual cash value as of the time of loss or damage.

F. Additional Conditions

The following conditions apply in addition to the Common Policy Conditions and the Commercial Property Conditions.

1. Mortgageholders

- a. The term mortgageholder includes trustee.
- b. We will pay for covered loss of or damage to buildings or structures to each mortgageholder shown in the Declarations in their order of precedence, as interests may appear.
- c. The mortgageholder has the right to receive loss payment even if the mortgageholder has started foreclosure or similar action on the building or structure.
- d. If we deny your claim because of your acts or because you have failed to comply with the terms of this Coverage Part, the mortgageholder will still have the right to receive loss payment if the mortgageholder:
 - (1) Pays any premium due under this Coverage Part at our request if you have failed to do so;
 - (2) Submits a signed, sworn proof of loss within 60 days after receiving notice from us of your failure to do so; and
 - (3) Has notified us of any change in ownership, occupancy or substantial change in risk known to the mortgageholder.

All of the terms of this Coverage Part will then apply directly to the mortgageholder.

- e. If we pay the mortgageholder for any loss or damage and deny payment to you because of your acts or because you have failed to comply with the terms of this Coverage Part:
 - (1) The mortgageholder's rights under the mortgage will be transferred to us to the extent of the amount we pay; and

- (2) The mortgageholder's right to recover the full amount of the mortgageholder's claim will not be impaired.

At our option, we may pay to the mortgageholder the whole principal on the mortgage plus any accrued interest. In this event, your mortgage and note will be transferred to us and you will pay your remaining mortgage debt to us.

- f. If we cancel this policy, we will give written notice to the mortgageholder at least:
 - (1) 10 days before the effective date of cancellation if we cancel for your nonpayment of premium; or
 - (2) 30 days before the effective date of cancellation if we cancel for any other reason.
- g. If we elect not to renew this policy, we will give written notice to the mortgageholder at least 10 days before the expiration date of this policy.

2. Need for Adequate Insurance

We will not pay a greater share of any loss than the portion that the Limit of Insurance bears to the value on the date of completion of the building described in the Declarations.

EXAMPLE #1 (UNDERINSURANCE)

When: The value of the building on the date of completion is: \$200,000
The Limit of Insurance for it is: \$100,000
The Deductible is: \$ 500 The amount of loss is: \$ 80,000

Step (1): $\$100,000 \div \$200,000 = .50$

Step (2): $\$80,000 \times .50 = \$40,000$

Step (3): $\$40,000 - \$500 = \$39,500$.

We will pay no more than \$39,500. The remaining \$40,500 is not covered.

EXAMPLE #2 (ADEQUATE INSURANCE)

When: The value of the building on the date of completion is: \$200,000
The Limit of Insurance for it is: \$200,000
The Deductible is: \$ 1,000
The amount of loss is: \$ 80,000

The limit of Insurance in the example is adequate and therefore no penalty applies. We will pay no more than \$79,000 (\$80,000 amount of loss minus the deductible of \$1,000).

3. Restriction Of Additional Coverage – Collapse

If the Causes Of Loss – Broad Form is applicable to this Coverage Form, Paragraph C.2.f. of the Additional Coverage – Collapse does not apply to this Coverage Form.

If the Cause Of Loss – Special Form is applicable to this Coverage Form, Paragraphs D.2.c. and D.2.d of the Additional Coverage Collapse do not apply to this Coverage Form.

4. When Coverage Ceases

The insurance provided by this Coverage Form will end when one of the following first occurs:

- a. This policy expires or is cancelled.
- b. The property is accepted by the purchaser;
- c. Your interest in the property ceases;
- d. You abandon the construction with no intention to complete it;
- e. Unless we specify otherwise in writing.
 - (1) 90 days after construction is complete or;
 - (2) 60 days after any building described in the Declarations is:
 - (a) Occupied in whole or in part; or
 - (b) Put to its intended use.

G. Definitions

“Pollutants” means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.

CAUSES OF LOSS – SPECIAL FORM

Words and phrases that appear in quotation marks have special meaning. Refer to Section G., Definitions.

A. Covered Causes Of Loss

When Special is shown in the Declarations, Covered Causes of Loss means Risk of Direct Physical Loss unless the loss is:

1. Excluded in Section B., Exclusions; or
2. Limited in Section C., limitations; that follow.

B. Exclusions

1. We will not pay for loss or damage caused directly or indirectly by any of the following. Such loss or damage is excluded regardless of any other cause or event that contributes concurrently or in any sequence to the loss.

a. Ordinance or Law

The enforcement of any ordinance or law:

- (1) Regulating the construction, use or repair of any property; or
- (2) Requiring the tearing down of any property, including the cost of removing its debris.

This exclusion, Ordinance Or Law applies whether the loss results from:

- (a) An ordinance or law that is enforced even if the property has not been damaged; or
- (b) The increased costs incurred to comply with an ordinance or law in the course of construction, repair, renovation, remodeling or demolition of property, or removal of its debris, following a physical loss to that property.

b. Earth movement

- (1) Earthquake, including any earth sinking, rising or shifting related to such event;
- (2) Landslide including any earth sinking, rising or shifting related to such event.
- (3) Mine subsidence, meaning subsidence of a man-made mine, whether or not mining activity has ceased;
- (4) Earth sinking (other than sinkhole collapse), rising or shifting including soil conditions which cause settling, cracking or other disarrangement of foundations or other parts

or realty. Soil conditions include contraction, expansion, freezing, thawing, erosion, improperly compacted soil and the action of water under the ground surface.

But if Earth Movement, as described in b.(1) through (4) above, results in fire or explosion, we will pay for the loss or damage caused by that fire or explosion.

- (5) Volcanic eruption, explosion or effusion. But if volcanic eruption, explosion or effusion results in fire, building glass breakage or Volcanic Action, we will pay for the loss or damage caused by that fire, building glass breakage or Volcanic Action.

Volcanic Action means direct loss or damage resulting from the eruption of a volcano when the loss or damage is caused by:

- (a) Airborne volcanic blast or airborne shock waves;
- (b) Ash, dust or particulate matter; or
- (c) Lava flow.

All volcanic eruptions that occur within any 168-hour period will constitute a single occurrence.

Volcanic Action does not include the cost to remove ash, dust or particulate matter that does not cause direct physical loss or damage to the described property.

c. Governmental Action

Seizure or destruction of property by order of governmental authority.

But we will pay for loss or damage caused by or resulting from acts of destruction ordered by governmental authority and taken at the time of a fire to prevent its spread, if the fire would be covered under this Coverage Part.

d. Nuclear Hazard

Nuclear reaction or radiation, or radioactive contamination, however caused.

But if nuclear reaction or radiation, or radioactive contamination, results in fire, we

will pay for the loss or damage caused by that fire.

e. Utility Services

The failure of power, communication, water or other utility service supplied to the described premises, however caused, if the failure:

- (1) Originates away from the described premises; or
- (2) Originates at the described premises but only if such failure involves equipment used to supply the utility service to the described premises from a source away from the described premises.

Failure of any utility service includes lack of sufficient capacity and reduction in supply. Loss or damage caused by a surge of power is also excluded, if the surge would not have occurred but for an event causing failure of power.

But if the failure or surge of power, or the failure of communication, water or other utility service, results in Covered Cause of loss, we will pay for the loss or damage caused by that Covered Cause of Loss.

Communication services include but are not limited to service relating to Internet access or access to any electronic, cellular or satellite network.

f. War And Military Action

- (1) War, including undeclared or civil war;
- (2) Warlike action by military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

g. Water

- (1) Flood, surface water, waves, tides, tidal waves, overflow of any body of water or their spray, all whether driven by wind or not;
- (2) Mudslide or mudflow;
- (3) Water that backs up or overflows from a sewer, drain or sump; or
- (4) Water under the ground surface pressing on, or flowing or seeping through:

- (a) Foundations, walls, floors or paved surfaces;

- (b) Basements, whether paved or not; or

- (c) Doors, windows or other openings.

But if Water, as described in **g.(1)**. Through **g.(4)**. above, results in fire, explosion or sprinkler leakage, we will pay for the loss or damage caused by that fire explosion or sprinkler leakage.

h. "Fungus", Wet Rot, Dry Rot And Bacteria

Presence, growth, proliferation, spread or any activity of "fungus", wet or dry rot or bacteria.

But if "fungus", wet or dry rot or bacteria results in a "specified cause of loss", we will pay for the loss or damage caused by that "specified cause of loss".

This exclusion does not apply:

- 1. When "fungus", wet or dry rot or bacteria results from fire or lightning; or
- 2. To the extent that coverage is provided in the Additional Coverage – Limited Coverage For "Fungus", Wet Rot, Dry Rot And Bacteria with respect to loss or damage by a cause of loss other than fire or lightning.

Exclusions **B.1.a.** through **B.1h.** apply whether or not the loss event results in widespread damage or affects a substantial area.

2. We will not pay for loss or damage caused by or resulting from any of the following:

- a. Artificially generated electrical, magnetic or electromagnetic energy that damages, disturbs, disrupts or otherwise interferes with any:

- (1) Electrical or electronic wire, device, appliance, system or network; or
- (2) Device, appliance, system or network utilizing cellular or satellite technology.

For the purpose of this exclusion, electrical, magnetic or electromagnetic energy includes but is not limited to:

- (a) Electrical current, including arcing;
- (b) Electrical charge produced or conducted by a magnetic or electromagnetic field;
- (c) Pulse of electromagnetic energy; or
- (d) Electromagnetic waves or microwaves.

But if fire results, we will pay for the loss or damage caused by the fire.

b. Delay, loss of use or loss of market.

c. Smoke, vapor or gas from agricultural smudging or industrial operations

- d. (1) Wear and tear;**
- (2) Rust or other corrosion, decay, deterioration, hidden or latent defect or any quality in property that causes it to damage or destroy itself;**
- (3) Smog;**
- (4) Setting, cracking, shrinking or expansion;**
- (5) Nesting or infestation, or discharge or release of waste products or secretions, by insects, birds, rodents or other animals.**
- (6) Mechanical breakdown, including rupture or bursting caused by centrifugal force. But if mechanical breakdown results in elevator collision, we will pay for the loss or damage caused by the elevator collision.**
- (7) The following causes of loss to personal property:**
 - (a) Dampness or dryness of atmosphere;**
 - (b) Changes in or extremes of temperature; or**
 - (c) Marring or scratching.**

But if an excluded cause of loss that is listed in **2.d.(1).** through **(7)** results in a “specified cause of loss” or building glass breakage, we will pay for the loss or damage caused by that “specified cause of loss” or building glass breakage.

- e. Explosion of steam boilers, steam pipes, steam engines or steam turbines owned or leased by you, or operated under your control. But if explosion of steam boilers, steam pipes, steam engines or steam turbines result in fire or combustion explosion, we will pay for the loss or damage caused by that fire or combustion explosion. We will also pay for loss or damage caused by or resulting from explosion of gases or fuel within the furnace of any fired vessel or within the flues or passages through which the gases of combustion pass.**
- f. Continuous or repeated seepage or leakage of water, or the presence or condensation of humidity, moisture or vapor, that occurs over period of 14 days or more.**
- g. Water, other liquids, powder or molten material that leaks or flows from plumbing, heating, air conditioning or other equipment (except fire protective systems) caused by or resulting from freezing, unless:**
 - (1) You do your best to maintain heat in the building or structure; or**
 - (2) You drain the equipment and shut off the supply if the heat is not maintained.**

- h. Dishonest or criminal act by you, any of your partners, members, officers, managers, employees (including leased employees), directors, trustees, authorized representatives or anyone to whom you entrust the property for any purpose.**

- (1) Acting alone or in collusion with others; or**
- (2) You drain the equipment and shut off the supply if the heat is not maintained.**

This exclusion does not apply to acts of destruction by your employees (including leased employees); but theft by employees (including leased employees) is not covered.

- i. Voluntary parting with any property by you or anyone else to whom you have entrusted the property if induced to do so by any fraudulent scheme, trick, device or false pretense.**
- j. rain, snow, ice or sleet to personal property in the open.**
- k. Collapse, including any of the following conditions of property or any part of the property:**
 - (1) An abrupt falling down or caving in;**
 - (2) Loss of structural integrity, including separation of parts of the property or property in danger of falling down or caving in; or**
 - (3) Any cracking, bulging, sagging, bending, leaning, setting, shrinkage or expansion as such condition relates to (1) or (2) above.**

But if collapse results in a Covered Cause of Loss at the described premises, we will pay for the loss or damage caused by that Covered Cause of Loss.

The exclusion, **k.**, does not apply:

 - (a) To the extent that coverage is provided under the Additional Coverage – Collapse; or**
 - (b) To collapse caused by one or more of the following:**
 - (i) The “specified cause of loss”;**
 - (ii) Breakage of building glass;**
 - (iii) Weight of rain that collects on a roof; or**
 - (iv) Weight of people or personal property.**
- l. Discharge, dispersal, seepage, migration, release or escape of “pollutants” unless the discharge, dispersal, seepage, migration, release or escape is itself caused by any of the “specified causes of loss”. But if the discharge, dispersal, seepage, migration, release or escape of “pollutants” results in “specified cause of loss”, we will pay**

for the loss or damage caused by that “specified cause of loss”.

The exclusion, **L.**, does not apply to damage to glass caused by chemicals applied to glass.

m. Neglect of an insured to use all reasonable means to save and preserve property from further damage at and after the time loss.

3. We will not pay for loss or damage caused by or resulting from any of the following, **3.a.** through **3.c.** But if an excluded cause of loss that is listed in **3.a.** through **3.c.** results in a Covered Cause of Loss, we will pay for the loss or damage caused by that Covered Cause of Loss.

a. Weather conditions. But this exclusion only applies if weather conditions contribute in any way with a cause or event excluded in Paragraph **1.** above to produce the loss or damage.

b. Acts or decisions, including the failure to act or decide, of any person, group, organization or governmental body.

c. Faulty, inadequate or defective:

(1) Planning, zoning, development, surveying, siting;

(2) Design, specifications, workmanship, repair, construction, renovation, remodeling, grading, compaction;

(3) Materials used in repair, construction renovation or remodeling; or

(4) Maintenance;
of part or all of any property on or off the described premises.

4. Special Exclusions

The following provisions apply only to the specified Coverage Forms.

a. Business Income (And Extra Expense) Coverage Form, Business Income (Without Extra Expense) Coverage Form, Or Extra Expense Coverage Form

We will not pay for:

(1) Any loss caused by or resulting from:

(a) Damage or destruction of “finished stock”;
or

(b) The time required to reproduce “finished stock”.

This exclusion does not apply to Extra Expense.

(2) Any loss caused by or resulting from direct physical loss or damage to radio or television antennas (including satellite dishes) and their lead in-wiring, masts or towers.

(3) Any increase of loss caused by or resulting from:

(a) Delay in rebuilding, repairing or replacing the property or resuming “operations”, due to interference at the location of the rebuilding, repair or replacement by strikers or other persons; or

(b) Suspension, lapse or cancellation of any license, lease or contract. But if the suspension, lapse or cancellation is directly caused by the “suspension” of “operations”, we will cover such loss that affects your Business Income during the “period of restoration” and any extension of the “period of restoration” in accordance with the terms of the Extended business Income Additional Coverage and the Extended Periods Of Indemnity Optional Coverage or any variation of these.

(4) Any Extra Expense caused by or resulting from suspension, lapse or cancellation of any license, lease or contract beyond the “period of restoration”.

(5) Any other consequential loss.

b. Leasehold interest Coverage Form

(1) Paragraph **B.1.a.**, Ordinance Or Law, does not apply to insurance under this Coverage Form.

(2) We will not pay for any loss caused by:

(a) Your cancelling the lease;

(b) The suspension lapse or cancellation of any license; or

(c) Any other consequential loss.

c. Legal liability Coverage Form

(1) The following exclusions do not apply to insurance under this Coverage Form:

(a) Paragraph **B.1.a.**, Ordinance Or Law;

(b) Paragraph **B.1.c.**, Governmental Action

(c) Paragraph **B.1.d.**, Nuclear Hazard;

(d) Paragraph **B.1.e.**, Utility Services; and

(e) Paragraph **B.1.f.**, War And Military Action

(2) The following additional exclusions apply to insurance under this Coverage Form:

(a) **Contractual Liability**

We will not defend any claim or “suit”, or pay damages that you are legally liable to pay solely by reason of your assumption of liability in a contract or

agreement. But this exclusion does not apply to a written lease agreement in which you have assumed liability for building damage resulting from an actual or attempted burglary or robbery, provided that:

- (i) Your assumption of liability was executed prior to accident; and
- (ii) The building is Covered Property under this Coverage Form.

(b) Nuclear Hazard

We will not defend any claim or “suit”, or pay any damages, loss, expense or obligation, resulting from nuclear reaction or radiation, or radioactive contamination, however caused.

5. Additional Exclusion

The following provisions apply only to the specified property.

LOSS OR DAMAGE TO PRODUCTS

We will not pay for loss or damage to any merchandise, goods or other product caused by or resulting from error or omission by any person or entity (including those having possession under an arrangement where work or a portion of the work is outsourced) in any stage of the development, production or use of the product, including planning, testing, processing, packaging, installation, maintenance or repair. This exclusion applies to any effect that compromises the form, substance or quality of the product. But if such error or omission results in a Covered Cause loss, we will pay for the loss or damage caused by that Covered Cause of Loss.

C. Limitations

The following limitations apply to all policy forms and endorsements, unless otherwise stated.

- 1. We will not pay for loss of or damage to property, as described and limited in the section. In addition, we will not pay for any loss that is a consequence of loss or damage as described and limited in this section.
 - a. Steam boilers, steam pipes steam engines or steam turbines caused by or resulting from any condition or event inside such equipment. But we will pay for loss of or damage to such equipment caused by or resulting from an explosion of gases or fuel within the furnace of any fired vessel or

within the flues or passages through which the gases of combustion pass.

- b. Hot water boilers or other water heating equipment caused by ore resulting from any condition or event inside such boilers or equipment, other than an explosion.
- c. The interior of any building or structure or to personal property in the building or structure, caused by or resulting from rain, snow, sleet, ice, sand or dust, whether driven by wind or not, unless:
 - (1) The building or structure first sustains damage by a Covered Cause of Loss to its roof or walls through which the rain, snow, sleet, ice, sand or dust enters; or
 - (2) The loss or damage is caused by or results from thawing of snow, sleet or ice on the building or structure.

- d. Building materials and supplies not attached as part of the building or structure caused by or resulting from theft.

However, this limitation does not apply to:

- (1) Building materials and supplies held for sale by you, unless they are insured under the Builders Risk Coverage Form; or
- (2) Business Income Coverage or Extra Expense Coverage.

- e. Property that is missing, where the only evidence of the loss or damage is a shortage disclosed on taking inventory, or other instances where there is no physical evidence to show what happened to the property.

- f. Property that has been transferred to a person or to a place outside the described premises on the basis of unauthorized instructions.

- 2. We will not pay for loss of or damage to the following types of property unless caused by the “specified causes of loss” or building glass breakage:
 - a. Animals, and then only if they are killed or their destruction is made necessary.
 - b. Fragile articles such as statuary, marbles, chinaware and porcelains, if broken. This restriction does not apply to:
 - (1) Glass; or
 - (2) Containers of property held for sale.

c. Builders' machinery, tools and equipment owned by you or entrusted to you, provided such property is Covered Property.

- (1) If the property is located on or within 100 feet of the described premises, unless the premises is insured under the Builders Risk Coverage Form; or
- (2) To Business Income Coverage or to Extra Expense Coverage.

3. The special limit shown for each category, a. through d., is the total limit for loss of or damage to all property in that category. The special limit applies to any one occurrence of theft, regardless of the types or number of articles that are lost or damaged in that occurrence. The special limits are:

- a. \$2,500 for furs, fur garments and garments trimmed with fur.
- b. \$2,500 for jewelry, watches, watch movements, jewels, pearls, precious and semiprecious stones, bullion, gold, silver, platinum, and other precious alloys or metals. This limit does not apply to jewelry and watches worth \$100 or less per item.
- c. \$2,500 for patterns, dies, molds and forms.
- d. \$250 for stamps, tickets, including lottery tickets held for sale, and letters for credit.

These special limits are part of, not in addition to, the Limit of Insurance applicable to the Covered Property.

This limitation, C.3., does not apply to Business Income Coverage or Extra Expense Coverage.

4. We will not pay the cost to repair any defect to a system or appliance from which water, other liquid, powder or molten material escapes. But we will pay the cost to repair or replace damaged parts of fire-extinguishing equipment if the damage:

- a. Results in discharge of any substance from an automatic fire protection system; or
- b. Is directly caused by freezing.

However, this limitation does not apply to Business Income Coverage or to Extra Expense Coverage.

D. Additional Coverage – Collapse

The coverage provided under this Additional Coverage – Collapse applies only to an abrupt collapse as described and limited in D.1., through D.7.,

1. For the purpose of this Additional Coverage – Collapse, abrupt collapse means an abrupt falling down or caving in of a building or any part of a building with the result that building or part of

the building cannot be occupied for its intended purpose.

2. We will pay for direct physical loss or damage to Covered Property, caused by abrupt collapse of building or any part of a building that is insured under this Coverage Form or that contains Covered Property insured under this Coverage Form, if such collapse is caused by one or more of the following.

- a. Building decay that is hidden from view unless the presence of such decay is known to an insured prior to collapse;
- b. Insect or vermin damage that is hidden from view, unless the presence of such damage is known to an insured prior to collapse;
- c. Use of defective material or methods in construction, remodeling or renovation if the abrupt collapse occurs during the course of the construction, remodeling or renovation.
- d. Use of defective material or methods in construction, remodeling or renovation if the abrupt collapse occurs after the construction, remodeling or renovation is complete but only if the collapse is caused in part by:
 - (1) A cause of loss listed in 2.a. or 2.b.;
 - (2) One or more of the “specified causes of loss”;
 - (3) Breakage of building glass;
 - (4) Weight of people or personal property; or
 - (5) Weight of rain that collects on a roof.

3. This **Additional Coverage – Collapse** does **not** apply to:

- a. A building or any part of a building that is in danger of falling down or caving in;
- b. A part of a building that is standing, even if it has a separated from another part of the building; or
- c. A building that is standing or any part of a building that is standing even if it shows evidence of cracking, bulging, sagging, bending, leaning, setting, shrinkage or expansion.

4. With respect to the following property:

- a. Outdoor radio or television antennas (including satellite dishes) and their lead-in wiring, masts or towers;
- b. Awnings, gutters and downspouts;
- c. Yard fixtures;
- d. Outdoor swimming pools;
- e. Fences;

- f. Piers, wharves and docks;
 - g. Beach or diving platforms or appurtenances;
 - h. Retaining walls; and
 - i. Walks, roadways and other paved surfaces;
- if an abrupt collapse is caused by cause of loss listed in **2.a.** through **2.d.**, we will pay for loss or damage to that property only if:

- (1) Such loss or damage is a direct result of the abrupt collapse of a building insured under this Coverage Form.
- (2) The property is Covered Property under this Coverage Form.

- 5.** If personal property abruptly falls down or caves in and such collapse is **not** the result of abrupt collapse of a building, we will pay for loss or damage to Covered property caused by such collapse of personal property only if:
- a. The collapse of personal property was caused by a cause of loss listed in **2.a.** through **2.d.**;
 - b. The personal property which collapses is inside a building; and
 - c. The property which collapses is not of a kind listed in **4.**, regardless of whether that kind of property is considered to be personal property or real property.

The coverage stated in the Paragraph **5.** does not apply to personal property if marring and/or scratching is the only damage to that personal property caused by the collapse.

- 6.** This Additional Coverage – Collapse does not apply to a personal property that has not abruptly fallen down or caved in, even if the personal property shows evidence of cracking, bulging, sagging, bending, leaning, settling, shrinkage or expansion.
- 7.** This Additional Coverage – Collapse will not increase the Limits of Insurance provided in this Coverage Part.
- 8.** The term Covered Cause of Loss includes the Additional Coverage – Collapse as described and limited in **D.1.** through **D.7.**

E. Additional Coverage – Limited Coverage For “Fungus”, Wet Rot, Dry Rot And Bacteria

- 1.** The coverage described in **E.2.** and **E.6.** only applies when the “fungus”, wet or dry rot or bacteria is the result of one or more of the following causes that occurs during the policy period and only if all reasonable means were used to save and preserve the property from further damage at the time of and after that occurrence.

- a. A “specified cause of loss” other than fire or lightning; or
 - b. Flood, if Flood Coverage Endorsement applies to the affected premises.
- 2.** We will pay for loss or damage by “fungus” wet or dry rot or bacteria. As used in this Limited Coverage, the term loss or damage means:
- a. Direct physical loss or damage to Covered Property caused by “fungus”, wet or dry rot or bacteria including the cost of removal of the “fungus”, wet or dry rot or bacteria;
 - b. The cost to tear out and replace any part of the building or other property as needed to gain access to the “fungus”, wet or dry rot or bacteria; and
 - c. The cost of testing performed after removal, repair, replacement or restoration of the damaged property is completed, provided there is a reason to believe that “fungus”, wet or dry rot or bacteria are present.
- 3.** The coverage described under **E.2.** of this Limited Coverage is limited to \$15,000. Regardless of the number of claims, this limit is the most we will pay for the total of all loss or damage arising out of all occurrences of “specified cause of loss” (other than fire or lightning) and Flood which take place in a 12 month period (starting with the beginning of the present annual policy period). With respect to a particular occurrence of loss which results in “fungus”, wet or dry rot or bacteria, we will not pay more than a total of \$15,000 even if the “fungus”, wet or dry rot or bacteria continues to be present or active, or recurs, in a later policy period.
- 4.** The coverage provided under this Limited Coverage does not increase the applicable Limit of Insurance on any Covered Property. If a particular occurrence results in loss or damage by “fungus”, wet or dry rot or bacteria, and other loss or damage, we will not pay more, for the total of all loss or damage, than the applicable Limit of Insurance on the affected Covered Property.
- If there is covered loss or damage to Covered Property, not caused by “fungus”, wet or dry rot or bacteria, loss payment will not be limited by the terms of this Limited Coverage, except to the extent that “fungus”, wet or dry rot or bacteria causes an increase in the loss. Any such increase

in the loss will be subject to the terms of this Limited Coverage.

5. The terms of this Limited Coverage do not increase or reduce the coverage provided under Paragraph F.2. (Water Damage, Other Liquids, Powder Or Molten Material Damage) of this Causes Of Loss Form or under the Additional Coverage – Collapse.

6. The following, 6.a or 6.b., applies only if Business Income and/or Extra Expense Coverage applies to the described premises and only if the “suspension” of “operations” satisfies all terms and conditions of the applicable Business Income and/or Extra Expense Coverage Form.

a. If the loss which resulted in “fungus”, wet rot or dry rot or bacteria does not in itself necessitate a “suspension” of “operations”, but such “suspension” is necessary due to loss or damage to property caused by “fungus” wet or dry rot or bacteria, then our payment under Business Income and/or Extra Expense is limited to the amount of loss and/or expense sustained in a period of not more than 30 days. The days need not be consecutive.

b. If a covered “suspension” of “operations” was caused by loss or damage other than “fungus”, wet or dry rot or bacteria but remediation of “fungus”, wet or dry rot or bacteria but remediation of “fungus”, wet or dry rot or bacteria prolongs the “period of restoration”, we will pay for loss and/or expense sustained during the delay (regardless of when such delay occurs during the “period of restoration”), but such coverage is limited to 30 days. The days need not be consecutive.

F. Additional Coverage Extensions

1. Property In Transit

This Extension applies only to your personal property to which this form applies.

a. You may extend the insurance provided by this Coverage Part to apply to your personal property (other than property in the care, custody or control of your salespersons) in transit more than 100 feet from the described premises. Property must be in or on a motor vehicle you own, lease or operate while between points in the coverage territory.

b. Loss or damage must be caused by or result from one of the following causes of loss:

(1) Fire, lightning, explosion, windstorm or hail riot or civil commotion, or vandalism.

(2) Vehicle collision, upset or overturn. Collision means accidental contact of your vehicle with another vehicle or object. It does not mean your vehicle’s contact with the roadbed.

(3) Theft of an entire bale, case or package by forced entry into a securely locked body or compartment of the vehicle. There must be visible marks of the forced entry.

c. The most we will pay for loss or damage under this Extension is \$5,000.

This Coverage Extension is additional insurance. The Additional Condition, Coinsurance, does not apply to this Extension.

2. Water Damage, Other Liquids, Powder Or Molten Material Damage

If loss or damage caused by or resulting from covered water or other liquid, powder or molten material damage loss occurs, we will also pay the cost to tear out and replace any part of the building or structure to repair damage to the system or appliance from which the water or other substance escapes. This Coverage Extension does not increase the Limit of Insurance.

3. Glass

a. We will pay for expenses incurred to put up temporary plates or board up openings if repair or replacement of damaged glass is delayed.

b. We will pay for expenses incurred to remove or replace obstructions when repairing or replacing glass that is part of a building. This does not include removing or replacing window displays.

The Coverage Extension, F.3., does not increase the Limit of Insurance.

G. Definitions

1. “Fungus” means type or form of fungus, including mold or mildew, and any mycotoxins, spores, scents or by-products produced or released by fungi.

2. “Specified cause of loss” means the following: fire; lightning; explosion; windstorm or hail; smoke; aircraft or vehicles; riot or civil commotion; vandalism; leakage from fire-extinguishing equipment; sinkhole collapse; volcanic action; falling objects; weight of snow, ice or sleet; water damage.

a. Sinkhole collapse means sudden sinking or collapse of land into underground empty spaces

created by the action of water on limestone or dolomite. This cause of loss does not include:

- (1) The cost of filling sinkholes; or
- (2) Sinking or collapse of land into manmade underground cavities.

b. Falling objects does not include loss or damage to:

- (1) Personal property in the open; or
- (2) The interior of a building or structure, or property inside a building or structure, unless the roof or an outside wall of the

building or structure is first damaged by a falling object.

c. Water damage means accidental discharge or leakage of water or steam as the direct result of the breaking apart or cracking of a plumbing, heating, air conditioning or other system or appliance (other than a sump system including its related equipment and system including its related equipment and parts), that is located on the described premises and contains water or steam.

EXHIBIT E

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 20 37 04 13

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS
SCHEDULED PERSON – COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) and Description Of Completed Operations
Orange County Board of County Commissioners Procurement Division 400 E. South Street Orlando, FL 32801	
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule but only with respect to liability for “bodily injury”, or “property damage” caused, in whole or in part by “your work” at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the “products-completed operations hazard”.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by laws; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required

by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to Section III-Limits of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable Limits of Insurance shown in the Declarations; Whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

EXHIBIT F

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 20 10 04 13

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS-
SCHEDULE PERSON OR ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) Of Covered Operations
Orange County Board of County Commissioners Procurement Division 400 E. South Street Orlando, FL 32801	
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	
<p>A. Section II – Who is An Insured is amended to include as an additional insured the person(s) or organizations(s) shown in the Schedule, but only with respect to liability for “bodily injury”, “property damage” or “personal and advertising injury” caused, in whole or in part, by:</p> <ol style="list-style-type: none"> 1. Your acts omissions; or 2. The acts or omissions of those acting on your behalf; <p>In the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.</p> <p>However:</p> <ol style="list-style-type: none"> 1. The insurance afforded to such additional insured only applies to the extent permitted by law; and 2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured. 	<p>B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply: This insurance does not apply to “bodily injury” or property damage occurring after::</p> <ol style="list-style-type: none"> 1. All work , including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured (s) at the location of the covered operations has been completed; or 2. That portion of “your work” out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project. <p>C. With respect to the insurance afforded to these additional insureds, the following is added to Section III- Limits of Insurance: If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:</p> <ol style="list-style-type: none"> 1. Required by the contract or agreement; or 2. Available under the applicable Limits of Insurance shown in the Declarations; whichever is less. <p>This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.</p>

EXHIBIT H

POLICY NUMBER: _____

COMMERCIAL GENERAL LIABILITY
CG 24 04 0509

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies Insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:

ORANGE COUNTY BOARD OF COUNTY COMMISSIONERS
PROCUREMENT DIVISION
400 E. SOUTH STREET
ORLANDO, FL 32801

(Information required to complete this Schedule, if not shown above, will be shown in the Declarations.)

The following is added to Paragraph 8, Transfer of rights of Recovery Against Others To Us of Section IV – Conditions:

We waive any right to recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or “your work” done under a contract with that person or organization and included in the “Products-completed operations hazard”. This waiver applies only to the person or organization shown in the Schedule above.

IFB NO. Y15-790-PH

ISSUED: June 9, 2015

INVITATION FOR BIDS

FOR

**MALCOLM ROAD WATER SUPPLY FACILITY PRODUCTION WELLS MR1, MR2,
MR3, MR5, AND MR-6 DRILLING AND TESTING**

**PART H
TECHNICAL SPECIFICATIONS**

PART H

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TECHNICAL PROVISIONS (SPECIFICATIONS)

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DIVISION 2 – SITEWORK

02050	Malcolm Road WSF Lower Floridan Aquifer Production Wells
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Figure 2	Proposed and Existing Production Well Location Map
Figure 3	Typical LFA Production Well Detail

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DIVISION 1
GENERAL REQUIREMENTS

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SECTION 01010

SUMMARY OF WORK

1.0 GENERAL

1.01 WORK INCLUDED

- A. All of the work under this contract is located within the areas shown on the Figures.
- B. The CONTRACTOR shall furnish all labor, materials, equipment, tools, services and incidentals to complete all work required by these Specifications and as shown on the Figures.
- C. The CONTRACTOR shall perform the work complete, in place, and ready for continuous service, and include repairs, testing, permits, cleanup, replacements and restoration required as a result of damages caused during this construction.
- D. All materials, equipment, skills, tools and labor which are reasonably and properly inferable and necessary for the proper completion of the work in a substantial manner and in compliance with the requirements stated or implied by these Specifications or Figures shall be furnished and installed by the CONTRACTOR whether specifically indicated in the contract documents or not.
- E. The CONTRACTOR shall comply with all Municipal, County, State, Federal, and other codes which are applicable to the proposed construction work.

1.02 GENERAL DESCRIPTION OF WORK

- A. The project consists of the construction and development of five (5) lower Floridan aquifer production wells at the Malcolm Road Water Supply Facility (MRWSF) for Orange County Utilities as shown on **Figures 1 and 2**. The work shall be performed by a licensed Florida Water Well Contractor with equipment which is adequate to complete all phases of well construction. All work shall be performed under the direct supervision of an experienced well driller and an adequate number of competent helpers. If the CONTRACTOR's equipment is not capable of satisfactorily performing the work provided for in these Specifications, the CONTRACTOR at his own expense shall substitute equipment satisfactory to the OWNER. All work shall be completed in full conformance with St. Johns River Water Management District (SJRWMD) and Florida Department of Environmental Protection (FDEP) rules and regulations for water wells, or this Specification, whichever is more stringent.

1.03 DETAILED DESCRIPTION OF COMPONENTS

Base Bid

The CONTRACTOR shall install and test five (5) lower Floridan aquifer production wells. A Typical well construction drawing is provided as Figure 3. The construction of each production well will include the following work components:

- A. Drill an 8-inch diameter pilot hole from land surface to approximately 220 feet below land surface (bls) using mud rotary.
- B. Vibrate, drive, or install by rotary method a 36-inch diameter steel surface casing to approximately 110 feet bls into a competent unit. Driven casing shall meet SJRWMD regulation 40C-3.502 F.A.C. and FDEP regulations 62.532.500 F.A.C. If the casing is installed by rotary method, drill a nominal 42-inch diameter borehole prior to installation of surface casing. An appropriate grouting method shall be used depending upon installation method of casing.
- C. Drill a nominal 36-inch diameter borehole from approximately 110 to 220 feet bls using mud rotary which includes drilling out grout plug.
- D. Set a 30-inch diameter steel intermediate casing from ground surface to approximately 220 feet bls and cement casing in place from the bottom up to land surface.
- E. Drill a nominal 8-inch pilot hole from approximately 220 to 1,050 feet bls using reverse air circulation drilling methods.
- F. Drill a nominal 30-inch diameter borehole from approximately 220 to 1,050 feet below land surface (bls) using reverse air circulation drilling methods which includes drilling out grout plug.
- G. Perform geophysical logging from 1,050 feet to land surface.
- H. Set a 24-inch diameter steel casing from ground surface to approximately 1,050 feet bls and cement from the bottom up to land surface.
- I. Drill a nominal 8-inch pilot hole from approximately 1,050 to 1,300 feet bls using reverse air circulation drilling methods.
- J. Drill a nominal 24-inch diameter borehole using a reverse air circulation drilling methods from cased depth to approximately 1,300 feet bls which includes drilling out grout plug.
- K. Perform plumbness and alignment test from 40 feet bls to approximately 200 feet bls.
- L. Install temporary wellhead assembly, set up pump testing equipment and discharge piping, and develop the well, as specified.
- M. Collect background water level data and perform step drawdown pumping test (SDT), as specified.
- N. Perform final geophysical and video log in the open borehole from land surface to total depth.
- O. Perform disinfection, collect water quality samples and cap wellhead,.

After completion of all five (5) lower Floridan aquifer production wells the Contractor will:

- P. Collect background water level data and perform a lower Floridan aquifer constant rate discharge test (CRDT) for 24 hours on one well selected by the ENGINEER/GEOLOGIST and the OWNER's REPRESENTATIVE.

Alternative Item Bid

If during construction an unstable zone is encountered when trying to install the 24-inch diameter casing in any well, the OWNER might decide to use an 18-inch casing to bridge this zone. If so, the Contractor will:

- A. Set an 18-inch diameter steel casing from ground surface to approximately 1,050 feet bls (for purposes of the bid) and cement casing in place from the bottom up to approximately 200 feet bls.
- B. Backfill the annular space between the 24-inch and 18-inch diameter steel casing and the natural formation (at the edge of the nominal 24-inch diameter borehole) from the bottom up to approximately 200 feet bls. Backfill material will be combination of gravel—for filling cavities, to the extent approved by the SJRWMD—and cement.
- C. Cut and remove that portion of the 18-inch casing from the well above 200 feet bls.

2.0 PRODUCTS

Not Used.

3.0 EXECUTION

Not Used.

END OF SECTION

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SECTION 01015

PROJECT REQUIREMENTS

1.0 GENERAL DESCRIPTION OF WORK.

The work described herein consists of constructing five public supply wells to the Lower Floridan Aquifer (LFA) in accordance with Section 02050 of the Specifications and as shown in Figures 1 through 3. The work shall be performed by a licensed Florida Water Well CONTRACTOR with equipment which is adequate to complete all phases of well construction. All work shall be completed in full conformance with St. Johns River Water Management District (SJRWMD) and Florida Department of Environmental Protection (FDEP) rules and regulations for water wells, or this Specification, whichever is greater or more restrictive.

2.0 UNITS OF MEASUREMENT.

- A. Both inch-pound (English) and SI (metric) units of measurement are specified herein; the values expressed in inch-pound units shall govern.
- B. The CONTRACTOR shall submit a Construction Assistance Request form (enclosed) at least 72 hours in advance of requiring the above activities to be performed.

3.0 REFERENCE:

Sections 01500 and 01614.

4.0 OFFSITE STORAGE

Offsite storage arrangements shall be approved by COUNTY for all materials and equipment not incorporated into the Work but included in Applications for Payment. Such offsite storage arrangements shall be presented in writing and shall afford adequate and satisfactory security and protection. Offsite storage facilities shall be accessible to COUNTY and Engineer.

5.0 SUBSTITUTES AND "OR-EQUAL" ITEMS.

Whenever a material or article is specified or described by using the name of a proprietary product or the name of a particular manufacturer or vendor, the specified item shall be understood as establishing the type, function, and quality desired. Requests for review of equivalency will not be accepted from anyone except CONTRACTOR, and such requests will not be considered until after the Contract has been awarded. Other manufacturers' products may be accepted, provided sufficient information is submitted to allow Engineer to determine that the products proposed are equivalent to those named. Such items shall be submitted for

review by the procedure set forth in the Submittals section.

6.0 PREPARATION FOR SHIPMENT.

All materials shall be suitably packaged to facilitate handling and protect against damage during transit and storage. Painted surfaces shall be protected against impact, abrasion, discoloration, and other damage. All painted surfaces which are damaged prior to acceptance of equipment shall be repainted to the satisfaction of Engineer.

Each item, package, or bundle of material shall be tagged or marked as identified in the delivery schedule or on the Shop Drawings. Complete packing lists and bills of material shall be included with each shipment

7.0 LAND FOR CONSTRUCTION PURPOSES.

- A. CONTRACTOR will be permitted to use available land belonging to COUNTY, on or near the Site, for construction purposes and for storage of materials and equipment.
- B. The locations and extent of the areas so used shall be as indicated on the Drawings.
- C. CONTRACTOR shall immediately move stored materials or equipment if any occasion arises, as determined by COUNTY, requiring access to the storage area. Materials or equipment shall not be placed on the property of COUNTY until COUNTY has agreed to the location to be used for storage.

8.0 NOTICES TO COUNTIES AND AUTHORITIES.

- A. CONTRACTOR shall, as provided in the General Conditions, notify Counties of adjacent property and utilities when prosecution of the Work may affect them.
- B. When it is necessary to temporarily deny access to property, or when any utility service connection must be interrupted, CONTRACTOR shall give notices sufficiently in advance to enable the affected persons to provide for their needs. Notices shall conform to any applicable local ordinance and, whether delivered orally or in writing, shall include appropriate information concerning the interruption and instructions on how to limit inconvenience caused thereby.
- C. Utilities and other concerned agencies shall be notified at least 24 hours prior to cutting or closing streets or other traffic areas or excavating near underground utilities or pole lines.

9.0 UNFAVORABLE CONSTRUCTION CONDITIONS.

During unfavorable weather, wet ground, or other unsuitable construction conditions, CONTRACTOR shall confine its operations to work which will not be affected adversely by such conditions. No portion of the Work shall be constructed under conditions which would affect

adversely the quality or efficiency thereof, unless special means or precautions are taken by CONTRACTOR to perform the Work in a proper and satisfactory manner.

10.0 HAZARDOUS ENVIRONMENTAL

No Hazardous Environmental Conditions at the Site in areas that will be affected by the Work are known to the COUNTY.

11.0 CLEANING UP.

- A. CONTRACTOR shall keep the premises free at all times from accumulations of waste materials and rubbish. CONTRACTOR shall provide adequate trash receptacles about the Site and shall promptly empty the containers when filled.
- B. Construction materials, such as concrete forms and scaffolding, shall be neatly stacked by CONTRACTOR when not in use. CONTRACTOR shall promptly remove splattered concrete, asphalt, oil, paint, corrosive liquids, and cleaning solutions from surfaces to prevent marring or other damage.
- C. Volatile wastes shall be properly stored in covered metal containers and removed daily.
- D. Wastes shall not be buried or burned on the Site or disposed of into storm drains, sanitary sewers, streams, or waterways. All wastes shall be removed from the Site and disposed of in a manner complying with local ordinances and antipollution laws.
- E. Adequate cleanup will be a condition for recommendation of progress payment applications.

12.0 APPLICABLE CODES.

References in the Contract Documents to local codes mean the following:

- a. 2007 Florida Building Code

Other standard codes which apply to the Work are designated in the Specifications.

13.0 REFERENCE STANDARDS.

Reference to standards, 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 (or on the effective date of the Contract or Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents. However, no provision of any referenced standard, specification, manual, or code, or any instruction of a Supplier, shall be

effective to change the duties or responsibilities of COUNTY, CONTRACTOR, or Engineer, or any of their SUBCONTRACTORS, consultants, agents, or employees from those set forth in the Contract Documents, nor shall any such provision or instruction be effective to assign to COUNTY, Engineer, or any of Engineer's CONSULTANTS, agents, or employees, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

14.0 PRECONSTRUCTION CONFERENCE.

Prior to the commencement of Work at the Site, a preconstruction conference will be held at a mutually agreed time and place. The conference shall be attended by:

- a. CONTRACTOR and its superintendent.
- b. Principal SubContractors.
- c. Representatives of principal Suppliers and manufacturers as appropriate. Engineer.
- d. Representatives of COUNTY.
- e. Government representatives as appropriate.

Others as requested by CONTRACTOR, COUNTY, or Engineer.

Unless previously submitted to Engineer, CONTRACTOR shall bring to the conference a preliminary schedule for each of the following:

- a. Progress Schedule.
- b. Procurement Schedule.
- c. Schedule of Values for progress payment purposes.
- d. Schedule of Shop Drawings and other submittals.

The purpose of the conference is to designate responsible personnel and establish a working relationship. Matters requiring coordination will be discussed and procedures for handling such matters established. The agenda will include:

- a. CONTRACTOR's preliminary schedules.
- b. Transmittal, review, and distribution of CONTRACTOR's submittals.
- c. Processing Applications for Payment.

- d. Maintaining record documents.
- e. Critical Work sequencing.
- f. Field decisions and Change Orders.
- g. Use of premises, office and storage areas, security, housekeeping, and COUNTY's needs.
- h. Major equipment deliveries and priorities.
- i. CONTRACTOR's assignments for safety and first aid.

Engineer will preside at the conference and will arrange for keeping the minutes and distributing the minutes to all persons in attendance.

15.0 PROGRESS MEETINGS.

- A. CONTRACTOR shall schedule and hold regular progress meetings at least monthly and at other times as requested by COUNTY or required by progress of the Work. CONTRACTOR, Engineer, and all SubContractors active on the Site shall be represented at each meeting. CONTRACTOR may at its discretion request attendance by representatives of its Suppliers, manufacturers, and other SubContractors.
- B. Regular Progress meetings will be held off site at the Water Conserv II Distribution Center Facility 17498 McKinney Road - Winter Garden, FL 34787.
- C. COUNTY shall preside at the meetings. Meeting minutes shall be prepared and distributed by the Engineer. The purpose of the meetings will be to review the progress of the Work, maintain coordination of efforts, discuss changes in scheduling, and resolve other problems which may develop.
- D. Each week, on the same day of the week as the monthly meeting, when there is no monthly meeting, the CONTRACTOR will hold a coordination meeting to discuss planned work for that week and for periods of two additional weeks. CONTRACTOR and CONTRACTOR's Superintendent, foreman, and SubContractors that are involved with the planned work, should be in attendance with the COUNTY's RPR. CONTRACTOR will provide a planned work Schedule for each meeting and make necessary corrections and changes after the meeting and distributed to attendees.

16.0 SITE ADMINISTRATION.

- A. CONTRACTOR shall be responsible for all areas of the Site used by it and by all SubContractors in the performance of the Work. CONTRACTOR shall exert full control over the actions of all employees and other persons with respect to the use and preservation of property and existing facilities, except such controls as may be specifically reserved to COUNTY or others. CONTRACTOR shall have the right to exclude from the Site all persons who have no purpose related to the Work or its inspection, and may require all persons on the Site (except COUNTY's employees) to observe the same regulations as CONTRACTOR requires of its employees.
- B. Access to the Site will be limited to the main gate off Avalon Road (C.R. 545) unless specific alternate arrangements are made with the Owner. CONTRACTOR shall supply a list, and periodically update it, that contains the names of all personnel with driver licenses numbers and license plate numbers of all vehicles that will be on-site during construction. CONTRACTOR shall also supply COUNTY's RPR a daily list of any scheduled visitors. Only scheduled visitors will be permitted to enter upon verification of identity.
- C. COUNTY reserves the right to direct CONTRACTOR to permanently remove any SubContractor or subcontracted employee from the site for breach of security, policy, unsafe working practice, unprofessional behavior, or failure to comply with access restrictions.

17.0 SECURITY.

- A. CONTRACTOR shall be responsible for protection of the Site, and all Work, materials, equipment, and existing facilities thereon, against vandals and other unauthorized persons. CONTRACTOR shall comply with Orange COUNTY's security requirements and Water Conserv II RIB Site 6 operators to protect the Malcolm Road site. Reference Section 01500.
- B. The COUNTY is implementing special security measures to protect the Malcolm Road well site and the CONTRACTOR shall provide the same level of security. The CONTRACTOR shall provide the following security measures:
 - a. CONTRACTOR will supply list of all personnel that will work on the Malcolm Road well site each morning to COUNTY's RPR.
 - b. All personnel, employees and or SubContractors and suppliers that pass through the security perimeter shall wear CONTRACTOR issued photo identification badges.
 - c. CONTRACTOR will supply list with names, driver license, and license plate numbers of all personnel.
 - d. All CONTRACTOR's and SubContractor's personnel passing through the security perimeter shall have background checks to identify any historical crimes dealing with terrorism,

sabotage, or other government related illegal activities at the cost of the CONTRACTOR and before entering Orange COUNTY Utilities' RIB Site 6. Proof of background checks shall be submitted to COUNTY.

- e. All project deliveries shall be inspected prior to entering the security perimeter of the Facility in order to verify contents. All delivery personnel and delivery vehicles shall be under supervision while within the security perimeter of the Facility in lieu of issuance of photo identification badges. The CONTRACTOR shall maintain staff to accept all deliveries to the site, the COUNTY will not be responsible for receipt of any deliveries.
 - f. Access to the site is through the main gate off Avalon Road (C.R. 545). The gate shall remain locked during working hours.
- C. No Claim shall be made against COUNTY by reason of any act of an employee or trespasser, and CONTRACTOR shall make good all damage to COUNTY's property resulting from CONTRACTOR's failure to provide security measures as specified.

18.0 SMOKING POLICY – TOBACCO FREE CAMPUS.

In order to protect the public health, safety, and welfare of citizens and employees, smoking tobacco or any other substance is prohibited in COUNTY owned or operated facilities and vehicles. CONTRACTOR's personnel will not be permitted to use tobacco products on COUNTY property, including COUNTY parking lots, break areas, and worksites. Smoking means the lighting of any cigarette, cigar or pipe, or the possession of any lighted cigarette, cigar or pipe, regardless of its composition. This requirement shall be enforced from the beginning of construction and violators will be removed from the property.

19.0 COUNTY'S WORK SCHEDULE.

- A. The COUNTY reserves the right to have their Resident Project Representative (RPR) present to witness and inspect all Work performed by the CONTRACTOR. Working hours for the RPR are a 10-hour period between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. Any Work beyond the 10-hour period shall be considered overtime and shall be requested in writing 24 hours prior. CONTRACTOR, with verbal permission of the RPR, may work 24 hours a day to provide clean-up, maintenance of vehicles and equipment, and other such items without the RPR present.
- B. Any Work required on Saturday or Sunday shall be considered overtime and shall be requested in writing 48 hours in advance. All requests must be approved by COUNTY in advance. Under emergency situations a verbal request may be made with a follow-up written request.
- C. COUNTY observes the following holidays: New Year's Day, Martin Luther King Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the day after Thanksgiving Day, Christmas Eve and Christmas Day

- D. CONTRACTOR shall pay for the RPR's overtime. Overtime shall be defined as time beyond the 10-hour working period between 7:00 a.m. and 7:00 p.m. on Monday through Friday, and all time on Saturdays, Sundays, and on holidays observed by the COUNTY. Hourly rates for the Resident Project Representatives shall be \$50 per hour.

20.0 PERMITS.

The CONTRACTOR shall comply with all laws, rules, regulations, and ordinances of any authority having jurisdiction over the work as required by the General Conditions. Permits obtained by the COUNTY are appended to this section. The term "Engineer" in the building department permit holds refers to the CONTRACTOR's Engineer.

21.0 ALTERNATIVE.

If during construction an unstable zone is encountered when trying to install the 24-inch diameter casing in any well, the OWNER might decide to use an 18-inch casing to bridge this zone. If so, the Contractor will:

- a. Set an 18-inch diameter steel casing from ground surface to approximately 1,050 feet bls (for purposes of the bid) and cement casing in place from the bottom up to approximately 200 feet bls.
- b. Backfill the annular space between the 24-inch and 18-inch diameter steel casing and the natural formation (at the edge of the nominal 24-inch diameter borehole) from the bottom up to approximately 200 feet bls. Backfill material will be combination of gravel—for filling cavities, to the extent approved by the SJRWMD—and cement.
- c. Cut and remove that portion of the 18-inch casing from the well above 200 feet bls.

END OF SECTION

SECTION 01026

MEASUREMENT AND PAYMENT

1.0 SCOPE.

This section covers methods of measurement and payment for items of Work under this Contract.

2.0 GENERAL.

- A. The total Contract Amount shall cover all Work required by the Contract Documents. All costs in connection with the proper and successful completion of the Work, including permit fees; furnishing all materials, equipment, supplies, and appurtenances; providing all construction equipment and tools; providing all necessary temporary facilities; and performing all necessary labor and supervision to fully complete the Work, shall be included in the unit and lump sum prices bid. All Work not specifically set forth as a pay item in the Bid Form shall be considered a subsidiary obligation of the CONTRACTOR and all costs in connection therewith shall be included in the prices bid.
- B. The CONTRACTOR shall receive and accept the compensation per quantity provided in the Proposal and the Contract as full payment for furnishing all materials, labor, tools and equipment, for performing all operations necessary to complete the work under the Contract, and also in full payment for all loss or damages arising from the nature of the work, or from the action of the elements or from any unforeseen difficulties which may be encountered during the execution of the work until the final acceptance by the OWNER.
- C. The prices stated in the Proposal include all costs and expenses for taxes, labor, equipment, materials, permits, commissions, transportation charges and expenses, patent fees and royalties, labor for handling materials during inspection, together with any and all other costs and expenses for performing and completing the work as shown on the Drawings and as specified herein. The basis of payment for an item at the price shown in the Proposal shall be in accordance with the description of that item in this Section.
- D. The quantities for payment under this Contract shall be determined by actual measurement of the completed items, in place, ready for service and accepted by the OWNER, in accordance with the applicable method of measurement therefore contained herein and the unit prices indicated on the Bid Form, as described below under 5. BID FORM PAYMENT ITEMS FOR WELLS.
- E. The quantities included in the Bid Form are the line item quantities required for the bidding of the wells. Total Contract Amount will be the sum of the itemized totals for five (5) lower Floridan aquifer production wells.

3.0 ESTIMATED QUANTITIES FOR WELLS.

All estimated quantities stipulated in the Bid Form or other Contract Documents for construction of the wells are approximate and are to be used only (a) as a basis for estimating the probable cost of the Work and (b) for the purpose of comparing the bids submitted for the

Work. The actual amounts of work done and materials furnished under unit price items for construction of the wells may differ from the estimated quantities. The basis of payment for work and materials for the wells will be the actual amount of work done and materials furnished for the wells ready for service and accepted by the OWNER. The CONTRACTOR agrees that it will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished for the wells and the estimated amounts therefore.

4.0 WELL WORK FAILURE.

- A. If evidence indicates that the casing in a well is broken or that the well is not constructed in accordance with the Specifications to the satisfaction of the ENGINEER/GEOLOGIST or the OWNER's REPRESENTATIVE, the ENGINEER/GEOLOGIST or the OWNER's REPRESENTATIVE may order repairs or alterations to be made by the CONTRACTOR to bring the well into compliance with the Specifications. In the event that repairs or alterations cannot be made to bring the well into compliance with the Specifications, the ENGINEER/GEOLOGIST and the OWNER's REPRESENTATIVE may order the CONTRACTOR to plug and abandon such well and to construct a new well without additional cost to the OWNER. If such well failure should occur before a well is completed, the CONTRACTOR shall plug the abandoned well and construct the new well to the same state of completion at no cost to the OWNER; and the OWNER shall pay the CONTRACTOR for Work performed to complete the construction, in accordance with the amounts indicated in the Bid Form.
- B. If the ENGINEER/GEOLOGIST or the OWNER's REPRESENTATIVE determines that a well must be abandoned due to circumstances beyond the CONTRACTOR's control, then payment will be made for all work and materials incorporated into the abandoned well based on the units completed in accordance with contract unit rates. Such circumstances would include, but not necessarily be limited to, unacceptable subsurface geologic or hydrologic conditions. Additionally, the CONTRACTOR will be paid for grout required to plug the abandoned well at the unit price for cement grouting indicated in the Bid Form.
- C. If it is determined by the ENGINEER/GEOLOGIST or the OWNER's REPRESENTATIVE that the CONTRACTOR is at fault for an interruption causing a pumping test to be terminated, no payment shall be made for test pumping for the hours expended during the terminated test. If a pumping test is interrupted and the CONTRACTOR is not at fault, then payment for the test pumping for the terminated test will be made on the basis of the unit price for test pumping as indicated on the Bid Form.

5.0 BID FORM PAYMENT ITEMS FOR WELLS.

A. ~~BASE BID AND ALTERNATIVE BIDS~~

Item 1. MOBILIZATION & DEMOBILIZATION. Payment for Mobilization/Demobilization will be made at the Contract lump sum price for the item, which price and payment shall be full compensation for the Work consisting of the preparatory Work and operations in mobilizing for beginning Work on the Contract, including, but not limited to, furnishing those supplies and incidentals to the project site, preparation of submittals, and for the establishment of temporary offices and buildings, safety equipment and first aid supplies, project signs, field surveys, sanitary

and other facilities required by these specifications, and State and local laws and regulations. The costs of bonds and any required insurance and any other preconstruction expense necessary for the start of the work, excluding the cost of construction materials, shall also be included. This Work also consist of the general project management of the Work including, but not limited to, field supervision and office management, as well as other incidental cost for management of the Work during the duration of the Contract. This Work also includes maintenance of the field offices for the duration of the Contract which includes a generator for temporary utility service. The Work specified in this item also consists of demobilization or the operations normally involved in ending Work on the project including, but not limited to, termination and removal of temporary utility service and field offices; demolition and removal of temporary structures and facilities; restoration of Contractor storage areas; disposal of trash and rubbish, and any other post-construction work necessary for the proper conclusion of the Work. This pay item may not exceed 5% of the Total Base Bid amount.

Item 2. INDEMNIFICATION In consideration of the CONTRACTOR's Indemnity Agreement as set out in the Contract Documents, the OWNER specifically agrees to give the Contractor \$100.00 and other good and valuable consideration, receipt of which is acknowledged upon signing of the Agreement. To the fullest extent permitted by law, the CONTRACTOR shall indemnify, hold harmless and defend the OWNER, its agents, servants, and employees from and against all claims, damages, losses and expenses including, but not limited to, attorney's fees and other legal costs such as those for paralegal, investigative and legal support services and the actual cost incurred for expert witness testimony, arising out of or resulting from the performance of services required under this Agreement, provided that same is caused in whole or part by error, omission, negligent act, conduct or misconduct of the CONTRACTOR, its agents, servants, employees, or subcontractors. In accordance with Section 725.06, Florida Statutes, adequate consideration has been provided to the CONTRACTOR for this obligation, the receipt and sufficiency of which is hereby specifically acknowledged.

Item 3. CONSTANT RATE DISCHARGE TEST. Following the construction of all on-site production wells, after development and performing step drawdown testing at each well, the CONTRACTOR will prepare and perform one (1) 24-hour constant rate discharge test on one (1) well selected by the OWNER or the ENGINEER/GEOLOGIST. The CONTRACTOR will be paid for the constant rate discharge test according to the unit price indicated on the Bid Form for performing constant rate discharge pumping tests.

Items 4, 29, 54, 79, 104. DRILL 8-inch BOREHOLE. The cost for drilling shall include all equipment and labor necessary for drilling the pilot hole as described in the Specifications. Payment will be made on the basis of the unit price identified on the Bid Form.

Items 5, 30, 55, 80, 105. DRILL NOMINAL 42-inch BOREHOLE. The cost for drilling shall include all equipment and labor necessary for drilling the borehole as described in the Specifications. Payment will be made on the basis of the unit price identified on the Bid Form.

Items 6, 31, 56, 81, 106. FURNISH AND INSTALL 36-inch CASING. The cost of furnishing and installing the surface casing and furnishing all accessories required for grouting shall be included in the unit price for this item. Payment will be made on the basis of the unit price indicated on the Bid Form.

Items 7, 32, 57, 82, 107. CEMENT GROUTING OF 36-inch CASING. Payment for cement grout will be made on the basis of the unit price as indicated on the Bid Form.

Items 8, 33, 58, 83, 108. DRILL NOMINAL 36-inch BOREHOLE. The cost for drilling shall include all equipment and labor necessary for drilling the borehole as described in the Specifications. Payment will be made on the basis of the unit price identified on the Bid Form.

Items 9, 34, 59, 84, 109. GEOPHYSICAL LOGS 36-inch BOREHOLE. The CONTRACTOR shall take geophysical logs of the borehole as described in the Specifications to determine the depth at which to set the 30-inch casing and to determine borehole volume as the basis for calculating grout quantities. Payment will be made on the basis of the lump sum price indicated on the Bid Form and shall include all equipment and labor necessary to provide the information identified in the Specifications.

Items 10, 35, 60, 85, 110. FURNISH AND INSTALL 30-inch CASING. The cost of furnishing and installing the intermediate casing and furnishing all accessories required for grouting shall be included in the unit price for this item. Payment will be made on the basis of the unit price indicated on the Bid Form.

Items 11, 36, 61, 86, 111. CEMENT GROUTING OF 30-inch CASING. Payment for cement grout will be made on the basis of the unit price as indicated on the Bid Form.

Items 12, 37, 62, 87, 112. DRILL 8-inch BOREHOLE. The cost for drilling shall include all equipment and labor necessary for drilling the pilot hole as described in the Specifications. Payment will be made on the basis of the unit price identified on the Bid Form.

Items 13, 38, 63, 88, 113. DRILL NOMINAL 30-inch BOREHOLE. The cost for drilling shall include all equipment and labor necessary for drilling the borehole as described in the Specifications. Payment will be made on the basis of the unit price identified on the Bid Form.

Items 14, 39, 64, 89, 114. GEOPHYSICAL LOGS 30-inch BOREHOLE. The CONTRACTOR shall take geophysical logs of the borehole as described in the Specifications to determine the depth at which to set the 24-inch casing and to determine borehole volume as the basis for calculating grout quantities. Payment will be made on the basis of the lump sum price indicated on the Bid Form and shall include all equipment and labor necessary to provide the information identified in the Specifications.

Items 15, 40, 65, 90, 115. FURNISH AND INSTALL 24-inch CASING. The cost of furnishing and installing the inner casing and furnishing all accessories required for grouting shall be included in the unit price for this item. Payment will be made on the basis of the unit price indicated on the Bid Form.

Items 16, 41, 66, 91, 116. CEMENT GROUTING OF 24-inch CASING. Payment for cement grout will be made on the basis of the unit price as indicated on the Bid Form.

Items 17, 42, 67, 92, 117. DRILL NOMINAL 24-inch BOREHOLE. The cost for drilling shall include all equipment and labor necessary for drilling the borehole as described in the Specifications. Payment will be made on the basis of the unit price identified on the Bid Form.

Items 18, 43, 68, 93, 118. DRILL 8-inch BOREHOLE. The cost for drilling shall include all equipment and labor necessary for drilling the pilot hole as described in the Specifications. Payment will be made on the basis of the unit price identified on the Bid Form.

Items 19, 44, 69, 94, 119. PLUMBNESS AND ALIGNMENT TESTING. The CONTRACTOR shall perform the plumbness and alignment tests as described in the Specifications. Payment will be made on the basis of the unit price indicated on the Bid Form and shall include all equipment, material, and labor necessary for the plumbness and alignment tests as specified.

Items 20, 45, 70, 95, 120. SET AND REMOVE WELL TEST PUMP. Setting and removing the test pump will be paid on the basis of the unit price indicated on the Bid Form. The unit price will include all equipment, labor and materials necessary for the pump installation, all necessary discharge piping, power generation, noise abatement, pump operation, and removal.

Items 21, 46, 71, 96, 121. WELL DEVELOPMENT. After the monitor well or test/production well has been completed, the CONTRACTOR shall develop the well by over pumping and surging. The CONTRACTOR will be paid for the well development according to the duration of development at unit prices indicated on the Bid Form for this item.

Items 22, 47, 72, 97, 122. STEP DRAWDOWN TEST. Following the installation of a test pump, the CONTRACTOR may be directed to provide preliminary pumping tests to determine the appropriate pumping rates for the detailed tests. The CONTRACTOR will be paid for the preliminary pumping tests according to the duration of the tests at unit prices indicated on the Bid Form for performing pumping tests.

Items 23, 48, 73, 98, 123. GEOPHYSICAL WELL LOGS AND VIDEO RECORDING OF WELL. The CONTRACTOR shall take geophysical logs and video log of the full depth of the well, as described in the Specifications. Payment will be made on the basis of the lump sum price indicated on the Bid Form and shall include all equipment and labor necessary to provide the information identified in the Specifications. The cost of the test pumping (including the setting and removing of the test pump) for geophysical logging under dynamic conditions is to be included in this lump sum price.

Items 24, 49, 74, 99, 124. INSTALL WELL CAP. The CONTRACTOR shall install well head, locking well cap, 6'X6' concrete pad, guard posts (bollards), and appurtenances as described in the Specifications and Figures. Payment will be made on the basis of the unit price indicated on the Bid Form and shall include all equipment, material, and labor necessary.

Items 25, 50, 75, 100, 125. WELL DISINFECTION. The OWNER shall pay the CONTRACTOR for disinfection of the well the amount included in the Bid Form for disinfection. If the first samples tested for bacteriological quality are found to be unacceptable, the costs of all additional actions necessary to produce water of acceptable bacteriological quality, including additional disinfection, will be paid by the CONTRACTOR, at no expense to the OWNER.

Items 26, 51, 76, 101, 126. SAND/PEA GRAVEL WELL CAVITY FILL. Payment for this pay item will be made at the contract unit price bid per cubic yard. This payment will be full compensation for furnishing and placing sand and/or pea gravel to fill large cavities encountered during the

grouting process if necessary. This pay item also includes delays incurred by CONTRACTOR between installing grout and sand or gravel.

Items 27, 52, 77, 102, 127. DREDGING. Dredging shall be as described in the Specifications. Dredging will be considered excessive if continuous drilling for 10 hours has resulted in less than 1 foot of additional borehole depth. If dredging should occur at two or more poorly indurated zones within a 10-foot interval then the dredging times will be considered continuous for the purpose of calculating excessive dredging. Payment for dredging shall be made at the hourly rate indicated on the Bid Form. All dredging work must be approved by OWNER.

Items 28, 53, 78, 103, 128. STAND-BY. Stand-by time shall be as described in the Specifications. Payment for stand-by time shall be made at the hourly rate indicated on the Bid Form. Stand-by time shall include cost of personnel and shall not include the cost of the rig or equipment. All stand-by time must be approved by OWNER.

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SECTION 01060

PERMITS AND REGULATORY REQUIREMENTS

1.0 GENERAL.

The Contractor shall;

- A. Obtain and pay for all permits and licenses as provided for in the General Conditions, except as otherwise specified herein.
- B. Schedule all inspections and obtain all written approvals of the agencies required by the permits and licenses.
- C. Comply with all conditions specified in each of the permits and licenses.
- D. A copy of the permits obtained by the County will be furnished to the Contractor upon request.

2.0 PERMITS OBTAINED BY THE CONTRACTOR:

The Contractor shall be responsible for obtaining the following permits when applicable:

- A. The Contractor shall be responsible for obtaining the applicable Orange County Permits, and shall pay for all permits subsequent to the initial Permit as required.
- B. The Contractor shall apply and pay for the permits required for the temporary construction trailers.
- C. All other permits required for Contractor's operations or required elsewhere in Contract Documents and not included herein. Furnish three copies of permits to the County prior to performance of work authorized by permits.
- D. Contractor will be responsible for obtaining extensions to permits obtained by the County if construction authorized by permits has not been completed by expiration date noted on these permits.
- E. Permits may require that a representative of permitting agency be present at site during construction or prior to covering up of activity authorized by permit. Contractor will be responsible for notifying permitting agency in compliance with requirements of such permits.
- F. Contractor shall include time to obtain permits in his construction schedule.

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SECTION 01310

PROGRESS SCHEDULES

1.0 GENERAL

1.01 GENERAL REQUIREMENTS

- A. The Contractor will submit Progress Schedules to the County based on Article 18, Part F of the General Conditions. This requirement includes, but is not limited to the Contractor's approach to utilization of the site, availability and use of manpower, materials and equipment, Activity cost-loading, recovering schedule and managing the effect of changes, substitutions and Delays on Work sequencing.
- B. The Contractor's Progress Schedule shall utilize the Critical Path Method ("CPM"). The Contractor's Progress Schedule shall be prepared using Primavera P-6 or other software approved by the County; the software shall be specifically intended for the preparation of construction schedules incorporating a critical path. The software used by the Contractor must be approved in advance by the County. The Contractor shall submit a Progress Schedule CPM (both in hard printed copy with network diagrams and electronic disc files) no later than twenty (20) days after receipt of the Notice to Proceed, and prior to commencing Work on the project.
- C. The Progress Schedule CPM shall clearly identify all controlling items of Work and activities defined as the critical path, which if delayed or prolonged, will delay the time of completion of the Contract. The critical path shall include a minimum 10% float time as part of the Contract Time for unforeseen conditions. Contractor shall provide additional float time above the required minimum 10% based on his experience, understanding of the scope, and inspection of the site.
- D. The County will review Progress Schedule Submittals and return review copy within 14 Days after receipt and the Contractor shall, if required, resubmit within 7 Days after return of review copy.
- E. These requirements are in addition to, and not in limitation of, those imposed elsewhere in the Contract Documents.

1.02 QUALITY ASSURANCE

- A. The Contractor may self-perform the Work covered by this Section or employ a Subcontractor, subject to the County's consent. Employment of a scheduling Subcontractor shall not in any way alter or reduce the Contractor's obligations under the Contract Documents.
- B. The Contractor will obtain a written interpretation from the County, if the Contractor believes that the selection of activities, logic ties and/or restraints requires a written interpretation of the Contract Documents. With each submission, the Contractor will point out by specific, written notation, any Progress Schedule feature that may reflect variations from any

requirements of the Contract Documents.

- C. It is the Contractor's responsibility to obtain information directly from each Subcontractor and Supplier when scoping their respective Activities, Values, logic ties and restraints.
- D. Neither Acceptance nor Review of any Progress Schedule will relieve the Contractor from the obligation to comply with the Contract Times and any sequence of Work indicated in or required by the Contract Documents and to complete, within the Contract Times, any Work omitted from that Progress Schedule.
- E. Neither Acceptance nor Review of any Progress Schedule will imply approval of any interpretation of or variation from the Contract Documents, unless expressly approved by the County through a written interpretation or by a separate, written notation on the returned Progress Schedule Submittal.

1.03 MILESTONES; SCHEDULE RECOVERY

- A. The County will select Milestones and Milestone Dates on the basis of the As-Planned Schedule. As the Official Schedule is revised, Milestone Dates will be revised accordingly. Milestone Dates will serve as target dates.

1.04 PROGRESS SCHEDULE SOFTWARE

- A. The scheduling software employed by the Contractor to process the Progress Schedule will be the current version of Oracle's Primavera P6 Professional Project Management, Oracle's Primavera Contractor CPM scheduling software, or other software approved by the County.

1.05 NON-PERFORMANCE

- A. The County may refuse to recommend all or any part of any payment, if the Contractor fails, refuses or neglects to provide the required Progress Schedule information on a timely basis. Partial payments without a properly updated Progress Schedule shall be returned to the Contractor as non-conforming. If justified under the circumstances, the County also may prepare alternate progress schedules, as appropriate, and deduct from the Contract Amount all related costs by Change Order and/or take other action commensurate with the breach.

2.0 WORK PRODUCTS

2.01 REPORTS; SCHEDULES; PLOTS

- A. Schedule Reports will include Activity (ID) code and description, duration, calendar, Early Dates, Late Dates and Total Float and will include separate Schedule Reports that will tabulate, for each Activity, all preceding and succeeding Activities with their logic types and lead times, whether CPM Plots displaying vertical logic ties are appended or not.
- B. CPM Schedule Plots will be plotted on a suitable time scale and identify the Contract Times,

Critical Paths and sub-Critical Paths on 11"x 17" or larger sheets. Activities will be shown on the Early Dates with Total Floats noted

2.02 NARRATIVE REQUIREMENTS

- A. The Initial Submittal narrative will describe the Contractor's approach to prosecution of the Work and the basis for determination of activity durations, sequence and logic, including the Contractor's management of the site, e.g., lay down, staging, parking, etc.; Contractor's phasing of the Work; use of crewing and construction equipment; identification of non-work days, shifts, weekend Work and multiple calendars applied to activities and an explanation of the basis for restraint dates
- B. Revision and Payment Submittal narratives will explain any changes to the approach or planning referred to in the Paragraph above on account of any change, delay, schedule recovery, substitution and/or Contractor-initiated revision occurring since the previous submittal.

3.0 EXECUTION

3.01 INITIAL SUBMITTAL

- A. Within twenty (20) Days after receipt of Notice to Proceed and prior to commencing Work on the Project, prepare and submit to the County the Initial Submittal of the Progress Schedule for the Work. The Initial Submittal will show the Work as awarded, without delays, Change Orders or substitutions.
- B. After the As-Planned Schedule is established, the County will select Milestones and record the Milestone Early and Late Dates. As the Official Schedule evolves, Milestone Dates will be revised accordingly.
- C. If the County refuses to endorse the Initial Submittal (or a resubmission) as "Resubmittal Not Required," the As-Planned Schedule will not be established. In that event, the Contractor will continue to submit Payment and Revision Submittals reflecting progress and the Contractor's approach to remaining Work. The County will rely on the available Payment and Revision Submittals, subject to whatever adjustments it determines appropriate.

3.02 PAYMENT SUBMITTALS

- A. Payment Submittals with progress up to the closing date and updated Early Dates and Late Dates for progress and remaining Activities will be due with each Progress Payment. As-built data will consist of actual dates, percent complete, earned payment, changes, Delays and other significant events occurring before the closing date.

- B. Activity percent complete and earned value should indicate a level of completion that corresponds to the Application for Progress Payment for the same period. The earned value should be calculated by the scheduling software as Activity Value times percent complete. Explanation should be provided whenever the cumulative earned value of activities in a Payment Submittal is not within 10% of the value of work completed as represented in the corresponding Application for Progress for Payment.

END OF SECTION

SECTION 01370

SCHEDULE OF VALUES

1.0 GENERAL

1.01 DEFINITION Schedule of Values (SOV)

- A. Schedule that divides the Contract Amount into pay items, such that the sum of all pay items equals the Contract Amount for the Work, or for any portion of the Work having a separate specified Contract Amount.

1.02 REQUIREMENT

- A. The Schedule of Values established as provided in the General Conditions will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to the Project Manager. Progress payments on account of Unit Price Work will be based on the number of units completed.
- B. No payment will be made for work performed on a lump sum contract or a lump sum item until the appropriate Schedule of Values is approved by the Project Manager.
- C. The equitable value of work deleted from a lump sum contract or lump sum item shall be determined from the approved Schedule of Values.

1.03 SUBMITTALS

- A. Submit three copies of a Preliminary Schedule of Values within fifteen (15) days after the recommended award of the Contract.
- B. Submit three copies of a proposed final detailed Schedule of Values within twenty (20) days after receipt of Notice to Proceed as per the General Conditions.
- C. Submit the Schedule of Values, typed, on EJCDC 1910-8-E form or Orange County forms or spreadsheets provided by Project Manager. The Contractor's standard form or electronic media printout will be considered for acceptability by the County.
- D. List installed value of each major item of work and each subcontracted item of work as a separate line item to serve as a basis for computing values for Progress Payments. Round off values to nearest dollar.
- E. Coordinate listings with the Progress Schedule.
- F. For items on which payments will be requested for stored materials or equipment, list sub-values for cost of stored products with taxes paid.

- G. The sum of values listed shall equal the total Contract Amount for the Work or the Contract Amount for a part of the Work with a separate Contract Amount provided for by the Contract Documents.
- H. When the Project Manager requires substantiating information, submit data justifying line item amounts in question.

1.04 PRELIMINARY SCHEDULE OF VALUES

- A. The preliminary schedule of values listing shall include, at a minimum, the proposed value for the following major work; Mobilization, General Requirements and Demobilization as per the specified percentage of Contract Amount.
- B. The total value of access road construction inclusive of clearing and grubbing, stripping, excavation, fill construction, paving, road removal, site restoration, and all incidental work associated with access roads. This total value shall be broken down into separate values for each access road.
- C. The total value of all other work not specifically included in the above items.

The Contractor and County Project Manager shall meet and jointly review the preliminary schedule of values and make any adjustments in value allocations if, in the opinion of the Project Manager, these are necessary to establish fair and reasonable allocation of values for the major work components. Front-end loading will not be permitted. The Project Manager may require reallocation of major work components from items in the above listing if, in the opinion of the Project Manager, such reallocation is necessary. This review and any necessary revisions shall be completed within 15 days from the date of the notification of the required reallocation.

1.05 DETAILED SCHEDULE OF VALUES

Base the detailed schedule of values on the accepted preliminary schedule of values for major work components. Because the ultimate requirement is to develop a detailed schedule of values sufficient to determine appropriate monthly progress payment amounts verifiable by cost loaded of Progress Schedule activities, provide sufficient detailed breakdown to meet this requirement. The County shall be the sole judge of acceptable numbers, details, and description of values established. If, in the opinion of the County, a greater number of schedule of values items than proposed by the Contractor is necessary, the Contractor shall add the additional items so identified by the County as a condition to processing the payment requests.

The minimum detail of breakdown of the major work components is indicated below:

- A. Mobilization/General Requirement/Demobilization costs on the Schedule of Values shall not exceed 5% of the Contract Amount. All Work included in the Schedule of Value that falls under this heading as described in this paragraph (including such Work by Subcontractors) will be added and checked for compliance with the 5% limitation. Any actual cost in excess of this amount shall be distributed proportionately to Schedule of Values items for direct Work items

not covered by this heading. Work under this heading may be detailed on Schedule of Value line items identifying each as to whether it is mobilization or initial costs, maintenance or overhead cost or finalization or demobilization cost. The subdivision of this Work into Schedule of Values line items shall be done to support the payment process that shall be distributed as follows: 50% for the first progress payment, 10% for the final payment following demobilization and restoration, and 40% spread evenly over payments made in between.

The Contractor and County shall meet and jointly review the detailed schedule of values within 40 days from the date of Notice to Proceed. The value allocations and extent of detail shall be reviewed to determine any necessary adjustments to the values and to determine if sufficient detail has been proposed to provide cost loading of the Progress Schedule activities. Make any adjustments deemed necessary to the value allocation or level of detail, and submit a revised detailed schedule of values within 10 days from the date of the review meeting.

1.06 INCORPORATION OF SCHEDULE OF VALUES INTO CPM PROJECT SCHEDULE

- A. Following acceptance of the detailed schedule of values, incorporate the values into the cost loading portion of the CPM Progress Schedule. The CPM activities and logic shall have been developed concurrent with development of the detailed schedule of values; however, it may be necessary to adjust the detailed schedule of values to correlate to individual schedule activities. It is anticipated that instances may occur, due to the independent but simultaneous development of the schedule of values and the CPM schedule activities, where interfacing these two documents will require changes to each document. Schedule activities may need to be added to accommodate the detail of the schedule of values. Schedule of Value items may need to be added to accommodate the detail of the CPM schedule activities. Where such instances arise, the Contractor shall propose changes to the schedule of values and to the CPM schedule activities to satisfy the CPM schedule cost loading requirements.
- B. Cross-Reference Listing - To assist in the correlation of the schedule of values and the CPM schedule, provide a cross-reference listing, furnished in two parts. The first part shall list each scheduled activity with the breakdown of the respective Schedule of Values items making up the total cost of the activity. The second part shall list the Schedule of Values item with the respective scheduled activity or activities that make up the total cost indicated. In the case where a number of schedule activities make up the total cost for a Schedule of Values item, the total cost for each schedule activity should be indicated.

END OF SECTION

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SECTION 01380

CONSTRUCTION PHOTOGRAPHS AND VIDEO

1.0 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Providing construction photographs and video pertinent to the Contract work during the Contract period as specified.
2. Non-applicable subsections with N/A designation.

1.02 SUBMITTALS

A. Product Data:

1. Submit to the County electronic images on DVD. A minimum of twelve photographs of the entire site, or pertinent features thereof, shall be taken before commencement of work and promptly submitted to the COUNTY's RPR. The same views shall be photographed upon completion of all construction activities and submitted with Contractor's application for final payment. Additional photographs shall be made each month throughout the progress of the work at such time as requested by the COUNTY and submitted with Contractor's application for progress payment.
 - a. Photographs shall be taken from a digital camera, image files shall be in a jpeg format, and stored on a writable DVD and provided to the COUNTY.
 - (1) Mark each DVD with name and number of Contract, name of Contractor and date photographed.
2. CONTRACTOR shall provide COUNTY with a video record of the existing conditions prior to construction. This video shall contain audio and shall be a standard DVD disk in standard mpeg 2 format. Audio portion shall describe the location of the video footage. The following features shall be shown in a clear manner, but not limited to the following:
 - a. All existing features and improvements within the site.
 - b. All existing features and improvements within the right-of- way.
 - c. All existing features and improvements within temporary construction easements.
 - d. All existing features and improvements within permanent easements.
 - e. All existing features and improvements adjacent to any construction.
3. Detail of the video shall be such that the following features and improvements shall be clear

and visible:

- a. Condition of buildings and cracks in walls.
 - b. Condition of fencing.
 - c. Condition of planted areas and types of vegetation.
 - d. Condition of sodded areas.
 - e. Conditions of sprinkler systems and associated controls and wiring.
 - f. Condition of paved areas.
 - g. Condition of signs.
 - h. Conditions of lighting and associated wiring.
4. Sufficient detail of any preexisting damages to physical features and improvements shall be shown. The coverage of the video should include the limits of effects of the use of vibratory rollers. This video record shall be presented to the County within thirty (30) days of the Commencement Date specified in the Notice to Proceed.

2.0 EXECUTION

2.01 APPLICATION

A. Special Techniques:

1. General:
 - a. All views to contain a relative dimension reference that is recognizable. In views where dimensions are critical use a recognizable measuring devices such as folding ruler, measuring tape in a manner the markings are clear and sharp in the photograph and the device located in close relationship with subject of photograph.
2. Site photography required:
 - a. Provide photographs at following stages of construction:
 - (1) Site before commencement of any construction at the facility.
 - (2) At 1-month intervals, progress photography during construction of facilities. Photos of any month need show only new work performed during month.
 - (3) Upon completion of all Contract work, overall site photography.
 - (4) Consult with COUNTY's RPR for instructions concerning views required at each specified visit to site.
 - (5) Photograph from locations to adequately illustrate state of project, or condition of construction.
 - (6) Take photographs from as close to the same position each time as practical.
 - (7) In addition, provide photographs prior to, at critical stages of, and at the end of construction, when they do not coincide with scheduled times.

END OF SECTION

SECTION 01500

TEMPORARY FACILITIES

1.0 UNITS OF MEASUREMENT

When both inch-pound (English) and SI (metric) units of measurement are specified herein, the values expressed in inch-pound units shall govern.

2.0 COUNTY INSPECTOR'S FIELD OFFICE TRAILER

The CONTRACTOR shall provide a suitable field office for the COUNTY's inspector and/or Resident Project Representative (RPR) separate from the CONTRACTOR's office at the site until no longer needed by the COUNTY.

- A. Although recurrent project progress meetings will be held off site at the Water Conserv II Distribution Center, the CONTRACTOR shall provide office space in accordance with the following:
 - a. The office space provided shall be either a building for the exclusive use of the COUNTY's project manager, RPR, and the Engineer throughout the period of construction until final completion.
 - b. The office trailer shall be weather tight and have a tight floor at least 18 inches off the ground, leveled properly and securely attached with hurricane straps. The office shall be insulated, air-conditioned, have suitable screened ventilation and a solid door provided with a cylinder lock, deadbolt and five sets of keys.
 - c. The office shall be provided with heating equipment, air conditioning equipment, electrical wiring, outlets, and light fixtures suitable to light the tables and desk adequately, and window blinds. CONTRACTOR shall supply all fuel for heating and pay all electrical bills for the office.
 - d. Toilet facilities in the office (Men and Women) trailer shall be connected to an approved septic system or to the plant sewer as approved by the COUNTY. Provide potable water for office services. It is the CONTRACTOR's responsibility to provide the services, determine suitability and workability and obtain building permit from Orange County for this project. Toilet facilities provided in the trailer shall be for exclusive use of COUNTY and their representatives.
- B. The field office will be fully outfitted and in service prior to any construction. CONTRACTOR shall provide the following items:
 - a. One (1) plan tables 4 feet by 6 feet, and two (2) new adjustable stools.

- b. A wooden desk for each office in the trailer, with a swivel chair for each desk.
- c. Two wastebaskets and one large garbage can.
- d. One (1) dry erase board 36" by 72"
- e. Tack board one (1) 36" by 30"
- f. Outside digital thermometer and digital rain gauge
- g. One 4-drawer, legal size filing cabinet with locks and key.
- h. Air conditioning/heating suitable for the office space
- i. Hot and cold bottled water cooler.
- j. One (1) Microwave oven, 1.5 CUFT
- k. One (1) Top-freezer refrigerator 18 CUFT.
- l. Four (4) Surge protectors power strips.
- m. A first aid kit suitable for at least five (5) people fully stocked with proper manuals for the trailer.
- n. Provide and maintain on-site adequate firefighting equipment capable of extinguishing incipient fires, and comply with NFPA No.241

3.0 MAINTENANCE

CONTRACTOR to maintain Temporary Field Offices for the duration of the Work. Maintenance by the CONTRACTOR shall include the following:

- a. Heat/air conditioning.
- b. Janitorial service (1x per week).
- c. Utility service including electricity, telephone (fax, voice, alarm, computer), water and sewer.
- d. Security.
- e. Weather-tightness.
- f. Supply of hot/cold drinking water.

- g. Paper cups, paper towels, liquid soaps and toilet paper.
- h. Repair of all furnishings and equipment supplied as part of the COUNTY Inspector's Field Office Trailer.

4.0 WATER

- A. All water required for and in connection with the Work to be performed shall be furnished by and at the expense of CONTRACTOR through meters installed on hydrants or existing piping. CONTRACTOR shall supply all necessary tools, hose, and pipe, or otherwise transport the water to the point of use, and shall make its own arrangements with OCU as to the amount of water required and the time when the water will be needed. Indiscriminate use of water so furnished will not be permitted. Special hydrant wrenches shall be used for opening and closing fire hydrants. In no case shall pipe wrenches be used for this purpose.
- B. The CONTRACTOR may use available reuse water and/or water from exiting permitted wells for filling basins and testing as approved by the COUNTY.
- C. Furnish potable drinking water in suitable dispensers and with cups for use of all employees at the job site during the entire construction period.

5.0. POWER.

Purchase electric power or provide portable electric power for the construction of the project. Provide for the extension of utility lines to the point of usage. The CONTRACTOR is responsible for the permitting and the provisions required in order to provide temporary power for construction facilities. There is no excess electrical power available at plant site.

6.0. SANITARY FACILITIES.

CONTRACTOR shall furnish temporary sanitary facilities at the Site, as provided herein, for the needs of all construction workers and others performing work or furnishing services on the Project. Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view to the greatest practical extent. If toilets of the chemically treated type are used, at least one toilet will be furnished for each 20 persons. CONTRACTOR shall enforce the use of such sanitary facilities by all personnel at the Site.

7.0. MAINTENANCE OF TRAFFIC

CONTRACTOR shall conduct its work to interfere as little as possible with the Water Conserv II operations on site, whether vehicular or pedestrian. Maintenance of Traffic will be confined to Water Conserv II land and should address issues that may arise within that environment. Whenever it is necessary to cross, obstruct, or close roads, driveways, and walks, CONTRACTOR shall provide and maintain suitable and safe bridges, detours, or other temporary expedients for the accommodation of the Water Conserv II site operators, and shall give a minimum of seven

(7) days notice to Water Conserv II before interfering with them. CONTRACTOR shall coordinate with the Water Conserv II operators to facilitate traffic flow and minimize interference.

8.0. FENCES.

All existing fences affected by the Work shall be maintained by CONTRACTOR until completion of the Work. Fences which interfere with construction operations shall not be relocated or dismantled until written permission is obtained from the COUNTY of the fence, and the period the fence may be left relocated or dismantled has been agreed upon. Where fences must be maintained across the construction easement, adequate gates shall be installed. Gates shall be kept closed and locked at all times when not in use.

On completion of the Work across any tract of land, CONTRACTOR shall restore all fences to their original or to a better condition and to their original locations.

9.0. DAMAGE TO EXISTING PROPERTY

CONTRACTOR will be held responsible for any damage to existing structures, Work, materials, or equipment because of his operations and shall repair or replace any damaged structures, Work, materials, or equipment to the satisfaction of, and at no additional cost to, COUNTY.

CONTRACTOR shall protect all existing structures and property from damage and shall provide bracing, shoring, or other work necessary for such protection.

10.0. DUST CONTROL

CONTRACTOR shall take reasonable measures to prevent unnecessary dust. Earth surfaces subject to dusting shall be kept moist with water. When practicable, dusty materials in piles or in transit shall be covered to prevent blowing dust.

Buildings or operating facilities which may be affected adversely by dust shall be adequately protected from dust. Existing or new machinery, motors, instrument panels, or similar equipment shall be protected by suitable dust screens. Proper ventilation shall be included with dust screens.

11.0. TEMPORARY DRAINAGE PROVISIONS

CONTRACTOR shall provide for the drainage of storm water and such water as may be applied or discharged on the Site in performance of the Work. Drainage facilities shall be adequate to prevent damage to the Work, the Site, and adjacent property.

Existing drainage channels and conduits shall be cleaned, enlarged, or supplemented as necessary to carry all increased runoff attributable to CONTRACTOR's operations. Dikes shall be constructed as necessary to divert increased runoff from entering adjacent property (except in natural channels), to protect COUNTY's facilities and the Work, and to direct water to drainage channels or conduits. Ponding shall be provided as necessary to prevent downstream flooding.

12.0. POLLUTION CONTROL

CONTRACTOR shall prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris, and other substances resulting from construction activities. No sanitary wastes shall be permitted to enter any drain or watercourse other than sanitary sewers. No sediment, debris, or other substance shall be permitted to enter sanitary sewers, and reasonable measures shall be taken to prevent such materials from entering any drain or watercourse.

13.0. TREE AND PLANT PROTECTION

All trees and other vegetation which must be removed to perform the Work shall be removed and disposed of by CONTRACTOR; however, no trees or cultured plants shall be unnecessarily removed unless their removal is indicated on the Drawings. All trees and plants not removed shall be protected against injury from construction operations.

14.0. SECURITY.

- A. CONTRACTOR shall be responsible for protection of the Site, and all Work, materials, equipment, and existing facilities thereon, against vandals and other unauthorized persons.
- B. No Claim shall be made against COUNTY by reason of any act of an employee or trespasser, and CONTRACTOR shall make good all damage to COUNTY's property resulting from CONTRACTOR's failure to provide security measures as specified.
- C. All personnel, CONTRACTOR employees and or subCONTRACTORS and suppliers that pass through the gates shall wear identification badges. All personnel passing through the gates shall be subject to background checks to identify any historical crimes dealing with terrorism, sabotage, or other government related illegal activities. Background checks shall be provided by the CONTRACTOR. The background checks shall include running fingerprints through FDLE to determine nationwide arrest history. Background check information for each personnel shall be submitted to the COUNTY prior to access to the facility.
- D. All deliveries entering the site shall be escorted by CONTRACTOR for the duration of the time on site.

15.0. LOCATION OF STORAGE AREAS.

Areas where the CONTRACTOR may store materials used in his operations shall be approved by the COUNTY. Offsite storage arrangements, if allowed, require pre-approval by COUNTY for all materials and equipment not incorporated into the Work but included in Applications for Payment. Such offsite storage arrangements shall be presented in writing and shall afford security and protection that is satisfactory to the COUNTY. Offsite storage facilities shall be accessible to COUNTY and ENGINEER.

16.0. EROSION CONTROL

CONTRACTOR shall prevent erosion of soil on the Site and adjacent property resulting from its construction activities. Effective measures shall be initiated prior to the commencement of clearing, grading, excavation, or other operation that will disturb the natural protection.

Work shall be scheduled to expose areas subject to erosion for the shortest possible time, and natural vegetation shall be preserved to the greatest extent practicable. Temporary storage and construction buildings shall be located, and construction traffic routed, to minimize erosion. Temporary fast-growing vegetation or other suitable ground cover shall be provided as necessary to control runoff.

17.0. PROJECT CONSTRUCTION SIGN.

CONTRACTOR shall provide two (2) project construction signs as described herein and as shown in the elevation included at the end of this section. Signs shall be 4' high x 8' wide x 3/4" MDO plywood. Signs shall be painted dark blue on both sides. Front face shall be trimmed with 1" orange border and shall have two horizontal 3/4" white lines dividing the face into three sections. The upper section shall include the Orange County logo in orange, green, and dark blue, and the project name in white. The middle section shall include the names of the County Commissioners, the County Administrator, and the Utility Director. The lower section shown shall include the name and logo of the engineer and name and logo of the CONTRACTOR. Signs shall have 2"x4" wood stops on the top and bottom of both sides and shall be painted white. Signs shall be mounted on 4"x4" pressure treated wood posts, painted white, with the bottom of the sign 4' above grade. Posts shall be embedded a minimum of 4 ft. The sign shall be installed within 30 days following the Notice to Proceed and shall be maintained in good condition during the course of the work.



**Malcolm Road
Water Supply Facility
Production Well Site**

**Water Conserv II - RIB Site 6
16991 Malcolm Road
Winter Garden, FL**

18.0 NOISE CONTROL

CONTRACTOR shall take reasonable measures to avoid unnecessary noise. Such measures shall be appropriate for the normal ambient sound levels in the area during working hours. All construction machinery and vehicles shall be equipped with practical sound-muffling devices, and operated in a manner to cause the least noise consistent with efficient performance of the Work.

During construction activities on or adjacent to occupied buildings, and when appropriate, CONTRACTOR shall erect screens or barriers effective in reducing noise in the building and shall conduct its operations to avoid unnecessary noise which might interfere with the activities of building occupants.

19.0 REMOVAL OF TEMPORARY CONSTRUCTION WHEN NO LONGER NEEDED

When temporary facilities, services, and controls are no longer needed and before the Work is completed, remove the various temporary facilities, services, and controls and legally dispose of them. Portions of the site used for temporary facilities shall be reconditioned and restored to their previous condition.

END OF SECTION

SECTION 01614

HANDLING AND STORAGE

1.0 SCOPE

This section covers delivery, storage, and handling of materials and equipment. Reference Section 01500.

2.0 DELIVERY

- A. Contractor shall bear the responsibility for delivery of equipment, spare parts, special tools, and materials to the site and shall comply with the requirements specified herein and shall provide required information concerning the shipment and delivery of the materials specified in this Contract. These requirements also apply to any sub suppliers making direct shipments to the jobsite.
- B. Contractor shall, either directly or through contractual arrangements with others, accept responsibility for the safe handling and protection of the equipment and materials furnished under this Contract before and after receipt at the port of entry. Acceptance of the equipment shall be made after it is installed, tested, placed in operation and found to comply with all the specified requirements.
- C. All items shall be checked against packing lists immediately on delivery to the site for damage and for shortages. Damage and shortages shall be remedied with the minimum of delay.
- D. Delivery of portions of the equipment in several individual shipments shall be subject to review of COUNTY before shipment. When permitted, all such partial shipments shall be plainly marked to identify, to permit easy accumulation, and to facilitate eventual installation.

3.0 STORAGE

- A. Upon delivery, all equipment and materials shall immediately be stored and protected until installed in the Work. The Contractor shall provide lien waivers for stored equipment as requested by the COUNTY. Refer to Section 01500.
- B. Equipment and materials shall not show any pitting, rust, decay, or other deleterious effects of storage when installed in the Work.
- C. In addition to the protection specified for prolonged storage, the packaging of spare units and spare parts shall be for export packing and shall be suitable for long-term storage in a damp location. Each spare item shall be packed separately and shall be completely identified on the outside of the container.

4.0 HANDLING

Stored items shall be laid out to facilitate their retrieval for use in the Work. Care shall be taken when removing the equipment for use to ensure the precise piece of equipment is removed and that it is handled in a manner that does not damage the equipment.

END OF SECTION

DIVISION 2

SITWORK

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SECTION 02050

MALCOLM ROAD WSF LOWER FLORIDAN AQUIFER PRODUCTION WELLS

PART I – GENERAL

1.01 THE REQUIREMENT

- A. General: The work described herein consists of constructing public supply wells in accordance with the Specifications and Figures (Figures 1 through 3) contained herein. The work shall be performed by a licensed Florida Water Well Contractor with equipment which is adequate to complete all phases of well construction. All work shall be performed under the direct supervision of an experienced well driller and an adequate number of competent helpers. If the CONTRACTOR's equipment is not capable of satisfactorily performing the work provided for in these Specifications, the CONTRACTOR at his own expense shall substitute equipment satisfactory to the OWNER. All work shall be completed in full conformance with St. Johns River Water Management District (SJRWMD) and Florida Department of Environmental Protection (FDEP) rules and regulations for water wells, or this Specification, whichever is greater or more restrictive.
- B. Site Access: The CONTRACTOR shall make arrangements with the OWNER in order to gain access to the site. The contact person is Mark Paquette (407-254-9786).
- C. Production Wells: The CONTRACTOR shall provide all equipment, labor and materials to construct, develop, test, and log, five (5) lower Floridan aquifer (LFA) production wells at the Malcolm Road Water Supply Facility (MRWSF). The well, and all appurtenant work, will be constructed in accordance with the requirements of the Contract Documents, Specifications, and Figures contained herein.
- D. Sound Proofing: The CONTRACTOR shall provide mufflers on equipment, and take whatever other steps necessary during drilling, pumping, testing, and all other work incidental there to ensure that noise levels conform to any County or other applicable noise ordinances. The CONTRACTOR will take necessary measures to limit access to the drilling site to minimize public hazards. Refer to Section 01500.
- E. Work Hours: The CONTRACTOR shall limit work hours between 7:00 a.m. and 7:00 p.m. Monday through Friday, unless given approval by the OWNER.
- F. The CONTRACTOR shall complete the work, disinfect where applicable, and prepare the well for continuous service. The CONTRACTOR shall make repairs, replacements and restoration required as a result of any damages caused during construction and/or testing. The CONTRACTOR will restore all areas disturbed during progress of work.
- G. The OWNER/ENGINEER/GEOLOGIST reserves the right to move to an alternate site for drilling and constructing a well if unfavorable subsurface hydrogeologic conditions are encountered at the site.

- H. The CONTRACTOR shall notify the SJRWMD and Orange County Department of Health, as required by regulations, prior to placement of any cement grout, and whenever else required for the construction of the well.

1.02 SCOPE OF SERVICES

- A. The Work to be performed under this Section includes the furnishing of all labor, materials, equipment, and all other facilities and incidentals necessary to construct, develop, and test five production wells with approximate construction specifications as summarized below.

Well	Casing Length	Total Depth	Casing Diameter
Production Well MR-1	1,050'	1,300'	24"
Production Well MR-2	1,050'	1,300'	24"
Production Well MR-3	1,050'	1,300'	24"
Production Well MR-5	1,050'	1,300'	24"
Production Well MR-6	1,050'	1,300'	24"

The production wells will be located at the Malcolm Road Water Supply Facility (MRWSF) in west Orange County, Florida as shown in **Figure 1**.

Casing for the production wells shall be constructed of new black steel pipe. The production wells shall each be capable of producing 3,500 gpm with the lowest practical amount of drawdown. The 24-inch casing for the production wells shall be set a minimum of 10 feet into competent limestone. A combination of the mud rotary method and the reverse air method shall be used to construct the wells. Alternate drilling methods may be proposed by the CONTRACTOR, but are not to be utilized unless prior approval from the ENGINEER/GEOLOGIST is provided. A detailed well location map is provided as **Figure 2**. Typical well construction details are shown in **Figure 3**.

The proposed well shall be constructed to public supply standards as described by the St. Johns River Water Management District (SJRWMD) and Florida Department of Environmental Protection (FDEP) rules and regulations, and shall comply with any other applicable federal, state and local rules and regulations.

- B. The CONTRACTOR shall establish his work sequence based on the use of crews to facilitate completion and testing within the allotted contract time.
- C. A series of geophysical logs will be performed on the production wells during construction and a final suite of geophysical logs plus a video log will be performed on each well after completion. The geophysical logs performed during construction will include caliper, gamma ray, spontaneous potential and resistivity. The final suite of geophysical logs performed after construction will include caliper, flow (dynamic and static), gamma ray, spontaneous potential, resistivity, acoustic, and temperature. The video log will be made with a color video camera with 360° directional side viewing capability and be performed while the well is flowing.

- D. A step drawdown test will be performed on each production well and shall be conducted in order to show proper development. The Work includes furnishing all labor, materials, equipment, and all other facilities and incidentals necessary to perform the step-drawdown test.
- E. A 24-hour constant rate discharge test will be performed on only one (1) production well yet to be determined after all production wells are installed and developed. The Work includes furnishing of all labor, materials, equipment, and all other facilities and incidentals necessary to perform the constant rate discharge test
- F. The Work includes the furnishing of all labor, materials, equipment and all other facilities and incidentals necessary to disinfect each well and bacteriologically clear them after pump removal, as required by FDEP.
- G. Location of all existing utilities will be the CONTRACTOR's responsibility. Damage to any utilities shall be repaired at the CONTRACTOR's expense.
- H. Water quality samples shall be collected in specially designated and approved sample containers provided to the CONTRACTOR by OCU LABORATORY for the specific parameters required by these specification documents. The CONTRACTOR is responsible for contacting the LABORATORY ahead of time in order to pick up the sample containers. All sample containers shall be requested by phone (407-254-9550) two (2) business days in advance of when they are to be picked up by the CONTRACTOR, as directed by the ENGINEER/GEOLOGIST or the OWNER's REPRESENTATIVE. Business hours are 8 am to 5 pm Monday through Friday, excluding holidays.
- I. These Specifications are intended to be a general description of the required work, but may not cover all contingencies that may occur during well construction. Changes or variations from the work plan shall be approved by the ENGINEER/GEOLOGIST, prior to execution.

1.03 REFERENCE TO STANDARDS

- A. AWWA, ASTM, ANSI, and API standards shall apply as referenced herein. Standards shall include, but are not restricted to the following:
 - 1. AWWA Water Well Standards, A100-97 and A100-90.
 - 2. ASTM Pipe Standards A53, D2241 and F480.
 - 3. API Pipe Standards, 5L.
 - 4. ASTM Portland Cement Standards, C 150-92.
- B. The wells shall be disinfected to remove bacteriological contamination in accordance with AWWA Water Well Standards AWWA C654-2013.

1.04 SUBMITTALS

- A. General: All CONTRACTOR submittals shall conform to the applicable requirements as specified by OWNER and the supplementary requirements specified. All measurements for depths shall be referenced to ground surface at the well site.
- B. Schedule: The CONTRACTOR shall submit a work schedule that includes the major components of the project. The work schedule shall be submitted to the OWNER and ENGINEER/GEOLOGIST as specified under Part F-Article 18 and Section 010310 of the specifications.
- C. Materials and Shop Drawings: Copies of all materials required to establish compliance with the Specifications shall be submitted. Submittals shall at least include descriptive literature, bulletins, and/or catalogs providing description of all materials and mill certifications by material and specification (e.g., ANSI). These submittals shall include, but not be limited to the surface casing, well casing, and drilling fluid products.
- D. Supplier's List: The CONTRACTOR shall submit a complete list of all proposed vendors, and suppliers, along with corresponding material specifications to be used in the work. The Materials and Supplier's List shall be submitted to the OWNER and ENGINEER/GEOLOGIST one week prior to mobilizing the rig to the site.
- E. Applications for Payment: The CONTRACTOR shall submit copies of all applications for payment to the OWNER.
- F. Subcontractor's List: The CONTRACTOR shall submit a complete list of all proposed subcontractors to be used in the work, for acceptance by the OWNER, one week prior to mobilizing the rig to the site. The CONTRACTOR may be required to submit additional information or a resume of qualifications for any of the subcontractors proposed.
- G. Welders: Prior to the start of work, the CONTRACTOR shall submit a list of the welders he proposes to use during well construction, and the type of welding for which each has been qualified, along with current certification documents for each welder listed.
- H. Daily Log: The CONTRACTOR shall maintain a detailed daily log of events for his activities on the site during well construction and testing. The information shall be recorded on Daily Drilling Report forms. Failure to keep this log up to date on a weekly basis shall be grounds for the ENGINEER/GEOLOGIST to stop drilling operations. No standby time will be paid. The report forms should include information on bit assembly and drill string, drilling mud and additives, fluid losses, water- and fluid- level changes, footage drilled and formations encountered, change in formation, hard and soft zones, and cementing operations. Installed quantities of items identified on the Bid Form should be included in the daily log. In addition, information relative to maintenance and repair time, along with details of repair, CONTRACTOR'S personnel/sub-contractors personnel, and other pertinent information shall be included. Development and pump testing records shall also be included and attached. One legible form (with any attachments) suitable for photocopying shall be submitted to the ENGINEER/GEOLOGIST on a weekly basis

- I. Mill Certificates: Casing mill certificates shall be submitted to the ENGINEER/GEOLOGIST for all casings, one week prior to the installation of the casing in the ground. Heat numbers on casing joints shall be readily visible and legible or the casing will not be accepted by the ENGINEER/GEOLOGIST.
- J. Welding Procedures: The CONTRACTOR shall submit to the ENGINEER/GEOLOGIST proposed procedure specifications and qualification records for welding activities for all pipe and casing welding to be performed under this section, in accordance with Section IX, Article II of the ASME Boiler and Pressure Vessel Code. Materials shall be submitted to the ENGINEER/GEOLOGIST no less than one week prior to the proposed welding activity.
- K. Geological Samples: The CONTRACTOR shall collect label and store, samples of all geological formations encountered in ten foot increments during drilling operations. Before collecting each sample, stop drilling and circulate drilling fluid until all cuttings are removed from the hole, then resume drilling and collect sample when cuttings reach the surface. Each sample shall be clearly labeled and indicate well number, date, time, and the exact depth from which the sample was taken. Two sets of samples shall be collected in zip lock or cloth bags and stored in a protected place near the drilling site.
- L. Geophysical Logging: The CONTRACTOR shall submit 2 draft field copies of all geophysical logs to the ENGINEER/GEOLOGIST within 24 hours following logging activities, and 6 final copies and an electronic file (pdf electronic file and Excel spreadsheet or txt binary file) within 10 days of logging. For each geophysical log suite performed, the ENGINEER/GEOLOGIST may request the CONTRACTOR to obtain a brief descriptive report from the service company interpreting the results of the log or logs. Caliper log reports must indicate borehole volume. Static and pumping flow logs must have discharge rate plotted on log in gallons per minute. Flow stations through the middle semi-confining unit in to the lower Floridan aquifer will be required. The printed reports must be submitted to the ENGINEER/GEOLOGIST within 72 hours of completion of logging. The logs to be performed are listed in Part 3-Execution.
- M. Abandonment: During back plugging or plugging of a well, daily reports shall be maintained by the CONTRACTOR and provided to the ENGINEER/GEOLOGIST. The daily report shall contain the following information: (a) number of feet plugged; (b) amount of cement and aggregate used; and (c) any other pertinent data that the CONTRACTOR may record or the ENGINEER/GEOLOGIST may request.
- N. Laboratory Analyses and Testing: The CONTRACTOR will coordinate with the ENGINEER/GEOLOGIST for the collection of water samples during reverse-air circulation drilling of the Floridan aquifer system for analysis by Orange County Utilities' at 9124 Curry Ford Road.
- O. Calibration Data: Calibration records for each measuring instrument used in the construction of the well shall be submitted to the ENGINEER/GEOLOGIST for review one (1) week prior to the installation or use of the instruments. Calibration of instruments shall have been performed within 30 days prior to use in testing. The calibration records shall contain the following information:

- a. Flow meter calibration sheet: Serial Number, Model Number, Gears, Test apparatus size, Meter reading and flow rate for at least three (3) steps, Percent error for each step, Tester's name and title.
 - b. Pressure gauge calibration sheet: Serial Number, Model Number, Scale range, Meter reading and inches of mercury for at least three steps covering the entire range of the gauge, Percent error for each step, Tester's name and title.
 - c. Inclination tools and geophysical logs: Each downhole instrument used in testing the wells during construction shall demonstrate acceptable calibration before use. Where possible, this calibration record shall be included on the output of the test or on the log.
- P. Operations: The CONTRACTOR shall submit for the ENGINEER/GEOLOGIST's approval plans for cementing operations and casing installation, at least 72 hours prior to commencing work on those operations. These plans shall include the following information:
- a. Cementing Program: Top and bottom of each interval to be cemented, pre-flush and spacer, composition of cement to be used in each interval and volume to be pumped, method of emplacement of cement, expected fill-up, expected pressures, and any additives to be used.
 - b. Casing Installation: Tabulation of casing on site and the length of each section, weight of each joint, cumulative string weight, order of installation of casing sections, locations of centralizers and casing tabs.
- Q. Well Development Description and Test Records: A description of the Well Development procedure shall be submitted to the ENGINEER/GEOLOGIST one (1) week prior to development activities. Development and test records shall be recorded on a half-hour basis, showing production rates, static water level (pre-development and post-development), pumping level, drawdown, production of sand with centrifugal sand separating meter, and all other pertinent information concerning development and testing methods. This data shall be recorded on a form to be provided to the ENGINEER/GEOLOGIST.
- R. Permits: It is the CONTRACTOR's responsibility to obtain all permits with local and state regulatory agencies associated with the construction and testing of the facility. The CONTRACTOR shall not perform work on the well until these permits are obtained. The CONTRACTOR shall furnish copies of all permits to the OWNER and ENGINEER/GEOLOGIST as the permits are obtained. As required by law, the CONTRACTOR shall retain and/or post copies of the permits at the site.
- S. Plumbness and Alignment Tests: A plumbness and alignment test, as described in AWWA Specification A-100-90, Standard for Water Wells, and any other regulatory agencies that may have jurisdiction, shall be provided to the ENGINEER/GEOLOGIST after the well has been completed and before its acceptance. In addition, the latest revisions of standards by the AWWA shall apply. During the plumbness and alignment testing, Daily Report forms shall be maintained by the CONTRACTOR and submitted to the ENGINEER/GEOLOGIST. The

reports shall provide a description of number of hours on the job, measurements recorded and other pertinent data specified in advance by the ENGINEER/GEOLOGIST. Upon completion of the plumbness and alignment testing of the well, the CONTRACTOR shall submit to the ENGINEER/GEOLOGIST written test data sheets within 24 hours. Test sheets shall include the horizontal deflection test results.

- T. Final Description: The final well descriptions shall show the following: diameter, wall thickness, depths and lengths of casings installed; borehole diameters; cemented casings; centralizer locations; depths and thickness' of annular seals; quantity of material removed during development operations; and all other pertinent details, and shall be submitted to the ENGINEER/GEOLOGIST prior to acceptance of the well.
- U. Records Required by Law: The CONTRACTOR shall maintain all records required by governmental agencies having jurisdiction, and shall submit such records to them as may be required. Two copies of all such material shall also be furnished to the ENGINEER/GEOLOGIST.
- V. Record Figures: Record Figures shall be submitted in accordance with the relevant section of the technical specifications and Figures.
- W. Completion Report Required: A Water Well Completion Report (Form 41.10-410(2)) must be filed with the appropriate agencies within 30 days of well completion.
- X. Drilling Waste Disposal: The CONTRACTOR shall notify the ENGINEER/GEOLOGIST of a drilling waste disposal location for approval by OWNER two (2) weeks prior to disposal.
- Y. Costs: All costs for meeting the provisions of the regulatory agencies having jurisdiction in this project shall be included in the lump sum bid. Should any action by the CONTRACTOR be necessary to meet these requirements during construction and testing, the entire cost of compliance shall be borne by the CONTRACTOR.
- Z. Video Survey: The CONTRACTOR shall perform a video survey on the well from land surface to the base of the well following drilling and development activities. Six (6) copies of the completed survey, in DVD format, shall be provided by the CONTRACTOR to the ENGINEER/GEOLOGIST for distribution within 30 days of completion of the video survey.

1.05 REVIEW

- A. The proposed method of well disinfection must be submitted to the ENGINEER/GEOLOGIST for approval thirty (30) days prior to well disinfection. The method of disinfection should comply with the latest AWWA C654.
- B. The proposed method and setup for the step drawdown and constant rate discharge testing must be submitted to the ENGINEER/GEOLOGIST for approval thirty (30) days prior to running these tests. The submittals must include plans for accessing all well included in the particular tests, routing of discharge water, pump equipment, meters, water level indicators, pressure transducers, data loggers and scheduling.

1.06 PERMITS

- A. The CONTRACTOR shall be responsible for obtaining and shall, within thirty days (30) working days following notice to proceed, apply for the well construction permits from the SJRWMD to construct the well specified herein, in accordance with the Rules of the SJRWMD, Chapter 40C-3, F.A.C. The permit shall be available for inspection at the site during construction and shall be kept on-site at all times. The CONTRACTOR shall be responsible for obtaining permit time extensions in accordance with the rule specified above, if well construction extends beyond the valid permit date.
- B. The CONTRACTOR shall be responsible for obtaining any additional federal, state, or local permits required for constructing the wells or discharging water from the site. If a generic discharge permit is required by the FDEP, the CONTRACTOR shall be responsible for obtaining the permit and for the compliance of all permit conditions.
- C. The CONTRACTOR shall not perform any work on the wells until these permits are obtained and SJRWMD notified 24 hours before construction begins.
- D. The CONTRACTOR shall furnish separate copies of all permits to the ENGINEER/GEOLOGIST as the permits are received.
- E. The CONTRACTOR is responsible for all permit fees.

1.07 QUALIFICATIONS

- A. The CONTRACTOR responsible for constructing the wells shall be licensed by the SJRWMD as a water well CONTRACTOR employing only competent workmen for the execution of this Work, and all such Work shall be performed under the direct supervision of an experienced well driller satisfactory to the OWNER and ENGINEER/GEOLOGIST.
- B. The CONTRACTOR's well driller shall be capable of identifying lithologic samples, maintaining complete and current well logs and daily notes for the well completion report, and developing and testing the well, as required by these specifications. A well completion report shall be submitted to the ENGINEER/GEOLOGIST and the SJRWMD.
- C. The ENGINEER/GEOLOGIST may make any other investigations deemed necessary to determine the ability of the CONTRACTOR to perform the Work, and the CONTRACTOR shall furnish to the ENGINEER/GEOLOGIST all such information and data for this purpose as the ENGINEER/GEOLOGIST may request.
- D. The CONTRACTOR shall furnish satisfactory evidence upon request that all materials to be furnished in performing the specified Work are new and all equipment to be used is in good working order.
- E. The CONTRACTOR shall complete the Work described in this Section in accordance with (a) the American Water Works Association Standard for Water Well (AWWA A100-97),

(b) applicable portions of the Rules of the SJRWMD, Chapter 40C-3, F.A.C., and (c) applicable portions of the Rules of the FDEP, Chapter 62-555, and 62-532 F.A.C.

1.08 PROJECT RECORDS

- A. Before installing the casing or materials in the wells, a report listing the source and description of the materials to be used and the mill certificates shall be submitted to the ENGINEER/GEOLOGIST.
- B. During drilling of the wells, the CONTRACTOR shall maintain at the well site a complete log setting forth the following:
1. The surveyed reference point for all depth measurements.
 2. The depth at which changes of formation occur.
 3. The depth and interval of each cavity encountered during drilling.
 4. The identification of the material of which each stratum is composed.
 5. The depth interval from which each formation sample is taken.
 6. The depth interval from which each water sample is taken.
 7. The depth at which hole diameters change.
 8. Depth at which drilling method is changed.
 9. Other pertinent data requested by the ENGINEER/GEOLOGIST.
- C. Lithologic samples and water quality samples shall be collected and preserved immediately upon retrieval. Lithologic samples shall be preserved in separate air tight jars or ziplock bags of at least 1.0 pound capacity for each interval specified by the CONTRACTOR. Lithologic samples shall be taken during drilling at 5-foot intervals in the siliceous surficial sediments, 10-foot intervals in the Floridan aquifer, and at lithologic changes. The CONTRACTOR will coordinate with the ENGINEER/GEOLOGIST for the collection of water samples during reverse-air circulation drilling of the lower Floridan aquifer starting at approximately 950 feet below land surface. Samples will be collected every 80 ft within the lower Floridan aquifer and be clearly and legibly labeled with the following information:
1. Location of the well.
 2. Name or number of the production well.
 3. Depth interval represented by the sample.
 4. Date taken.
 5. Time taken.
- Water quality samples will also be collected from each production well by the CONTRACTOR once development has been completed for primary and secondary drinking water standards.
- D. Upon completion of the wells, the CONTRACTOR shall also submit to the ENGINEER/GEOLOGIST a report and as-built drawings to include the following:
1. The total depth of the borehole and the length of casing installed in each well.
 2. The nominal hole diameter.

3. The depth or location of any lost drilling fluid, drilling materials, or tools.
 4. The type and amount of drilling fluid additives used.
 5. The depth and diameter of any surface casing.
 6. The amount of cement (cubic yards) used in grouting the well annulus and/or surface casing.
 7. The complete description (including length, diameter, depth, and mill certificates) of each well casing.
 8. Other pertinent data requested by the ENGINEER/GEOLOGIST.
 9. Any and all other pertinent information for a complete and accurate log (e.g., temperature, pH, and appearance (color) of any water samples taken).
- E. Formation sample jars or bags shall be provided and properly labeled by the CONTRACTOR.
- F. Blank well completion report forms can be obtained by written application to the Florida Department of Environmental Protection, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida, 32301, or the St. Johns River Water Management District. Well completion reports shall be submitted by the CONTRACTOR to the SJRWMD and ENGINEER/GEOLOGIST within 30 days of well completion.
- G. A daily detailed driller's report shall be maintained and delivered upon request to the ENGINEER/GEOLOGIST or the OWNER's REPRESENTATIVE at the well site. The report shall give a complete description of all lithologies encountered, number of feet drilled, number of hours on the job, shutdown time due to breakdown or other cause, the fluid level in the hole measured daily before starting pumps, the properties of the drilling fluid, feet of casing set, and such other pertinent data as requested by the ENGINEER/GEOLOGIST.
- H. The CONTRACTOR shall provide, install and maintain erosion controls for the duration of the well construction work as needed and to prevent sediment and turbidity from entering surface water bodies and to avoid erosion problems by directing flow away from the drilling site and adjacent properties. Refer to Section 01500.

1.09 HANDLING OF MATERIALS

- A. All materials shall be properly protected so that no damage or deterioration will occur during a prolonged delay from time of shipment until installation is completed and the well and equipment are ready for operation.
- B. Finished iron or steel surfaces not painted shall be properly protected to prevent rust and corrosion.

1.10 QUALITY ASSURANCE

- A. Subcontractor's List: Each subcontractor listed shall be approved by the ENGINEER/GEOLOGIST. The ENGINEER/GEOLOGIST reserves the right to disapprove the use of any subcontractor proposed.

- B. Tests: The CONTRACTOR shall conduct performance tests to demonstrate well soundness prior to acceptance.
- C. Instrumentation: The CONTRACTOR shall provide calibration records of all instruments used during testing to the ENGINEER/GEOLOGIST one (1) week prior to installation.
- D. Video Survey: The video camera to be used for the video survey will be centralized and of a type that is capable of focusing on the diameter of open borehole or casing upon which the survey is being performed, having sharp contrast and good resolution. The borehole video survey shall be accomplished using a color, radial view, 360-degree camera, with tilt capability of up to 85 degrees from vertical. The borehole camera shall have remote focus ability. Mirrors shall not be used to accomplish this range of view.
- E. Geophysical Logs: All geophysical logs shall be run by a qualified service company experienced (having performed at least 10 surveys) in the type of logs they are to perform. The firm retained to run the geophysical survey shall perform all geophysical requirements for the project. The logs will be run using accurate instruments of resolution sufficient to allow detailed interpretation of the logs. The correct calibration of each instrument shall be demonstrated at the time of logging, and a record of the calibration shall be included on the logs, where possible. The logs shall be run at no more than 30 feet per minute and shall be output at 20 feet per inch. A repeat section shall be included on each log to demonstrate the sensitivity of the instrument to variations in the properties of the intervals being logged and to demonstrate repeatability of the logs. The caliper tool shall include a minimum of 3 arms. Borehole volume shall be indicated on the reamed borehole caliper log, and shall be provided to the ENGINEER/GEOLOGIST for cementing calculations.
- F. Guarantee: The CONTRACTOR guarantees that the work performed under this section of the Contract, and the workmanship, materials and equipment supplied or used in the execution of the work, is free from defects or flaws and is furnished in strict accordance with the Contract Documents in every respect. The CONTRACTOR further guarantees that the performance test requirements of the Contract Documents shall be fulfilled. The CONTRACTOR shall repair, correct, or replace all damage to the work covered by failures covered by the guarantee. The guarantee shall remain in effect for a period of 1 year from the date of final acceptance by the OWNER.
- G. Sand Production: Sand production during well development shall be recorded on a form for pump development and testing. Sand production, shall be measured by a centrifugal sand separating meter as described in the AWWA A-100-90 Standard for Water Wells and Groundwater and Wells (Driscoll, 1986), and should not exceed 5 parts per million during the 30-minute period after the pump starts pumping at the design discharge rate, or as determined appropriate by the ENGINEER/GEOLOGIST. Should the well produce sand exceeding 5 parts per million, additional well development will occur at a discharge rate and for a time period determined appropriate by the ENGINEER/GEOLOGIST.
- H. Cement: Material used for sealing the casing shall consist of a neat cement grout using Type II Portland cement conforming to ASTM C 150. Neat-cement grout shall contain no

more than 5.2 gallons of fresh water per 94 pound sack of cement yielding a weight of roughly 15.6 lbs/gal for neat cement grout. A maximum of 9.1 gallons of fresh water shall be added to a 94 pound sack of cement with 6 percent bentonite added to yield a weight of approximately 13.5 lbs/gal for cement bentonite grout. Mixes between the two grout mixtures shall comply with manufacturer recommendations and shall yield weights between 13.5 and 15.6 lbs/gal. Grout samples shall be collected by the CONTRACTOR and checked with a Fluid Density Balance in accordance with API Spec. 10. Grout samples shall be collected a minimum of three (3) times during each cement stage: prior to pumping, in the middle, and near end of the stage. The specified slurry density shall match the specified slurry density indicated on the delivery certificate.

1.11 MATERIALS DELIEVERY, STORAGE and PROTECTION OF MATERIALS

- A. All materials shall be delivered in an undamaged condition and stored to provide protection against damage. All defective or damaged materials shall be replaced with new materials at the CONTRACTOR'S expense.
- B. All materials must be properly protected against damage during a prolonged period at the site.
- C. The CONTRACTOR shall prepare an area, within the limits of a location approved by the ENGINEER/GEOLOGIST, for the storage of materials required for this work.

1.12 CONTRACTOR EQUIPMENT

- A. Storage Area: The CONTRACTOR shall prepare an area, within the limits of a location approved by the ENGINEER/GEOLOGIST, for the storage of materials required for this work.
- B. Protection: The CONTRACTOR is responsible for protecting his own work including materials from theft, vandalism, and unauthorized entry.
- C. Equipment Use: The equipment shall be provided with all sound deadening devices reasonably possible. The rig engines and all other power plant equipment shall have mufflers, and metal parts of the rig that may encounter casing or drill pipe shall be protected through the use of wood, or other sound absorbent material, where possible. CONTRACTOR shall provide complete rotary drilling units, combination rig drilling units, cable tool drilling rig, all tools, accessories, power, pumps, lighting, water and other equipment necessary to conduct efficient drilling and testing operations.
- D. Equipment Requirements: The CONTRACTOR's drilling rig shall have a lift capacity exceeding the greatest load required during construction of the well. The rig shall be equipped with drill string weight and drilling speed recorder.
- I. CONTRACTOR shall make necessary arrangements to acquire construction water as specified under Section 01500. The LFA monitor well MR-LF-1 and the MR-LF-4 production well at the site may be available for this project subject to OWNER approval

and SJRWMD notification. Any water used from MR-LF-4 has to be metered and reported to the OWNER.

1.13 MOBILIZATION, PERSONNEL AND OPERATING REQUIRMENTS

- A. Mobilization: The CONTRACTOR shall mobilize its equipment and personnel to effectively commence its drilling operations within the time limit specified.
- B. Personnel Requirements: The CONTRACTOR shall furnish capable personnel, experienced in the work required by these specifications. In addition, the following shall apply:

- 1. The CONTRACTOR shall provide an adequate number of competent helpers.

- 2. The drillers shall be capable of keeping good and clean well logs, and reports of the drilling, developing and pump testing operations as instructed by the ENGINEER/GEOLOGIST.

- 3. Welders: All welding shall be performed according to the American Welding Society standards and American Society for Testing and Materials standards. All welding shall be conducted by certified welders of the AWS, ASTM, ASME, or approved equal.

- 4. Well Drillers: All well drillers shall possess a current State of Florida Water Well Contractor License, issued by the one of the five water management districts. The drillers must have prior experience operating the drilling equipment selected for the project and should be capable of identifying and describing local geologic formations, maintaining complete and current well logs and daily notes for the well completion reports. The Bidder must provide a minimum of three (3) references for recent work completed (within the last five years) for the construction of LFA production wells within Orange County, similar in scope and complexity to the work requested in this RFB. References must be individuals that can be readily contacted and have first-hand knowledge of the bidder's performance on the specific project performed by the bidder. At the minimum the Bidder must supply the following:

- Owner Name:

- Address:

- Contact Person:

- Contact Phone Number:

- Project Name and Location:

- Commencement Date:

- Completion Date:

- Description of Work Performed:

- C. Work Hours: The CONTRACTOR shall limit work hours between 7:00 a.m. and 7:00 p.m. Monday through Friday, unless given approval by the OWNER. The CONTRACTOR is not allowed to have personnel onsite before 7:00 a.m. and after 7:00 p.m.

- D. Service Companies: Where possible, the CONTRACTOR shall utilize the skills of a specialist service company, expert in the type of service for which they are employed. The name and

the background of the company and the individuals providing the services shall be submitted to the ENGINEER/GEOLOGIST for approval prior to beginning work. The ENGINEER/GEOLOGIST reserves the right to reject any service company. At a minimum, service companies shall be employed for the following:

1. Geophysical Logging;
 2. Video Surveying;
 3. Cementing, unless the CONTRACTOR can demonstrate previous experience and expertise in cementing.
- E. Water Samples: The CONTRACTOR will coordinate with the ENGINEER/GEOLOGIST for collection of water quality samples during construction. The samples will be analyzed by OCU Laboratories for chloride, sulfate, total dissolved solids, nitrate and nitrite. Samples will be collected every 80 feet within the Floridan aquifer system. The CONTRACTOR is responsible for contacting the LABORATORY ahead of time in order to pick up the sample containers. All sample containers shall be requested by phone (407-254-9550) two (2) business days in advance of when they are to be picked up by the CONTRACTOR, as directed by the ENGINEER/GEOLOGIST. Business hours are 7 am to 4 pm Monday through Friday, excluding holidays. Samples shall be delivered to the lab within 20 hours of collection and they shall be dropped off at the lab no earlier than 7 am and no later than 4 pm. The CONTRACTOR shall coordinate pickup and delivery of samples with ENGINEER/GEOLOGIST.
1. The sample containers shall be clearly labeled with the well identification, and the depth interval below ground surface from which the sample was collected and the time and date of sample collection.
 2. Chain of Custody forms shall be completed and accompany all water samples delivered to the LABORATORY. All persons handling the samples shall be required to sign the Chain of Custody form.
 4. The CONTRACTOR shall be aware of applicable water sampling holding times for the samples for which they are responsible and CONTRACTOR shall be responsible that the samples are transmitted to the LABORATORY within these time periods. Samples shall be delivered to the LABORATORY on the same day collected.
- F. Work Area: The CONTRACTOR shall prepare an area, within the limits of the location delineated in the field by the ENGINEER/GEOLOGIST, for the work described in these Technical Specifications.
- G. Cuttings and Fluid Disposal: It shall be the CONTRACTOR'S responsibility to arrange for an approved disposal site for drill cuttings, fluid from drilling, fluid from well development, and fluid from well production testing that complies with all applicable regulations. No drilling operations can commence without an approved disposal site by the OWNER or ENGINEER/GEOLOGIST. The CONTRACTOR shall be responsible for providing and maintaining all necessary tank trucks, dump trucks, pipe, pumps and

equipment necessary to pump and haul excess pad drainage, drilling fluid, drill cuttings and pumped water to a pre-determined disposal site in accordance with federal, state and local regulations, or sub-contract with a firm capable of providing these services when necessary.

- H. Construction Safety Program: The CONTRACTOR shall comply with the OSHA regulations contained in 29CFR Section 1910 for General Industry Regulations and 29CFR Section 1926 for Construction Regulations.

1.14 WELL ACCEPTANCE CRITERIA

- A. The sand content in the water pumped from the completed production wells shall not, at any time, exceed 1 mg/L while each well is being pumped at 3,500 gpm.
- B. The turbidity of the water from the completed production wells shall not exceed 1 NTU as measured on a calibrated turbidimeter when each well is being pumped at its design capacity of 3,500 gpm.
- C. The CONTRACTOR must supply the equipment necessary to test, in the field, sand and turbidity concentrations.
- D. The well efficiency of the completed wells shall not be less than seventy percent (70%) at the design pump rates (3,500 gpm) as calculated by the Hantush-Bierschenk's method.
- E. The casing and borehole for each well shall be constructed round, plumb and true to line; the wells shall comply with AWWA A100-97. The wells shall be tested for plumbness and alignment by the CONTRACTOR in accordance with Appendix D of the American Water Works Association (AWWA) Standard A100-97.
- F. The CONTRACTOR shall demonstrate that the wells are properly disinfected and bacteriologically cleared by passing five consecutive microbiological samples as described in Paragraph 3.11 of this Section.

1.15 WARRANTY

- A. All materials supplied under this Section shall be warranted for a period of five (5) years by the CONTRACTOR and material manufacturers. The manufacturer's warranty period shall run concurrently with the CONTRACTOR's warranty period. The warranty period shall commence on the Final Completion Date, as specified in the Contract or upon completion and acceptance by the OWNER of testing or remedial procedures.
- B. The materials shall be warranted to be free from defects in workmanship and design. Any materials that fail during the warranty period shall be replaced and the unit(s) restored to service at no expense to the OWNER.

1.16 SITE CLEANUP, PRESERVATION AND RESTORATION

- A. Unused Materials and Equipment: During construction, the CONTRACTOR shall regularly remove from the site all accumulated debris and surplus materials of any kind which results from his operations. Unused tools or equipment shall be stored at the CONTRACTOR's yard or base of operations for the project.
- B. Periodic Cleaning: The CONTRACTOR shall perform clean-up work on a regular basis and as frequently as requested by the ENGINEER/GEOLOGIST.
- C. Basic site restoration in an area shall be accomplished immediately following installation or substantial completion of the required facilities in that area. Also, such work shall be performed, when requested by the ENGINEER/GEOLOGIST, if partially completed facilities must remain incomplete for some time period due to unforeseen circumstances.
- D. If the CONTRACTOR fails to perform periodic clean-up and basic restoration of the site to the ENGINEER/GEOLOGIST's satisfaction, he/she may, upon five days written notice to the CONTRACTOR, employ such labor and equipment as he/she deems necessary for the intended purpose at the CONTRACTOR's expense.
- E. Work Completion: Upon completion of work at the site, the CONTRACTOR shall promptly remove all equipment and unused materials. CONTRACTOR shall dismantle any temporary structures erected for purposes not part of the final product. CONTRACTOR shall promptly provide minor repairs and leave the site in a manner acceptable to the ENGINEER/GEOLOGIST, within one month after the completion of drilling and testing.

1.17 ADDITIONAL WORK

- A. At the option of the OWNER, additional work may be authorized. Additional work shall be completed at prices not exceeding those of comparable work and materials contained in the CONTRACTOR's bid or as determined by the ENGINEER/GEOLOGIST.

PART 2 - PRODUCTS

2.01 INNER WELL CASING

- A. The well casing for each production well shall be new black steel pipe having perfect roundness and uniform thickness. Well casing shall have a nominal diameter of 24 inches, and a minimum wall thickness of 0.375 inches. The well casing shall conform to ASTM A53B or API 5L, Grade B, seamless or electric resistance welded, for black steel casing.
- B. The well casing shall be as manufactured by U.S. Steel Corporation, or an approved equal. Copies of the mill certificates shall be submitted by the CONTRACTOR to the OWNER/ENGINEER/GEOLOGIST for approval prior to shipment of casing to the site.
- C. Casing lengths shall be joined watertight by a method appropriate to the material used, as selected by the CONTRACTOR, so that the resulting joints shall have the same structural integrity as the casing itself. If metallic casing is welded, the standards of the

American Welding Society and AWWA C206 shall apply. Casing ends shall be coupled by field welding and shall be beveled. If threaded and coupled joints are used, couplings shall be API or equivalent, made up so that, when tight, all threads will be buried in the lip of the coupling. Should the joints fail or break, the CONTRACTOR shall be responsible for abandonment, repair or replacement of the well.

- D. No well casing shall be ordered or delivered to the site until approval has been provided by the ENGINEER/GEOLOGIST or the OWNERS REPRESENTATIVE. This is required due to the potential for quantity and size changes.

2.02 INTERMEDIATE CASING

- A. The intermediate casing for each production well shall be new black steel pipe having perfect roundness and uniform thickness. Well casing shall have a nominal diameter of 30 inches, and a minimum wall thickness of 0.375 inches. The well casing shall conform to ASTM A53B or API 5L, Grade B, seamless or electric resistance welded, for black steel casing.
- B. The well casing shall be as manufactured by U.S. Steel Corporation, or an approved equal. Copies of the mill certificates shall be submitted by the CONTRACTOR to the OWNER/ENGINEER/GEOLOGIST for approval prior to shipment of casing to the site.
- C. Casing lengths shall be joined watertight by a method appropriate to the material used, as selected by the CONTRACTOR, so that the resulting joints shall have the same structural integrity as the casing itself. If metallic casing is welded, the standards of the American Welding Society and AWWA C206 shall apply. Casing ends shall be coupled by field welding and shall be beveled. If threaded and coupled joints are used, couplings shall be API or equivalent, made up so that, when tight, all threads will be buried in the lip of the coupling. Should the joints fail or break, the CONTRACTOR shall be responsible for abandonment, repair or replacement of the well.
- D. No well casing shall be ordered or delivered to the site until approval has been provided by the ENGINEER/GEOLOGIST or the OWNERS REPRESENTATIVE. This is required due to the potential for quantity and size changes.

2.03 PIT AND SURFACE CASING

- A. Use of a pit casing will be left to the discretion of the CONTRACTOR. If used, the following criteria shall apply.
- B. The pit casing for each production well shall be black steel and shall have a nominal diameter of 42 inches and a minimum wall thickness of 0.375 inches. The pit casing shall conform to ASTM A53B or API 5L, Grade B, seamless or electric resistance welded, for black steel casing.
- C. The surface casing for each production well shall be black steel and shall have a nominal diameter of 36 inches, and a minimum wall thickness of 0.375 inches. The surface

casing shall conform to ASTM A53B or API 5L, Grade B, seamless or electric resistance welded, for black steel casing.

- D. Casing lengths shall be joined watertight by a method appropriate to the material used, as selected by the CONTRACTOR, so that the resulting joints shall have the same structural integrity as the casing itself. If metallic casing is welded, the standards of the American Welding Society and AWWA C206 shall apply. Casing ends shall be coupled by field welding and shall be beveled. If threaded and coupled joints are used, couplings shall be API or equivalent, made up so that, when tight, all threads will be buried in the lip of the coupling. Should the joints fail or break, the CONTRACTOR shall be responsible for abandonment, repair or replacement of the well.
- E. The pit and surface casing shall be as manufactured by U.S. Steel Corporation, or an approved equal. Copies of the mill certificates shall be submitted by the CONTRACTOR to the OWNER/ENGINEER/GEOLOGIST for approval prior to shipment of casing to the site.
- F. If any surface casing is intended for construction purposes only, it shall be reasonably watertight, and of such weight and design as necessary to prevent entrance of sand and unconsolidated material, and to permit its installation without distortion or rupture to the specified depth and dimension.
- G. No surface casing for the production wells shall be ordered or delivered to the site until approval has been provided by the ENGINEER/GEOLOGIST or the OWNERS REPRESENTATIVE.

2.04 DRILLING FLUID

- A. The drilling fluid shall possess such characteristics as are required to adequately maintain the walls of the hole, to prevent caving of the wall as drilling progresses, and to permit recovery of representative samples of cuttings. The fluid shall be consistent with AWWA A100-90 standards.
- B. Bentonite- or native-clay-based drilling fluids shall have residual chlorine content not less than 10 mg/L. The CONTRACTOR may select a drilling fluid (consistent with these Specifications) for completion of the boreholes below the surface casing to total cased depth.
- C. The CONTRACTOR shall provide all materials and equipment for mixing, circulating and testing the drilling fluid and for maintaining its properties. The drilling fluid shall be maintained within limits that allow their complete removal from the well, if necessary, and shall not damage the potential capacity, efficiency, or quality of the well.
- D. All additives used to maintain the properties of the drilling fluid shall be approved by the ENGINEER/GEOLOGIST and specifically recommended by the manufacturer for use in water well drilling. No additive shall be used which causes persistent bacterial growth in the well and aquifer. Makeup water shall be from an approved source.

2.05 CEMENT GROUT

- A. Grout shall be Type II (ASTM C150) neat Portland cement and proportioned in accordance with AWWA A100. The grout mixture may contain up to 6 percent (by volume) of bentonite clay and will be subject to testing at the discretion of the ENGINEER/GEOLOGIST. Grout not meeting the specification shall be rejected. The CONTRACTOR shall have an approved method of testing density of grout on site.
- B. Approximately 5.2 gallons of fresh water shall be added to a 94-lb sack of cement yielding a weight of roughly 15.6 lbs/gal for neat cement grout. A maximum of 9.1 gallons of fresh water shall be added to a 94-lb sack of cement with 6 percent bentonite added to yield a weight of approximately 13.5 lbs/gal for cement bentonite grout. Mixes between these two grout mixtures shall comply with manufacturer recommendations and shall yield weights between 13.5 and 15.6 lbs/gal.

2.06 TEST PUMPING EQUIPMENT

- A. The CONTRACTOR shall provide a test pump capable of pumping at least 4,000 gpm under atmospheric conditions after the maximum drawdown in each well and all piping head losses have been accounted for to test each production well. Additionally, the CONTRACTOR shall provide an opening or fitting such that depth to water level or potentiometric surface pressure may be measured using a pressure transducer during pumping.
- B. The CONTRACTOR shall provide a generator to power the test pump(s). If electric power is available at the site, the CONTRACTOR may use it at his option and expense. Any generator used for the test pumping shall have the necessary capacity to adequately power the selected test pump through the pumping period and discharge range.
- C. Discharge pipe shall be of a diameter and length adequate to transmit water at the maximum discharge rate specified herein from the well site to a designated discharge point up to 5,000 feet down gradient from the wells for the furthest site at a location to be determined by the OWNER. Discharge pipe shall be in good condition, shall be free from leaks and adequately restrained to withstand the maximum anticipated pressure without bursting of the pipe or separation of the joints. A hose bib suitable for collecting representative water samples shall be located on the discharge upstream from the flow meter. A ¼-inch diameter NPT threaded tap suitable for the installation of a sand tester shall be located on the horizontal centerline of the discharge pipe at a location approved by the ENGINEER/GEOLOGIST or the OWNER's REPRESENTATIVE. The discharge pipe layout and discharge point must be approved by the OWNER's REPRESENTATIVE at least seven (7) days prior to the start of the test.
- D. A gate valve suitable for controlling flow through the discharge pipe shall be provided and shall be located at the well head, downstream of the calibrated flowmeter.
- E. The CONTRACTOR shall provide a totalizing flow meter calibrated for the design flow and pipe size and capable of an accuracy of 5% or better. The meter shall have been

calibrated within 90 days of the proposed use. The flow meter shall be installed as specified by the manufacturer for accurate operation. The meter shall be located a minimum of 5 pipe diameters upstream and 10 pipe diameters downstream from any flow obstructions.

- F. The test pump shall be set a minimum of 100 feet below land surface. This requirement may be waived if pumping at a rate of 4,000 gpm in each 24-inch production well results in pumping water level drawdowns, which are considerably less than 100 feet below land surface.
- G. The CONTRACTOR shall provide one (1) data logging pressure transducer with appropriate pressure ranges for the measurement of water level changes or potentiometric pressure changes during the step-drawdown variable rate discharge testing. The CONTRACTOR shall provide eight (8) data logging pressure transducers with appropriate pressure ranges for the measurement of water level changes or potentiometric pressure changes during the constant rate discharge test.
- H. The data logger(s) shall be capable of recording measurements according to the schedule of variable time intervals as listed below:

<u>Interval</u>	<u>Number of Readings</u>	<u>Total Elapsed Time (min)</u>
1 sec	120	2
2 sec	120	6
5 sec	48	10
10 sec	60	20
30 sec	80	60
1 min	60	120
2 min	60	240
5 min	60	540
10 min	90-378	1440

- I. All test pumping equipment shall remain the property of the CONTRACTOR.

2.07 WELL COVERS

- A. Whenever work on the wells is interrupted, such as during an overnight shutdown, each well opening shall be tack welded with a substantial cover in accordance with the Rules of the SJRWMD, Chapter 40C-3, F.A.C. At all times during construction of each well, the CONTRACTOR shall use reasonable precautions to prevent both tampering with the well and entrance of foreign material into the well.
- B. The cover shall be watertight, restrict the positive upward pressure, and stop any potential flowing conditions at the wellhead.

2.08 DISINFECTANT

- A. Disinfectant solution shall be prepared for a minimum concentration of 50 mg/L of Sodium Hypochlorite chlorine for the full length of each well. A disinfection plan must be submitted to the OWNER and/or ENGINEER for approval prior to implementation.

PART 3 – EXECUTION

3.01 BOREHOLE CONSTRUCTION

- A. Each production well shall be constructed by a combination of the mud rotary and the reverse air rotary drilling methods. Alternate drilling methods may be proposed by the CONTRACTOR, but are not to be utilized unless prior approval from the ENGINEER/GEOLOGIST is provided.
- B. Eight inch (8") minimum diameter pilot holes shall be utilized to determine the seating depths of all casing strings.
- C. If 42-inch pit casing is to be installed at a well, the nominal borehole diameter shall be approximately 48 inches for the production well (**Figure 3**). The annular space between the borehole and the pit casing shall be a minimum of three (3) inches.
- D. When 36-inch surface casing is installed at a well, the nominal borehole diameter shall be approximately 42 inches for the production well. The annular space between the borehole and the surface casing shall be a minimum of three (3) inches.
- E. The nominal diameter of the borehole in which the 30-inch intermediate casing shall be set will be 36 inches for each production well. The annular space between the borehole and the well casing shall be a minimum of three (3) inches.
- F. The nominal diameter of the borehole in which the final well casing shall be set will be 24 inches for each production well. The annular space between the borehole and the well casing shall be a minimum of three (3) inches.
- G. The nominal diameter of the open borehole shall be 24 inches in each production well.
- H. Each borehole shall be drilled using clean, uncontaminated equipment in good working order and free from fuel, oil, and hydraulic fluid leaks or discharges. The drill bit, bottom hole assembly, and rod shall be in good condition and appropriate for rapid and correct completion.
- I. Drilling fluid shall be prepared using fresh uncontaminated water and approved additives. The flow of water at the site during drilling will be controlled to prevent excessive flooding of the site. At the earliest time possible after the Floridan aquifer has been penetrated, drilling with mud additives will be discontinued and drilling will continue using the reverse air method. Heavy mineral additives such as barite or ilmenite may be used to increase the density of the drilling fluid in order to restrict the flowing conditions of the well.

- J. An 8-inch minimum diameter pilot hole shall be advanced from the bottom of each pit casing, if used, to approximately 110 feet below land surface to verify the depth to set the surface casing.
- K. An 8-inch minimum diameter pilot hole shall be advanced from the bottom of surface casing to approximately 220 feet below land surface to verify the depth to set the intermediate casing.
- L. An 8-inch minimum diameter pilot hole shall be advanced from the bottom of intermediate inner casing to approximately 1,075 feet below land surface to verify the depth to set the inner well casing.
- M. An 8-inch minimum diameter pilot hole shall be advanced from the bottom of inner casing to approximately 1,300 feet below land surface.
- N. The 8-inch pilot hole will then be reamed out to a diameter of approximately 24 inches to a depth to 1,300 feet below land surface.
- O. All drilling procedures must comply with all applicable local, state and federal requirements, and be in accordance with the standards of AWWA A100.
- P. Drilling fluids shall be contained and recirculated with a closed loop system during construction activities. During reverse air drilling, the fluids recirculated back into the well shall have a turbidity concentration of 100 NTU or less.

3.02 SURFACE CASING INSTALLATION

- A. Once a borehole has been advanced to slightly below the depth at which the surface casing is to be set, the CONTRACTOR shall perform necessary work to condition the borehole, including as a minimum circulating cuttings out of the borehole.
- B. The CONTRACTOR shall lower the casing into the hole and hold plumb and center by use of welded steel centralizers. These centralizers will be placed within 5 feet of the bottom and the top of the casing and at approximately 40-foot intervals in between.
- C. The surface casing shall extend 12 inches above land surface.

3.03 INTERMEDIATE CASING INSTALLATION

- A. Once a borehole has been advanced to slightly below the depth at which the intermediate casing is to be set, the CONTRACTOR shall perform necessary work to condition the borehole, including as a minimum circulating cuttings out of the borehole.
- B. The CONTRACTOR shall lower the intermediate casing into the hole and hold plumb and center by use of welded steel centralizers. These centralizers will be placed within 5 feet of the bottom and the top of the casing and at approximately 40-foot intervals in between.

- C. The intermediate casing shall extend 12 inches above land surface.

3.04 INNER WELL CASING INSTALLATION

- A. Each inner well casing will be installed to an approximate depth of 1,050 feet or to another depth at the instruction of the ENGINEER/GEOLOGIST. The well casing shall be set at least 10 feet into competent limestone, and shall extend at least 36 inches above land surface at completion.
- B. Each inner well casing shall be lowered into the hole and held plumb and centered by the use of commercially available stainless steel centralizers. These centralizers will be placed within 5 feet of the bottom and the top of the casing and at approximately 40-foot intervals in between.

3.05 ALTERNATE INNER WELL CASING INSTALLATION

- A. If during the drilling of a nominal 24-inch diameter borehole there are problems with formation stability and production of fine sand due to geologic conditions, it may be necessary to install an additional inner steel casing of 18-inch in diameter.
- B. The additional inner well casing shall be lowered into the hole and held plumb and centered by the use of commercially available stainless steel centralizers. These centralizers will be placed within 5 feet of the bottom and the top of the casing and at approximately 40-foot intervals in between.

3.06 GROUTING

- A. Each production well shall be grouted in accordance with the Rules of the SJRWMD, Chapter 40C-3, F.A.C.
- B. All grouting and sealing of each well shall be performed in the presence of the ENGINEER/GEOLOGIST and a Department of Health or SJRWMD representative, if available. The grouting shall be done in a manner that will ensure that the annular space will be filled completely in one continuous operation. No drilling operations or other work in a well will be permitted until at least 24 hours after grouting the well.
- C. The CONTRACTOR shall flush the annular space with drilling fluids or water until clear and free of cuttings prior to the start of well grouting.
- D. Before proceeding with placement of the grout, the CONTRACTOR shall secure the ENGINEER/GEOLOGIST approval of the proposed method of placement. No method will be approved that does not specify the forcing of grout from the bottom of the space to be grouted towards the surface.
- E. The CONTRACTOR shall be responsible for any damage to well casing resulting from cementing operations and for the cost required to correct such damages.

3.07 WELDING

- A. The standards of the American Welding Society, Structural Welding Code (AWS D1.1) shall apply for all welded joint casing and accessories. All welds shall conform to the latest revision of ANSI B31.1. All welded casing joints shall be made by certified welders of the AWS, ASTM, ASME, or approved equal.
- B. Casing Connection: All casing shall be handled using drilling rig tools that are equipped with a weight indicator. Each casing joint shall be able to support the weight of the casing below. The casing joints shall be made with the casing properly aligned and using casing tabs to insure alignment and sufficient strength at the joint. Each weld shall be made with sufficient tensile strength to support the weight of the casing below and with sufficient burst strength to contain water at a pressure of 300 psi without leaking.
- C. Tension: The casing shall be suspended in tension from the surface by means of a landing clamp. The bottom of the casing shall be at a sufficient distance above the bottom of the reamed hole as to insure that none of the casing will be supported from the bottom of the hole.
- D. Weld Reinforcement: Weld reinforcement shall be as specified by the AWS code. Upon completion of welding, all weld splatter, flux, slag, and burrs left by attachments shall be removed. Welds shall be repaired to produce a workmanlike appearance, with uniform weld contours and dimensions.
- E. Failure to Complete: If the casing cannot be landed in the correct position or at a depth acceptable to the ENGINEER/GEOLOGIST, the CONTRACTOR shall construct another well immediately adjacent to the original location and complete this well in accordance with the Contract Documents at no additional cost to the OWNER. The abandoned hole shall be sealed in accordance with all State of Florida regulations at CONTRACTOR'S expense.
- F. Collapsed Casing: If the casing should collapse for any reason prior to well completion, it shall be withdrawn and replaced at the CONTRACTOR'S expense.
- G. Casing Installation: The casings shall be lowered into the borehole open-ended and the weight of the casing shall be supported by the drilling rig. The hook load of the drilling rig must exceed the maximum casing weight to be encountered during the construction of the well. Alternative methods of casing installation may be proposed by the CONTRACTOR by submitting the proposed method to the ENGINEER/GEOLOGIST for approval.
- H. Centralizers (Applicable only to Standard Rotary Casing Installations): All casings in the well shall be centralized in the borehole using strap-type centralizers (or approved equal) installed at intervals along the pipe at 0, 90, 180 and 270 degrees around the casing at each position. The four centralizers spaced at 90 degrees around the casing constitute a centralizer group. These centralizers will be placed within 5 feet of the bottom and the top of the casing the casing strings and at approximately 40-foot intervals in between.
- I. Alignment: All centralizer groups shall be vertically aligned, one above the other in order to permit the passage of tremie pipes alongside the casing to the bottom of the borehole.

- J. All welders and welding operators shall be qualified by a qualified testing laboratory at the CONTRACTOR's sole expense before performing any welding under this section. Qualification tests shall be in accordance with Section IX, Article III of the ASME Boiler and Pressure Vessel Code. Welders and operators shall be qualified for making groove welds in carbon steel pipe in position 6G for each welding process to be used.
- K. Qualification tests may be waived if evidence of prior qualification is deemed suitable by the ENGINEER/GEOLOGIST. CONTRACTOR shall retest any welders at any time the ENGINEER/GEOLOGIST considers the quality of the welder's work substandard. When the ENGINEER/GEOLOGIST requests the retest of a previously qualified welder, the labor costs for the retest will be at the OWNER's expense if the welder successfully passes the test. If the welder fails the retest, all costs shall be at the CONTRACTOR's expense.
- L. There shall be a minimum of three (3) weld passes on all pipe. Welded joints shall be allowed to cure for not less than 30 minutes before weld is placed in contact with water.
- M. When the reaming operation has been completed, blank casing shall be installed. The lengths and intervals of each casing type will be determined by the ENGINEER/GEOLOGIST. All casings shall be installed as shown in the Figures and in accordance with the Technical Specifications.

3.08 WELL DEVELOPMENT

- A. Each production well shall be developed by surging and interrupted over-pumping, or other methods approved by the ENGINEER/GEOLOGIST. Over-pumping shall be at various rates up to 4,000 gpm or greater. Development shall continue until each well produces less than 1 mg/L of sand at 3,500 gpm. It shall also continue until turbidity in each well is below 1 NTU after 5 minutes of uninterrupted pumping at 3,500 gpm. The CONTRACTOR shall test the turbidity and sand content at least every four hours during development and report the results to the ENGINEER/GEOLOGIST or the OWNERS REPRESENTATIVE. If the method of development employed by the CONTRACTOR is not yielding satisfactory results, which, in the opinion of the ENGINEER/GEOLOGIST, will produce levels of sand and turbidity that meet the acceptance criteria following the specified development period, the ENGINEER/GEOLOGIST may suspend work, at no additional cost to OWNER, and request that the CONTRACTOR modify his development procedure prior to continuation of further development.
- B. Sand content shall be determined in each well using a Rossum sand tester or approved equivalent. The CONTRACTOR shall demonstrate that the well meets the acceptance criteria under Paragraph A of this Section. It is the responsibility of the CONTRACTOR to secure prior written approval from the ENGINEER/GEOLOGIST for any changes in the sand content testing method.
- C. If a diesel engine is used to drive the test pumps, it shall be equipped with a clutch to allow instantaneous disengagement of the drive shaft and free spooling of the impellers. If an electric motor is used, it will not be equipped with an anti-reverse ratchet, therefore allowing the impellers to backspin when the motor is turned off.

- D. Pumping for the turbidity test for well acceptance will begin after a rest period of at least 5 minutes.
- E. Well development shall be deemed complete when sand content and turbidity are below the levels specified in Paragraph 1.10 G and well efficiency as calculated by the Hantush-Bierschenk's method is greater than the level specified in Paragraph 1.14 D at the design pump rate. Development shall be proved by step drawdown testing. It is the responsibility of the CONTRACTOR to attempt to meet the development criteria by the methods outlined.
- F. If the development criteria are not met after the time specified on the bid form for aggressive development using methods approved by the ENGINEER/GEOLOGIST, the ENGINEER/GEOLOGIST and CONTRACTOR shall meet to evaluate alternative development methods. It is not the intent of these criteria to place the entire burden on the CONTRACTOR for circumstances and events beyond his control. If, after due diligence by the CONTRACTOR and ENGINEER/GEOLOGIST, the development criteria cannot be met, these criteria may be waived.

3.09 GEOPHYSICAL AND VIDEO LOGGING

- A. A series of geophysical logs will be performed on each production well during construction, and another series of geophysical logs and a video log will be performed on each production well after completion of the well and initial development. The geophysical logs to be performed prior to setting of the 30-inch intermediate casing and the 24-inch inner casing will include caliper, gamma ray, spontaneous potential and resistivity. The final suite of geophysical logs will include caliper, static flow, dynamic flow, gamma ray, spontaneous potential, resistivity, acoustic, and temperature.
- B. The dynamic flow log shall be performed at least 2,000 gpm. If the well does not naturally flow at this rate, the CONTRACTOR shall pump the well during the dynamic flow log to attain the desired flow rate.
- C. An additional video log will be performed on each production well after interval and final development of the well.
- D. All data from the geophysical logging will be provided to the ENGINEER/GEOLOGIST data CD or DVD in ASCII format, in hard copy log format (six (6) copies), and with a graphics log viewer program with logs on CD.
- E. The video logs will be made with a color video camera with 360° directional side viewing capability. It will include inspection of the casing and open hole. The well will be allowed to flow during the video log to allow for inspection of highly transmissive zones that may be flowing and to help select zones for interval development. Four (4) copies of each video log will be provided.

- F. Water from the geophysical and video logging will be controlled by the CONTRACTOR in a manner similar to the one used for the step-drawdown and constant rate discharge testing.
- G. Geophysical logging shall be performed by experienced and well-trained personnel. Those performing the logging operations shall have a minimum of 10 years' experience. Five (5) years of the required experience shall be waived if the logger is a Florida registered Professional Geologist (P.G.) or Professional Engineer (P.E.). Training shall include more than the minimum training offered by manufacturers with the purchase of new logging equipment. The geophysical logging contractor shall submit a copy of their professional registration.

3.10 STEP DRAWDOWN TESTING

- A. Two step drawdown tests will be conducted on each well to determine performance. The tests will consist of step-drawdown tests in which each well will be pumped at four (4) escalating rates. The first will be done after each borehole has been reamed out prior to installation of the conductor case and will test the upper Floridan aquifer. The second step drawdown test will be conducted within one week of the completion and development of each well and will test the lower Floridan aquifer.

- 1. The discharge rates shall be as follows (or higher if the test pump will allow):

Step	Pump Rate
1	1,750 gpm
2	2,625 gpm
3	3,500 gpm
4	4,375 gpm

- 2. The pump used in the step-drawdown tests shall be capable of producing the discharge rates listed above.
- 3. Water levels, discharge rates, and totalizer flow meter readings shall be manually measured and recorded every 10 minutes through each step by the CONTRACTOR.
- 4. Each pumping step shall last until stabilization of drawdown occurs or two hours whichever occurs first.
- 5. Each well will be allowed to recover a minimum of 1 hour or to within 0.05 feet of the original static water level at the end of the last step.
- 6. Water quality samples might be collected at the conclusion of the step drawdown test at the discretion of the OWNER.

- B. Prior to the start of well testing, the CONTRACTOR shall install test data collection equipment. The pump and all measuring or testing equipment must be disinfected prior to being placed in each well.
1. A gate valve shall be installed in the discharge pipe located at the well head. The valve shall be in good condition and shall be capable of controlling the discharge rate of the well.
 2. A totalizing flow meter calibrated to read within 5% of actual discharge shall be installed in the discharge pipe to measure the discharge during testing.
 3. The pressure transducer shall be setup in the pumping well and connected to the data logger. The data logger will be setup to record measurements every 5 seconds for the duration of the test and recovery period.
- C. During testing of each well, the CONTRACTOR will record discharge rates and water levels in the well at predetermined times. For this purpose, the CONTRACTOR shall operate the pump without interruption, at no more than 2 percent fluctuation in the designated rates of discharge, during the full period of the step-drawdown test. If a test is started, but must be stopped due to equipment breakdown or inadequate supervision by the CONTRACTOR, no extra payment will be made for the time spent pumping before the test had to be stopped, or the time spent waiting for recovery before the test is restarted. If any part of the pumping equipment fails to operate properly or impairs the proper functioning of another element or instrument involved in the test, the equipment shall be removed and repaired at the expense of the CONTRACTOR and no extra payment will be made for the delay.
- D. If, as a result of step-drawdown test analysis, the ENGINEER/GEOLOGIST determines that a pumping well has not been fully developed, the CONTRACTOR shall continue well development using the test pump or other means. No additional payment will be due the CONTRACTOR for time in setting up and conducting the additional step-drawdown test which will be required for well acceptance following this additional development.
- E. A copy of the test data collected by the data logger will be provided to the ENGINEER/GEOLOGIST for reduction and analysis in its raw form on a data CD or DVD in ASCII or Microsoft® Excel format. A copy of all other data, hand written or otherwise, collected for the test will also be provided to the ENGINEER/GEOLOGIST for reduction and analysis.

3.11 CONSTANT RATE DISCHARGE TESTING

- A. One constant rate discharge test (CRDT) will be conducted on only one production well to be selected by the ENGINEER/GEOLOGIST and the OWNER's REPRESENTATIVE. The CONTRACTOR shall submit to the ENGINEER/GEOLOGIST and the OWNER's REPRESENTATIVE the CRDT plan at least seven (7) days prior to the start of the test. The test will consist of pumping the well at a constant rate for a specified period or until the water level drawdown stabilizes in the production well. The discharge rate will be based on the results of the step drawdown testing though it is anticipated the well will be

pumped at the design capacity of 3,500 gpm. The CRDT will be performed after the step drawdown tests of the lower Floridan aquifer are completed at each production well. The duration of the CRDT will be 24 hours.

1. The CONTRACTOR shall wait a minimum of 24 hours following the completion of all step-drawdown testing before beginning the CRDT to allow the well to recover and the collection of background water levels by the CONTRACTOR.
 2. Background and pumping test water levels shall be obtained by the pressure transducers with data loggers from the pumped production well, the other five production wells, the lower Floridan monitor well MR-LF-1, and upper Floridan monitor well MR-UF-1. Up to four additional data collection points may be selected at surrounding wells and/or piezometers at the COUNTY's discretion.
 3. Daily rainfall data will be collected by the CONTRACTOR during the background water level measurement, during the CRDT, and during the test recovery period.
 4. Discharge rates shall be measured and recorded periodically throughout the test by the CONTRACTOR. The totalizing flow meter reading shall be recorded every half-hour for the duration of the test.
 5. Water levels in the production well shall be measured with pressure transducers with appropriate operating ranges and recorded by the data loggers. Water levels shall be collected manually by the CONTRACTOR at the production well every hour for the duration of the test.
 6. Static water levels, drawdown, and recovery from the test shall be measured by the CONTRACTOR to the nearest 0.01-foot by pressure transducers in the observation wells. The measurement schedule will be followed during the CRDT and restarted for the recovery period.
 7. Water levels shall be collected by the CONTRACTOR at the end of the discharge test until the pumping well recovers within 0.05 feet of the original static water level or for a minimum of 24 hours.
 8. A copy of the test data collected by the data logger will be provided to the ENGINEER/GEOLOGIST for reduction and analysis in its raw form on data CD or DVD in ASCII or Microsoft[®] Excel format. A copy of all other data, hand written or otherwise, collected for the test will also be provided to the ENGINEER/GEOLOGIST for reduction and analysis.
- B. Prior to the start of well testing, the CONTRACTOR shall install test data collection equipment. The pump and all measuring or testing equipment must be disinfected prior to being placed in the wells.
1. A 1¼-inch nominal diameter pipe, open only at the top and bottom and suitable for water-level measurement using a pressure transducer, shall be installed in

the pumping production well. The top of the pipe shall be installed at or slightly above land surface and be accessible during the pumping test as directed by the ENGINEER/GEOLOGIST. A fitting allowing for the watertight sealing of the access pipe around the transducer cable must be provided. The bottom of the pipe shall be 3 feet above the top of the pump bowl assembly. The inside of the pipe shall be smooth and unobstructed and the pipe shall be sufficiently plumb and straight so that there will be no interference with measurement.

2. A gate valve shall be installed in the discharge pipe located at the well head. The valve shall be in good condition and shall be capable of controlling the discharge rate of the well.
 3. A totalizing flow meter calibrated to read within 5% of actual discharge shall be installed in the discharge pipe to measure the discharge during testing.
- C. During testing of the well, the CONTRACTOR will record discharge rates and water levels in the well at predetermined times. For this purpose, the CONTRACTOR shall operate the pump without interruption, at no more than 2 percent fluctuation in the designated rate of discharge, during the full period of the test. If a test is started but must be stopped due to equipment breakdown or inadequate supervision by the CONTRACTOR, no extra payment will be made for the time spent pumping before the test had to be stopped, or the time spent waiting for recovery before the test is restarted. If any part of the pumping equipment fails to operate properly or impairs the proper functioning of another element or instrument involved in the test, the equipment shall be removed and repaired at the expense of the CONTRACTOR and no extra payment will be made for the delay.
- D. Pump rates for the CRDT shall be 3,500 gpm for the production well. This rate may be modified based on the results of the step drawdown tests.

3.12 PLUMBNESS AND ALIGNMENT

- A. Surface, conductor, and well casings shall be set round, straight, and plumb. To demonstrate compliance with this requirement, the CONTRACTOR shall perform the test described herein in conformance with AWWA A100-97. The final test for plumbness and alignment would be made following construction of each well and before test pump equipment is installed. The CONTRACTOR may, at his option and expense, perform such a test at other times, such as prior to cementing surface casing. Such additional testing would not replace final testing after construction of each well. The CONTRACTOR shall notify the ENGINEER/GEOLOGIST and the OWNER'S REPRESENTATIVE at least seven (7) days prior to the start of the test.
- B. Alignment shall be tested by lowering into each well a section of pipe 40 feet long or a dummy of the same length, in conformance with AWWA A100-97. Plumbness shall be tested by lowering into the well a cylindrical plummet to the specified depth. The plummet shall consist of a rigid spindle with round plates at both ends. The outer diameter of the end plates shall be 0.5-inches smaller than the inside diameter of that part of the casing or hole being tested. The distance between the end plates shall be

approximately 1.25 times the diameter of that part of the casing or hole being tested. The plummet shall be heavy enough to keep the plumb line taut. The plumb line is attached to the plummet at the exact center of the top end plate and shall be of uniform diameter.

- C. The plumbness and alignment of a well would be corrected by the CONTRACTOR at his sole expense under the following conditions:
1. The plummet fails to move freely throughout the length of the casing or hole.
 2. The well varies from plumb more than two thirds the smallest inside diameter of that part of the well being tested per 100 feet of depth.
 3. Alignment is not satisfactory for successful operation of pumping equipment provided by the OWNER.
 4. Does not meet specifications described in AWWA A100-97.

Should the CONTRACTOR fail to correct such faulty plumbness or alignment, the ENGINEER/GEOLOGIST may direct that the well be abandoned and replaced at no expense to the OWNER.

- D. The CONTRACTOR may propose an alternative method at no extra cost, such as inclinometer survey, capable of demonstrating to the satisfaction of the ENGINEER/GEOLOGIST that the well is plumb and straight as described in this Section and Appendix D - AWWA A100-97.

3.13 DISCHARGE CONTROL

- A. Discharge pipe shall be laid from the wells to a discharge location as shown on Figure 2. A more convenient location may be determined by the OWNER and OWNER's REPRESENTATIVE at their discretion and discussed with the CONTRACTOR four weeks prior to the start-up of any test that involves discharge flow.
- B. The quality of water discharged from each production well and allowed to flow to the surface water discharge points shall be monitored by the CONTRACTOR. Both dissolved oxygen and turbidity concentrations are a concern with the proposed discharge. The CONTRACTOR shall be responsible for maintaining conditions at the point of discharge within acceptable limits of the FDEP.
- C. If water is discharged to any surface water body, dissolved oxygen concentrations shall be maintained by the CONTRACTOR at a minimum of 5 mg/L at the points of discharge. This shall be achieved by injecting compressed air in the discharge line a minimum of 500 feet upstream of the end of the discharge pipe. Alternate methods of aeration may be approved by the ENGINEER/GEOLOGIST, if the ultimate goal of dissolved oxygen concentration can be achieved. Discharge pipe shall be laid from the wells to a distance of up to 5,000 feet at a location to be determined by the OWNER's REPRESENTATIVE.

- D. Turbidity shall be maintained by the CONTRACTOR at a maximum of 25 NTU at the points of discharge. This shall be achieved by filtration through hay bales or some other means in the discharge stream upstream of the actual points of discharge.
- E. Discharge shall be discontinued until these water quality conditions can be met.
- F. Dissolved oxygen and turbidity concentrations shall be monitored with calibrated dissolved oxygen meter and turbidimeter, respectively. The quality of the discharge water shall be recorded and maintained by the CONTRACTOR twice a day during periods of discharge.
- G. The CONTRACTOR shall provide, install and maintain erosion controls for the duration of the well construction work as needed and to prevent sediment and turbidity from entering surface water bodies and to avoid erosion problems by directing flow away from the drilling site and adjacent properties.

3.14 WELL DISINFECTION

- A. Following completion of testing, each well shall be disinfected using sodium hypochlorite to remove bacteriological contamination in accordance with AWWA C654-2013. Each well shall also be disinfected at any time when work on the well is stopped and not expected to recommence for a period of greater than 5 days. A disinfection plan must be submitted to the OWNER and ENGINEER for approval prior to implementation.
- B. The Sodium Hypochlorite solution shall be prepared and applied so that a minimum concentration of 50 mg/L of available chlorine shall be maintained for the entire depth of each well. The solution shall be allowed to remain in the well for at least 2 hours as a minimum holding time.
- C. A sufficient volume of disinfectant must be applied to the well bore and aquifer to disinfect each well in accordance with the latest revision of Chapter 62-555.315, F.A.C.
- D. After a well has been chlorinated and pumped to waste or allowed to free flow for a minimum of 15 minutes with zero chlorine residual, duplicate analyses shall be taken not less than 30 minutes apart and the samples tested for the presence of coliform in accordance with Standard Methods for the Examination of Water and Wastewater. Additional samples shall be collected until samples collected on two consecutive days do not show the presence of coliform bacteria. When no coliforms are present for two consecutive days disinfection shall be considered complete.
- E. Chlorinated water from each well must be impounded or neutralized with sodium bisulfite or sulfur dioxide to reduce the residual to less than 0.02 mg/L prior to discharge.

3.15 WATER QUALITY ANALYSIS

- A. Water quality samples shall be collected from each production well during advancement of the pilot hole every 80 feet within the lower Floridan aquifer for the following parameters: chloride, sulfate, iron, hydrogen sulfide, total dissolved solids, nitrate and nitrite. Once development has been completed samples will also be collected and delivered to the OCU Laboratories for analysis of primary and secondary drinking water parameters as defined in FDEP Chapter 62-550.310, F.A.C. and Chapter 62-550.320, F.A.C., respectively. In addition to the primary and the secondary water drinking standards, the parameter shall also include SOC.s, VOC's and Radiologicals.
- B. The water samples shall be collected from a smooth sample port while the well is being discharged at the design pump rate.
- C. The CONTRACTOR shall be responsible for coordination with the state-approved analytical laboratory for the delivery of the required sample containers, appropriate storage and delivery of samples to the laboratory, and for all the analytical costs.
- D. The CONTRACTOR will perform bacteriological sampling following disinfection and pump off. The CONTRACTOR shall be responsible for providing a pump capable of sampling each well and all appurtenances as per AWWA C654-2013. Each well requires a total of four (4) bacteriological samples collected over two (2) consecutive days at least six hours apart. If the sample contains unacceptable levels of bacteria, the CONTRACTOR shall re-disinfect the well at no additional cost to the OWNER.

3.16 WELLHEAD COMPLETION

- A. Immediately after removing the test pump, the CONTRACTOR shall weld a capping plate to the production well casing. The temporary capping plate is to secure the well and prevent entrance of any foreign material prior to installation of the permanent pump. The capping plate shall be welded to the top of the production casing in a continuous bead weld. A two-inch threaded steel pipe shall be welded to the top of the capping plate to allow access for water level measurement. A threaded cap shall be installed on the pipe. A schematic has been provided (Figure 3) showing the details for the completion of the top of casing protection.

3.17 WELL ABANDONMENT

- A. In the event that the CONTRACTOR fails to complete any well to the depth specified or to such lesser depth as requested by the ENGINEER/GEOLOGIST due to equipment failure, or fails to set or grout the casing to SJRWMD and FDEP standards, or must abandon a well because of loss of tools or for any other cause, he shall, if requested by the ENGINEER/GEOLOGIST, plug the well in accordance with standards and procedures specified in the Rules of the SJRWMD, Chapter 40C-3, F.A.C.
- B. The well casing of any well to be abandoned may, at the CONTRACTOR's option, be salvaged and become the property of the CONTRACTOR. Such casing shall not be reused without approval by the ENGINEER/GEOLOGIST.

- C. No hourly rate will be paid for pulling casing or reconditioning the open borehole unless the ENGINEER/GEOLOGIST directs that the casing be pulled.
- D. If the CONTRACTOR must abandon a well through fault of the CONTRACTOR or his employees or SUBCONTRACTORS, costs of drilling and abandonment will be borne by the CONTRACTOR.

3.18 PROTECTION AND SITE CLEAN-UP

- A. At all times during the progress of the Work the CONTRACTOR shall use all reasonable precautions to prevent tampering with a well or entrance of foreign material into it. The CONTRACTOR shall also maintain the site in a clean and orderly fashion at all times so that no adverse aesthetic impacts are created upon adjacent private properties or the adjacent public right-of-way. The OWNER reserves the right to suspend work and have the site cleaned prior to proceeding, at no additional expense to OWNER, if the site is not properly maintained.
- C. Immediately upon disinfection of all wells, the CONTRACTOR shall remove all of his equipment, materials, and supplies from the site of the Work, remove all surplus materials and debris, fill in all holes or excavations, and regrade the site to conform to the contours of the land which existed before work started. The site shall be thoroughly cleaned and made ready for the contractors on succeeding work. Not more than two weeks will be allowed for this site restoration, and the CONTRACTOR shall complete all site restoration work within that time.

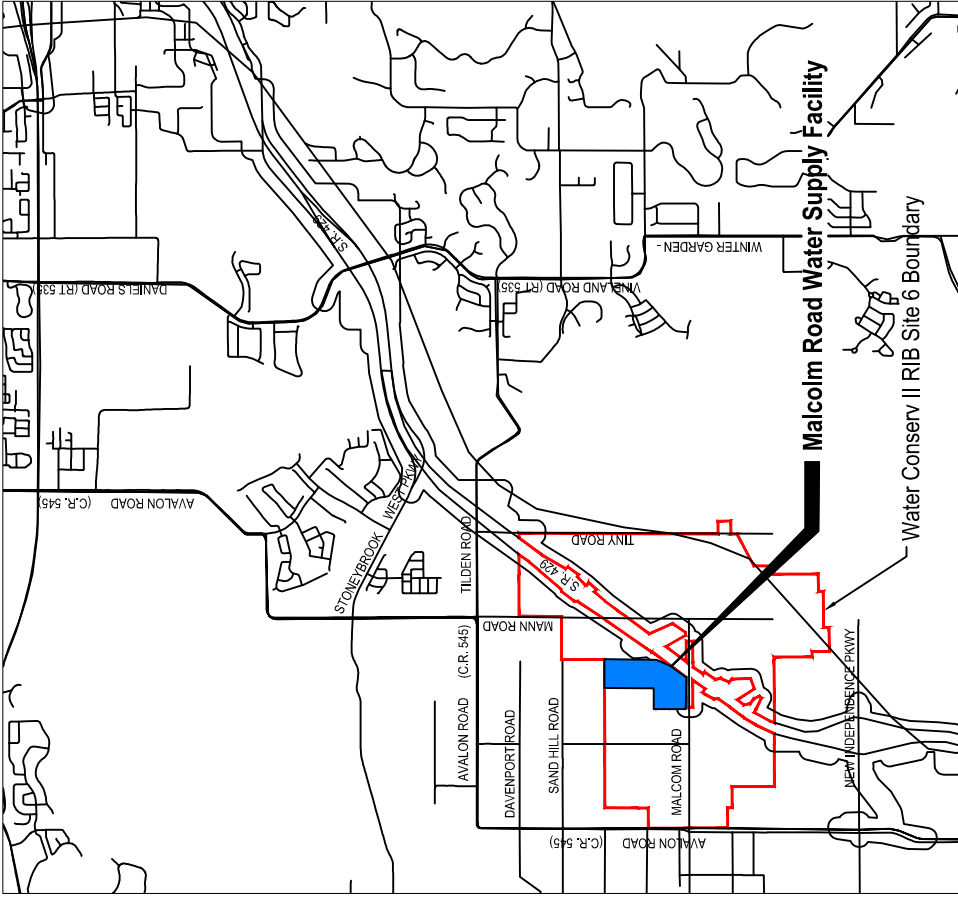
3.19 SANITARY FACILITIES

- A. The CONTRACTOR shall provide temporary sanitary facilities at the site for the needs of all construction workers and others performing work or services in connection with this project. Sanitary facilities shall be of reasonable capacity, and properly maintained throughout the construction period. The CONTRACTOR shall place the sanitary facilities such that they are obscured from public view to the greatest practical extent. A least one (1) chemically-treated type toilet will be provided for every ten (10) employees. The CONTRACTOR shall enforce the use of such sanitary facilities by all personnel at the site. All toilets, regardless of type, must have self-contained waste storage facilities.

END OF SECTION

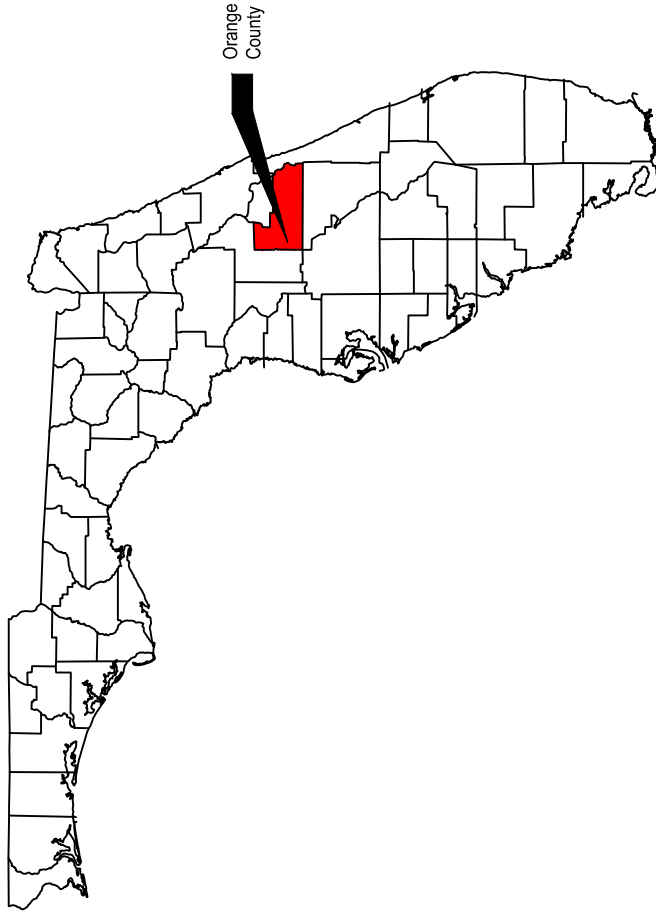
FIGURES

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Location Map

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Vicinity Map

Scale: None



FIGURE 1: OCU MALCOLM ROAD WSF LOCATION MAP
ORANGE COUNTY, FL



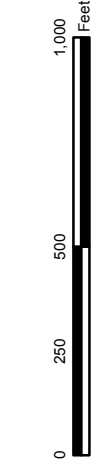
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Well ID	LATITUDE	LONGITUDE
MR-1	81°37'35.227"W	28°29'45.629"N
MR-2	81°37'35.657"W	28°29'39.954"N
MR-3	81°37'35.253"W	28°29'35.704"N
MR-4	81°37'29.578"W	28°29'33.525"N
MR-5	81°37'28.529"W	28°29'41.541"N
MR-6	81°37'28.368"W	28°29'45.656"N

- New Well Location
- Existing Well Location
- MRWSF Boundary

FIGURE 2: PROPOSED AND EXISTING PRODUCTION WELL LOCATION MAP
ORANGE COUNTY, FL

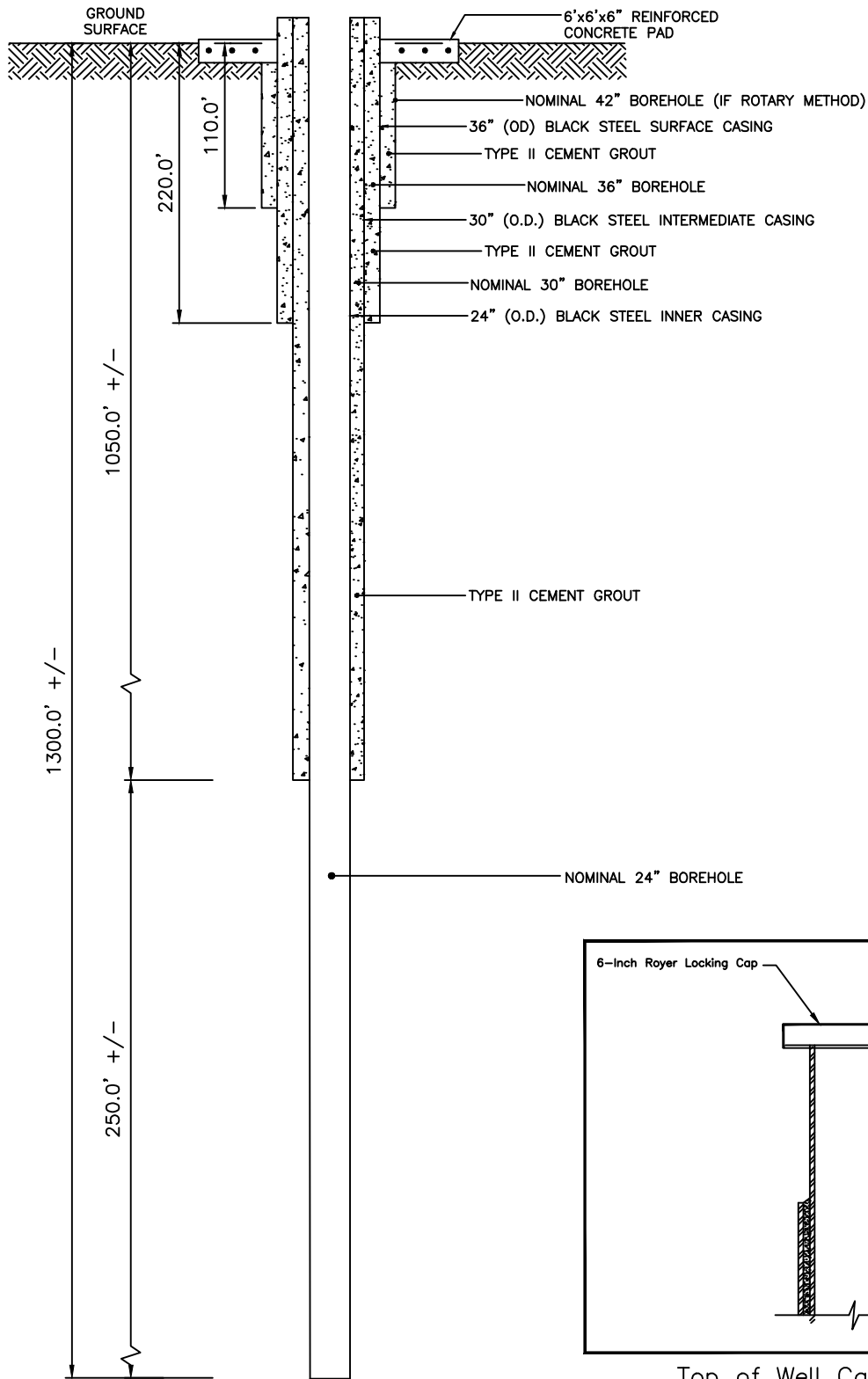


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GENERAL NOTE:

Refer to Specifications Section 02050 for additional information



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