

INVITATION FOR BIDS

FOR

**SOUTH WATER RECLAMATION FACILITY SOUTH PLANT AUTOMATIC
BACKWASH FILTER REHABILITATION**

Mail or Hand Deliver

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

BY 2:00 PM – September 6, 2016

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:

September 6, 2016 - 2:00 PM

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

**Non - Mandatory Pre-Bid Conference – August 12, 2016 1:00 P.M.
SWRF Administration Building Conference Room
4760 West Sand Lake Road, Orlando FL 32819**

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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ISSUED: August 5, 2016

**NOTICE
INVITATION FOR BID NO. Y17-703-PH**

**SOUTH WATER RECLAMATION FACILITY SOUTH PLANT AUTOMATIC
BACKWASH FILTER REHABILITATION**

Sealed bid offers (Original Bid Form and three (3) complete copies) for furnishing the above will be accepted up to **2:00 PM, September 6, 2016** 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 **\$10** 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 August 12, 2016, 1:00 P.M., SWRF Administration Building Conference Room, 4760 West Sand Lake Road, Orlando FL 32819. Interested bidders are encouraged to attend.

SCOPE OF WORK: Rehabilitation of existing wastewater automatic backwash filters to include media, underdrains, pumps, piping, electrical and instrumentation.

PROJECT LOCATION: 4760 West Sand Lake Road, Orlando FL 32819

Carrie Woodell, MPA, CFCM, CPPO, C.P.M., CPPB, APP
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 5.

- 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 or telecopied 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, Fax Number (407) 836-5899**. To be given consideration, such requests must be received Ten (10) days prior to bid opening.

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

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

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

3. MINORITY/WOMEN OWNED BUSINESS ENTERPRISES:

- a. To provide for the participation of certified minority and women owned businesses (M/WBE's) in the County's procurement of construction services, Bidders submitting bids to the County are urged to comply with M/WBE subcontracting goals established by the County Minority/Women Business Enterprise Ordinance, No. 94-02 and amended by Ordinance No.2009-21. The overall goal for all bids (inclusive of all additive and deductive alternates) is 25% participation for M/WBE subcontractors and suppliers. Upon Contract award the Contractor must meet the M/WBE expenditure required by the Contract. Each M/WBE utilized to meet the project goal must be listed as a subcontractor on Attachment C-2. If there are any pre-qualifications required by the firm, then this must be provided to the M/WBE when they are solicited for interest in the bid. This required information must be completed prior to bid submittal.

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/or purchase orders issued to M/WBE's listed on Attachment C-2 to the Business Development Division Liaison. 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, **as it relates to the scopes of services in the bid documents**, 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. about information on bonding, insurance and other pertinent requirements;

All requirements as it relates to the bonding, insurance and pre-qualifications must be given to the M/WBE's at the time the notice is provided. This information must be received and decisions to utilize the M/WBE must be known and denoted on Attachment C-2 prior to the bid submittal.

- 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. If M/WBE goals were not achieved the bidder shall provide an explanation as to why the scope of services listed in the bid documents were 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-4.
 - 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 it is determined that the bidder is 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 Liaison for guidance and assistance as a resource to obtain M/WBE's available to be utilized for participation.

If the Bidder fails to meet one of the first four good faith effort requirements listed above (i – iv), the substitution will only count towards one good faith effort requirement and all other good faith requirements must be met. The substitution is from the following:

- (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. Enclose a copy of the certificate provided to your firm when the service was successfully completed.

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 of the Bid Forms and **must** be executed by the apparent low Bidder for all M/WBE Subcontractors and/or suppliers listed. The letter(s) of intent **must** be submitted to the Business Development Division office before 5:00 P.M. on the second business day after bid opening. In the event the lowest bidder is not the recommended bidder, then letters of intent must be obtained from the recommended bidder two business days after being contacted.
- 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 Liaison for verification of certification.

1. 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:

- 1. Non-County Utilization Credit (Credit issued for the actual contract dollars)**

This credit may be earned for the use of Orange County certified M/WBE's on private sector projects not involving governmental funding, and government projects that do not have mandated M/WBE goals.

- 2. First-Time M/WBE Utilization Credit (Credit issued for the actual contract dollar)**

This credit may be earned by contractors/consultants who joint venture with an Orange County certified M/WBE for the first time or include and utilize a M/WBE for the first time in a bid/proposal.

You will need to obtain approval for these credits from the Business Development Manager. This process will take at least 30 days to complete. Begin by submitting a letter indicating the specific M/WBE credit (Non-County Utilization Credit or First Time M/WBE Utilization Credit) for consideration.

Also, include for the Non-County Utilization Credit program details to support documentation such as contracts from project after January 2002 through current year, proof of payment.

Upon receipt of this written request, our office will begin contacting the M/WBE firms to verify the M/WBE utilization information on provided. If the information is verified, then a certificate of credit will be provided. The credits are good for two years, then expire without renewal.

The firm must specify on form C-2 when a credit is to be used. Credits may be used to offset a maximum of 20% of the overall M/WBE goals (For example, if the bid is for \$500,000, the stipulated M/WBE goal for this project will be 25%, or \$125,000. 20% of the stipulated goal is \$25,000 in credits that may be used. The remaining \$100,000 (to meet the stipulated goal) must be obtained through regular M/WBE participation.

Credits are tracked for each firm by the Business Development Division.

- m. The County has a graduate 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 ensure 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.

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 REGISTERED SERVICE-DISABLED VETERANS (SDV)

The Orange County Registered Service-Disabled Veteran Business Program Ordinance sets vendor preferences for registered 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 registered 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 Prime 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.

Prime 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 prime 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 Bids 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 will 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.**

- 1. Effective July 1, 2015 the reciprocal local preference will 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.**
- 2. If the solicitation involves a federally funded project where the funding source requirements prohibit the use of state and/or local preferences, the reciprocal local preference will not be applied.**

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 **shall** 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.

The Contractor shall record bonds in Orange County public records as required by Florida Statutes, Chapter 255.05. Before commencing the work the Contractor shall provide to the Manager of the Procurement Division a certified copy of the recorded bond. No payment will be made to the contractor until the contractor has provided the copy of the recorded bond.

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 three similar projects successfully completed **by the Bidder, as a Prime or Sub Contractor** within the last fifteen years. Failure to provide this information may be cause for rejection of the bid. Bidder shall submit as previous successful project experience that includes the following:

Construction of a new automatic backwash filter or rehabilitation of an existing automatic backwash filter at a wastewater treatment facility with a filtration capacity of 0.5 MGD or greater

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:

In compliance with the Public Bid Disclosure Act, Section 218.80, Florida Statutes, each permit, license, and/or fee applicable to this work/project (before and during construction) that will either be paid by the Contractor or by the Orange County Board of County Commissioners as specified below:

Orange County will be responsible for paying for any and all permits, licenses, and fees imposed on the Work by agencies of the Orange County Board of County Commissioners. This does not alleviate the Contractor from obtaining the permits.

For Permits and Fees for Agencies other than Orange County Board of County Commissioners:

The Contractor shall procure and pay for all permits and licenses, charges and fees and give all notices necessary and incidental to the due and lawful prosecution of the work. The cost of all permits, fees, etc ; shall be included in the bid price except where noted otherwise in the specifications or other bid documents.

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.**

IFB NO. Y17-703 - PH

ISSUED: August 5, 2016

OFFICIAL BID FORM

FOR

**SOUTH WATER RECLAMATION FACILITY SOUTH PLANT AUTOMATIC BACKWASH
FILTER REHABILITATION**

Mail or Hand Deliver

ORIGINAL BID FORM AND THREE (3) COMPLETE COPIES

BY 2:00 PM - September 6, 2016

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:

September 6, 2016, - 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: **SOUTH WATER RECLAMATION FACILITY SOUTH PLANT AUTOMATIC BACKWASH FILTER REHABILITATION** 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 LUMP SUM

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.

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 | ___ |
| | Good Faith Effort, Attachment C-4 | 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 **330** consecutive calendar days from date of Official Notice to Proceed.
3. Final completion in **360** 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. 3/16)

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/proposal 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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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 the entire contract, including all Option Years** 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 Registered 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? Yes ____ No ____
(If so, insert copy of credit and specify credit type below)

PRIME CONTRACTOR/SUBCONTRACTOR/SUPPLIER INFORMATION

	COMPANY NAME, CONTACT ADDRESS PHONE NUMBER	WORK TO BE PERFORMED (TRADE) OR COMMODITY TO BE SUPPLIED	DOLLAR AMOUNT	O.C. CERTIFIED M/WBE OR NON-M/WBE; OR REGISTERED SDV; OR TYPE OF M/WBE CREDIT – FTU OR NC
1.		Sub/ Supplier/ In-house (circle one)		
2.				
3.		Sub/ Supplier/ In-house (circle one)		

Signature of Bidder

Title

	COMPANY NAME, CONTACT ADDRESS PHONE NUMBER	WORK TO BE PERFORMED (TRADE) OR COMMODITY TO BE SUPPLIED	DOLLAR AMOUNT	O.C. CERTIFIED M/WBE OR NON-M/WBE; OR REGISTERED SDV; OR TYPE OF M/WBE CREDIT – FTU OR NC
4.		Sub/ Supplier/ In-house (circle one)		
5.		Sub/ Supplier/ In-house (circle one)		
6.		Sub/ Supplier/ In-house (circle one)		
7.		Sub/ Supplier/ In-house (circle one)		
8.		Sub/ Supplier/ In-house (circle one)		
9.		Sub/ Supplier/ In-house (circle one)		
10.		Sub/ Supplier/ In-house (circle one)		
11.		Sub/ Supplier/ In-house (circle one)		

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, dollar and/or percentage amount 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

CERTIFIED 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 Manager. 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

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GOOD FAITH EFFORT M/WBE CONTACT 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: List at least up to three similar projects successfully completed by the **BIDDER AS A PRIME** or **SUBCONTRACTOR** within the last 15 years. Bidder shall submit a previous successful project experience that includes the following elements:

Construction of a new automatic backwash filter or rehabilitation of an existing automatic backwash filter at a wastewater treatment facility with a filtration capacity of 0.5 MGD or greater

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

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

1. Project Name _____
Owner _____
Contact _____
Address _____

Telephone Number/Email Address _____

Contract Number and Amount # _____ \$ _____

Change Orders \$ _____

Final Contract \$ _____

Completed on Schedule? Yes ___ No ___ Date: _____

Project Description _____

2. Project Name _____
Owner _____
Contact _____
Address _____

ATTACHMENT E

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

**SOUTH WATER RECLAMATION FACILITY SOUTH PLANT AUTOMATIC BACKWASH
FILTER REHABILITATION**

Case or Bid No. **Y17-703 -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

SOUTH WATER RECLAMATION FACILITY SOUTH PLANT AUTOMATIC BACKWASH FILTER REHABILITATION

Case or Bid No. **Y17-703 -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

**SOUTH WATER RECLAMATION FACILITY SOUTH PLANT AUTOMATIC BACKWASH
FILTER REHABILITATION**

Case or Bid No. **Y17-703 -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 **Y17-703 -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 **Y17-703 -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 **Y17-703 -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. Y17- 703-PH, SOUTH WATER RECLAMATION FACILITY SOUTH
PLANT AUTOMATIC BACKWASH FILTER REHABILITATION, 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. Y17-703-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: _____

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
LUMP SUM 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 **SOUTH WATER RECLAMATION FACILITY SOUTH PLANT AUTOMATIC BACKWASH FILTER REHABILITATION** in full accordance with the drawings and as elaborated in the specifications of **Invitation for Bids No. Y17-703-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 Contract Amount of >(\$>) at the lump sum set forth in the Invitation for Bid Official Bid Form, Part D.

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. Y17-703-PH dated August 5, 2016**, (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, SOUTH WATER RECLAMATION FACILITY SOUTH PLANT AUTOMATIC BACKWASH FILTER REHABILITATION**".
- c. Addendum No.> dated >;
- d. >'s Bid Proposal dated **September 6, 2016**;
- 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 **330** consecutive calendar days from date of Official Notice to Proceed.
- c. Final Completion of the Work shall be achieved not later than **360** 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 _____
Carrie Woodell, MPA, CFCM, CPPO, C.P.M.
CPPB, APP, Manager, Procurement Division

BY _____
Signature

DATE _____
(For County use only)

Type or Print Name

**Corporate
Seal**

P E R F O R M A N C E B O N D

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. Y17-703** with the "County", also referred to herein as the OWNER, for the project entitled: **SOUTH WATER RECLAMATION FACILITY SOUTH PLANT AUTOMATIC BACKWASH FILTER REHABILITATION, 4760 West Sand Lake Road, Orlando FL 32819 site 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: Rehabilitation of existing wastewater automatic backwash filters to include media, underdrains, pumps, piping, electrical and instrumentation.

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. Y17-703** with the "County", also referred to herein as the OWNER, for the project entitled: **SOUTH WATER RECLAMATION FACILITY SOUTH PLANT AUTOMATIC BACKWASH FILTER REHABILITATION, 4760 West Sand Lake Road, Orlando FL 32819 site 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: Rehabilitation of existing wastewater automatic backwash filters to include media, underdrains, pumps, piping, electrical and instrumentation.

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. Y17-703, entitled:

SOUTH WATER RECLAMATION FACILITY SOUTH PLANT AUTOMATIC
BACKWASH FILTER REHABILITATION

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: _____

<p><u>For Purchasing Use Only</u> Track Change Order: <input type="checkbox"/> Yes <input type="checkbox"/> No Change Award Amount to: \$ _____</p> <p>Add the following text to the PO/DO: _____</p>

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.

The Contractor shall record bonds in Orange County public records as required by Florida Statutes, Chapter 255.05. Before commencing the work the Contractor shall provide to the Manager of the Procurement Division a certified copy of the recorded bond. No payment will be made to the contractor until the contractor has provided the copy of the recorded bond.

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 payor to see to the payment of any monies due any Subcontractor, except as may otherwise be required by law. The County may furnish to any Subcontractor, to the extent practicable, evidence of amounts paid to the Contractor on account of specific Work done. The divisions and sections of the Specifications and the identifications of any Drawings shall not control the Contractor in dividing the Work among Subcontractors or delineating the Work to be performed by any specific trade.

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

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

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

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

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

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

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

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

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

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

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

- A. All employees on the Project and other persons who may be affected thereby:
- B. All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site; and
- C. Other property at the site or adjacent thereto including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Cleaning Up - The Contractor will keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work; at the completion of the Work he will remove all waste materials, rubbish and debris from and about the premises as well as all tools, construction equipment and machinery, and surplus materials, and will leave the site clean and ready for occupancy by the County.

The Contractor will restore to their original condition those portions of the Site not designated for alteration by the Contract Documents. If at any time during construction of this project, the Contractor fails to clean up on a daily basis, the County may do so. All costs associated with the County's cleanup activities on behalf of the Contractor shall be deducted from amounts due to the Contractor.

ARTICLE 10 – WORK BY OTHERS AND UTILITY COORDINATION

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

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

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

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

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

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

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

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

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

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

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

- A. Investigate both subsurface and aboveground conditions to identify potential conflicts far enough in advance of his planned construction operations to allow the Contractor to coordinate with utility owners and responsible parties any necessary conflict resolutions, relocations, or adjustments such that they can occur without delay to the Contractor's operations and Progress Schedule.
- B. Conduct regularly scheduled Utility Coordination Meetings with all affected utilities, and shall maintain detailed minutes of the discussions.
- C. Contact all utility owners in advance of any needed conflict resolutions, relocations, or adjustments.
- D. Contact the Project Manager as to all Contractor scheduled utility conflict resolutions, relocations, or adjustments.
- E. Schedule all work to be performed by the utility owners related to utility conflict resolutions, relocations, or adjustments.

- F. Schedule all work to be performed by the utility owners so as not to delay or disrupt in any way the Contractor's own performance of the Contractor's Performance Schedule.
- G. Assure the proper connection of the Contractor's Work with the work of the utility owners.
- H. Assure that the schedule, contacts, and proper connections between the Contractor's Work and the utility owner's work harmonize the work of both in a common action to achieve resolution of utility conflicts, relocations, and adjustments.
- I. Contractor shall, at no cost to the County, adjust the project schedule to allow the work to proceed in such a manner that delays to the progress of the work are minimized.

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

ARTICLE 11 - PROJECT OWNER STATUS DURING CONSTRUCTION

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

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

Manager, Field Services Division, or designee
Address: 9150 Curry Ford Road, Orlando, FL 32780

:

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 Manager.

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 for the work including quantities and unit prices totaling the total 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 Consent of Surety to Partial Payment. However, if payment or performance bonds are not required by the contract, the County's Project Manager may require applications for Progress Payments to be accompanied by legally effective partial releases or waivers of liens executed by all Subcontractors that 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. 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.

For projects that the Contractor was required to furnish a payment and performance bond, the final application for payment shall be accompanied by legally effective final release or waiver of lien from 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.

For projects **not** requiring bonds 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. 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.

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 Liaison 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 Liaison 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 Liaison no later than the fifth day of each month beginning one month after the Work begins and to continue until Final Completion of the project/contract. The Business Development Liaison has the authority to delay Contractor's Progress Payments 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 from the Orange County Business Development Manager**, nor **must** the Contractor reduce the scope of work or monetary value of a subcontract without prior written authorization of the Business Development Manager. All modifications, additions and deletions to any and all Contracts issued to said M/WBE's **must** also have prior written authorization of the Business Development Manager.
- E. The Contractor shall expeditiously advise all M/WBE's and the Business Development Division Liaison 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 (\$150,000) 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.

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.

ARTICLE 28 – OWNER DIRECT PURCHASE

Pursuant to *Florida Statutes*, Section 212.08(6), and *Florida Administrative Code*, Number 12A-1.094, Orange County Florida is exempt from Florida Sales Tax for the purchase of construction materials, supplies and/or equipment incorporated into a construction project.

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 that realize a tax savings of at least \$5000.

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.

When it has been determined that the use of direct purchases is warranted, the, Orange County Owner Direct Purchase Provision in Exhibit 2 shall govern.

ARTICLE 29 – PUBLIC RECORDS COMPLIANCE (APPLICABLE FOR SERVICE CONTRACTS)

Orange County is a public agency subject to Chapter 119, Florida Statutes. The Contractor agrees to comply with Florida's Public Records Law. Specifically, the Contractor shall:

1. Keep and maintain public records required by Orange County to perform the service.
2. Upon request from Orange County's custodian of public records, provide Orange County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in this chapter or as otherwise provided by law.

3. Ensure that public records that are exempt or confidential and exempt from the public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the Contractor does not transfer the records to Orange County.
4. Upon completion of the contract, Contractor agrees to transfer at no cost to Orange County all public records in possession of the Contractor or keep and maintain public records required by Orange County to perform the service. If the Contractor transfers all public record to Orange County upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of the contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to Orange County, upon request from Orange County's custodian of public records, in a format that is compatible with the information technology systems of Orange County.
5. A Contractor who fails to provide the public records to Orange County within a reasonable time may be subject to penalties under section 119.10, Florida Statutes.
6. **IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT :**

Teresa Miller, Procurement Public Records Liaison
400 E. South Street, 2nd Floor, Orlando, FL 32801
407-836-5897
Teresa.Miller@ocfl.net

**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: _____

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 the amount that we pay for direct physical loss or damage to the Covered Property that has sustained loss or damage.

- 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.
- (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 Loss 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 + \$30,000 = \$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
SAMPLE ONLY

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
SAMPLE ONLY

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; or2. 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; and2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.	<p>B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:</p> <p>This insurance does not apply to “bodily injury” or property damage occurring after::</p> <ol style="list-style-type: none">1. All work , including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured (s) at the location of the covered operations has been completed; or2. That portion of “your work” out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project. <p>C. With respect to the insurance afforded to these additional insureds, the following is added to Section III- Limits of Insurance:</p> <p>If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:</p> <ol style="list-style-type: none">1. Required by the contract or agreement; or2. 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 G
SAMPLE ONLY

WORKERS COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY WC 00 03 13
(Ed. 4-84)

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

Name of Person or Organization:

ORANGE COUNTY BOARD OF COUNTY COMMISSIONERS
PROCUREMENT DIVISION
400 E. SOUTH STREET
ORLANDO, FL 32801

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.
(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement	Effective Policy No.	Endorsement No.
Insured		
Insurance Company	Countersigned by _____	

WC 00 03 13

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.

**ORANGE COUNTY
OWNER DIRECT PURCHASE PROVISION**

1. OBJECTIVE:

To provide guidelines for Owner Direct Purchases (ODP) in order to realize the benefits of owner tax exempt status for the procurement of materials for incorporation into a public works project.

2. AUTHORITY:

Pursuant to *Florida Statutes*, Section 212.08(6), and *Florida Administrative Code*, Number 12A-1.094, Orange County Florida is exempt from Florida Sales Tax for the purchase of construction materials, supplies and/or equipment incorporated into a construction project. Under this program, the Florida Sales Tax rate of 6% shall apply to purchases of \$5000.01 and above. For purchases of \$5000 or less 6.5% shall apply. For example on a \$100,000 purchase 6% sales tax would apply to the total purchase and the .5% would apply to the first \$5000 only. Total sales tax saved on a \$100,000 purchase would be \$6025.

3. DIRECTION:

The Owner has elected to exercise this right to direct purchase selected materials on all construction projects and such direct purchase shall be without any additional cost to the Owner. **All bids are to be submitted with all applicable taxes included.**

The Contractor shall be fully responsible for all matters relating to the receipt of materials, equipment, supplies and furnishings, including but not limited to providing and obtaining all warranties and guarantees in favor of and for the benefit of the County for all materials, equipment, supplies and furnishings as required by the Contract. At the time of and subsequent to the delivery of such materials, equipment, supplies and furnishings, the County shall be liable for all loss or damage to materials, equipment, supplies and furnishings purchased pursuant to the owner direct purchase provisions. Notwithstanding the foregoing, the County shall be responsible for payment of the invoices issued by the supplier, vendor or subcontractor. The County shall retain the risk of loss of and damage to County furnished materials, equipment, supplies and furnishings for the purpose of receiving a tax exemption under Section 212.08(6), Fla. Stat, which meets the criteria in Rule 12A 1.094(4)(b)(1-4), Fla. Admin. Code, to determine if the County is the purchaser for the purposes of the tax exemption under Section 212.08(6), Fla. Stat.

The procedures outlined here may change at any time without prior notice to Contractor.

4. TERMS - For the purpose of this document, the following terms are defined as:

- a. **Change Order (CO):** A written order authorizing a change in the scope of work, contract amount or contract time. (Attachment F)
- b. **Contractor:** A General Contractor (GC), Construction Manager (CM) or Design Builder.
- c. **Orange County Board of County Commissioners, Orange County, Florida:** OC or Owner.

**ORANGE COUNTY
OWNER DIRECT PURCHASE PROVISION**

- d. **Owner Direct Purchase Order (ODP):** A purchase order issued by the Owner directly to the Contractor's vendor for the purchase of materials exempt from sales tax.
- e. **Owner Direct Purchase Procedures:** Guidelines outlined in this document.
- f. **Material:** Any material, supplies, or equipment incorporated into an OC construction project.
- g. **Letter of Indemnification:** Agreement between Contractor and Owner that will undertake to indemnify Contractor from any and all liability for unpaid sales tax due to DPO. (Attachment E)
- h. **Letter of Understanding:** Agreement between Contractor and Owner that Contractor contractual duties remain the same insofar as the inspection, handling, storage, protection and installation of the direct purchase item into the work. (Attachment D)
- i. **Purchase Requisition (PR):** A request to purchase stated material or services for a quoted price. (Attachment A)
- j. **Purchase Order (PO):** A written authorization issued by the Owner for a vendor to delivery material or services at a specified price, which becomes a legally binding contract upon acceptance by the vendor.
- k. **Vendor:** A company supplying material to the Project, whether such provision includes installation or not.
- l. **Vendor List:** A list provided by the Contractor of the vendors the Owner will direct purchase material from.

5. FUNCTIONS:

The County reserves the right to require the Contractor to assign some or all of its subcontracts or other agreements with material suppliers directly to the County. This process will be referred to as ODP and is a method that may be utilized to create savings for the County.

A. Initial Requirements.

A purchase order may be awarded for supplies or materials without competition where such supplies or materials are being procured by the County as an ODP for incorporation into a public works project (as defined in Section 12A-1.094, 4c. of the Florida Department of Revenue, Florida Administrative Code), the contract for which was previously awarded by the County and which prior award included the cost of such supplies or materials. In such event, the County may procure the supplies or materials in compliance with the requirements of the Florida Department of Revenue, Florida Administrative Code Section 12A-1.094, as amended; for the direct purchase of materials and/or other tangible personal property that is incorporated into or becomes a part of a public facility pursuant to a public works contract, and that will not be used to furnish or equip the project in accordance with Section 12A-1.038(4) of the Florida Administrative Code, as amended. *Under no circumstances shall any materials which will not be incorporated into the public works project be purchased by the County as ODP materials, including but not limited to, any consumables such as fuel or any equipment related to the public works project which will not be affixed or otherwise incorporated into the public works project such as reusable construction equipment.*

**ORANGE COUNTY
OWNER DIRECT PURCHASE PROVISION**

B. Procedural Requirements.

The following steps are to be followed unless modified by the Manager of the Procurement Division, or designee, and may be enhanced based on individual project circumstances or at the discretion of the Manager of the Procurement Division:

- i. The price for all construction materials will be provided in the Contractor's bid. The Contractor's bid shall also include all Florida State Sales and other taxes normally applicable to such material. The County may consider purchasing any approved materials.
- ii. At any time upon the request of the County, the Contractor shall provide County with a list of all intended suppliers for such materials as specified by County for consideration for procurement by the County as ODP materials. The list shall include price quotes from the suppliers, as well as a description of the materials to be supplied, estimated quantities and prices. The Owner will purchase the material from Vendors selected by the Contractor for the price originally negotiated by the Contractor.
- iii. The Contractor shall be responsible for maintaining the project schedule and the execution of the terms and conditions of the ODP purchase order, including expediting the suppliers' delivery schedules. The Contractor shall assume all risk and remain fully responsible for all material incorporated into any project, directly purchased by the Owner or not. This will include, but not be limited to, insurance, theft, storage, damage during installation, coordination, quantities ordered, submittals, protection, scheduling, shipping, security, expediting, receiving, installation, cleaning and all applicable warranties, etc.
- iv. After receipt of the Purchase Requisition Form and all required documents, the County shall prepare a purchase order for all items of material which County chooses to purchase directly. The purchase order shall include the County's Consumer's Certificate of Exemption number and a copy of the Consumer's Certificate of Exemption, and a Certificate of Entitlement (See Attachment "B"). The County's purchase order shall be sent directly to the supplier by the County with a copy sent to the Contractor, including a copy of the Certificate of Entitlement. Pursuant to the purchase order, the supplier will provide the required quantities of material at the price established in the supplier's quote to the Contractor or subcontractor.
- v. In conjunction with the PR the Contractor shall submit the Letter of Understanding and a Letter of Indemnification.

**ORANGE COUNTY
OWNER DIRECT PURCHASE PROVISION**

- vi. In conjunction with the issuance by the County of Purchase Orders for ODP materials to suppliers, Owner shall submit a deductive change order to Contractor who shall execute and deliver to County deductive change orders, with a complete description referencing the full value of all ODP materials to be provided by each supplier from whom the County elected to purchase materials directly, plus all sales taxes associated with such materials in Contractor's bid to the County.
- vii. The Contractor shall be required to obtain consent from their Surety acknowledging that Surety's obligation under our Payment and Performance. Bond remains unmodified and in full force and effect, notwithstanding that Orange County has entered into a separate Purchase Order with (Supplier) for the direct purchase of the Materials that will be deducted and deleted from the Contract by the Deductive Change Order. This must accompany the deductive change order.
- viii. Notwithstanding the transfer of ODP materials by the County to the Contractor's possession, the County shall retain legal and equitable title to any and all ODP materials. The transfer of possession of ODP materials from the County to the Contractor shall constitute a bailment for the mutual benefit of the County and the Contractor. The County shall be considered the bailor and the Contractor the bailee of the ODP materials. Transfer of possession shall be deemed to occur immediately and automatically upon delivery of ODP materials to the County without notice from County to Contractor. ODP materials shall be considered returned to the County for purposes of their bailment at such time as they are incorporated into the project. While in Contractor's possession, Contractor shall handle and store all ODP materials in a manner consistent with the supplier's or manufacturer's instructions regarding handling and storage to ensure later installation of ODP materials in a sound and undamaged condition.
- ix. The County will make payment directly to the suppliers of the ODP materials.
- x. The Contractor shall purchase and maintain builders risk insurance sufficient to protect against any loss of or damage to ODP materials. Such insurance shall cover the full value of any ODP materials not yet incorporated into the work during the period between the time the County first takes title to any of such ODP materials and the time when the last of such is incorporated into the work. The Contractor shall purchase and maintain builders risk, "all-risk" insurance based on the completed value of the Project. The Contractor must name the County as additional insured on its policy with respect to all ODP materials and County shall be solely entitled to all proceeds related to the loss or damage of ODP materials.
- xi. The Contractor shall be required to review all invoices submitted to the County by suppliers of ODP materials and either concur or object to the County's issuance of payment to the suppliers, based upon Contractor's records of materials and any defects detected in such materials.

**ORANGE COUNTY
OWNER DIRECT PURCHASE PROVISION**

The County shall directly pay all suppliers with respect to ODP materials purchased by the County.

- xii. The Contractor shall ensure that ODP materials conform to all specifications contained in the contract documents.

Contractor shall determine prior to incorporation into the work if such materials are patently defective, and whether such materials are identical to the materials ordered and match the description on the bill of lading.

If the Contractor discovers defective or non-conformities in ODP materials upon such visual inspection, the Contractor shall not utilize such nonconforming or defective materials in the work and instead shall promptly notify the County of the defective or nonconforming condition so that repair or replacement of those materials can occur without any undue delay or interruption to the work.

If the Contractor fails to perform such inspection and otherwise incorporates into the work such defective or nonconforming ODP materials, the condition of which it either knew or should have known by performance of an inspection, Contractor shall be responsible for all damages to County resulting from Contractor's incorporation of such materials into the work, including liquidated or delay damages.

- xiii. In order to arrange for timely payment to the suppliers of ODP materials, Contractor shall promptly submit to County within five (5) days of County's receipt of an invoice from a supplier (i) a copy of the applicable purchase order as receiving report, (ii) copies of the delivery tickets, (iii) written acceptance of the delivered items by the Contractor, and (iv) such other documentation as may be reasonably required by the COUNTY. Upon receipt of the appropriate documentation, the County shall prepare a check drawn to the supplier based upon the data provided by Contractor. This check will be made payable and remitted directly to the supplier. The Contractor agrees to assist the County to immediately obtain partial or final release of waivers as appropriate.

- xiv. The Contractor shall maintain records of all ODP materials it incorporates into the work. The Contractor shall account monthly to the County for any ODP materials delivered into the Contractor's possession, indicating portions of all such materials which have been incorporated into the work

- xv. The Contractor shall be responsible for obtaining and managing all warranties and guarantees for all ODP materials in the same manner and on the same terms as materials obtained by the Contractor as required by the contract documents. All repair, maintenance or damage-repair calls shall be forwarded to the Contractor for resolution with the appropriate supplier or subcontractor.

**ORANGE COUNTY
OWNER DIRECT PURCHASE PROVISION**

The Contractor agrees and understands that it shall undertake all warranty enforcement and other related duties of the County for all ODP materials. Additionally, all ODP materials shall be warranted and guaranteed by the Contractor as part of the Contractor's warranty and guarantee of the work to the same extent and degree as other materials procured and provided to the work by Contractor. Contractor's warranty and guarantee duties shall be governed by and carried out pursuant to the terms of the contract documents. To that end, the Contractor expressly agrees it shall make no distinction in discharging such warranty and guarantee duties and obligations between ODP materials and equipment and materials otherwise supplied by the Contractor.

- xvi. The County shall in no way be liable for any interruption or delay in the public works project, for any defects or other problems with the public works project, or for any extra costs resulting from any delay in the delivery of, or defects in ODP materials. Contractor's sole or exclusive remedy shall be an extension of the time of completion of the public works project for such reasonable time as determined by County.

6. REQUIREMENTS FOR PURCHASE ORDER ISSUANCE:

The Procurement Division will issue a Purchase Order to the intended supplier and a deductive change order will be prepared by the County's Project Manager to reduce the amount of the contract with the Contractor by the cost of materials purchased through ODP (including tax savings).

Upon request from the County and in a timely manner, Contractor shall prepare a Purchasing Requisition Request Form which shall, in form and detail acceptable to County, specifically identify the materials which County, in its discretion, has identified and elected to purchase directly as ODP materials. The Purchasing Requisition Request Form shall include:

- a. the name, address, telephone number and a contact person for the material supplier;
- b. the manufacturer or brand, model or specification number of the item;
- c. quantity needed as estimated by Contractor;
- d. the price quoted by the supplier for the materials identified;
- e. any sales tax associated with such quote;
- f. delivery dates as established by Contractor;
- g. the PR and the quote must indicate FOB Destination or Job Site.
The Owner will not pay shipping and handling charges.

Upon receipt of a Purchase Order Request Form, the PM will initiate a requisition specifying price, quantity, delivery, material/equipment description, etc. and provide a copy of the Purchase Order Request form and all backup to the Procurement Division. Upon receipt of the electronic requisition, the Procurement Division will review all submittals and issue the purchase order.

**ORANGE COUNTY
OWNER DIRECT PURCHASE PROVISION**

The original ODP purchase order, along with a copy of the County's Tax Exemption Certificate and the signed Certificate of Entitlement, will be either e-mailed or faxed and mailed to the material supplier; and a copy will be sent to the Contractor including a copy of the Certificate of Entitlement.

7. REQUIREMENTS FOR PURCHASE ORDER PAYMENT:

- a. Upon delivery of ODP materials to such locations as the County may designate, the Contractor shall visually inspect all shipments from suppliers, and sign off on all receiving reports for ODP material delivered or received. The Contractor shall assure that each delivery of ODP materials is accompanied by delivery tickets or such other documentation as is adequate to identify the purchase order against which the purchase is made. This documentation may consist of a delivery ticket and a copy of the invoice from the supplier conforming to the purchase order together with such additional information as the County may require. The Contractor will then forward the delivery tickets to the County to match up with the invoice for payment. The County shall be directly invoiced by the suppliers for all ODP materials. In the event that Contractor receives any invoices (other than copies of invoices the originals of which have been sent directly by the supplier to the County), Contractor shall not pay such invoice and shall immediately notify the supplier that the County must be directly invoiced on all ODP materials.
- b. Invoices for payment will be submitted by the materials supplier to the County. The purchase order number must be noted on all invoices.
- c. Except as expressly stated herein, Contractor shall be fully responsible for all matters relating to the procurement of ODP materials furnished by and incorporated into the public works project including, but not limited to, assuring the correct quantities, verifying documents and the placement of all orders in a timely manner, assuring coordination of purchases, providing and obtaining all warranties and guarantees required by the contract documents, and inspection and acceptance of the materials at the time of delivery. The Contractor shall coordinate delivery locations and schedules, sequence of delivery, loading orientation, and other arrangements normally required by the Contractor for the particular materials furnished. The Contractor shall provide all services required for the unloading, handling and storage of materials through installation. **The County assumes the risk of loss of ODP materials from the time title to such material passes from the supplier at purchase, or upon delivery if allowed by Laws and Regulations.**

8. REFERENCES:

Attachment "A" - Owner Direct Purchase Requisition Form
Attachment "B" - Certificate of Entitlement
Attachment "C" - Consumers Certificate of Exemption
Attachment "D" - Letter of Understanding
Attachment "E" - Letter of Indemnification
Attachment "F" - Change Order Form
Attachment "G" - Example Consent of Surety

DIRECT PURCHASE REQUISITION

Project Name: _____ Request No: _____

It is requested that Orange County make arrangements for Direct Purchase by the County of the following item which is included in the work to be done by the Contractor pursuant to the requirements set forth in Contract #Y17-703

ITEM (Brief Description):

COST (Value) of item to be purchased:

Total Cost (Value) including taxes and freight charges	\$
Amount of Florida State Sales Tax	\$
Direct Purchase Cost Less Florida State Sales Tax	\$

PURCHASE Directly from (Vendor):

Vendor's Complete Company Name:
Federal Employee Identification No.:

Mailing Address:

Contact Person:
Position/Title:

Telephone No.:
Email Address:

Purchase Deletion:

This Direct Purchase is to be deleted by Change Order to the contract which has been executed between the Contractor and:

Company/Trade/Sub Contractor Name
Trade/Sub Contract Execution Date

REQUEST MADE BY:

Construction Manager/General Contractor/Design Builder
By:
Title:
Date:

CERTIFICATE OF ENTITLEMENT

(For direct purchase of construction materials by a governmental entity pursuant to 212.08(6), F.S. and Rule 12A-1.094, F.A.C.)

The undersigned authorized representative of Orange County Board of County Commissioners (hereinafter "Governmental Entity"), Florida Consumer's Certificate of Exemption Number 85-8012622266C-O, affirms that the tangible personal property purchased pursuant to Purchase Order Number _____ from _____ (Vendor) on or after _____ (date) will be incorporated into or become a part of a public facility as part of a public works Contract # Y _____ with _____ (Name of Contractor) for the construction of _____.

Governmental Entity affirms that the purchase of the tangible personal property contained in the attached Purchase Order meets the following exemption requirements contained in Section 212.08(6), F.S., and Rule 12A-1.094, F.A.C.:

Initial each of the following requirements.

- _____ 1. The attached Purchase Order is issued directly to the vendor supplying the tangible personal property the Contractor will use in the identified public works.
- _____ 2. The vendor's invoice will be issued directly to Governmental Entity.
- _____ 3. Payment of the vendor's invoice will be made directly by Governmental Entity to the vendor from public funds.
- _____ 4. Governmental Entity will take title to the tangible personal property from the vendor at the time of purchase or of delivery by the vendor.
- _____ 5. Governmental Entity assumes the risk of damage or loss at the time of purchase or delivery by the vendor.

Governmental Entity affirms that if the tangible personal property identified in the attached Purchase Order does not qualify for the exemption provided in Section 212.08(6), F.S. and Rule 12A-1.094, F.A.C., Governmental Entity will be subject to the tax, interest, and penalties due on the tangible personal property purchased. If the Florida Department of Revenue determines that the tangible personal property purchased tax-exempt by issuing this Certificate does not qualify for the exemption, Governmental Entity will be liable for any tax, penalty, and interest determined to be due.

I understand that if I fraudulently issue this certificate to evade the payment of sales tax I will be liable for payment of the sales tax plus a penalty of 200% of the tax and may be subject to conviction of a third degree felony.

Under penalties of perjury, I declare that I have read the foregoing Certificate of Entitlement and the facts stated in it are true.

Carrie Woodell, MPA, CFCM, CPPO, C.P.M.
CPPB, APP, Manager, Procurement Division

Date

Federal Employer Identification Number: _____

Telephone Number: _____

You must attach a copy of the Purchase Order to this Certificate of Entitlement.

Do not send to the Florida Department of Revenue.

This Certificate of Entitlement must be retained in the vendor's and the contractor's books and records.



Consumer's Certificate of Exemption

DR-14
R. 04/11

Issued Pursuant to Chapter 212, Florida Statutes

85-8012622266C-0	10/31/2012	10/31/2017	COUNTY GOVERNMENT
Certificate Number	Effective Date	Expiration Date	Exemption Category

This certifies that

ORANGE COUNTY BOARD OF COUNTY
COMMISSIONERS
201 S ROSALIND AVE 4TH FL
ORLANDO FL 32801-3527

is exempt from the payment of Florida sales and use tax on real property rented, transient rental property rented, tangible personal property purchased or rented, or services purchased.



Important Information for Exempt Organizations

DR-14
R. 04/11

1. You must provide all vendors and suppliers with an exemption certificate before making tax-exempt purchases. See Rule 12A-1.038, Florida Administrative Code (F.A.C.).
2. Your *Consumer's Certificate of Exemption* is to be used solely by your organization for your organization's customary nonprofit activities.
3. Purchases made by an individual on behalf of the organization are taxable, even if the individual will be reimbursed by the organization.
4. This exemption applies only to purchases your organization makes. The sale or lease to others of tangible personal property, sleeping accommodations, or other real property is taxable. Your organization must register, and collect and remit sales and use tax on such taxable transactions. Note: Churches are exempt from this requirement except when they are the lessor of real property (Rule 12A-1.070, F.A.C.).
5. It is a criminal offense to fraudulently present this certificate to evade the payment of sales tax. Under no circumstances should this certificate be used for the personal benefit of any individual. Violators will be liable for payment of the sales tax plus a penalty of 200% of the tax, and may be subject to conviction of a third-degree felony. Any violation will require the revocation of this certificate.
6. If you have questions regarding your exemption certificate, please contact the Exemption Unit of Account Management at 800-352-3671. From the available options, select "Registration of Taxes," then "Registration Information," and finally "Exemption Certificates and Nonprofit Entities." The mailing address is PO Box 6480, Tallahassee, FL 32314-6480.

LETTER OF UNDERSTANDING

CM/DB/GC _____, in its capacity as Construction Manager/Design Builder/General Contractor, agrees that the direct purchase of _____ by Orange County, Owner, from _____, as Supplier/Vendor, does not in any way or manner diminish or modify the contractual duties of the Construction Manager/Design-Builder/General Contractor to the Owner insofar as the inspection, handling, storage, protection, and installation of the aforementioned direct purchase item into the Work is concerned and that such duties pertinent thereto as are set forth in the contract between CM/DB/GC, as Construction Manager/Design-Builder/General Contractor, and Orange County, as Owner, remain unchanged.

ORANGE COUNTY
BOARD OF COUNTY COMMISSIONERS

CM/DB/GC

By: _____
Carrie Woodell, MPA, CFCM, CPPO, C.P.M.
CPPB, APP, Manager, Procurement Division

By: _____

Name Typed

Date: _____

Title

LETTER OF INDEMNIFICATION

The County does hereby undertake to indemnify _____ (CM/DB/GC) from any and all liability for unpaid sales tax which the CM/DB/GC may suffer as a result of claims, demands, costs or judgments against the CM/DB/GC, made by or in favor of the State of Florida on occasion by any claim on account of failure of the CM/DB/GC to pay Florida State taxes on materials purchased by County under this Purchase Order. The County agrees to defend against any such claims or actions brought against the CM/DB/GC whether rightfully or wrongfully brought or filed. The CM/DB/GC agrees that it will promptly notify the County in writing of any such claim, demand or action.

ORANGE COUNTY
BOARD OF COUNTY COMMISSIONERS CM/DB/GC

By: _____ By: _____
Carrie Woodell, MPA, CFCM, CPPO, C.P.M.
CPPB, APP, Manager, Procurement Division

Name Printed

Date: _____

Title:

**ORANGE COUNTY PROCUREMENT DIVISION
CHANGE ORDER REQUEST FORM**

DATE	DEPARTMENT/DIVISION	CONTACT NAME	CONTACT PHONE

CHANGE ORDER NO.	VENDOR	DOCUMENT NO.	DOOC	POOC	CONTRACT NUMBER	ORIGINAL DOCUMENT APPROVAL BUYER/PA/CA NAME

INCREASE, DECREASE OR DELETE COMMODITY LINE

CMDTY. LINE NO.	ACTION		PREVIOUS LINE DOLLAR AMOUNT	NEW LINE DOLLAR AMOUNT	COMMODITY LINE DESCRIPTION/COMMENTS	NET DOLLAR CHANGE
	FROM	TO				

ADD COMMODITY LINE

CMDTY. LINE NO.	CMDTY. CODE	DESCRIPTION		QTY.	UNIT OF MEAS.	UNIT COST	ACCOUNTING LINE	NET DOLLAR CHANGE
		FOR D.O. YOU MUST SPECIFY AN MA LINE	MA LINE					

ACCOUNTING LINE CHANGE

CMDTY. LINE NO.	ACCTG. LINE NO.	FROM AMOUNT	FROM ACCOUNTING LINE		TO ACCOUNTING LINE	

OTHER CHANGES

DESCRIBE

ENCUMBERED/DE-ENCUMBERED (REQUIRED FOR ALL TRANSACTIONS)

ORIGINAL PO/DO AMT.	NET DOLLARS PREVIOUS C/O	NET DOLLARS FOR THIS C/O	DOCUMENT TOTAL AFTER THIS C/O
	<input type="checkbox"/> ADD <input type="checkbox"/> SUBTRACT	<input type="checkbox"/> ADD <input type="checkbox"/> SUBTRACT	

CONTRACT AMOUNT

AWARD AMOUNT	NET DOLLARS PREVIOUS C/O	NET DOLLARS FOR THIS C/O	CONTRACT TOTAL AFTER THIS C/O
	<input type="checkbox"/> ADD <input type="checkbox"/> SUBTRACT	<input type="checkbox"/> ADD <input type="checkbox"/> SUBTRACT	

- CANCEL ENTIRE PO/DO
- DO NOT MAIL VENDOR COPY

JUSTIFICATION (REQUIRED FOR ALL TRANSACTIONS)

--

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: _____

DEPARTMENT APPROVAL SIGNATURE _____ DATE: _____

OFFICIAL PROCUREMENT DIVISION USE ONLY

PROCUREMENT DIVISION APPROVAL: _____	DATE: _____
ADD THE FOLLOWING TEXT TO PO/DO: TRACK CHANGES: <input type="checkbox"/> YES <input type="checkbox"/> NO	CHANGE AWARD AMOUNT TO : _____

Date

Contractor/Trade Contractor/Subcontractors Name

Point of Contact

Address

Re:Orange County Project Name and Contract Number

Please be advised that we have reviewed a copy of Deductive Change Order No. _____ issued to (CM/DB/GC) and we acknowledge that its obligation under our Payment and Performance Bond remains unmodified and in full force and effect, notwithstanding that Orange County has entered into a separate Purchase Order with (Supplier) for the direct purchase of the Materials deducted and deleted from the Contract by the Deductive Change Order.

Sincerely,

(Name of Attorney in Fact for Surety)

Attorney in Fact

(Name of Surety)

NOTE: Must be accompanied by effectively dated Power of Attorney

INVITATION FOR BIDS

FOR

**ORANGE COUNTY SOUTH WATER RECLAMATION FACILITY
AUTOMATIC BACKWASH FILTER REHABILITATION**

**PART H
TECHNICAL SPECIFICATIONS**

July 2016
BID SET

PART H

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TECHNICAL SPECIFICATIONS**

ORANGE COUNTY

**SOUTH WATER RECLAMATION FACILITY
AUTOMATIC BACKWASH FILTER REHABILITATION**

**Cap Number: 1555-20
Project Sequence Number: 76825
CPH Project No. O28504**

July, 2016

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OF THE CONTRACT PROVIDED BY ORANGE COUNTY
PURCHASING**

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SECTION 01001
GENERAL WORK REQUIREMENTS

PART 1 - GENERAL

1.01 NOTICES

- A. All notices or other papers required to be delivered by the Contractor to the County shall be delivered to the office of the Engineering Division, Orange County Utilities Department, 9150 Curry Ford Road, Orlando, FL 32825.

1.02 WORK TO BE DONE

- A. 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 Drawings, at a rate of progress which will ensure completion of the Work within the Contract Time stipulated.
- B. The Contractor shall perform the Work complete, in place, and ready for continuous service, and shall include repairs, testing, permits, clean up, replacements, and restoration required as a result of damages caused during this construction.
- C. The Contractor shall comply with all City, County, State, Federal, and other codes, which are applicable to the proposed Work.
- D. All newly constructed Work shall be carefully protected from injury in any way. No wheeling, walking, or placing of heavy loads on it shall be allowed and all portions damaged shall be reconstructed by the Contractor at his own expense.
- E. Scope of Work: See Section 01015 "Summary of Work" and the Bid Schedule for details.

1.03 DRAWINGS AND PROJECT MANUAL

- A. The Work shall be performed in accordance with the Drawings and Specifications prepared by the County/Professional. All work and materials shall conform to the Orange County Utilities Standards and Construction Specifications Manual, latest edition or as indicated in these Specifications or Drawings.
- B. The Contractor shall verify all dimensions, quantities and details shown on the Drawings, Supplementary Drawings, Schedules, Specifications or other data received from the County/Professional, and shall notify same, in writing, of all errors, omissions, conflicts and discrepancies found therein. Failure to discover or correct errors, conflicts or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory Work, faulty construction or improper operation resulting there from, nor from rectifying such conditions at his own expense.

C. All schedules are given for the convenience of the County and the Contractor and are not guaranteed to be complete. The Contractor shall assume all responsibility for the making of estimates of the size, kind, and quantity of materials and equipment included in the Work to be done under this Contract.

D. Intent:

1. All Work called for in the Specifications applicable to this Contract, but not shown on the Drawings in their present form, or vice versa, shall be of like effect as if shown or mentioned in both. Work not specified either in the Drawings or in the Specifications, but involved in carrying out their intent or in the complete and proper execution of the Work, is required and shall be performed by the Contractor as though it were specifically delineated or described.
2. Items of material, equipment, machinery, and the like may be specified on the Drawings and not in the Specifications. Such items shall be provided by the Contractor in accordance with the specification on the Drawings.
3. The apparent silence of the Specifications as to any detail, or the apparent omission from them of a detailed description concerning any Work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used, and interpretation of these Specifications shall be made upon that basis.

E. Refer to the Contract for the order of precedence of items and documents.

1.04 PROTECTION AND RESTORATION

- A. The Contractor shall be responsible for the preservation of all public and private property, and shall use every means of protection necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the Work on the part of the Contractor, such property shall be restored by the Contractor, at his expense, to a condition similar or equal to that existing before the damage was done, or the Contractor shall make good the damage in other manner acceptable to the County/Professional.
- B. Lawn Areas: All lawn areas disturbed by construction shall be replaced with like kind to a condition similar or equal to that existing before construction. Where sod is to be removed, it shall be carefully removed, and the same re-sodded, or the area where sod has been removed shall be restored with new sod in the manner described in the applicable section.
- C. The cost of all labor, materials, equipment, and work for restoration shall be deemed included in the appropriate Contract Item or items, or if no specific item is provided therefore, as part of the overhead cost of the Work, and no additional payment will be made therefore.

1.05 PUBLIC NUISANCE

- A. The Contractor shall not create a public nuisance including, but not limited to,

encroachment on adjacent lands, flooding of adjacent lands, or excessive noise.

- B. Sound levels measured by the County/Professional shall not exceed 45 dBA from 8 p.m. to 8 a.m. or 55 dBA 8 a.m. to 8 p.m. This sound level shall be measured at the exterior of the nearest exterior wall of the nearest residence. Levels at the equipment shall not exceed 85 dBA at any time. Sound levels in excess of these values are sufficient cause to have the Work halted until equipment can be quieted to these levels. Work stoppage by the County/Professional for excessive noise shall not relieve the Contractor of the other portions of this specification including, but not limited to, completion dates and bid amounts.
- C. No extra charge may be made for time lost due to work stoppage resulting from the creation of a public nuisance.

1.06 LABOR

- A. Supervision: The Contractor shall supervise and direct the Work efficiently and with his best skills and attention. The Contractor shall have a competent, English speaking superintendent or representative, who shall be on the site of the Project at all working hours, and who shall have full authority by the Contractor to direct the performance of the Work and make arrangements for all necessary materials, equipment, and labor without delay.
- B. Jurisdictional Disputes: It shall be the responsibility of the Contractor to pay all costs that may be required to perform any of the Work shown on the Drawings or specified herein to avoid any work stoppages due to jurisdictional disputes. The basis for subletting work in question, if any, shall conform to precedent agreements and decisions on record with the Building and Construction Trades Department, AFL-CIO, dated June, 1973, including any amendments thereto.
- C. Apprenticeship: The Contractor shall comply with all of the requirements of Section 446, Florida Statutes, for all contracts in excess of \$25,000 excluding roadway, highway or bridge contracts and the Contractor agrees to insert in any subcontract under this Contract the requirements of this Article.

1.07 MATERIALS AND EQUIPMENT

A. MANUFACTURER

1. All transactions with the manufacturers or Subcontractors shall be through the Contractor, unless the Contractor and the County/Professional request that the manufacturer or Subcontractor communicate directly with the County/Professional. Any such transactions shall not in any way release the Contractor from his full responsibility under this Contract.
2. All workmanship and materials shall be of the highest quality. The equipment shall be the product of manufacturers who are experienced and skilled in the field with an established record of research and development. No equipment will be considered unless the manufacturer has designed and manufactured equipment of comparable type and size and have demonstrated sufficient experience in such design and

- manufacture.
3. No material shall be delivered to the Site without prior approval of the County/Professional.
 4. All apparatus, mechanisms, equipment, machinery, and manufactured articles for incorporation into the Project shall be the new (most current production at time of bid) and unused standard products of recognized reputable manufacturers.
 5. Manufactured and fabricated products:
 - a. Design, fabricate and assemble in accord with the best engineering and shop practices.
 - b. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
 - c. Any two or more pieces of material or equipment of the same kind, type or classification, and being used for identical types of service, shall be made by the same manufacturer.
 - d. Products shall be suitable for service conditions as specified and as stated by manufacturer.
 - e. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.
 - f. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

1.08 MANUFACTURER'S SERVICE

- A. Where service by the manufacturer is specified to be furnished as part of the cost of the item of equipment, the Work shall be at the Contractor's expense.
- B. The services provided shall be by a qualified manufacturer's service representative to check and verify the completed installation, place the equipment in operation, and instruct the County's operators in the operation and maintenance procedures. Such services are to be for period of time and for the number of trips specified. A working day is defined as a normal 8-hour working day on the job and does not include travel time.
- C. The services shall further demonstrate to the County/Professional's complete satisfaction that the equipment will satisfactorily perform the functions for which it has been installed.

1.09 INSPECTION AND TESTING

- A. General
 1. All materials and equipment furnished by the Contractor shall be subject to the inspection, review and acceptance of the County and meet the requirements as outlined in the Orange County Utilities Standards and Construction Specifications Manual. If in the testing of any material or equipment it is ascertained by the County/Professional that the material or equipment does not comply with the Contract, the Contractor shall be notified thereof, and the Contractor will be directed to refrain from delivering said material or equipment, or to remove it promptly from the Site or from the Work and not accepted by the County shall be replaced with acceptable material, without cost to the County.

2. Tests of electrical and mechanical equipment and appliances shall be conducted in accordance with recognized test codes of the ANSI, ASME, or the IEE, except as may otherwise be stated herein.
3. The Contractor shall give notice in writing to the County sufficiently in advance of his intention to commence the manufacture or preparation of materials especially manufactured or prepared for use in or as part of the permanent construction. Such notice shall contain a request for inspection, the date of commencement and the expected date of completion of the manufacture or preparation of materials. Upon receipt of such notice, the County shall arrange to have a representative present at such times during the manufacture as may be necessary to inspect the materials; or the County will notify the Contractor that the inspection will be made at a point other than the point of manufacture; or the County will notify the Contractor that inspection will be waived.
4. When inspection is waived or when the County/Professional so requires, the Contractor shall furnish to the County authoritative evidence in the form of Certificates of Manufacture that the materials to be used in the Work have been manufactured and tested in conformity with the Contract Documents. These certificates shall be notarized and shall include five (5) copies of the results of physical tests and chemical analysis, where necessary, that have been made directly on the product or on similar products of the manufacturer.
5. The Contractor must comply with these provisions before shipping any material. Such inspections by the County shall not release the Contractor from the responsibility for furnishing materials meeting the requirements of the Contract Documents.

B. Cost

1. County shall employ and pay for the services of an independent testing laboratory to perform testing indicated on the Contract Documents, or at the County's discretion to ensure conformity with the Contract Documents.
2. The cost of field leakage and pressure tests and shop tests of materials and equipment specifically called for in the Contract Documents shall be borne by the Contractor. Such costs shall be deemed to be included in the Contract price.
3. The Contractor shall notify the County laboratory a minimum of 48-hours in advance of operations for scheduling of tests. When tests or inspections cannot be performed after such notice, the Contractor shall reimburse County for expenses incurred.
4. The Contractor shall pay for all work required to uncover, remove, replace, retest, etc., any work not tested due to the Contractor's failure to provide the 48-hours advance notice or due to failed tests. The Contractor shall also provide compensation for the County/Professional's personnel for required re-testing due to failed or rescheduled testing.

C. Shop Testing

1. Each piece of equipment for which pressure, duty, capacity, rating, efficiency, performance, function or special requirements are specified shall be tested in the shop of the manufacturer in a manner which shall conclusively prove that its characteristics comply fully with the requirements of the Contract Documents. No such equipment shall be shipped to the worksite until the County/Professional notifies the Contractor,

- in writing, that the results of such tests are acceptable.
2. The manufacturing company shall provide five (5) copies of the manufacturer's actual shop test data and interpreted results signed by a responsible official of the manufacturing company and notarized, showing conformity with the Contract Documents as a prerequisite for the acceptance of any equipment. The cost of shop tests (excluding cost of County's representative) and of furnishing manufacturer's preliminary and shop test data of operating equipment shall be borne by the Contractor and shall be included in the Contract price.

D. Field Testing:

1. The County shall employ and pay for services of an independent testing laboratory to perform testing specifically indicated in the Contract Documents. Employment of the laboratory shall in no way relieve Contractor's obligations to perform the Work of the Contract. The Contractor shall provide compensation for retesting of all failed tests.
2. The County may at any time during the progress of the Work, request additional testing beyond that which is specified in the Contract. This testing will be at the County's expense. Contractor shall:
 - a. Cooperate with laboratory personnel, provide access to the Project.
 - b. Secure and deliver to the laboratory adequate quantities of representative samples of materials proposed to be used and which require testing.
 - c. Provide to the laboratory the preliminary design mix proposed to be used for concrete, and other material mixes, which require control by the testing laboratory.

E. Demonstration Tests: Upon completion of the Work and prior to final payment, all equipment and piping installed under this Contract shall be subjected to acceptance or demonstration tests as specified or required to provide compliance with the Contract Documents. The Contractor shall furnish all labor, fuel, energy, water and all other equipment necessary for the demonstration tests at no additional cost to the County.

F. Final Inspection: Prior to preparation of the final payment application, a final inspection will be performed by the County to determine if the Work is properly and satisfactorily constructed in accordance with the requirements of the Contract Documents. See also Section 01700 "Project Closeout."

G. Inspection by Other Agencies: The Florida Department of Transportation, the Florida Department of Environmental Protection, and other authorized governmental agencies shall have free access to the site for inspecting materials and work, and the Contractor shall afford them all necessary facilities and assistance for doing so. Any instructions to the Contractor resulting from these inspections shall be given through the County. These rights of inspections shall not be construed to create any contractual relationship between the Contractor and these agencies.

1.10 PROJECT SITE AND ACCESS

A. ACCESS

1. Contractor agrees that representatives of the County and any governmental agents will have access to the Work wherever it is in preparation or progress and that the

Contractor shall provide facilities for such access and inspection.

1.11 RELATED CONSTRUCTION REQUIREMENTS

A. DAILY REPORTS

1. The Contractor shall submit to the County's Representative daily reports of construction activities including non-work days. The reports shall be complete in detail and shall include the following information:
 - a. Days from Notice to Proceed; Days remaining to substantial and final completion.
 - b. Weather information
 - c. Work activities with reference to the Critical Path Method (CPM) schedule activity numbers (including manpower, equipment and daily production quantities for each individual activity).
 - d. Major deliveries
 - e. Visitors to site
 - f. Test records
 - g. New problems, and
 - h. Other pertinent information
2. A similar report shall be submitted for/by each Subcontractor.
3. The report(s) shall be submitted to the County Representative within 2 days of the respective report date. Each report shall be signed by the Contractor's Superintendent or Project Manager. Pay request will not be processed unless daily reports are current.
4. If a report is incomplete, in error, or contains misinformation, a copy of the report shall be returned by the County Representative to the Contractor's Superintendent or Project Manager with corrections noted. When chronic errors or omissions occur, the Contractor shall correct the procedures by which the reports are produced.

B. CLEANING

1. During Construction
 - a. During construction of the Work, the Contractor shall, at all times, keep the Site free from material, debris and rubbish as practicable and shall remove the same from any portion of the Site if, in the opinion of the County, such material, debris, or rubbish constitutes a nuisance or is objectionable.
 - b. Provide on-site containers for the collection of waste materials, debris and rubbish and remove such from the Site periodically by disposal at a legal disposal area away from the Site.
 - c. The Contractor shall remove from the site all surplus materials and temporary structures when no longer necessary to the Work at the direction of the County.
2. Final Cleaning
 - a. At the conclusion of the Work, all equipment, tools, temporary structures and materials belonging to the Contractor shall be promptly taken away, and the Contractor shall remove and promptly dispose of all water, dirt, rubbish or any other foreign substances. Employ skilled workmen for final cleaning. Thoroughly clean all installed equipment and materials to a bright, clean, polished and new appearing condition. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior

and exterior surfaces. Broom clean exterior paved surfaces; rake clean other surfaces of the grounds.

- b. The Work shall be left in an improved condition and the remainder of the site shall be restored to a condition equal or better than what existed before the Work.
- c. Prior to final completion, or County occupancy, Contractor shall conduct an inspection of interior and exterior surfaces, and all work areas to verify that the entire Work is clean. The County will determine if the final cleaning is acceptable.

1.12 CONSTRUCTION NOT PERMITTED

A. USE OF EXPLOSIVES

1. No blasting shall be done except as approved by the County and the governmental agency or political subdivision having jurisdiction.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

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SECTION 01015 PROJECT REQUIREMENTS

1. GENERAL DESCRIPTION OF WORK. The Work to be performed under these Contract Documents is generally described as follows:

This Project involves the reconstruction of the Phase 3A Expansion Automatic Backwash Filters at the South Water Reclamation Facility (SWRF). There are four (4) filters each 16 feet wide by 98 feet long. The site and mechanical record drawings of the filters from the 1991 project are included in scanned electronic format as part of the specifications, Appendix A. The contractor may use this information to prepare a bid. The contractor may also use this information to determine the access to the filters to determine placement of construction equipment and where he may place materials prior to installation and reconstruction. All work performed will be required to be done while the owner maintains functional operations, including the filters, at the SWRF. Only one filter can be taken out of service. The other units cannot be removed from service until the first unit is complete and accepted by OCUD.

A more detailed description of the work is as follows:

- 1) Remove media (sand and anthracite) and dispose of properly. The filters will remain as dual media filters and utilize 11 inches of sand media and 11 inches of anthracite media.
- 2) Remove the underdrain components that consist of:
 - a. Porous plates
 - b. Sealant
 - c. Retaining angles
 - d. Hardware
- 3) Properly dispose of the items that are not being reused and other construction debris.
- 4) Furnish and install sluice gates and stop log systems to prevent water back flow into the filter bed area during repair.
- 5) Furnish and install new porous plates, retaining angles, sealant and associated hardware.
- 6) Provide for 7 days curing time on the caulk.
- 7) Provide a temporary sun shade to protect the caulk, while curing, from rain, sunshine and heat.
- 8) Install stainless steel divider caps and threaded rod spacers.
- 9) Install new sand media.

- 10) Install new anthracite media.
- 11) Remove and replace the festoon power system cable wire, the signal cable wire, and trolleys. Level the support square tube which holds the trolleys.
- 12) Replace the skimmer pump system.
- 13) Replace the backwash pump system.
- 14) Replace the washwater pump system.
- 15) Replace the spray wash system.
- 16) Replace the backwash shoe assembly including upper and lower tensioning springs.
- 17) Replace the wear strip (material - UHMW) to the effluent channel outlets to provide a smooth surface for the backwash shoe assembly. No waves or distortion in the alignment of the wear strip will be allowed in order to provide a proper sealing surface between the shoe and the wear strip.
- 18) Reuse the influent and effluent ports, rails, cell dividers and washwater troughs.
- 19) Clean and re-paint the backwash bridge support guiderails. Only the sides of the rails will be painted. The top of the rail shall remain uncoated and the stainless steel caps shall remain secured.
- 20) Clean and re-coat the interior filter walls.
- 21) Repair washwater troughs by installing new caulk in the joints to eliminate water leaks.
- 22) Replace the filter control panels with PLC type controls.
- 23) The filter indexing system shall be rebuilt and re-instated.
- 24) Filter demonstration testing.

The Contractor shall furnish all labor, equipment, tools, services and incidentals to complete all Work required by these Specifications.

2. **UNITS OF MEASUREMENT.** Both inch-pound (English) and SI (metric) units of measurement are specified herein; the values expressed in inch-pound units shall govern.
3. **WORK BY PUBLIC UTILITIES.** None.
4. **WORK BY COUNTY.** County shall perform certain activities in connection with the Project with its own personnel as follows:
 - a. Open/Close valves
 - b. Testing as described in Section 01400
 - c. Operate and maintain the backup disk filter system in accordance with Section 01516.
 - d. Take samples and analyze samples during the “Demonstration Test.”

The Contractor shall submit a Construction Assistance Request form (see Figure 1 of this specification section) at least 72 hours in advance of requiring the above activities to be performed.

5. 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.

6. 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.

7. 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.

8. LAND FOR CONSTRUCTION PURPOSES. 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.

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.

9. OPERATION OF EXISTING FACILITIES. The existing treatment plant must be kept in continuous operation throughout the construction period in accordance with the requirements of Section 01143. The Contractor shall submit a Contractor's Assistance Request for Access to County Facilities (see Figure 2) at least 72 hours in advance for entering buildings or other restricted areas or equipment.

10. NOTICES TO COUNTIES AND AUTHORITIES. Contractor shall, as provided in the General Conditions, notify Counties of adjacent property and utilities when prosecution of the Work may affect them.

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.

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.

11. CONNECTIONS TO EXISTING FACILITIES. Unless otherwise specified or indicated, Contractor shall make all necessary connections to existing facilities, including structures, drain lines, and utilities such as water, sewer, gas, telephone, and electric. In each case, Contractor shall receive permission from County or the owning utility prior to undertaking connections. Contractor shall protect facilities against deleterious substances and damage. Connections to existing facilities which are in service shall be thoroughly planned in advance, and all required equipment, materials, and labor shall be on hand at the time of undertaking the connections. Work shall proceed continuously (around the clock) if necessary to complete connections in the minimum time. Operation of valves or other appurtenances on existing utilities, when required, shall be by or under the direct supervision of the County or the owning Utility.

12. 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.

13. CUTTING AND PATCHING. Contractor shall perform all cutting and patching required for the Work and as may be necessary in connection with uncovering Work for inspection or for the correction of defective Work.

Contractor shall perform all cutting and patching required for and in connection with the Work, including but not limited to the following:

Removal of improperly timed Work.

Removal of samples of installed materials for testing.
Alteration of existing facilities.
Installation of new Work in existing facilities.

Contractor shall provide all shoring, bracing, supports, and protective devices necessary to safeguard all Work and existing facilities during cutting and patching operations. Contractor shall not undertake any cutting or demolition which may affect the structural stability of the Work or existing facilities without Engineer's concurrence.

Materials shall be cut and removed to the extent indicated on the Drawings or as required to complete the Work. Materials shall be removed in a careful manner, with no damage to adjacent facilities or materials. Materials which are not salvable shall be removed from the site by Contractor.

All Work and existing facilities affected by cutting operations shall be restored with new materials, or with salvaged materials acceptable to Engineer, to obtain a finished installation with the strength, appearance, and functional capacity required. If necessary, entire surfaces shall be patched and refinished.

14. HAZARDOUS ENVIRONMENTAL CONDITIONS AT SITE. No Hazardous Environmental Conditions at the Site in areas that will be affected by the Work are known to the County.

15. CLEANING UP. 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.

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.

Volatile wastes shall be properly stored in covered metal containers and removed daily.

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.

Adequate cleanup will be a condition for recommendation of progress payment applications.

16. APPLICABLE CODES. References in the Contract Documents to local codes mean the

following:

2014 Florida Building Code

Other standard codes which apply to the Work are designated in the Specifications.

17. 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.

18. 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:

- Contractor and its superintendent.
- Principal Subcontractors.
- Representatives of principal Suppliers and manufacturers as appropriate.
- Engineer.
- Representatives of County. 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:

- Progress Schedule.
- Procurement Schedule.
- Schedule of Values for progress payment purposes.
- 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:

- Contractor's preliminary schedules.
- Transmittal, review, and distribution of Contractor's submittals.
- Processing Applications for Payment.
- Maintaining record documents.
- Critical Work sequencing.
- Field decisions and Change Orders.
- Use of premises, office and storage areas, security, housekeeping, and County's needs.
- Major equipment deliveries and priorities.
- 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.

19. PROGRESS MEETINGS. 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.

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.

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.

20. SITE ADMINISTRATION. 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.

Access to the Site will be limited to the west gate off Sand Lake Road 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 Security Representative a daily list of any scheduled visitors. Only scheduled visitors will be permitted to enter upon verification of identity.

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.

21. SECURITY. 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 to protect the South Water Reclamation Facility site.

The County has a contract to provide guard services at the plant site from 5:00 AM to 5:00 PM Monday through Friday. Site access through the west gate off Sand Lake Road is controlled by the guard service. The Contractor shall be required to pay for additional guard services to accommodate work outside of these hours and holidays to provide the same level of security. In addition, the Contractor shall provide the following security measures:

- a. The Contractor will supply a list of all personnel that will be on Site to County's R.P.R. The list must be kept current and provided at least one day in advance of the personnel's arrival.
- 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' South Water Reclamation Facilities. Proof of background checks shall be submitted, in sealed envelopes, to County's Safety Division.
- 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. If access other than the west gate off Sand Lake Road is utilized, a full time guard shall be provided at the construction gate during contractor working hours at the cost of the Contractor. All arrangements for alternative access shall be pre-arranged with the County. All alternative access must be secured and locked when not in use.

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.

22. CONSTRUCTION ASSISTANCE REQUEST (CAR) FORM. The Contractor shall submit CAR to the Owner's Representative for any interaction requiring the involvement of the Owner's Operational Staff at SWRF, including but not limited to the following examples; existing valve actuation, process interruptions, equipment operation interruption, power interruption, flow diversions, spare parts transfers, and training. The Contractor shall not have contact with the Operations Staff without the knowledge of the Owner's Representative. The Owner's Representative reserves the right to direct the Contractor to provide a CAR at his discretion. Unless otherwise noted by the Owner's Representative, a CAR shall be submitted a minimum of seven (7) calendar days in advance of the intended operation noted within the CAR. Unless otherwise noted in the Contract Documents, for all activities affecting treatment process operation, a CAR shall be submitted a minimum of thirty (30) days in advance of the scheduled activity. Unless otherwise noted in the Contract Documents, the schedule for performing work which will require shutting down a unit process must be coordinated with the Owner by CAR submittal a minimum of sixty (60) days in advance of the scheduled activity. Reference a blank copy of the form within this section.

23. TOBACCO FREE 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.

24. COUNTY'S WORK SCHEDULE. 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.

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.

County observes the following holidays: New Year's Day, Martin Luther King Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Contractor shall pay for the RPR's overtime. Overtime shall be defined as time beyond the 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 \$51 per hour.

26. TRAINING. Unless otherwise specified, a minimum of 2 days of training shall be provided for each piece of equipment supplied, including all electrical installation, instruments, and testing equipment. Contractor shall video and audio record the training. The Contractor shall submit a C.A.R (Construction Assistance Request) form seven days prior to beginning of training. Contractor shall submit training agenda, instructor names and resumes, and training handouts to be used. Training shall be based on O&M manuals supplied by the Contractor. Manuals shall be supplied prior to training.

27. 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, refers to the Contractor's engineer.

END OF SECTION

**CONTRACTOR'S ASSISTANCE REQUEST
FOR ACCESS TO COUNTY FACILITIES**

PROJECT: SWRF PHASE 3A AUTOMATIC BACKWASH FILTER REHABILITATION

DATE: _____ NUMBER: _____

LOCATION/STRUCTURE: _____

PURPOSE: _____

ADDITIONAL ASSISTANCE REQUESTED: _____

DATE ACCESS NEEDED: _____

DURATION OF WORK: _____

CONTRACTOR

OCU CONSTRUCTION

COMMENTS/RESTRICTIONS: _____

PLANT SUPERVISOR

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SECTION 01027
APPLICATIONS FOR PAYMENT

PART 1 - GENERAL

1.01 REQUIREMENT

- A. This Section specifies administrative and procedural requirements governing the Contractor's Applications for Payment.
- B. Prior to submitting a monthly payment application, the Contractor's progressive As-Built Drawings, As-Built Asset Attribute Data, Gravity Main, and Pipe Deflection Tables for the period covered by the monthly payment application shall be submitted and accepted by the County.

1.02 FORMAT

- A. Format and Content: Use the accepted Schedule of Values.
 - 1. Arrange the Schedule of Values in a tabular form with separate columns to indicate the following for each item listed:
 - a. Generic name
 - b. Related specification section
 - c. Name of subcontractor
 - d. Name of manufacturer or fabricator
 - e. Name of supplier
 - f. Dollar value
 - 2. Round amounts off to the nearest whole dollar. The total shall equal the Contract Amount.

1.03 PREPARATION OF APPLICATION

- A. Each Application for Payment shall be consistent with previous applications for payments as certified and paid for by the County.
- B. Payment Application Times: As stated in the General Conditions, Payment Applications shall be submitted monthly on a day of the month established by the County at the Pre-Construction Conference.
- C. Application Preparation: Contractor shall complete every entry on the Pay Application form. The form shall be executed by a person authorized to sign legal documents on behalf of the Contractor and the signature notarized. Incomplete applications will be returned without action. The following procedure shall be followed by the Contractor:
 - 1. Submit applications typed on forms provided by the County.
 - 2. Use data on Bid Form and approved Schedule of Values. Provide dollar value in each column for each line item for portion of Work performed and for stored products.

3. List each authorized Change Order and use additional sheets if necessary, list Change Order number and dollar amount for the original item of work.
 4. Each item shall have an assigned dollar value for the current pay period and a cumulative value for the project to-date.
 5. Submit stored material log, partial waivers of claims and mechanic liens, and Consent of Surety with each application, as further explained below.
- D. Contractor shall submit a stored material log with each application for payment that identifies the type, quantity, and value of all stored material that tracks when the stored materials were installed and deducts the installed material from the stored quantity at that time. Include original invoices for all stored materials for which payment is requested.
- E. Consent of Surety: The Contractor shall submit a Consent of Surety with each pay application.
- F. Waivers of Claims and Mechanics Lien (Waivers):
1. The Contractor shall submit the final Application for Payment with, if not already submitted, the final waivers from every entity involved with performance of work covered by the Application that could lawfully be entitled to a payment claim or lien.
 2. Format of Waiver Forms: The Contractor shall submit executed waivers of claims and liens on forms acceptable to the County.
 3. The County reserves the right to designate which entities involved in the Work must submit waivers.
- G. Transmittal of Pay Applications: Contractor shall submit seven (7) executed copies of each Application for Payment to the County. One (1) copy shall include the Consent of Surety and other similar attachments.
1. The Contractor shall transmit each Pay Application package with a transmittal form that lists attachments and all appropriate information related to the application. The transmittal form shall be acceptable to the County.
 2. The Contractor shall include a certification with each application stating that all previous payments received from the County under the Contract have been applied by the Contractor to discharge, in full, all obligations of the Contractor in connection with the Work covered by prior applications for payment. The Contractor shall also certify that all materials and equipment incorporated into the Work are free and clear of all liens, claims, security interest, and encumbrances.
- H. Initial Application for Payment Submittal: Administrative actions and submittals that must precede or coincide with submittal of the initial Application for Payment include the following:
1. List of Subcontractors
 2. List of principal suppliers and fabricators
 3. Schedule of Values
 4. Contractor's Construction Progress Schedule (accepted)
 5. List of Contractor's staff assignments
 6. Copies of building permits
 7. Copies of authorizations and licenses from governing authorities for performance of the Work

8. Certificates of insurance and insurance policies
 9. Performance and Payment bonds (if required)
 10. Data needed to acquire County's insurance
- I. Monthly Application for Partial Payment Submittals: Administrative actions and submittals that must precede or coincide with submittal of Monthly Applications for Partial Payment include the following, as applicable:
1. Relevant tests
 2. Progressive As-builts Survey Drawings - one (1) paper copy and electronic copy
 3. Table 01050-2 Asset Attribute Data -one (1) paper copy and electronic copy (see Specification Section 01050 "Surveying and Field Engineering" Table 01050-2)
 4. Table 01050-3 Pipe Deflection Table - one (1) paper copy and electronic copy (see Specification Section 01050 "Surveying and Field Engineering" Table 01050-3)
 5. Table 01050-4 Gravity Main Table - one (1) paper copy and electronic copy (see Specification Section 01050 "Surveying and Field Engineering" Table 01050-4)
 6. Boundary Surveys on 8 1/2"X11" format of fee simple and permanent easements for pump stations, treatment facilities, and constructed pipe in easements
 7. Partial Release of Lien
 8. Partial Consent of Surety
 9. Site photographs
 10. Updated Progress Schedule: submit one (1) electronic copy and five (5) copies
 11. Summary of Values
 12. Pay Request
 13. On-Site Storage of materials
- J. Substantial Completion Application for Payment Submittal: Following issuance of the Certificate of Substantial Completion, Contractor shall submit an Application for Payment. This Application shall reflect any Certificates of Partial Substantial Completion issued previously for the County's occupancy of designated portions of the Work.
1. Administrative actions and submittals that shall precede or coincide with this application include:
 - a. Occupancy permits and similar approvals
 - b. Warranties (guarantees) and maintenance agreements
 - c. Test/adjust/balance records
 - d. Maintenance instructions
 - e. Meter readings
 - f. Start-up performance reports
 - g. Change-over information related to the County's occupancy, use, operation and maintenance
 - h. Final Cleaning
 - i. Application for reduction of retainage and consent of surety
 - j. Advice on shifting insurance coverage
 - k. List of incomplete Work, recognized as exceptions to County's Certificate of Substantial Completion
- K. Final Completion Application for Payment Submittal: Administrative actions and

submittals which must precede or coincide with submittal of the final payment Application for Payment include the following:

1. Prior to submitting a request for final payment or the County issuing a Certificate of Completion for the Work, the Contractor shall submit the final Record Documents to the County for approval. Retainage funds will be withheld at the County's discretion based on the quality and accuracy of the final Record Documents.
2. Written signed statements by the Contractor
 - a. Completion of project close-out requirements
 - b. Completion of items specified for completion after Substantial Completion
 - c. Assurance that unsettled claims are settled
 - d. Assurance that work not complete and accepted is now completed
3. Transmittal of Record Documents to the County
4. Proof that taxes, fees, and similar obligations have been paid
5. Removal of temporary facilities and services has been completed
6. Removal of surplus materials, rubbish, and similar elements
7. Prepare Application for Final Payment as required in General Conditions

1.04 PAY APPLICATION SUBSTANTIATING DATA

- A. When the County requires substantiating data for a Pay Application, submit data justifying Pay Application line item amounts in question.
- B. Provide one (1) copy of data with a transmittal letter for each copy of Pay Application submittal. The Pay Application number, date, and line item by number and description shall be clearly stated.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01070
ABBREVIATIONS AND SYMBOLS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Reference to the following standards of any technical society, organization or body shall be construed to mean the latest standard, code or specification or tentative specification adopted and published at the date of advertisement for bids, even though reference has been made to an earlier standard. Such reference is hereby made a part of the Contract the same as if herein repeated in full and in the event of any conflict between any of these specifications, standard codes or tentative specifications and the Contract Documents, the most stringent shall govern.

AA	Aluminum Association
AASHTO	American Association of State Highway and Transportation Officials
ABPA	Acoustical and Board Products Association
ACI	American Concrete Institute
AFBMA	Anti-Friction Bearing Manufacturer's Association
AGA	American Gas Association
AGMA	American Gear Manufacturers Association
AI	The Asphalt Institute
AIA	American Institute of Architects
AIEE	American Institute of Electrical Engineers
AIMA	Acoustical and Insulating Materials Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AMCA	American Moving and Conditioning Association
ANSI	American National Standards Institute
API	American Petroleum Institute
APWA	American Public Works Association
AREA	American Railway Engineering Association
ASA	American Standards Association (now ANSI)
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASSCBC	American Standard Safety Code for Building Construction
ASTM	American Society for Testing and Materials
AWPA	American Wood Preservers Association
AWBP	American Wood Preservers Board
AWS	American Welding Society
AWWA	American Water Works Association

CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standard
DOT Spec	Standard Specification for Road and Bridge Construction –
FDOT	Florida Department of Transportation
FAC	Florida Administrative Code
FS	Federal Standard
IEEE	Institute of Electrical and Electronic Engineers
IPCEA	Insulated Power Cable Engineers Association
NACE	National Association of Corrosion Engineers
NASSCO	National Association of Sewer Service Companies
NBFU	National Board of Fire Underwriters
NBS	National Bureau of Standards
NEC	National Electrical Code
NECA	National Electrical Contractor's Association
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NPT	National Pipe Threads
NSF	National Science Foundation
OSHA	U.S. Department of Labor, Occupational Safety and Health Administration
PCA	Portland Cement Association
PCI	Prestressed Concrete Institute
PS	United States Products Standards
SAE	Society of Automotive Engineers
SDI	Steel Decks Institute
SJI	Steel Joists Institute
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
SSPC	Structural Steel Painting Council
UL	Underwriter's Laboratories, Inc.
USASI	United States of American Standards Institute (Now ANSI)

B. UNITS OF MEASUREMENT

CU FT	cubic feet
CU IN	cubic inch(es)
CY	cubic yard(s)
DegC	degree(s) Centigrade
DegF	degree(s) Fahrenheit
F	Fahrenheit
FT	feet, foot
G	gram(s)
GA	gage
GAL	gallon(s)
GPH	gallon(s) per hour
GPM	gallon(s) per minute

GPS	gallon(s) per second
HR	hour(s)
IN	inch(es)
IPS	iron pipe size
KG	kilogram(s)
L	liter(s)
LB	pound(s)
LBF-IN	pound (force) inch
LF	linear foot, linear feet
MIN. min.	minute(s), minimum
ml	milliliter
MO	month(s)
OZ	ounce(s)
QT	quart
RH	relative humidity
SF	square foot, square feet
SQ IN	square inch(es)
YD	yard(s)
YR	year(s)

C. TERMINOLOGY

@	at
AB	anchor bolt
ADJ	adjust, adjustable
ADMIN	administration
AFG	above finished grade
AGGR	aggregate
AL	aluminum
ALT	alternate
APPX	appendix
APX	approximate
ART	article
ASPH	asphalt
ASSY	assembly
AUTO	automatic
AUX	auxiliary
AVE	avenue
AVG	average
AWG	American Wire Gauge
BAR	barrier
BCCMP	bituminous coated corrugated metal pipe
BL	base line
BLDG	building
BLKG	blocking
BM	beam

C to C	center to center
CCB	concrete block, masonry
CEM	cement
CIP	cast iron pipe, cast in place
CJ	construction joint
CL	center line, clearance
CM	Construction Manager
CMP	corrugated metal pipe
CO	cleanout
CONC	concrete
CONN	connection
CONST	construction
CONT	continuous
CONTR	contractor
CU, COP	copper
ORR	corridor
CRIT	critical
CTD	coated
CTR	center
CULV	culvert
d	delta
DBL	double
DEM	demolition, demolish
DEPT	department
DET	detail
DIA, D	diameter
DIAG	diagonal
DIM	dimension
DWG	drawing
FEM	female
FUT	future
FV	field verify
FM	force main
FH, HYD	fire hydrant
ID	inside diameter
MAS	masonry
MATL	material
MAX	maximum
MFD	manufactured
MFG	manufacturing
MFR	manufacturer
MH	manhole, metal hallide
MIN	minimum
MISC	miscellaneous
MTL	material

NAT	natural
NATL	national
NOM	nominal
NTS	not to scale
OD	outside diameter
PP	power pole
R	radius
Rd	road
REIN	reinforce
REL A	relief air
REQD	required
REV	revision
RR	railroad
R/W	right-of-way
RWM	reclaimed water main
RY	railway
SAN	sanitary
SCH	schedule
SECT	section
SLV	sleeve
SQ	square
SST	stainless steel
ST	street
STA	station
STD	standard
SURF	surface
SUSP	suspend(ed)
SYM	Symbol, symmetrical
SYS	system
TEMP	Temperature, temporary
TYP	typical
UTIL	utility
W	West
WLD	welded
WM	water main
W/O	without
WT	weight
YD	yard
YR	year
Y W	wye

END OF SECTION

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SECTION 01091
REFERENCE SPECIFICATIONS

PART 1 - GENERAL

1.01 GENERAL

- A. Applicable Publications: Whenever in these Specifications references are made to published specifications, codes, standards, or other requirements, it shall be understood that wherever no date is specified, only the latest specifications, standards, or requirements of the respective issuing agencies which have been published as of the date that the Work is advertised for bids, shall apply; except to the extent that said standards or requirements may be in conflict with applicable laws, ordinances, or governing codes. No requirements set forth herein or shown on the Drawings shall be waived because of any provision of or omission from said standards or requirements.

- B. Assignment of Specialists: In certain instances, specification test requires (or implies) that specific work is to be assigned to specialist or expert entities who must be engaged for the performance of the Work. Such assignments shall be recognized as special requirements over which the Contractor has no choice or option. These requirements shall not be interpreted so as to conflict with the enforcement of building codes and similar regulations governing the Work. They are not intended to interfere with local union jurisdiction settlements and similar conventions. Such assignments are intended to establish which party or entity involved in a specific unit of Work is recognized as "expert" for the indicated construction processes or operations. Nevertheless, the final responsibility for fulfillment of the entire set of Contract requirements remains with the Contractor.

1.02 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

- A. Without limiting the generality of other requirements of the Specifications, all Work specified herein shall conform to or exceed the requirements of such referenced documents which are not in conflict with the requirements of these Specifications or applicable codes.

- B. References herein to "Building Code" shall mean the Florida Building Code. The latest edition of the code shall apply to the Work herein, including all addenda, modifications, amendments, or other lawful changes thereto.

- C. In case of conflict between codes, reference standards, Drawings, and the other Contract Documents, the most stringent requirements shall govern. All conflicts shall be brought to the attention of the Engineer for clarification and directions prior to ordering or providing any materials or labor. The Contractor shall bid the most stringent requirements.

D. Applicable Standard Specifications: The Contractor shall construct the Work specified herein in accordance with the requirements of the Contract Documents and the referenced portions of those referenced codes, standards, and specifications listed.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01270

MEASUREMENT AND PAYMENT - LUMP SUM CONTRACTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

Measurement and payment provisions, schedule of values.

1.02 GENERAL MEASUREMENT AND PAYMENT PROVISIONS

- A. Payment for all work done in compliance with the Contract Documents, inclusive of furnishing all manpower, equipment, materials, and performance of all operations relative to construction of this project, will be made as a lump sum which will be complete payment for all work called for or reasonably inferable from the Contract Documents and other work will be considered incidental to the Contract and no additional compensation will be allowed.
- B. The Owner reserves the right to alter the Drawings, modify incidental work as may be necessary, and increase or decrease the work to be performed to accord with such changes, including deductions or additions to the scope of work outlined in the Contract Documents. Changes in the work shall not be considered as a waiver of any conditions of the Contract nor invalidate any provisions thereof. Changes resulting in changes in the scope or quantities of Work or time or other conditions of work will be basis for consideration of a Change Order which is to be negotiated and executed before proceeding with the work. A supplemental agreement between the Contractor and the Owner will be required when such changes meet the conditions described in the Supplementary Conditions. Work which has not been authorized by a written Change Order will not be subsequently considered for additional payment.
- C. The Contractor shall take no advantage of any apparent error or omission in the Drawings or Specifications, and the Engineer shall be permitted to make corrections and interpretations as may be deemed necessary for fulfillment of the intent of the Contract Documents.
- D. If the Contractor makes a claim for an extra or additional cost and requests a Change Order be issued prior to performing the work and the Engineer and/or Owner renders a decision denying such request, the Contractor must notify the Engineer in writing within three (3) days of the time that the Contractor is informed of the Engineer's decision. Otherwise the Owner will not consider any such difference as a claim for a Change Order or additional payment or time. Any such written notice received by the Engineer from the Contractor within the 3-day period shall be just reason for the Engineer to re-evaluate his previous decision.
- E. Failure on the part of the Contractor to construct any item to plan or authorized dimensions within the specification tolerances shall result in: reconstruction to acceptable

tolerances at no additional cost to the Owner; acceptance at no pay; or, acceptance at reduced price, all at the discretion of the Engineer.

- F. Work shall not be considered complete until all testing has been satisfactorily completed and the item of work has demonstrated compliance with plans and specifications.
- G. A preliminary monthly application for payment shall be submitted to the Owner/Engineer for review five (5) days prior to the submittal for approval of the Contractor's monthly payment request.

1.03 SCHEDULE OF VALUES

- A. The Contractor shall submit a complete Schedule of Values for approval prior to commencing construction. As a minimum, include those values identified in Section 01370. The Complete Schedule of Values shall be the basis for making payment applications and establishing prices for Change Orders.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01300

SUBMITTALS

PART 1 - GENERAL

Work completed without approved Shop Drawings and/or samples shall be considered installed at the Contractor's risk.

1.01 SHOP DRAWINGS AND DATA

- A. Shop Drawings defined in the General Conditions, shall complement design and construction Drawings, and shall contain sufficient detail to clearly define all aspects of the Construction. These Drawings shall be complete and detailed.
- B. Contractor and Supplier's catalog sheets, brochures, diagrams, illustrations and other standard descriptive data shall be clearly marked with specification title and numbers to identify pertinent materials, product or models. Delete information which is not applicable to the Work by striking or cross-hatching.
- C. If Shop Drawings show variations from Contract requirements because of standard shop practice or for other reasons, the Contractor shall describe such variations in the letter of transmittal. If acceptable, proper adjustment in the Contract shall be implemented where appropriate. If the Contractor fails to describe such variations, the Contractor shall not be relieved of the responsibility for executing the Work in accordance with the Contract, even though such Drawings have been reviewed.
- D. Data on materials and equipment shall include, without limitation, materials and equipment lists, catalog data sheets, cuts, performance curves, diagrams, verification of conformance with applicable standards or codes, materials of construction and similar descriptive material. Materials and equipment list shall, for each item, give the name and location of the Supplier or manufacturer, trade name, catalog reference, size, finish and all other pertinent data.
- E. For all equipment furnished, the Contractor shall provide a list including the equipment name and address and telephone number of the Supplier's representative and service company so that service and/or spare parts can be readily obtained.
- F. The Contractor will obtain an installation list from suppliers and equipment suppliers who propose to furnish equipment or products for submittal to County/Professional along with the required Shop Drawings. The installation list shall include at least 5 installations where identical equipment has been installed and has been in operation for a period of at least 1-year.

1.02 REVIEW OF SHOP DRAWINGS AND SAMPLES

- A. The County /Professional's review of Shop Drawings, Data, and Samples as submitted by the Contractor will be to determine if the items(s) generally conform(s) to the information in the Contract Documents and is/are compatible with the design concept. The County/Professional's review and exceptions, if any, will not constitute an approval of dimensions, connections, quantities, and details of the material, equipment, device, or item shown.
- B. The review of drawings and schedules will be general, and shall not be construed:
 - 1. As permitting any departure from the Contract Documents
 - 2. As relieving the Contractor of responsibility for any errors, including details, dimensions, and materials
 - 3. As approving departures from details furnished by the County/Professional, except as otherwise provided herein
- C. If the drawings or schedules as submitted describe variations and show a departure from the Contract Documents which the County/Professional finds to be in the interest of the County and to be so minor as not to involve a change in Contract Price or Contract Time, the County/Professional may return the reviewed drawings without noting an exception.
- D. "Approved As Noted": Contractor shall incorporate County/Professional's comments into the submittal before release to manufacturer. The Contractor shall send a letter to the County/Professional acknowledging the comments and their incorporation into the Shop Drawing.
- E. "Amend and Resubmit": Contractor shall resubmit the Shop Drawing to the County/Professional. The resubmittal shall incorporate the County/Professional's comments highlighted on the Shop Drawing.
- F. "Rejected": Contractor shall correct, revise and resubmit Shop Drawing for review by County/Professional.
- G. Resubmittals will be handled in the same manner as first submittals. For resubmittals the Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, to revisions other than the corrections requested by County/Professional on previous submissions. The Contractor shall make any corrections required by the County/Professional.
- H. If the Contractor considers any correction indicated on the Drawings to constitute a change to the Drawings or Specifications, the Contractor shall give written notice thereof to the County/Professional.

- I. When the Shop Drawings have been completed to the satisfaction of the County/Professional, the Contractor shall carry out the Construction in accordance therewith and shall make no further changes therein except upon written instructions from the County/Professional.
- J. No partial submittals will be reviewed. Submittals not deemed complete will be stamped "Rejected" and returned to the Contractor for resubmittal. Unless otherwise specifically permitted by the County/Professional, make all submittals in groups containing all associated items for:
 - 1. Systems
 - 2. Processes
 - 3. As indicated in specific Specifications Sections
All drawings, schematics, manufacturer's product data, certifications, and other Shop Drawing submittals required by a system specification shall be submitted at one time as a package to facilitate interfaces checking.
- K. Only the County/Professional shall utilize the color "red" in marking Shop Drawing submittals.
- L. Failure to comply with any of the above may result in the rejection of Shop Drawings.

1.03 PRODUCT DATA

- A. Submit not less than 6-copies, unless approved by the County/Professional. Mark each copy to identify applicable products, models, options and other data. Supplement manufacturers' standard data to provide information unique to the Work.

1.04 MANUFACTURERS' INSTRUCTIONS

- A. When required in an individual Specification Section, submit manufacturer's printed instructions for delivery, storage, assembly, installation, start-up, adjusting and finishing, in quantities specified for product data.

1.05 SAMPLES

- A. Submit full range of manufacturers' standard colors, textures and patterns for the County's selection. Submit samples for selection of finishes within 30-days after Award of Contract. All color and finish selections must be submitted by the Contractor in a single submission, properly labeled and identified.
- B. Submit samples to illustrate functional characteristics of the product, with integral parts and attachment devices. Coordinate submittal of different categories for interfacing work.

- C. Submit the number of samples specified in the respective Specification section, but no less than two (2). After review one (1) will be retained by the County. Reviewed samples that may be used in the Work are indicated in the Specification Section.
- D. Samples shall be delivered to the County as directed. The Contractor shall prepay shipping charges on samples. Materials or equipment for which samples are required shall not be used in the Work until approved by the County/Professional.
- E. Samples shall be of sufficient size to clearly illustrate:
 - 1. Functional characteristics of the product, with integrally related parts and attachment devices
 - 2. Full range of color, texture and pattern
 - 3. Each sample shall have a label indicating:
 - a. Name of Project
 - b. Name of Contractor and Subcontractor
 - c. Material or equipment represented
 - d. Place of origin
 - e. Name of product and brand (if any)
 - f. Location in Project
 - g. Specification title and number
 - h. Submittal number
 - i. Note: Samples of finished materials shall have additional marking that will identify them under the finished schedules.
- F. The Contractor shall prepare a transmittal letter, in triplicate (3) for each shipment of samples containing the information required in paragraph herein. The Contractor shall enclose a copy of this letter with the shipment and send a copy of this letter to the County/Professional. Approval of a sample shall be only for the characteristics or use named in such approval and shall not be construed to change or modify any Contract requirements.
- G. Approved samples not destroyed in testing shall be sent to the County or stored at the site of the Work. Approved samples of the hardware in good condition may be incorporated in the Work if requested in writing by the Contractor and approved in writing by the County/Professional. Samples that failed testing or were not approved will be returned to the Contractor at the Contractor's expense, if so requested at time of submission.

1.06 FIELD SAMPLES

- A. Provide field samples of finishes as required by individual Specifications sections. Install the sample completely and finished. Acceptable samples in place may be retained in completed Work.

1.07 DRAWINGS, PRODUCT DATA AND CERTIFICATES

- A. Each letter of transmittal shall identify each and every item transmitted by title, drawing number, revision number and date.

- B. The County generally will not check dimensions, quantities or schedules, except in cases where the information is lacking in the Specifications.
- C. The following is applicable to submitted drawings, data and certificates:
 - 1. Show relation to adjacent structures or materials.
 - 2. Clearly identify field dimensions.
 - 3. Show required dimensions and clearances.
 - 4. Performance characteristic and capabilities shall accompany original Shop Drawing submittals.
 - 5. Wiring diagrams and controls shall accompany original Shop Drawing submittals.
 - 6. Installation instructions shall accompany original Shop Drawing submittals.
 - 7. Each submittal shall identify applicable Standards, such as ASTM number or Federal Specification number.
 - 8. All information not pertinent shall be removed from the submittal, or shall be crossed out.
- D. When resubmission is required, the County/Professional will return only two (2) marked up copies. A third submission from the same manufacturer will not be accepted.

1.08 SUBSTITUTIONS

- A. The substitution requirements of this Section are in addition to the requirements of the General Conditions and Supplementary Conditions.
- B. When a particular product is specified or called for, it is intended and shall be understood that the proposal tendered by the Bidder includes those products in his Bid. Substitutions will only be considered in cases where original materials are unavailable or in an instance where substitute can be proven superior in its planned application
- C. The intent of these specifications is to provide the County with a quality facility without discouraging competitive bidding. For products specified only by reference standards, performance and descriptive methods, without naming manufacturer's products, the Contractor may provide the products of any manufacturer complying with the Contract Documents, subject to the review of product data by the County/Professional as specified herein.
- D. The County/Professional's approval is required for substitutions.
- E. The Contract is based on the materials, equipment and methods described in the Contract Documents.
- F. The County/Professional will consider proposals for substitution of materials equipment and methods only when such proposals are accompanied by full and complete technical data and all other information required by the County/Professional to evaluate the proposed substitution.

- G. Do not substitute materials, equipment or methods unless such substitution has been specifically approved for this Work by the County/Professional in writing. The Contractor must provide a submittal per this Section specifically requesting approval of the substitution. Failure to specifically identify the requested substitution may invalidate approval of a submittal.

1.09 AVAILABILITY OF SPECIFIED ITEMS

- A. Verify prior to bidding that all specified items will be available in time for installation during Construction for orderly and timely progress of the Work.
- B. In the event that specified items will not be available, notify the County/Professional prior to receipt of proposals.

1.10 OPERATING MANUALS

- A. Submit all manuals in accordance with requirements of Divisions 2 through 16 of the Contract Specifications and Section 01700 "Project Closeout."

1.11 WARRANTIES, GUARANTEES AND BONDS

- A. Provide as required by Technical Sections of the Specifications and Sections 01700 "Project Closeout" and Section 01740 "Warranties and Bonds."

1.12 CADD FILES

- A. The Professional's CADD files will be available on a limited basis to qualified firms at the County's prerogative. The procedure for requesting such files is noted elsewhere in these documents and there is a cost associated with handling and reproduction. Recipients are cautioned that these files may not accurately show actual conditions as constructed. Users are responsible to verify actual field conditions.
- B. The Professional's Drawings are to be used only for background information. If the Professional's Drawings are just reproduced and resubmitted (e.g. for ductwork drawings) they will be rejected.
- C. Copies of data furnished by the County/Professional to Contractor or Contractor to County/Professional that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

- D. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60-days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.
- E. When transferring documents in electronic media format, the transferring party makes no representations as to long-term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

1.13 PROGRESS PHOTOGRAPHS

- A. Photographs and digital pictures shall be in color. Provide 1 copy of each digital picture on each of three (3) CDs and provide 1 print of each photograph in two (2) separate albums.
- B. Photographs shall be from locations to illustrate the condition of Construction and state of progress adequately.
- C. Provide up to 12 digital photographs of views randomly selected by the County, taken prior to any construction and prior to each scheduled Application for Payment.
- D. Deliver electronic images, prints, and negatives to the County.
- E. Each print shall be single weight paper with glossy finish and the overall dimension shall be 7-1/2-inch x 10-inches (19.05 x 25.4 cm). The print shall be clear, sharp and free of distortion after the enlargement from the negative.
- F. Provide loose-leaf albums for each set of photographs to hold prints with a maximum of 50-leaves per binder.
- G. Each print shall be protected by flexible, transparent acetate or plastic sheet protector leaves with metal reinforced holes. Two (2) extra leaves shall be provided in each binder.
- H. Capture and provide digital, ortho-rectified, true-color, aerial photographs of the complete project site prior to start of Construction and at final completion. A final 6-inch or less ground pixel resolution is required. If using traditional photography, the photos will need to be captured at an appropriate scale and scanned at a high enough dpi to yield a final ground pixel size of 6-inches or less. If captured digitally, a final 6-inches or less ground sample distance is required. The final orthorectified photos shall use a projection of NAD 27, State Plane West and all vertical reference shall be NAVD 88, US feet. All orthophoto mosaics shall meet a final accuracy of plus or minus 5-feet.

- I. Provide a total of four (4) true-color, color balanced orthophoto mosaic prints. Three (3) prints each of the pre and post construction (final completion) orthophoto mosaics, for a total of six (6). Each orthophoto mosaic print shall be on double-weight paper with glossy finish and shall have overall dimensions of 36-inches x 58-inches. Two (2) copies of each of the digital orthophoto mosaics shall be supplied in Geotiff format on disk for each time period (pre and post construction). The final color balanced, true-color orthophoto mosaics will be projected in NAD 27, State Plane West and all vertical reference shall be NAVD 88, US feet and shall meet a final accuracy of plus or minus 5-feet.
- J. The Contractor shall provide before and after photographs of each portion of the site. The below ground facilities shall include all equipment, walls, floor, piping, supports and entrance. At major locations, photographs shall include before, during, and after prints and all prints shall be placed in binders in ascending date order to show the Work as it progresses.
- K. Descriptive Information:
 - 1. Each photograph shall have a permanent title block on the back and shall contain the typed information and arrangement as follows:
 - a. ORANGE COUNTY, FLORIDA
 - b. (ENTER PROJECT NAME)
 - c. BID No. (Enter Bid Number)
 - d. CONTRACTOR: (Name of Contractor)
 - e. DATE: (When photo was taken)
 - f. PHOTO NO.: (Consecutive Numbers)
 - g. PHOTO BY: (Firm Name of Photographer)
 - h. LOCATION: (Description of Location and View)
 - 2. The Contractor shall provide the Professional with a written description of each photograph. This description shall be included in the binders and a copy shall be submitted with the CDs.

1.14 PROJECT RECORD DOCUMENTS

Project Record Documents shall be submitted in accordance with Section 01720 "Project Record Documents" of these specifications.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 SUBMITTAL PROCEDURES

- A. Article 9 of the General Conditions contains additional provisions regarding submittals.

- B. Preliminary Shop Drawing Data: Within 20-days after the Award of the Contract or before the Pre-Construction Meeting, the Contractor shall submit to the County/Professional a complete listing of manufacturers for all items for which Shop Drawings are to be submitted.
- C. Shop Drawing Submittal Schedule: Within 30-days after the Notice to Proceed, the Contractor shall submit to the County/Professional a complete schedule of Shop Drawings submittals with the respective dates for submission, the beginning of manufacture, testing and installation of materials, supplies and equipment, noting those submittals critical to the progress schedule.
- D. Submittal Log: An accurate updated log of submittals will be maintained by the Contractor and subject to review by the County/Professional at each scheduled progress meeting.
- E. If the Contractor considers any correction indicated on the Drawings to constitute a change to the Contract Drawings or specifications, the Contractor shall give written notice thereof to the County/Professional. This does not constitute a change order until accepted by the County.
- F. Shop Drawing and submittal data shall be reviewed by the County/Professional for each original submittal and first resubmittal; thereafter review time for subsequent resubmittals shall be charged to the Contractor. The Contractor shall reimburse the County for services rendered by the County/Professional at the rate multiplied by the County's Professional multiplier based on the fee schedule provided to the County for this Project. If a County engineer is performing any portion of the review, this fee is based upon the hourly rate of the engineer times the County's multiplier for overhead, benefits, and expenses. The Contractor agrees that the County shall deduct such charges from the Contract Amount by a deductive Change Order.
- G. Contractor Shop Drawing and Sample submittals shall include 5 copies in addition to any other copies that the Contractor wants returned. The County will retain 5 copies of approved submittals.
- H. Identify Project, Project Number, date, dates of previous submittals, Contractor, Sub-Contractors, suppliers with their addresses, pertinent Drawings by sheet and detail number, and Specification Section number, as appropriate. Identify all deviations from the Contract Documents. Provide space for Contractor and Professional review stamps.
- I. Contractor's delivery of Shop Drawings for review shall follow a reasonable sequence, as is necessary to support the dates on the Progress Schedule and avoid an overload of Shop Drawings awaiting review at any one time. Coordinate submittal of related items.

- J. Submit Shop Drawings per the schedule of Shop Drawing submittals, inserted in 1 loose-leaf binder, with tabs and index to the County/Professional. All individual submittal sheets inserted in said binder must be clearly marked and referenced to proper paragraph and subparagraph of specifications. Cross out any items on sheets which constitute information not pertaining to equipment specified. Clearly mark all components that are provided as "optional" by manufacturer. Shop Drawings shall be approved by the Contractor prior to submittal to the County/Professional. Shop Drawings will be reviewed by the County/Professional. After County/Professional approval, reproduce and distribute in accordance with requirements herein.
- K. All submissions of Shop Drawings, brochures and catalog cuts shall be accompanied by a transmittal letter listing the Drawings submitted by number and title.
- L. When engineering calculations and/or professional certification of performance criteria of materials, systems, and/or equipment are required, the County is entitled to rely upon the accuracy and completeness of such calculations and certifications submitted by the Contractor. Calculations, when required, shall be submitted in a neat, clear and in an easy to follow format. Such calculations and/or certifications shall be signed and sealed by a Professional Engineer registered in the State of Florida.
- M. Distribute copies of reviewed submittals to concerned parties. Instruct recipients to promptly report any inability to comply with provisions.
- N. Prior to submission of Shop Drawings and samples, the Contractor shall stamp and sign the submittals. Any submission which, upon examination by the County, shows evidence of not having been thoroughly checked, or is not in compliance with the provisions of this Section will be returned to the Contractor for completion before it will be considered for review.
- O. Notify the County of the need for making any changes in the arrangement of piping, connections, wiring, manner of installation, etc., which may be required by the material or equipment Contractor proposes to supply.
- P. On resubmittals, direct specific attention in writing or on the revised Drawings or sample to revisions other than the corrections required by County on previous submissions.
- Q. All drawings, schematics, manufacturer's product data, certifications and other drawing submittals required for a system specification shall be submitted at one time as a package to facilitate interface checking.
- R. The County will distribute Shop Drawings as follows for the indicated action taken:

SHOP DRAWING SUBMITTAL DISTRIBUTION

Representative Party	No Exception Taken or Make Correction Noted			Rejected or Revise & Resubmit		
	Submittal Transmittal	Shop Drawing	Review Comment Sheet	Submittal Transmittal	Shop Drawing	Review Comment Sheet
Engineer	2 Copies	File Copy	1 Copy	Original	File Copy	1 Copy
Contractor (see Note 1)	2 Copies	1 Copy Each Submittal	1 Copy	1 Copy	All Copies Except Engineers	1 Copy
County	1 Copy	1 Copy Each Submittal	1 Copy	1 Copy	None	1 Copy
Inspector	2 Copies	1 Copy Each Submittal	1 Copy	1 Copy	None	1 Copy
Project Record Data (see Note 2)	1 Copy	1 Copy Each Submittal	1 Copy	1 Copy	None	1 Copy

NOTES:

1. Contractor shall distribute additional copies to Subcontractors as required.
2. Stored by Contractor to be furnished to County upon closeout.

- S. All Shop Drawings shall be accompanied with a transmittal letter providing the following information:
1. Project Title and Contract Number
 2. Date
 3. Contractor's name and address
 4. The number of each Shop Drawing, project data, and sample required
 5. Notification of Deviations from Contract Documents
 6. Submittal Log Number conforming to specification section numbers
 - a. Submit each specification section separately.
 - b. Identify each Shop Drawing item required under respective specification section.
 - c. Identify resubmittal using specification section followed by A (first resubmittal), B (second resubmittal)...etc.

3.02 CONTRACTOR'S REVIEW

- A. Contractor's Responsibility for Coordination: Where the dimension, size, shape, location, capacity or other characteristic affects another item, and where the Contractor selects, fabricates or installs related or adjacent products to be used, the Contractor shall be responsible for coordination of related items. The Contractor shall insure that a proper exchange of information takes place prior to or during preparation of each submittal and that submittals reflect such coordination. The notation "verify" or "coordinate" on the Drawings indicates the necessity for Contractor coordination in the particular instances used.

- B. Contractor's Checking: When checking submittals from Subcontractors and suppliers, the Contractor shall mark all sets, indicating his corrections and comments in blue or green. Copies marked in red may be returned for revision.
- C. The Contractor is responsible to deliver and pick-up all submittals in a timely manner at the County/Professional's designated office. The Contractor is responsible for all related costs and expenses for the transmittal of such submittals.

3.03 COUNTY'S / PROFESSIONAL'S REVIEW

- A. Corrections or comments made on Shop Drawings during review do not relieve the Contractor from compliance with the requirements of Drawings and Specifications. This check is only for review of general conformance with the design concept of this Project and general compliance with information given in Contract Documents. Any substitutions or changes shall be properly noted.
- B. No action will be taken on "rough-in" Shop Drawings for plumbing and electrical connections when the items of equipment are not included in the same submittal.
- C. Review Time:
 - 1. On a normal basis, each submittal will be returned to the Contractor within 15 working days of the date it is received. Some submittals may require additional time.
 - 2. If, for any reason, the above schedule cannot be met, the Contractor will be so informed within a reasonable period and the Schedule of Submittals revised. If the specific submittal affects the critical path, the Contractor shall immediately notify the County/Professional in writing. In the event of separate submittals of individual components of a system, these submittals may be held until all components of the system are submitted, and the Contractor will be so notified.

END OF SECTION

SECTION 01301
PRODUCT SUBSTITUTIONS

PART 1 - GENERAL

1.01 SUMMARY

A. General

1. Base all bids on materials and equipment specified in the Appendix D Orange County Utilities List of Approved Products.
2. Certain types of equipment and kinds of material are described in specifications by means of references to names of manufacturers and vendors, trade names, or catalog numbers.
 - a. When this method of specifying is used, it is not intended to exclude from consideration other products bearing other manufacturer's or vendor's names, trade names, or catalog numbers, provided said products are "or-equals," as determined by County/Professional.
3. Other types of equipment and kinds of material may be acceptable substitutions under the following conditions:
 - a. Or-equals are unavailable due to strike, discontinued production of products meeting specified requirements, or other factors beyond control of Contractor; or,
 - b. Contractor proposes a cost and/or time reduction incentive to the Owner.

1.02 QUALITY ASSURANCE

A. In making request for substitution or in using an approved product, Contractor:

1. Has investigated proposed product, and has determined that it is adequate or superior in all respects to that specified, and that it will perform the function for which it is intended.
2. Will provide same guarantee for substitute item as for product specified.
3. Waives all claims for additional costs related to substitution which subsequently arise.

1.03 DEFINITIONS

- A. Product: Manufactured material or equipment.

1.04 PROCEDURE FOR REQUESTING SUBSTITUTION

A. Substitution shall be considered only:

1. After award of Contract
2. Under the conditions stated herein

- B. Written request through Contractor only.

C. Transmittal Mechanics

1. Follow the transmittal mechanics prescribed for Shop Drawings in Specification Section 01300 "Submittals."
 - a. Product substitution will include in the transmittal letter, either directly or as a clearly marked attachment, the items listed in Paragraph D below.

D. Transmittal Contents

1. Product identification:
 - a. Manufacturer's name
 - b. Telephone number and representative contact name
 - c. Specification Section or Drawing reference of originally specified product, including discrete name or tag number assigned to original product in the Contract Documents.
2. Manufacturer's literature clearly marked to show compliance of proposed product with Contract Documents.
3. Itemized comparison of original and proposed product addressing product characteristics including but not necessarily limited to:
 - a. Size
 - b. Composition or materials of construction
 - c. Weight
 - d. Electrical or mechanical requirements
4. Product experience
 - a. Location of past projects utilizing product.
 - b. Name and telephone number of persons associated with referenced projects knowledgeable concerning proposed product.
 - c. Available field data and reports associated with proposed product.
5. Data relating to changes in construction schedule.
6. Data relating to changes in cost.
7. Samples
 - a. At request of County/Professional.
 - b. Full size if requested by County/Professional.
 - c. Held until substantial completion.
 - d. County/Professional is not responsible for loss or damage to samples.

1.05 APPROVAL OR REJECTION

- A. Written approval or rejection of substitution to be given by the Engineer.
- B. Engineer reserves the right to require proposed product to comply with color and pattern of specified product if necessary to secure design intent.
- C. In the event the substitution is approved, the resulting cost and/or time reduction will be documented by Change Order in accordance with the General Conditions.
- D. Substitution will be rejected if:
 1. Submittal is not through the Contractor with his stamp of approval.
 2. Request is not made in accordance with this Specification Section.

3. In the County/Professional's opinion, acceptance will require substantial revision of the original design.
 4. In the County/Professional's opinion, substitution will not perform adequately the function consistent with the design intent.
- E. Contractor shall reimburse the County for the cost of the evaluation whether or not substitution is approved.

PART 2 - PRODUCTS - (NOT USED)

PART 3 - EXECUTION - (NOT USED)

END OF SECTION

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SECTION 01310
PROGRESS SCHEDULES

PART 1 - GENERAL

1.01 REQUIREMENT

- A. The Contractor will submit precedence method cost loaded Critical Path Method (CPM) Progress Schedules to the County depicting the approach to prosecution and completion of the Work. This requirement includes, but is not limited to the Contractor's approach to Activity cost loading, recovering schedule and managing the effect of changes, substitutions and Delays on Work sequencing.
- B. The Progress Schedule shall show how the Contractor's priorities and sequencing for the Work (or Work remaining) conform to the Contract requirements and the sequences of Work indicated in or required by the Contract Documents; reflect how the Contractor anticipates foreseeable events, site conditions and all other general, local and prevailing conditions that may affect cost, progress, schedule, furnishing and performance of the Work; and show how the Contractor's Means and Methods translate into Activities and logic.
- C. The Progress Schedule will consist of the Initial Submittal, Payment Submittals and Revision Submittals. Upon acceptance by the County, the Initial submittal will become the As-Planned Schedule for the Work. Revision submittals upon acceptance will become the As-Planned Schedule for the Work remaining to be completed as of the submittal date for that Revision.
- D. References to the Critical Path Method (CPM) are to CPM construction industry standards that are consistent with the requirements of this Section.

1.02 GLOSSARY OF TERMS

- A. The following terms, whether or not already defined elsewhere in the Contract Documents, have the following intent and meanings within this Section:
 - 1. Activity Value (Value): That portion of the Contract Price representing an appropriate level of payment for the part of the Work designated by the Activity.
 - 2. As-Planned Schedule: The first, complete Initial Progress Schedule submitted by the Contractor with the intent to depict the entire Work as awarded and accepted by the County or returned as no resubmittal required.
 - 3. Contract Float: Days between the Contractors anticipated date for completion of the Work, or of a specified portion of the Work, if any, and the corresponding Contract Time.

4. CPM Schedule: The Progress Schedule based on the Critical Path Method (CPM) of scheduling. The term Critical Path means any continuous sequence of Activities in the Progress Schedule controlling, because of their sum duration, the Early Date of a pertinent, specified Contract Time.
5. Early/Late Dates: Early/late times of performance, based on CPM calculations, for an Activity in the Progress Schedule. Early Dates will be based on proceeding with all or part of the Work on the date when the corresponding Contract Time commences to run. Late Dates will be based on completing all or part of the Work on the corresponding Contract Time, even if the Contractor plans early completion.
6. Milestones: Key, pre-determined points of progress in the completion of a facility, denoting interim targets in support of the Contract Times. Milestones may pinpoint targets for key excavation and substructure events, significant deliveries, critical path transition from superstructure to piping and electrical rough in and building enclosure. Also, hook-up of mechanical and electrical equipment, availability of power for testing, equipment shakedown, training of County personnel, start-up, Substantial Completion and other events of like import.
7. Official Schedule: The Initial or most recent Revision Submittal accepted by the County or returned as no resubmittal required and the basis for Payment Submittals until another Revision Submittal is submitted and accepted. The accepted Initial Submittal is also the As-Planned Schedule.
8. Payment Submittal: A monthly Progress Schedule update reflecting progress and minor adjustments on the Activities, sequencing and restraints for Work remaining.
9. Total Float: Days by which an activity may slip from its Early Dates without necessarily extending a pertinent Contract Time. Total Float at least equals Contract Float. Total Float may also be calculated and reported in working Days. When an activity is delayed beyond Early Dates by its Total Float it becomes a Critical Path activity and if delayed further will impact a Contract Time.

1.03 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.

1.04 MILESTONES AND 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.
- B. Whenever any Activity slips by 14 or more Days from the Late Date for an activity in the Official Schedule, Milestone Dates selected by the County, or a pertinent Contract Time, the Contractor will deliver a Revision Submittal documenting the Contractor's schedule recovery plan and/or a properly supported request for an extension in the Contract Time. The narrative will identify the Delay and actions taken by the Contractor to recover schedule, whether by adding labor, Subcontractors or construction equipment, activity re-sequencing, expediting of submittals and/or deliveries, overtime or shift Work, and so forth. Activity shortening and overlapping shall be explained as to their basis (and be supported by increases in resources).
- C. Upon evaluation of that Revision Submittal, if the County determines there is sufficient cause, the County may withhold liquidated damages or provide a notice of intent to do so, if schedule is indeed not recovered, and/or may give a notice of default.

1.05 PROGRESS SCHEDULE SOFTWARE

- A. The scheduling software employed by the Contractor to process the Progress Schedule will be the current version of Primavera P6.0®, or Primavera® Contractor 5.0 CPM scheduling software.
- B. If the Contractor intends to use companion schedule reporting, analysis or graphics software tools, the Contractor will furnish to the County descriptive materials and samples describing such software tools.

1.06 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.

- B. 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.

1.07 REPORTS, SCHEDULES AND PLOTS

- A. Schedule Reports will include Activity (ID) code and description, duration, calendar, Early Dates, Late Dates and Total Float. Separate Schedule Reports will tabulate, for each Activity, all preceding and succeeding logic types and lead times, whether CPM Plots displaying 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, phases and work areas on 24-inch x 36-inch or smaller sheets. Activities will be shown on the Early Dates with Total Floats noted by Late Date flags. For Payment and Revision Submittals plot a target comparison based on the current Official Schedule.
- C. The Activity Value report will tabulate Activity code and description and Activity Value, percent complete and earned value as calculated by the scheduling software. Cash flow plots shall be provided showing the monthly and cumulative actual and planned earned values with curves shown for Early and Late Dates in the schedules. For Payment and Revision Schedule submittals, the cash flow curves shall also plot the most current Official Schedule planned earnings curves.
- D. Each submittal shall include listings of all added and deleted activities, logic, constraints, Activity Value changes and update information vs. the previous Progress Schedule submittal. This list may be manually prepared or generated by accessory software that will generate such listings.

1.08 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 County/Professional's, 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 Paragraph A above on account of any change, delay, schedule recovery, substitution and/or Contractor-initiated revision occurring since the previous submittal.
- C. Each narrative will list the Critical Path Activities and compare Early and Late Dates against Contract Times and Milestone Dates. Narratives shall also recap progress and Days gained or lost vs. the current Official Schedule, and identify delays, their extent and causes.

- D. The Initial Submittal narrative will describe all delays occurring since Contract Award and all pending and anticipated "or equal" and substitution proposals. Payment and Revision Submittal narratives will describe any new delays and shall certify that the Contractor has not been delayed, as of the cut off date, by any acts or omissions of the County, except as otherwise specifically stated.

1.09 ACTIVITY REQUIREMENTS

- A. Separate activities will identify permits, design when included in the Work, construction, Submittal preparation and review (and resubmission and re-review), deliveries (site or storage), testing, start-up, commissioning and Punch List.
- B. Activities will be detailed to the extent required to show the transition of trade Work. Activities will delineate the progression of the Work.
- C. Activities will not combine separate or non-concurrent items of Unit Price or lump sum Work.
- D. Activity durations will equal the Work Days required to sufficiently complete the Work designated by the Activity, (i.e., when finish-to-start successors could start, even if the Activity is not quite 100% complete). Installation Activities will last from 10 to 40 workdays. Submittal review activity durations shall conform to specified timeframes.
- E. Activities will be assigned consistent descriptions and identification codes. Sort codes will group Activities by meaningful schemes.
- F. Activities will be assigned Activity Values as appropriate and needed to reasonably allocate the Contract Amount to the time periods that they will be earned and eligible for payment based on the Progress Schedule and Schedule of Values. Separate pay activities may be used to simplify cost loading of the Progress Schedule. When used, pay activities shall be loaded with the cost of Work that is included, at no cost, in related (generally, concurrent) CPM activities. Pay activities shall not control the rate of progress; however, their start and finish dates shall be consistent with those of their related CPM activities to ensure accurate Early Date and Late Date cash-flow plots.

1.10 FLOAT TOLERANCES AND FLOAT OWNERSHIP

- A. Refer to Division 0 for float requirements. See sections entitled "Contract Float" and "Progress Schedule"

1.11 SUBMITTALS

- A. Each Progress Schedule Submittal will consist of a narrative, 5 copies of the required reports and plots and an optical ROM data disk with the Contractor's corresponding schedule and schedule layout files in Primavera ".XER" format.
- B. The County will review Progress Schedule Submittals and return a review copy within

14-days after receipt and the Contractor shall, if required, resubmit within 7-days after return of the review copy.

C. Requirements for the Initial Submittal:

1. Within 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.
 - a. Activity Values will prorate Schedule of Values costs and/or pay items through to Activities. Provide a cross-reference listing with two parts; a part that will list each activity with the respective amounts allocated from each Schedule of Values and Unit Price Item making up the total value of each activity and a second part that will list the Schedule of Values and Unit Price Items with the respective amounts allocated from each activity that make up the total value of each item.
2. 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.
3. 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.

D. Requirements for Payment Submittals:

1. 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.
2. 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.
3. At the Contractor's option, a Payment Submittal may overlay minor adjustments on activities and sequencing for Work remaining. This excludes Activity re-scoping to reflect Delays, changes, schedule recovery or substitutions.

E. Requirements for Revision Submittals:

1. Revision Submittals will be submitted when necessary because of major changes or delays affecting activities, sequencing or restraints for Work remaining and/or to put forth a schedule recovery plan. Revision Submittals may also be required because of Contractor-initiated re-planning, or when Contractor plans to perform Work ahead or out-of-sequence that will require additional testing or inspection personnel, or when requested by the County when Work is performed out-of-sequence from the current Official Schedule such that the number of Days gained or lost can not be determined or the scheduled dates of completion of the Work in a Payment Submittal are not viewed as reliable.
2. If requesting a time extension, the Revision Submittal should show the impact of the delay after incorporating reasonable mitigation to minimize the impact and illustrate how the number of Days requested time extension was determined. The delay should be determined as the change in the forecast Contract Completion Date(s) resulting solely from delays that entitle the Contractor to a time extension as provided in the General Conditions. Any and all Contractor slippage and delay occurring prior to and concurrent with the delay potentially entitling the Contractor to a time extension shall be incorporated in the Revision and explained such that the concurrent and non-concurrent periods of delay are indicated. If the Contractor does not follow the procedures contained in this Section or, if the Contractor's analysis is not verifiable by an independent, objective evaluation by the County using the electronic files and data furnished by the Contractor, any such extension in Contract Time will not be granted.

F. Retrospective Delay Analysis.

1. If the County/Professional refuses to endorse any Revision Submittal as "Resubmittal Not Required," the Contractor and County will use the latest Official Schedule when evaluating the effect of Delays on Contract Time and/or Contract Price. The procedure to be used will consist of progressively updating the latest Official Schedule at key closing dates corresponding to starting and finishing dates of the delays and/or dates the delays became critical or dates the Critical Path may have changed for other reasons. For each Progress Schedule iteration, slippage between actual Milestone Dates and Initial Milestone Dates will be correlated to Delays occurring solely in that iteration.
2. For each iteration, revisions in Activities, logic ties and restraints affecting Work after the closing date will be included in that Progress Schedule only if they meet any of the following conditions. First, they are Progress Schedule revisions that the County consented to contemporaneously (i.e., before the closing date) in writing. Second, they reflect comments or objections raised by or on behalf of the County and that were actually confirmed by the as-built progress. Lastly, they represent Contractor's schedule recovery plans or other Progress Schedule revisions that were actually confirmed by the as-built progress.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01370
SCHEDULE OF VALUES

PART 1 - GENERAL

1.01 DEFINITION

- A. Schedule of Values: 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 County. Progress payments on account of Unit Price Work will be based on the number of units completed and shall be prorated by the percent complete on the number of units installed not meeting all requirements of the Contract including testing
- 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 County.
- 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 3 copies of a Preliminary Schedule of Values within 15-days after the recommended award of the Contract.
- B. Submit 3 copies of a proposed final Schedule of Values within 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 County. 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 and provide corresponding

schedule of value item number. Stored materials quantities shall not exceed installed quantities on bid tab or as required by the Contract Documents.

- 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 County requires substantiating information, submit data justifying line item amounts in question.

1.04 UNIT PRICE CONTRACTS

- A. Not Applicable to this project.

1.05 LUMP SUM CONTRACTS

- A. The Contractor shall submit a complete Schedule of Values for approval prior to commencing construction. As a minimum, include those values reported on the following Schedule of Values Table. The Complete Schedule of Values shall be the basis for making payment applications and establishing prices for Change Orders.
- B. The Contractor shall provide information as requested by the Engineer to substantiate prices included in the Schedule of Values.
- C. The Schedule of Values shall be set up as four sub-projects; Filters one through four.
- D. The total of all items shall be equal to the Base Bid Price.
- E. The attached schedule of values is intended to assist the Bidder in the preparation of their Complete Schedule of Values. The scope of work for this project as described in the contract documents includes but is not limited to the list of items on the attached Schedule of Values. In no case shall the Complete Schedule of Values contain fewer items than listed in the Table below.

SCHEDULE OF VALUES

**ORANGE COUNTY SOUTH WATER RECLAMATION FACILITY
PHASE 3A EXPANSION AUTOMATIC BACKWASH FILTER REHABILITATION**

Item No.	Description	TOTAL PRICE (FIGURES)
1	Mobilization/Demobilization	
2	Indemnification	
3	Pre-construction Video	
4	FILTER #1	
4.a	Demolition	
4.b	Furnish & Install New Plates and Appurtenances	
4.c	Caulk and Cure Plates	
4.d	Furnish and Install SS Caps for Cell Dividers	
4.e	Remove Old and Install New Sand Media	
4.f	Remove Old and Install New Anthracite Media	
4.g	Replace Festoon Cables and Trolleys	
4.h	Remove, Replace and Repair Backwash Bridge Accessories	
4.i	Remove and Replace Control Panel	
4.j	Furnish and Install Stop Log System	
4.k	Furnish and Install Sluice Gate	
4.l	All Other Items	
5	FILTER #2	
5.a	Demolition	
5.b	Furnish & Install New Plates and Appurtenances	
5.c	Caulk and Cure Plates	
5.d	Furnish and Install SS Caps for Cell Dividers	
5.e	Remove Old and Install New Sand Media	
5.f	Remove Old and Install New Sand Media	

5.g	Replace Festoon Cables and Trolleys	
5.h	Remove, Replace and Repair Backwash Bridge Accessories	
5.i	Remove and Replace Control Panel	
5.j	Furnish and Install Stop Log System	
5.k	Furnish and Install Sluice Gate	
5.l	All Other Items	
6	FILTER #3	
6.a	Demolition	
6.b	Furnish & Install New Plates and Appurtenances	
6.c	Caulk and Cure Plates	
6.d	Furnish and Install SS Caps for Cell Dividers	
6.e	Remove Old and Install New Sand Media	
6.f	Remove Old and Install New Anthracite Media	
6.g	Replace Festoon Cables and Trolleys	
6.h	Remove, Replace and Repair Backwash Bridge Accessories	
6.i	Remove and Replace Control Panel	
6.j	Furnish and Install Stop Log System	
6.k	Furnish and Install Sluice Gate	
6.l	All Other Items	
7	FILTER #4	
7.a	Demolition	
7.b	Furnish & Install New Plates and Appurtenances	
7.c	Caulk and Cure Plates	
7.d	Furnish and Install SS Caps for Cell Dividers	
7.e	Remove Old and Install New Sand Media	
7.f	Remove Old and Install New Anthracite Media	
7.g	Replace Festoon Cables and Trolleys	
7.h	Remove, Replace and Repair Backwash Bridge Accessories	
7.i	Remove and Replace Control Panel	

7.j	Furnish and Install Stop Log System	
7.k	Furnish and Install Sluice Gate	
7.l	All Other Items	
Total Base Bid Amount		

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

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SECTION 01380
AUDIO – VISUAL DOCUMENTATION

PART 1 - GENERAL

1.01 PURPOSE AND DESCRIPTION OF WORK

- A. The purpose of the audio - visual documentation is to provide the County with regularly documented audio - visual records of the Construction process from the existing conditions through final completion.

1.02 PRE-CONSTRUCTION VIDEO REQUIREMENTS INCLUDED

- A. The Contractor shall employ a professional videographer to take a Pre-Construction video of the entire site including the areas of adjacent properties within 100-feet of the limits of Work and shall be made within 30-days of Work beginning. Special attention shall be made to show the existing paved roads, shoulders, signs, and other existing features.
- B. The Contractor shall submit a quality audio-video recording documenting Pre-Construction field conditions for the entire project. When the Work includes construction of water, wastewater, reuse, or other lines in the vicinity of any street or road, the Contractor shall take digital audio-video recordings of existing conditions along both sides of the street or road. The Pre-Construction video shall be submitted to the County and accepted prior to commencing any Work or using any Contractor laydown areas.
- C. Electronic digital photography shall also be used as necessary to record and facilitate resolution of on-site issues through the transmission of electronic photographs by e-mail from the site to the Professional's and County's offices.

PART 2 - PRODUCTS

2.01 AUDIO-VIDEO RECORDING

- A. Each audio-video recording shall be saved on appropriate DVD media viewable on standard DVD players or computer.

- B. Each DVD shall contain the following information and arrangement at the beginning as a title screen:
- Orange County, Florida
 - PROJECT NAME
 - PROJECT NUMBER
 - CONTRACTOR: (Name of Contractor)
 - DATE: (When photo was taken)
 - VIDEO BY: (Firm Name of Videographer)
 - LOCATION: (Description of Location(s) and View(s))
- C. Each DVD recording section shall begin with an audio description of the County's name, Contract name and number, Contractor's name, date and location information such as street name, direction of travel, viewing side, etc.
- D. Information appearing on the video recording must be continuous and run simultaneously by computer generated transparent digital information. No editing or overlaying of information at a later date will be acceptable.
- E. Digital information to appear in the upper left corner shall be as follows:
1. Name of Contractor
 2. Day, date and time
 3. Name of Project & Specification Number
- F. Time must be accurate and continuously displayed on the video record
- G. Written documentation must coincide with the information on the DVD so as to make easy retrieval of locations at a later date.
- H. The video system shall have the capability to transfer individual frames of video electronically into hard copy prints or photographic negatives.
- I. Audio shall be recorded at the same time as the video recording and shall have the same information as on the viewing screen. Special commentary shall be given for unusual conditions of buildings, sidewalks and curbing, foundations, trees and shrubbery, structures, equipment, pavement, etc.
- J. All DVDs and boxes shall bear labels with the following information:
1. DVD Number
 2. County's Name
 3. Date of Recording
 4. Project Name and Number
 5. Location and Standing Limit of Video

2.02 CONSTRUCTION PHOTOGRAPHS

- A. The Contractor shall employ a competent photographer to take construction record photographs periodically during the course of the Work.

- B. Prints: Date imprinted 8-inch x 10-inch high resolution glossy single weight color print paper; 5 sets, bound in 3-ring binders to be provided to the County with each respective Application for Payment and distributed by the County as follows:
 - 1. County (2 sets)
 - 2. Engineer (1 set)
 - 3. Contractor (1 set)
 - 4. Project Record Data (1 set stored by Contractor to be furnished to County upon Closeout)

PART 3 - EXECUTION

3.01 VIDEO VIEWS REQUIRED

- A. Complete coverage shall include all surface features within 100-feet of the Work area to be used by the Contractor and shall be supported by appropriate audio description made simultaneously with video coverage. Such coverage shall include, but not be limited to, all existing driveways, sidewalks, curbs, ditches, roadways, landscaping, trees, culverts, headwalls, and retaining walls, equipment, structures, pavements, manholes, vaults, handrails, etc. located within the work zone. Video coverage shall extend to the maximum height of all structures within this zone.
- B. The video recorder shall take special efforts to point out and provide audio commentary on cracking, breakage, damage, and other defects in existing features.
- C. All video recording shall be done during times of good visibility. No video recording shall be done during periods of visible precipitation, or when more than 10% of the ground area is covered with standing water, unless otherwise authorized by County.
- D. Prior to commencement of audio-video recording, the Contractor shall notify the County in writing within 48-hours of the audio-video recording. The County may provide a designated representative to accompany and observe all video recording operations. Audio-video recording completed without a County Representative present will be unacceptable unless specifically authorized by the County.

3.02 AUDIO-VIDEO REQUIREMENTS

- A. Major Locations:
 - 1. The Contractor shall provide color digital video of each major facility and structures and facilities adjacent to the Construction before construction starts.
 - 2. All videos shall be recorded with character generator operating with date, time, and location on screen. During video recording, the Contractor shall narrate video explaining what is being shown. All master videos shall be delivered to the County.

3. The audio and video portions of the recording shall maintain viewer orientation. To this end, overall establishing views of all visible house and business addresses shall be used. In areas where the proposed construction location will not be readily apparent to the video recording viewer, highly visible yellow flags shall be placed, by the Contractor, in such a fashion as to clearly indicate the proposed centerline of Construction. When conventional wheeled vehicles are used as conveyances for the recording system, the vertical distance between the camera lens and the ground shall not exceed 10-feet. The camera shall be firmly mounted such that transport of the camera during the recording process will not cause an unsteady picture.
4. All video recording shall be done during time of good visibility. No video recording shall be done during precipitation, mist or fog. The recording shall only be done when sufficient sunlight is present to properly illuminate the subjects of recording and to produce bright, sharp video recordings of those subjects.
5. The average rate of travel during a particular segment of coverage shall be directly proportional to the number, size and value of the surface features within that construction area's zone of influence. The rate of speed in the general direction of travel of the vehicle used during taping shall not exceed 44-feet per minute.

3.03 PHOTOGRAPHS

- A. A minimum of 3 views (top, upstream, and downstream) each shall generally be taken prior to backfilling pipelines or structures. Photographs shall be provided for:
 1. Utility conflicts/relocations
 2. Manholes
 3. Pump stations
 4. Boring and jacking
 5. Directional drilling pipe entrance and exit
 6. Valve installation
 7. Air release valve installation
 8. Fire hydrant assembly
- B. Photo Identification
 1. Name of Project
 2. Name of Structure
 3. Orientation of View
 4. Date & Time of Exposure
 5. Film numbered identification of exposure

END OF SECTION

SECTION 01400
QUALITY CONTROL

PART 1 - GENERAL

1.01 SITE INVESTIGATION AND CONTROL

- A. Contractor shall verify all dimensions in the field and check field conditions continuously during construction. Contractor shall be solely responsible for any inaccuracies built into the Work due to Contractor's failure to comply with this requirement.
- B. Contractor shall inspect related and appurtenant Work and report in writing to County any conditions which will prevent proper completion of the Work. Failure to report any such conditions shall constitute acceptance of all site conditions, and any required removal, repair, or replacement caused by unsuitable conditions shall be performed by the Contractor at Contractor's sole cost and expense.

1.02 INSPECTION OF THE WORK

- A. The Work shall be conducted under the general observation of representatives of the County acting on behalf of the County to ensure strict compliance with the requirements of the Contract Documents. Such inspection may include mill, plant, shop, or field inspection, as required. The County shall be permitted access to all parts of the Work, including plants where materials or equipment are manufactured or fabricated. Inspection by the County are in addition to the inspections required of Contractor by his QC Representatives.
- B. The presence of the County, however, shall not relieve the Contractor of the responsibility for the proper execution of the Work in accordance with all requirements of the Contract Documents. Compliance is a duty of the Contractor, and said duty shall not be avoided by any act or omission on the part of the County. Further, no requirement of this Contract may be waived or modified except by change order or formal (written) substitution approval.
- C. All materials and articles furnished by the Contractor shall be subject to rigid inspection, and no materials or articles shall be used in the Work until they have been inspected and accepted by the County. No Work shall be backfilled, buried, cast in concrete, hidden, or otherwise covered until it has been inspected. Any Work so covered in the absence of inspection shall be subject to uncovering. Where uninspected Work cannot be uncovered, such as in concrete cast over reinforcing steel, all such Work shall be subject to demolition, removal, and reconstruction under proper inspection and no additional payment will be allowed therefore.

- D. The Contractor is responsible for the Quality of his own work and shall designate a qualified individual, to be approved by the County, who will ensure that all work is performed in strict accordance with the Contract Documents. This quality representative shall inspect the work for the Contractor and provide to the County and the Contractor a report outlining all work accomplished, all inspections, and all testing performed for all days when work is performed. The objective of this report is to provide "Objective Evidence of Compliance" by the Contractor with the requirements of the Contract.

1.03 TIME OF INSPECTION AND TESTS

- A. Samples and testing required under these Specifications shall be furnished and prepared in ample time for the completion of the necessary tests and analyses before said articles or materials are to be used. Except as otherwise provided in the Contract Documents, performance of the required tests will be by the Contractor and all costs therefore will be borne by the Contractor at no cost to the County. Whenever the Contractor is ready to backfill, bury, cast in concrete, hide, or otherwise cover any Work under this Contract, the County shall be notified not less than 24-hours in advance to request inspection before beginning any such Work of covering. Failure of the Contractor to notify the County at least 24-hours in advance of any such inspections shall be reasonable cause for the County to order a sufficient delay in the Contractor's schedule to allow time for such inspection, any remedial, or corrective work required, and all costs of such delays, including its impact on other portions of the Work, shall be borne by the Contractor.

1.04 SAMPLING AND TESTING

- A. When not otherwise specified, all sampling and testing shall be in accordance with the methods prescribed in the current standards of the ASTM, as applicable to the class and nature of the article or materials considered. However, the County reserves the right to use any generally accepted system of inspection which, in the opinion of the County, will ensure the County that the quality of the workmanship is in full accord with the Contract Documents.
- B. Any waiver of any specific testing or other quality assurance measures, whether or not such waiver is accompanied by a guarantee of substantial performance as a relief from the specified testing or other quality assurance requirements as originally specified, and whether or not such guarantee is accompanied by a performance bond to assure execution of any necessary corrective or remedial work, shall not be construed as a waiver of any technical or qualitative requirements of the Contract Documents.
- C. Notwithstanding the existence of such waiver, the County shall reserve the right to make independent investigations and tests as specified in the following paragraph and, upon failure of any portion of the Work to meet any of the qualitative requirements of the Contract Documents, shall be reasonable cause for the County to require the removal or correction and reconstruction of any such Work.

- D. In addition to any other inspection or quality assurance provisions that may be specified, the County shall have the right to independently select, test, and analyze, at the expense of the County, additional test specimens of any or all of the materials to be used. Results of such tests and analyses shall be considered along with the tests or analyses made by the Contractor to determine compliance with the applicable specifications for the materials so tested or analyzed provided that wherever any portion of the Work is discovered, as a result of such independent testing or investigation by the County which fails to meet the requirements of the Contract Documents, all costs of such independent inspection and investigation and all costs of removal, correction, reconstruction, or repair of any such Work shall be borne by the Contractor.

1.05 RIGHT OF REJECTION

- A. The County shall have the right at all times and places to reject any articles or materials to be furnished hereunder which, in any respect, fail to meet the requirements of the Contract Documents, regardless of whether the defects in such articles or materials are detected at the point of manufacture or after completion of the Work at the site. If the County or inspector, through an oversight or otherwise, has accepted materials or Work which is defective or which is contrary to the Contract Documents, such material, no matter in what stage or condition of manufacture, delivery, or erection, may be rejected by County.
- B. Contractor shall promptly remove rejected articles or materials from the site of the Work after notification or rejection.
- C. All costs of removal and replacement of rejected articles or materials, as specified herein, shall be borne by the Contractor.
- D. If the Contractor fails to remove or replace defective work after notification to do so, the County may have the work removed and replaced by others and deduct all costs from the Contractor's pay requests.

1.06 TESTING LABS

- A. All geotechnical testing laboratory services for field testing will be paid by the County. The lab(s) shall function as independent lab(s) and report independently to the County and the Contractor. The test lab(s) may not approve or allow any deviation from the Contract Documents.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

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SECTION 01516
FILTER SYSTEM BYPASS

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. The Work covered by this section consists of providing all temporary bypassing to perform all operations in connection with the flow of wastewater around the existing Automatic Backwash (ABW) Phase 3A filters. The purpose of bypassing is to prevent wastewater overflows. The County shall provide a temporary disk filter and concrete pad to process wastewater flow while each Phase of the ABW filters is being worked on. When the influent channel level rises to a County provided set point, the filter system bypass shall turn on to maintain water levels below the set point.

1.02 SUBMITTALS

- A. Prior to implementation of the filter bypass system, the Contractor shall submit and receive County acceptance of a filter bypass plan. The comprehensive written plan shall describe when and for what duration the bypass filter system must be operated for the Contractor to complete the work and maintain flows during construction.

PART 2 - PRODUCTS

2.01 GENERAL

- A. All equipment, piping and pumps shall be provided and operated via a float system by the County.

PART 3 - EXECUTION

3.01 GENERAL

- A. The Contractor shall have all materials, equipment and labor necessary to complete the repair, replacement, or rehabilitation of the ABW filters on the job site prior to isolating the ABW filters. The County shall demonstrate that the temporary filter bypass pumping system is in good working order and is sufficiently sized to successfully handle flows by performing a test run for a period of 24-hours prior to beginning the Work.

3.02 BYPASS OPERATION

- A. The County shall implement the filter bypass plan.
- B. Contractor shall monitor the wastewater system flow and report all issues to the operating

staff during working hours.

- C. The County shall be responsible for monitoring the bypass operation 24-hours per day, 7-days per week. The County shall pay for all costs of the bypass pumps, bypass filter and piping. All maintenance of the temporary pumps shall be provided by the County.
- D. The Contractor shall complete the Work as quickly as possible and pass all tests and inspections returning flow to a newly refurbished ABW filter. The Contractor shall coordinate activities with the County before moving on to the next filter repair.
- E. During bypassing, no wastewater shall be leaked, dumped, or spilled in or onto, any area outside of the existing wastewater system.
- F. The Contractor shall immediately notify the County should an overflow occur.

END OF SECTION

SECTION 01610
DELIVERY, STORAGE AND HANDLING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section specifies the general requirements for the delivery, handling, storage and protection for all items required in the construction of the Work.
- B. Deliver, handle and store products in accordance with manufacturer's recommendations and by methods and means that will prevent damage, deterioration, and loss including theft and protect against damage from climatic conditions. Control delivery schedules to minimize long-term storage of products at the site and overcrowding of construction spaces. In particular, provide delivery/installation coordination to ensure minimum holding or storage times for products recognized to be flammable, hazardous, easily damaged, or sensitive to deterioration, theft and other sources of loss. Damaged or defective items, in the opinion of the County, will be replaced at no cost to the County.

1.02 REQUIREMENTS

- A. The Contractor is responsible for all material, equipment and supplies sold and delivered to the County under this Contract until final inspection of the Work and acceptance thereof by the County.
- B. All materials and equipment to be incorporated in the Work will be handled and stored by the Contractor before, during and after shipment in a manner to prevent warping, twisting, bending, breaking, chipping, rusting, and any injury, theft or damage of any kind whatsoever to the material or equipment.
- C. All materials and equipment, which in the opinion of the County, have become so damaged as to be unfit for the use intended or specified, will be promptly removed from the site of the Work, and the Contractor will receive no compensation for the damaged materials or equipment or for its removal.
- D. In the event any such material, equipment and supplies are lost, stolen, damaged or destroyed prior to final inspection and acceptance, the Contractor will replace same without additional cost to the County.

1.03 DELIVERY

- A. Transport and handle items in accordance with manufacturer's instructions.

- B. The County and the Contractor's project superintendent must be on-site to accept all deliveries shipped directly to the job site. If the project superintendent is not present for a delivery, that delivery may be rejected by the County. If any delivery is rejected due to non-availability of the Contractor's project superintendent, delivery shall be rescheduled at no additional cost to the County.
- C. Schedule delivery to reduce long-term on-site storage prior to installation and/or operation. Under no circumstances will materials or equipment be delivered to the site more than 1-month prior to installation without written authorization from the County.
- D. Coordinate deliveries in order to avoid delay in, or impediment of, the progress of the Work.
- E. Coordinate delivery with installation to ensure minimum holding time for items that are hazardous, flammable, easily damaged or sensitive to deterioration.
- F. All items delivered to the site will be unloaded and placed in a manner that will not hamper the Contractor's normal construction operation or those of Subcontractors and other Contractors and will not interfere with the flow of necessary traffic.
- G. Deliver products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible. Maintain packaged materials with seals unbroken and labels intact until time of use.
- H. Immediately on delivery, inspect shipments with the County to ensure compliance with requirements of Contract Documents and accepted submittals, and that products are properly protected and undamaged. If the Contractor does not notify the County regarding the delivery and the County rejects any part of the delivery, there will be no additional cost to the County for the material to be returned. For items furnished by others (i.e. County), perform inspection in the presence of the County. Provide written notification to the County of any problems.
- I. Promptly remove damaged material and unsuitable items from the job site, and promptly replace with material meeting the specified requirements, at no additional cost to the County.

1.04 STORAGE AND HANDLING

- A. Provide equipment and personnel to handle products by methods recommended by the manufacturer to prevent soiling or damage to products or packaging, with seals and labels intact and legible.
- B. The Contractor is responsible for securing a location for on-site storage of all material and equipment necessary for completion of the Work. The location and storage layout will be submitted to the County at the Pre-Construction conference.
- C. Manufacturer's storage instructions will be carefully studied by the Contractor and reviewed with the County. These instructions will be carefully followed and a written

record of this kept by the Contractor.

- D. All material delivered to the job site will be protected from dirt, dust, dampness, water, and any other condition detrimental to the life of the material from the date of delivery to the time of installation of the material and acceptance by the County.
- E. When required or recommended by the manufacturer, the Contractor will furnish a covered, weather protected storage structure providing a clean, dry, non-corrosive environment for all mechanical equipment valves, architectural items, electrical and instrumentation equipment, and special equipment to be incorporated into this Project.
- F. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored products to assure that products are maintained under specified conditions and free from damage or deterioration.
- G. Should the Contractor fail to take proper action on storage and handling of equipment supplied under this Contract within 7-days after written notice to do so has been given, the County retains the right to correct all deficiencies noted in previously transmitted written notice and deduct the cost associated with these corrections from the Contract Amount. These costs may be comprised of expenditures for labor, equipment usage, administrative, clerical, engineering, and any other costs associated with making the necessary corrections.

1.05 SPECIFIC STORAGE AND HANDLING

(Additional specific storage and handling requirements may be found in the specification sections addressing the material requirements.)

- A. All mechanical and electrical equipment and instruments subject to corrosive damage by the atmosphere if stored outdoors (even though covered by canvas) will be stored in a weather tight building to prevent damage. The building may be a temporary structure on the site or elsewhere, but it must be satisfactory to the County. The building will be provided with adequate ventilation to prevent condensation. Maintain temperature and humidity within range required by manufacturer.
 - 1. All equipment will be stored fully lubricated with oil, grease and other lubricants unless otherwise instructed by the manufacturer. Mechanical equipment to be used in the Work, if stored for longer than 90-days, will have the bearings cleaned, flushed and lubricated prior to testing and startup, at no extra cost to the County.
 - 2. Moving parts will be rotated a minimum of once weekly to ensure proper lubrication and to avoid metal-to-metal "welding." Upon installation of the equipment, the Contractor will start the equipment, at least half load, once weekly for an adequate period of time to ensure that the equipment does not deteriorate from lack of use.

3. Lubricants will be changed upon completion of installation and as frequently as required thereafter during the period between installation and acceptance. New lubricants will be put into the equipment at the time of acceptance. Prior to acceptance of the equipment, the Contractor will have the manufacturer inspect the equipment and certify that its condition has not been detrimentally affected by the long storage period. Such certifications by the manufacturer will be deemed to mean that the equipment is judged by the manufacturer to be in a condition equal to that of equipment that has been shipped, installed, tested and accepted in a minimum time period. As such, the manufacturer will guaranty the equipment equally in both instances. If such a certification is not given, the equipment will be judged to be defective. It will be removed and replaced at the Contractor's expense.
 4. Electric motors provided with heaters will be temporarily wired for continuous heating during storage. Upon installation of the equipment, the Contractor will start the equipment, at least half load, and once weekly for an adequate period of time to insure that the equipment does not deteriorate from lack of use.
- B. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
 - C. Cement and lime will be stored under a roof and off the ground and will be kept completely dry at all times.
 - D. Brick, block and similar masonry products will be handled and stored in a manner to minimize breakage, chipping, cracking and spilling to a minimum.
 - E. Precast Concrete will be handled and stored in a manner to prevent accumulations of dirt, standing water, staining, chipping or cracking.
 - F. All structural and miscellaneous steel and reinforcing steel will be stored off the ground or otherwise to prevent accumulations of dirt or grease, and in a position to prevent accumulations of standing water and to minimize rusting. Beams will be stored with the webs vertical.
 - G. Metals will be stored dry, all under cover and vented to prevent build-up of humidity, all off ground to provide air circulation.
 - H. Lumber will be stacked to provide air circulation. Store materials for which maximum moisture content is specified in an area where moisture content can be maintained.
 - I. Gypsum wallboard systems will be stored to protect all metal studs, furring, insulation boards, batts, accessories and gypsum board to prevent any type of damage to these materials. Rusted material components, damp or wet insulation or gypsum boards will not be accepted.

- J. Acoustical materials will be delivered to the job site in unbroken containers labeled and clearly marked. Materials will not be removed from containers until ready to install, but will be stored in dry area with cartons neatly stacked. Before installation, acoustical board will be stored for not less than 24-hours in the Work area at the same temperature and relative humidity.
- K. Linear items will be stored in dry area with spacers to provide ventilation. Stack linear items to prevent warping, complying with manufacturer's instructions.
- L. Paints and other volatile materials will be stored within approved safety containers. No glass jugs will be permitted. Storage areas will be equipped with not less than 2 fire extinguishers (CO2 type) sufficient to discharge a distance of 25-feet when fully charged and have current tags. No other building materials will be stored in this area. Used rags will be removed daily. Clean rags will be stored in metal closed containers.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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SECTION 01700
PROJECT CLOSEOUT

PART 1 - GENERAL

1.01 DESCRIPTION

The term "Project Closeout" is defined to include requirements near the end of the Contract Time, in preparation for Substantial Completion acceptance, occupancy by the County, release of retainage, final acceptance, final payment, and similar actions evidencing completion of the Work. Time of closeout is directly related to "Substantial Completion"; therefore, the time of closeout may be either a single period for the entire Work or a series of time periods for individual elements of Work that has been certified as substantially complete at different dates. This time variation, if any, will be applicable to the other provisions of this section.

1.02 SCOPE OF WORK

- A. This Section specifies administrative and procedural requirements for project closeout, including but not limited to:
 - 1. Final Cleaning
 - 2. Substantial Completion
 - 3. Final Acceptance

- B. The first filter to be reconstructed must be placed back into service prior to starting work on the second filter. The County will conduct a substantial completion inspection on this first unit and the Contractor will perform the performance testing requirements. Upon successful completion of this inspection, the County will assume ownership of the unit and work may begin on the second unit.

1.03 RELATED WORK

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

- B. Closeout requirements for specific construction activities are included in the appropriate Sections in Divisions 2 through 16.

- C. Section 01740 "Warranties and Bonds"

1.04 PREREQUISITES FOR SUBSTANTIAL COMPLETION.

When the Contractor considers the Work as substantially complete, submit to the County a written notice stating so and requesting an inspection to determine the status of completion. The Contractor will attach to the notice a list of items known to be incomplete or yet to be

corrected. Complete the following before requesting the County's inspection for certification of substantial completion.

- A. In the progress payment request that coincides with or is the first request following, the date substantial completion is claimed, show 100% completion or list incomplete items, the value of incomplete Work, and reasons for the Work being incomplete. Inspection procedures include supporting documentation for completion as indicated in these Contract Documents.
- B. Submit a statement showing an accounting of changes to the Contract Sum.
- C. Submit specific warranties, workmanship/maintenance bonds, maintenance agreements, final certifications and similar documents in accordance with Section 01740 "Warranties and Bonds."
- D. Obtain and submit lien releases enabling the County's full, unrestricted use of the Work and access to services and utilities.
- E. Submit Operation and Maintenance Manuals.
- F. Make final changeover of permanent locks. Submit keys and keying schedule.
- G. Deliver tools, spare parts, extra stock, and similar items.
- H. Complete final cleaning requirements necessary for Substantial Completion.

1.05 FINAL CLEANING.

Complete the following cleaning operations prior to Substantial Completion or Owner occupancy.

- A. Remove from job site all tools, surplus materials, construction equipment, storage sheds, debris, waste and temporary services.
- B. Clean the site, including landscape development areas, of rubbish, litter and other foreign substances. Sweep paved areas broom clean; remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.
- C. Structures:
 - 1. Visually inspect exterior surfaces and remove all traces of soil, waste materials, smudges and other foreign matter.
 - 2. Remove all traces of splashed materials from adjacent surfaces.
 - 3. Ensure exterior surfaces have a uniform degree of cleanliness.
 - 4. Visually inspect interior surfaces and remove all traces of soil, waste materials, smudges and other foreign matter.
 - 5. Remove paint droppings, spots, stains and dirt from finished surfaces.
 - 6. Remove labels that are not permanent labels.
 - 7. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compound and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.

8. Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of stains, films and similar foreign substances. Leave concrete floors broom clean.
9. Wipe surface of mechanical and electrical equipment. Remove excess lubrication and other substances. Clean light fixtures and lamps.
10. Clean permanent filters of ventilating systems and replace disposable filters if units were operated during construction. Clean ducts, blowers and coils if units were operated without filters during construction.

1.06 OPERATION AND MAINTENANCE MANUALS

- A. The Contractor will submit the proposed format, content and tab structure for all Operating and Maintenance Manuals for the County's review and approval. The tab structure for Operating and Maintenance Manuals will follow specification division format as accepted by the Construction Specification Institute. After the County approves the proposed format, content, and tab structure for the Operating and Maintenance Manuals, the Contractor will create and deliver 5 complete sets.
- B. Operation and Maintenance documentation is required for each piece of mechanical, electrical, communications, instrumentation and controls, pneumatic, hydraulic, conveyance, and special construction. If required by the technical specifications, provide Operation and Maintenance documentation for any other product not listed in the foregoing.
- C. The requirements of this Section are separate, distinct and in addition to product submittal requirements that may be established by other Sections of the Specifications. Owner's manuals, manufacturer's printed instructions, parts lists, test data and other submittals required by other Sections of the Specifications may be included in the Operating and Maintenance Manuals provided that they are approved and are formatted in a manner consistent with the requirements of this Section.
- D. Deliver Operation and Maintenance Manuals directly to the County.
- E. Operating and Maintenance Manual documents must include, but are not limited to, table of contents, approved submittals, manufacturer's operating and maintenance instructions, brochures, Shop Drawings, performance curves and data sheets annotated to indicate equipment actually furnished (e.g. identifying impeller size, model, horsepower, etc), procedures, wiring and control diagrams, records of factory and field tests and device/controller settings and calibration, program lists or data compact discs, maintenance and warranty terms and contact information, spare parts listings, inspection procedures, emergency instructions, and other Operating and Maintenance documentation that may be useful to the County. The material and equipment data required by this Section must include all data necessary for the proper installation, removal, normal operation, emergency operation, startup, shutdown, maintenance, cleaning, adjustment, calibration, lubrication, assembly, disassembly, repair, inspection, trouble-shooting, and warranty service of the equipment or materials.

- F. The Contractor must bind the Operating and Maintenance Manual documents in heavy-duty, 3-ring vinyl-covered binders including pocket folders for folded sheet information. Mark binder identification on both the front and spine of each binder. Binder information must list the project title, identify separate structures or locations as applicable, identify the general subject matter covered in the manual and must include the words "OPERATING AND MAINTENANCE INSTRUCTIONS".
 - 1. The Contractor must submit the Operating and Maintenance documents on three-hole punched, 8-1/2-inch x 11-inch sheets or on three-hole punched sheets that are foldable in multiples of 8-1/2-inch x 11-inch. The three-hole punched edge will be the left 11-inch edge.
 - 2. The Contractor may request waivers to the size requirement for specific instances. The Contractor's waiver request must be in writing to the County. The Contractor's waiver request must include a justification for seeking the waiver.

- G. The Contractor must provide an electronic version of the complete and final Operating and Maintenance Manuals in original electronic file format on compact disc or DVD. The Contractor must also provide one (1) electronic pdf file of each bound Operating and Maintenance Manual that represents each Manual's content. The electronic pdf file must match the Operating and Maintenance Manual content and organizational structure.

1.07 SUBSTANTIAL COMPLETION INSPECTION PROCEDURES

- A. Upon receipt of the Contractor's request for inspection, the County will either proceed with inspection or advise the Contractor of incomplete prerequisites.

- B. Following the initial inspection, the County will either prepare the certificate of Substantial Completion, or advise the Contractor of Work which must be performed before the certificate will be issued. The County will repeat the inspection when requested in writing and when assured that the Work has been substantially completed.

- C. Results of the completed inspection will form the initial "punch list" for final acceptance.

1.08 PREREQUISITES FOR FINAL ACCEPTANCE.

Complete the following before requesting the County's final inspection for certification of final acceptance, and final payment. List known exceptions, if any, in the request.

- A. Submit the final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates for insurance for products and completed operations where required.

- B. Submit written certification that:
 - 1. The County's final punch list of itemized Work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance.
 - 2. The Contract Documents have been reviewed and Work has been completed in accordance with Contract Documents.

3. Equipment and systems have been tested in the presence of the County and are operational.
4. Work is completed and ready for final inspection.

C. Submit consent of surety.

D. Submit evidence of final, continuing insurance coverage complying with insurance requirements.

1.09 FINAL ACCEPTANCE INSPECTION PROCEDURES

A. The County will re-inspect the Work upon receipt of the Contractor's written notice that the Work, including punch list items resulting from earlier inspections, has been completed, except for those items for which completion has been delayed because of circumstances that are acceptable to the County.

B. Upon completion of re-inspection, the County will either prepare a certificate of final acceptance or advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled, which are required for final acceptance.

C. If necessary, the re-inspection procedure will be repeated.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

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SECTION 01740
WARRANTIES AND BONDS

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.

1.02 RELATED WORK

- A. Refer to Conditions of Contract for the general requirements relating to warranties and bonds.
- B. General closeout requirements are included in Section 01700 "Project Closeout."
- C. Specific requirements for warranties for the Work and products and installations that are specified to be warranted are included in the individual Sections of Division 2 through 16.

1.03 DEFINITIONS

- A. Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the County.
- B. Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the County.

1.04 SUBMITTALS

- A. Submit written warranties to the County prior to requesting a Substantial Completion Inspection as outlined in Section 01700 "Project Closeout." If the Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the County.
- B. When a designated portion of the Work is completed and occupied or used by the County, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the County within 15-days of completion of that designated portion of the Work.

- C. When a special warranty is required to be executed by the Contractor, or the Contractor and a Subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the County for approval prior to final execution.
- D. Refer to individual Sections of Divisions 2 through 16 for specific content requirements, and particular requirements for submittal of special warranties.
- E. Prior to Substantial Completion Inspection, submit to the County two (2) copies of each required warranty and bond properly executed by the Contractor, or by the Contractor, Subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents and sized to receive 8-1/2-inch by 11-inch three-hole punched paper.
 - 2. Table of Contents will be neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification Section in which specified and the name of the product or work item.
 - 3. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address and telephone number of the installer, supplier and manufacturer.
 - 4. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS", the project title or name and the name, address and telephone number of the Contractor.
 - 5. When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

1.05 WARRANTY REQUIREMENT

- A. The Contractor will warrant all equipment in the Contractor's five-year warranty period described in Section 1.02 of Specification Section 13221.
- B. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
- C. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty will be equal to the original warranty with an equitable adjustment for depreciation.
- D. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the County has benefited from use of the

Work through a portion of its anticipated useful service life.

- E. County's Recourse: Written warranties made to the County are in addition to implied warranties, and will not limit the duties, obligations, rights and remedies otherwise available under the law, nor will warranty periods be interpreted as limitations on time in which the County can enforce such other duties, obligations, rights, or remedies.
- F. Rejection of Warranties: The County reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
- G. The County reserves the right to refuse to accept Work for the project where a special warranty, certification, or similar commitment is required on such work or part of the Work, until evidence is presented that entities required to counter-sign such commitments are willing to do so.
- H. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and Subcontractors required to countersign special warranties with the Contractor.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 DELIVERABLES

- A. Assemble warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and Subcontractors, and bind into a commercial quality standard 3-ring binder; submit 5 copies of the warranties and bonds to the County for review.
 - 1. The warranties and bonds shall include:
 - a. Equipment or product description
 - b. Manufacturer's name, principal, address and telephone number
 - c. Contractor, name of responsible principal, address and telephone number
 - d. Local supplier's or representatives name and address
 - e. Scope of warranty or bond
 - f. Proper procedure in case of failure
 - g. Instances which might affect the validity of warranty or bond
 - h. Date of beginning of warranty, bond or service and maintenance contract
 - i. Duration of warranty, bond or service maintenance contract

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SECTION 13221

AUTOMATIC BACKWASH FILTER REHABILITATION

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. The Contractor shall furnish all labor, materials, equipment and incidentals required for the rehabilitation of four (4) automatic backwash filters as described below. The existing filters have dual media layers (sand and anthracite); the cells are 12 inches wide; and, the filters are approximately 16 feet wide by 98 feet long each, contained in a concrete structure. The original manufacturer was Aqua Aerobic Systems and they were constructed in 1991. No major reconstruction has occurred since installation.
- B. The scope of work shall include all elements specified herein, including the traveling bridge, the compartmental filter bottom, porous plates, filter media, cleaning and backwash mechanism complete with interconnected automatic operating PLC based controls including electrical wires, signal wires and electrical feed line system.
- C. The OWNER will supply a temporary back-up filter on a slab adjacent to the existing filters. This unit is a package disk filter and will be mounted on a slab with all piping and pumping installed by the OWNER. The filter has an AADF of 2.5 MGD and 5 MGD peak flow. Owner shall be responsible for all operational and maintenance requirements and costs for the temporary disk filter.

1.02 WARRANTY

The Contractor shall provide a full five (5) -year non-prorated warranty covering all materials and labor provided under this scope. Warranty shall commence upon substantial completion of the project and acceptance by the Owner.

1.03 OPERATION AND MAINTENANCE MANUALS

Electronic operation and maintenance manuals shall be furnished covering all equipment and materials provided in the work. The manuals shall be prepared specifically for this installation and shall include all required cut sheets, drawings, equipment lists, and material descriptions that are required to instruct operation and maintenance personnel unfamiliar with such equipment. The manuals shall be in PDF format compatible with Adobe Acrobat. In addition, an electronic copy of the running PLC program in the programming software format shall be provided.

1.04 PRODUCT HANDLING

All parts shall be properly protected so that no damage or deterioration will occur during a prolonged delay from the time of shipment until installation is completed and the equipment is ready for operation. On-site precautions shall be taken by the Contractor to ensure adequate protection during storage.

1.05 SHOP DRAWINGS

The Contractor shall submit for review, shop drawings, test reports, certifications and data on materials and equipment provided under this scope of work. The Contractor shall not begin any of the work covered by a drawing, data, or certification until this information has been reviewed and approved by the Owner. Examples of information required to be submitted prior to starting the work include but is not limited to: Pump and motor documentation including pump curves, certifications that the media meets the required material specifications, painting/coating systems, control panel layout drawing and wiring schematic, and UL certification for the panel.

1.06 QUALITY CONTROL

Equipment and material shall be manufactured by Aqua-Aerobic Systems, Inc., Infilco Degremont, or Evoqua Water Technologies without exception.

The following Manufacturer's Field Services shall be required at a minimum:

1 trip; training on porous plate removal

4 trips - 2 days each; one onsite trip per filter for light tests to ensure the porous plates are installed properly

4 trips - 2 days each; one onsite trip per filter for mechanical check, to ensure that the mechanical components are installed properly

4 trips - 2 days each; one onsite trip per filter for electrical startup

2 trips - 2 days each; onsite for equipment startup and training after all of the equipment (four filters complete) is installed

1.07 DRAWINGS

The original construction drawings are attached to the specification as Appendix A for informational purposes only.

PART 2 - PRODUCTS

2.01 MATERIALS AND EQUIPMENT

- A. All structural steel used in the fabrication of the equipment shall be 316 stainless steel, unless otherwise noted, and shall conform to the requirements of "Specifications", ASTM Designation A-240. All welding shall conform to the latest standards of the American Welding Society.
- B. The following items on the existing filter system are not in need of replacement and shall be reused and/or repaired: Bridge weldment, skimmer weldment, festoon posts, festoon square bar, backwash arm, washwater hood, cell dividers, influent and effluent ports, rails and washwater troughs.
- C. The concrete structure will also be reused. No repairs are included to the concrete structure. See Section 2.11 herein for cleaning and painting of the concrete interior surfaces.

2.02 FILTER UNDERDRAIN SYSTEM

- A. Filter Bed: The filter bed consists of a series of partitions (cell dividers) which divide the filter into a multiple of 12" wide compartments.
- B. Cell Dividers: The existing cell dividers shall be reused. Stainless Steel repair caps shall be provided to cap three hundred and eighty eight (388) cell dividers. Caps shall be nine (9) inches in depth and 304 SS. Dividers shall be capped over the entire length (width of the filter cell). The joints for the caps shall be staggered between cell tops.

The end cell dividers that back up to the concrete walls shall be repaired. The existing plates have separated from the wall and fill with debris. The space between the dividers and the wall shall be cleaned by means of a vacuum system. The plates shall be physically attached to the wall to prevent separation and the top and side seams shall be sealed with an elastomeric sealant to prevent liquid and materials from entering the void.

- C. Cell Divider Spacer Rods: All spacer rods shall be replaced with new threaded 304 SS spacer rods.
- D. Influent and Effluent Headers: The existing influent and effluent headers shall be reused.
- E. Filter Media Support System: The filter media support system shall consist of HDPE porous plates that meet the following requirements:
 - 1. Porosity: 500 micron
 - 2. Modulus of Rupture: 700lbs./sq. in.
 - 3. Air Permeability: 100 S.C.F.M. per ft² per 1" thick plate at 1" water column pressure
 - 4. Thickness: 1" (nominal)

- F. The existing 1-inch thick porous plates shall be removed, replaced and completely sealed in place with a gasket-forming type sealant such as polyurethane. The porous plates shall be held down by a fiberglass reinforced polyester retaining angle attached to the cell divider with 1/4" stainless steel fasteners through factory pre-drilled holes. A slotted pipe system is not allowed.

2.03 GRANULAR MEDIA

- A. Sand Media: The sand media, approximately eleven (11) inches deep, shall be a high-grade silica sand with a minimum of 85% silica dioxide complying with Sections 1, 2.2 and 5 of the Standard Specifications for Filtering Material (AWWA Designation: B100-09). The sand shall be well graded and materials showing abnormal grading will be rejected. The particle size distribution shall be determined by screening through standard U.S. Series sieves. The percent size shall be determined from a plot of the percentages of the material passing each sieve, against the rated openings of the sieve. The 10% size or effective size shall be between 0.55 and 0.65 millimeters. The uniformity coefficient (ratio of 60% size to 10% size) shall not exceed 1.50.
- B. Anthracite Media: The anthracite media, approximately eleven (11) inches deep, shall be durable anthracite coal particles of various sizes complying with Sections 1, 2.3, 3 and 5 of the Standard Specification for Filtering Material (AWWA Designation B100-09). The 10% size or effective size shall be between 0.85 and 0.95 millimeters. The uniformity coefficient (ratio of 60% size to 10% size) shall not exceed 1.70.
- C. The nominal collective depth of the media supplied shall be 22". The depth specified shall be obtained when the filter is completely submerged and after thorough backwashing to remove all media fines.

2.04 BACKWASH MECHANISM ASSEMBLY

- A. Bridge: The existing stainless steel bridge weldments will be reused. Wear and mechanical components on the bridge, including the backwash and washwater pumps, the bridge drive system (shafts, wheels, bearings, drive motor and gear box), skimmer pump, backwash shoe and tensioning assembly, limit switches, wall spray system, level sensors/probes, roller mast assembly, all connecting hoses (replaced in kind), PVC piping for backwash and washwater pumps, all shut-off and isolation valves, all manual control valves to control pump flow and the control panel shall be replaced. The supplier and the contractor shall coordinate the various equipment elevations between the bridge, the discharge piping and the existing effluent trough. Contractor shall verify that all equipment has the proper clearance and functions properly during the backwash cycle.

- B. Pumps: The backwash and washwater systems shall each be powered by submersible pumps that shall have mountings suspended from the filter bridge. The pumps shall be constructed of cast iron. A single pump system shall not be allowed.
1. Each pump shall be capable of a minimum pumping rate of 17 gallons per minute per ft² of cell area. All pumps shall be sized to perform the duty required as per original manufacturers specifications for the filter. The pumps shall be equipped with stainless steel shafts and trim.
 2. All motors shall be provided with sealed conduit boxes. Motors shall be designed for 3 phase, 60 hertz, 460 volt power supply, NEMA B design, single-speed with Class B insulation.
- C. Backwash Shoe: The backwash shoe shall be mounted on the backwash frame such that it can independently follow any irregularities of the matching backwash wear strip. This flexible movement shall be controlled by 300 series stainless steel springs and fasteners. The shoe shall attach to Schedule 80 PVC piping by means of a flexible hose. A pivoting backwash frame is not allowed.
- D. Wear Strip: The replaceable wear strip against which the backwash shoe will slide shall be replaced. The wear strip shall be surface mounted to the effluent wall. Wear strip shall be mounted to provide a smooth and linear face (no waves).
- E. Drive Mechanism: The bridge drive unit shall consist of one single speed motor with 1.15 service factor, a gear reducer, a drive shaft and self aligning, flanged bearings.
- F. All gearing shall be fully enclosed in an oil-tight cast housing with the gears running in oil and all bearings of anti-friction type.
- G. The steel drive shaft shall be turned, ground, polished and shall have a rust inhibiting PVC covering. The drive shaft shall be supported by self-aligning anti-friction ball bearings. All bearings shall have lubrication fittings easily accessible from the bridge walkway.
- H. All bridge wheels shall be solid, double-flanged, 316 stainless steel. Both wheels on backwash end of the bridge shall be locked to the shafts to maintain proper alignment with backwash wear strip. The wheels on the influent end of the bridge shall be capable of compensating for minor misalignment of rails by sliding on the shafts.
- I. The Contractor shall re-instate the backwash indexing system. New FRP channel struts and stainless steel pegs shall be provided including mounting hardware, limit switches and accessories to provide a complete an operable system. A 304 Stainless steel indexing peg shall be provided at each filter cell. A 304 SS peg shall also be provided for the “end of travel” signal at each end of the filter. The indexing pegs shall be attached to a new

FRP channel strut. The FRP Strut shall be mounted to the concrete tank with stainless steel anchors approved by the supplier. Each filter bridge shall be provided with a limit switch that will activate a timer within the control panel. The timer shall allow an adjustable dwell time over each filter cell that is being backwashed.

- J. The backwashing system shall have the same capabilities after rehab as exists before rehab. The ability to manually adjust the underdrain backwash flow shall be maintained. Contractor shall provide an adjustable pressure bleed-off valve to manually adjust backwash pressure and volume.

2.05 FLOATING VERTEX SKIMMER

- A. Skimmer: The existing skimmer system shall remain. The skimmer pump shall be replaced. The skimmer pump shall be a heavy-duty cast-iron submersible type with a stainless steel motor shaft, 1/2 HP, sealed with class B insulation. The floating skimmer heads, collars, hoses, poly skimmer blades and associated hardware shall be replaced.

2.06 WALL SPRAY SYSTEM

Wall Spray: The wall spray system including the throttling valves, stainless steel piping and fittings, flexible hose, brass spray nozzles and stainless steel hardware shall be replaced.

2.07 FESTOON SYSTEM

- A. The electrical supply cable and the signal cable shall be replaced. The electrical supply cable shall be four conductors, #6 gauge each. The signal cable shall be eight conductors, #14 gauge each.
- B. Upon traveling to the end of the basin, the looped cable is extended to form a draped cable; as the cable returns, the loops are retracted by the action of the cable guide fastened to the bridge, towing the lead carrier.
- C. The festoon posts shall be reused.
- D. The festoon trolley support system will not be replaced. However, the support shall be repaired to a level position along the entire length of each support.
- E. Replace thirty-two (32) festoon trolleys and the eight (8) stationary cable support units with forty-eight (48) festoon trolleys and eight (8) stationary cable support units.

2.08 FACTORY PAINTING

- A. Shop painting (prime and finish) shall be carefully done by the equipment manufacturers and all coatings applied in a workmanlike manner in strict accordance with the paint manufacturer's published recommendations.

1. All ferrous metal purchased components including gear-motors, pumps, and bearings shall be given an additional top coat of safety blue enamel over the manufacturer's original finish prior to assembly.

2.09 RAIL SYSTEM

- A. Inspect all rail anchors and report condition to the OWNER.
- B. Clean rust and corrosion of the rails and anchors to a minimum of SSPC-SP3 requirements and re-coat the anchors and the side of the rails. Do not remove the stainless steel caps on the rails. Do not paint the rail tops. Coat (color shall be white) with one of the following (Carboline, Tnemec and PPG/Ameron are approved OCUD Appendix D suppliers):
 - 1) Carboline: Two coats Carboline - Carboguard 890, 4-6 mils DFT per coat.
 - 2) PPG/Ameron: Primer - one coat of Amercoat 240 High Build Epoxy at 6-12 mils DFT and Finish - one coat of Amercoat 240 High Build Epoxy at 6-12 mils DFT.
 - 3) Tnemec: Prime coat – one coat Zinc Series 90-97 at 2.5-3.5 mils DFT per coat; intermediate coat Color Hi-build Epoxoline II Series N69 at 4-10 mils DFT per coat and final coat Endura-Shield Series 73 at 2-3 mils DFT per coat.
- C. Repair the rails to a “like-new” condition at the one end of each filter where the carriage drive wheels have eroded the top of the rails. Replace the stainless steel caps in this area.

2.10 WASHWATER TROUGHS

- A. Repair washwater troughs by installing new fiberglass troughs and new caulk in the joints.
- B. Verify hardware connections and replace hardware that has failed.
- C. Caulk all holes and openings.

2.11 CONCRETE PAINTING SYSTEM

Clean the interior concrete walls. Pressure wash, followed by a sweep abrasive blast to remove all existing coatings and contaminants, SSPC-SP7/NACE 4 Brush-off Blast Cleaning. Establish a surface profile equal to ICRI CSP 5 or greater. Coat walls with one of the following (Carboline, PPG/Ameron, and Tnemec are approved OCUD suppliers):

- 1) Carboline: Two Coats 890 Series Epoxy at 6-8 mils per coat; 10 to 16 mils total DFT
- 2) PPG/Ameron: Finish - two coats of Amercoat 78HB Coal Tar Coating at 6-8 mils per coat; 10 to 16 mils total DFT.

3) Tnemec: Filler/Surfacer coat – one coat Series 218 at an average of 1/16” to 1/8”; three separate coats of Series of 104 at 6-8 mils per coat; 10 to 24 mils total DFT.

2.12 CONTROL SYSTEM

- A. The automatic and manual controls for operation of the system shall be furnished fully assembled, wired and pre-programmed in a UL certified control enclosure.
- B. Included with the panel are control relays and PLC, and level sensing probes whereby the pump motors and drive motor may be actuated automatically by a predetermined increase in hydraulic head, or by the PLC to control the interval between each cleaning cycle automatically. The cleaning cycle is terminated by a signal from the level sensing probe signaling low water. The "off-time" of the cleaning cycle is controlled by the PLC with an adjustable range. When the PLC times out, the motors are actuated. During the "on-time", the PLC timer function resets for starting off-time at the end of the cycle. Should high water occur during off-time, the motors are started by a relay actuated from the high water electrode signal, with a corresponding resetting of the PLC timer function.
- C. The control sequence for the backwash mechanism shall be wired so that the backwash mechanism stops at either end of the filter upon termination of the backwash cycle, which will be at the low operating probe signal. A low water shutoff probe shall prevent pumping the filter tank below the minimum water level point.
- D. The control system shall include the control components and practices specified herein.
- E. The existing control panels shall be returned to the OWNER.

2.12.1 CONTROL PANEL WIRING AND ASSEMBLY

- A. All control enclosures shall be custom assembled and wired in an Underwriters Laboratories (UL) certified cabinet shop using quality materials and labor.
- B. All control panel wire shall be 16 AWG multi-strand machine tool wire (MTW) minimum, with PVC insulation.
- C. Wire colors are as follows:

208 VAC or higher	-	Black
120 VAC control power	-	Red
Neutral	-	White
Ground	-	Green
AC Power from remote source	-	Yellow
Neutral from remote source	-	White with Yellow Stripe
24 VDC (+)	-	Blue
24 VDC (-)	-	White with Blue Stripe

VDC (+) from remote source	-	Orange
VDC (-) from remote source	-	White with Orange Stripe
Intrinsically Safe	-	Light Blue

- D. All wires shall be clearly marked with an identification number consistent with the wiring schematic drawing. Wire markers shall be a thermal transfer printable type. The material shall be a self-laminating vinyl. Labels shall be Brady THT-9-427-10 or approved equal.
- E. Wiring inside the control panel shall be run in PVC wiring duct rated for continuous temperatures up to 122° F (50°C). Devices mounted in the enclosure door shall have wires run in spiral wrap to avoid pinch points when opening and closing the door.
- F. Control components mounted internal and external to the enclosure shall be mounted with stainless steel hardware and clearly labeled with a plastic identification nametag. The tag shall be white with black lettering.
- G. Individual stainless Steel disconnects shall be installed at each filter.

2.12.2 CONTROL PANEL QUALITY ASSURANCE

- A. All Control panels shall be UL certified, with evidence provided prior to shipment. Testing shall consist of the following:

Point to point testing of all wiring prior to application of power

Intended supply voltage shall be applied to the enclosure

All components shall be tested for proper operation and calibration

The timer function and level controls shall be functionally checked

All components shall be checked to confirm proper mounting specifications have been followed

Enclosure shall be inspected for defects and repaired if necessary

All labeling of wires and devices are correct, properly installed and clean

- B. Upon the successful completion of the control testing of the enclosure assembly, all applicable documentation (i.e. finalized drawing set, device data sheets, etc.) shall be placed in the drawing pocket of the enclosure.

2.12.3 CONTROL ENCLOSURE

- A. The automatic controls shall be provided in a UL listed, NEMA Type 4X, 316 stainless steel (14 gauge) enclosure that provides insulation and protection for electrical controls and components from highly corrosive environments indoors and outdoors. Enclosure shall include a seamless foam-in-place gasket to assure watertight and dust-tight seal. An internal 3-point latch and 316SS padlocking POWERGLIDE® handle shall be provided.

Enclosure shall include a painted white mild steel (12 gauge) sub-panel mounted with collar studs. Enclosure shall be manufactured by Hoffman or approved equal.

2.12.4 CORROSION INHIBITOR

- A. Each control enclosure assembly shall be provided with corrosion inhibitors to protect interior electrical components from damage caused by high humidity. The corrosion inhibitors shall be installed prior to shipment to provide protection during shipment and storage of the enclosure. The corrosion inhibitor shall be Hoffman AHCI5E or approved equal.

2.12.5 MAIN DISCONNECT CIRCUIT BREAKER

A UL listed, automatic molded case 3-pole disconnect breaker shall be provided in the control enclosure(s). The primary function of the disconnect switch shall be to provide a means to manually open a circuit and automatically open a circuit under overload or short circuit conditions. The disconnect breaker shall have a door mounted operating mechanism with trip indication. Power distribution connectors shall be mounted integrally to the circuit breaker for multiple load connections. Integral connectors shall be provided. The disconnect circuit breaker shall be a Square D/FAL, HDL, JDL, LAL, MGL, PGL or approved equal.

2.12.6 MOTOR STARTER

Starters shall be full voltage reversing and non-reversing. Each starter shall consist of a contactor and overload relay. Assembled starter shall comply with NEMA, UL, EEMAC, CSA, IEC, VDE and other international standards. Contactors shall be rated 600 V, 60 hertz AC unless otherwise noted. Mechanical-life of 10 million make/break operations. Auxiliary contacts shall be rated for AC 600 V max., at 120 V contacts rated for 60 AMP make and 6 AMP break. Overload relay shall have NEMA class 10 tripping characteristics, ambient compensation, time delay and phase loss sensitivity, reset button with trip-free feature, manual/automatic reset, circuit test button and field adjustable.

2.12.7 TRANSFORMER

A step-down multi-tap transformer shall be supplied when there is a necessity to reduce incoming 3-phase power to 120 VAC single-phase. The transformer power wire connections (incoming and outgoing) shall be protected with a finger-safe cover to protect against accidental contact. Primary and secondary fuse protection shall be provided. Transformer shall be UL listed and of continuous wound construction with vacuum impregnated with non-hygroscopic thermosetting varnish. Transformer shall be Square D 9070T or approved equal.

2.12.8 TRANSFORMER PRIMARY AND SECONDARY FUSE

Properly rated fuses and fuse blocks shall be provided for primary and secondary protection of the transformer. Each fuse shall be equipped with a thermoplastic cover to protect against accidental contact. Clip style fuse block shall be rated up to 600 VAC and 100 amps, dual element, time delay fuses shall be rated up to 600 VAC. Fuse blocks and fuses shall be UL listed. Fuses shall be Littelfuse Class CC or approved equal. Fuse blocks and fuse covers shall be manufactured by Marathon or approved equal.

2.12.9 CIRCUIT BREAKER

All single phase branch or supplementary circuits shall be protected with a single-pole, C-Curve rated circuit breaker. Circuit breakers shall be rated for 240 VAC maximum, 50/60 Hz and UL 489 listed. Supplementary and branch protection circuit breakers shall be Merlin Gerin Multi 9 or approved equal.

2.12.10 FUSE

Properly rated fuses and fuse holders shall be provided for protection of individual control devices (discrete and analog signals) mounted outside of the enclosure. Each fuse shall be housed in a hinged type fuse block to protect against contact with the fuse. Fuses shall be rated up to 250 VAC and be Littelfuse or approved equal. Fuse holders for discrete devices shall be rated to 600 VAC and 30 Amps. Fuse holders for analog devices shall be rated to 300 VAC and 15 Amps. Fuse holders shall be Allen Bradley 1492 or approved equal.

2.12.11 OPERATOR DEVICE

- A. Operator devices (pushbuttons and selector switches) shall be mounted through the control enclosure door for manual operation of the filter. Transformer type pilot lights and illuminated pushbuttons shall be provided for indication of an operation status. Lights shall be 24 VDC LED type lamps. Color coding shall be applied as required and is as follows:

Amber – Alarm active, caution

Green – Valve open, motor running

Red – Valve closed

White – Information

- B. All operator devices shall be UL Listed, 30.5mm style, NEMA Type 4X rated, oil and water tight with finger safe guards located on the contact blocks to prevent accidental contact with wire connections. Operator device function shall be identified with an engraved white Gravoply nameplate with black letters. Operator devices shall be Allen-Bradley 800H, Square D 9001, or approved equal.

2.12.12 INDUCTION RELAY

An induction relay shall be provided for liquid level alarming and control of pumps and motors utilizing level sensing probes. The induction relay shall provide field convertible contacts rated for 25 amps at 120 VAC or 240VAC. Induction relay shall be B/W Controls 1500 or approved equal.

2.12.13 CONTROL RELAY

UL listed control relays for general control purposes shall be supplied with a pilot light to indicate when the coil is in an energized state. The relay socket shall be panel or DIN rail mounted inside the enclosure. The relays shall provide the following ratings: 120VAC coil, 10A contact rating (thermal), 250 VAC insulation rating and 5 million mechanical life cycles. Relays shall be Allen Bradley 700-HK, Square D, or approved equal.

2.12.14 HIGH FREQUENCY NOISE FILTER

A UL listed active tracking filter shall be provided to protect the PLC and HMI power feeds from high-frequency noise and low-energy transients. It shall be designed for a single phase input voltage of 120/240VAC operating at 47 to 63 Hz. The unit shall reduce normal mode transients to plus or minus 2 volts, provide surge capacity of 45,000 amps and protect in all modes (Line to neutral, line to ground and neutral to ground). The noise filter shall be an Islatrol IC+ or approved equal.

2.12.15 GROUND FAULT DUPLEX RECEPTACLE

A UL listed ground fault circuit interrupter (GFCI) duplex receptacle shall be provided within the panel for instrument (e.g. programming terminal, modem, etc.) use only. The receptacle shall be protected with a 5 Amp circuit breaker. The receptacle shall carry a 20A / 120VAC rating. The electro-mechanical circuit interrupter shall be double-pole and trip free (GFCI protection and shall not be overridden by holding reset button). Built-in transient suppression shall protect GFCI's internal circuitry from voltage transients. Receptacle shall be Hubbell DRUBGFI20 or approved equal.

2.12.16 24 VOLT DC POWER SUPPLY

A UL listed, industrial grade, compact power supply shall be supplied to provide 24 VDC power to such rated components. The power supply shall be DIN rail mounted and functional with input voltage of 100 to 240 VAC (single-phase) incoming control power. The power supply shall have a green LED which shall be illuminated when output voltage is "OK". The power supply shall be an Allen Bradley 1606 or approved equal.

2.12.17 PROGRAMMABLE LOGIC CONTROLLER SYSTEM

A. GENERAL:

The Programmable Logic Controller (PLC) system shall be configured as required to support the I/O of the Automatic Backwash Filter. The PLC system shall be a Siemens model as specified herein and shall include a central processing unit (CPU), power supply and input/output (I/O) modules. All PLC system components shall be assembled into the control cabinet via a mechanical mounting rack and shall provide a functioning control system.

B. CENTRAL PROCESSING UNIT:

The PLC processor shall be Siemens S7-1516-3PN/DP (6ES7516-3AN00-0AB0), equipped with Ethernet Profinet and Profibus DP communication interface and minimum 1 MB integrated working memory for program and a minimum of 5 MB for data. A memory module for the processor shall be provided. The Load memory module shall be a minimum of 4 MB. The PLC shall be programmed in accordance with County standards.

C. POWER SUPPLY:

A PLC power supply shall provide power to the processor and I/O modules of the PLC system via a connecting comb. Power supplies shall have 120/230VAC nominal input voltage and 24VDC rated output.

D. INPUT/OUTPUT MODULES:

The input/output (I/O) system shall be configured as a modular designed to communicate with the CPU.

The following types of I/O modules shall be provided:

Analog Input Module: Analog input modules shall have eight (8) 4-20 mA DC input channels.

Space shall be provided in the Control Panel for an Analog Output Module: Analog output modules shall have eight (4) isolated 4-20 mA DC channels.

Digital Input Module: Digital input modules shall have sixteen (16) discrete input channels.

Digital Output Module: Digital output modules shall have sixteen (16) digital output channels.

I/O modules shall be provided in the quantities and types required to serve the I/O signal circuits identified in the I/O List.

2.12.18 HUMAN MACHINE INTERFACE OVERVIEW

- A. The control system shall be equipped with a UL listed operator interface that provides control display screens. These screens shall be used by the operator to monitor and control filter status, setpoint and alarm information.
- B. The Interface shall allow the Operator access to adjust the following operating parameters at a minimum:
- Backwash interval
 - Backwash duration
 - Number of Backwashes between Solids Waste interval.
- C. The operator interface shall provide information to assist the Operator in assessing the status of the filter system. The interface screen shall display, at minimum, the following parameters:
- Water level in the filter
 - Time since last Backwash
 - Time since last Solids Waste withdrawal
 - Elapsed time on the Drive Motor
 - Elapsed time on the Backwash/Waste Pump(s)
 - Total Backwash time and cycles
- D. The operator interface shall allow the Operator to:
- Initiate Backwash
 - Control all electric actuated valves
- E. The interface shall display the alarm history. The alarm history shall include the time and date of the most recent 25 alarms along with the description of the alarm.
- F. The interface shall also display current alarms, including the date, time and a description of the alarm.
- G. As a diagnostic aid to the Operator, the interface shall display the time between Backwashes for the most recent 40 Backwashes.

2.12.19 HUMAN MACHINE INTERFACE TERMINAL

The Human Machine Interface (HMI) Terminal shall be a NEMA Type 4X/12 rated, 7” LCD STN color display and resistive analog touch screen. The HMI shall have a minimum of 2 MB application memory. Communications interface to associated PLC shall be via Ethernet. The HMI shall be a Siemens Comfort TP700 and programming shall be performed and coordinated with Orange County personnel to insure proper functionality with the existing control system at the facility.

2.12.20 HUMAN MACHINE INTERFACE SUN SHIELD

A sun shield constructed of 316 stainless steel shall be mounted over the operator interface to provide protection and visibility of operator screens in outdoor applications. The control panel shall be mounted such that the interface screen is pointed in the north direction.

2.12.21 TERMINAL BLOCK

Standard feed-through screw terminal blocks, DIN rail mounted, shall be supplied for all point to point wiring connections. All terminals shall be numbered per the wiring schematic with printed markers. Terminals shall carry a 600V AC/DC voltage rating. Terminal blocks shall be Allen-Bradley 1492-J4 (35A max) and 1492-J16 (85A max) or approved equal.

PART 3: EXECUTION

3.01 INSTALLATION

- A. The Contractor is responsible for isolating flow to the filter unit being repaired for the duration of the repair while maintaining flow to the other three units and the back-up disk filter. Work on the filters shall be consecutive and work shall not be started on a new filter until the previous filter is completed, tested and accepted. It is recommended that the contractor install the slide gates and stop log systems prior to the filter rehab work. It is required that the contractor isolate all water from entering the filter being repaired and to not allow the flooding of the filter and the caulk before it is fully cured. See also D below. Install four (4) stop log systems in the filter effluent channels as shown in Appendix B.
- B. The Contractor shall remove all media from the filter bed, and then all hold down angles, spacer rods, hardware, caulk, and existing porous plates. After removal, all cell dividers shall be inspected and ledges shall be cleaned to be free of caulking. Once the unit is clean, new HDPE porous plates, sealant, retaining angles, and hardware, and the wear strip shall be installed. After this is completed, a light test shall be performed to assure the plates are installed properly.
- C. The Contractor shall install the stainless steel caps on the dividers and the stainless steel threaded spacer rods in accordance with the manufacturer's requirements. Installation sequence shall be as recommended by the manufacturer.
- D. The Contractor shall erect a tent over the filter (work shall proceed only on one filter at a time) to protect the work from sunlight, rainfall and excessive heat during the caulking process and caulk curing period. Tent may be removed/relocated after the caulk has cured for a minimum of 7 days.

- E. The Contractor shall install the new bridge components and accessories. New shafts, wheels, bearings and drive shall be installed. Once the shafts, wheels and bearings have been installed, the Contractor shall adjust the bridge tracking as needed to confirm that the bridge will track properly on the rails.
- F. Contractor shall install new skimmer pump, washwater pump and backwash pump. Contractor shall remove and replace all connecting hoses, valves, fittings and piping.
- G. Contractor shall remove and replace the spray wash system, including piping.
- H. A new PLC based control panel shall be installed on the bridge. The Contractor's licensed electrician shall wire the new control panel and the new backwash, washwater and skimmer pumps into the system. Contractor shall provide wiring from the limit switches and the probes to the control panel.
- I. A new backwash shoe and tensioning assembly shall be installed.
- J. Contractor shall repair the bridge support rails in accordance with 13221- Section 2.09.
- K. Contractor shall provide a new cable mast assembly at the control panel. Contractor is responsible for connecting the wiring and control cable from the Festoon system to the control panel. Contractor shall also be responsible for all wiring to connect the new control panel to all replaced pumps, accessories and controls (limit switches and level probes).
- L. The Contractor shall install new electrical cable and signal cable on the existing festoon system. The new traveling cable trolleys and the tow trolleys will be installed on the existing square tube on the existing festoons. The existing square tube shall be leveled as required.
- M. After the caulk, used for the installation of the porous plates and dividers, has cured for a minimum of seven (7) days, the Contractor shall install the filter media. Media shall be delivered in supersacks. Therefore, a crane will be required to install the media.
- N. The Contractor shall be responsible for offloading all equipment, removal and disposal of media and all construction debris (waste materials) generated throughout the project in accordance with local and State regulations, and providing all equipment, tools, or other items necessary for completion of the work.
- O. Electrical service at 110V, 20 amp is available in the area of the work and electricity from this source will be provided by the OWNER at no charge to the Contractor.

3.02 START-UP

Prior to system start-up, the Contractor shall successfully complete all field testing of the individual components incorporated into the work, including the instrumentation and controls. The Contractor shall provide a checklist of all digital and analog signals to be tested and verified. The Owner shall witness the testing and verification of all signals. The Contractor shall then commence the start-up of each complete filter and shall be responsible for running the filter in automatic for five consecutive days as a demonstration of performance. This five day period shall be known as the "Filter Demonstration Test".

3.03 FILTER DEMONSTRATION TESTING AND TRAINING

- A. Contractor shall assume that the influent TSS to the filters is no greater than 25 mg/l.
- B. Each filter shall be tested separately upon completion of each filter before acceptance by the Owner for use. The filter test period shall be 30 days in duration. The initial 25 days shall be for proving consistent operation of the unit. The next 5 days shall consist of the performance test described below.
- C. During the filter demonstration test, the filter effluent shall contain less than five (5) mg/l to be considered successful. Samples of the filter effluent (three per day) shall be taken during the morning peak hour, the evening peak hour and the midday low flow. Fifteen (15) filter effluent samples shall be taken for TSS analysis for each filter test. No single filter effluent sample shall exceed 5 mg/l TSS during the testing period/performance period. If the system fails during this demonstration of performance, the Contractor shall correct the source of failure, and the test shall restart at day zero.

Once per day, a filter influent sample will be taken. A total of five (5) filter influent samples will be taken during each filter test period. If the influent TSS to the filter exceeds 25 mg/l at any time during the test, the plant operator shall be notified and OCUD shall be given the opportunity to correct the situation. If the filter effluent TSS samples taken during this event (filter influent TSS exceedence) are within the test criteria, the test will remain valid. If not, then the test will start over again and the contractor shall be compensated for the time spent performing the initial test.

- D. The contractor is responsible for all sampling during the test period as described above. Samples shall be taken and analyzed by a State of Florida Department of Health Environmental Laboratory Certification Program.
- E. The filter effluent chamber shall be thoroughly cleaned immediately prior to the testing period. There shall be no visible materials (filter sand) in the filter effluent chamber before, during or after the completion of the test. Materials (filter sand) in the effluent chamber shall be considered a failure of the system and the contractor shall correct the problem.

- F. Upon successful completion of all four filter demonstration tests and acceptance by the County, training shall be provided to the Owner's personnel. Four (4) two-hour training sessions shall be provided by the equipment manufacturer's representative. The two-hour training session shall be provided to two separate groups at the wastewater facility. One group is the operations staff and the other group is the maintenance staff. The same two-hour training shall be provided to both groups. In addition, the same two-hour training session shall be provided on two separate occasions on different days, to accommodate the shift schedule of plant personnel. Upon completion of the training, a Training Disk shall be provided with all of the information presented in the two-hour training session. Upon delivery of all close out documentation to OCUD, the project will be considered substantially complete, and the warranty period will be allowed to commence.

3.04 SPARE PARTS

- A. The contractor shall provide the following spare parts:
- 1) Lights and fuses of each size and/or type for the control panel (Qty. 3 of each size).
 - 2) Backwash pump (Qty. 1).

END OF SECTION

SECTION 15114

FABRICATED STAINLESS STEEL SLIDE GATES

PART 1 – GENERAL

1-1. SCOPE. This section covers furnishing slide gates and actuators as specified herein and Section 13221- Automatic Backwash Filter Rehabilitation. Slide gates shall be furnished complete with frames, slides, seals, actuators, operating stems, and appurtenances as specified herein.

1-2. GENERAL. Equipment furnished under this section shall be fabricated and assembled in full conformity with Specifications, engineering data, instructions, and recommendations of the equipment manufacturer, unless exceptions are noted by Engineer.

Gates and actuators shall be furnished with all necessary parts and accessories specified, or otherwise required for a complete, properly operating installation and shall be the latest products of a manufacturer engaged in the production of slide gates.

1-2.01. General Equipment Stipulations. The General Equipment Stipulations shall apply to all equipment furnished under this section. If requirements in this specification differ from those in the General Equipment Stipulations, the requirements specified herein shall take precedence.

1-2.02. Governing Standard. Except as modified or supplemented herein, all slide gates shall conform to the applicable requirements of ANSI/AWWA C561.

1-3. SUBMITTALS. Complete drawings, construction details, and specifications covering the slide gates and appurtenances shall be submitted in accordance with the Submittals Procedures section. Each drawing shall be identified with the slide gate designation.

PART 2 – PRODUCTS

2-1. SERVICE CONDITIONS. Wastewater

2-2. PERFORMANCE AND DESIGN REQUIREMENTS. Slide gates shall be designed for 3 feet wide by 8.33 feet tall water conditions.

2-2.01. Design. Liberal factors of safety shall be used throughout the design, especially in the design of parts subject to intermittent or alternating stresses. In general, working stresses shall not exceed one-third of the yield point or one-fourth of the ultimate strength of each material.

Gates shall be designed to fit into the existing structures indicated on the Record Drawings. Contractor shall field verify all dimensions and placement areas.

2-3. ACCEPTABLE MANUFACTURERS. For slide gates acceptable manufacturers are Coldwell-Wilcox, Golden Harvest, Hydro Gate, Waterman, Fontaine, and Whipps.

2-4. MATERIALS.

Frames, Guides, Slides, Reinforcing Members, and Yoke Beams	Stainless Steel, ASTM A276, 316L, and ASTM A240, 316L.
Flush Bottom Closure Seal	Compressible neoprene.
Hollow Bulb J-Seals	Compressible neoprene.
Seal Retainer Bar	Aluminum, ASTM B211 or B221, Alloy 6061-T6.
Slide Seats and Bearing Bars	UHMW polyethylene.
Operating Stems	Stainless steel, AISI Type 316.
Assembly Fasteners	Stainless steel, AISI Type 302, 303, or 304.
Roller Chain	ANSI B29.1.
Epoxy Enamel	PPG-Amercoat “Amercoat 385 Epoxy”, Carboline “Carboguard 890”, Sherwin-Williams “Macropoxy 646” or Tnemec “Series N69 Hi-Build Epoxoline II”.

2-5. CONSTRUCTION.

2-5.01. Frames. Each frame shall be an integral unit of extruded or welded structural shapes at least ¼ inch thick. Frames shall be designed for installation on the face of the existing concrete walls.

Guides shall be provided on each side of each frame. Guides shall be sufficiently strong to require no further reinforcing where they extend above the operating floor, and shall support the entire height of the slide in all positions.

Full-length plastic slide seats or bearing bars shall be provided on the downstream side of the slide on gates subject to seating pressure from one direction. Seats and bars shall be mechanically retained in the frame.

Self-contained gates shall be equipped with a yoke, shop welded to the top of vertical frame members to support the actuator. Yokes shall be fabricated from a pair of rolled or extruded channels or angles and shall be designed to deflect not more than 1/360 of the span when the gate is operated at the maximum actuator thrust with the safety factor as indicated in the governing standard. Each yoke shall be designed to permit vertical removal of the slide. Actuators shall be mounted so that no eccentric loads are transmitted to the yoke.

2-5.02. Slides. Slides shall be at least ¼ inch thick and shall be provided with welded stiffeners to limit deflection to 1/360 under the maximum seating or unseating head indicated in the Fabricated Stainless Steel Slide Gate Schedule. Slides shall be adequately reinforced to withstand, without permanent distortion, the maximum thrust which can be transmitted by the operating stem. Each slide shall have a reinforced pocket or an internally threaded nut welded to the slide for connection of the stem. The pocket or nut shall be designed to withstand the maximum thrust which can be transmitted by the operating stem.

2-5.03. Closures. The bottom of each slide gate frame shall be surface mounted. A compressible seal shall be securely attached to the bottom of the slide or to the frame invert. The seal shall be of sufficient length to seal the bottom corners of each slide.

2-5.04. Operating Stems. Operating stems shall conform to the requirements of Section 4.3.6 of the governing standard. Contact surfaces of threads shall be rolled or machined to a 63 micro-inch [1600 nm] finish, or smoother. Each stem shall be securely attached to the slide.

2-5.05. Stainless Steel. All stainless steel shall be pickled in accordance with ASTM A380 at the mill before being shipped. Pickling shall produce a modest etch and shall remove all embedded iron and heat tint. After fabrication, pickled surfaces shall be subjected to a 24 hour water test or a ferroxyl test to detect the presence of residual embedded iron. All pickled surfaces damaged during fabrication, including welded areas, shall be re-pickled or passivated in accordance with ASTM A380 as needed to remove all traces of iron contamination. All stainless steel surfaces shall be adequately protected during fabrication, shipping, handling, and installation to prevent contamination from iron or carbon steel objects or surfaces.

2-6. ACTUATORS. Manual wheel actuators and their accessories shall be provided by the gate manufacturer. Actuators shall conform to ANSI/AWWA C561.

2-6.01. General. Actuators shall be sized to produce the torque or thrust required to operate the gate when subject to the seating and unseating operating heads as indicated in the respective gate schedules.

Both the design head and the operating head shall be measured from the surface of the liquid to the center line of the gate.

All bearings and gears shall be totally enclosed in a weathertight housing having a sufficient number of fittings to permit periodic lubrication of all internal moving components without partial or total disassembly of the mechanism. The pinion shaft of crank-operated mechanisms shall be supported by roller bearings or needle bearings.

The direction of rotation of the wheel to open the gate shall be to the left (counterclockwise). Actuators for rising stem self-contained gates shall be designed for mounting directly on the frame yoke.

2-6.02. Stem Covers. Rising stem manual actuators shall be provided with a stem. Stem covers shall conform to Section 4.4 of ANSI/AWWA C560.

2-6.05.01. Plastic Covers. Covers shall be constructed of transparent plastic pipe and shall be furnished with an end cap, condensation vents, and a clear mylar, position-indicating, marking tape. The marking tape shall be adhesive backed and shall be permanently marked and calibrated in feet and inches. The tape shall be applied to the stem cover after the gate has been installed and shall be so positioned that the height of the slide will be indicated by reference to the top of the stem.

2-7. SPARE PARTS. Provide the following spare parts for each size of slide gate:

Quantity	Description
1	Set of seals
2	Stem Covers

2-8. SHOP PAINTING. All surfaces of aluminum which will be in contact with concrete, mortar, grout, or dissimilar metals shall be given a coat of epoxy enamel or coal tar epoxy.

2-9. SHOP TESTING. Gates shall be completely assembled in the shop to ensure that all parts fit together properly.

PART 3 – EXECUTION

3-1. INSTALLATION. Slide gates and appurtenances shall be surface mounted inside the channel. Install four (4) slide gates at four (4) effluent channel locations. Each gate assembly shall be designed to close a channel of 3 feet wide by 8.33 feet tall (interior dimension). Gates are located as shown in Appendix B.

3-1.01. Installation Check. An experienced, competent, and authorized representative of the manufacturer shall visit the site of the Work and inspect, check, adjust if necessary, and approve the equipment installation. The representative shall be present when the equipment is placed in operation in accordance with Startup Requirements section, and shall revisit the jobsite as often as necessary until all trouble is corrected and the equipment installation and operation are satisfactory in the opinion of the Engineer.

The manufacturer's representative shall furnish a written report certifying that the equipment has been properly installed and lubricated; is an accurate alignment; is free from any undue stress imposed by connecting piping or anchor bolts; and has been operated under full load conditions and that it operated satisfactorily.

All costs for these services shall be included in the contract price.

3-2. FIELD QUALITY CONTROL.

3-2.01. Field Testing. After installation, all gates shall be pressure tested for leakage as specified in Section 15111.

END OF SECTION

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Appendix A

Filter Record Drawings

Orange County South Water Reclamation Facility

“Sand Lake Road Regional Wastewater Treatment Facilities

Phase 3A Expansion”

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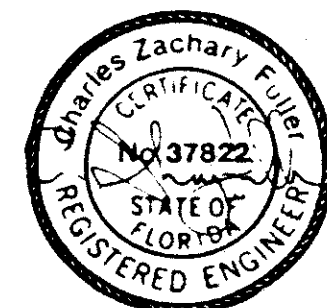
SQ # 3973

ORANGE COUNTY SOUTH SERVICE AREA
WASTEWATER FACILITIES PROGRAM

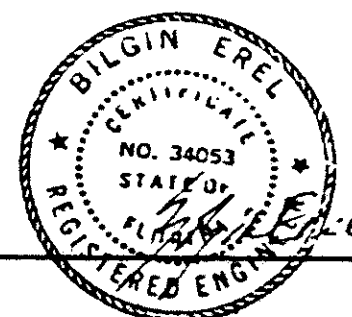
SAND LAKE ROAD REGIONAL
WASTEWATER TREATMENT FACILITIES
PHASE 3A EXPANSION

ORANGE COUNTY COMMISSION

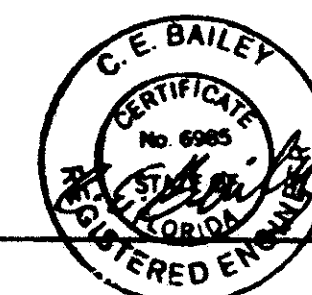
Tom Dorman Chairman, District 2	Hal Marston Vice Chairman, District 3	Vera Carter Commissioner, District 1	Linda Chapin Commissioner, District 4	Lou Treadway Commissioner, District 5
Tom Sewell Orange County Administrator				Alan Ispass, P.E., Director Division of Public Utilities



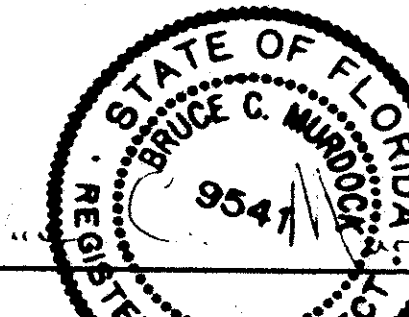
C. ZACHARY FULLER, P.E. NO. 37822
CIVIL AND MECHANICAL WORK
FLORIDA REGISTERED PROFESSIONAL ENGINEER



BILGIN EREL, P.E. NO. 34053
STRUCTURAL WORK
FLORIDA REGISTERED PROFESSIONAL ENGINEER



C. E. BAILEY, P.E. NO. 6985
ELECTRICAL WORK
FLORIDA REGISTERED PROFESSIONAL ENGINEER

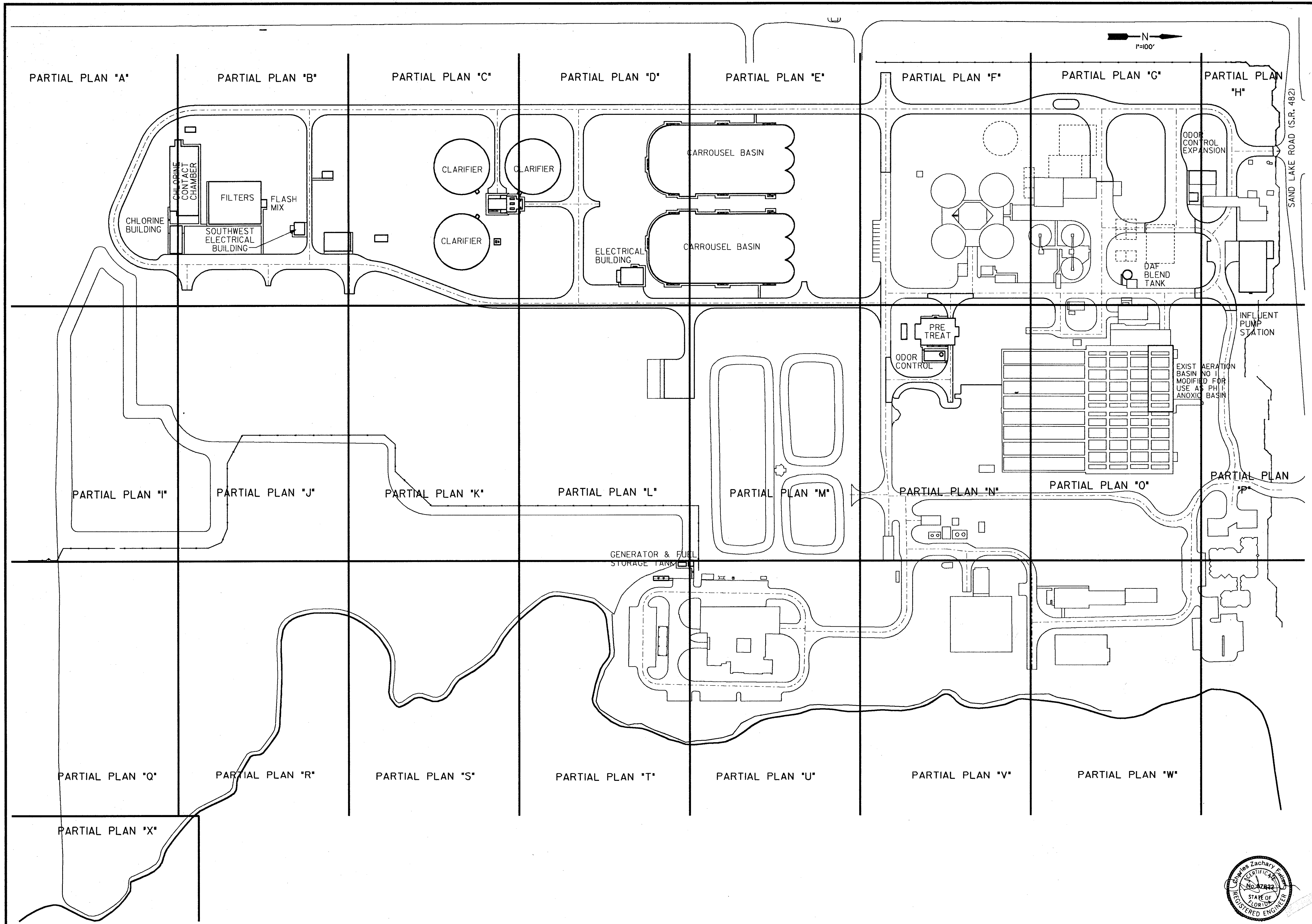


BRUCE M. WOOD, ARCHITECT NO. 9541
ARCHITECTURAL WORK
FLORIDA REGISTERED ARCHITECT

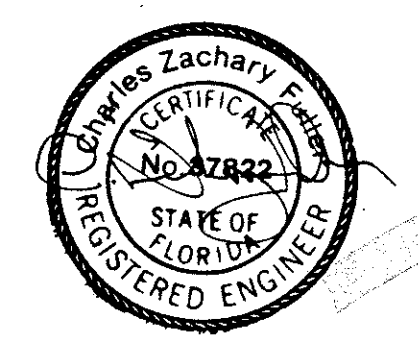
153 sheets

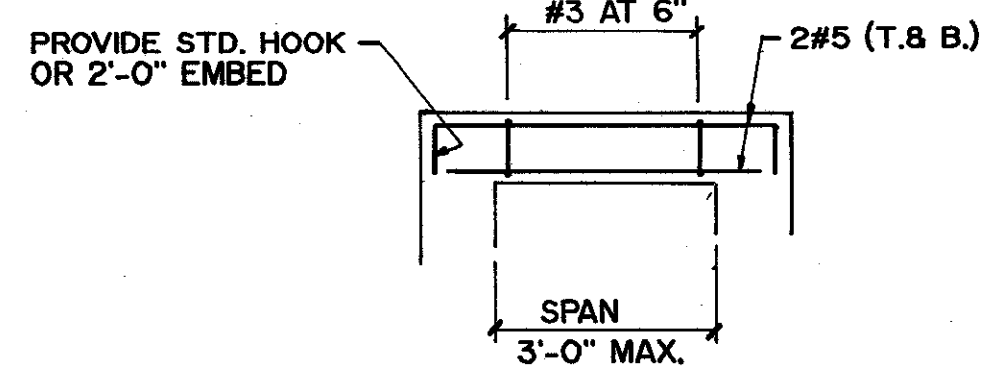
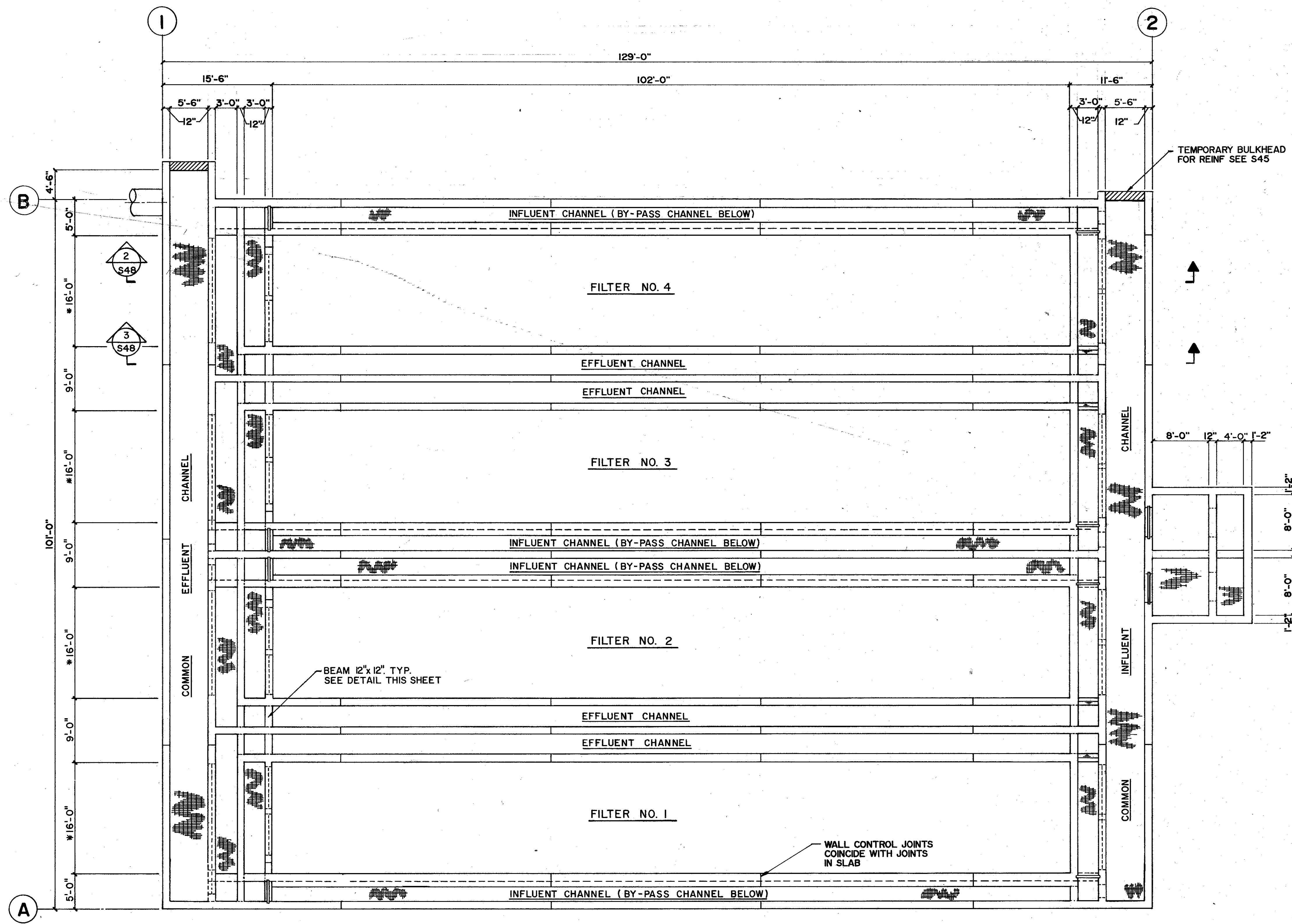
CONFORMED DWGS. APRIL, 1988

VOLUME 1 OF 2



SAND LAKE ROAD WASTEWATER TREATMENT FACILITIES PHASE 3A EXPANSION SITE PLAN AND KEY MAP ORANGE COUNTY, FLORIDA	PROJECT NO. 6059-SL3R	SHEET NO. C-13	
	DESIGNED BY: REP DRAWN BY: JWH CHECKED BY: DAP APPROVED BY: SEE DATE: MAR 21, 1988	REV. NO. DATE DRAWN CHKD 4/88 SAF	REMARKS CONFORMED DWG.
	CAMP DRESSER & MCKEE INC. www.campdresser.com engineers, scientists, planners & management consultants	CDM	
	SAND LAKE ROAD (S.R. 482)		





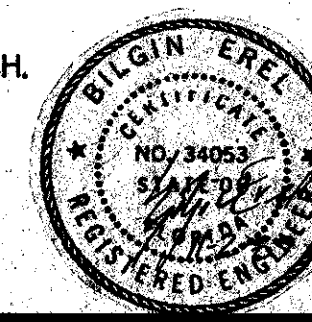
TYP. 12"x12" BEAM REINF.

PLAN AT TOP OF STRUCTURE

1/8" = 1'-0"

NOTE

* SKIMMER ASSEMBLY AND ITS MOVING CARRIAGE TRAVEL BETWEEN THESE WALLS. THE 16'-0" DIMENSION MUST BE MAINTAINED AND THE WALLS STRAIGHT AND PLUMB SO AS NOT TO INTERFERE WITH MECH. EQUIP. SEE "M" DWGS. FOR MANUFACTURER'S TOLERANCES, RAIL LOCATION AND DETAILS.



STI structural technologies, inc.
CONSULTING ENGINEERS
Wekiva Business Center
Suite 104, 1429 East Semoran Blvd., Apopka, Florida 32703
405-884-9980

DRAWN BY: MFS
CHECKED BY: REH
APPROVED BY: BE
DATE: SEPT 1987
SCALE: AS SHOWN
86-101

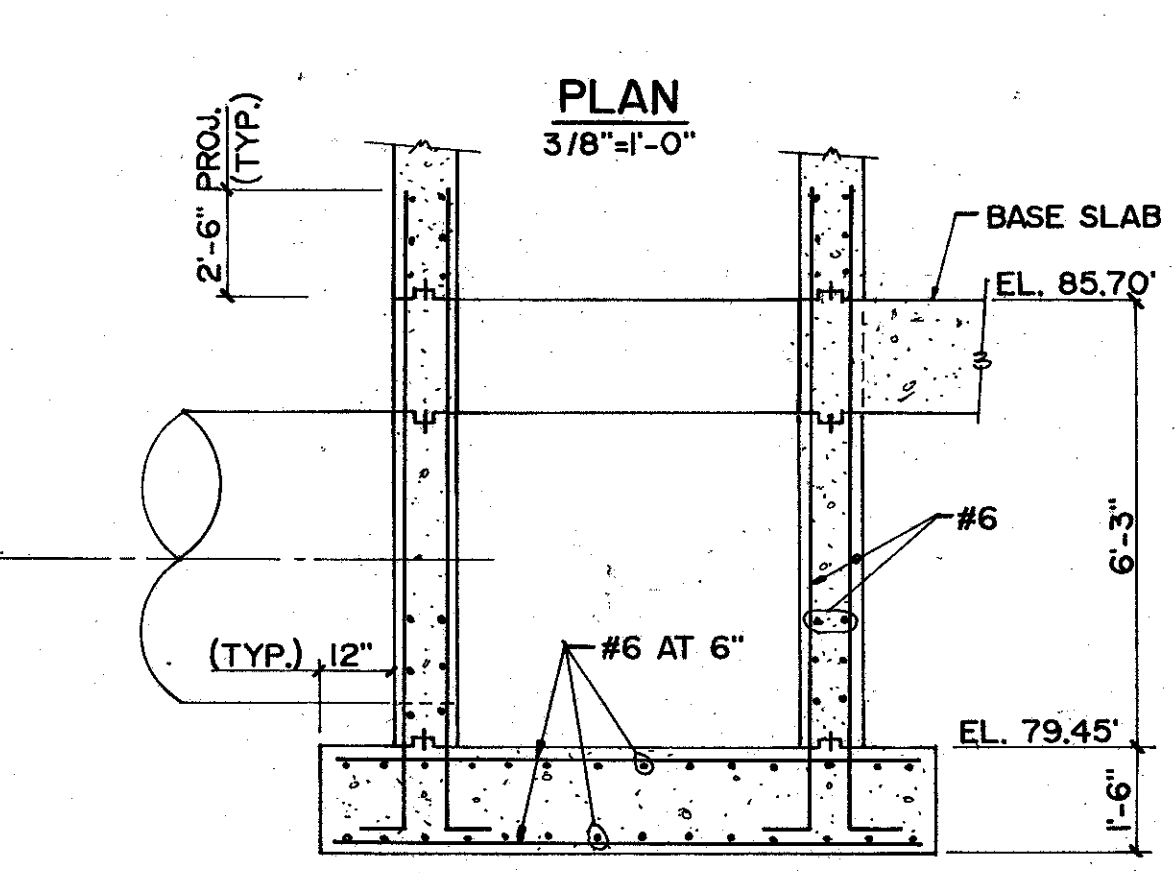
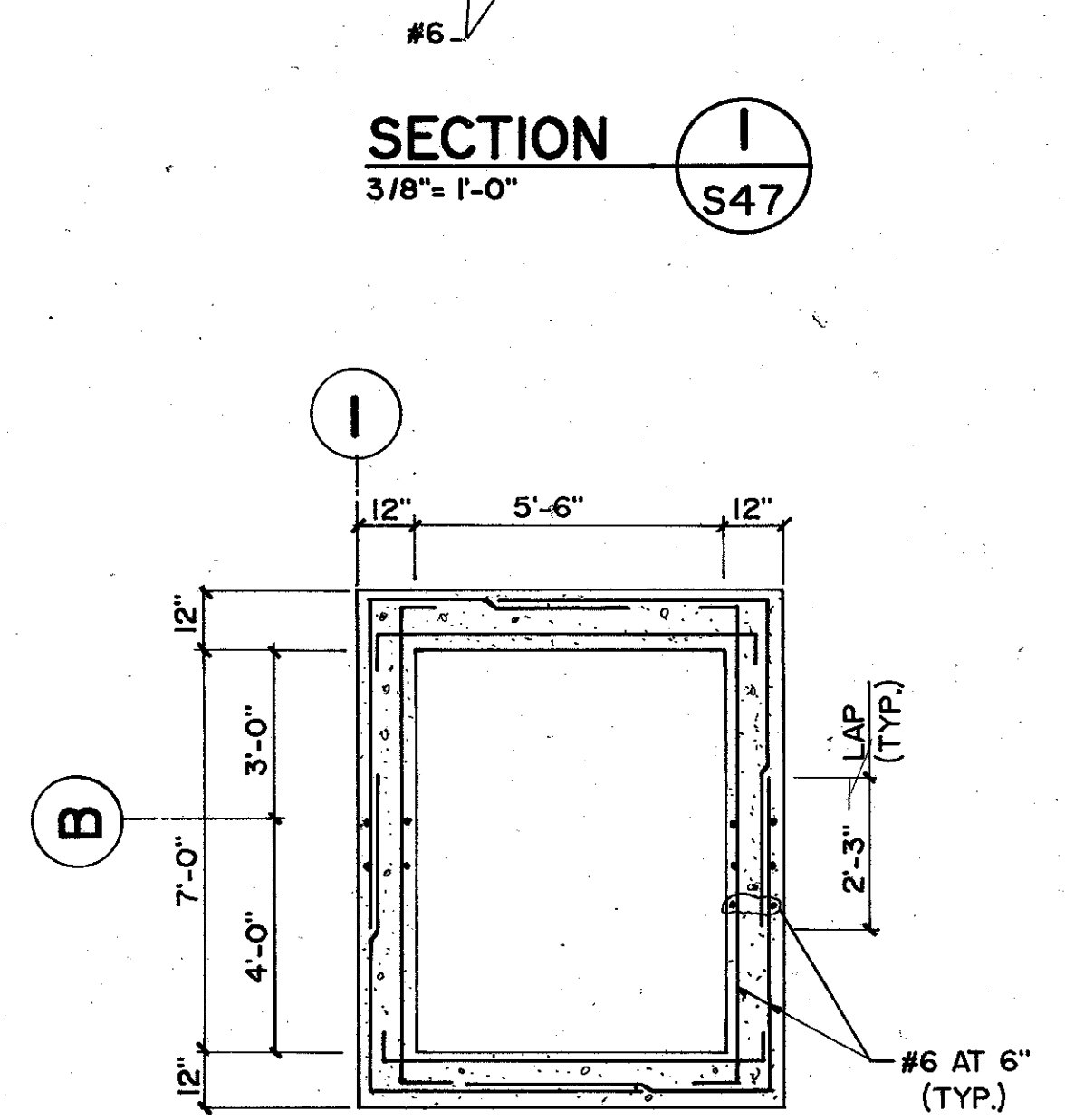
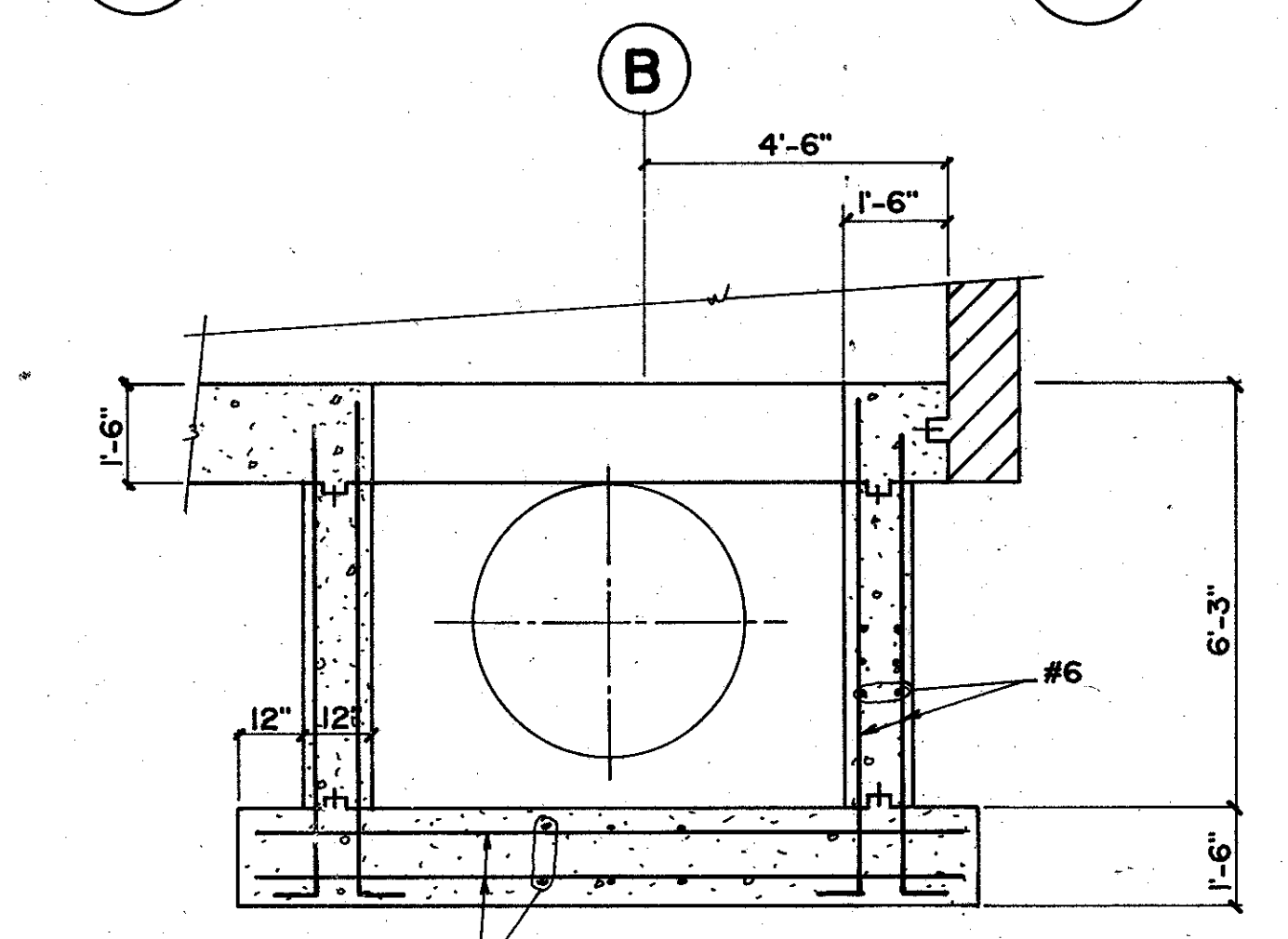
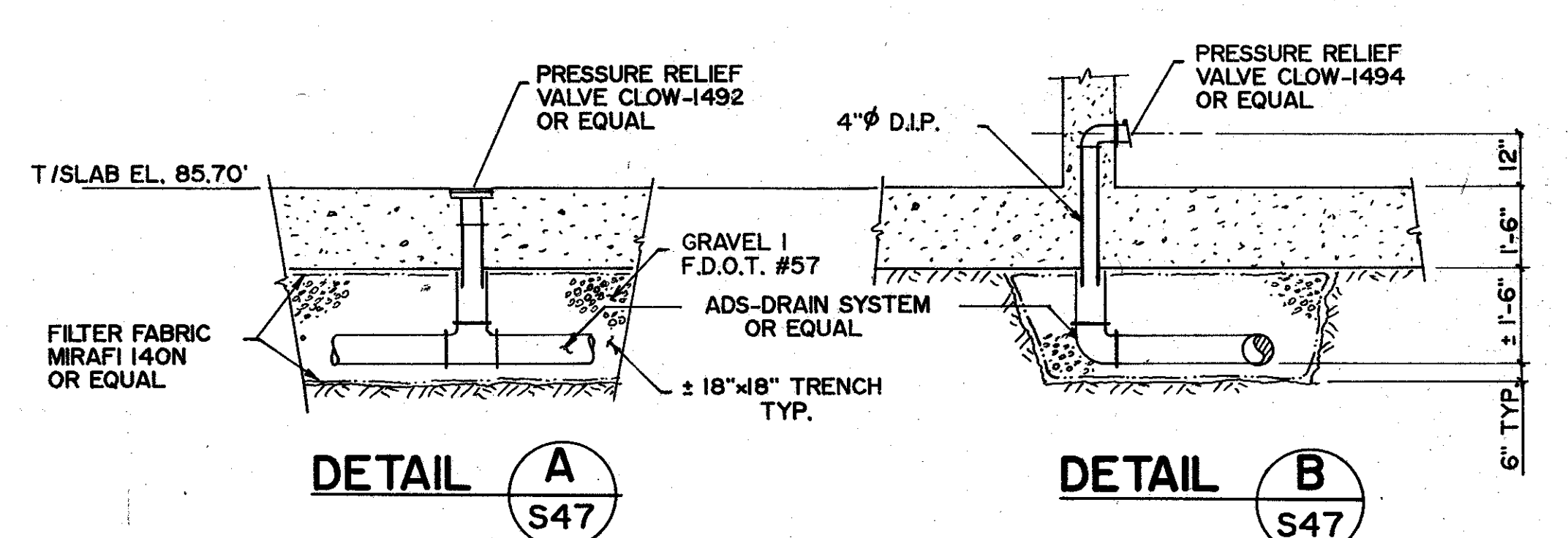
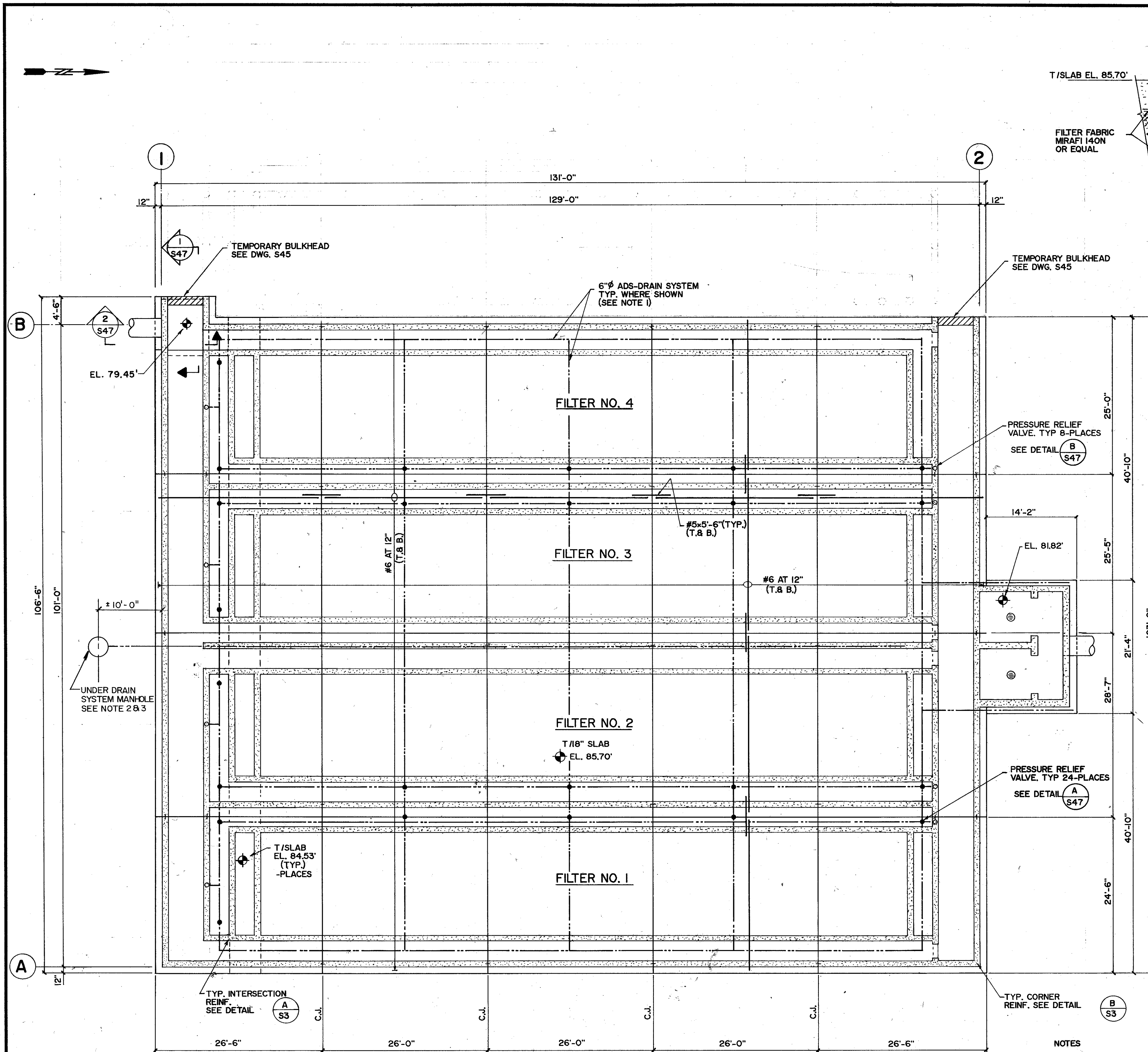
SAND LAKE ROAD WASTEWATER TREATMENT FACILITIES
PHASE 3A EXPANSION
AUTOMATIC BACKWASH FILTERS
PLAN AT T/STRUCTURE
ORANGE COUNTY, FLORIDA

PROJECT NO. 6059-SL3R

SHEET NO. **S46**

CAMP DRESSER & MCKEE INC.
environmental engineers, scientists,
planners & management consultants
CDM

DESIGNED BY:	DATE:	CHKD:	REMARKS:
DRAWN BY: SAF	4/88	SAF	CONFORMED DWG.
CHECKED BY:			
APPROVED BY:			
DATE:			



- NOTES
1. PROVIDE FITTINGS AS REQUIRED
 2. PROVIDE STD. MANHOLE PER DETAILS ON DWG. CD-2.
 3. UNDER DRAIN SYSTEM OPERATION: MANHOLE TO BE CONTINUOUSLY DEWATERED FOR AT LEAST 3 DAYS, PRIOR TO DRAIN ANY PORTION OF THE TANK DEWATERING SHALL CONTINUE WHILE ANY PORTION OF TANK IS EMPTY.

FOUNDATION PLAN
1/8" = 1'-0"
TOP OF MAT EL. 85.70' U.N.

DESIGNED BY	CHKD	REMARKS
DRAWN BY	SAF	CONFORMED DWG.
CHECKED BY		
APPROVED BY		
DATE	4/88	
REV. NO.		

CAMP DRESSER & MCKEE INC.

CDM

SAND LAKE ROAD WASTEWATER TREATMENT FACILITIES
PHASE 3A EXPANSION
AUTOMATIC BACKWASH FILTERS
FOUNDATION PLAN
ORANGE COUNTY, FLORIDA

PROJECT NO. 6039-SL3R

SHEET NO. S47

SCALE AS SHOWN 86-101

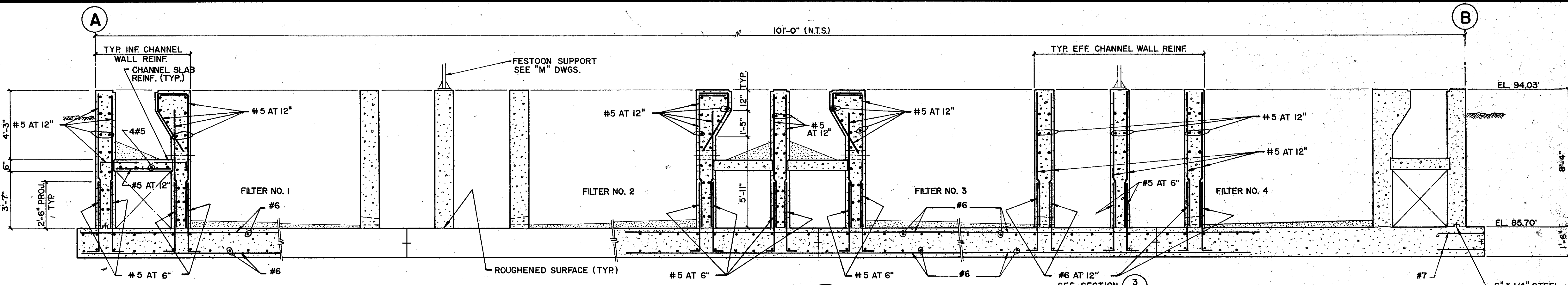
DATE SEPT. 1987

APPROVED BY BE

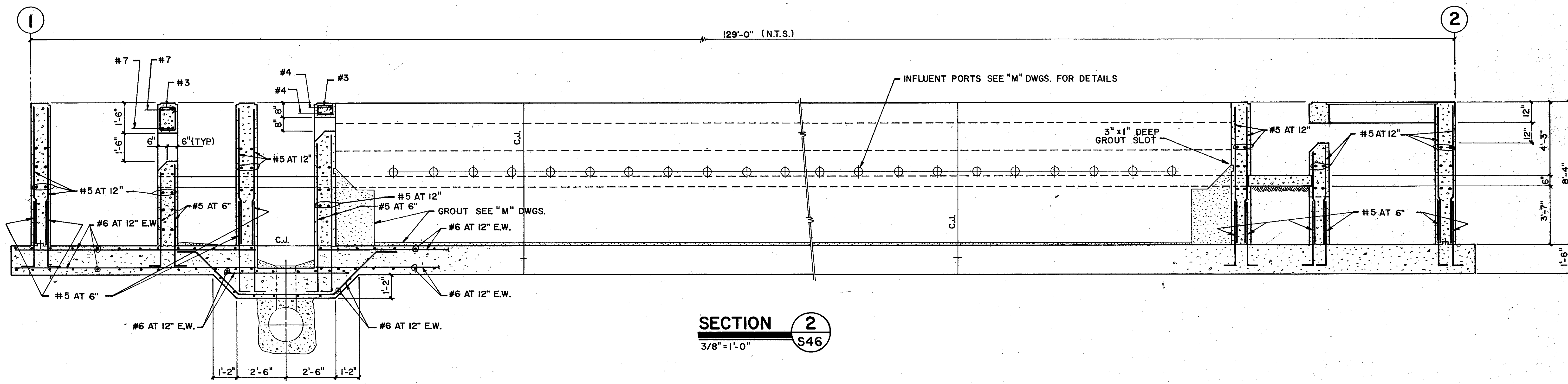
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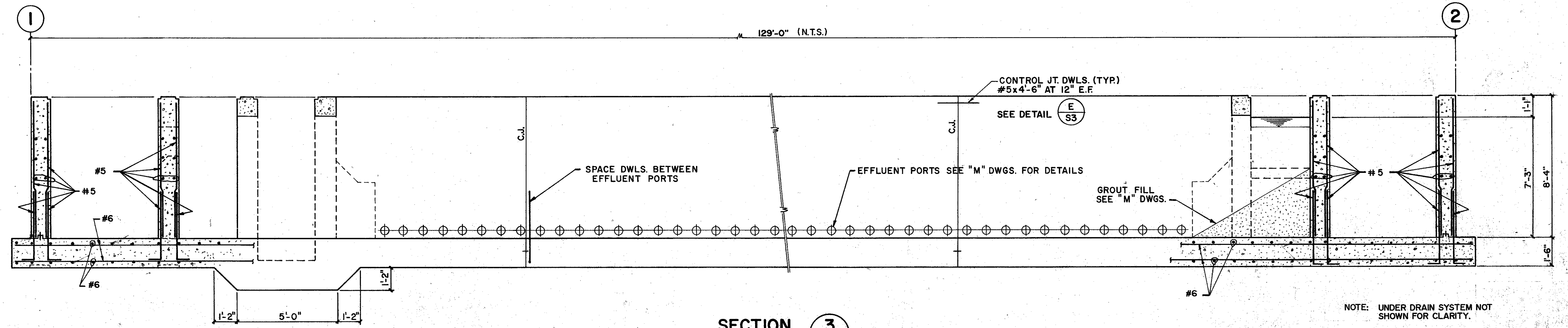
STI structural technologies inc.
CONSULTING ENGINEERS
Wekiva Business Center
Suite 104, 1428 East Semoran Blvd., Apopka, Florida 32703
(305) 889-9660



SECTION 1
3/8" = 1'-0" S46



SECTION 2
3/8" = 1'-0" S46



SECTION 3
3/8" = 1'-0" S46

NOTE: UNDER DRAIN SYSTEM NOT SHOWN FOR CLARITY.

REVISION NO.	DATE	DRWN	CHKD	REMARKS
4/88	SAF			CONFORMED DWG.

DESIGNED BY: _____
 DRAWN BY: _____
 CHECKED BY: _____
 APPROVED BY: _____
 DATE: _____

CAMP DRESSER & MCKEE INC.
 environmental engineers, scientists,
 planners & management consultants
CDM

SAND LAKE ROAD WASTEWATER TREATMENT FACILITIES
 PHASE 3A EXPANSION
AUTOMATIC BACKWASH FILTERS
 SECTIONS
 ORANGE COUNTY, FLORIDA

PROJECT NO.
6059-SL3R

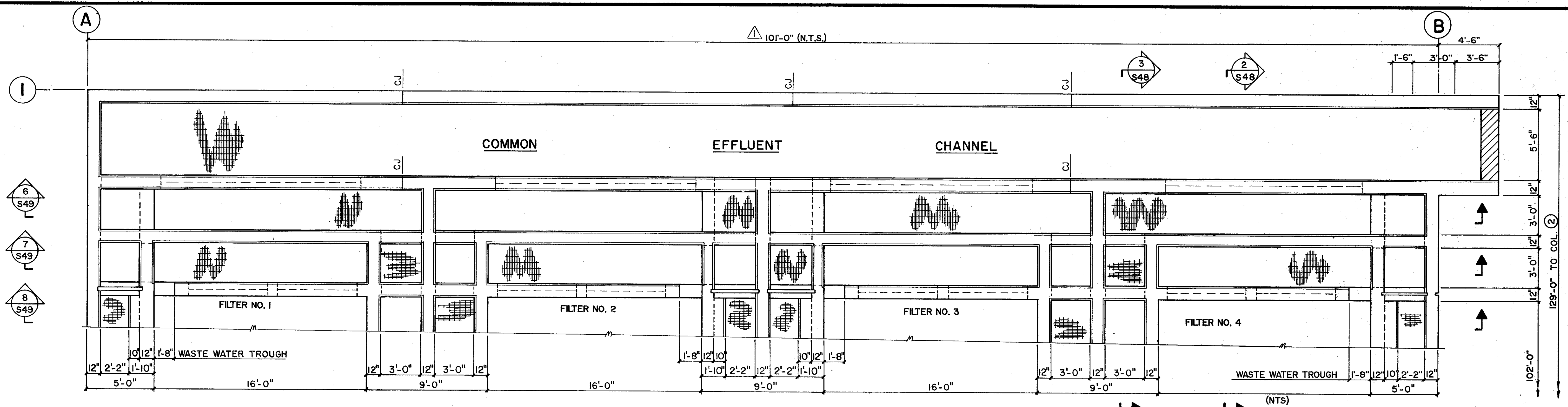
SHEET NO.
S48



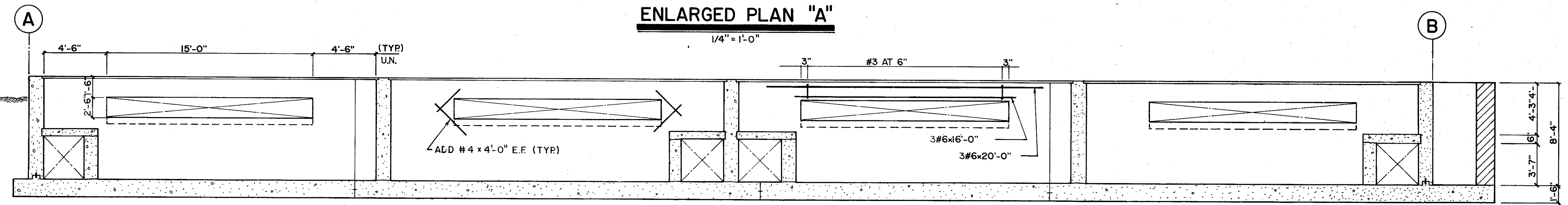
STI structural technologies inc.
 10 N.W. 12th Ave., Suite 200
 Ft. Lauderdale, FL 33304
 Phone: (954) 571-1111
 Fax: (954) 571-1112

DRAWN BY: MPE
 CHECKED BY: REH
 APPROVED BY: _____
 DATE: SEPT 1997
 SCALE: AS SHOWN
 06-101

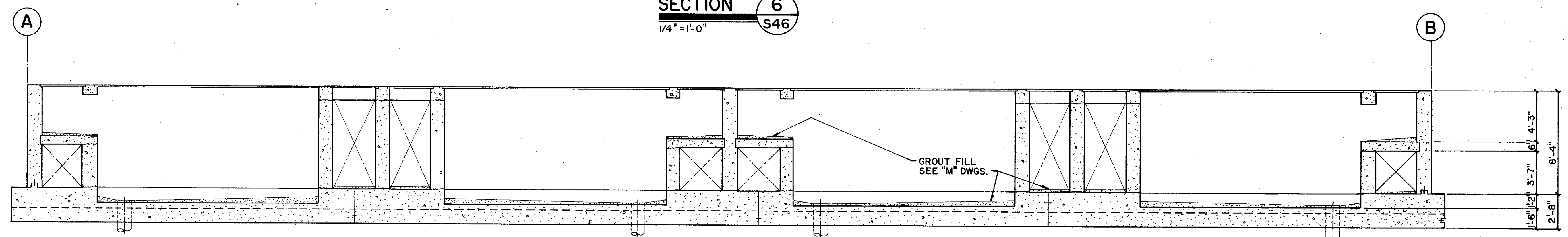
CITY BLUE PRINT CO.



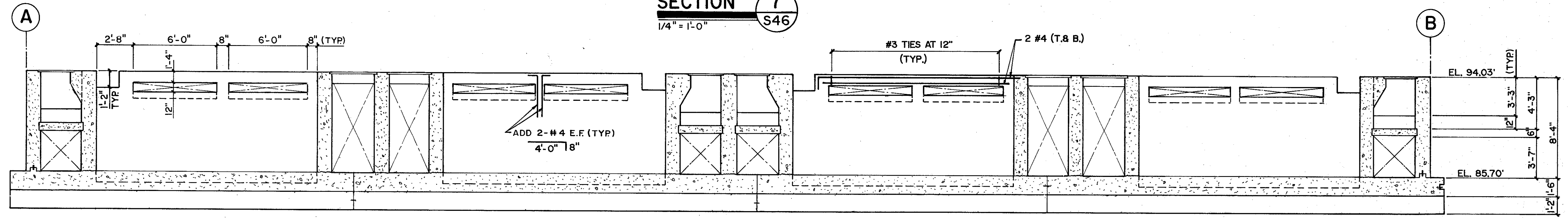
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1/4" = 1'-0"



SECTION 6
1/4" = 1'-0"



SECTION 7
1/4" = 1'-0"



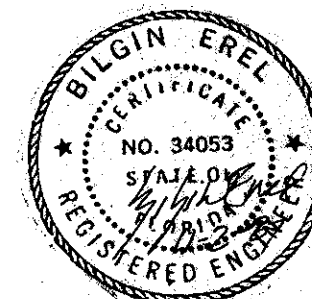
SECTION 8
1/4" = 1'-0"

REMARKS	ADDENDUM 1	CONFORMED DWG
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environmental engineers, scientists,
planners & management consultants

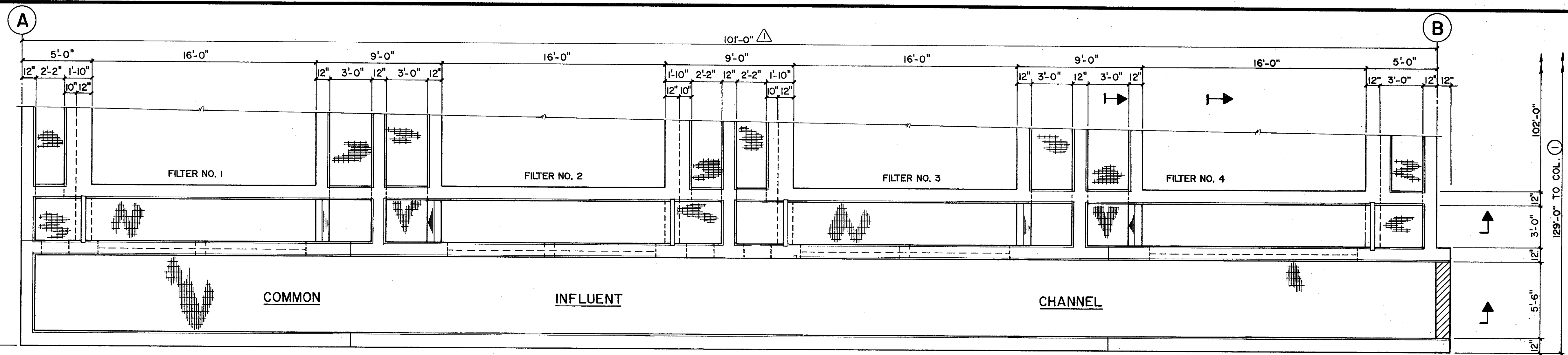
SAND LAKE ROAD WASTEWATER TREATMENT FACILITIES
PHASE 3A EXPANSION
AUTOMATIC BACKWASH FILTERS
ENLARGED PLAN "A" AND SECTIONS
ORANGE COUNTY, FLORIDA

PROJECT NO. 6059-SL3R
SHEET NO. **S49**



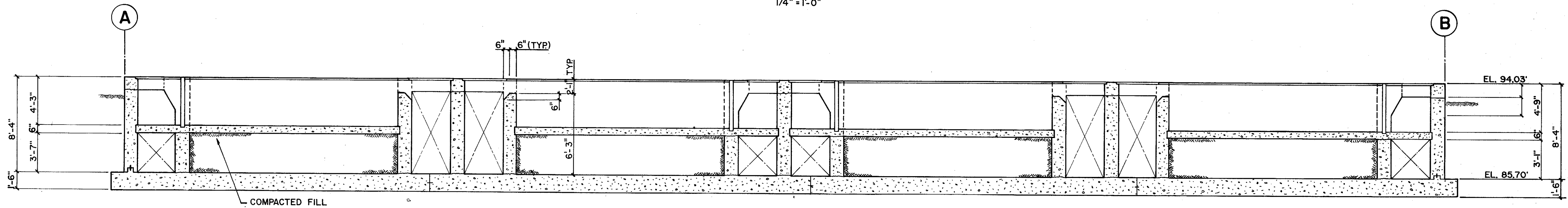
STI structural technologies inc.
CONSULTING ENGINEERS
Wekiwa Business Center
Suite 104, 1420 East Semoran Blvd., Apopka, Florida 32703
(352) 889-9800

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CHECKED BY: RBH
APPROVED BY: BE
DATE: SEPT. 1987
SCALE: AS SHOWN
86-101



ENLARGED PLAN "B"

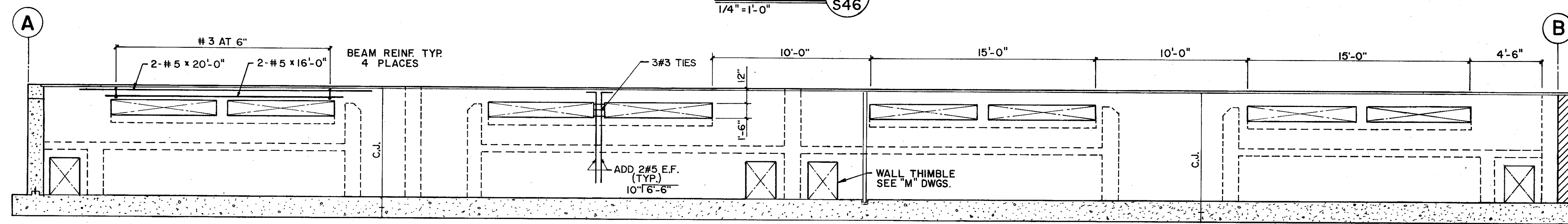
1/4" = 1'-0"



SECTION 4

1/4" = 1'-0"

S46



SECTION 5

1/4" = 1'-0"

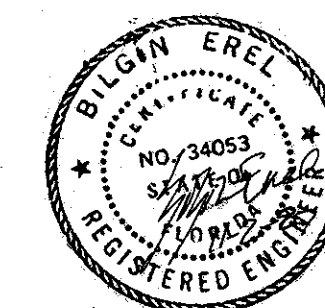
S46

DESIGNED BY:	DATE:	DRWN:	CHKD:	REMARKS:
DRAWN BY:	4/88	SAF		ADDENDUM 1
CHECKED BY:				CONFORMED DWG
APPROVED BY:				
DATE:				

CAMP DRESSER & MCKEE INC.
environmental engineers, architects, planners & management consultants
CDM

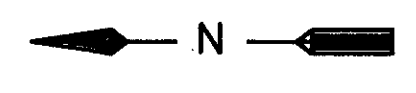
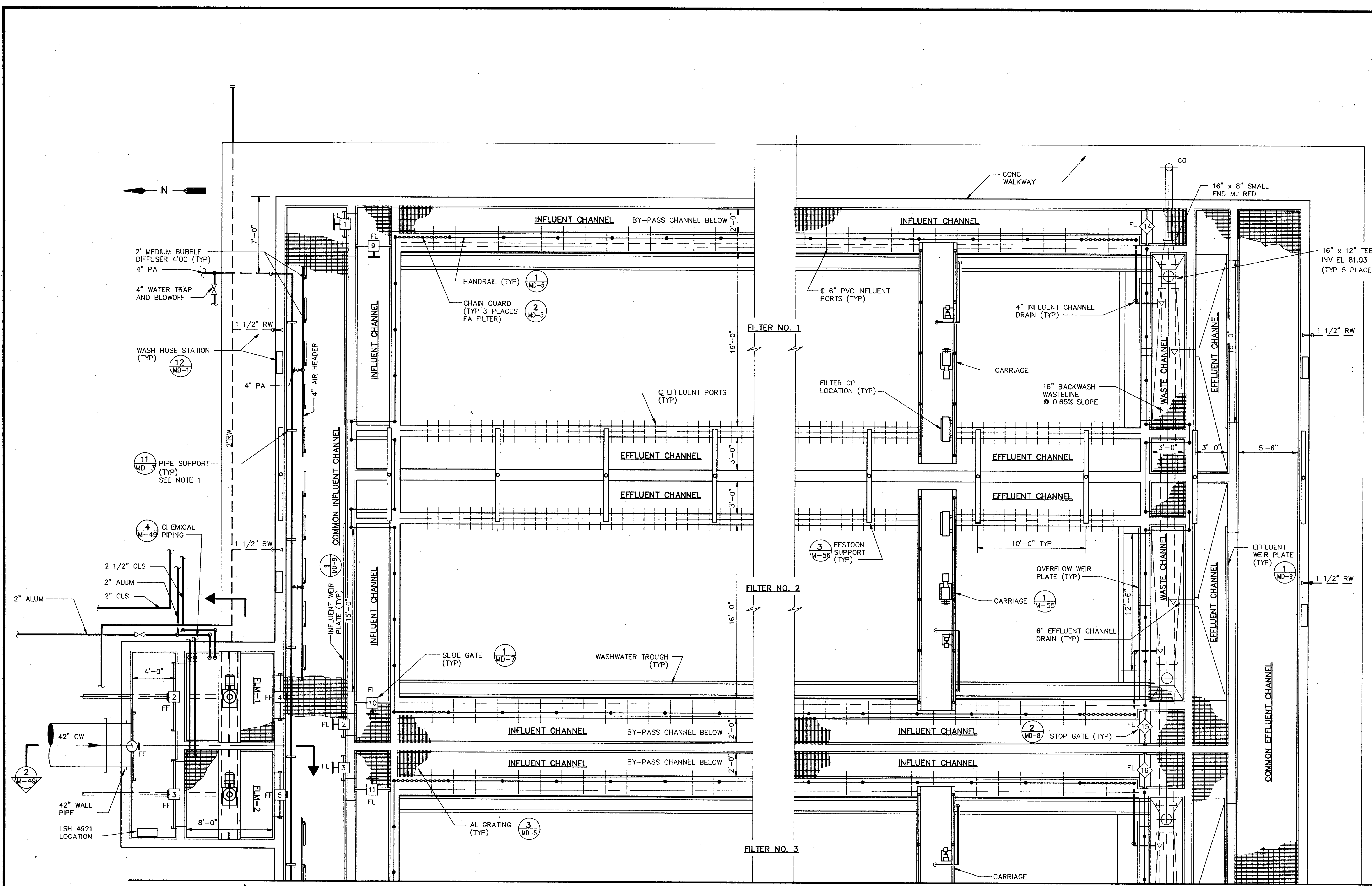
SAND LAKE ROAD WASTEWATER TREATMENT FACILITIES
 PHASE 3A EXPANSION
AUTOMATIC BACKWASH FILTERS
ENLARGED PLAN "B" AND SECTIONS
 ORANGE COUNTY, FLORIDA

PROJECT NO.
6059-SL3R
 SHEET NO.
S50



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 CONSULTING ENGINEERS
 Wekiwa Business Center
 Suite 104, 1428 East Semoran Blvd., Apopka, Florida 32703
 (305) 889-9600

DRAWN BY: MFS
 CHECKED BY: REM
 APPROVED BY: BE
 DATE: SEPT, 1987
 SCALE: AS SHOWN
 86-101

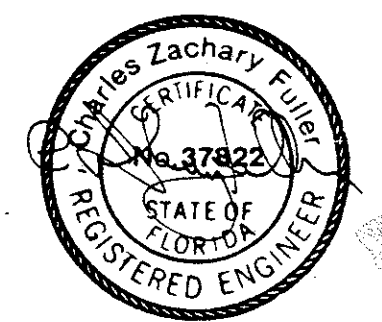


NOTE:
 1. LOCATE PIPE SUPPORTS FOR 4" PA
 10' ± OC.

FOR CONTINUATION, SEE SHEET M-51

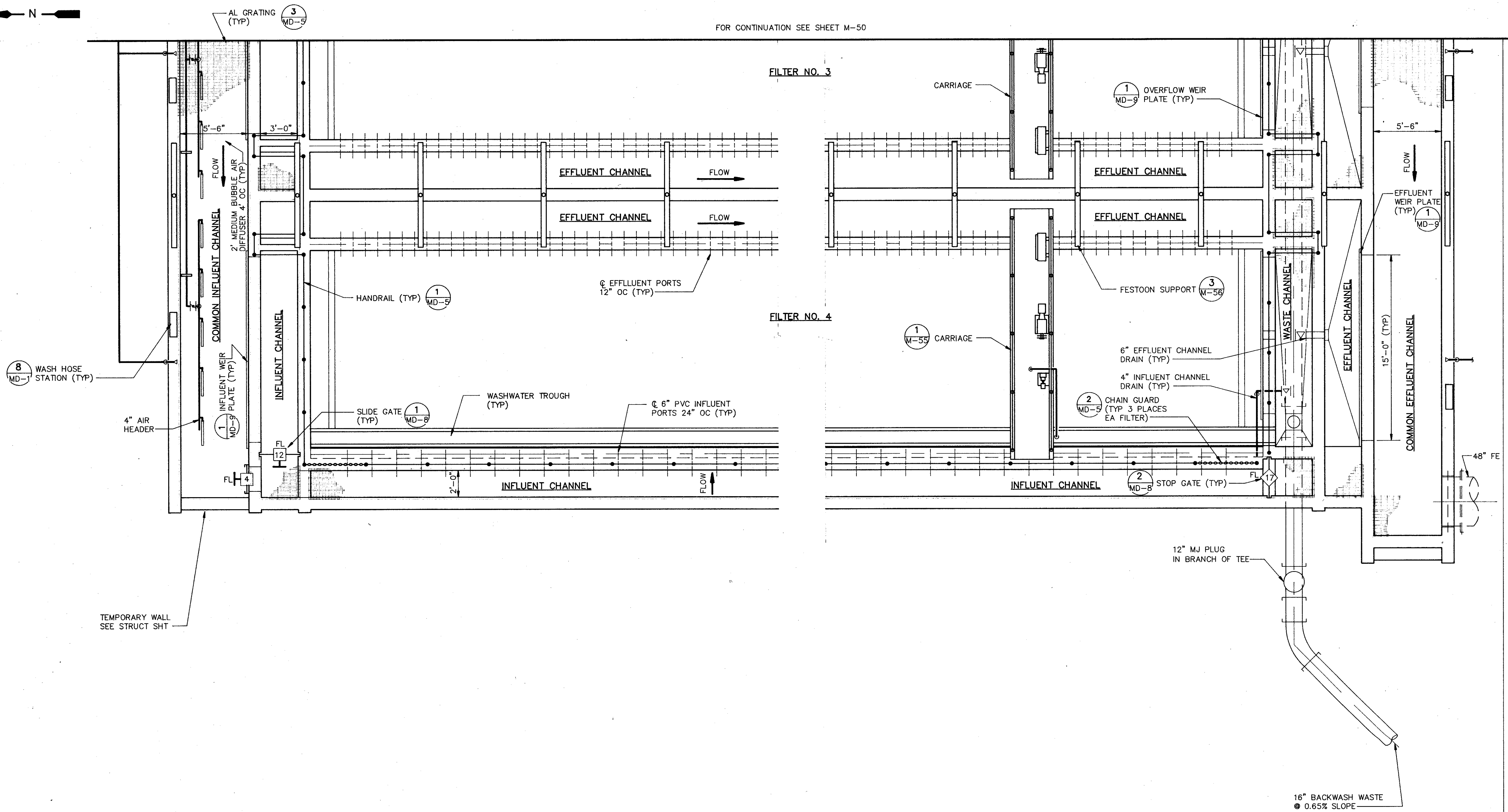
PARTIAL PLAN
 1/4" = 1'-0"

REMARKS	
DATE	4/88 SAF
CHKD	
CONFORMED DWG.	
DESIGNED BY	JGL
DRAWN BY	JGL
CHECKED BY	JGL
APPROVED BY	EEF
DATE	MARCH, 1988
CDM <small>Environmental Engineers, Scientists Partners & Management Consultants</small>	
CAMP DRESSER & MCKEE INC.	
SAND LAKE ROAD WASTEWATER TREATMENT FACILITIES PHASE 3A EXPANSION	
AUTOMATIC BACKWASH FILTERS-PARTIAL PLAN	
ORANGE COUNTY, FLORIDA	
PROJECT NO.	6059-SL3R
SHEET NO.	M-50

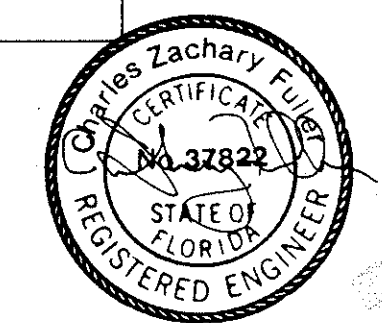




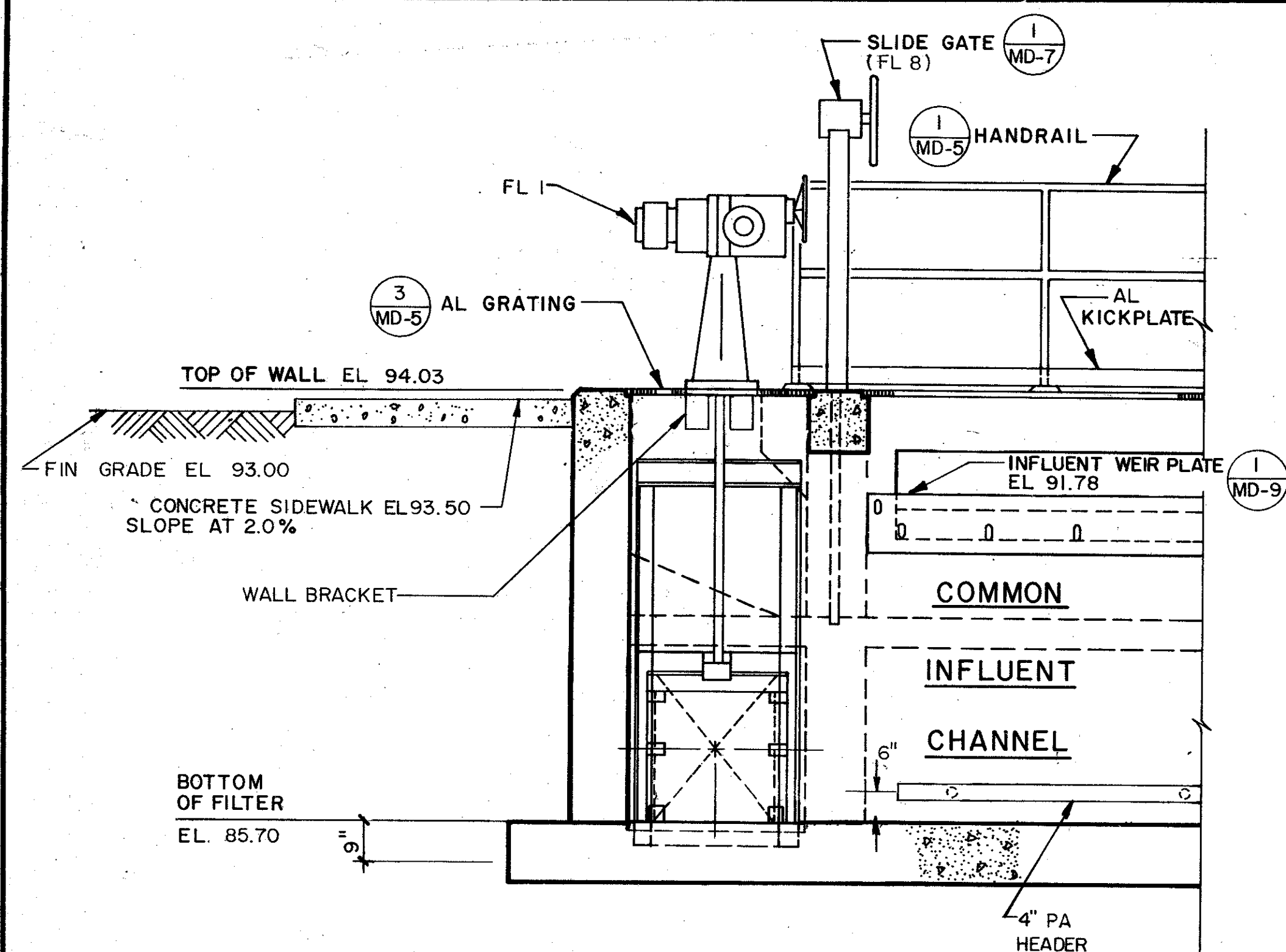
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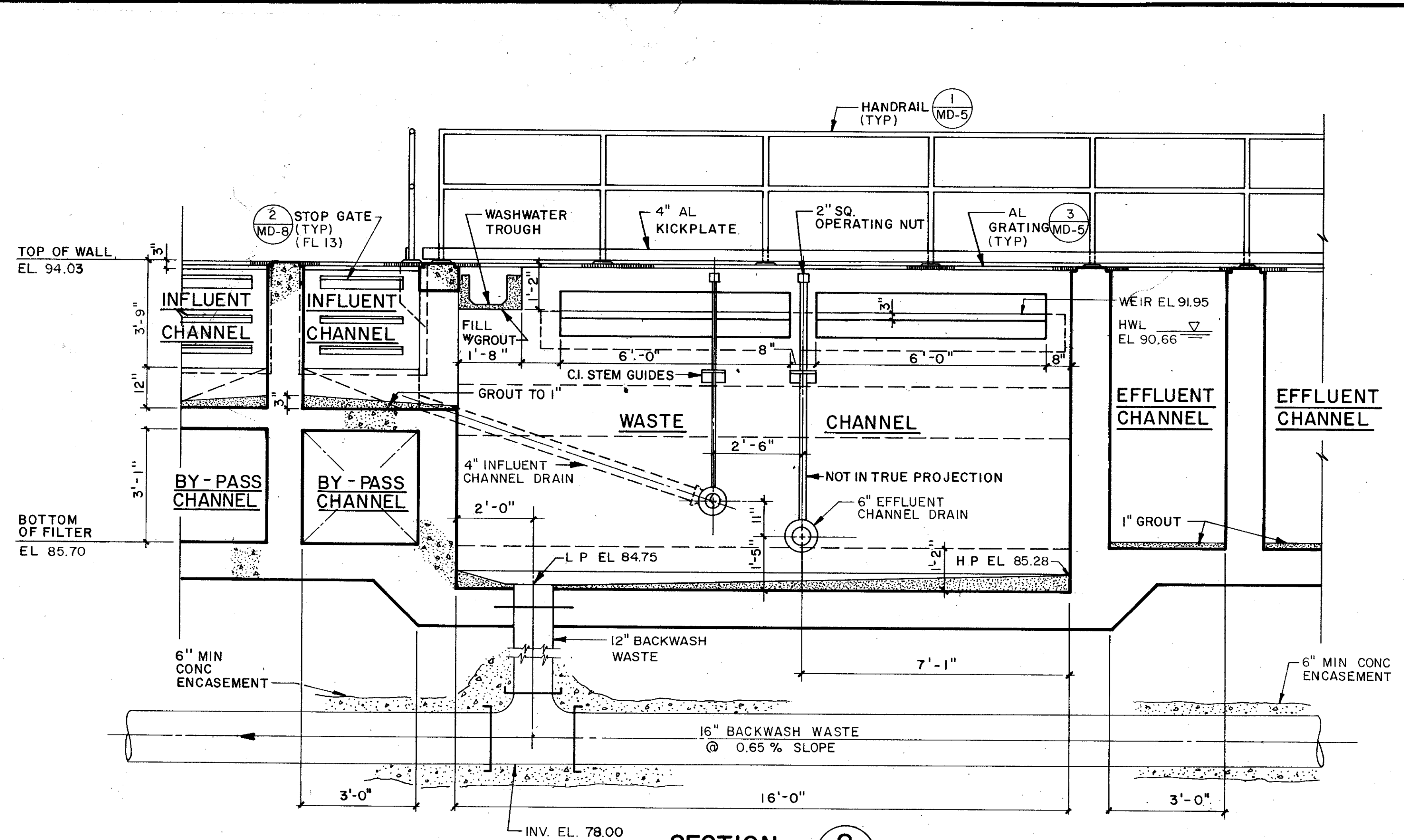
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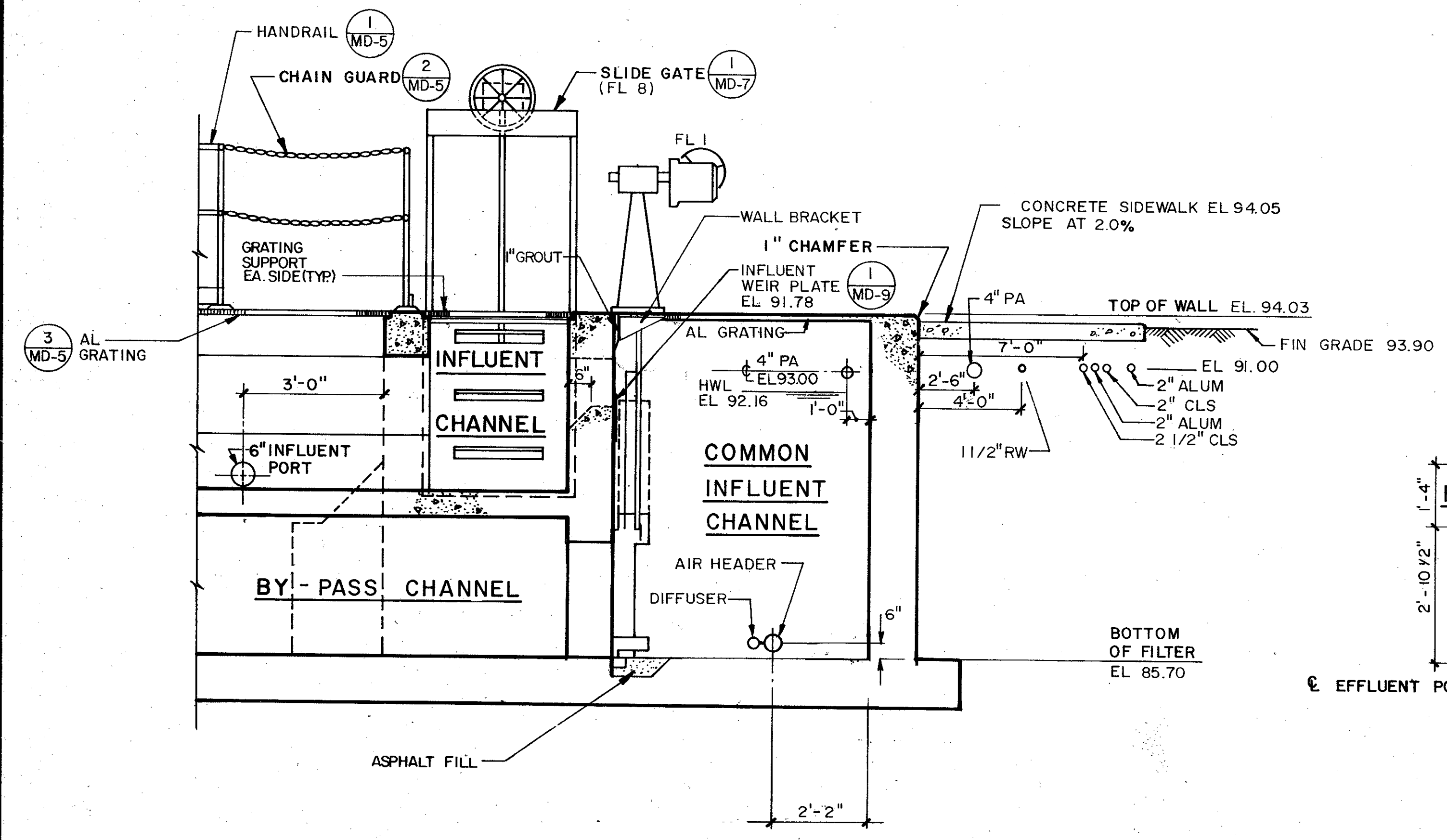
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ORANGE COUNTY, FLORIDA		CHECKED BY JGL				
		APPROVED BY CEF				
		DATE MARCH 1988				
		CDM				
		CAMP DRESSER & MCKEE INC.				
		PROJECT NO.				
		6059-SL3R				
		SHEET NO.				
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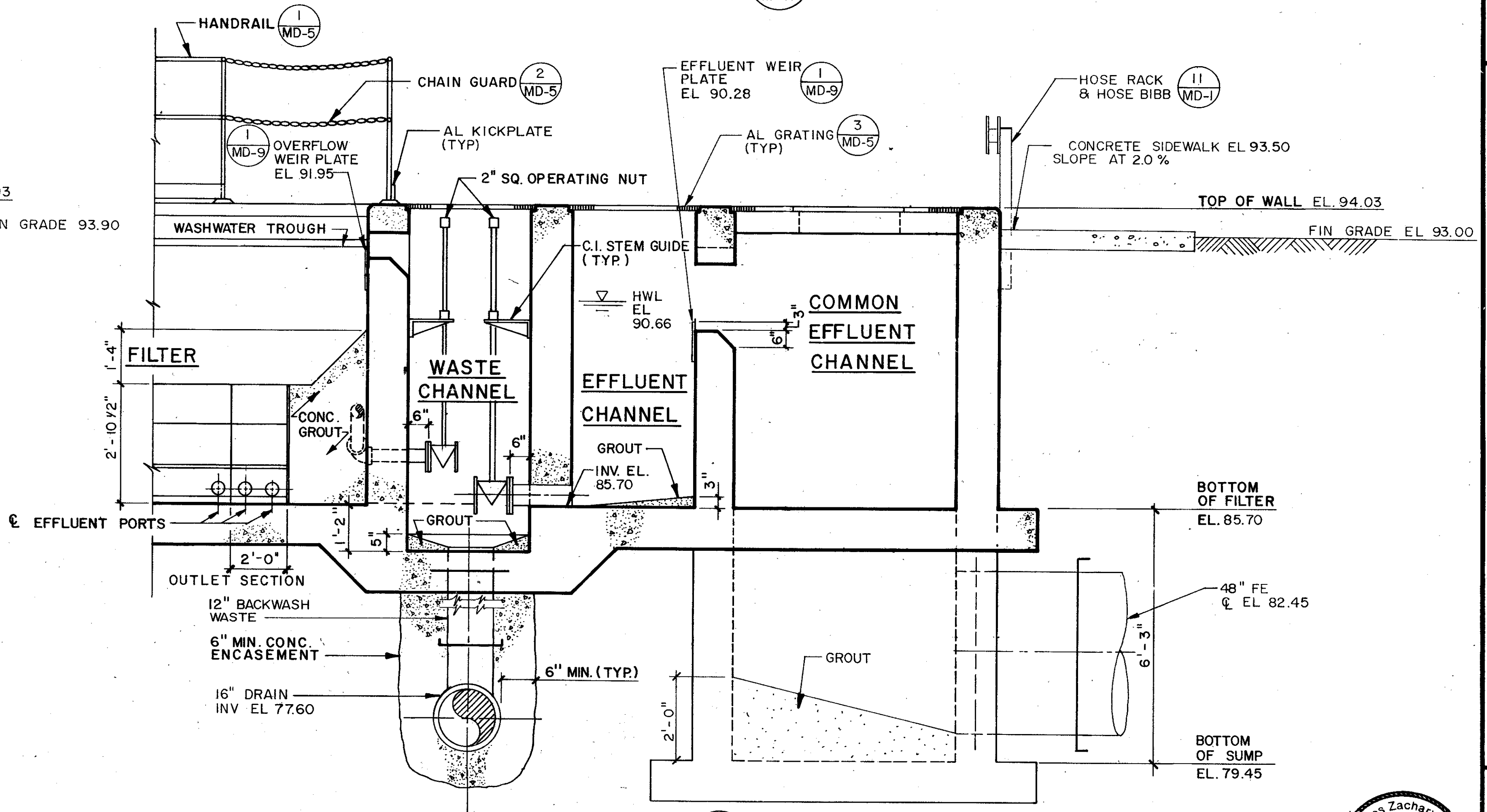
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NTS M-47



SECTION 2
NTS M-47

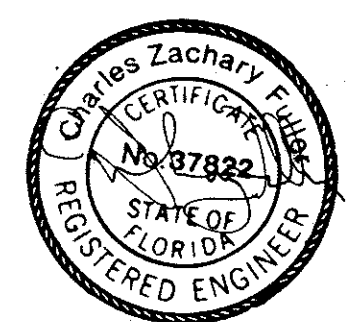


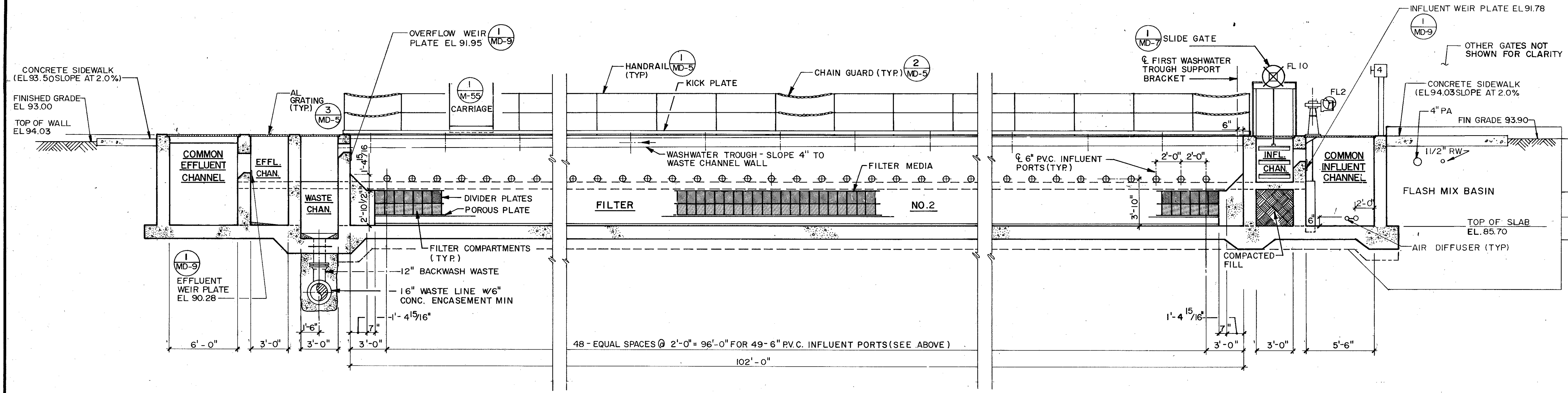
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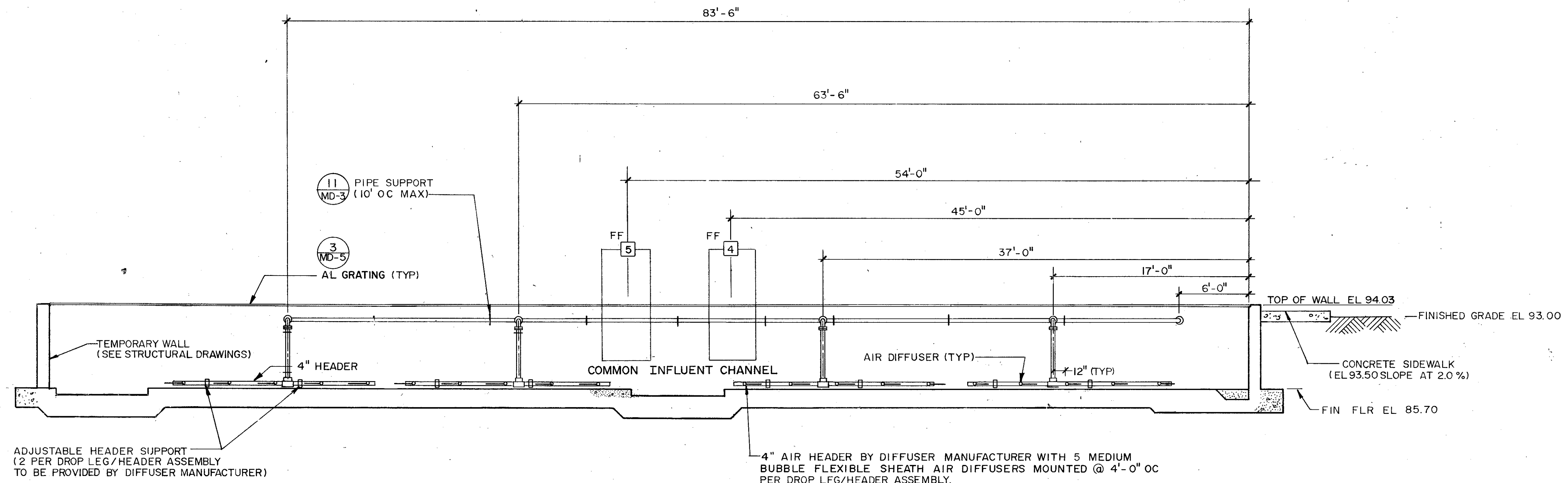
SECTION 4
NTS M-47

REMARKS	
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DRAWN BY: J.E.K.	DATE: 4/88
CHECKED BY: B.S.	SAF
APPROVED BY: C.Z.F.	
DATE: MARCH 1988	
CDM	
CAMP DRESSER & MCKEE INC.	
SAND LAKE ROAD WASTEWATER TREATMENT FACILITIES PHASE 3A EXPANSION	
AUTOMATIC BACKWASH FILTERS - SECTIONS	
ORANGE COUNTY, FLORIDA	
PROJECT NO.	6059-SL3R
SHEET NO.	M-53





SECTION I
NTS M-47



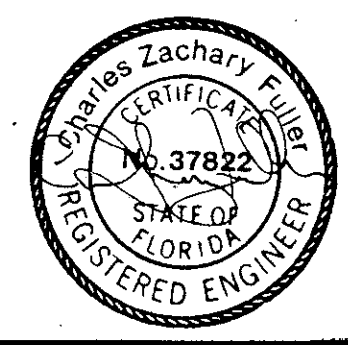
SECTION 2
NTS M-47

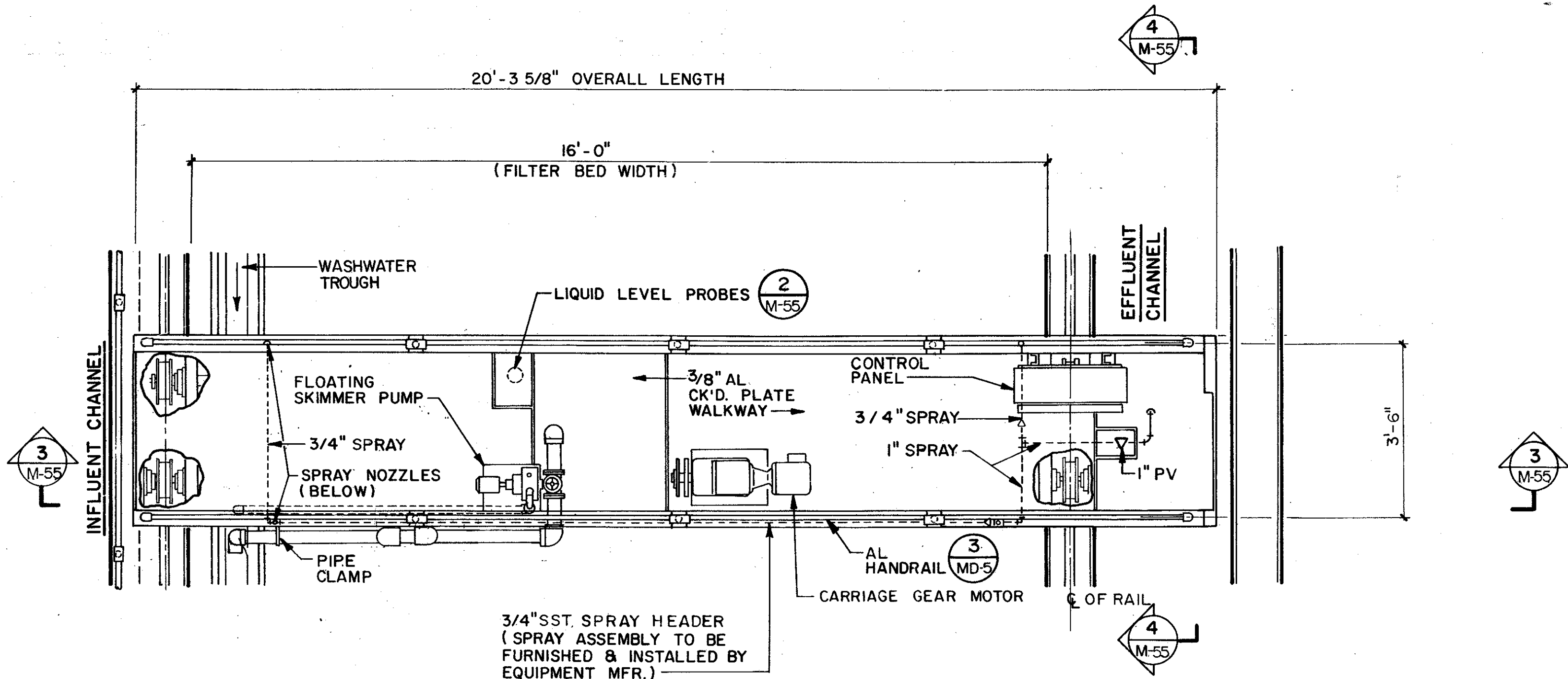
REMARKS	CONFORMED DWG.
DATE	4/88
DRWN	SAF
CHKD	
DESIGNED BY: BKS	
DRAWN BY: K.N.P.	
CHECKED BY: BKS	
APPROVED BY: J.P.F.	
DATE: MARCH, 1987	

CAMP DRESSER & MCKEE INC.
environmental engineering, construction, management & management consultants

SAND LAKE ROAD WASTEWATER TREATMENT FACILITIES
 PHASE 3A EXPANSION
AUTOMATIC BACKWASH FILTERS - SECTIONS
 ORANGE COUNTY, FLORIDA

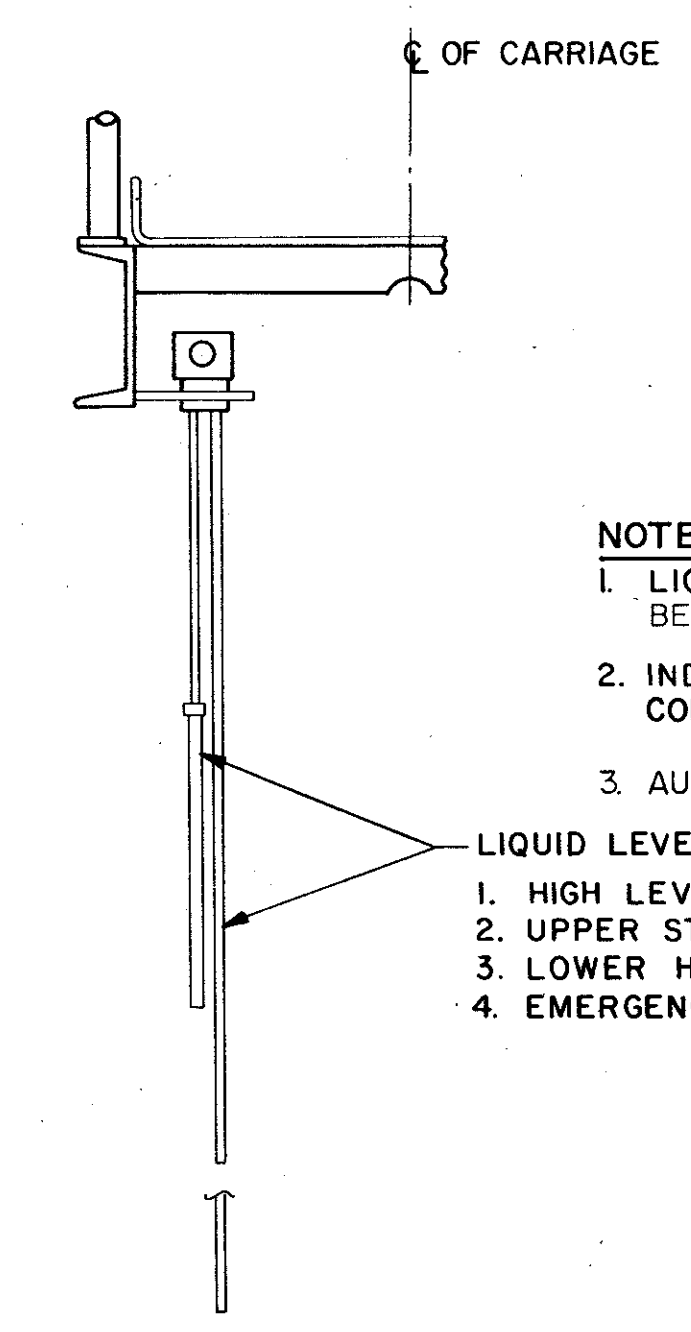
PROJECT NO.
6059-SL3R
 SHEET NO.
M-54





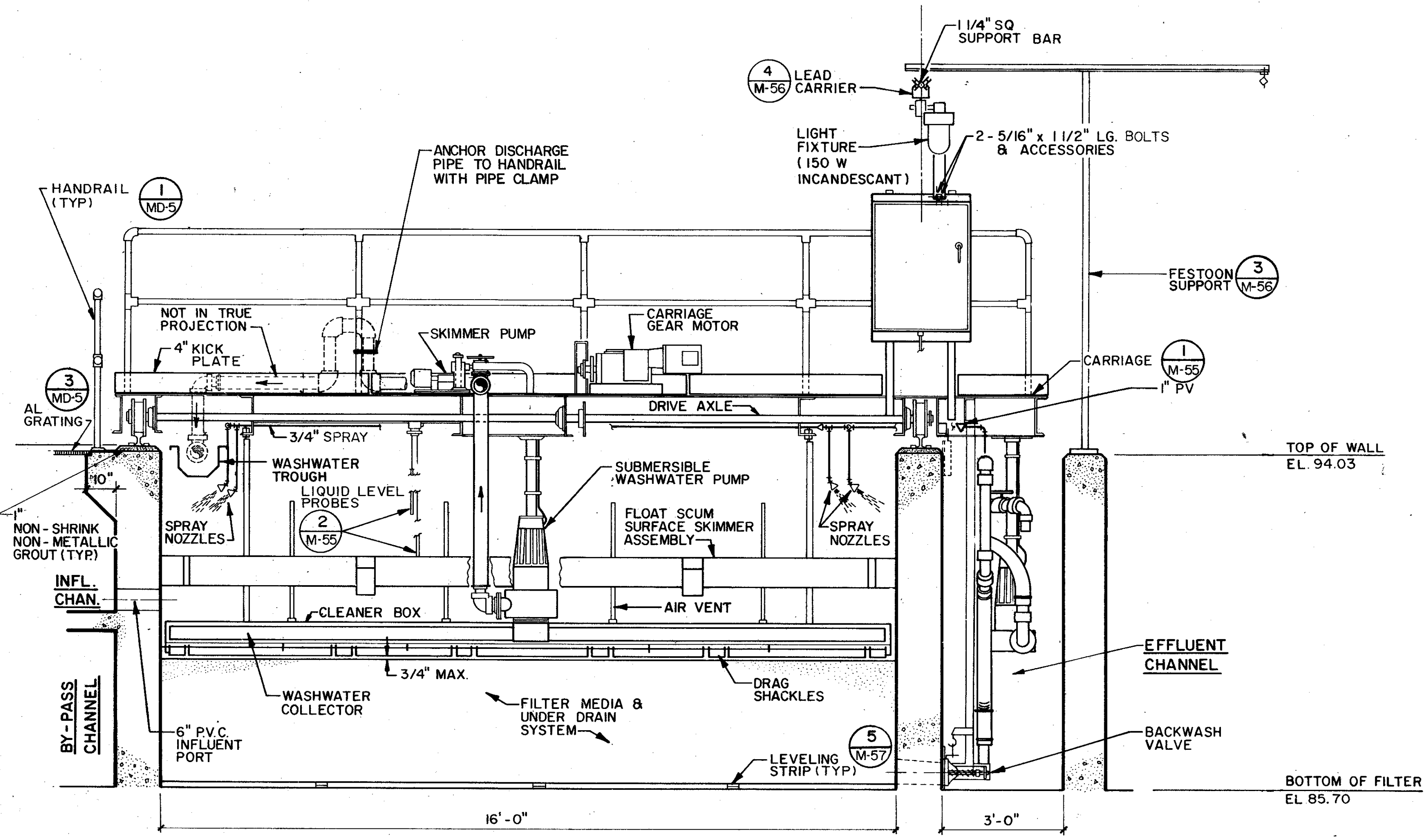
CARRIAGE

PLAN 1 NTS



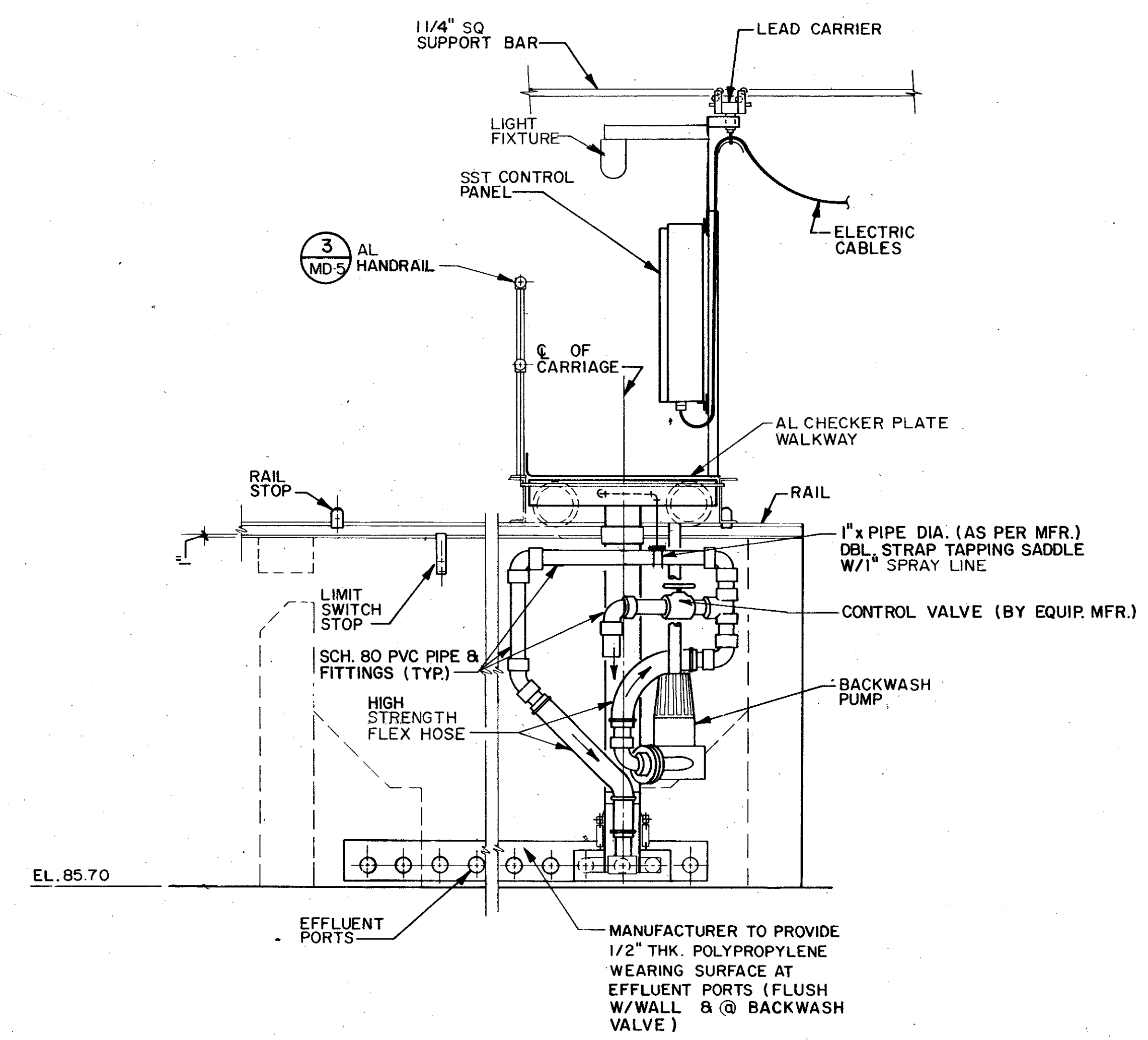
- NOTES
- LIQUID LEVEL PROBES ON ALL CARRIAGES TO BE PROVIDED BY MANUFACTURER.
 - INDICATING LIGHTS & ALARMS REQUIRED IN BRIDGE CONTROL PANEL.
 - AUXILIARY CONTACTS REQUIRED FOR REMOTE INDICATION
- LIQUID LEVEL PROBES (4 REQ'D.)
- HIGH LEVEL ALARM ELECTRODE.
 - UPPER START WASH CYCLE ELECTRODE.
 - LOWER HOLD WASH CYCLE ELECTRODE.
 - EMERGENCY CUT-OFF ELECTRODE.

LIQUID LEVEL PROBES DETAIL 2 NTS



NOTE:
SKIMMER PUMP AND CARRIAGE GEAR MOTOR MAY ALTERNATELY, BE MOUNTED BELOW BRIDGE. MANUFACTURER TO PROVIDE DETAILS OF SUPPORT.

SECTION 3 NTS



SECTION 4 NTS

DESIGNED BY: BRS	REV. NO.	DATE	DRWN	CHKD	REMARKS
DRAWN BY: KMP	4/88	SAF			CONFORMED DWG.
CHECKED BY: BRS					
APPROVED BY: CZE					
DATE: MAR 24, 1989					

CAMP DRESSER & MCKEE INC.

SAND LAKE ROAD WASTE WATER TREATMENT FACILITIES
PHASE 3A EXPANSION

AUTOMATIC BACKWASH FILTERS
SECTIONS & DETAILS

ORANGE COUNTY, FLORIDA

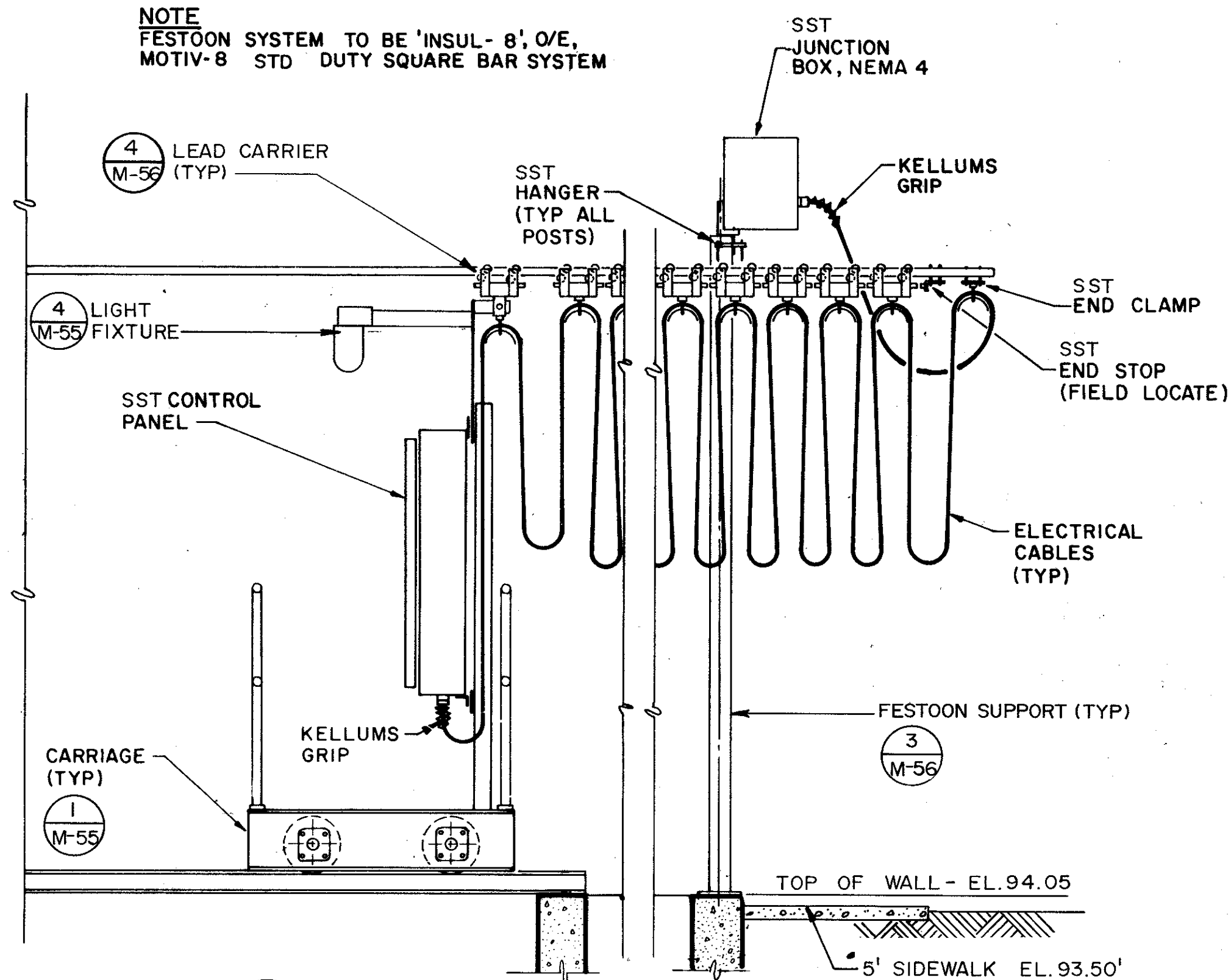
PROJECT NO. 6059 - SL3R

SHEET NO.

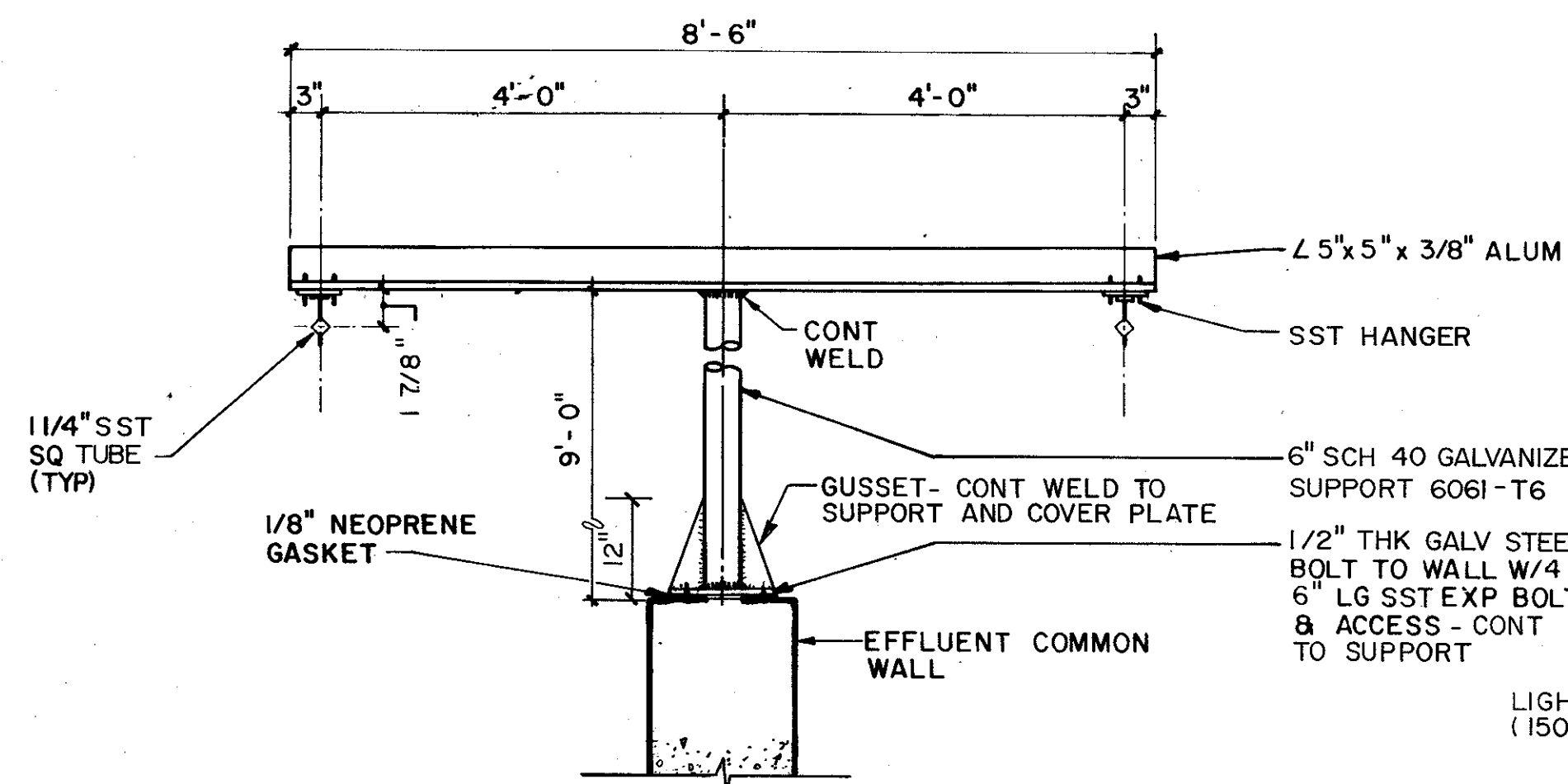
M-55

REGISTERED ENGINEER
Zachary
37822
STATE OF FLORIDA

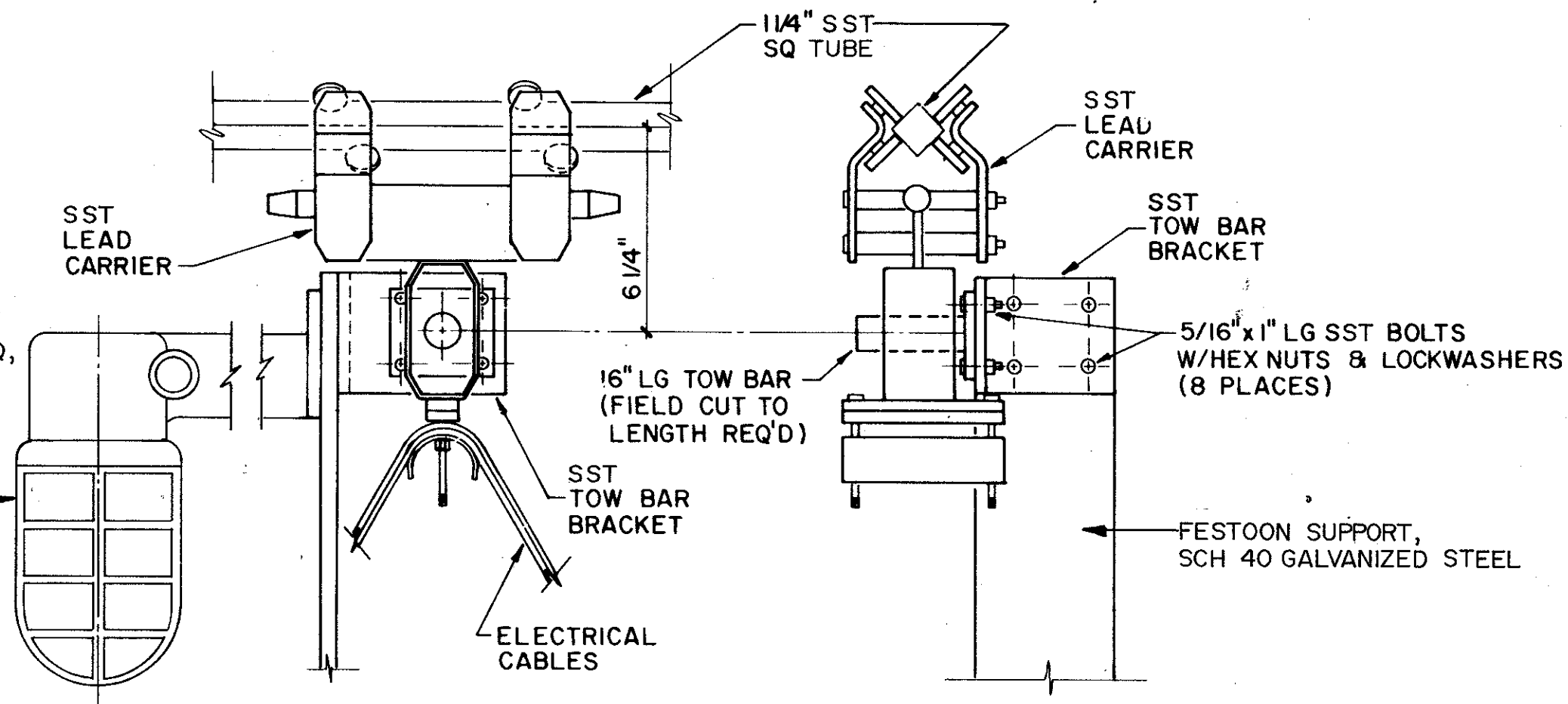
NOTE
FESTOON SYSTEM TO BE 'INSUL- 8', O/E,
MOTIV-8 STD DUTY SQUARE BAR SYSTEM



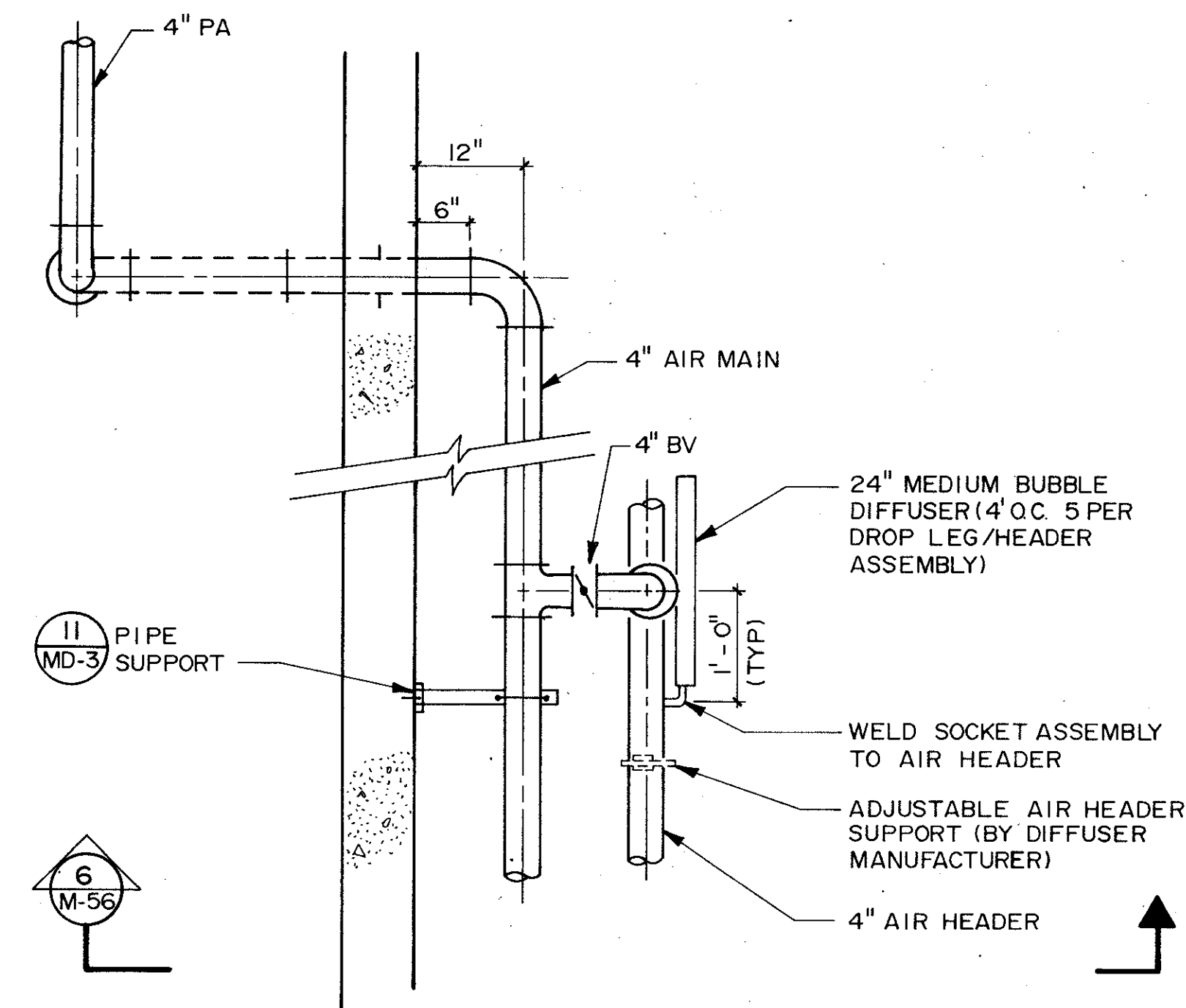
ELECTRICAL CABLE FESTOON SYSTEM 1
NTS



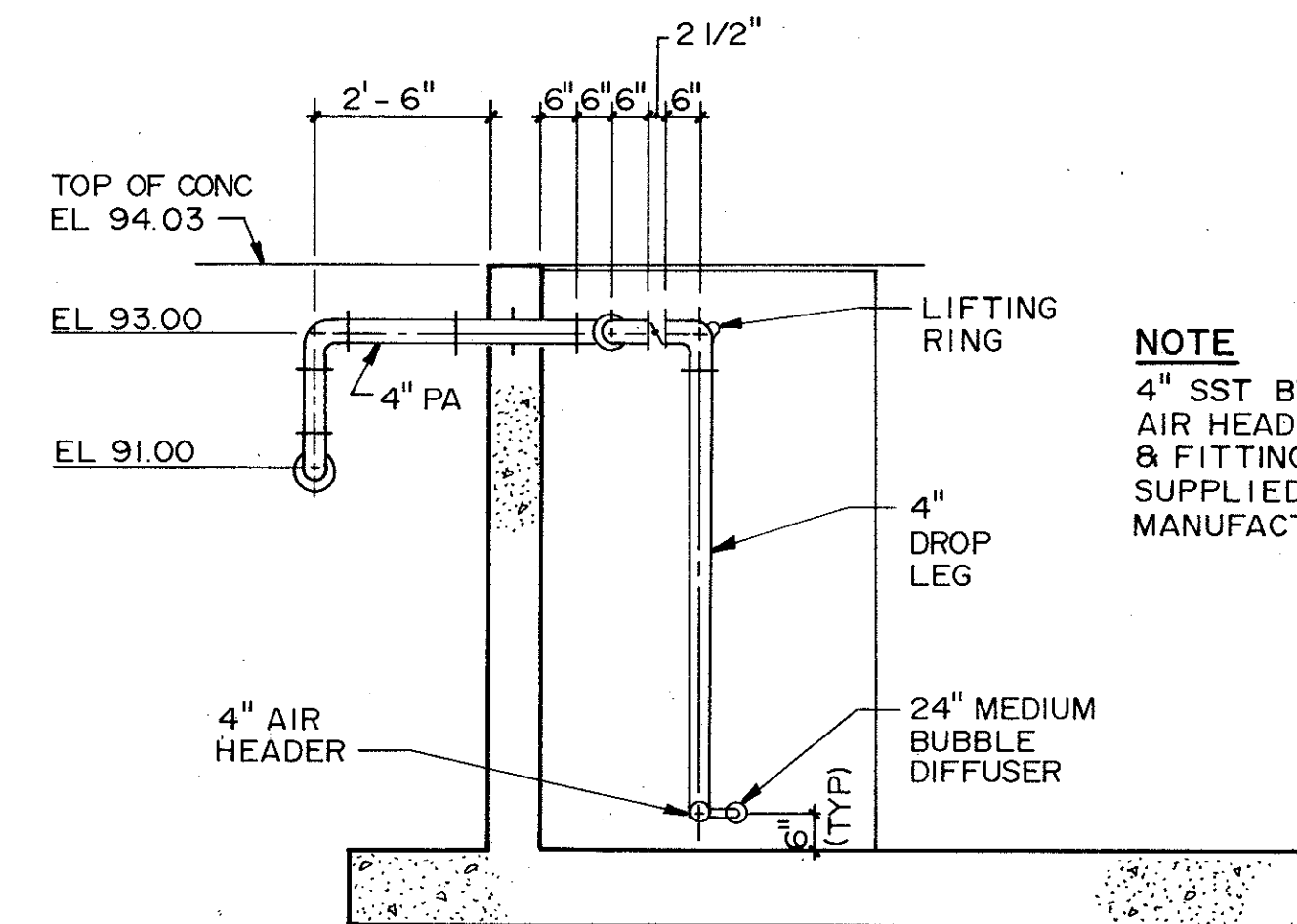
DETAIL 3
NTS



LEAD CARRIER DETAIL 4
NTS



PROCESS AIR PARTIAL PLAN 5
3/4" = 1' - 0" M-56



NOTE
4" SST BV, DROP LEG, AIR HEADER, DIFFUSERS & FITTINGS (TO BE SUPPLIED BY DIFFUSER MANUFACTURER).

SECTION 6
3/8" = 1' - 0" M-56

REMARKS	CONFORMED DWG.
DATE	4/88
DRWN	SAF
DESIGNED BY	BKS
DRAWN BY	KMP
CHECKED BY	BKS
APPROVED BY	CZF
DATE	MARCH 1989

CAMP DRESSER & MCKEE INC.

AUTOMATIC BACKWASH FILTERS SECTIONS & DETAILS

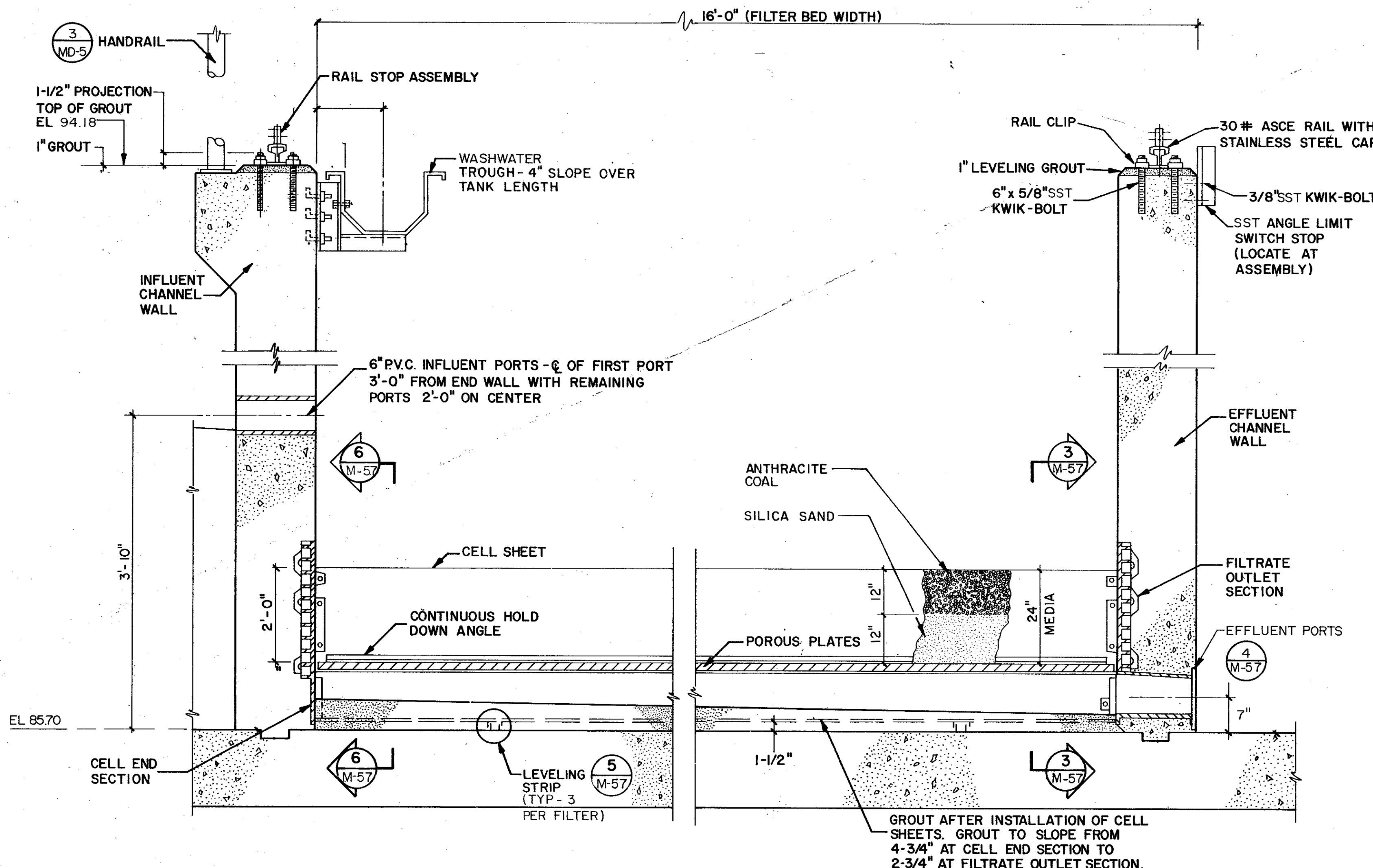
SAND LAKE ROAD WASTEWATER TREATMENT FACILITIES PHASE 3A EXPANSION

ORANGE COUNTY, FLORIDA

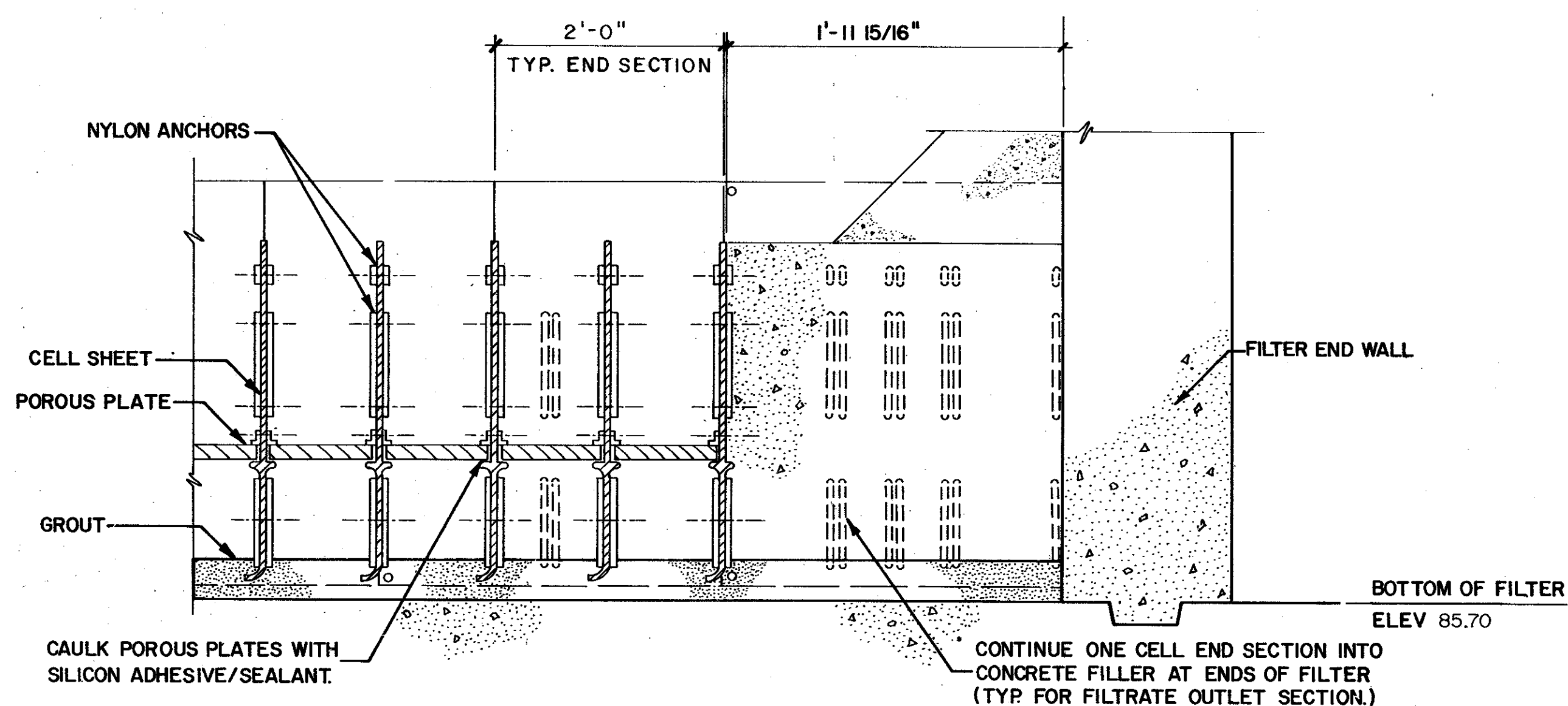
PROJECT NO. 6059 - SL3R

SHEET NO. M-56

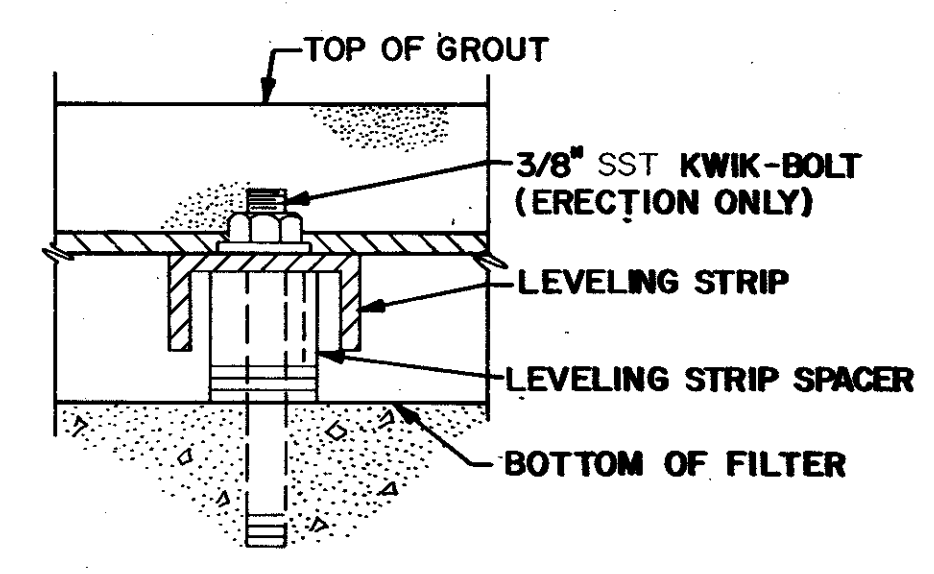
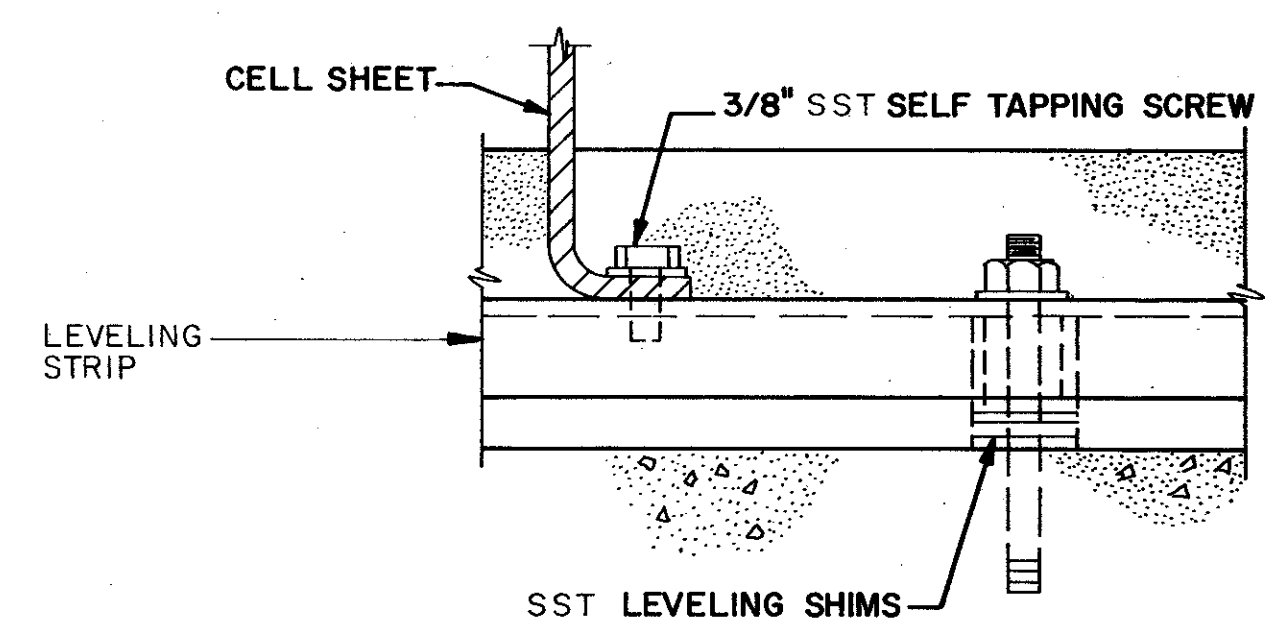
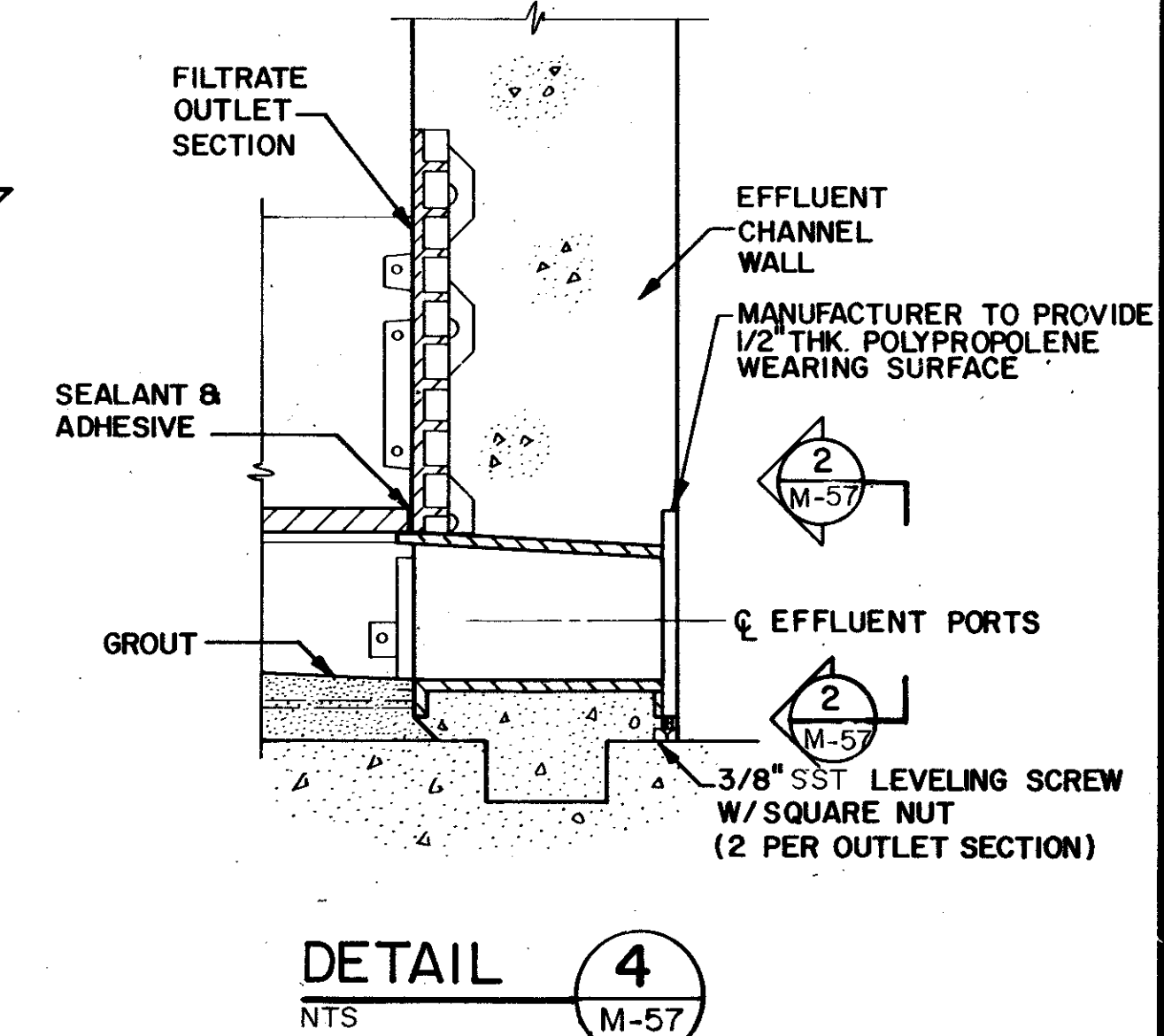
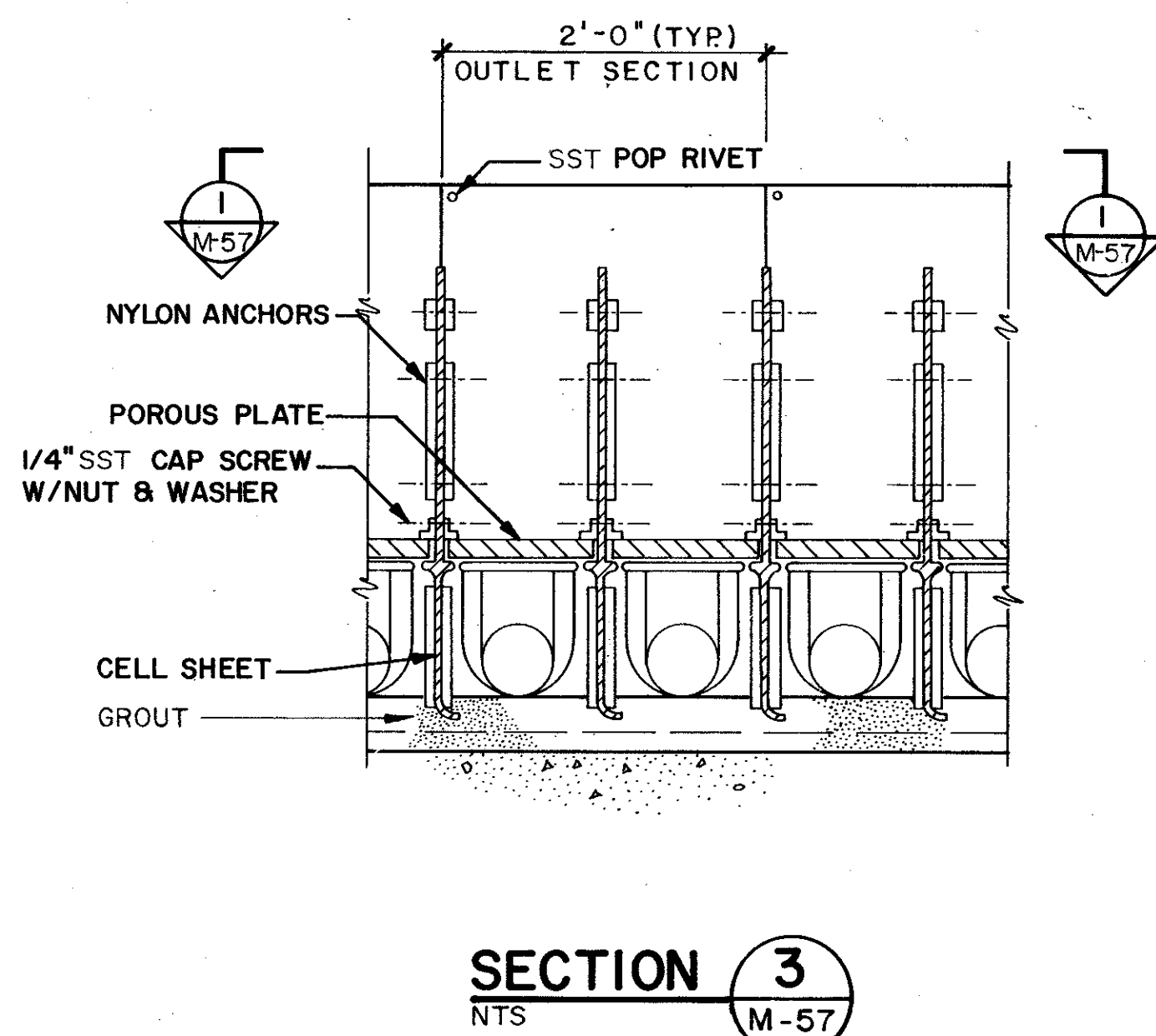
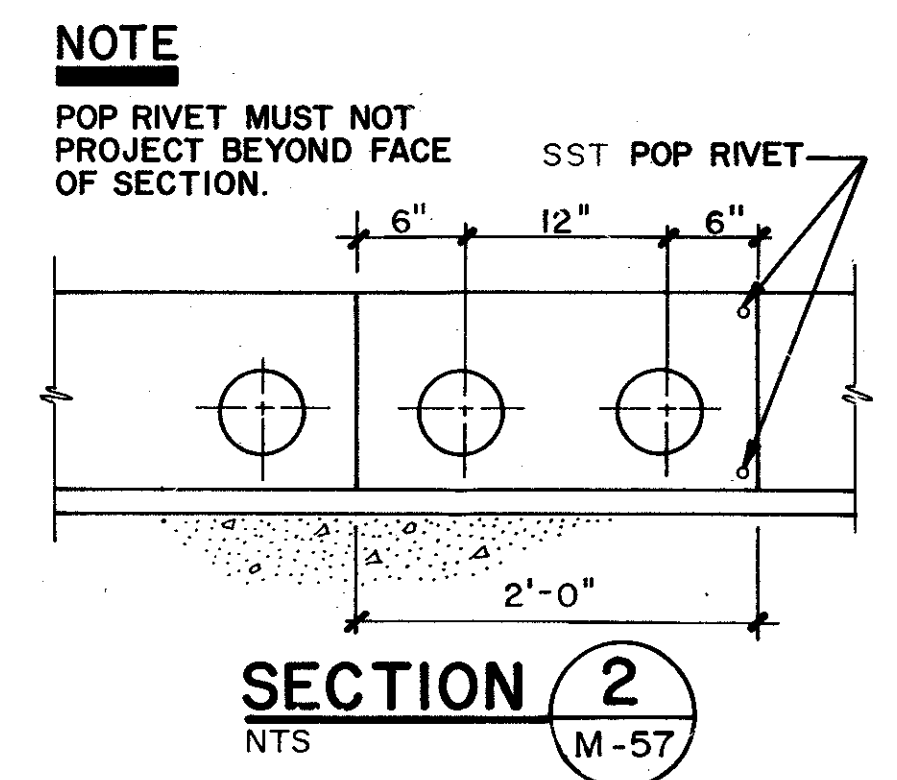
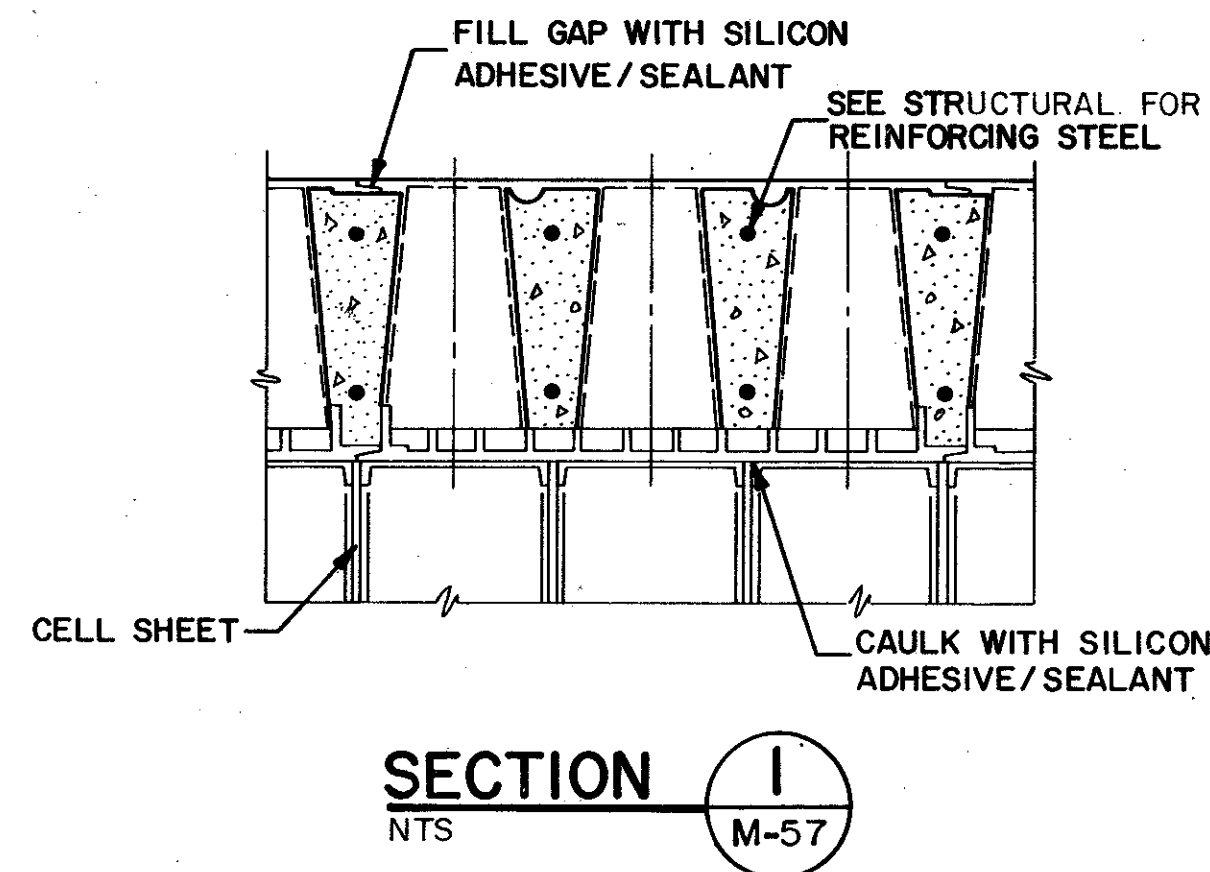
Charles Zachary, P.E.
REGISTERED ENGINEER
No. 37822
STATE OF FLORIDA



TYPICAL SECTION - FILTER BED
NTS



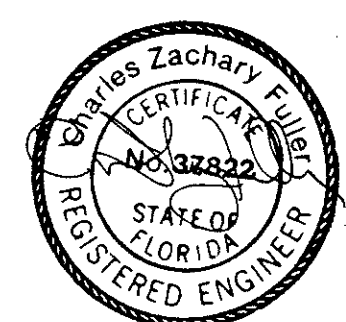
SECTION 6
NTS M-57



SAND LAKE ROAD WASTEWATER TREATMENT FACILITIES
PHASE 3A EXPANSION
AUTOMATIC BACKWASH FILTERS
SECTIONS & DETAILS
ORANGE COUNTY, FLORIDA

PROJECT NO
6059 - SL3R

SHEET NO
M-57



DESIGNED BY: BKS
DRAWN BY: KMP
CHECKED BY: BKS
APPROVED BY: CZF
DATE: MARCH, 1988

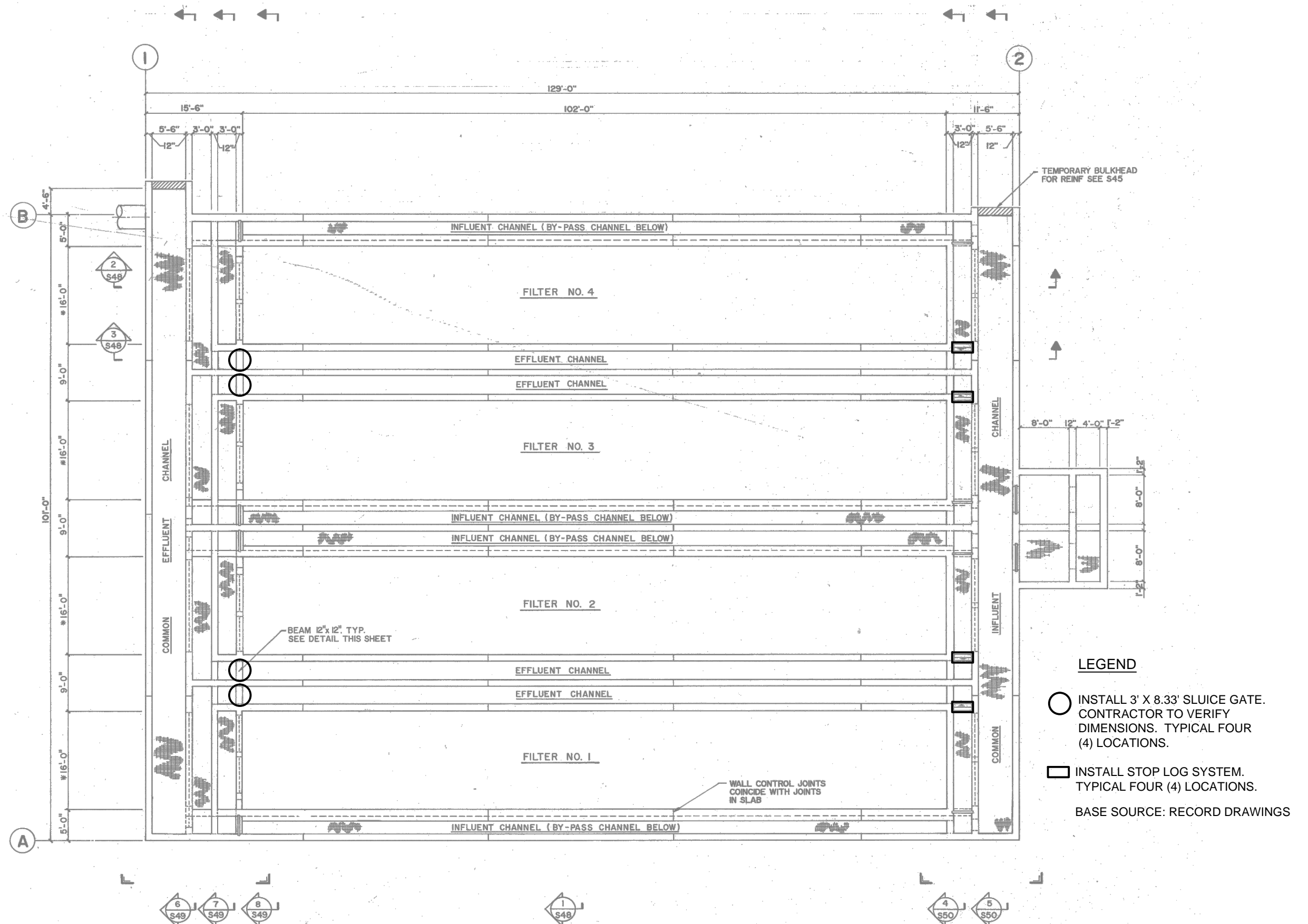
CAMP DRESSER & MCKEE INC.
CDMI
environmental engineering, sciences, planning & management consultants

REV NO	DATE	DRWN	CHKD	REMARKS
4/88		SAF		CONFORMED DWG.

Appendix B

Slide Gate and Stop Log Diagrams

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LEGEND

○ INSTALL 3' X 8.33' SLUICE GATE. CONTRACTOR TO VERIFY DIMENSIONS. TYPICAL FOUR (4) LOCATIONS.

□ INSTALL STOP LOG SYSTEM. TYPICAL FOUR (4) LOCATIONS.

BASE SOURCE: RECORD DRAWINGS

Designed by:	TMZ	Date: 7/5/2016
Drawn by:	CKJ	Job No. O28504
Checked by:	TMZ	File: WWTP PLAN
Approved by:	TMZ	
Scale:	NTS	© 2015



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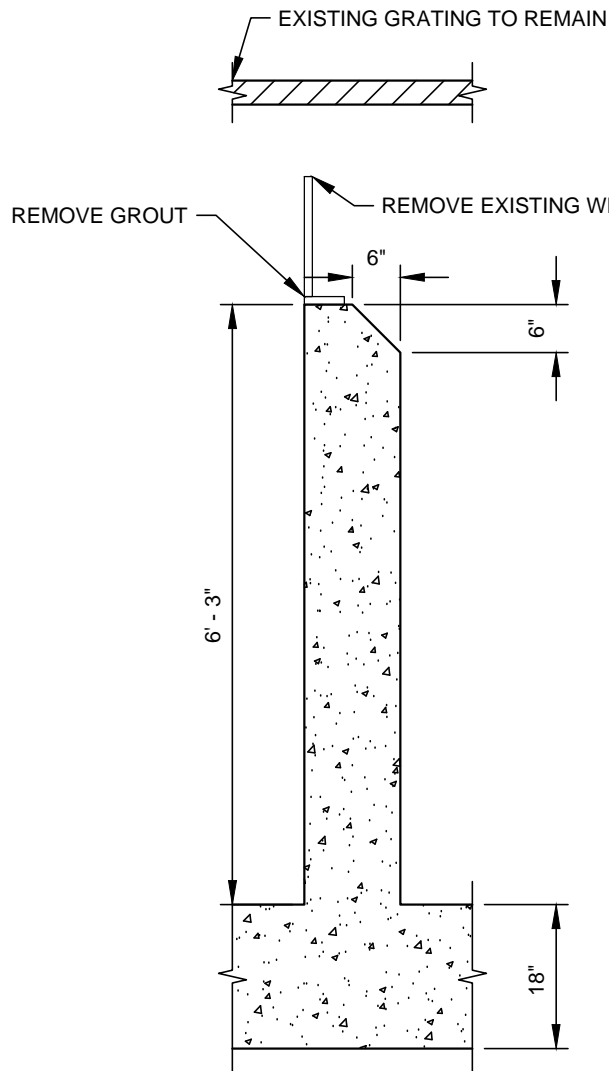
- Florida
- Puerto Rico
- Connecticut
- Maryland
- Texas

Plan Prepared By:
CPH, Inc.
1117 E. Robinson St. ~ Orlando, FL
32801 Ph: 407.425.0452
Licenses:
Eng. C.O.A. No. 3215
Survey L.B. No. 7143
Arch. Lic. No. AA2600926
Lndscp. Lic. No. LC0000298

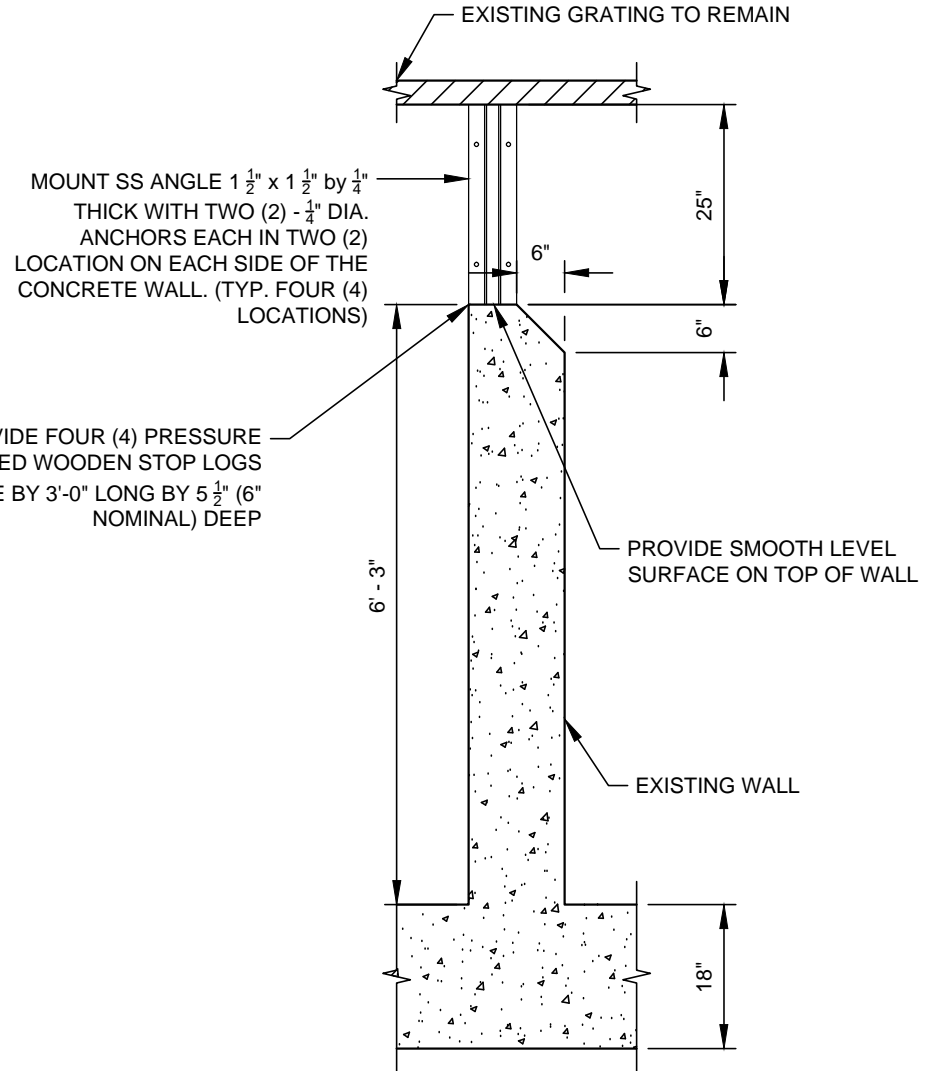
STOP LOG AND GATE LOCATIONS

ORANGE COUNTY SOUTH WATER RECLAMATION FACILITY
AUTOMATIC BACKWASH FILTER REHABILITATION

EXHIBIT
2



EXISTING WALL SECTION



PROPOSED SECTION

*CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS



Plan Prepared By:
CPH, Inc.
 Licenses:
 Eng. C.O.A. No. 3215
 Survey L.B. No. 7143
 Arch. Lic. No. AA2600926
 Lndscp. Lic. No. LC0000298

Date: 7/5/2016
 Job No. O28504
 Scale: 1/2" = 1'
 File: DETAIL

1117 E. Robinson St. ~ Orlando, FL. 32801 ~ Ph: 407.425.0452

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STOP LOG DETAIL

ORANGE COUNTY SOUTH WATER RECLAMATION FACILITY
 AUTOMATIC BACKWASH FILTER REHABILITATION

EXHIBIT
 1