MANATEE COUNTY

April 5, 2012

All Interested Bidders:

SUBJECT: Invitation for Bid #12-1144-OV
Second 10 MG Reclaimed Water Storage Tank and High Service Pump Station
At the Southwest Water Reclamation Facility
Manatee County Project No. 6037083

ADDENDUM #1

Bidders are hereby notified that this Addendum shall be acknowledged on page 00300-1 of the Bid Form and made a part of the above named bidding and contract documents. Bids submitted without acknowledgement of the Addendum will be considered incomplete.

The following items are issued to add to, modify, and clarify the bid and contract documents. These items shall have the same force and effect as the original bidding and contract documents, and cost involved shall be included in the bid prices. Bids to be submitted on the specified bid date, shall conform to the additions and revisions listed herein.

Bidders Note: Bid Opening date has been revised:

TO: April 18, 2012 at 2:00 PM

(WAS: April 12, 2012 at 2:00 PM)

The stated deadline of March 27, 2011 to submit all inquiries concerning interpretation, clarification or additional information pertaining to this bid has lapsed. This deadline has been established to maintain fair treatment for all potential bidders, while maintaining the expedited nature of the Economic Stimulus that the contracting of this work may achieve. Questions received after this date and time shall not be considered.

Financial Management Department - Purchasing Division
1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205
Phone: 941-749-3055 - Fax: 941-749-3034

Attachment #1 – URS Memorandum dated March 29, 2012 responding to questions received at the Pre-Bid / Information Conference held on March 20, 2012 and questions received from Contractors through 5:00 PM, March 27, 2012. (8 Total Pages)

Attachment #2 – URS Memorandum dated February 1, 2012 providing the "Construction Cost Estimate". (1 Total Page)

Bidders: It is important to note that Manatee County Government is currently receiving competitive bids which are up to 50% lower than the Engineers' Estimate.

Attachment #3 - Memorandum to URS from Manatee County Planning Department dated March 20, 2012 providing Final Site Plan approval. (3 Total Pages)

Attachment #4 – Florida Department of Environmental Protection Permit dated April 4, 2012. (30 Total Pages)

Attachment #5 – At the request of Contractors, the attached Site Inspection Sign-In Record is made a part of this Addendum No. 1. (6 Total Pages)

Bidders Note: The following PDF's (22 total pages) have been uploaded as part of this Addendum No. 1:

C12 Civil Details 22 xx 34 (1 Total Page)
L1 Landscape Plan 22 x 34 (1 Total Page)
Monitoring Well Detail (1 Total Page)
Medium Voltage Switchgear for Substations 11 & 12 (4 Total Pages)
Section 16430 Switchgear 600 v & less (14 Total Pages)
Driveway Repair Detail (1 Total Page)

Additional questions received via email from Contractors through March 27, 2012, 5:00 PM.

Q. "Can the owner consider just turning in 1 original bid form, ad allow the bidder to turn in copies within 24 hours after the bid? Or at least eliminate 1 of the copies? This would ensure that the Owner gets the lowest possible price at bid time."

A. Please refer to Article A.02: Sealed & Marked, Page 00010-2 of the Invitation for Bid:
One original and two copies of your **signed bid** shall be submitted in one sealed package, clearly marked on the outside "**Sealed Bid #12-1144-OV / Second 10 MG Reclaimed Water Storage Tank and High Service Pump Station at the Southwest Water Reclamation Facility** with your company name.

Q. In order to insure competitive bidding on the new storage tank, Precon asks that we be allowed to bid on the existing tank modifications and assume the remaining warranty for the existing tank.

A. Pursuant to **Section 13200, "Prestressed Concrete Tank"**, Article 1.05, "Quality Assurance", paragraph E. Existing Tank Modifications: "The existing tank was constructed by Crom Corporation and is under a five (5) year warrant until 2016. Thus, all modifications to the existing 10 million gallon tank must be performed by Crom Corporation in order to preserve said warranty."

Bidders Note: Ref: Article A.03 SECURING OF DOCUMENTS: Correction is made to the contact information. Documents may be obtained by contacting Manatee County Public Works Department between the hours of 8:00 AM to 4:00 PM, Monday through Friday, exception of holidays.

Contact No.: (941) 708-7450, Extension 7327 OR 7334

(WAS: (941) 708-7450, Extension 7349

If you have submitted a bid prior to receiving this addendum, you may request in writing that your original, sealed bid be returned to your firm. All sealed bids received will be opened on the date stated.

END OF ADDENDUM #1

Bids will be received at the **Manatee County Purchasing Division, 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205 until 2:00 P.M. on April 18, 2012 at 2:00 PM.**

Sincerely,

Melissa M. Wendel, CPPO, Purchasing Official
Purchasing Division

Ov
Attachments – (48 Pages + 22 PDFs)

URS

Memorandum

ATTACHMENT #1
URS MEMORANDUM REPLY
TO QUESTIONS
(8 Total Pages)

Date: March 29, 2012

To: Olga Valcich, Manatee County Purchasing Department

Cc: Anthony Benitez, Manatee County Project Management

From: David A. Wilcox, P.E.

Subject: **Text for Addendum No. 1**
IFB 12-1144-OV Second 10 MG Reclaimed Water Storage Tank and High Service Pump Station at the Southwest Water Reclamation Facility (6036083)

QUESTIONS/COMMENTS FROM PRE-BID MEETING, MARCH 20, 2012

1. Permits Status. The County is obtaining the following permits. Once they are issued, they will be provided via addendum for informational purposes.

    a) FDEP – Environmental Resource Permit (stormwater). All comments from FDEP have been satisfied. FDEP will write the permit by the end of March/early April.

    b) Manatee County Planning Department – Final Site Plan (FSP). All comments have been satisfied. The Planning Department will sign-off on the FSP by the end of March.

    c) Building Department – Building Permit. URS pre-applied on behalf of the County. There were no comments. The Building Permit will be available for pick-up once the signed FSP has been delivered to the Building Department by the Engineer. The Contractor will need to provide the balance of the permit fee and his information to obtain the permit (refer to specification Section 01150, Measurement and Payment). The Contractor should ensure that he meets the Building Department requirements for licensing/registration.

2. The Contractor shall obtain the following permits and certifications. The Contractor shall obtain NPDES permit(s) for stormwater and produced groundwater (i.e., dewatering) discharges. Certifications for the relocated monitoring well must be submitted to FDEP per Sheet C-3.

3. Dewatering. Refer to General Note 26 on Sheet G-2, General Notes, Final Site Plan Notes and Index to Sheets. The Contractor must develop a dewatering plan in coordination with and approved by FDEP.

4. The County will not be buying new equipment for the Contractor to install. The County will be providing existing Plant equipment (8 High Service Pumps and 3 VFD's) that is to be relocated and installed at the new High Service Pump Station.

5. Sheet G-4, Construction Phasing Plan.

    a) High Service (HS) Pump Testing. Refer to specification Sections 01150, Measurement and Payment, and Section 11150, Modifications to Existing Vertical Turbine Pumps and Accessories. It is currently unknown how much time will be required for the pump testing and modifications, since the extent of the modifications is unknown. If the time becomes excessive, a time extension to the construction contract will be negotiated.

URS Corporation
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Tel: 813.286.1711
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www.urscorp.com

b) Once installed, the High Service Pumps will be tested per Paragraph 3.03, Field Acceptance Tests.

c) The Lake Filtration and North Pond Improvement Project will be constructed at the same time (more or less) as this project. The piping connections in Phase 2 cannot be completed until the new piping included in the Lake Filtration Project is complete. The existing 10 MG Tank cannot be taken down until the lake filter return system included in the Lake Filtration and North Pond Improvement Project is operational. The Contractor should be prepared to demobilize for up to 3 months as required after Phase 1 to allow for the piping and lake filtration system to be completed.

d) The County has 8 HS Pumps (350 hp) at the SWWRF. Pumps #1 through #6 are installed at the existing HSPS. Pumps #7 & #8 are in storage on the Plant site. All 8 will require testing and modifications per Section 11150, Modifications to Existing Vertical Turbine Pumps and Accessories. Five of the modified HS Pumps will be installed at the new HSPS. The remaining 3 modified pumps will be delivered to the County for storage on-site. The existing HSPS will be converted to a Transfer Pump Station (TPS). Six new Transfer Pumps (100 hp) provided by the Contractor will be installed at the new TPS.

e) Phase 1. The first 2 High Service Pumps (#7 & #8) to be tested, modified and installed in the new HSPS are currently in storage. Thus, there will be no impact to the existing HSPS.

f) Phase 2. The next 2 HS Pumps (#5 & #6) will be removed from the existing HSPS, tested, modified, and installed in the new HSPS. This will leave 4 HS Pumps at the existing HSPS (3 duty and 1 standby), which are adequate to meet current peak flows and have one standby pump. These pumps will continue to act as the HSPS. Install two new transfer pumps (#T5 & #T6) at the new TPS during this phase in preparation for Phase 3. The new transfer pumps will not be utilized in Phase 2.

g) Phase 3.

   i. Turn the new HSPS "on"; running 3 of the installed HS Pumps, with the 4th pump as standby. Turn the new TPS "on", running the 2 new Transfer Pumps (#T5 & #T6) and 2 of the existing HS Pumps (#1 & #2 at 70% speed), with HS Pump #3 as standby.

   ii. Remove HS Pump #4 from the TPS and send it to be tested and modified. Once ready, install in the new HSPS. This will complete the HS Pump installation at the new HSPS. Install Transfer Pump #T4 in the new TPS.

   iii. At the Transfer PS, run Transfer Pumps #T4, #T5 & #T6 and HS Pump #1 (at 70% speed), with HS Pump #2 as standby. Remove HS Pump #3 that is not in use and send it to be tested and modified, returning it to the Plant to be stored. Install Transfer Pump #T3 in the new TPS.

   iv. At the Transfer PS, run Transfer Pumps #T3, #T4, #T5 & #T6, with HS Pump #1 as standby. Remove HS Pump #2 not in use and send it to be tested and modified, returning it to the Plant to be stored. Install Transfer Pump #T2 in the new TPS.

   v. At the Transfer PS, run Transfer Pumps #T3, #T4, #T5 & #T6, with #T2 as standby. Remove HS Pump #1 not in use and send it to be tested and modified, returning it to the Plant to be stored. Install Transfer Pump #T1 in the new TPS.

6. Sheet C-7, Yard Piping Plan. Please note that there is an FP&L guy wire in the work area that requires relocation. The Contractor will need to coordinate with FP&L. URS has coordinated with FP&L and

obtained a budgetary price for the work, as listed in Section 01010, Summary of Work, and Section 01150, Measurement and Payment.

7. Sheet C-12, Civil Details, Detail 1, Utility Crossing, top profile view. **Please see attached** modified plan sheet. Restraining tie rods shall be stainless steel, not galvanized. Reference to concrete encasement was removed, as the County does not allow.

8. Sheet L-1, Landscape Plan. **Please see attached** modified plan sheet. The size and type of holly was changed. The number of trees was increased from 12 to 16, as well as the layout.

9. Relocated Monitoring Well. Sheet C-3, Demolition Plan, and Sheet C-4, Paving, Grading and Drainage. The monitoring well to be relocated is 17 feet deep, not 20 feet deep as shown on the bid document plans. **Attached is a detail** for the relocated monitoring well, "Surficial Aquifer Monitor Well Construction (MW-B)".

CHANGES TO SPECIFICATIONS

10. Section 02615, Ductile iron Pipe and Fittings
    a) Paragraph 2.01, G.
    DELETE:
    Restrained joint designs which require wedges and/or shims to be driven into the joints in order to disassemble the pipe shall not be allowed.

11. Section 11150, Modifications to Existing Vertical Turbine Pumps and Accessories
    b) Paragraph 1.03, C.
    DELETE:
    The pump vendor performing testing and modifications to the existing vertical turbine pumps shall be able to perform the work within a 100-mile radius of the project site and must be capable of providing at least five (5) references of similar type work performed for municipal clients.
    REPLACE WITH:
    The pump vendor performing testing and modifications to the existing vertical turbine pumps must be capable of providing at least five (5) references of similar type work performed for municipal clients.

    c) Paragraph 2.03, A.
    DELETE:
    For three (3) of the existing vertical turbine pumps, the distance from the bottom of the pump head to the bell lip is 14'-4". This distance needs to be increase to 16'-4".
    REPLACE WITH:
    For four (4) of the existing vertical turbine pumps, the distance from the bottom of the pump head to the bell lip is 14'-4". This distance needs to be increase to 16'-4".

12. Section 11100, Pumping Systems
    a) Paragraph 2.01, C, Bowl.
    DELETE:
    The intermediate bowl and suction bell shall be designed such that wear rings can be installed at the location of each impeller seat to reduce maintenance cost.

    b) Paragraph 2.01, G, Discharge Head
    DELETE:
    The discharge head shall be made of close-grained cast iron, (ASTM A48 Class40), free of foundry imperfections and other detrimental defects. Discharge flange, cast integral, shall be machined and drilled per ANSI 125#FF flange. The head shaft shall be of stainless steel (ASTM

A582-416), turned, ground and polished. Impeller adjustment, on vertical hollow shaft motor, shall be provided at the top of the motor by means of a steel, (ASTM A108-Grade 1018), adjustment nut.
REPLACE WITH:
The discharge head shall be made fabricated steel, free of imperfections and other detrimental defects. Discharge flange shall be machined and drilled per ANSI 125#FF flange. The head shaft shall be of stainless steel (ASTM A582-416), turned, ground and polished. Impeller adjustment, on vertical hollow shaft motor, shall be provided at the top of the motor by means of a steel, (ASTM A108-Grade 1018), adjustment nut.

c) Paragraph 2.01, H, Column
Bearing retainers shall be integral steel, not bronze.

d) Paragraph 2.01, L, Painting and Protection
DELETE:
2. All cast iron and steel wetted parts shall be coated with coal tar epoxy.

13. Section 17010, Instrumentation and Controls, General Requirements
a) Paragraph 1.07, C.
DELETE:
3. Project bonding capacity of two million dollars ($1,000,000).

RESPONSES TO SUBMITTED QUESTIONS

Questions 1-5 from: WPC Industrial Contractors, Donnie Belloit
Question 1: Please confirm as mentioned at the Pre-Bid meeting that the Contractor can put dewatering discharge into an existing ditch at the proposed WTP site.
Response 1: On previous projects, the Contractor was allowed to discharge into the ditch NE of the existing tank (along the Plant internal road). An NPDES permit for discharging produced ground water will be required. Refer above to permit discussion in Pre-Bid Meeting Notes.

Question 2: Will the water required to test the GST & Piping be supplied and paid for by the Owner?
Response 2: The County will provide reclaimed water for testing at no charge to the Contractor.

Question 3: Referring to Drawing C-9, Detail 1, "Concrete Pile Cap", please confirm as mentioned at the pre-bid meeting that there is no existing sheet pile wall to attach any item to.
Response 3: The detail is incorrect. There is no existing sheet pile wall, only the proposed one.

Question 4: Referring to the Geotechnical Report, Foundation Analysis & Recommendations, 4.4/Piping Connections states that it is recommended that "underground piping be constructed no more than 2 to 3 feet beyond the outside edge of the tank footing before filling the GST to monitor settling. Can this length be adjusted out a little further to prevent undermining the GST foundation when the Contractor excavates this pipe to tie it into the proposed yard piping in the 2nd phase of the project?
Response 4: Yes, we will work with the selected Contractor on this issue.

Question 5: Will there be any other electrical fees that are the responsibility of the Contractor, other than the basic electrical permit cost and the set cost to move the existing guy wire?
Response 5: If the Contractor uses Plant power for his construction trailer, the County will need to be compensated for the electrical usage.

Questions 6-11 from: Vogel Brothers Building Co., John Jullian & Darren F. Vogel
Question 6: Your qualifications require a General Contractor **and** Underground Utility certification. The underground license is a sub-set of general contracting, there is nothing that covers that cannot be done by

a general contractor. A utility contractor cannot build above ground structures, such as a pre-stressed tank, under that classification. Please remove the "and" from your qualification statement.
Response 6: The qualification is General Contractor. Underground Utility certification is no longer required.

Question 7: DWG L-1 refers to record drawings for irrigation per specifications, none provided. Please clarify.
Response 7: The two record drawing sheets are part of the specifications. They are located at the end of the specifications, after the Geotechnical Report, in section Supplemental Information, Irrigation Record Drawings.

Question 8: DWG G-4 Phase 1 refers to relocating high service pumps #7 and 8 from storage. Please provide the location of the storage facility.
Response 8: High Service Pumps #7 & #8 are stored on–site in the Chlorine Building which is located just east of the existing 5th Clarifier (refer to the bottom right corner of Sheet C-1).

Question 9: DWG G-4 please note Phase 3 Note 7 does not include pump #4
Response 9: HS Pump #4 is addressed in Note 6. Also, refer above to discussion of Construction Phasing.

Question 10: Who is supplying the MV Switchgear for substations 11,12? Who is supplying the new switchgear for the new High Service Pump Station? If the contractor is to supply the switch gear please provide a specification section.
Response 10: The Contractor is to provide the switchgears. The Medium Voltage Switchgear for Substations 11 and 12 must be Square D to match/mate up to the existing Square D switchgear. **Attached are submittal sheets** from Square D indicating the required equipment. **Specification Section 16430, Switchgear (600 Volts or Less) is attached** for the low voltage switchgear required for the new HSPS.

Question 11: Please provide a specification section for the nuts and bolts required for the flanged ductile iron.
Response 11: Nuts and bolts for flanged connections shall be 316 stainless steel (02640, 1.02, J and 05500, 2.02, B).

Questions 12-13 from: Vallflo Pumps, Scott Thurrott
Question 12: Section 11150 Page 1 C under requirements states that the pump vendor must have a pump test and repair facility within 100 miles of the site. I am not aware of anyone having at test facility for a 5,500 gpm within 100 miles of the site. If there is someone could you please let me know who it is?
Response 12: Per the specification change listed above, the 100 mile requirement has been eliminated.

Question 13: I represent Vallflo Pumps in Florida. I would like to quote the above referenced job as an approved equal for the vertical turbine pumps. We meet the specification and exceed the specified efficiencies for the pumps. We would quote the contractors as a supplier. Please advise if there is anything you would require from us.
Response 13: If a pump shop drawing submittal meets the written specification, it will be approved.

Question 14 from: Prestige Concrete Products – Gunit/Shotcrete & Ready Mix , Brian Vance
Question 14: "Section 13200, Performance 2.02 C F Thickness of core wall to be determined by Compressive Calculation of roof (Minimum) 3.5"." Question: What is the estimated volume in yards for shotcrete for the tank (given the unknown variable of 2.02 F listed above)?
Response 14: Specification Section 13200, Prestressed Concrete Tank, is a performance specification. It is the responsibility of the tank manufacturer to design and construct the tank. Questions regarding the design of the tank should be directed to the specified Tank Manufacturers.

Questions 15-21 from: RJ Sullivan Corporation, Bob Mullen

Question 15: Detail 1 on Sheet M-15 shows a 6-mil vapor barrier under the compacted subgrade of the Electrical Building slab. Normally the vapor barrier is between the slab and the subgrade. The subgrade is also shown as it might be some type of stone fill. Please clarify the type of subgrade and the position of the vapor barrier.

Response 15: The detail should have the vapor barrier directly underneath the slab. The vapor barrier should be placed over 12 inches of existing subgrade compacted to 95%.

Question 16: A note on Sheet M-7 calls for 10 adjustable pipe supports and refers us to Detail 7 on M-89. There is no detail 7 on M-9. Please provide the detail for adjustable pipe supports.

Response 16: Refer to Detail 1, Pump Installation, on Sheet M-8, High Service Pump Station Section & Details. The adjustable pipe support is included in this detail.

Question 17: Detail 1 on Sheet C-9 refers to existing and new sheet piling. Where is the existing sheet piling?

Response 17: The detail is incorrect. There is no existing sheet piling, only the proposed one.

Question 18: From the site plan on Sheet C-4 and Detail 3 on C-10, I am unable to determine the limits of the concrete slabs at Control Structure ST-02. Please provide missing dimensions.

Response 18: On the northwest and southeast sides, the slab extends approximately 7.5 feet each way. On the southwest side, the slab extends approximately 4 feet. The slab does not extend to the northeast.

Question 19: Specification Section 13200, paragraph 3.03 A.3 requires that we fill, test and monitor the existing tank for settlement. Is this correct? Are we supposed to test the existing tank as well as the new tank?

Response 19: Only the new tank is to undergo a Tank Settlement Monitoring program. The reclaimed water source to fill the new tank is the existing influent line that feeds the existing tank.
Please note that vibration at the existing storage tank is to be monitored during site compaction per Note 1 on Sheet M-1, Proposed 10 Mgal Tank Plan & Elevation.

Question 20: Paragraph 3.04 requires that we disinfect the tank. Do we really disinfect a reclaimed water tank? If so, do we also disinfect the existing tank?

Response 20: Only the new tank is to be disinfected.

Question 21: A note on Sheet G-4, Phase I states that the Contractor is to demobilize for 3 months until Lake Filtration & North Pond improvement project is completed. Will the Contract Time continue to run during this period?

Response 21: Yes, the Contract time will continue to run. It is possible that the Contractor may not need to demobilize or that the demobilization period may be less than 3 months depending on the progress of the Lake Filtration & North Pond Improvement project.

Questions 22-23 from: RJ Sullivan Corporation, Jason Buckwalter & Bob Mullen

Question 22: On Drawing C-3 the existing 24" Return line is shown to be grout filled and abandoned in place. This line is over 600' long and will require a large amount of grout fill (approximately 70 cubic yards total) at considerable expense, including excavation in the road (and subsequent road repairs) on the north side of the existing HSPS and several other intermediate points to facilitate placing of the grout fill. Please indicate whether the County intends to incur this expense or if there is another method of pipe abandonment that may be acceptable.

Response 22: Please bid the project per the plans. Due to the existing site conditions adjacent to the existing 24" Return Line in this location, there are no other methods of pipe abandonment that may be acceptable.

Question 23: Specification Section 16269, page 9, paragraph 3.04 calls for a 12 month warranty of the Adjustable Speed Drives. In other areas of the Specifications we are required to provide a 3 year warranty. Are the drives an exception to the 3 year warranty?

Response 23: No, all equipment should have a minimum 3 year warranty.

Question 24 from: Ortega Industrial Contractors, Vielka Garcia
Question 24: Paragraph A.23 of the Information for Bidders states: "Manatee County is exempt from Federal Excise and State Sales Taxes". Please clarify if the bidder is to include or not State Sales tax in his bid.
Response 24: Manatee County does not pay Federal Excise and State Sales Taxes. The Contractor is required to pay these taxes and should include his state sales taxes in his unit price(s).

Questions 25-27 from: PCL, Water Infrastructure Group, Leonard Carlton
Question 25: What is the extent of the repair of the driveway for the Lab building where we have to connect the drain age RCP pipe to the existing structure? . Will an overlay be required for a particular distance beyond the actual cut in the pavement?
Response 25: Please refer to **attached Driveway Repair Detail**. No overlay is required.

Question 26: Specification 17010 Article 1.07 paragraph C.3 on page 17010-16 states: "Project bonding capacity of two million dollars ($1,000,000)" please clarify the intent.
Response 26: Per the specification change listed above, the separate bonding capacity requirement listed in the Section 17010 has been eliminated. The Contractor shall provide project bonding as described in Section 00030, General Terms and Conditions of the Contract.

Question 27: Does Manatee County want any excess fill material generated from excavation under the proposed GST?
Response 27: No, the Contractor shall remove and dispose of all excess material.

Questions 28-37 from: Encore Construction Company, Mark A. Kelly
Question 28: Specification 02485 mentions both seed and sod. Please confirm if seed or sod shall be used at all disturbed areas.
Response 28: Disturbed areas shall be sodded.

Question 29: On Drawing C-3 and C-4, please confirm the size of the existing well to be abandoned and size of new to be installed.
Response 29: Refer to attached monitoring well detail referenced above.

Question 30: Per Note 1 on C-3, please identify the items the Owner is going to retain.
Response 30: The County wishes to retain any valve that is removed. Removed miscellaneous piping and other items shall be disposed of by the Contractor.

Question 31: Please confirm if 12" of stone base is required under the New Ground Storage Tank.
Response 31: A stone base is not required. The subgrade shall be prepared as shown in Note 1 on Sheet M-1 and per specification Section 02220, Excavation, Fill, Backfill, and Grading for Structures.

Question 32: Specification 02064-3.03 refers to be asbestos cement pipe. Please confirm and identify if there is any asbestos pipe to be removed on this project.
Response 32: There is no asbestos pipe in this project. This is a County standard specification that includes items that may not be included in this project.

Question 33: From Section A on Drawing C-9, is it the intent for the final elevation to be 19.50 around the entire tank perimeter or only at the existing stormwater pond?
Response 33: The proposed elevation of 19.50 is in the vicinity of the existing stormwater pond. For the remainder of the tank perimeter, grade should be approximately 18.5, sloped back to existing grade.

Question 34: Detail 1 on Drawing C-9 shows a galvanized angle welded to the coated steel sheet piling below the concrete cap. Please confirm the purpose of this angle as it is not a good idea to grind off the coal tar epoxy, which lessens the strength of the sheet, in order to weld the galvanized angle. Also it will

most likely be near impossible to have this angle bent exactly to the shape the sheet piles are installed. If it is the intent for this to be used as a form for the cap, there are temporary "hanging" form accessories we can use to accomplish this. Please confirm if deleting these angles and using hanging forms would be acceptable.
Response 34: The purpose of the angles is to act as a form for the pile cap. Alternative methods can be utilized.

Question 35: On Drawing C-9, please confirm the coal tar epoxy coating for the sheeting is to be both sides of the sheets, 100%.
Response 35: Yes, the coal tar epoxy coating should be on both sides of the sheet pile.

Question 36: Per Drawing C-4 and Detail B on Drawing C-9, please confirm how deep the existing berm is to be excavated in order to fill the existing swale.
Response 36: The goal of this detail is to re-grade the area in order to eliminate the swale and berm so that there is a gradual slope away from the tank.

Question 37: Per Drawing C-4 and Details A and B on Drawing C-5, does the proposed lab building stormwater pond receive sod?
Response 37: Sod shall be provided on the both sides of the pond side slopes and the top of bank. On the interior pond side slopes, the sod shall extend down to the seasonal high water table (SHWT) elevation of 15.50 feet.

CLARIFICATIONS

1. FDEP Environmental Resource Permit, Page 1, 3rd Bullet Item. "Industrial Wastewater Permit" referenced is NPDES Permit for Discharge of Produced Ground Water which contractor must obtain from FDEP.

2. Detail 1, Pump Installation, on Sheet M-8, High Service Pump Station Section and Details. Existing Discharge Head Base shall be connected to a new 1½-inch Steel Pump Mounting Plate supplied by the Contractor. All required hardware to be provided by the Contractor.

3. Detail 1, Pump Installation, on Sheet M-14, Proposed Sections for Transfer Pump Station. Steel Pump Mounting Plate and associated hardware to be provided by Contractor.

URS

ATTACHMENT #2
(1 Total Page)

February 1, 2012

To All Bidders

Subject: Second 10 MG Reclaimed Water Storage Tank & High Service Pump Station at the Southwest Water Reclamation Facility

The "construction cost estimate" for the Second 10 MG Reclaimed Water Storage Tank & High Service Pump Station at the Southwest Water Reclamation Facility is $7,495,000.00 (seven million, four hundred ninety-five thousand dollars and no cents)

This construction cost estimate was determined as of February 1, 2012. The construction cost estimate is based on the original specifications and drawings issued February 2012. Changes to the specifications subsequent to the original documents by addenda to this bid may not be accounted in this construction cost estimate.

Sincerely,

URS Corporation Southern

David A. Wilcox, P.E.
Project Manager
Water/Wastewater Group
Engineer of Record for Filter Piping Improvements at the SWWRF

cc: Sia Mollanazar, Deputy Director of Engineering
Jeff Streitmatter, Senior Project Manager
Anthony Benitez, Project Manager
Sue Sandhoff, Fiscal Services Manager
Manatee Co. Project File: 6036083
URS File 12010046 (6300)

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ATTACHMENT #3
FINAL SITE PLAN APPROVAL
(3 Total Pages)

MANATEE COUNTY
FLORIDA

March 30, 2012

URS Corp
Rebecca Avalos
7850 W. Courtney Campbell Causeway, Suite 700
Tampa, FL 33607
Telephone: 813-286-1711
Email: "Avalos, Rebecca" <rebecca.avalos@urs.com>
Fax: 813-636-2494

Case Number:	PDPI-09-11(P)/FSP-12-07
DTS#:	20120033
Case Name:	SW Reclaimed Water Facility Second Tank and Pump
Type of Approval:	Final Site Plan
PIN:	5182410109
Zoning:	PDPI
FLUC:	P/SP-1
Flood zone:	Zone C FIRM Panel 120153 0309C revised 7/15/92
Location:	5101 65th St W, Bradenton
Uses:	Public utility – reclaimed water facility
Setbacks:	According to site plan

Dear Ms. Avalos

The Planning Director approves your application for development approval. This site plan approval shall expire after four (4) years.

Appropriate agencies have reviewed your application for Final Site Plan approval and found it sufficiently in compliance with the Manatee County Land Development Code and Comprehensive Plan subject to any stipulations that may appear below in this approval letter. The applicant's signature at the end of this letter shall constitute written consent to such stipulations and make this approval complete.

Stipulations This approval incorporates the following stipulations or conditions required by the respective reviewing agencies:

A. Zoning:

1. Lighting: All outdoor lighting fixtures must have full horizontal cut-off optics to limit direct illumination of residential windows and patios.

Stipulated by Miles Gentry, Building and Development Services Dept, at (941) 748-4501, extension 6857, miles.gentry@mymanatee.org

B. Environmental:

1. Two separate inspections by EPD staff are required prior to authorization of construction and/or land clearing activities:

   - You are authorized to stake erosion and sediment control (ESC) device locations. After staking ESC measures, EPD staff must be contacted to inspect the staked locations.

   - After the installation of ESC devices has been completed, a second inspection is required to ensure adequacy.

2. Nuisance, exotic plant species removal shall be completed in accordance with the approved Final Site Plan and inspected by Environmental Planning Division staff prior to Final Plat or Certificate of Occupancy issuance.

Stipulated by reviewer Dorothy Rainey. Contact (941) 748-4501 ext 6851 or dorothy.rainey@mymanatee.org. When ready for inspections, please contact her.

C. Engineering:

1. Any offsite improvements within the Manatee County Right-Of-Way (ROW) as depicted on the approved Construction Plans and Final Site Plan, as applicable, shall require a "Temporary Traffic Control Plan" (TTCP) based on the minimum requirements provided in the Manual Of Uniform Traffic Control Devices (MUTCD) and/or Manatee County Transportation Standard Detail 406.0 (Road/Lane Closure Procedures). The TTCP shall be submitted to Mr. Andy Fischer, Infrastructure Inspections Division Manager prior to the start of said construction. Contact Mr. Fischer at (941) 708-7450, Ext 7347 for specific requirements.

2. Certification(signed and sealed) or a letter requesting final zoning inspection approval (aka) Certificate of Completion approval from the property owner shall be submitted to Ken LaBarr with the Public Works Department once the project is 100% complete and meets substantial compliance with the approved plans. A Final Zoning Inspection will be

completed within 48 hours. (two working days) If inadequate, a Deficiency Notice will be forwarded to the Engineer of record and or the owner noting same. Certifications or letters of inspection request listing outstanding construction or substantial deviations are considered STATUS/PROGRESS reports.

Stipulated by reviewer Mark Mayer. Contact (941) 708-7450, extension 7217 or mark.mayer@mymanatee.org.

The owner's agent must present a copy of this letter and a copy of the site plan, both fully signed, when applying for a building permit.

Sincerely,

Miles Gentry
Building & Development Services Department

Applicant's Consent to Stipulatons: I have read and understand this letter and agree to the stipulations and conditions. I will provide a copy of this letter and approved Site Plan to the General Contractor prior to commencement of construction for this Project.

4-2-12
Date

Rebecca Linder, URS
Applicant or Agent for Property Owner

Florida Department of
Environmental Protection
Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

APR - 4 2012

ATTACHMENT #4
FDEP PERMIT
(30 Total Pages)

Manatee County
c/o Mr. Sia Mollanazar, Deputy Director Engineering
Engineering Section, Public Works Department
1022 26th Avenue East
Bradenton, FL 34208

File No.: 41-0221256-002

Dear Mr. Mollanazar:

Enclosed is the Environmental Resource Permit, DEP Project No. 41-0221256-002, issued pursuant to Part IV of Chapter 373, Florida Statutes, and Title 62, Florida Administrative Code.

Appeal rights for you and for any affected third party are described in the text of the permit along with conditions that must be met when authorized activities are undertaken.

You, as the applicant, are responsible for all aspects of permit compliance. You should therefore review this permit document carefully to ensure compliance with the general and specific conditions contained herein. Please be aware of permit specific condition numbers 2, 3 and 4, which respectively state that:

- the erosion control methods depicted in the attached permit drawings shall be in place prior to construction,
- a dewatering plan must be approved prior to beginning dewatering activities, and
- that the applicant shall obtain an industrial wastewater permit prior to discharging dewatering effluent off site.

Please also note that the operation and maintenance of the existing wet detention pond that was authorized by the Southwest Florida Water Management District will be included in this permit upon the transfer to operation of the surface water management system.

If you have any questions about this document, please contact me at (813) 632-7600, ext. 470.

Thank you for your participation in the permit process and in managing the natural resources of the State of Florida.

Sincerely yours,

Dennis Pierson

Dennis Pierson,
Engineering Specialist,
Submerged Lands and Environmental
Resource Management

Enc: Environmental Resource Permit with attachments (28 pages).

Florida Department of
Environmental Protection
Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Environmental Resource Permit

Permittee: Manatee County
Permit No: 41-0221256-002
Permit Issuance Date: APR - 4 2012
Permit Construction Phase Expiration Date: APR - 4 2017

AUTHORIZATIONS

Project Description

This permit authorizes construction of a new wet detention pond and the modification of an existing wet detention pond that was previously authorized by the Department's Environmental Resource Permit (ERP) No. 41-0221256-001. The existing wet detention pond will be made smaller by encroachment of a new 10 MG storage tank installation and the displaced volume will be compensated for by the addition of the new detention pond. The surface water management system (SWMS) authorized by this permit includes the new and existing wet detention ponds and also incorporates an existing wet detention pond that was previously permitted by the Southwest Florida Water Management District (SWFWMD) ERP No. 44035177.00. The existing SWFWMD-authorized wet detention pond will not be altered and the maintenance of operation of that pond will be included in this permit upon the transfer to operation of the SWMS. The three wet detention ponds (two existing and one new) and their contributing areas are included in a 3.42 acre project area on the 329-acre Manatee County South West Water Reclamation Facility (SWWRF). Each of the three wet detention ponds included in the SWMS will provide discharge rate attenuation and one inch of water quality treatment for the runoff from each of contributing areas and will discharge northward through three separate outfalls to an existing roadside ditch along SWWRF Access Road.

Other construction within the project area includes a new ten million-gallon (MG) reclaimed water storage tank, piping, an electrical building, and a high service pump station, a driveway entrance that will cross a ditch, and an 18-inch pipe under the driveway for a total of 0.152 acres of impervious surface within the project area. Construction of the driveway will result in approximately 0.021 acres of fill within an upland ditch (FLUCCS 510). The stormwater runoff from dome of the new ten MG storage tank, and from the dome of an existing ten MG storage tank that had previously drained to the SWFWMD-permitted detention pond, will be routed to the tank interiors via collection systems that will be attached to the tanks. Flood plain compensation is not required. Authorized activities are depicted on the attached exhibits.

The project described above may only be conducted accordance with the terms, conditions and attachments contained in this permit. The issuance of this permit does not infer, nor guarantee, nor imply that future permits or modifications will be granted by the Department.

State-owned Submerged Lands Authorization

As staff to the Board of Trustees, the Department has reviewed the activity described above and has determined that the activity is not located on submerged lands owned by the State of Florida. Therefore, your project is not subject to the requirements of Chapter 253, Florida Statutes (F.S.).

Federal Authorization

A copy of this permit has been sent to the U.S. Army Corps of Engineers (USACE). The USACE may require a separate permit. Failure to obtain any required federal permits prior to construction could subject you to enforcement action by that agency.

Coastal Zone Management

This permit also constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Management Act.

Water Quality Certification

This permit constitutes certification of compliance with state water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. 1341.

Other Authorizations

You are advised that authorizations or permits for this project may be required by other federal, state or local entities, including the municipality/county in which the project is located. Please be sure to contact the local county building and environmental department to obtain these required authorizations. This permit does not relieve you from the requirements to obtain all other required permits or authorizations.

PROJECT LOCATION

The activities authorized by this permit are located at the Manatee County Southwest Water Reclamation Facility 5101 65th Street West, Bradenton, FL 34210, Section 8, Township 35 South, Range 17 East, Manatee County.

PERMIT CONDITIONS

The activities described herein must be conducted in accordance with:

- **The Specific Conditions**
- **The General Conditions**
- **The limits, conditions and locations of work shown in the attached drawings**
- **The term limits of this authorization**

You are advised to read and understand these conditions and drawings prior to commencing the authorized activities, and to ensure that the work is conducted in conformance with all the terms, conditions, and drawings. If you are utilizing a contractor, the contractor should also read and understand these conditions and drawings prior to commencing the authorized activities. Failure to comply with these conditions shall constitute grounds for revocation of the permit and appropriate enforcement action by the Department.

Operation of the facility is not authorized except when determined to be in conformance with all applicable rules and this permit/certification/authorization.

SPECIFIC CONDITIONS

1. Submittals required herein (e.g., progress reports, as-built drawings, etc.) shall include the permittee's name and permit number 41-0221256-002 and shall be directed by e-mail to SW_ERP@dep.state.fl.us with a subject line of compliance permit number 41-0221256-002, or by mail to:

   Department of Environmental Protection
   Southwest District
   Submerged Lands and Environmental Resource Program
   13051 North Telecom Parkway
   Temple Terrace, FL 33637-0926

PRIOR TO CONSTRUCTION CONDITIONS (The permittee shall comply with the following conditions prior to commencement of any construction activities.)

2. Best management practices for erosion control shall be implemented prior to construction commencement and shall be maintained at all times during construction to prevent siltation and turbid discharges in excess of State water quality standards (>29 NTU's above background, pursuant to Rule 62-302, F.A.C. Erosion control methods shall be implemented as depicted in Sheets C-1, C-4, C-5, C-6, and C-10 of the attached permit drawings.

3. If dewatering activities are anticipated during construction, the permittee shall submit a dewatering plan for Department approval prior to the initiation of work authorized by this permit. Proposed dewatering activities may require modification of the environmental resource permit.

CONSTRUCTION CONDITIONS

4. Wetland areas or water bodies that are outside the specific limits of construction authorized by this permit, must be protected from erosion, sedimentation, siltation, scouring, excess turbidity, and/or dewatering. There shall be no discharge in violation of the water quality standards in Chapter 62-302, F.A.C. Turbidity/erosion controls shall be installed prior to clearing, excavation or placement of fill material, shall be maintained until construction is completed, disturbed areas are stabilized, and turbidity levels have fallen to less than 29 NTU's above background. The turbidity and erosion control devices shall be removed within 14 days once these conditions are met.

5. Areas of exposed soils shall be isolated from wetlands or other surface waters to prevent erosion and deposition of these soils into wetlands or other surface waters during construction and operation of permitted activities.

6. Side slopes, exposed and/or disturbed land surfaces shall be stabilized with sod, seed or mulch within 48 hours following completion of final grades at the project site to prevent erosion, sedimentation, siltation or scouring.

7. The authorized SWMS shall be completed prior to or simultaneously with associated upland development. Occupation of the site shall be in accordance with General Condition 12.

CONSTRUCTION COMPLETION CONDITIONS (The permittee shall comply with the following conditions prior to the transfer to operation phase of the facility. All documentation required below shall be included with the permittee's request to transfer the project to the operation phase [Form No. 62-343.900(7),F.A.C.].)

8. The permittee shall submit two copies of signed, dated and sealed as-built drawings to the Department for review and approval within 30 days of completion of construction. The as-built drawings shall be based on the Department permitted construction drawings, which should be revised to reflect changes made during construction. Both the original design and constructed elevation must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawings. Surveyed dimensions and elevations required shall be verified and signed, dated and sealed by a Florida registered surveyor or engineer. *As-builts shall be submitted to the Department regardless of whether or not deviations are present. In addition to the "As-built Certification" form; the permittee shall submit the "Request for Transfer of Environmental Resource Permit Construction Phase to Operation Phase" form as required in General Condition #13.*

The following information shall be verified on the as-built drawings from the engineering drawings signed and sealed by Mr. David Wilcox, P.E., #34942, on January 26, 2012:

Plan View/Cross-Section	Sheet Number
Paving, Grading, and Drainage	C-4
Paving, Grading, and Drainage Enlarged Plan and Sections	C-5
Civil Details	C-6 and C-10

9. Permanent signs shall be posted in conspicuous locations at 100-foot intervals along the perimeter of each of the three wet detention ponds. The signs shall clearly read:

Stormwater Treatment Pond
No mowing or spraying of aquatic vegetation
allowed unless authorized by FDEP.
DEP Permit No. 41-0221256-002
Contact the Department of Environment Protection at

(813) 632-7600 for more information.

The signs shall consist of aluminum posts, driven well into the ground and extending a minimum of three feet above the ground, with a highly visible aluminum sign (minimum 12 inches by 12 inches) bolted to the post. The signs shall be posted prior to the transfer to operation and shall be maintained for the life of the facility.

OPERATING CONDITIONS (The permittee shall comply with the following operation conditions for the life of the facility. The operation and maintenance of the existing SWFWMD-authorized wet detention pond will be included in this permit upon the transfer to operation of the SWMS.)

10. A minimum of 35 percent of the area of the three wet detention ponds shall be comprised of a vegetated littoral shelf as shown on Sheets C-4 and C-5 of the attached permit drawings. The littoral shelf shall be vegetated with native wetland species as defined by Rule 62-340, F.A.C. Should the establishment of native vegetation not be accomplished within 24 months of construction of the wet detention pond, the permittee shall plant the littoral shelf to achieve the required coverage. Periodic replanting is required if the areal coverage of the littoral shelf falls below the 35 percent coverage during the life of the facility. Details on the size of the littoral shelf in relation to the pond shall be included with the inspection certification reports required in Specific Condition No. 12.

11. The maintenance of the SWMS, including the three wet detention ponds within the 3.42-acre project area, shall be in accordance with the attached "Operation & Maintenance Instructions". It is the responsibility of the permittee to ensure that that the SWMS is functioning as designed.

12. Beginning 24 months after operation is authorized and every 24 months thereafter, the Operation and Maintenance Entity shall inspect the SWMS and submit inspection reports in the form required by the Department (see attached FDEP Inspection Certification Form, 62-343.900(6), F.A.C.).

13. The stormwater treatment pond signs required in specific condition #9 shall be maintained for the life of the facility.

GENERAL CONDITIONS

1. All activities shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit.

2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications, shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by Department staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.

3. Activities approved by this permit shall be conducted in a manner that does not cause violations of state water quality standards. The permittee shall implement best management practices for erosion and pollution control to prevent violation of state water quality standards. Temporary erosion control shall be implemented prior to and during construction and permanent control measures shall be completed within seven days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. Thereafter the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.

4. Water quality data for the water discharged from the permittee's property or into the surface waters of the state shall be submitted to the Department as required by the permit. Analyses shall be performed according to procedures outlined in the current edition of Standard Methods for the Examination of Water and Wastewater by the American Public Health Association or Methods for Chemical Analyses of Water and Wastes by the U.S. Environmental Protection Agency. If water quality data are required, the permittee shall provide data as required on volumes of water discharged, including total volume discharged during the days of sampling and total monthly volume discharged from the property or into surface waters of the state.

5. Department staff must be notified in advance of any proposed construction dewatering. If the dewatering activity is likely to result in offsite discharge or sediment transport into wetlands or surface waters, a written dewatering plan must either have been submitted and approved with the permit application or submitted to the Department as a permit modification prior to the dewatering event. The permittee is advised that the rules of the Southwest Florida Water Management District state that a water use permit may be required prior to any use exceeding the thresholds in Chapter 40D-2, F.A.C.

6. Stabilization measures shall be initiated for erosion and sediment control on disturbed areas as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven days after the construction activity in that portion of the site has temporarily or permanently ceased.

7. Off site discharges during construction and development shall be made only through the facilities authorized by this permit. Water discharged from the project shall be through structures having a mechanism suitable for regulating upstream stages. Stages may be subject to operation schedules satisfactory to the Department.

8. The permittee shall complete construction of all aspects of the SWMS, including wetland compensation (grading mulching, planting), water quality treatment features, and discharge control facilities prior to beneficial occupancy or use of the development being served by this system.

9. The following shall be properly abandoned and/or removed in accordance with the applicable regulations:

    a. Any existing wells in the path of construction shall be properly plugged and abandoned by a licensed well contractor.

    b. Any existing septic tanks on site shall be abandoned at the beginning of construction.

c. Any existing fuel storage tanks and fuel pumps shall be removed at the beginning of construction.

10. All surface water management systems shall be operated to conserve water in order to maintain environmental quality and resource protection; to increase the efficiency of transport, application and use; to decrease waste; to minimize unnatural runoff from the property and to minimize dewatering of offsite property.

11. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the Department a written notification of commencement using an "Environmental Resource Permit Construction Commencement" notice (Form No. 62-343.900(3), F.A.C.) indicating the actual start date and the expected completion date.

12. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the occupation of the site or operation of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of that phase or portion of the system to a local government or other responsible entity.

13. Within 30 days after completion of construction of the permitted activity, the permittee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required "Environmental Resource Permit As-Built Certification by a Registered Professional" (Form No. 62-343.900(5), F.A.C.), and "Request for Transfer of Environmental Resource Permit Construction Phase to Operation Phase" (Form 62-343-900(7), F.A.C.). Additionally, if deviations from the approved drawings are discovered during the certification process, the certification must be accompanied by a copy of the approved permit drawings with deviations noted.

14. This permit is valid only for the specific processes, operations and designs indicated on the approved drawings or exhibits submitted in support of the permit application. Any substantial deviation from the approved drawings, exhibits, specifications or permit conditions, including construction within the total land area but outside the approved project area(s), may constitute grounds for revocation or enforcement action by the Department, unless a modification has been applied for and approved. Examples of substantial deviations include excavation of ponds, ditches or sump areas deeper than shown on the approved plans.

15. The operation phase of this permit shall not become effective until the permittee has complied with the requirements of the conditions herein, the Department determines the system to be in compliance with the permitted plans, and the entity approved by the Department accepts responsibility for operation and maintenance of the system. The permit may not be transferred to the operation and maintenance entity approved by the Department until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the Department, the permittee shall request transfer of the permit to the responsible operation and maintenance entity approved by the Department, if different from the permittee. Until a transfer is approved by the Department pursuant to Section 62-343.110(1)(d), F.A.C., the permittee shall be liable for compliance with the terms of the permit.

16. Should any other regulatory agency require changes to the permitted system, the Department shall be notified of the changes prior to implementation so that a determination can be made whether a permit modification is required.

17. This permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations including a determination of the proposed activities' compliance with the applicable comprehensive plan prior to the start of any activity approved by this permit.

18. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40D-4 or Chapter 40D-40, F.A.C.

19. The permittee is hereby advised that Section 253.77, F.S., states that a person may not commence any excavation, construction, other activity involving the use of sovereign or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.

20. The permittee shall hold and save the Department harmless from any and all damages, claims, or liabilities which may arise by reason of the activities authorized by the permit or any use of the permitted system.

21. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under section 373.421(2), F.S., provides otherwise.

22. The permittee shall notify the Department in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of the permitted system or the real property at which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of section 62-343.130, F.A.C. The permittee transferring the permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to such sale, conveyance or other transfer.

23. Upon reasonable notice to the permittee, Department authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with Department rules, regulations and conditions of the permits.

24. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the Department and the Florida Department of State, Division of Historical Resources.

25. The permittee shall immediately notify the Department in writing of any previously submitted information that is later discovered to be inaccurate.

NOTICE OF RIGHTS

This permit is hereby final unless a sufficient petition for an administrative hearing is timely filed under Sections 120.569 and 120.57 of the Florida Statutes as provided below. The procedures for petitioning for a hearing are set forth below.

Mediation is not available.

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Because the administrative hearing process is designed to re-determine final agency action on the application, the filing of a petition for an administrative hearing may result in a modification of the permit or even a denial of the application. If a sufficient petition for an administrative hearing or request for an extension of time to file a petition is timely filed, this

permit automatically becomes only proposed agency action on the application, subject to the result of the administrative review process. Accordingly, the applicant is advised not to commence construction or other activities under this permit until the deadlines noted below for filing a petition for an administrative hearing, or request for an extension of time has expired.

Under rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the applicable deadline. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon. If a request is filed late, the Department may still grant it upon a motion by the requesting party showing that the failure to file a request for an extension of time before the deadline was the result of excusable neglect.

In the event that a timely and sufficient petition for an administrative hearing is filed, other persons whose substantial interests will be affected by the outcome of the administrative process have the right to petition to intervene in the proceeding. Any intervention will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

In accordance with Rule 62-110.106(3) F.A.C., petitions for an administrative hearing by the applicant must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first.

Under section 120.60(3) of the Florida Statutes, however, any person who has asked the Department for notice of agency action may file a petition within 21 days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition for an administrative hearing within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of the Florida Statutes.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C. Under Sections 120.569(2)(c) and (d), F.S., a petition for administrative hearing must be dismissed by the agency if the petition does not substantially comply with the above requirements or is untimely filed.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. Upon the timely filing of a petition this order will not be effective until further order of the Department.

This permit constitutes an order of the Department. The applicant has the right to seek judicial review of the order under Section 120.68, F.S., by the filing of a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when the final order is filed with the Clerk of the Department. The applicant, or any party within the meaning of Section 373.114(1)(a), F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1), F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the

Department within 20 days from the date when the final order is filed with the Clerk of the Department.

Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

William L. Vorstadt
Program Administrator
Submerged Lands and Environmental
Resource Program
Southwest District

WLV/dp

Attachments:
Commencement notice /62-343.900(3) (1 page)
As-built certification/62-343.900(5) (1 page)
Inspection certification/62-343.900(6) (1 page)
Transfer construction to operation phase/62-343.900(7) (1 page)
Application for transfer of an ERP /62-343.900(8) (1 page)
Project Location Map (1 page)
Permit Drawings (6 pages)
Operation and Maintenance Instructions (2 pages)

Copies furnished to:
U.S. Army Corps of Engineers
Southwest Florida Water Management District, c/o Mr. John Emery, Compliance Manager, 2379 Broad Street, Brooksville, FL 34604-6899, Reference Permit No. 44035177.000
URS Corporation Southern, c/o Mr. David Wilcox, P.E., Water/Wastewater Group Manager, 76500 West Courtney Campbell Causeway, Tampa, FL 33607-1462
File

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this permit, including all copies, was mailed before the close of business on 4/4/12, to the above listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, under 120.52(7) of the Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

E Robinson 4/4/12

Clerk Date

Form #62-343.900(3) FAC
Form Title: Construction Commencement Notice
Effective Date: October 3,1995

ENVIRONMENTAL RESOURCE PERMIT
Construction Commencement Notice

Project: Phase:

I hereby notify the Department of Environmental Protection that the construction of the surface water management system authorized by Environmental Resource Permit Number has commenced / is expected to commence on and will require a duration of approximately months weeks days to complete. It is understood that should the construction term extend beyond one year, I am obligated to submit the Annual Status Report for surface Water Management System Construction.

PLEASE NOTE: If the actual construction commencement date is not known, Department staff should be so notified in writing in order to satisfy permit conditions.

Permittee or Authorized Agent Title and Company Date

Phone Address

Form #62-343.900(5), F.A.C.
Form Title: As-Built Certification by a Registered Professional
Effective Date: October 3, 1995

ENVIRONMENTAL RESOURCE PERMIT
AS-BUILT CERTIFICATION BY A REGISTERED PROFESSIONAL

Permit Number:

Project Name:

I hereby certify that all components of this surface water management system have been built substantially in accordance with the approved plans and specifications and are ready for inspection. Any substantial deviations (noted below) from the approved plans and specifications will not prevent the system from functioning as designed when properly maintained and operated. These determinations are based upon on-site observation of the system conducted by me or by my designee under my direct supervision and/or my review of as-built plans certified by a registered professional or Land Surveyor licensed in the State of Florida.

Name (please print) _____ Signature of Professional

Company Name Florida Registration Number

Company Address Date

City, State, Zip Code

Telephone Number (Affix Seal)

Substantial deviations from the approved plans and specifications:

(Note: attach two copies of as-built plans when there are substantial deviations)

Within 30 days of completion of the system, submit two copies of the form to:

Form #62-343.900(6) FAC
Form Title: Inspection Certification
Effective Date: October 3,1995

ENVIRONMENTAL RESOURCE PERMIT
INSPECTION CERTIFICATION

Permit Number:

Project Number:

Inspection Date(s):

Inspection results: (check one)

☐ I hereby certify that I or my designee under my direct supervision have inspected the system at the above referenced project and that the system appears to be functioning in accordance with the requirements of the permit and Chapter 373 F.S. (as applicable).

☐ The following necessary maintenance was conducted:

☐ I hereby certify that I or my designee under my direct supervision has inspected the system at the above referenced project and that the system does not appear to be functioning in accordance with the requirements of the permit and Chapter 373 F.S. (as applicable). I have informed the operation and maintenance entity of the following: (a) that the system does not appear to be functioning properly, (b) that maintenance is required to bring the system into compliance, and (c) if maintenance measures are not adequate to bring the system into compliance, the system may have to be replaced or an alternative design constructed subsequent to Department approval.

Name

Signature of Professional Engineer

Company Name

Florida Registration Number

Company Address

Date

City, State, Zip Code

Telephone Number

(affix seal)

Within 30 days of completion of the inspection, submit two copies of the form to the following Department Office:

Department of Environmental Protection

Form #: 62-353.900(7)F.A.C.
Form Title: Request for Transfer to Operation Phase
Effective Date: September 25, 1995

Request for Transfer of Environmental Resource Permit Construction Phase to Operation Phase

(To be completed and submitted by the operating entity)

Florida Department of Environmental Protection

It is requested that Department Permit Number _____authorizing the construction and operation of a surface water management system for the below mention project be transferred from the construction phase permittee to the operation phase operating entity.

Project:

From: Name:
Address:
City: State: Zip:

To: Name:
Address:
City: State: Zip:

The surface water management facilities are hereby accepted for operation and maintenance in accordance with the engineers certification and as outlined in the restrictive covenants and articles of incorporation for the operating entity. Enclosed is a copy of the document transferring title of the operating entity for the common areas on which the surface water management system is located. Note that if the operating entity has not been previously approved, the applicant should contact the Department staff prior to filing for a permit transfer.

The undersigned hereby agrees that all terms and conditions of the permit and subsequent modifications, if any, have been reviewed, are understood and are hereby accepted. Any proposed modifications shall be applied for and obtained prior to such modification.

Operating Entity:

_____ Title:
Name

Telephone:

Enclosure

☐ copy of recorded transfer of title surface water management system
☐ Coy of plat(s)
☐ Copy of recorded restrictive covenants, articles of incorporation, and certificate of incorporation.

[redacted]

APPLICATION FOR TRANSFER OF ENVIRONMENTAL RESOURCE PERMIT AND NOTIFICATION OF SALE OF A FACILITY OR SURFACE WATER MANAGEMENT SYSTEM

Permit No. _____ Date Issued _____ Date Expires _____

FROM (Name of Current Permit Holder) _____

Mailing Address _____

City _____ State _____ Zip Code _____

Telephone: (_____) _____

Identification or Name of Facility/Surface Water Management System: _____

Phase of Facility/Surface Water Management System (if applicable): _____
The undersigned hereby notifies the Department of the sale or legal transfer of this facility, or surface water management system, and further agrees to assign all rights and obligations as permittee to the applicant in the event the Department agrees to the transfer of permit.

Signature of the current permittee: _____

Title (if any):_____ Date: _____

TO (Name of Proposed Permit Transferee): _____

Mailing Address: _____

City: _____ State:_____ Zip Code: _____

Telephone: (_____) _____

The undersigned hereby notifies the Department of having acquired the title to this facility, or surface-water management system. The undersigned also states he or she has examined the application and documents submitted by the current permittee, the basis of which the permit was issued by the Department, and states they accurately and completely describe the permitted activity or project. The undersigned further attests to being familiar with the permit, agrees to comply with its terms and with its conditions, and agrees to assume the rights and liabilities contained in the permit. The undersigned also agrees to promptly notify the Department of any future changes in ownership of, or responsibility for, the permitted activity or project.

Signature of the applicant (Transferee): _____

Title (if any): _____ Date: _____

Project Engineer Name (if applicable) _____

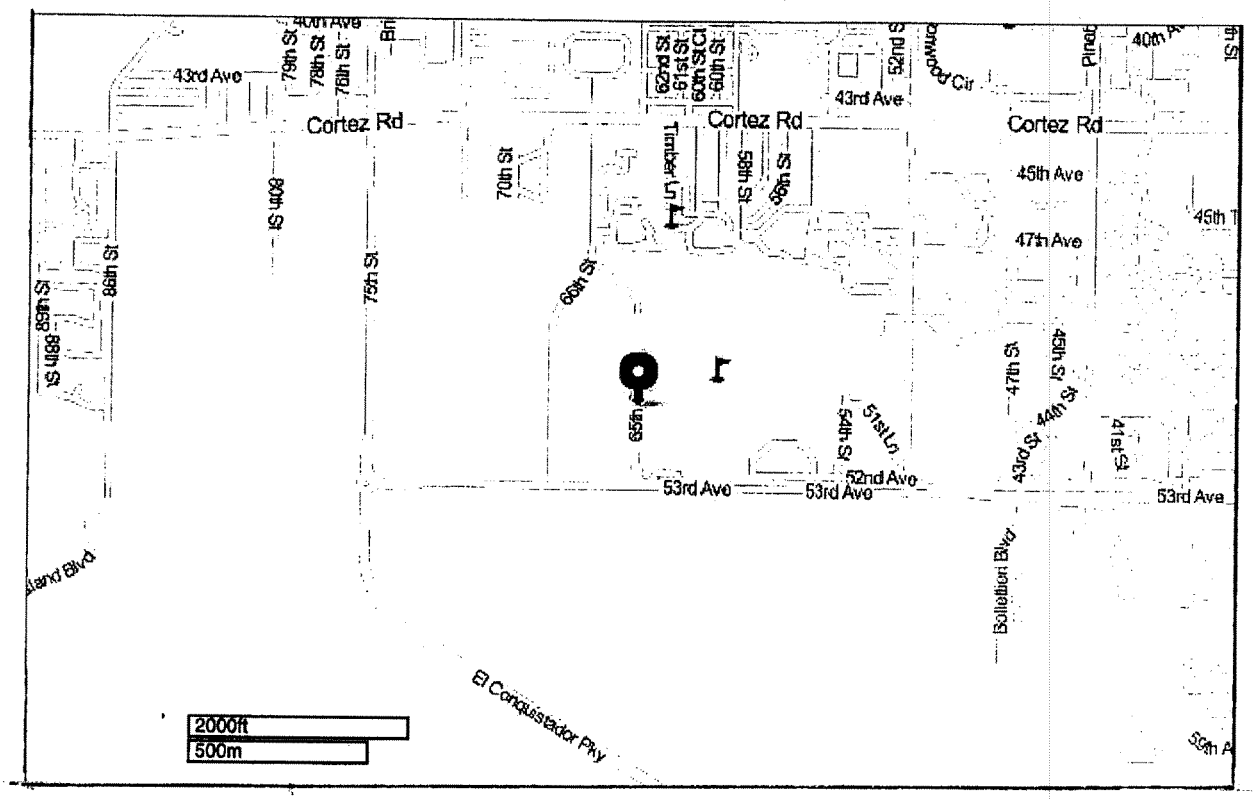
Mailing Address: _____

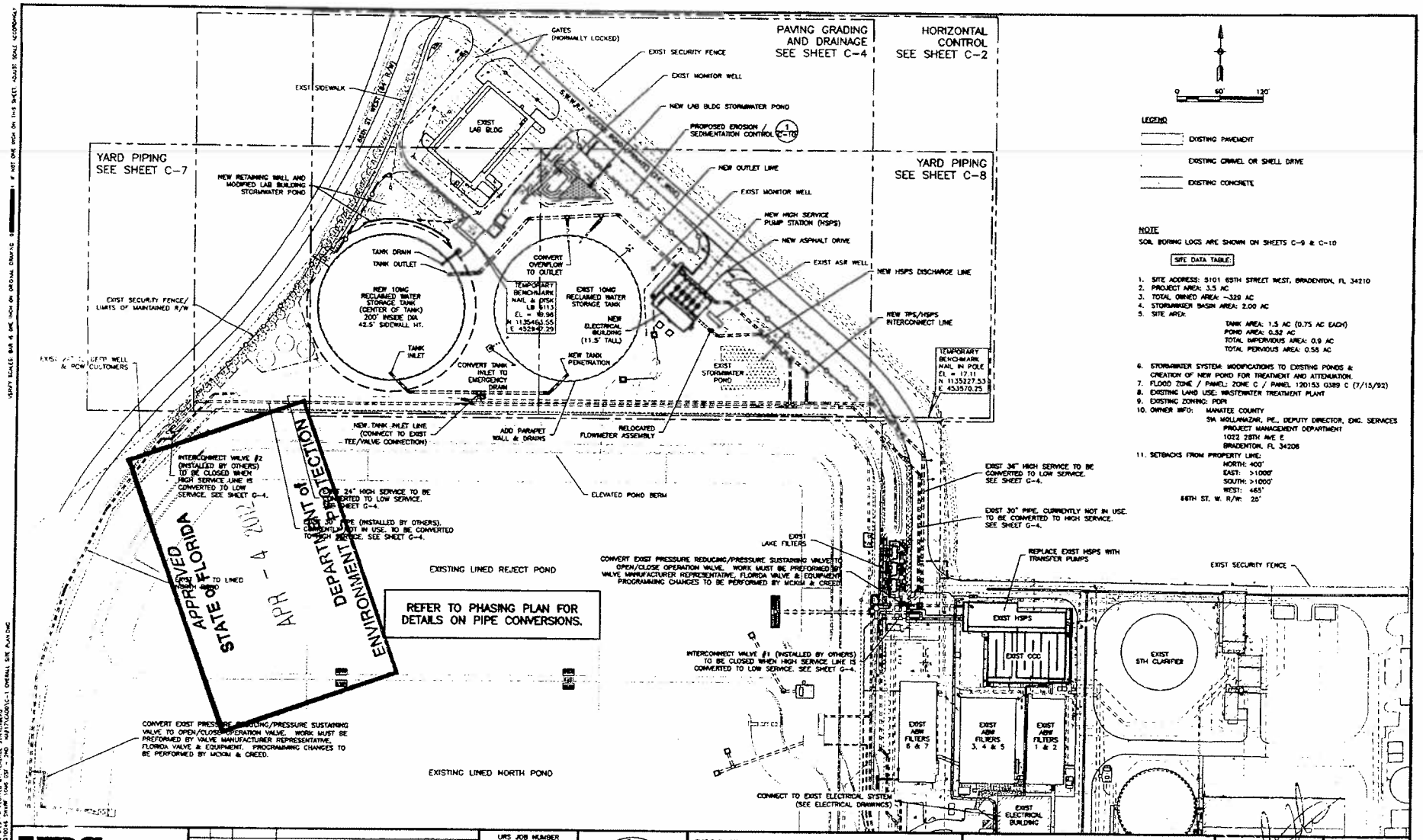
Telephone: (_____) _____

Project Location Map

Project Name: Manatee County Second 10 MG Reclaimed Water Tank
File Number: 41-0221256-002

The project is located at the Manatee County Southwest Water Reclamation Facility, 5101 65th Street West, Bradenton, FL 34210, Section 8, Township 35 South, Range 17 East, Manatee County.





URS
7650 West Courtney Campbell Causeway
Suite 700
Tampa, Florida 33607
Ph: (813) 286-1711 Fax: (813) 286-6567
Florida Engineering Number 000002

NO.	BY	DATE	DESCRIPTION
			REVISIONS

URS JOB NUMBER 12010046
PM: D. WILCOX
ENG: R. AVALOS
DRW: T. SONNENBERG
FILE SAVE DATE: January 17, 2012

MANATEE COUNTY FLORIDA

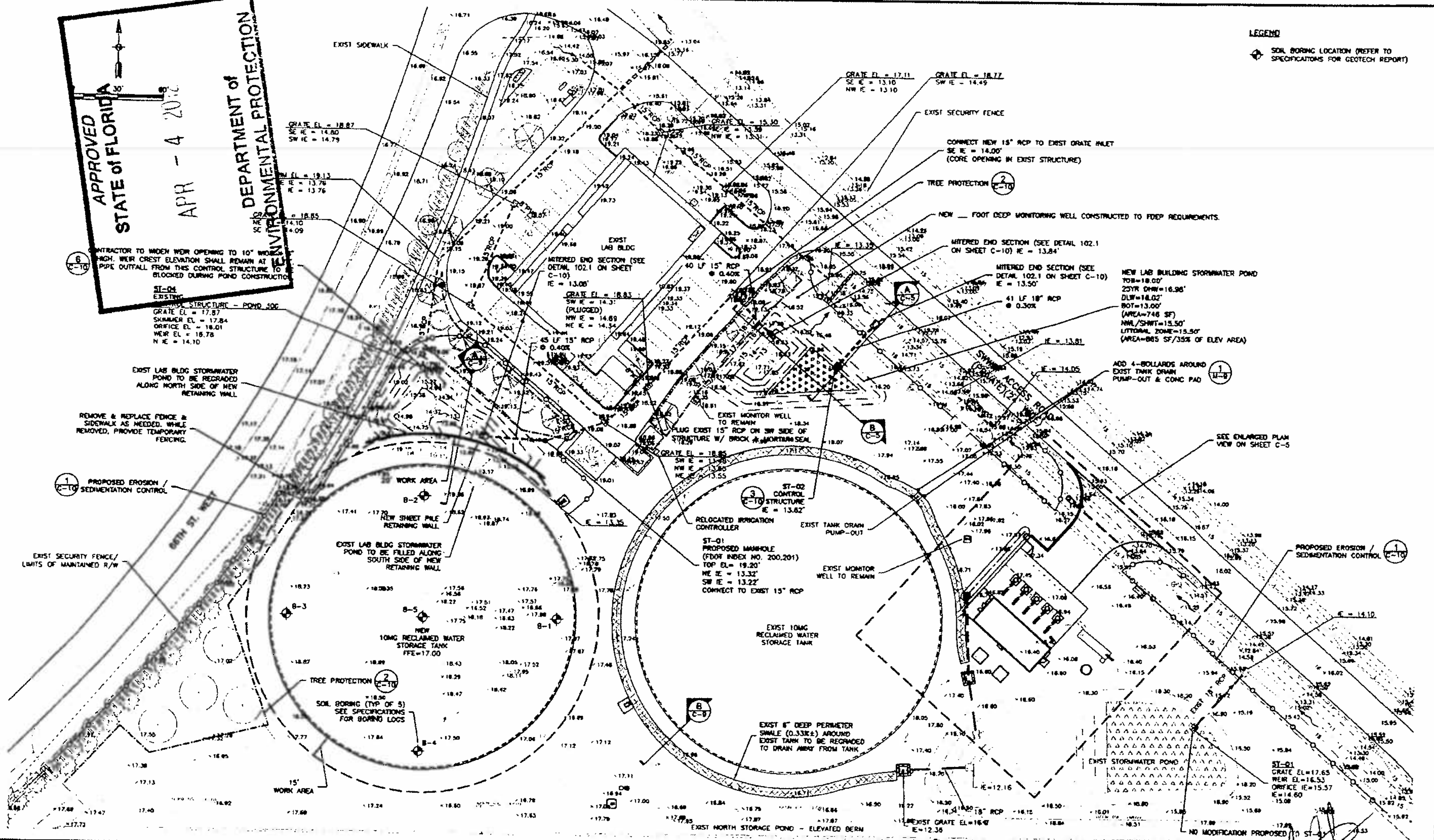
SECOND 10MG RECLAIMED WATER STORAGE TANK AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY
FOR
MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

OVERALL SITE PLAN

DAVID A. WILCOX FLORIDA P.E. NO. 34942

PROJECT STATUS PRELIMINARY NOT FOR CONSTRUCTION

C-1



URS
7650 West Courtney Campbell Causeway
Suite 700
Tampa, Florida 33607
Ph: (813) 286-1711 Fax: (813) 286-6587
Florida Engineering Number: 000002

NO.	BY	DATE	DESCRIPTION
			REVISIONS

URS JOB NUMBER 12010046
PM: D. WILCOX
ENG: R. AVALOS
DRW: T. SONNENBERG
FILE SAVE DATE: January 24, 2012

MANATEE COUNTY FLORIDA

SECOND 10MG RECLAIMED WATER STORAGE TANK AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY

FOR
MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

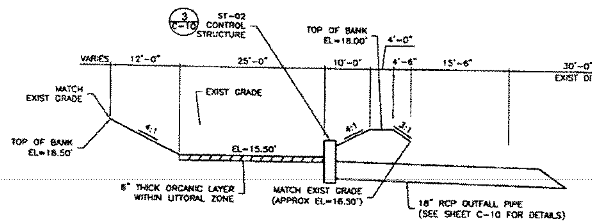
PAVING GRADING AND DRAINAGE

DAVID A. WILCOX
FLORIDA P.E. NO. 34942

PROJECT STATUS
PRELIMINARY
NOT FOR
CONSTRUCTION

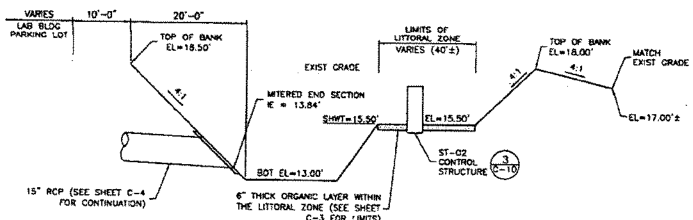
C-4

VERIFY SCALES: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY



PROPOSED LAB BUILDING STORMWATER POND

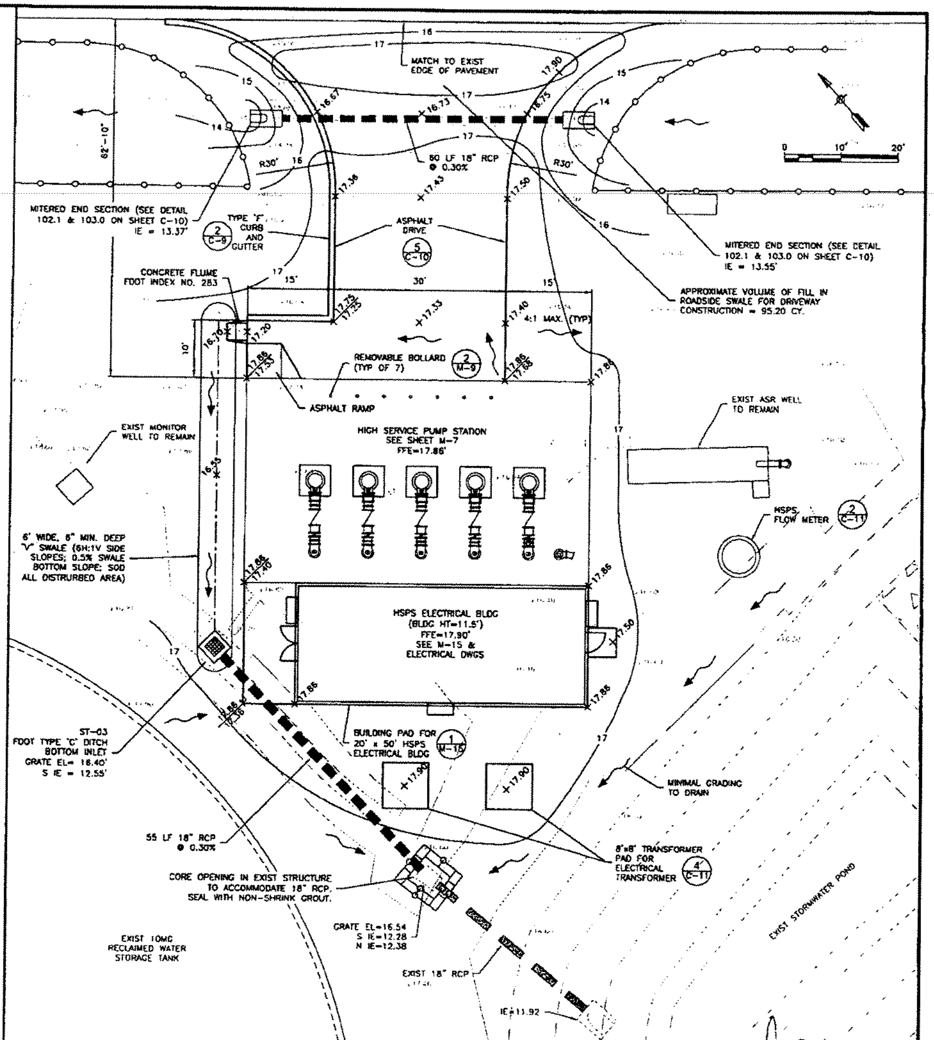
A C-4 SECTION
SCALE: NTS



PROPOSED LAB BUILDING STORMWATER POND

B C-4 SECTION
SCALE: NTS

APPROVED
STATE of FLORIDA
DEPARTMENT of
ENVIRONMENTAL PROTECTION



ENLARGED PLAN VIEW
SCALE: 1"=10'-0"

URS
7650 West Courtney Campbell Causeway
Suite 700
Tampa, Florida 33607
Ph: (813) 286-1711 Fax: (813) 286-6587
Florida Engineering Number: 000002

NO.	BY	DATE	DESCRIPTION

REVISIONS

URS JOB NUMBER 12010046
PM: D. WILCOX
ENG: K. WESTBERRY
DRW: T. SONNENBERG
FILE SAVE DATE: January 24, 2012

MANATEE COUNTY FLORIDA

SECOND 10MG RECLAIMED WATER STORAGE TANK AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY
FOR
MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

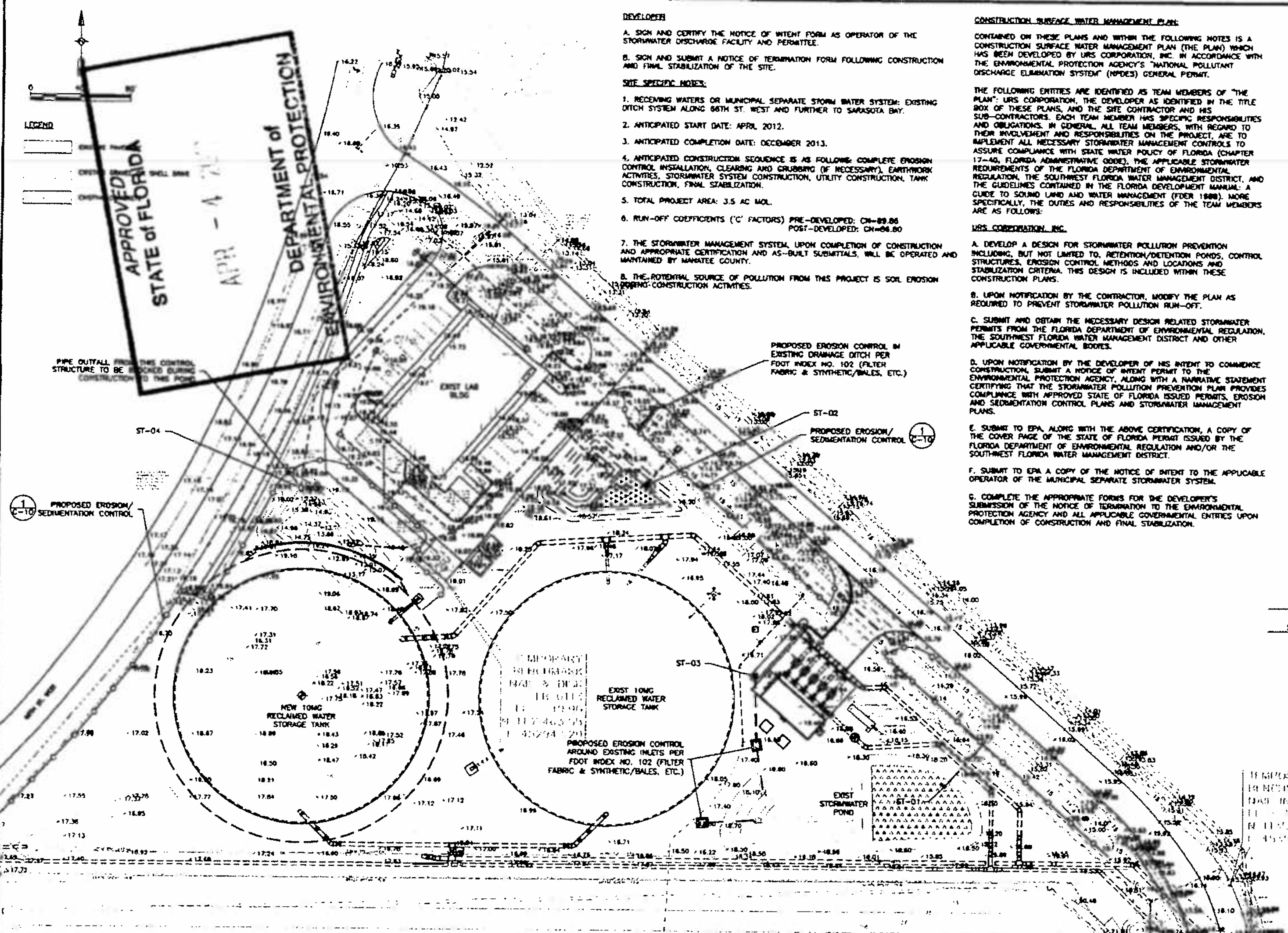
PAVING GRADING AND DRAINAGE ENLARGED PLAN AND SECTIONS

DAVID A. WILCOX
FLORIDA P.E. NO. 34942

PROJECT STATUS
PRELIMINARY
NOT FOR CONSTRUCTION

C-5

VERIFY SCALES: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET ADJUST SCALE ACCORDINGLY



DEVELOPER

A. SIGN AND CERTIFY THE NOTICE OF INTENT FORM AS OPERATOR OF THE STORMWATER DISCHARGE FACILITY AND PERMITTEE.

B. SIGN AND SUBMIT A NOTICE OF TERMINATION FORM FOLLOWING CONSTRUCTION AND FINAL STABILIZATION OF THE SITE.

SITE SPECIFIC NOTES:

1. RECEIVING WATERS OR MUNICIPAL SEPARATE STORM WATER SYSTEM: EXISTING DITCH SYSTEM ALONG 66TH ST. WEST AND FURTHER TO SARASOTA BAY.

2. ANTICIPATED START DATE: APRIL 2012.

3. ANTICIPATED COMPLETION DATE: DECEMBER 2013.

4. ANTICIPATED CONSTRUCTION SEQUENCE IS AS FOLLOWS: COMPLETE EROSION CONTROL INSTALLATION, CLEARING AND GRUBBING (IF NECESSARY), EARTHWORK ACTIVITIES, STORMWATER SYSTEM CONSTRUCTION, UTILITY CONSTRUCTION, TANK CONSTRUCTION, FINAL STABILIZATION.

5. TOTAL PROJECT AREA: 3.5 AC MOL.

6. RUN-OFF COEFFICIENTS ('C' FACTORS) PRE-DEVELOPED: CN=89.86
POST-DEVELOPED: CN=86.80

7. THE STORMWATER MANAGEMENT SYSTEM, UPON COMPLETION OF CONSTRUCTION AND APPROPRIATE CERTIFICATION AND AS-BUILT SUBMITTALS, WILL BE OPERATED AND MAINTAINED BY MANATEE COUNTY.

8. THE POTENTIAL SOURCE OF POLLUTION FROM THIS PROJECT IS SOIL EROSION DURING CONSTRUCTION ACTIVITIES.

CONSTRUCTION SURFACE WATER MANAGEMENT PLAN:

CONTAINED ON THESE PLANS AND WITHIN THE FOLLOWING NOTES IS A CONSTRUCTION SURFACE WATER MANAGEMENT PLAN (THE PLAN) WHICH HAS BEEN DEVELOPED BY URS CORPORATION, INC. IN ACCORDANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY'S "NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM" (NPDES) GENERAL PERMIT.

THE FOLLOWING ENTITIES ARE IDENTIFIED AS TEAM MEMBERS OF "THE PLAN": URS CORPORATION, THE DEVELOPER AS IDENTIFIED IN THE TITLE BOX OF THESE PLANS, AND THE SITE CONTRACTOR AND HIS SUB-CONTRACTORS. EACH TEAM MEMBER HAS SPECIFIC RESPONSIBILITIES AND OBLIGATIONS. IN GENERAL, ALL TEAM MEMBERS, WITH REGARD TO THEIR INVOLVEMENT AND RESPONSIBILITIES ON THE PROJECT, ARE TO IMPLEMENT ALL NECESSARY STORMWATER MANAGEMENT CONTROLS TO ASSURE COMPLIANCE WITH STATE WATER POLICY OF FLORIDA (CHAPTER 17-40, FLORIDA ADMINISTRATIVE CODE), THE APPLICABLE STORMWATER REQUIREMENTS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION, THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT, AND THE GUIDELINES CONTAINED IN THE FLORIDA DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (FDER 1988). MORE SPECIFICALLY, THE DUTIES AND RESPONSIBILITIES OF THE TEAM MEMBERS ARE AS FOLLOWS:

URS CORPORATION, INC.

A. DEVELOP A DESIGN FOR STORMWATER POLLUTION PREVENTION INCLUDING, BUT NOT LIMITED TO, RETENTION/DETENTION PONDS, CONTROL STRUCTURES, EROSION CONTROL METHODS AND LOCATIONS AND STABILIZATION CRITERIA. THIS DESIGN IS INCLUDED WITHIN THESE CONSTRUCTION PLANS.

B. UPON NOTIFICATION BY THE CONTRACTOR, MODIFY THE PLAN AS REQUIRED TO PREVENT STORMWATER POLLUTION RUN-OFF.

C. SUBMIT AND OBTAIN THE NECESSARY DESIGN RELATED STORMWATER PERMITS FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION, THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND OTHER APPLICABLE GOVERNMENTAL BODIES.

D. UPON NOTIFICATION BY THE DEVELOPER OF HIS INTENT TO COMMENCE CONSTRUCTION, SUBMIT A NOTICE OF INTENT PERMIT TO THE ENVIRONMENTAL PROTECTION AGENCY, ALONG WITH A NARRATIVE STATEMENT CERTIFYING THAT THE STORMWATER POLLUTION PREVENTION PLAN PROVIDES COMPLIANCE WITH APPROVED STATE OF FLORIDA ISSUED PERMITS, EROSION AND SEDIMENTATION CONTROL PLANS AND STORMWATER MANAGEMENT PLANS.

E. SUBMIT TO EPA, ALONG WITH THE ABOVE CERTIFICATION, A COPY OF THE COVER PAGE OF THE STATE OF FLORIDA PERMIT ISSUED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION AND/OR THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT.

F. SUBMIT TO EPA A COPY OF THE NOTICE OF INTENT TO THE APPLICABLE OPERATOR OF THE MUNICIPAL SEPARATE STORMWATER SYSTEM.

G. COMPLETE THE APPROPRIATE FORMS FOR THE DEVELOPER'S SUBMISSION OF THE NOTICE OF TERMINATION TO THE ENVIRONMENTAL PROTECTION AGENCY AND ALL APPLICABLE GOVERNMENTAL ENTITIES UPON COMPLETION OF CONSTRUCTION AND FINAL STABILIZATION.

CONTRACTOR

A. DURING CONSTRUCTION, ASSURE COMPLIANCE WITH THE DESIGNED CONSTRUCTION SURFACE WATER MANAGEMENT PLANS PREPARED BY URS CORPORATION.

B. NOTIFY URS CORPORATION, INC. AND THE DEVELOPER IN WRITING OF ANY NON-STORMWATER POLLUTION SOURCES WHICH ARE BEING STORED, OR OTHERWISE USED DURING THE CONSTRUCTION OF THE PROJECT , I.E., FERTILIZERS, FUELS, PESTICIDES, OTHER CHEMICALS. THIS NOTIFICATION SHOULD BE ACCOMPANIED WITH THE CONTRACTOR'S DESIGN AND METHODS TO PREVENT POLLUTION RUN-OFF FROM THESE SOURCES.

C. INSPECT ALL EROSION CONTROL DEVICES (MINIMUM WEEKLY), REPAIR AND/OR REPLACE AS NEEDED.

D. INSPECT ALL STORMWATER POINTS OF DISCHARGE AND NOTIFY URS CORPORATION IN WRITING IF EROSION CONTROL AND STORMWATER MANAGEMENT MEASURES ARE INEFFECTIVE, AND IF REVISION TO THE STORMWATER MANAGEMENT PLAN ARE NEEDED.

E. INITIATE SITE STABILIZATION MEASURES AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED.

F. SUBMIT A CERTIFICATION, UTILIZING YOUR COMPANY LETTERHEAD, TO URS CORPORATION AND TO THE DEVELOPER AS FOLLOWS:

"I CERTIFY UNDER PENALTY OF LAW, THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORMWATER DISCHARGES ASSOCIATED WITH ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION."

CONTRACTOR ____________
ADDRESS ____________
CITY, STATE, ZIP ____________
TELEPHONE NUMBER ____________
DATE ____________
SIGNATURE ____________
NAME & TITLE ____________

THIS CERTIFICATION SHALL BE MADE PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR IS ALSO RESPONSIBLE TO ASSURE THAT ALL SUB-CONTRACTORS SIGN THE ABOVE CERTIFICATION AND SUBMIT SAME TO THE DEVELOPER AND URS CORPORATION, INC.

G. MAINTAIN A COPY OF THE CONSTRUCTION PLANS, WHICH INCLUDE THE CONSTRUCTION SURFACE WATER MANAGEMENT PLANS, ON-SITE.

H. UNDERTAKE ALL REASONABLE MEASURES TO ASSURE THAT SILTED OR OTHERWISE POLLUTED STORMWATER IS NOT ALLOWED TO DISCHARGE FROM THE SITE.

I. USE THE DETENTION PONDS AS SEDIMENTATION BASINS OR CREATE SEDIMENTATION BASINS AS NEEDED.

SIGNATURE	DATE
SIA MOLLANAZAR (PRINT NAME)	DEPUTY DIRECTOR ENGINEERING SERVICES (TITLE)

AUTHORIZED REPRESENTATIVE FOR:
MANATEE COUNTY PROJECT MANAGEMENT

URS
7650 West Courtney Campbell Causeway
Suite 700
Tampa, Florida 33607
Ph: (813) 286-1711 Fax: (813) 286-6587
Florida Engineering Number: 000002

NO.	BY	DATE	DESCRIPTION
			REVISIONS

URS JOB NUMBER 12010046
PM: D. WILCOX
ENG: R. AVALOS
DRW: T. SONNENBERG
FILE SAVE DATE: January 24, 2012

MANATEE COUNTY FLORIDA

SECOND 10MG RECLAIMED WATER STORAGE TANK AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY

FOR
MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

CONSTRUCTION SURFACE WATER MANAGEMENT PLAN

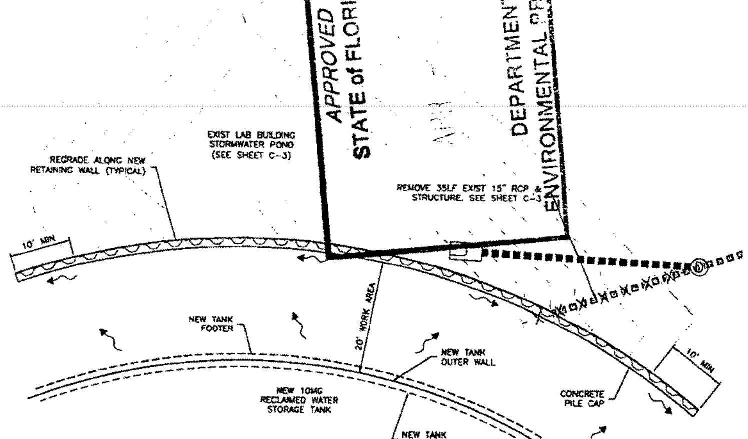
DAVID A. WILCOX
FLORIDA P.E. NO. 34942

PROJECT STATUS
PRELIMINARY
NOT FOR
CONSTRUCTION

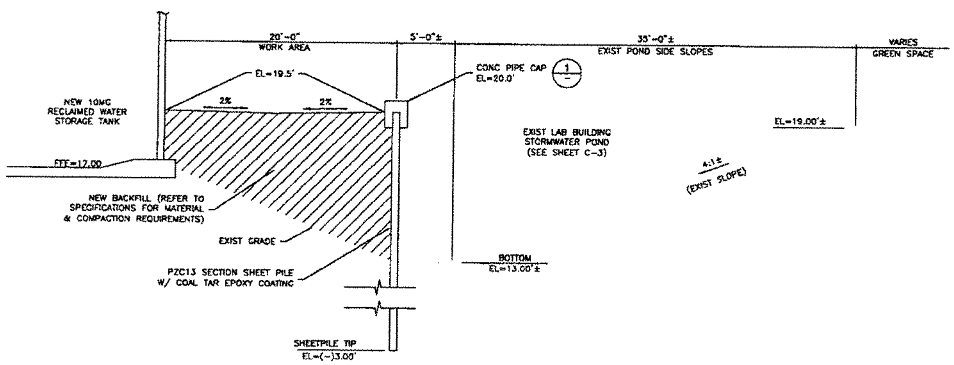
C-6

VERIFY SCALES: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY

APPROVED
STATE of FLORIDA
DEPARTMENT of
ENVIRONMENTAL PROTECTION

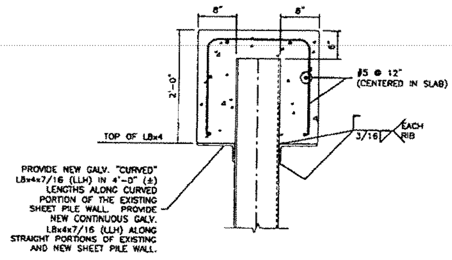


PLAN VIEW



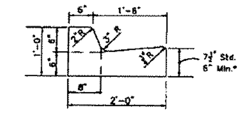
MODIFICATIONS TO EXISTING LAB BUILDING STORMWATER POND

A SECTION
C-4 SCALE: NTS



CONCRETE PILE CAP

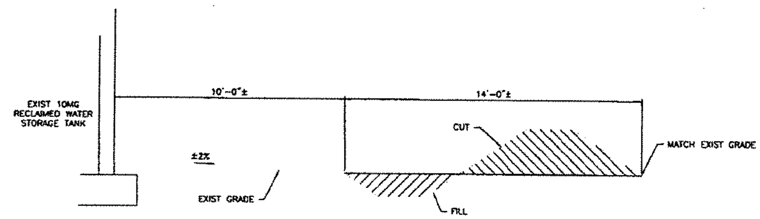
1 DETAIL
SCALE: NTS



* THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

TYPE 'F' CURB & GUTTER

2 DETAIL
SCALE: NTS
(F.D.O.T. INDEX NO. 300)



TYPICAL SWALE REGRADING

B SECTION
C-4 SCALE: NTS

PLOTTED January 24, 2012 3:27 PM PLOTTED BY: TERENCE SONNENBERG
K:\MANATEE PROJECTS\12010046 SWWRF 10MG GST - 2ND WAF17\CADD\C-9 CIVIL DETAILS.DWG

URS
7650 West Courtney Campbell Causeway
Suite 700
Tampa, Florida 33607
Ph: (813) 286-1711 Fax: (813) 286-6587
Florida Engineering Number: 000002

NO.	BY	DATE	DESCRIPTION

REVISIONS

URS JOB NUMBER
12010046
PM: D. WILCOX
ENG: R. AVALOS
DRW: T. SONNENBERG
FILE SAVE DATE:
January 16, 2012

MANATEE COUNTY FLORIDA

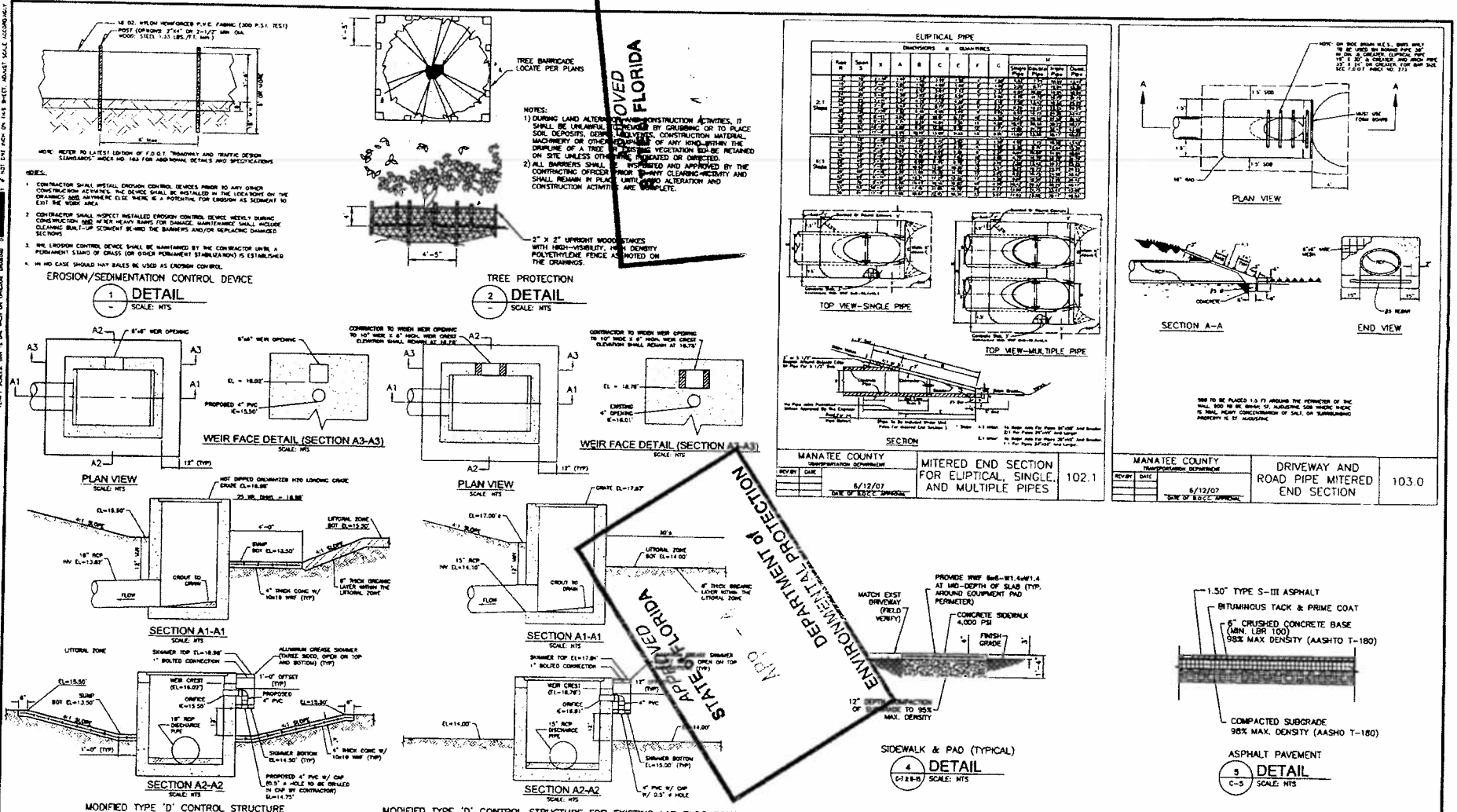
SECOND 10MG RECLAIMED WATER STORAGE TANK AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY
FOR
MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

CIVIL DETAILS

DAVID A. WILCOX
FLORIDA P.E. NO. 34947

PROJECT STATUS
PRELIMINARY
NOT FOR
CONSTRUCTION

C-9



URS
7650 West Courtney Campbell Causeway
Suite 700
Tampa, Florida 33607
Ph: (813) 286-1711 Fax: (813) 286-8567
Florida Engineering Number: 000002

NO.	BY	DATE	DESCRIPTION

REVISIONS

URS JOB NUMBER 12010046
PIC: D. WILCOX
ENG: R. AVALOS
DRW: T. SOMMENBERG
FILE SAVE DATE: January 24, 2012

SECOND 10MG RECLAIMED WATER STORAGE TANK AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY
FOR
MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

CIVIL DETAILS

PROJECT STATUS
PRELIMINARY
NOT FOR CONSTRUCTION

C-10

Operation and Maintenance Instructions
for the
Manatee County Southwest Water Reclamation Facility
Second 10 MG Reclaimed Water Tank
Surface Water Management System
Permit No.: 41-0279235-002

The following normal maintenance items, including cleaning or replacement of the various elements of the system, will be required for the surface water management system (SWMS) to continue to operate as designed.

General Maintenance

1. All SWMS pipes, culverts, inlets, catch basins, manholes, flumes, pond inflow and outfall structures (including oil skimmers), and discharge pipes shall be inspected on a regular basis (monthly or quarterly) and following significant storm events. They should be maintained by removing built-up debris and vegetation and repairing deteriorating structures.

2. Chemicals, oils, greases or similar wastes are NOT to be disposed of in the SWMS or through storm sewers. Treatment ponds are designed to treat normal road, parking lot, roof and yard runoff only. Some chemicals may interfere with a treatment pond's functions or kill vegetation and wildlife. Dispose of these potentially dangerous materials properly by taking them to recycling facilities or to collection locations sponsored by many local governments.

   Do not dispose of grass clippings in a SWMS. Grass clippings pose problems by smothering desirable vegetation, clogging outfall structures and, when they decompose, may cause unsightly algae blooms that can kill fish.

3. Accumulated pond sediments may contain heavy metals such as lead, cadmium and mercury, as well as other potentially hazardous materials. Therefore, sediments removed from SWMS inlets, pipes and ponds shall be disposed of at an approved facility (check with your county Solid Waste Department or the Florida Department of Environmental Protection for disposal facilities approved to accept treatment pond sediment).

4. Repair and/or maintenance activities shall not cause erosion or siltation to adjacent or off-site areas.

5. Alterations (filling, enlarging, etc.) of any part of the SWMS are not permitted without prior approval from the Department and all other applicable governing agencies.

Three Wet Detention Ponds

1. The side slopes if the detention ponds shall be inspected for bare spots, damage or erosion. Bare areas shall be sodded or seeded to replace the grass cover. In the case of erosion, replace the missing soil and bring the affected areas back to grade.

2. Maintain, rather than remove, wetland vegetation that becomes established in the littoral zones. Do not cut, mow, use herbicide or use grass carp to remove any of the vegetation in the littoral zone.

3. On a quarterly basis and following significant storm events, inspect the area in front of the outfall control structures and remove built-up sediments, vegetation, and debris that impair the operation of the structures.

4. When littoral zone vegetation and sediment accumulate to such an extent that water depth decreases, the littoral zones may need to be re-graded and re-vegetated. When it appears that any of the three ponds has reached this state, contact the Department prior top large scale maintenance.

5. Notify the Department within 24 hours of observation of sinkhole development within any of the part of the SWMS for the facility. Reference Permit No. 41-0221256-002.

ATTACHMENT #5
SITE INSPECTION SIGN-IN RECORD
(6 Total Pages)

ATTENDANCE RECORD

MANDATORY

SITE INSPECTION

Title: 2nd 10 MG RECLAIMED WATER STORAGE TANK AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY PROJECT NO. 6036083

Location: MANATEE COUNTY SOUTHWEST WATER RECLAMATION FACILITY 5101 65TH STREET WEST, BRADENTON, 34210

Date / Time: March 20, 2012 at 10:30 AM

IFB/RFP#: IFB #12-1144-OV

TELEPHONE NO.	NAME/ TITLE	EMAIL ADDRESS	FIRM
941-708-7527	Olga Valcich, Contract Specialist		Manatee County Purchasing
941-708-7333	Anthony Benitez, Project Engineer II		Manatee County PW, Project Mgmt. Division
904-268-0099	Donnie Bolloit	dbelloit@w	WPC
352 332 1200	KURT LINGBARGER	[illegible]@PRECONTANKS.com	PRECON
407-877-5903	MARK KELLY		ENCORE CONSTRUCTION
407-952-2294	JEFF GORMAN		GARNEY CONSTRUCTION
941-377-8555	Eric Maczk		Cardinal
813-425-1443	Leonard Carlton		PCL Construction
941-723-1611	Russ DesErmia		Westra Const.
813-458-8907	BRIAN VAN [illegible]		[illegible]
727-445-7544	Jeremiah Jones	Kevin@brandesengineering.com	Brandes
813-287-0709	DAVE HARTWIG	DHARTWIG3@VERIZON.NET	CARTER+VERPLANCK
561-845-1233	Tom Clark		Florida Design Contractors

Site Inspection

TELEPHONE NO.	NAME/ TITLE	EMAIL ADDRESS	FIRM
305-325-1930	Duane Armstrong Sr. PM		Poole + Kent Company
813-636-2146	Rebecca Avalos		URS
813-636-2198	David Wilcox		URS.
813-288 0068	Chris High Project Eng Intern		Wharton-Smith
352-372-3436	BILL BARRIO / P.M.		CROM
352 262 4136	Jim Worwick, VP		CROM
	Tom Birk		MCG.
	Anthony Benitez		MCG - PW
	Chuck Froman		MCG-Utilities
	Scott Pevy		MCG - PW

SITE INSPECTION

Title: 2ND 10 MG RECLAIMED WATER STORAGE TANKS AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY (Project No. 6036083)

Location: 5101 65th Street West, Bradenton, FL 34210

IFB #: IFB #12-1144-OV

NAME/PRINT	SIGNATURE	FIRM
Jason Bockwalter	J. Bockwalter	RJ Sullivan Corp 954-975-0388 bidding@rjsullivancorp.com
Michele Campbell	Michele Campbell	RTD Construction INC 813-783-9119 bids@rtdconstruction.com

MANATEE COUNTY
2012 MAR 27 AM 8 30
PURCHASING

SITE INSPECTION

Title: 2ND 10 MG RECLAIMED WATER STORAGE TANKS AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY (Project No. 6036083)

Location: 5101 65th Street West, Bradenton, FL 34210

IFB #: IFB #12-1144-OV

DATE	Firm	Phone #	Email Address
3/27	VOGEL BROS	8636465078	JJULIANO@VOGELBLDG.COM

MANATEE COUNTY
2012 MAR 29 AM 10 35
PURCHASING

SITE INSPECTION

Title: 2ND 10 MG RECLAIMED WATER STORAGE TANKS AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY (Project No. 6036083)

Location: 5101 65th Street West, Bradenton, FL 34210

IFB #: IFB #12-1144-OV

DATE	Firm	Phone #	Email Address
4/3/12	McKenzie Construction + Site Development	813-438-2615	DAN.FERNANDEZ@McKenzieSiteDevelopment.com

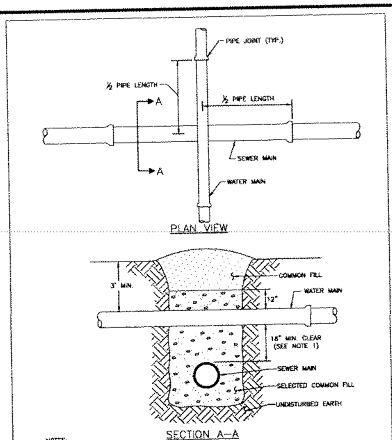
SITE INSPECTION

Title: 2ND 10 MG RECLAIMED WATER STORAGE TANKS AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY (Project No. 6036083)

Location: 5101 65th Street West, Bradenton, FL 34210

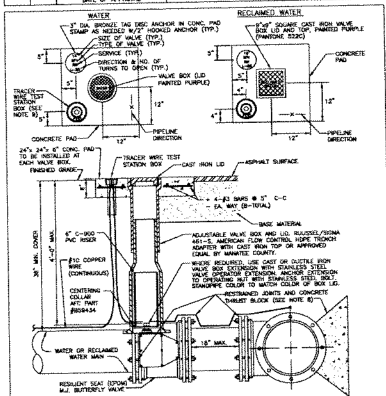
IFB #: IFB #12-1144-OV

DATE	Firm	Phone #	Email Address
4-2-12	ORTEGA INDUSTRIAL	904 468-2181	TLINDO@ORTEGAINDUSTRIAL.COM



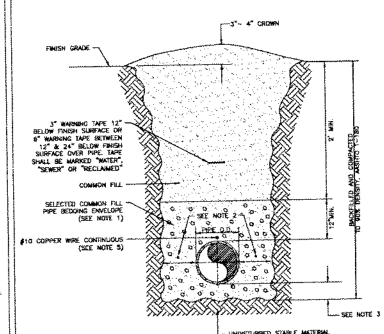
NOTES:
1. CLEARANCE MAY BE REDUCED TO 6" FOR GRAVITY SEWER WHERE WATER MAIN IS DUCTILE IRON OR 3" FOR FORCE MAIN WHERE FORCE MAIN IS ENCASED A MINIMUM OF 10' EACH SIDE OF CROSSING.
2. WHERE NO ENCASEMENT IS REQUIRED, PIPE SECTIONS SHALL BE FULL-LENGTH AND SHALL BE ADJUSTED HORIZONTALLY SO THAT THE CROSSING IS AT EACH PIPE SECTION'S MIDPOINT REGARDLESS OF THE VERTICAL CLEARANCE.
3. REFER TO THE JACK & BORE CROSSING DETAIL FOR CASING AND SPACER REQUIREMENTS.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT — MAY 10, 2011 (DATE OF APPROVAL) — TYPICAL NEW WATER & SEWER LINE CROSSING — UG-2 — PAGE 102

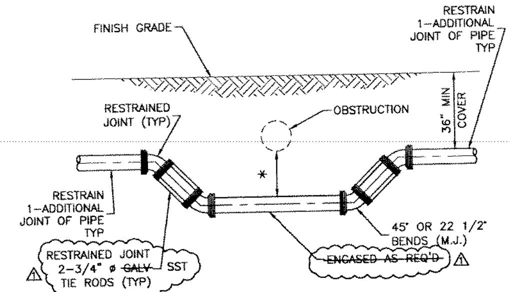


MANATEE COUNTY PUBLIC WORKS DEPARTMENT — MAY 10, 2011 (DATE OF APPROVAL) — BUTTERFLY VALVE, BOX, LID AND TAG — UW-3 — PAGE 121

NOTES:
1. USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
2. PROVIDE ADEQUATE CLEARANCE TO PLACE AND COMPACT STAGE 1 BEDDING MATERIAL IN TRENCH AREA BELOW PIPE SPRINGLINE. PIPE EMBEDMENT MUST BE COMPACTED OUT TO THE TRENCH WALL OR 2.5 TIMES THE PIPE OD, WHICHEVER IS LESS.
3. TYPICALLY 4" TO 6".
4. PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
5. TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.



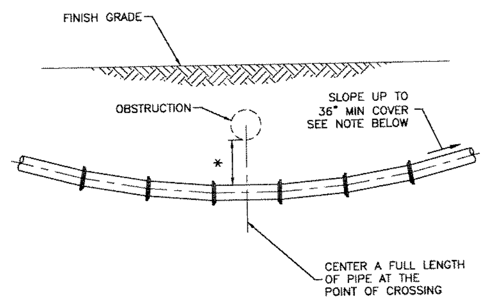
MANATEE COUNTY PUBLIC WORKS DEPARTMENT — MAY 10, 2011 (DATE OF APPROVAL) — TRENCH WITH UNIMPROVED SURFACE TYPE A-1 PIPE BEDDING — UG-11 — PAGE 111



SPECIAL UTILITY CROSSING - FITTING TYPE
NTS

* 18" MIN CLEARANCE REQUIRED FOR POTABLE WATER MAINS, RECLAIMED WATER MAINS, SANITARY GRAVITY SEWER PIPING, SANITARY FORCE MAINS, AND STORM WATER PIPES.

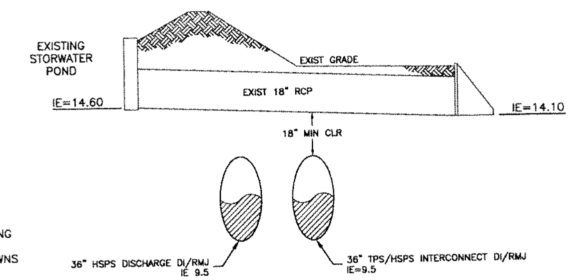
THE "FITTING TYPE" DETAIL SHOULD ONLY BE USED WHEN "DEFLECTION TYPE" DETAIL IS NOT POSSIBLE.



STANDARD UTILITY CROSSING - DEFLECTION TYPE
NTS

1. THE DEFLECTION TYPE CROSSING SHALL BE USED WHERE EVER POSSIBLE.
2. CONSTRUCT STANDARD CROSSING USING 75% OF MANUFACTURERS MAXIMUM JOINT DEFLECTION (MAX).
3. TIE RODS SHALL BE STAINLESS STEEL.
4. TIE RODS MAY BE OMITTED WHEN OTHER APPROVED METHODS OF RESTRAINING ARE UTILIZED.
5. CONTRACTOR SHALL COORDINATE EXISTING PIPE RELOCATIONS AND SHUT DOWNS WITH PLANT PERSONNEL.

UTILITY CROSSING
DETAIL 1/– SCALE: NTS



STORMWATER PIPE CROSSING
DETAIL 2/– SCALE: NTS

URS
7650 West Courtney Campell Causeway
Suite 700
Tampa, Florida 33607
Ph: (813) 286-1711 Fax: (813) 286-6587
Florida Engineering Number: 000002

NO.	BY	DATE	DESCRIPTION
1	RMA	3/29/12	ADDENDUM NO. 1

REVISIONS

URS JOB NUMBER 12010046
PM: D. WILCOX
ENG: R. AVALOS
DRW: T. SONNENBERG
FILE SAVE DATE: March 23, 2012

MANATEE COUNTY FLORIDA

SECOND 10MG RECLAIMED WATER STORAGE TANK AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY

FOR
MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

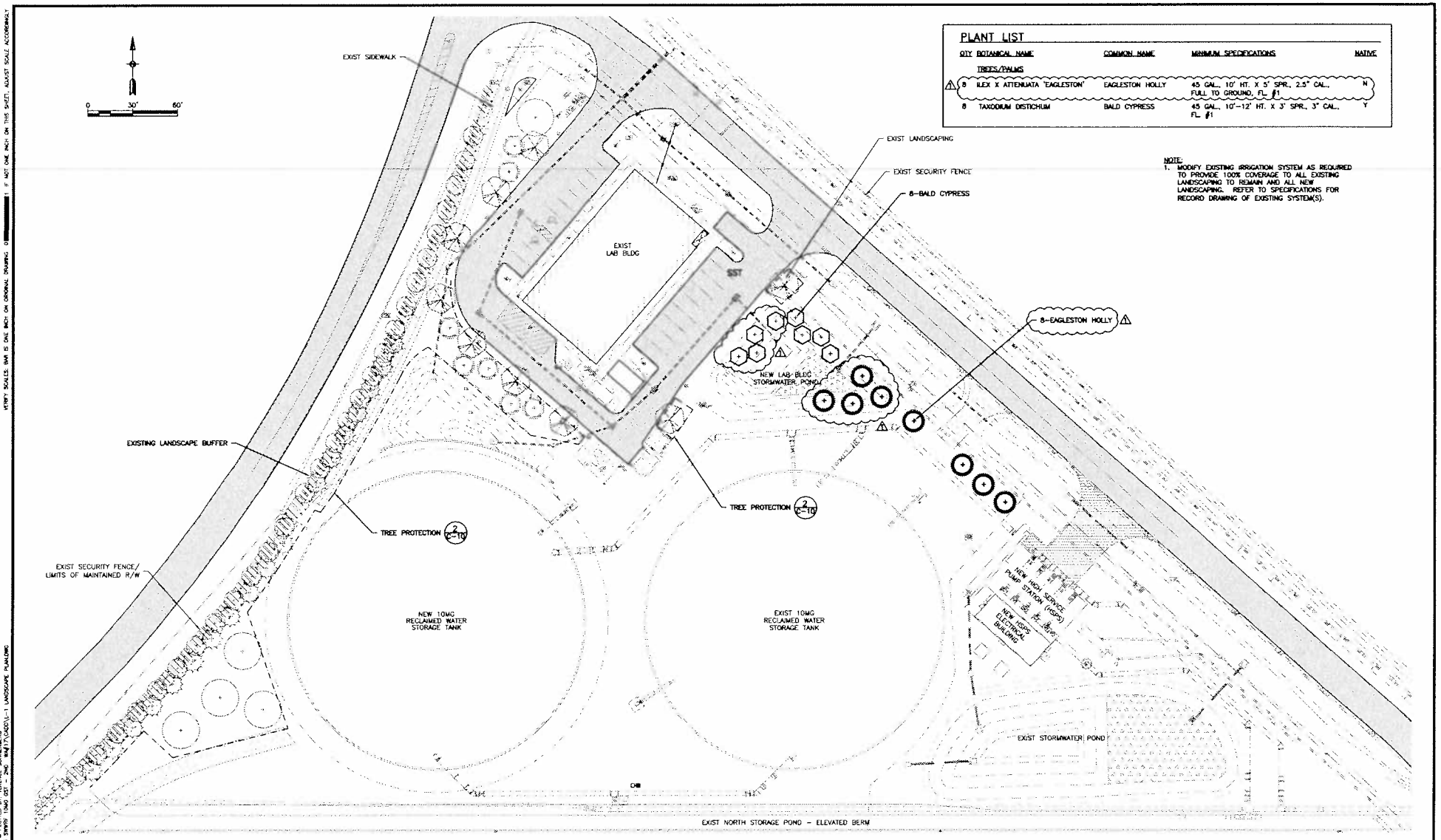
CIVIL DETAILS

DAVID A. WILCOX
FLORIDA P.E. NO. 34942

PROJECT STATUS
BID SET
FEBRUARY 2012

C-12

22X34



PLANT LIST

QTY	BOTANICAL NAME	COMMON NAME	MINIMUM SPECIFICATIONS	NATIVE
	TREES/PALMS			
⚠ 8	ILEX X ATTENUATA 'EAGLESTON'	EAGLESTON HOLLY	45 GAL., 10' HT. X 5' SPR., 2.5" CAL., FULL TO GROUND, FL. #1	N
8	TAXODIUM DISTICHUM	BALD CYPRESS	45 GAL., 10'-12' HT. X 3' SPR., 3" CAL., FL #1	Y

NOTE:
1. MODIFY EXISTING IRRIGATION SYSTEM AS REQUIRED TO PROVIDE 100% COVERAGE TO ALL EXISTING LANDSCAPING TO REMAIN AND ALL NEW LANDSCAPING. REFER TO SPECIFICATIONS FOR RECORD DRAWING OF EXISTING SYSTEM(S).

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY
VERIFY SCALES: BAR IS ONE INCH ON ORIGINAL DRAWING
PLOTTED: March 23, 2012 3:18 PM PLOTTED BY: TERENCE SONNENBERG
K:\MANATEE PROJECTS\12010046 SWWTF 10MG GST - 2ND WAY\CADD\L-1 LANDSCAPE PLAN.DWG

URS
7650 West Courtney Campell Causeway
Suite 700
Tampa, Florida 33607
Ph: (813) 286-1711 Fax: (813) 286-8587
Florida Engineering Number: 000002

NO.	BY	DATE	DESCRIPTION
⚠ 1	RMA	3/29/12	ADDENDUM NO. 1

REVISIONS

URS JOB NUMBER 12010046
PM: D. WILCOX
ENG: R. AVALOS
DRW: T. SONNENBERG
FILE SAVE DATE: March 23, 2012

SECOND 10MG RECLAIMED WATER STORAGE TANK AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY
FOR
MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

LANDSCAPE PLAN

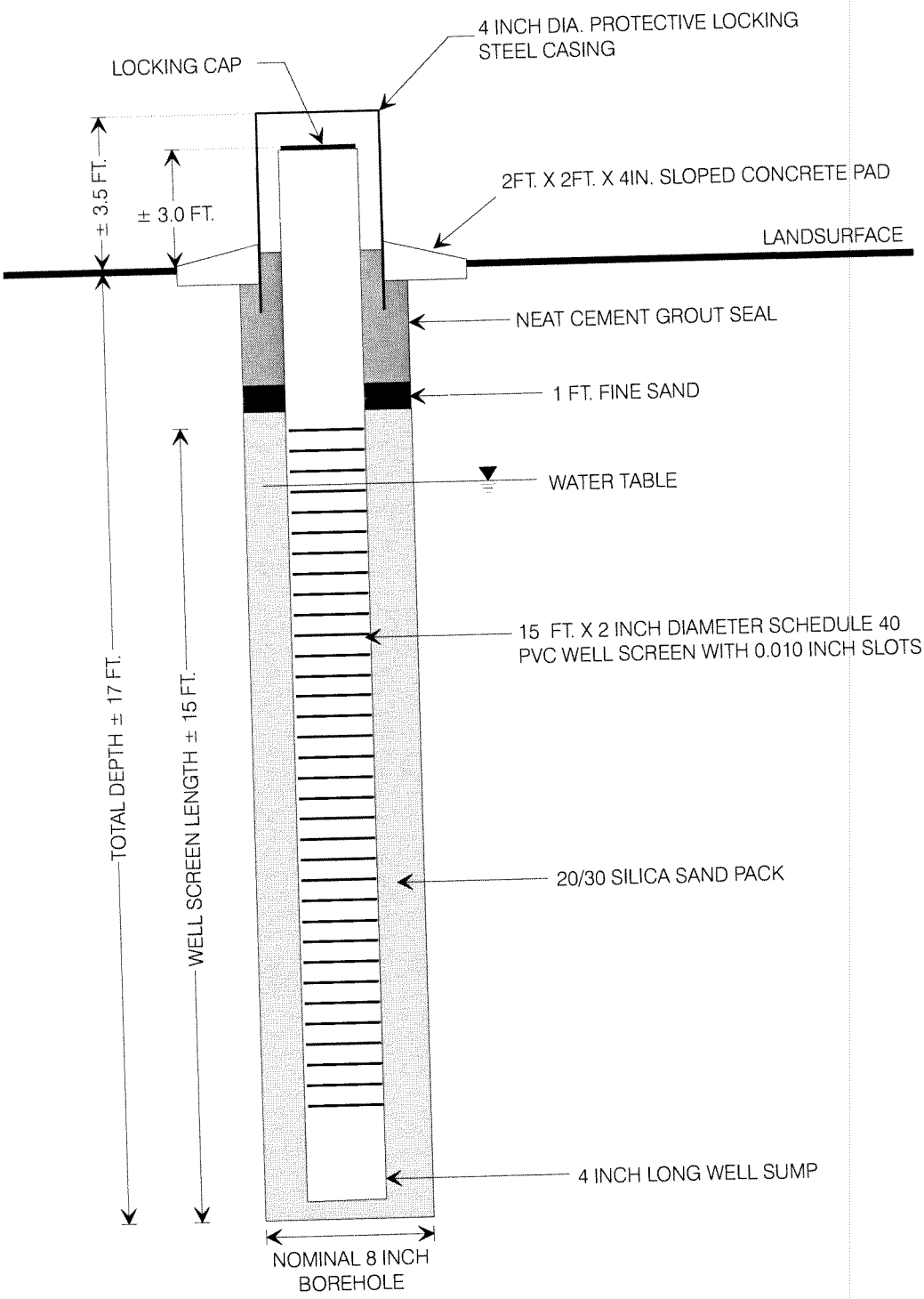
PAUL KURTZ
FLORIDA L.A. NO. 1716

PROJECT STATUS
BID SET
FEBRUARY 2012

L-1

22 X 34

✓



MANATEE COUNTY
SOUTHWEST WATER RECLAMATION
MONITORING WELL INSTALLATION REPORT

SURFICIAL AQUIFER MONITOR WELL CONSTRUCTION (MW-B)

DATE	REVISED

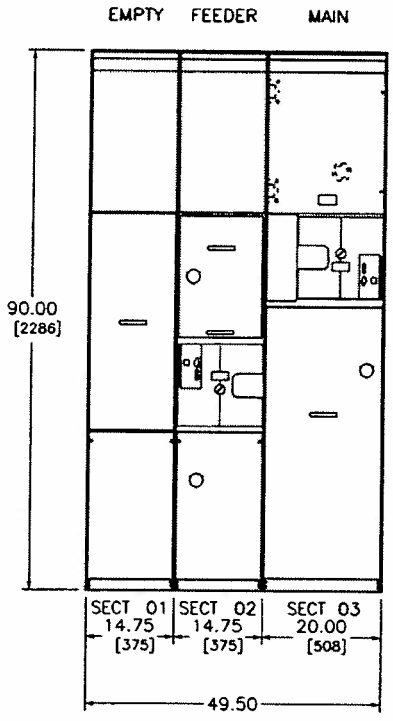
PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater And Environmental Engineering Services
10014 N. Dale Mabry Hwy, Suite 205
Tampa, Florida 33618
(813) 968-5882

DATE: JUNE 2010

FIGURE: 2

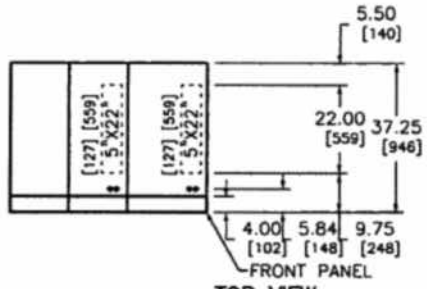
REV	DESCRIPTION	BY	DATE
-	----	--	--/--/--



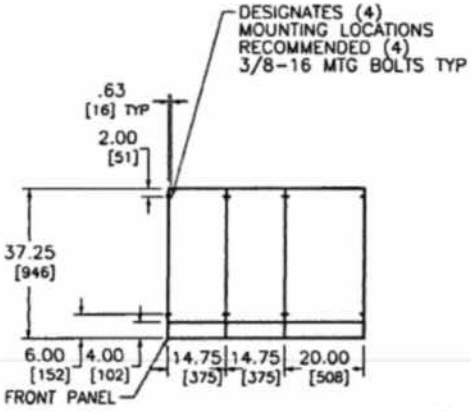
ENGLISH DIMENSIONS: INCHES

JOB NAME:	SW REGIONAL WTP SUB 11	EQUIPMENT DESIGNATION:	
JOB LOCATION:	BRADENTON FL	EQUIPMENT TYPE:	METAL ENCLOSED SWITCHGEAR
DRAWN BY:	(02C)	DRAWING TYPE:	ELEVATION
ENGR:	----		
DATE:	NOV 15, 2011		
DRAWING STATUS:	QUOTE NOT FOR CONSTRUCTION	DWG # F50870452-1	PG 1 OF 1 REV -

REV	DESCRIPTION	BY	DATE
-	----	--	--/--/--



TOP VIEW



FLOOR PLAN

ENGLISH DIMENSIONS: INCHES

JOB NAME:	SW REGIONAL WTP SUB 11	EQUIPMENT DESIGNATION	
JOB LOCATION:	BRADENTON FL	EQUIPMENT TYPE:	METAL ENCLOSED SWITCHGEAR
DRAWN BY:	(QZC)	DRAWING TYPE:	TOP VIEW/FLOOR PLAN
ENGR:	----		
DATE:	NOV 15, 2011		
DRAWING STATUS: QUOTE	NOT FOR CONSTRUCTION	DWG# F30870452-2	PG 1 OF 3 REV -

REV	DESCRIPTION	BY	DATE
-	----	--	--/--/--

GENERAL NOTES:

PRODUCT DESCRIPTION AND RATINGS:

4160 VOLTS, 3 PHASE, 4 WIRE WYE SOLIDLY GROUNDED
5.0 kV MAXIMUM VOLTAGE RATING
60 kV BIL, 60 HERTZ FREQUENCY
CONTROL POWER NOT REQUIRED

BUS SYSTEM DATA:

600A COPPER, TIN PLATED MAIN BUS
EPOXY BUS SUPPORTS
BARE COPPER GROUND BUS
40 kA Asym (25 kA Sym) MAIN BUS BRACING

ENCLOSURE DATA:

TYPE 1 INDOOR CONSTRUCTION
CATEGORY "B" ENCLOSURE
ANSI #49 FINISH
FRONT ACCESS ONLY
PADLOCK PROVISIONS
TOP CABLE ENTRY: ENTRY & EXIT THRU TOP TO BE PUNCHED DURING INSTALLATION IN GENERAL AREA SHOWN ON TOP VIEW, IF APPLICABLE. RECOMMENDED POWER CABLE ENTRY AREA, 5" X 22" (127 X 559) AS SHOWN ON TOP VIEW.
CONTROL CONDUIT KNOCKOUTS, 1.125" (29) DIA. (2) PLACES AS SHOWN ON TOP VIEW.

HANDLING:

SWITCHGEAR SECTIONS ARE FURNISHED WITH LIFTING ANGLES AND ARE SHIPPED ON SKIDS. ROLLERS OR FORKLIFT SHALL ONLY BE USED WITH SKID IN PLACE.
APPROXIMATE WEIGHT: 1520 LBS 691 KG
SHIPPING SPLIT 1 WEIGHT: 1520 LBS 691 KG

CODE STANDARDS:

UL LABEL

PRODUCT INFORMATION:

INSTRUCTION BULLETIN:

OPTIONS/ACCESSORIES:

LIST OF MISC. ACCESSORIES:

1 SET OF CERTIFIED TEST REPORTS

LIST OF MISC. STRUCTURE OPTIONS:

TOUCH-UP PAINT
INFRARED VIEWING WINDOW - SEE FRONT ELEVATION FOR LOCATION

LIST OF MISC. GENERAL OPTIONS:

SPECIAL FEATURES-(OVERALL DIMENSIONS ARE SUBJECT TO CHANGE.)

SECTION N° - 1

1 - Bus transition to existing HVLcc

JOB NAME:	SW REGIONAL WTP SUB 11	EQUIPMENT DESIGNATION:	
JOB LOCATION:	BRADENTON FL	EQUIPMENT TYPE:	METAL ENCLOSED SWITCHGEAR
DRAWN BY:	(Q2C)	DRAWING TYPE:	GENERAL NOTES
ENGR:	----		
DATE:	NOV 15, 2011		
DRAWING STATUS:	QUOTE NOT FOR CONSTRUCTION	DWG# F30870452-3	PG 1 OF 1 REV -

REV	DESCRIPTION	BY	DATE
-	----	--	--/--/--

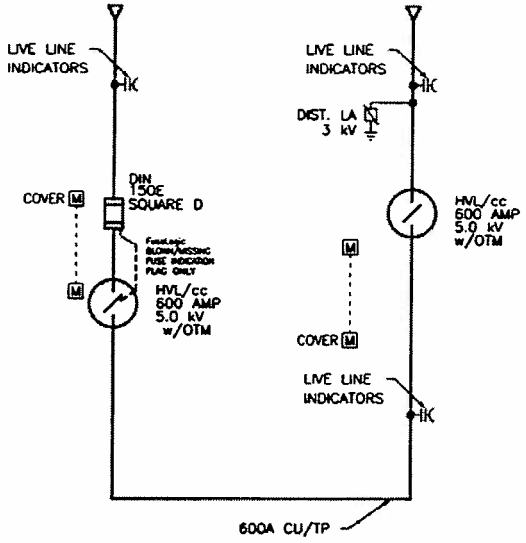
EMPTY SECTION
C-UL LABEL

FEEDER SECTION
C-UL LABEL

COMPRESSION LUGS
SUITABLE FOR TWO
250 KCMIL CABLE(S) /PH
TOP OUTGOING

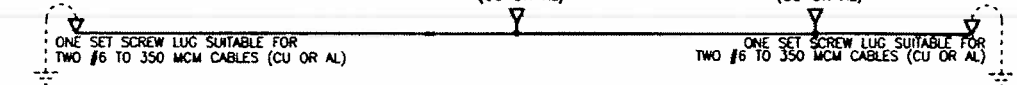
MAIN SECTION
C-UL LABEL

COMPRESSION LUGS
SUITABLE FOR TWO
250 KCMIL CABLE(S) /PH
TOP INCOMING



TWO SET SCREW LUG
SUITABLE FOR (2)
#6 - 350 KCMIL CABLES
(CU OR AL)

TWO SET SCREW LUG
SUITABLE FOR (2)
#6 - 350 KCMIL CABLES
(CU OR AL)



CUSTOMER GROUND | SECT 1 | SECT 2 | SECT 3 | CUSTOMER GROUND

JOB NAME:	SW REGIONAL WTP SUB 11	EQUIPMENT DESIGNATION:	
JOB LOCATION:	BRADENTON FL	EQUIPMENT TYPE:	METAL ENCLOSED SWITCHGEAR
DRAWN BY:	(DZC)	DRAWING TYPE:	ONE LINE
ENGR:	----		
DATE:	NOV 15, 2011		
DRAWING STATUS: QUOTE	NOT FOR CONSTRUCTION	DWG# 9300870452-1	PG 1 OF 1 REV -

SECTION 16430

SWITCHGEAR (600 VOLT AND LESS)

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM A 167	(1999; R 2009) Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip
ASTM A 780/A 780M	(2001; R 2006) Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings
ASTM D 1535	(2008) Specifying Color by the Munsell System
ASTM D 709	(2001; R 2007) Laminated Thermosetting Materials

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE C2	(2007; Errata 2006 & 2007; INT 44-56 2007; INT 47, 49, 50, 52-56 2008; INT 57, 58, 51, 48, 59 2009) National Electrical Safety Code
IEEE C37.20.1	(2002; Addenda A 2005; Addenda B 2006; R 2007) Standard for Metal-Enclosed Low-Voltage Power Circuit-Breaker Switchgear
IEEE C37.90.1	(2002; Errata 2003; Errata 2004) Surge Withstand Capability (SWC) Tests for Relays and Relay Systems Associated with Electric Power Apparatus
IEEE C57.12.29	(2005) Pad-Mounted Equipment - Enclosure Integrity for Coastal Environments
IEEE C57.13	(2008) Standard Requirements for Instrument Transformers
IEEE Std 100	(2000) The Authoritative Dictionary of IEEE Standards Terms

IEEE Std 81	(1983) Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Ground System (Part 1)Normal Measurements

INTERNATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)

NETA ATS	(2009) Standard for Acceptance Testing Specifications for Electrical Power Equipment and Systems

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA C12.1	(2008) Electric Meters; Code for Electricity Metering
NEMA ICS 6	(1993; R 2006) Standard for Industrial Controls and Systems Enclosures
NEMA LI 1	(1998) Industrial Laminated Thermosetting Products
NEMA ST 20	(1992; R 1997) Standard for Dry-Type Transformers for General Applications

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70	(2008; AMD 1 2008) National Electrical Code - 2008 Edition

UNDERWRITERS LABORATORIES (UL)

UL 1558	(1999; Rev thru Jun 2009) Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear
UL 467	(2007) Standard for Grounding and Bonding Equipment

1.2 DEFINITIONS

Unless otherwise specified or indicated, electrical and electronics terms used in these specifications, and on the drawings, shall be as defined in IEEE Std 100.

1.3 QUALITY ASSURANCE

A. Regulatory Requirements

In each of the publications referred to herein, consider the advisory provisions to be mandatory, as though the word, "shall" had been substituted for "should" wherever it appears. Interpret references in these publications to the "authority having jurisdiction," or words of similar meaning, to mean the County. Equipment, materials, installation, and workmanship shall be in accordance with the mandatory and advisory provisions of NFPA 70 unless more stringent requirements are specified or indicated.

B. Standard Products

Provide materials and equipment that are products of manufacturers regularly engaged in the production of such products which are of equal material, design and workmanship. Products shall have been in satisfactory commercial or industrial use for 2 years prior to bid opening. The 2-year period shall include applications of equipment and materials under similar circumstances and of similar size. The product shall have been on sale on the commercial market through advertisements, manufacturers' catalogs, or brochures during the 2-year period. Where two or more items of the same class of equipment are required, these items shall be products of a single manufacturer; however, the component parts of the item need not be the products of the same manufacturer unless stated in this section.

C. Alternative Qualifications

Products having less than a 2-year field service record will be acceptable if a certified record of satisfactory field operation for not less than 6000 hours, exclusive of the manufacturers' factory or laboratory tests, is furnished.

D. Material and Equipment Manufacturing Date

Products manufactured more than 3 years prior to date of delivery to site shall not be used, unless specified otherwise.

1.4 MAINTENANCE

A. Switchgear Operation and Maintenance Data

Submit Operation and Maintenance Manuals in accordance with Section 01340.

B. Assembled Operation and Maintenance Manuals

Manuals shall be assembled and bound securely in durable, hard covered, water resistant binders. The manuals shall be assembled and indexed in the following order with a table of contents. The contents of the assembled operation and maintenance manuals shall be as follows:

1. Manufacturer's O&M information required by the paragraph entitled "Operation and Maintenance Data".

2. Catalog data required by the paragraph entitled, "Product Data".

3. Drawings required by the paragraph entitled, "Shop Drawings".

4. Prices for spare parts and supply list.

5. Design test reports

6. Production test reports

1.5 WARRANTY

The equipment items shall be supported by service organizations which are reasonably convenient to the equipment installation in order to render satisfactory service to the equipment on a regular and emergency basis during the warranty period of the contract.

1.6 PROTECTIVE DEVICE COORDINATION

Include manufacturer's published Time-Current Curves (TCC) on 11 x 17 logarithmic paper. Submit TCCs that depict each protective device between (and including) the medium voltage cutouts supplying the building and the largest circuit protector in each panel. TCCs shall manufacturer specific curves of each fuse, relay, circuit breaker, transformer and conductors. Where a unique path is split between multiple TCCs provide overlap of the protective devices so that selectivity of both upstream and downstream devices will be indicated. Include a table of setpoints used in creating TCCs for each device represented in the TCCs including CT ratios, where applicable.

PART 2 PRODUCTS

2.1 SWITCHGEAR

IEEE C37.20.1 and UL 1558.

A. Ratings

The voltage rating of the switchgear shall be 480Y/277 volts AC, 4-wire 3 phase. The continuous current rating of the main bus shall be as indicated. The short-circuit current rating shall be as indicated. The switchgear shall be UL listed and labeled as service entrance equipment.

B. Construction

Switchgear shall consist of vertical sections bolted together to form a rigid assembly and shall be front and rear aligned. All circuit breakers shall be front accessible. Compartmentalized switchgear shall have vertical insulating barriers between the front device section, the main bus section, and the cable compartment with full front to rear vertical insulating barriers between adjacent sections. Where indicated, "space for future" or "space" shall mean to include bus, device supports, and connections. Provide insulating barriers in accordance with NEMA LI 1, Type GPO-3, 0.25 inch minimum thickness. Apply moisture resistant coating to all rough-cut edges of barriers.

1. Enclosure

The switchgear enclosure shall be NEMA Type 12. Enclosure shall be bolted together with removable bolt-on side and rear covers, and sloping roof downward toward rear. Front doors shall be provided with stainless steel padlockable vault handles with a three point catch. Bases, frames and channels of enclosure shall be corrosion resistant and shall be fabricated of ASTM A 167 Type 304 or 304L

stainless steel. Base shall include any part of enclosure that is within 3 inches of concrete pad. Paint enclosure, including bases, ASTM D 1535 light gray No. 61 or No. 49. Paint coating system shall comply with IEEE C57.12.29 for stainless steel.

2. Bus Bar

   Bus bars shall be copper with silver-plated contact surfaces. Plating shall be a minimum of 0.0002 inch thick. Make bus connections and joints with hardened steel bolts. The through-bus shall be rated at the full ampacity of the main throughout the switchboard. Provide minimum one-quarter by 2 inch copper ground bus secured to each vertical section along the entire length of the switchgear. The neutral bus shall be rated 100 percent of the main bus continuous current rating.

3. Main Section

   The main sections shall consist of an individually mounted drawout insulated-case circuit breaker.

4. Distribution Sections

   The distribution sections shall consist of individually mounted, drawout, insulated-case circuit breakers as indicated.

5. Auxiliary Sections

   Auxiliary sections shall consist of indicated instruments, metering equipment, control equipment, and current transformer compartments as indicated.

6. Handles

   Handles for individually mounted devices shall be of the same design and method of external operation. Label handles prominently to indicate device ampere rating, color coded for device type. Identify ON-OFF indication by handle position and by prominent marking.

C. Protective Device

   Provide main and branch protective devices as indicated on drawings.

1. Circuit Breakers

   UL listed, 100 percent rated, drawout, manually operated, low voltage, insulated-case circuit breaker, with a short-circuit current rating as indicated. Breaker frame size shall be as indicated.

D. Drawout Breakers

   Equip drawout breakers with disconnecting contacts, wheels, and interlocks for drawout application. The main, auxiliary, and control disconnecting contacts shall be silver-plated, multifinger, positive pressure, self-aligning type. Each drawout breaker shall be provided with four-position operation. Each position shall be clearly identified by an indicator on the circuit breaker front panel.

1. Connected Position: Primary and secondary contacts are fully engaged. Breaker must be tripped before racking into or out of position.

2. Test Position: Primary contacts are disconnected but secondary contacts remain fully engaged. Position shall allow complete test and operation of the breaker without energizing the primary circuit.

3. Disconnected Position: Primary and secondary contacts are disconnected.

4. Withdrawn (Removed) Position: Places breaker completely out of compartment, ready for removal. Removal of the breaker shall actuate assembly that isolates the primary stabs.

E. Electronic Trip Units

Equip main and distribution breakers with a solid-state tripping system consisting of three current sensors and a microprocessor-based trip unit that will provide true rms sensing adjustable time-current circuit protection. The ampere rating of the current sensors shall be as indicated. The trip unit ampere rating shall be as indicated. Ground fault protection shall be residual type sensing. The electronic trip units shall have the following features.

1. Breakers shall have long delay pick-up and time settings, and LED indication of cause of circuit breaker trip.

2. Main breakers shall have short delay pick-up and time settings and, instantaneous settings and ground fault settings as indicated.

3. Distribution breakers shall have short delay pick-up and time settings, instantaneous settings, and ground fault settings as indicated.

4. Breakers shall have provisions for communication via a network twisted pair cable for remote monitoring and control.

F. Electronic Trip Unit Central Monitor

Provide a microprocessor-based device designed to monitor and display parameters of the circuit breaker electronic trip units. The central monitor shall have the following features:

1. Alphanumeric display.

2. Indication of circuit breaker status; tripped, open, closed.

3. Cause of circuit breaker trip.

4. Phase, neutral, and ground current for each breaker.

5. Energy parameters for each breaker.

6. Provisions for communicating directly to a remote computer.

G. Meter Fusing

Provide a fuse block mounted in the metering compartment containing one fuse per phase to protect the voltage input to voltage sensing meters. Size fuses as recommended by the meter manufacturer.

H. Terminal Boards

Provide with engraved plastic terminal strips and screw type terminals for external wiring between components and for internal wiring between removable assemblies. Terminal boards associated with current transformers shall be short-circuiting type. Terminate conductors for current transformers with ring-tongue lugs. Terminal board identification shall be identical in similar units. External wiring shall be color coded consistently for similar terminal boards.

I. Wire Marking

Mark control and metering conductors at each end. Provide factory-installed, white, plastic tubing, heat stamped with black block type letters on factory-installed wiring. On field-installed wiring, provide white, preprinted, polyvinyl chloride (PVC) sleeves, heat stamped with black block type letters. Each sleeve shall contain a single letter or number, shall be elliptically shaped to securely grip the wire, and shall be keyed in such a manner to ensure alignment with adjacent sleeves. Provide specific wire markings using the appropriate combination of individual sleeves. Each wire marker shall indicate the device or equipment, including specific terminal number to which the remote end of the wire is attached.

2.2 MANUFACTURER'S NAMEPLATE

Each item of equipment shall have a nameplate bearing the manufacturer's name, address, model number, and serial number securely affixed in a conspicuous place; the nameplate of the distributing agent will not be acceptable. This nameplate and method of attachment may be the manufacturer's standard if it contains the required information.

2.3 FIELD FABRICATED NAMEPLATES

ASTM D 709. Provide laminated plastic nameplates for each switchgear, equipment enclosure, relay, switch, and device; as specified in this section or as indicated on the drawings. Each nameplate inscription shall identify the function and, when applicable, the position. Nameplates shall be melamine plastic, 0.125 inch thick, white with black center core. Provide red laminated plastic label with white center core where indicated. Surface shall be matte finish. Corners shall be square. Accurately align lettering and engrave into the core. Minimum size of nameplates shall be one by 2.5 inches. Lettering shall be a minimum of 0.25 inch high normal block style.

2.4 SOURCE QUALITY CONTROL

A. Equipment Test Schedule

The County reserves the right to witness tests. Provide equipment test schedules for tests to be performed at the manufacturer's test facility. Submit required test schedule and location, and notify the County 30 calendar days before scheduled test date. Notify the County 15 calendar days in advance of changes to scheduled date.

1. Test Instrument Calibration

a) The manufacturer shall have a calibration program which assures that all applicable test instruments are maintained within rated accuracy.

b) The accuracy shall be directly traceable to the National Institute of Standards and Technology.

c) Instrument calibration frequency schedule shall not exceed 12 months for both test floor instruments and leased specialty equipment.

d) Dated calibration labels shall be visible on all test equipment.

e) Calibrating standard shall be of higher accuracy than that of the instrument tested.

f) Keep up-to-date records that indicate dates and test results of instruments calibrated or tested. For instruments calibrated by the manufacturer on a routine basis, in lieu of third party calibration, include the following:

1) Maintain up-to-date instrument calibration instructions and procedures for each test instrument.

2) Identify the third party/laboratory calibrated instrument to verify that calibrating standard is met.

B. Switchgear Design Tests

IEEE C37.20.1 and UL 1558.

1. Design Tests

Furnish documentation showing the results of design tests on a product of the same series and rating as that provided by this specification.

a) Short-circuit current test

b) Enclosure tests

c) Dielectric test

2. Additional design tests

   In addition to normal design tests, perform the following tests on the actual equipment. Furnish reports which include results of design tests performed on the actual equipment.

   a) Temperature rise tests

   b) Continuous current

C. Switchgear Production Tests

IEEE C37.20.1 and UL 1558. Furnish reports which include results of production tests performed on the actual equipment for this project. These tests include:

1. 60-hertz dielectric tests

2. Mechanical operation tests

3. Electrical operation and control wiring tests

4. Ground fault sensing equipment test

PART 3 EXECUTION

3.1 INSTALLATION

Electrical installations shall conform to IEEE C2, NFPA 70, and to the requirements specified herein.

3.2 GROUNDING

NFPA 70 and IEEE C2, except that grounds and grounding systems shall have a resistance to solid earth ground not exceeding 5 ohms.

A. Grounding Electrodes

Provide driven ground rods as specified in Section 33 71 02.00 20 UNDERGROUND ELECTRICAL DISTRIBUTION. Connect ground conductors to the upper end of the ground rods by exothermic weld or compression connector. Provide compression connectors at equipment end of ground conductors.

B. Equipment Grounding

Provide bare copper cable not smaller than No. 4/0 AWG not less than 24 inches below grade connecting to the indicated ground rods. When work in addition to that indicated or specified is directed to obtain the specified ground resistance, the provision of the contract covering "Changes" shall apply.

C. Connections

Make joints in grounding conductors and loops by exothermic weld or compression connector.

D. Grounding and Bonding Equipment

UL 467, except as indicated or specified otherwise.

3.3 INSTALLATION OF EQUIPMENT AND ASSEMBLIES

Install and connect equipment furnished under this section as indicated on project drawings, the approved shop drawings, and as specified herein.

A. Switchgear

IEEE C37.20.1.

B. Field Applied Painting

Where field painting of enclosures is required to correct damage to the manufacturer's factory applied coatings, provide manufacturer's recommended coatings and apply in accordance with manufacturer's instructions.

C. Galvanizing Repair

Repair damage to galvanized coatings using ASTM A 780/A 780M, zinc rich paint, for galvanizing damaged by handling, transporting, cutting, welding, or bolting. Do not heat surfaces that repair paint has been applied to.

D. Field Fabricated Nameplate Mounting

Provide number, location, and letter designation of nameplates as indicated. Fasten nameplates to the device with a minimum of two sheet-metal screws or two rivets.

3.4 FOUNDATION FOR EQUIPMENT AND ASSEMBLIES

Interior Location

Mount switchgear on concrete slab. Unless otherwise indicated, the slab shall be at least 4 inches thick. The top of the concrete slab shall be approximately 4 inches above finished floor. Edges above floor shall have 1/2 inch chamfer. The slab shall be of adequate size to project at least 8 inches beyond the equipment. Provide conduit turnups and cable entrance space required by the equipment to be mounted. Seal voids around conduit openings in slab with water- and oil-resistant caulking or sealant. Cut off and bush conduits 3 inches above slab surface.

3.5 FIELD QUALITY CONTROL

Contractor shall submit request for settings of breakers to the County after approval of switchgear and at least 30 days in advance of their requirement.

A. Performance of Acceptance Checks and Tests

Perform in accordance with the manufacturer's recommendations and include the following visual and mechanical inspections and electrical tests, performed in accordance with NETA ATS.

1. Switchgear

a. Visual and Mechanical Inspection

1) Compare equipment nameplate data with specifications and approved shop drawings.

2) Inspect physical, electrical, and mechanical condition.

3) Confirm correct application of manufacturer's recommended lubricants.

4) Verify appropriate anchorage, required area clearances, and correct alignment.

5) Inspect all doors, panels, and sections for paint, dents, scratches, fit, and missing hardware.

6) Verify that circuit breaker sizes and types correspond to approved shop drawings.

7) Verify that current transformer ratios correspond to approved shop drawings.

8) Inspect all bolted electrical connections for high resistance using low-resistance ohmmeter, verifying tightness of accessible bolted electrical connections by calibrated torque-wrench method, or performing thermographic survey.

9) Confirm correct operation and sequencing of electrical and mechanical interlock systems.

10) Clean switchgear.

11) Inspect insulators for evidence of physical damage or contaminated surfaces.

12) Verify correct barrier installation.

13) Exercise all active components.

14) Inspect all mechanical indicating devices for correct operation.

15) Verify that vents are clear.

16) Test operation, alignment, and penetration of instrument transformer withdrawal disconnects.

17) Inspect control power transformers.

b. Electrical Tests

1) Perform insulation-resistance tests on each bus section.

2) Perform overpotential tests.

3) Perform insulation-resistance test on control wiring; Do not perform this test on wiring connected to solid-state components.

4) Perform control wiring performance test.

5) Perform primary current injection tests on the entire current circuit in each section of assembly.

6) Perform phasing check on double-ended switchgear to ensure correct bus phasing from each source.

7) Verify operation of switchgear heaters.

2. Circuit Breakers
Low Voltage

a. Visual and Mechanical Inspection

1) Compare nameplate data with specifications and approved shop drawings.

2) Inspect circuit breaker for correct mounting.

3) Operate circuit breaker to ensure smooth operation.

4) Inspect case for cracks or other defects.

5) Inspect all bolted electrical connections for high resistance using low resistance ohmmeter, verifying tightness of accessible bolted connections and/or cable connections by calibrated torque-wrench method, or performing thermographic survey.

6) Inspect mechanism contacts and arc chutes in unsealed units.

b. Electrical Tests

1) Perform contact-resistance tests.

2) Perform insulation-resistance tests.

3) Perform Breaker adjustments for final settings.

4) Perform long-time delay time-current characteristic tests.

a. Determine short-time pickup and delay by primary current injection.

b. Determine ground-fault pickup and time delay by primary current injection.

c. Determine instantaneous pickup current by primary injection.

d. Verify correct operation of any auxiliary features such as trip and pickup indicators, zone interlocking, electrical close and trip operation, trip-free, and anti-pump function.

3. Grounding System

a. Visual and Mechanical Inspection

1) Inspect ground system for compliance with contract plans and specifications.

b. Electrical Tests

1) IEEE Std 81. Perform ground-impedance measurements utilizing the fall-of-potential method. On systems consisting of interconnected ground rods, perform tests after interconnections are complete. On systems consisting of a single ground rod perform tests before any wire is connected. Take measurements in normally dry weather, not less than 48 hours after rainfall. Use a portable ground testing megger in accordance with manufacturer's instructions to test each ground or group of grounds. The instrument shall be equipped with a meter reading directly in ohms or fractions thereof to indicate the ground value of the ground rod or grounding systems under test.

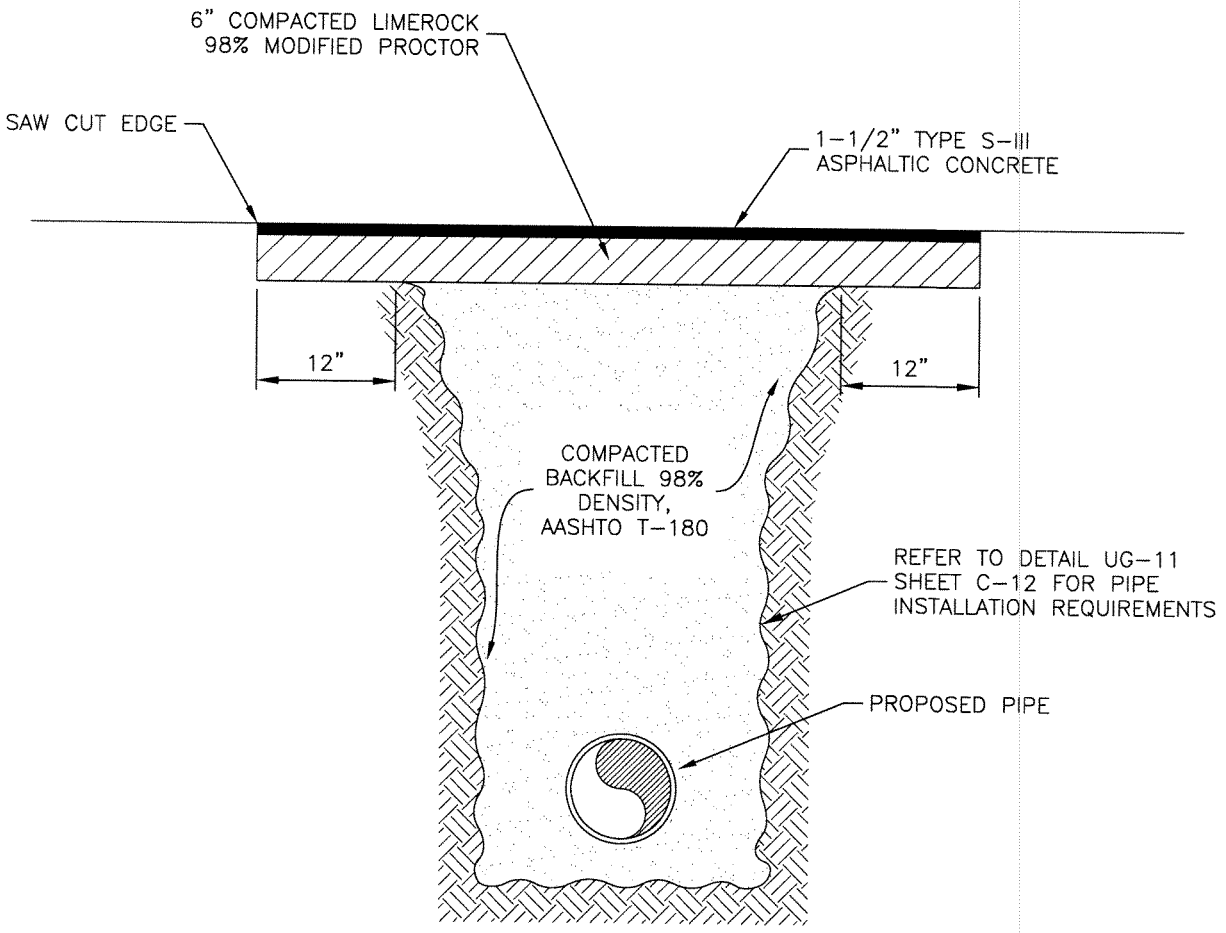
2) Submit the measured ground resistance of each ground rod and grounding system, indicating the location of the rod and grounding system. Include the test method and test setup (i.e., pin location) used to determine ground resistance and soil conditions at the time the measurements were made.

B. Follow-Up Verification

Upon completion of acceptance checks, settings, and tests, the Contractor shall show by demonstration in service that circuits and devices are in good operating condition and

properly performing the intended function. Circuit breakers shall be tripped by operation of each protective device. Test shall require each item to perform its function not less than three times. As an exception to requirements stated elsewhere in the contract, the County shall be given 5 working days advance notice of the dates and times for checks, settings, and tests.

END OF SECTION



DRIVEWAY REPAIR DETAIL

SCALE: 1/2"=1'-0"

URS
7650 West Courtney Campbell Cswy, Suite 700
Tampa, Florida 33607
Ph: (813) 286-1711 Fax: (813) 286-6587
Florida Engineering Number: 000002

SECOND 10MG RECLAIMED WATER STORAGE TANK AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAMATION FACILITY

MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

PROJECT NO.	12010046
DESN/APVD	TRS/DAW
DATE	3/28/12
ADDENDUM NO.	1