



Fulton County, GA

Department of Purchasing & Contract Compliance

March 11, 2014

Re: **#14ITB91556K-DB**
Construction Services for the Big Creek WRF Immediate Needs
Rehabilitation Project S-134

Dear Vendors:

Attached is one (1) copy of Addendum 2, hereby made a part of the above referenced **#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134.**

Except as provided herein, all terms and conditions in the ITB referenced above remain unchanged and in full force and effect.

Sincerely,

Darlene A. Banks

Darlene A. Banks, APA

Winner 2000 - 2009 Achievement of Excellence in
Procurement Award • National Purchasing Institute



**#14ITB91556K-DB; Construction Services for the Big Creek WRF Immediate
Needs Rehabilitation Project S-134
Addendum No. 2
Page Two**

This Addendum forms a part of the contract documents and **modifies** the original ITB documents as noted below:

GENERAL ITEMS:

1. The City of Roswell will require a Soil Erosion and Sedimentation Control Maintenance/Performance Bond to be provided prior to issuance to the Land Disturbance Permit. The successful bidder will be required to obtain the Soil Erosion and Sedimentation Control Maintenance/Performance Bond in the amount of \$3,000.00 payable to the City of Roswell. The options for procuring the bond are cash and via Surety.

RESPONSE TO QUESTIONS:

QUESTION 1:

Request that Val-Matic be considered as an acceptable supplier for the equipment listed under Specification Section 40 0523 – Process Valves, as follows:

1. Plug Valve: Model 5000 in 40-0523, 2.2
2. Swing check valve: Model 7800 in 40-0523, 2.9
3. Butterfly valve: Model 2000 in 40-0523, 2.10

RESPONSE 1:

Yes, revise Specification Section "Process Valves" 40-0523 as follows:

1. Paragraph 2.2 Eccentric Plug Valves, 2.2 A "All valves and actuators shall be as manufactured by DeZurik, Val-Matic, or approved equal."
2. Paragraph 2.9 Eccentric Plug Valves, 2.9 A "Check valves larger than 3-inches shall be cushioned swing check valves rated for a minimum working pressure of 200 psi and shall be of the "Shockless Swing-Check" type as manufactured by GA Industries, APCO, Val-Matic, or Approved Equal."
3. Paragraph 2.10 Butterfly Valves - Air Service (Open/Close Applications), 2.10 A. "Manufacturers: Provide products manufactured by DeZurik, Val-Matic, or Approved Equal."

QUESTION 2:

Regarding Specification Section "Sludge Dewatering Screw Press" 46-7627:

Will the screw press manufacturer be required to replace just one brush on one machine or brushes on all four machines? Also will this be in one trip or 4 separate trips? Please clarify 1 or 4 brush changes and number of trips.

RESPONSE 2:

The requirement is for one machine - the first machine requiring service. The number of trips will be as many as necessary to meet the requirement.

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QUESTION 3:

Unfortunately, we were unable to make the official site visit and would like to know if you will grant us a visit to look at the job before we submit a bid proposal for work.

RESPONSE 3:

We currently have no additional site visits planned but any additional site visits will be made known via addendum.

QUESTION 4:

We respectfully ask if JASH Engineering, Ltd can be added to the current gate specification, Section 43 3063 Stainless Steel Slide Gates, by addendum to the list of gate manufacturers on Page 4, under Part 2 – Productions, 2.02 Manufacturer?"

RESPONSE 4:

Yes, revise Specification Section "Stainless Steel Slide Gates", Division 43-3063 as follows:
Paragraph 2.2A "Manufacturers: Provide equipment of one of the following:
1. Waterman Industries
2. Rodney Hunt Company / H. Fontaine Ltd.
3. Jash Engineering Limited
4. Approved Equal."

QUESTION 5:

Please consider postponing the bid date and time.

RESPONSE 5:

The Bid Due date and time will remain as Monday, March 24, 2014 @ 11:00am.

QUESTION 6:

Form C3 is a Georgia Professional License certification. This does not seem applicable as our contract does not include any design services. We are a licensed General Contractor and Utility Contractor in the state of Georgia.

RESPONSE 6:

The Entity acting as the Contractor shall have an active Utility Contractors License. See Item 17 in Section 00-0100 "Instructions to Bidders" for Professional License certification requirements.

QUESTION 7:

Exhibit C Schedule of Intended Subcontractor Utilization – are we to list all subcontractors that is known at the time of bid or just the MBE/WBE/DBE firms on this exhibit?

RESPONSE 7:

Yes....list all subcontractors (M/FBE and non-minority).

QUESTION 8:

Regarding Specification Section "Circular Clarifier Equipment" 46-4321:

RESPONSE 8:

Clarification equipment by SPS Engineering, Inc. will not be considered an alternate manufacturer for this project.

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QUESTION 9:

We respectfully ask if Gummi-Jaeger AERATION LLC can be added to the current FLEXIBLE MEMBRANE TUBE DIFFUSERS specification, Section 46 5131 - Page 1 to 7, by addendum to the list of flexible membrane tube diffuser manufacturers Section 1.3 SUBMITTALS.

RESPONSE 9:

Flexible Membrane tube diffusers by Gummi-Jaeger AERATION LLC will not be considered an alternate manufacturer for this project.

QUESTION 10:

Request to allow Keystone Valve, K-Lok Series 36, butterfly valves for modulating service as an approved product.

RESPONSE 10:

Yes, Revise Specification Section "Process Valves" 40-0523 as follows:
Paragraph 2.11 A. "Manufacturers: Provide products manufactured by DeZurik, Keystone Valve, or Approved Equal."

QUESTION 11:

Page 9-1, Item 5: The first sentence states "Using the forms provided in this Section, list previously completed or current projects....." We could not locate any forms provided for this. Please clarify.

RESPONSE 11:

See item 1 in "CHANGES TO VOLUME 1: BIDDING INFORMATION"

QUESTION 12:

Page 9-1, Item 5.a: The first sentence states "Contractors must have successfully completed..." This contradicts Item 5 that states "previously completed or current projects..." Please clarify.

RESPONSE 12:

See item 1 in "CHANGES TO VOLUME 1: BIDDING INFORMATION"

QUESTION 13:

Page 9-2, Item 7: The first sentence states "Using the forms provided in this Section provide information for the Project Manager and the Project Superintendent." We could not locate any forms provided for this. Please clarify.

RESPONSE 13:

See item 1 in "CHANGES TO VOLUME 1: BIDDING INFORMATION"

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QUESTION 14:

The following question concerns Spec Sections 40 9100 2.4 A Level Components Ultrasonic and Spec Section 40-9100 2.7 Flow Components Electromagnetic.

While Rosemount is named in sections for D.O./ORP (2.3 B), Temperature RTD (2.5), Pressure and Level Transmitters (2.6 D and E) we were not included in Sections 2.4 A Ultrasonic Level and 2.7 Electromagnetic Flow. Therefore; we respectfully request that the County include Rosemount as an approved supplier of these devices.

RESPONSE 14:

Since the request for approval was not received by the pre-approval cut-off date, the request cannot be reviewed for pre-approval.

QUESTION 15:

Request for Daniel Mechanical Company to be included as an alternate equipment supplier for specification section 40 0513.76 (FRP Ductwork), 40 0523.10 (FRP Dampers), 44 3119 (Radial Flow Carbon Odor Control Systems)

RESPONSE 15:

Since the request for approval was not received by the pre-approval cut-off date, the request cannot be reviewed for pre-approval.

QUESTION 16:

Request for Process Wastewater Technologies, LLC to be included as an alternate equipment supplier for the Sludge Dewatering Screw Press.

RESPONSE 16:

Since the request for approval was not received by the pre-approval cut-off date, the request cannot be reviewed for pre-approval.

CHANGES TO VOLUME 1: BIDDING INFORMATION

1. DELETE SECTION 00-0900, "SPECIAL CONDITIONS" and replace with the following SECTION 00-0900, "SPECIAL CONDITIONS" which is attached to this addendum.

CHANGES TO VOLUME 2: TECHNICAL SPECIFICATIONS

1. ADD SECTION 01-2900, "PAYMENT PROCEDURES" which is attached to this addendum.

CHANGES TO VOLUME 3: CONSTRUCTION DRAWINGS

1. The Land Disturbance Permit Set of drawings is attached to this Addendum as a PDF. There are 10 sheets, numbered as follows: C-00.01, C-00.02, C-00.03, C-00.07, C-00.11, C-00.12, C-00.13, C-00.15, C-00.16, C-00.17

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ACKNOWLEDGEMENT OF ADDENDUM NO. 2

The undersigned bidder acknowledges receipt of this addendum by returning one (1) copy of this form with the proposal package to the Department of Purchasing & Contract Compliance, Fulton County Public Safety Building, 130 Peachtree Street, Suite 1168, Atlanta, Georgia 30303 by the ITB due date and time **Monday, March 24, 2014, @ 11:00 A.M.**

This is to acknowledge receipt of Addendum No. 2, _____ day of _____, 20__.

Legal Name of Bidder

Signature of Authorized Representative

Title

**SECTION 00 0900
SPECIAL CONDITIONS**

STATEMENT OF BIDDER'S QUALIFICATIONS AND SAFETY RECORD FORM

STATEMENT OF BIDDER'S QUALIFICATIONS

This Statement is to accompany bids submitted for the following project:
14ITB91556K-DB Construction Services for the Big Creek WRF Immediate Needs Rehabilitation Project S-134. Bidders must meet the minimum qualification criteria set forth under items 5, 7, 8, 9 10, 11 and 12 of this section and must provide the organization chart as set forth under item 6 of this section to be deemed a "Responsible and Responsive Bidder".

1. NAME OF BIDDER: _____

2. BUSINESS ADDRESS: _____

3. TELEPHONE NUMBER: _____

4. OFFICIAL REPRESENTATIVE AND TITLE: _____

5. Using the form provided at the end of this Section, list previously completed projects which are similar in scope and complexity to this project which were completed or assigned to your firm or joint venture, including: Name of project, location of project, owner's name, address and phone number, description of work performed, initial contract amount, final contract amount, start date, scheduled completion date and actual completion date. (If a joint venture, list separately for each joint venture partner.) Limit to 5.

a. Contractors must have successfully completed at least two contracts involving construction or modification of an activated sludge wastewater treatment plant with at least tertiary treatment and with solids handling systems. Work will have included reinforced concrete, erection of structural steel, piping, installation of process and mechanical equipment, odor control, electrical, instrumentation and control systems with a capacity of not less than 20 MGD and a construction value of not less than \$15,000,000.

6. Provide the following information for the organization proposed for this project:

a. Organizational chart.

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- b. Indicate the participation by the various members in the organization, as shown on the organizational chart, in the management and in the division of work (If a joint venture, indicate percent of man hours and percent of project cost to be performed by each joint venture member).

- 7. Using the form provided at the end of this Section, provide information for the Project Manager and the Project Superintendent.
 - a. Project Manager must have been project manager for duration of project and successfully completed at least two contracts involving construction or modification of an activated sludge wastewater treatment plant with at least tertiary treatment and with solids handling systems. Work will have included reinforced concrete, erection of structural steel, piping, installation of process and mechanical equipment, odor control, electrical, instrumentation and control systems with a capacity of not less than 20 MGD and a construction value of not less than \$15,000,000.
 - b. Project Superintendent must have successfully completed at least two contracts involving construction or modification of an activated sludge wastewater treatment plant with at least tertiary treatment and with solids handling systems. Work will have included reinforced concrete, erection of structural steel, piping, installation of process and mechanical equipment, odor control, electrical, instrumentation and control systems with a capacity of not less than 20 MGD and a construction value of not less than \$15,000,000.

- 8. The Contractor must have an established Safety Program. Complete the attached form entitled "CONTRACTOR SAFETY RECORD FORM".

- 9. The Contractor's Workman's Compensation Ratings (EMR-Experience Modification Rate) **must not exceed** an average of 1.0 over the last three (3) years.

Year	Experience Modification Rate (EMR)
Average:	

- 10. The Contractor's OSHA Incidence Rates **must not** exceed the Industry

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Standard for Construction, published by the U.S. Department of Labor (2012) for Heavy and Civil Engineering Construction, all industries, (i.e.- Recordable Incidence Rates of 3.2 and Days Away from Work Incidence Rates of 1.7 per OSHA definition and calculation) for the last three (3) years.

Year	Total Recordable Incidents	Total Hours Worked	OSHA Incidence Rate*
Average			

Year	Total Days Away from Work Incidents	Total Hours Worked	OSHA Incidence Rate*
Average			

* Use your OSHA Form No. 200 and the formula:

$$(\text{Total Incidents} \times 200,000 \text{ hours}) \div (\text{Number of hours worked}) = \text{Incidence Rate}$$

11. If there have been any fatalities during the last five (5) years on any projects performed by the Contractor or on any work performed under the direct supervision of a proposed Project Manager and the Contractor or proposed Project Manager was cited by OSHA for "Willful", in performing the work in which the fatality occurred, the Contractor will be disqualified based on the County's review. The Contractor may also be disqualified in the event that a Recordable Incident occurred due to the same condition that existed when a previous fatality occurred and resulted in an OSHA citation for failure to implement a corrective action plan.
- a. Fatalities during the last five years where Contractor was cited by OSHA for "Willful" Violation _____
 - b. Fatalities during the last five years where the proposed Project Manager was cited by OSHA for "Willful" Violation.

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12. If there have been any incidents during the last five (5) years on any wastewater or water treatment facility projects performed by the Contractor or on any work performed under the direct supervision of a proposed Project Manager that resulted in the wastewater or water treatment facility failing to meet NPDES Discharge Permit requirements due to the actions of the Contractor or Project Manager or failure of the Contractor or Project Manager to perform work on schedule; the Contractor will be disqualified based on the County's review.
- a. NPDES Discharge Permit violations during the last 5 years related to facility projects performed by the Contractor: _____
 - b. NPDES Discharge Permit violations during the last 5 years related to work under the direct supervision of the proposed Project Manager:

The previous statements and attachments are true, correct, and complete to the best of my knowledge.

Date: _____

Firm Name: _____

By: _____

Title: _____

Sworn to and subscribed before me

this ____ day of _____, 2013

Notary Public

CONTRACTOR SAFETY RECORD FORM

A. General Information

Name of Firm:	
Business Address:	
Telephone:	Fax:
Prepared by/Title:	Date prepared:

II. Experience Modification Rates

List your firm's Workers Compensation Experience Modification Rates (EMR) for the last three years.

Year	Experience Modification Rate (EMR)

III. OSHA Incidence Rates

A. List your firm's Occupational Safety Health Administration (OSHA) incidence rates for the last three years.

Year	Total Recordable Incidents	Total Hours Worked	OSHA Incidence Rate*

* Use your OSHA Form No. 200 and the formula:

$$(\text{Total Incidents} \times 200,000 \text{ hours}) \div (\text{Number of hours worked}) = \text{Incidence Rate}$$

B. Provide your incidence rates over the last three years for the following categories:

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Category	Incidence Rate by Year*		
	Year	Year	Year
Fatalities			
Injuries and Illnesses with Lost Work Days			
Injuries and Illnesses with Restricted Work Days			

* Use your OSHA Form No. 200 and the formula:

$$(\text{Total Incidents} \times 200,000 \text{ hours}) \div (\text{Number of hours worked}) = \text{Incidence Rate}$$

C. Does your firm have any upheld OSHA citations in the past five years?

Yes No (If yes, attach explanation)

IV. Safety Program Information

A. Do you have a written safety program?

Yes No (If yes, attach outline)

B. Which of the following does your safety program contain:

1. Does your company require health and safety training of its subcontractors?

Yes No

2. Is documentation of health and safety training required?

Yes No

3. Do you have a Hazard Communication Program (29 CFR 1910.1200, CCR Title 8 Section 5194)?

Yes No

4. Do you have a Confined Space Entry and Rescue Program (29 CFR 1910.146, CCR Title 8 Section 5156-5159)?

Yes No (If yes, attach explanation)

5. Do you have a "Hot Work" permit program (29 CFR 1910.146, CCR Title 8 5156-5159)?

Yes No (If yes, attach explanation)

IV. Safety Program Information (cont'd)

B. Which of the following does your safety program contain (cont'd):

6. Do you have a "Lock-Out/Tag-Out" program (29 CFR 1910.417)?

Yes No (If yes, attach explanation)

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C. Do you have an Equipment Maintenance Program for the following:

- | | | |
|--|------------------------------|-----------------------------|
| 1. Miscellaneous construction tools and equipment? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 2. Ladders? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 3. Scaffolds? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 4. Heavy Equipment? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 5. Vehicles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

D. Do you have a new employee safety orientation program?

Yes No

1. If yes, does it include instruction in the following:

- | | | |
|-----------------------------------|------------------------------|-----------------------------|
| (a) Company Safety Policy | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (b) Company Safety Rules | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (c) Safety Meeting Attendance | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (d) Company Safety Record | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (e) Hazard Recognition | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (f) Hazard Reporting | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (g) Injury Reporting | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (h) Non-Injury Accident Reporting | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (i) Personal Protective Equipment | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (j) Respiratory Protection | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (k) Fire Protection | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (l) Housekeeping | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (m) Toxic Substance | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (n) Electrical Safety | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (o) Fall Protection | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (p) First-Aid/CPR | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (q) Driving Safety | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (r) Hearing Conservation | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (s) Lock-Out/Tag-Out | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (t) Bloodborne Pathogens | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (u) Asbestos | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (v) Confined Spaces | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (w) Hazard Communication | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

IV. Safety Program Information (cont'd)

E. Do you conduct safety meetings for your employees? Yes No

1. If yes, how often:

Daily Weekly Bi-weekly Monthly As Needed

F. Do you conduct health and safety audits of work in progress?

Yes No

1. If yes, who conducts the audits?

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2. How often are the audits conducted?

G. Do you notify all employees of accidents and precautions related to accidents and near misses?

Yes No

1. If yes, how is this notification accomplished?

- | | | |
|---|------------------------------|-----------------------------|
| (a) Safety meetings | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (b) Post notification in office | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (c) Post notification at the site where the incident occurred | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (d) Other _____ | | |

H. Is safety a criteria in evaluating the performance of:

- | | | |
|----------------|------------------------------|-----------------------------|
| 1. Employees | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 2. Supervisors | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 3. Management | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

I. Does your firm hold "tailgate" safety meetings? Yes No

1. If yes, how often:

Daily Weekly Bi-weekly Monthly As Needed

J. Does your company have a drug and alcohol testing policy?

Yes No

K. Does your company require that subcontractors participate in a drug surveillance/testing program?

Yes No

L. Does your company have a method of disseminating safety information?

Yes No

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STATEMENT OF BIDDER'S QUALIFICATIONS
PROJECT SUPERINTENDENT'S EXPERIENCE
 (Complete Form Only For Projects That Meet Minimum Criteria)

Project Name	
Project Location	
Contractor's Project Superintendent	
Owners Representative & Phone Number	
Design Engineer Representative Name & Phone Number	
Treatment Facility Capacity (MGD)	
Initial Contract Amount	\$
Final Contract Amount	\$
Project Duration	Date Started: Date Completed: Time Extensions:
Was Project Completed on Time?	
List Any NPDES Permit Violations Due to Contractors Failure to Complete Project on Schedule or Due to Contractor's Failure to Properly Coordinate its Work.	
Description of Major Project Components:	

END OF SECTION 00 0900

INVITATION TO BID 14ITB91556K-DB
 CONSTRUCTION SERVICES FOR THE BIG CREEK WRF IMMEDIATE NEEDS
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STATEMENT OF BIDDER'S QUALIFICATIONS
PROJECT MANAGER'S EXPERIENCE

(Complete Form Only For Projects That Meet Minimum Criteria)

Project Name	
Project Location	
Contractor's Project Manager	
Owners Representative & Phone Number	
Design Engineer Representative Name & Phone Number	
Treatment Facility Capacity (MGD)	
Initial Contract Amount	\$
Final Contract Amount	\$
Project Duration	Date Started: Date Completed: Time Extensions:
Was Project Completed on Time?	
List Any NPDES Permit Violations Due to Contractors Failure to Complete Project on Schedule or Due to Contractor's Failure to Properly Coordinate its Work.	
Description of Major Project Components:	

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STATEMENT OF BIDDER'S QUALIFICATIONS
COMPANY PROJECT EXPERIENCE

(Complete Form Only For Projects That Meet Minimum Criteria)

Project Name	
Project Location	
Contractor's Project Manager	
Contractor's Project Superintendent	
Owners Representative & Phone Number	
Design Engineer Representative Name & Phone Number	
Treatment Facility Capacity (MGD)	
Initial Contract Amount	\$
Final Contract Amount	\$
Project Duration	Date Started: Date Completed: Time Extensions:
Was Project Completed on Time?	
List Any NPDES Permit Violations Due to Contractors Failure to Complete Project on Schedule or Due to Contractor's Failure to Properly Coordinate its Work.	
Description of Major Project Components:	

PART 1 –GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
 - 1 Section "Measurement and Payment".
 - 2 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
 - 3 Section "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.

1.2 SCHEDULE OF VALUES

Schedule of values will be per Section 01-3001, "Schedule of Values"

1.3 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Engineer and Construction Manager and paid for by Owner.
 - 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
- C. Payment Application Times: Submit Application for Payment to the Construction Manager by the end of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.
- D. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 AIA Document G702/CMA and AIA Document G703 as form for Applications for Payment.
- E. Application for Payment Forms: Use forms acceptable to Owner and Engineer for Applications for Payment.
- F. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. The

PAYMENT PROCEDURES

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Construction Manager will return incomplete applications without action.

1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- G. Transmittal: Submit five signed and notarized original copies of each Application for Payment to the Construction Manager by a method ensuring receipt within 24 hours. One approved copy will be returned to the Contractor.
1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- H. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 2. When an application shows completion of an item, submit conditional final or full waivers.
 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 4. Waiver Forms: Submit executed waivers of lien on forms acceptable to Owner.
- I. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
 2. Schedule of values.
 3. Contractor's construction schedule (preliminary if not final).
 4. Schedule of unit prices.
 5. Submittal schedule (preliminary if not final).
 6. List of Contractor's staff assignments.
 7. List of Contractor's principal consultants.
 8. Copies of building permits.
 9. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 10. Initial progress report.
 11. Report of preconstruction conference.
 12. Certificates of insurance and insurance policies.
 13. Pre-construction photographs and videos.
 14. Other documents as required by the Contract or Construction Manager.
- J. Application for Payment at Substantial Completion: After Engineer issues the

PAYMENT PROCEDURES

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Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.

1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- K. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 3. Updated final statement, accounting for final changes to the Contract Sum.
 4. AIA Document G706, current version, "Contractor's Affidavit of Payment of Debts and Claims."
 5. AIA Document G706A, current version, "Contractor's Affidavit of Release of Liens."
 6. AIA Document G707, current version, "Consent of Surety to Final Payment."
 7. Evidence that claims have been settled.
 8. Exhibit A, Final Affidavit, page 7-33, Section 00-0700 "General Conditions."
 9. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
 10. Final liquidated damages settlement statement.
 11. Post-construction photographs and videos
 12. Contractor's statement of completion of all work.
 13. Notification of warranty period for all major pieces of equipment.
 14. Transmittal signed by the Construction Manager for all deliverables.
 15. Other documents requested by the Contract or Construction Manager as deemed required for final payment.

PART 2 -PRODUCTS (Not Used)

PART 3 -EXECUTION (Not Used)

END OF SECTION 01-2900

CIVIL NOTES:

- THIS PROJECT IS LOCATED IN FULTON COUNTY, GEORGIA, AT 1030 MARIETTA HIGHWAY, ROSWELL, GEORGIA 30075, AT THE BIG CREEK WATER RECLAMATION FACILITY. LAT-LONG COORDINATES ARE 34.003186 N, 84.393000 W.
- PROJECT DESCRIPTION - THE WORK CONSISTS OF IMPLEMENTING HYDRAULIC IMPROVEMENTS, REPLACING EQUIPMENT, OPERATIONAL IMPROVEMENTS AND ALL OTHER DIRECT OR INDIRECT WORK WHILE MAINTAINING THE PLANT IN REGULATORY COMPLIANCE AND SATISFACTORY OPERATION.
- THIS PROJECT IS REQUIRED TO HAVE EROSION AND SEDIMENTATION CONTROL PLANS IN EFFECT. CONTRACTOR IS REQUIRED TO FOLLOW THE E&SC METHODS IN PLACE BY THE STATE OF GEORGIA AND ENTITIES HAVING JURISDICTION. PLEASE REFER TO EROSION & SEDIMENTATION DRAWINGS FOR THIS PACKAGE. FOR DETAIL DRAWINGS AND TECHNICAL INFORMATION NOT SHOWN IN THESE DRAWINGS REFER TO THE STATE OF GEORGIA MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA (GREEN BOOK) AND THE GA EPD TECHNICAL GUIDANCE ON EROSION AND SEDIMENTATION.
- ANY AND ALL DISTURBED VEGETATION SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS OR BETTER AFTER PROJECT HAS BEEN DEEMED COMPLETE AND CONTRACTOR DE-MOBILIZATION OCCURS.
- CONTRACTOR AND ALL SUB-CONTRACTORS SHALL USE THE MAIN ENTRANCE OFF MARIETTA HIGHWAY FOR ACCESS ON AND OFF THE PROJECT SITE.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS, WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE. ALL EXISTING FEATURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL PROPERLY AND LAWFULLY DISPOSE OF ALL DEBRIS FROM DEMOLITION, CONSTRUCTION, MOBILIZATION AND DE-MOBILIZATION EFFORTS.
- THE CONTRACTOR SHALL DISPOSE OF ALL NON-ORGANIC WASTES SUCH AS GUNITE, PIPING, ROCK RUBBLE, ETC AT AN APPROVED LANDFILL OR OTHER SUITABLE DISPOSAL SITE.
- CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ANY AND ALL SURVEY MONUMENTS AND CONTROL POINTS.
- REFUSE, DEBRIS AND WASTE MATERIAL RESULTING FROM DEMOLITION AND CLEARING OPERATIONS SHALL NOT BE BURNED.
- PRIMARY PERMITEE FOR THIS PROJECT IS:

FULTON COUNTY
141 PRYOR ST.
ATLANTA, GA 30303
(404) 612-4000
- SITE RUNOFF COEFFICIENT CALCULATION:
PRE-CONSTRUCTION: 0.10/POST-CONSTRUCTION 0.14
- TOTAL SITE AREA: 1,762,490 SF/TOTAL DISTURBED AREA: 42,302 SF

24 HR. EMERGENCY CONTACT

SIMEON SOLOMERO
PROJECT MANAGER
FULTON COUNTY DEPARTMENT
OF WATER RESOURCES
404-630-8639



CITY OF ROSWELL GENERAL CONSTRUCTION NOTES

- A PRE-CONSTRUCTION MEETING WITH THE LAND DISTURBANCE INSPECTOR IS REQUIRED PRIOR TO RELEASE OF THE LAND DISTURBANCE PERMIT.
- ALL BUFFERS MUST BE CLEARLY DELINEATED INSTALLED PRIOR TO ISSUANCE OF THE LAND DISTURBANCE PERMIT.
- ALL TREE PROTECTION FENCING INSTALLED MUST BE APPROVED BY THE CITY ARBORIST PRIOR TO ISSUANCE OF THE LAND DISTURBANCE PERMIT. CONTACT THE CITY ARBORIST OFFICE AT 770-594-6293.
- ALL SILT BARRIERS AND CONSTRUCTION ENTRANCE PADS MUST BE PLACED PRIOR TO ANY CLEARING AND/OR GRADING. NO GRADING SHALL BE DONE UNTIL SILT BARRIER INSTALLATION IS COMPLETE AND A GRADING PERMIT IS ISSUED BY THE LAND DEVELOPMENT INSPECTOR.
- AN ENCROACHMENT PERMIT IS REQUIRED FOR ANY WORK WITHIN THE PUBLIC RIGHT OF WAY FROM THE ROSWELL DEPARTMENT OF TRANSPORTATION. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES WHILE ROADWAY FRONTAGE IMPROVEMENTS ARE BEING MADE. CONTACT JOHN WOOTEN FOR ENCROACHMENT PERMITS AND TRAFFIC CONTROL PLAN APPROVAL AT 770-594-6108.
- CONTRACTOR MUST NOTIFY LAND DEVELOPMENT INSPECTOR AT 770-594-6100 TWENTY-FOUR (24) HOURS PRIOR TO BEGINNING CONSTRUCTION AND AT THE BEGINNING OF EACH NEW PHASE OR AFTER A LULL OF MORE THAN FOURTEEN (14) DAYS.
- CONSTRUCTION WILL BE ALLOWED MON.-SAT. BETWEEN THE HOURS OF 7:00 AM AND 6:00 PM ONLY. ANY SPECIAL EXCEPTIONS REQUIRE PRIOR APPROVAL OF THE CHIEF BUILDING OFFICIAL WHO MAY BE CONTACTED AT 770-641-3780. ALLOW AT LEAST ONE WEEK FOR APPROVAL.
- OWNER AGREES TO PROVIDE AND MAINTAIN OFF-STREET PARKING ON THE SUBJECT PROPERTY DURING THE ENTIRE CONSTRUCTION PERIOD.
- BURNING OF DEBRIS OR CONSTRUCTION MATERIALS IS NOT PERMITTED WITHIN THE CITY OF ROSWELL.
- BURIAL OF CONSTRUCTION MATERIALS IS NOT PERMITTED WITHIN THE CITY OF ROSWELL.
- THE OWNER/DEVELOPER IS RESPONSIBLE TO COORDINATE WITH THE US ARMY CORPS OF ENGINEERS CONCERNING PERMITS OR REQUIREMENTS WHEN WETLANDS ARE PROPOSED TO BE DISTURBED ON THE PROPERTY. FAILURE TO REQUEST A DETERMINATION OF PERMIT REQUIREMENT BEFORE DISTURBING ANY WETLANDS COULD RESULT IN PENALTIES BEING IMPOSED BY THE CORPS OF ENGINEERS.
- A CITY OF ROSWELL TRENCHING PERMIT IS REQUIRED PRIOR TO ANY TRENCHING ACTIVITY. CONTACT YOUR CITY OF ROSWELL LAND DEVELOPMENT INSPECTOR OR CALL 770-594-6100 TO OBTAIN A TRENCHING PERMIT.
- NO ADDITIONAL DRAINAGE AREAS SHALL BE DIVERTED ONTO CITY RIGHT-OF-WAY.
- ALL CORRUGATED METAL STORM DRAINPIPE SHALL BE FULLY BITUMINOUS-COATED GALVANIZED STEEL OR ALUMINIZED TYPE II WITH RE-ROLLED ENDS AND BANDS.
- ALL OPEN DRAINAGE SWALES MUST BE GRASSED, AND RIPRAP MUST BE PLACED AS REQUIRED TO CONTROL EROSION. A MINIMUM OF 10 SQUARE YARDS OF 40 LB. STONE SHALL BE PLACED AT ALL HEADWALLS OR FLUMES.
- ALL EXTERIOR LIGHTING SHALL BE PLACED SO AS NOT TO DIRECTLY ILLUMINATE ADJACENT PROPERTY.
- ALL LAND DEVELOPMENT CONSTRUCTION SHALL CONFORM TO THE CITY STANDARD CONSTRUCTION SPECIFICATIONS AND SUBDIVISION REGULATIONS, CURRENT EDITION. COPIES ARE AVAILABLE ON THE CITY WEBSITE AT WWW.ROSWELLGOV.COM OR PRINT COPIES MAY BE PURCHASED FROM THE COMMUNITY DEVELOPMENT DEPARTMENT FOR \$20.00.

CIVIL LEGEND:

HATCHING

- LIMITS OF ROAD REPAIR AND OVERLAY
- CONCRETE DRIVE/SIDEWALK

LINETYPES

- LIMIT OF DISTURBANCE
- WATER LINE
- DRAIN/SEWER LINE

READY MIX CHUTE WASH-DOWN NOTES

THE WASHING OF READY-MIX CONCRETE DRUMS AND DUMP TRUCK BODIES USED IN THE DELIVERY OF PORTLAND CEMENT CONCRETE IS PROHIBITED ON THIS SITE.

ONLY THE DISCHARGE CHUTE UTILIZED IN THE DELIVERY OF PORTLAND CEMENT CONCRETE MAY BE RINSED FREE OF FRESH CONCRETE REMAINS. THE CONTRACTOR SHALL EXCAVATE A PIT OUTSIDE OF STATE WATER BUFFERS, AT LEAST 25 FEET FROM ANY STORM DRAIN AND OUTSIDE OF THE TRAVELED WAY, INCLUDING SHOULDERS, FOR A WASH-DOWN PIT. THE PIT SHALL BE LARGE ENOUGH TO STORE ALL WASH-DOWN WATER WITHOUT OVERTOPPING. IMMEDIATELY AFTER THE WASH-DOWN OPERATIONS ARE COMPLETED AND AFTER THE WASH-DOWN WATER HAS SOAKED INTO THE GROUND, THE PIT SHALL BE FILLED IN, AND THE GROUND ABOVE IT SHALL BE GRADED TO MATCH THE ELEVATION OF THE SURROUNDING AREAS. ALTERNATE WASH-DOWN PLANS MUST BE APPROVED BY THE PROJECT ENGINEER.

WASH-DOWN PLANS DESCRIBE PROCEDURES THAT PREVENT WASH-DOWN WATER FROM ENTERING STREAMS AND RIVERS. NEVER DISPOSE OF WASH-DOWN WATER DOWN A STORM DRAIN. ESTABLISH A WASH-DOWN PIT THAT INCLUDES THE FOLLOWING: (1) A LOCATION AWAY FROM ANY STORM DRAIN, STREAM, OR RIVER, (2) ACCESS TO THE VEHICLE BEING USED FOR WASH DOWN, (3) SUFFICIENT VOLUME FOR WASH-DOWN WATER, AND (4) PERMISSION TO USE THE AREA FOR WASH DOWN.

ON SITES WHERE PERMISSION OR ACCESS TO EXCAVATE A WASH-DOWN PIT IS UNAVAILABLE, THE CONTRACTOR MAY HAVE TO WASH-DOWN INTO A SEALABLE 55-GALLON DRUM OR OTHER SUITABLE CONTAINER AND THEN TRANSPORT THE CONTAINER TO A PROPER DISPOSAL SITE. FOR ADDITIONAL INFORMATION, REFER TO THE GEORGIA SMALL BUSINESS ENVIRONMENTAL ASSISTANCE PROGRAM'S "A GUIDE FOR READY MIX CHUTE/HOPPER WASH-DOWN".

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
INFRASTRUCTURE CONSTRUCTION PROJECTS

Plan Page #	Included Y/N	Notes
C-00.01	Y	1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted.
ALL	Y	2 Level II certification number issued by the Commission, signature and seal of the certified design professional.
C-00.01	Y	3 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.
C-00.01	Y	4 Provide the name, address and phone number of primary permittee.
C-00.01	Y	5 Note total and disturbed acreage of the project or phase under construction.
C-00.01	Y	6 Provide the GPS locations of the Beginning and End of the Infrastructure project. Give the Latitude and Longitude in decimal degrees.
ALL	Y	7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
C-00.01	Y	8 Description of the nature of construction activity.
C-00.11	Y	9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
C-00.03	Y	10 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, etc. which may be affected.
C-00.11	Y	11 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on page 15 of the permit.
N/A	N/A	12 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on page 15 of the permit.
N/A	N/A	13 Design professional certification statement and signature that the permittee's ES&PC plan provides for representative sampling as stated on page 26 of permit as applicable.
N/A	N/A	14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements, perimeter control BMPs and sediment basins in accordance with part IV.A.5. within 7 days after installation."
C-00.11	Y	15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wooded vegetation without first acquiring the necessary variances and permits."
N/A	N/A	16 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."
N/A	N/A	17 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a section 404 permit."
N/A	N/A	18 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities."
N/A	N/A	19 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."

N/A	N/A	20 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."
N/A	N/A	21 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment must comply with Part III. C. of the Permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment."
N/A	N/A	22 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 21 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan."
N/A	N/A	23 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited."
C-00.11	Y	24 Provide BMPs for the remediation of all petroleum spills and leaks.
N/A	N/A	25 Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed."
N/A	N/A	26 Description of the practices that will be used to reduce the pollutants in storm water discharges."
N/A	N/A	27 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).
N/A	N/A	28 Provide complete requirements of inspections and record keeping by the primary permittee."
N/A	N/A	29 Provide complete requirements of sampling frequency and reporting of sampling results."
N/A	N/A	30 Provide complete details for retention of records as per Part IV.F. of the permit."
N/A	N/A	31 Description of analytical methods to be used to collect and analyze the samples from each location."
N/A	N/A	32 Appendix B rationale for NTU values at all outfall sampling points where applicable."
N/A	N/A	33 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged also provide a summary chart of the justification and analysis for the representative sampling as applicable."
N/A	N/A	34 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the brmps into a single phase."
ALL	Y	35 Graphic scale and north arrow.
C-00.02 & C-00.03	Y	36 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following: Existing Contours USGS 1": 2000' Topographical Sheets Proposed Contours 1": 400' Centerline Profile
ALL	Y	37 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswc.org.
C-00.02 & C-00.03	Y	38 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.
N/A	N/A	39 Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site.
N/A	N/A	40 Delineation and acreage of contributing drainage basins on the project site.
N/A	N/A	41 Delineate on-site drainage and off-site watersheds using USGS 1": 2000' topographical sheets.
C-00.01	Y	42 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.
N/A	N/A	43 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.
C-00.11	Y	44 Soil series for the project site and their delineation.
MULTIPLE	Y	45 The limits of disturbance for each phase of construction.
MULTIPLE	Y	46 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. Silt fencing shall be utilized to achieve the required sediment storage for the site.
ALL	Y	47 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.
C-00.16	Y	48 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.
C-00.17	Y	49 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.

"If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream the * checklist items would be N/A. Effective January 1, 2014

ISSUE	DATE	DESCRIPTION	BY	PROJECT NUMBER	0000002943501
1	2/14	ADDENDUM NO. 2	CH		
0	12/13	ISSUED FOR BID	CH		

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON ORIGINAL DRAWINGS

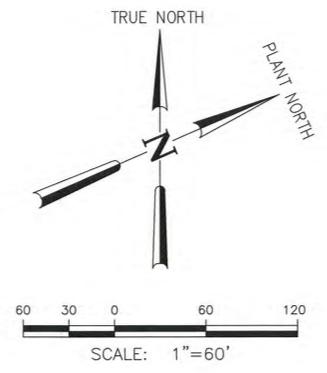
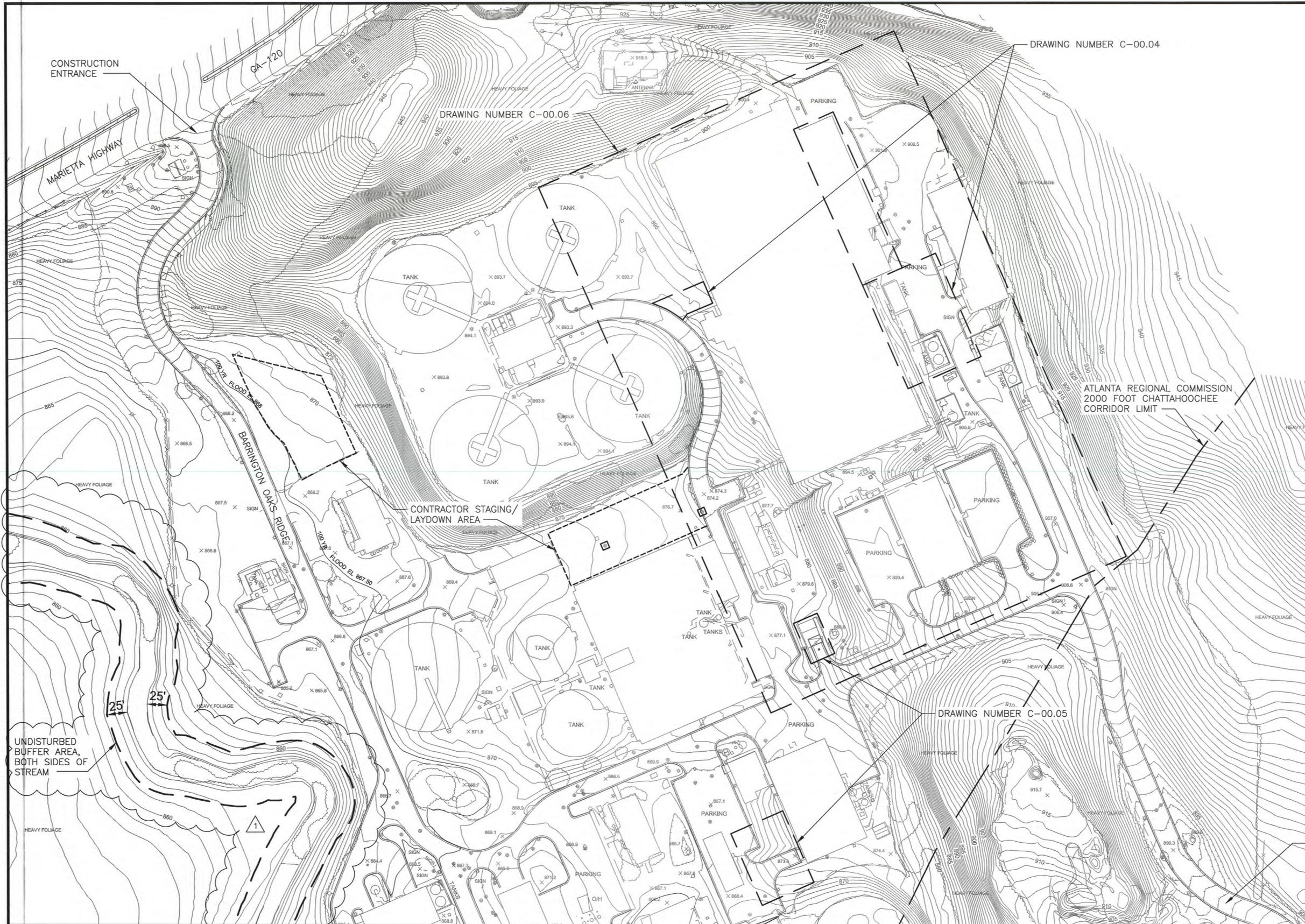
2325 Lakeview Parkway
Suite 400
Alpharetta, GA 30004
770.754.0755
Certification Nos.:
AAP000034/EB0003806/
IB26000797/LC26000381
WWW.GSPNET.COM

2/10/2014

DEPARTMENT OF WATER RESOURCES
FULTON COUNTY, GEORGIA
BIG CREEK WATER RECLAMATION FACILITY
1030 MARIETTA HWY, ROSWELL GA., 30075

CIVIL NOTES AND LEGEND
S-134 BIG CREEK WRF IMMEDIATE NEEDS REHABILITATION PROJECT

DRAWING NUMBER:	C-00.01
SHEET:	40 OF 185
DATE:	2/10/2014
FILENAME:	3501C-10001.dwg
SCALE:	



- NOTES:**
1. CONTRACTOR SHALL NOT USE ENTRANCE TO THE SOUTH OF THE PLANT INTERSECTING WILLEO ROAD.
 2. SEE G-00.05 TO FIND DRAWING AREA DESIGNATIONS.
 3. THIS TOPOGRAPHIC MAP AND SURVEY CAME FROM FULTON COUNTY.

SEE NOTE 1

1	2/14	ADDENDUM NO. 2	CH		
0	12/13	ISSUED FOR BID	CH		
ISSUE	DATE	DESCRIPTION	BY	PROJECT NUMBER	0000002943501

Designed By JO
 Drawn By MDR
 Approved By CMH
 Checked By JBB

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON ORIGINAL DRAWINGS



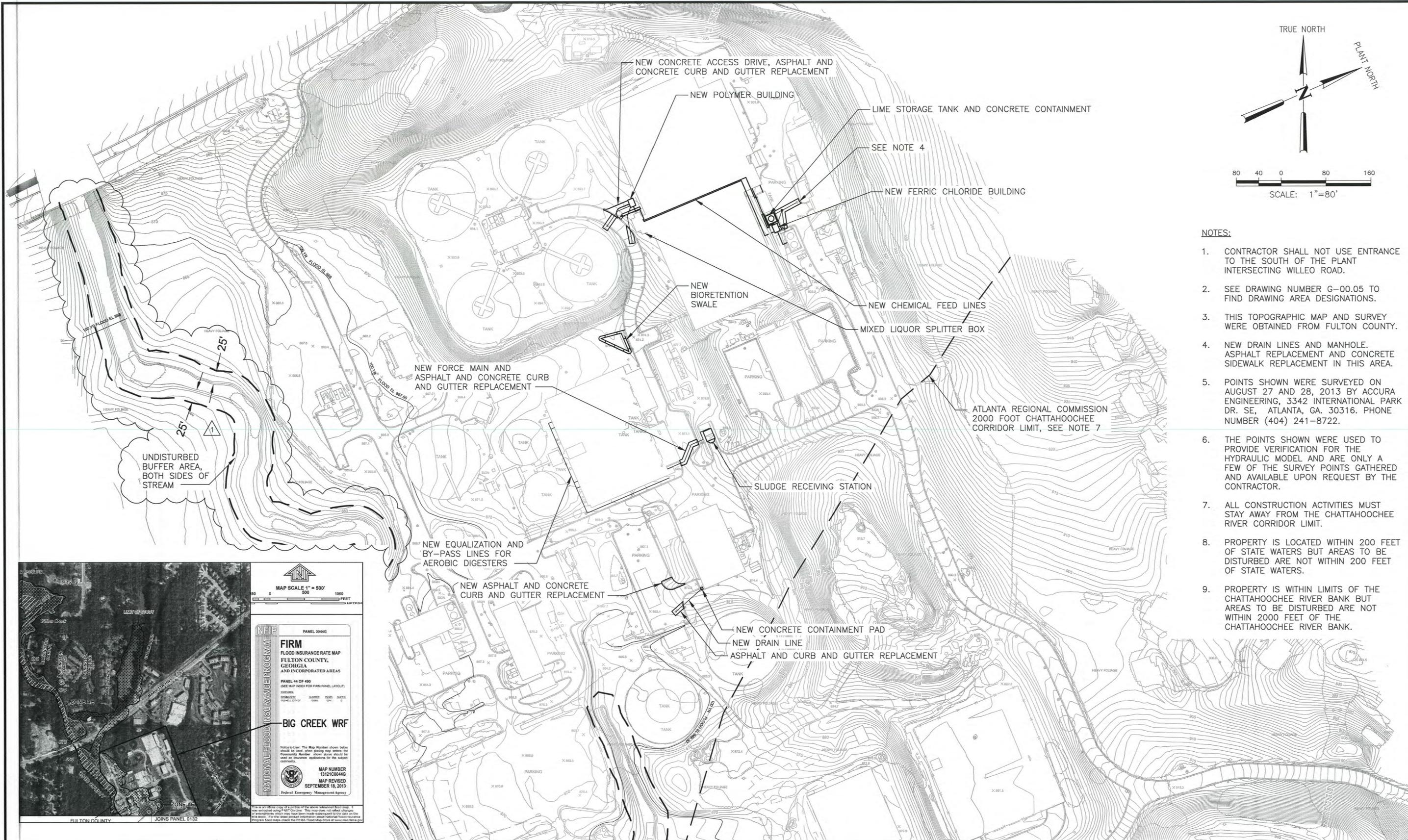
2325 Lakeview Parkway
 Suite 400
 Alpharetta, GA 30004
 770.754.0755
 Certification Nos.:
 AAP000034/EB0003806/
 IB26000797/LC26000381
 WWW.GSPNET.COM




DEPARTMENT OF WATER RESOURCES
 FULTON COUNTY, GEORGIA
 BIG CREEK WATER RECLAMATION FACILITY
 1030 MARIETTA HWY, ROSWELL GA., 30075

CIVIL
 OVERALL EXISTING SITE PLAN
 S-134 BIG CREEK WRF IMMEDIATE NEEDS REHABILITATION PROJECT

DRAWING NUMBER: C-00.02
 SHEET: 41 OF 185
 DATE: 2/10/2014
 FILENAME: 3501C-10002.dwg
 SCALE:



- NOTES:**
- CONTRACTOR SHALL NOT USE ENTRANCE TO THE SOUTH OF THE PLANT INTERSECTING WILLEO ROAD.
 - SEE DRAWING NUMBER G-00.05 TO FIND DRAWING AREA DESIGNATIONS.
 - THIS TOPOGRAPHIC MAP AND SURVEY WERE OBTAINED FROM FULTON COUNTY.
 - NEW DRAIN LINES AND MANHOLE, ASPHALT REPLACEMENT AND CONCRETE SIDEWALK REPLACEMENT IN THIS AREA.
 - POINTS SHOWN WERE SURVEYED ON AUGUST 27 AND 28, 2013 BY ACCURA ENGINEERING, 3342 INTERNATIONAL PARK DR. SE, ATLANTA, GA. 30316. PHONE NUMBER (404) 241-8722.
 - THE POINTS SHOWN WERE USED TO PROVIDE VERIFICATION FOR THE HYDRAULIC MODEL AND ARE ONLY A FEW OF THE SURVEY POINTS GATHERED AND AVAILABLE UPON REQUEST BY THE CONTRACTOR.
 - ALL CONSTRUCTION ACTIVITIES MUST STAY AWAY FROM THE CHATTAHOOCHEE RIVER CORRIDOR LIMIT.
 - PROPERTY IS LOCATED WITHIN 200 FEET OF STATE WATERS BUT AREAS TO BE DISTURBED ARE NOT WITHIN 200 FEET OF STATE WATERS.
 - PROPERTY IS WITHIN LIMITS OF THE CHATTAHOOCHEE RIVER BANK BUT AREAS TO BE DISTURBED ARE NOT WITHIN 2000 FEET OF THE CHATTAHOOCHEE RIVER BANK.

FIRM
FLOOD INSURANCE RATE MAP
FULTON COUNTY, GEORGIA
AND INCORPORATED AREAS

PANEL 0044G
PANEL 44 OF 400
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

BIG CREEK WRF

MAP NUMBER 1312C004G
MAP REVISED SEPTEMBER 18, 2013
Federal Emergency Management Agency

DESIGNED BY	JQ		
DRAWN BY	MDR		
APPROVED BY	CMH		
CHECKED BY	JBB		
1	2/14	ADDENDUM NO. 2	CH
0	12/13	ISSUED FOR BID	CH
ISSUE	DATE	DESCRIPTION	BY
PROJECT NUMBER 000002943501			

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON ORIGINAL DRAWINGS

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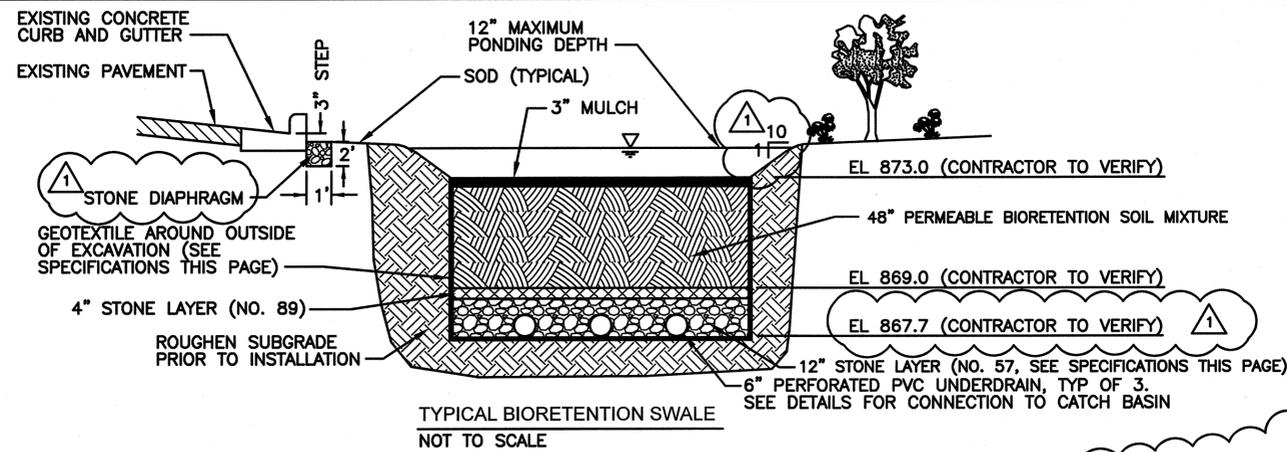
DEPARTMENT OF WATER
RESOURCES
FULTON COUNTY, GEORGIA

BIG CREEK WATER RECLAMATION FACILITY
1030 MARIETTA HWY, ROSWELL GA., 30075

CIVIL
OVERALL PROPOSED SITE PLAN

S-134 BIG CREEK WRF IMMEDIATE NEEDS REHABILITATION PROJECT

DRAWING NUMBER:	C-00.03
SHEET:	42 OF 185
DATE:	2/10/2014
FILENAME:	3501C-10003.dwg
SCALE:	



TYPICAL BIORETENTION SWALE
NOT TO SCALE

PLANTING LEGEND

- HERBACEOUS COVER
- TREE
- SHRUB
- SHRUBS**
- IH INDIAN HAWTHORNE
- CJ CREEPING JUNIPER
- WH WITCH HAZEL
- HERBACEOUS SPECIES**
- YI YELLOW IRIS
- SG SWITCHGRASS
- FG FOUNTAIN GRASS

THE PERMEABLE BIORETENTION SOIL MIXTURE (BSM) CONSISTS OF TOP SOIL, COMPOST AND SAND IN THE FOLLOWING PROPORTIONS:

ITEM	COMPOSITION BY VOLUME
TOPSOIL	2%
COMPOST	13%
SAND	85%

THE BIORETENTION SOIL MIXTURE SHALL BE TESTED AND MEET THE FOLLOWING CRITERIA:

ITEM	CRITERIA	TEST METHOD
COEFFICIENT OF PERMEABILITY (K)	1.5-1.90 ** (FT/DAY)	ASTM D4972
CORRECT PH	5.5-7.5	*
MAGNESIUM	MINIMUM 32 PPM	*
PHOSPHORUS (PHOSPHATE - P ₂ O ₅)	NOT TO EXCEED 69 PPM	*
POTASSIUM (K ₂ O)	MINIMUM 78 PPM	*
SOLUBLE SALTS	NOT TO EXCEED 500 PPM	*

- * USE AUTHORIZED SOIL TEST PROCEDURES.
- ** SHOULD COEFFICIENT OF PERMEABILITY NOT MEET THE ACCEPTABLE RANGE, ADD COURSE SAND OR TOP SOIL TO BSM. BSM MUST BE UNIFORMLY MIXED AND TESTED, UNTIL DESIRED COEFFICIENT OF PERMEABILITY IS ACHIEVED.

TOP SOIL SPECIFICATIONS:

THE USDA TEXTURAL CLASSIFICATION OF THE TOP SOIL FOR THE BSM SHALL BE LOAMY SAND OR SANDY LOAM. THE TOP SOIL MAY BE SALVAGED OR FURNISHED AND MEET THE FOLLOWING CRITERIA:

ITEM	PERCENT BY WEIGHT	TEST METHOD
SAND (2.0 - 0.050 MM)	60-85%	AASHTO T88
SILT (0.050 - 0.002 MM)	0-25%	AASHTO T88
CLAY (LESS THAN 0.002 MM)	0-5%	AASHTO T88
ORGANIC MATTER	1.5-10%	AASHTO T194

SAND SPECIFICATIONS:

PROVIDE CLEAN SAND, FREE OF DELETERIOUS MATERIALS. SAND SHALL MEET AASHTO M-6 OR ASTM C-33 WITH GRAIN SIZE OF 0.02" - 0.04".

GEOTEXTILE SPECIFICATIONS:

USE MIRAFI 140NL, 140N, 140NC, OR APPROVED EQUAL.

STONE SPECIFICATIONS:

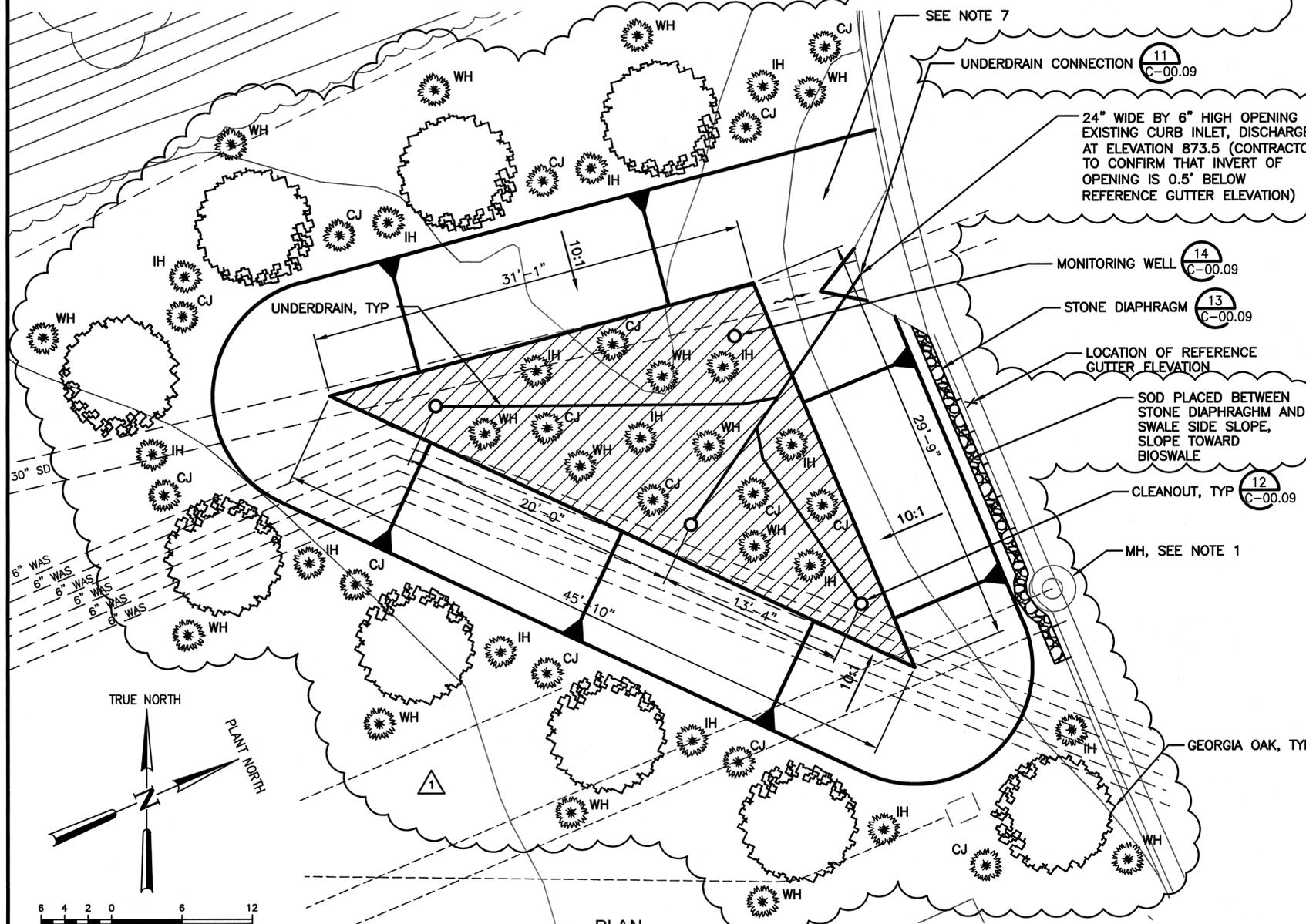
USE DOUBLE WASHED, #57 STONE, 1-1/2" IN SIZE.

UNDERDRAIN PIPE SPECIFICATIONS:

PROVIDE 6" SCHEDULE 40 PVC OR SDR35 DWV PIPE WITH 3/8" PERFORATIONS, SPACED AT 6" CENTERS, WITH A MINIMUM OF 4 HOLES PER ROW. PIPE IS SPACED AT A MAXIMUM OF 10 FEET ON CENTER AND A MINIMUM GRADE OF 0.5% MUST BE MAINTAINED.

NOTES:

1. CONTRACTOR SHALL FIELD LOCATE AND PROTECT ALL IN-SERVICE UNDERGROUND UTILITY LINES WITHIN THE BOUNDARIES OF THE LAYDOWN/STAGING AREA THAT WILL NOT BE RELOCATED. IN-SERVICE UNDERGROUND UTILITIES THAT NECESSITATE RELOCATION SHALL BE LOCATED, EXPOSED AND MOVED PRIOR TO MOBILIZING AND BEGINNING CONSTRUCTION.
 2. CONTRACTOR SHALL VERIFY ALL ABANDONED UTILITIES AND STRUCTURES WITHIN THE LIMITS OF THE STAGING/LAYDOWN AREA WITH THE OWNER PRIOR TO MOBILIZING AND COMMENCEMENT OF CONSTRUCTION. ABANDONED STRUCTURES AND PIPING MAY BE DEMOLISHED ONLY WITH WRITTEN AUTHORIZATION FROM THE OWNER. ANY ABANDONED PIPE LEFT IN THE GROUND SHALL BE PLUGGED PER METHODS APPROVED BY THE LOCAL GOVERNING AGENCY.
 3. PLANT 2" TRUNK DIAMETER GEORGIA OAK (*Quercus georgiana*) TREES ON A 16'-0" CENTER-TO-CENTER SPACING ALONG EDGE OF BIOSWALE.
 4. PLANT 12" TALL SHRUBS AS SHOWN PER PLANTING LEGEND AT 36" MINIMUM SPACING IN ALL DIRECTIONS.
 5. PLANT HERBACEOUS SPECIES AS SHOWN PER PLANTING LEGEND AT 18" MINIMUM SPACING IN ALL DIRECTIONS.
 6. CONTRACTOR SHALL MAINTAIN TREES, PLANTS AND SOD UNTIL FULLY ESTABLISHED FOR A MINIMUM PERIOD OF 6 MONTHS. ANY VEGETATION THAT FAILS TO ESTABLISH SHALL BE REPLACED BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
 7. SOD 10:1 SIDE SLOPES OF BIOSWALE. SOD TO COVER ALL DISTURBED AREAS OUTSIDE OF BIOSWALE AREA.
 8. REFER TO DRAWING NUMBER C-00.08 FOR MORE DETAILED INFORMATION.
 9. PERMEABLE GEOTEXTILE IS TO BE PLACED BETWEEN THE GRAVEL LAYER AND THE BIORETENTION SOIL MIXTURE LAYER. GEOTEXTILE SHALL COMPLETELY SEPARATE THE GRAVEL AND SOIL LAYERS. GEOTEXTILE SHALL ALSO SURROUND THE BIORETENTION AREA ON ALL SIDES AND BOTTOM TO PREVENT SOIL INTRUSION. SEE GEOTEXTILE SPECIFICATIONS THIS PAGE.
 10. CLEANOUTS SHALL BE PROVIDED PER DETAILS AT THE TERMINATION OF EACH UNDERDRAIN PIPE.
 11. PERMEABLE BIORETENTION SOIL SHALL BE A MIXTURE OF TOPSOIL, MEDIUM COARSE SAND AND COMPOST/PEAT MOSS. SEE SPECIFICATIONS THIS PAGE.
 12. CURB CUTS SHALL CONSIST OF ALTERNATING 36" LENGTH OPENINGS WITH 36" OF CONCRETE CURBING. OPENING BEGINS AT EXISTING CURB INLET, CURBING TO REMAIN AROUND THE EXISTING MANHOLE. SAWCUT EXISTING CURB AT 60° ANGLES TO GRADE.
 13. USE PVC WYES AND ELBOWS AT DISCHARGE HEADER FOR TRANSITIONS. NO 90° FITTING CONNECTION SHOULD BE USED.
- BIOSWALE SOIL MIXTURE:**
- A. THE BIORETENTION SOIL MIXTURE (BSM) SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES EXCLUDING MULCH. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE BIORETENTION AREA THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS.
 - B. PERMEABLE BIORETENTION SOIL THAT FAILS TO MEET THE MINIMUM REQUIREMENTS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER. MIXING OF THE CORRECTIVE ADDITIVES TO THE BSM IS INCIDENTAL AND SHALL BE AT NO ADDITIONAL COST TO THE OWNER.
 - C. MIXING OF THE BSM TO A HOMOGENOUS CONSISTENCY SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER.
 - D. SHOULD THE PH FALL OUTSIDE OF THE ACCEPTABLE RANGE, IT MAY BE MODIFIED WITH LIME (TO RAISE) OR IRON SULFATE PLUS SULFUR (TO LOWER). THE LIME OR IRON SULFATE MUST BE MIXED UNIFORMLY INTO THE BSM PRIOR TO USE IN BIORETENTION FACILITIES.
 - E. SHOULD THE BSM NOT MEET THE MINIMUM REQUIREMENT FOR MAGNESIUM, IT MAY BE MODIFIED WITH MAGNESIUM SULFATE. LIKEWISE, SHOULD THE BSM NOT MEET THE MINIMUM REQUIREMENT FOR POTASSIUM, IT MAY BE MODIFIED WITH POTASH. MAGNESIUM SULFATE AND POTASH MUST BE MIXED UNIFORMLY INTO THE BSM PRIOR TO USE IN BIORETENTION FACILITIES.



PLAN
SCALE: 1" = 6'

ISSUE	DATE	DESCRIPTION	BY	PROJECT NUMBER
1	2/14	ADDENDUM NO. 2	CH	000002943501
0	12/13	ISSUED FOR BID	CH	

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON ORIGINAL DRAWINGS



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DEPARTMENT OF WATER
RESOURCES
FULTON COUNTY, GEORGIA
BIG CREEK WATER RECLAMATION
FACILITY
1030 MARIETTA HWY, ROSWELL GA, 30075

CIVIL
BIORETENTION SWALE PLAN VIEW
AND DETAILS
S-134 BIG CREEK WRF IMMEDIATE NEEDS REHABILITATION PROJECT

DRAWING NUMBER:	C-00.07
SHEET:	46 OF 185
DATE:	2/19/2014
FILENAME:	3501C-10007.dwg
SCALE:	

CITY OF ROSWELL EROSION SEDIMENTATION AND POLLUTION CONTROL NOTES

- IF APPLICABLE, THE CONTRACTOR/OPERATOR/OWNER UPON FILING THE NOI AND NOT FOR THE STATE NPDES CONSTRUCTION GENERAL PERMIT, SHALL SUBMIT COPIES OF THE NOI AND NOT TO THE CITY ENGINEER.
- CONSTRUCTION OF THE SITE WILL INITIATE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UP GRADIENT GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.
- PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE SHALL OCCUR WITHIN THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
- NO GRADING SHALL BE DONE UNTIL SILT BARRIER INSTALLATION IS COMPLETE AND A GRADING PERMIT IS ISSUED BY THE LAND DEVELOPMENT INSPECTOR.
- NO CLEARING BEYOND THE LIMITS OF DISTURBANCE SHOWN ON THE APPROVED PLANS SHALL BE ALLOWED.
- NO LAND DISTURBING ACTIVITY OR STORAGE OF MATERIALS WITHIN ANY TREE SAVE AREA SHALL BE ALLOWED.
- THE PROPERTY OWNER AND CONTRACTOR ARE EQUALLY RESPONSIBLE FOR ALL EROSION CONTROL ACTIVITIES.
- NOTICE IS HEREBY GIVEN THAT ALL EROSION AND SEDIMENT DEVICES AND PRACTICES MUST BE INSTALLED AND MAINTAINED AT ALL TIMES. NO FURTHER NOTICE WILL BE GIVEN. ANY SITE UPON WHICH THE LAND DEVELOPMENT INSPECTOR FINDS ANY DEFICIENCY WILL BE SUBJECT TO AN IMMEDIATE ENFORCEMENT ACTION WITHOUT WARNING.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN QUALIFIED PROFESSIONAL ADVICE WHEN QUESTIONS ARISE CONCERNING DESIGN AND EFFECTIVENESS OF EROSION CONTROL DEVICES, NOT THE CITY OF ROSWELL.
- EROSION CONTROL DEVICES THAT ARE INSTALLED AS DIRECTED BY THE LAND DEVELOPMENT INSPECTOR BUT NOT SHOWN ON THE APPROVED PLAN AND WHICH ALSO SUBSEQUENTLY FAIL ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL FURNISH THE CITY OF ROSWELL LAND DEVELOPMENT INSPECTOR WITH A SCHEDULE OF ANTICIPATED STARTING AND COMPLETION DATES FOR EACH SEQUENCE OF LAND DISTURBING ACTIVITY.
- THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ON TO PUBLIC RIGHT-OF-WAY OR PRIVATE ROADS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS DEMANDS, AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC/PRIVATE ROADWAY OR INTO STORM DRAIN MUST BE REMOVED.
- SILT FENCE FABRIC SHALL BE COMPRISED OF GA. DEPARTMENT OF TRANSPORTATION QUALIFIED PRODUCTS LIST (QPL) 36 FOR SILT FENCE FABRIC. TYPE "A" SILT FENCE FABRIC AND CONSTRUCTION MAY BE ALLOWED WITH PRIOR WRITTEN APPROVAL FROM THE LAND DEVELOPMENT INSPECTOR.
- SILT FENCES SHALL NOT BE PLACED IN STREAM BUFFER, FLOOD PLAINS OR ACROSS AREAS OF CONCENTRATED FLOW. CHECK DAMS OR ROCK FILTER DAMS, AS APPROPRIATE ARE TO BE INSTALLED ACROSS AREAS OF CONCENTRATED FLOW.
- TOPSOIL SHALL BE STOCKPILED AND USED TO DRESS FINAL GRADES.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA AND APPLICABLE UPDATES THERETO ON THE GASWCC WEBSITE.
- BELOW ALL FILL SLOPES GREATER THAN 25% AND HIGHER THAN 10 FEET, A FLAT AREA LENGTH OF 10 FEET BETWEEN THE TOE OF THE SLOPE TO THE FENCE SHALL BE PROVIDED.

- ALL OPEN DRAINAGE SWALES MUST BE GRASSED, AND RIPRAP MUST BE PLACED AS REQUIRED TO CONTROL EROSION. A MINIMUM OF 10 SQUARE YARDS OF 40 LB. STONE SHALL BE PLACED AT ALL HEADWALLS OR FLUMES.
- FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED CONSISTENT WITH THE CITY OF ROSWELL SOIL EROSION, SEDIMENTATION AND POLLUTION CONTROL ORDINANCE.
- A CONSTRUCTION SITE COPY OF THE EROSION SEDIMENT AND/OR POLLUTION CONTROL PLAN MUST BE KEPT UP TO DATE. REVISIONS TO THE PLAN SHALL BE APPROVED BY THE LAND DEVELOPMENT INSPECTOR.
- REVISIONS WHICH INVOLVE A HYDRAULIC COMPONENT MUST BE REVISED BY THE DESIGN ENGINEER AND APPROVED BY THE CITY ENGINEER.
- WHENEVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED AND SUPPLEMENTED.
- THE DISTURBED AREA AND THE DURATION OF EXPOSURE TO EROSION ELEMENTS SHALL BE KEPT TO A PRACTICABLE MINIMUM. DISTURBED SOIL SHALL BE STABILIZED AS QUICKLY AS PRACTICABLE.
- TEMPORARY VEGETATION AND/OR HEAVY MULCHING SHALL BE EMPLOYED TO PROTECT EXPOSED CRITICAL AREAS DURING DEVELOPMENT. IN NO CASE SHALL A CRITICAL AREA BE LEFT BARE FOR MORE THAN SEVEN (7) DAYS.
- GRADING EQUIPMENT MUST CROSS FLOWING STREAMS BY MEANS OF BRIDGES OR CULVERTS EXCEPT WHEN SUCH METHODS ARE NOT FEASIBLE, PROVIDED, IN ANY CASE, THAT SUCH CROSSING IS KEPT TO A MINIMUM.
- EROSION CONTROL DEVICES WILL BE IN PLACE BEFORE SITE DISTURBANCE AND WILL BE PERIODICALLY INSPECTED AND REPAIRED OR RESTORED AS NEEDED TO FUNCTION PROPERLY UNTIL PERMANENT MEASURES ARE ESTABLISHED AND PROJECT IS COMPLETE, I.E.: CONSTRUCTION EXITS AND SILT FENCES SHALL BE RE-TOPPED OR CLEANED AS SILT REDUCES THEIR EFFECTIVENESS.
- ADDITIONAL MEASURES MAY BE REQUIRED TO CONTROL EROSION AS DETERMINED NECESSARY BY CITY LAND DEVELOPMENT INSPECTORS.
- CONCENTRATED FLOW AREAS, ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF TEN FEET OR GREATER, AND CUTS AND FILLS WITHIN STREAM BUFFERS, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKETS.
- ALL SLOPES STEEPER THAN 3:1 SHALL RECEIVE SURFACE ROUGHENING TREATMENT OR BE STABILIZED WITH GDOT APPROVED EROSION CONTROL BLANKETS OR SOIL REINFORCEMENT MATTING. MOWED SLOPES SHALL NOT BE STEEPER THAN 3:1. ALL SLOPES MUST BE PROTECTED UNTIL A PERMANENT VEGETATIVE STAND IS ESTABLISHED.
- RYEGRASS SHALL NOT BE USED IN ANY SEEDING MIXTURES CONTAINING PERENNIAL SPECIES DUE TO ITS ABILITY TO OUT-COMPETE DESIRED SPECIES CHOSEN FOR PERMANENT PERENNIAL COVER.
- ALL TEMPORARY AND PERMANENT SEEDING MUST BE PERFORMED AT THE APPROPRIATE SEASON. ADDITIONAL PLANTINGS WILL BE NECESSARY IF A SUFFICIENT STAND OF GRASS FAILS TO GROW.
- THE LAND DEVELOPMENT INSPECTOR WILL DETERMINE ADEQUATE COVER OF NEW PLANTINGS.
- ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
- THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.
- CONTACT YOUR LAND DISTURBANCE INSPECTOR OR CALL 770-594-6100 TO SCHEDULE INSPECTIONS

37. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50 FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

PETROLEUM STORAGE, SPILLS AND LEAKS

THESE PLANS EXPRESSLY DELEGATE THE RESPONSIBILITY OF PROPER ON-SITE HAZARDOUS MATERIAL MANAGEMENT TO THE CONTRACTOR. THE CONTRACTOR SHALL, AT A MINIMUM, PROVIDE AN ACTION PLAN AND KEEP THE NECESSARY MATERIALS ON SITE FOR THE CAPTURE, CLEAN UP AND DISPOSAL OF ANY PETROLEUM PRODUCT, OR OTHER HAZARDOUS MATERIAL, LEAKS OR SPILLS ASSOCIATED WITH THE SERVICING, REFUELING OR OPERATION OF ANY EQUIPMENT UTILIZED AT THE SITE. A COPY OF THE ACTION PLAN SHALL BE SUBMITTED TO THE PROJECT ENGINEER AND MAINTAINED ON THE PROJECT SITE. ALL PERSONNEL OPERATING OR SERVICING EQUIPMENT SHALL BE FAMILIAR WITH THE ACTION PLAN. THE CONTRACTOR SHALL NOT PARK, REFUEL, OR MAINTAIN EQUIPMENT WITHIN STREAM BUFFERS.

IF THE CONTRACTOR ELECTS TO STORE PETROLEUM PRODUCTS ON SITE, THE CONTRACTOR SHALL PREPARE AN ESPCP ADDENDUM THAT ADDRESSES THE ADDITIONAL BMP'S NEEDED FOR ONSITE STORAGE AND SPILL PREVENTION FOR PETROLEUM PRODUCTS. THIS PLAN SHALL BE PREPARED BY A CERTIFIED DESIGN PROFESSIONAL AS REQUIRED BY GAR100002 FOR INCLUSION WITH THESE PLANS.

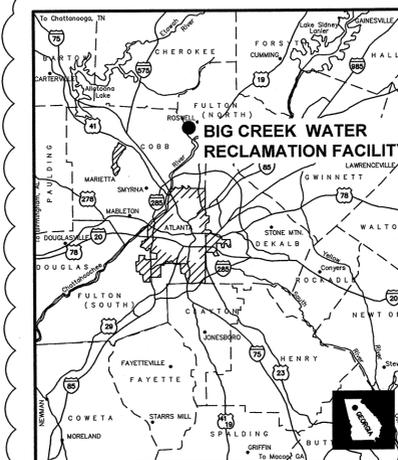
EROSION AND SEDIMENTATION CONTROL (E&SC) PLAN LEGEND

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION EXIT			A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Cr	CONSTRUCTION ROAD STABILIZATION			A gravelway constructed as part of a construction plan including access roads, subdivision roads, parking areas and other on-site vehicle transportation routes.
Dc	STREAM DIVERSION CHANNEL			A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Di	DIVERSION			An earth channel or dike located above, below, or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE			A flexible conduit of heavy-duty fabric or other material designed to safely conduct surface runoff down a slope. This is temporary and inexpensive.
Dn2	PERMANENT DOWNDRAIN STRUCTURE			A paved chute, pipe, sectional conduit or similar material designed to safely conduct surface runoff down a slope.
Fr	FILTER RING			A temporary stone barrier constructed at storm drain inlets and pond outlets.
Ga	GABION			Rock filter baskets which are hand-placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE			Permanent structures installed to protect channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER			A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM			A permanent or temporary stone filter dam installed across small streams or drainage ways.
Re	RETAINING WALL			A wall installed to stabilize out and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Rt	RETRO FITTING			A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter.
Sd1	SEDIMENT BARRIER			A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence.
Sd2	INLET SEDIMENT TRAP			An impounding area created by excavating around a storm drain drop inlet. The excavated area will be filled and stabilized in compliance with construction activities.
Sd3	TEMPORARY SEDIMENT BASIN			A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out.
Sr	TEMPORARY STREAM CROSSING			A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment.
St	STORMDRAIN OUTLET PROTECTION			A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.
Su	SURFACE ROUGHENING			A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading.

VEGETATIVE MEASURES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)			Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP SEEDING)			Establishing a temporary vegetative cover with fast growing seedlings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)			Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, sod or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (SODDING)			A permanent vegetative cover using sods on highly erodible or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS			Controlling surface and air movement of dust on construction site, roadways and similar sites.
Mb	EROSION CONTROL MATTING AND BLANKETS			The installation of a protective covering (blanket) or soil stabilization mat on a prepared planting area of a steep slope, channel, or shoreline.
Pm	POLY-CRYLAMIDE (PAM)			The liquid application of product containing anionic polyacrylamide (PAM) as temporary soil binding agents to reduce soil erosion.
Sb	STREAMBANK STABILIZATION (USING PERM VEGETATION)			The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion problems.
Tb	TACKIFIERS AND BINDERS			Substance used to anchor straw or hay mulch by causing the organic material to bind together.



DESIGN PROFESSIONAL'S CERTIFICATION:

- I CERTIFY THAT THE PERMITEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH LAND DISTURBING ACTIVITY WAS PERMITTED. THE PLAN PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS. THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHOD IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100002.
- I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATION DESCRIBED HEREIN BY MYSELF OR BY MY AUTHORIZED AGENT, UNDER MY DIRECT SUPERVISION."
- I CERTIFY UNDER THE PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED UPON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

Michael Bywaletz 3/5/14
 MICHAEL BYWALETZ, P.E.
 GSWCC LEVEL II DESIGN PROFESSIONAL CERTIFICATION #0000000424
 08/10/2014
 EXPIRATION DATE

ISSUE	DATE	DESCRIPTION	BY	PROJECT NUMBER
1	2/14	ADDENDUM NO. 2	CH	0000002943501
0	12/13	ISSUED FOR BID	CH	

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON ORIGINAL DRAWINGS



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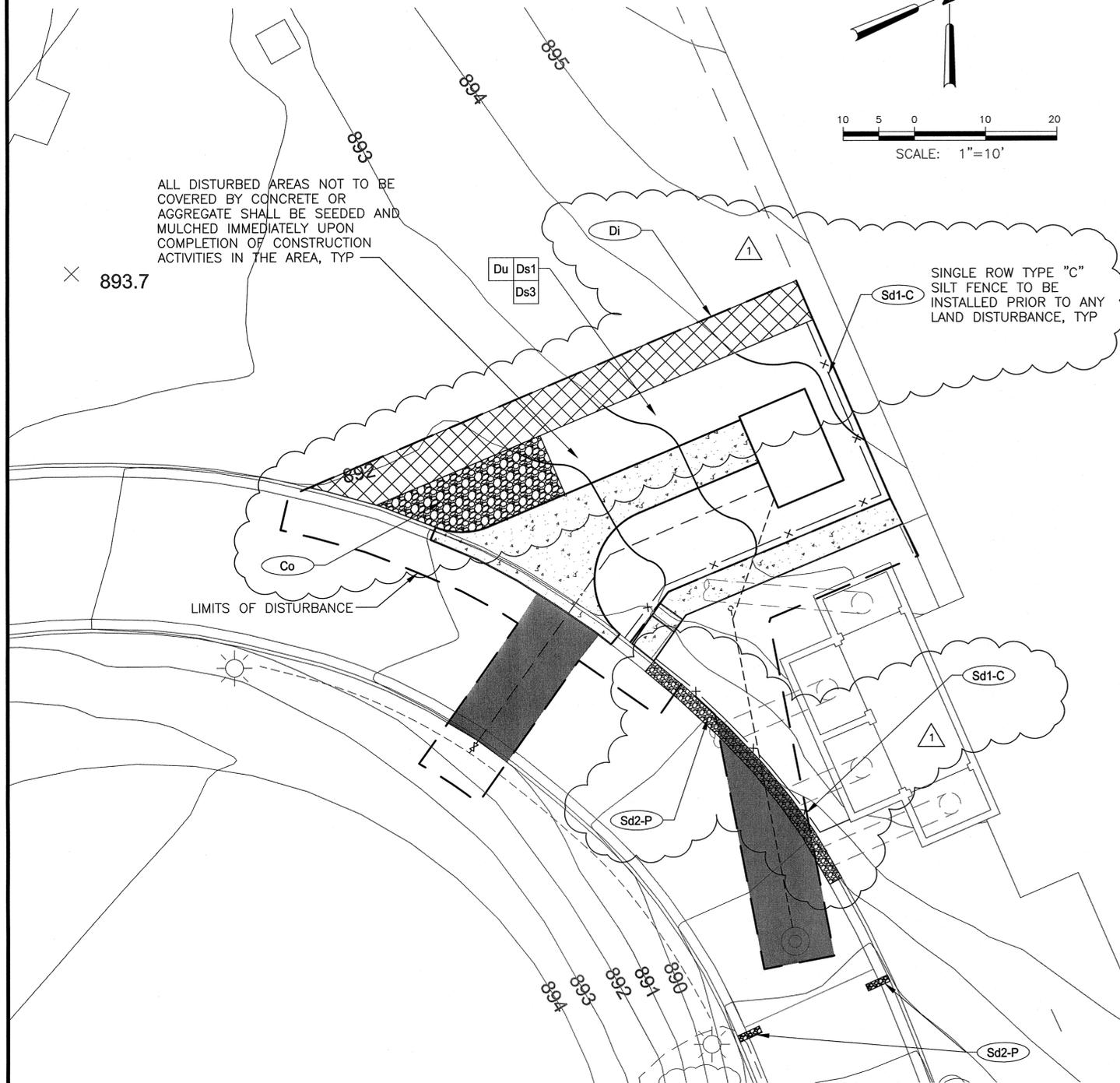
DEPARTMENT OF WATER RESOURCES
 FULTON COUNTY, GEORGIA
 BIG CREEK WATER RECLAMATION FACILITY
 1030 MARIETTA HWY, ROSWELL GA., 30075

CIVIL EROSION CONTROL NOTES, LEGEND AND ABBREVIATIONS
 S-134 BIG CREEK WRF IMMEDIATE NEEDS REHABILITATION PROJECT

DRAWING NUMBER:	C-00.11
SHEET:	50 OF 185
DATE:	2/10/2014
FILENAME:	3501C-10011.dwg
SCALE:	

NOTES:

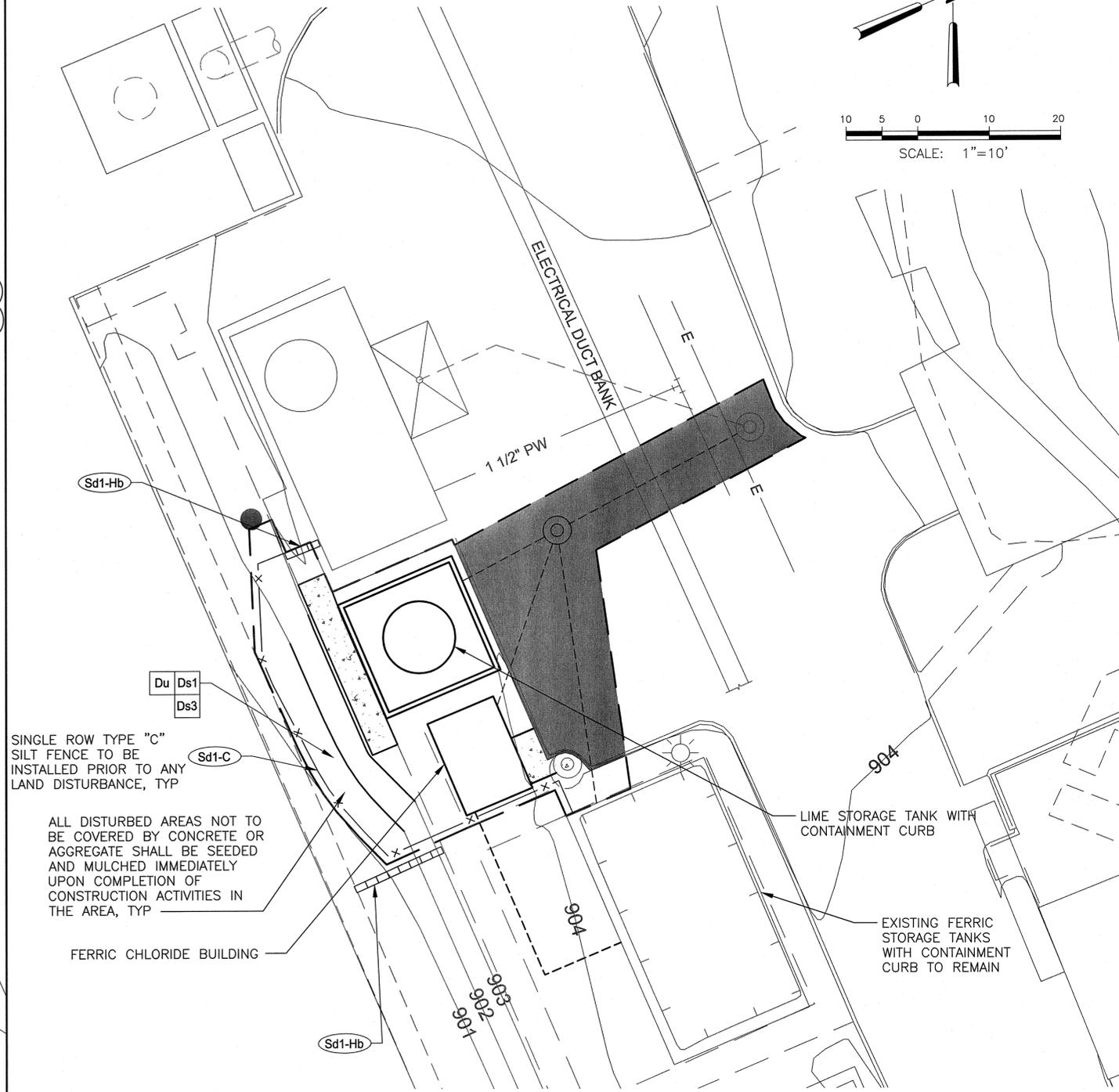
1. CONTRACTOR SHALL USE PROPER BMP'S ON STOCK-PILED DIRT AREAS.



LIMITS OF DISTURBANCE = 2849 SQUARE FEET (0.07 ACRES)

NOTES:

1. CONTRACTOR SHALL USE PROPER BMP'S ON STOCK-PILED DIRT AREAS.



LIMITS OF DISTURBANCE = 2505 SQUARE FEET (0.06 ACRES)

1	2/14	ADDENDUM NO. 2	CH		
0	12/13	ISSUED FOR BID	CH		
ISSUE	DATE	DESCRIPTION	BY	PROJECT NUMBER	000002943501

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON ORIGINAL DRAWINGS



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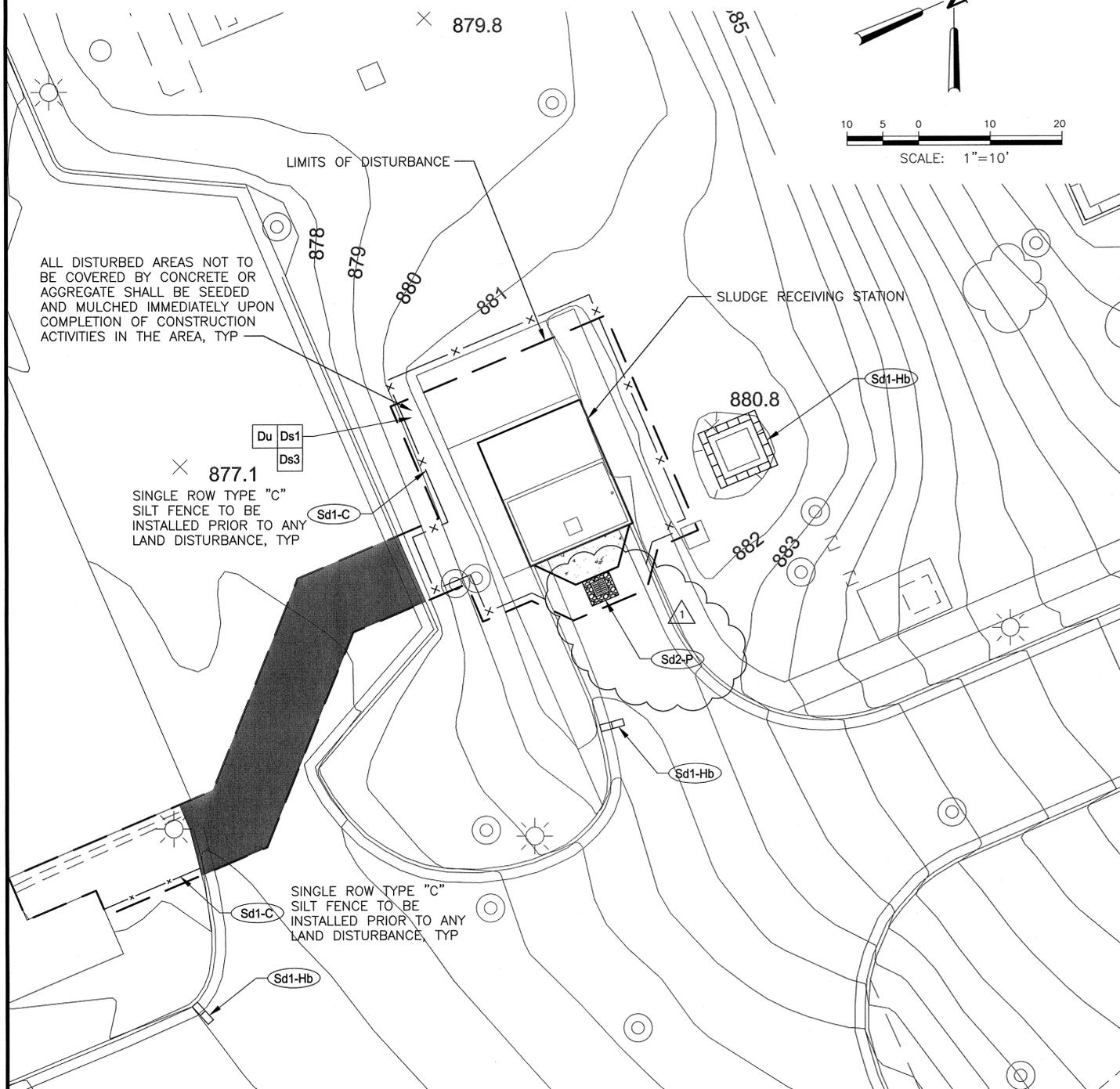
DEPARTMENT OF WATER
RESOURCES
FULTON COUNTY, GEORGIA
BIG CREEK WATER RECLAMATION
FACILITY
1030 MARIETTA HWY, ROSWELL GA., 30075

CIVIL
POLYMER BUILDING, LIQUID LIME
STORAGE TANK AND FERRIC BUILDING
EROSION CONTROL PLANS
S-134 BIG CREEK WRF IMMEDIATE NEEDS REHABILITATION PROJECT

DRAWING NUMBER:	C-00.12
SHEET:	51 OF 185
DATE:	2/10/2014
FILENAME:	3501C-10012.dwg
SCALE:	

NOTES:

1. CONTRACTOR SHALL USE PROPER BMP'S ON STOCK-PILED DIRT AREAS.



ALL DISTURBED AREAS NOT TO BE COVERED BY CONCRETE OR AGGREGATE SHALL BE SEEDED AND MULCHED IMMEDIATELY UPON COMPLETION OF CONSTRUCTION ACTIVITIES IN THE AREA, TYP

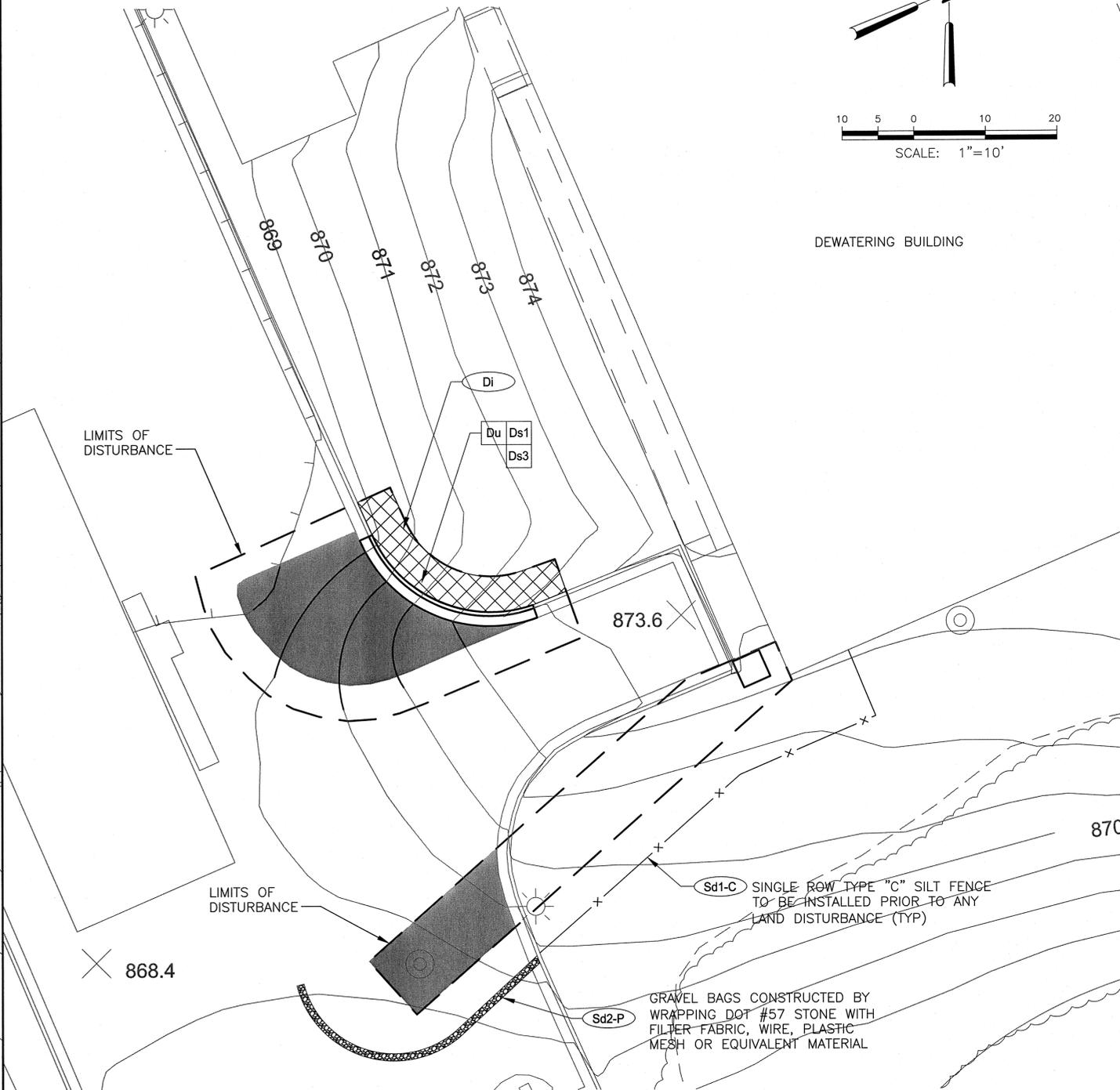
SINGLE ROW TYPE "C" SILT FENCE TO BE INSTALLED PRIOR TO ANY LAND DISTURBANCE, TYP

SINGLE ROW TYPE "C" SILT FENCE TO BE INSTALLED PRIOR TO ANY LAND DISTURBANCE, TYP

LIMITS OF DISTURBANCE = 1443 SQUARE FEET (0.03 ACRES)

NOTES:

1. CONTRACTOR SHALL USE PROPER BMP'S ON STOCK-PILED DIRT AREAS.



GRAVEL BAGS CONSTRUCTED BY WRAPPING DOT #57 STONE WITH FILTER FABRIC, WIRE, PLASTIC MESH OR EQUIVALENT MATERIAL

LIMITS OF DISTURBANCE = 1430 SQUARE FEET (0.03 ACRES)

1	2/14	ADDENDUM NO. 2	CH		
0	12/13	ISSUED FOR BID	CH		
ISSUE	DATE	DESCRIPTION	BY	PROJECT NUMBER	000002943501

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON ORIGINAL DRAWINGS



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DEPARTMENT OF WATER
RESOURCES
FULTON COUNTY, GEORGIA
BIG CREEK WATER RECLAMATION
FACILITY
1030 MARIETTA HWY, ROSWELL GA, 30075

CIVIL
SLUDGE RECEIVING STATION AND
POLYMER DEWATERING
EROSION CONTROL PLANS
S-134 BIG CREEK WRF IMMEDIATE NEEDS REHABILITATION PROJECT

DRAWING NUMBER:	C-00.13
SHEET:	52 OF 185
DATE:	2/10/2014
FILENAME:	3501C-10013.dwg
SCALE:	

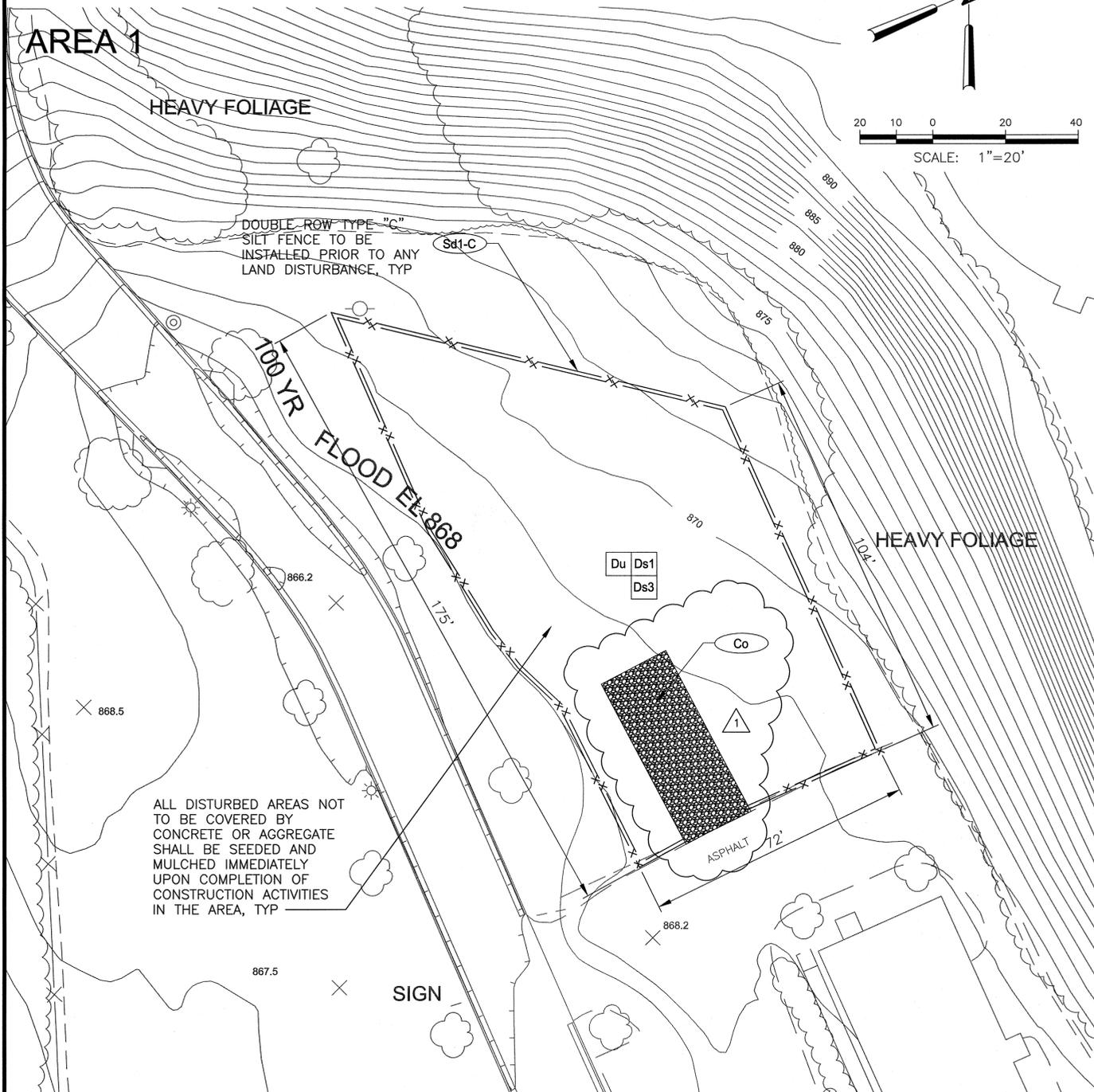
NOTES:

1. CONTRACTOR SHALL USE PROPER BMP'S ON STOCK PILED DIRT AREAS.
2. CONTRACTOR CAN USE ALL OF AREA 1 AND AREA 2 OR A COMBINATION OF BOTH IF NECESSARY.
3. CONTRACTOR SHALL FIELD LOCATE AND PROTECT ALL UNDERGROUND UTILITY LINES WITHIN THE BOUNDARIES OF THE LAYDOWN/STAGING AREA.

NOTES:

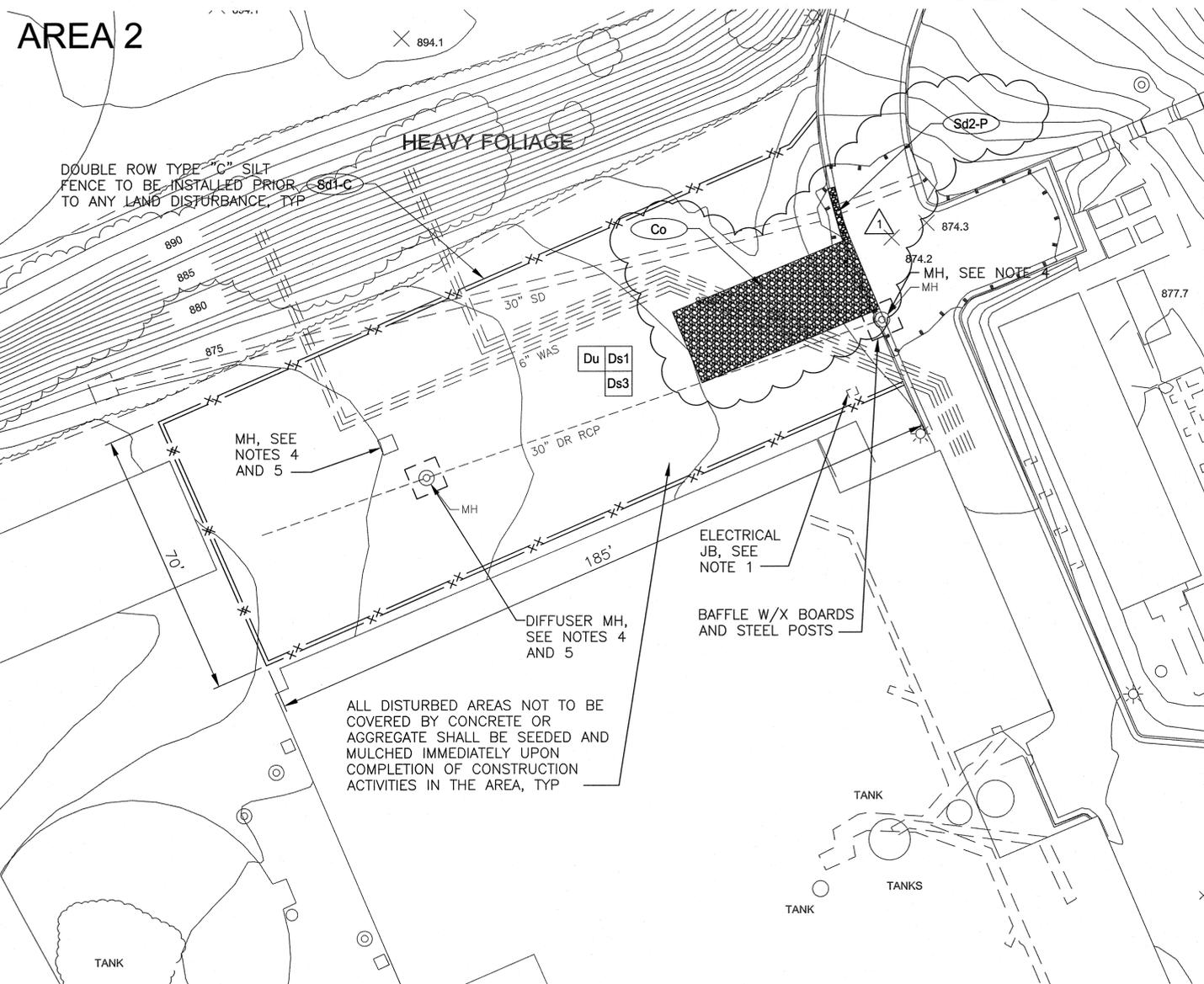
1. CONTRACTOR SHALL USE PROPER BMP'S ON STOCK PILED DIRT AREAS.
2. PROTECT EXISTING MANHOLES AND DRAINAGE INLETS FROM DAMAGE.
3. CONTRACTOR CAN USE ALL OF AREA 1 AND AREA 2 OR A COMBINATION OF BOTH IF NECESSARY.
4. CONTRACTOR SHALL FIELD LOCATE AND PROTECT ALL IN-SERVICE UNDERGROUND UTILITY LINES WITHIN THE BOUNDARIES OF THE LAYDOWN/STAGING AREA THAT WILL NOT BE RELOCATED. IN-SERVICE UNDERGROUND UTILITIES THAT NECESSITATE RELOCATION SHALL BE LOCATED, EXPOSED AND MOVED PRIOR TO MOBILIZING AND BEGINNING CONSTRUCTION.
5. CONTRACTOR SHALL VERIFY ALL ABANDONED UTILITIES AND STRUCTURES WITHIN THE LIMITS OF THE STAGING/LAYDOWN AREA WITH THE OWNER PRIOR TO MOBILIZING AND COMMENCEMENT OF CONSTRUCTION. ABANDONED STRUCTURES AND PIPING MAY BE DEMOLISHED ONLY WITH WRITTEN AUTHORIZATION FROM THE OWNER. ANY ABANDONED PIPE LEFT IN THE GROUND SHALL BE PLUGGED PER METHODS APPROVED BY THE LOCAL GOVERNING AGENCY.

AREA 1



LIMITS OF DISTURBANCE = 11,335 SQUARE FEET (0.26 ACRES)

AREA 2



LIMITS OF DISTURBANCE = 12,740 SQUARE FEET (0.29 ACRES)

Designed By	JO		
Drawn By	BDK		
Approved By	CMH		
Checked By	JBB		
1	2/14	ADDENDUM NO. 2	CH
0	12/13	ISSUED FOR BID	CH
ISSUE	DATE	DESCRIPTION	BY
		PROJECT NUMBER	0000002943501

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON ORIGINAL DRAWINGS



2325 Lakeview Parkway
Suite 400
Alpharetta, GA 30004
770.754.0755
Certification Nos.:
AAP000034/EB0003806/
IB26000797/LC26000381
WWW.GSPNET.COM

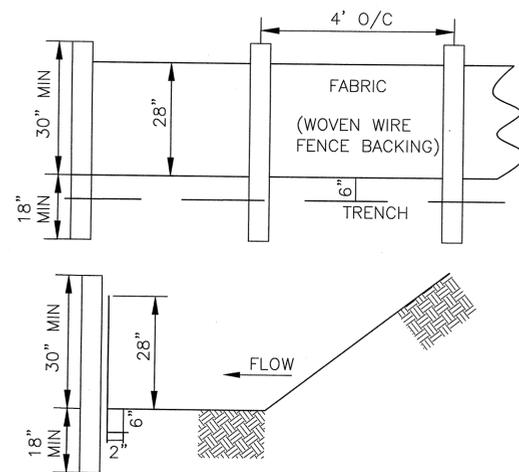


DEPARTMENT OF WATER RESOURCES
FULTON COUNTY, GEORGIA
BIG CREEK WATER RECLAMATION FACILITY
1030 MARIETTA HWY, ROSWELL GA., 30075

CIVIL CONTRACTOR LAYDOWN / STAGING AREA
EROSION CONTROL PLAN

S-134 BIG CREEK WRF IMMEDIATE NEEDS REHABILITATION PROJECT

DRAWING NUMBER:	C-00.15
SHEET:	54 OF 185
DATE:	2/4/2014
FILENAME:	3501C-10015.dwg
SCALE:	



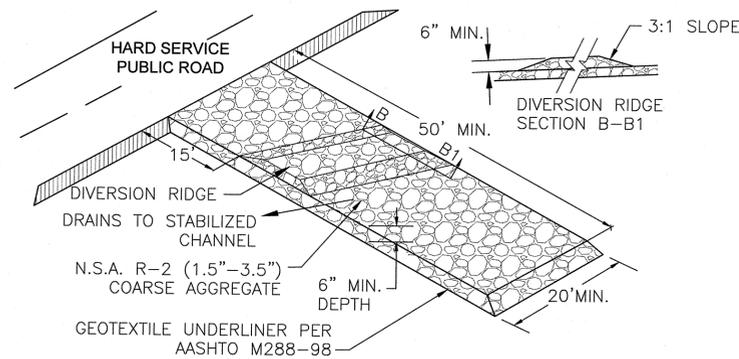
SILT FENCE
 THE MANUFACTURER SHALL HAVE EITHER AN APPROVED COLOR MARK YARN IN THE FABRIC OR LABEL THE FABRICATED SILT FENCE WITH BOTH THE MANUFACTURER AND FABRIC NAME EVERY 100 FEET.

THE TEMPORARY SILT FENCE SHALL BE INSTALLED ACCORDING TO THIS SPECIFICATION, AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. FOR INSTALLATION OF THE FABRIC, SEE DETAIL.
 POST INSTALLATION SHALL START AT THE CENTER OF THE LOW POINT (IF APPLICABLE) WITH THE REMAINING POSTS SPACED 4 FEET APART FOR TYPE C SILT FENCE. ONLY STEEL POSTS SHALL BE USED WITH TYPE C SILT FENCE. POSTS SHALL BE 4' IN LENGTH, 1.3 LBS/ FT. ALONG STREAM BUFFERS AND OTHER SENSITIVE AREAS, TWO ROWS OF TYPE C SILT FENCE OR ONE ROW OF TYPE C SILT FENCE BACKED BY HAYBALES SHALL BE USED.

MAINTENANCE

SEDIMENT SHALL BE REMOVED ONCE IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE BARRIER. FILTER FABRIC SHALL BE REPLACED WHENEVER IT HAS DETERIORATED TO SUCH AN EXTENT THAT THE EFFECTIVENESS OF THE FABRIC IS REDUCED (APPROXIMATELY SIX MONTHS). TEMPORARY SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. ALL SEDIMENT ACCUMULATED AT THE BARRIER SHALL BE REMOVED AND PROPERLY DISPOSED OF BEFORE THE BARRIER IS REMOVED.

TEMPORARY SILT FENCE - Sd1-C 1
 NOT TO SCALE



CONSTRUCTION EXIT
 A STONE STABILIZED PAD SHALL BE LOCATED AT ANY POINT WHERE TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE TO A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, PARKING AREA, OR ANY OTHER AREA WHERE THERE IS A TRANSITION FROM BARE SOIL TO A PAVED AREA.

AGGREGATE SIZE
 STONE WILL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5 TO 3.5 INCH STONE).

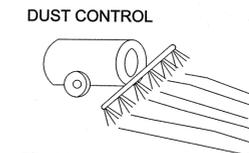
PAD THICKNESS
 THE GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6 INCHES.

PAD WIDTH
 AT A MINIMUM, THE WIDTH SHOULD EQUAL FULL WIDTH OF ALL POINTS OF VEHICULAR EGRESS, BUT NOT LESS THAN 20 FEET WIDE.

DIVERSION RIDGE
 ON SITES WHERE THE GRADE TOWARD THE PAVED AREA IS GREATER THAN 2%, A DIVERSION RIDGE 6 TO 8 INCHES HIGH WITH 3:1 SIDE SLOPES SHALL BE CONSTRUCTED ACROSS THE FOUNDATION APPROXIMATELY 15 FEET ABOVE THE ROAD.

MAINTENANCE
 THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1.5-3.5 INCH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OR SITE ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

CONSTRUCTION EXIT - Co 2
 NOT TO SCALE



TEMPORARY METHODS
MULCHES. SEE STANDARD DS1 - DISTURBED AREA STABILIZATION (WITH MULCHING ONLY). SYNTHETIC RESINS MAY BE USED INSTEAD OF ASPHALT TO BIND MULCH MATERIAL. REFER TO STANDARD TB-TACKIFIERS AND BINDERS. RESINS SUCH AS CURASOL OR TERRATAK SHOULD BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

VEGETATIVE COVER. SEE STANDARD DS2 - DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING).

SPRAY-ON ADHESIVES. THESE ARE USED ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS. REFER TO STANDARD TB-TACKIFIERS AND BINDERS.

TILLAGE. THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS.

IRRIGATION. THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.

BARRIERS. SOLID BOARD FENCES, SNOWFENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.

CALCIUM CHLORIDE. APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT METHODS
PERMANENT VEGETATION. SEE STANDARD DS3 -DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION). EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.

TOPSOILING. THIS ENTAILS COVERING THE SURFACE WITH LESS EROSION SOIL MATERIAL. SEE STANDARD TP - TOPSOILING.

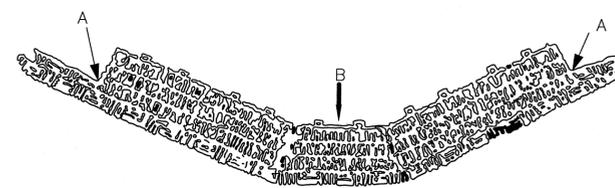
STONE. COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. SEE STANDARD CR-CONSTRUCTION ROAD STABILIZATION.

DUST CONTROL - Du 3
 NOT TO SCALE

MATERIAL	QUANTITY
DRY STRAW OR HAY	2" - 4" DEPTH
WOOD WASTE (SAWDUST, BARK, CHIPS)	2" - 3" DEPTH
CUTBACK ASPHALT (SLOW CURING)	1200 GAL. PER ACRE (1/4 GAL PER SQ. YD.)
POLYETHYLENE FILM	COMPLETELY COVERING EXPOSED AREA. TRENCHED IN AT OUTER EDGES.

STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION. MULCH MAY BE ANCHORED BY MECHANICALLY PRESSING INTO SURFACE. IF SPREAD WITH BLOWER EQUIPMENT, MULCH SHALL BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE AE-5 OR SS-1)--100 GAL. ASPHALT + 100 GAL. WATER PER TON OF MULCH. NETTING SHALL BE USED TO ANCHOR WOOD WASTE AND CHIPS. POLYETHYLENE SHALL BE TRENCHED IN AT EDGES.

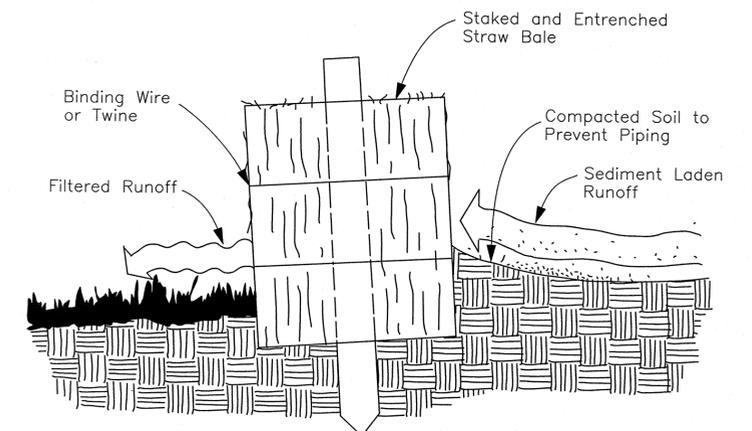
MULCHING - Ds1 4
 NOT TO SCALE



Points A should be higher than point B

PROPER PLACEMENT OF STRAW BALE BARRIER IN DRAINAGE WAY

DETAIL 6-10.3 FROM THE STATE OF GEORGIA MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA (GREEN BOOK)



Note: Embed hay bales a minimum of 4 inches.
CROSS-SECTION OF A PROPERLY INSTALLED STRAW BALE

HAY BALE STAKING - Sd1-Hb 5
 NOT TO SCALE

ISSUE	DATE	DESCRIPTION	BY	PROJECT NUMBER
1	2/14	ADDENDUM NO. 2	CH	000002943501
0	12/13	ISSUED FOR BID	CH	

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON ORIGINAL DRAWINGS



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DEPARTMENT OF WATER RESOURCES
 FULTON COUNTY, GEORGIA
 BIG CREEK WATER RECLAMATION FACILITY
 1030 MARIETTA HWY, ROSWELL GA, 30075

CIVIL EROSION CONTROL DETAILS
 S-134 BIG CREEK WRF IMMEDIATE NEEDS REHABILITATION PROJECT

DRAWING NUMBER:	C-00.16
SHEET:	55 OF 185
DATE:	2/4/2014
FILENAME:	3501C-10016.dwg
SCALE:	

Species	Broadcast		Resource	Planting Dates by Resource Areas	Remarks																																										
	Rates 1/- PLS 2/	Per 1000 sq. ft.																																													
CROWN VETCH (Coronilla varia)	15 lbs.	0.3 lb.	P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										100,000 seed per pound. Dense growth. Drought tolerant and fire resistant. Attractive rose, pink, and white blossoms spring to late fall. Mix with 30 pounds of Tall fescue or 15 pounds of rye. Inoculate seed with M inoculant. Use from both Atlanta and Northward.
J	F	M	A	M	J	J	A	S	O	N	D																																				
FESCUE TALL (Festuca arundinacea)	50 lbs. 30 lbs.	1.1 lbs. 0.7 lb.	P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										227,000 seed per pound. Use alone only on better sites. Not for droughty soils. Mix with perennial lespedeza or crown vetch. Apply topdressing in spring following fall plantings. Not for heavy use areas or athletic fields.
J	F	M	A	M	J	J	A	S	O	N	D																																				

Species	Broadcast		Resource	Planting Dates by Resource Areas	Remarks																																										
	Rates 1/- PLS 2/	Per 1000 sq. ft.																																													
LESPEDEZA, SERICEA (Lespedeza cuneata)	80 lbs.	1.4 lbs.	P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										350,000 seed per pound. Widely adapted. Low maintenance. Mix with weeping lovegrass, common bermuda, bahia, or tall fescue. Takes 2 to 3 years to become fully established. Excellent on roadbanks. Inoculate seed with EL inoculant.
J	F	M	A	M	J	J	A	S	O	N	D																																				
unscarified	75 lbs.	1.7 lb.	P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										Mix with Tall fescue or winter annuals.
J	F	M	A	M	J	J	A	S	O	N	D																																				
seed-bearing hay	3 tons	138 lb.	P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										Cut when seed is mature, but before it shatters. Add Tall fescue or winter annuals.
J	F	M	A	M	J	J	A	S	O	N	D																																				

Species	Broadcast		Resource	Planting Dates by Resource Areas	Remarks																																										
	Rates 1/- PLS 2/	Per 1000 sq. ft.																																													
LESPEDEZA Ambr virgata (Lespedeza virgata DC) or Appalow (Lespedeza cuneata [Dumont] G. Don)	80 lbs.	1.4 lb.	P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										300,000 seed per pound. Height of growth is 18 to 24 inches. Advantageous in urban areas. Spreading-type growth has bronze coloration. Mix with weeping lovegrass, common bermuda, bahia, tall fescue or winter annuals. Do not mix with Sericea lespedeza. Slow to develop solid stands. Inoculate seed with EL inoculant.
J	F	M	A	M	J	J	A	S	O	N	D																																				
unscarified	75 lbs.	1.7 lb.	P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										
J	F	M	A	M	J	J	A	S	O	N	D																																				
LESPEDEZA, SHRUB (Lespedeza bicolor) (Lespedeza thurbergii) plants	3x3'		P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										Provide wildlife food and cover.
J	F	M	A	M	J	J	A	S	O	N	D																																				
LOVEGRASS, WEEPING (Eragrostis curvula)	4 lbs.	0.1 lb.	P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										1,500,000 seed per pound. Quick cover. Drought tolerant. Grows well with Sericea lespedeza on roadbanks.
J	F	M	A	M	J	J	A	S	O	N	D																																				
with other perennials	2 lbs.	0.05 lb.	P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										
J	F	M	A	M	J	J	A	S	O	N	D																																				

Species	Broadcast		Resource	Planting Dates by Resource Areas	Remarks																																										
	Rates 1/- PLS 2/	Per 1000 sq. ft.																																													
MADENKANE (Rhinoceros horn)	2' x 3' spacing		ALL	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										For very wet sites. May clog channels. Dig sprigs from local sources. Use along river banks and shorelines.
J	F	M	A	M	J	J	A	S	O	N	D																																				
FRINGRASS, ATLANTIC COASTAL (Panicum amarum var. amarulum)	20 lbs.	0.5 lb.	P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										Grows well on coastal sand dunes, borrow areas, and gravel pits. Provides winter cover for wildlife. Mix with Sericea lespedeza except on sand dunes.
J	F	M	A	M	J	J	A	S	O	N	D																																				
REED CANARY GRASS (Phalaris arundinacea)	50 lbs.	1.1 lb.	P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										Grows similar to tall fescue.
J	F	M	A	M	J	J	A	S	O	N	D																																				
with other perennials	30 lbs.	0.7 lb.	P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										
J	F	M	A	M	J	J	A	S	O	N	D																																				
SUNFLOWER 'AZTEC' MAXIMILIAM (Helianthus maximiliani)	10 lbs.	0.2 lb.	P	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																						J	F	M	A	M	J	J	A	S	O	N	D										227,000 seed per pound. Mix with weeping lovegrass or other low-growing grasses or legumes.
J	F	M	A	M	J	J	A	S	O	N	D																																				

Fertilizer Requirements

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
1. Cool season grasses	First	6-12-12	1500 lbs./ac.	50-100 lbs./ac. 1/2/
	Second	6-12-12	1000 lbs./ac.	
	Maintenance	10-10-10	400 lbs./ac.	
2. Cool season grasses and legumes	First	6-12-12	1500 lbs./ac.	30 0-50 lbs./ac. 1/
	Second	0-10-10	1000 lbs./ac.	
	Maintenance	0-10-10	400 lbs./ac.	
3. Ground covers	First	10-10-10	1300 lbs./ac. 3/	
	Second	10-10-10	1300 lbs./ac. 3/	
	Maintenance	10-10-10	1100 lbs./ac.	
4. Pine seedlings	First	20-10-5	one 21-gram pellet per seedling placed in the closing hole	
5. Shrub Lespedeza	First	0-10-10	700 lbs./ac.	30 lbs./ac. 5/
	Maintenance	0-10-10	700 lbs./ac. 4/	
6. Temporary cover crops seeded alone	First	10-10-10	500 lbs./ac.	
7. Warm season grasses	First	6-12-12	1500 lbs./ac.	50-100 lbs./ac. 2/6/
	Second	6-12-12	800 lbs./ac.	
	Maintenance	10-10-10	400 lbs./ac.	
8. Warm season grasses and legumes	First	6-12-12	1500 lbs./ac.	50 lbs./ac. 16/
	Second	0-10-10	1000 lbs./ac.	
	Maintenance	0-10-10	400 lbs./ac.	

- 1/ Apply in spring following seeding.
- 2/ Apply in split applications when high rates are used.
- 3/ Apply in 3 split applications.
- 4/ Apply when plants are pruned.
- 5/ Apply to grass species only.
- 6/ Apply when plants grow to a height of 2 to 4 inches.

VEGETATION NOTES

1. MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO ROUGH GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. IF AN AREA IS EXPECTED TO BE UNDISTURBED FOR LONGER THAN SIX MONTHS, PERMANENT PERENNIAL VEGETATION SHALL BE USED. IF OPTIMUM PLANTING CONDITIONS FOR TEMPORARY GRASSING IS LACKING, MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, ANCHORED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE. REFER TO SPECIFICATION DS1-DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).
2. WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED. WHEN USING CONVENTIONAL OR HANDSEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL. WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.
3. LIME AND FERTILIZER RATES AND ANALYSIS (PERMANENT VEGETATION, DS-3) AGRICULTURAL LIME IS REQUIRED AT THE RATE OF ONE TO TWO TONS PER ACRE UNLESS SOIL TESTS INDICATE OTHERWISE. GRADED AREAS REQUIRE LIME APPLICATION. IF LIME IS APPLIED WITHIN SIX MONTHS OF PLANTING PERMANENT PERENNIAL VEGETATION, ADDITIONAL LIME IS NOT REQUIRED. AGRICULTURAL LIME SHALL BE WITHIN THE SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF AGRICULTURE. INITIAL FERTILIZATION, NITROGEN, TOPDRESSING, AND MAINTENANCE FERTILIZER REQUIREMENTS FOR EACH SPECIES OR COMBINATION OF SPECIES ARE LISTED IN FERTILIZER REQUIREMENTS.

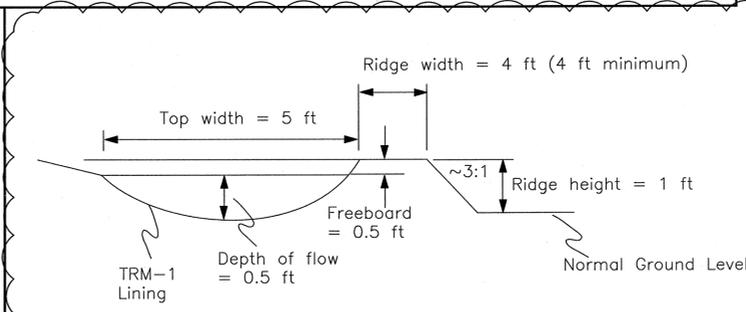
MULCHING

1. MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED:
2. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF TWO AND ONE-HALF (2 1/2) TONS PER ACRE.
3. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING.
4. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER, SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 3/4:1 OR STEEPER. SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE (3) TONS PER ACRE.
5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR SEEDED AREAS.
6. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED.
7. BITUMINOUS TREATED ROVING MAY BE APPLIED ON PLANTED AREAS ON SLOPES, IN DITCHES OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED ROVING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

STABILIZATION WITH PERMANENT VEGETATION - Ds3 6
NOT TO SCALE

DIVERSION CONSTRUCTION SPECIFICATIONS

1. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE DIVERSION.
2. THE DIVERSION SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND FREE OF IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
3. ALL FILLS SHALL BE MACHINE COMPACTED AS NEEDED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETED DIVERSION.
4. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE DIVERSION.
5. DIVERSION CHANNEL SHALL BE STABILIZED IN ACCORDANCE WITH SPECIFICATION CH - CHANNEL STABILIZATION.



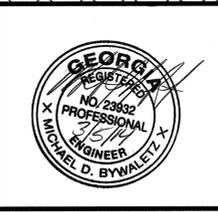
DIVERSION - Di 7
NOT TO SCALE

ISSUE	DATE	DESCRIPTION	BY	PROJECT NUMBER
1	2/14	ADDENDUM NO. 2	CH	0000002943501
0	12/13	ISSUED FOR BID	CH	

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON ORIGINAL DRAWINGS

Designed By: JO
Drawn By: MDR
Approved By: CMH
Checked By: JBB

G S & P
2325 Lakeview Parkway
Suite 400
Alpharetta, GA 30004
770.754.0755
Certification Nos.:
AAP000034/EB00003806/
IB26000797/LC26000381
WWW.GSPNET.COM



DEPARTMENT OF WATER RESOURCES
FULTON COUNTY, GEORGIA
BIG CREEK WATER RECLAMATION FACILITY
1030 MARIETTA HWY, ROSWELL GA, 30075

CIVIL EROSION CONTROL DETAILS AND NOTES
DRAWING NUMBER: **C-00.17**
SHEET: 56 OF 185
DATE: 2/6/2014
FILENAME: 3501C-10017.dwg
SCALE:

S-134 BIG CREEK WRF IMMEDIATE NEEDS REHABILITATION PROJECT