



Fayette
COUNTY

“WHERE QUALITY
IS A LIFESTYLE”

PURCHASING DEPARTMENT
140 STONEWALL AVENUE WEST, STE 204
FAYETTEVILLE, GEORGIA 30214
PHONE: 770-305-5420
www.fayettecountyga.gov

INVITATION TO BID

Fayette County, Georgia is seeking Bids from qualified Contractors for Lake Peachtree Dredging.

Bids should be on the attached Bid Schedule. Be sure to include the **Bid Number** and **reference** along with your company's name and address on the **sealed** envelope in which the Bid is returned.

Bids must be submitted to:

FAYETTE COUNTY PURCHASING DEPARTMENT
140 STONEWALL AVENUE WEST, SUITE 204
FAYETTEVILLE, GEORGIA 30214
BID #922
REFERENCE: LAKE PEACHTREE DREDGING

A **MANDATORY pre-Bid conference** to respond to any questions related to the details of this Project will be held at **10:00 a.m. EST on Thursday, December 18, 2014** at the City of Peachtree City, City Hall in the Community Room, 153 Willowbend Road, Peachtree City, Georgia 30269. **Bids will not be accepted from Bidders that do not have a representative at the pre-Bid conference.**

All questions and inquiries concerning the Invitation for Bids listed above shall be addressed to: Trina Barwicks, Contract Administrator of Purchasing, 140 Stonewall Avenue West, Suite 204, Fayetteville, Georgia 30214 from 8:00 a.m. to 5:00 p.m. The telephone number is (770) 305-5420 or email address tbarwicks@fayettecountyga.gov. Questions may be submitted until **2:00 p.m. EST time on Tuesday, December 30, 2014**. Any deviation from this procedure for questions or information pertaining to this Invitation for Bids may result in your Bid being rejected.

Bids will be received in the Fayette County Purchasing Department at 140 Stonewall Avenue West, Suite 204, Fayetteville, Georgia 30214 until **3:00 p.m. EST time, Thursday, January 8, 2015**. Bids will be opened at approximately **3:00 p.m., January 8, 2015** and then at said office publicly the Bidder's Names, Base Bid, Alternative Bid by Item, confirmation of Bid Bond submittal, and confirmation of signature will be read aloud. Bids must be signed to be considered. Late Bids will not be considered. Bids may be submitted in person, via the U.S. Mail, or a commercial delivery device. Faxed Bids will not be considered.

For the complete list of Specifications, requirements and relevant information, Invitation for Bids #922 Lake Peachtree Dredging, is available for download on the Fayette County website at: http://www.fayettecountyga.gov/purchasing/bids_and_proposals.asp

If the Invitation for Bids listed above is downloaded from the Fayette County website, it is the responsibility of the individual or company that downloads the Invitation for Bids to continue to check the Fayette County website for any addenda that might come out for that Invitation for Bids and are posted on the Fayette County website. Fayette County shall not be responsible for any information that any individual or company fails to get in an addendum that is posted on the Fayette County website but is not downloaded. However, if the Fayette County Purchasing Department mails the Invitation for Bids to a company or individual, we will keep a record of who we mailed that Invitation for Bids to and all addenda for that Invitation for Bids will also be mailed to those companies or individuals.

Bids will be posted on the Fayette County website within 3 business days after the Bid opening.

There is no set time for an award to be made. If an award is not made within 45 days of the Bid opening, an update will be posted on the Fayette County website.

If the County awards this Bid, once everything has been received by that company and the award has been completed, that information will also be posted on the Fayette County website. Please keep this procedure in mind.

The County reserves the right to reject or accept any or all Bids and to waive technicalities, informalities, and minor irregularities in Bids received.

Dated this 4th day of December, 2014.

Sincerely,

Ted L. Burgess

Ted L. Burgess
Director of Purchasing

CONTRACT DOCUMENTS FOR
CONSTRUCTION OF

LAKE PEACHTREE LAKE DREDGING

BID #922



Fayette
COUNTY

WHERE QUALITY
IS A LIFESTYLE.

PREPARED FOR THE

FAYETTE COUNTY WATER DEPARTMENT FAYETTE COUNTY, GEORGIA

SPECIFICATIONS
VOLUME 1 OF 2

For information regarding this project, contact:

ALAN BOWLING, P.E.
6600 Peachtree Dunwoody Road
400 Embassy Row, Suite 600
Atlanta, GA 30328
770.604.9095

CH2MHILL®

Project No.
481967

DECEMBER 2014

BID DOCUMENTS

TABLE OF CONTENTS

| | | <u>Pages</u> |
|---|---|--------------|
| <u>PART 1—BIDDING REQUIREMENTS</u> | | |
| 00 11 13 | Invitation to Bid | 1- 2 |
| 00 11 56.01 | Bidders Qualification Form | 1- 5 |
| 00 21 13 | Instructions to Bidders | 1- 8 |
| 00 41 13 | Bid Form (Unit Price Basis) | 1- 10 |
| 00 43 13 | Bid Bond | 1- 2 |
| 00 45 57 | Contractor Affidavit..... | 1- 1 |
| <u>PART 2—CONTRACTING REQUIREMENTS</u> | | |
| <u>CONTRACTING FORMS</u> | | |
| 00 52 13 | Agreement..... | 1- 3 |
| <u>PROJECT FORMS</u> | | |
| 00 61 13.13 | Performance Bond Form..... | 1- 3 |
| 00 61 13.16 | Payment Bond Form | 1- 3 |
| <u>CONDITIONS OF THE CONTRACT</u> | | |
| 00 72 00 | General Terms and Conditions | 1- 5 |
| 00 73 00 | Supplemental Conditions | 1- 2 |
| <u>PART 3—SPECIFICATIONS</u> | | |
| <u>DIVISION 1—GENERAL REQUIREMENTS</u> | | |
| 01 11 00 | Summary of Work..... | 1- 1 |
| 01 26 00 | Contract Modification Procedures | 1- 4 |
| 01 29 00 | Payment Procedures..... | 1- 4 |
| 01 31 13 | Project Coordination | 1- 3 |
| 01 31 19 | Project Meetings | 1- 2 |
| 01 32 00 | Construction Progress Documentation | 1- 3 |
| 01 33 00 | Submittal Procedures | 1- 7 |
| | Supplement 1, Form: Transmittal of Contractor’s Submittal | |
| 01 58 13 | Project Sign..... | 1- 2 |
| 01 77 00 | Closeout Procedures | 1- 3 |
| <u>DIVISIONS 2 THROUGH 30 (NOT USED)</u> | | |

Pages

DIVISION 31—EARTHWORK

| | | | |
|-------------|---------------------|----|---|
| 31 10 00 | Site Clearing | 1- | 4 |
| 31 23 16 | Excavation | 1- | 3 |
| 31 23 19.01 | Dewatering..... | 1- | 2 |

DIVISIONS 32 THROUGH 49 (NOT USED)

PART 4—ATTACHMENTS

| | | | |
|---|---|----|----|
| A | Alternative Bid Items Location Map | 1- | 1 |
| B | Sediment Sampling and Analysis Report | 1- | 15 |

PART 5—DRAWINGS (BOUND SEPARATELY)

END OF SECTION

PART 1

BIDDING REQUIREMENTS

The Owner requires prospective Bidders interested in Bidding on the Work to provide a completed Bidder's Qualification Form with their Bid. If form is not received with Bid and in accordance with Instructions to Bidders, Bid will be considered nonconforming and nonresponsive.

The information submitted in this form will be regarded as confidential.

BIDDER'S QUALIFICATION FORM

Submitted By: _____
 (Bidder)

A Corporation
 A Partnership
 An Individual
 (Circle One)

Principal Office
 Address: _____
 Telephone Number: _____
 Contact Person: _____

If **Corporation**, provide the following:

Date of Incorporation: _____
 State of Incorporation: _____
 Chief Executive Officer's Name: _____
 President's Name: _____
 Vice President's Name(s): _____
 Secretary's Name: _____
 Treasurer's Name: _____

If a **Partnership**, provide the following:

Date of organization: _____
 Is partnership general or limited? _____
 Name and address of each partner: _____

If an **Individual**, provide the following:

Name and business address: _____

Bidder's Surety:

Firm Name: _____
 Address: _____
 Telephone Number: _____
 Contact Person: _____

Bidder's General Information:

Georgia General Contractor's License Number: _____

Years in business under license number: _____

If nonresident, proof of authority to do business in the State. Attach with form submission.

Primary type of work your company performs: _____

Number of people permanently employed: _____

Bonding Capacity: \$ _____

Dollar volume presently under Contract: _____

Is this organization an equal employment opportunity employer? _____

Does this organization have a written drug and alcohol policy? _____

Does this organization have a written Quality Assurance/Quality Control Program? _____

Bidder's Business References

1. Architect/Engineer:

Firm Name: _____

Address: _____

Telephone Number: _____

Contact Person: _____

Firm Name: _____

Address: _____

Telephone Number: _____

Contact Person: _____

2. Owner:

Company Name: _____

Address: _____

Telephone Number: _____

Contact Person: _____

Company Name: _____

Address: _____

Telephone Number: _____

Contact Person: _____

Bidder’s Safety Questionnaire

1. Provide your company’s Experience Modification Rate (EMR) for the 3 most recent years.

Year _____ Rate _____
 Year _____ Rate _____
 Year _____ Rate _____

2. Provide your company’s Lost Time Incident Rate (LTIR) for the 3 most recent years.

Year _____ Rate _____
 Year _____ Rate _____
 Year _____ Rate _____

3. Does your company have a written safety program (Yes/No): _____.

Bidder’s Experience Questionnaire

1. How many years’ experience in the proposed type and size of construction work has your organization had: _____

2. List the most recent Projects (within last 5 years) your organization has had in construction work similar in type and size to the work proposed herein:

| Contract Amount | Type of Work | Date Completed | Owner Name, Address, Telephone, and Contact Person |
|------------------------|---------------------|-----------------------|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

3. What other Projects has your organization completed that may be of interest?

| Contract Amount | Type of Work | Date Completed | Owner Name, Address, Telephone, and Contact Person |
|------------------------|---------------------|-----------------------|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

4. Have you ever failed to complete any work awarded to you? _____. If so, list below and state why? _____

5. Have you ever been removed from a Project? _____. If so, list below and state why? _____

6. What is the construction experience of the principal individuals of your organization?

| Individual's Name | Present Position or Office | Years of Construction Experience | Magnitude & Type of Work | In What Capacity |
|--------------------------|-----------------------------------|---|-------------------------------------|-------------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

7. List the major items of equipment that this organization owns or leases (designate which) which will be available for use on the proposed Project:

8. List below the Contracts that you, your company, or corporation were party, during the previous 10 years, were involved in litigation of any type:

9. Are there any judgments, claims, arbitration proceedings, or lawsuits pending, outstanding, or threatened to which this organization, or an officer or partner in this organization has been a party? _____
If yes, describe: _____

10. Has company ever been disbarred from Bidding? _____. If so, list below and state why?

11. Has the company ever been denied a Bid, performance, or payment bond? _____. If so, list below and state why? _____

12. Has the company ever been involved in bankruptcy proceedings? _____. If so, list below and state why? _____

END OF SECTION

INSTRUCTIONS TO BIDDERS

1. COPIES OF BIDDING DOCUMENTS

1.1. Complete sets of Bidding Documents shall be used in preparing Bids. Neither Owner nor Engineer assumes responsibility for errors or misinterpretations resulting from use of incomplete sets of Bidding Documents.

1.2. Full-size Drawings may be obtained from Engineer at cost of reproduction and handling, plus postage for mailing (if mailing is requested).

1.3. Owner and Engineer, in making copies of Bidding Documents made available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license or grant for any other use.

2. QUALIFICATIONS OF BIDDERS

2.1. In order to perform public work, Bidder and its Subcontractors, prior to award of Contract or as otherwise required by the jurisdiction, shall hold or obtain such licenses as required by State Statutes, and federal and local Laws and Regulations.

2.2. Bidder is advised to carefully review those portions of the Bid Form requiring representations and certifications.

3. EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

3.1. Subsurface Conditions: Subsurface conditions are provided in Volume 2 of 2 Drawings. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such Drawings.

3.2. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner or others.

3.3. Sediment Sampling and Analysis report is provided in Part 4: Attachments of Volume 1 of 2: Specifications. An electronic copy of the report appendices will be made available by Owner to any Bidder on request. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such Drawings.

3.4. On request, Owner will provide each Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.

3.5. It is responsibility of each Bidder before submitting a Bid to:

3.5.1. Examine and carefully study the Bidding Documents, other related data identified in the Bidding Documents, and any Addenda.

3.5.2. Visit the Site to become familiar with and satisfy Bidder as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

3.5.3. Become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.

3.5.4. Consider the information known to Bidder; information commonly known to Contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on:

3.5.4.1. Cost, progress, and performance of the Work.

3.5.4.2. Means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents.

3.5.4.3. Bidder's safety precautions and programs.

3.5.5. Agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price(s) Bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.

3.5.6. Become aware of the general nature of the Work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

3.5.7. Promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in Bidding Documents and confirm that written resolution thereof by Engineer is acceptable to Bidder.

3.5.8. Determine Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance of the Work.

3.6. Submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this article; that without exception the Bid is premised upon performing and furnishing the Work required by Bidding Documents and applying specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by Bidding Documents; that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in Bidding Documents and the written resolutions thereof by Engineer are acceptable to Bidder; and that Bidding Documents are generally sufficient to indicate and convey understanding of terms and conditions for performing and furnishing the Work.

4. PREBID CONFERENCE

4.1. A pre-Bid conference will be held at the time and place identified in the Invitation to Bid. Representatives of Owner and Engineer will be present to discuss the Project.

4.2. Bidders are required to attend and participate in the conference. Bids will not be accepted from Bidders that do not have a representative at the pre-Bid conference.

4.3. Engineer will transmit to prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

5. SITE AND OTHER AREAS

5.1. The Site is identified in the Bidding Documents. Owner to provide and ensure access to the Project Site.

6. INTERPRETATIONS AND ADDENDA

6.1. All questions about the meaning or intent of the Bidding Documents are to be submitted to Fayette County Purchasing in writing. Interpretations or clarifications considered necessary by Fayette County Purchasing in response to such questions will be issued by Addenda uploaded to the County Purchasing website prior to Bid Opening. Questions received after the date identified in the Invitation to Bid may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

6.2. Addenda may also be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner or Engineer.

7. BID SECURITY

7.1. Bid shall be accompanied by Bid security made payable to Owner in an amount of 5 percent of Bidder's maximum Bid price and in the form of a certified check, bank money order, or a penal Bid bond (on the attached form).

7.1.1. In addition to types of Bid security listed above, a cashier's check will also be acceptable.

7.2. The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract Documents, furnished the required Contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required Contract security within the time period specified in Article Signing of Agreement, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults. Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of the 7th day after the Effective Date of the Agreement or the number of days specified for all Bids to remain subject to acceptance in Article Bids to Remain Subject to Acceptance, whereupon Bid security furnished by such Bidders will be returned.

7.3. Bid security of other Bidders whom Owner believes do not have a reasonable chance of receiving the award will be returned within 7 days after Bid opening.

8. CONTRACT TIMES

8.1. The number of days within which, or the dates by which the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

9. SUBSTITUTE AND "OR-EQUAL" ITEMS

9.1. The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or "or-equal" items. Whenever it is specified or described in the Bidding Documents that a substitute or "or-equal" item of material or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement.

10. PREPARATION OF BID

10.1. With each copy of the Bidding Documents, Bidder will be furnished one separate unbound copy of the Bid Form, and, if applicable, the Bid Bond Form. No substitution of the Bid Form will be allowed.

10.2. All blanks on the Bid Form shall be completed by typing or printing with ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each Bid item listed therein or the words "No Bid," "No Change," or "Not Applicable" entered.

10.3. A Bid by a corporation shall be executed in the corporate name by the president or a vice president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown.

10.4. A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown.

10.5. A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.

10.6. A Bid by an individual shall show the Bidder's name and official address.

10.7. A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.

10.8. All names shall be typed or printed in ink below the signatures.

10.9. The Bid shall contain an acknowledgement of receipt of all Addenda; the numbers of which shall be filled in on the Bid Form.

10.10. Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.

10.11. The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number and class, if applicable, shall also be shown on the Bid Form.

11. BASIS OF BID; COMPARISON OF BIDS

11.1. Unit Price:

11.1.1. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid schedule.

11.1.2. The total of all estimated prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price.

11.1.3. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

11.2. Allowances:

11.2.1. Cash Allowance:

11.2.1.1. Bid price shall include such amounts as the Bidder deems proper for Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses on account of cash allowances.

11.2.1.2. As described in the Bid Form.

12. SUBMISSION OF BID

12.1. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the following data:

12.1.1. Bidder's Qualification Form

12.1.2. Bid Form

12.1.3. Bid Bond

12.1.4. Contractor's License No.

13. OPENING OF BIDS

13.1. Bids will be opened at the time and place indicated in the Invitation to Bid and unless obviously nonresponsive, Bidder's Names, Base Bid, Alternative Bid by Item, confirmation of Bid Bond submittal, and confirmation of signature will be read aloud. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

14. BIDS TO REMAIN SUBJECT TO ACCEPTANCE

14.1. All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

15. EVALUATION OF BIDS AND AWARD OF CONTRACT

15.1. Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate Contract terms with the Successful Bidder.

15.2. More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.

15.3. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

15.4. In evaluating Bidders, Owner may consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted either with the Bid, or otherwise prior to issuance of the Notice of Award.

15.5. Owner may conduct such investigations as Owner deems necessary to establish responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work in accordance with the Contract Documents.

15.6. If the Contract is to be awarded, Owner will award the Contract to Bidder whose Bid is in the best interests of the Project.

16. SIGNING OF AGREEMENT

16.1. Pursuant to Code of Georgia 13-10-90 et. seq., the Georgia Security and Immigration Compliance Act of 2006, the following shall be completed prior to Award:

16.1.1. Contractor understands and agrees that compliance with the requirements of OCGA 13-10-90 and Georgia Department of Labor Rule 300-10-02 are conditions of this Agreement.

16.1.2. Contractor further agrees that such compliance shall be attested by Contractor and its Subcontractors by execution of the appropriate Contractor Affidavit and Agreement and Subcontractor Affidavit forms included in Contract Documents.

16.2. Pursuant to Code of Georgia 48-13, nonresident Contractor shall complete the following prior to Award:

16.2.1. Register with Secretary of State and pay all necessary fees.

16.2.2. Execute and file with Secretary of State, as required, a bond worth 10 percent of Contract, conditioned that state and local taxes will be paid.

16.2.3. Appoint, in writing, Secretary of State to be lawful agent upon whom all lawful processes, proceedings, or notices may be served.

16.3. When Owner issues a Notice of Award to Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement along with the other Contract Documents that are identified in the Agreement as attached thereto. Within 15 days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within 10 days thereafter, Owner shall deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification.

END OF SECTION

NOTE TO BIDDER: Use typewriter or ink for completing this Bid Form.

**BID FORM
(UNIT PRICE BASIS)**

1. BID RECIPIENT

1.1. This Bid is submitted to:

Owner: Fayette County, Georgia

Address: Purchasing Department, 140 Stonewall Avenue West,
Suite 204, Fayetteville, Georgia 30214

Project Identification: Lake Peachtree Dredging
Bid #922

1.2. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

2. BIDDER'S ACKNOWLEDGEMENTS

2.1. Bidder accepts all of the terms and conditions of the Information to Bidders and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

3. BIDDER'S REPRESENTATIONS

3.1. In submitting this Bid, Bidder represents that:

3.1.1. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

| Addendum No. | Addendum Date |
|---------------------|----------------------|
| | |
| | |
| | |

(Bidder shall insert number of each Addendum received.)

3.1.2. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

3.1.3. Bidder is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

3.1.4. Bidder has carefully studied reports of explorations and tests of subsurface conditions at or contiguous to the Site and Drawings of physical conditions relating to existing surface or subsurface at the Site (except Underground Facilities) which have been identified.

3.1.5. Bidder has considered the information known to Bidder; information commonly known to Contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and Drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.

3.1.6. Based on information and observations referred to in paragraph above, Bidder does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) Bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.

3.1.7. Bidder is aware of the general nature of Work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

3.1.8. Bidder has given Engineer written notice of conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.

3.1.9. The Bidding Documents are generally sufficient to indicate and convey understanding of terms and conditions for the performance of the Work for which this Bid is submitted.

4. BIDDER'S CERTIFICATION

4.1. Bidder certifies:

4.1.1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization or corporation;

4.1.2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;

4.1.3. Bidder has not solicited or induced any individual or entity to refrain from bidding; and

4.1.4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this paragraph:

4.1.4.1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;

4.1.4.2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish Bid prices at artificial noncompetitive levels, or (c) to deprive Owner of the benefits of free and open competition;

4.1.4.3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, noncompetitive levels; and

4.1.4.4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

4.1.5. Required sales and use taxes are included in the stated Bid prices for the Work unless provision is made herein for the Bidder to separately itemize the estimated amount of sales tax or if Instructions to Bidders state Owner is tax exempt.

5. BASIS OF BIDS

5.1. Bids shall consist of two general components:

5.1.1. The Base Bid includes items 1 through 37, and will be mandatory work.

5.1.2. The Alternative Bid items 1 through 11 may be chosen in any combination for award, or may not be awarded. If any or all of the alternative items are awarded, the begin date may not be the same as for the items in the Base Bid.

5.2. Unit Price Bid:

5.2.1. Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

5.3. Base Bid:

5.3.1. Bidder shall complete the Work in accordance with the Contract Documents for the following price(s):

5.3.2. Base Bid Schedule:

| Base Bid Unit Price Bid Schedule | | | | | |
|---|--|---------------------------|-------------|-----------------------|--------------------------------|
| Item No. | Description | Estimated Quantity | Unit | Bid Unit Price | Extended Bid Unit Price |
| GENERAL | | | | | |
| 1. | Mobilization & Demobilization | 1 | L.S. | \$ | \$ |
| 2. | Project Signs | 1 | each | \$ | \$ |
| 3. | Traffic Control | 1 | L.S. | \$ | \$ |
| SITE WORK | | | | | |
| 4. | Clearing, Grubbing and Bushhogging, within Limits of Disturbance | 48 | acres | \$ | \$ |
| 5. | Sitework Excavation | 64,000 | C.Y. | \$ | \$ |
| 6. | Hauling Excavation Offsite | 64,000 | C.Y. | \$ | \$ |

| Base Bid Unit Price Bid Schedule | | | | | |
|--|--|--------------------|-------|----------------|-------------------------|
| Item No. | Description | Estimated Quantity | Unit | Bid Unit Price | Extended Bid Unit Price |
| 7. | Haul Road, including geotextile underlayment (stone TBD by Contractor) | 2,600 | ton | \$ | \$ |
| 8. | Temp Fencing at Picnic Park | 250 | L.F. | \$ | \$ |
| 9. | Install Crape Myrtle (7-8' height) | 3 | each | \$ | \$ |
| 10. | Cart Path Repair (in-kind) | 1 | each | \$ | \$ |
| 11. | 18" CMP at S.R. 54 road access | 1 | each | \$ | \$ |
| 12. | Fence: plastic picket (est. 100 l.f.) (remove, store, and reinstall upon project completion) | 1 | L.S. | \$ | \$ |
| 13. | Drake Field: repair staging area to original conditions, including removal of stone | 1 | L.S. | \$ | \$ |
| EROSION, SEDIMENTATION AND POLLUTION CONTROL | | | | | |
| 14. | NPDES Inspections | 1 | L.S. | \$ | \$ |
| 15. | Concrete Washdown | 1 | each | \$ | \$ |
| 16. | Co - Construction Exit | 1 | each | \$ | \$ |
| 17. | Fence, orange tree save | 8,260 | L.F. | \$ | \$ |
| 18. | Ch - Riprap, type 3 stone | 74 | C.Y. | \$ | \$ |
| 19. | Sd1-S - belted silted fence, CPOP or equivalent | 26,560 | L.F. | \$ | \$ |
| 20. | DS1 - straw mulch | 6,400 | bales | \$ | \$ |
| 21. | DS2 - temporary seeding, hydroseed | 48 | acres | \$ | \$ |
| 22. | DS3 - permanent seeding, hydroseed | 5 | acres | \$ | \$ |
| 23. | DS4 - Sodding | 2.8 | acres | \$ | \$ |
| 24. | Sr - temp stream crossing | 6 | each | \$ | \$ |
| 25. | Tc - turbidity curtain | 1 | each | \$ | \$ |

| Base Bid Unit Price Bid Schedule | | | | | |
|----------------------------------|--|--------------------|-------|----------------|-------------------------|
| Item No. | Description | Estimated Quantity | Unit | Bid Unit Price | Extended Bid Unit Price |
| ENGINEERING DIRECTED WORK | | | | | |
| 26. | Straw mulch bales | 100 | each | \$ | \$ |
| 27. | Mb - matting blanket (material: jute straw) | 10,000 | S.F. | \$ | \$ |
| 28. | Bushhog | 10 | acres | \$ | \$ |
| 29. | No. 3 Stone (including hand or machine placement) | 50 | ton | \$ | \$ |
| 30. | No. 57 Stone (including hand or machine placement) | 10 | ton | \$ | \$ |
| 31. | Asphalt patching/parking lot repair (in-kind) | 200 | S.Y. | \$ | \$ |
| 32. | Concrete Curb Repair (in-kind) | 80 | L.F. | \$ | \$ |
| 33. | Area 5 - Sitework Excavation, below water line | 1,500 | C.Y. | \$ | \$ |
| 34. | Area 5 - Sitework Excavation, above water line | 2,000 | C.Y. | \$ | \$ |
| 35. | Area 5 - Hauling Excess Offsite | 3,500 | C.Y. | \$ | \$ |
| CASH ALLOWANCES | | | | | |
| 36. | Owner-required Services | - | - | \$40,000.00 | \$40,000.00 |
| 37. | City of Peachtree City Traffic Control Officer | - | - | \$40,000.00 | \$40,000.00 |

Base Bid: \$ _____
 (Total of Extended Bid Unit Prices for items 1 through 37)

5.4. Alternative Bid:

5.4.1. Bidder shall complete the Work in accordance with the Contract Documents for the following price(s).

5.4.2. Work performed within Alternative Bid may require construction of additional items provided in the Base Bid. Base Bid unit prices are to be used within the Alternative Bid.

5.4.3. Alternative Bid Schedule:

| Alternative Bid Unit Price Bid Schedule | | | | | |
|---|--|--------------------|-------|----------------|-------------------------|
| Item No. | Description | Estimated Quantity | Unit | Bid Unit Price | Extended Bid Unit Price |
| Accessing, Cutting, Removal, and Disposal of all Vegetation in not removed by Base Bid Contract as shown on Attachment A. | | | | | |
| 1. | Zone 1 | 10 | acres | \$ | \$ |
| 2. | Zone 2 | 24 | acres | \$ | \$ |
| 3. | Zone 3 | 1 | acres | \$ | \$ |
| 4. | Zone 4 | 9 | acres | \$ | \$ |
| Sitework Excavation and Hauling Excavation Offsite for areas shown in red on Attachment A. | | | | | |
| 5. | Zone 1 (range 1,500 – 4,000 c.y.) | 2,800 | C.Y. | \$ | \$ |
| 6. | Zone 2 (range 3,800 – 7,800 c.y.) | 5,700 | C.Y. | \$ | \$ |
| 7. | Zone 3 (range: 200 – 800 c.y.) | 600 | C.Y. | \$ | \$ |
| 8. | Zone 4 (range 5,000 – 9,000 c.y.) | 7,600 | C.Y. | \$ | \$ |
| 9. | Zone 5 (range 600 – 1,300 c.y.) | 900 | C.Y. | \$ | \$ |
| 10. | Zone 6 (range 1,800 – 2,800 c.y.) | 2,500 | C.Y. | \$ | \$ |
| 11. | Zone 4 Snake Island removal to approximately 4 feet below normal pool elevation. | 98,000 | C.Y. | \$ | \$ |

6. TIME OF COMPLETION

6.1. Bidder agrees the Base Bid Work will be substantially complete within **120** calendar days after the date when the Contract Times commence to run as provided in Part 14 of the General Conditions, and will be completed and ready for final payment within **150** calendar days after the date when the Contract Times commence to run.

6.2. Alternative Bid items schedule to be negotiated between Owner and Bidder prior to commencement to work.

7. ATTACHMENTS TO THIS BID

7.1. The following documents are submitted with and made a condition of this Bid:

| | Initial |
|------------------------------------|---------|
| 7.1.1. Bidder's Qualification Form | _____ |
| 7.1.2. Bid Form | _____ |
| 7.1.3. Bid Bond | _____ |
| 7.1.4. Contractor's License No. | _____ |

8. DEFINED TERMS

8.1. The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

9. BID SUBMITTAL

9.1. This Bid submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By (signature): _____

Doing business as: _____

A Partnership

Partnership Name: _____ (SEAL)

By: _____
(Signature of general partner – attach evidence of authority to sign)

Name (typed or printed): _____

A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____

Type (General Business, Professional, Service, Limited Liability): ____

By: _____
(Signature – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____ (CORPORATE SEAL)

Attest: _____
(Signature of Corporate Secretary)

Date of Qualification to do business in *(state where Project is located)*
is: _____.

A Joint Venture

Joint Venturer Name: _____ (SEAL)

By: _____
(Signature of joint venture partner – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

Bidder's Business Address: _____

Phone No.: _____

E-mail: _____

SUBMITTED on _____, 20_____

Georgia Contractor's License No.: _____

Contractor's License Class (where applicable): _____

END OF SECTION

BID BOND

KNOW ALL PERSONS BY THESE PRESENTS: that we, the undersigned as Principal, and as Surety, are hereby held and firmly bound unto Fayette County, Georgia as Owner in the penal sum of

_____ Dollars

(\$ _____) for the payment of which, well and truly to be made, we hereby jointly severally bind ourselves, successors and assigns.

Signed, this day of _____, 20____. The condition of the above obligation is such that whereas the Principal has submitted to Fayette County, Georgia a certain Bid, attached hereto and hereby made a part hereof to enter into a Contract in writing, for: Bid #922, LAKE PEACHTREE LAKE DREDGING.

NOW, THEREFORE,

(a) If said Bid shall be rejected, or

(b) If said Bid shall be accepted and the Principal shall execute and deliver a Contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a Bond for faithful performance of said Contract, and for the payment of all persons performing labor furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its Bond shall be in no way impaired or affected by any extensions of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Principal L.S.

Surety: _____

By: _____
Name Signature

Title

Address: _____

IMPORTANT: Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where Project is located.

END OF SECTION

Contractor Affidavit under O.C.G.A. § 13-10-91(b)(1)

By executing this affidavit, the undersigned Contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of (name of public employer) has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned Contractor will continue to use the federal work authorization program throughout the Contract period and the undersigned Contractor will Contract for the physical performance of services in satisfaction of such Contract only with subcontractors who present an affidavit to the Contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Contractor

Name of Project

Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, ____, 201__ in _____ (city), _____ (state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE _____ DAY OF _____, 201__.

NOTARY PUBLIC

My Commission Expires:

PART 2

CONTRACTING REQUIREMENTS

STATE OF GEORGIA

COUNTY OF FAYETTE

AGREEMENT

This Agreement, made this _____ day of _____, 20____, by and between Fayette County Board of Commissioners, hereinafter called "Owner" and _____ doing business as (an individual), or (a partnership), or (a corporation) hereinafter called "Contractor".

WITNESSETH

For and in consideration of the payments and agreements herein after mentioned:

1. The Contractor will commence and complete the construction of:
BID 922: LAKE PEACHTREE DREDGING (PROJECT)
2. The Contractor will furnish all of the materials, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the Project described herein.
3. The Contractor will commence the work required by the Contract Documents within 14 calendar days after the date of each Notice To Proceed and will complete the same within the calendar days in accordance with Section 01 11 00, Summary of Work, of these Specifications.
4. The Contractor agrees to perform all of the Work described in the Contract Documents and comply with the terms therein for the Unit Prices as shown in the Bid Schedule.
5. The terms "Contract Documents" means and includes the following:
 - 5.1. Notice of Award
 - 5.2. Agreement
 - 5.3. Bidder's Bid
 - 5.4. Drawings prepared by Engineer, will be issued for each portion of the project when authorized by the Owner.
 - 5.5. Addenda:
 - No. _____, dated _____, 20____.
 - No. _____, dated _____, 20____.
 - No. _____, dated _____, 20____.

- 5.6. Performance Bond
- 5.7. Payment Bond
- 5.8. Invitation for Bids
- 5.9. Notice to Proceed
- 6. The Owner will pay to the Contractor in the manner and at such times as set forth in the General Conditions such amounts as required by the Contract Documents.
- 7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.
- 8. Any dispute which may arise under this agreement shall be resolved under the laws of the State of Georgia and venue shall be proper in Fayette County, Georgia.

IN WITNESS WHEREOF, the parties hereto have executed or caused to be executed by their duly authorized official, this Agreement in Duplicate (2) copies shall be deemed an original on the date first above written.

OWNER: Board of Commissioners of Fayette County

BY: _____

(SEAL) NAME: Steve Brown
TITLE: Chairman, Board of Commissioners

ATTEST: _____

NAME: Floyd Jones
TITLE: County Clerk

CONTRACTOR: _____
(Company Name)

BY: _____
(Authorized Signature)

NAME/TITLE: _____

ADDRESS: _____

EMPLOYER IDENTIFICATION NUMBER: _____

(SEAL)

ATTEST: _____

NAME/TITLE: _____

(By Corporate Secretary w/ Corporate Seal if Incorporated.
By Notary w/Seal otherwise)

END OF SECTION

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENT: that

(Name of Contractor)

(Address of Contractor)

a _____, herein called Principal, and

(Name of Surety)

(Address of Surety)

herein called Surety, are held and firmly bound unto

Fayette County Board of Commissioners
(Name of Owner)

140 Stonewall Avenue West, Fayette, Georgia 30214
(Address of Owner)

hereinafter called Owner, in total aggregate penal sum of:

_____ Dollars
(\$ _____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents.

THIS CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain Contract with the Owner, dated the _____ day of _____, 20____, a copy of which is hereto attached and made a part hereof for the construction of:

Bid #922, LAKE PEACHTRE LAKE DREDGING

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said Contract during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety and during the one year guaranty period and if the Principal shall satisfy all claims and demands incurred under such Contract, and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the

Owner may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to Work to be performed thereunder or the Specifications accompanying same shall in any way affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work or to the Specifications.

PROVIDED, FURTHER, that it is expressly agreed that the Bond shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the Contract price more than 20 percent so as to bind the Principal and the Surety to the full and faithful performance of the Contract as so amended. The term "Amendment", wherever used in this Bond, and whether referring to this Bond, or the Contract shall include any alteration, addition, extension, or the modification of any character whatsoever.

IN WITNESS WHEREOF, this instrument is executed in four counterparts, each one of which shall be deemed an original, this _____ day of _____, 20____.

(SEAL)

ATTEST:

Principal (Secretary)

Principal

(Witness as to Principal)

By: _____

Address

Address

ATTEST:

(Witness to Surety)

(Attorney in Fact)

Address

Address

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is partnership, all partners should execute Bond.

IMPORTANT: Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where Project is located.

Surety companies must present financial statements for the prior three (3) years as proof of financial responsibility. The Owner reserves the right to review said financial statements and reject any surety not deemed financially able to assume the responsibility of this Contract.

Such bond shall not be deemed accepted until approved by Owner's Attorney.

END OF SECTION

PAYMENT BOND FORM

KNOW ALL PERSONS BY THESE PRESENT: that

(Name of Contractor)

(Address of Contractor)

a _____, herein called Principal, and

(Name of Surety)

(Address of Surety)

herein called Surety, are held and firmly bound unto

Fayette County Board of Commissioners
(Name of Owner)

140 Stonewall Avenue West, Fayette, Georgia 30214
(Address of Owner)

hereinafter called Owner, in total aggregate penal sum of:

_____ Dollars
(\$ _____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents.

This Condition Of This Obligation is such that whereas, the Principal entered into a certain contract with the Owner, dated the ____ day of _____, 20____, a copy of which is hereto attached and made a part hereof for the construction of:

Bid #922, LAKE PEACHTREE LAKE DREDGING

Now, Therefore, if the Principal shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the Work provided for in such contract, and any authorized extensions or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such Work, and for all labor cost incurred in such Work including that by a Subcontractor,

and to any mechanic or material man lien holder whether it acquires its lien by operation of State or Federal law; then this obligation shall be void, otherwise to remain in full force and effect.

Provided, that beneficiaries or claimants hereunder shall be limited to the Subcontractors, and persons, firms, and corporations having a direct contract with the Principal or its Subcontractors.

Provided, Further, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the Specifications accompanying same shall in any way affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the Specifications.

Provided, Further, that no suit or action shall be commenced hereunder by any claimant: (a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following : The Principal, the Owner, or the Surety above named within ninety (90) days after such claimant did or performed the last of the work or labor, if furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner, or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer. (b) After the expiration on one {1} year following the date of which Principal ceased work on said Contract, is being understood, however, that if any limitation embodied in the Bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

Provided, Further, that it is expressly agreed that this Bond shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 percent, so as to bind the Principal and the Surety to the full and faithful performance of the Contract as so amended. The term "Amendment", wherever used in this Surety Bond and whether referring to this Bond, the contract shall include any alteration, addition, extension or modification of any character whatsoever.

Provided, Further, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied

IN WITNESS WHEREOF, this instrument is executed in four counterparts, each one of which shall be deemed an original, this _____ day of _____, 20 ____.

(SEAL)
ATTEST:

Principal (Secretary)

Principal

(Witness as to Principal)

By: _____

Address

Address

ATTEST:

(Witness to Surety)

(Attorney in Fact)

Address

Address

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is partnership, all partners should execute Bond.

IMPORTANT: Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where project is located.

Surety companies must present financial statements for the prior three (3) years as proof of financial responsibility. The Owner reserves the right to review said financial statements and reject any surety not deemed financially able to assume the responsibility of this contract.

Such bond shall not be deemed accepted until approved by Owner's Attorney.

END OF SECTION

GENERAL TERMS AND CONDITIONS

1. **Definitions:** The term “Contractor” as used herein and elsewhere in these specifications shall be used synonymously with the term “successful bidder.” The term “County” shall mean Fayette County, Georgia.
2. **Bid is Offer to Contract:** Each bid constitutes an offer to become legally bound to a contract with the County, incorporating the invitation to bid and the bidder’s bid. The binding offer includes compliance with all terms, conditions, special conditions, specifications, and requirements stated in the invitation to bid, except to the extent that a bidder takes written exception to such provisions. All such terms, conditions, special conditions, specifications, and requirements will form the basis of the contract. The bidder should take care to answer all questions and provide all requested information, and to note any exceptions in the bid submission. Failure to observe any of the instructions or conditions in this invitation to bid may result in rejection of the bid.
3. **Binding Offer:** Each bid shall constitute a firm offer that is binding for sixty (60) days from the date of the bid opening, unless the bidder takes exception to this provision in writing.
4. **Bidder’s Questions:** The Fayette County Purchasing Department must receive questions about this invitation to bid in writing before the scheduled bid opening, within the timeframe provided in the Invitation to Bid. The County will post answers to questions and/or other information concerning the invitation to bid in the form of an addendum on the County’s website at www.fayettecountyga.gov. It is the responsibility of the prospective bidder to check the website for any addenda issued for this invitation to bid.
5. **Bid Submission:** Submit your bid, along with any addenda issued by the County, in a sealed opaque envelope with the following information written on the outside of the envelope:
 - 1.1. The bidder’s company name,
 - 1.2. The bid number, which can be found in the cover letter to the invitation to bid document or on the web site, and
 - 1.3. The “reference” which identifies the bid, which can be found in the cover letter or the web site.

Mail or deliver one (1) original bid, signed in ink by a company official authorized to make a legal and binding offer, to:

Fayette County Government
 Purchasing Department
 140 Stonewall Avenue West, Suite 101
 Fayetteville, GA 30214
 Attention: Contracts Administrator

You may submit bids in person, by U.S. mail, or by a commercial carrier. Do not submit bids by facsimile, e-mail, or other electronic means. Once submitted, all bids become the property of Fayette County.

6. **Bid Preparation Costs:** The bidder shall bear all costs associated with preparing the bid.
7. **Late Bids:** Bids not received by the time and date of the scheduled bid opening will not be considered, unless the delay is a result of action or inaction by the County.
8. **Bid Corrections or Withdrawals:** The bidder may correct a mistake, or withdraw a bid, before the bid opening by sending written notification to the Director of Purchasing. Bids may be withdrawn after the bid opening only with written authorization from the Director of Purchasing.
9. **Defects or Irregularities in Bids:** The County reserves the right to waive any defect or irregularity in any bid received. In case of an error in extension of prices or totals in the bid, the unit prices shall govern.
10. **Prices Held Firm:** Prices quoted shall be firm for the period of the contract, unless otherwise specified in the bid. All prices for commodities, supplies, equipment, or other products shall be quoted FOB Destination, Fayette County or jobsite.
11. **Non-Collusion:** By responding to this invitation to bid, the bidder represents that the bid is not made in connection with any competing bidder, supplier, or service provider submitting a separate response to this invitation to bid, and is in all respects fair and without collusion or fraud.
12. **Arrears:** Bids will not be accepted from any person, firm, or corporation who is in arrears in any debt or obligation to Fayette County.
13. **Bid Evaluation:** Award will be made to the lowest responsive, responsible bidder, taking into consideration payment terms, vendor qualifications and experience, quality, references, any exceptions listed, and/or other factors deemed relevant in making the award. The County may make such investigation as it deems necessary to determine the ability of the bidder to perform, and the bidder shall furnish to the County all information and data for this purpose as the County may request. The County reserves the right to reject any bid item, any bid, or all bids, and to re-advertise for bids.
14. **Discounts:** Cash discounts offered will be a consideration in awarding the bid, but only if they give the County at least 15 days from receipt of invoice to pay. For taking discounts, time will be computed from the date of acceptance at destination or the date a correct invoice is received, whichever is the later date. Payment is deemed made, for the purpose of earning the discount, on the date of the check. For payment of full invoice price, minimum terms of net 30 are preferred.

15. **Trade Secrets - Confidentiality:** A bid is a public record, except for material which qualifies as trade secret information. To keep this information confidential, a bidder must submit trade secret materials in a separate, sealed envelope marked "Trade Secret – Confidential and Proprietary Information – Do Not Disclose Except for the Purpose of Evaluating this Bid." Each page in the envelope should be stamped or otherwise marked designating it as trade secrets or confidential. Do not attempt to designate the entire bid as a trade secret, and do not attempt to designate pricing information as a trade secret, as doing so may result in your bid being disqualified. See O.C.G.A. 50-18-72 for specific Georgia law on this subject.
16. **Trade Secrets – Internal Use:** In submitting a bid, the bidder agrees that the County may reveal any trade secret materials contained in the bid to all County staff and officials involved in the selection process, and to any outside consultant or other third parties who may assist in the selection process. The bidder agrees to hold harmless the County and each of its officers, employees, and agents from all costs, damages, and expenses incurred in connection with refusing to disclose any material which the bidder has designated as a trade secret.
17. **Contract Execution & Notice to Proceed:** After the Board of Commissioners makes an award, all required documents are received by the County, and the contract is fully executed with signature of both parties, the County will issue a written Notice to Proceed. The County shall not be liable for payment of any work done or any costs incurred by any bidder prior to the County issuing the Notice to Proceed.
18. **Unavailability of Funds:** This contract will terminate immediately and absolutely at such time as appropriated and otherwise unobligated funds are no longer available to satisfy the obligations of the County under the contract.
19. **Insurance:** The successful bidder shall, without expense to the County, carry the following insurance, to be in effect throughout the term of the contract, in at least the amounts and limits as follows:
 - 1.1. **General Liability Insurance:** \$1,000,000 combined single limit per occurrence, including bodily and personal injury, destruction of property, and contractual liability.
 - 1.2. **Automobile Liability Insurance:** \$1,000,000 combined single limit each occurrence, including bodily injury and property damage liability.
 - 1.3. **Worker’s Compensation and Employer’s Liability Insurance:** Workers Compensation as required by Georgia statute.
 - 1.4. **Pollution Liability Insurance:** \$1,000,000 combined single limit per occurrence, covering third party bodily injury and property damage.

Before a contract with the successful bidder is executed, the successful bidder shall provide Certificates of Insurance for all required coverage. The successful offeror can provide the Certificate of Insurance after award of the contract, but must be provided prior to execution of the contract document by both parties. The certificate shall list an additional insured as follows:

Fayette County, Georgia
140 Stonewall Avenue West
Fayetteville, GA 30214

20. **Bid Bond:** You must include a bid bond with your bid, equal to five percent (5%) of the total amount bid. Bid bonds shall be provided by a surety which appears on Georgia's list of approved sureties administered by the State Insurance Commissioner, or the U.S. Treasury's list of approved bond sureties (Circular 570).
21. **Performance and Payment Bonds:** Prior to execution of a contract, the successful bidder shall submit performance and payment bonds each equal to 100 percent of the contract value, provided by a surety which appears on Georgia's list of approved sureties administered by the State Insurance Commissioner, or the U.S. Treasury's list of approved bond sureties (Circular 570).
22. **Unauthorized Performance:** The County will not compensate the Contractor for work performed unless the work is authorized under the contract, as initially executed or as amended.
23. **Assignment of Contract:** Assignment of any contract resulting from this invitation to bid will not be authorized.
24. **Indemnification:** The Contractor shall defend and indemnify the County and all its officers, agents and employees against any suits, actions, or other claims brought on account of any injuries or damages to any person, persons, or property resulting from any negligent act or fault of the Contractor, or of any agent, employee, subcontractor or supplier in the performance of any contract which may be awarded. The Contractor shall pay any judgment with cost which may be obtained against the County growing out of such injury or damages.
25. **Patent Indemnity:** The Contractor guarantees to save the County, its agents, officers, or employees harmless from liability of any nature or kind for use of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, articles or appliances furnished or used in the performance of the contract, for which the Contractor is not the patentee, assignee or licensee.

26. **Severability:** The invalidity of one or more of the phrases, sentences, clauses or sections contained in the contract shall not affect the validity of the remaining portion of the contract. If any provision of the contract is held to be unenforceable, then both parties shall be relieved of all obligations arising under such provision to the extent that the provision is unenforceable. In such case, the contract shall be deemed amended to the extent necessary to make it enforceable while preserving its intent.
27. **Delivery Failures:** If the Contractor fails to deliver contracted goods or services within the time specified in the contract, or fails to replace rejected items in a timely manner, the County shall have authority to make open-market purchases of comparable goods or services. The County shall have the right to invoice the Contractor for any excess expenses incurred, or deduct such amount from monies owed the Contractor. Such purchases shall be deducted from contracted quantities.
28. **Termination for Cause:** The County may terminate the contract for cause by sending written notice to the Contractor of the Contractor's default in the performance of any term of this agreement. Termination shall be without prejudice to any of the County's rights or remedies by law.
29. **Termination for Convenience:** The County may terminate the contract for its convenience at any time with 10 days' written notice to the Contractor. In the event of termination for convenience, the County will pay the Contractor for services performed. The County will compensate partially completed performance based upon a signed statement of completion submitted by the Contractor, which shall itemize each element of performance completed.
30. **Governing Law:** This agreement shall be governed in accordance with the laws of the State of Georgia. The parties agree to submit to the jurisdiction in Georgia, and further agree that any cause of action arising under this agreement shall be required to be brought in state court in Fayette County, Georgia.

END OF SECTION

SUPPLEMENTAL CONDITIONS

1. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

- A. The Contractor may be furnished additional instructions and detail Drawings, by the Engineer, as necessary to carry out the Work required by the Contract Documents.
- B. The additional Drawings and instructions thus supplied will become a part of the Contract Documents. The Contractor shall carry out the Work in accordance with the additional detail drawings and instructions.

- 2. Where work on unit price items are substantially complete but lack cleanup and/or corrections ordered by the engineer, amounts shall be deducted from unit prices in partial payment estimates to amply cover such cleanup and corrections.

3. DRAWINGS AND SPECIFICATIONS

- A. The intent of the Drawings and Specifications is that the Contractor shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the Work in accordance with the Contract Documents and all incidental Work necessary to complete the Project in an acceptable manner, ready for use, occupancy or operation by the Owner.
- B. In case of conflict between the Drawings and Specifications, the Specifications shall govern. Figure dimensions on Drawings shall govern over general Drawings.
- C. Any discrepancies found between the Drawings and Specifications and site conditions or any inconsistencies or ambiguities in the Drawings or Specifications shall be immediately reported to the Engineer, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. Work done by the Contractor after discovery of such discrepancies, inconsistencies or ambiguities shall be done at the Contractor's risk.

4. SHOP DRAWINGS

- A. The Contractor shall provide Shop Drawings as may be necessary for the prosecution of the Work as required by the Contract Documents. The Engineer shall promptly review all Shop Drawing S. The Engineer's approval of any Shop Drawings shall not release the Contractor from responsibility for deviations from the Contract Documents. The approval of any Shop Drawings which substantially deviates from the requirement of the Contract Documents shall be evidenced by a Change Order.

- B. When submitted for the Engineer's review, Shop Drawings shall bear the Contractor's certification that he has reviewed, checked and approved the Shop Drawings and that they are in conformance with the requirements of the Contract Documents.
- C. Portions of the Work requiring a Shop Drawing or sample submission shall not begin until the Shop Drawing or submission has been approved by the Engineer. A copy of each approved Shop Drawing and each approved sample shall be kept in good order by the Contractor at the site and shall be available to the Engineer.

5. MATERIALS, SERVICES AND FACILITIES

- A. It is understood that, except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the Work within the specified time.
- B. Materials supplied by the Contractor and equipment shall be so stored as to insure the preservation of their quality and fitness for the Work. Stored materials and equipment to be incorporated in the Work shall be located so as to facilitate prompt inspection.
- C. Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- D. Materials, supplies, and equipment shall be in accordance with samples submitted by the Contractor and approved by the Engineer.

6. INSPECTION AND TESTING

- A. The Owner shall provide all inspection and testing services not required by the Contract Documents.
- B. The Contractor shall provide at the Contractor's expense the testing and inspection services required by the Contract Documents.
- C. Inspections, tests, or approvals by the Engineer or others shall not relieve the Contractor from the obligations to perform the Work in accordance with the requirements of the Contract Documents.

PART 3

SPECIFICATIONS

**SECTION 01 11 00
SUMMARY OF WORK**

PART 1 GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work to be performed under this Contract shall consist of furnishing all labor, materials, tools, equipment, and incidentals and performing all work required to dredge and grade the lake bed for the portions of Lake Peachtree, as detailed in the Contract Documents. The Work also includes replacement, in kind, any damage incurred to Owner's property during construction of the Project.
- B. Related Work shall include, but is not limited to:
 - 1. Dredge the lake bed to remove sediment deposits.
 - 2. Grade the lake bed per the proposed grading plan.
 - 3. Temporary sediment and erosion control.
 - 4. Landscape the disturbed areas.
 - 5. All Work shall be performed as shown on the Drawings indicated and as specified in the Contract Documents.
- C. It is intended that none, part, or all of the work shown on the Alternative Bid Schedule may be awarded. It may be awarded at the time the Base Bid work is awarded or at a later date. It may be authorized through an addendum or through a separate contract with the City of Peachtree City.

1.02 PROJECT LOCATION

- A. The Lake Peachtree Lake Dredging Project site is located on Lake Peachtree, behind City Hall at 153 Willowbend Road, Peachtree City, Georgia 30269.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 26 00
CONTRACT MODIFICATION PROCEDURES

PART 1 GENERAL

1.01 PROPOSAL REQUESTS

- A. Owner may, in anticipation of ordering an addition, deletion, or revision to the Work, request Contractor to prepare a detailed proposal of cost and times to perform contemplated change.
- B. Proposal request will include reference number for tracking purposes and detailed description of and reason for proposed change, and such additional information as appropriate and as may be required for Contractor to accurately estimate cost and time impact on Project.
- C. Proposal request is for information only; Contractor is neither authorized to execute proposed change nor to stop Work in progress as result of such request.
- D. Contractor's written proposal shall be transmitted to Engineer promptly, but not later than 14 days after Contractor's receipt of Owner's written request. Proposal shall remain firm for a maximum period of 45 days after receipt by Engineer.
- E. Owner's request for proposal or Contractor's failure to submit such proposal within the required time period will not justify a Claim for an adjustment in Contract Price or Contract Times (or Milestones).

1.02 CLAIMS

- A. Include, at a minimum:
 - 1. Specific references including (i) Drawing numbers, (ii) Specification section and article/paragraph number, and (iii) Submittal type, Submittal number, date reviewed, Engineer's comment, as applicable, with appropriate attachments.
 - 2. Stipulated facts and pertinent documents, including photographs and statements.
 - 3. Interpretations relied upon.
 - 4. Description of (i) nature and extent of Claim, (ii) who or what caused the situation, (iii) impact to the Work and work of others, and (iv) discussion of claimant's justification for requesting a change to price or times or both.
 - 5. Estimated adjustment in price claimant believes it is entitled to with full documentation and justification.

6. Requested Change in Contract Times: Include at least (i) Progress Schedule documentation showing logic diagram for request, (ii) documentation that float times available for Work have been used, and (iii) revised activity logic with durations including sub-network logic revisions, duration changes, and other interrelated schedule impacts, as appropriate.
7. Documentation as may be necessary as set forth below for Work Change Directive, and as Engineer may otherwise require.

1.03 WORK CHANGE DIRECTIVES

A. Procedures:

1. Engineer will:
 - a. Initiate, including a description of the Work involved and any attachments.
 - b. Affix signature, demonstrating Engineer's recommendation.
 - c. Transmit three copies to Owner for authorization.
2. Owner will:
 - a. Affix signature, demonstrating approval of the changes involved.
 - b. Return two copies to Engineer, who will retain one copy, and forward one copy to Contractor.
3. Upon completion of Work covered by the Work Change Directive or when final Contract Times and Contract Price are determined, Contractor shall submit documentation for inclusion in a Change Order.
4. Contractor's documentation shall include but not be limited to:
 - a. Appropriately detailed records of Work performed to enable determination of value of the Work.
 - b. Full information required to substantiate resulting change in Contract Times and Contract Price for Work. On request of Engineer, provide additional data necessary to support documentation.
 - c. Support data for Work performed on a unit price or Cost of the Work basis with additional information such as:
 - 1) Dates Work was performed, and by whom.
 - 2) Time records, wage rates paid, and equipment rental rates.
 - 3) Invoices and receipts for materials, equipment, and subcontracts, all similarly documented.

- B. Effective Date of Work Change Directive: Date of signature by Owner, unless otherwise indicated thereon.

1.04 CHANGE ORDERS

A. Procedure:

1. Engineer will prepare four copies of proposed Change Order and transmit such with Engineer's written recommendation and request to Contractor for signature.
2. Contractor shall, upon receipt, either: (i) promptly sign copies, retaining one for its file, and return remaining three copies to Engineer for Owner's signature, or (ii) return unsigned three copies with written justification for not executing Change Order.
3. Engineer will, upon receipt of Contractor signed copies, promptly forward Engineer's written recommendation and partially executed three copies for Owner's signature, or if Contractor fails to execute the Change Order, Engineer will promptly so notify Owner and transmit Contractor's justification to Owner.
4. Upon receipt of Contractor-executed Change Order, Owner will promptly either:
 - a. Execute Change Order, retaining one copy for its file and returning two copies to Engineer; or
 - b. Return to Engineer unsigned copies with written justification for not executing Change Order.
5. Upon receipt of Owner-executed Change Order, Engineer will transmit one copy to Contractor, and retain one copy, or if Owner fails to execute the Change Order, Engineer will promptly so notify Contractor and transmit Owner's justification to Contractor.
6. Upon receipt of Owner-executed Change Order, Contractor shall:
 - a. Perform Work covered by Change Order.
 - b. Revise Schedule of Values to adjust Contract Price and submit with next Application for Payment.
 - c. Revise Progress Schedule to reflect changes in Contract Times, if any, and to adjust times for other items of Work affected by change.
 - d. Enter changes in Project record documents after completion of change related Work.

B. In signing a Change Order, Owner and Contractor acknowledge and agree that:

1. Stipulated compensation (Contract Price or Contract Times, or both) set forth includes payment for (i) the Cost of the Work covered by the Change Order, (ii) Contractor's fee for overhead and profit, (iii) interruption of Progress Schedule, (iv) delay and impact, including cumulative impact, on other Work under the Contract Documents, and (v) extended overheads.

481967A.GN1

2. Change Order constitutes full mutual accord and satisfaction for the change to the Work.
3. Unless otherwise stated in the Change Order, all requirements of the original Contract Documents apply to the Work covered by the Change Order.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

**SECTION 01 29 00
PAYMENT PROCEDURES**

PART 1 GENERAL

1.01 GENERAL

- A. Measurement of an item of work will be by the unit indicated in the Bid.
- B. The Bid lists each item of the Project for which payment will be made. Unless otherwise stated in individual sections of the Specifications or in the Bid, no separate payment will be made for any item of work, materials, parts, equipment, supplies or related items required to perform and complete the work. The costs for all such items required shall be included in the price bid for item of which it is a part. No payment will be made for any items other than those listed in the Bid.
- C. Required items of work and incidentals necessary for the satisfactory completion of the work which are not specifically listed in the Bid, and which are not specified in this Section to be measured or to be included in one of the items listed in the Bid, shall be considered as incidental to the work. All costs thereof, including Contractor's overhead costs and profit, shall be considered as included in the lump sum or unit prices bid for the various Bid items. The Contractor shall prepare the Bid accordingly.
- D. Payment will be made by extending unit prices multiplied by quantities provided and then summing the extended prices to reflect actual work. Such price and payment shall constitute full compensation to the Contractor for furnishing all plant, labor, equipment, tools and materials not furnished by the Owner and for performing all operations required to provide to the Owner the entire Project, complete in place, as specified and as indicated on the Drawings.
- E. Payment will include all necessary and incidental related work not specified to be included in any other item of work listed in the Bid.
- F. Final payment quantities shall be determined from the record drawings. The record drawing lengths, dimensions, quantities, etc. shall be determined by a survey after the completion of all required work. The precision of final payment quantities shall match the precision shown for that item in the Bid.

1.02 SUBMITTALS

A. Informational Submittals:

1. Schedule of Values: Submit on Contractor's standard form.
2. Application for Payment.
3. Final Application for Payment.

1.03 SCHEDULE OF VALUES

- A. Upon request of Engineer, provide documentation to support the accuracy of the Schedule of Values.
- B. Unit Price Work: Reflect unit price quantity and price breakdown from conformed Bid Form.
- C. An unbalanced or front-end loaded schedule will not be acceptable.
- D. Summation of the complete Schedule of Values representing all the Work shall equal the Contract Price.

1.04 APPLICATION FOR PAYMENT

- A. Transmittal Summary Form: Attach one Summary Form with each detailed Application for Payment for each schedule and include Request for Payment of Materials and Equipment on Hand as applicable. Execute certification by authorized officer of Contractor.
- B. Use detailed Application for Payment Form provided by Engineer.
- C. Include accepted Schedule of Values.
- D. Include separate line item for each Change Order and Work Change Directive executed prior to date of submission. Provide further breakdown of such as requested by Engineer.
- E. Preparation: Submit Application for Payment, including a Transmittal Summary Form and detailed Application for Payment Form(s), a listing of materials on hand, and such supporting data as may be requested by Engineer.

1.05 NONPAYMENT FOR REJECTED OR UNUSED PRODUCTS

A. Payment will not be made for following:

1. Loading, hauling, and disposing of rejected material.
2. Quantities of material wasted or disposed of in manner not called for under Contract Documents.

3. Rejected loads of material, including material rejected after it has been placed by reason of failure of Contractor to conform to provisions of Contract Documents.
4. Material not unloaded from transporting vehicle.

1.06 EROSION AND SEDIMENTATION CONTROL

A. General:

1. No separate payment shall be made for temporary and/or permanent erosion and sedimentation controls, except as noted below. All other temporary and/or permanent erosion and sedimentation control costs shall be included in the unit price bid for the item to which it pertains.
2. No payment will be made for any portion of the Project for which temporary erosion and sedimentation controls are not properly maintained.
3. Quantities for payment shall be based upon actual quantity constructed and authorized by the Engineer.

B. Payment Schedule:

1. For the following item, Contractor shall be paid 50 percent of Extended Bid Unit Price at in the initial pay application and 50 percent of Extended Bid Unit Price at in the final pay application, upon submittal of required documentation to the Engineer:
 - a. NPDES Inspections, as per 100001 NPDES General Permit
2. For the following items, Contractor shall be paid 85 percent of Extended Bid Unit Price at item installation and 15 percent of Extended Bid Unit Price at removal, as approved by the Engineer:
 - a. Concrete washdown.
 - b. Co – construction exit.
 - c. Fence, orange tree save.
 - d. Sd1-S – silt fence.
 - e. Sr – temporary stream crossing.
 - f. Tc – turbidity curtain.
3. For all remaining items within “Erosion, Sedimentation and Pollution Control” section of the Bid Form, Contractor shall be paid 100 percent of Extended Bid Unit Price at installation/construction.

C. Construction Exits: All costs for construction exits, including installation, maintenance, repair, and removal, shall be included in the unit price bid for Construction Exits.

D. Silt Fence: All costs for silt fence, whether Type A or Type C, including installation, maintenance, repair, replacement, and removal, shall be included in the appropriate unit price bid for Silt Fence.

- E. Hay Bale Check Dams: All costs for Hay Bale Check Dams including hay, silt fence, stakes, necessary earthwork, periodic maintenance and repair, and removal of sediment and hay bales following establishment of permanent erosion control measures shall be included in the unit price bid for Hay Bale Check Dams.
- F. Rip Rap: The cost of all rip rap, including filter fabric, shown on the Drawings, specified, or directed by the Engineer, shall be included in the unit price bid for Rip Rap.
- G. Grassing:
 - 1. The unit price bid for Grassing shall be for one-time clean-up of the disturbed area, whether permanent, temporary, or both. Any other costs for labor, materials, and equipment for cleanup and grassing of the disturbed area shall be included in the unit price bid for the item to which it pertains.
 - 2. No additional payment will be made for those areas where the Contractor must reseed due to inadequate watering and maintenance; loss of seeds caused by site erosion, e.g., wind and rain; inadequate germination of the seeds; inadequate coverage/density.
- H. Sodding: Sodding, where ordered by the Engineer, shall be provided at the unit price bid for Sodding. Payment for sodding shall be in addition to the payment made for Grassing.
- I. Matting: All costs for matting blankets, including installation, maintenance, repair, and replacement, shall be included in the appropriate unit price bid for matting.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 31 13
PROJECT COORDINATION

PART 1 GENERAL

1.01 SUBMITTALS

A. Informational:

1. Photographs: in accordance with Article Construction Photographs.

1.02 UTILITY NOTIFICATION AND COORDINATION

A. Coordinate the Work with various utilities within Project limits. Notify applicable utilities prior to commencing Work, if damage occurs, or if conflicts or emergencies arise during the Work.

1. Electrical Company: Georgia Power
 - a. Contact Person: Robert Plunkett
 - b. Telephone: (770) 306-5704
2. Electrical Company: Central Georgia EMC
 - a. Contact Person: Curtis Camp
 - b. Telephone: (770) 502-0226
3. Water Department: Owner

1.03 CONSTRUCTION SEQUENCE AND CONSTRAINTS

- A. The Contractor shall be solely responsible for all construction sequencing.
- B. The information provided herein should not be relied upon by Contractor as fully complete, comprehensive, or fully detailed. Contractor shall make his own assessment and determination of requirements that affect or may affect the progress, sequence, or cost of the Work.
- C. Sequence and constraints other than those described will be considered upon written request to Owner and Engineer.

1.04 ADJACENT FACILITIES AND PROPERTIES

A. Examination:

1. After Effective Date of the Agreement and before Work at Site is started, Contractor, Engineer, and affected property owners and utility owners shall make a thorough examination of pre-existing conditions including existing buildings, structures, and other improvements in vicinity of Work, as applicable, which could be damaged by construction operations.

2. Periodic reexamination shall be jointly performed to include, but not limited to, cracks in structures, settlement, leakage, and similar conditions.

- B. Documentation: Record and submit documentation of observations made on examination inspections in accordance with Article Construction Photographs.

1.05 CONSTRUCTION PHOTOGRAPHS

A. General:

1. Photographically document the Project, including at a minimum pre-construction and post-construction.
2. Digital Images: No electronic editing of images is allowed. Stored image shall be actual image as captured without cropping or other edits.

B. Pre-construction and Post-Construction:

1. After Effective Date of the Agreement and before Work at Site is started, and again upon issuance of Substantial Completion, take a minimum of 48 photographs of Site and property adjacent to perimeter of Site.
2. Format: Digital, minimum resolution of 1,680 by 2,240 pixels and 24-bit, millions of color.

1.06 REFERENCE POINTS AND SURVEYS

A. Contractor's Responsibilities:

1. Provide additional survey and layout required to layout the Work.
2. Check and establish exact location of existing facilities prior to Work.
3. In event of discrepancy in data or staking provided by Owner, request clarification before proceeding with Work.
4. Maintain complete accurate log of survey work as it progresses as a Record Document.
5. On request of Engineer, submit documentation.
6. Provide competent employee(s), tools, stakes, and other equipment and materials as Engineer may require to:
 - a. Establish control points, lines, and easement boundaries.
 - b. Check layout, survey, and measurement work performed by others.
 - c. Measure quantities for payment purposes.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 31 19
PROJECT MEETINGS

PART 1 GENERAL

1.01 GENERAL

- A. Engineer will schedule physical arrangements for meetings throughout progress of the Work, prepare meeting agenda with regular participant input and distribute with written notice of each meeting, preside at meetings, record minutes to include significant proceedings and decisions, and reproduce and distribute copies of minutes within 5 days after each meeting to participants and parties affected by meeting decisions.

1.02 PRECONSTRUCTION CONFERENCE

- A. Contractor shall be prepared to discuss the following subjects, as a minimum:

1. Required schedules.
2. Status of Bonds and insurance.
3. Sequencing of critical path work items.
4. Progress payment procedures.
5. Project changes and clarification procedures.
6. Use of Site, access, storage areas, security and temporary facilities.
7. Major product delivery and priorities.
8. Contractor's safety plan and representative.

- B. Attendees will include:

1. Owner's representatives.
2. Contractor's office representative.
3. Contractor's resident superintendent.
4. Subcontractors' representatives whom Contractor may desire or Engineer may request to attend.
5. Engineer's representatives.
6. Others as appropriate.

1.03 PROGRESS MEETINGS

- A. Engineer will schedule regular progress meetings at Site, conducted monthly to review the Work progress, Progress Schedule, Schedule of Submittals, Application for Payment, contract modifications, and other matters needing discussion and resolution.

B. Attendees will include:

1. Owner's representative(s), as appropriate.
2. Contractor, Subcontractors, and Suppliers, as appropriate.
3. Engineer's representative(s).
4. Others as appropriate.
5. Scheduled by Engineer on regular basis and as necessary to review.

1.04 OTHER MEETINGS

- A. In accordance with Contract Documents and as required by Owner and Engineer.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 32 00
CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 GENERAL

1.01 SUBMITTALS

A. Informational Submittals:

1. Progress Schedule:
 - a. Submit initial Detailed Progress Schedule within 30 days after Effective Date of the Agreement.
 - b. Submit an Updated Progress Schedule at each update, in accordance with Article Detailed Progress Schedule.
2. Submit with Each Progress Schedule Submission:
 - a. Contractor's certification that Progress Schedule submission is actual schedule being utilized for execution of the Work.
 - b. Progress Schedule: One legible copy.
3. Prior to final payment, submit a final Updated Progress Schedule.

1.02 PROGRESS SCHEDULE

- A. In addition to basic requirements outlined in General Conditions, show a detailed schedule, beginning with Notice to Proceed, for minimum duration of 30 days, and a summary of balance of Project through Final Completion.
- B. Show activities including, but not limited to the following:
 1. Notice to Proceed.
 2. Initial Site Work.
 3. Earthwork.
 4. Specified Work sequences and construction constraints.
 5. Contract Milestone and Completion Dates.
 6. Substantial Completion.
 7. Final Completion.
- C. Update Progress Schedule monthly as part of progress payment process. Failure to do so may result in the Owner withholding all or part of the monthly progress payment until the Progress Schedule is updated in a manner acceptable to Engineer.
- D. Format: Bar Chart and/or Table with start and end dates for each item.

1.03 SCHEDULE ACCEPTANCE

A. Engineer's acceptance will demonstrate agreement that:

1. Proposed schedule is accepted with respect to:
 - a. Contract Times, including Final Completion and all intermediate Milestones are within the specified times.
 - b. Specified Work sequences and constraints are shown as specified.
 - c. Access restrictions are accurately reflected.
 - d. Submittal review times are as specified.
2. In all other respects, Engineer's acceptance of Contractor's schedule indicates that, in Engineer's judgment, schedule represents reasonable plan for constructing Project in accordance with the Contract Documents. Engineer's review will not make any change in Contract requirements. Lack of comment on any aspect of schedule that is not in accordance with the Contract Documents will not thereby indicate acceptance of that change, unless Contractor has explicitly called the nonconformance to Engineer's attention in submittal. Schedule remains Contractor's responsibility and Contractor retains responsibility for performing all activities, for activity durations, and for activity sequences required to construct Project in accordance with the Contract Documents.

B. Unacceptable Progress Schedule:

1. Make requested corrections; resubmit within 10 days.
2. Until acceptable to Engineer as Baseline Progress Schedule, continue review and revision process, during which time Contractor shall update schedule on a monthly basis to reflect actual progress and occurrences to date.

1.04 ADJUSTMENT OF CONTRACT TIMES

- A. Reference General Conditions and Section 01 26 00, Contract Modification Procedures.
- B. Evaluation and reconciliation of Adjustments of Contract Times shall be based on the Updated Progress Schedule at the time of proposed adjustment or claimed delay.
- C. Schedule Contingency:
 1. Contingency, when used in the context of the Progress Schedule, is time between Contractor's proposed Completion Time and Contract Completion Time.

2. Contingency included in Progress Schedule is a Project resource available to both Contractor and Owner to meet Contract Milestones and Contract Times. Use of Schedule contingency shall be shared to the proportionate benefit of both parties.
3. Use of schedule contingency suppression techniques such as preferential sequencing and extended activity times is prohibited.
4. Pursuant to Contingency sharing provisions of this Specification, no time extensions will be granted, nor will delay damages be paid until a delay occurs which (i) consumes all available contingency time, and (ii) extends Work beyond the Contract Completion date.

D. Claims Based on Contract Times:

1. Where Engineer has not yet rendered formal decision on Contractor's Claim for adjustment of Contract Times, and parties are unable to agree as to amount of adjustment to be reflected in Progress Schedule, Contractor shall reflect an interim adjustment in the Progress Schedule as acceptable to Engineer.
2. It is understood and agreed that such interim acceptance will not be binding on either Contractor or Owner, and will be made only for the purpose of continuing to schedule Work until such time as formal decision has been rendered as to an adjustment, if any, of the Contract Times.
3. Contractor shall revise Progress Schedule prepared thereafter in accordance with Engineer's formal decision.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 33 00
SUBMITTAL PROCEDURES

PART 1 GENERAL

1.01 DEFINITIONS

- A. Action Submittal: Written and graphic information submitted by Contractor that requires Engineer's approval.
- B. Informational Submittal: Information submitted by Contractor that requires Engineer's review and determination that submitted information is in accordance with the Conditions of the Contract.

1.02 PROCEDURES

- A. Direct submittals to Engineer at the following, unless specified otherwise: as provided at preconstruction conference.
- B. Electronic Submittals: Submittals shall, unless specifically accepted, be made in electronic format.
 - 1. Each submittal shall be an electronic file in Adobe Acrobat Portable Document Format (PDF). Use the latest version available at time of execution of the Agreement.
 - 2. Electronic files that contain more than ten pages in PDF format shall contain internal bookmarking from an index page to major sections of the document.
 - 3. PDF files shall be set to open "Bookmarks and Page" view.
 - 4. Add general information to each PDF file, including title, subject, author, and keywords.
 - 5. PDF files shall be set up to print legibly at 8.5-inch by 11-inch, 11-inch by 17-inch, or 22-inch by 34-inch. No other paper sizes will be accepted.
 - 6. Submit new electronic files for each resubmittal.
 - 7. Include a copy of the Transmittal of Contractor's Submittal form, located at end of section, with each electronic file.
 - 8. Provide Engineer with authorization to reproduce and distribute each file as many times as necessary for Project documentation.
 - 9. Detailed procedures for handling electronic submittals will be discussed at the preconstruction conference.

C. Transmittal of Submittal:

1. Contractor shall review each submittal and check for compliance with Contract Documents.
2. Complete, sign, and transmit with each submittal package, one Transmittal of Contractor's Submittal form attached at end of this section.
3. Identify and describe each deviation or variation from Contract Documents.

D. Format:

1. Package submittal information by individual Specification section. Do not combine different Specification sections together in submittal package, unless otherwise directed in Specification.
2. Present in a clear and thorough manner and in sufficient detail to show kind, size, arrangement, and function of components, materials, and devices, and compliance with Contract Documents.

E. Processing Time:

1. Time for review shall commence on Engineer's receipt of submittal.
2. Engineer will act upon Contractor's submittal and transmit response to Contractor not later than 14 days after receipt, unless otherwise specified.
3. Resubmittals will be subject to same review time.
4. No adjustment of Contract Times or Price will be allowed as a result of delays in progress of Work caused by rejection and subsequent resubmittals.

F. Resubmittals: Clearly identify each correction or change made.

G. Incomplete Submittals:

1. Engineer will return entire submittal for Contractor's revision if preliminary review deems it incomplete.
2. When any of the following are missing, submittal will be deemed incomplete:
 - a. Contractor's review completed and signed.
 - b. Transmittal of Contractor's Submittal; completed and signed.
 - c. Insufficient number of copies.

H. Submittals not required by Contract Documents:

1. Will not be reviewed and will be returned stamped “Not Subject to Review.”
2. Engineer will keep one copy and return submittal to Contractor.

1.03 ACTION SUBMITTALS

A. Prepare and submit Action Submittals required by individual Specification sections.

B. Shop Drawings:

1. Copies: If electronic submittals are not provided, submit six hard copies.
2. Identify and Indicate:
 - a. Applicable Contract Drawing and Detail number, products, units and assemblies, and system or equipment identification or tag numbers.
 - b. Equipment and Component Title: Identical to title shown on Drawings.
 - c. Critical field dimensions and relationships to other critical features of Work. Note dimensions established by field measurement.
 - d. Project-specific information drawn accurately to scale.
3. Manufacturer’s standard schematic drawings and diagrams as follows:
 - a. Modify to delete information that is not applicable to the Work.
 - b. Supplement standard information to provide information specifically applicable to the Work.
4. Product Data: Provide as specified in individual Specifications.
5. Foreign Manufacturers: When proposed, include names and addresses of at least two companies that maintain technical service representatives close to Project.

C. Action Submittal Dispositions: Engineer will review, comment, stamp, and distribute as noted:

1. Approved:
 - a. Contractor may incorporate product(s) or implement Work covered by submittal.
 - b. Distribution:
 - 1) One copy furnished Owner.
 - 2) One copy furnished Resident Project Representative.
 - 3) One copy retained in Engineer’s file.
 - 4) Remaining copies returned to Contractor appropriately annotated.

2. Approved as Noted:
 - a. Contractor may incorporate product(s) or implement Work covered by submittal, in accordance with Engineer's notations.
 - b. Distribution:
 - 1) One copy furnished Owner.
 - 2) One copy furnished Resident Project Representative.
 - 3) One copy retained in Engineer's file.
 - 4) Remaining copies returned to Contractor appropriately annotated.
3. Partial Approval, Resubmit as Noted:
 - a. Make corrections or obtain missing portions, and resubmit.
 - b. Except for portions indicated, Contractor may begin to incorporate product(s) or implement Work covered by submittal, in accordance with Engineer's notations.
 - c. Distribution:
 - 1) One copy furnished Owner.
 - 2) One copy furnished Resident Project Representative.
 - 3) One copy retained in Engineer's file.
 - 4) Remaining copies returned to Contractor appropriately annotated.
4. Revise and Resubmit:
 - a. Contractor may not incorporate product(s) or implement Work covered by submittal.
 - b. Distribution:
 - 1) One copy furnished Resident Project Representative.
 - 2) One copy retained in Engineer's file.
 - 3) Remaining copies returned to Contractor appropriately annotated.

1.04 INFORMATIONAL SUBMITTALS

A. General:

1. Copies: If electronic submittals are not provided, submit three copies, unless otherwise indicated in individual Specification section.
2. Refer to individual Specification sections for specific submittal requirements.
3. Engineer will review each submittal. If submittal meets conditions of the Contract, Engineer will forward copy to appropriate parties. If Engineer determines submittal does not meet conditions of the Contract and is therefore considered unacceptable, Engineer will retain one copy and return remaining copy with review comments to Contractor, and require that submittal be corrected and resubmitted.

- B. Certificates:
1. General:
 - a. Provide notarized statement that includes signature of entity responsible for preparing certification.
 - b. Signed by officer or other individual authorized to sign documents on behalf of that entity.
 2. Installer: Prepare written statements on manufacturer's letterhead certifying installer complies with requirements as specified in individual Specification section.
 3. Material Test: Prepared by qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements.
 4. Certificates of Successful Testing or Inspection: Submit when testing or inspection is required by Laws and Regulations or governing agency or specified in individual Specification sections.
 5. Construction Photographs: In accordance with Section 01 31 13, Project Coordination, and as may otherwise be required in Contract Documents.
- C. Closeout Submittals: In accordance with Section 01 77 00, Closeout Procedures.
- D. Contractor-design Data (related to temporary construction):
1. Written and graphic information.
 2. List of assumptions.
 3. List of performance and design criteria.
 4. Summary of loads or load diagram, if applicable.
 5. Calculations.
 6. List of applicable codes and regulations.
 7. Name and version of software.
 8. Information requested in individual Specification section.
- E. Manufacturer's Instructions: Written or published information that documents manufacturer's recommendations, guidelines, and procedures in accordance with individual Specification section.
- F. Payment:
1. Application for Payment: In accordance with Section 01 29 00, Payment Procedures.
 2. Schedule of Values: In accordance with Section 01 29 00, Payment Procedures.

- G. Schedules:
 - 1. Progress Schedules: In accordance with Section 01 32 00, Construction Progress Documentation.
- H. Special Guarantee: Supplier's written guarantee as required in individual Specification sections.
- I. Statement of Qualification: Evidence of qualification, certification, or registration as required in Contract Documents to verify qualifications of professional land surveyor, engineer, materials testing laboratory, specialty Subcontractor, trade, Specialist, consultant, installer, and other professionals.
- J. Submittals Required by Laws, Regulations, and Governing Agencies:
 - 1. Promptly submit promptly notifications, reports, certifications, payrolls, and otherwise as may be required, directly to the applicable federal, state, or local governing agency or their representative.
 - 2. Transmit to Engineer for Owner's records one copy of correspondence and transmittals (to include enclosures and attachments) between Contractor and governing agency.
- K. Test, Evaluation, and Inspection Reports:
 - 1. General: Shall contain signature of person responsible for test or report.
 - 2. Factory:
 - a. Identification of product and Specification section, type of inspection or test with referenced standard or code.
 - b. Date of test, Project title and number, and name and signature of authorized person.
 - c. Test results.
 - d. If test or inspection deems material or equipment not in compliance with Contract Documents, identify corrective action necessary to bring into compliance.
 - e. Provide interpretation of test results, when requested by Engineer.
 - f. Other items as identified in individual Specification sections.
 - 3. Field:
 - a. As a minimum, include the following:
 - 1) Project title and number.
 - 2) Date and time.
 - 3) Record of temperature and weather conditions.
 - 4) Identification of product and Specification section.
 - 5) Type and location of test, Sample, or inspection, including referenced standard or code.
 - 6) Date issued, testing laboratory name, address, and telephone number, and name and signature of laboratory inspector.

- 7) If test or inspection deems material or equipment not in compliance with Contract Documents, identify corrective action necessary to bring into compliance.
- 8) Provide interpretation of test results, when requested by Engineer.
- 9) Other items as identified in individual Specification sections.

1.05 SUPPLEMENTS


A. The supplement listed below, following “End of Section”, is part of this Specification.

1. Form: Transmittal of Contractor’s Submittal.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

| | | | |
|--|--|---------------------------------|--|
|  | TRANSMITTAL OF CONTRACTOR'S SUBMITTAL (ATTACH TO EACH SUBMITTAL) | DATE: _____ | |
| TO: _____ _____ _____ _____ FROM: _____ <div style="text-align: center;">Contractor</div> _____ _____ _____ | Submittal No.: _____ <input type="checkbox"/> New Submittal <input type="checkbox"/> Resubmittal Project: _____ Project No.: _____ Specification Section No.: _____ (Cover only one section with each transmittal) Schedule Date of Submittal: _____ | | |
| SUBMITTAL TYPE: | <input type="checkbox"/> Shop Drawing <input type="checkbox"/> Deferred | <input type="checkbox"/> Sample | <input type="checkbox"/> Informational |

The following items are hereby submitted:

| Number of Copies | Description of Item Submitted (Type, Size, Model Number, Etc.) | Spec. and Para. No. | Drawing or Brochure No. | Contains Variation to Contract | |
|------------------|--|---------------------|-------------------------|--------------------------------|-----|
| | | | | No | Yes |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Contractor hereby certifies that (i) Contractor has complied with the requirements of Contract Documents in preparation, review, and submission of designated Submittal and (ii) the Submittal is complete and in accordance with the Contract Documents and requirements of laws and regulations and governing agencies.

By: _____
 Contractor (Authorized Signature)

SECTION 01 58 13
PROJECT SIGN

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. This section covers Work necessary for creation and installation of a Project Sign.

1.02 REFERENCES

- A. Drawings and General Provisions of the Contract, including general and Supplementary Conditions and Division 1, General Requirements Specification sections, apply to this section.

1.03 WORK INCLUDED

- A. All Work necessary to install the material including, but not limited to, the purchase, delivery to the Work Site, onsite storage, delivery to the work areas, and construction of the Project signs, painting, installing, and cleanup.

1.04 DEFINITIONS

- A. None.

1.05 SUBMITTALS

- A. Shop Drawings:
1. Sign proofs for review by Engineer, including: Project Sign.
 2. Manufacturer's product information for interpretive sign and mounting frames.

PART 2 PRODUCTS

2.01 PROJECT SIGN

- A. Provide and maintain 6 feet wide by 3 feet sign constructed of 3/4-inch exterior high density overlaid plywood. Sign shall be mounted on metal or treated wood posts that will last the entire length of the Project. Sign content shall be provided by Engineer.
- B. Signs shall bear name of Project, Owner, Owner Logo, Contractor, Engineer, and other participating agencies. Lettering shall be blue applied on a white background or per Engineer request.

481967A.GN1

PART 3 EXECUTION

3.01 PROJECT SIGN

- A. Sign shall be mounted on metal or treated wood posts that will last the entire length of the Project.

END OF SECTION

**SECTION 01 77 00
CLOSEOUT PROCEDURES**

PART 1 GENERAL

1.01 SUBMITTALS

A. Informational Submittals:

1. Submit prior to application for final payment.
 - a. Record Documents: As required in General Conditions.
 - b. Special bonds, Special Guarantees, and Service Agreements.
 - c. Releases from Agreements.
 - d. Final Application for Payment: Submit in accordance with procedures and requirements stated in Section 01 29 00, Payment Procedures.
 - e. Extra Materials: As required by individual Specification sections.

1.02 RECORD DOCUMENTS

A. Quality Assurance:

1. Furnish qualified and experienced person, whose duty and responsibility shall be to maintain record documents.
2. Accuracy of Records:
 - a. Coordinate changes within record documents, making legible and accurate entries on each sheet of Drawings and other documents where such entry is required to show change.
 - b. Purpose of Project record documents is to document factual information regarding aspects of the Work, both concealed and visible, to enable future modification of the Work to proceed without lengthy and expensive Site measurement, investigation, and examination.
3. Make entries within 24 hours after receipt of information that a change in the Work has occurred.
4. Prior to submitting each request for progress payment, request Engineer's review and approval of current status of record documents. Failure to properly maintain, update, and submit record documents may result in a deferral by Engineer to recommend whole or any part of Contractor's Application for Payment, either partial or final.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 MAINTENANCE OF RECORD DOCUMENTS

A. General:

1. Promptly following commencement of Contract Times, secure from Engineer at no cost to Contractor, one complete set of Contract Documents. Drawings will be full size.
2. Label or stamp each record document with title, "RECORD DOCUMENTS," in neat large printed letters.
3. Record information concurrently with construction progress and within 24 hours after receipt of information that change has occurred. Do not cover or conceal Work until required information is recorded.

B. Preservation:

1. Maintain documents in a clean, dry, legible condition and in good order. Do not use record documents for construction purposes.
2. Make documents and Samples available at all times for observation by Engineer.

C. Making Entries on Drawings:

1. Using an erasable colored pencil (not ink or indelible pencil), clearly describe change by graphic line and note as required.
 - a. Color Coding:
 - 1) Green when showing information deleted from Drawings.
 - 2) Red when showing information added to Drawings.
 - 3) Blue and circled in blue to show notes.
2. Date entries.
3. Call attention to entry by "cloud" drawn around area or areas affected.
4. Legibly mark to record actual changes made during construction, including, but not limited to:
 - a. Depths of various elements of foundation in relation to finished first floor data if not shown or where depth differs from that shown.
 - b. Horizontal and vertical locations of existing and new Underground Facilities and appurtenances, and other underground structures, equipment, or Work. Reference to at least two measurements to permanent surface improvements.
 - c. Location of internal utilities and appurtenances concealed in the construction referenced to visible and accessible features of the structure.

- d. Locate existing facilities, piping, equipment, and items critical to the interface between existing physical conditions or construction and new construction.
 - e. Changes made by Addenda and Field Orders, Work Change Directive, Change Order, and Engineer's written interpretation and clarification using consistent symbols for each and showing appropriate document tracking number.
5. Dimensions on Schematic Layouts: Show on record Drawings, by dimension, the centerline of each run of items such as are described in previous subparagraph above.
- a. Clearly identify the item by accurate note such as "cast iron drain," "galv. water," and the like.
 - b. Show, by symbol or note, vertical location of item ("under slab," "in ceiling plenum," "exposed," and the like).
 - c. Make identification so descriptive that it may be related reliably to Specifications.

3.02 FINAL CLEANING

- A. At completion of the Work or of a part thereof and immediately prior to Contractor's request for certificate of Substantial Completion; or if no certificate is issued, immediately prior to Contractor's notice of completion, clean entire Site or parts thereof, as applicable.
1. Leave the Work and adjacent areas affected in a cleaned condition satisfactory to Owner and Engineer.
 2. Remove grease, dirt, dust, paint or plaster splatter, stains, labels, fingerprints, and other foreign materials from exposed surfaces.
 3. Repair, patch, and touch up marred surfaces to specified finish and match adjacent surfaces.
 4. Broom clean exterior paved driveways and parking areas.
 5. Hose clean sidewalks and cart paths.
 6. Rake clean all other surfaces.
 7. Leave water courses, gutters, and ditches open and clean.
- B. Use only cleaning materials recommended by manufacturer of surfaces to be cleaned.

END OF SECTION

**SECTION 31 10 00
SITE CLEARING**

PART 1 GENERAL

1.01 DEFINITIONS

- A. Interfering or Objectionable Material: Trash, rubbish, and junk; vegetation and other organic matter, whether alive, dead, or decaying; topsoil.
- B. Clearing: Removal of interfering or objectionable material lying on or protruding above ground surface.
- C. Grubbing: Removal of vegetation and other organic matter including stumps, buried logs, and roots greater than 2-inch caliper to a depth of 6 inches below subgrade.
- D. Scalping: Removal of sod without removing more than upper 3 inches of topsoil.
- E. Stripping: Removal of topsoil remaining after applicable scalping is completed.
- F. Project Limits: Areas, as shown or specified, within which Work is to be performed.

1.02 SUBMITTALS

- A. Action Submittals: Drawings clearly showing clearing, grubbing, and stripping limits.

1.03 QUALITY ASSURANCE

- A. Obtain Engineer's approval of staked clearing, grubbing, and stripping limits, prior to commencing clearing, grubbing, and stripping.

1.04 SCHEDULING AND SEQUENCING

- A. Prepare Site only after adequate erosion and sediment controls are in place. Limit areas exposed uncontrolled to erosion during installation of temporary erosion and sediment controls to maximum of 0.9 acres.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 GENERAL

- A. Clear, grub, and strip areas actually needed for waste disposal, borrow, or Site improvements within limits shown or specified.
- B. Do not injure or deface vegetation that is not designated for removal.

3.02 LIMITS

- A. As follows, but not to extend beyond Project limits.
 - 1. Staging and Construction Access Areas:
 - a. Clearing and Grubbing: 5 feet beyond toe of temporary fill and construction access areas.
 - b. Stripping and Scalping: 2 feet beyond toe of temporary fill and construction access areas.
 - 2. Reservoir Area:
 - a. Clearing and Grubbing: lake bed, embankments, and 5 feet beyond top of cut slopes.
 - b. Scalping and Stripping: Not required.
 - 3. Other Areas: as directed by Engineer.
- B. Remove rubbish, trash, and junk from entire area within Project limits.

3.03 CLEARING

- A. Clear areas within limits shown or specified.
- B. Fell trees so that they fall away from facilities and vegetation not designated for removal.
- C. Cut stumps not designated for grubbing flush with ground surface.
- D. Cut off shrubs, brush, weeds, and grasses to within 2 inches of ground surface.

3.04 GRUBBING

- A. Grub areas within limits shown or specified.

3.05 SCALPING

- A. Do not remove sod until after clearing and grubbing is completed and resulting debris is removed.
- B. Scalp areas within limits shown or specified.

3.06 STRIPPING

- A. Do not remove topsoil until after scalping is completed.
- B. Strip areas within limits to minimum depths shown or specified. Do not remove subsoil with topsoil.
- C. Stockpile strippings, meeting requirements for topsoil, separately from other excavated material.

3.07 TREE REMOVAL OUTSIDE CLEARING LIMITS

- A. Remove Within Project Limits: Dead, dying, leaning, or otherwise unsound trees that may strike Work limits in falling and are approved for removal by Engineer and property owner in writing.
- B. Cut stumps off flush with ground, remove debris, and if disturbed, restore surrounding area to its original condition.

3.08 SALVAGE

- A. Saleable log timber may be sold to Contractor's benefit. Promptly remove from Project Site.
- B. Sod with commercial value may be sold to Contractor's benefit. Promptly remove from Project Site.

3.09 DISPOSAL

- A. Clearing and Grubbing Debris:
 - 1. Dispose of debris offsite.
 - 2. Burning of debris onsite will not be allowed.
 - 3. Stockpiled material shall not remain onsite in excess of 30 days.
 - 4. Woody debris may be chipped. Chips may be sold to Contractor's benefit or used for landscaping onsite as mulch or uniformly mixed with topsoil, provided that resulting mix will be fertile and not support combustion. Maximum dimensions of chipped material used onsite shall be 1/4-inch by 2 inches. Dispose of chips that are unsuitable for landscaping or other uses.

5. Limit offsite disposal of clearing and grubbing debris to locations that are approved by federal, state, and local authorities, and that will not be visible from Project.
- B. Scalpings: As specified for clearing and grubbing debris.
- C. Strippings:
1. Dispose of strippings that are unsuitable for topsoil or that exceed quantity required for topsoil offsite.
 2. Stockpile topsoil in sufficient quantity to meet Work needs. Dispose of excess strippings offsite.

END OF SECTION

**SECTION 31 23 16
EXCAVATION**

PART 1 GENERAL

1.01 SUBMITTALS

A. Informational Submittals:

1. Excavation Plan, Detailing:
 - a. Methods and sequencing of excavation.
 - b. Proposed temporary onsite locations of stockpiled excavated material.
 - c. Proposed offsite spoil disposal sites.
 - d. Numbers, types, and sizes of equipment proposed to perform excavations.
 - e. Anticipated difficulties and proposed resolutions.
 - f. Reclamation of onsite temporary stockpile areas.

1.02 QUALITY ASSURANCE

- A. Provide adequate survey control to avoid unauthorized overexcavation.

1.03 WEATHER LIMITATIONS

- A. Material excavated when frozen or when air temperature is less than 32 degrees F shall not be used as fill or backfill until material completely thaws.
- B. Material excavated during inclement weather shall not be used as fill or backfill until after material drains and dries sufficiently for proper compaction.

1.04 SEQUENCING AND SCHEDULING

- A. Demolition: Complete applicable demolition Work prior to excavating.
- B. Clearing, Grubbing, and Stripping: Complete applicable Work specified in Section 31 10 00, Site Clearing, prior to excavating.
- C. Dewatering: Conform to applicable requirements of Section 31 23 19.01, Dewatering, prior to initiating excavation.
- D. Excavation Support: Install and maintain as necessary to support sides of excavations and prevent detrimental settlement and lateral movement.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 GENERAL

- A. Excavate to lines, grades, and dimensions shown and as necessary to accomplish Work. Excavate to within tolerance of plus or minus 0.3 feet, except where dimensions or grades are shown or specified as maximum or minimum. Allow for forms, working space, granular base, topsoil, and similar items, wherever applicable. Trim to neat lines where concrete is to be deposited against earth.
- B. Do not overexcavate without written authorization of Engineer.

3.02 UNCLASSIFIED EXCAVATION

- A. Excavation is unclassified. Complete all excavation regardless of the type, nature, or condition of the materials encountered.

3.03 EMBANKMENT AND CUT SLOPES

- A. Shape, trim, and finish cut slopes to conform with lines, grades, and cross-sections shown, with proper allowance for topsoil or slope protection, where shown.
- B. Remove stones and rock that exceed 3-inch diameter and that are loose and may roll down slope. Remove exposed roots from cut slopes.
- C. Round tops of cut slopes in soil to not less than a 6-foot radius, provided such rounding does not extend offsite or outside easements and rights-of-way, or adversely impacts existing facilities, adjacent property, or completed Work.

3.04 STOCKPILING EXCAVATED MATERIAL

- A. Stockpile excavated material that is suitable for use as fill or backfill until material is needed.
- B. Post signs indicating proposed use of material stockpiled. Post signs that are readable from all directions of approach to each stockpile. Signs should be clearly worded and readable by equipment operators from their normal seated position.
- C. Confine stockpiles to within approved work areas. Do not obstruct roads, parking, streets, or construction access.

- D. Do not stockpile excavated material adjacent to trenches and other excavations, unless excavation side slopes and excavation support systems are designed, constructed, and maintained for stockpile loads.
- E. Do not stockpile excavated materials near or over existing facilities, adjacent property, or completed Work, if weight of stockpiled material could induce excessive settlement.

3.05 DISPOSAL OF SPOIL

- A. Dispose of excavated materials, which are unsuitable or exceed quantity needed for fill or backfill, offsite.
- B. Dispose of debris resulting from removal of underground facilities offsite.
- C. Dispose of debris resulting from removal of organic matter, trash, refuse, and junk as specified in Section 31 10 00, Site Clearing, for clearing and grubbing debris.

END OF SECTION

**SECTION 31 23 19.01
DEWATERING**

PART 1 GENERAL

1.01 SUBMITTALS

- A. Informational Submittals: Water control plan.

1.02 WATER CONTROL PLAN

- A. As a minimum, include:
1. Descriptions of proposed groundwater and surface water control facilities including, but not limited to, equipment; methods; standby equipment and power supply, pollution control facilities, discharge locations to be utilized, and provisions for immediate temporary water supply as required by this section.
 2. Drawings showing locations, dimensions, and relationships of elements of each system.
 3. Design calculations demonstrating adequacy of proposed dewatering systems and components.
- B. If system is modified during installation or operation revise or amend and resubmit Water Control Plan.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 GENERAL

- A. Remove and control water during periods when necessary to properly accomplish Work.

3.02 SURFACE WATER CONTROL

- A. Remove surface runoff controls when no longer needed.

3.03 DEWATERING SYSTEMS

- A. Provide, operate, and maintain dewatering systems of sufficient size and capacity to permit excavation in dry and to lower and maintain groundwater level a minimum of 2 feet below the lowest point of excavation.
- B. Maintain excavations free of water, regardless of source, until meeting final grade.

- C. Dewatering systems shall include wells or well points, and other equipment and appurtenances installed sufficiently below lowest point of excavation, or to maintain specified groundwater elevation.
- D. Design and Operate Dewatering Systems:
 - 1. To prevent loss of ground as water is removed.
 - 2. To avoid inducing settlement or damage to existing facilities, completed Work, or adjacent property.
 - 3. To relieve artesian pressures and resultant uplift of excavation bottom.
- E. Provide sufficient redundancy in each system to keep excavation free of water in event of component failure.
- F. Provide 100 percent emergency power backup with automatic startup and switchover in event of electrical power failure.
- G. Provide supplemental ditches and sumps only as necessary to collect water from local seeps. Do not use ditches and sumps as primary means of dewatering.

3.04 DISPOSAL OF WATER

- A. Obtain discharge permit for water disposal from authorities having jurisdiction.
- B. Treat water collected by dewatering operations, as required by regulatory agencies, prior to discharge.
- C. Discharge water as required by discharge permit and in manner that will not cause erosion or flooding, or otherwise damage existing facilities, completed Work, or adjacent property.
- D. Remove solids from treatment facilities and perform other maintenance of treatment facilities as necessary to maintain their efficiency.

3.05 PROTECTION OF PROPERTY

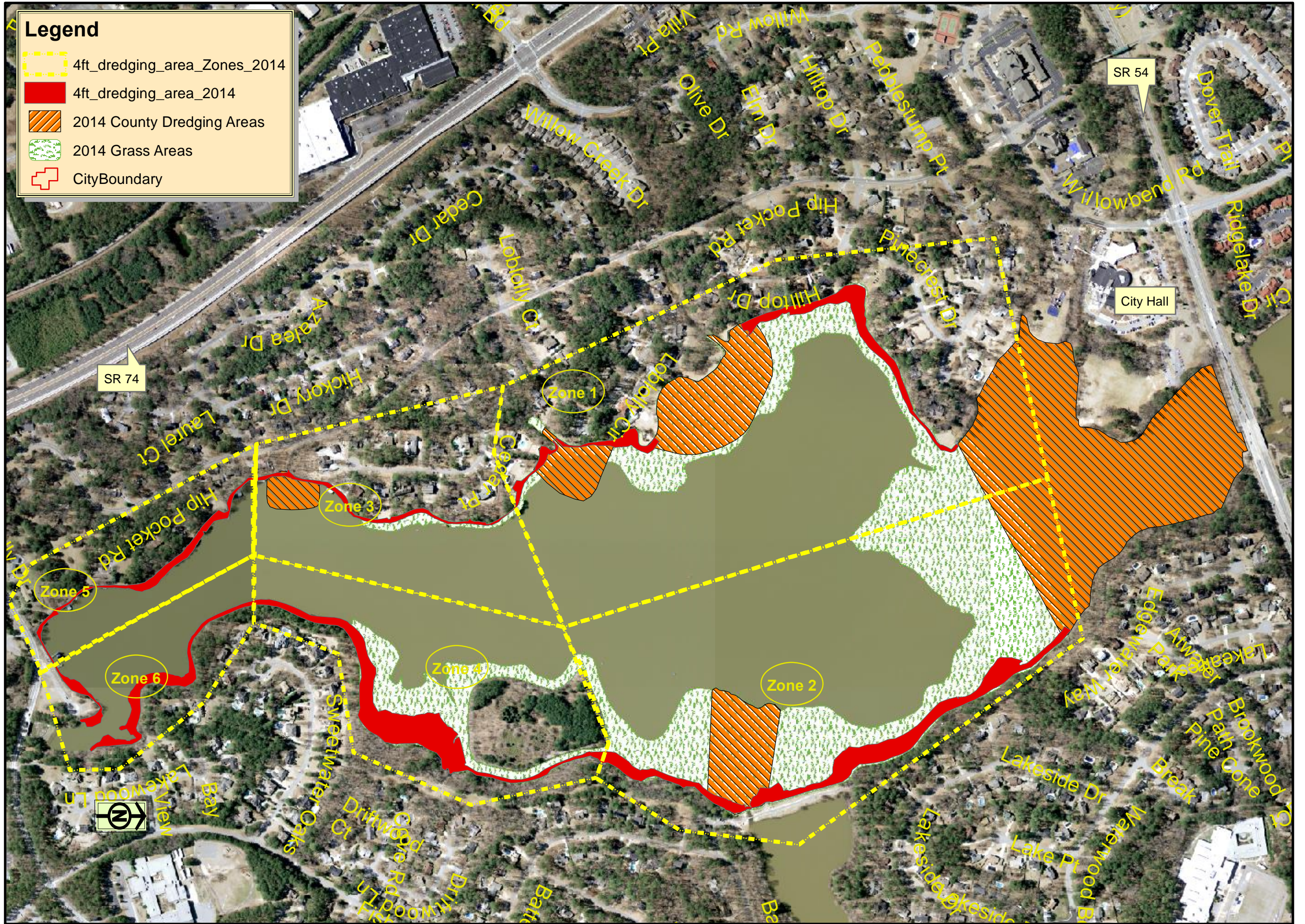
- A. Make assessment of potential for dewatering induced settlement. Provide and operate devices or systems, including but not limited to reinjection wells, infiltration trenches and cutoff walls, necessary to prevent damage to existing facilities, completed Work, and adjacent property.
- B. Securely support existing facilities, completed Work, and adjacent property vulnerable to settlement due to dewatering operations. Support shall include, but not be limited to, bracing, underpinning, or compaction grouting.

END OF SECTION

PART 4

ATTACHMENTS

Attachment A: Lake Peachtree Dredging Potential Additions



Sediment Sampling and Analysis Report

Lake Peachtree Sediment Dredging Project

Prepared for
Fayette County Water Department

September 2014

CH2MHILL®

ATL Office
6600 Peachtree Dunwoody Road
Embassy Row 400, Suite 600
Atlanta, GA 30328

Contents

| Section | Page |
|---|-------------------------------------|
| Introduction and Background | 1-1 |
| 1.1 Background | 1-1 |
| 1.2 Project Study Area | 1-1 |
| Technical Approach | 2-1 |
| 2.1 Field Data Collection | 2-1 |
| 2.1.1 Project Schedule and Sampling Locations | 2-1 |
| 2.1.2 Sediment Samples..... | 2-1 |
| 2.2 Data Analysis..... | 2-3 |
| 2.3 Quality Assurance/Quality Control | 2-5 |
| 2.3.1 Type 1: Field Surveys | 2-5 |
| 2.3.2 Type 2: Field Sampling | 2-5 |
| 2.3.3 Type 3: Laboratory Analysis..... | 2-5 |
| 2.3.4 Data Analysis..... | 2-5 |
| 2.3.5 Chain-of-Custody and Sample Delivery | 2-5 |
| Results | 3-1 |
| References | 4-1 |
| Tables | |
| 1 Lake Peachtree Dredging Areas | Error! Bookmark not defined. |
| 2 Lake Peachtree Sampling Locations..... | Error! Bookmark not defined. |
| 3 Summary of Sampling Sites..... | Error! Bookmark not defined. |
| 4 Summary of Laboratory Parameters and Required Analytical Methods. | Error! Bookmark not defined. |
| 5 Summary of Results Above the Reporting Limit | Error! Bookmark not defined. |
| Figures | |
| 1 Location Map | Error! Bookmark not defined. |
| Appendix | |
| A Field Safety Instructions | |
| B Operating Procedure: Sediment Sampling (USEPA, 2010) | |
| C Laboratory Results | |

Introduction and Background

1.1 Background

Lake Peachtree is one of five raw water reservoirs operated by the Fayette County Water System (FCWS). The lake is located along Flat Creek in Peachtree City, Georgia. In 1985, Peachtree City (the owner of Lake Peachtree) and FCWS executed an agreement which granted the County the right to withdrawal water. Condition 2 of this agreement states that the *“County also acknowledges that certain areas of the Lake are prone to buildups of silt deposits, and County therefore specifically covenants, agrees and warrants that it will reasonably maintain those areas of the Lake (stream and drainage inlets and appurtenant areas as shown on Exhibit “A” attached hereto and made a part hereof), in such a manner that excess silt deposits shall be removed and streams and drainage inlets shall be kept clean and open. County has previously agreed to dredge excess silt from these areas to the depth existing in 1966...”*

In accordance with this agreement, FCWS has agreed to maintain Lake Peachtree by dredging accumulated sediment in seven separate areas along the lake’s perimeter. FCWS is preparing to conduct dredging and has completed a sediment investigation to determine potential dredging haul and fill alternatives, including resale, County use, or landfill disposal. The following Sediment Sampling and Analysis Report outlines methods used for FCWS’s sediment investigation and the results of this investigation.

1.2 Project Study Area

The project study area includes the seven separate areas along Lake Peachtree’s perimeter, previously mentioned, which will be included in dredging activities. These areas were selected due to being located where streams enter the lake and most readily deposit their sediments in the lake bottom. Table 1 provides a summary of these areas, and the areas are shown on Figure 1. Sediment sampling in each of these areas was conducted to identify potential uses of the dredged material.

TABLE 1

Lake Peachtree Dredging Areas

Sampling and Analysis Report for Lake Peachtree

| Area | Acreage (acres) | Sediment Volume (c.y.) ^a | Description |
|------|-----------------|-------------------------------------|---|
| A | 14.0 | 24,100 | Northern headwaters of lake, adjacent to GA Hwy 54, Drake Field, and Picnic Park |
| B | 6.9 | 11,900 | Northern headwaters of lake, adjacent to GA Hwy 54, Drake Field, and Picnic Park |
| C | 4.3 | 7,400 | Northern headwaters of lake, adjacent to GA Hwy 54, Drake Field, and Picnic Park |
| D | 6.4 | 7,200 | Western boundary of lake, at stream entering lake between Hilltop Drive and Loblolly Circle |
| E | 2.3 | 6,400 | Western boundary of lake, at stream entering lake between Loblolly Circle and Cedar Point |
| F | 1.2 | 3,800 | Western boundary of lake, at end of Cedar Point |
| G | 2.3 | 3,700 ^b | Eastern boundary of lake, adjacent to Battery Park, where East Lagoon empties into the lake |

^a Sediment volume estimates based upon bathymetric survey performed by Mallett Consulting, Inc. in 2012.

^b Mallett did not survey Area G. Its sediment volume is estimated based upon average c.y./acre from Areas A-F.



FIGURE 1
Site Map and Approximate Sampling Locations
Sampling and Analysis Report for Lake Peachtree

Technical Approach

The following section describes the technical approach used to complete sediment sampling and analysis to support the Lake Peachtree Dredging Project, including:

- Section 2.1: field data collection procedures,
- Section 2.2: data analysis procedures, and
- Section 3.3: a quality assurance/quality control plan for data collection and analysis.

2.1 Field Data Collection

The technical approach used for field data collection is detailed in the following section. The Field Safety Instructions (FSI) for the lake sampling is included as Appendix A. The FSI was thoroughly reviewed by the field team prior to the first field event and accompanied the team during the event.

2.1.1 Project Schedule and Sampling Locations

Sediment sampling was conducted during a one-day field event on September 9, 2014. Samples were collected from a total of 21 sites, as outlined in Table 2 and shown on Figure 1. The location of each site was identified in the field and recorded using a global positioning system (GPS).

TABLE 2
Sampling Locations
Sampling and Analysis Report for Lake Peachtree

| Area | Acreage (acres) | Number of Sampling Locations |
|--------------|--------------------|---------------------------------|
| A | 14.0 | 4 |
| B | 6.9 | 5 |
| C | 4.3 | 3 |
| D | 6.4 | 3 |
| E | 2.3 | 3 |
| F | 1.2 | 0 |
| G | 2.3 | 3 |
| Total | 37.4 | 21 |

2.1.2 Sediment Samples

Sediment collection was consistent with United States Environmental Protection Agency (USEPA) standard operating procedures for sediment collection (USEPA, 2010; Appendix B)ⁱ, which describe procedures, methods, and considerations to be used when collecting sediment samples for field screening or laboratory analysis. Sediment samples were collected from the top 6 to 18 inches of sediment, at each of the 21 sampling locations, using a hand-held auger. The field team transferred the sediment directly from the auger to appropriate containers provided by the accredited laboratory. Samples were packed in a cooler, on ice, and delivered to the laboratory to meet the necessary hold times. A summary of the analysis completed at each sampling location is provided in Table 3.

TABLE 3

Summary of Sampling Sites*Sampling and Analysis Report for Lake Peachtree*

| SITE | Latitude | Longitude | DEPTH (in) | TCLP Full | Percent Moisture | Chlorinated Herbicides and PAH | TKN and Total Phosphorous | PCB and Pesticides | Mercury and Total Metals |
|-------------|-----------------|------------------|-----------------------|----------------------|-----------------------------|---|--|-------------------------------|---|
| 1B | 33°23.981' | -84°34.751' | 17 | X | X | X | X | X | X |
| 2C | 33°23.987' | -84°34.753' | 12 | | X | X | X | X | X |
| 3B | 33°23.981' | -84°34.72' | 15 | | X | X | X | X | X |
| 4C | 33°23.942' | -84°34.695' | 12 | | X | X | X | X | X |
| 5C | 33°23.936' | -84°34.674' | 18 | | X | X | X | X | X |
| 6B | 33°24.004' | -84°34.66' | 17 | | X | X | X | X | X |
| 7B | 33°24.009' | -84°34.66' | 20 | X | X | X | X | X | X |
| 8B | 33°24.086' | -84°34.68' | 18 | | X | X | X | X | X |
| 9A | 33°24.133' | -84°34.618' | 21 | | X | X | X | X | X |
| 10A | 33°24.069' | -84°34.579' | 21 | X | X | X | X | X | X |
| 11A | 33°23.987' | -84°34.575' | 21 | | X | X | X | X | X |
| 12A | 33°23.952' | -84°34.497' | 21 | | X | X | X | X | X |
| 13G | 33°23.695' | -84°34.284' | 10 | X | X | X | X | X | X |
| 14G | 33°23.708' | -84°34.291' | 16 | | X | X | X | X | X |
| 15G | 33°23.707' | -84°34.316' | 18 | | X | X | X | X | X |
| 16D | 33°23.687' | -84°34.753' | 13 | X | X | X | X | X | X |
| 17D | 33°23.712' | -84°34.741' | 12 | | X | X | X | X | X |
| 18D | 33°23.722' | -84°34.743' | 8 | | X | X | X | X | X |
| 19E | 33°23.537' | -84°34.641' | 6 | X | X | X | X | X | X |
| 20E | 33°23.53' | -84°34.641' | 8 | | X | X | X | X | X |
| 21E | 33°23.546' | -84°34.64' | 8 | | X | X | X | X | X |

2.2 Data Analysis

For each of the 21 sediment samples collected (see Table 3), laboratory analysis was conducted on the parameters outlined in Table 4, with the exception of the Toxicity Characteristic Leaching Procedure (TCLP) analysis, which was completed on samples from 6 locations. These parameters were identified as necessary to determine the potential for hazardous material, and to evaluate the presence of pollutants that may be present based on the land use of the lake's drainage area. TCLP analysis, which determines if the sediment is characteristically hazardous, was conducted on one sample from each of the six areas (i.e., Areas A through E and Area G). The following sample sites included a TCLP analysis: 01B, 07B, 10A, 13G, 16D, and 19E.

Sediment analysis was completed by a contracted laboratory, using USEPA-approved analytical methods (40 CFR Part 136). The methods used for each parameter, and the associated laboratory reporting limit, are also shown in Table 4. Results of investigation will be used by FCWS in determining dredging haul and fill alternatives.

TABLE 4

Summary of Laboratory Parameters and Required Analytical Methods

Sampling and Analysis Report for Lake Peachtree

| Parameter | Method | Laboratory Reporting Limit |
|--|--------------|----------------------------|
| Parameters Analyzed for all 21 Samples | | |
| Chlorinated herbicides (includes 10 herbicides) | SW8151A | 0.037 to 0.57 mg/kg dry |
| Chlorinated pesticides (includes 21 pesticides) | SW8081B | 0.0019 to 0.29 mg/kg dry |
| Mercury | SW7471B | 0.11 to 0.169 mg/kg dry |
| Polychlorinated Biphenyls (PCBs) (includes 7 PCBs) | SW8082A | 0.037 to 0.058 mg/kg dry |
| Polynuclear Aromatic Hydrocarbons (PAHs) (includes 18 PAHs) | SW8270D | 0.37 to 0.057 mg/kg dry |
| Nitrogen, Total Kjeldahl (TKN) | E351.2 MOD | 53.6 to 84.6 mg/kg dry |
| Total Cadmium | SW6010C | 1.53 to 4.1 mg/kg dry |
| Total Chromium | SW6010C | 1.53 to 4.1 mg/kg dry |
| Total Copper | SW6010C | 1.53 to 4.1 mg/kg dry |
| Total Lead | SW6010C | 3.06 to 8.19 mg/kg dry |
| Total Nickel | SW6010C | 3.06 to 8.19 mg/kg dry |
| Total Zinc | SW6010C | 3.06 to 8.19 mg/kg dry |
| Total Phosphorus | E365.1 | 10.9 to 16.9 mg/kg dry |
| Toxicity Characteristic Leaching Procedure (TCLP) Analysis Conducted on 6 Samples | | |
| 1,1-Dichloroethene | SW1311/8260B | 0.10 mg/L |
| 1,2-Dichloroethane | SW1311/8260B | 0.10 mg/L |
| 1,4-Dichlorobenzene | SW1311/8270D | 0.10 mg/L |
| 2,4,5-TP (Silvex) | SW1311/8151A | 0.20 mg/L |
| 2,4,5-Trichlorophenol | SW1311/8270D | 0.10 mg/L |
| 2,4,6-Trichlorophenol | SW1311/8270D | 0.10 mg/L |
| 2,4-D | SW1311/8151A | 0.20 mg/L |

| Parameter | Method | Laboratory Reporting Limit |
|----------------------|--------------|----------------------------|
| 2,4-Dinitrotoluene | SW1311/8270D | 0.10 mg/L |
| 2-Butanone | SW1311/8260B | 0.20 mg/L |
| Arsenic | SW1311/6010C | 0.250 mg/L |
| Barium | SW1311/6010C | 0.500 mg/L |
| Benzene | SW1311/8260B | 0.10 mg/L |
| Cadmium | SW1311/6010C | 0.0250 mg/L |
| Carbon tetrachloride | SW1311/8260B | 0.10 mg/L |
| Chlordane | SW1311/8081B | 0.0050 mg/L |
| Chlorobenzene | SW1311/8260B | 0.10 mg/L |
| Chloroform | SW1311/8260B | 0.10 mg/L |
| Chromium | SW1311/6010C | 0.0500 mg/L |
| Cresols, Total | SW1311/8270D | 0.10 mg/L |
| Endrin | SW1311/8081B | 0.0010 mg/L |
| gamma-BHC | SW1311/8081B | 0.00050 mg/L |
| Heptachlor | SW1311/8081B | 0.00050 mg/L |
| Heptachlor epoxide | SW1311/8081B | 0.00050 mg/L |
| Hexachlorobenzene | SW1311/8270D | 0.10 mg/L |
| Hexachlorobutadiene | SW1311/8270D | 0.10 mg/L |
| Hexachloroethane | SW1311/8270D | 0.10 mg/L |
| Lead | SW1311/6010C | 0.0500 mg/L |
| m,p-Cresol | SW1311/8270D | 0.10 mg/L |
| Mercury | SW1311/7470A | 0.00400 mg/L |
| Methoxychlor | SW1311/8081B | 0.0050 mg/L |
| Nitrobenzene | SW1311/8270D | 0.10 mg/L |
| o-Cresol | SW1311/8270D | 0.10 mg/L |
| Pentachlorophenol | SW1311/8270D | 0.50 mg/L |
| Pyridine | SW1311/8270D | 0.10 mg/L |
| Selenium | SW1311/6010C | 0.100 mg/L |
| Silver | SW1311/6010C | 0.0250 mg/L |
| Tetrachloroethene | SW1311/8260B | 0.10 mg/L |
| Toxaphene | SW1311/8081B | 0.050 mg/L |
| Trichloroethene | SW1311/8260B | 0.10 mg/L |
| Vinyl chloride | SW1311/8260B | 0.040 mg/L |

^a One TCLP sample was collected from each of the six areas (i.e., Areas A through E and Area G)

2.3 Quality Assurance/Quality Control

Quality Assurance/Quality Control (QA/QC) is designed to assure the reliability and quality of the analysis and data and to identify any contamination that may result from lab methods, equipment, or sample collection. Sample collection, preservation, handling and storage, and analytical procedures were conducted in accordance with standard methods and practices. Three types of QA/QC were performed as part of the sediment sampling:

- Type 1 includes regular checks of field equipment and proper documentation of sampling activities and field conditions by the field team members.
- Type 2 consists of sampling procedures intended to identify the type and estimate the level of contamination.
- Type 3 provides confirmation of the analytical procedures conducted by the laboratories.

In combination, these types of QA/QC provide the equivalent of a modified Level 3 USEPA data quality objective.

2.3.1 Type 1: Field Surveys

Type 1 QA/QC encompasses field monitoring activities and calibration of field equipment (in this case, only the GPS unit). Field personnel for this project is experienced in the calibration and operation of each piece of field equipment used on the project. Field instruments were calibrated according to manufacturers' specifications, and these procedures were documented in a field notebook or on specially prepared field sheets. Type 1 activities include documenting other pertinent data concerning the sampling events such as weather conditions and time of sampling. Type 1 documentation can be summarized as follows:

- Instrument identification
- Calibration information (standards used and results)
- Date and time of calibrations and measurement

2.3.2 Type 2: Field Sampling

Type 2 QA/QC activities include sample procedures designed to detect contamination from sampling equipment resulting from improper sample collection. Sediment collection was consistent with the USEPA's standard operating procedures for sediment collection (USEPA, 2010; Appendix B). QA/QC was utilized according to USEPA approved guidance and methodology, including chain-of-custody protocol. Two personnel with experience or special training in sediment sampling techniques conducted field sampling.

2.3.3 Type 3: Laboratory Analysis

Laboratory analysis was conducted by a contracted laboratory using USEPA-approved analysis methods (40 CFR Part 136). The methods and reporting limits used for each parameter to ensure proper QA/QC were shown in Table 4.

2.3.4 Data Analysis

Following each sampling event, data was downloaded to or manually entered into a Microsoft Excel spreadsheet, depending on the sampling type. A scientist other than the individual entering these data performed a QC check of the spreadsheets by scanning field sheets and comparing to entered data. The developed profiles were evaluated for outliers, and any quality concerns will be discussed with FCWS prior to finalizing the results.

2.3.5 Chain-of-Custody and Sample Delivery

Any sampling and analytical program must follow a system for sample control from collection to data reporting. This includes the ability to trace the possession and handling of samples from the time of collection through analysis and final disposition. The documentation of the sample history is referred to as "chain-of-custody" (COC). A sample is considered to be in a person's custody if it is:

1. in the person's physical possession,
2. in view of the person after he/she has taken possession,
3. secured by that person so that no one can tamper with the sample, or
4. in a designated secure area.

The following section details the chain-of-custody system followed by the field team.

Chain-of-Custody Record

To establish the documentation necessary to trace sample possession from the time of collection, a COC record provided by the sampling laboratory was completed for every sample event. In order to maintain the COC record, every person who has custody of the sample at any time signed, dated, and noted the time on the COC record. Samples were not left unattended unless placed in a secured and sealed container with the COC record inside the container.

The COC record included special instructions for the laboratory to follow, such as composite preparation or clean metal analysis, which is consistent with the contract. If discrepancies are identified, the field team will inform the Project Manager before the samples are analyzed. The following special instructions were included on the COC forms:

Sample Labeling and Transport

For each sediment sample, the following information was clearly marked and labeled on the sample container:

- Project Name
- Sample Identification Number
- Location
- Analyses Requested
- Preservative
- Date and Time
- Field Team

During sampling, filled and labeled containers were stored in coolers on ice to maintain a temperature of less than or equal to 6 °C. The coolers remained in the custody of the field team until the end of the sampling event, and the samples were delivered to the laboratory in a cooler, on ice. Glass containers were wrapped in bubble-wrap to prevent breakage. Samples were stored on ice and hand-delivered to the appropriate laboratory in order to meet the appropriate holding times.

Coolers prepared for delivery were lined with a cooler liner and packed with ice in double-wrapped Ziploc bags so that movement of samples would be minimized. A COC form was included in each container describing: the type of sample, number of containers, type and kind of analysis, QA/QC instructions and samples, and special processing and handling procedures. It is imperative that the samples taken to fulfill the QA/QC requirements to be completed by the lab are included on the COC. The field team will keep the copy of the COC form.

Custody Seals

Custody seals are used to detect tampering with samples following collection, up to the time of analysis. If, for any reason, samples need to be shipped, custody seals were placed across the latch and across the lid opening of the coolers to confirm that they arrive at the laboratory unopened. The custody seal placed across the lid opening was secured with strapping tape. The tape was placed over the custody seal and wrapped completely around the cooler so that it remains closed during shipping.

SECTION 3

Results

Lake Peachtree receives inflow from up to six separate stream channels, the primary one being Flat Creek, with a total estimated drainage area of approximately 18.4 square milesⁱⁱ. The majority of the land draining into the lake is residential, as well as one golf course, and some light commercial developments.

Laboratory analysis was conducted on samples collected from 21 locations; each site was analyzed for the parameters outlined in Table 4, with the exception of the TCLP analysis, which was completed on samples from 6 locations (i.e., 01B, 07B, 10A, 13G, 16D, and 19E).

Results of the sediment analysis are provided in Table 5, and laboratory reports are provided in Appendix C. Parameters in which all samples either did not detect or detected below the laboratory reporting limit (see Table 4 for these limits) were not included in Table 5.

As shown in Table 5, chromium, copper, lead, and zinc were detected in most of the samples collected. PAHs were detected only at Sites 1B and 2C, at the inflow channel coming from the stream located between Peachtree City city hall and Picnic Park. One chlorinated pesticide (4,4'-DDE) was detected at Site 5C, in proximity to Sites 1B and 2C. Of the 40 parameters included in TCLP hazardous substance analysis, only barium was detected at levels above the laboratory reporting limit, at four locations. Levels of this contaminant at each of the four sites ranged from 0.698 to 0.852 mg/L, well below 100 mg/L, which is the Maximum Concentration of Contaminants for Toxicity Characteristic (the D List), as regulated by the U.S. Environmental Protection Agency. Results indicate that sediment collected from Lake Peachtree locations would not be considered toxic, and therefore not classified as hazardous waste.

As would be anticipated for sediment within a suburban area, the soils contain high concentrations of Nitrogen and Phosphorus.

Potential use of the dredged material includes (among other alternatives)ⁱⁱⁱ:

- Topsoil, covering or being blended with rougher fill material.
- Non-structural fill material, including slope stabilization and berm creation
- Land creation, including shoreline protection.

Excess soils may be disposed of in inert landfills, providing the landfill operator notice that the dredged material is not hazardous. This report may serve as this notice.

TABLE 5
Summary of Results Above the Reporting Limit
Sampling and Analysis Report for Lake Peachtree

| Sample ID | TCLP Analysis | Chlorinated Pesticide | Total Metals | | | | | Polynuclear Aromatic Hydrocarbons (PAHs) | | | | TKN, Extractable (mg/Kg-dry) | Total Phosphorus (mg/Kg-dry) | Percent Moisture (% wt) |
|-----------|---------------|-----------------------|----------------------|--------------------|------------------|--------------------|------------------|--|----------------------|--------------------------|--------------------|------------------------------|------------------------------|-------------------------|
| | Barium (mg/L) | 4,4'-DDE (mg/Kg-dry) | Chromium (mg/Kg-dry) | Copper (mg/Kg-dry) | Lead (mg/Kg-dry) | Nickel (mg/Kg-dry) | Zinc (mg/Kg-dry) | Benzo(b) fluoranthene (mg/Kg-dry) | Chrysene (mg/Kg-dry) | Fluoranthene (mg/Kg-dry) | Pyrene (mg/Kg-dry) | | | |
| 1B | BRL | BRL | 13 | 18.7 | 18.1 | BRL | 223 | 0.96 | 0.67 | 1 | 0.89 | 2450 | 326 | 42.2 |
| 2C | BRL | BRL | BRL | BRL | BRL | BRL | 12.6 | BRL | BRL | 0.56 | 0.51 | 242 | 160 | 27.2 |
| 3B | BRL | BRL | 14.9 | 11.7 | 20.1 | BRL | 29 | BRL | BRL | BRL | BRL | 871 | 291 | 34.5 |
| 4C | BRL | BRL | 4.98 | 2.3 | 7.08 | BRL | 7.04 | BRL | BRL | BRL | BRL | 95 | 51.4 | 10.8 |
| 5C | BRL | 0.015 | 12.2 | 9.6 | 17.8 | BRL | 25.4 | BRL | BRL | BRL | BRL | 841 | 287 | 38.6 |
| 6B | BRL | BRL | 22 | 19.2 | 30.5 | BRL | 62.3 | BRL | BRL | BRL | BRL | 813 | 405 | 37.1 |
| 7B | 0.701 | BRL | 16.4 | 17.1 | 27.2 | BRL | 41.6 | BRL | BRL | BRL | BRL | 1440 | 294 | 36.4 |
| 8B | BRL | BRL | 16.3 | 15.4 | 22.8 | 5.27 | 51.7 | BRL | BRL | BRL | BRL | 820 | 328 | 29.7 |
| 9A | BRL | BRL | 7.92 | 11.1 | 10.1 | BRL | 30.4 | BRL | BRL | BRL | BRL | 927 | 179 | 24.8 |
| 10A | 0.828 | BRL | 17.3 | 15 | 9.09 | BRL | 19.8 | BRL | BRL | BRL | BRL | 357 | 114 | 35.9 |
| 11A | BRL | BRL | 18 | 16.8 | 21.4 | 6.07 | 53.7 | BRL | BRL | BRL | BRL | 581 | 218 | 28.7 |
| 12A | BRL | BRL | 17.3 | 16.7 | 19.6 | 6.77 | 42.9 | BRL | BRL | BRL | BRL | 845 | 358 | 25.8 |
| 13G | 0.698 | BRL | 4.11 | 6.28 | 5.78 | BRL | 19.1 | BRL | BRL | BRL | BRL | 123 | 92.8 | 12.1 |
| 14G | BRL | BRL | 5.65 | 10.4 | 12.8 | BRL | 27.7 | BRL | BRL | BRL | BRL | 774 | 122 | 20.6 |
| 15G | BRL | BRL | 1.96 | 2.52 | BRL | BRL | 7.35 | BRL | BRL | BRL | BRL | 172 | 121 | 24.5 |
| 16D | BRL | BRL | 9.39 | 4.83 | 9.79 | BRL | 15 | BRL | BRL | BRL | BRL | BRL | 44.8 | 17.8 |
| 17D | BRL | BRL | 7.35 | 5.58 | 13.6 | BRL | 13.9 | BRL | BRL | BRL | BRL | 379 | 112 | 17.2 |
| 18D | BRL | BRL | 14.8 | BRL | BRL | BRL | 12.2 | BRL | BRL | BRL | BRL | BRL | 32.7 | 14.6 |
| 19E | 0.852 | BRL | 11.1 | 17.5 | 18.2 | BRL | 105 | BRL | BRL | BRL | BRL | 765 | 129 | 25.8 |
| 20E | BRL | BRL | 7.41 | 3.38 | 12.5 | BRL | 15.7 | BRL | BRL | BRL | BRL | 332 | 91.2 | 16.5 |
| 21E | BRL | BRL | 13 | 22.1 | 24.2 | BRL | 125 | BRL | BRL | BRL | BRL | 1000 | 326 | 40.5 |

BRL = Below Reporting Limit (see Table 4)

SECTION 4

References

- i U.S. Environmental Protection Agency (USEPA). 2010. Operating Procedure: Sediment Sampling. USEPA Region 4, Science and Ecosystem Support Division. Athens, Georgia. September 8, 2010.
- ii USGS 02344673 FLAT CREEK (DS OF LAKE) AT PEACHTREE CITY, GA. (n.d.). Retrieved September 25, 2014, from http://waterdata.usgs.gov/nwis/nwisman/?site_no=02344673&agency_cd=USGS
- iii Beneficial Uses Of Dredged Material. (2013, October). Retrieved September 25, 2014, from <http://el.erdc.usace.army.mil/dots/budm/budm.cfm>

PART 5

DRAWINGS
(BOUND SEPARATELY)
