

CHATHAM COUNTY PURCHASING & CONTRACTING DEPARTMENT

ADDENDUM NO. 2 TO 21-0087-4

FOR: CHATHAM COUNTY SLIP 1 DREDGING

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PLEASE SEE THE FOLLOWING FOR ADDITIONS, CLARIFICATIONS AND/OR CHANGES:

NOTE: The bid opening has been extended. See below. The contract completion time has also been extended to 270 days.

Attachments:

1. See attached sheets (2 pages) for Responses to Question Received.
2. Replace current Bid Sheet with the attached revised Bid Sheet.
3. Replace current *Special Conditions* with the attached revised *Special Conditions*. (5 pages)
4. See attached sheet of Adjacent Overall Site Plan ( 1 sheet)
5. See attached USACE Permit Draft ( 58 pages)
6. See attached revised plan sheets. ( 12 sheets)

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**BID OPENING HAS BEEN EXTENDED TO WEDNESDAY,  
SEPTEMBER 1, 2021.**

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THE PROPOSER IS RESPONSIBLE FOR MAKING THE NECESSARY CHANGES AND MUST ACKNOWLEDGE RECEIPT OF ADDENDUM.

8/11/21  
DATE

  
\_\_\_\_\_  
ROBERT E. MARSHALL  
SENIOR PROCUREMENT SPECIALIST  
CHATHAM COUNTY

**Bid No. 21-0087-4 Addendum 1**

**Questions Received:**

1. Q) With respect to the County Tax Certificate Requirement referenced on page 2 of the ITB, what is required from Contractor's not currently operating in the State of Georgia?  
***A) Contractor must apply and receive Tax Certificate at the time of contract award***
2. Q) Warranties are not typically required of dredging projects, please detail what is to be warrantied as this requirement is listed multiple times in the bid package.  
***A) No warranty can be provided on the material removal. A blanket void of all warranty mentions in the documents should be issued.***
3. Q) Please provide the USACE permit at your earliest convenience as the works are to be carried out in compliance with the permit and will dictate means and methods of the works.  
***A) A copy of the current draft USACE permit will be provided with Addendum***
4. Q) In the dredging specification (3.2.1), dredging is to a depth of -16' NAVD88 while the drawings list a depth of -18' NAVD88. Please confirm the design dredging depth.  
***A) The design dredging depth will be -16. The plans will be revised and included in the Addendum.***
5. Q) On drawing G002, Construction note 2 states activities shall only take place within project limits, unless otherwise noted. Please confirm adjacent land area beyond that shown on VN101 will be available for staging, dewatering, and sorting of material prior to final disposal.  
***A) There is a separate active project underway which makes access to the adjacent parcel unavailable. All work will need to be done from water. This will be noted on revised plans and specifications as applicable to be included in Addendum.***
6. Q) On drawing G002, Dredging note 4 states timber piles and debris to be removed and disposed. Please confirm there is no expectation of contaminated or restricted materials within the project boundaries requiring disposal.  
***A) No testing has been done on the timber piles and debris that are known to be present and any other items which are discovered in the course of the work. While there are no known indications of contamination, the possibility of such must be considered***
7. Q) On drawing G002, Environmental note 3 states a 404 Water Quality Permit from USACE for Dredging Activities is required. Please confirm this permit is the responsibility of the Owner and, if acquired, provide.  
***A) It is the responsibility of Chatham County to obtain all necessary permits and to provide them to the contractor.***
8. Q) In order to find local disposal for dredged materials, please clarify if the County is aware of any contaminant present in the project. If yes please provide us a report  
***A) The County is not aware of any contamination present in the materials to be removed. However, there has been very little testing, so the possibility of contamination must be considered.***
9. Q) Will complete revised drawings be sent out showing the change in dredge depths and areas along the east bulkhead wall for contractors laydown and staging be eliminated?

*A) Complete revised drawings will be included in Addendum showing the revision to dredge depth and the loss of surface area for staging and laydown.*

10. Q) - How close and depth along existing walls will the contractor be required to maintain?

*A) Initial setbacks from the existing walls are shown on the revised plans. This is the theoretical setback which will result in the mud settling to provide the design elevation at the walls. Actual settlement will be monitored as material is removed to verify assumptions. Setback may be varied in the field either closer to or farther from the walls if necessary to achieve elevation desired at wall face.*

11. Q) Who will monitor the existing bulkheads for movement and settlement?

*A) Chatham County will engage a third party geotechnical firm to monitor all progress and existing conditions, which would include the existing walls.*

12. Q) Will there be work restrictions due to the location of the existing hotel next to the site?

*A) Initial discussions with the hotel have been with the idea that work in the slip will be continuous once begun. Engineering staff at the hotel have been accepting of this. While there may be further input when work begins, the bid should assume no work restrictions.*

13. Q) The contractor was informed that with these changes, that all dredge materials would need to be placed on barges and moved off site to unload and dispose of at their expense.

*A) Due to the loss of the adjacent site as a laydown/ storage area due to active construction there, all materials will need to be removed by barge to a location to be determined by the contractor and provided to the County for inclusion in the final permit. An allowance of \$ 500,000 has been added to the Bid Schedule to cover tipping fees and other costs associated with offsite disposal, while the initial removal and transport should be included in the price bid for material removal.*

14. Q) - Adding all the changes and time constraints we request that the contract time be extended to 300 CD's and bid time be extended by three(3) weeks.

*A) The bid time will be extended by two weeks, with bids due by September 1. The contract time will be extended to 270 days, which should result in a completion date of July 1, 2022. The County will be open to further extensions based on progress and field conditions.*

15. Q) Bid Items to be added to proposal: A - Tipping Fees, B – Field Condition Allowance be increase to \$ 500,000.00.

*A) The Bid Schedule has been revised to add an allowance of \$ 500,000 to cover tipping fees and other offsite disposal costs. This item will be monitored during work and can be adjusted if necessary. The Field Condition Allowance will be set at \$ 300,000 initially. Any adjustments to this or other items required by the work can be accomplished by change order.*

16. Q) Is it possible contaminated material exist in the dredge area.

*A) See responses to previous questions.*

17. Q) Does the County have any information on the existing materials in the dredge area.

*A) The County has very limited information on the materials. What we do have is included on the plans.*

SLIP 1 DREDGING  
HUTCHINSON ISLAND  
JULY, 2021 ( REVISED AUGUST 9, 2021)  
BID SCHEDULE

ITEM NUMBER	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL COST
1.	Mobilization	JOB	LUMP SUM	_____
2.	Project Management/ Operations, including progress surveys and planning	JOB	LUMP SUM	_____
3.	Material removal	132,000 CY	_____	_____
4.	Erosion Control	JOB	LUMP SUM	_____
5.	Standby time per day	14 Days	_____	_____
6.	Tipping fees/ offsite disposal allowance	JOB	LUMP SUM	500,000
7.	Field Condition Allowance	JOB	LUMP SUM	300,000
TOTAL ALL WORK				\$ _____

\_\_\_\_\_  
NAME/ TITLE

\_\_\_\_\_  
COMPANY

\_\_\_\_\_  
ADDRESS

\_\_\_\_\_  
PHONE/ FAX

\_\_\_\_\_  
EMAIL

## **SPECIAL CONDITIONS**

### **SECTION 01600**

#### **PART 1 – PROJECT DESCRIPTION**

The project is located on Hutchinson Island adjacent to the existing Westin Hotel. The project is located within the corporate limits of the City of Savannah. Previous projects have installed bulkheads and supports around the slip, while future projects will construct a pedestrian pathway around the slip, develop a marina in the slip, and develop the upland areas east of the slip. The area can be accessed from US 17 via the Island's road network and from the Savannah River.

The slip area between the bulkheads contains accumulated sediment, underlying soils materials, timber structures, and other known and unknown debris. The scope of work for the project is the removal of all the materials encountered in the slip down to the specified design elevation and the disposal of the removed materials off site by the Contractor. Mechanical excavation is the preferred method of removal due to the anticipated debris, but other methods proposed will be considered. There is no available space for disposal of hydraulically dredged material. No upland areas adjacent to the slip are available for staging and temporary storage of removed materials. All work and material removal will be waterborne. Compliance with requirements of the NPDES Georgia General Permit is required to the extent indicated on the plans. Minimal impacts to roadway and river traffic are anticipated, but access must be maintained to the docks at the Westin. Soil erosion and sedimentation control measures must be implemented prior to, and maintained during, construction where determined necessary by the owner. There are no known utility features in the area.

#### **PART 2 – CONTRACT DOCUMENTS**

##### **2.1 Specifications**

01300	Submittal Procedures
01600	Special Conditions
02210	Erosion Control
02480	Grassing
35 20 23	Dredging

##### **2.2 Plans**

G001	Cover Sheet
G002	General Notes and Legend
VN101	Overall Existing Conditions Plan
VN102	Debris and Obstructions
B101	Boring Locations
B601	Boring Logs
CN101	Site Development Plan
CN102 – CN105	Detailed Dredging Plans
CN301	Dredging Cross Sections

### **PART 3 – PRE-CONSTRUCTION INSPECTIONS**

A pre-construction conditions video (standard DVD format) is required and must be submitted to the Chatham County Department of Engineering for approval prior to start of any work. Special emphasis shall be given to recording pre-disturbance condition of roadways, walkways, bulkheads, adjacent properties, and other improvements located within or within 100 feet of the project limits. This is in addition to other inspections and surveys required of the Contractor or performed by the County. The video shall be prepared by a photographer having experience in similar work and approved by the County. A voice narrative shall identify location and features of the pre-construction video. A typewritten version of the voice narrative shall be provided upon request. Still photographs with a detailed description log may be substituted for the video provided that level of coverage is similar.

### **PART 4 – EROSION AND SEDIMENTATION CONTROL**

Due to the limited size and nature of the work items included in this project the project is exempt from the need to file an NOI or provide storm water monitoring, and does not need to comply with the requirements of the Georgia General Permit.

The contractor shall be responsible for complying with any applicable sections of the Georgia Water Quality Act.

### **PART 5– FINES AND LIQUIDATED DAMAGES**

#### **5.1 Fine**

- A. A \$400 per day fee shall be assessed against the Contractor and withheld from the Contract Price for each and every day that the erosion and sedimentation control plan is not in proper operation. This fee shall be in addition to any penalties or assessments made against the Contractor for non-compliance with the Georgia Water Quality Control Act.

#### **5.2 Liquidated Damages**

- A. Liquidated Damages shall be assessed at \$ 1000 per calendar day for work not completed within the Contract period. The full amount of liquidated damages will be deducted from the final payment to the Contractor.

## **PART 6– ALLOWANCE**

### **6.1 Field Condition Allowance**

- A. The Field Condition Allowance shown on the bid sheet shall belong to Chatham County. The purpose of this Allowance is to allow the County to designate actions associated with completion of the project which are not indicated on the plans, but which are dictated by field conditions. Bidders shall not use this Allowance to assume any Contractor costs known or unknown at the bidding. Chatham County must approve use of the Allowance. All bidders shall include this Field Condition Allowance within their base bid. Any unused allowance shall revert to Chatham County.

## **PART 7 – SPECIAL REQUIREMENTS OF CONSTRUCTION**

1. The work area can be accessed by water from the Savannah River. The site can be accessed from US Highway 17 via the Hutchinson Island road network, but this access is limited to the roadways themselves. There is no general vehicular access to the slip, although specific and limited access may be arranged with the contractor doing work on the adjacent site.
2. The Contractor shall comply with all local, state and federal regulations as they pertain to the work.
3. Due to the nature of the work, no restrictions are specifically established on working hours. The Contractor is encouraged to take the adjacent developments into account when developing their work plan so as to limit, to the extent practical, impacts, both physical and sound, on these properties.
4. A detailed construction schedule for the project shall be provided to and approved by Chatham County prior to beginning work on the project.
5. The project site is located on the Savannah River, which is a major shipping channel. The Contractor will schedule and conduct the various work items in a manner which does not impact the river traffic.
6. The adjacent Westin Hotel has docks which are in close proximity to the slip. Some impacts from the work on access to these docks is anticipated, but these shall be kept to a minimum. Limits on access shall be coordinated in advance with the Westin
7. The work will be completed under a permit from the US Army Corps of Engineers. A copy of the permit will be made available to bidders on request. The Contractor shall comply with all applicable sections of the permit document.

8. A limited geotechnical investigation was completed in 2015. The boring locations and logs are included in the plans and are for reference only. The boring locations are in upland area which was partially excavated in the previous project. See notes on plans.

## **PART 8 – MEASUREMENT AND PAYMENT**

### **8.1 Measurement**

The items listed in the bid proposal shall be considered as sufficient to complete the work in accordance with the drawings and specifications. Any portion of the work not listed in the bid form shall be deemed to be a part of the item which it is associated with and shall be included in the cost of the unit shown on the bid form. Payment for the unit shown on the bid form shall be considered to cover the cost of all labor, material, equipment and performing all operations necessary to complete the work in place. The unit of measurement shall be the unit shown on the bid form. Payment for unit price items shall be based upon the actual quantity multiplied by the unit prices. Where work is to be performed at a lump sum price, the lump sum shall include all operations and elements necessary to complete the work. No payment will be made for any material wasted, unused, rejected or used for the convenience of the Contractor.

### **8.2 Payment**

#### **A. Mobilization**

Mobilization of equipment and commencement of project. Payment shall be on the basis of the lump sum price in the Bid Proposal and shall not to exceed 5% of the total price bid for the project.

#### **B. Project Management/ Operations**

This item shall contain all project management and operations efforts which are to be completed by the Contractor during the course of the work. Costs for insurance, bonds and supervision shall be included in this item. Planning and submittal of required documents shall be included in this item. Completion of progress and final surveys as noted in the documents shall be included in this item. Payment shall be at the lump sum price in the Bid Proposal.

#### **C. Material Removal**

This item covers the removal of all material between the bulkheads to the extent shown on the plans, management and maintenance of any temporary stockpiles, and disposal of the removed materials. Measurement shall be by use of progress surveys taken as defined in the documents to determine the volume removed. Payment shall be at the unit price in the bid schedule and shall include all labor,

materials and equipment required. Removal of debris located within the work area is included in the pay volume. Overdredge to the limits noted in the documents shall be paid at the unit price in the Bid Proposal.

D. Erosion Control

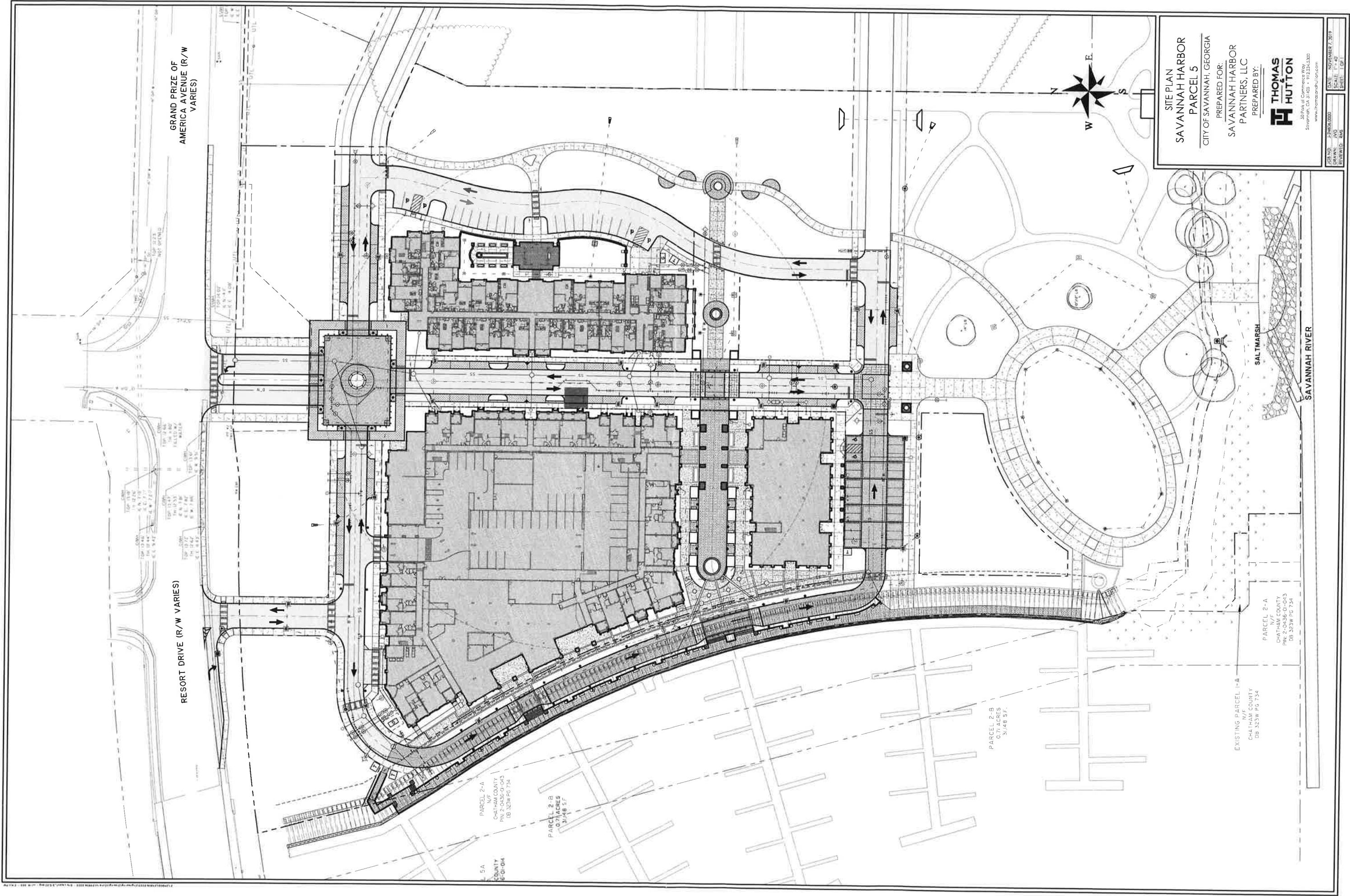
Payment shall be at the lump sum price in the Bid Proposal and shall include all items required to prevent soil erosion, migration of soil materials via water, and stabilization of all surface areas disturbed by the work. This shall include, but is not limited to, the turbidity curtain, construction exit, silt fence around temporary stockpiles, and temporary and permanent grassing of stockpiles and other surface disturbances.

E. Standby Time per Day

This item is to compensate the Contractor for lost time should the work need to be paused per direction from the County due to permit requirements or field conditions. Payment shall be at the unit price in the Bid Proposal for each day or part of a day when work is suspended. Delays due to operational actions or other causes attributable to Contractor actions will not be eligible for standby time.

F. Tipping Fees/ Off Site Disposal Allowance

An allowance to cover tipping fees and other costs for the off site disposal of material removed has been established. The initial value of the allowance is shown on the Bid Schedule. All bidders shall include the amount of the allowance in their bid total. Requests for payment under the allowance must be supported by weigh tickets, disposal site invoices, or other documentation acceptable to the County. Any funds remaining in the allowance at the end of the project shall revert to the County and will not be paid to the contractor.



RESORT DRIVE (R/W VARIES)

GRAND PRIZE OF AMERICA AVENUE (R/W VARIES)

PARCEL 2-A  
N/F  
CHATHAM COUNTY  
PIN: 2-0436-0-043  
DB 323W PG 734

PARCEL 2-B  
0.71 ACRES  
3,148 SF

PARCEL 2-B  
0.71 ACRES  
3,148 SF

EXISTING PARCEL 1-A  
N/F  
CHATHAM COUNTY  
DB 323W PG 734

PARCEL 2-A  
N/F  
CHATHAM COUNTY  
PIN: 2-0436-0-043  
DB 323W PG 734

SITE PLAN  
SAVANNAH HARBOR  
PARCEL 5

PREPARED FOR:  
CITY OF SAVANNAH, GEORGIA  
SAVANNAH HARBOR  
PARTNERS, LLC  
PREPARED BY:

**THOMAS  
HUTTON**

50 Park of Commerce Way  
Savannah, GA 31405 • 912.234.5320  
www.thomashutton.com

DATE: NOVEMBER 7, 2019  
SCALE: 1" = 40'  
DRAWN: JKH  
CHECKED: JKH



DEPARTMENT OF THE ARMY  
SAVANNAH DISTRICT, CORPS OF ENGINEERS  
100 W. OGLETHORPE AVENUE  
SAVANNAH, GEORGIA 31401-3640

FEBRUARY 03 2017

Regulatory Division  
SAS-2005-01453

Mr. Leon Davenport  
Chatham County  
124 Bull Street  
Savannah, Georgia 31412

Dear Davenport :

I refer to your letter of January 21, 2016, requesting modification of Department of the Army permit number SAS-2005-01453. This permit authorized the extension of the existing Hutchinson Island Riverwalk and the deepening of the slip. The project site is located in the Savannah Harbor, within Slip 1, on Hutchinson Island, in Chatham County, Georgia, (Latitude 32.0840, Longitude -81.0842).

In accordance with your request, I am hereby authorizing the following modifications to Department of the Army permit number SAS-2005-01453:

**AUTHORIZED MODIFICATIONS:**

- a. The completion date for work authorized under Department of the Army permit number SAS-2009-00629 is extended from December 31, 2016, to December 31, 2019.
- b. Prior to the commencement of any permitted work in waters of the United States, the permittee shall debit 5.5 wetland mitigation credits from the Salt Creek Mitigation Bank, and submit documentation of this to the U.S. Army Corps of Engineers. The documentation must reference the Corps file number assigned to the permitted project. If all or a portion of the required credits are not available from Salt Creek Mitigation Bank, the permittee shall obtain written approval from the Corps prior to purchasing credits from an alternate mitigation bank. Please note, this special condition supersedes special condition 6 in the original permit.

This permit modification is subject to the terms and conditions of the original permit. You will not depart from the approved location or plans without obtaining prior approval from the Department of the Army.

This authorization does not convey any property rights, either in real estate or material, or any exclusive privileges. It does not authorize any injury to property, invasion of rights, or any infringement of federal, state, local laws, or regulations; nor

does it obviate the requirement to obtain State or local assent required by law for the activity described herein. It does not affect your liability for any damages that may be caused by the work.

If this permit modification is agreeable to you, sign both the original and duplicate copies. Please retain the original for your records and return the signed duplicate to this office. Please be advised that this permit modification is valid only if the signed duplicate copy is received in our office within 60 days from the date of this letter. If we do not receive the signed duplicate copy from you within the 60-day timeframe, this permit modification will automatically expire.

If you object to this decision due to certain terms and conditions therein, you may request that the permit be modified under our regulations at Title 33 Code of Federal Regulations (C.F.R.) § Part 331. Enclosed you will find a Notification of Appeal Process (NAP) Fact Sheet and Request for Appeal (RFA) Form. To request that the permit be modified you must complete Section II of the enclosed form and return the form to the District Engineer at the address shown above.

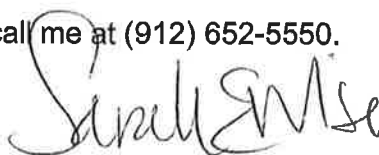
In order for an RFA to be accepted, the U.S. Army Corps of Engineers must determine that it is complete, that it meets the criteria for appeal under 33 C.F.R. § Part 331.5, and that it has been received by the District Engineer within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by this deadline.

It is not necessary to submit an RFA form to the District Office if you do not object to the permit decision.

A copy of this letter is being provided to the following part: Mr. Alton Brown, Resource and Land Consultants, 41 Park of Commerce Way, Suite 303, Savannah, Georgia 31405.

Thank you in advance for completing our on-line Customer Survey Form located at [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=regulatory\\_survey](http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey). We value your comments and appreciate your taking the time to complete a survey each time you have interaction with our office.

If you have any questions, please call me at (912) 652-5550.



For Marvin L. Griffin, P.E.  
Colonel, U.S. Army  
Commanding

Enclosure

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Permittee hereby accepts the terms and conditions of this instrument.

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(Permittee)

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(Date)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To request the transfer of this permit and the associated liabilities with compliance with its terms and conditions, the permittee and transferee must sign and date below.

\_\_\_\_\_  
(PERMITTEE-Printed Name)

\_\_\_\_\_  
(PERMITTEE-Signature)

\_\_\_\_\_  
(DATE)

\_\_\_\_\_  
(TRANSFERREE-Printed Name)

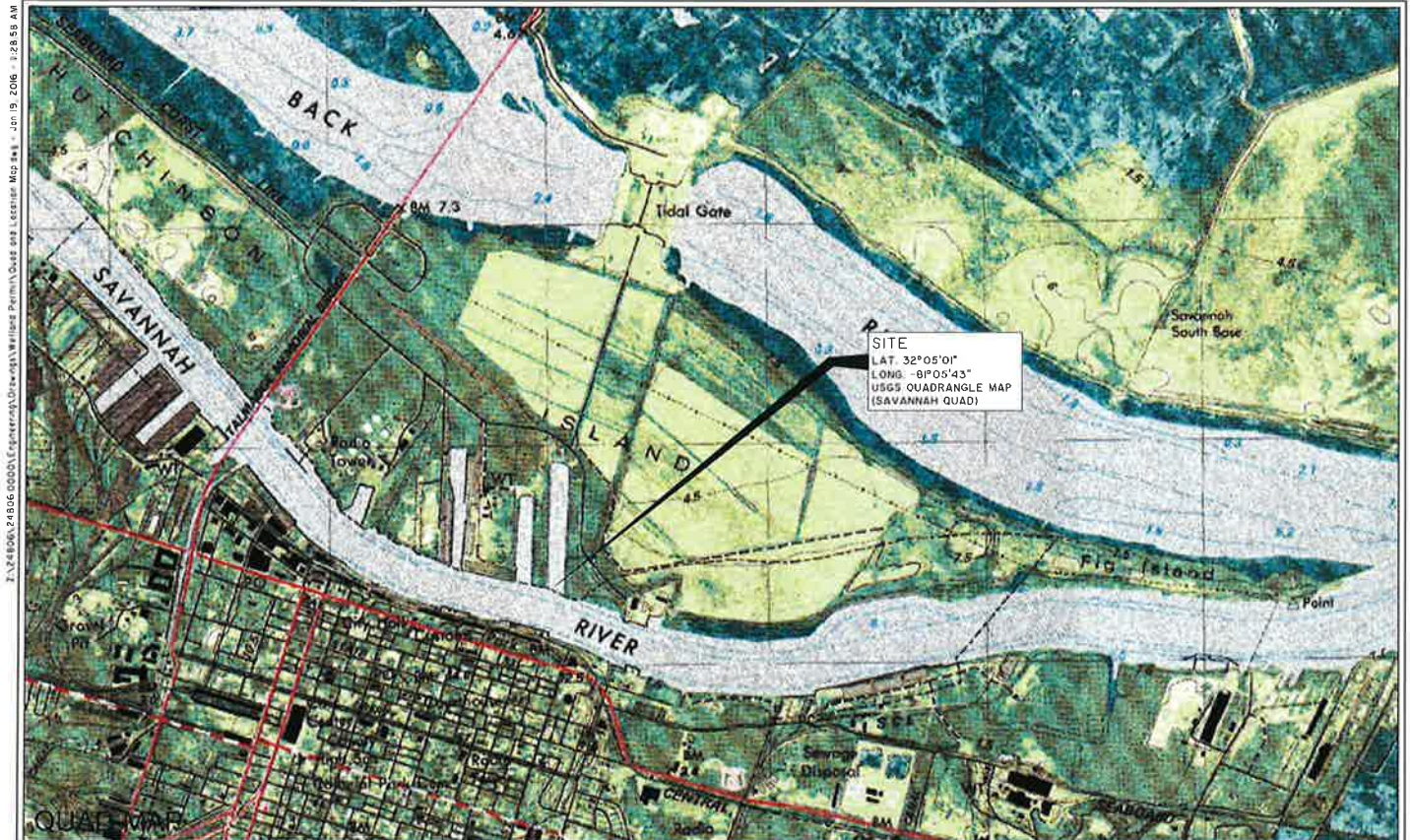
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(TRANSFERREE-Signature)

\_\_\_\_\_  
(DATE)

By signature below, the U.S. Army Corps of Engineers hereby validates the transfer of the permit from the permittee named above to the transferee named above.

\_\_\_\_\_  
Issued for and in behalf of:  
Marvin L. Griffin, P.E.  
Colonel, U.S. Army  
Commanding

\_\_\_\_\_  
(DATE)



## SLIP 1 RIVERWALK EXTENSION

SAVANNAH, GEORGIA

APPLICANT:  
CHATHAM COUNTY  
COUNTY: CHATHAM  
DATE: JANUARY 19, 2016

PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD

DATUM: NAVD 88  
SHEET: 1 of 15  
SCALE: 1"=1000'

**THOMAS & HUTTON**  
Engineering | Surveying | Planning | GIS | Consulting

50 Park of Commerce Way  
PO Box 2727  
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[www.thomasandhutton.com](http://www.thomasandhutton.com)

Z:\14805\14806\_0000\Engineering\Drawings\Water Permit\Gen and Location Map.dwg - Jan 19, 2016 - 11:28:22 AM



LOCATION MAP

## SLIP 1 RIVERWALK EXTENSION

SAVANNAH, GEORGIA

APPLICANT:  
CHATHAM COUNTY  
COUNTY: CHATHAM  
DATE: JANUARY 19, 2016

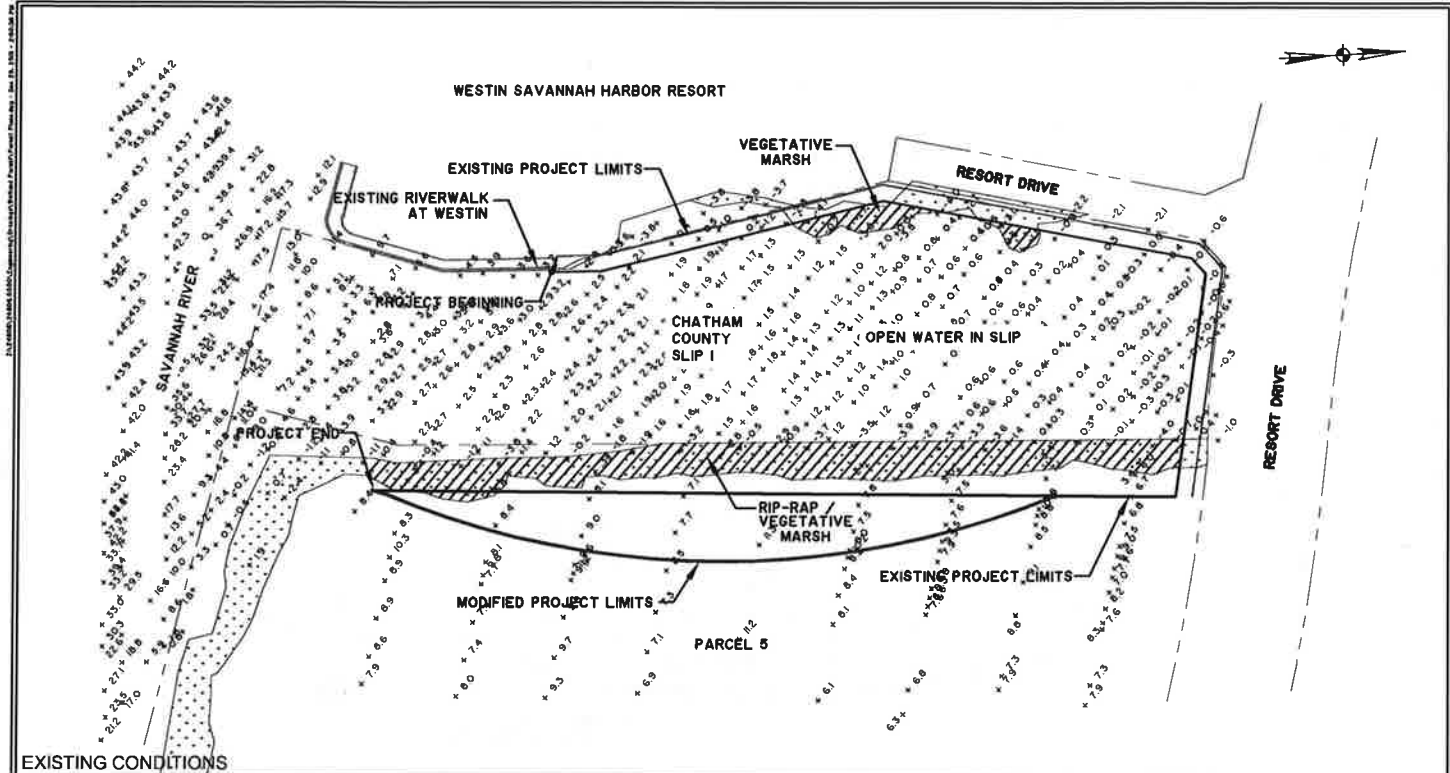
PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD

DATUM: NAVD 88  
SHEET: 2 OF 15  
SCALE: 1"=1000'

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EXISTING CONDITIONS

**SLIP 1 RIVERWALK EXTENSION**

SAVANNAH, GEORGIA

APPLICANT:  
CHATHAM COUNTY

COUNTY: CHATHAM

DATE: JANUARY 19, 2016

PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD

DATUM: NAVD 88

SHEET: 3 of 15

SCALE: 1"=100'-0"

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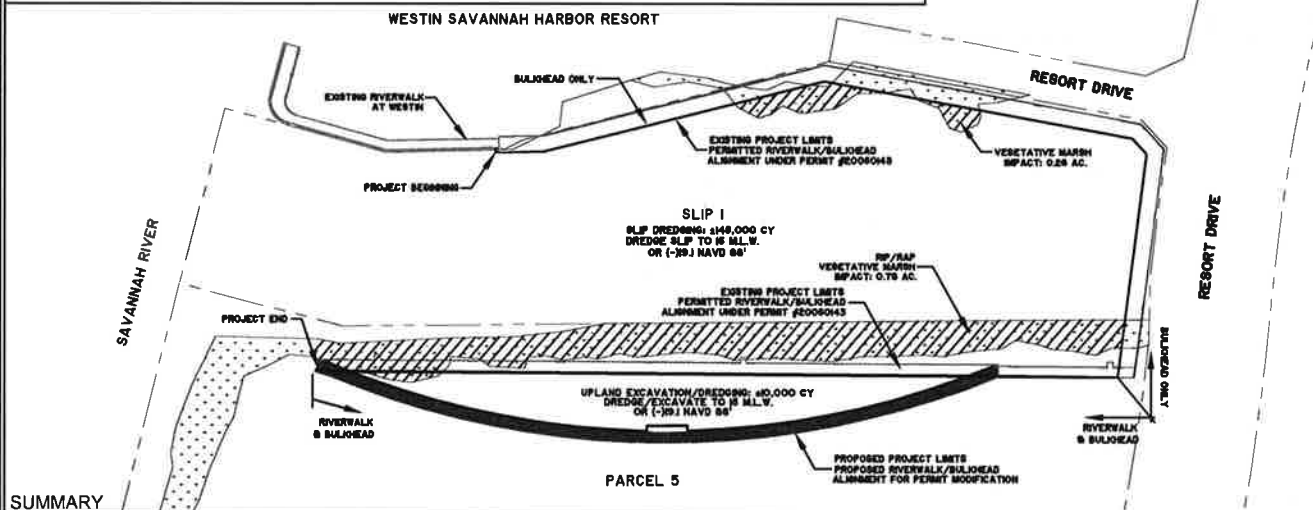
## PERMIT MODIFICATION SUMMARY

### EXISTING PERMIT 200501453

RIVERWALK: 1890 LF  
BULKHEAD: 1890 LF  
MARSH IMPACT: 0.3 ACRE  
SLIP DREDGING: 145,000 CY

### PERMIT MODIFICATION

RIVERWALK: 956 LF  
BULKHEAD: 1962 LF  
MARSH IMPACT: 0.86 ACRE  
SLIP DREDGING: ±145,000 CY  
UPLAND EXCAVATION/  
DREDGING: ±10,000 CY



SUMMARY

### SLIP 1 RIVERWALK EXTENSION

SAVANNAH, GEORGIA

APPLICANT:  
CHATHAM COUNTY

COUNTY: CHATHAM

DATE: JANUARY 19, 2016

PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD

DATUM: NAVD 88

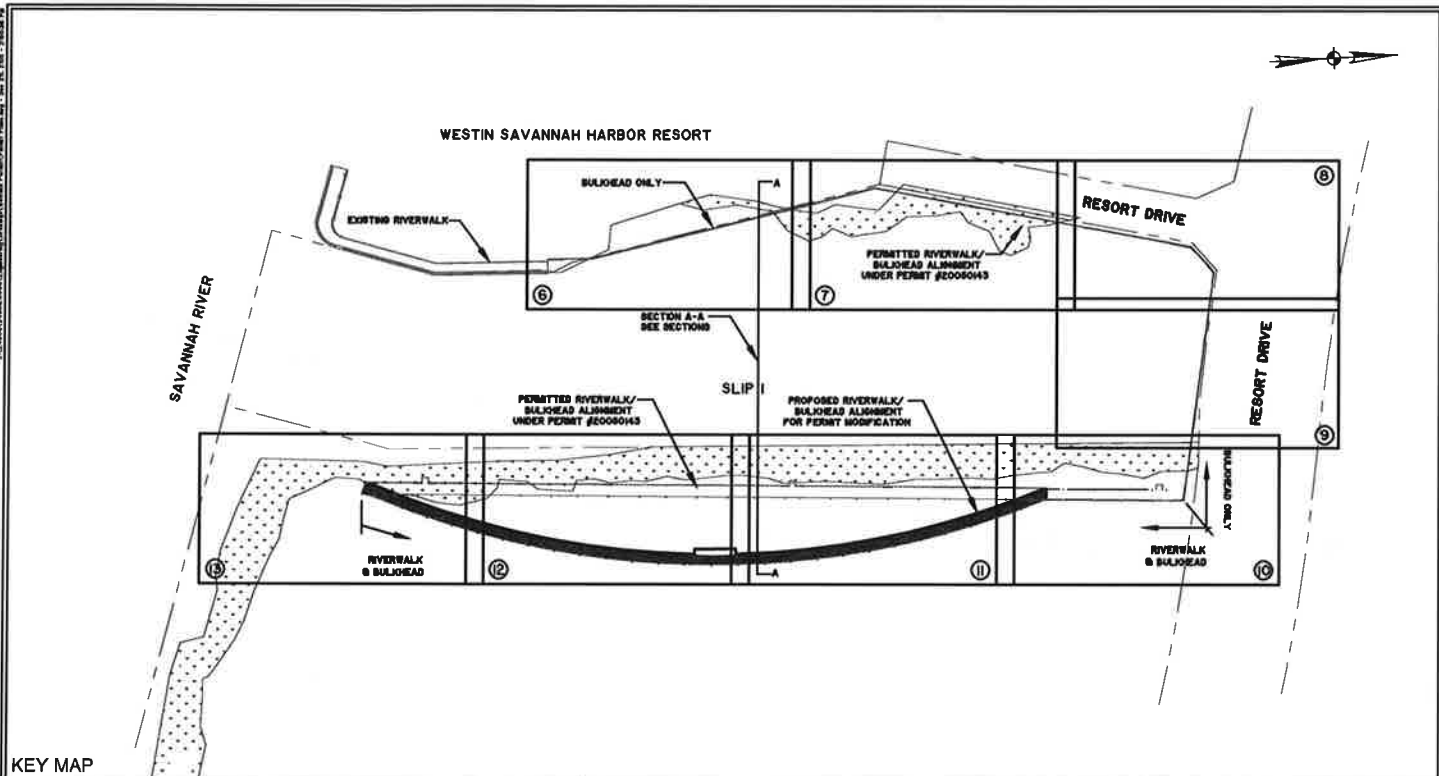
SHEET: 4 of 15

SCALE: 1"=100'-0"

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## KEY MAP

## SLIP 1 RIVERWALK EXTENSION

**SAVANNAH, GEORGIA**

**APPLICANT:**  
**CHATHAM COUNTY**

**COUNTY: CHATHAM**

**DATE: JANUARY 19, 2016**

**PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD**

**DATUM: NAVD 88**

**SHEET: 5 of 15**

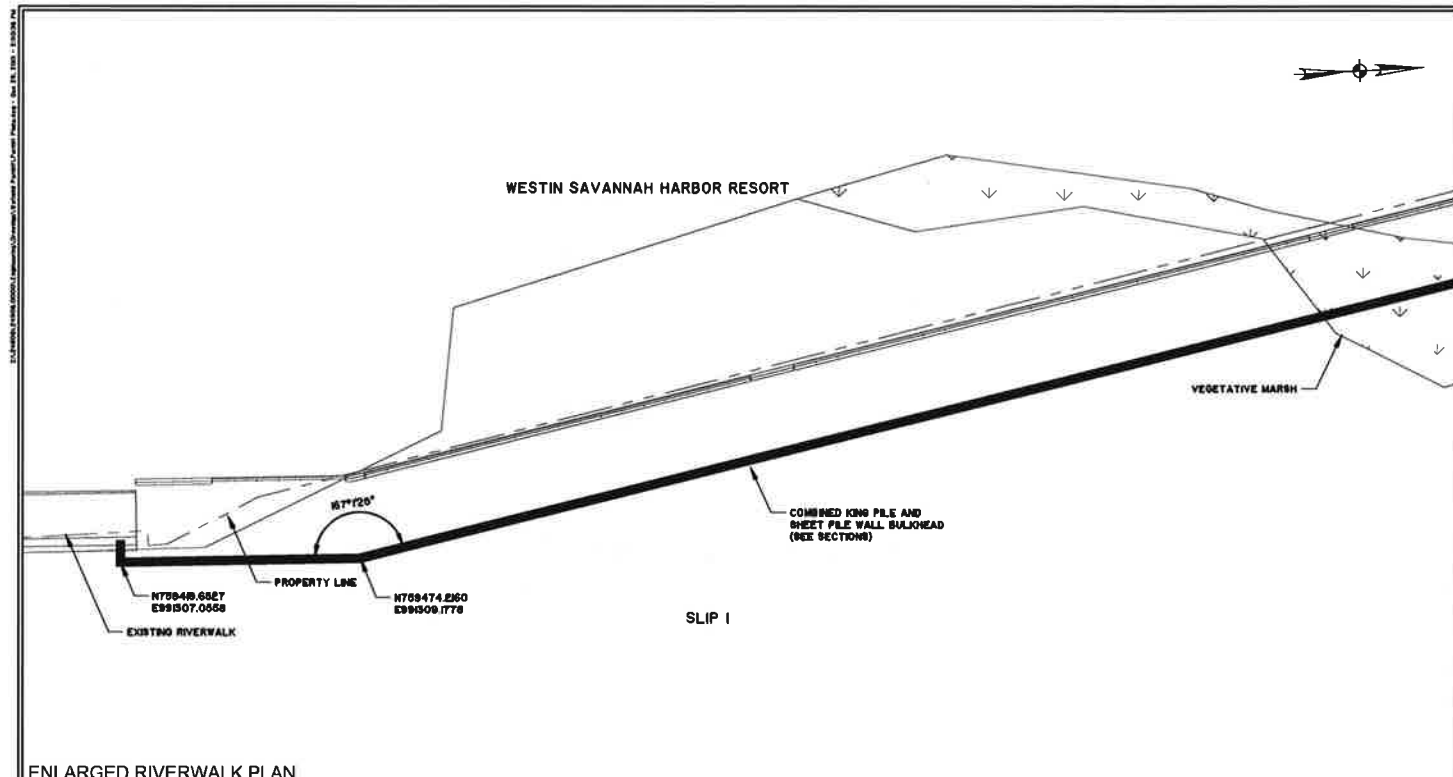
**SCALE: 1"=100'-0"**



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## ENLARGED RIVERWALK PLAN

**SAVANNAH, GEORGIA**

COUNTY: CHATHAM

DATE: JANUARY 19, 2016

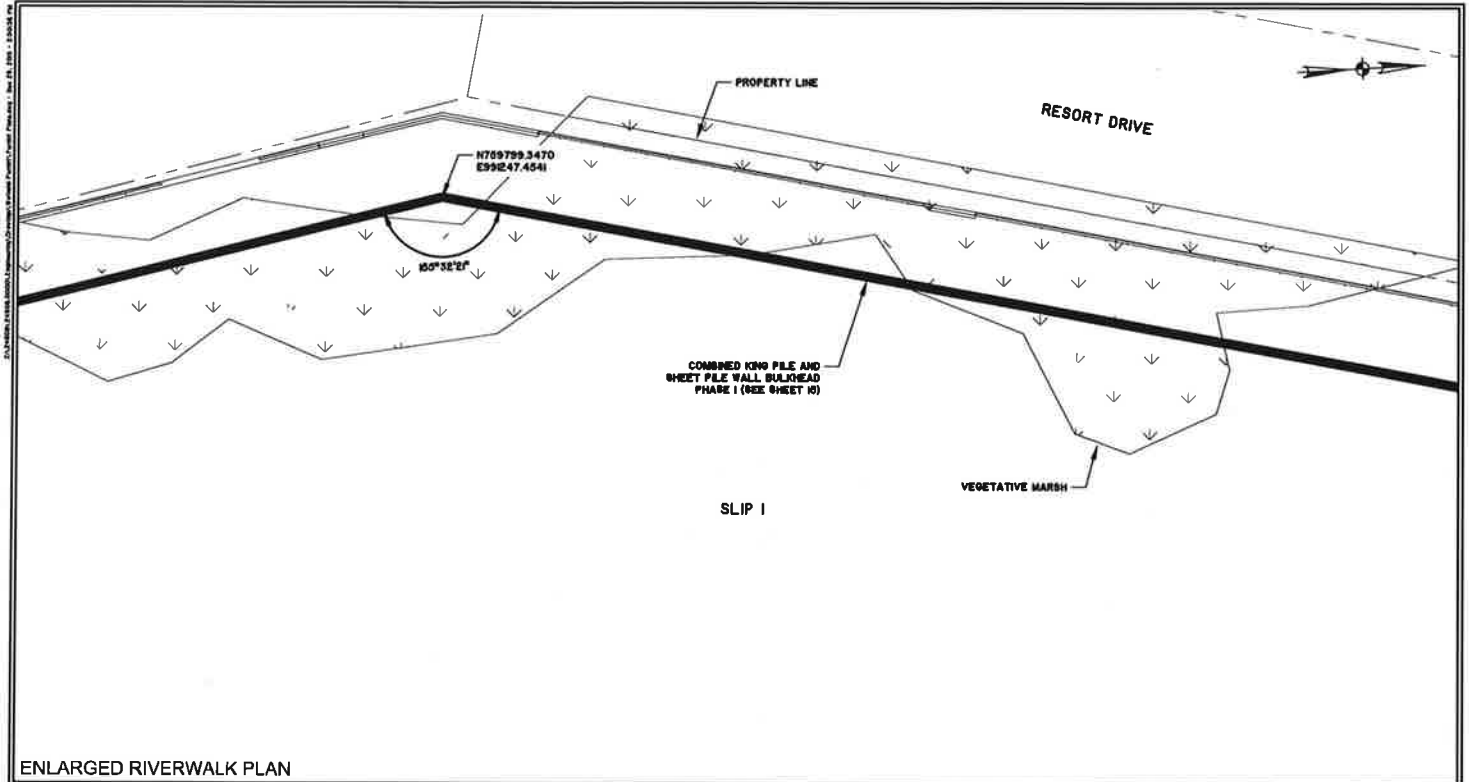
**PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD**

**DATUM: NAVD 88**

**SCALE: 1"=20'-0"**


**THOMAS & HUTTON**  
 Engineering | Surveying | Planning | GIS | Consulting

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ENLARGED RIVERWALK PLAN

**SLIP 1 RIVERWALK EXTENSION**  
SAVANNAH, GEORGIA

APPLICANT:  
CHATHAM COUNTY  
COUNTY: CHATHAM  
DATE: JANUARY 19, 2016

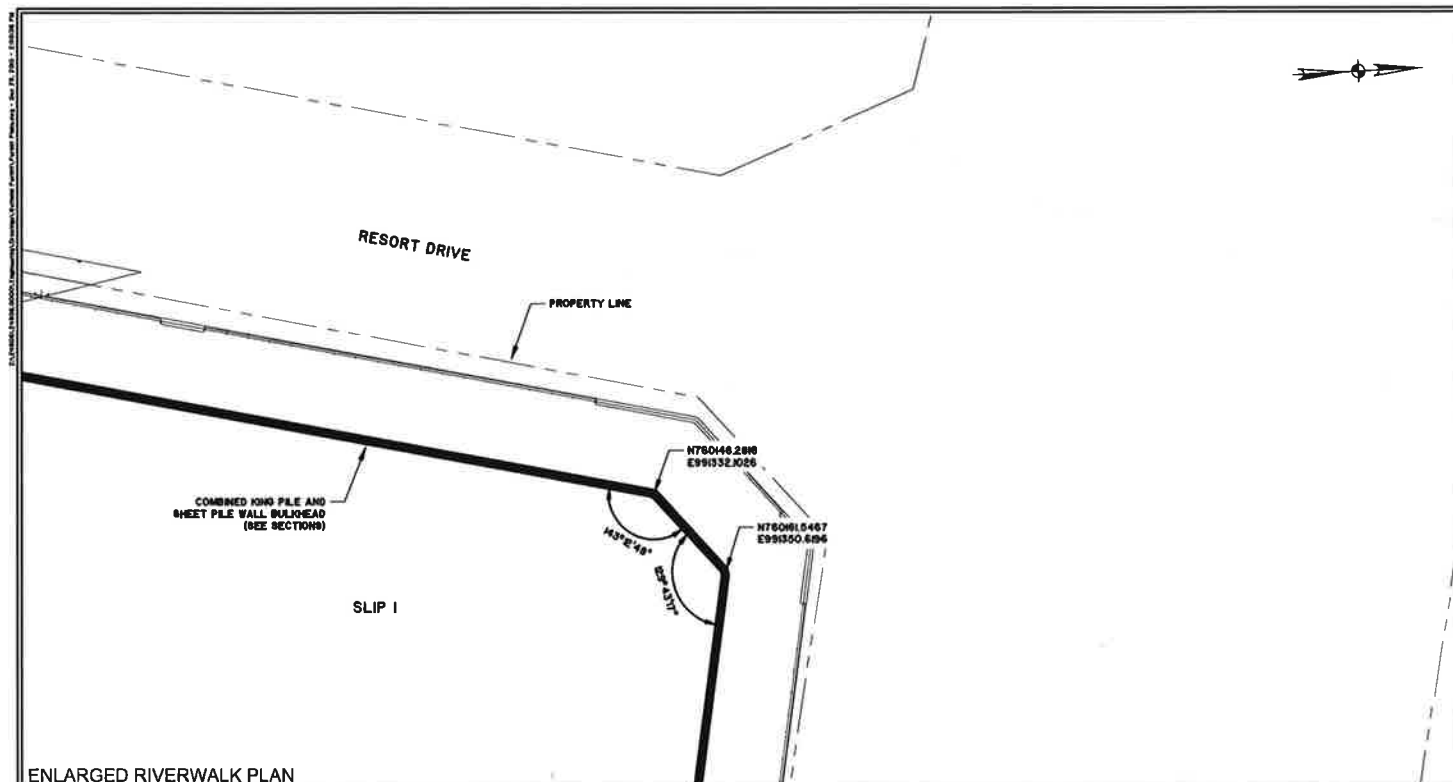
PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD

DATUM: NAVD 88  
SHEET: 7 of 10  
SCALE: 1"=20'-0"

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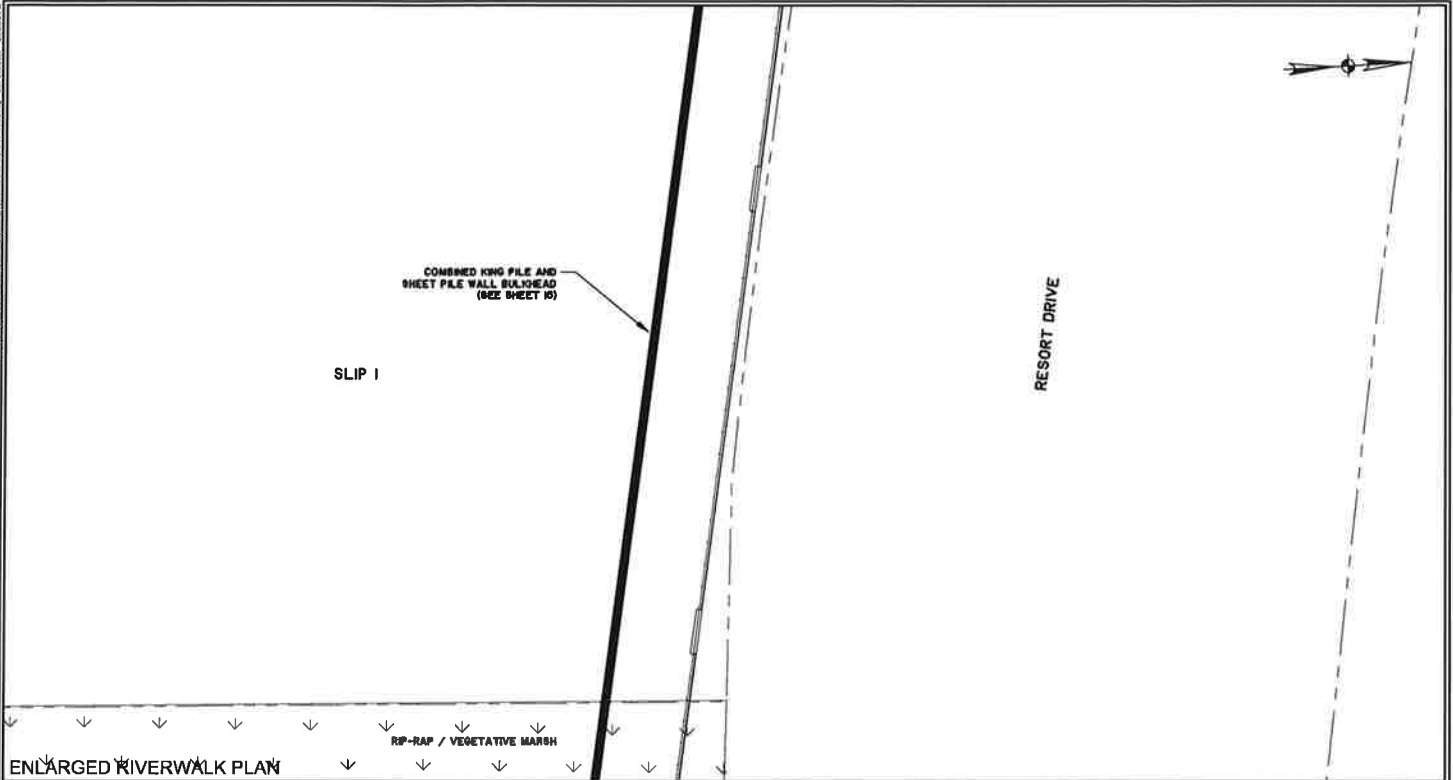
ENLARGED RIVERWALK PLAN

APPLICANT:  
CHATHAM COUNTY  
COUNTY: CHATHAM  
DATE: JANUARY 19, 2016

**PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD**

DATUM: NAVD 88  
SHEET: 8 of 15  
SCALE: 1"=20'-0"

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## SLIP 1 RIVERWALK EXTENSION

**SAVANNAH, GEORGIA**

**APPLICANT:  
CHATHAM COUNTY**

**COUNTY: CHATHAM**

**DATE: JANUARY 19, 2016**

**PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD**

DATUM: NAVD 88

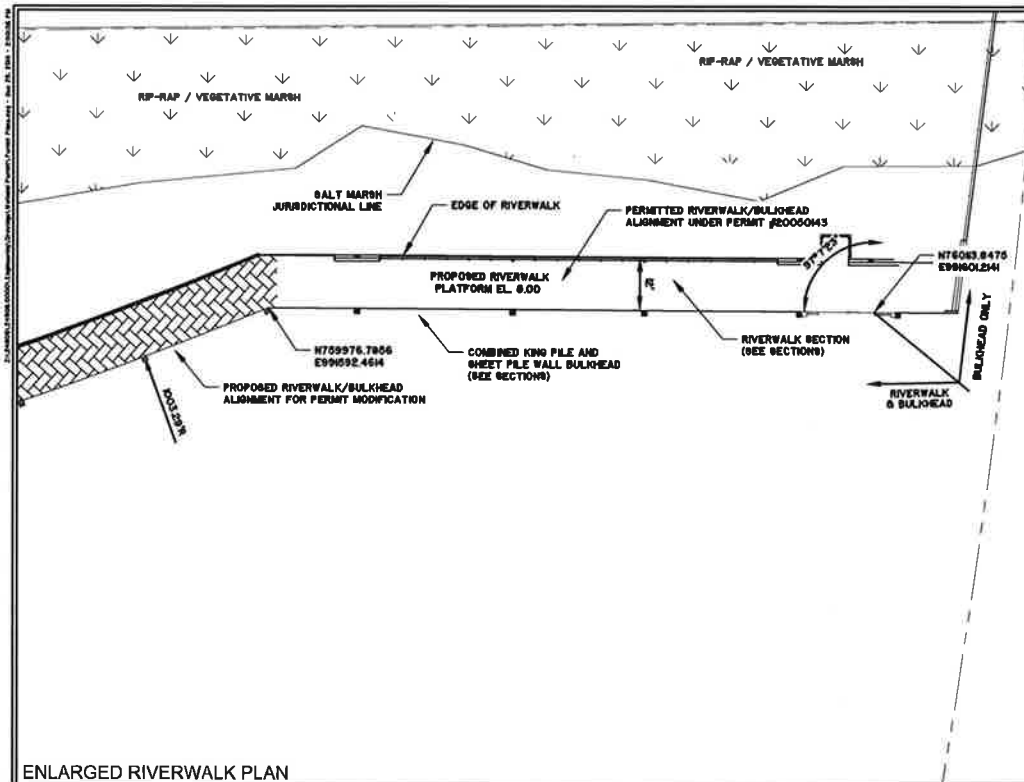
**SHEET: 9 of 15**

**SCALE: 1"=20'-0"**


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ENLARGED RIVERWALK PLAN

# SLIP 1 RIVERWALK EXTENSION

SAVANNAH, GEORGIA

APPLICANT:

CHATHAM COUNTY

COUNTY: CHATHAM

DATE: JANUARY 19, 2016

PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD

DATUM: NAVD 88

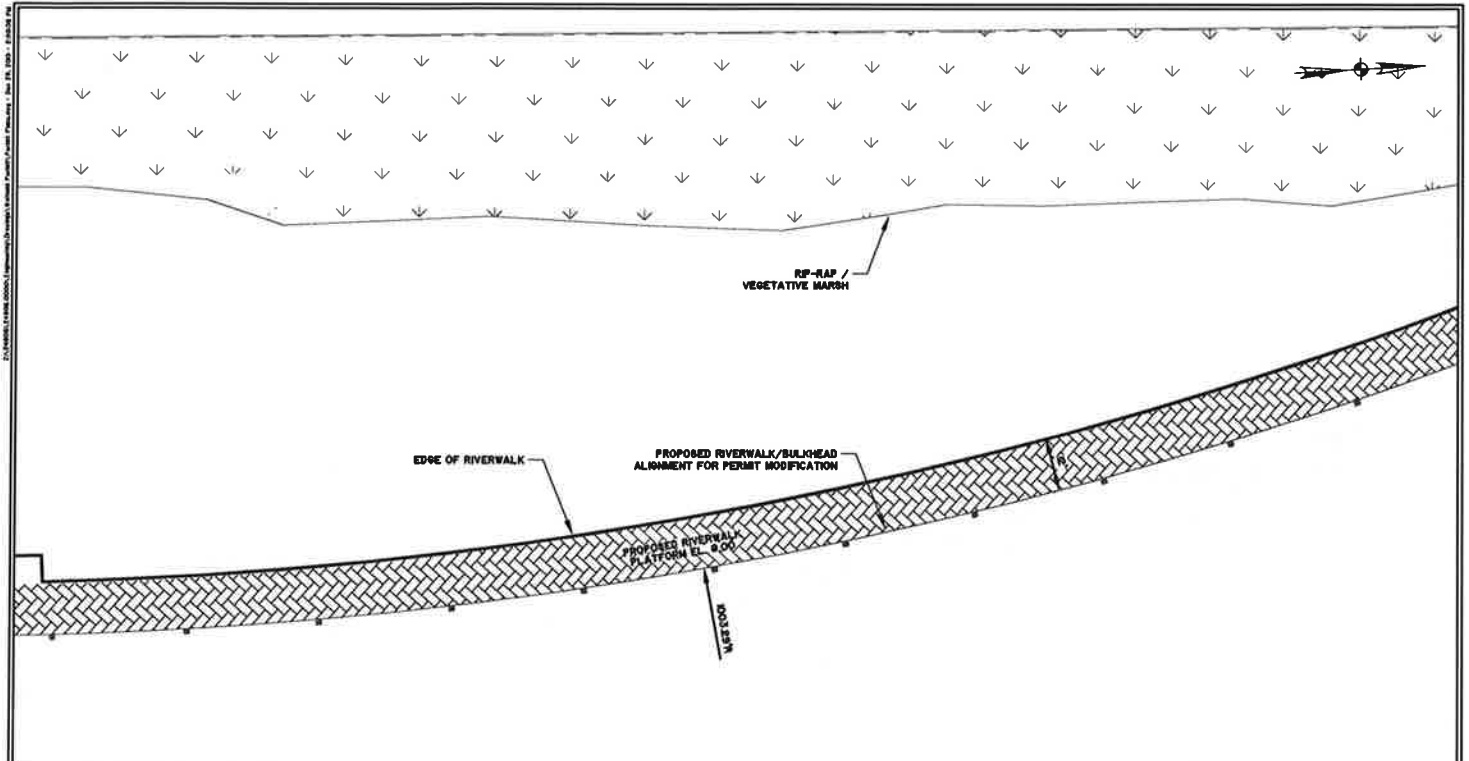
SHEET: 10 of 15

SCALE: 1"=20'-0"

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ENLARGED RIVERWALK PLAN

**SLIP 1 RIVERWALK EXTENSION**

SAVANNAH, GEORGIA

APPLICANT:  
CHATHAM COUNTY

COUNTY: CHATHAM

DATE: JANUARY 19, 2016

PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD

DATUM: NAVD 88

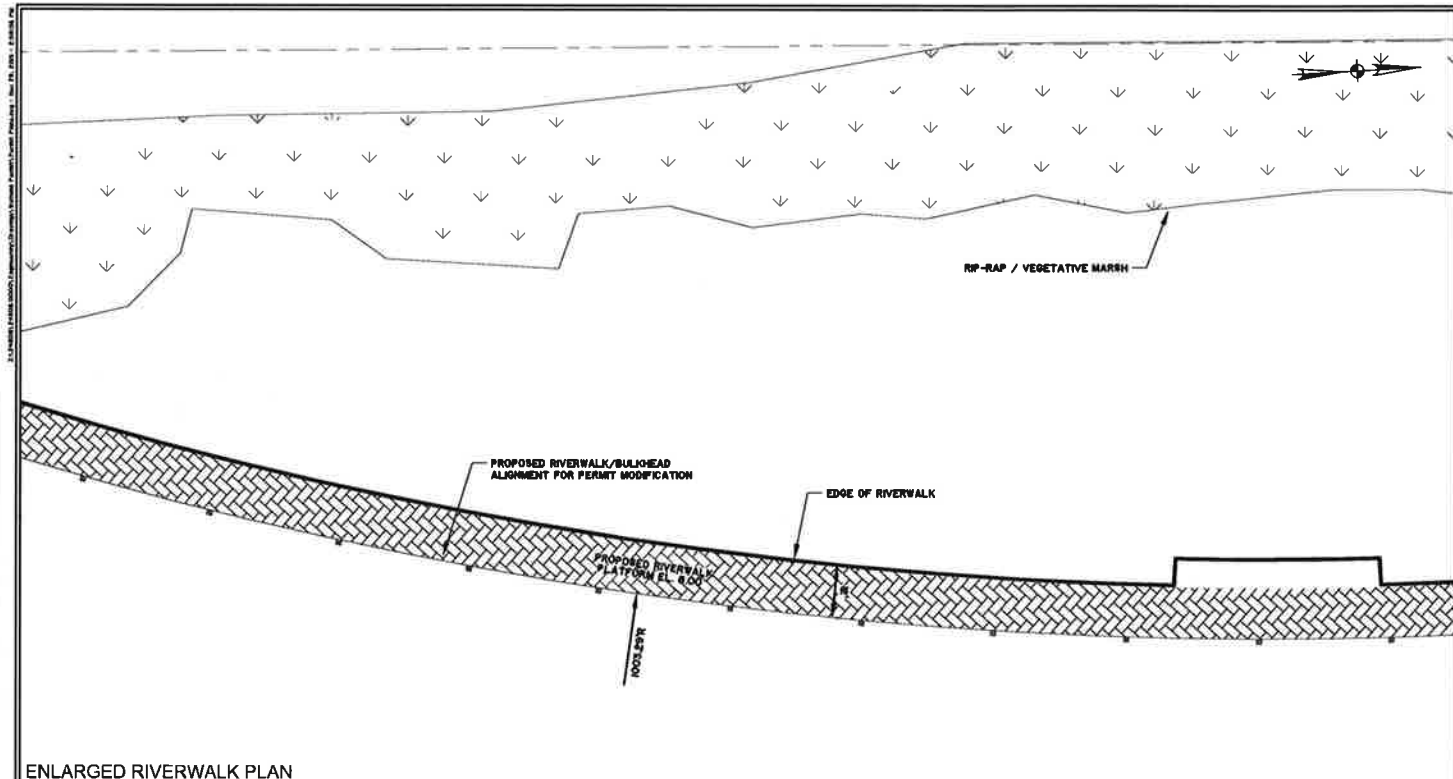
SHEET: 11 of 18

SCALE: 1"=20'-0"

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ENLARGED RIVERWALK PLAN

# SLIP 1 RIVERWALK EXTENSION

SAVANNAH, GEORGIA

APPLICANT:  
CHATHAM COUNTY

COUNTY: CHATHAM

DATE: JANUARY 19, 2018

PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD

DATUM: NAVD 88

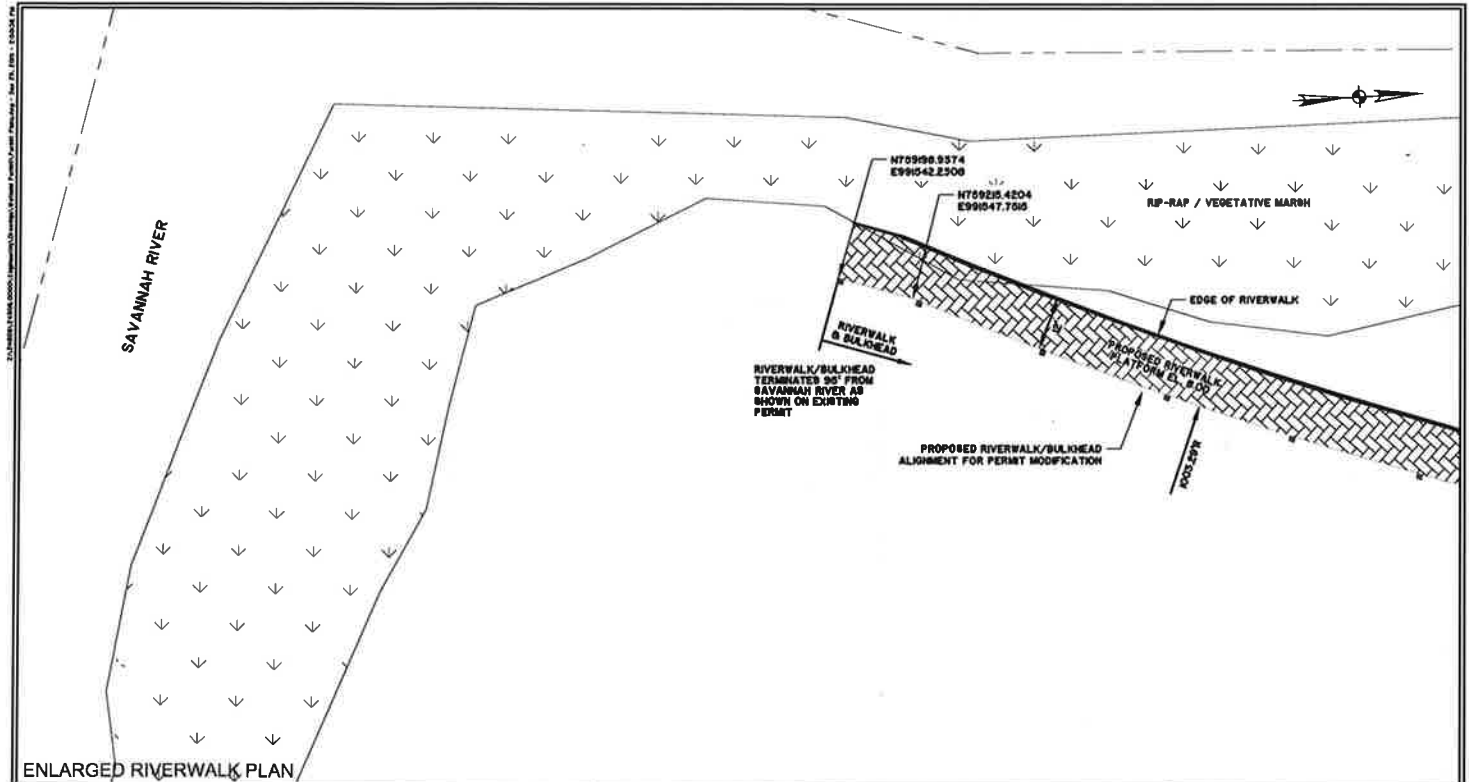
SHEET: 12 of 15

SCALE: 1"=20'-0"

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# **SLIP 1 RIVERWALK EXTENSION**

SAVANNAH, GEORGIA

APPLICANT:  
CHATHAM COUNTY

COUNTY: CHATHAM

DATE: JANUARY 19, 2016

PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD

DATUM: NAVD 88

SHEET: 15 of 15

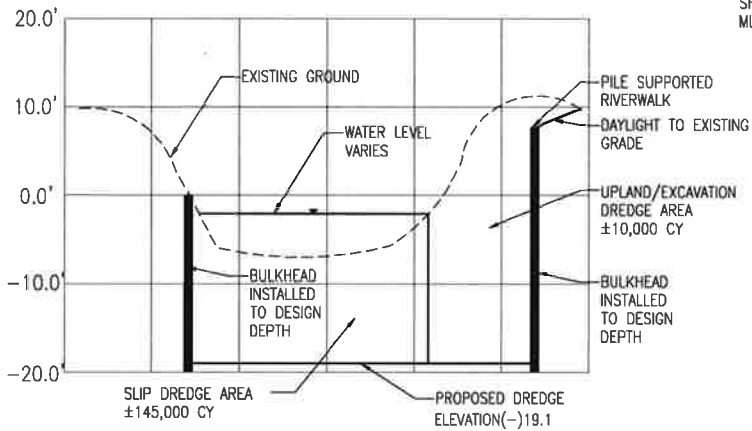
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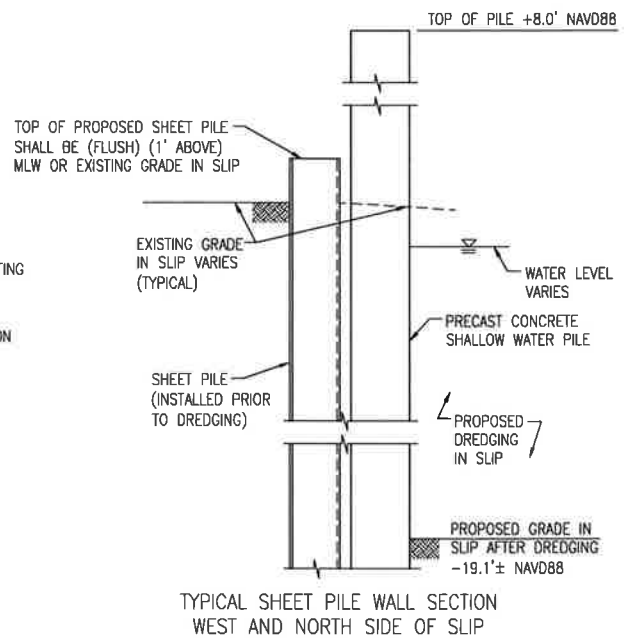
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SLIP 1 RIVERWALK EXTENSION



TYPICAL DREDGE SECTION A-A  
NAVD 88' DATUM  
N.T.S.



**SLIP 1 RIVERWALK EXTENSION**

SAVANNAH, GEORGIA

APPLICANT:  
CHATHAM COUNTY

COUNTY: CHATHAM

DATE: JANUARY 19, 2016

**PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD**

DATUM: NAVD 88

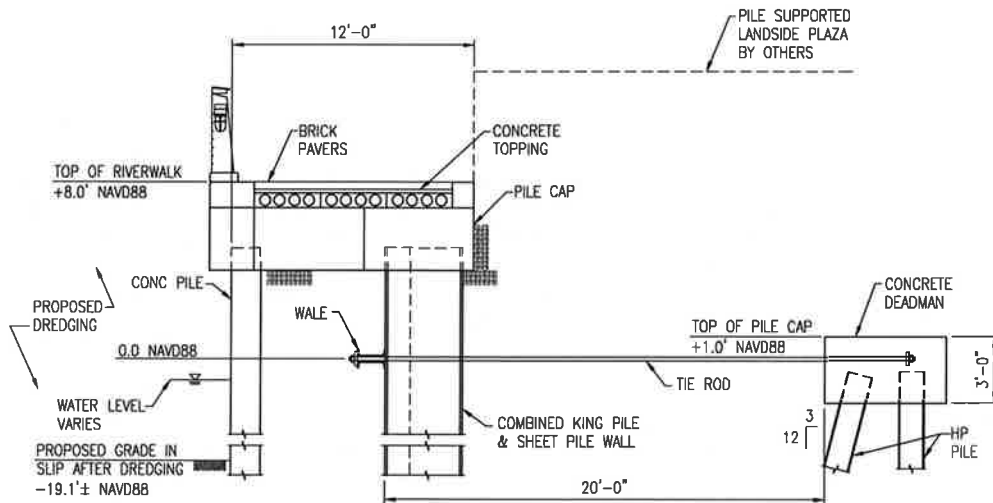
SHEET: 14 of 15

SCALE: N.T.S.

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TYPICAL RIVERWALK SECTION

NOTE:  
CONSTRUCTION OF THE RIVERWALK WILL INCLUDE  
COMPONENTS RELATED TO HARDSCAPE, LANDSCAPE,  
LIGHTING, DRY AND WET UTILITIES THAT MAY NOT BE  
SPECIFICALLY DESCRIBED IN THESE DRAWINGS.

# SLIP 1 RIVERWALK EXTENSION

SAVANNAH, GEORGIA

APPLICANT:  
CHATHAM COUNTY

COUNTY: CHATHAM

DATE: JANUARY 19, 2016

PROPOSED ACTIVITY:  
RIVERWALK/BULKHEAD

DATUM: NAVD 88

SHEET: 15 of 15

SCALE: N.T.S.

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## NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Mr. Leon Davenport, Chatham County		File Number: SAS-2005-01453	Date: February 3, 2017
Attached is:		See Section below	
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
X	PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
	PERMIT DENIAL	C	
	APPROVED JURISDICTIONAL DETERMINATION	D	
	PRELIMINARY JURISDICTIONAL DETERMINATION	E	

**SECTION I -** The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at [http://www.usace.army.mil/CECW/Pages/reg\\_materials.aspx](http://www.usace.army.mil/CECW/Pages/reg_materials.aspx) or Corps regulations at 33 C.F.R. § Part 331.

**A: INITIAL PROFFERED PERMIT:** You may accept or object to the permit.

**ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

**OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT:** You may accept or appeal the permit.

**ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

**APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.

**ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

**APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. The division engineer must receive this form within 60 days of the date of this notice.

**E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.



DEPARTMENT OF THE ARMY  
SAVANNAH DISTRICT, CORPS OF ENGINEERS  
100 W. OGLETHORPE AVENUE  
SAVANNAH, GEORGIA 31402-0889

March 1, 2007

Regulatory Division  
200501453

Chatham County  
Attention: Mr. Patrick C. Monahan  
124 Bull Street  
Savannah, Georgia 31412

Dear Mr. Monahan:

PLEASE READ THIS LETTER CAREFULLY AND COMPLY WITH ITS PROVISIONS.

We are enclosing a draft of your Department of the Army Permit in duplicate. If you agree with the terms and conditions, please sign and date both copies of the Draft permit and return them to this office. Upon receipt, the District Engineer will validate your permit and return the original to you for your records. We will also send a Notice of Authorization, which you should display at the project site. Your permit is not valid until signed by the District Engineer.

We require a \$100.00 fee for issuance of a permit for commercial activities. Please make your check payable to the Finance and Accounting Officer, Savannah District and return it to the above address to the attention of Jason O'Kane.

IT SHALL NOT BE LAWFUL TO DEVIATE FROM THE PLANS EITHER BEFORE OR AFTER COMPLETION OF THE WORK, unless a plan reflecting the modification has previously been submitted to and approved by this office.

In addition, please note that the permit not only authorizes the work, but also its intended use. No use other than that specified in this permit can be made of permitted work, or structures.

Please direct your attention to the General Conditions and the Special Conditions of the permit.

This office must be notified ten days in advance of your intent to start work on this project. You must also notify this office when the project is completed.

This letter contains an initial proffered permit for your proposed project. If you object to this decision, you may request an administrative appeal under Corps regulations at 33 Code of Federal Regulation (CFR) Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this decision you

**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:

Sarah Wise  
U.S. Army Corps of Engineers, Savannah District  
100 W. Oglethorpe Avenue  
Savannah, Georgia 31401-3640  
(912) 652-5550

If you only have questions regarding the appeal process you may also contact:

District Commander  
U.S. Army Corps of Engineers, Savannah District  
100 W. Oglethorpe Avenue  
Savannah, Georgia 31401

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

\_\_\_\_\_  
Signature of appellant or agent.

Date:

Telephone number:

must submit a completed RFA form to the South Atlantic Division Office at the following address:

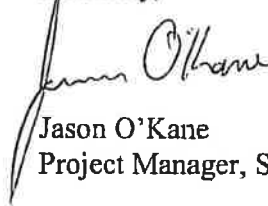
Administrative Appeal Review Officer  
CESAD-ET-CO-R (Michael F. Bell)  
US Army Corps of Engineers, South Atlantic Division  
60 Forsyth Street, Room 9M15  
Atlanta, Georgia 30303-8801  
Phone: (404) 562-5137, Fax: (404) 562-5138

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR, part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP.

It is not necessary to submit an RFA form to the Division Office if you do not object to the decision in this letter.

Thank you in advance for completing our Customer Survey Form. This can be accomplished by either completing the enclosed Customer Survey Form and returning it to the address shown above or visiting our Web Site at [www.sas.usace.army.mil/permit.htm](http://www.sas.usace.army.mil/permit.htm) (See General Information 6) and completing the survey on-line. We value your comments and appreciate your taking the time to complete a survey each time you have interaction with our office. If you have any questions, please call me at (912) 652-5349.

Sincerely,



Jason O'Kane  
Project Manager, Southern Section

Enclosures

Copies Furnished:

US Environmental Protection Agency, Region IV  
Wetlands Regulatory Section  
Attention: Ronald Mikulak, Chief  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, Southwest  
Atlanta, Georgia 30303-8960

Copies Furnished Continued:

US Fish and Wildlife Service, Coastal Office  
Attention: Yates Allen  
4270 Norwich Street  
Brunswick, Georgia 31520

Georgia Department of Natural Resources  
Environmental Protection Division  
Water Protection Branch  
Attention: Mr. Keith Parsons  
4220 International Parkway, Suite 101  
Atlanta, Georgia 30354

National Marine Fisheries Service  
Habitat Conservation Div.  
Attention: Mrs. Kay Davy  
219 Fort Johnson Road  
Charleston, South Carolina 29412-9110

Sligh Environmental Consultants, Inc.  
Attention: Stuart Sligh  
31 Park of Commerce Way, Suite 200B  
Savannah, Georgia 31405

DEPARTMENT OF THE ARMY PERMIT

PERMITTEE: Chatham County  
Attention: Mr. Patrick C. Monahan  
124 Bull Street  
Savannah, Georgia 31412

PERMIT NUMBER: 200501453

ISSUING OFFICE: Savannah District  
US Army Corps of Engineers  
Post Office Box 889  
Savannah, Georgia 31402-0889

NOTE: The term "you" and its derivatives used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate District or Division office of the US Army Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

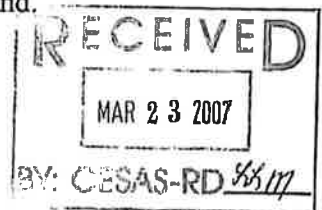
You are authorized to perform work in accordance with the terms and conditions specified below.

PROJECT DESCRIPTION: Chatham County, here in referred to as the applicant, will impact approximately 0.30 acre of vegetated tidal marsh for the extension of the existing public Hutchinson Island Riverwalk by 1,890 linear feet. The proposed project will connect to the existing Hutchinson Island Riverwalk that is located on the western side of the slip (Slip 1), adjacent to the Westin Hotel. Work will consist of the installation of a steel sheet pile cut-off wall that would facilitate deepening of Slip 1. This new slip will then serve as a boat basin for recreational vessels. Additionally, the applicant will construct a pile supported walkway, a concrete deck and paver system, hand railing, and lighting along the entire perimeter of the existing slip. Work will also include the removal of timber pile remnants, as well as the remnant of a submerged barge; all are located within the slip. Work will be performed by water-borne barge and crane vessels operating from within the slip.

In order to deepen the slip, the applicant will hydraulically dredge approximately 145,000 cubic yards of sediments and pump this dredge material to Confined Disposal Facility (CDF) 12-A. Routine maintenance dredging activities of approximately 20,000 cubic yards of sediment will be performed annually. These activities will consist of hydraulic dredging with upland disposal, mechanical clamshell dredging with disposal into water borne scows or barges, agitation dredging, or hydraulic pump with discharge into the Savannah River.

Construction of the proposed project will impact approximately 0.30 acre of vegetated tidal marsh in Slip 1. The applicant proposes to mitigate for this impact by creating 0.56 acre of tidal marsh through excavation of an upland bluff along existing marsh on Hutchinson Island.

Check # 3165 For \$ 100.00  
W/D & FWD P & A on



PROJECT LOCATION: The project site is located in Savannah Harbor, at latitude 32° 05.038' and longitude 81° 05.043', Slip Number 1, Hutchinson Island, Chatham County, Georgia. Confined Disposal Facility (CDF) 12-A is located adjacent to the north bank of Savannah Harbor, approximately between River Mile 5.3 and 11.7, in Jasper County, South Carolina.

PERMIT CONDITIONS:

General Conditions.

1. The time limit for completing the work authorized by this Individual Permit ends on December 31, 2011. If you find that you need more time to complete the authorized activity, you must submit a request for your permit extension at least one month prior to the above date.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. Water Quality Certifications have been issued for your project by Georgia and South Carolina. You must comply with conditions specified in these certifications as Special Conditions to this permit. For your convenience, copies of these certifications are attached.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.
7. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall

cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

Special Conditions.

1. The permittee shall contact the Catawba Indian Tribe regarding their desires to receive a copy of the final Phase I Cultural Resource Survey. A point of contact for the Catawba Indian Tribe is Dr. Wenonah G. Haire Jr. Tribal Historic Preservation Officer, Catawba Indian Nation, Catawba Cultural Preservation Project, P.O. Box 750, Rock Hill, SC 29731, (803) 328-2427, [wenonahh@ccppcrafts.com](mailto:wenonahh@ccppcrafts.com) (also cc to [jackier@ccppcrafts.com](mailto:jackier@ccppcrafts.com)).

2. The permittee shall locate, outline, design, construct, and operate the work in accordance with the minimal requirements of the Georgia Erosion and Sedimentation Control Act of 1975, as amended.

3. Changes in the layout of the project on upland portions of the project site do not require modification of this permit, and the permittee is not required to coordinate such changes with this office. Minor changes in the footprint of authorized wetland impacts may be authorized under this permit, provided: the proposed minor change would result in no additional impact to the specific wetland area (i.e., swapping of wetland impact acreage from one permitted wetland fill site to another is not considered a minor change); and the permittee submits a change request and

obtains prior written concurrence from this office. Any proposed change to the project that would result in additional impacts to wetlands would require formal modification of the permit.

4. The permittee will ensure that the project complies with all rules, regulations, and/or requirements of the Federal Emergency Management Agency (FEMA) with regard to flood plains and floodways.

5. The permittee shall ensure that all work is accomplished in accordance with the plans and drawings attached to this permit. The plans and drawings enclosed are incorporated in and made a part of this permit:

- a. Site Vicinity Map
- b. Design Drawings (2)
- c. Hydro & Topographic Survey
- d. Site Development Plan

e. Section Drawings (3)

f. January 5, 2006, letter from the USACE, Navigation Section, conditions for use of USACE Confined Disposal Facility 12A.

g. Department of Transportation, State of Georgia, Special Provision, Section 107.23G, conditioning the work to protect Federally Threatened and/or Endangered Species.

6. The permittee shall provide mitigation for this project by working with other permittees to create approximately 8.06 acres of tidal salt marsh. The site for the created salt marsh will be located on the east northeastern end Hutchinson Island, in Chatham County, Georgia. Five projects propose utilizing this site for compensatory mitigation, USACE file numbers: 200500423, 200415260, 200114820/200501453, 200600393 and 200600909. As property owner, Chatham County will serve as the primary point of contact and manage the site. However, each party participating in the mitigation project will be jointly responsible for the success of the created, 8.06 acres of tidal marsh.

When developing the created marsh, the permittee will adhere to the approach and methodology defined in the draft mitigation and monitoring plan entitled, "Hutchinson Island Multi-Project Mitigation Site; Chatham County, Georgia," dated 6 October 2006 and revised 18 October 2006. However, the permittee must receive final, written authorization from the USACE before starting construction of the created marsh.

Within one year of the date of this permit, the permittee shall request authorization from the USACE to start construction of the created marsh site. The permittee shall complete construction within 9 months of the date of the USACE letter which authorized construction. If the permittee fails to complete construction of the created marsh within the cumulative 21 months, all five permits authorizing use of the mitigation site shall be considered non-compliant. At that time, an additional five percent of required acreage will automatically be added to the required mitigation for all mitigation at the site, and the additional mitigation will accrue every 6 months. The USACE shall determine the amount of additional mitigation required by each permittee by calculating the percent acreage of the 8.06 total acres that has already been allocated to each of the parties. The percent acreage will be calculated based on quantities defined in the previously referenced, draft mitigation and monitoring plan.

If during the monitoring period, a percentage of the site, or the entire site, does not satisfy USACE compliance requirements, then all five permits utilizing the mitigation site shall be considered non-compliant. Should a non-compliant determination be made by the USACE, then all permittees shall be required to identify additional salt marsh mitigation so that the sum total equates to 8.06 acres. Additional salt marsh mitigation may include, but is not limited to: (a) replanting the proposed mitigation site; (b) modification the proposed site's hydrology; (c) continued monitoring of the proposed site; and/or (d) identification of a new mitigation site. The USACE shall determine the amount of additional mitigation required by each permittee by calculating the percent acreage of the 8.06 total acres that has already been allocated to each of the parties. The percent acreage will be calculated based on quantities defined in the previously

referenced, draft mitigation and monitoring <sup>5</sup> plan. If the site is deemed unacceptable by the USACE during, or at the end of the monitoring period, each permittee will identify an alternate, USACE-approved site for development of salt marsh mitigation.

7. The permittee shall contact USACE and GDOT prior to disposal of material in CDF 12-A. The permittee shall inspect the CDF 12-A disposal facility prior to deposition of any dredged material into the area, to insure that all berms, embankments and weirs are in satisfactory condition. Before using the CDF 12-A disposal facility, the applicant must obtain authorization from the US Army Corps of Engineers, Savannah District's Operations Division (Stan Clark, at 912-652-5058 or Roger Lafond, at 912-652-5326) and Georgia Department of Transportation (John Phillips, at 404-651-9213).

8. Water quality data will be taken on a weekly basis when controlled releases occur from CDFs during dredged material disposal management operations. Data will include salinity (ppt), pH, dissolved oxygen (mg/l and salinity corrected), total suspended solids (TSS) (mg/l), date, time, and flow. The above data will be taken at the outfall of each weir from which there is a discharge. Should any effluent exceeding 0.1 cubic foot per second appear to violate a state standard, resampling will occur at the end of a mixing zone in the receiving water (generally 100 feet downcurrent from the point at which the effluent enters the receiving water) to determine if a violation of state standards is occurring. If a violation in the receiving water is found to be occurring, management actions will be taken to correct the violation. Where the violation can not be corrected, the permittee must contact the Savannah District Corps of Engineers, Regulatory Division, for further direction.

Current South Carolina State Standards are as follows:

Dissolved oxygen*	Daily average of 5.0 mg/l with a minimum 4.0 mg/l	All year
pH	6.0 – 8.5	All year

\*Minimum instantaneous concentration throughout the water column.

The USACE, Savannah District, has adopted a TSS standard of 500 mg/l, based on published no-effects criteria. CDF effluent must be managed to ensure compliance with this standard and any applicable state standards. Also in accordance with District policy, the permittee may develop a correlation between effluent TSS and NTUs, and accomplish routine TSS monitoring through determination of NTUs in the effluent.

9. The permittee is authorized to use agitation, hydraulic and/or clamshell dredging to accomplish periodic maintenance dredging of the Slip 1. For the purposes of these special permit conditions, maintenance dredging, agitation dredging, hydraulic dredging and clamshell

dredging, and are defined as follows:

a. Maintenance Dredging. The use of agitation, hydraulic and/or clamshell dredging to accomplish routine periodic removal of accumulated sediments from an existing area, to it's previously authorized depth.

b. Agitation Dredging. Dragging an I-beam or other similar device behind a tug, thereby suspending sediments to be swept from the area by the tide.

c. Hydraulic Dredging. Use of a small hydraulic dredge (14 inches or less), where the discharge end of the pipeline is to be positioned at or very near the edge of the Federal Navigation Channel, and at or very near the river bottom. Use of larger dredges (greater than 14 inches) will be considered on a case-by-case basis. The permittee shall submit a written request at least 30 days prior to any planned use of a large dredge. This request shall include specific measure(s) to be employed to insure that the discharge flow rate and volume of the proposed large dredge would be limited to that of a small dredge.

d. Clamshell Dredging. Use of a closed clamshell dredge (i.e., environmental bucket), with placement of sediments in an approved confined upland disposal facility.

10. No sooner than 7 days and at least 48 hours in advance of a planned maintenance dredging event, the permittee shall contact Operations Division, Dredging Section for prior verbal approval. The permittee will be informed whether the proposed dredging can be conducted as scheduled. The permittee's proposed dredging event may be subject to postponement, modification and/or a tidal cycle restriction (i.e., ebb or flood). Factors that can impact upon a proposed dredging event include, but are not limited to, the following: the condition of the adjacent federal channel (e.g., a shoal has formed in the Federal channel within 2000 feet up or downstream of the berth); a previously approved agitation dredging event is being or will be conducted within 3000 feet up or downstream of the area; a previously approved hydraulic dredging event is being or will be conducted within 5000 feet up or downstream of the area; a dredge is or will be working in the Federal channel within 3000 feet up or downstream of the area; and/or pre or post-dredging hydrographic surveys are being performed, or are scheduled to be performed, in an area of the Federal channel within 2000 feet up or downstream of the area. The permittee is responsible for resolving scheduling conflicts.

11. Unless otherwise pre-approved by the Savannah District, the permittee shall not:

a. Perform agitation or clamshell dredging in any area within 3000 feet up or downstream of another approved or ongoing agitation or clamshell dredging event.

b. Perform agitation or clamshell dredging in any area within 5000 feet of the end of the discharge pipe for an approved or ongoing hydraulic dredging event.

c. Place a hydraulic dredge discharge pipe within 5000 feet up or downstream of another approved or ongoing maintenance dredging event.

12. The permittee shall perform required hydrographic surveys in accordance with criteria and procedures contained in the US Army Corps of Engineers Hydrographic Surveying Manual, EM 110-2-1003. Required hydrographic surveys shall be provided to Operations Division, Dredging Section, as plan views and shall include the shoreline and basin area, stationed to match the US Army Corps of Engineers' annual Savannah Harbor Surveys.

13. The permittee shall conduct a hydrographic survey of the area no more than 15 days before and no more than 7 days after every maintenance dredging event. An event includes all maintenance dredging work performed during one or more ebb and/or flood tides, in the accomplishment of one maintenance dredging cycle. In instances where a post dredging survey is not performed within 7 days of completing the dredging event, the permittee shall calculate the volume of material dredged by using the pre-event survey and the authorized depth (i.e., it will be assumed that the area was dredged to the authorized depth).

14. The permittee shall also conduct a hydrographic survey in the federal channel before and after every hydraulic dredging event. Channel surveys shall be performed within 24 hours of initiating and within 24 hours of completing the event. Surveys are required of the federal channel for a distance of approximately 2000 feet up and/or downstream of the point where dredged material is discharged. The permittee is only required to survey 50% of the federal channel, as measured from the channel centerline to the edge of the channel adjacent to the point of discharge. The required survey areas are as follows: hydraulic dredging during ebb tide(s) only requires a survey 2000 feet downstream of the point of discharge; hydraulic dredging during flood tide(s) only requires a survey 2000 feet upstream of the point of discharge; and hydraulic dredging during ebb and flood tide(s) requires a survey 2000 feet up and downstream of the discharge point.

15. The permittee shall direct hydraulically dredged material into the deeper parts of the federal channel in a location designated by the Savannah District, Navigation Section. The discharge end of the dredge pipeline is to be positioned at or very near the edge of the federal channel and at or very near the river bottom. The permittee shall ensure that hydraulically dredged material that is deposited in the authorized dimensions of the federal channel is spread in a thin, uniform layer. The permittee shall ensure that dredged material does not form peaks or mounds of more than 1 foot above the federal channel elevation identified by the required pre-dredging event hydrographic survey. In addition, the permittee shall ensure that dredged material does not form a peak, mound or shoal above the authorized project depth of the federal channel. The permittee shall immediately notify Operations Division, Dredging Section, of the formation of any identified peak, mound and/or shoal within the federal channel.

16. The permittee shall maintain accurate records of every maintenance dredging event for the basin. Maintenance dredging event records shall include the following minimum information: the type(s) of dredging used for each event; starting and ending date and time of each event; hours of dredging during each ebb and/or flood tidal cycle for each event; calculated volume of material moved during each event; copies of both pre and post dredging hydrographic surveys of the berth; and if hydraulic dredging is performed, copies of required federal channel

hydrographic surveys.

17. Within 30 days of the end of each quarter (i.e., quarters end on the last day of March, June, September and December) the permittee shall submit a written maintenance dredging quarterly report to Operations Division, Dredging Section. This report shall include the information identified in special condition Number 8, above. If no dredging work is performed during a given quarter, the permittee shall still submit a report stating this.

18. The permittee shall make full payment to the Savannah District within 30 days of receipt of a bill for reimbursement of costs associated with the Corps removal of agitation and/or hydraulic dredged material from the federal channel. The rate of payment is \$1.44 per cubic yard for agitation dredging, and \$1.80 per cubic yard for hydraulic dredging. The Savannah District will give 120 days prior notice to permittees when a change in these rates is anticipated.

19. To the extent that it is reasonably practicable, the permittee shall avoid maintenance dredging from 16 March through 31 May of each year. During this period, only unavoidable urgent dredging will be allowed. The permittee shall obtain approval from the Georgia Department of Natural Resources, Fisheries Management Section (GADNR), prior to performing any maintenance dredging during this period. At least 10 days in advance of any anticipated maintenance dredging event during this period, the permittee shall submit a written request to GADNR, 22814 Highway 144, Richmond Hill, Georgia 31324 (912-727-2112); and submit informational copies of this request to the Georgia Department of Natural Resources, Environmental Protection Division, 4220 International Parkway, Suite 101, Atlanta, Georgia 30334 (404-675-6240) and the National Marine Fisheries Service, Habitat Conservation Division, 219 Fort Johnson Road, Charleston, South Carolina 29412, (843-762-8574). The request shall include the following information:

a. An explanation, with documentation, adequately demonstrating that the permittee has made every reasonable effort to avoid maintenance dredging during this period; including the

date(s) that the berth was last dredged before the beginning of the 16 March through 31 May restrictive window.

b. Documentation that the basin is authorized to be maintained at a depth that is adequate to support its intended use, and that under normal circumstances, it will accumulate sediments for a minimum of 90 days without the need for maintenance dredging. [NOTE: The 90 day sediment accumulation depth varies due to factors such as, but not limited to, the permittee's intended use of the facility and substantial differences in sediment accumulation rates. Some areas in the harbor accumulate sediment at rate of 18 inches or more per month, while others areas accumulate little sediment. Under no circumstances shall the permittee be allowed to perform maintenance dredging during the period from March 16 to May 31, unless: (1) the permittee can document that every reasonable effort has been made to avoid dredging during this period; and (2) the permittee can document that every reasonable effort has been made to provide a minimum 90 day sediment storage capacity in the subject basin.]

20. The following special conditions detail measures that the permittee must implement to insure that the manatee is not adversely impacted by routine maintenance dredging activities:

a. The permittee shall insure that all personnel associated with the routine maintenance dredging are advised that there are civil and criminal penalties for harming, harassing or killing manatees, which are protected under the Endangered Species Act of 1973 and the Marine Mammal Act of 1972. The permittee and/or contractor(s) will be held responsible for any manatee harmed, harassed or killed as a result of construction activities.

b. All vessels associated with the routine maintenance dredging will operate at "no wake/idle" speeds at all times while in water where the draft of the vessel provides less than four feet clearance from the bottom and that vessels will follow routes of deep water whenever possible.

c. All dredging activities in open water will cease upon the sighting of manatees within 100 yards of the project area. Construction/dredging activities will not resume until the manatees have not been seen in the project area for at least 30 minutes.

d. Any collision with a manatee shall be reported immediately by the permittee to: the US Army Corps of Engineers (912-652-5050); the US Fish and Wildlife Service, Brunswick Field Office (912-265-9336); and the Georgia Department of Natural Resources (Weekdays 8:00 a.m. to 4:30 p.m.: 912-264-7218 or 1-800-272-8363; nights and weekends: 1-800-241-4113).

e. The permittee agrees that the contractor shall keep a log detailing sightings, collisions, or injury to manatees, which have occurred during the contract period.

f. The permittee agrees that following project completion, a report summarizing the above incidents and sightings will be submitted to the US Fish and Wildlife Service, 4270 Norwich Street, Brunswick, Georgia 31520.

g. The permittee shall insure that during all maintenance dredging activities a "Caution Manatee Area" sign is installed on any tugboat, dredge, barge or other water-based equipment performing authorized work. The sign shall be placed on the vessel in a location that is clearly visible by all personnel associated with the dredging operations. The manatee awareness sign shall be three feet by four feet, 125 gauge 61TS aluminum, covered with white, engineer grade, reflective sheeting; black painted lettering; black screened design; and orange, engineer grade, reflective tape border. The permittee may contact the Brunswick Field Office of the U.S. Fish and Wildlife Service (912-265-9336) for information on manatee signs.

21. Within 21 months of the date of this permit, all property identified in the mitigation plan, shall be protected by a restrictive covenant. A draft Declaration of Covenants and Restrictions with exhibits shall be prepared by an attorney for the permit holder and forwarded to the USACE Savannah District, Office of Counsel, for written approval. All

restrictive covenants should be drafted utilizing the latest version of the USACE Savannah District's model document entitled, "Declaration of Covenants and Restrictions with Instructions." The model document is located on the Department of the Army, Corps of Engineers, Savannah District web site at [www.sas.usace.army.mil/](http://www.sas.usace.army.mil/). Select the yellow box titled, "Permit Info." Scroll down to find the model draft Declaration of Covenants and Restrictions with Instructions. Upon written approval by Office of Counsel, the restrictive covenant will be recorded in the land records Office of the Clerk of the Superior Court in the county in which the land lies. A copy of the recorded restrictive covenant, showing book and page numbers of its recorded location, shall be provided to Office of Counsel. Upon receipt by Office of Counsel of a copy of the recorded restrictive covenant, showing book and page numbers and properly executed, the restrictive covenant requirement shall be completed.

22. The permittee shall assure the boundary of all property identified as mitigation property and protected by the restrictive covenant shall be posted with appropriate signs or marked clearly to guard against unauthorized disturbance to this area during or following construction activities. Signs shall meet the following criteria: be painted metal, printed plastic, or other durable construction; placed at intervals not to exceed 250 feet; affixed at approximately 5 feet above ground elevation; contain the phrase "Conservation Area Do Not Disturb"; "Conservation Area Do Not Disturb" text shall be of sufficient font, size and color to be easily legible at 25 feet; signs shall face away from the protected property.

23. The permittee shall ensure that soil conditions during all mitigation area excavation work is closely monitored for any signs of possible contamination and that appropriate actions are taken if any issue arise.

24. Water Quality Certifications have been issued for your project by Georgia and South Carolina. You must comply with conditions specified in these certifications as Special Conditions to this permit. For your convenience, copies of these certifications are attached.

#### FURTHER INFORMATION:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to Section 404 of the Clean Water Act (33 United States Code 1344).

#### 2. Limits of this Authorization.

a. This permit does not obviate the need to obtain other federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed federal projects.

3. **Limits of Federal Liability.** In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.
- e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. **Reliance on Applicant's Data.** The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. **Reevaluation of Permit Decision.** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision. Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7, or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order which requires you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate.
- d. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. **Extensions.** General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion

of the authorized activity or a reevaluation of the public interest decision, the US Army Corps of Engineers will normally give favorable consideration to a request for an extension of time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

Patrick C. Monahan  
(PERMITTEE)

03-06-2007  
(DATE)

This permit becomes effective when the federal official, designated to act for the Secretary of the Army, has signed below.

Mark S. Held  
Issued for and in behalf of:  
Mark S. Held  
Colonel, US Army  
District Engineer

5 Apr 07  
(DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities with compliance with its terms and conditions, have the transferee sign and date below.

\_\_\_\_\_  
(TRANSFEREE)

\_\_\_\_\_  
(DATE)

Regulatory Branch

CERTIFICATION OF COMPLIANCE  
WITH  
DEPARTMENT OF THE ARMY PERMIT

PERMIT NUMBER: 200501453

PERMITTEE: Chatham County  
Attention: Mr. Patrick C. Monahan  
124 Bull Street

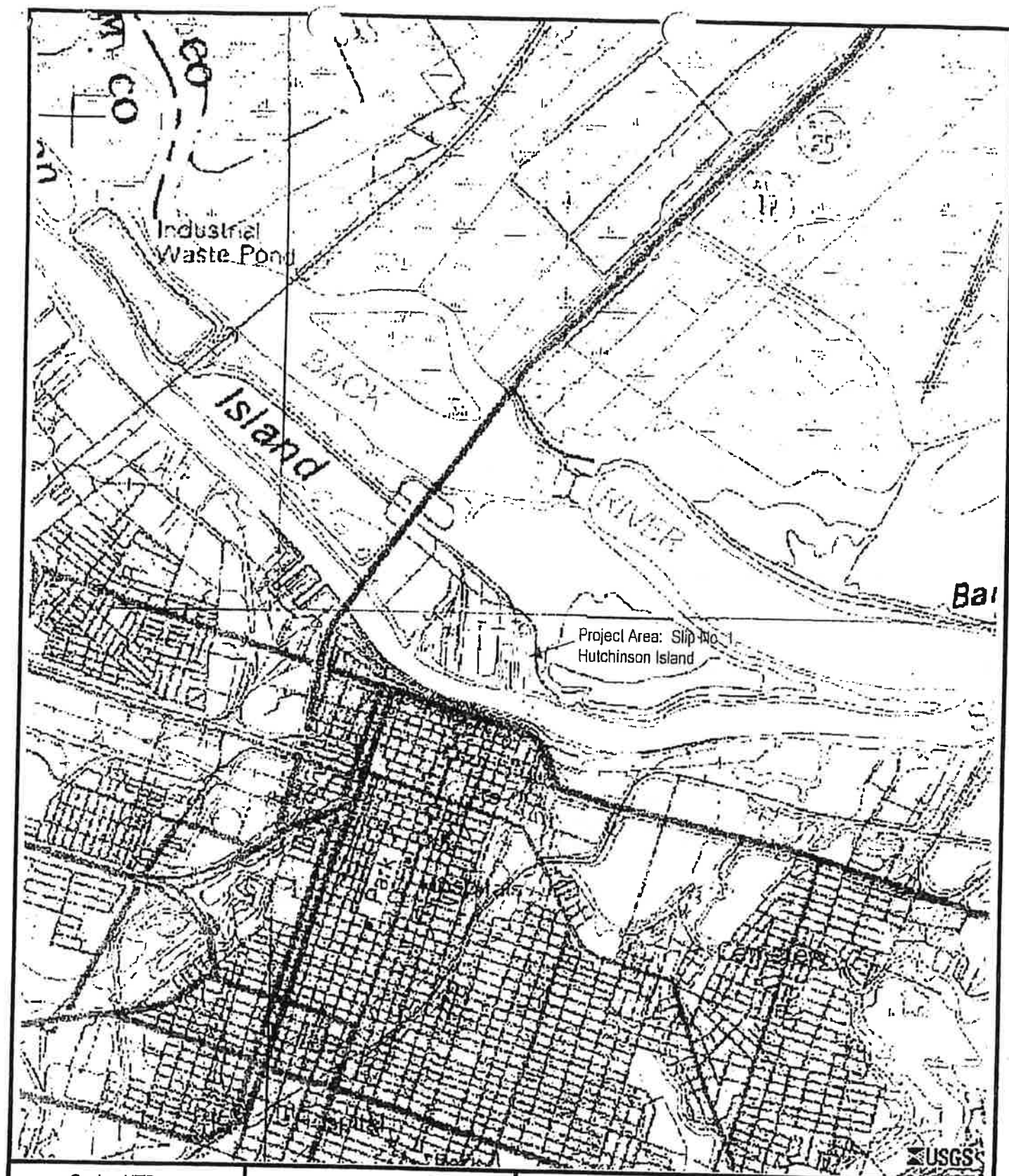
Within 30 days of completion of the activity authorized by this permit, sign this certification and return it to the following address:

Commander  
US Army Engineer District, Savannah  
Attention: Regulatory Branch  
Post Office Box 889  
Savannah, Georgia 31402-0889

Please note that your permitted activity is subject to compliance inspection by an US Army Corps of Engineers' representative. If you fail to comply with the permit conditions it may be subject to suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit.

\_\_\_\_\_  
Signature of Permittee/Date



Scale: NTS

Date: June 2003

Checked By: SDM



**S&ME**

**SITE VICINITY MAP**  
 Slip No. 1 Hutchinson Island  
 Savannah, Georgia  
 S&ME Project No.: 1134-03-377

Figure No.:

1

**SURVEYOR'S NOTES**

1. PROPERTY LINE AND EASEMENT INFORMATION SHOWN WAS TAKEN FROM A PLAT OF SAVANNAH HARBOR BY THOMAS & HUTTON ENGINEERING CO. DATED MARCH 3, 2000
2. FIELD EQUIPMENT: TOPCON TOTAL STATION
3. THIS SITE IS IN FLOOD ZONE 4E (BUT) PER FIRM 130030 D045 Z DATED MAY 13, 1987
4. SW. WATER STREAMS AND MARSHES ARE HIGH LIEU BY THE GEORGIA DEPARTMENT OF NATURAL RESOURCES AND THE U.S. ARMY CORPS OF ENGINEERS. INJURY OF THESE AREAS WITHOUT PROPERTY AUTHORIZATION MAY BE PENALTY BY LAW

CWT SAVANNAH HOTEL, LLC  
PARCEL 2

N 76.0157° 36.8  
E 99.4102° 26.6

RESORT DRIVE

MARSH GRASS AREA  
0.95 ACRES

MARSH GRASS AREA  
1.87 ACRES

PARCEL 5A  
5.979  
ACRES  
(SLIP #1)

HIGH WATER  
MARK ON  
RIP-RAP

HELPEFUL CONSTRUCTION  
EASEMENT

RIVER WALK EASEMENT

CSX REALTY DEVELOPMENT CORP.  
PARCEL 5

GRID NORTH  
EAST ZONE NAD 83  
GA STATE PLANE

MARSH AREA



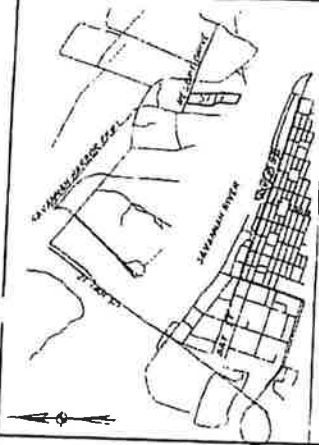
WRIGHT C. POWERS, JR.  
GA REG. LAND SURVEYOR  
LICENSE NO. 2612

LINE	BEARING	LENGTH
L1	N04°13'08"W	18.25'
L2	N02°14'51"W	60.15'
L3	N02°49'21"W	26.94'
L4	S12°52'40"E	27.62'
L5	N06°18'31"W	35.64'
L6	N15°00'32"W	21.51'
L7	N02°45'18"W	15.25'
L8	N01°26'42"E	09.34'
L9	N01°51'01"E	29.21'
L10	N14°18'09"E	21.88'
L11	N17°12'37"W	20.91'
L12	N10°12'54"W	20.56'
L13	N02°53'27"E	19.60'
L14	N07°11'36"W	14.44'
L15	N09°51'49"W	29.22'
L16	S05°31'32"W	25.26'
L17	S01°40'22"E	18.25'
L18	S10°41'41"E	13.21'
L19	S10°56'24"E	18.61'
L20	N07°43'36"W	41.21'
L21	S12°52'55"E	16.53'
L22	S01°01'31"E	28.08'
L23	S12°12'24"E	19.32'

LINE	BEARING	LENGTH
L14	S15°59'16"E	70.34'
L15	N12°05'48"E	43.67'
L16	S09°02'48"W	33.43'
L17	N11°25'52"E	102.06'
L18	S18°17'27"E	23.15'
L19	S11°30'49"W	68.03'
L20	N04°01'14"W	196.13'
L21	S02°21'42"E	43.22'
L22	S14°00'48"W	46.16'
L23	S09°42'45"W	35.49'
L24	S02°12'40"E	45.42'
L25	S02°01'20"E	34.07'
L26	S01°10'51"E	45.28'
L27	S00°28'56"W	27.27'
L28	S00°57'26"W	29.13'
L29	S08°10'47"E	31.26'
L30	S01°10'37"E	51.93'
L31	S05°12'18"W	37.37'
L32	S05°19'13"W	29.38'
L33	S07°16'56"W	11.20'
L34	S05°19'52"E	45.33'
L35	S05°12'18"W	41.34'
L36	S01°17'18"W	55.56'
L37	S14°39'11"E	18.35'
L38	S03°53'41"E	35.41'

**SYMBOL LEGEND**

- BENCHMARK
- BOUNDARY POINT
- CONC. MONUMENT FOUND
- CONC. MONUMENT SET
- IRON PIPE FOUND
- IRON REBAR FOUND



VICINITY MAP (NOT TO SCALE)

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A WETLAND PLAT OF

**PARCEL 5A  
SAVANNAH HARBOR**

BTH G.M.D.  
HUTCHINSON ISLAND  
CITY OF SAVANNAH  
CHATHAM COUNTY, GEORGIA

PREPARED FOR:

**THE CHAIRMAN AND  
COMMISSIONERS OF  
CHATHAM COUNTY, GEORGIA**

PREPARED BY:

**THOMAS & HUTTON ENGINEERING CO.**  
50 PARK OF COMMERCE WAY, P.O. BOX 2727  
SAVANNAH, GA 31405 / (912) 234-5300  
www.thomas-hutton.com



SCALE  
FILE  
FIELD DATE  
PLAT DATE

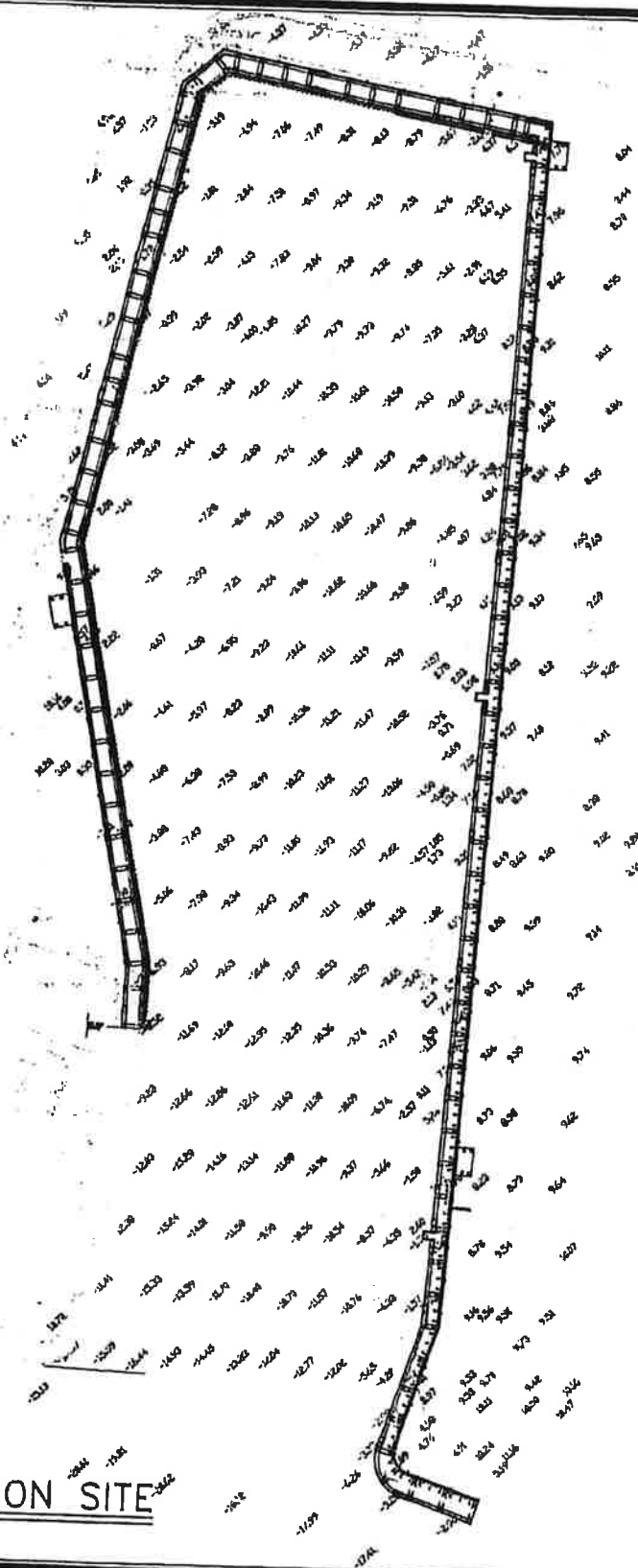
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J-16067  
03/20/05  
03/23/05

DRAWN BY  
REVIEWED BY  
APPROVED BY  
PARTY CHIEF

WCP  
WCP  
WCP  
JL

SHEET 1 OF 1

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# RIVER WALK EXTENSION SITE

NTS

**HUSSEY, GAY, BELL & DEYOUNG INC.**  
CONSULTING ENGINEERS

POST OFFICE BOX 14247  
SAVANNAH, GEORGIA  
31416-1247

328 COMMERCIAL DRIVE  
OFFICE (912) 354-4828  
TELEFAX (912) 354-6754



HUTCHINSON ISLAND RIVERWALK EXTENSION  
FOR  
CHATHAM COUNTY

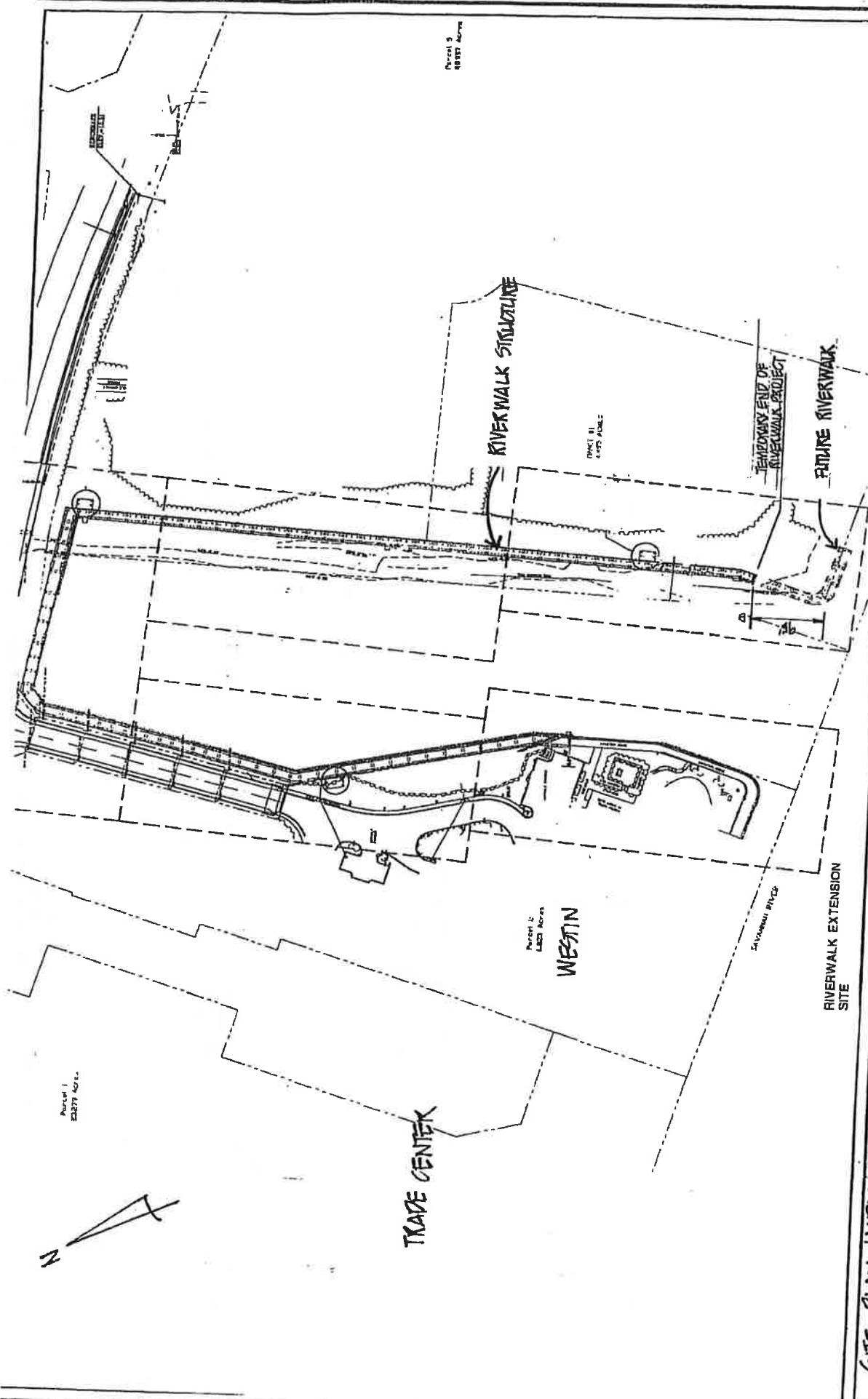
HYDRO & TOPOGRAPHIC SURVEY

DATE 6-26-03  
DRAWN BY KRW  
CHECKED BY RTH  
APPROVED BY RTH

SHEET NUMBER

C1

1 OF 8 SHEETS



SITE PLAN INDICATING RIVERWALK TERMINATION

PROPOSED ACTIVITY:  
 SLIP 1 RIVERWALK EXTENSION  
 COUNTY: CHATHAM  
 APPLICANT: CHATHAM COUNTY

DATE: NOV. 29, 2006  
 SHEET: 2  
 SCALE: NTS  
 SOURCE: THOMAS & HUTTON ENGINEERING CO  
 DATUM: MLW

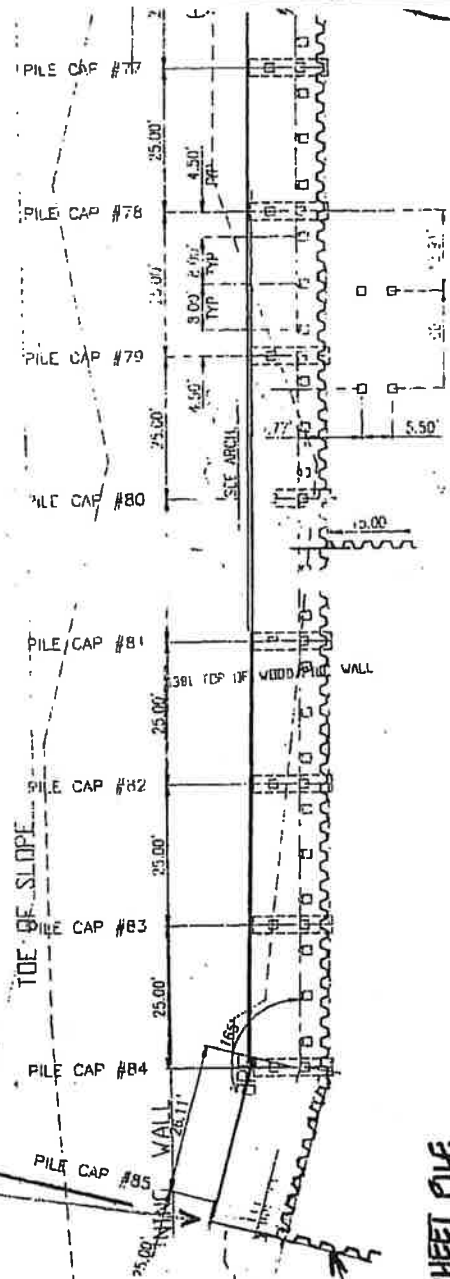
SAVANNAH RIVER

EDGE OF RIVERWALK AT WESTERN

TEMPORARY END OF RIVERWALK PROJECT

95'

SLIP 1



LOCATION

LAYOUT INDICATING RIVERWALK TERMINATION

PROPOSED ACTIVITY:  
SLIP 1 RIVERWALK EXTENSION

COUNTY: CHATHAM

APPLICANT: CHATHAM COUNTY

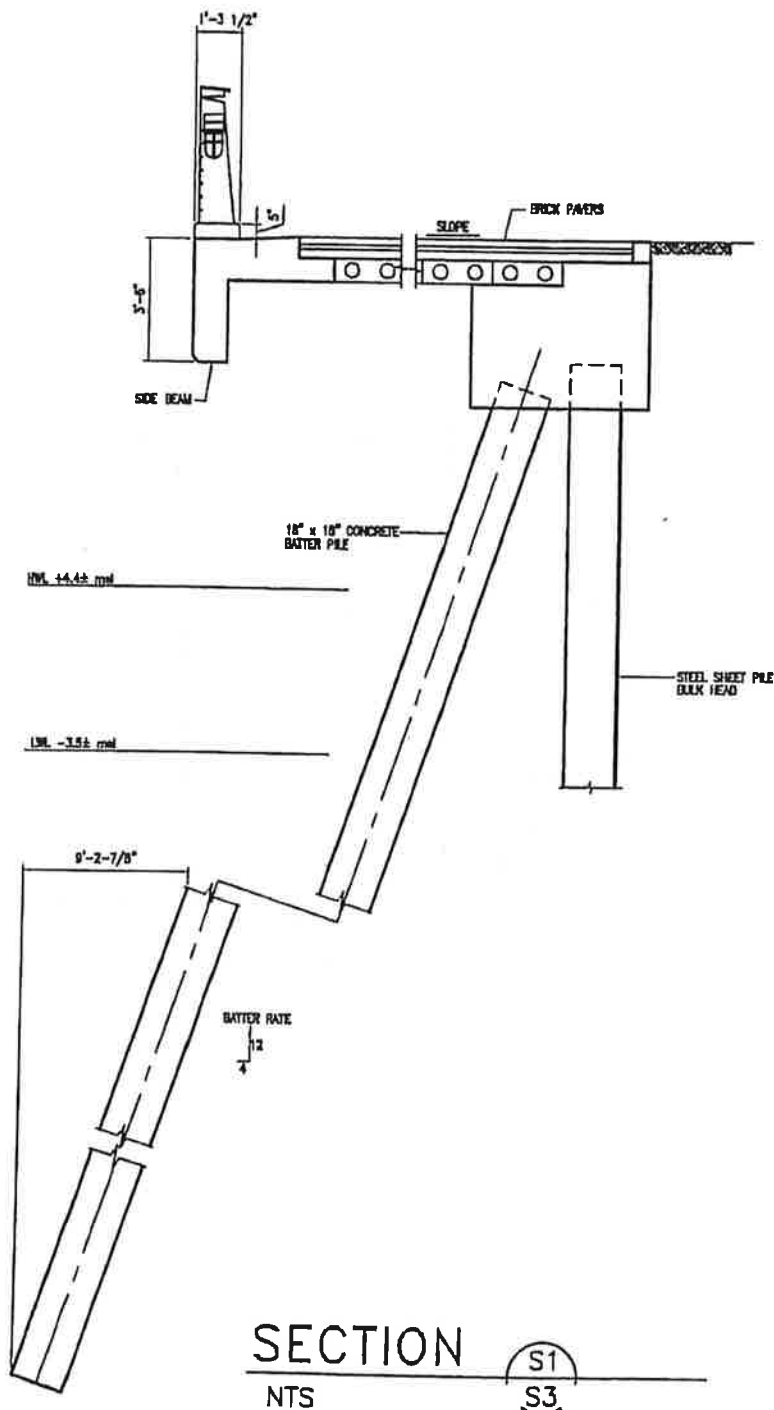
DATE: NOV. 29, 2006

SHEET: 1

SCALE: NTS

SOURCE: THOMAS HUTTON ENGINEERING CO.

DATUM: MLLW



**HUSSEY, GAY, BELL & DEYOUNG INC.**  
CONSULTING ENGINEERS

POST OFFICE BOX 14247  
SAVANNAH, GEORGIA  
31416-1247

319 COMMERCIAL DRIVE  
OFFICE (912) 354-4828  
TELEFAX (912) 354-6754



HUTCHINSON ISLAND RIVERWALK EXTENSION  
FOR  
CHATAM COUNTY

SECTION

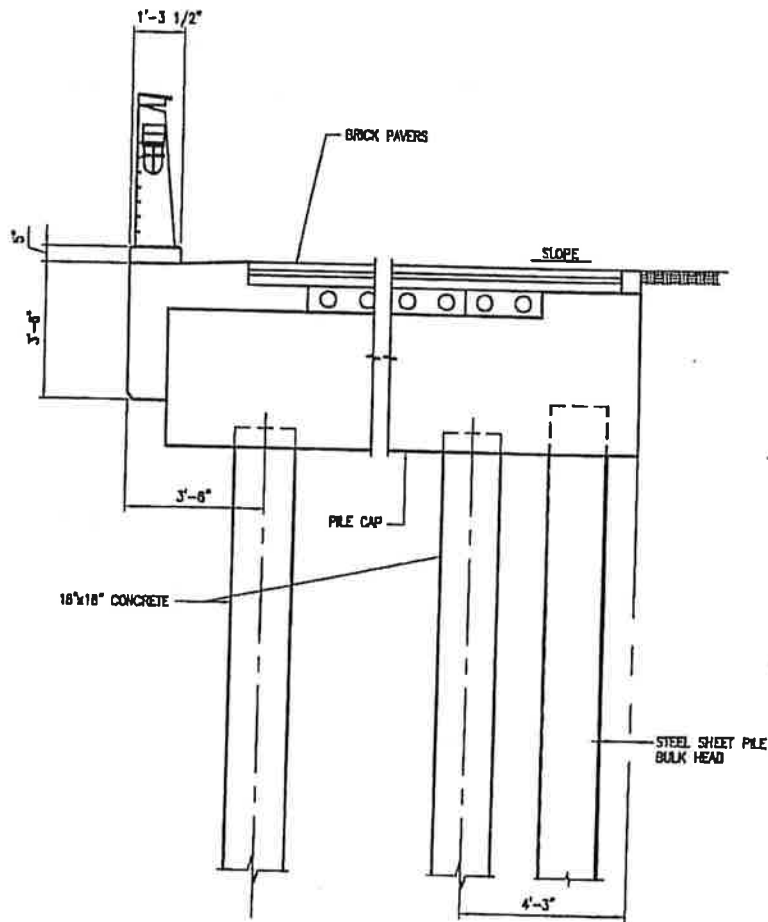
DATE 8-28-03  
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APPROVED BY: RTH

SHEET . NUMBER

**S3**

1 OF 6 SHEETS

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SECTION

NTS

S1

S4

HUSSEY, GAY, BELL & DEYOUNG INC.  
CONSULTING ENGINEERS

POST OFFICE BOX 14247  
SAVANNAH, GEORGIA  
31416-1247

329 COMMERCIAL DRIVE  
OFFICE (912) 354-1428  
TELEFAX (912) 354-8754

**HGB**  
A Bell Company

HUTCHINSON ISLAND RIVERWALK EXTENSION  
FOR  
CHATHAM COUNTY

SECTION

DATE 6-26-03  
DRAWN BY: KRW  
CHECKED BY: RTH  
APPROVED BY: RTH

SHEET NUMBER

S4

8 OF 8 SHEETS

**Hutchinson Island Multi-Project Mitigation Site**  
**Chatham County, Georgia**  
**6 October 2006**  
**Revised 18 October 2006**

**Introduction:**

The construction of a 8.06 acre multi-project tidal mitigation site is proposed on Hutchinson Island within Chatham County, Georgia. This mitigation will satisfy the compensatory tidal wetland mitigation requirements for five projects. These projects include the Village at Oglethorpe Landing (USACE Project No. 200500423), City of Savannah Riverwalk Extension (USACE Project No. 200415260), Slip One on Hutchinson Island (USACE Project No. 200114820/200501453), Hardin Canal Drainage Improvements Project (USACE Project No. 200600393) and Skidaway Narrows Emergency Access (USACE Project No. 200600909). This compensatory mitigation plan will provide a description of the construction and monitoring activities proposed for the mitigation site.

As a special condition associated with each of the permits, the applicants/permittee have proposed the creation of vegetated tidal marsh to compensate for unavoidable project related impacts. Table 1 provides an outline of the proposed impacts and mitigation requirements associated with each of the four projects.

TABLE 1.0

Project Name	Applicant Name	USACE Project Number	Tidal Marsh Impacts (Acres)	Tidal Marsh Creation (Acres)
Village at Oglethorpe Landing	The Village at Oglethorpe Landing, LLC	200500423	0.28	1
City of Savannah Riverwalk Extension	City of Savannah	200415260	1.6	5.4
Slip One on Hutchinson Island	Chatham County	200114820/200501453	0.28	0.58
Hardin Canal Drainage Improvements Project	Chatham County	200600393	0.27	0.54
Skidaway Narrows Emergency Access	Chatham County	200600909	0.56	0.56
			<b>TOTAL</b>	<b>8.06</b>

**Mitigation Site Location:**

The proposed mitigation site will consist of 8.06 acres located east of The Westin Savannah Harbor Golf Resort, west of Fig Island and adjacent to and south of the Back River on Hutchinson Island (approximate Latitude 32° 04' 58.61" Longitude 81° 03' 27.79"). The following sections will discuss the implementation methodologies and schedule necessary to produce suitable surface water hydrology, wetland vegetation, and physical and biological parameters within the proposed wetland creation area. Vegetative and structural measures such as Type C silt fence, hay bales, grassed slopes, etc. will be employed for the duration of construction activities to prevent discharge of sedimentation into adjacent wetlands.

**Site Preparation:**

Prior to initiation of site preparation activities, the applicant will complete a topographic survey within the creation area and adjacent tidal wetlands (reference wetland) adjacent to and immediately north the site. Using this topographic information, site preparation will include excavating and grading the mitigation area to create elevations matching those of the reference wetland and insure a hydrological connection between wetlands. All excavated material will be placed within an upland disposal site located on Hutchinson Island and currently owned by Chatham County. It is anticipated that site preparation work and construction of the 8.06 acre tidal marsh creation area will begin in 2007.

**Vegetation Planting:**

Upon the completion of the site preparation activities, the applicant is proposing to plant saltmarsh cordgrass (*Spartina alterniflora*) on 12 inch centers. In addition to establishing vegetation within the site via planting, it is expected that the adjacent tidal wetland area and daily tidal exchange will act as a natural seed source for aquatic herbaceous species to aid in the creation efforts and the diversity of the mitigation area.

**Mitigation Monitoring:**

**Creation Area:** The success of the wetland creation efforts will be documented by monitoring the creation site over a five-year period. The first monitoring period will be conducted the fall after the creation site has been planted and annually thereafter. During this five-year monitoring period, mitigation success will be evaluated by the USACE to determine if the monitoring plan will require modification and/or an additional study. Detailed field surveys will focus on measurements of soil saturation and vegetation survival and growth. Vegetation monitoring will be accomplished

with quadrant sampling procedures for the comprehensive wetland determination as described in the 1987 "Corps of Engineers Wetlands Delineation Manual"<sup>1</sup>. Two randomly located sampling plots will be permanently established in the creation area and marked with PVC pipe. The plots will be sampled annually at the end of the growing season (1 August to 30 September) each monitoring year. Planted stem survival and species composition and density of naturally regenerating plants will be documented within the plot. Visual documentation will be provided in photographs to be taken at established points in the mitigation areas over the five-year monitoring period. These photographs will document the vegetation growth changes that occur in the mitigation area. Results of these samples will provide a quantifiable means of evaluating the vegetative and hydrologic responses of the mitigation plan.

The hydrology monitoring will be conducted by placing two ground and surface water monitoring wells within the 8.06 acre creation area. These electronic wells will record the hydrologic conditions within both the creation area and reference wetland twice daily over the five-year monitoring period.

**Reference Wetland:** As indicated above, the existing tidal marsh area located immediately adjacent to and north of the proposed mitigation site will be used to establish elevations during construction activities. One monitoring ground and surface water monitoring well will be installed and baseline vegetation data, including stem density and species composition, will be collected within the reference wetland. This information will be used to confirm the success of the mitigation site during the five year monitoring period.

**Success Criteria:**

The tidal wetland vegetation creation effort will be considered successful and complete if, at the end of the five-year monitoring program, 70 percent of the planted stems survive, the plant material exhibits a consistent increase in height and lateral growth and the site contains an average stem density greater than or equal to 75 % of the average stem density in the reference area. In the alternative, if less than 70 percent of the planted species survive but desired volunteer tidal species are established to adequately compensate, the creation project may, after review by the appropriate regulatory agency personnel, be considered complete. Annual monitoring reports will be submitted to document the ongoing success of the mitigation site.

Hydrologic conditions will be considered successful if the frequency, duration, and elevations of flooding are within 10% of those recorded within the adjacent reference wetland.

**Contingency:**

If, at the end of the five-year monitoring period, success criteria have not been satisfied, Chatham County will consult with the appropriate regulatory review agencies to determine specifically what remedial action should be taken. If significant problems with the creation efforts are identified prior to the end of the initial five-year monitoring period, regulatory agency personnel will be consulted regarding the advisability of taking corrective action. Remedial action may include replanting or modification of hydrology and continued monitoring until the success criteria is met.

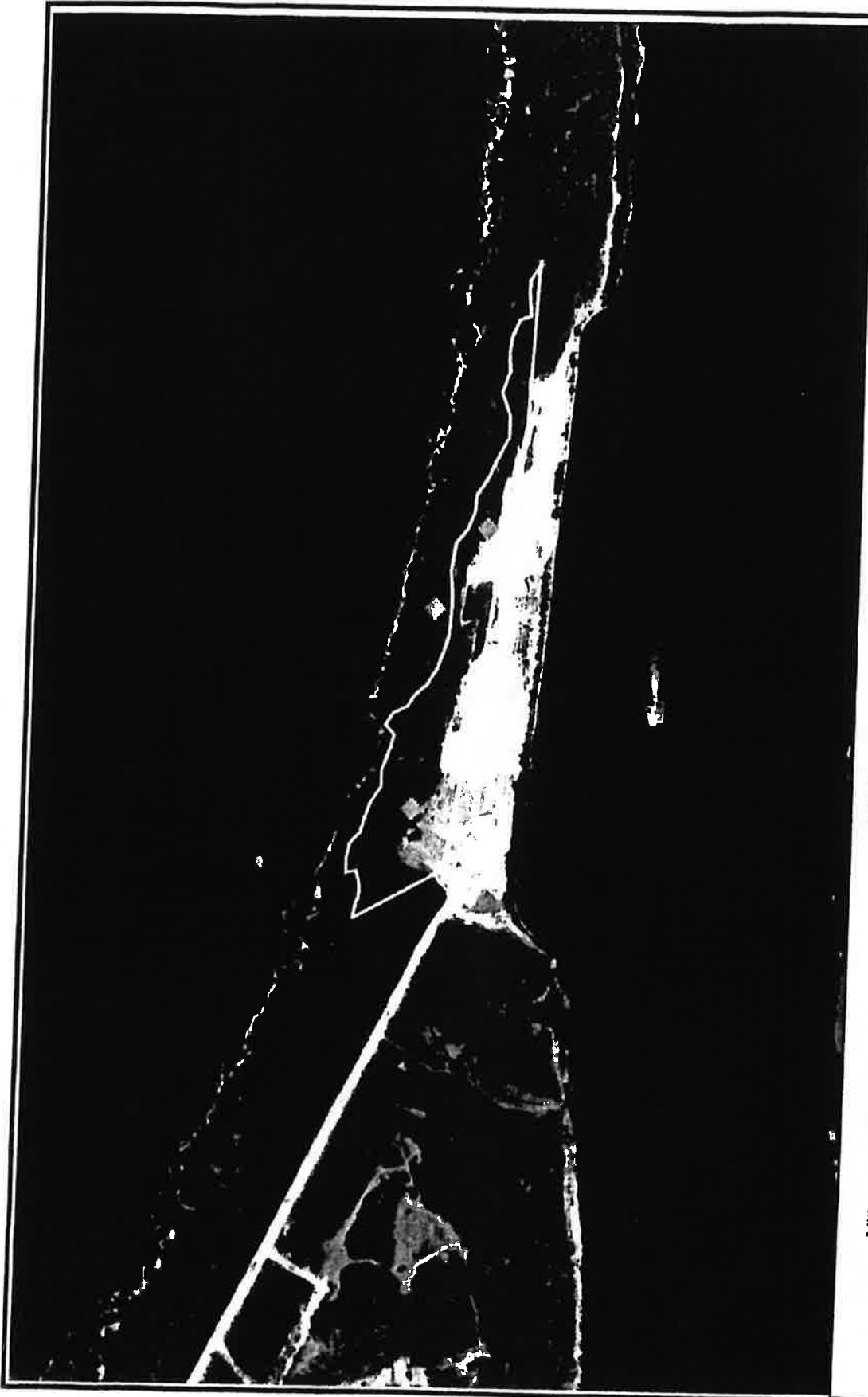
This multi-project mitigation site is currently proposed to satisfy the mitigation requirements for five projects and if additional tidal marsh mitigation is required for future Chatham County projects, the County intends to expand the 8.06 acre creation area as necessary. Chatham County, as the property owner, will be the point of contact for the project and will manage the site; however, each party participating in this project including The Village at Oglethorpe Landing, LLC, City of Savannah, and Chatham County will be jointly responsible for the success of the 8.06 acre tidal marsh creation area. If any portion of the site does not meet the success criteria indicated above, all participating parties will be responsible for any remedial action required by the regulatory agencies.

**Restrictive Covenants:**

Within six months of completing the excavation, grading, and planting, the permittee will prepare a draft restrictive covenant package to be submitted to the USACE for review and approval. Within three months of final USACE approval, Chatham County will record the restrictive covenants and provide the USACE with a final copy of the recorded covenants.

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<sup>1</sup> Environmental Laboratory, 1987. "Corps of Engineers Wetlands Delineation Manual." Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.



Mitigation Area Boundary - 8.06 Acres



Reference Wetland Area

Monitoring Well Locations

**sligh** environmental consultants, inc.  
31 Park of Commerce Way, Suite 2008  
Savannah, Georgia 31405  
912/232-0451  
912/232-0453 (fax)

Hutchinson Island Multi-Project Mitigation Site  
Chatham County, Georgia



1999 Aerial Photograph

1 inch = 500 feet

6 October 2006/Revised 18 October 2006



**sligh** environmental consultants, inc.  
31 Park of Commerce Way, Suite 200B  
Savannah, Georgia 31405  
912/232-0451  
912/232-0453 (fax)

**Hutchinson Island Multi-Project Mitigation Site  
Chatham County, Georgia**



USGS Savannah Quadrangle

1 inch = 1000 feet

6 October 2006

ESTABLISH MARSH-TYPE  
VEGETATION IN EXCAVATED  
AREA

CLEAR AND REMOVE  
EXISTING VEGETATION

EXCAVATE AND REMOVE  
EXISTING MATERIAL

INSTALL PERIMETER  
SILT FENCING AROUND  
EXCAVATION AREA

EXISTING  
MARSH

MHW = 3.00 MSL

PROPOSED FINISHED  
GRADE ELEV. = 2.00

MLW = (-)3.48

## TYPICAL SECTION

SCALES: HORIZONTAL: 1" = 30'-0"  
VERTICAL: 1" = 5'-0"

SLIP 1 RIVERWALK EXTENSION - CHATHAM COUNTY  
HUTCHINSON ISLAND, GEORGIA

DATE: AUGUST 30, 2005  
SHEET 15

SCALE: AS SHOWN

SOURCE: THOMAS & HUTTON ENGINEERING CO.

PROPOSED ACTIVITY:  
WETLAND MITIGATION  
AND RESTORATION

COUNTY:

CHATHAM, GEORGIA

APPLICANT:

CHATHAM COUNTY

DATUM:  
MSL

*Beckwith*

**Georgia Department of Natural Resources**  
2 Martin Luther King, Jr. Drive, S.E., East Foyu Tower, Atlanta, Georgia 30334  
Lonice C. Barrett, Commissioner  
David M. Word, Assistant Director  
Environmental Protection Division  
404/656-4713

October 22, 2003

Manager, Chatham County  
124 Bull Street  
Savannah, Georgia 31412

Re: Water Quality Certification  
Public Notice No. 200114820  
Hutchinson Island Riverwalk Expansion  
Savannah River Basin/Coastal Zone  
Chatham County

Dear Sirs:

Pursuant to Section 401 of the Federal Clean Water Act, the State of Georgia issues this certification to Chatham County, an applicant for a federal permit or license to conduct an activity in, on or adjacent to the waters of the State of Georgia.

The State of Georgia certifies that there is no applicable provision of Section 301; no limitation under Section 302; no standard under Section 306; and no standard under Section 307, for the applicant's activity. The State of Georgia certifies that the applicant's activity will comply with all applicable provisions of Section 303.

This certification is contingent upon the following conditions:

1. All work performed during construction will be done in a manner so as not to violate applicable water quality standards.
2. No oils, grease, materials or other pollutants will be discharged from the construction activities which reach public waters.

RECEIVED BY OP-F  
ON 27 OCT 2003 MC  
5

Page 2  
JPN 200114820  
Chatham County

This certification does not relieve the applicant of any obligation or responsibility for providing acceptable mitigation for unavoidable impacts to waters of the State or for complying with the provisions of any other laws or regulations of other federal, state or local authorities.

It is your responsibility to submit this certification to the appropriate federal agency.

Sincerely,



David M. Word  
Assistant Director

DMW:kpk

cc: ✓ Ms. Mirian Magwood  
Mr. Ron Mikulak  
Ms. Sandra Tucker  
Mr. David Rackley  
Ms. Jeannie Butler  
Ms. Kelie Moore

BOARD:  
Dorothy M. Haglund  
Chairman  
Edwin H. Cooper, III  
Vice Chairman  
Steven C. Kiser  
Secretary



C. Earl Hunter, Commissioner

*Promoting and protecting the health of the public and the environment*

BOARD:  
Henry C. Scott  
Paul C. Aughtry, III  
Glenn A. McCall  
Coleman F. Buckhouse, MD

January 25, 2007

Chatham County Assistant County Manager  
124 Bull St  
Savannah GA 31412

Re: Certification in Accordance with Section 401 of the Clean Water Act, as amended and the Coastal Zone Management Program (48-39-10 et. seq., and 15 CFR 93)

Chatham County Assistant County Manager  
Expansion of the existing public riverwalk on Hutchinson Island  
Savannah River  
Jasper County  
P/N 2005-1W-413

Dear Sir,

The Bureau of Water and Ocean and Coastal Resource Management have reviewed plans for this project and determined there is a reasonable assurance that the proposed project will be conducted in a manner consistent with the Certification requirements of Section 401 of the Federal Clean Water Act, as amended, and the Coastal Zone Management Act (48-39-10 et. seq., and 15 CFR 93).

In accordance with the provisions of Section 401, we certify that this project, subject to the indicated conditions, is consistent with applicable provisions of 303 of the Federal Clean Water Act, as amended. We also certify that there are no applicable effluent limitations under Sections 301(b) and 302, and that there are no applicable standards under Sections 306 and 307.

This certification is subject to the following conditions:

1. OCRM must be notified, in writing, prior to initiation of construction. OCRM will then issue an "authorization to commence work" placard. The placard must be placed in a conspicuous place at the site. No authorized work can commence until the placard is posted and all required permits have been issued and is not valid until all other required federal, state and local permits have been issued for the activity.
2. The applicant must implement best management practices that will minimize erosion and migration of sediments on and off the project site during and after construction. These practices should include the use of appropriate grading and sloping techniques, mulches, hay bales, silt fences, or other devices capable of preventing erosion, migration of sediments and bank failure. All disturbed land surfaces and sloped areas must be stabilized and sloped with a minimum 3/1 slope upon project completion.

Page: 2

Chatham County Assistant County Manager  
January 25, 2007

3. The applicant must dispose of the initial dredge spoils into the previously authorized confined disposal facility 12-A. Any alternate disposal area must be reviewed and approved by the Division of Water Quality prior to its use.
4. Maintenance dredging must be performed in accordance with the long-term maintenance strategy (LTMS) for Savannah Harbor previously authorized May 10, 1996. The applicant must adhere to the conditions of the water quality certification issued for the LTMS on May 10, 1996, as those conditions are still in effect.
5. The applicant must supply a copy of any final cultural or archaeological survey report to the Catawba Indian Nation.
6. If any skeletal remains and/or any objects falling the Native Americans Graves Protection and Repatriation Act Graves Protection and Repatriation Act (NAGPRA) are uncovered during construction, the construction must stop immediately. The United Keetoowah Band of Cherokee Indians in Oklahoma, the Eastern Shawnee Tribe of Oklahoma, and the Catawba Indian Nation must be notified and consulted for resolution
7. The applicant must provide compensatory mitigation in accordance with the mitigation and monitoring plan entitled, "Hutchinson Island Multi-Project Mitigation Site; Chatham County, Georgia," as revised October 18, 2006 Monitoring must be performed for a period of five years in accordance with the mitigation and monitoring plan revised on October 18, 2006. Contingency measures included in this plan must be implemented if success criteria are not met.

The SC Department of Health and Environmental Control reserves the right to impose additional conditions on this Certification to respond to unforeseen, specific problems that might arise and to take any enforcement action necessary to ensure compliance with State water quality standards.

Sincerely,



Heather Preston, Director  
Division of Water Quality  
Bureau of Water

cc: U.S. Army Corps of Engineers,  
Charleston District Office  
SC DHEC, District Office  
OCRM

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
SPECIAL PROVISION**

**Project MSL-0002-00(691), Chatham County, P.I. #0002691**

**Section 107 – Legal Regulations and Responsibility to the Public**

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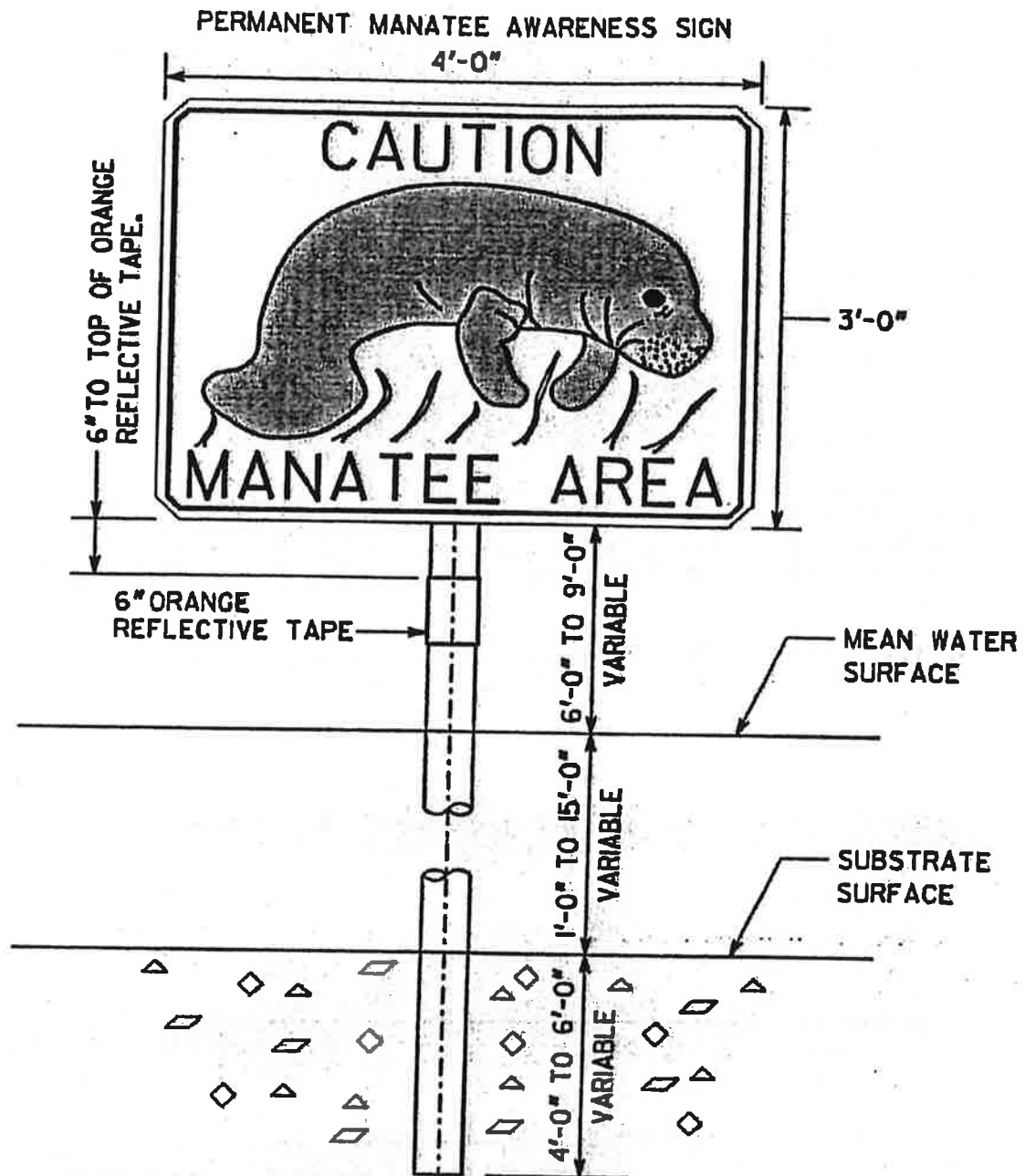
*Add the following to Subsection 107.23:*

**G. Protection of Federally Threatened and/or Endangered Species**

The following conditions are intended as a minimum to protect these species and its habitat during any activities that are in close proximity to the known location(s) of these species.

1. The Contractor shall advise all project personnel employed to work on this project about the potential presence and appearance of the federally protected manatee, bald eagle, wood stork, shortnose sturgeon, and marine sea turtles, and that there are civil and criminal penalties for harming, harassing, or killing manatees, bald eagles, shortnose sturgeon, or marine sea turtles which are protected under the Endangered Species Act of 1973. Manatees are also protected under the Marine Mammal Protection Act of 1972. Bald eagles are also protected under the Eagle Protection Act of 1940. Pictures and habitat information will be provided to the Contractor at the preconstruction conference.
2. The Contractor shall advise all personnel of the responsibility of watching for the presence of manatees, bald eagles, wood storks, shortnose sturgeon, and marine sea turtles at all times during construction, including water related activities to implement appropriate precautions and ensure protection.
3. All barges used in the construction activities shall be of such size and weight that dredging of the river will not be required.
4. Construction debris shall not be allowed into the water.
5. Extreme care shall be taken in lowering equipment or materials, including, but not limited to, piles, sheet piles, casings for drilled shaft construction, spuds, pile templates, etc., below the water surface and into the river bed taking precaution not to harm any manatee, shortnose sturgeon, or marine sea turtles that may have entered the construction area undetected. The maximum speed at which these items can be lowered shall be 10 feet per minute.
6. All vessels shall operate at "no wake/idle" speeds at all times.
7. Propellers on all boats, 21 feet in length and less, shall be equipped with propeller guard systems, approved by the Project Engineer, designed to prevent harm to manatees.
8. A total of six (6) signs will be required and placed by the Contractor at prominent locations within the construction area:
  - a. Four (4) "Caution Manatee Area" signs (two on the upstream side and two on the downstream side of the side of the slip or construction area) shall be placed in the construction vicinity prior to commencement of work and shall be maintained until such time that Final Acceptance of the project is made (Figure 1).

Section 107 – Legal Regulations and Responsibility to the Public



SPECIFICATIONS :

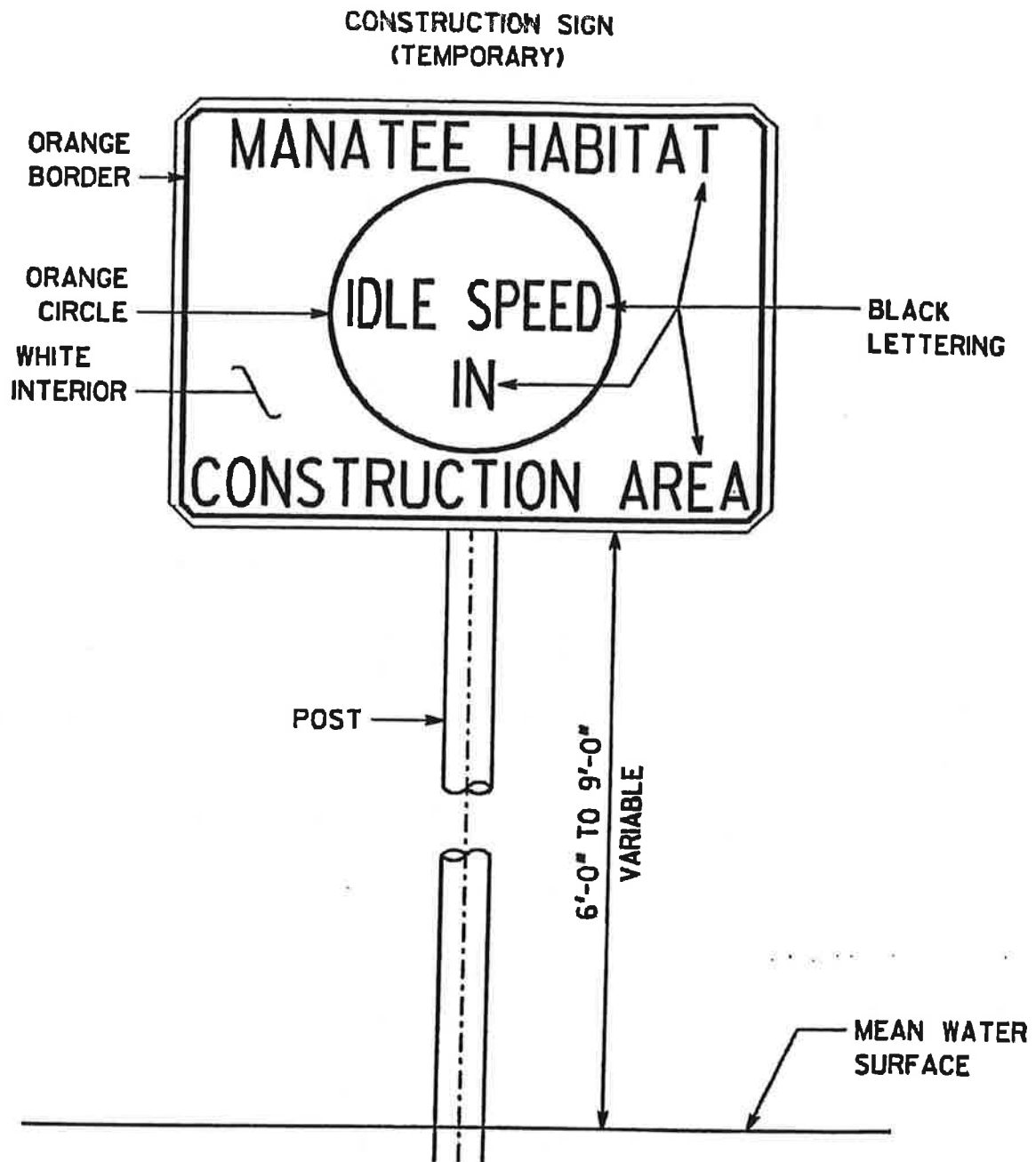
SIGNS SHALL BE A MINIMUM OF 3' X 4', PAINTED WHITE;  
WITH BLACK 4" LETTERING.

FIGURE NO. 1

## Section 107 – Legal Regulations and Responsibility to the Public

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- b. Two (2) "Manatee Habitat – Idle Speed in Construction Areas" signs (one on the upstream and one on the downstream side of the side of the slip or construction area) shall be placed in the construction vicinity prior to commencement of work and shall be maintained until such time that Final Acceptance of the project is made (Figure 2).
9. The "Caution Manatee Area" and "Manatee Habitat – Idle Speed in Construction Area" signs shall be 3 feet by 4 feet conforming with Section 636 – Highway Signs; covered with white, Type I reflective sheeting; black painted lettering; black screened design; and orange, Type I reflective tape border.
10. Placement of all signs shall be as approved by the Georgia Department of Natural Resources, Coastal Resources Division, Brunswick, Georgia. The contact person for the Georgia Department of Natural Resources is Leigh Youngner at (912)-264-7218.
11. A trained spotter provided by the Contractor, shall be onsite for sightings of manatees during removal of the piles and debris from the boat slip and construction of the river walk. Personnel designated by the Contractor shall receive training by the Georgia Department of Natural Resources, Coastal Resources Division, Brunswick, Georgia. The contact person for the Georgia Department of Natural Resources is Leigh Youngner at (912) 264-7218.
12. Underwater blasting shall not be allowed from April 1 to October 31 to minimize the likelihood of injury to manatees and marine sea turtles. "Danger zones", defined by the U.S. Fish and Wildlife Service's "Manatee Protection Measures", shall be established by the Contractor if open water blasting is planned from November 1 to December 31 and from February 16 to March 14. The U.S. Fish and Wildlife Service recommends the following Manatee Protection Measures for blasting:
- a. For each explosive charge placed, detonation shall not occur if a manatee or marine sea turtle is known to be within a circular area (the "danger zone") around the detonation site with the following radius:
- $$r = 260(\sqrt[3]{W})$$
- where
- $r$  = radius of the danger zone in feet
- $W$  = weight of the explosive charge in pounds (tetra or TNT)
- b. A manatee and marine sea turtle watch shall be conducted by no less than two qualified observers from watercraft, aircraft, or high vantage point for at least 30 minutes before, during, and after detonation, in a circular area at least three (3) times the radius of the above described danger zone. Establishment of danger zones will not be required from January 1 to February 15.
- c. Any manatee(s) or marine sea turtle(s) in the danger zone or the watch zone shall not be forced to move out of those zones by human intervention. Detonation shall not occur until the manatee(s) or marine sea turtle(s) move(s) out of the danger zone on its own volition.
13. The Contractor shall cease all construction activities and vessel movement in open water shall cease upon the sighting of a manatee or marine sea turtle within 300 feet of the project area. The Contractor shall only resume construction activities once the manatee or marine sea turtle has not been observed in the project area or within 300 feet of the project area for at least 30 minutes.
14. All construction activities shall cease upon the sighting of a bald eagle or wood stork within 100 yards of the project area. The construction activities shall not resume until the bald eagle or wood stork has not been observed in the project area or within 100 yards of the project area for at least 30 minutes.



**SPECIFICATIONS :**

SIGNS SHALL BE A MINIMUM OF 3' X 4', PAINTED WHITE; BLACK 4" LETTERING; AND ORANGE, ENGINEER GRADE, REFLECTIVE CIRCLE AND BORDER.

FIGURE NO. 2

## Section 107 – Legal Regulations and Responsibility to the Public

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15. Any sighting of manatee, bald eagle, wood stork, shortnose sturgeon, or marine sea turtle or in the event any incident occurs that causes harm or that could be detrimental to the continued existence of the manatee, bald eagle, wood stork, shortnose sturgeon, or marine sea turtle along the project corridor, the Contractor shall report the incident immediately to the Project Engineer who in turn will notify:
- a. U.S. Fish and Wildlife Service, Brunswick Field Office at (912) 265-9336 for manatee and bald eagle;
  - b. National Marine Fisheries Service, Southeast Regional Office at (727) 824-5312 for shortnose sturgeon marine sea turtle;
  - c. Federal Highway Administration, Georgia Division at (404) 562-3630 for all species;
  - d. Georgia Department of Natural Resources, Coastal Resources Division, at (912) 264-7218 for all species; and
  - e. Harvey Keepler, Georgia Department of Transportation, Office of Environment/Location at (404) 699-4401 or (770) 478-7268 for all species.

In the event of possible harm to the manatee, bald eagle, wood stork, shortnose sturgeon, or marine sea turtle, all activity shall cease pending Section 7 consultation by the Department with the U. S. Fish and Wildlife Service or National Marine Fisheries Service and the lead Federal Agency.

16. Dead manatees, shortnose sturgeon, or marine sea turtles shall be secured to an object to prevent the carcass from being swept away by water currents.
17. The Contractor shall keep a log detailing any sightings collisions, or injury to manatees, bald eagles, wood storks, shortnose sturgeon, or marine sea turtles in or adjacent to the project until such time that Final Acceptance of the project is made. Following project completion, the log and a report summarizing any incidents and/or sightings with manatees, bald eagles, wood storks, shortnose sturgeon, and marine sea turtles shall be submitted by the Contractor to the:
- a. Project Engineer;
  - b. Harvey Keepler, Georgia Department of Transportation, Office of Environment/Location, 3993 Aviation Circle, Atlanta, Georgia 30336-1593;
  - c. Federal Highway Administration, Georgia Division, 61 Forsyth Street, S.W., Suite 17T100, Atlanta, Georgia 30303-3104;
  - d. U.S. Fish and Wildlife Service, Brunswick Field Office, 4270 Norwich Street, Brunswick, Georgia 31520;
  - e. Georgia Department of Natural Resources, Coastal Resources Division, 1 Conservation Way, Brunswick, Georgia 31523; and
  - f. National Marine Fisheries Service, Southeast Regional Office, 263 13th Avenue South, St. Petersburg, Florida 33701.
18. All costs pertaining to any requirement contained herein shall be included in the overall bid submitted unless such requirement is designated as a separate Pay Item in the Proposal.



## F



D



**B**


A


SHEET INDEX	
Sheet Title	Sheet Number
COVER SHEET	G001
GENERAL NOTES & LEGEND	G002
OVERALL EXISTING CONDITIONS PLAN	VN101
DEBRIS AND OBSTRUCTIONS	VN102
BORING LOCATIONS	B100
BORING LOGS	B601
SITE DEVELOPMENT PLAN	CN101
DETAILED DREDGING PLAN	CN102
DETAILED DREDGING PLAN	CN103
DETAILED DREDGING PLAN	CN104
DETAILED DREDGING PLAN	CN105
DREDGING CROSS SECTIONS	CN301

**ISSUED FOR BID**  
**NOT TO BE USED FOR CONSTRUCTION**

[illegible]

ISSUE DATE: JULY 30, 2021		
SOLICITATION NO.:	DESIGNED BY: JPB	DRAWN BY: BWA
CONTRACT NO.:	CHECKED BY: MTF	
CATEGORY CODE:	SUBMITTED BY: JPB	FILE NAME: 21-1020 G001-COVER.DWG
	SIZE: ANSI D	

 **Ball Maritime Group, LLC**  
4 Cedar View Court | Savannah, Georgia | 31419 | (912) 462-2914  
www.ballmaritime.com | Copyright © 2021

 **RAYMOND**

CHATHAM COUNTY SLIP 1 DREDGING

COVER SHEET

SHEET ID  
G001

A

B

C

D

E

F

G

GENERAL NOTES

1.

NOTES BELOW ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES.

2.

ALL WORK SHALL CONFORM WITH THESE DRAWINGS, THE PROJECT SPECIFICATIONS, AND ALL CURRENT APPLICABLE CODES WITH THEIR LATEST REVISIONS OF THE FOLLOWING REFERENCE DOCUMENTS:

MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA (GREEN BOOK)

GEORGIA STORMWATER MANAGEMENT MANUAL VOLUMES 1, 2, & THE COASTAL STORMWATER SUPPLEMENT

3.

THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS AND LICENSES AND KEEP COPIES OF THE SAME ONSITE DURING CONSTRUCTION.

4.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES FOUND SHALL BE CALLED TO THE ATTENTION OF THE OWNER AND BE RESOLVED BEFORE PROCEEDING WITH THE WORK.

5.

ALL INFORMATION SHOWN ON THESE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. THE CONTRACTOR SHALL REPORT IMMEDIATELY TO THE OWNER ANY CONDITIONS CONFLICTING WITH THE DRAWINGS. FIELD MODIFICATIONS TO THE DRAWINGS SHALL NOT BE MADE WITHOUT THE CONSENT OF THE OWNER.

6.

THE CONTRACTOR SHALL, ON A DAILY BASIS, REMOVE DEBRIS FROM THE SITE. DISPOSAL OF ALL MATERIALS IS THE CONTRACTOR'S RESPONSIBILITY, EXCEPT AS OTHERWISE NOTED.

7.

THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE LOCAL AND STATE ENVIRONMENTAL PROTECTION STANDARDS, LAWS AND REGULATIONS.

8.

ALL APPLICABLE SAFETY REGULATIONS SHALL BE STRICTLY FOLLOWED. METHODS OF DEMOLITION, CONSTRUCTION, AND ERECTION OF STRUCTURAL MATERIAL IS THE CONTRACTOR'S RESPONSIBILITY .

9.

CONTRACTOR SHALL SUBMIT A WRITTEN CONSTRUCTION PHASING PLAN TO THE OWNER FOR THEIR APPROVAL PRIOR TO ANY ONSITE CONSTRUCTION ACTIVITY. DO NOT BLOCK ACCESS TO THE ADJACENT FACILITIES DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER.

10.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS SHOWN ON THE PLANS WITH THE EXISTING CONDITIONS IN THE FIELD PRIOR TO COMMENCING DEMOLITION, FABRICATION, AND CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS.

11.

THE CONTRACTOR SHALL KEEP AND MAINTAIN A SET OF PROJECT PLANS AND SPECIFICATIONS ON THE SITE AT ALL TIMES.

12.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WITH MATCHING MATERIALS ANY PAVEMENT, DRIVEWAYS, WALKS, CURBS, PAVEMENT MARKINGS, ETC. THAT MUST BE CUT OR REMOVED, OR THAT ARE DAMAGED DURING CONSTRUCTION.

13.

CONTRACTOR SHALL STOP WORK AND NOTIFY ENGINEER IF ANYTHING OF HISTORIC OR ARCHEOLOGICAL SIGNIFICANCE IS ENCOUNTERED.

14.

FOR SITE PLANS, SEE SHEETS CN101 TO CN105

COORDINATION

1.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH OWNER.

2.

THE CONTRACTOR SHALL SUBMIT A SCHEDULE FOR CONSTRUCTION TO OWNER, IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

3.

IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL ARRANGE A MEETING WITH OWNER TO DISCUSS COORDINATION OF CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE SUBJECT TO AND COMPLY WITH COORDINATION REQUIREMENTS OF OWNER.

CONSTRUCTION

1.

SUBMITTALS ON MATERIALS FOR THIS PROJECT SHALL BE PROVIDED TO THE OWNER FOR APPROVAL PRIOR TO ORDERING AND BEGINNING CONSTRUCTION.

2.

ALL CONSTRUCTION ACTIVITIES SHALL ONLY TAKE PLACE WITHIN PROJECT LIMITS, UNLESS OTHERWISE NOTED.

3.

ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATIONS AND STANDARDS.

4.

EXISTING VEGETATION SURROUNDING THE CONSTRUCTION AREA SHALL REMAIN IN A NATURAL STATE. DAMAGES BY CONTRACTOR OUTSIDE THE PROJECT LIMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

5.

CONTRACTOR SHALL REMAIN WITHIN PROJECT LIMITS DURING ALL CONSTRUCTION ACTIVITIES.

SURVEY NOTES

1.

VERTICAL DATUM - ELEVATIONS SHOWN ARE IN FEET AND ARE BASED ON NAVD 88 DATUM.

2.

HORIZONTAL DATUM - GEORGIA STATE PLANE COORDINATE SYSTEM, NAD 83.

3.

THESE DRAWINGS ARE BASED ON:

A FIELD SURVEY PREPARED BY SHUPE SURVEYING COMPANY, DATED JUNE 9, 2021,

SUPPLEMENTED WITH CHATHAM COUNTY LIDAR, AND

A HYDROGRAPHIC SURVEY PREPARED BY BOTTOM LINE ECHO IN 2014 FOR THOMAS & HUTTON.

4.

THE FOLLOWING DATA IS PROVIDED REGARDING TIDAL INFORMATION. TIDAL INFORMATION WAS OBTAINED FROM THE NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA), VDATUM SOFTWARE. ELEVATIONS ARE REFERENCED ON THE 1983-2001 EPOCH & NAVD 88 DATUM.

MHHW = +4.03 FT

MHW = +3.70 FT

MTL = (-)0.18 FT

MLW = (-)4.06 FT

MLLW = (-)4.27 FT

5.

HORIZONTAL & VERTICAL CONTROL POINTS ARE INDICATED ON THE EXISTING CONDITIONS PLANS.

6.

FOR EXISTING CONDITIONS PLAN, SEE SHEETS VN101 THROUGH VN102.

DREDGING NOTES

1.

THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF BULKHEADS ADJACENT TO THE WORK TO REMAIN IN PLACE.

2.

ALL MATERIALS REMOVED BY MECHANICAL DREDGING AND/OR EXCAVATION SHALL BE REMOVED FROM THE SITE BY BARGE UNLESS OTHER MEANS PROVIDED BY THE CONTRACTOR ARE APPROVED BY THE OWNER. THE OFF-SITE DISPOSAL PLAN MUST BE APPROVED BY THE OWNER AND IN COMPLIANCE WITH ALL LOCAL, STATE, AND FEDERAL PERMITS.

3.

THE BASIS OF DESIGN FOR THIS PROJECT ASSUMES DREDGED MATERIAL IS REMOVED MECHANICALLY. OTHER MEANS OF DREDGING MUST BE APPROVED BY THE OWNER AND ARE SUBJECT TO THE SPECIAL CONDITIONS OF THE USACE PERMIT.

4.

TIMBER PILES AND DEBRIS LOCATED WITHIN THE PROJECT LIMITS ARE TO BE REMOVED WITH THE DREDGED MATERIAL AND DISPOSED OFFSITE BY THE CONTRACTOR. UNIT COSTS FOR DISPOSAL OF DREDGED MATERIAL SHALL INCLUDE THE DEBRIS TO

BE REMOVED.

FOR DREDGING PLANS, SEE SHEETS CN101 TO CN105.

GEOTECHNICAL NOTES

1.

A LIMITED GEOTECHNICAL EXPLORATION HAS BEEN PERFORMED ON THE SITE AND IS SUMMARIZED IN A GEOTECHNICAL INFORMATION PREPARED BY TERRACON, DATED OCTOBER 2015.

2.

FOR BORING LOCATIONS, SEE SHEET B101.

3.

FOR BORING LOGS, SEE SHEET B601.

ENVIRONMENTAL NOTES

1.

WETLANDS DELINEATION PER PERMIT NO. SAS-2005-01453 FOR SLIP ONE DREDGING & RIVER WALK INSTALLATION PROJECT. ORIGINALLY PERMITTED MARCH 1, 2007. MODIFICATION AUTHORIZED VIA USACE LETTER DATED FEBRUARY 3, 2017.

2.

CONSTRUCTION ENTRANCE SHALL BE LOCATED ALONG THE SAVANNAH RIVER NAVIGATION CHANNEL..

3.

PROJECT AREA IS 7.22 ACRES. THE PROJECT REQUIRES THE FOLLOWING PERMIT:

404 WATER QUALITY PERMIT FROM USACE FOR DREDGING ACTIVITIES.

4.

FOR SOIL EROSION & SEDIMENTATION CONTROL DETAIL, SEE SHEET CN101.

5.

IF PROTECTED SPECIES ARE DETECTED WITHIN THE PROJECT AREA DURING CONSTRUCTION, THE CONTRACTOR SHALL CEASE WORK IMMEDIATELY AND INFORM THE OWNER.

LEGEND

PROPERTY LINE

-----

PROPOSED

ADJACENT PROPERTY LINE

-----

CHANNEL/DITCH TOP OF BANK

- - - - -

CHANNEL/DITCH TOE OF BANK

-- · --- · --

CHANNEL/DITCH CENTER

-- · --- · --

TREE LINE

~~~~~

CONTOURS

-- 8 --

\_\_\_\_\_ 8 \_\_\_\_\_

UNDERGROUND ELECTRIC

\_\_\_\_ UE \_\_\_\_

OVERHEAD ELECTRIC

\_\_\_\_ OHF \_\_\_\_

POWER POLE

⌋

COMMUNICATION

\_\_\_\_ COM \_\_\_\_

WATER PIPE

\_\_\_\_ UW \_\_\_\_

\_\_\_\_\_ W \_\_\_\_\_

WATER MANHOLE

(W)

WATER LATERAL STUBOUT

●<sub>w</sub>

WATER VALVE

✕

☒

FIRE HYDRANT

○

SEWER PIPE

\_\_\_\_ SS \_\_\_\_

\_\_\_\_\_ SS \_\_\_\_\_

SEWER MANHOLE

(S)

SEWER CLEAN OUT

—

◯

STORM PIPE

\_\_\_\_ SD \_\_\_\_

STORM MANHOLE

(D)

WETLAND

[x x x]

ABBREVIATIONS:

APPROX = APPROXIMATE  
ASTM = AMERICAN SOCIETY FOR TESTING AND MATERIALS  
CLR = CLEAR  
CMP = CONCRETE MONUMENT FOUND  
CMP = CORRUGATED METAL PIPE  
CONC = CONCRETE  
DB = DEED BOOK  
DEMO = DEMOLITION  
DIM = DIMENSION  
DWG = DRAWING  
E = EAST  
EA = EACH  
EL = ELEVATION  
ELEVV = ELEVATION  
EPD = ENVIRONMENTAL PROTECTION DIVISION  
ETC = ET CETERA  
EXIST = EXISTING  
FG = FINISHED GRADE  
FPS = FEET PER SECOND  
FT = FEET  
GDOT = GEORGIA DEPARTMENT OF TRANSPORTATION  
HWY = HIGHWAY  
IAW = IN ACCORDANCE WITH  
IN = INCHES  
INC = INCORPORATED  
INV = INVERT  
IRF = IRON ROD FOUND  
IRS = IRON ROD SET  
LB = POUND  
LF = LINEAR FEET  
LH = LEFT HAND  
MAX = MAXIMUM  
MDD = MAXIMUM DRY DENSITY  
MIN = MINIMUM  
MISC = MISCELLANEOUS  
N = NORTH  
N/F = NOW OR FORMERLY  
NAD = NORTH AMERICAN DATUM  
NAVD = NORTH AMERICAN VERTICAL DATUM  
NIC = NOT IN CONTRACT  
No. = NUMBER  
NTS = NOT TO SCALE  
OC = ON CENTER  
OHPL = OVERHEAD POWER LINE  
PG = PAGE  
PKF = P.K. NAIL FOUND  
PP = POWER POLE  
R/W = RIGHT OF WAY  
RCP = REINFORCED CONCRETE PIPE

REQ'D = REQUIRED  
RH = RIGHT HAND  
S = SOUTH  
SCH = SCHEDULE  
SF = SQUARE FEET  
SR = STATE ROAD  
ST = STREET  
STA = STATION  
STD = STANDARD  
SY = SQUARE YARD  
TP = TOP OF PAVEMENT  
TW = TOP OF WALK (SIDEWALK)  
TYP = TYPICAL  
UNON = UNLESS OTHERWISE NOTED  
W = WEST  
WI = WITH  
WP = WORK POINT  
# = NUMBER OR POUNDS  
& = AND  
@ = AT  
℄ = CENTERLINE  
Ø = DIAMETER  
ε = PLATE  
° = SECONDS OR INCH  
' = MINUTES OR FEET  
± = PLUS OR MINUS  
° = DEGREES  
% = PERCENT

ISSUED FOR BID

NOT TO BE USED FOR CONSTRUCTION

SHEET ID G002

CHATHAM COUNTY SLIP 1 DREDGING

GENERAL NOTES & LEGEND

R BALL MARITIME GROUP, LLC

DESIGNED BY: JPB

CHECKED BY: MTB

SUBMITTED BY: [Signature]

FILE NAME: 21-1020-G002-GENNOTES.DWG

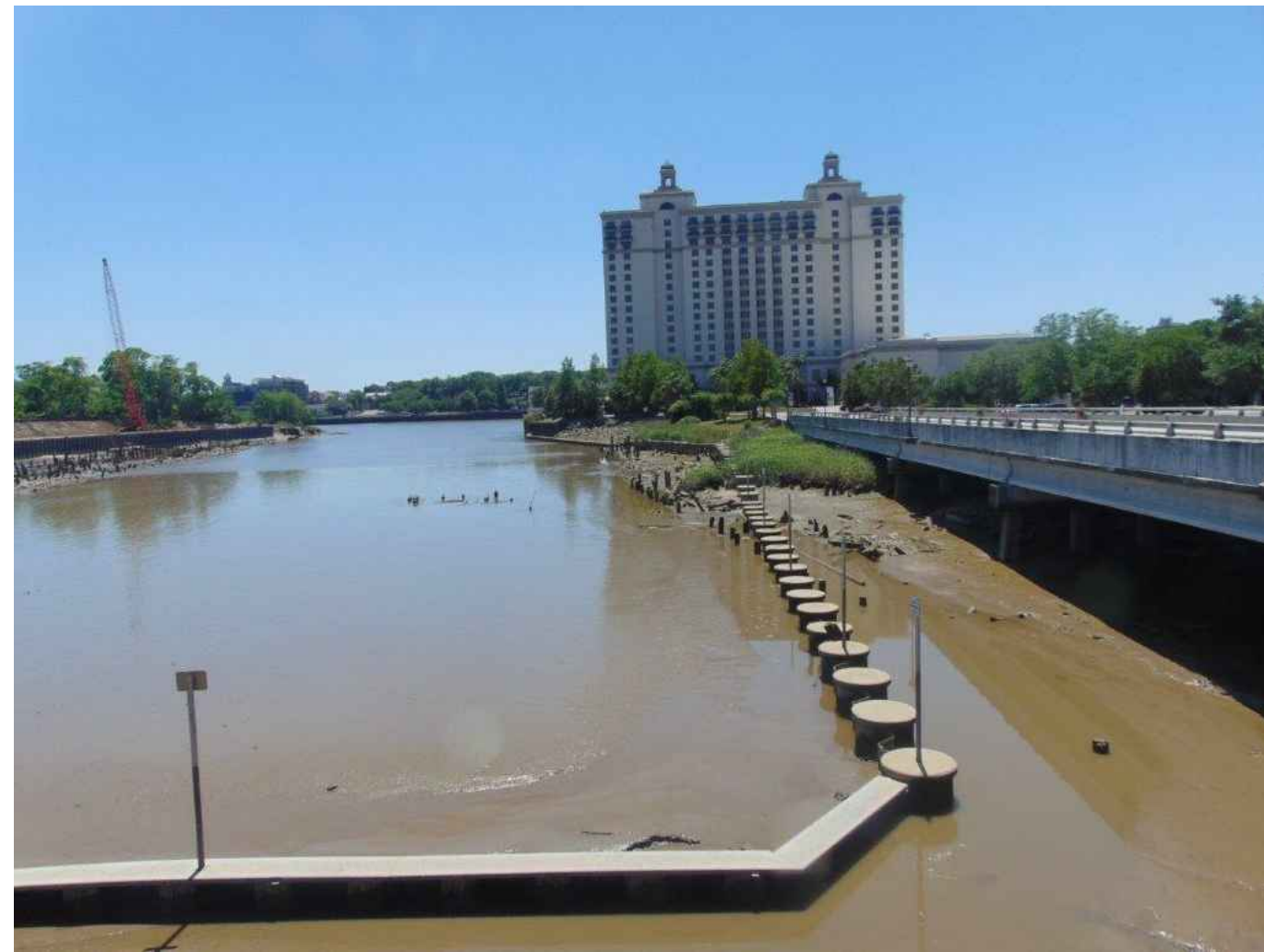
DATE: 8/1/21

MARK DESCRIPTION





## TYPICAL NORTHERN SHEET PILE WALL



## TYPICAL WESTERN SHEET PILE WALL

NOTES:

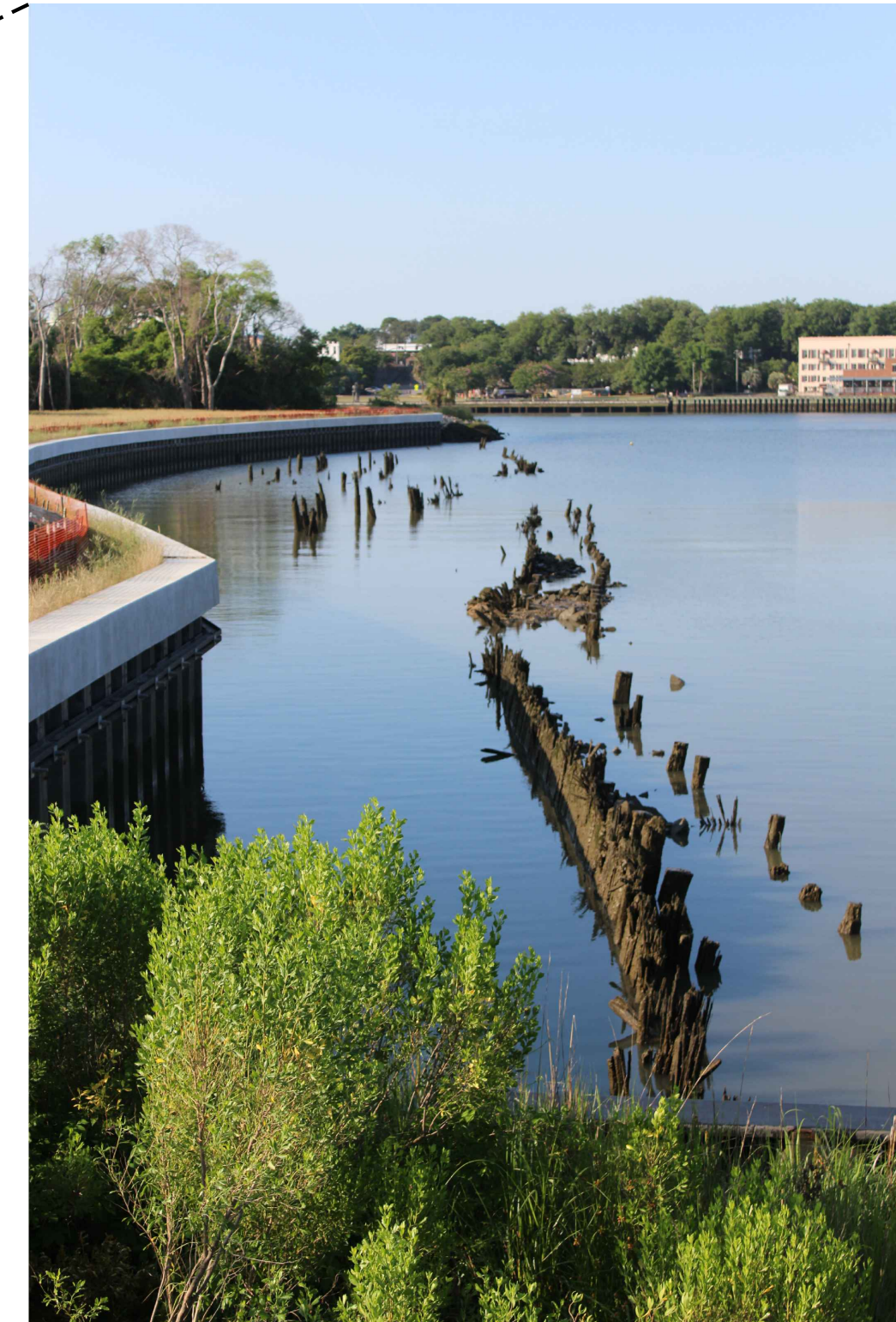
1. DEBRIS & OBSTRUCTIONS FOUND ARE ESTIMATED FROM FIELD OBSERVATIONS AND AN ARCHAEOLOGICAL SURVEY, PREPARED BY BROCKINGTON ASSOCIATES.
2. VIEWS ON THIS PLAN REFLECT DEBRIS, BUT ARE NOT ALL INCLUSIVE OF DEBRIS THAT MAY BE ENCOUNTERED.




PROJECT LIMITS -


## DEBRIS AND OBSTRUCTIONS

SCALE: 1" = 80'

[illegible]

|                                                    |                      |                   |
|----------------------------------------------------|----------------------|-------------------|
| ISSUE DATE:<br>JULY 30, 2021                       | DESIGNED BY:<br>JPS  | SOLICITATION NO.: |
| DRAWN BY:<br>BWA                                   | CHECKED BY:<br>MTF   | CONTRACT NO.:     |
|                                                    | SUBMITTED BY:<br>JPS | CATEGORY CODE:    |
| FILE NAME:<br>21-1020 VH102-DEBRISOBSTRUCTIONS.DWG |                      | SIZE:<br>ANSI D   |

 **Ball Maritime Group, LLC**  
4 Cedar View Court | Savannah, Georgia | 31410 | (912) 662-2914  
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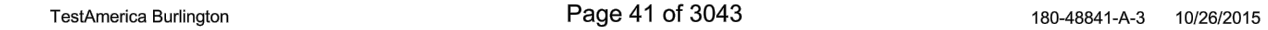
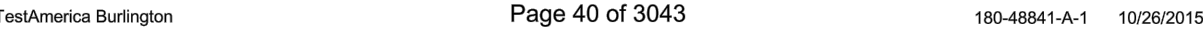
 **RAYMOND**

# CHATHAM COUNTY SLIP 1 DREDGING

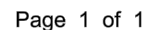
SHEET ID  
VN102

**ISSUED FOR BID**  
NOT TO BE USED FOR CONSTRUCTION

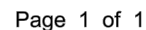




1. BORING LOCATIONS ARE IN THE AREA THAT HAS BEEN PARTIALLY EXCAVATED DURING THE EASTERN SHEET PILE WALL INSTALLATION. BORINGS WERE COMPLETED PRIOR TO EXCAVATION.



Terracon  
2201 Rowland Avenue, Savannah, Georgia 31404  
Phone: 912-629-4000, Fax: 912-629-4001

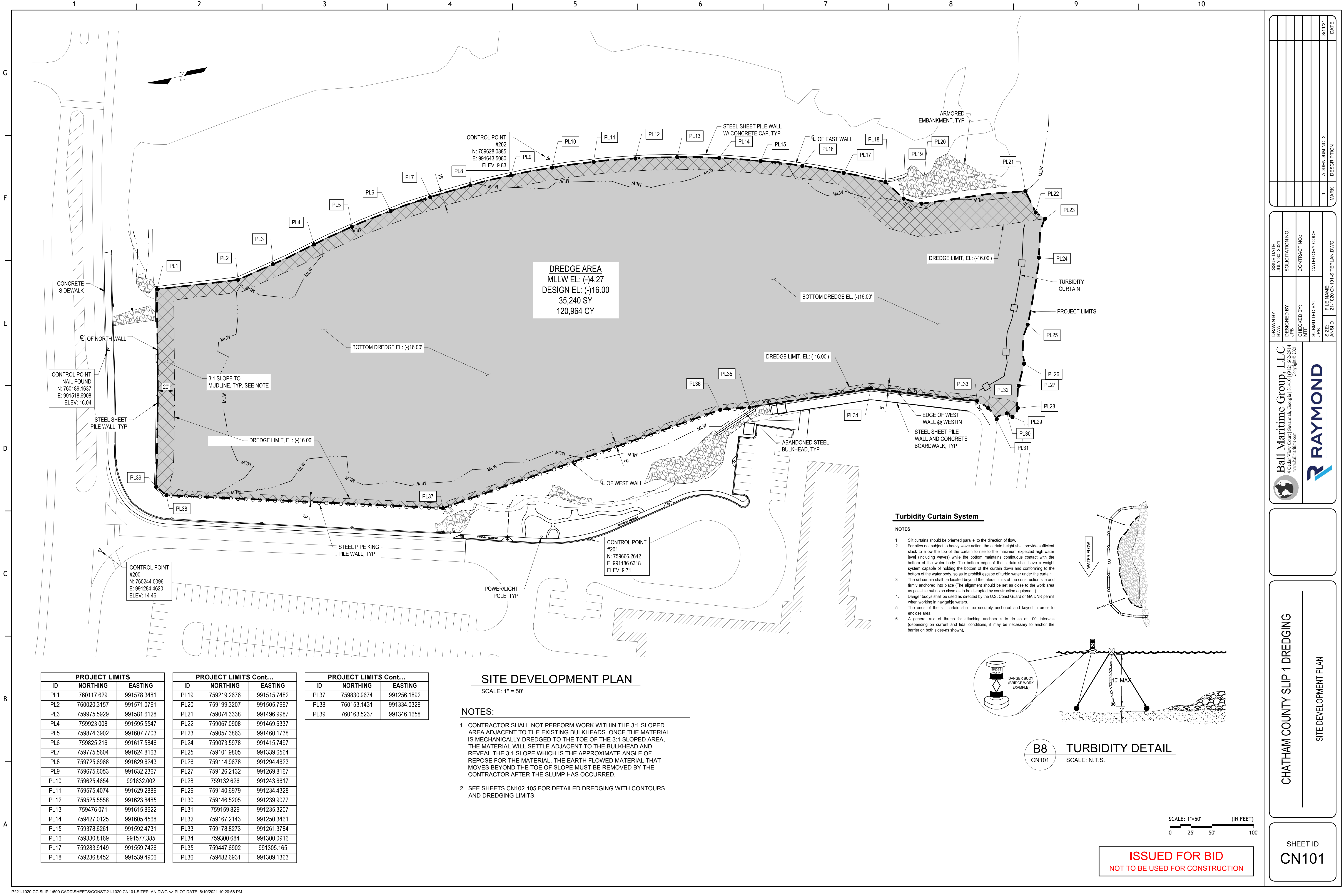


Terracon  
2201 Rowland Avenue, Savannah, Georgia 31404  
Phone: 912-629-4000, Fax: 912-629-4001

CHATHAM COUNTY SLIP 1 DREDGING

## BORING LOGS

SHEET ID  
B601



| PROJECT LIMITS |             |             | PROJECT LIMITS Cont... |             |             | PROJECT LIMITS Cont... |             |             |
|----------------|-------------|-------------|------------------------|-------------|-------------|------------------------|-------------|-------------|
| ID             | NORTHING    | EASTING     | ID                     | NORTHING    | EASTING     | ID                     | NORTHING    | EASTING     |
| PL1            | 760117.629  | 991578.3481 | PL19                   | 759219.2676 | 991515.7482 | PL37                   | 759830.9674 | 991256.1892 |
| PL2            | 760020.3157 | 991571.0791 | PL20                   | 759199.3207 | 991505.7997 | PL38                   | 760153.1431 | 991334.0328 |
| PL3            | 759975.5929 | 991581.6128 | PL21                   | 759074.3338 | 991496.9987 | PL39                   | 760163.5237 | 991346.1658 |
| PL4            | 759923.008  | 991595.5547 | PL22                   | 759067.0908 | 991469.6337 |                        |             |             |
| PL5            | 759874.3902 | 991607.7703 | PL23                   | 759057.3863 | 991460.1738 |                        |             |             |
| PL6            | 759825.216  | 991617.5846 | PL24                   | 759073.5978 | 991415.7497 |                        |             |             |
| PL7            | 759775.5604 | 991624.8163 | PL25                   | 759101.9805 | 991339.8564 |                        |             |             |
| PL8            | 759725.6968 | 991629.6243 | PL26                   | 759114.9678 | 991294.4623 |                        |             |             |
| PL9            | 759675.6053 | 991632.2367 | PL27                   | 759126.2132 | 991269.8167 |                        |             |             |
| PL10           | 759625.4654 | 991632.002  | PL28                   | 759132.626  | 991243.6617 |                        |             |             |
| PL11           | 759575.4074 | 991629.2889 | PL29                   | 759140.6979 | 991234.4328 |                        |             |             |
| PL12           | 759525.5558 | 991623.8485 | PL30                   | 759146.5205 | 991239.9077 |                        |             |             |
| PL13           | 759476.071  | 991615.8622 | PL31                   | 759159.829  | 991235.3207 |                        |             |             |
| PL14           | 759427.0125 | 991605.4568 | PL32                   | 759167.2143 | 991250.3461 |                        |             |             |
| PL15           | 759378.6261 | 991592.4731 | PL33                   | 759178.8273 | 991261.3784 |                        |             |             |
| PL16           | 759330.8169 | 991577.385  | PL34                   | 759300.684  | 991300.0916 |                        |             |             |
| PL17           | 759283.9149 | 991559.7426 | PL35                   | 759447.6902 | 991305.165  |                        |             |             |
| PL18           | 759236.8452 | 991539.4906 | PL36                   | 759482.6931 | 991309.1363 |                        |             |             |

**SITE DEVELOPMENT PLAN**  
SCALE: 1" = 50'

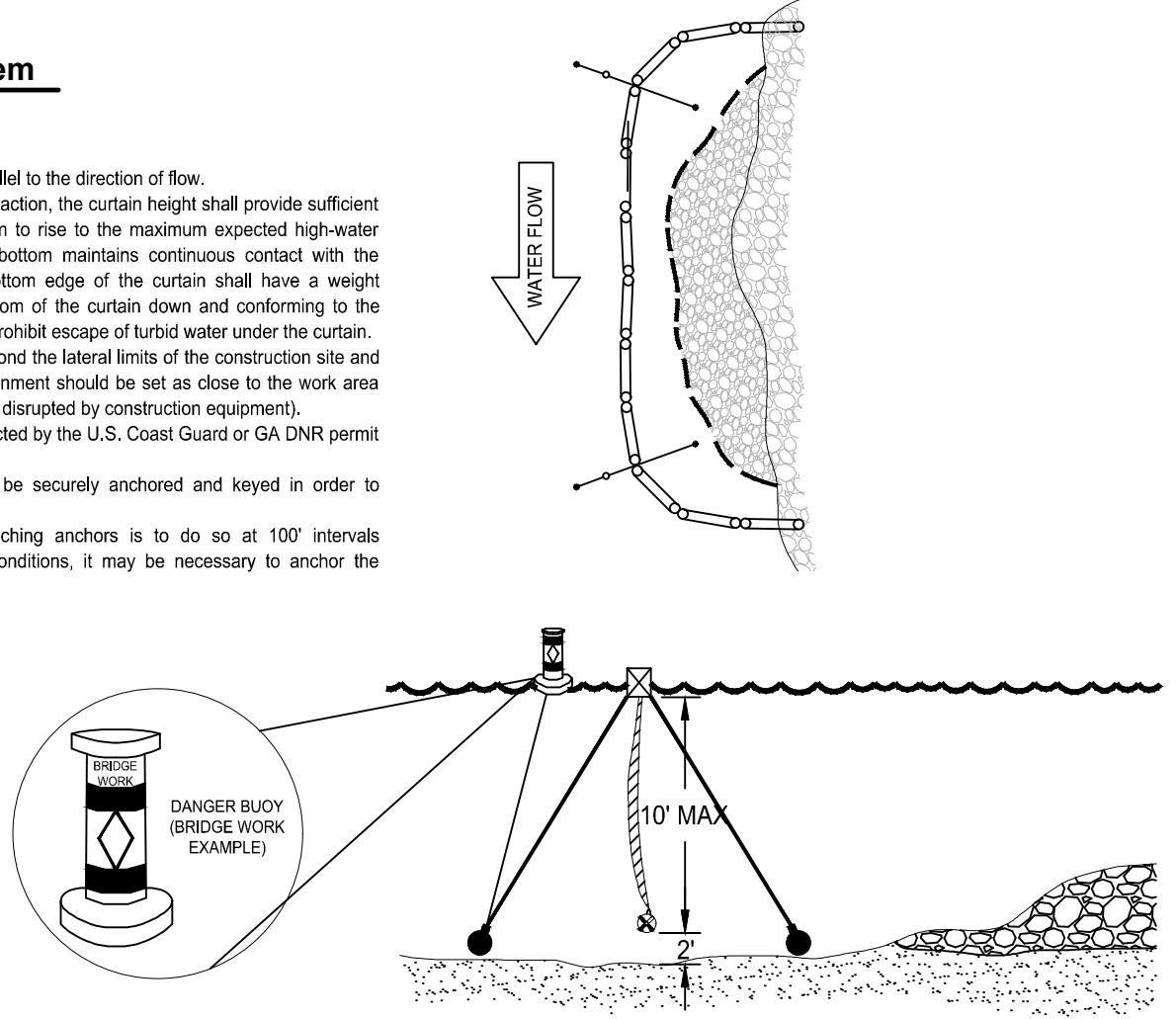
**NOTES:**

1. CONTRACTOR SHALL NOT PERFORM WORK WITHIN THE 3:1 SLOPED AREA ADJACENT TO THE EXISTING BULKHEADS. ONCE THE MATERIAL IS MECHANICALLY DREDGED TO THE TOE OF THE 3:1 SLOPED AREA, THE MATERIAL WILL SETTLE ADJACENT TO THE BULKHEAD AND REVEAL THE 3:1 SLOPE WHICH IS THE APPROXIMATE ANGLE OF REPOSE FOR THE MATERIAL. THE EARTH FLOWED MATERIAL THAT MOVES BEYOND THE TOE OF SLOPE MUST BE REMOVED BY THE CONTRACTOR AFTER THE SLUMP HAS OCCURRED.

2. SEE SHEETS CN102-105 FOR DETAILED DREDGING WITH CONTOURS AND DREDGING LIMITS.

**Turbidity Curtain System**

- NOTES**
- Silt curtains should be oriented parallel to the direction of flow.
  - For sites not subject to heavy wave action, the curtain height shall provide sufficient slack to allow the top of the curtain to rise to the maximum expected high-water level (including waves) while the bottom maintains continuous contact with the bottom of the water body. The bottom edge of the curtain shall have a weight system capable of holding the bottom of the curtain down and conforming to the bottom of the water body, so as to prohibit escape of turbid water under the curtain.
  - The silt curtain shall be located beyond the lateral limits of the construction site and firmly anchored into place (The alignment should be set as close to the work area as possible but no so close as to be disrupted by construction equipment).
  - Danger buoys shall be used as directed by the U.S. Coast Guard or GA DNR permit when working in navigable waters.
  - The ends of the silt curtain shall be securely anchored and keyed in order to enclose area.
  - A general rule of thumb for attaching anchors is to do so at 100' intervals (depending on current and tidal conditions, it may be necessary to anchor the barrier on both sides-as shown).



**B8**  
CN101  
**TURBIDITY DETAIL**  
SCALE: N.T.S.

SCALE: 1"=50'  
(IN FEET)  
0 25' 50' 100'

**ISSUED FOR BID**  
NOT TO BE USED FOR CONSTRUCTION

CHATHAM COUNTY SLIP 1 DREDGING

SITE DEVELOPMENT PLAN

SHEET ID

CN101

DRAWN BY:  
BIM

DESIGNED BY:  
JPB

CHECKED BY:  
MTF

SUBMITTED BY:  
JPB

ISSUE DATE:  
8/10/2021

SOLICITATION NO.:  
314107 (913) 662-2914  
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CONTRACT NO.:

CATEGORY CODE

FILE NAME:  
21-1020 CN101-SITEPLAN.DWG

1

ADDENDUM NO. 2

MARK

8/11/21

DATE



SCALE: N.T.5

1. THE DESIGN DREDGING LIMITS ARE AT THE OFFSETS SHOWN FROM EACH RESPECTIVE BULKHEAD. NO MATERIAL WILL BE PHYSICALLY REMOVED WITHIN THESE OFFSETS. THE OFFSETS WILL BE INCREASED AND OR DECREASED AS DIRECTED BY THE OWNER DURING CONSTRUCTION IN ORDER FOR NATURAL MUD SLUMP TO RESULT IN THE APPROXIMATE MUD ELEVATION AT THE FACE OF THE WALLS.
2. CONTOUR LINES SHOWN ARE APPROXIMATE RESULT OF MUD SLUMP IN RESPONSE TO MATERIAL REMOVAL TO DREDGING LIMITS.



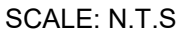
|                             |                                                   |
|-----------------------------|---------------------------------------------------|
| <b>DRAWN BY:</b><br>BWA     | <b>ISSUE DATE:</b><br>JULY 30, 2021               |
| <b>DESIGNED BY:</b><br>JPB  | <b>SOLICITATION NO.:</b>                          |
| <b>CHECKED BY:</b><br>MTF   | <b>CONTRACT NO.:</b>                              |
| <b>SUBMITTED BY:</b><br>JPB | <b>CATEGORY CODE:</b>                             |
| <b>SIZE:</b><br>ANSI D      | <b>FILE NAME:</b><br>21-1020 CN102-DREDGEPLAN.DWG |

## DETAILED DREDGING PLAN

SHEET ID  
CN102

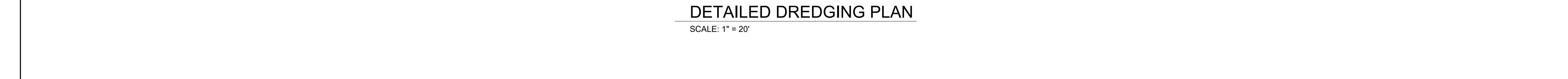


SCALE: 1" = 20'



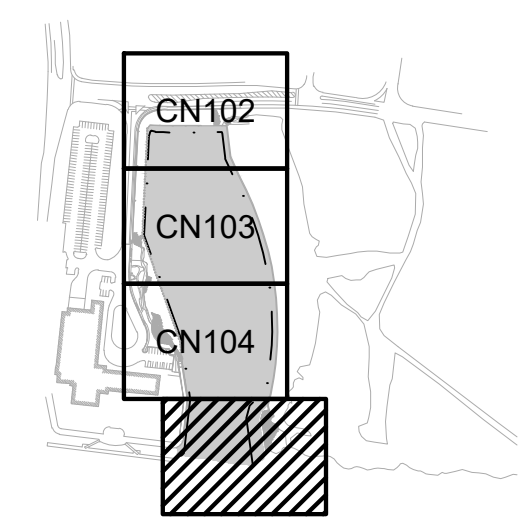
1. THE DESIGN DREDGING LIMITS ARE AT THE OFFSETS SHOWN FROM EACH RESPECTIVE BULKHEAD. NO MATERIAL WILL BE PHYSICALLY REMOVED WITHIN THESE OFFSETS. THE OFFSETS WILL BE INCREASED AND/OR DECREASED AS DIRECTED BY THE OWNER DURING CONSTRUCTION IN ORDER FOR NATURAL MUD SLUMP TO RESULT IN THE APPROXIMATE MUD ELEVATION AT THE FACE OF THE WALLS.
2. CONTOUR LINES SHOWN ARE APPROXIMATE RESULT OF MUD SLUMP IN RESPONSE TO MATERIAL REMOVAL TO DREDGING LIMITS.

SHEET ID  
CN103



- ## NOTES:
1. THE DESIGN DREDGING LIMITS ARE AT THE OFFSETS SHOWN FROM EACH RESPECTIVE BULKHEAD. NO MATERIAL WILL BE PHYSICALLY REMOVED WITHIN THESE OFFSETS. THE OFFSETS WILL BE INCREASED AND OR DECREASED AS DIRECTED BY THE OWNER DURING CONSTRUCTION IN ORDER FOR NATURAL MUD SLUMP TO RESULT IN THE APPROXIMATE MUD ELEVATION AT THE FACE OF THE WALLS.
  2. CONTOUR LINES SHOWN ARE APPROXIMATE RESULT OF MUD SLUMP IN RESPONSE TO MATERIAL REMOVAL TO DREDGING LIMITS.

SHEET ID  
CN104



## KEY MAP


SCALE: N.T.S.

NOTES:

1. THE DESIGN DREDGING LIMITS ARE AT THE OFFSETS SHOWN FROM EACH RESPECTIVE BULKHEAD. NO MATERIAL WILL BE PHYSICALLY REMOVED WITHIN THESE OFFSETS. THE OFFSETS WILL BE INCREASED AND OR DECREASED AS DIRECTED BY THE OWNER DURING CONSTRUCTION IN ORDER FOR NATURAL MUD SLUMP TO RESULT IN THE APPROXIMATE MUD ELEVATION AT THE FACE OF THE WALLS.
2. CONTOUR LINES SHOWN ARE APPROXIMATE RESULT OF MUD SLUMP IN RESPONSE TO MATERIAL REMOVAL TO DREDGING LIMITS.

|      |                |         |
|------|----------------|---------|
|      |                |         |
|      |                |         |
|      |                |         |
|      |                |         |
|      |                |         |
|      |                |         |
|      |                |         |
| 1    | ADDENDUM NO. 2 | 8/11/21 |
| MARK | DESCRIPTION    | DATE    |

|                                            |  |
|--------------------------------------------|--|
| ISSUE DATE:<br>JULY 30, 2021               |  |
| SOLICITATION NO.:                          |  |
| CONTRACT NO.:                              |  |
| CATEGORY CODE:                             |  |
| FILE NAME:<br>21-1020 CN102-DREDGEPLAN DWG |  |
| SIZE:<br>ANSI D                            |  |
| DRAWN BY:<br>BWA                           |  |
| DESIGNED BY:<br>JPB                        |  |
| CHECKED BY:<br>MTF                         |  |
| SUBMITTED BY:<br>JPB                       |  |

 **Ball Maritime Group, LLC**  
4 Cedar View Court | Savannah, Georgia | 31410<sup>10</sup> | (912) 662-2914  
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CHATHAM COUNTY SLIP 1 DREDGING

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DETAILED DREDGING PLAN

SHEET ID  
**CN105**

