

# REQUEST FOR BIDS NO. 2025-03

Cecil Circle Culvert
Replacement
for
Town of James Island

#### PROJECT OVERVIEW

**DATE:** 9/3/2025

**SOLICITATION NUMBER:** RFB No. 2025-03

**DESCRIPTION OF WORK:** Removal of a 12" RCP pipe and replacement it with a 15" RCP

pipe and riprap outfall. Repair of the dirt road.

PRE-BID CONFERENCE: NO

**DUE DATE FOR WRITTEN** 09/25/2025 at 3:00 p.m.

QUESTIONS: 843-795-4141 <u>lcabiness@thejlagroup.com</u>

Any issued addenda will be posted to the website at

www.jamesislandsc.us/bids

**OPENING DATE/TIME:** 10/2/2025 at 3:00 p.m.

LOCATION: Town of James Island

1122 Dills Bluff Rd James Island, SC 29412

This solicitation does not commit the Town of James Island to award a contract, to pay any cost incurred in the preparation of bids submitted, or to procure or contract for the services. The Town reserves the right to accept or reject any, all or any part of bids received as a result of this request, or to cancel in part or in its entirety this Invitation for Bids if it is in the best interest of the Town to do so. The Town will be the sole judge as to whether bids submitted meet all requirements contained in this solicitation.

#### SECTION I. – INTRODUCTION AND BACKGROUND

This Request for Bid (RFB) solicitation is issued for the Town of James Island to obtain adequate information from interested firms and individuals with the qualifications necessary to replace a damaged stormwater culvert with approximately 136 linear feet of 15" RCP pipe. This includes cutting vegetation and removing trees, hauling away the drainage structures and vegetative debris, repairing the existing dirt road and seeding disturbed areas outside the travel surface of the road. The Town desires to select and negotiate an acceptable contract with such a firm or individual to perform the activities found in **SECTION IV. – SCOPE OF SERVICES**. It is the intent of the Town that this RFB will serve as the basis for award of a contract for completion of this work in a safe and timely manner.

Every effort has been made to ensure that all information needed by the Bidder is included herein; however, questions are allowed and encouraged to clear up any information as described herein, etc. The Town will not accept telephone calls or visits regarding this Solicitation. All questions shall be in writing and addressed to: Laura Cabiness, Town of James Island, 1122 Dills Bluff Road, Charleston, SC 29412, email to: lcabiness@thejlagroup.com. All questions must be received before 3:00 pm on September 25, 2025. The Town of James Island reserves the right, and has a duty, to hire the most qualified provider for the Scope of Services requested. This may result in the Town contracting with any firm or individual that responds to this RFB that, in the sole determination of the Town Council of the Town of James Island, is qualified to complete the job, regardless of the bid price. The Town may also disqualify bidders and/or cancel, rebid, or extend the RFBor bid review process pursuant to Town of James Island and State of South Carolina procurement laws.

The Mayor, Town Council, and Town Staff may be involved in the evaluation of all bids and will use criteria including, but not limited to, cost, experience, availability, capacity, references, knowledge of James Island, etc.

Prior to awarding a Contract, the Mayor, Town Council or Town Staff may require other additional information to determine the Respondent's ability to complete the terms of the Contract. Failure to provide this information in a timely manner may result in the Town rejecting the Bid and finding the Respondent non-responsive.

#### SECTION II. – SUBMITTAL INSTRUCTIONS

Respondents are responsible for examining all solicitation documents, including any Addenda. Any discrepancies in documents should be immediately provided to the designee identified in Section I. above for clarification.

An on-site pre-bid conference will NOT be held.

No allowance will be made for misunderstandings or oversight of the Respondent, after the submittal due date.

Elements of the Submittal must include:

- A) Completed and signed Bid Form
- B) Statement committing to an Affirmative Action and Drug-Free workplace.
- C) A statement that the Respondent, if applicable, will follow appropriate traffic controls and regulations and the latest OSHA safety requirements.
- D) A statement regarding the willingness to obtain or maintain commercial liability insurance in the amount of \$1,000,000 for all work, listing the Town of James Island as an additional insured.
- E) A signed receipt of any Addenda issued.

Bidder shall submit three (3) hardcopies in a sealed envelope, clearly marked with the solicitation number and title as found prior in this RFP. Respondents are responsible for the delivery of submittals prior to the submittal deadline and during the normal Town Hall business hours of 9:00 A.M. to 5:00 P.M., Monday through Friday. Submittals received after the due date may be disqualified.

Submittals are to be mailed to:

Town of James Island

P.O. Box 12240

Charleston, SC 29422 Attn: Mayor Brook Lyon

Hand-carried to: Town of James Island

1122 Dills Bluff Road Charleston, SC 29412 Attn: Mayor Brook Lyon

Submittals received by the bid opening due date will be publicly opened on the date and time specified and read aloud. Only the submittal of the successful Respondent shall be available for public inspection after the award of a contract upon written request. Proprietary or confidential information marked as such in any submittal shall not be disclosed without prior written consent of the Respondent. Manufacturer's part or model numbers, descriptions and cost information, etc. cannot be considered Proprietary.

#### **SECTION III. – GENERAL CONDITIONS:**

Addenda:

Changes or corrections may be made after the solicitation document is issued and prior to the Proposal Due Date. In such cases, the Town will issue a written Addenda describing the changes. Such Addenda will take precedence over the prior documentation and a signed receipt of Addenda will become part of the required submission documents. The Town is not responsible for any oral instructions.

*Holding Time:* The Respondent agrees that, by responding to this RFB, the Proposal may

not be withdrawn for a period of ninety (90) days following the Proposal

Opening Date.

<u>Lawfulness:</u> All firms or individuals with which the Town of James Island contracts

with are required to comply with the laws of any agency of the United States, the State of South Carolina, the County of Charleston, and the Town of James Island. By responding to this RFP, all respondents agree to comply with Federal, State, and Local laws. This includes securing any and all required permits, utility locations, and business licenses to work in

the Town of James Island.

Gratuities: Amended Section 8-13-420 of the 1976 Code of Laws of South Carolina

stated: "It shall be a breach of ethical standards for any payment, gratuity, or offer of employment to be made by or on behalf of a Sub-Contractor or any person associated therewith as an inducement for the award of a Sub-Contract order." All RFP awards made shall conform to applicable South

Carolina statutes.

<u>Prime Contractor:</u> The Respondent is expected to be the Prime Contractor named in any

negotiated contract between the Town and the Respondent because of any award of this solicitation. The Prime Contractor is not an employee of the Town and is expected to be the responsible party regarding elements including, but not limited to, quality, timeliness, responsiveness to

residents, cleanliness of worksite, safety, etc.

#### **SECTION IV. – SCOPE OF SERVICES:**

- 1. The Town of James Island requires:
- 2. Survey to establish limits of the existing drainage easement.
- 3. Confirmation of utility locations both horizontally and vertically prior to land disturbance. Minimal excavation may be performed solely for exposing the existing utilities.
- 4. All trees and underbrush to be removed from the easement, including stumps to prevent intrusion into the new culvert.
- 5. Removal of approximately 136 feet of 12" RCP culvert and installation of a new 15" culvert with a riprap apron at the outfall.
- 6. All trees, vegetation, structures, and debris are to be removed.
- 7. Remove any excess dirt not used as fill.
- 8. Repair of the existing dirt road and hydroseeding of disturbed areas outside the dirt travel way
- 9. Grade and seed all surrounding disturbed property.

The Contractor shall have the easement limits marked using a licensed surveyor. The Town will communicate with residents to remove any easement encroachments and inform them of the

project.		
	5	

## Certification regarding Debarment, Suspension, Ineligibility, and Voluntary exclusion

The contractor certifies, by submission of this qualification statement or acceptance of a contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any State, Federal department, or agency.

It further agrees by submitting this qualification statement that it will include this clause without modification in all lower-tire transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/contractor or any lower tier participant is unable to certify this statement, it shall attach an explanation to this solicitation/bid.

State whether your company has been involved in any litigation within the past five (5) years, arising out of your performance.

#### Circle Yes or No.

If you answer yes, explain fully if it has been involved in any litigation involving performance.

Contractor
C:
Signature
Name and Title of Signer
1 (41110 4114 61 2181101
Date

#### CERTIFICATION BY CONTRACTOR

Regarding

#### NON-SEGREGATED FACILITIES

The Bidder certifies that he does not, and will not, provide and maintain segregated facilities for his employees at his establishments and, further that he does not, and will not, permit his employees to perform their services at those locations, under his control, where segregated facilities are provided and maintained. Segregated fountains, transportation, parking, entertainment, recreation, and housing facilities; waiting, rest, wash, dressing, and locker room, and time clock, work, storage, restaurant, and other eating areas which are set apart in fact, or by explicit directive, habit, local custom, or otherwise, based on color, creed, national origin, and race. The Bidder agrees that, except where he has obtained identical certifications from proposed subcontractors for specific time periods, he will obtain identical certifications from proposed subcontractors prior to the award of subcontractors exceeding \$10,000.00 which are not exempt from the provisions of the Equal Opportunity clause, and that he will retain such certifications in his files.

The Bidder agrees that a breach of this certification is a violation of the Equal Opportunity clause in this Contract. The penalty for making false statements is prescribed in 18 U.S.C. 1001.

Contractor		
Contractor		
G. 1		
Signature		
Name and Title of Signer		
Traine and True of Signer		
Date		

#### **BID FORM**

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

#### **ARTICLE 1—OWNER AND BIDDER**

- 1.01 This Bid is submitted to: The Town of James Island, 1122 Dills Bluff Road, Charleston, SC 29412
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

#### **ARTICLE 2—ATTACHMENTS TO THIS BID**

- 2.01 The following documents are submitted with and made a condition of this Bid:
  - A. List of Proposed Subcontractors;
  - B. List of Proposed Suppliers;
  - C. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;
  - D. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;
  - E. Required Bidder Qualification Statement with supporting data; and
  - F. Exhibits to this Contract (enumerated as follows):
    - 1. Exhibit A Certification regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion
    - 2. Exhibit B Certification by Contractor Regarding Non-Segregated Facilities

#### ARTICLE 3—BASIS OF BID—LUMP SUM BID AND UNIT PRICES

- 3.01 Lump Sum Bids
  - A. Bidder will complete the Work in accordance with the Contract Documents for the following lump sum (stipulated) price(s), together with any Unit Prices indicated in Paragraph 3.02:
    - 1. Lump Sum Price (Single Lump Sum)

Lump Sum Bid Price	\$

#### **ARTICLE 4—TIME OF COMPLETION**

4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment on or before the dates or within the number of days indicated in the Agreement.

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4.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

# ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

- 5.01 Bid Acceptance Period
  - A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.
- 5.02 Instructions to Bidders
  - A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.
- 5.03 Receipt of Addenda
  - A. Bidder hereby acknowledges receipt of the following Addenda: [Add rows as needed. Bidder is to complete table.]

Addendum Number	Addendum Date

#### ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

- 6.01 Bidder's Representations
  - A. In submitting this Bid, Bidder represents the following:
    - 1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
    - 2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
    - 3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
    - 4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
    - 5. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.

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- 6. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- 7. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- 8. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- 10. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

#### 6.02 Bidder's Certifications

#### A. The Bidder certifies the following:

- This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
- 2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
- 3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
- 4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
  - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
  - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
  - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
  - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

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# CECIL CIRCLE CULVERT REPLACEMENT JAMES ISLAND, SOUTH CAROLINA

BIDDER hereby submits this Bid as set forth above:

Bidder:	
	(typed or printed name of organization)
By:	
News	(individual's signature)
Name:	(typed or printed)
Title:	
	(typed or printed)
Date:	
	(typeu or printeu)
If Bidder is	a corporation, a partnership, or a joint venture, attach evidence of authority to sign.
Attest:	
	(individual's signature)
Name:	
Title:	(typed or printed)
ritie.	(typed or printed)
Date:	
	(typed or printed)
Address fo	or giving notices:
Bidder's C	Contact:
Name:	(tuned or printed)
Title:	(typed or printed)
Title:	(typed or printed)
Phone:	
Email:	
Address:	
Bidder's C	Contractor License No.: (if applicable)

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#### CONTRACT FOR CONSTRUCTION OF A SMALL PROJECT

This Contract is by and between [Legal name of Owner] (Owner) and [Legal name of Contractor] (Contractor). Owner and Contractor hereby agree as follows:

#### **ARTICLE 1—THE WORK**

#### 1.01 *Work*

- A. Work includes all labor, materials, equipment, services, and documentation necessary to construct the Project defined herein. The Work may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
- B. The Contractor shall complete all Work as specified or indicated in the Contract Documents. The Project is generally described as follows:
  - 1. [Project Name] which consists of [short description of the Work].
  - 2. The Site of the Work includes property, easements, and designated work areas described in greater detail in the Contract Documents but generally located [short description of the location of the Site].

#### ARTICLE 2—CONTRACT DOCUMENTS

#### 2.01 Intent of Contract Documents

- A. It is the intent of the Contract Documents to describe a functionally complete Project. The Contract Documents do not indicate or describe all of the Work required to complete the Project. Additional details required for the correct installation of selected products are to be provided by the Contractor and coordinated with Owner and Engineer. This Contract constitutes the entire agreement between Owner and Contractor, and supersedes prior negotiations, representations, and agreements, whether written or oral. The Contract Documents are complementary; what is required by one part of the Contract Documents is as binding as if required by other parts of the Contract Documents.
- B. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work under the Contract Documents. During the performance of the Work and until final payment, Contractor and Owner shall submit to Engineer all matters in question concerning the requirements of the Contract Documents, or relating to the acceptability of the Work. Engineer will render a written clarification, interpretation, or decision on the issue submitted, or initiate a modification to the Contract Documents.
- C. Contractor, and its subcontractors and suppliers, shall not have or acquire any title to or ownership rights to any of the Drawings, Specifications, or other documents (including copies or electronic media versions) prepared by Engineer or its consultants.
- D. Contract Price or Contract Times: References to a change in "Contract Price or Contract Times" or "Contract Times or Contract Price" or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term "or both" is not expressed.

E. Nothing in the Contract Documents creates any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity.

#### 2.02 Contract Documents Defined

- A. The Contract Documents consist of the following documents:
  - 1. This Contract for Construction of a Small Project.
  - 2. Drawings.
  - 3. Addenda.
  - 4. Exhibits to this Contract (enumerated as follows):
    - Exhibit A Certification regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion
    - b. Exhibit B Certification by Contractor Regarding Non-Segregated Facilities
  - 5. The following which may be delivered or issued on or after the Effective Date of the Contract:
    - a. Notice to Proceed (EJCDC® C-550).
    - b. Work Change Directives (EJCDC® C-940).
    - c. Change Orders (EJCDC® C-941).
    - d. Field Orders (EJCDC® C-942).

#### ARTICLE 3—ENGINEER

#### 3.01 Engineer

A. The Engineer for this Project is Johnson, Laschober & Associates, P.C.

#### **ARTICLE 4—CONTRACT TIMES**

#### 4.01 Contract Times

A. The Work will be substantially complete within 45 days after the Effective Date of the Contract and completed and ready for final payment within 45 days after the Effective Date of the Contract.

#### 4.02 Liquidated Damages

A. Contractor and Owner recognize that time is of the essence in the performance of the Contract, and that Owner will incur damages if Contractor does not complete the Work according to the requirements of Paragraph 4.01. Because such damages would be difficult and costly to determine, Owner and Contractor agree that as liquidated damages for delay in completion (but not as a penalty) Contractor shall pay Owner \$500.00 for each day that expires after the Contract Time for substantial completion.

#### 4.03 Delays in Contractor's Progress

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times or Contract Price.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor or its subcontractors or suppliers.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times.
- D. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor or Contractor's subcontractors or suppliers.

#### 4.04 Progress Schedules

- A. Contractor shall develop a progress schedule and submit it to Engineer for review and comment before starting Work on the Site. Contractor shall modify the schedule in accordance with Engineer's comments.
- B. Contractor shall update and submit the progress schedule to Engineer each month. Owner may withhold payment if Contractor fails to submit the schedule.

#### ARTICLE 5—CONTRACT PRICE

#### 5.01 Payment

A. Owner shall pay Contractor, in accordance with the Contract Documents, the lump sum amount of \$[Contract Price] for all Work.

#### ARTICLE 6—INSURANCE

#### 6.01 *Insurance*

- A. When Contractor delivers the signed counterparts of the Contract to Owner, Contractor shall furnish certificates, endorsements, and any other evidence of insurance requested by Owner. Insurance is to be provided by companies that are duly licensed or authorized in the jurisdiction in which the Project is located with a minimum A.M. Best rating of A-VII or better. Contractor shall provide insurance in accordance with the following:
  - 1. Contractor shall provide coverage for not less than the following amounts, or greater where required by Laws and Regulations:
    - a. Workers' Compensation and Employer's Liability

Workers' Compensation	Statutory
Employer's Liability	
Each Accident	\$1,000,000

Each Employee	\$1,000,000
Policy Limit	\$1,000,000

#### b. Commercial General Liability

General Aggregate	\$1,000,000
Products - Completed Operations Aggregate	\$1,000,000
Personal and Advertising Injury	\$1,000,000
Bodily Injury and Property Damage—Each Occurrence	\$1,000,000

#### c. Automobile Liability

Bodily Injury	
Each Person	\$
Each Accident	\$
Property Damage	
Each Accident	\$
[OR]	
Combined Single Limit (Bodily Injury and Property Damage)	\$1,000,000

#### d. Excess or Umbrella Liability

Per Occurrence	\$2,000,000
General Aggregate	\$2,000,000

#### e. Contractor's Pollution Liability

Each Occurrence/Claim	\$1,000,000
General Aggregate	\$1,000,000

- B. All insurance policies required to be purchased and maintained will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days after notice has been received by the purchasing policyholder. Within three days of receipt of any such notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.
- C. Automobile liability insurance provided by Contractor will be written on an occurrence basis and provide coverage against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle.
- D. Contractor's commercial general liability policy will be written on a 1996 or later ISO commercial general liability occurrence form and include the following coverages and endorsements:
  - 1. Products and completed operations coverage maintained for three years after final payment;
  - 2. Blanket contractual liability coverage to the extent permitted by law;
  - 3. Broad form property damage coverage; and

- 4. Severability of interest; underground, explosion, and collapse coverage; personal injury coverage.
- The Contractor's commercial general liability and automobile liability, umbrella or excess, and pollution liability policies will include and list Owner and Engineer and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each as additional insureds; and the insurance afforded to these additional insureds will provide primary coverage for all claims covered thereby (including, as applicable, those arising from both ongoing and completed operations) on a non-contributory basis.
  - Additional insured endorsements will include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.
  - Contractor shall provide ISO Endorsement CG 20 32 07 04, "Additional Insured— Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent for design professional additional insureds.
- F. Umbrella or excess liability insurance will be written over the underlying employer's liability, commercial general liability, and automobile liability insurance. The coverage afforded must be at least as broad as that of each and every one of the underlying policies. Contractor may meet the policy limits specified for employer's liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policy's policy limits and partial attribution of the policy limits of an umbrella or excess liability policy that is at least as broad in coverage as that of the underlying policy.
- G. The Contractor shall provide property insurance covering physical loss or damage during construction to structures, materials, fixtures, and equipment, including those materials, fixtures, or equipment in storage or transit.
- H. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 15.

#### ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

#### 7.01 Contractor's Means and Methods of Construction

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

#### 7.02 Supervision and Superintendence

- A. Contractor shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without notice to and approval by the Owner and Engineer except under extraordinary circumstances.
- C. Contractor shall maintain good discipline and order at the Site.
- D. Except as otherwise required for the safety or protection of the Work or persons or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday.

#### 7.03 Other Work at the Site

- A. In addition to and apart from the Work of the Contractor, other work may occur at or adjacent to the Site. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
- B. Contractor shall notify Owner, the owners of adjacent property, the owners of underground facilities and other utilities (if the identity of such owners is known to Contractor), and other contractors and utility owners performing work at or adjacent to the Site when Contractor knows that prosecution of the Work may affect them; and Contractor shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.

#### 7.04 Services, Materials, and Equipment

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for everything necessary for the performance, testing, start-up, and completion of the Work.
- B. All materials and equipment incorporated into the Work must be new and of good quality, and be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable supplier, except as otherwise may be provided in the Contract Documents.

#### 7.05 Subcontractors and Suppliers

A. Just as Contractor is responsible for its own acts and omissions, Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of suppliers and subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work. The Contractor's retention of a subcontractor or supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.

#### 7.06 Licenses, Fees and Permits

A. Contractor shall pay all license fees and royalties and assume all costs incident to performing the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others.

B. Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy, unless otherwise provided in the Contract Documents.

#### 7.07 Laws and Regulations; Taxes

- A. Contractor shall give all notices required by, and shall comply with, all local, state, and federal laws and regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any laws or regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to laws or regulations, Contractor shall bear all resulting costs and losses, and to the fullest extent permitted by law Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all such claims, costs, losses, and damages.
- C. Contractor shall pay all applicable sales, consumer, use, and other similar taxes.

#### 7.08 Record Documents

A. Contractor shall maintain one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved shop drawings in a safe place at the Site. Contractor shall annotate them to show changes made during construction. Contractor shall deliver these record documents to Engineer upon completion of the Work.

#### 7.09 Safety and Protection

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
  - 1. All persons on the Site or who may be affected by the Work;
  - 2. All the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
  - Other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and underground facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property caused, directly or indirectly, in whole or in part, by Contractor, or anyone for whose acts the Contractor may be liable, will be remedied by Contractor at its expense (except damage or loss attributable to the fault of the Contract Documents or to the acts or omissions of Owner or Engineer and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor).

- E. Contractor shall be responsible for coordinating any exchange of safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with laws or regulations.
- F. In emergencies affecting the safety or protection of the Work or persons or property at the Site or adjacent thereto, Contractor shall act to prevent damage, injury, or loss. Contractor shall give Engineer prompt notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

#### 7.10 *Submittals*

- A. Contractor shall review and coordinate shop drawings, samples, and other submittals with the requirements of the Work and the Contract Documents, and shall verify all related field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information. Contractor shall confirm that the submittal is complete with respect to all related data included in the submittal.
- B. Shop drawings and samples must bear a stamp or specific written certification that Contractor has satisfied its obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
- C. With each shop drawing or sample submittal, Contractor shall give Engineer specific written notification, in a communication separate from the shop drawing or sample, of any variations that the shop drawing or sample may have from the requirements of the Contract Documents.
- D. Engineer will provide timely review of submittals. Engineer's review and approval of submittals will not extend to the means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs.
- E. Engineer's review of shop drawings and samples will be only to determine if the items covered will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole.
- F. Engineer's review and approval of a separate item in a shop drawing or sample does not indicate approval of the assembly in which the item functions.
- G. Contractor shall make corrections required by Engineer, return the required number of corrected copies of shop drawings, and submit new samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
- H. Shop drawings are not Contract Documents.

#### 7.11 Warranties and Guarantees

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its consultants are entitled to rely on Contractor's warranty and guarantee.

#### 7.12 Correction Period

A. If within one year after the date of substantial completion, any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, or other adjacent areas used by Contractor as permitted by laws and regulations, is found to be defective, then Contractor shall promptly correct any such defective Work and repairs, at no cost to Owner.

#### 7.13 *Indemnification*

A. To the fullest extent permitted by law, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from all losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any subcontractor, any supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.

#### ARTICLE 8—OWNER'S RESPONSIBILITIES

#### 8.01 Responsibilities

- A. Except as otherwise provided in the Contract Documents, Owner shall issue all communications to Contractor through Engineer.
- B. Owner shall make payments to Contractor as provided in this Contract.
- C. Owner shall provide the Site and easements required to construct the Project.
- D. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- E. Owner shall furnish copies of any applicable Owner safety programs to Contractor.
- F. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, unless stated elsewhere in the Contract Documents, Owner shall have sole authority and responsibility for such coordination.
- G. Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or for related safety precautions and programs, or for any failure of Contractor to comply with laws and regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

#### ARTICLE 9-ENGINEER'S STATUS DURING CONSTRUCTION

#### 9.01 Engineer's Status

- A. Engineer will be Owner's representative during construction.
- B. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility, or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, its subcontractors, suppliers, or sureties, or to any employee or agent of any of them.
- C. Engineer will make visits to the Site at intervals appropriate to the various stages of construction. Engineer will not be required to make exhaustive or continuous inspections to check the quality or quantity of the Work.
- D. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or for related safety precautions and programs, or for any failure of Contractor to comply with laws and regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

#### ARTICLE 10—CHANGES IN THE WORK

#### 10.01 Authority to Change the Work

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work.

#### 10.02 Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders covering:
  - Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
  - Changes in the Work which are: (a) ordered by Owner or (b) agreed to by the parties or (c) resulting from the Engineer's decision, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
  - 3. Changes in the Contract Price or Contract Times or other changes which embody the substance of any final binding results under Article 12.
- B. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

#### 10.03 Work Change Directive

A. A Work Change Directive may be issued to Contractor ordering an addition, deletion, or revision in the Work. A Work Change Directive will not change the Contract Price or Contract Times, but is evidence that the parties expect that the modification ordered or documented by the Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on Contract Price or Contract Times.

#### 10.04 Field Orders

- A. Engineer may issue a Field Order to authorize minor changes in the Work, provided that the changes do not involve an adjustment in the Contract Price or Contract Times.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then Contractor shall request such adjustment before proceeding with the Work.

#### ARTICLE 11—DIFFERING SUBSURFACE OR PHYSICAL CONDITIONS

#### 11.01 Differing Site Conditions Process

- A. If Contractor believes that any subsurface or physical condition (including but not limited to utilities or other underground facilities) that is uncovered or revealed at the Site either (1) differs materially from that shown or indicated in the Contract Documents, or (2) is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract Documents, then Contractor shall promptly notify Owner and Engineer about such condition. Contractor shall not further disturb such condition or perform any Work in connection with the condition (except with respect to an emergency) until receipt of authorization to do so.
  - Contractor shall be entitled to an equitable adjustment in Contract Price or Contract
    Times, to the extent that the existence of a differing subsurface or physical condition,
    or any related delay, disruption, or interference, causes an increase or decrease in
    Contractor's cost of, or time required for, performance of the Work. Contractor shall
    not be entitled to any adjustment in the Contract Price or Contract Times if Contractor
    knew of, or should have known of, the existence of the condition prior to entry into the
    Contract.
- B. After receipt of notice regarding a possible differing subsurface or physical condition, Engineer will promptly:
  - 1. Review the condition in question;
  - 2. Determine if it is necessary for Owner to obtain additional exploration or tests with respect to the condition;
  - 3. Determine whether the condition falls within one of the two differing site condition categories described in Paragraph 11.01.A.;
  - 4. Obtain any pertinent cost or schedule information from Contractor;
  - 5. Advise Owner of Engineer's findings, conclusions, and recommendations, including recommendations to Owner regarding the Contractor's resumption of Work in

connection with the subsurface or physical condition in question, the need for any change in the Drawings or Specifications, and possible Contract Price or Contract Times adjustments.

C. After receipt of Engineer's findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part, and granting any equitable adjustment in Contract Times or Contract Price to which Contractor is entitled.

#### ARTICLE 12—CLAIMS AND DISPUTE RESOLUTION

#### 12.01 Claims Process

- A. The party submitting a claim shall deliver it directly to the other party to the Contract and the Engineer promptly (but in no event later than 10 days) after the start of the event giving rise thereto.
- B. The party receiving a claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the claim through the exchange of information and direct negotiations. All actions taken on a claim must be stated in writing and submitted to the other party.
- C. If efforts to resolve a claim are not successful, the party receiving the claim may deny it by giving notice of denial to the other party. If the receiving party does not take action on the claim within 45 days, the claim is deemed denied.
- D. If the dispute is not resolved to the satisfaction of the parties, Owner or Contractor shall give notice to the other party of the intent to submit the dispute to a court of competent jurisdiction unless the Owner and Contractor both agree to an alternative dispute resolution process.

#### ARTICLE 13—TESTS AND INSPECTIONS; CORRECTION OF DEFECTIVE WORK

#### 13.01 Tests and Inspections

- A. Owner and Engineer will have access to the Site and the Work at reasonable times for observation, inspection, and testing. Contractor shall provide proper and safe conditions for such access.
- B. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- C. Except as otherwise provided in the Contract Documents, Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required: (1) by the Contract Documents; (2) by codes, laws, or regulations; (3) to attain Owner's and Engineer's acceptance of materials or equipment; and (4) to obtain Engineer's approval prior to purchase of materials, mix designs, or equipment.

D. If any Work that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense.

#### 13.02 Defective Work

- A. Contractor warrants that the Work is not defective.
- B. Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. The Contractor shall promptly correct all defective Work.
- E. When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's warranty and guarantee on said Work.
- F. If the Work is defective or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated.

#### ARTICLE 14—PAYMENTS TO CONTRACTOR

#### 14.01 Progress Payments

A. Contractor shall prepare a schedule of values that will serve as the basis for progress payments. The schedule of values will be in a form acceptable to Engineer. Lump sum items will be broken into units that allow for measurement of Work in progress. For unit price work, the unit price breakdown in Article 5 will be used as the schedule of values.

#### 14.02 Applications for Payments

- A. Contractor shall submit signed applications for payment to Engineer monthly, in a form acceptable to the Engineer. Contractor shall provide supporting documentation required by the Contract Documents. Owner will pay for Work completed as of the date of the application for payment.
- B. Beginning with the second application for payment, each application must include an affidavit of Contractor stating that all previous progress payments have been applied to discharge Contractor's obligations associated with the prior applications for payment.

#### 14.03 Retainage

A. The Owner shall retain 5% of each progress payment until the Work is substantially complete.

#### 14.04 Review of Applications

A. Within 10 days after receipt of each application for payment, Engineer will either recommend payment and present the application for payment to Owner, or return the application for payment to Contractor indicating Engineer's reasons for refusing to recommend payment. The Contractor will make the necessary corrections and may resubmit the application for payment.

- B. Engineer will recommend reductions in payment (set-offs) which, in the opinion of the Engineer, are necessary to protect Owner from loss because the Work is defective and requires correction or replacement.
- C. The Owner is entitled to impose set-offs against payment based on any claims that have been made against Owner, or any incurred costs, losses, or damages, on account of Contractor's conduct in the performance of the Work; for defective Work; or for liquidated damages that have accrued as a result of Contractor's failure to complete the Work.

#### 14.05 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

#### 14.06 Substantial Completion

- A. When Contractor considers the Work ready for its intended use, Contractor shall request that Engineer issue a certificate of substantial completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's request, Engineer will inspect the Work with Owner and Contractor to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor and Owner of the reasons for Engineer's decision.
- C. If Engineer considers the Work substantially complete, or upon resolution of all reasons for non-issuance of a certificate, Engineer will deliver to Owner and Contractor a certificate of substantial completion that will fix the date of substantial completion and include a punch list of items to be completed or corrected before final payment.

#### 14.07 Final Inspection

A. Upon notice from Contractor that the entire Work is complete, Engineer will promptly make a final inspection with Owner and Contractor, and will notify Contractor of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work and remedy such defects.

#### 14.08 Final Payment

- A. Contractor may make application for final payment after satisfactorily completing all Work, including providing all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents, and other documents.
- B. The final application for payment must be accompanied (except as previously delivered) by:
  - 1. All documentation called for in the Contract Documents;
  - Consent of the surety to final payment;

- Satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any liens or other title defects, or will so pass upon final payment;
- 4. A list of all pending claims; and
- 5. Complete and legally effective releases or waivers (satisfactory to Owner) of all lien rights arising out of the Work, and of liens filed in connection with the Work.
- C. The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.

#### 14.09 Waiver of Claims

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding claim, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a claim.

#### **ARTICLE 15—SUSPENSION OF WORK AND TERMINATION**

#### 15.01 Owner May Suspend Work

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 60 consecutive days by notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or Contract Times, to the extent directly attributable to any such suspension.

#### 15.02 Owner May Terminate for Cause

- A. Contractor's failure to perform the Work in accordance with the Contract Documents or other failure to comply with a material term of the Contract Documents will constitute a default by Contractor and justify termination for cause.
- B. If Contractor defaults in its obligations, then after giving Contractor and any surety 10 days' notice that Owner is considering a declaration that Contractor is in default and the termination of the Contract, Owner may proceed to:
  - Declare Contractor to be in default, and give Contractor and any surety notice that the Contract is terminated; and
  - 2. Enforce the rights available to Owner under any applicable performance bond.
- C. Owner may not proceed with termination of the Contract under Paragraph 15.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- D. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take

- possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- E. In the case of a termination for cause, if the cost to complete the Work, including related claims, costs, losses, and damages, exceeds the unpaid contract balance, Contractor shall pay the difference to Owner.
- F. If Contractor has provided a performance bond, the provisions of that bond will govern over any inconsistent provisions of Paragraph 15.02.

#### 15.03 Owner May Terminate for Convenience

- A. Upon 7 days' notice to Contractor, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for the following, without duplication of any items:
  - Completed and acceptable Work executed in accordance with the Contract Documents
    prior to the effective date of termination, less any set-offs, and including fair and
    reasonable sums for overhead and profit on such Work;
  - 2. Expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
  - 3. Other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits, or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

#### 15.04 Contractor May Stop Work or Terminate

A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 60 consecutive days by Owner or under an order of court or other public authority, or (2) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' notice to Owner, and provided Owner does not remedy such suspension or failure within that time, either stop the Work until payment is received, or terminate the Contract and recover payment from the Owner.

#### ARTICLE 16—CONTRACTOR'S REPRESENTATIONS

#### 16.01 Contractor Representations

- A. Contractor makes the following representations when entering into this Contract:
  - 1. Contractor has examined and carefully studied the Contract Documents.
  - Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
  - 3. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

4. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that, without exception, all prices in the Contract are premised upon performing and furnishing the Work required by the Contract Documents.

#### ARTICLE 17—MISCELLANEOUS

#### 17.01 Giving Notice

A. Whenever any provision of the Contract Documents requires the giving of notice to Owner, Engineer, or Contractor, such notice must be in writing, and delivered in person (by commercial courier or otherwise); by registered or certified mail; or by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

#### 17.02 Cumulative Remedies

A. The duties and obligations expressly imposed by this Contract, and the rights and remedies expressly available to the parties under this Contract, are in addition to, and are not to be construed in any way as a limitation of, any duties, obligations, rights, or remedies otherwise imposed or available by laws or regulations, by warranty or guarantee, or by other provisions of the Contract.

#### 17.03 Limitation of Damages

A. Neither Owner, Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

#### 17.04 No Waiver

A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

#### 17.05 Survival of Obligations

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

#### 17.06 Contractor's Certifications

A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or entering into the Contract.

#### 17.07 Controlling Law

A. This Contract is to be governed by the law of the state in which the Project is located.

## The Effective Date of the Contract is [date to be inserted at the time of execution].

Owner:	Contractor:
(typed or printed name of organization)	(typed or printed name of organization)
Ву:	By:
(individual's signature)	(individual's signature)
Date: (date signed)	Date:
••	Name:
Name:(typed or printed)	(typed or printed)
Title:	Title:
(typed or printed)	(typed or printed)
	(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)
Attest:	Attest:
(individual's signature)	(individual's signature)
Title:	Title:
(typed or printed)	(typed or printed)
Address for giving notices:	Address for giving notices:
Designated Representative:	Designated Representative:
Name:	Name:
(typed or printed)	(typed or printed)
Title:	Title:
(typed or printed)	(typed or printed)
Address:	Address:
	_
	_
	_
Phone:	Phone:
Email:	Email:
Agreement.)	License No.:
	(where applicable)
	State:

# TOWN OF JAMES ISLAND P.O. BOX 12240, JAMES ISLAND, SC 29412

# CECIL CIRCLE CULVERT REPLACEMENT

CECIL COURT, CHARLESTON, SC 29412

**ASPHALT** 

## 1. ALL CONSTRUCTION TO CONFORM WITH SCDOT & CITY OF CHARLESTON STANDARDS 2. THE CONTRACTOR SHALL COORDINATE THE WORK WITH THE UTILITY COMPANIES AND SHALL VERIFY ALL EXISTING PIPE INVERTS AND EXISTING ROAD ELEVATIONS PRIOR TO

3. INITIAL BMP's (BEST MANAGEMENT PRACTICES) MUST BE IN PLACE PRIOR TO CLEARING, REGARDLESS OF PLAN REQUIREMENT OR PROJECT SIZE. NO CLEARING OR GRADING MAY BE DONE UNTIL BMP INSTALLATION IS COMPLETE AND INSPECTED. CONTRACTOR MUST CONTACT ENVIRONMENTAL SERVICES FOR INSPECTION BMPs PRIOR TO BEGINNING CLEARING OR GRADING ACTIVITIES.

**GENERAL NOTES** 

- 4. ALL EASEMENTS WITHIN THE DISTURBED AREA MUST BE GRASSED AND/OR RIP-RAPPED
- 5. CONTRACTORS ARE RESPONSIBLE TO REMOVE OR CLEAN OUT ANY SILT, DIRT, MUD OR ANY OTHER TYPE OF DEBRIS THAT COMES OFF THEIR SITE AND FINDS ITS WAY INTO A BRIVALE PROPERTY OF RICCUE PROFERS SHOWAY CITY OWNED POND OR COUNTY
- 6. THE CONTRACTOR SHALL ADHERE TO THE WEIGHT LIMITS PRESCRIBED ON CITY OR SCDOT MAINTAINED ROADS FOR HAULING EQUIPMENT AND/OR MATERIALS TO AND FROM
- THIS SITE. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGES TO THE STREETS AND/OR UTILITIES DUE TO NON-COMPLIANCE OF WEIGHT LIMIT REGULATIONS.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS AND LICENSES AS REQUIRED BY THE TOWN OF JAMES ISLAND NECESSARY FOR THE CONSTRUCTION.

## PROJECT LOCATION MAP

PROPOSED

BLDG. STRUCTURE		ASPH. B.M. OR BM B/	ASPHALT BENCH MARK BOTTOM
PROPERTY LINE OR	BEARING/LENGTH	BOC, BC	BACK OF CURB
RIGHT-OF-WAY ×	DIST./RADIUS	C CMP	CABLE CORRUGATE METAL PIPE
SPOT ELEVATION	+ 100.00	CO CONC.	CLEAN-OUT CONCRETE
TREE LINE		C.P. DET. DIP	CONTROL POINT DETAIL DUCTILE IRON PIPE
CONTOUR	100 JB	D.I. DWG.	DRAINAGE INLET DRAWING
STORM DRAIN	<< SD	EL./ELEV. EXIST.	ELEVATION EXISTING
FRENCH DRAIN	<< 6"FD	EOP, EP	EDGE OF PAVEMENT
SANITARY SEWER	МН	FO	FIBER OPTIC
	<< \$\$ \$	FH	FIRE HYDRANT
CLEAN-OUT/SS SERVICE	C.O.	GV I.E.	GAS VALVE INVERT ELEV.
WATER	w	'L MH	LINEAR FEET LEFT MANHOLE
NATURAL GAS	3"G	MJ	MECH. JOINT
OVERHEAD POWER	OHP	PID PP	PROPERTY ID NUMBER POWER POLE
UNDERGROUND POWER	UGP	PVMT. 'R	PAVEMENT LINEAR FEET RIGHT
OVERHEAD TELEPHONE	OHT	RCP RJF	REINF. CONC. PIPE RESTRAINT JOINT FITTIN
UNDERGROUND TELEPHONE	UGT	RW R/W, ROW	RAW WATER RIGHT-OF-WAY
CABLE	С	SD STA	STORM DRAIN STATION
FIBER OPTICS	F/O	SS TYP.	SANITARY SEWER TYPICAL
DITCH/SWALE	(TYPE)	TP T/	TELEPHONE PEDESTAL
FENCE	(1112)	U.N.O. VERT.	UNLESS NOTED OTHERV
CONCRETE		WM	WATER METER

SITE LEGEND

SHEET INDEX

Sheet Title

COVER SHEET

EXISTING CONDITIONS AND DEMOLITION PLAN

GRADING AND DRAINAGE, S.W.P.P.P. PLAN AND PROFILE

BMP DETAILS AND NOTES

MISCELLANEOUS DETAILS

Sheet Number

CG001

CD101

C-201

C-202

C-601

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2

LASCHOBER & ASSOC., PC No. C00790

PROJECT NO.

DATE:

CDB CHECKED BY: LSC 08/05/2024 SHEET TITLE :

**COVER SHEET** 

## PROJECT DATA

OWNER (PRIMARY PERMITEE): TOWN OF JAMES ISLAND MAYOR BROOK LYON PO BOX 12240 JAMES ISLAND, SC 29412 PHONE: (843) 795-4141 EMAIL: blyon@jamesislandsc.us

PARCELS: 428-02-00-075 ZONING:

PROPERTY ADDRESS: CECIL CIRCLE

CHARKESTON, SC 29412

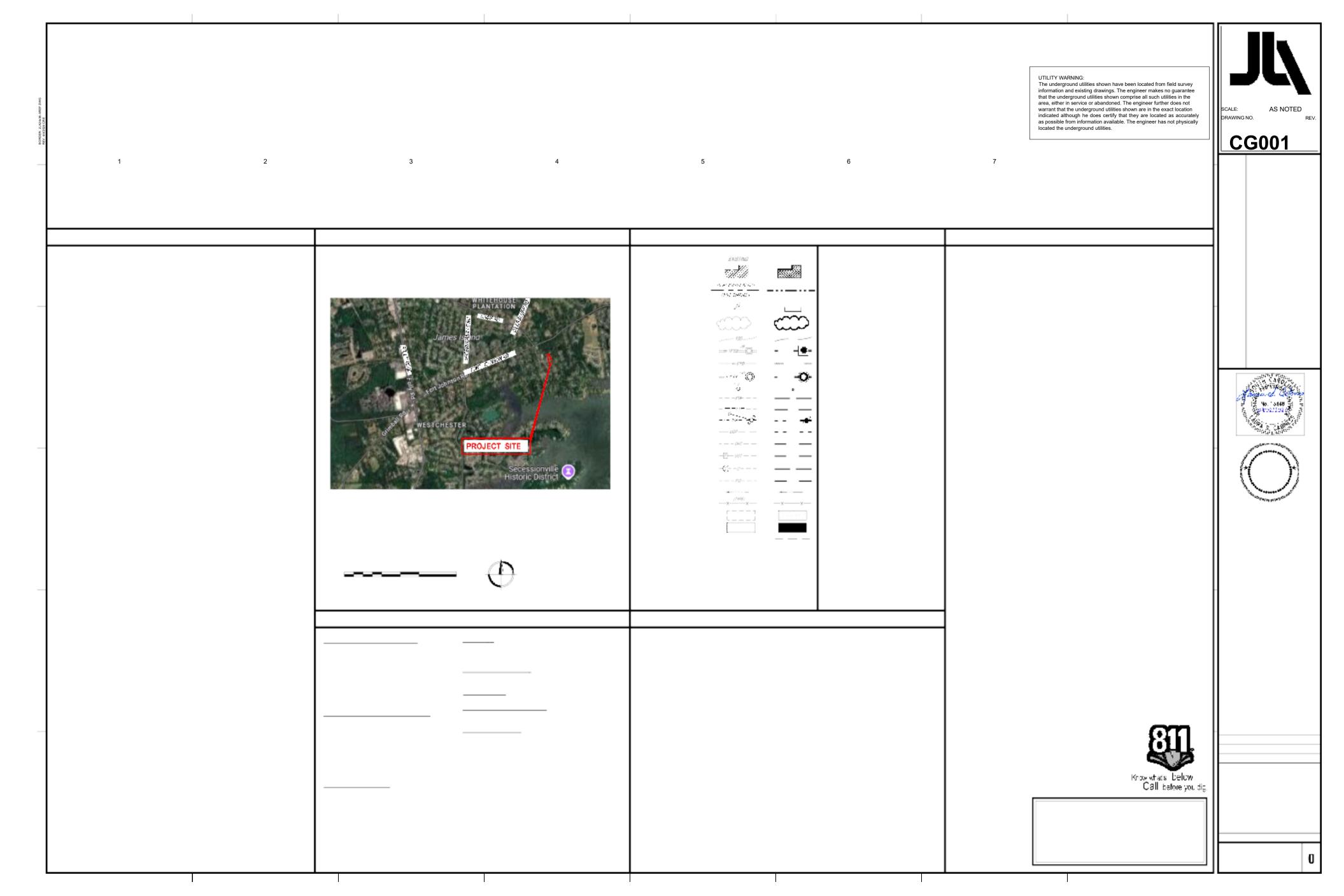
PROPERTY COORDINATES: 32.723198° N

JOHNSON, LASCHOBER & ASSOCIATES, P.C. LAURA S. CABINESS, PE 701 EAST BAY STREET, SUITE 304 CHARLESTON, SC 29403 PHONE: (706) 709-7575 EMAIL: lcabiness@thejlagroup.com

OWNER'S REP/24 HOUR CONTACT:

DISTURBED AREA: 0.051 ACRES

BASIN INFORMATION: RECEIVING BASIN: CHARLESTON HARBOR



LIMIT OF DISTURBANCE AREA = 0.06 ACRES

MAIL BOX

**DEMOLITION LEGEND:** 

# REMOVE

# PROTECT & MAINTAIN

LIMITS OF DISTURBANCE LINE

BUILDING STRUCTURES
 (CANOPY; SHED; PORTABLE BLDG.)

CONCRETE
 (PAVEMENT; PAD; CURB & GUTTER; SIDEWALK,
 SAWCUT OR REMOVE FROM NEAREST JOINT )

4. STORM DRAIN (STRUCTURE; PIPE)

FENCE/GATE

5. SANITARY SEWER (MANHOLE; PIPE; CLEAN-OUT)

6. ELECTRICAL/POWER

(POWER POLE; LIGHT POLE, ELEC. BOXES) 7. TELEPHONE/COMMUNICATION/FIBER OPTIC (MANHOLE; PEDESTAL/JUNCTION BOX; PANEL)

8. NATURAL GAS/FUEL LINE (PIPE; METER)

9. VEGETATION (TREES; SHRUBBERY; TREELINE)

MISC. ITEMS (SIGN; PAINT MARKER; BOLLARD; AS NOTED)

### **DEMOLITION NOTES:**

- 1. ITEMS TO BE DEMOLISHED ARE DOUBLE HATCHED; ITEMS TO BE ABANDONED
- (IF ANY) ARE SINGLE HATCHED; AND BOTH SHOWN DOTTED.

  2. UNDERGROUND LOCATIONS ARE APPROXIMATE AND SUPPLIED BY VARIOUS UTILITY COMPANIES. NOTIFY THE ENGINEER IMMEDIATELY IN WRITING OF ANY CONFLICTS OR DISCREPANCIES.

  3. CONTRACTOR TO VERIFY ALL EXISTING FIELD CONDITIONS PRIOR TO
- DEMOLITION & CONSTRUCTION WORK INCLUDING FIELD VERIFY ALL UTILITY LOCATIONS AND HAVE APPROPRIATE UTILITY COMPANY MARK THEIR LOCATION BEFORE DIGGING OR TRENCHING. THIS SHALL INCLUDE BUT IS NOT LIMITED TO THE USE OF SONIC, ELECTRONIC OR MAGNETIC DETECTION DEVICES, BY NOTING PULL BOX AND UTILITY BOX LOCATIONS AT THE SURFACE, AND BY POTHOLING. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY UTILITIES DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE GOVERNMENT.

  4. UNLESS OTHERWISE NOTED: DEMOLISHED ITEMS TO BE REMOVED IN ITS
- ENTIRETY FROM SITE & DISPOSED OF IN LEGAL MANNER OR UPON OWNER'S DISCRETION.

  5. CONTRACTOR TO PROTECT BENCHMARKS SET BY THE SURVEYOR. PRESERVE
- BENCHMARKS LOCATED WITHIN THE CONSTRUCTION LIMITS UNTIL NEW BENCHMARK IS RE-ESTABLISHED.

  6. THE CONTRACTOR IS REQUIRED TO CONTACT 811 THREE (3) DAYS PRIOR TO ANY DIGGING OR COMMENCING OF CONSTRUCTION.

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CECIL CIRCLE CULVERT REPLACEMENT

TOWN OF JAMES ISLAND DILLS BLUFF RD JAMES ISLAND, SC 294

JOHNSON, CLASCHOBER No. C00790 PROJECT NO. 3082.2401 DRAWN BY: CDB LSC

**EXISTING CONDITIONS AND DEMOLITION PLAN** 

DATE: SHEET TITLE : 08/05/2024

AS NOTED SCALE: DRAWING NO.

UTILITY WARNING:

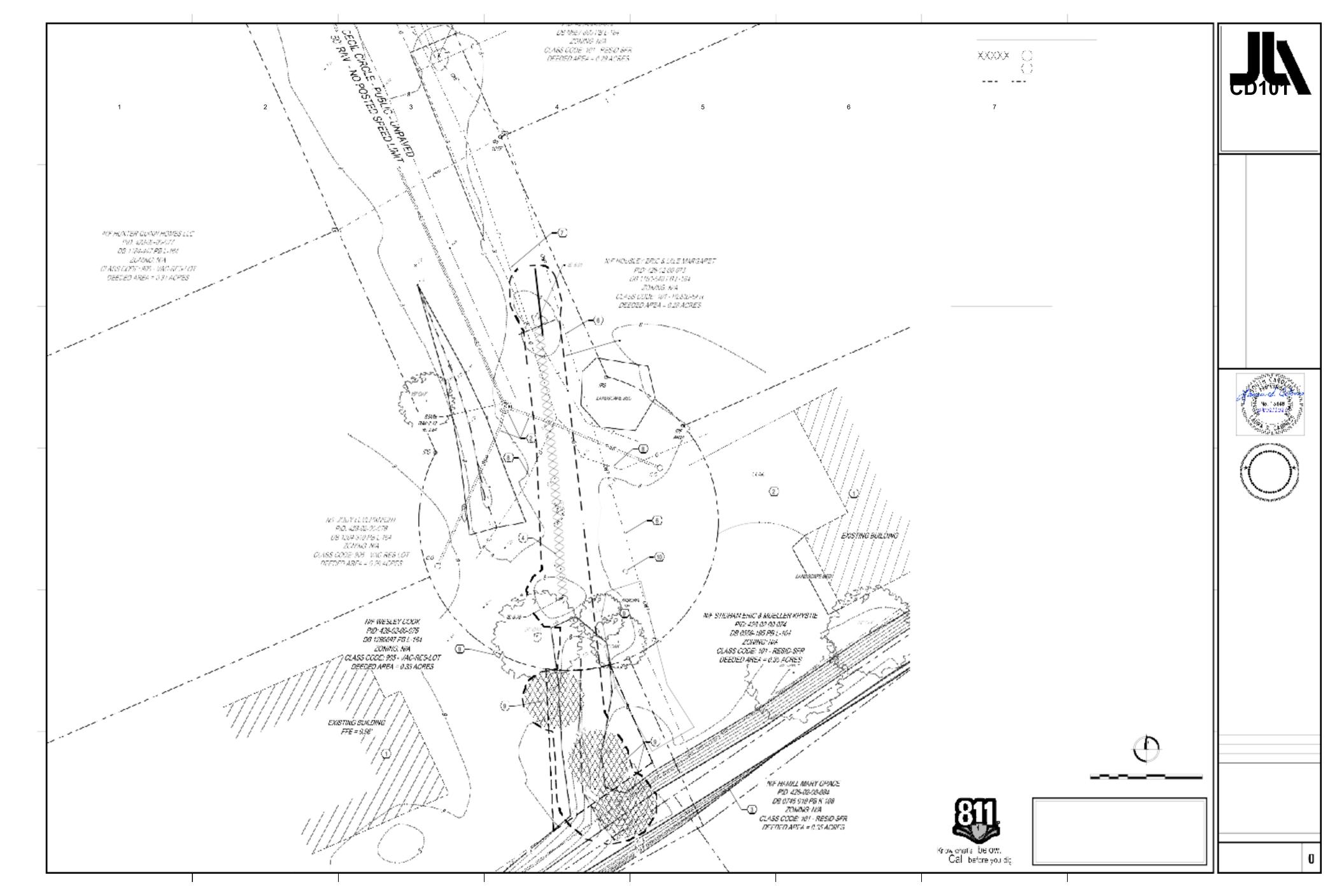
The underground utilities shown have been located from field survey information and existing drawings. The engineer makes no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The engineer further does not warrant that the underground utilities shown are in the exact location indicated although he does certify that they are located as accurately as possible from information available. The engineer has not physically

SCALE: 1" = 10'

10' 5' 0

as possible from information available. The engineer has not physically located the underground utilities.

UTILITY WARNING:



STATION -0+25 1+30 IE(OUT):5.25 MITERED END PROPOSED GRADE @ 0.85% GRADE IE: 4.10' DATUM ELEVATION C/L SD-A PROFILE SCALE: HOR: 1"=10' VER: 1"=5' MAPPING SYMBOLS FOR EROSION AND SEDIMENT CONTROL PLANS EROSION PREVENTION MEASURES SEDIMENT CONTROL BMP's SYMBOL DESCRIPTION SYMBOL DESCRIPTION FILTER FABRIC INLET TEMPORARY SEEDING PROTECTION TYPE "A" PERMANENT SEEDING LIMIT OF DISTURBANCE AREA = 0.06 ACRES ROCK CHECK DAM SILT FENCE v v D 0 00 FOR ALL DISTURBED AREA THAT IS NOT PAVED, RIP RAPED OR DIRT ROAD 00 136 LF-15" RCP @ 0.85% GRADE 00+10C INSTALL 10 TONS OF PLATAPOFAMAIR BLOW INSTALL MITERED END

0 55 590 -300 10' 5' 10' 20'

HORIZONTAL

1" = 10

## STORMWATER POLLUTION PREVENTION PLAN GENERAL NOTES:

- 1. IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW:
   WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS
- PRACTICABLE.

  WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARII V CEASED, AND EARTH-DISTURRING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS.
- WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- 3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION. THE AIKEN COUNTY REQUIRES AN INSPECTION AFTER EVERY HALF INCH RAIN EVENT.
- 4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
- 5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- 6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
- 7. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
- 8. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED
- BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.

  9. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER)
- AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- 10. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
- 11. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
- 12. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL
- 13. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE;
- 14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE
- 15. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
  - WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
- WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
- FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
- SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- 17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
- 18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
- 19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.

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PROJE

JOHNSON,
LASCHOBER
& ASSOC., PC
No. C00790

PROJECT NO.
DRAWN BY:
CHECKED BY:
DATE:

SHEET TITLE :

GRADING AND DRAINAGE, S.W.P.P.P. PLAN AND PROFILE

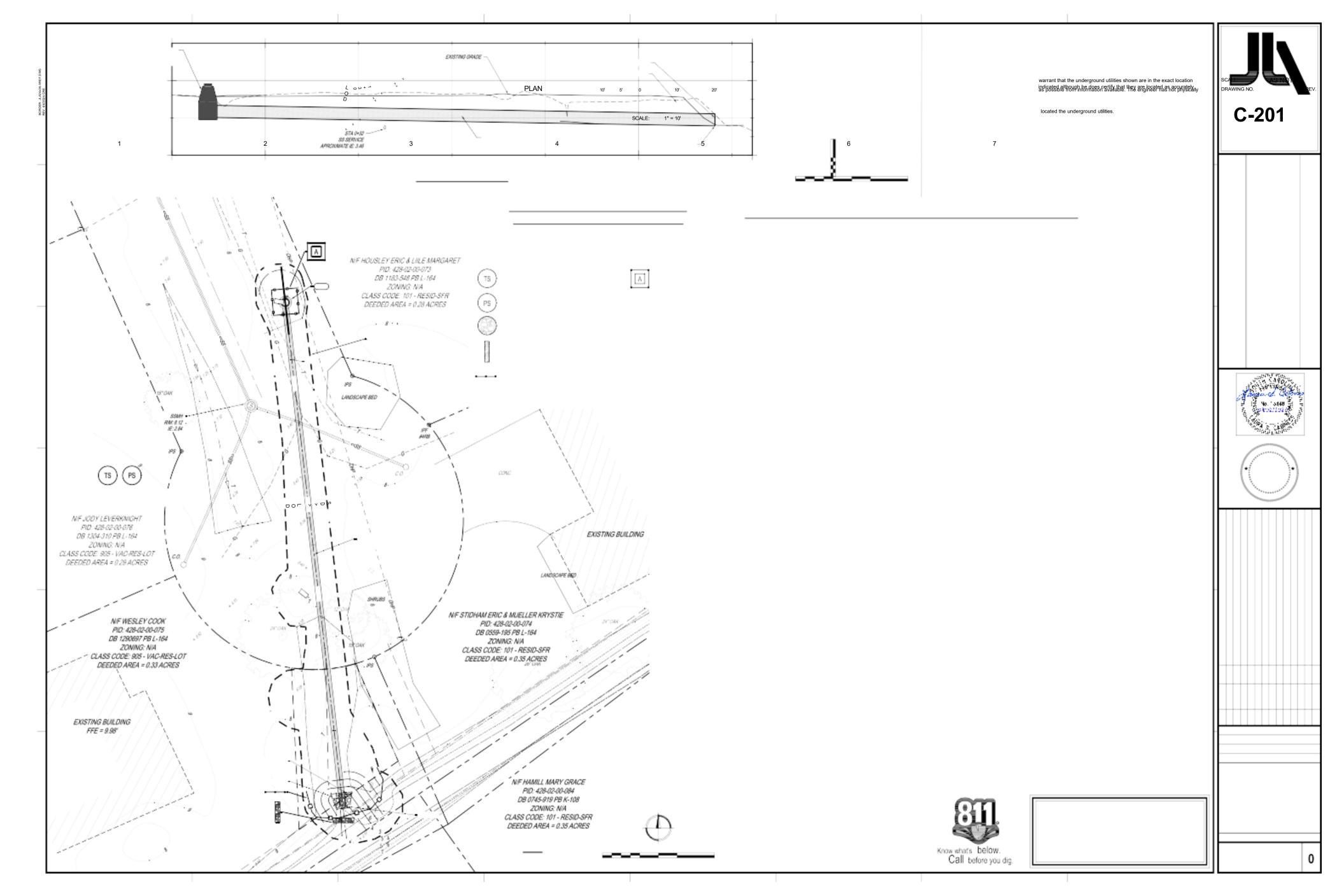
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#### TYPE A - FILTER FABRIC REQUIREMENTS

- . SILT FENCE MUST BE COMPOSED OF WOVEN GEOTEXTILE FILTER FABRIC THAT CONSISTS OF THE FOLLOWING REQUIREMENTS: COMPOSED OF FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS OF AT LEAST 85% BY WEIGHT OF POLYOLEFINS, POLYESTERS, OR POLYAMIDES THAT ARE FORMED INTO A NETWORK SUCH THAT THE FILAMENTS OR YARNS RETAIN DIMENSIONAL STABILITY RELATIVE
- FREE OF ANY TREATMENT OR COATING WHICH MIGHT ADVERSELY
- ALTER ITS PHYSICAL PROPERTIES AFTER INSTALLATION; FREE OF ANY DEFECTS OR FLAWS THAT SIGNIFICANTLY AFFECT ITS PHYSICAL AND/OR FILTERING PROPERTIES; AND, HAVE A MINIMUM WIDTH OF 36-INCHES.

4. FILTER FABRIC SHALL BE PURCHASED IN CONTINUOUS ROLLS AND CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. 5. FILTER FABRIC SHALL BE INSTALLED AT A MINIMUM OF 24-INCHES ABOVE THE GROUND.

COMPOSED OF A HIGH STRENGTH STEEL WITH A MINIMUM YIELD

STRENGTH OF 50,000 PSI.
INCLUDE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH
OF 1.38-INCHES AND A NOMINAL "T" LENGTH OF 1.48-INCHES.
WEIGH 1.25 POUNDS PER FOOT (± 8%)

2. POSTS SHALL BE EQUIPPED WITH PROJECTIONS TO AID IN FASTENING OF FILTER FABRIC.

3. INSTALL POSTS TO A MINIMUM OF 24-INCHES. A MINIMUM HEIGHT OF 1- TO 2- INCHES ABOVE THE FABRIC SHALL BE MAINTAINED, AND A MAXIMUM HEIGHT OF 3 FEET SHALL BE MAINTAINED ABOVE THE GROUND.

4. POST SPACING SHALL BE AT A MAXIMUM OF 3-FEET ON CENTER.

12-INCHES OF THE FABRIC SHOULD BE PLACED WITHIN EXCAVATED TRENCH AND TOED IN WHEN THE TRENCH IS BACKFILLED.

TYPE A - POST REQUIREMENTS

- USE ONLY FABRIC APPEARING ON SC DOT'S QUALIFIED PRODUCTS LISTING (QPL), APPROVAL SHEET #34, MEETING THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE SC DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION
- BE REMOVED WHEN IT FILLS APPROXIMATELY 1/3 THE DEPTH OF THE SUMP.

REMOVED SEDIMENT SHALL BE PLACED IN STOCKPILE STORAGE AREAS OR SPREAD THINLY ACROSS DISTURBED AREA STABILIZE THE REMOVED SEDIMENT AFTER IT IS RELOCATED.

THE KEY TO FUNCTIONAL INLET PROTECTION IS WEEKLY

MAINTENANCE, AND REGULAR SEDIMENT REMOVAL

ATTENTION TO SEDIMENT ACCUMULATIONS ALONG THE FILTER FABRIC IS EXTREMELY IMPORTANT.

CCUMULATED SEDIMENT SHOULD BE CONTINUALLY

- CHECK FOR AREAS WHERE STORMWATER RUNOFF HAS ERODED A CHANNEL BENEATH THE FILTER FABRIC, OR WHERE THE FABRIC HAS SAGGED OR COLLAPSED DUE TO RUNOFF OVERTOPPING THE INLET PROTECTION

8. INLET PROTECTION STRUCTURES SHOULD BE REMOVED AFTER ALL THE DISTURBED AREAS ARE PERMANENTLY STABILIZED. REMOVE ALL CONSTRUCTION MATERIAL AND SEDIMENT, AND DISPOSE OF THEM PROPERLY, GRADE THE DISTURBED AREA TO THE ELEVATION OF THE DROP INLET STRUCTURE CREST. STABILIZE ALL BARE AREAS

NOTES:

PLACE STONE OVER CHANNEL BANKS

#### Plants, Planting Rates, And Planting Dates For Temporary Cover Or Companion Crops TYPE A - INSPECTION & MAINTENANCE

Species	Rates per	Planting Dates	
Species	Acre	UPSTATE	
Millet, Browntop (alone)	40 lbs.	4/15-8/30	
Millet, Browntop (in mixtures)	40 lbs.	4/15-8/30	
Ryegrass, Annual (alone)	50 lbs.	9/1-11/15	
Ryegrass, Annual (in mixtures)	8 lbs.	9/1-11/15	
Rye Grain (alone)	56 lbs.	9/7-12/15;2/1-4/15	
Rye Grain (in mixtures)	10 lbs.	9/7-12/15;2/1-4/15	
Weeping Lovegrass (alone)	4 lbs.	4/7-8/1	
Weeping Lovegrass (in mixtures)	2 lbs	4/7-8/1	

Fertilizer Requirements for Temporary Vegetation				
Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	N Top Dressing Rate (lbs./acre)
Cool season grasses	First	6-12-12	1500	50-100
	Second	6-12-12	1000	
	Maintenance	10-10-10	400	30
Cool season grasses & legumes	First	6-12-12	1500	0-50
	Second	0-10-10	1000	
	Maintenance	0-10-10	400	
Temporary cover crops seeded alone	First	10/10/10	500	30
Warm season grasses	First	6-12-12	1500	50-100
	Second	6-12-12	800	50-100
	Maintenance	10-10-10	400	30

TEMPORARY GRASSING

1. ALL SEEDED AREAS WILL BE MULCHED WITH HAY OR STRAW AT A

RATE OF 2-2 1/2 TONS PER ACRE WITHIN 24 HRS. AFTER SEEDING.

USE OF A TACKIFIER IS REQUIRED ON ALL SLOPES EXCEEDING 3:1.

2. GRASSING WILL BE ACCEPTED WHEN A 100% COVER BY PERMANENT GRASSING IS OBTAINED AND WEEDS ARE NOT DOMINANT.

3. GRASSING OF DISTURBED AREAS WILL COMMENCE AT COMPLETION OF EACH PHASE OF CONSTRUCTION OR IN THE SEQUENCE AS

BEGIN AT EARLIEST POSSIBLE DATE.

INDICATED. IN ANY CASE, GRASSING OF ANY DISTURBED AREA WILL

Plants,	Planting	Rates, And	d Planting Dates For Permanent Cov	ver
Species	Rate	Rates per	Planting Dates	Remarks
	Acre	1,000 sq. ft.	UPSTATE	
Bermuda, Common (Hulled seed) Alone With Perennials	10 lbs. 6 lbs.	0.2 lb. 0.1 lb.	5/15-8/21 5/21-8/31	Quick cover; low growing; sod forming; needs full sun.
Bermuda, Common (Unhulled seed) With temporary cover With other perennials	10 lbs. 6 lbs.	0.2 lb. 0.1 lb.	10/1-2/28	Plant with Winter annuals.
Bermuda Sprigs	40cu.ft.	0.9cu.ft.	4/15-6/15	1 cu. ft. = 650 sprigs;
With temporary cover	Sod plugs			1 bu. = 1.25 cu. Ft. or 800 sprigs.

Fertilizer Requirements for Permanent Vegetation				
Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	N Top Dressing Rate (lbs./acre)
Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 1000 400	50-100  30
Cool season grasses & legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 1000 400	0-50  
Ground covers	First Second Maintenance	10-10-10 10-10-10 10-10-10	1300 1300 1100	
Pine seedlings	First	20-10-5	one 21-gram pellet per seedling placed in the closing hole	-
Shrub Lespedeza	First Maintenance	0-10-10 0-10-10	700 700	-
Temporary cover crops seeded alone	First	10-10-10	500	30
Warm season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 800 400	50-100 50-100 30
Warm season grasses & legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 1000 400	50

PERMANENT SEEDING

RATE OF 1 TO 2 TONS PER AN	CKE
Material	Depth
Dry Straw Or Hay	2" To 4"
Wood Waste (sawdust, Bark, Chips)	2" To 3"
Cutback Asphalt (slow Curing)	1200 Gal./acre (1/4 Gal./sq.yd.)
Black Polyethylene Film	Completely Cover Area; Hold In Place With Soil On Outer Edge

SLAND, SC 28 F JAMES ISL

A F

MULCHING

7. MULCHING WILL BE EMPLOYED FOR DISTURBED AREAS LAID BARE FOR MORE THAN 14 DAYS AND NO GREATER THAN 45 DAYS PRIOR TO CONSTRUCTION RECOMMENCEMENT.

8. MULCHING & TEMPORARY GRASSING WILL BE EMPLOYED FOR DISTURBED AREAS LAID BARE FOR MORE THAN 45 DAYS AND NO GREATER THAN 180 DAYS PRIOR TO

CONSTRUCTION RECOMMENCEMENT

9. TEMPORARY & PERMANENT GRASSING SHALL BE EMPLOYED FOR DISTURBED AREAS LAID BARE FOR MORE THAN 180 DAYS PRIOR TO CONSTRUCTION RECOMMENCEMENT.

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1. A ROCK DITCH CHECK SHOULD BE INSTALLED IN STEEPLY SLOPED SWALES,

SC-4 ROCK DITCH CHECK

WHEN AND WHERE TO USE IT:

OR IN SWALES WHERE ADEQUATE VEGETATION CANNOT BE ESTABLISHED. ROCK DITCH CHECKS SHOULD BE USED ONLY IN SMALL OPEN CHANNELS. ROCK DITCH CHECKS SHOULD NOT BE PLACED IN WATERS OF THE COMMONWEALTH OR USGS BLUE-LINE STREAMS (UNLESS APPROVED BY CENTRE) OR EFFECTAL ATTROSTIEND.

1. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE INSTALLED OVER THE SOIL

SURFACE WHERE THE ROCK DITCH CHECK IS TO BE PLACED. 2. THE BODY OF THE ROCK DITCH CHECK SHALL BE COMPOSED OF 12-INCH D50 3. THE UPSTREAM FACE OF THE ROCK DITCH CHECK MAY BE COMPOSED OF

1-INCH D50 WASHED STONE.

ROCK DITCH CHECKS SHOULD NOT EXCEED A HEIGHT OF 2-FEET AT THE CENTERLINE OF THE CHANNEL.

ROCK DITCH CHECKS SHOULD HAVE A MINIMUM TOP FLOW LENGTH OF

 STONE SHOULD BE PLACED OVER THE CHANNEL BANKS TO PREVENT WATER FROM CUTTING AROUND THE DITCH CHECK.
THE ROCK MUST BE PLACED BY HAND OR MECHANICAL PLACEMENT (NO

DUMPING OF ROCK TO FORM DAM) TO ACHIEVE COMPLETE COVERAGE OF THE DITCH OR SWALE AND TO ENSURE THAT THE CENTER OF THE CHECK IS LOWER THAN THE EDGES.

THE MAXIMUM SPACING BETWEEN THE DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM CHECK IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM CHECK.

#### INSPECTION AND MAINTENANCE:

INSPECT ROCK DITCH CHECKS EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES ½-INCHES OR MORE OF PRECIPITATION. INSPECT FOR SEDIMENT AND DEBRIS ACCUMULATION. INSPECT DITCH CHECK EDGES FOR EROSION AND REPAIR PROMPTLY AS REQUIRED.

3. SEDIMENT SHOULD BE REMOVED WHEN IT REACHES 1/3 THE ORIGINAL

IN THE CASE OF GRASS-LINED DITCHES AND SWALES, ROCK DITCH CHECKS SHOULD BE REMOVED WHEN THE GRASS HAS MATURED SUFFICIENTLY TO PROTECT THE DITCH OR SWALE UNLESS THE SLOPE OF THE SWALE IS GREATER THAN 4%.

THE GRADING CONTRACTOR IF VEGETATION WILL BE USED FOR PERMANENT

6. THE AREA BENEATH THE ROCK DITCH CHECKS SHOULD BE SEEDED AND MULCHED IMMEDIATELY AFTER ROCK CHECK DAM REMOVAL

# NO SCALE

= THE DISTANCE SUCH THAT POINTS

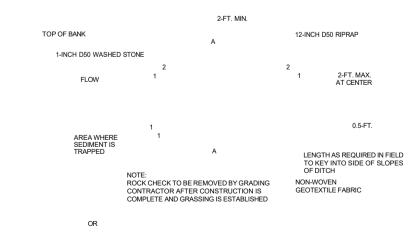
12-INCH D50 RIPPAP 1-FT. MIN. 0.5-FT. MIN. 1-FT, SUMP CHANNEL BOTTOM GEOTEXTILE FABRIC

Α

NON-WOVEN GEOTEXTILE FABRIC

### SPACING BETWEEN DITCH CHECK

CROSS SECTION A-A THRU STONE DITCH CHECK



TYPICAL DITCH CHECK SECTION

SC-4 ROCK DITCH CHECK NO SCALE

GRASSING FERTILIZATION AND MULCH

4. IRRIGATION WILL BE APPLIED AT A RATE THAT WILL NOT CAUSE

6. PERMANENT GRASSING SHALL BE IRRIGATED AND MAINTAINED

4 TO 6 INCHES OF TOP GROWTH.

5. TOPDRESSING WILL BE APPLIED ON ALL TEMPORARY & PERMANENT

SPECIES PLANTED ALONE OR IN MIXTURES WITH OTHER SPECIES.

BERMUDA GRASS MAY BE MOWED AS DESIRED MAINTAINING AT LEAST

RUNOFF.

JOHNSON, & ASSOC.. PC No. C00790

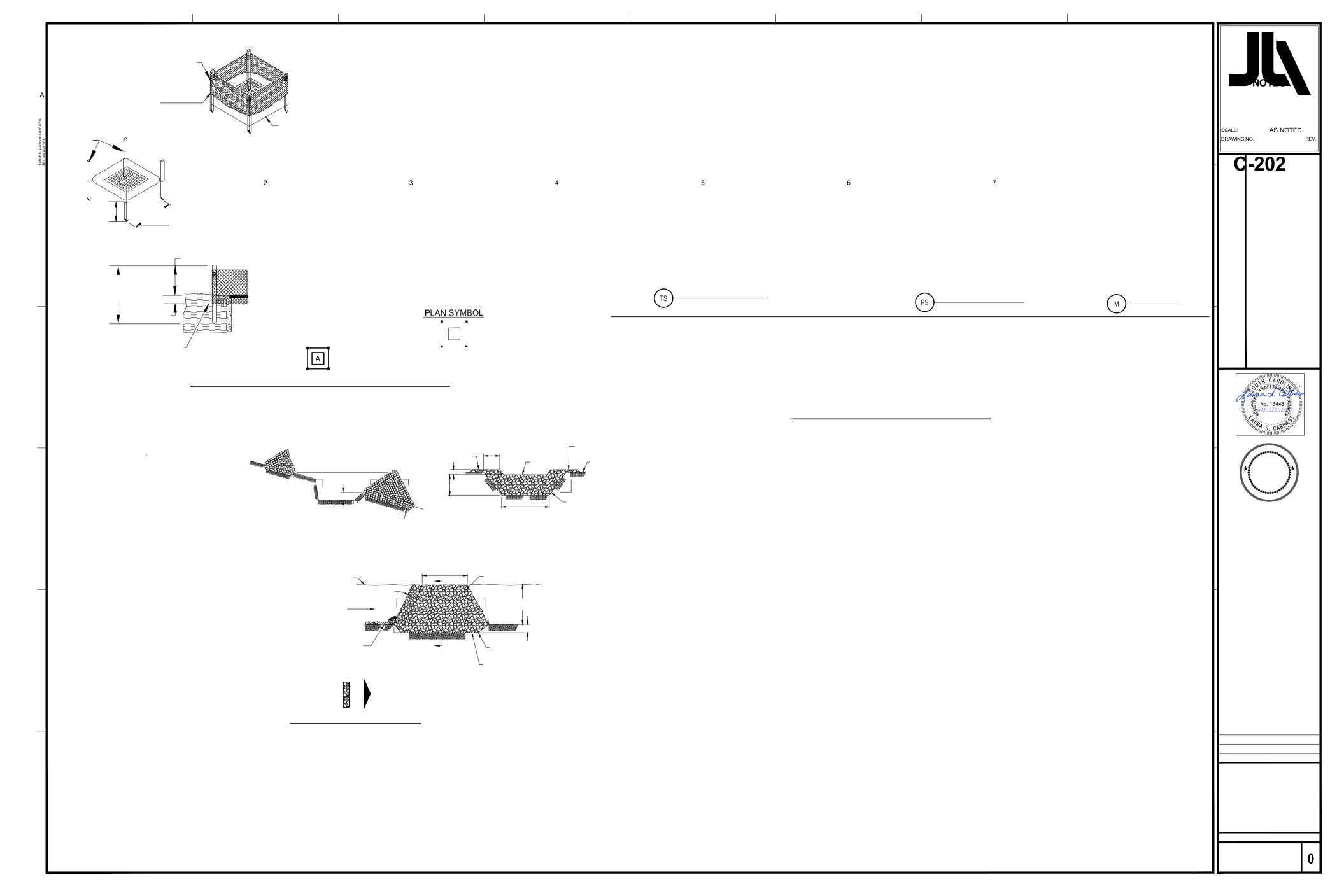
3082.2401 PROJECT NO. DRAWN BY : CHECKED BY DATE: 08/05/2024

SHEET TITLE :

**BMP DETAILS AND** 

CDB

LSC



#4's @ 6" O.C., EACH WAY NUMBER OF BARS REQUIRED DEPEND ON INSTALL MANHOLE RING & COVER 2'-8" MIN. OR D+12" 1- #4 DIAGONAL SLAB (4 SIDES) CORNER CONCRETE TOP VIEW FRAME & COVER: 1) MANHOLE FRAME: USF 1110 TYPE "N" OR APPROVED EQUAL.
2) COVER TYPE: N LOAD RATING: HEAVY-DUTY OR APPROVED EQUAL 3000 PSI CONC. WITH #4 BARS STEEL SHALL BE PLACED 1" GROUT (TYP.) 3/4" CHAMFER (TYP.) C-601 **OPENING** PACK VOID BETWEEN PIPE 1'-0" TYP. & STRUCTURE FLUSH TO FACE OF CONCRETE WITH NON-SHRINK GROUT, TYP. 6" PRECAST CONC.OR OR 8" BRICK CONST. 6" SUMP PUMP MANHOLE STEPS 12" O.C. IN BOXES HAVING A DEPTH OF 3000 PSI CONC. WITH #4 4'-0" OR GREATER. (STEPS BARS AT 10" O.C. EACH WAY. MUST CONFORM TO ASTM-C-478 OR EQUIVALENT) ALL STEEL SHALL BE PLACED 2" CL. FROM TOP OF SLAB **SECTION** NOTES: 1. INSTALL STEPS @ 12" O.C. IN BOXES HAVING A DEPTH OF 4'-0" OR GREATER. (STEPS MUST CONFORM TO ASTM-C-478 OR EQUIVALENT)
2. IF HEIGHT OF STRUCTURE REQUIRES THAT IT BE CAST IN PIECES, SEAL JOINTS W/CUT-OFF RAMNECK FLUSH W/ INSIDE OF WALLS & GROUT SECTIONS OF MANHOLE INSIDE & OUTSIDE & WIPE SMOOTH, TYP.

3. INSIDE DIMENSION OF STRUCTURE SHALL BE 4'-0" MIN. FOR 36"Ø & SMALLER PIPES. FOR LARGER PIPES, INSIDE DIMENSION OF STRUCTURE SHALL BE OUTSIDE DIAMETER OF PIPE PLUS 6" CLEARANCE EACH SIDE & ROUNDED UP TO 4. SEE STORM STRUCTURE SCHEDULE OR GRADING & DRAINAGE PLAN FOR TOP OF STRUCTURE, WEIR INLET EL. & PIPE INVERT ELEVATIONS. WEIR INLET TRAP DETAIL C-601

С

USE ONLY PIPE CLASSES III OR GREATER. USE PIPE AND JOINT MATERIAL FROM A
MANUFACTURER COMBINATION SHOWN ON WRAP ALL EXTERIOR PIPE JOINTS SCDOT "QUALIFIED PRODUCT LIST 69"
REFER TO MOST RECENT SCDOT WITH NON-WOVEN GEOTEXTILE FILTER FABRIC. WRAP TIGHT TO PIPE STANDARDS AND SPECIFICATION FOR BY LAPPING FABRIC OR UTILIZING ZIP TIES (BOTH SIDES OF JOINT) PRIOR TO BACKFILLING. THIS DOES NOT ADDITIONAL INFORMATION. PRECLUDE THE CONTRACTOR FROM INSTALLING THE SPECIFIED GASKETS OR BUTYL RUBBER SEALANT IN THE PIPE SYSTEM JOINTS. 2' FABRIC OVERLAP FLOW 2'-0" **SECTION ELEVATION** 

3

TYPICAL JOINT FOR RCP GRAVITY STORM SEWER INSTALLATION

NO SCALE

PROVIDE GREEN WARNING TAPE OVER STORM PIPES.

THERMOPLASTIC PIPE SHALL BE INSTALLED PER THIS DETAIL & PER ASTM D-2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE  $\,$ 

3. REINFORCED CONCRETE PIPE (RCP) SHALL BE INSTALLED PER THIS DETAIL & PER ASTM 01479-01 "STANDARD PRACTICE FOR INSTALLATION OF PRECAST CONCRETE SEWER, STORM DRAIN, AND CULVERT PIPING USING STANDARD INSTALLATIONS."

COMPACTED STRUCTURAL WARNING TAPE BACKFILL PER SPECS. (12" BELOW F.G.) (BACKFILL SHALL BE AN APPROVED BORROW MATERIAL) VARIES

8" MAX 6" MIN.

PIPE

FOR HDPE, PROVIDE NO. 57 STONE BEDDING. FOR RCP, PROVIDE NO. 57 STONE BEDDING WHERE PIPE TRENCH IS LOCATED IN UNSUITABLE OR WET VIRGIN MATERIAL, AS DETERMINED BY THIRD PARTY SOILS TESTING LABRATORY

> TYPICAL TRENCH SECTION FOR **GRAVITY STORM SEWER INSTALLATION**

> > NO SCALE

C-601 C-601

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RIPRAP (9" AVG.)

### RIPRAP DITCH SECTION

6" LAYER NO. 57 STONE

OR NON-WOVEN FILTER FABRIC (MIRAFI 180N)

10' MIN.

NO SCALE

CULVERT TOWN OF JAMES ISLAND DILLS BLUFF RD JAMES ISLAND, SC 294

SIL CIRCLE CULVIREPLACEMENT

CECIL

JOHNSON, LASCHOBER & ASSOC., PC No. C00790

PROJECT NO. DRAWN BY: CDB CHECKED BY:

**MISCELLANEOUS** 

LSC 08/05/2024 SHEET TITLE :

