

### Mr. Darrell White, Interim Director

### **CERTIFIED MAILED/EMAILED**

TO:

All Vendors

**Tywanna Scott, Procurement Assurance Analyst** 

Herbert Judon, Augusta Regional Airport

FROM:

Darrell White

**Interim Procurement Director** 

DATE:

March 12, 2025

SUBJ:

Clarifications to the Specifications and Responses to Vendor's

Questions

BID ITEM:

BID Item #25-150 Southeast Drainage Ditch Enclosure Ph. II

for Augusta, GA – Augusta Regional Airport

BID OPENING DATE: Wednesday, March 19, 2025 @ 3:00 p.m.

### **ADDENDUM NO. 1**

This Addendum shall form a part of the referenced BID Item #25-150 Southeast Drainage Ditch Enclosure Ph. II and any agreement entered into in connection therewith equally as if bound into the original document. Acknowledge receipt of all Addendums on Attachment "B" within the Specifications package.

### Clarifications to the Specifications:

### **Project Manual Changes/Clarifications:**

- Please Replace pages BF-1 through BF-18 with Revised pages BF-1 through BF-18 included in this Addendum No. 1.
- Please Replace pages GC2-1 through GC2-4 with Revised, updated, and added additional items within the Basis of Payment pages GC2-1 through GC2-4 included in this Addendum No. 1.

### **Construction Drawing changes:**

• Sheets G-001: Updated and revised sheet index and notes. <u>Delete</u> sheets G-001 and <u>replace</u> with pages G-001 attached to this Addendum No. 1.

Suite 605 - 535 Telfair Street, Augusta Georgia 30901 (706) 821-2422 - Fax (706) 821-2811

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- Sheets G-061: Updated and revised quantity tables. <u>Delete</u> sheets G-061 and <u>replace</u> with pages G-061 attached to this Addendum No. 1.
- Sheets C-021 C-041: Updated and revised drainage sheets. <u>Delete</u> sheets C-021 C-041 and replace with pages C-021 C-041 attached to this Addendum No. 1.
- Sheets C-101 & C-102: Updated and revised notes. <u>Delete</u> sheet C-101 & C-102 and replace with page C-101 & C-102 attached to this Addendum No. 1.
- Sheets C-105 C-107: Updated and revised notes. <u>Delete</u> sheets C-105 C-107 and replace with pages C-105 C-107 attached to this Addendum No. 1.
- Sheets C-441 C-444: Updated to show directional flow arrows. <u>Delete</u> sheets C-441 C-444 and <u>replace</u> with pages C-441 C-444 attached to this Addendum No. 1.
- Sheet C-451: Updated and revised notes. <u>Delete</u> sheet C-451 and <u>replace</u> with page C-451 attached to this Addendum No. 1.
- Sheet C-455: Additional stormwater GDOT detail. Add sheet C-455 after sheet C-454 attached to this Addendum No. 1.

### **Responses to Vendor's Questions:**

- Question: In the contract documents, you have a "Minority and Women Owned Business" goal of 6% and a "Women-Owned Business" goal of 3%. Can a registered Woman owned business be used for the 6% goal since it says "M/WBE Goal"?
   Response: Only if that business owner is a minority woman. Please contact Dr. Yolanda Jackson, DBE Compliance Manager at Office:(706) 821-2406/Cell: (706) 305-0683 or <a href="mailto:yjackson@augustaga.gov">yjackson@augustaga.gov</a> for any questions.
- 2. Question: Can you use a M/WBE contractor for both goals? Response: You must use MBE firms and WBE firms.
- 3. Question: Does the "M/WBE" contractor have to be registered with Augusta-Richmond County or can the bidding contractor use M/WBE contractors that are registered with GDOT?

Response: The contractor MUST be certified in Augusta's M/WBE program ONLY.

4. Question: On page BF-5 of the contract documents, Line No 16, should this line read "Unclassified Excavation"?

Response: Line No 16 is correct per the P-152 Specification.

- 5. Question: Will the "unsuitable/Over Excavation" be wasted onsite? If so where? Response: Unsuitable/Over Excavation shall be disposed of off-site.
- 6. Question: On page BF-10 of the contract documents, Line No 17, should this line read "Unclassified Excavation"?

Response: Line No 16 is correct per the P-152 Specification.

7. Question: On sheet C-442 of the plans, the storm sewer shows ending at Sta 26+00 in the base bid with the remainder of the storm line in Alternate 1. What will be the ending point for the storm sewer if Alternate 1 is not awarded? As it is drawn in the plans, Sta 26+00 is in the middle of the storm line going from Manhole 2 to manhole 3. The storm sewer is all flowing to HW #2 west of this point and clearly in the work for Alternate 1. By not performing Alternate 1 work, the storm water does not appear to have anywhere to go as drawn on the plans.

Response: In the event only the base bid is awarded a headwall shall be placed at STA 26+00 and graded to connect to the existing storm drainage ditch. See sheets C-103 & C-104 for proposed grading plan in the event the alternate is not awarded.

- 8. Question: Who is responsible for the cost of all compaction testing on the project? Response: The contractor shall be responsible for the cost associated with compaction testing as stated within the Technical Specifications.
- 9. Question: Will storm pipe require pipe video inspection? If so, who is responsible for the cost?

Response: Pipe sizes less than 48" shall require video inspection in accordance with ASTM C1840. Cost shall be incidental to associated line-item cost. Pipe sizes larger than 48" shall be inspected via walk-through inspection.

10. Question: Will precast headwalls be allowed?

Response: Yes, pending they meet the dimensions and requirements per the plans and specifications.

11. Question: On the "Rock filter Dam" detail on sheet C-036 of the plans, it referenced the Rip Rap to be "GDOT Type 1, Type 3". Please clarify if these are to be Type 1 or Type 3 Rip Rap?

Response: Rip Rap shall be GDOT Type 3. See project manual changes/clarifications.

12. Question: Please verify that Line item No 10 and Line item No 11 on the base bid and Bid alternate 1 bid schedules respectively, is to be Type 1 Rip Rap?

Response: Rip Rap shall be GDOT Type 3. See project manual changes/clarifications.

13. Question: Will the MBE/WBE goals be based solely on the base bid amount? Response: The goal is set based on the entire project amount.

14. Question: Is a soil survey or other geotechnical evaluations available? **Response: No.** 

15. Question: In the general provisions, Section 90-06, page GP1-42, it states, "from the total amount determined to be payable on a partial payment, 10 percent of such will be deducted and retained..." Does this amount change to 5(5%) percent for the life of the project as per new Georgia law regarding public construction contracts since the contract date will be after 6/30/2022?

Response: The retainage for this project shall be the maximum allowable per Georgia State Law.

- 16. Question: Section 60-05, Page GP1-25 of the General Provisions state that contractor is to provide a field office. Will this be required and how will it be paid?
  - Response: Use of field office shall be contingent upon contractor's needs. Associated costs shall be incidental to mobilization line item.
- 17. Question: Will the determination of the apparent low bidder be based off of the base bid only or base bid and bid alternates?

Response: Low bidder shall be determined based on the total of the base bid plus all bid alternates regardless of the alternates chosen for the project. Owner reserves the right to award the project and alternate as deemed fit.

Please acknowledge addendum in your submittal

**END ADDENDUM** 

ATTACHMENTS: BID FORMS BF-1 THROUGH BF-18 (18 PAGES)

ITEM C-102, GC2-1-GC2-4 (4 PAGES)

### **BID FORM**

(Failure to furnish all requested data will be cause for considering BIDDER non-responsive and may render this BID invalid on that basis.)

| BID FOR:      | AUGUSTA REGIONAL AIR<br>SOUTHEAST DRAINAGE I                                                               |                |
|---------------|------------------------------------------------------------------------------------------------------------|----------------|
| SUBMITTED TO: | Augusta-Richmond County<br>Attn: Procurement Director<br>535 Telfair Street, Room 605<br>Augusta, GA 30901 |                |
| SUBMITTED BY: |                                                                                                            |                |
|               | Bidder's Name                                                                                              |                |
|               | Address                                                                                                    |                |
|               | City, State and Zip Code                                                                                   |                |
|               | Phone / Fax                                                                                                | Date Completed |

- 1. The undersigned, hereinafter called Bidder, in compliance with the "Notice to Bidders" accepting all of the terms and conditions of the "Instructions to Bidders," including without limitation those dealing with the disposition of the Bid Security; proposes and agrees, if awarded the Contract, to enter into an agreement with the Owner utilizing the form Contract included in the Bid Documents. Bidder shall furnish all materials, equipment, machinery, tools, apparatus, means of transportation and labor necessary to complete the work to be performed under the Contract within the time indicated in the contract, in full and complete accordance with the shown, noted, described and reasonably intended requirements of the Contract Documents, to the full and entire satisfaction of the Owner, for the amounts contained in this Bid Schedule.
- 2. This Bidder's bid shall remain open for ninety (90) days after the day of Bid opening. If awarded a contract, Bidder will sign the Contract and submit the Contract Security and other documents required by the Contract Documents within fifteen (15) calendar days after the date indicated in Owner's Notice of Award.
- 3. In submitting this Bid, the Bidder represents that:
  - a. Bidder has become thoroughly familiar with the terms and conditions of the Bid Documents accepting the same as sufficient to indicate understanding of all the conditions and requirements under the Contract which will be executed for the Work.
  - b. Bidder has examined the site and locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules and regulations) and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as Bidder deems necessary.

- c. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or corporation to refrain from submitting a bid; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.
- d. No member of the Augusta Board of Commissioners, Aviation Commission or other officers or employees of said Owner Is interested directly or indirectly in the bid or in any portion of the bid or in the Contract or any part of the Contract which may be awarded the undersigned on the basis of such bid without such full disclosure being made.
- e. It is a condition of this bid and any subsequent contract entered into pursuant to this bid, and it shall be made a condition of each subcontract entered into pursuant to the prime contract that the Contractor and any subcontractor shall not require any laborer to mechanic employed in the performance of the contract to work in surroundings or under working conditions which are unsatisfactory, hazardous, or dangerous to his/her health or safety, as determined under Construction Safety and Health Standards, Title 29, CFR Part 1518 36FR7340, promulgated by the U.S. Secretary of Labor, in accordance with Section 107 of the Contract Work hours and Safety Standards act, Stat. 96; that is further condition of this bid that Bidder shall be solely responsible for the enforcement of such Construction and Health Standards, and that Bidder fully understands that the Owner and its authorized representatives will not assume any liability resulting from the Contractor's failure to police and enforce all such standards.
- f. The description under each bid item, being briefly stated, implies, although it does not mention, all incidentals and that the prices stated are intended to cover all such work, materials and incidentals as constitute Bidder's obligations as described in the Specifications, and any details not specifically mentioned, but evidently included in the Contract shall be compensated for in the item which most logically includes it.
- g. The unit prices bid include all applicable taxes and fees. Bids shall also include appropriate provisions for price escalation for materials and labor including but not limited to increases in federal, state and local sales taxes and income or FICA taxes.

### 4. Contract Time: Bidder agrees that:

- The work will be completed within the timeframes described in the General Provisions and the Construction Documents.
- b. Bidder shall commence work with an adequate force and equipment at the time stated in the Notice to Proceed and complete all work by the date established in said Notice. Bidder shall not work overtime or on Saturdays, Sundays, or legal holidays except as specifically allowed by the Contract Documents and approved by the Owner.
- c. The quantities of work listed in the Bid Schedules are APPROXIMATE and are assumed solely for the comparison of bids. Compensation will be based upon the unit price bid and the ACTUAL quantities of work performed in accordance with the Contract Documents and as accepted by the ENGINEER.
- 5. **Bid Schedule:** See attached Pages BF-3 through BF-12.

| Line<br>No. | Item No.     | Item Description                                                        | Est. Qty. | Units | Unit Price | Bid Amount |
|-------------|--------------|-------------------------------------------------------------------------|-----------|-------|------------|------------|
| 1           | C-100.1      | Contractor Quality Control<br>Program (CQCP)                            | 1         | LS    |            |            |
|             | Written Unit | Price                                                                   |           |       |            |            |
| 2           | C-102.1a     | Installation, Maintenance, and<br>Removal of Silt Fence or Silt<br>Sock | 1,650     | LF    |            |            |
|             | Written Unit | Price                                                                   |           |       |            |            |
| 3           | C-102.1b     | Construct, Maintain, and<br>Remove Inlet Sediment Trap                  | 2         | EA    |            |            |
|             | Written Unit | Price                                                                   |           |       |            |            |
| 4           | C-102.1c     | Construct, Maintain, and<br>Remove Construction Exit                    | 2         | EA    |            |            |
|             | Written Unit | Price .                                                                 |           |       |            |            |
| 5           | C-102.1e     | Construct, Maintain, and<br>Remove Rock Dam                             | 1         | EA    |            |            |
|             | Written Unit | Price                                                                   |           |       |            |            |
| 6           | C-102.1f     | Water Quality Monitoring and Sampling                                   | 8         | EA    |            |            |
|             | Written Unit | Price                                                                   |           |       |            |            |
| 7           | C-102.1g     | Water Quality Inspections                                               | 3         | EA    |            |            |
|             | Written Unit | Price                                                                   |           |       |            |            |

| Line<br>No. | Item No.     | Item Description                          | Est. Qty. | Units | Unit Price | Bid Amount |
|-------------|--------------|-------------------------------------------|-----------|-------|------------|------------|
| 8           | C-102.1h     | Erosion Control Mobilization              | 1         | LS    |            |            |
|             | Written Unit | Price                                     | 100       |       |            |            |
| 9           | C-102.1i     | Emergency Erosion Control<br>Mobilization | 1         | LS    |            |            |
|             | Written Unit | Price                                     |           |       |            |            |
| 10          | C-102.1j     | Rip Rap, Type III 18" Depth               | 80        | SY    |            |            |
|             | Written Unit | Price                                     |           |       |            |            |
| 11          | C-105.1      | Mobilization, Cleanup, and Demobilization | 1         | LS    |            |            |
|             | Written Unit | Price                                     |           |       |            |            |
| 12          | C-105.2      | Airfield Safety and Traffic<br>Control    | 1         | LS    |            |            |
|             | Written Unit | Price                                     |           |       |            |            |
| 13          | P-101.1      | Remove Existing 30-72" RCP                | 570       | LF    |            |            |
|             | Written Unit | Price                                     |           |       |            |            |
| 14          | P-101.2      | Remove Existing Concrete<br>Headwall      | 2         | EA    |            |            |
|             | Written Unit | Price                                     |           | 1     |            |            |

| Line<br>No. | Item No.     | Item Description                                                  | Est. Qty. | Units | Unit Price | Bid Amount |
|-------------|--------------|-------------------------------------------------------------------|-----------|-------|------------|------------|
| 15          | P-151.1      | Tree Clearing and Grubbing                                        | 2         | AC    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |
| 16          | P-152.1      | Unclassified Excavation,<br>Select Fill from Off-Site<br>Material | 1,810     | CY    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |
| 17          | P-152.2      | Borrow Excavation, Select Fill from On-Site Material              | 7,250     | CY    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |
| 18          | P-152.3      | Unsuitable/Over excavation                                        | 1,000     | CY    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |
| 19          | D-701.1      | Concrete Sewer Pipe, 30-inch,<br>Class V                          | 160       | LF    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |
| 20          | D-701.2      | Concrete Sewer Pipe, 72-inch,<br>Class V                          | 700       | LF    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |
| 21          | D-701.3      | Concrete Sewer Pipe, 84-inch,<br>Class V                          | 940       | LF    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |

| Line<br>No. | Item No.     | Item Description                                       | Est. Qty. | Units | Unit Price | Bid Amount |
|-------------|--------------|--------------------------------------------------------|-----------|-------|------------|------------|
| 22          | D-751.1      | Airfield Inlet with Aircraft Rated<br>Grate            | 2         | EA    |            |            |
|             | Written Unit | Price                                                  |           |       |            |            |
| 23          | D-751.2      | Airfield Manhole with Aircraft<br>Rated Lid            | 2         | EA    |            |            |
|             | Written Unit | Price                                                  |           |       |            |            |
| 24          | D-751.3      | Connect New Storm Sewer<br>Pipe to Existing Storm Pipe | 2         | EA    |            |            |
|             | Written Unit | Price                                                  |           |       |            |            |
| 25          | D-752.1      | Concrete Storm Headwall                                | 2         | EA    |            |            |
|             | Written Unit | Price                                                  |           |       |            |            |
| 26          | T-901.1      | Temporary Seeding                                      | 5         | AC    |            |            |
|             | Written Unit | Price                                                  |           |       |            |            |
| 27          | T-901.2      | Permanent Seeding                                      | 5         | AC    |            |            |
|             | Written Unit | Price                                                  | v.        |       |            |            |
| 28          | T-901.3      | Seeding, Staging Area                                  | 1         | AC    |            |            |
|             | Written Unit | Price                                                  |           |       |            |            |

### Location of Project: Augusta Regional Airport, Augusta, Georgia

### Title of Project: Augusta Regional Airport Southeast Drainage Ditch Enclosure Ph II

| Line<br>No. | Item No.     | Item Description                                      | Est. Qty. | Units | Unit Price | Bid Amount |
|-------------|--------------|-------------------------------------------------------|-----------|-------|------------|------------|
| 29          | T-904.1      | Sodding                                               | 165       | SY    |            |            |
|             | Written Unit | Price                                                 |           |       |            |            |
| 30          | T-905.1      | Topsoiling (Obtain on Site or Removed from Stockpile) | 6,900     | CY    |            |            |
|             | Written Unit | Price                                                 |           |       |            |            |
| 31          | T-905.2      | Topsoiling, Staging Area                              | 2,762     | CY    |            |            |
|             | Written Unit | Price                                                 |           |       |            |            |
| 32          | T-905.2      | Mulching                                              | 5         | AC    |            |            |
|             | Written Unit | Price                                                 |           |       |            |            |

| Total Base Bid =         |  |
|--------------------------|--|
| Total Base Bid Written = |  |

### Location of Project: Augusta Regional Airport, Augusta, Georgia

Title of Project: Augusta Regional Airport Southeast Drainage Ditch Enclosure Ph II

| Item No.     | Item Description                                                                                                                                        | Est. Qty.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Units                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Unit Price                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Bid Amount                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| C-100.1      | Contractor Quality Control<br>Program (CQCP)                                                                                                            | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | LS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Written Unit | Price                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| C-102.1a     | Installation, Maintenance, and<br>Removal of Silt Fence or Silt<br>Sock                                                                                 | 720                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | LF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Written Unit | Price                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| C-102.1b     | Construct, Maintain, and<br>Remove Inlet Sediment Trap                                                                                                  | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | EA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Written Unit | Price                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| C-102.1c     | Construct, Maintain, and<br>Remove Construction Exit                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | EA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Written Unit | Price                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| C-102.1d     | Construct, Maintain, and<br>Remove Check Dam                                                                                                            | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | EA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Written Unit | Price                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| C-102.1e     | Construct, Maintain, and<br>Remove Rock Dam                                                                                                             | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | EA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Written Unit | Price                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| C-102.1f     | Water Quality Monitoring and Sampling                                                                                                                   | 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | EA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Written Unit | Price                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              | C-100.1  Written Unit  C-102.1a  Written Unit  C-102.1b  Written Unit  C-102.1c  Written Unit  C-102.1d  Written Unit  C-102.1d  Written Unit  C-102.1f | C-100.1 Contractor Quality Control Program (CQCP)  Written Unit Price  C-102.1a Installation, Maintenance, and Removal of Silt Fence or Silt Sock  Written Unit Price  C-102.1b Construct, Maintain, and Remove Inlet Sediment Trap  Written Unit Price  C-102.1c Construct, Maintain, and Remove Construction Exit  Written Unit Price  C-102.1d Construct, Maintain, and Remove Check Dam  Written Unit Price  C-102.1e Construct, Maintain, and Remove Rock Dam  Written Unit Price  C-102.1e Construct, Maintain, and Remove Rock Dam  Written Unit Price | C-100.1 Contractor Quality Control Program (CQCP) 1  Written Unit Price  C-102.1a Installation, Maintenance, and Removal of Silt Fence or Silt Sock  Written Unit Price  C-102.1b Construct, Maintain, and Remove Inlet Sediment Trap 1  Written Unit Price  C-102.1c Construct, Maintain, and Remove Construction Exit 1  Written Unit Price  C-102.1d Construct, Maintain, and Remove Check Dam 2  Written Unit Price  C-102.1d Construct, Maintain, and Remove Check Dam 2  Written Unit Price  C-102.1e Construct, Maintain, and Remove Rock Dam 2  Written Unit Price  C-102.1e Water Quality Monitoring and Sampling 6 | C-100.1 Contractor Quality Control Program (CQCP) 1 LS  Written Unit Price  C-102.1a Installation, Maintenance, and Removal of Silt Fence or Silt Sock  Written Unit Price  C-102.1b Construct, Maintain, and Remove Inlet Sediment Trap 1 EA  Written Unit Price  C-102.1c Construct, Maintain, and Remove Construction Exit 1 EA  Written Unit Price  C-102.1d Construct, Maintain, and Remove Check Dam 2 EA  Written Unit Price  C-102.1d Construct, Maintain, and Remove Check Dam 2 EA  Written Unit Price  C-102.1e Construct, Maintain, and Remove Check Dam 2 EA  Written Unit Price  C-102.1e Construct, Maintain, and Remove Rock Dam 2 EA | C-100.1 Contractor Quality Control Program (CQCP) 1 LS  Written Unit Price  C-102.1a Installation, Maintenance, and Removal of Silt Fence or Silt Sock  Written Unit Price  C-102.1b Construct, Maintain, and Remove Inlet Sediment Trap 1 EA  Written Unit Price  C-102.1c Construct, Maintain, and Remove Construction Exit 1 EA  Written Unit Price  C-102.1d Construct, Maintain, and Remove Check Dam 2 EA  Written Unit Price  C-102.1d Construct, Maintain, and Remove Check Dam 2 EA  Written Unit Price  C-102.1e Construct, Maintain, and Remove Check Dam 2 EA  Written Unit Price  C-102.1e Water Quality Monitoring and Sampling 6 EA |

| Line<br>No. | Item No.     | Item Description                             | Est. Qty. | Units | Unit Price | Bid Amount |
|-------------|--------------|----------------------------------------------|-----------|-------|------------|------------|
| 8           | C-102.1g     | Water Quality Inspections                    | 2         | EA    |            |            |
|             | Written Unit | Price                                        |           |       |            |            |
| 9           | C-102.1h     | Erosion Control Mobilization                 | 1         | LS    |            |            |
| 1           | Written Unit | Price                                        | di.       |       |            |            |
| 10          | C-102.1i     | Emergency Erosion Control<br>Mobilization    | 1         | LS    |            |            |
|             | Written Unit | Price                                        |           |       | - 1        |            |
| 11          | C-102.1j     | Rip Rap, Type III 18" Depth                  | 930       | SY    |            |            |
|             | Written Unit | Price                                        |           |       |            |            |
| 12          | C-102.1k     | Erosion Control<br>Blanket/Matting           | 300       | SY    |            |            |
|             | Written Unit | Price                                        |           |       |            |            |
| 13          | C-105.1      | Mobilization, Cleanup, and<br>Demobilization | 1         | LS    |            |            |
|             | Written Unit | Price                                        |           |       |            |            |
| 14          | C-105.2      | Airfield Safety and Traffic<br>Control       | 1         | LS    |            |            |
|             | Written Unit | Price                                        |           |       |            |            |

| Line<br>No. | Item No.     | Item Description                                                  | Est. Qty. | Units | Unit Price | Bid Amount |
|-------------|--------------|-------------------------------------------------------------------|-----------|-------|------------|------------|
| 15          | P-101.1      | Remove Existing 30-72" RCP                                        | 75        | LF    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |
| 16          | P-101.2      | Remove Existing Concrete<br>Headwall                              | 1         | EA    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |
| 17          | P-152.1      | Unclassified Excavation,<br>Select Fill from Off-Site<br>Material | 2,430     | CY    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |
| 18          | P-152.2      | Borrow Excavation, Select Fill from On-Site Material              | 9,720     | CY    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |
| 19          | P-152.3      | Unsuitable/Over excavation                                        | 1,000     | CY    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |
| 20          | D-701.2      | Concrete Sewer Pipe, 72-inch,<br>Class V                          | 200       | LF    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |
| 21          | D-701.3      | Concrete Sewer Pipe, 84-inch,<br>Class V                          | 700       | LF    |            |            |
|             | Written Unit | Price                                                             |           |       |            |            |

| Line<br>No. | Item No.     | Item Description                                        | Est. Qty. | Units | Unit Price | Bid Amount |
|-------------|--------------|---------------------------------------------------------|-----------|-------|------------|------------|
| 22          | D-751.2      | Airfield Manhole with Aircraft<br>Rated Lid             | 1         | EA    |            |            |
|             | Written Unit | Price                                                   |           |       |            |            |
| 23          | D-751.4      | Connect Storm Sewer Pipe to<br>Existing Storm Structure | 1         | EA    |            |            |
|             | Written Unit | Price                                                   |           |       |            |            |
| 24          | D-752.1      | Concrete Storm Headwall                                 | 1         | EA    |            |            |
|             | Written Unit | Price                                                   |           |       |            |            |
| 25          | T-901.1      | Temporary Seeding                                       | 4         | AC    |            |            |
|             | Written Unit | Price                                                   |           |       |            |            |
| 26          | T-901.2      | Permanent Seeding                                       | 4         | AC    |            |            |
|             | Written Unit | Price                                                   |           |       |            |            |
| 27          | T-901.3      | Seeding, Staging Area                                   | 1         | AC    |            |            |
|             | Written Unit | Price                                                   |           |       |            |            |
| 28          | T-904.1      | Sodding                                                 | 80        | SY    |            |            |
|             | Written Unit | Price                                                   |           |       |            |            |

## Location of Project: Augusta Regional Airport, Augusta, Georgia Title of Project: Augusta Regional Airport Southeast Drainage Ditch Enclosure Ph II

| Line<br>No. | Item No.     | Item Description                                      | Est. Qty. | Units | Unit Price | Bid Amount |
|-------------|--------------|-------------------------------------------------------|-----------|-------|------------|------------|
| 29          | T-905.1      | Topsoiling (Obtain on Site or Removed from Stockpile) | 6,900     | CY    |            |            |
|             | Written Unit | Price                                                 |           |       |            |            |
| 30          | T-905.2      | Topsoiling, Staging Area                              | 2,762     | CY    |            |            |
|             | Written Unit | Price                                                 |           |       |            |            |
| 31          | T-908.1      | Mulching                                              | 4         | AC    |            |            |
|             | Written Unit | Price                                                 |           |       |            |            |

| Total Bid Alternate 1 V                     | Vritt | en =        |
|---------------------------------------------|-------|-------------|
|                                             |       | BID SUMMARY |
| Base Bid                                    | =     |             |
| Base Bid Written                            | =     |             |
| Bid Alternative 1                           | =     |             |
| Bid Alternative 1 Written                   | =     |             |
| Total Base Bid + Bid<br>Alternate 1         | =     |             |
| Total Base Bid + Bid<br>Alternate 1 Written | =     |             |

Total Bid Alternate 1 = \_\_\_\_\_

6. **Determination of Low Bidder:** Low bidder will be determined based on the total of the base bid plus all bid alternates regardless of the alternates chosen for the project. Owner shall reserve the right to award the overall project and alternate as deemed fit.

| 7.             | and Bonds within fifteen (15) days after<br>bid bond accompanying this bid, and th                                                          | at in case of failure on its part to execute the said ( the date indicated in the "Notice of Award," the o money payable thereon, shall be paid to the O erwise the Bid Security or check accompanying | check or<br>wner as |  |  |  |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--|--|--|
| 8.             | Documentation: The following required                                                                                                       | documents are attached to and made a part of thi                                                                                                                                                       | is bid              |  |  |  |
|                | <ul> <li>a. Required Bid Security in the form</li> <li>b. Performance of Work by Subco</li> <li>c. Certificate of Prompt Payment</li> </ul> | of a Bid Bond payable to the order of the City of A<br>tractor List;                                                                                                                                   | lugusta;            |  |  |  |
| 9.             | Name and business address (mailing an                                                                                                       | street) of Bidder to which all formal notices shall l                                                                                                                                                  | be sent:            |  |  |  |
| 10.            |                                                                                                                                             | ed in the General Provisions of the Construction C<br>have the meanings assigned to them in the C                                                                                                      |                     |  |  |  |
| 11.            | Bidder hereby acknowledges receipt of the following addenda:                                                                                |                                                                                                                                                                                                        |                     |  |  |  |
|                | Addendum No.                                                                                                                                | Date                                                                                                                                                                                                   |                     |  |  |  |
| 12.<br>and the | The Bidder shall state on the line below date of said corporation.                                                                          | if a corporation, the name of state in which incor                                                                                                                                                     | porated             |  |  |  |
| Signed         | this day of                                                                                                                                 | , 20                                                                                                                                                                                                   |                     |  |  |  |
|                |                                                                                                                                             | Contractor                                                                                                                                                                                             |                     |  |  |  |
|                |                                                                                                                                             | Ву:                                                                                                                                                                                                    |                     |  |  |  |
|                |                                                                                                                                             | (Signature of individual, partner or office signing the Bid)                                                                                                                                           | r                   |  |  |  |
| (SEAL          | .)                                                                                                                                          | License Number                                                                                                                                                                                         |                     |  |  |  |
|                |                                                                                                                                             | Elocito i fallipoi                                                                                                                                                                                     |                     |  |  |  |

ATTEST:

NOTE: If Contractor is a Corporation, Secretary should attest seal. Seal is required if Bidder is a If Contractor is a Partnership, all partners shall execute the bid (add spaces as required). Corporation.

### **BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned

| as <b>Principal,</b> and                                                                                                                                                                                   |                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| as <b>Surety,</b> are hereby                                                                                                                                                                               |                   |
|                                                                                                                                                                                                            |                   |
| held and firmly bound unto                                                                                                                                                                                 | _ as <b>Owner</b> |
| in the penal sum of                                                                                                                                                                                        |                   |
| for the payment of which, well and truly to be made, we hereby jointly and several                                                                                                                         | ly                |
| bind ourselves, our heirs, executors, administrators, successors, and assigns.                                                                                                                             |                   |
| Signed this day of, 20                                                                                                                                                                                     |                   |
| The conditions of the above obligation is such that whereas the Princip Augusta Airport Aviation Commission certain Bill, attached hereto and hereby mainto a Contract in writing for the Construction of: |                   |

### AUGUSTA REGIONAL AIRPORT SOUTHEAST DRAINAGE DITCH ENCLOSURE PH II

### NOW THEREFORE,

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

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

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

(L.S.) Principal

Surety

By:

(SEAL)

- (1) Date of Bond must be same date as bid.
- (2) Bond must be signed or countersigned by Surety's proper Georgia Resident Agent. Date of Power-of-Attorney shall be same date as date of Bond.
- (3) If a Partnership, all partners shall execute Bond.

### PERFORMANCE OF WORK BY SUBCONTRACTORS

The Bidder hereby states that he proposes to use the subcontractors listed below on this project if awarded the Contract. Please list all proposed subcontractors, trade specialty and dollar value of their work. The Bidder shall obtain prior written permission of the Owner should it choose to add or substitute other subcontractor(s) not shown below.

| Subcontractor<br>Name/Address/Phone Number | Subcontractor Work Items                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Dollar Value of<br>Subcontractor Work |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                       |
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|                                            | Literatura de la Collega de la |                                       |
| mated Total Cost of Items that Bidder      | states will be performed by Subcon                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ITACIOFS IS:                          |
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### CERTIFICATION OF PROMPT PAYMENT

The prime Contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than thirty (30) days from the receipt of each payment the prime Contractor receives from the Owner. The prime Contractor further agrees to return retainage payments to each subcontractor within thirty (30) days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval from the Owner. This clause applies to both DBE and non-DBE subcontractors.

| Name of Bidder's            | Signature of Bidder's     |
|-----------------------------|---------------------------|
| Authorized Representative   | Authorized Representative |
| (Please Print or Type Name) |                           |
|                             |                           |
| Title of Bidder's           | Date                      |
|                             |                           |

### Item C-102 Temporary Air and Water Pollution, Soil Erosion, and Siltation Control

### DESCRIPTION

102-1. This item shall consist of temporary control measures as shown on the plans or as ordered by the Resident Project Representative (RPR) during the life of a contract to control pollution of air and water, soil erosion, and siltation through the use of silt fences, berms, dikes, dams, sediment basins, fiber mats, gravel, mulches, grasses, slope drains, and other erosion control devices or methods.

Temporary erosion control shall be in accordance with the approved erosion control plan; the approved Construction Safety and Phasing Plan (CSPP) and AC 150/5370-2, *Operational Safety on Airports During Construction*. The temporary erosion control measures contained herein shall be coordinated with the permanent erosion control measures specified as part of this contract to the extent practical to assure economical, effective, and continuous erosion control throughout the construction period.

Temporary control may include work outside the construction limits such as borrow pit operations, equipment and material storage sites, waste areas, and temporary plant sites.

Temporary control measures shall be designed, installed and maintained to minimize the creation of wildlife attractants that have the potential to attract hazardous wildlife on or near public-use airports.

### **MATERIALS**

- **102-2.1 Grass.** Grass that will not compete with the grasses sown later for permanent cover per Item T-901shall be a quick-growing species (such as ryegrass, Italian ryegrass, or cereal grasses) suitable to the area providing a temporary cover. Selected grass species shall not create a wildlife attractant.
- **102-2.2 Mulches.** Mulches may be hay, straw, fiber mats, netting, bark, wood chips, or other suitable material reasonably clean and free of noxious weeds and deleterious materials per Item T-908. Mulches shall not create a wildlife attractant.
- **102-2.3 Fertilizer.** Fertilizer shall be a standard commercial grade and shall conform to all federal and state regulations and to the standards of the Association of Official Agricultural Chemists.
- **102-2.4 Slope drains.** Slope drains may be constructed of pipe, fiber mats, rubble, concrete, asphalt, or other materials that will adequately control erosion.
- 102-2.5 Silt fence. Silt fence shall consist of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life. Silt fence shall meet the requirements of ASTM D6461.
- **102-2.6 Other.** All other materials shall meet commercial grade standards and shall be approved by the RPR before being incorporated into the project.

### **CONSTRUCTION REQUIREMENTS**

**102-3.1** General. In the event of conflict between these requirements and pollution control laws, rules, or regulations of other federal, state, or local agencies, the more restrictive laws, rules, or regulations shall apply.

The RPR shall be responsible for assuring compliance to the extent that construction practices, construction operations, and construction work are involved.

102-3.2 Schedule. Prior to the start of construction, the Contractor shall submit schedules in accordance with the approved Construction Safety and Phasing Plan (CSPP) and the plans for accomplishment of temporary and permanent erosion control work for clearing and grubbing; grading; construction; paving; and structures at watercourses. The Contractor shall also submit a proposed method of erosion and dust control on haul roads and borrow pits and a plan for disposal of waste materials. Work shall not be started until the erosion control schedules and methods of operation for the applicable construction have been accepted by the RPR.

102-3.3 Construction details. The Contractor will be required to incorporate all permanent erosion control features into the project at the earliest practicable time as outlined in the plans and approved CSPP. Except where future construction operations will damage slopes, the Contractor shall perform the permanent seeding and mulching and other specified slope protection work in stages, as soon as substantial areas of exposed slopes can be made available. Temporary erosion and pollution control measures will be used to correct conditions that develop during construction that were not foreseen during the design stage; that are needed prior to installation of permanent control features; or that are needed temporarily to control erosion that develops during normal construction practices, but are not associated with permanent control features on the project.

Where erosion may be a problem, schedule and perform clearing and grubbing operations so that grading operations and permanent erosion control features can follow immediately if project conditions permit. Temporary erosion control measures are required if permanent measures cannot immediately follow grading operations. The RPR shall limit the area of clearing and grubbing, excavation, borrow, and embankment operations in progress, commensurate with the Contractor's capability and progress in keeping the finish grading, mulching, seeding, and other such permanent control measures current with the accepted schedule. If seasonal limitations make such coordination unrealistic, temporary erosion control measures shall be taken immediately to the extent feasible and justified as directed by the RPR.

The Contractor shall provide immediate permanent or temporary pollution control measures to minimize contamination of adjacent streams or other watercourses, lakes, ponds, or other areas of water impoundment as directed by the RPR. If temporary erosion and pollution control measures are required due to the Contractor's negligence, carelessness, or failure to install permanent controls as a part of the work as scheduled or directed by the RPR, the work shall be performed by the Contractor and the cost shall be incidental to this item.

The RPR may increase or decrease the area of erodible earth material that can be exposed at any time based on an analysis of project conditions.

The erosion control features installed by the Contractor shall be maintained by the Contractor during the construction period.

Provide temporary structures whenever construction equipment must cross watercourses at frequent intervals. Pollutants such as fuels, lubricants, bitumen, raw sewage, wash water from concrete mixing operations, and other harmful materials shall not be discharged into any waterways, impoundments or into natural or manmade channels.

102-3.4 Installation, maintenance and removal of silt fence. Silt fences shall extend a minimum of 16 inches (41 cm) and a maximum of 34 inches (86 cm) above the ground surface. Posts shall be set no more than 10 feet (3 m) on center. Filter fabric shall be cut from a continuous roll to the length required minimizing joints where possible. When joints are necessary, the fabric shall be spliced at a support post with a minimum 12-inch (300-mm) overlap and securely sealed. A trench shall be excavated approximately 4 inches (100 mm) deep by 4 inches (100 mm) wide on the upslope side of the silt fence. The trench shall be backfilled and the soil compacted over the silt fence fabric. The Contractor shall remove and dispose of silt that accumulates during construction and prior to establishment of permanent

erosion control. The fence shall be maintained in good working condition until permanent erosion control is established. Silt fence shall be removed upon approval of the RPR.

### **METHOD OF MEASUREMENT**

- **102-4.1** Temporary erosion and pollution control work required will be performed as scheduled or directed by the RPR. Completed and accepted work will be measured as follows:
  - a. Temporary seeding and mulching will be measured by the square yard (square meter).
  - **b.** Temporary slope drains will be measured by the linear foot (meter).
- c. Temporary benches, dikes, dams, and sediment basins will be measured by the cubic yard (cubic meter) of excavation performed, including necessary cleaning of sediment basins, and the cubic yard (cubic meter) of embankment placed as directed by the RPR.
  - **d.** All fertilizing will be measured by the ton (kg).
  - e. Installation and removal of silt fence or silt sock will be measured by the linear foot.
- 102-4.2 Control work performed for protection of construction areas outside the construction limits, such as borrow and waste areas, haul roads, equipment and material storage sites, and temporary plant sites, will not be measured and paid for directly but shall be considered as a subsidiary obligation of the Contractor.

### BASIS OF PAYMENT

**102-5.1** Accepted quantities of temporary water pollution, soil erosion, and siltation control work ordered by the RPR and measured as provided in paragraph 102-4.1 will be paid for under:

| Item C-102.1a | Installation and Removal of Silt Fence or Silt Sock, Type A - per linear foot |
|---------------|-------------------------------------------------------------------------------|
| Item C-102.1b | Construct, Maintain, and Remove Inlet Sediment Trap - per each                |
| Item C-102.1c | Construct, Maintain, and Remove Construction Exit - per each                  |
| Item C-102.1d | Construct, Maintain, and Remove Check Dam - per each                          |
| Item C-102.1e | Construct, Maintain, and Remove Rock Dam - per each                           |
| Item C-102.1f | Water Quality Monitoring and Sampling - per each                              |
| Item C-102.1g | Water Quality Inspections – per each                                          |
| Item C-102.1h | Erosion Control Mobilization – per lump sum                                   |
| Item C-102.1i | Emergency Erosion Control Mobilization – per lump sum                         |
| Item C-102.1j | Rip Rap, Type III – per square yard                                           |
| Item C-102.1k | Erosion Control Blanket/Matting – per square yard                             |

Where other directed work falls within the specifications for a work item that has a contract price, the units of work shall be measured and paid for at the contract unit price bid for the various items.

Temporary control features not covered by contract items that are ordered by the RPR will be paid for in accordance with Section 90, paragraph 90-05 *Payment for Extra Work*.

### REFERENCES

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

Advisory Circulars (AC)

AC 150/5200-33 Hazardous Wildlife Attractants on or Near Airports

AC 150/5370-2 Operational Safety on Airports During Construction

ASTM International (ASTM)

ASTM D6461 Standard Specification for Silt Fence Materials

United States Department of Agriculture (USDA)

FAA/USDA Wildlife Hazard Management at Airports, A Manual for Airport Personnel

**END OF ITEM C-102** 

| EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST  STAND ALONE CONSTRUCTION PROJECTS GAR100001 |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                 | 27 Description of practices to p                             |                               | <b>.</b>                                                |                                                                                                       |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
|                                                                                                        | SWCD: Piedmont                                                                                                                                                                                                                                                           | CE 0.03 Y                                                                                                                                                                                                                                                       | 28 Description of the practices                              | s that will be used to reduc  | ce the pollutants in storm wa                           | ater discharges. *                                                                                    |
| Project Name: AGS Ditch Enclosure Phase II Address: 1501 Aviation Way, Augusta, GA                     |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                 |                                                              |                               | •                                                       | nich disturb soils for the major portions of the site                                                 |
| Local Issuing Authority: Augusta/Richmond Date on Plans: July 2023, Rev. January 2025                  |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                 | (i.e., initial perimeter and s infrastructure, temporary a   | · ·                           | clearing and grubbing activity                          | ties, excavation activities, utility activities, grading,                                             |
| Name & Email of person filling out checklist: C'lee Bishop, cbishop@aulickengineering.com              |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                 | 30 Provide complete requirem                                 | ŕ                             | record keeping by the Prima                             | ary Permittee. *                                                                                      |
| Plan Included Page # Y/N                                                                               | TO BE SHOWN ON ES&PC PLAN                                                                                                                                                                                                                                                | CE 0.03 Y                                                                                                                                                                                                                                                       | 31 Provide complete requirem                                 | nents of Sampling Freque      | ency and Reporting of samp                              | oling results. *                                                                                      |
| CE 0.01 Y                                                                                              | 1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the                                                                                                                                        | CE 0.03 Y                                                                                                                                                                                                                                                       | 32 Provide complete details fo                               | or Retention of Records as    | s per <b>Part IV.F.</b> of the perm                     | it. *                                                                                                 |
|                                                                                                        | year in which the land-disturbing activity was permitted.  The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed. Permit IV.D.1. pg 27                                                                                          | CE 0.04 Y                                                                                                                                                                                                                                                       | 33 Description of analytical me                              | ethods to be used to colle    | ect and analyze the samples                             | s from each location. *                                                                               |
| DI ANG V                                                                                               | 2 Level II certification number issued by the Commission, signature and seal of the certified design professional.                                                                                                                                                       | CE 0.04 Y                                                                                                                                                                                                                                                       | 34 Appendix B rationale for N                                |                               | ·                                                       |                                                                                                       |
| PLANS Y                                                                                                | Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed. The Level                                                                                                                                           | CE 0.04 Y                                                                                                                                                                                                                                                       | • •                                                          |                               |                                                         | intermittent streams and other water bodies into                                                      |
|                                                                                                        | Il certification must be issued to the Design Professional, after completion of a GSWCC approved course, and whose                                                                                                                                                       | CE 0.04                                                                                                                                                                                                                                                         | which storm water is discha                                  | •                             | or isan, and perennar and                               |                                                                                                       |
|                                                                                                        | signature and seal are on the Plan.                                                                                                                                                                                                                                      | CE 0.04 Y                                                                                                                                                                                                                                                       | 36 A description of appropriate                              | e controls and measures       | that will be implemented at                             | the construction site including: (1) initial sediment                                                 |
| CE 0.02 Y                                                                                              | 3 Limits of disturbance shall be <b>less than</b> 50 acres at any one time without prior written authorization from the GAEPD District Office.                                                                                                                           |                                                                                                                                                                                                                                                                 | - · · · · · · · · · · · · · · · · · · ·                      |                               |                                                         | nd drainage BMPs, and (3) final BMPs. For storage requirements and initial perimeter control          |
|                                                                                                        | If GAEPD approves the request to disturb 50 acres or more at any one time, the Plan <u>must</u> include the GAEPD approval letter and completed Appendix 1 of this checklist with at least 4 of the chosen BMPs. *                                                       |                                                                                                                                                                                                                                                                 |                                                              |                               | •                                                       | e, the Plan may combine all BMPs into a single                                                        |
|                                                                                                        | A copy of the written approval by GAEPD must be attached to the Plan for the Plan to be reviewed. <b>Permit IV.D.3. pg 28</b>                                                                                                                                            |                                                                                                                                                                                                                                                                 | nhase nlan *                                                 |                               |                                                         |                                                                                                       |
| CE 0.02 Y                                                                                              | 4 The name and phone number of the 24-hour contact responsible for erosion, sedimentation and pollution controls.                                                                                                                                                        | PLANS Y                                                                                                                                                                                                                                                         | 37 Graphic scale and North a                                 |                               |                                                         |                                                                                                       |
| CE 0.02 Y                                                                                              | 5 Provide the name, address, email address, and phone number of Primary Permittee.                                                                                                                                                                                       | PLANS Y                                                                                                                                                                                                                                                         | 38 Existing and proposed con  Map Scale                      | Ground Slope                  | es drawn at an interval in ac<br>Contour Intervals, ft. | ccordance with the following:                                                                         |
| CE 0.02 Y                                                                                              | 6 Note total and disturbed acreages of the project or phase under construction.                                                                                                                                                                                          |                                                                                                                                                                                                                                                                 | ·                                                            | Flat 0 - 2%                   | 0.5 or 1                                                |                                                                                                       |
| CE 0.02 Y                                                                                              | 7 Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees.                                                                                                                                                    |                                                                                                                                                                                                                                                                 | 1 inch = 100ft or<br>larger scale                            | Rolling 2 - 8%                | 1 or 2                                                  |                                                                                                       |
| CE 0.02 Y                                                                                              | 8 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.                                                                                                                                             |                                                                                                                                                                                                                                                                 | larger scale                                                 | Steep 8% +                    | 2, 5 or 10                                              |                                                                                                       |
| CE 0.02 Y                                                                                              | 9 Descriptions of the nature of construction activity and existing site conditions.                                                                                                                                                                                      | CE 0.04 Y                                                                                                                                                                                                                                                       |                                                              |                               | ·                                                       | valent to or superior to conventional BMPs as                                                         |
| CE 0.02 Y                                                                                              | 10 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.                                                                                                                                               |                                                                                                                                                                                                                                                                 | •                                                            |                               | red by GAEPD or the Georg<br>ound at www.gaswcc.georgia | ria Soil and Water Conservation Commission).                                                          |
| CE 0.02 Y                                                                                              | 11 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands,                                                                                                                                | CE 0.04 Y                                                                                                                                                                                                                                                       |                                                              |                               |                                                         | endix A-2 of the Manual for Erosion & Sediment                                                        |
|                                                                                                        | marshlands, etc. which may be affected.                                                                                                                                                                                                                                  | CE 0.04                                                                                                                                                                                                                                                         | Control in Georgia 2016 Ed                                   |                               | ent bivit List. Note: to Appe                           | Maix 742 of the Mandal for Elosion & occument                                                         |
| CE 0.02 Y                                                                                              | 12 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on Part IV page 20 of the permit.                                                                                              | CE 0.04 Y                                                                                                                                                                                                                                                       | 41 Delineation of the applicable by the Local Issuing Author |                               | •                                                       | State Waters and any additional buffers as required                                                   |
| CE 0.02 Y                                                                                              | 13 Design professional's certification statement and signature that the Permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on <b>Part IV page 20</b> of the permit. *                | CE 0.04 Y                                                                                                                                                                                                                                                       | 42 Delineation of all State Wat                              |                               |                                                         | project site.                                                                                         |
|                                                                                                        | 14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect <b>and certify</b> the installation of                                                                                                                             | CE 0.04 Y                                                                                                                                                                                                                                                       | 43 Delineation and acreage of                                | f contributing drainage ba    | asins on the project site.                              |                                                                                                       |
| CE 0.02 Y                                                                                              | the initial sediment storage requirements and perimeter control BMPs within 7 days after installation." *                                                                                                                                                                | CE 0.05 Y                                                                                                                                                                                                                                                       | 44 Provide hydrology study ar                                |                               |                                                         | ·                                                                                                     |
|                                                                                                        | 15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers                                                                                                                                     | MAPS  45 Estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed. For solar farm projects, post-construction impervious area shall be calculated as 70% of total solar panel square foot |                                                              |                               |                                                         |                                                                                                       |
| CE 0.02 Y                                                                                              | as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."                                                  | CE 0.05 Y                                                                                                                                                                                                                                                       | 46 Storm-drain pipe and weir                                 | velocities with appropriate   | e outlet protection to accomi                           | modate discharges without erosion.                                                                    |
|                                                                                                        | 16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.                                                                                                                                                                 |                                                                                                                                                                                                                                                                 | Identify/Delineate at all stor                               | m water discharge points      | •                                                       |                                                                                                       |
| CE 0.02 Y                                                                                              | 17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a                                                                                                                                                | CE 0.05 Y                                                                                                                                                                                                                                                       | 47 Soil series for the project si                            | ite and their delineation.    |                                                         |                                                                                                       |
|                                                                                                        | hydraulic component must be certified by the design professional." *                                                                                                                                                                                                     | CE 0.05 Y                                                                                                                                                                                                                                                       | 48 The limits of disturbance fo                              | or each phase of construc     | tion.                                                   |                                                                                                       |
| CE 0.02 Y                                                                                              | 18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit." *                                                                                                                     | CE 0.05 Y                                                                                                                                                                                                                                                       |                                                              | •                             | - ·                                                     | ing a temporary sediment basin, retrofitted age location. Sediment storage volume must be in          |
| CE 0.02 Y                                                                                              | 19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment                                                                                                                                      |                                                                                                                                                                                                                                                                 |                                                              |                               |                                                         | he site has been achieved. A written justification                                                    |
|                                                                                                        | control measures and practices prior to land disturbing activities."                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 | ' •                                                          | •                             |                                                         | attainable must be included in the Plan for each justification as to why 67 cubic yards of storage is |
| CE 0.02 Y                                                                                              | 20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan                                                                                                                                    |                                                                                                                                                                                                                                                                 |                                                              |                               | •                                                       | ded for structural BMPs and all calculations used                                                     |
|                                                                                                        | does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."                                                                                                          |                                                                                                                                                                                                                                                                 | • •                                                          | ·                             | -                                                       | equivalent controls. When discharging from                                                            |
| CE 0.02 Y                                                                                              | 21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or                                                                                                                                       |                                                                                                                                                                                                                                                                 | ·                                                            |                               |                                                         | ructures that withdraw water from the surface,<br>t feasible, a written justification explaining this |
| CL 0.02                                                                                                | temporary seeding."                                                                                                                                                                                                                                                      | PLANS Y                                                                                                                                                                                                                                                         |                                                              |                               |                                                         | ingent than, the Manual for Erosion and Sediment                                                      |
|                                                                                                        | 22 Any construction activity which discharges storm water into a Biota Impaired Stream Segment, or within 1 linear mile upstream of                                                                                                                                      | 1 27 443                                                                                                                                                                                                                                                        |                                                              |                               | om the Manual Chapter 6, v                              |                                                                                                       |
| CE 0.02 Y                                                                                              | and within the same watershed as any portion of a Biota Impaired Stream Segment, must comply with <b>Part III.C.</b> of the permit.  Include the completed Appendix 1 of this checklist with at least 4 of the chosen BMPs that will be used for those areas of the site | DETAILS Y                                                                                                                                                                                                                                                       | 51 Provide detailed drawings t                               | for all structural practices. | Specifications must, at a n                             | n inimum, meet the guidelines set forth in the                                                        |
|                                                                                                        | which discharge to the Impaired Stream Segment. *                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                 | Manual for Erosion and Se                                    | 9                             |                                                         |                                                                                                       |
| CE 0.02 Y                                                                                              | 23 If a TMDL Implementation Plan for sediment has been finalized for the Biota Impaired Stream Segment (identified in Item 22                                                                                                                                            | DETAILS Y                                                                                                                                                                                                                                                       | <del>-</del>                                                 |                               |                                                         | es. Include species, planting dates and seeding, ropriate time of year that seeding will take place   |
|                                                                                                        | above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements                                                                                                                                           |                                                                                                                                                                                                                                                                 | and for the appropriate ged                                  | • • •                         |                                                         | rophate time of year tracsecurity will take place                                                     |
|                                                                                                        | included in the TMDL Implementation Plan. *                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                 |                                                              |                               |                                                         | at most of a common development (1) (                                                                 |
| CE 0.02 Y                                                                                              | 24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Include statement that                                                                                                                                              |                                                                                                                                                                                                                                                                 | •                                                            | • •                           | ess than 1 acre and no<br>hecklist items would b        | ot part of a common development but                                                                   |
|                                                                                                        | washout of the drum at the construction site is prohibited. *  25 Provide BMPs for the remediation of all petroleum spills and leaks.                                                                                                                                    |                                                                                                                                                                                                                                                                 | widini 200 it oi a pele                                      | annai su cam, uic - Ci        | nconnet itemie would b                                  | Effective January 1, 2025                                                                             |
| CE 0.02 Y                                                                                              | בט דוסיותב בועודס וטו עוב דבווז בעומעטודטו מו ווי בעוטובעווד סףווס מווע ובמגס.                                                                                                                                                                                           |                                                                                                                                                                                                                                                                 |                                                              |                               |                                                         | • •                                                                                                   |

CE 0.03 Y 26 Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur

after construction operations have been completed. \*

NOTES: C-021 - C-025 PLANS: C-026 - C-035 DETAILS: C-036 - C-039 DAMS: C-040 - C-041

Mead and Hunt, Inc. 5955 Core Road, Suite 515 North Charleston, SC 29406 phone: 843-486-8330 meadhunt.com



**ULICK ENGINEERING LLC** STORMWATER | HYDRAULICS | EROSION CONTRO AIRFIELD & CIVIL SITE | CONSTRUCTION SERVICES

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- AIRPORT GE DITCH

10/22/2024 ISSUED FOR BID

No. PE049285 GSWCC LEVEL II DESIGN PROFESSIONAL CERTIFICATION # 0000098122 EXP. 04/26/2025

REVISION #1: ADDENDUM NO. 1

M&H NO.: 0119700-210463.01 DATE: OCTOBER 22, 2024 DESIGNED BY: CMJ

DRAWN BY: HCA CHECKED BY: AKM

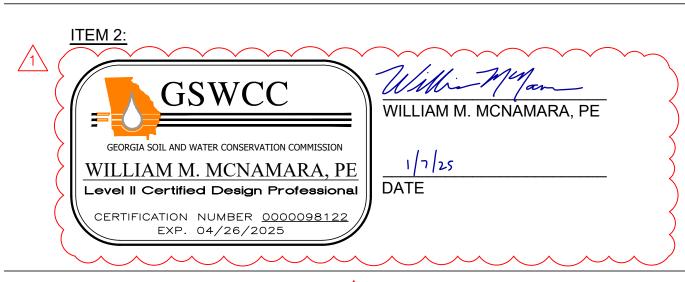
DO NOT SCALE DRAWINGS

SHEET CONTENTS

**EROSION, SEDIMENT &** POLLUTION CONTROL PLAN - CHECKLIST



THE APPLICABLE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN CHECKLIST ESTABLISHED BY THE COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED. SEE SHEET C-021.



### ITEM 3:

LIMITS OF DISTURBANCE SHALL BE LESS THAN 50 ACRES AT ANY ONE TIME WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE GAEPD DISTRICT OFFICE. IF GAEPD APPROVES THE REQUEST TO DISTURB 50 ACRES OR MORE AT ANY ONE TIME, THE PLAN MUST INCLUDE THE GAEPD APPROVAL LETTER AND COMPLETED APPENDIX 1 OF THIS CHECKLIST WITH AT LEAST 4 OF THE CHOSEN BMPS.

LIMITS OF DISTURBANCE: SEE ITEM #6 BELOW

### ITEM 4 & 5:

24-HR EROSION CONTROL CONTACT: NAME: **ELIZABETH GILES** ADDRESS: 1501 AVIATION WAY AUGUSTA, GA 30906

PHONE NUMBER: (706) 796 - 4010

EGILES@AUGUSTAGA.GOV

PRIMARY PERMITTEE:

NAME: TIM WEEGAR ADDRESS: 1501 AVIATION WAY

AUGUSTA, GA 30906 PHONE NUMBER: (706) 796 - 4009 EMAIL ADDRESS: TWEEGAR@AUGUSTA.GOV

### <u>ITEM 6:</u>

TOTAL AREA PHASE 1 (INITIAL): 9.5 AC TOTAL DISTURBED AREA PHASE 1 (INITIAL): 9.5 AC

TOTAL AREA PHASE 2 (INTERMEDIATE): 9.5 AC TOTAL DISTURBED AREA PHASE 2 (INTERMEDIATE): 9.5 AC

TOTAL AREA PHASE 3 (FINAL): 0.0 AC TOTAL DISTURBED AREA PHASE 3 (FINAL): 0.0 AC

### ITEM 7:

THE GPS LOCATION OF THE CONSTRUCTION EXIT 1 IS: N33.36024 -W81.96851 THE GPS LOCATION OF THE CONSTRUCTION EXIT 2 IS: N33.36018 -W81.96104

### ITEM 8:

INITIAL DATE AND REVISION DATES OF THE PLAN ARE DEPICTED ON ALL SHEETS.

### <u>ITEM 9:</u>

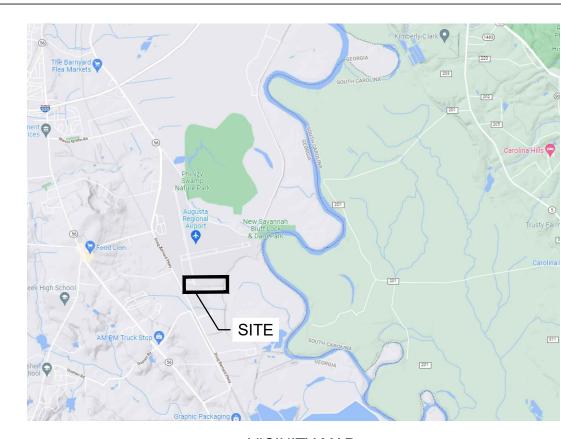
### **EXISTING SITE CONDITIONS:**

THE EXISTING SITE IS A PARTIALLY DEVELOPED SITE AT AUGUSTA REGIONAL AIRPORT. THE SITE HAS OPEN DITCH INCLUDING A PORTION OF COVERED WITH UNDERGROUND PIPE.

### NATURE OF CONSTRUCTION ACTIVITY:

THIS PROJECT INVOLVES CONSTRUCTION OF NEW UNDERGROUND DRAINAGE NETWORK (PIPES AND INLETS). THE NEW PIPES WILL BE COVERED WITH PROPOSED GRADING WORK. THE GRADING PHASE CONSISTS OF GRADING, DRAINAGE, EROSION CONTROL, AND GRASSING.

### <u>ITEM 10:</u>



**VICINITY MAP** NTS

THE RUNOFF LEAVES THE SITE INTO TWIGGS DEAD RIVER AND EVENTUALLY SAVANNAH RIVER.

### OTHER ADJACENT SITE DATA & SENSITIVE AREAS:

STREAMS - THE DRAINAGE FROM THE SITE FLOWS INTO THE EXISTING PIPE SYSTEM. FROM THERE RUNOFF FLOWS INTO A DRAINAGE CHANNEL WHICH CONNECTS TO TWIGGS DEAD RIVER AND **EVENTUALLY SAVANNAH RIVER** 

### LAKES - THERE ARE NO LAKES NEAR THIS PROJECT AT THE PROJECT.

RESIDENTIAL AREAS - THERE ARE ONLY RESIDENTIAL AREAS TO THE WEST OF THE AIRPORT OFF MIKE PADGETT HIGHWAY.

WETLANDS - THERE ARE NO WETLANDS THAT WILL BE AFFECTED BY THIS PROJECT

MARSHLANDS - THERE ARE NO MARSHLANDS IN THIS PROJECT LIMITS. SENSITIVE AREAS - STREAM BUFFERS ARE LOCATED DOWNSTREAM OF THE SITE TO THE SOUTH WEST

### ITEM 12 & 13:

### DESIGN PROFESSIONAL'S CERTIFICATION:

1) I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL), PUBLISHED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORMWATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR100001.

2) I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION

3) I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT CERTIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

WILLIAM M. MCNAMARA, PE LEVEL II CERTIFIED DESIGN PROFESSIONAL GSWCC CERTIFICATION NO.: 0000098122

### DESIGN PROFESSIONAL 7-DAY SITE CERTIFICATION

DATE OF INSPECTION

I CERTIFY THE SITE WAS IN COMPLIANCE WITH THE ES&PC PLAN ON THE DATE OF INSPECTION

GSWCC LEVEL II DESIGN PROFESSIONAL

**CERTIFICATION #** 

INSPECTION REVEALED THE FOLLOWING DISCREPANCIES FROM THE ES&PC PLAN:

THE DEFICIENCIES MUST BE ADDRESSED AND A RE-INSPECTION SCHEDULED. WORK SHALL NOT PROCEED ON THE SITE UNTIL DESIGN PROFESSIONAL CERTIFICATION IS OBTAINED.

### ITEM 14:

"THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT AND CERTIFY) THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS WITHIN 7 DAYS AFTER INSTALLATION."

THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE DESIGN ENGINEER ONE WEEK PRIOR TO THE ANTICIPATED PERIMETER CONTROL AND SEDIMENT BASIN INSTALLATION. CALL AULICK ENGINEERING AT 678-825-8196; THE ENGINEER'S NAME IS LISTED UNDER ITEMS #2 AND #12 ON THIS SHEET. FAILURE TO NOTIFY THE DESIGN PROFESSIONAL RELEASES AULICK ENGINEERING FROM ANY RELATED FINES OR LIABILITY.

"NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

THERE ARE NO BUFFER ENCROACHMENTS OR BUFFER VARIANCES REQUIRED.

### ITEM 17:

"AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL."

"WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.'

"THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES."

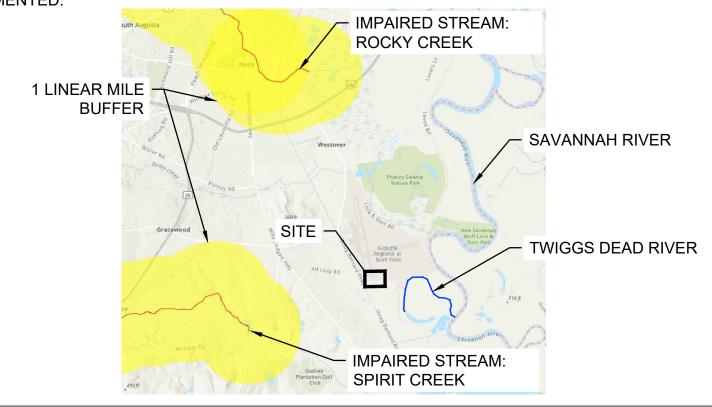
### ITEM 20:

"EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE."

"ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING."

### <u>ITEM 22:</u>

THIS PROJECT DOES NOT DISCHARGE STORMWATER DIRECTLY INTO AN IMPAIRED STREAM, NOR IS LOCATED WITHIN ONE LINEAR MILE OF AN IMPAIRED STREAM, AND THEREFORE A TMDL PLAN HAS NOT BEEN IMPLEMENTED.



### ITEM 23:

THERE IS NO IMPAIRED STREAM SEGMENT WITHIN 1 LINEAR MILE OF THIS PROJECT. THEREFORE. A TMDL PLAN FOR SEDIMENT HAS NOT BEEN FINALIZED AT LEAST 6 MONTHS PRIOR TO NOI.

### ITEM 24:

CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF THE VEHICLES ON THE PROJECT SITE IS ALLOWED ONLY IN DESIGNATED AREAS AND PER DETAIL IN THIS PLAN SET. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED

### ITEM 25:

### SPILL PREVENTION:

ANY LEAKS OR SPILLS OF PETROLEUM PRODUCTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTAIN, CONTROL, AND REMEDIATE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES. ORDINANCES. AND LAWS.

CONTROL OF POLLUTANTS: POLLUTANTS OF POTENTIALLY HAZARDOUS MATERIALS, SUCH AS FUELS, LUBRICANTS, LEAD PAINT, CHEMICALS OR BATTERIES, SHALL BE TRANSPORTED, STORED AND UTILIZED IN A MANNER TO PREVENT LEAKAGE OR SPILLAGE INTO THE ENVIRONMENT. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PROPER AND LEGAL DISPOSAL OF ALL SUCH MATERIALS. EQUIPMENT, ESPECIALLY CONCRETE OR ASPHALT TRUCKS, SHALL NOT BE WASHED OR CLEANED OUT ON THE PROJECT EXCEPT IN AREAS WHERE UNUSED PRODUCT CONTAMINANTS CAN BE PREVENTED FROM ENTERING WATERWAYS.

AN SPCC PLAN WILL BE DEVELOPED AND APPROVED PRIOR TO INSTALLATION OF FUEL TANKS. THIS PLAN WILL REQUIRE THE FOLLOWING:

- 1. ALL BARE SOIL AROUND FUELING AREA LINED TO PREVENT SEEPAGE INTO SOIL. IN ADDITION. A SPILL KIT WILL BE KEPT ON SITE IN CASE OF LEAKS.
- 2. TERTIARY CONTAINMENT WILL BE PROVIDED IN THE MOBILE TRUCK AREA
- 3. SECONDARY CONTAINMENT WILL BE PROVIDED IN THE FORM OF A CONTAINMENT PAD WITH A VALVE SIZED (OR APPROVED EQUAL) FOR THE APPROPRIATE REFUELING TRUCK.

THE CONTRACTOR SHALL PREPARE AN SPCC PLAN FOR FUEL STORAGE AREAS DURING CONSTRUCTION.

MATERIALS AND EQUIPMENT NECESSARY FOR PETROLEUM SPILL CLEANUP MUST BE KEPT ONSITE AND IN STORAGE AREAS. THESE MAY INCLUDE BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS. SPILL PREVENTION PRACTICES AND PROCEDURES MUST BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. ALL SPILLS MUST BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) MUST BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.

FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD MUST BE CONTACTED WITHIN 24 HOURS. FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES MUST BE CONTACTED AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLANS IF MORE THAN 1320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITY EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED **PROFESSIONAL** 

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10/22/2024 ISSUED FOR BID REVISION #1: ADDENDUM NO. No. PÉ049285 PROFESSIONAL GSWCC LEVEL II DESIGN **PROFESSIONAL** 

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CERTIFICATION # 0000098122 EXP. 04/26/2025

CHECKED BY: AKM DO NOT SCALE DRAWINGS

PLAN - NOTES

SHEET CONTENTS **EROSION. SEDIMENT & POLLUTION CONTROL** 

- SLOPE STABILIZATION
- SODDING
- STONE OUTLET PROTECTION
- PERMANENT GRASSING

THESE BMPS WERE SELECTED BASED ON EXISTING CONDITIONS AND TOPOGRAPHY

### ITEM 27:

THE CONTRACTOR MUST USE MEASURES SUCH AS PLASTIC SHEETING OR TEMPORARY ROOFS TO COVER BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE, AND OTHER MATERIALS IN ORDER TO MINIMIZE EXPOSURE TO PRECIPITATION AND STORMWATER.

### ITEM 28:

THE PRACTICES THAT WILL BE USED TO REDUCE THE POLLUTANTS IN STORMWATER DISCHARGE ARE

- TEMPORARY GRASSING
- ROCK DAM FILTER
- EXCAVATED SEDIMENT TRAP
- TEMPORARY CHECK DAMS TEMPORARY SILT FENCE

THESE BMPS REMOVE POLLUTANTS THROUGH SETTLING, FILTRATION, PONDING AND OTHER METHODS AS ILLUSTRATED IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.

### PRODUCT SPECIFIC PRACTICES

PETROLEUM BASED PRODUCTS - CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS, AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ONSITE VEHICLES AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATERS, NATURAL DRAINS, AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS, AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.

PAINTS/FINISHES/SOLVENTS - AIL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS, AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

CONCRETE TRUCK WASHING - CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT

FERTILIZER/HERBICIDES - THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS.

BUILDING MATERIALS - NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTE DISPOSAL PROCEDURES.

### ITEM 29:

### **CONSTRUCTION SCHEDULE**

MEASURES

 $\overline{\phantom{a}}$ START DATE: JUNE 2025 **END DATE: OCTOBER 2025** 

MONTHS **CONSTRUCTION ACTIVITY** 2 INSTALL CONSTRUCTION EXIT & PERIMETER MEASURES INSTALL INITIAL PHASE E&SC MEASURES INSTALL SEDIMENT STORAGE BMPS PERFORM GRADING & INSTALL DRAINAGE INSTALL GRADING PHASE E&SC MEASURES PERFORM GRADING PHASE GRASSING PERFORM FINAL GRASSING MAINTENANCE OF ES&PC BMPS REMOVE OBSOLETE E&SC

SCHEDULE SHOWN IS APPROXIMATE. CONTRACTOR SHALL PROVIDE AN UPDATED AND ACCURATE CONSTRUCTION AND BMP INSTALLATION AND MAINTENANCE SCHEDULE AS NEEDED AND WILL HAVE A SCHEDULE AVAILABLE ON-SITE.

### INSPECTION REQUIREMENTS

(1). EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (A) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT AND (B) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

(2). MEASURE AND RECORD RAINFALL WITHIN DISTURBED AREAS OF THE SITE THAT HAVE NOT MET FINAL STABILIZATION ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.

(3). CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST):

(a) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (B) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.A.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

(4). CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION HAS BEEN SUBMITTED) | REPORTING THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. RECEIVING WATER(S).

PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI. CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. (6). A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (I.E., INITIAL, INTERMEDIATE OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.A.(5). OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION SITE THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT.

THERE IS ONE OUTFALL SAMPLING LOCATION FOR THE AGS DITCH ENCLOSURE PHASE II PROJECT. THE OUTFALL SAMPLING LOCATION WILL BE AT THE PROJECT OUTFALLS SHOWN ON SHEET C-032.

SAMPLING METHODS AND DEVICES TO BE USED SHALL BE DETERMINED BY THE CONTRACTOR, PROVIDED AS A PART OF THE NOI SUBMITTAL, AND MAINTAINED WITH THE ES&PCP. THESE DEVICES SHALL, AT A MINIMUM, MEET THE REQUIREMENTS OF NPDES PERMIT GAR100001.

THE OUTFALL SAMPLING POINT IS LOCATED IN THE RECEIVING WATERS OF A WARM WATER FISHERY. THE NEPHELOMETRIC TURBIDITY UNIT (NTU) VALUE AT THE SAMPLING LOCATION SHALL BE NO HIGHER THAN 75 UNITS AS SHOWN IN ITEM 34.

### SAMPLING FREQUENCY:

NPDES PERMIT GAR100001 REQUIRES THAT A MINIMUM OF TWO SAMPLING EVENTS OCCUR OVER THE COURSE OF THE PROJECT AS FOLLOWS:

(1). THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINNING OF ANY STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN IN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.

(2). HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.

(3). SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING QUALIFYING EVENTS:

(A). FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING WORMAL BUSINESS HOURS AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO COMPLETION OF MASS GRADING OPERATIONS, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION;

### ITEM 31 (CONT'D):

(B). IN ADDITION TO (A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO SUBMITTAL OF A NOT, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER COMES FIRST;

(C). AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE, IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL ARE NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS\* UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-RAIN EVENT INSPECTIONS DETERMINE THAT BMPS ARE PROPERLY DESIGNED, INSTALLED

(D). WHERE SAMPLING PURSUANT TO (A), (B) OR (C) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE), THE PERMITTEE, IN ACCORDANCE WITH PART IV.D.4.a.(6), MUST INCLUDE A WRITTEN JUSTIFICATION IN THE INSPECTION REPORT OF WHY SAMPLING WAS NOT PERFORMED. PROVIDING THIS JUSTIFICATION DOES NOT RELIEVE THE PERMITTEE OF ANY SUBSEQUENT SAMPLING OBLIGATIONS UNDER (A), (B) OR (C) ABOVE; AND

(E). EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C) ABOVE.

\*NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (A) AND (B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR SAMPLING AT ANY TIME OF THE DAY OR WEEK.

THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C. BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT. UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN | SAMPLING AND ANALYSIS OF ANY STORMWATER DISCHARGE(S) OR THE RECEIVING WATER(S) BEYOND THE WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED IN A SIMILAR MANNER TO THE EPD. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. SAMPLING REPORTS MUST BE (5). BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION SUBMITTED TO EPD USING THE ELECTRONIC SUBMITTAL SERVICE PROVIDED BY EPD. SAMPLING REPORTS

ALL SAMPLING REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:

- a. THE RAINFALL AMOUNT, DATE, EXACT PLACE AND TIME OF SAMPLING OR MEASUREMENTS;
- b. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING AND MEASUREMENTS;
- c. THE DATE(S) ANALYSES WERE PERFORMED;
- d. THE TIME(S) ANALYSES WERE INITIATED;
- e. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES;
- f. REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED;
- g. THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC., USED TO DETERMINE THESE RESULTS;
- h. RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS "EXCEEDS 1000 NTU:" AND
- CERTIFICATION STATEMENT THAT SAMPLING WAS CONDUCTED AS PER THE PLAN.

ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE DISTRICT OFFICE OF THE EPD ACCORDING TO THE SCHEDULE IN APPENDIX A OF THIS PERMIT. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

### ITEM 32:

### RETENTION OF RECORDS:

THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART

a. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;

b. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT; c. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE

WITH PART IV.A.5. OF THIS PERMIT d. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT; e. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.a. OF THIS PERMIT;

f. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D. OF THIS PERMIT; AND

g. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.a.(2). OF THIS PERMIT. 2. COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, INSPECTION REPORTS, SAMPLING REPORTS (INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION) OR OTHER REPORTS REQUESTED BY THE EPD. EROSION. SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO

COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI. OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.

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> M&H NO.: 0119700-210463.01 OCTOBER 22, 2024 DESIGNED BY: CMJ

EXP. 04/26/2025

DRAWN BY: HCA CHECKED BY: AKM

DO NOT SCALE DRAWINGS SHEET CONTENTS

**EROSION. SEDIMENT &** 

**POLLUTION CONTROL** PLAN - NOTES

# SAMPLING REQUIREMENTS

THIS PERMIT REQUIRES THE MONITORING OF NEPHELOMETRIC TURBIDITY IN RECEIVING WATER(S) OR OUTFALLS IN ACCORDANCE WITH THIS PERMIT. THIS SECTION IS APPLICABLE TO PRIMARY PERMITTEES WITH A TOTAL PLANNED DISTURBANCE EQUAL TO OR GREATER THAN ONE (1) ACRE THE FOLLOWING PROCEDURES CONSTITUTE EPD'S GUIDELINES FOR SAMPLING TURBIDITY.

(A). SAMPLING REQUIREMENTS SHALL INCLUDE THE FOLLOWING:

(1). A USGS TOPOGRAPHIC MAP, A TOPOGRAPHIC MAP OR A DRAWING (REFERRED TO AS A TOPOGRAPHIC MAP) THAT IS A SCALE EQUAL TO OR MORE DETAILED THAN A 1:24000 MAP SHOWING THE LOCATION OF THE SITE OR THE COMMON DEVELOPMENT: (A) THE LOCATION OF ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES AS SHOWN ON A USGS TOPOGRAPHIC MAP, AND ALL OTHER PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES LOCATED DURING MANDATORY FIELD VERIFICATION. INTO WHICH THE STORMWATER IS

AND (B) THE RECEIVING WATER AND/OR OUTFALL SAMPLING LOCATIONS. WHEN THE PERMITTEE HAS CHOSEN TO USE A USGS TOPOGRAPHIC MAP AND THE RECEIVING WATER(S) IS USGS TOPOGRAPHIC MAP, THE LOCATION OF THE RECEIVING WATER(S) MUST BE HAND-DRAWN ON THE USGS TOPOGRAPHIC MAP FROM WHERE THE STORMWATER(S) ENTERS THE RECEIVING WATER(S) TO THE POINT WHERE THE RECEIVING WATER(S) COMBINES WITH THE FIRST BLUE LINE STREAM SHOWN ON THE USGS TOPOGRAPHIC MAP:

(2). THE ANALYTICAL METHOD USED TO COLLECT AND ANALYZE THE SAMPLES INCLUDING QUALITY CONTROL/QUALITY ASSURANCE PROCEDURES. THIS NARRATIVE MUST INCLUDE PRECISE SAMPLING METHODOLOGY FOR EACH SAMPLING LOCATION;

(3). WHEN THE PERMITTEE HAS DETERMINED THAT SOME OR ALL OUTFALLS WILL BE SAMPLED, A RATIONALE MUST BE INCLUDED ON THE PLAN FOR THE NTU LIMIT(S) SELECTED FROM APPENDIX B. THIS RATIONALE MUST INCLUDE THE SIZE OF THE CONSTRUCTION SITE, THE CALCULATION OF THE SIZE OF THE SURFACE WATER DRAINAGE AREA, AND THE TYPE OF RECEIVING WATER(S) (I.E., TROUT STREAM OR SUPPORTING WARM WATER FISHERIES): AND

(4). ANY ADDITIONAL INFORMATION EPD DETERMINES NECESSARY TO BE PART OF THE PLAN. EPD WILL PROVIDE WRITTEN NOTICE TO THE PERMITTEE OF THE INFORMATION NECESSARY AND THE LINE FOR SUBMITTAL.

ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED); THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD

- (1). SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.
- (2). SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.

(3). LARGE MOUTH, WELL CLEANED AND RINSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.

(4). MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT, THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFYING EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER SAMPLES ARE NOT REQUIRED TO BE COOLED.

(5). SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV.E.

### SAMPLING POINTS

(1). FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORM WATER OUTFALLS USING THE FOLLOWING MINIMUM GUIDELINES:

(A). THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORM WATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE. SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.

(B). THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORM WATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE. SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.

(C). IDEALLY THE SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORM WATER OUTFALL CHANNEL(S)

(D). CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORM WATER CHANNEL.

(E). THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.

(F). THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.

(G). PERMITTEES DO NOT HAVE TO SAMPLE SHEETFLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION, STABILIZED SHALL MEAN, FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY EPD FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR LANDSCAPED ACCORDING TO THE PLAN (UNIFORMLY COVERED WITH LANDSCAPING MATERIALS IN PLANNED LANDSCAPED AREAS), OR EQUIVALENT PERMANENT STABILIZATION MEASURES AS DEFINED IN THE MANUAL (EXCLUDING A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET CROP PERENNIALS APPROPRIATE FOR THE REGION)

(H). ALL SAMPLING PURSUANT TO THIS PERMIT MUST BE DONE IN SUCH A WAY (INCLUDING GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING, AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORM WATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.3. OR III.D.4, WHICHEVER IS APPLICABLE.

### **ITEM 34**:

APPENDIX B NTU VALUES AT OUTFALL SAMPLING POINTS:

|                     | W      | WARM WATER (SUPPORTING WARM WATER FISHERIES) |          |          |          |            |            |      |  |
|---------------------|--------|----------------------------------------------|----------|----------|----------|------------|------------|------|--|
|                     |        | SURFACE WATER DRAINAGE AREA, SQUARE MILES    |          |          |          |            |            |      |  |
| SITE SIZE,<br>ACRES | 0-4.99 | 5-9.99                                       | 10-24.99 | 25-49.99 | 50-99.99 | 100-249.99 | 250-499.99 | 500- |  |
| 1.00-10             | 75     | 150                                          | 200      | 400      | 750      | 750        | 750        | 750  |  |
| 10.01-25            | 50     | 100                                          | 100      | 200      | 300      | 500        | 750        | 750  |  |
| 25.01-50            | 50     | 50                                           | 100      | 100      | 200      | 300        | 750        | 750  |  |
| 50.01-100           | 50     | 50                                           | 50       | 100      | 100      | 150        | 300        | 600  |  |
| 100.01+             | 50     | 50                                           | 50       | 50       | 50       | 100        | 200        | 100  |  |
| ,                   |        |                                              |          |          |          |            |            |      |  |

THE SAMPLING LOCATIONS, PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORM WATER IS DISCHARGED ARE SHOWN ON DRAINAGE AREA MAPS, C-040 AND C-041.

### INITIAL PHASE EROSION

A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT, AND NPDES PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES.

THE FOLLOWING INITIAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY OTHER **CONSTRUCTION ACTIVITY:** 

- PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
- THE CONSTRUCTION EXIT IS TO BE INSTALLED AND MAINTAINED AS SHOWN IN DETAILS
- IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXITS, ALL PERIMETER EROSION CONTROL AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE INITIAL PHASE EROSION CONTROL PLAN.
- STONE CHECK DAMS AND/OR ROCK DAMS SHALL BE INSTALLED IN AREAS OF CONCENTRATED FLOWS AS SHOWN ON THE PLAN.
- ALL OTHER SITE SPECIFIC EROSION CONTROL BMP'S PER THE PLANS SHEETS IN THIS SET

### INTERMEDIATE (GRADING) EROSION CONTROL NOTES:

DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS LIMITED.

EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITIES. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.

AT THE END OF EACH WORK DAY ALL SLOPES 3:1 OR STEEPER AND SLOPES HIGHER THAN 5 FEET SHALL RECEIVE SURFACE ROUGHENING, EROSION CONTROL MATTING, AND SEEDING AS SHOWN ON THE EROSION CONTROL PLAN.

SILT FENCE SHALL BE PLACED AT THE TOE OF ALL DIRT STOCK PILE AREAS AS LOCATED BY CONTRACTOR. COST OF SILT FENCE AND TEMPORARY GRASSING ASSOCIATED WITH STOCK PILE AREAS SHALL BE INCIDENTAL TO MOBILIZATION.

TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF LAND DISTURBANCE.

CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY. IN ADDITION. SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT AND MAINTAINED OR REPLACED. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED AT CONTRACTOR'S EXPENSE.

EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

CONTRACTOR SHALL INSTALL TEMPORARY DOWNDRAINS WITH INLET FILTER RINGS AND STORM DRAIN OUTLET PROTECTION AS NEEDED TO CONTROL RUNOFF AND EROSION CONTROL DURING GRADING OPERATIONS THE COST OF THESE MEASURES SHALL BE CONSIDERED INCIDENTAL TO GRADING

FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE PROJECT UNTIL SUCH MEASURES ARE CORRECTED AS SHOWN ON THE APPROVED EROSION CONTROL PLANS.

ALL EROSION CONTROL DEVICES SHALL MEET THE REQUIREMENTS SET FORTH IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", LATEST EDITION, GEORGIA SOIL AND WATER CONSERVATION COMMISSION AND THE "FIELD MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA". LATEST EDITION.

### ITEM 36 (CONT'D):

SITE AREA: 1,411 AC

SURFACE DA: 0.06 SQ MI

### FINAL PHASE EROSION CONTROL NOTES:

CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY. IN ADDITION, SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT AND MAINTAINED OR REPLACED. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

SEDIMENT SHALL NOT BE WASHED INTO INLETS. IT SHALL BE REMOVED FROM THE SEDIMENT TRAPS AND DISPOSED OF SO THAT IT WILL NOT ENTER THE INLETS AGAIN.

EROSION CONTROL MEASURES WILL BE MAINTAINED UNTIL FINAL STABILIZATION WHERE 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER. TEMPORARY EROSION CONTROL DEVICES MAY BE REMOVED AND DISPOSED OF AFTER APPROVAL OF THE ENGINEER.

FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES UNTIL STABILIZATION WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE PROJECT UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.

ALL EROSION CONTROL DEVICES SHALL MEET THE REQUIREMENTS SET FORTH IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", LATEST EDITION, GEORGIA SOIL AND WATER CONSERVATION COMMISSION.

### ITEM 37:

GRAPHIC SCALE AND NORTH ARROW ARE ON ALL PLAN SHEETS

EXISTING AND PROPOSED CONTOUR LINES WITH CONTOUR LINES DRAWN AT AN INTERVAL IN ACCORDANCE WITH THE FOLLOWING CAN BE FOUND ON ALL SHEETS WITH CONTOURS

| Map Scale         | Ground Slope   | Contour Intervals, ft |
|-------------------|----------------|-----------------------|
| 1 inch = 100ft or | Flat 0 - 2%    | 0.5 or 1              |
| larger scale      | Rolling 2 - 8% | 1 or 2                |
|                   | Steep 8% +     | 2,5 or 10             |

### ITEM 39:

### **ALTERNATIVE BMPS**

ALTERNATIVE EROSION CONTROL BMP DESIGNS WHOSE PERFORMANCE HAS BEEN DOCUMENTED TO BE EQUIVALENT TO OR SUPERIOR TO CONVENTIONAL BMPS AS CERTIFIED BY A DESIGN PROFESSIONAL (UNLESS DISAPPROVED BY EPD OR THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION) MUST BE SUBMITTED TO THE DESIGN ENGINEER PRIOR TO THE INSTALLATION.

ALTERNATIVE BMPS USED ON THIS PROJECT: NONE

### ITEM 40:

THERE ARE NO ALTERNATE BMP FOR APPLICATION TO THE EQUIVALENT BMP LIST

### ITEM 41:

THERE IS NO BUFFER WITHIN 200FT OF PROJECT LIMITS

### ITEM 42:

THERE IS A WETLAND LESS THAN 200 FT FROM THE WESTERN EDGE OF THE PROJECT LIMITS.

### ITEM 43:

DRAINAGE BASIN DELINEATION SHOWN ON DRAINAGE AREA MAPS, C-041 AND C-042

Mead and Hunt, Inc. 5955 Core Road, Suite 515 North Charleston, SC 29406 phone: 843-486-8330 meadhunt.com



**ULICK ENGINEERING LLC** STORMWATER | HYDRAULICS | EROSION CONTR

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No. PE049285 PROFESSIONAL 1/7/25 GSWCC LEVEL II DESIGN **PROFESSIONAL** CERTIFICATION # 0000098122 EXP. 04/26/2025

10/22/2024

ISSUED FOR BID

0119700-210463.01 OCTOBER 22, 2024 DESIGNED BY: CMJ

**POLLUTION CONTROL** 

DRAWN BY: HCA CHECKED BY: AKM DO NOT SCALE DRAWINGS

SHEET CONTENTS **EROSION. SEDIMENT &** 

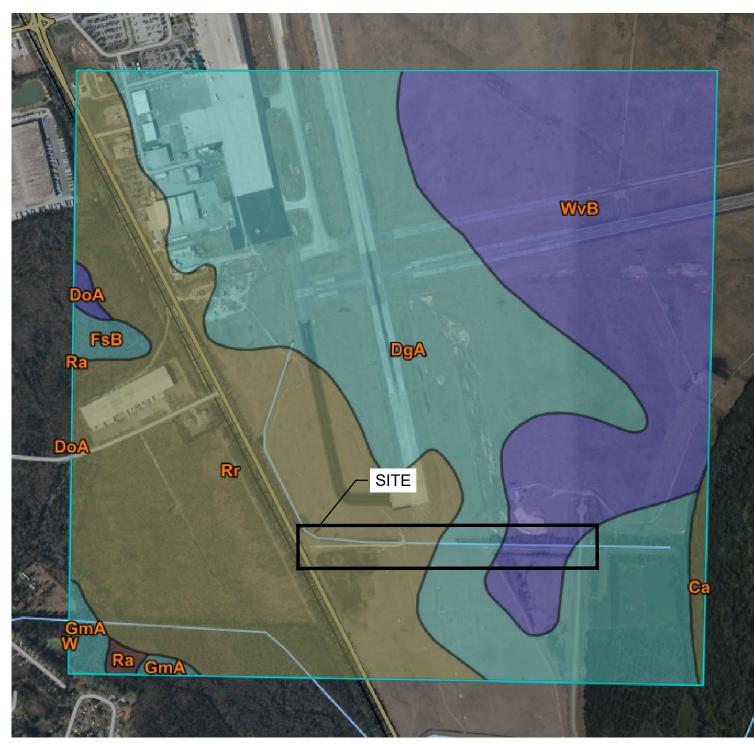
PLAN - NOTES

THE PRE-PROJECT AND POST-PROJECT CURVE NUMBERS AND PEAK FLOW RATES CAN BE FOUND ON THE DRAINAGE AREA MAPS, C-040 AND C-041.

ITEM 46:

THERE ARE PIPES OR STORM STRUCTURES, THEREFORE OUTLET PROTECTION IS APPLICABLE FOR THIS PROJECT AND INFORMATION CAN BE FOUND AT C-036

<u>ITEM 47:</u>



SOILS MAR

| MAP UNIT<br>SYMBOL | MAP UNIT NAME                                   | MAP UNIT<br>SYMBOL | MAP UNIT NAME                  |
|--------------------|-------------------------------------------------|--------------------|--------------------------------|
| Rr                 | ROANOKE LOAM                                    | WvB                | WICKHAM-URBAN LAND             |
| DgA                | DOGUE FINE SANDY LOAM,<br>0 TO 3 PERCENT SLOPES | VVVD               | COMPLEX, 2 TO 6 PERCENT SLOPES |

### ITEM 48:

LIMITS OF DISTURBANCE FOR EACH PHASE OF CONSTRUCTION SHOWN ARE SHOWN ON THE EROSION CONTROL PLAN SHEET C-027 - C-035.
THE TOTAL DISTURBED AREAS ARE LISTED UNDER ITEM 6.

ITEM 49:

### SEDIMENT STORAGE:

FOR COMMON DRAINAGE LOCATIONS A TEMPORARY (OR PERMANENT) SEDIMENT BASIN PROVIDING AT LEAST 1,809 CUBIC FEET (67 CUBIC YARDS) OF STORAGE PER ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE 1,809 CUBIC FEET (67 CUBIC YARDS) OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFF-SITE AREAS AND FLOWS FROM ON-SITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. FOR DRAINAGE LOCATIONS WHERE A TEMPORARY SEDIMENT BASIN PROVIDING AT LEAST 1,809 CUBIC FEET (67 CUBIC YARDS) OF STORAGE PER ACRE DRAINED, OR EQUIVALENT CONTROLS IS NOT ATTAINABLE, SEDIMENT TRAPS, SILT FENCES, WOOD MULCH BERMS OR EQUIVALENT SEDIMENT CONTROLS ARE REQUIRED FOR ALL SIDE SLOPE AND DOWN SLOPE BOUNDARIES OF THE CONSTRUCTION AREA. WHEN THE SEDIMENT FILLS TO A VOLUME AT MOST OF 22 CUBIC YARDS PER ACRE FOR EACH ACRE OF DRAINAGE AREA, THE SEDIMENT SHALL BE REMOVED TO RESTORE THE ORIGINAL DESIGN VOLUME. THIS SEDIMENT MUST BE PROPERLY DISPOSED.

PER THE FOLLOWING TABLE, ROCK DAMS AND EXCAVATED INLET SEDIMENT TRAPS ARE USED TO PROVIDE 1,809 CF OF STORAGE PER DRAINAGE ACRE.

| Phase   | Disturbed Area                                               | Sediment Storage Required | Sediment Storage Provided             | Sadimont Storage BNADs |  |
|---------|--------------------------------------------------------------|---------------------------|---------------------------------------|------------------------|--|
|         | (ac)                                                         | (cf)                      | (cf)                                  | Sediment Storage BMPs  |  |
| Initial | 9.6                                                          | 17,383                    | 30,736                                | Rd #1 & #2             |  |
| Grading | 9.6                                                          | 17,383                    | 40,723                                | Sd2- EXC. #1-3, Rd #3  |  |
| Final   | No disturbance in Final Phase - only permanent stabilization |                           |                                       |                        |  |
|         |                                                              |                           | · · · · · · · · · · · · · · · · · · · |                        |  |

ITEM 50:

LOCATION OF BEST MANAGEMENT PRACTICES ARE SHOWN ON EROSION CONTROL SHEET C-027 - C-035.

<u>ITEM 51:</u>

DETAILED DRAWINGS FOR ALL STRUCTURAL PRACTICES ARE SHOWN ON EROSION CONTROL DETAIL SHEETS, C-036 - C-039

ITEM 52:

VEGETATIVE PLAN IS SHOWN ON SHEET C-039.

### PROJECT PERMITTING NOTES:

- 1. THE COST OF LAND DISTURBANCE PERMITTING WITH THE CITY, COUNTY AND THE STATE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 2. THE CONTRACTOR IS ALSO RESPONSIBLE FOR FILING ALL OTHER FEDERAL, STATE, AND LOCAL PERMITS AND FEES REQUIRED FOR CONSTRUCTING THE PROJECT, INCLUDING, BUT NOT LIMITED TO, DRIVEWAY PERMITS, LOCAL LAND DISTURBANCE PERMITS, NOIS, BUILDING PERMITS, ETC. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PAYING ALL COSTS AND FEES ASSOCIATED WITH ANY REQUIRED PLAN PREPARATION, PAPERWORK, TESTING, INSPECTION, OR ANY OTHER ITEMS NECESSARY TO MEET PERMIT REQUIREMENTS. ANY FINES FOR IMPROPER INSTALLATION AND MAINTENANCE SHALL BE PAID FOR AT THE CONTRACTOR'S EXPENSE
- 3. THE BMPS SHOWN ON THESE PLANS REPRESENT THE MINIMUM REQUIRED BMPS. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ADDITIONAL BMPS AT NO ADDITIONAL COST TO THE PROJECT FOR PHASING OF CONSTRUCTION OR TO CONTROL THE ESCAPE OF SEDIMENT FROM THE SITE.

### GENERAL EROSION CONTROL NOTES:

- 1. CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION ACTIVITY.
- 2. CONTRACTOR SHALL MAINTAIN AND PROTECT ALL EXISTING SIGNS, LIGHTS, EXISTING UTILITIES, AND CIRCUITS UNLESS OTHERWISE NOTED IN THE DEMOLITION PLANS OR UNTIL REQUIRED FOR REMOVAL.
- 3. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES IN THE LAYOUT AND SHALL NOT PROCEED UNTIL CLARIFICATION IS PROVIDED.
- 4. STAGING AREA MAY BE FIELD ADJUSTED IF APPROVED BY ENGINEER AND/OR RPR.
- 5. COST OF MAINTENANCE FOR EROSION CONTROL ITEMS SHALL BE INCIDENTAL TO THE COST OF THAT ITEM.
- 6. ALL COSTS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND REMOVAL OF THE STAGING AREA SHALL BE INCIDENTAL TO THE COST OF MOBILIZATION FOR THE PROJECT.
- 7. ANY REMOVAL OF EXISTING SEDIMENT AND VEGETATION THAT IS REQUIRED TO CONSTRUCT A BMP SHALL BE INCIDENTAL TO THE CONSTRUCTION OF SAID BMP.

Mead Hunt

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AUGUSTA REGIONAI SOUTHEAST DRAINA ENCLOSURE PH II

10/22/2024
ISSUED FOR BID
01/07/2025
REVISION #1: ADDENDUM NO. 1

ORG

No. PE049285
PROFESSIONAL
1/7/25
WGINEER
MANACAE

GSWCC LEVEL II DESIGN
PROFESSIONAL
CERTIFICATION # 0000098122
EXP. 04/26/2025

AIG:

M&H NO.: 0119700-210463.01

DATE: OCTOBER 22, 2024

DESIGNED BY: CMJ

DRAWN BY: HCA

CHECKED BY: AKM

DO NOT SCALE DRAWINGS

PLAN - NOTES

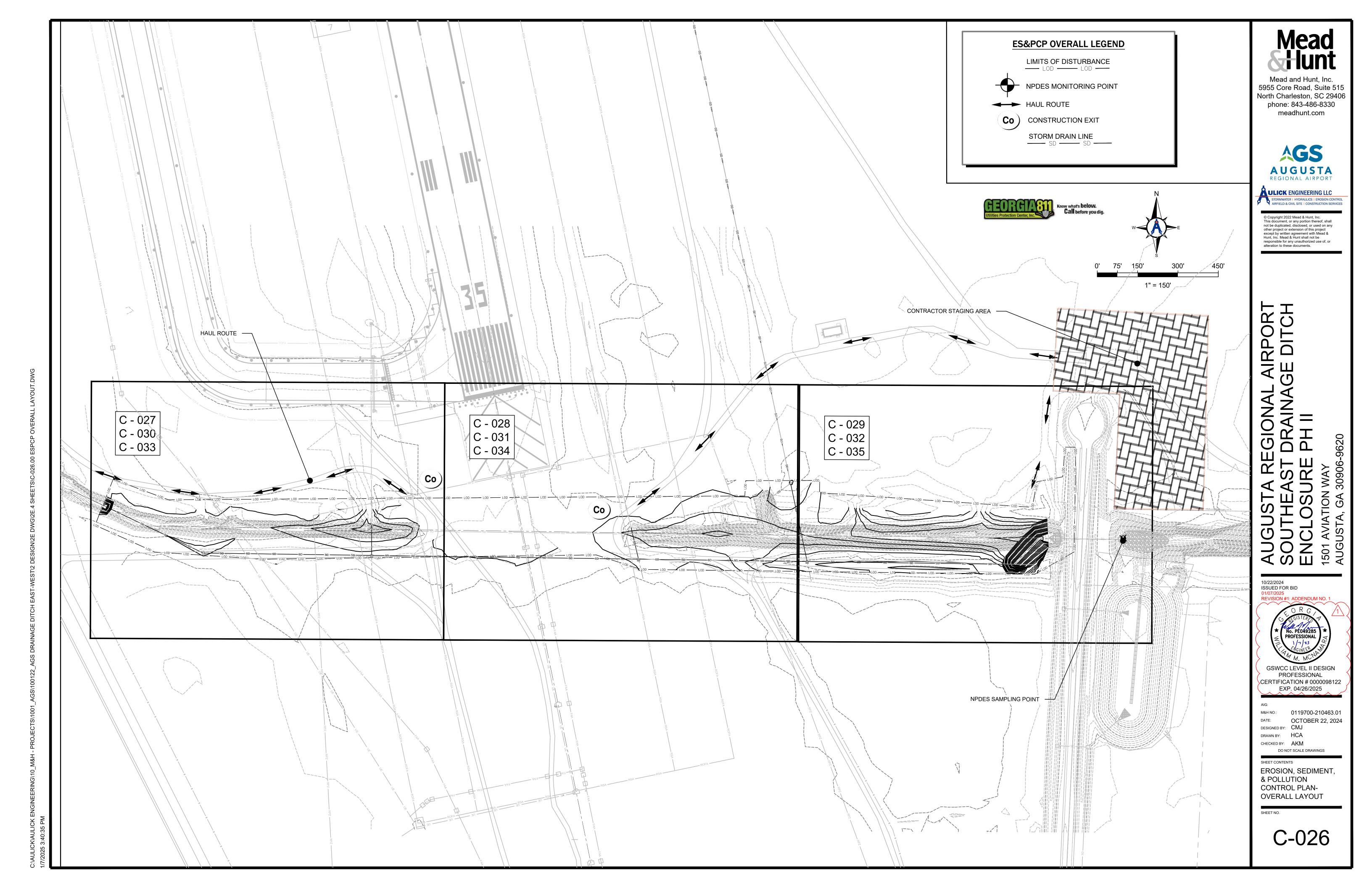
SHEET CONTENTS

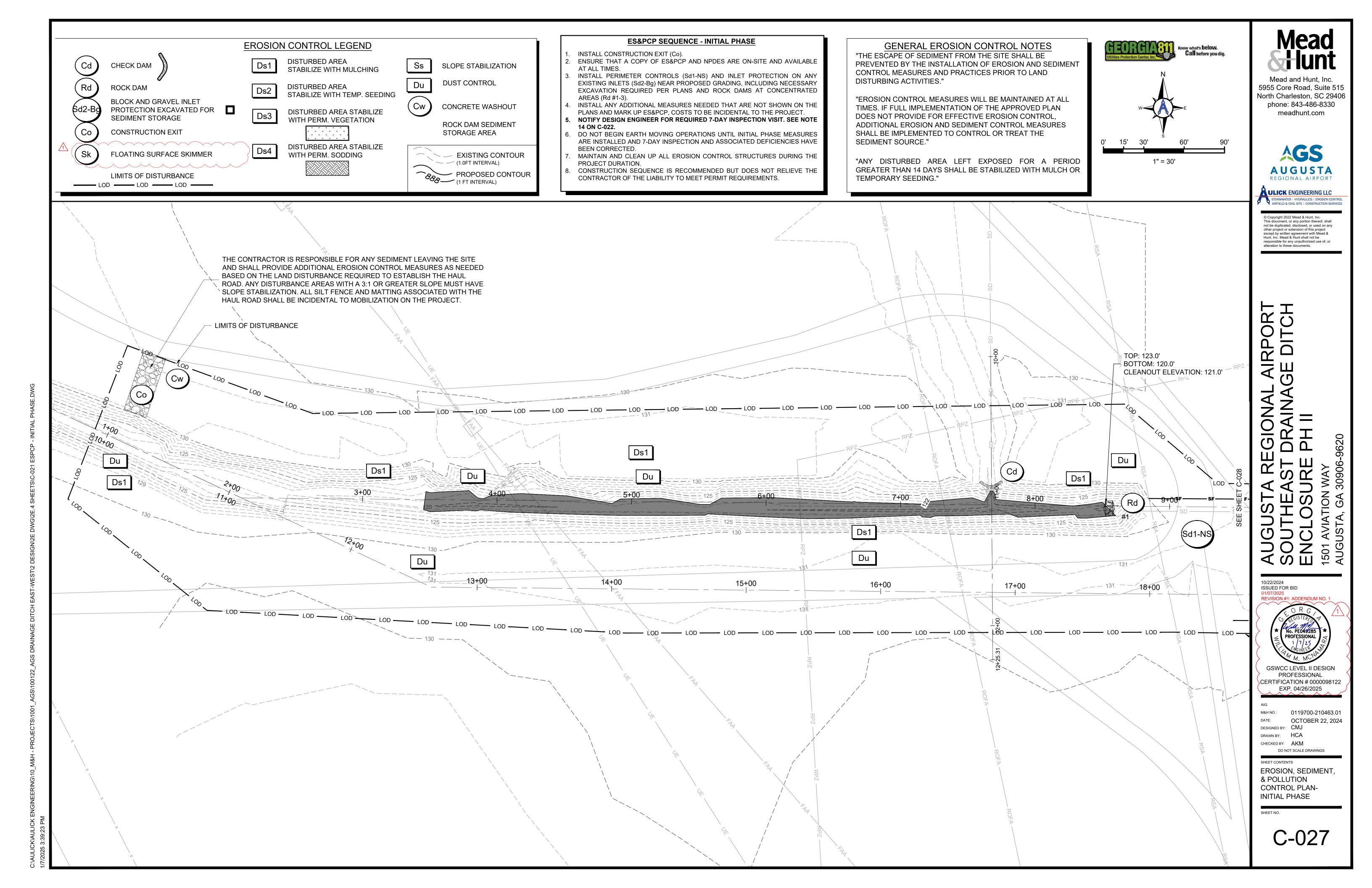
EROSION, SEDIMENT &

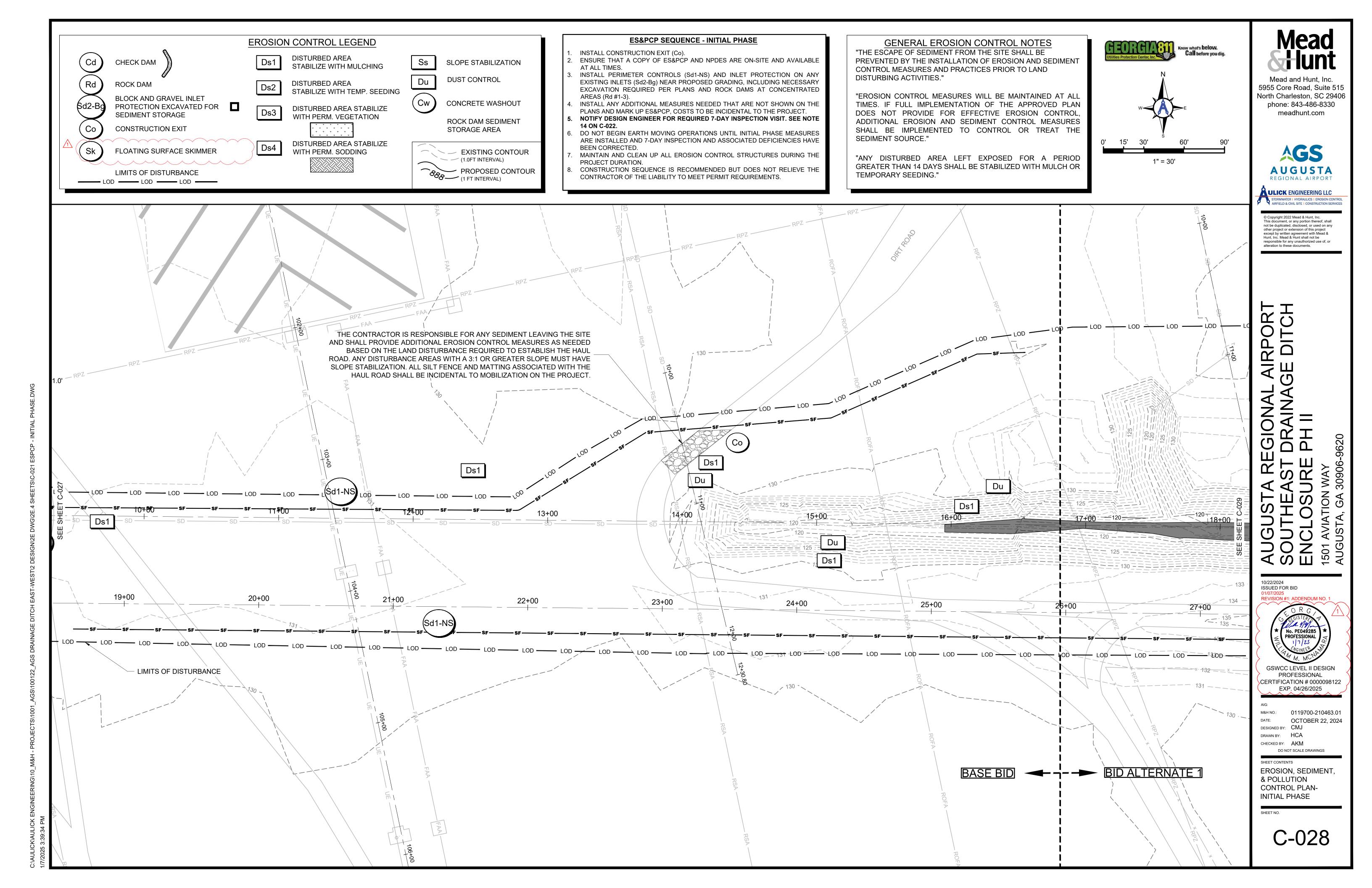
POLLUTION CONTROL

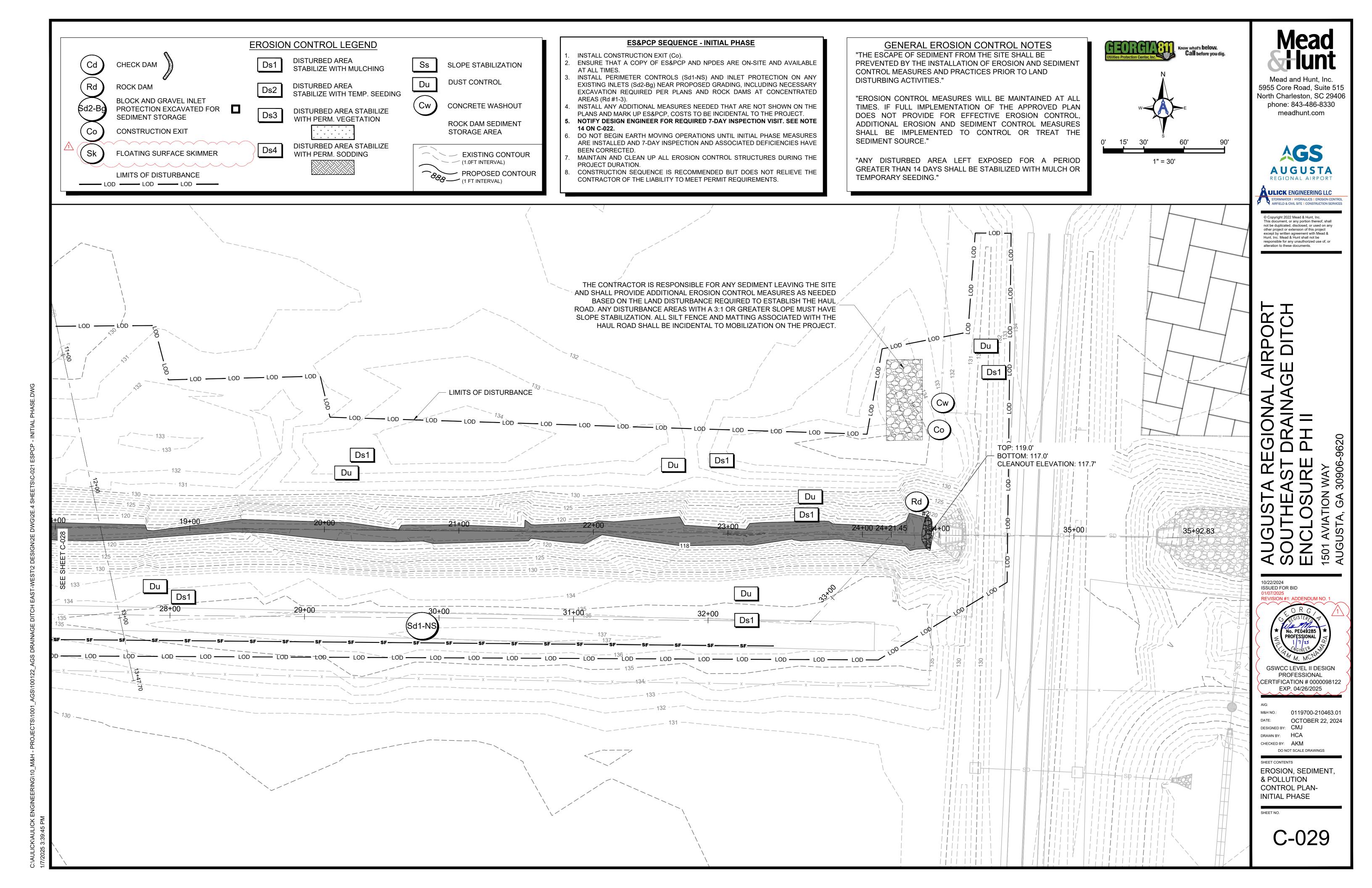
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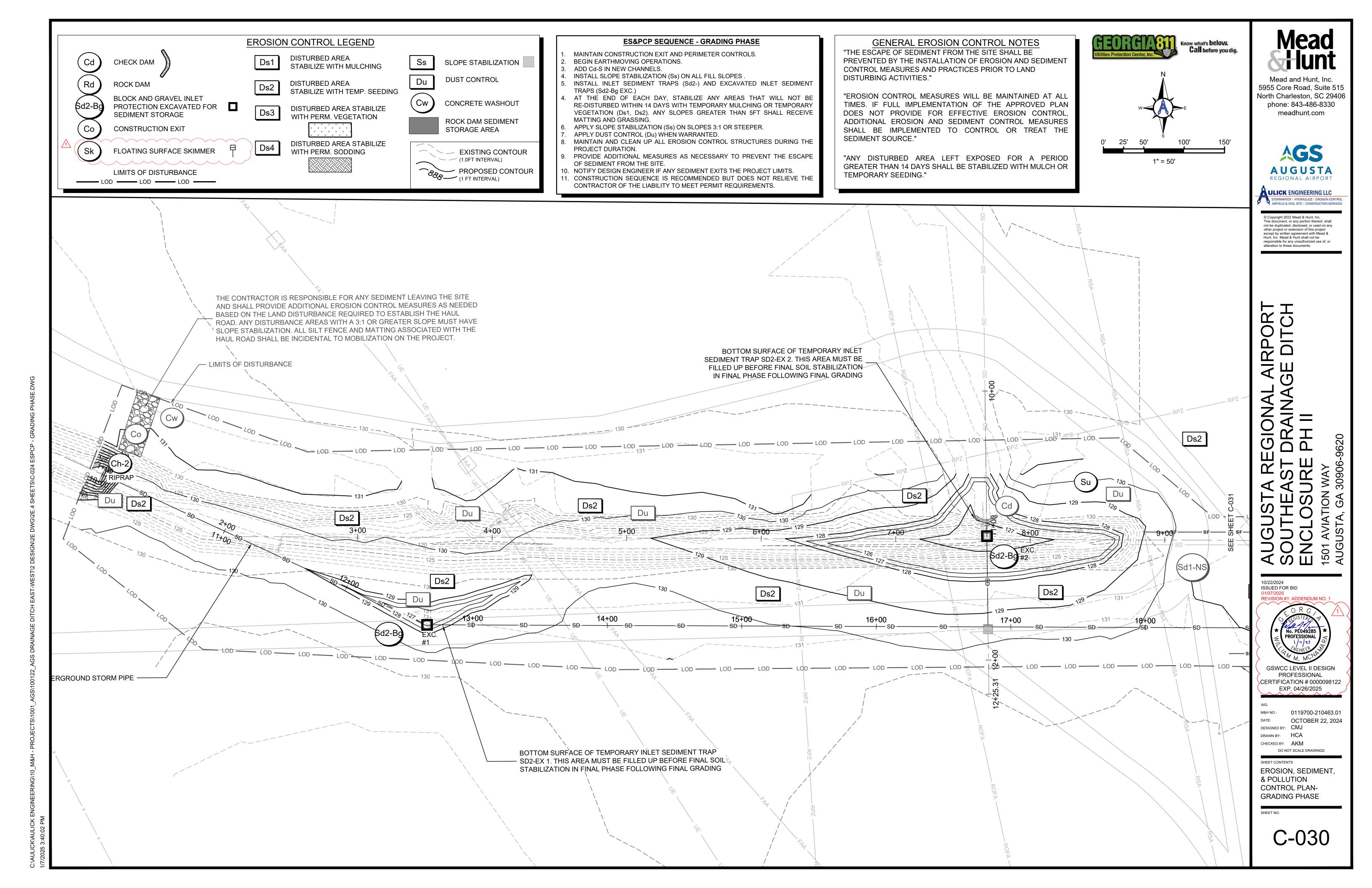
C-025

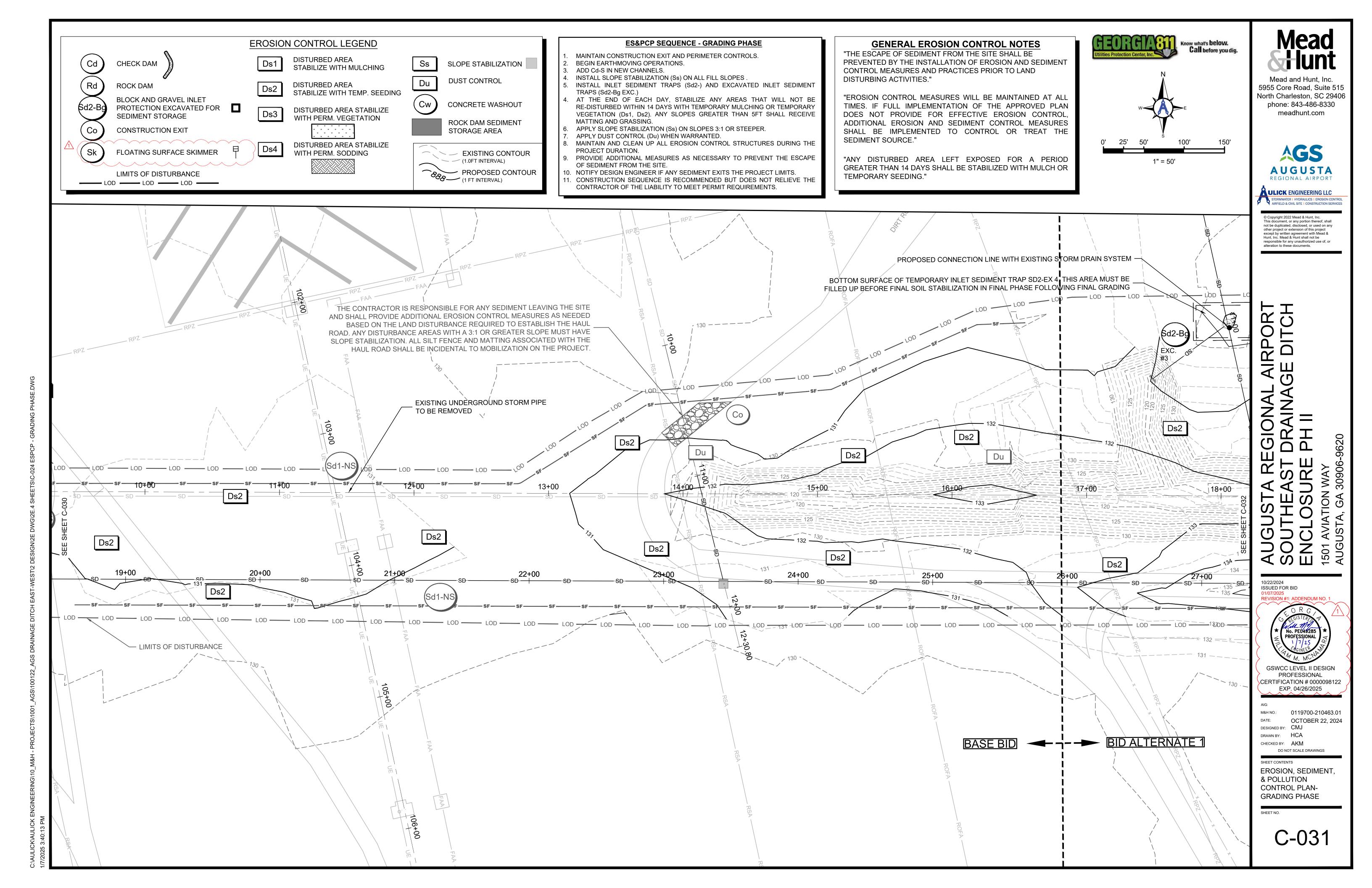


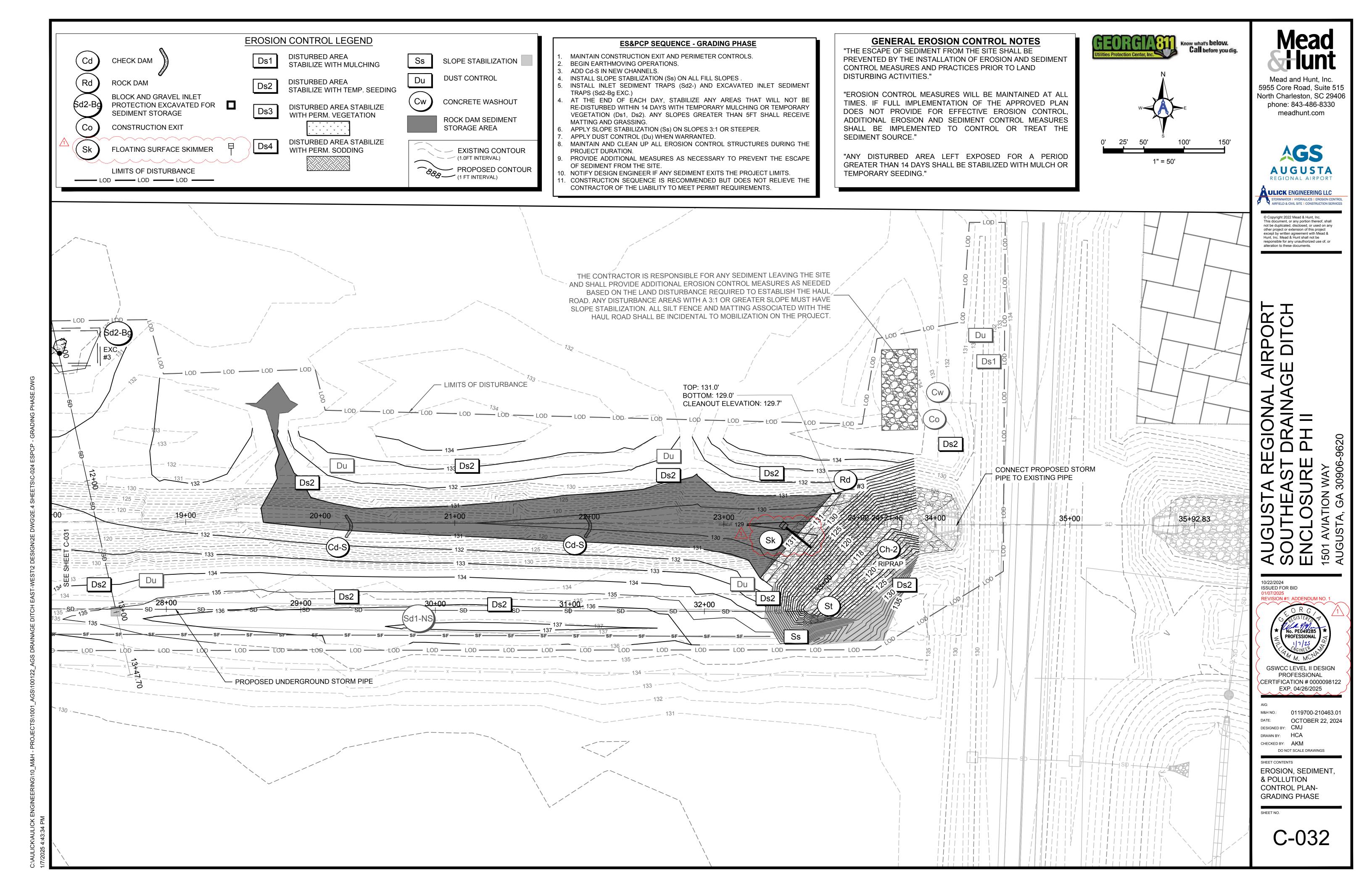


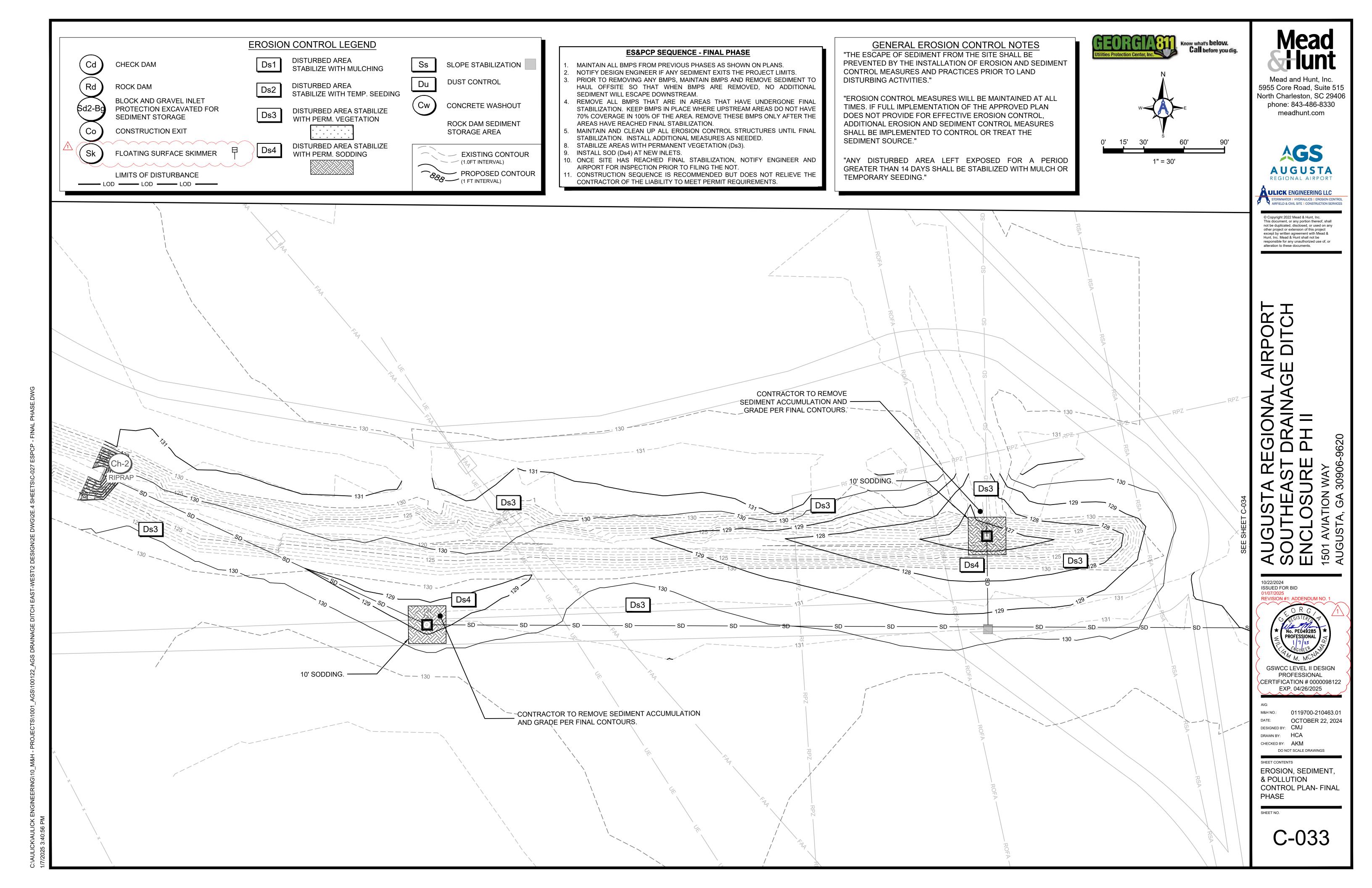


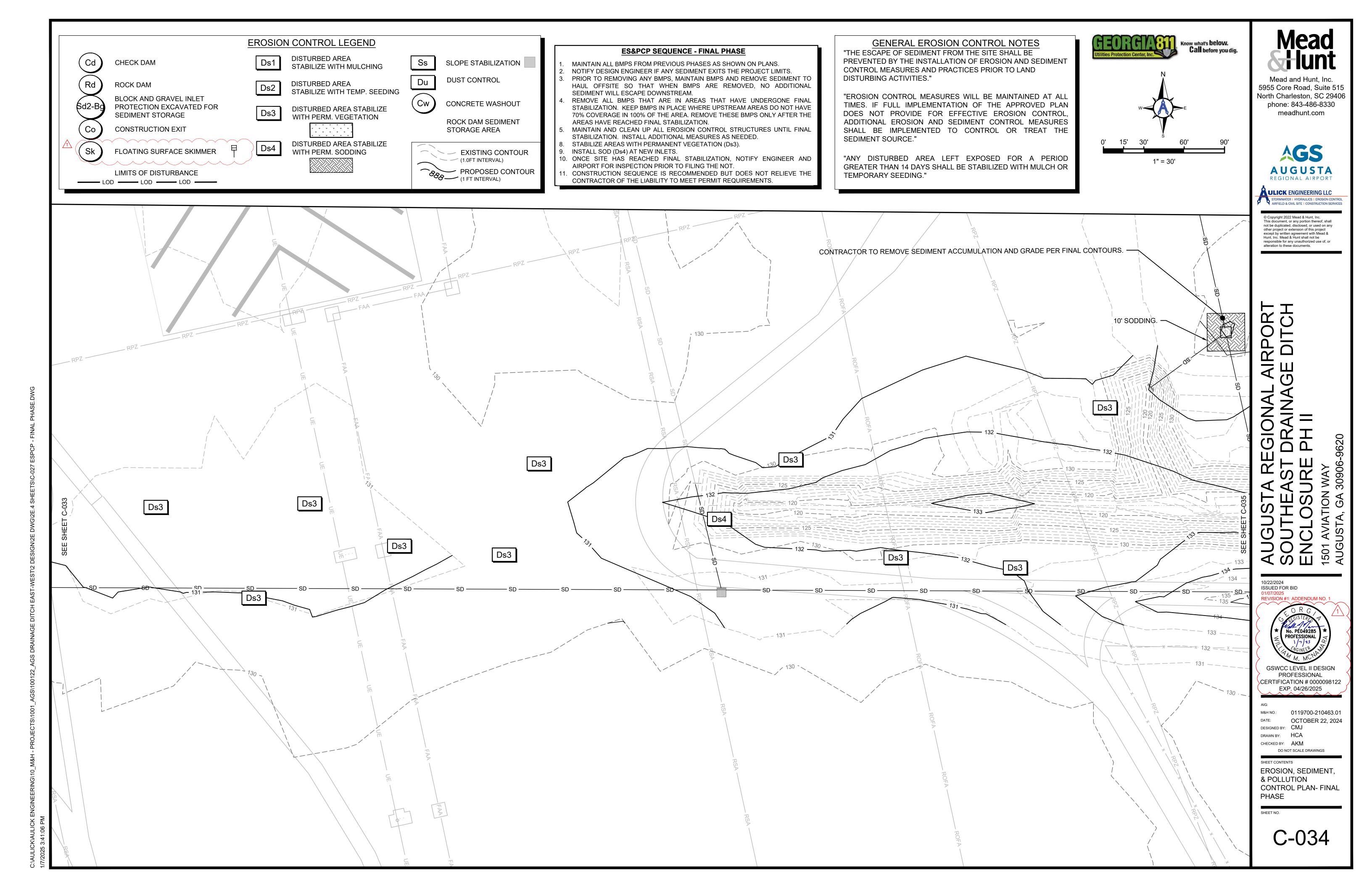


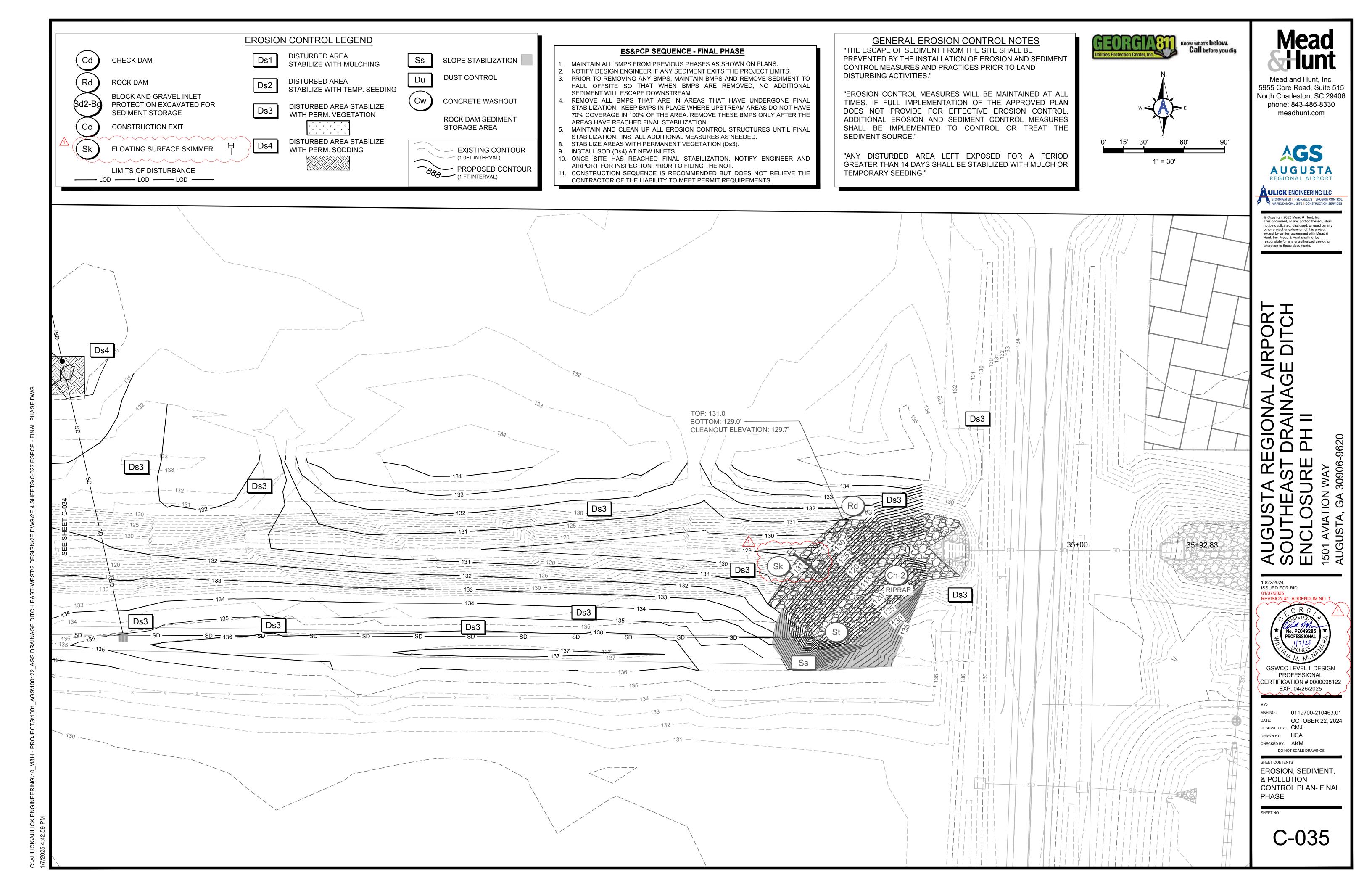








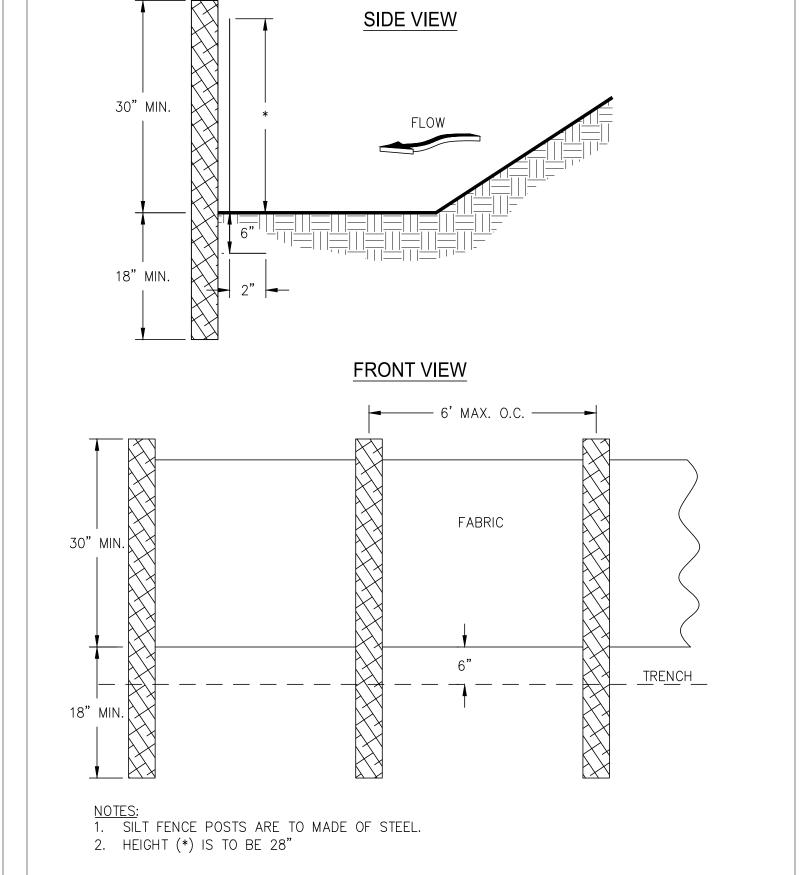


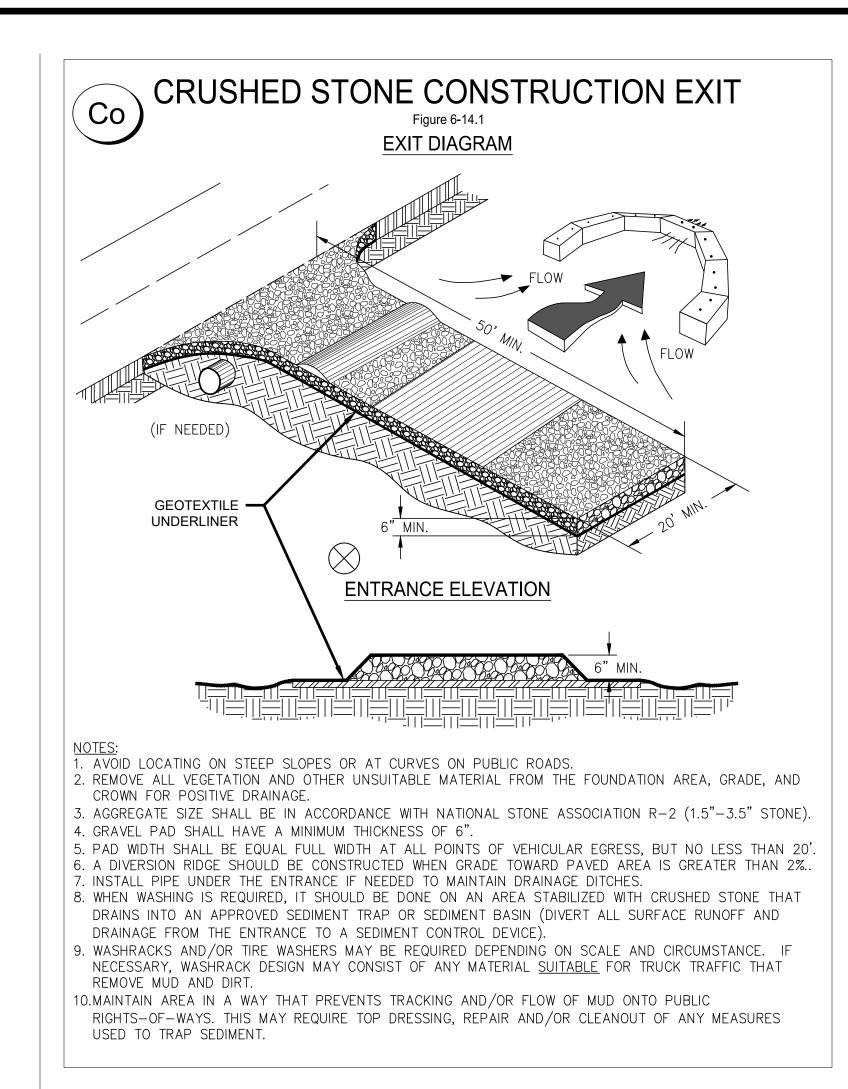


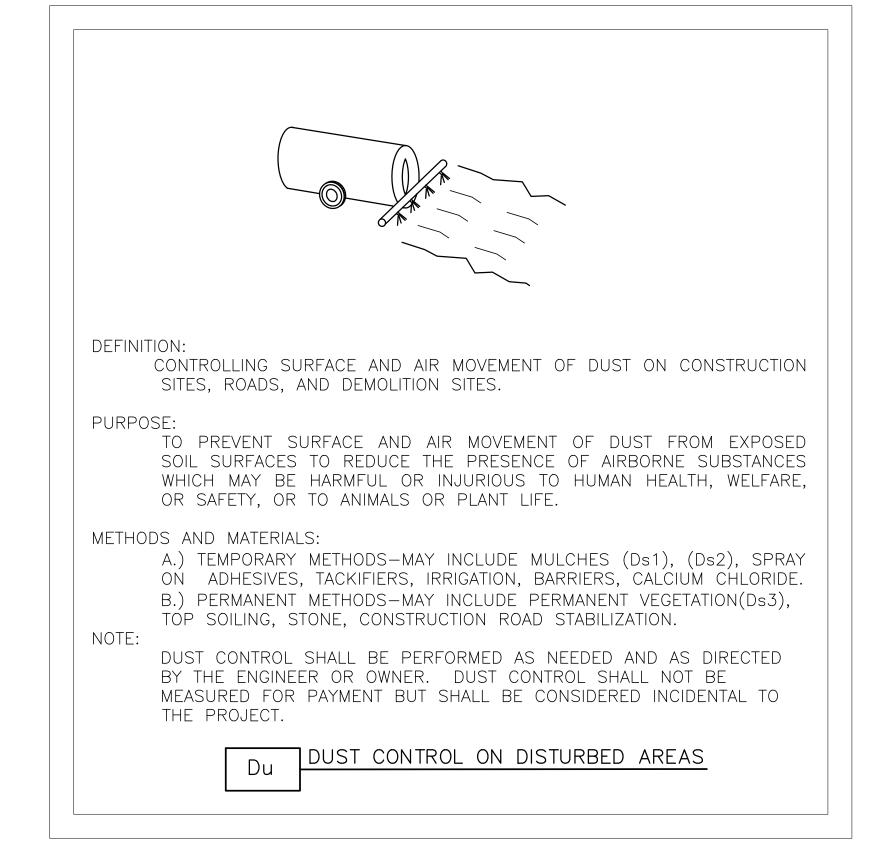
| Rd #     | BOTTOM ELEV.        | TOP ELEV.             | DRAINAGE<br>AREA<br>(ac) | SEDIMENT<br>STORAGE<br>REQUIRED<br>(cf) | SEDIMENT<br>STORAGE<br>PROVIDED*<br>(cf) |
|----------|---------------------|-----------------------|--------------------------|-----------------------------------------|------------------------------------------|
| 1        | 120.0               | 123.00                | 2.94                     | 5,324                                   | 18,442                                   |
| 2        | 117.0               | 119.00                | 6.67                     | 12,066                                  | 12,294                                   |
| 3        | 129.0               | 131.00                | 4.38                     | 7,917                                   | 24,963                                   |
| *Note: R | ock dam (Rd) to bac | k up water into chanr | nel and provide sedim    | ent storage. Sediment                   | Storage Provided is the                  |

SILT FENCE - TYPE NON-SENSITIVE Figure 6-27.1 SIDE VIEW

volume of the channel between the provided elevations.







The container must be portable and temporary, watertight, equipped with ramps and have a holding capacity to accept washout from approximately 350 yards of poured concrete. A vacuum service must accompany washout container and be used by site superintendent as needed. A rampless container may be used in conjunction with a ramped container or by itself if a concrete pump is not needed. The washwater must be disposed of or treated and recycled in an evironmentally safe maanner and in accordance with federal, state

#### TARGETED POLLUTANTS

Caustic wastewater (high pH level near 12 units)

Assorted Metals; Chromium VI, Nickel, Sulfate, Potassium, Magnesium and Calcium Compounds

#### CONCRETE WASHOUT

CONCRETE WASHOUT SHALL BE "CONCRETE WASHOUT SYSTEMS, INC." OR APPROVED EQUAL FOR ALL ONSITE CONCRETE TRUCK WASHOUTS. COST OF WASHOUT AND MAINTENANCE SHALL BE INCIDENTAL TO PROJECT BID ITEMS.

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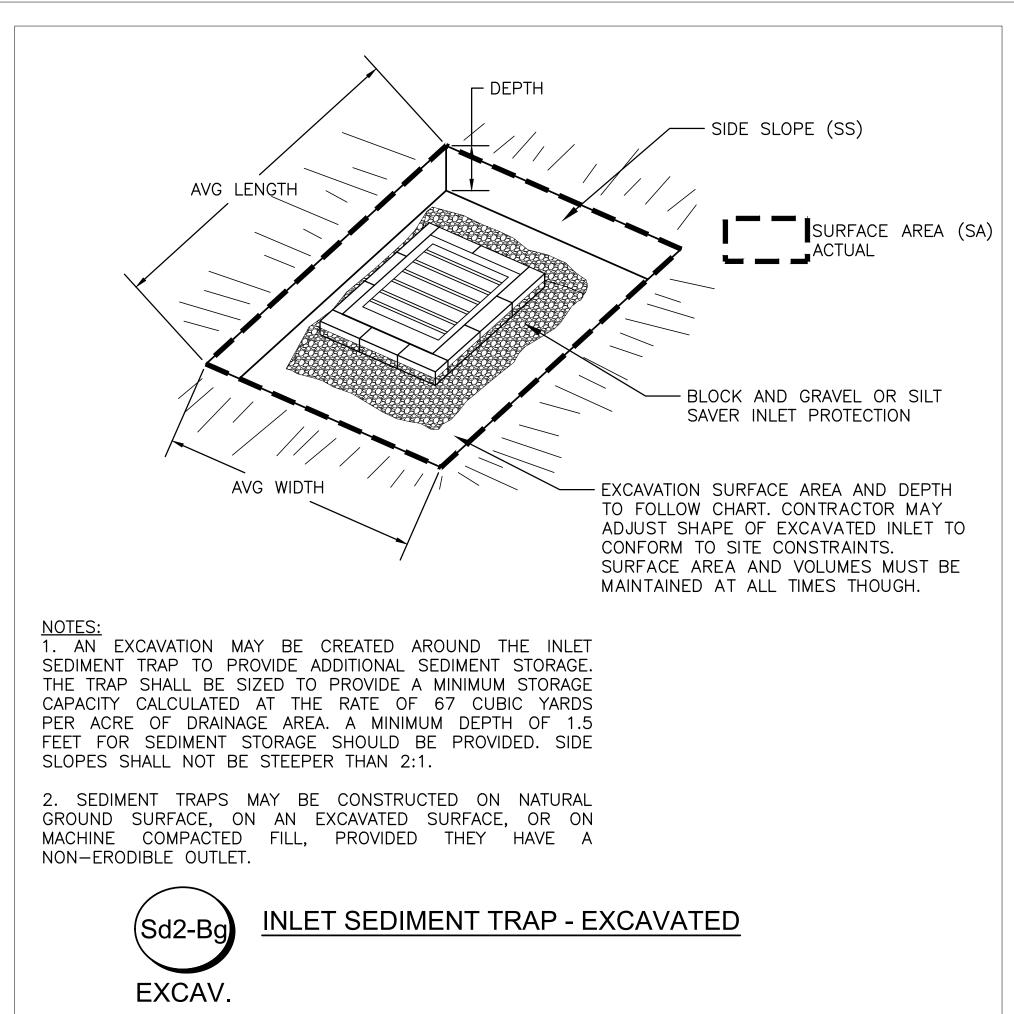
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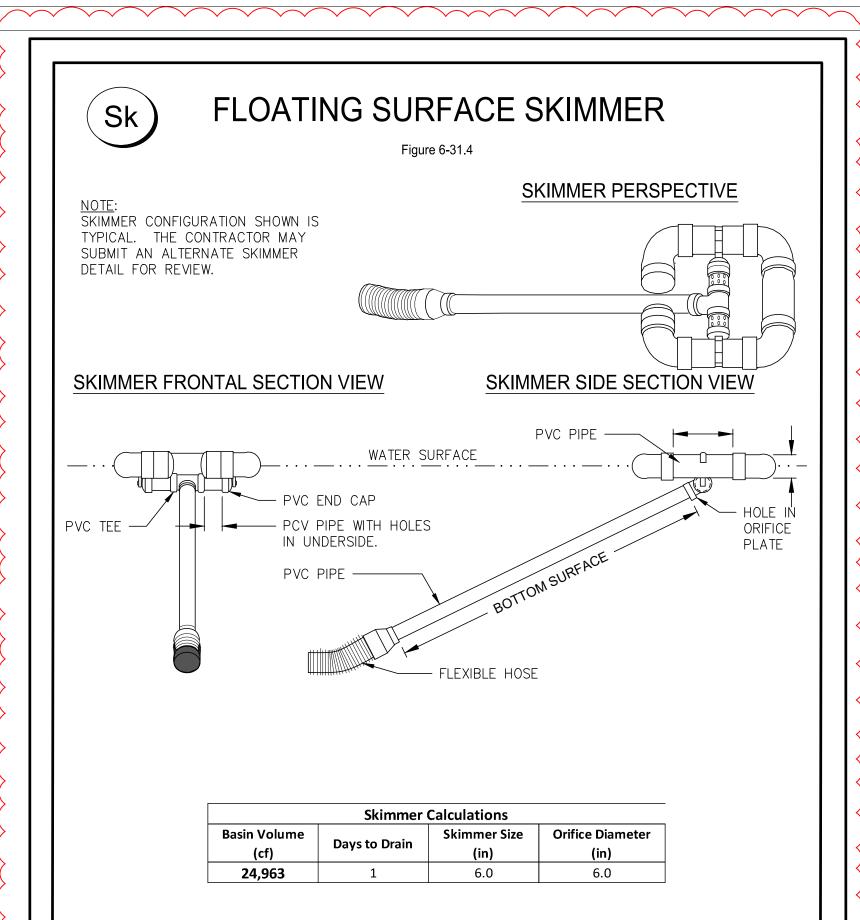
M&H NO.: 0119700-210463.01 OCTOBER 22, 2024

DESIGNED BY: CMJ DRAWN BY: HCA CHECKED BY: AKM

DO NOT SCALE DRAWINGS SHEET CONTENTS

**EROSION, SEDIMENT &** POLLUTION CONTROL PLAN - DETAILS





| f the <b>FXCAVATED</b>    | INI FT SF        | DIMFN           | 1<br>IT TRAP is us | sed show   | 0.54 ac cy = 974 cf ft.) = 2 ft r that 2:1) = 3:1 ation depth ft  cy = 1,564 cf |                             |    |
|---------------------------|------------------|-----------------|--------------------|------------|---------------------------------------------------------------------------------|-----------------------------|----|
|                           |                  |                 |                    | 30a, 33 ii |                                                                                 |                             |    |
| 1. Drainage area =        | :                | 0.5             | <b>4</b> ac        |            |                                                                                 |                             |    |
| 2. Required sedim         | ent stora        | ate = 6         | 7cy/ac * dra       | inage area | Э                                                                               |                             |    |
| Required sedim            | ent stora        | age = 6         | 67 cy/ac *         | 0.54       | ac                                                                              |                             |    |
| Required sedim            | ent stora        | age =           | 36.1               | cy =       | 974                                                                             | cf                          |    |
| 3. Assume excavat         | ion <b>dep</b> t | : <b>h</b> (mir | nimum of 1.5       | 5 ft.) =   | 2                                                                               | ft                          |    |
| 4. Assumed <b>slope</b> ( | of sides (       | shall           | not be steep       | er that 2: | 1) =                                                                            | -<br>3 :1                   |    |
| 5. Determine requ         | ired surf        | ace ar          | ea                 |            |                                                                                 |                             |    |
| SA min = Requi            |                  |                 |                    | avation de | pth                                                                             |                             |    |
| SA min =                  | 974              |                 | 2                  | _          | •                                                                               |                             |    |
| SA min =                  | 487              | – ·<br>sf       |                    |            |                                                                                 |                             |    |
| SA Design=                | 2,126            | –<br>sf         |                    |            |                                                                                 |                             |    |
| Provided sedim            | ent stora        | –<br>age =      | 173.8              | s cy =     | 1,564                                                                           | cf                          |    |
| 6. Assumed shape          |                  | _               | and determi        | ne dimens  | ions.                                                                           |                             |    |
| •                         |                  |                 |                    |            |                                                                                 | ded.)                       |    |
| Shape:                    |                  |                 | PLANS              |            |                                                                                 | ,                           |    |
| Dimensions: I =           |                  | _ ft            | w=                 | ft         | —<br>diamete                                                                    | r (if applicab <u>le</u> )= | ft |
|                           |                  |                 |                    |            |                                                                                 |                             |    |

|                         | 2/10/              |               | 2              |             | (50.2)      | LCULATIONS          |    |
|-------------------------|--------------------|---------------|----------------|-------------|-------------|---------------------|----|
| If the <b>EXCAVATE</b>  | INLET SEC          | IMEN          | IT TRAP is use | ed, show    | the follow  | ing information:    |    |
| 1. Drainage area        | =                  | 1.1           | . <b>4</b> ac  |             |             |                     |    |
| 2. Required sedi        | ment stora         | te = 6        | 7cy/ac * drai  | nage area   | ì           |                     |    |
| Required sedi           | ment stora         | ge = 6        | 57 cy/ac *     | 1.14        | ac          |                     |    |
| Required sedi           | ment stora         | ge =          | 76.2           | cy =        | 2,058       | cf                  |    |
| 3. Assume excav         | ation <b>deptl</b> | <b>h</b> (mir | nimum of 1.5   | ft.) =      | 2           | _ft                 |    |
| 4. Assumed <b>slope</b> | of sides (         | shall ı       | not be steepe  | er that 2:1 | L) =        | 3 :1                |    |
| 5. Determine red        | uired surfa        | ace ar        | ea             |             |             |                     |    |
| SA min = Requ           | ired sedim         | ent st        | torage / exca  | vation de   | pth         |                     |    |
| SA min =                | 2,058              | cf /          | 2              | ft          |             |                     |    |
| SA min =                | 1,029              | -<br>sf       |                | _           |             |                     |    |
| SA Design=              | 9,190              | -<br>sf       |                |             |             |                     |    |
| Provided sedi           | ment stora         | -<br>ge =     | 1221.8         | cy =        | 10,996      | cf                  |    |
| 6. Assumed shap         | e of excava        | tion a        | and determin   | e dimens    | ions.       |                     |    |
| ( A rectangle sh        | nape with 2        | 2:1 ler       | ngth to width  | ratio is re | ecommend    | led.)               |    |
| Shape:                  |                    | SEE I         | PLANS          |             |             |                     |    |
| Dimensions: I =         | :                  | ft            | w=             | ft          | <br>diamete | r (if applicable )= | ft |
|                         |                    | _             |                |             |             |                     |    |

|                         | <b>EXCAVATED SE</b>        | DIMENT TRAF            | (Sd2) CAL   | CULATIONS        |    |
|-------------------------|----------------------------|------------------------|-------------|------------------|----|
|                         |                            | 3                      |             |                  |    |
| If the <b>EXCAVATED</b> | INLET SEDIMENT TRA         | <b>P</b> is used, show | the followi | ng information:  |    |
| 1. Drainage area        | = <b>0.88</b> ad           | 2                      |             |                  |    |
| 2. Required sedin       | nent storate = 67cy/ac     | * drainage are         | a           |                  |    |
| Required sedin          | nent storage = 67 cy/a     | c * <b>0.88</b>        | ac          |                  |    |
| Required sedin          | nent storage =             | <b>59.1</b> cy =       | 1,597       | cf               |    |
| 3. Assume excava        | tion <b>depth</b> (minimum | of 1.5 ft.) =          | 2           | ft               |    |
| 4. Assumed <b>slope</b> | of sides ( shall not be    | steeper that 2:        | 1) =        | <u> </u>         |    |
| 5. Determine req        | uired surface area         |                        |             |                  |    |
| SA min = Requi          | red sediment storage       | / excavation de        | epth        |                  |    |
| SA min =                | <b>1,597</b> cf /          | <b>2</b> ft            |             |                  |    |
| SA min =                | <b>798</b> sf              |                        |             |                  |    |
| SA Design=              | <b>1,600</b> sf            |                        |             |                  |    |
| Provided sedin          | ient storage =             | <b>118.5</b> cy =      | 3,200       | cf               |    |
| 6. Assumed shape        | of excavation and de-      | termine dimen          | sions.      |                  |    |
| ( A rectangle sh        | ape with 2:1 length to     | width ratio is         | recommende  | ed.)             |    |
| Shape:                  | Rectangular (2:1)          |                        |             |                  |    |
| Dimensions: I =         | <b>57</b> ft w=            | <b>28</b> ft           | diameter    | (if applicak N/A | ft |



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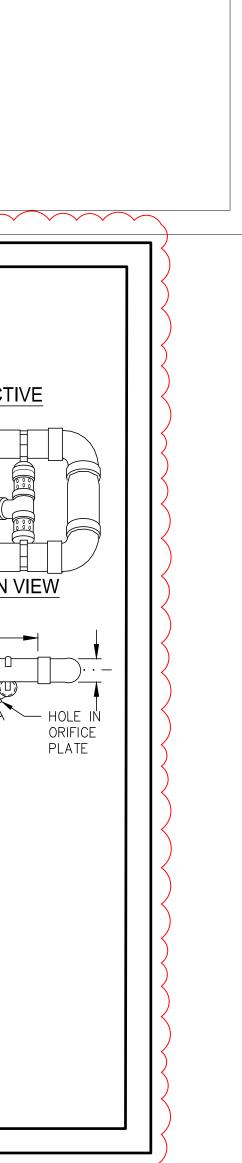
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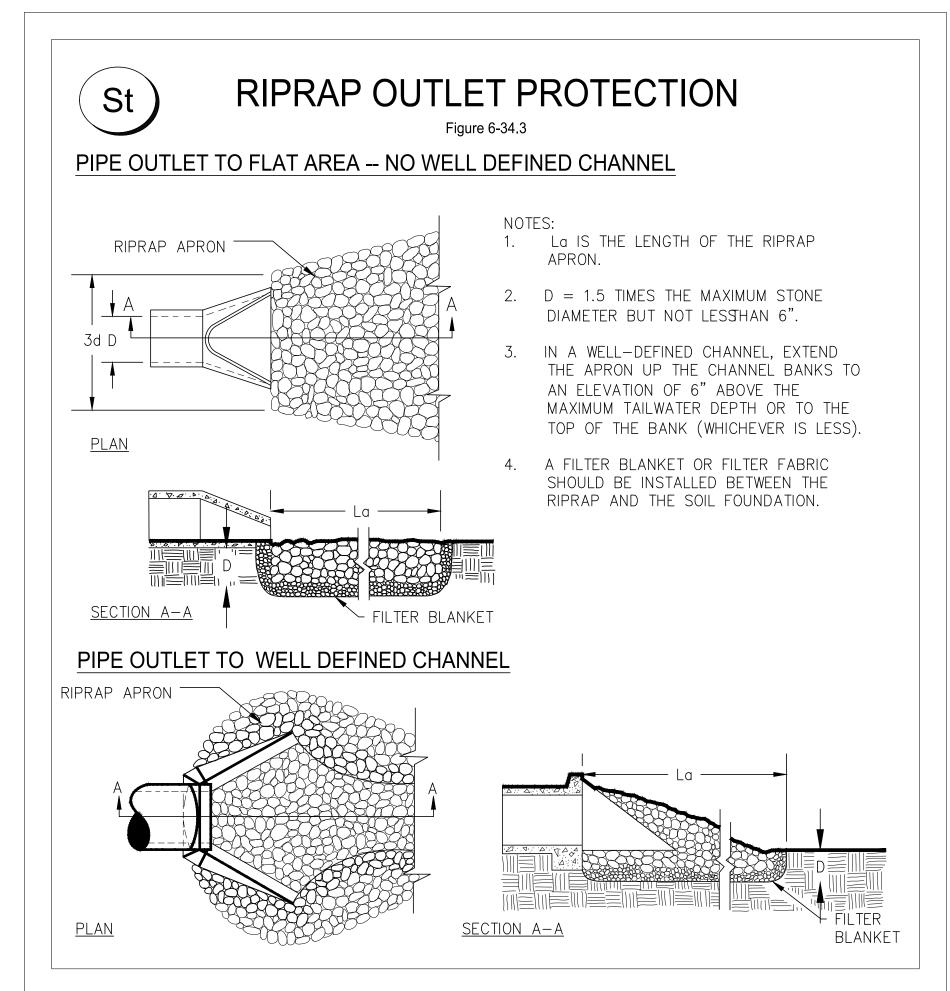
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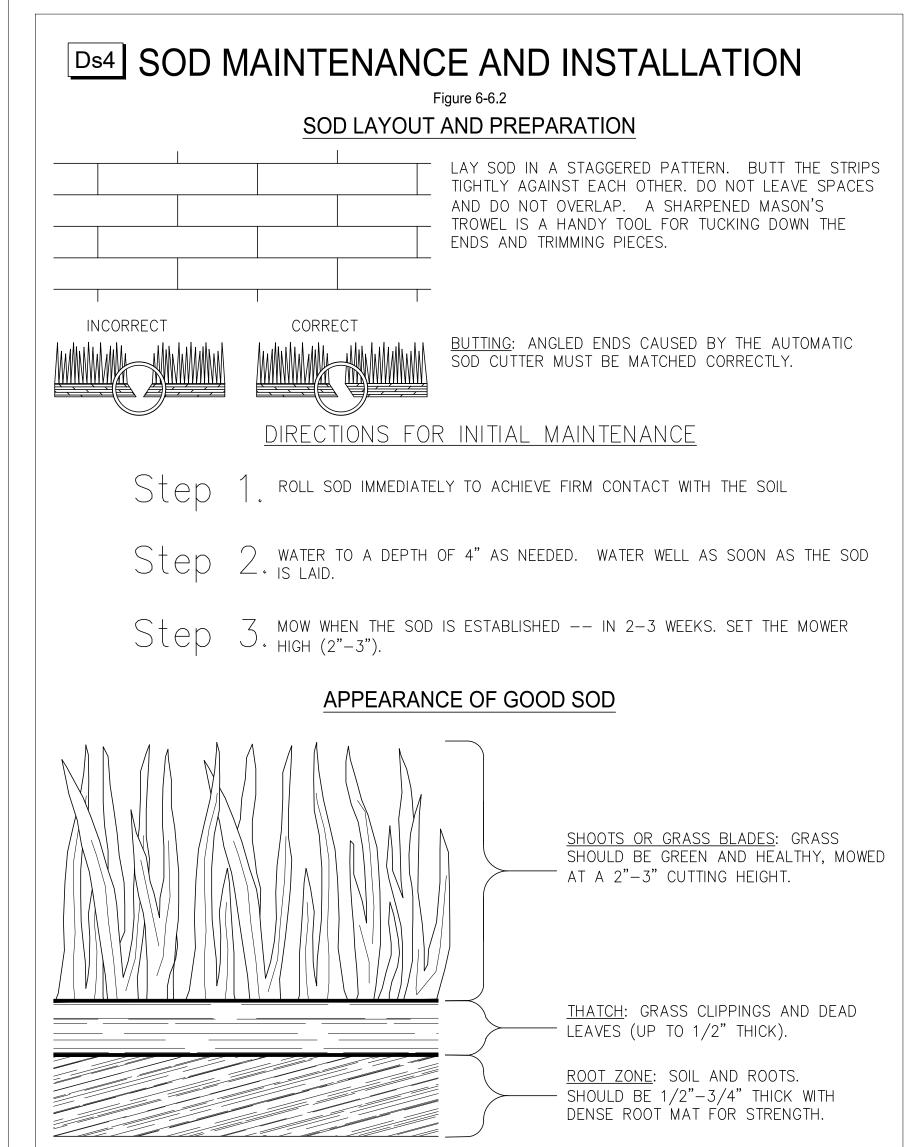
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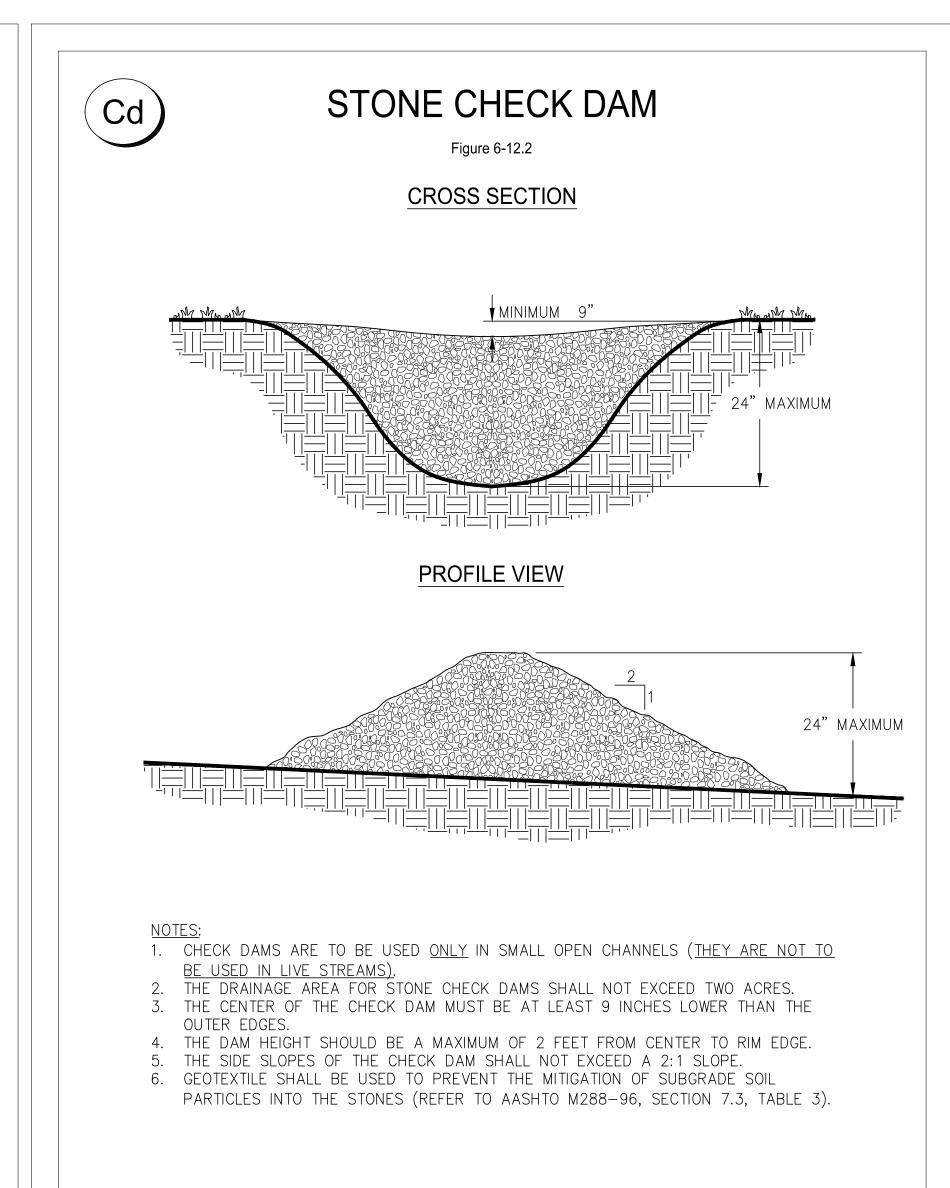
SHEET CONTENTS **EROSION, SEDIMENT &** POLLUTION CONTROL

PLAN - DETAILS











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**EROSION, SEDIMENT &** POLLUTION CONTROL PLAN - DETAILS

#### TEMPORARY GRASSING

1. APPLY TEMPORARY GRASSING TO DISTURBED AREAS WITHIN 14 DAYS OF LAND DISTURBING ACTIVITIES IF PERMANENT GRASSING IS NOT REQUIRED. APPLY TEMPORARY GRASSING TO SOIL STOCKPILES.

Ds1

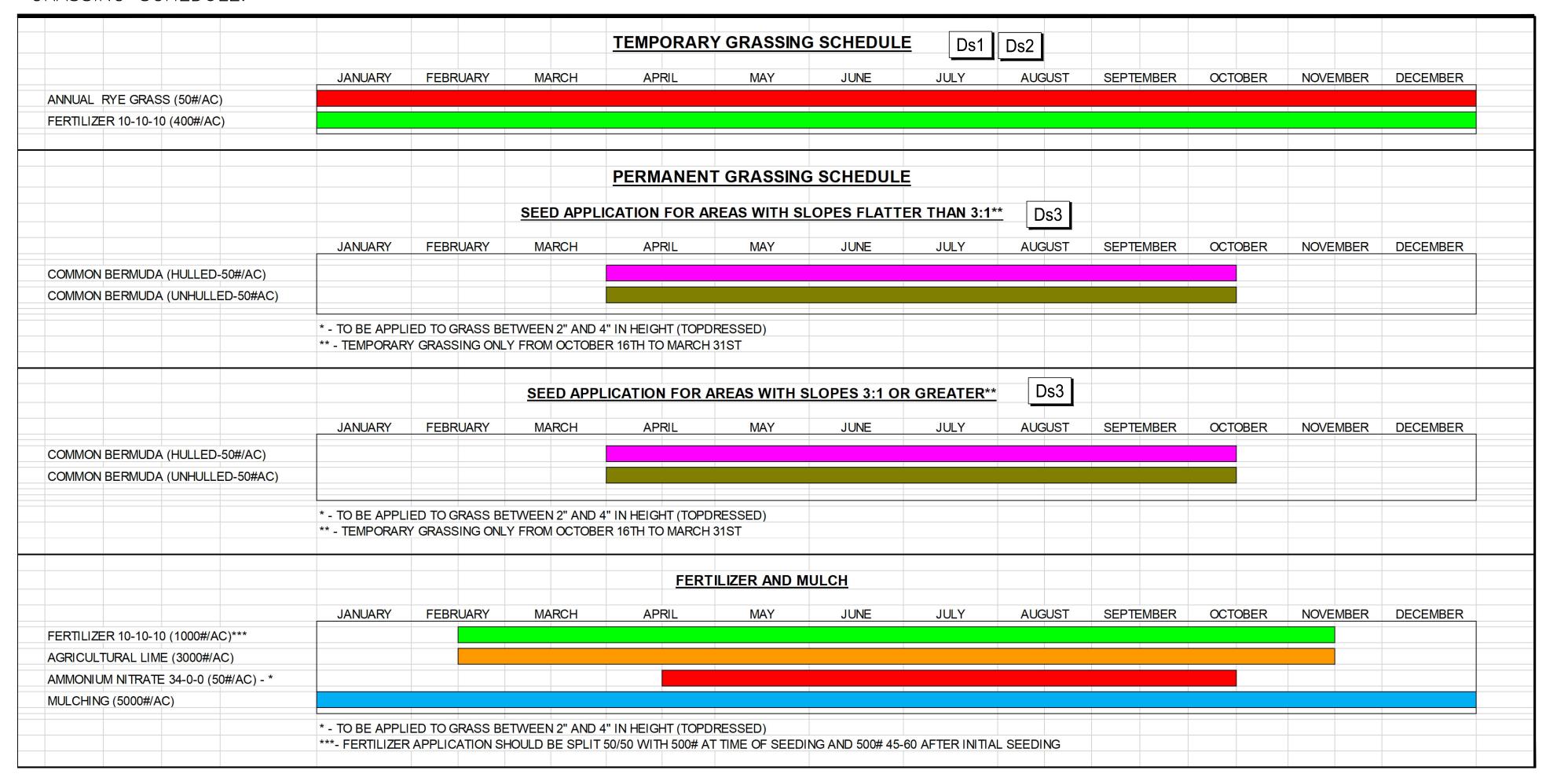
Ds2

- 2. ALL AREAS RECEIVING TEMPORARY GRASS MIXTURE SHALL RECEIVE AN APPLICATION OF FERTILIZER AND BE PROTECTED WITH MULCH.
- 3. APPLY SEED MIXTURE AT SPECIFIED APPLICATION RATE EVENLY. DO NOT SEED AN AREA IN EXCESS OF THAT WHICH CAN BE MULCHED ON THE SAME DAY. DO NOT SOW IMMEDIATELY FOLLOWING A RAIN, WHEN GROUND IS TOO DRY, OR DURING WINDY PERIODS.
- 4. MULCH SHALL BE APPLIED IMMEDIATELY AFTER GRASSING. ALL MULCH SHALL RECEIVE AN APPLICATION OF TACKIFIER.
- 5. TACKIFIER IS TO BE APPLIED AS PER MANUFACTURERS RECOMMENDATIONS.
- 6. TEMPORARY MIXTURES ACCEPTABLE FOR THIS PROJECT ARE LISTED IN THE SPECIFICATIONS. SEED MIXTURES GROW RAPIDLY AND ARE LOW-MAINTENANCE.

#### PERMANENT GRASSING Ds

- 1. APPLY PERMANENT GRASSING WHENEVER GRADING OPERATIONS ARE COMPLETE AND ALL ADDITIONAL CONSTRUCTION OPERATIONS WILL NOT IMPACT THE DISTURBED AREA. APPLY PERMANENT GRASSING TO ALL NON-CONSTRUCTION AREAS WHICH SHOW SIGNS OF EXCESSIVE EROSION.
- 2. ALL AREAS RECEIVING PERMANENT GRASS MIXTURE SHALL RECEIVE AN APPLICATION OF FERTILIZER AND BE PROTECTED WITH MULCH AND/OR EROSION CONTROL MATTING. APPLY LIME AT A RATE BASED ON PH OF SOIL (SEE LIME REQUIRED FOR GRASSING BASED ON THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA). FOR DRY GRASSING, UNIFORMILY INCORPORATE INTO SOIL FOR A DEPTH OF 1 INCH AND LIGHTLY WATER TO AID THE DISSIPATION OF FERTILIZER.
- 3. APPLY SEED MIXTURE AT SPECIFIED RATES EVENLY IN TWO INTERSECTING DIRECTIONS BY THE USE OF A MECHANICAL SPREADER OR HYDROSEEDER. DO NOT SEED AN AREA IN EXCESS OF THAT WHICH CAN BE MULCHED ON THE SAME DAY. DO NOT SOW IMMEDIATELY FOLLOWING A RAIN, WHEN GROUND IS TOO DRY, OR DURING WINDY PERIODS.
- 4. COMBINED HYDRAULIC APPLICATION OF SEED, FERTILIZER, AND MULCH MAY BE PERFORMED. TACKIFIER APPLICATION MAY BE WITHIN THE COMBINED MIXTURE IF ALLOWED BY MANUFACTURER'S RECOMMENDATIONS. HYDRAULIC SPRAYING EQUIPMENT AND MIXTURE SHALL BE DESIGNED SUCH THAT WHEN THE GRASS MIXTURE IS SPRAYED OVER THE AREA, THE MIXTURE COMPONENTS SHALL BE EQUAL IN QUANTITY TO THE SPECIFIED RATES.
- 5. WOOD FIBER MULCH SHALL BE APPLIED AS INDICATED IN THE PROJECT SPECIFICATIONS. STRAW MULCH SHALL BE UTILIZED TO PROVIDE A UNIFORM LOOSE DEPTH BETWEEN 1-1/2 TO 3 INCHES. ALL MULCH SHALL RECEIVE AN APPLICATION OF TACKIFIER.
- 6. PERMANENT MIXTURES ACCEPTABLE FOR THIS PROJECT ARE LISTED BELOW AND IN THE SPECIFICATIONS. THESE MIXTURES ARE GROW RAPIDLY AND ARE LOW-MAINTENANCE.

#### GRASSING SCHEDULE:



#### **HYDROSEEDING**

- 1. HYDROSEEDING IS THE WET HYDRAULIC SPRAYING OF SEED, FERTILIZER, TACKIFIER, AND USUALLY MULCH IN A ONE—STEP PROCESS. MATERIALS ARE MIXED WITH WATER IN A SLURRY TANK TO FORM A HOMOGENEOUS SLURRY, WHICH IS THEN SPRAYED ON THE SOIL SURFACE BY A HYDRAULIC SEEDER.
- 2. ORDINARY MULCH IS NOT SUITABLE FOR HYDROSEEDING. MULCH FOR HYDROSEEDING IS GENERALLY VIRGIN WOOD FIBER MULCH, MANUFACTURED TO BE UNIFORMILY SUSPENDED AS A SLURRY. STRAW MULCH SHALL BE APPLIED AFTER HYDROSEEDING.

#### **FERTILIZING**

- 1. CONTRACTOR IS RESPONSIBLE FOR FERTILIZING AS NEEDED THROUGHOUT THE PROJECT. COST SHALL BE INCIDENTAL TO THE COST OF GRASSING.
- 2. CONTRACTOR SHALL FERTILIZE GRASSING THROUGH THE ONE YEAR WARRANTY AFTER SUBSTANTIAL COMPLETION AT NO ADDITIONAL COST.
- 3. CONTRACTOR TO PROVIDE A FERTILIZING PLAN SPECIFIC TO PROJECT SITE TO OWNER AS PART OF PROJECT CLOSEOUT
- \*\*\*CONTRACTOR SHALL CONDUCT SOIL TESTS TO IDENTIFY AND TO IMPLEMENT SITE—SPECIFIC FERTILIZER NEEDS. THIS WILL SATISFY SECTION P OF APPENDIX 1 IN THE EROSION CONTROL CHECKLIST, PER THE IMPAIRED STREAMS.

#### <u>MAINTENANCE</u>

- 1. INSPECT FREQUENTLY WITHIN THE FIRST SIX WEEKS OF PLANTING TO SEE IF GRASS STANDS ARE UNIFORM AND DENSE, AND TO ASSURE THAT APPROPRIATE MOISTURE LEVELS ARE MAINTAINED. MAKE PROVISIONS TO WATER AS NEEDED.
- 2. CONTRACTOR TO REVISE AND MULCH AS NECESSARY UNTIL THE GRASS IS SATISFACTORY TO THE OWNER.
- 3. CHECK FOR DAMAGE CAUSED BY EQUIPMENT OR HEAVY RAINS. DAMAGED AREAS SHOULD BE REPAIRED, FERTILIZED, SEEDED, AND MULCHED. TACK OR TIE DOWN MULCH AS NECESSARY TO PREVENT BLOWING.
- 4. ADDITIONAL VEGETATION WILL BE EMPLOYED WHERE DETERMINED NECESSARY BY ACTUAL SITE CONDITIONS AT CONTRACTOR EXPENSE.
- 5. GRASS THAT ATTRACTS WILDLIFE SHALL NOT BE USED.
- 6. AT THE TIME THAT A SATISFACTORY VEGETATION HAS BEEN ESTABLISHED, ALL TEMPORARY EROSION CONTROL BMPS SHALL BE REMOVED FROM THE SITE, AND ALL RETROFITTED DETENTION PONDS WILL BE CLEANED AND GRADED TO THE DETENTION POND DESIGN.
- 7. ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICE MAINTENANCE, REMOVAL, REPAIR, REGRASSING AND RECONSTRUCTION COSTS WILL BE INCIDENTAL TO THE COST OF THE PROJECT.
- 8. CONTRACTOR IS RESPONSIBLE FOR MOWING UNTIL PROJECT CLOSEOUT PAPERWORK IS COMPLETE. HEIGHT SHALL BE MAINTAINED TO NO GREATER THAN 4"-6" THROUGHOUT THE PROJECT AND AS DIRECTED BY THE ENGINEER.



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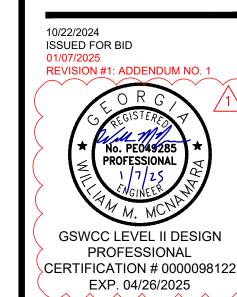


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DATE: OCTOBER 22, 2024

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CHECKED BY: AKM

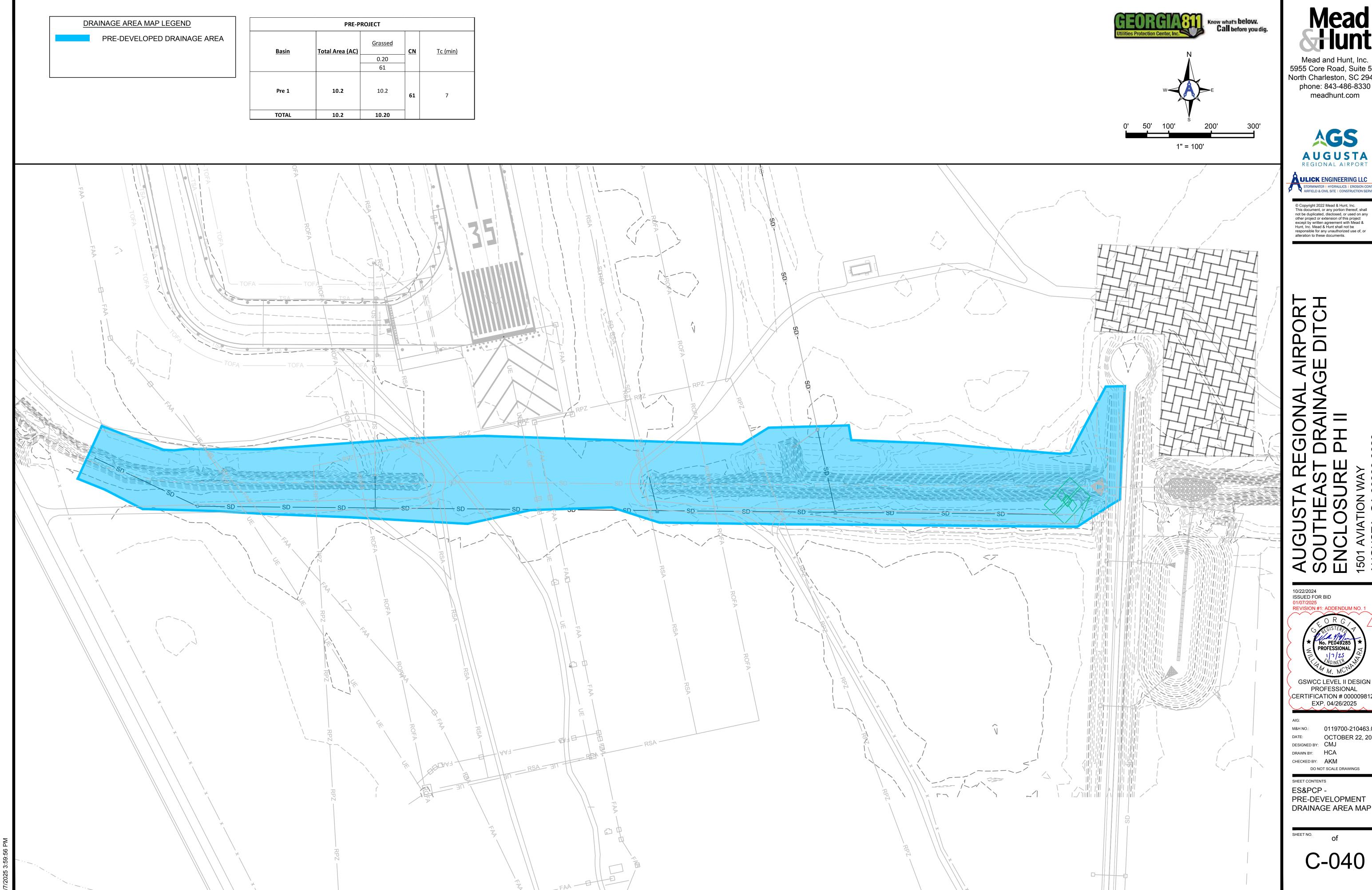
SHEET CONTENTS

EROSION. SEDIMENT

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EROSION, SEDIMENT & POLLUTION CONTROL PLAN - DETAILS

HEET NO



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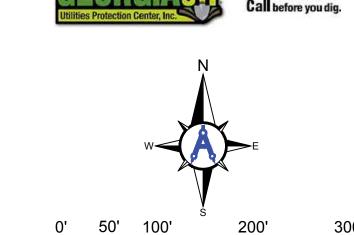
PRE-DEVELOPMENT DRAINAGE AREA MAP

DRAINAGE AREA MAP LEGEND POST-DEVELOPED DRAINAGE AREA

| POST-PROJECT |                      |                |           |         |  |  |  |  |
|--------------|----------------------|----------------|-----------|---------|--|--|--|--|
| Basin        | <u>Total</u><br>Area | <u>Grassed</u> | <u>CN</u> | Tc (min |  |  |  |  |
|              | (AC)                 | 0.20           |           |         |  |  |  |  |
|              |                      | 61             |           |         |  |  |  |  |
| Post 1       | 10.2                 | 10.2           | 61        | 7       |  |  |  |  |

DRAINAGE AREA MAP NOTE

THERE IS NO CHANGE IN EXISTING LAND USE AS A RESULT OF THIS PROJECT, THEREFORE, POST-CONSTRUCTION STORMWATER PEAK FLOWS AND CURVE NUMBERS WILL NOT CHANGE.



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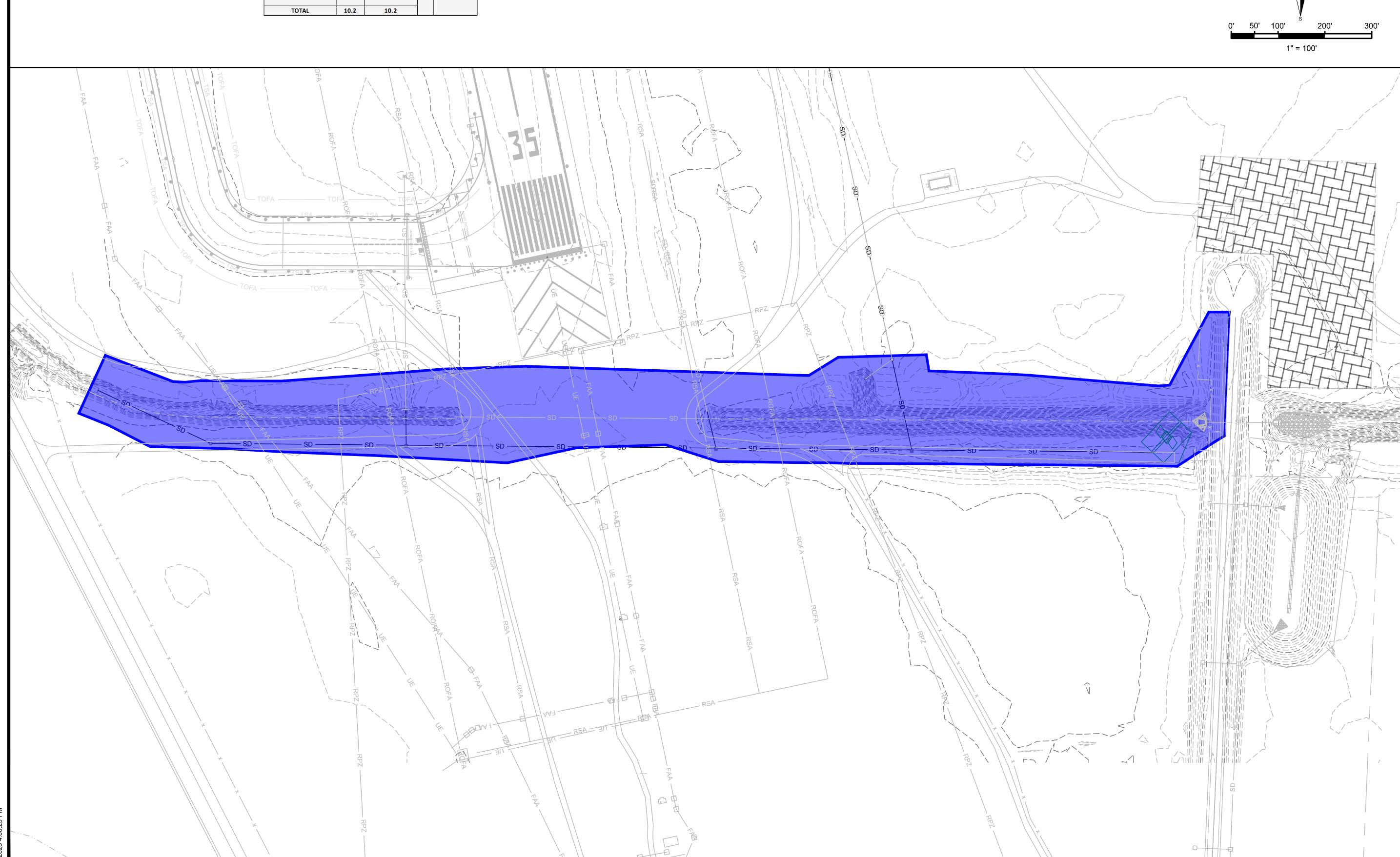
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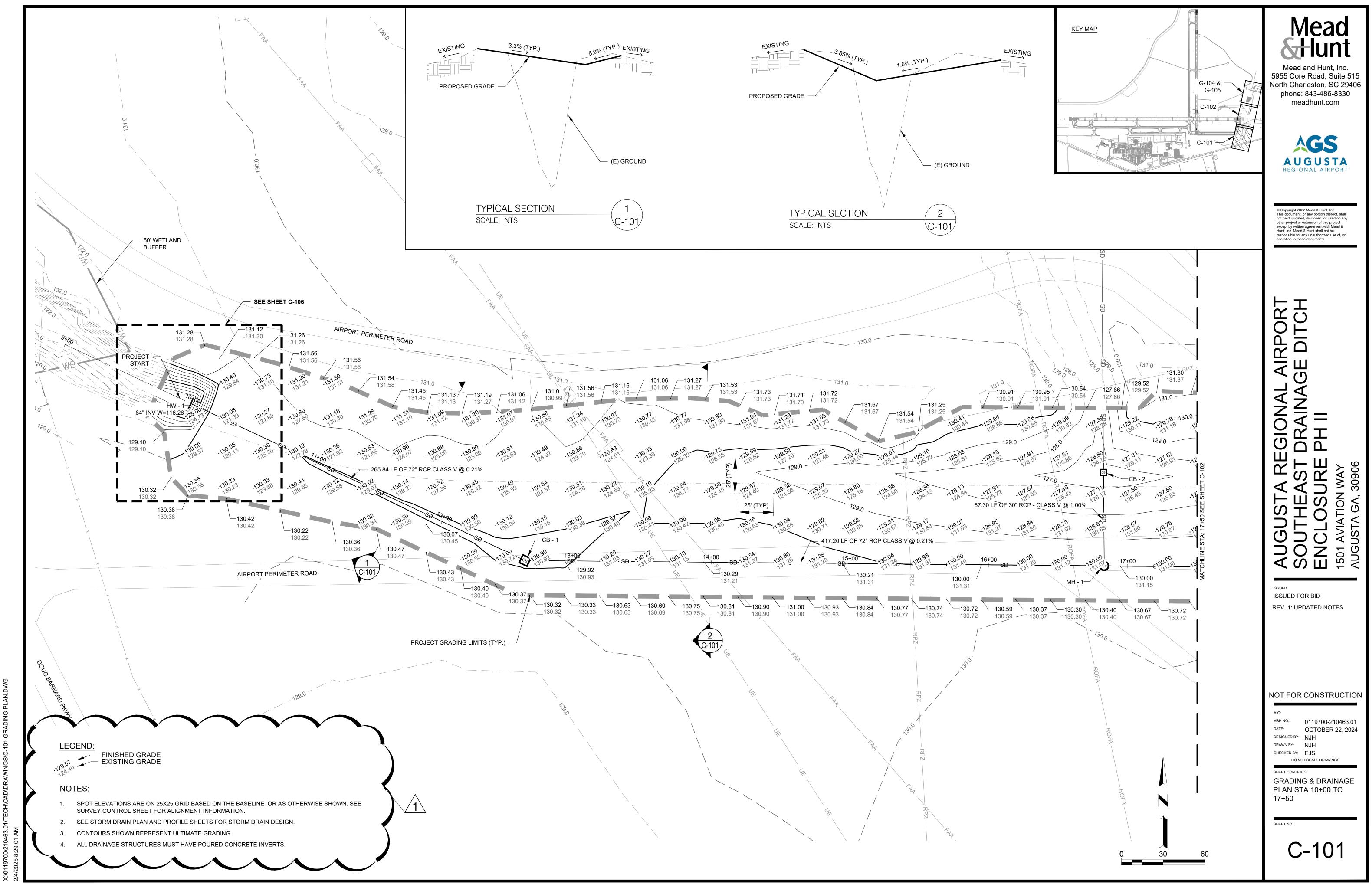
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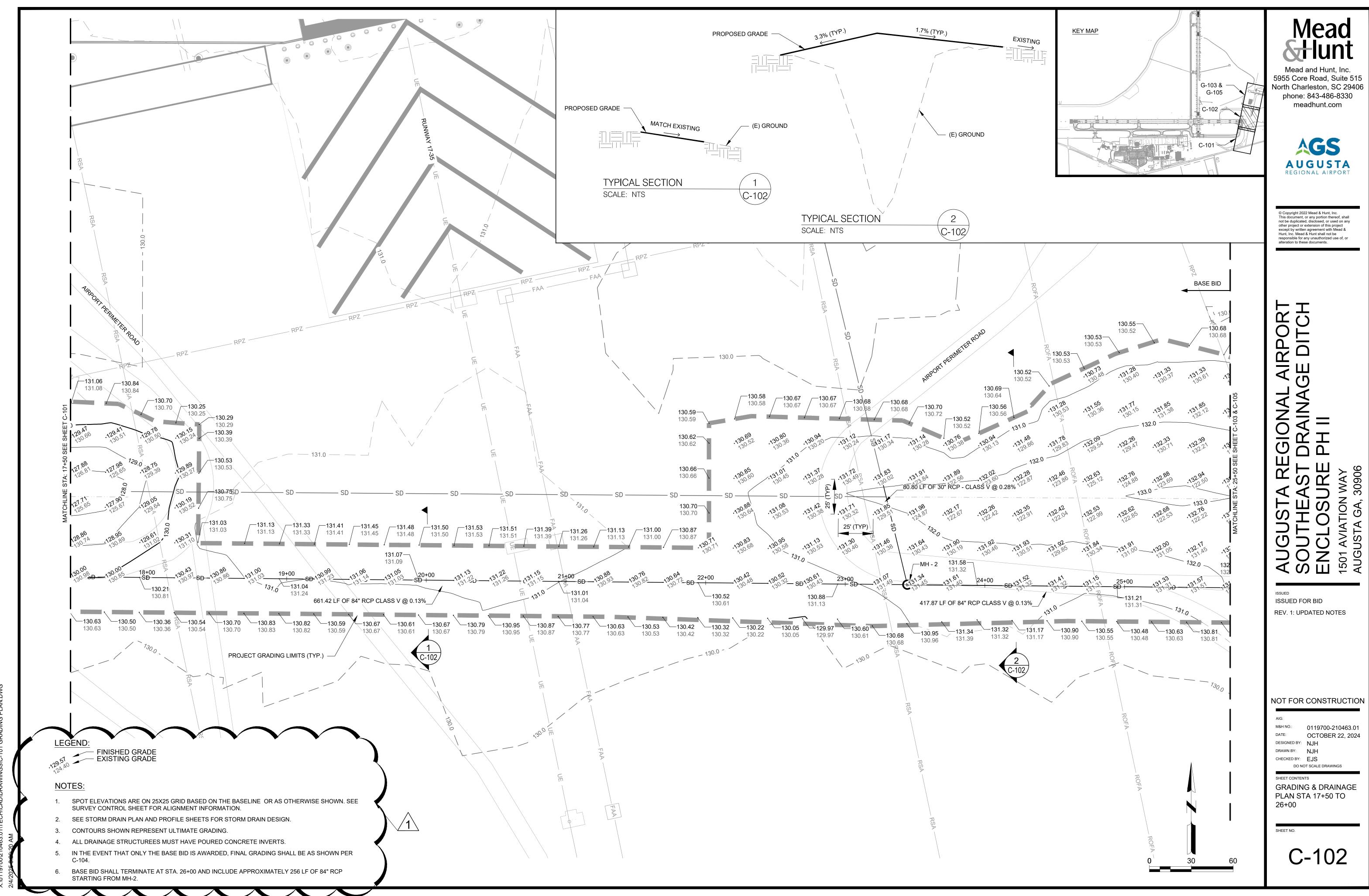
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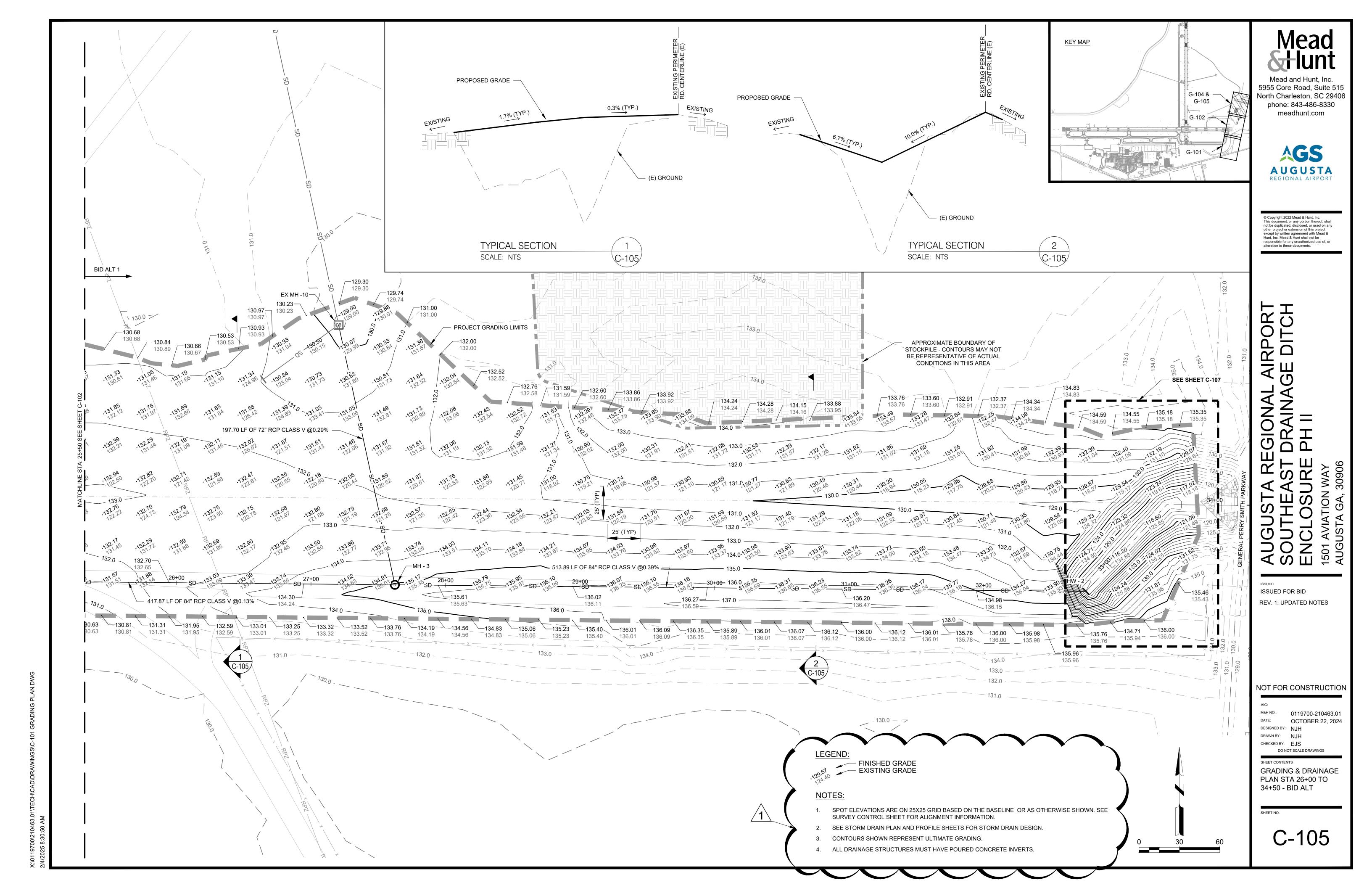
ES&PCP -POST-DEVELOPMENT DRAINAGE AREA MAP

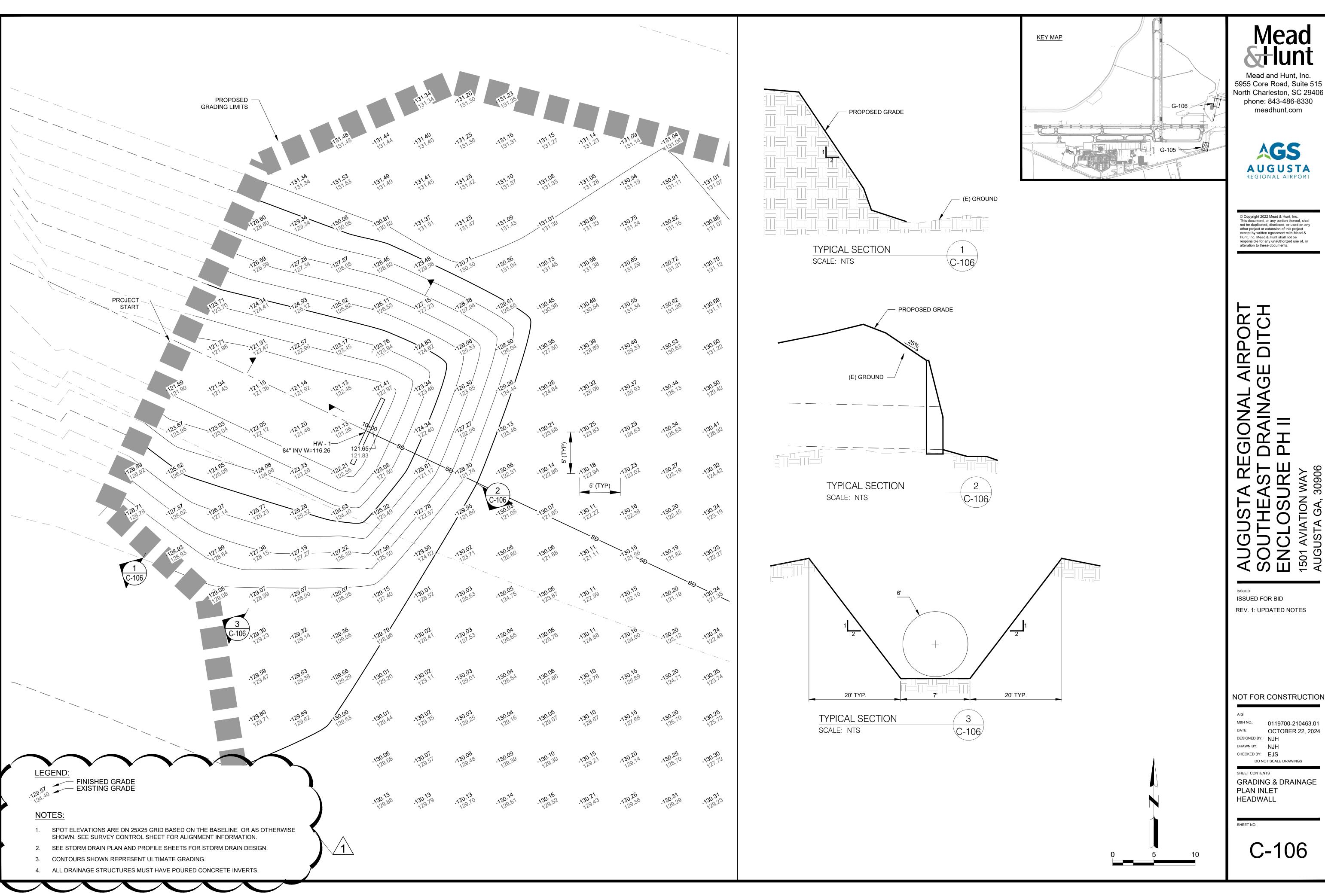






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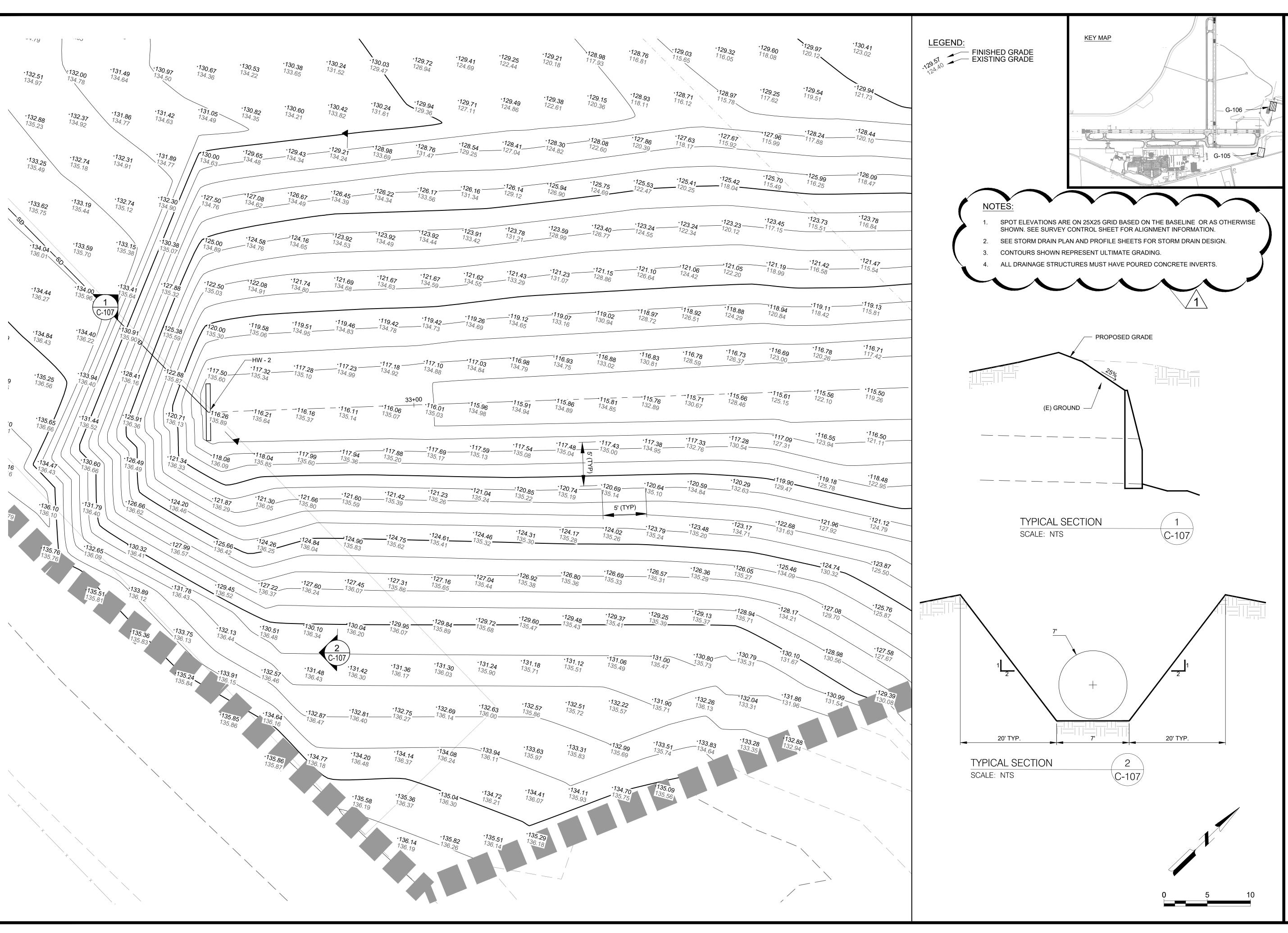
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CHECKED BY: EJS DO NOT SCALE DRAWINGS

SHEET CONTENTS **GRADING & DRAINAGE** 

PLAN INLET HEADWALL



Mead

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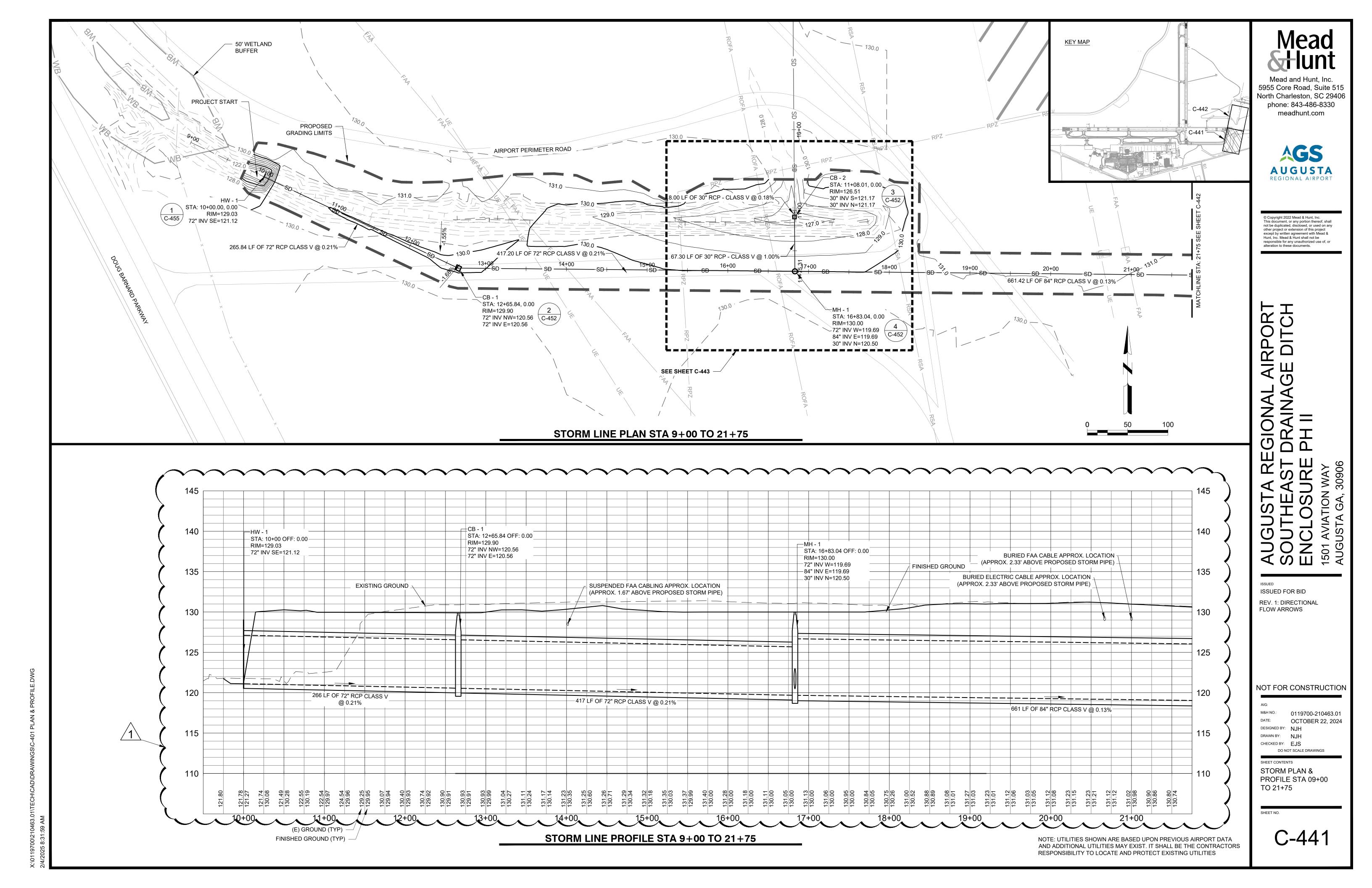
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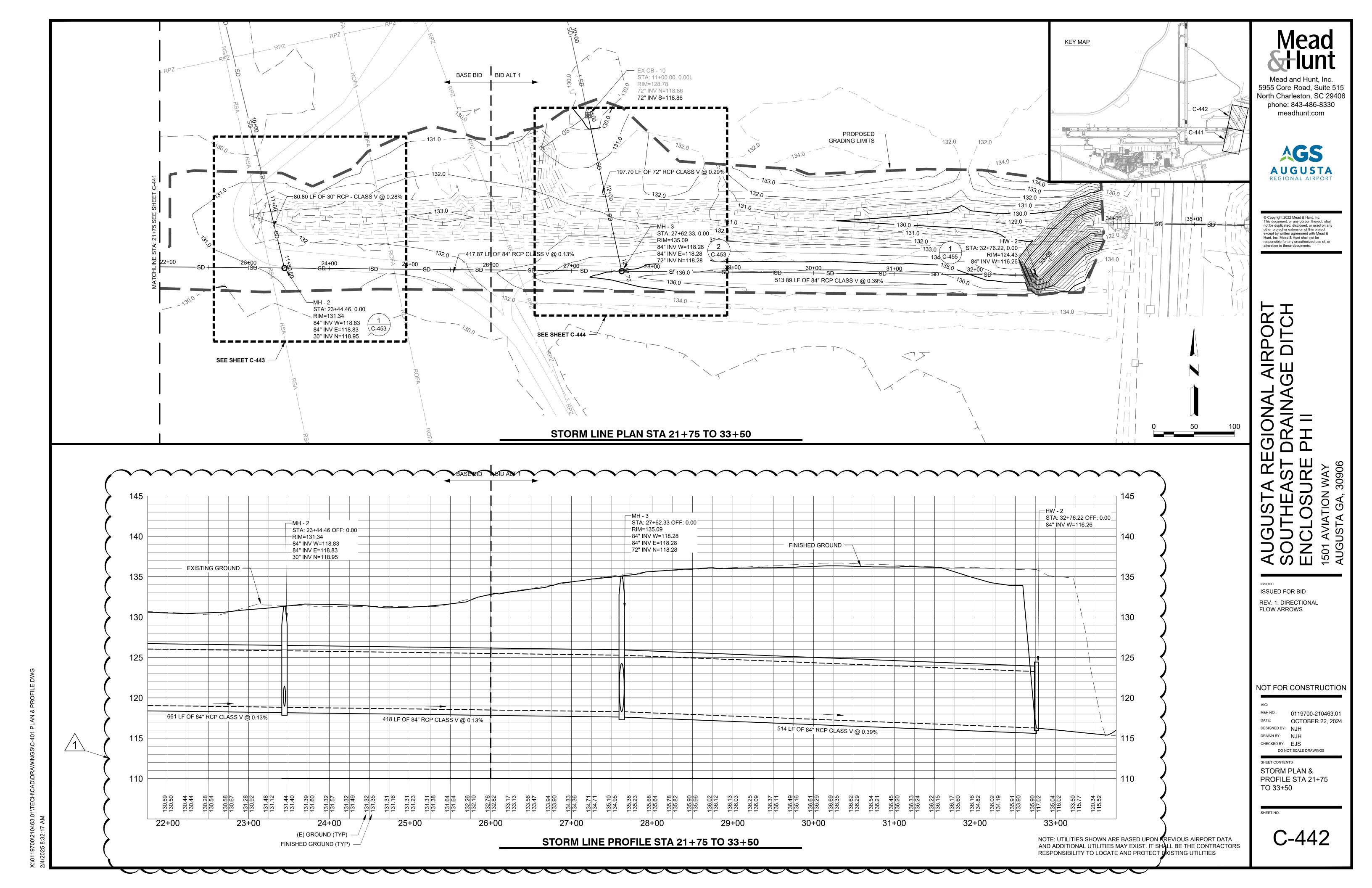
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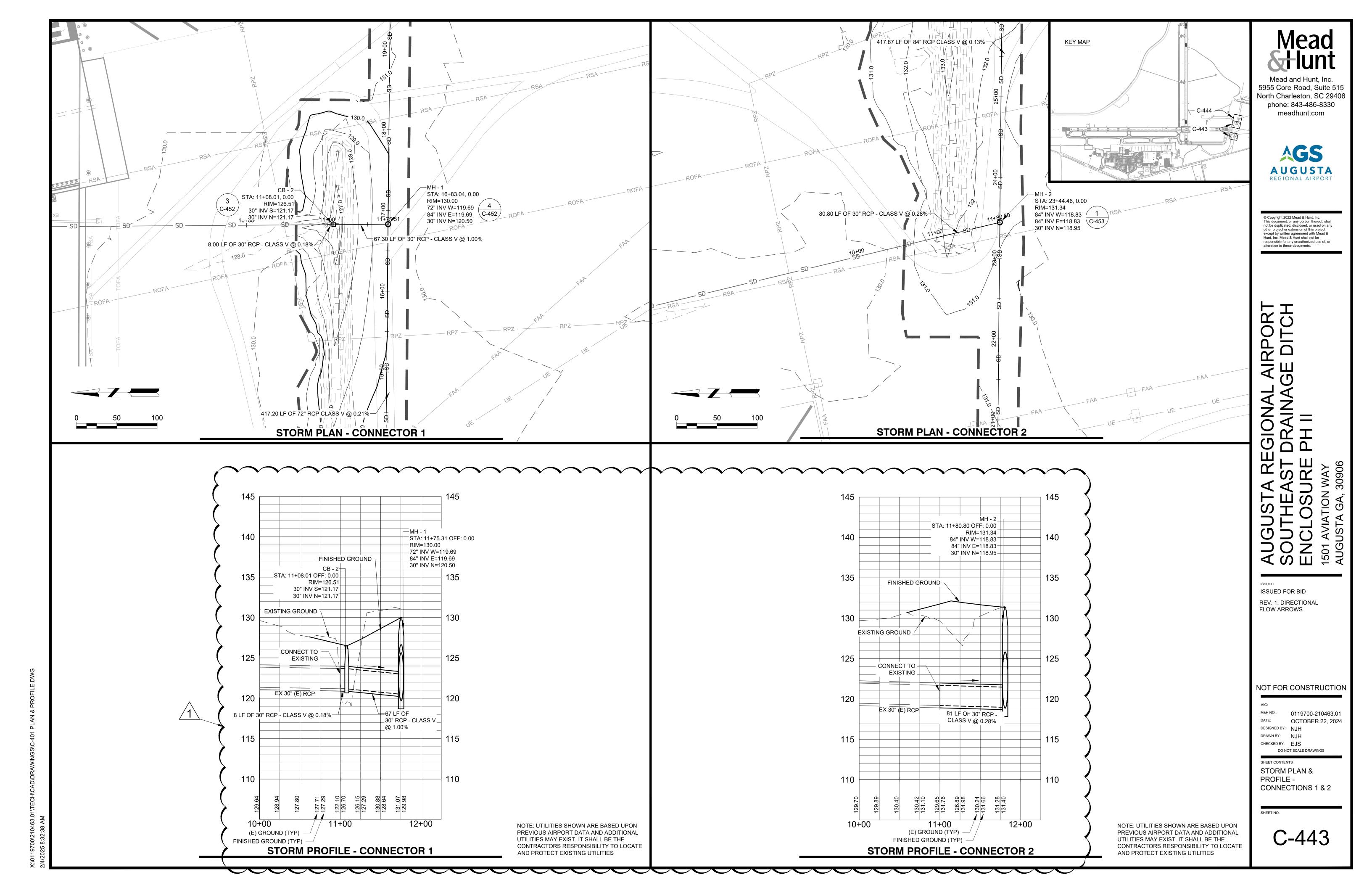
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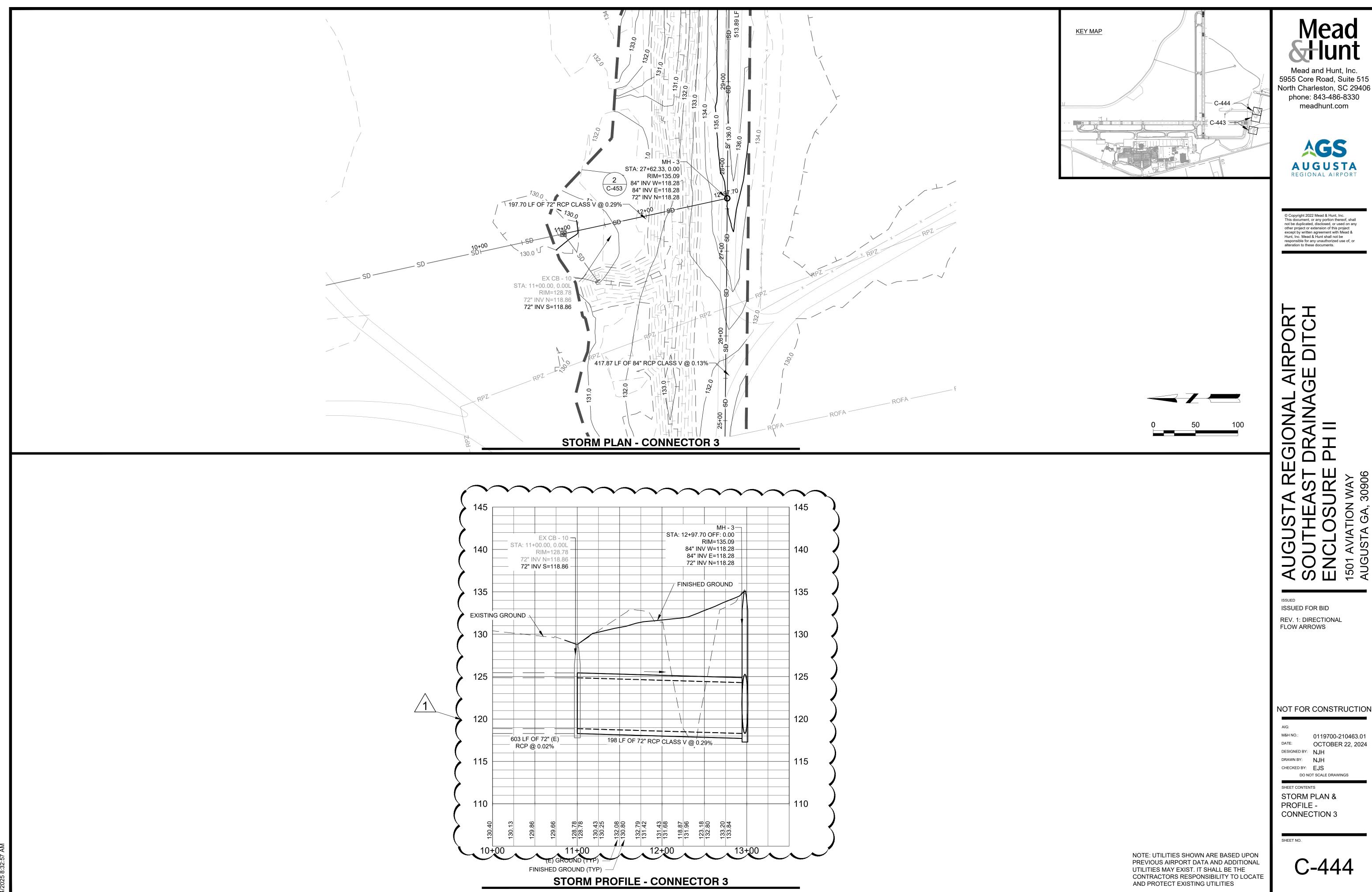
CHECKED BY: EJS DO NOT SCALE DRAWINGS

**GRADING & DRAINAGE** PLAN OUTLET **HEADWALL** 









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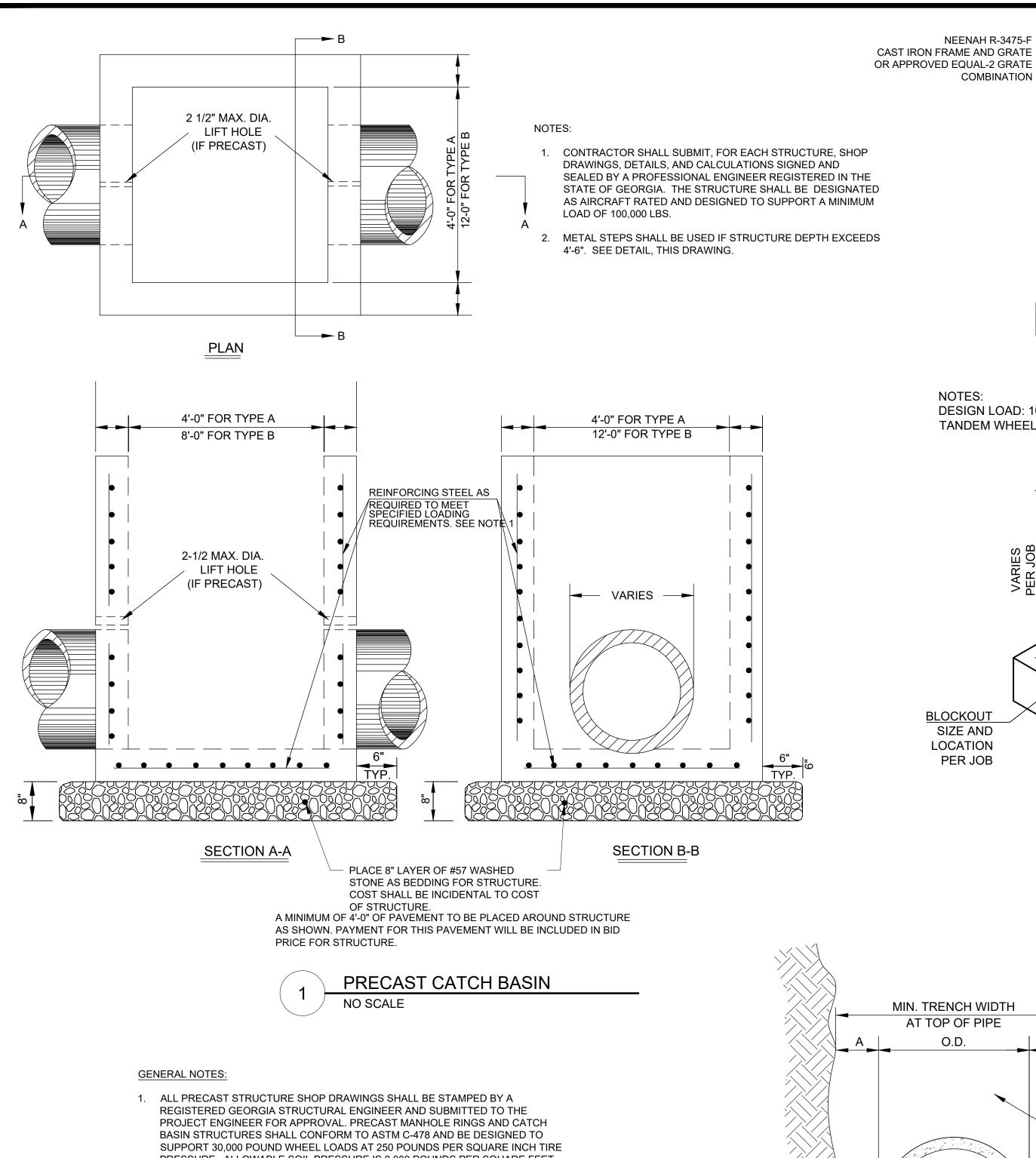
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ISSUED FOR BID REV. 1: DIRECTIONAL FLOW ARROWS

0119700-210463.01 OCTOBER 22, 2024 DESIGNED BY: NJH DRAWN BY: NJH CHECKED BY: EJS

DO NOT SCALE DRAWINGS SHEET CONTENTS

STORM PLAN & PROFILE -CONNECTION 3



PIPE DIA. "D" MIN. "A" 15" & LESS MIN. TRENCH WIDTH 18" TO 21" 10" AT TOP OF PIPE 24" TO 30" 12" O.D. 33" TO 42" 15" 48" & LARGER

NEENAH R-3475-F

COMBINATION

DESIGN LOAD: 100,000 LB. DUAL

TANDEM WHEEL LOADING

**BLOCKOUT** SIZE AND LOCATION PER JOB

PRESSURE. ALLOWABLE SOIL PRESSURE IS 2,000 POUNDS PER SQUARE FEET. 2. CATCH BASIN DIMENSIONS ARE TYPICAL. ACTUAL DIMENSIONS SHALL BE SUITABLE TO WITHSTAND THE ANTICIPATED LOADS FOR THE GIVEN CATCH BASIN

CONFIGURATIONS AND PIPE PENETRATIONS. 3. PIPE PENETRATIONS SHALL BE CORED OR BLOCKED OUT. CONCRETE STORM PIPE CONNECTIONS SHALL BE SEALED WITH NON-SHRINK GROUT. SUBDRAIN

4. PROVIDE ROUND RUBBER GASKET MEETING ASTM C-443 BETWEEN MANHOLE SECTION JOINTS.

CONNECTIONS SHALL BE MADE WITH A FLEXIBLE CONNECTOR.

5. MANHOLE COVER AND CATCH BASIN COVER SHALL CONFORM TO ONE OF THE REQUIREMENTS WITHIN THE SPECIFICATIONS.

FRAMES SHALL BE CAST INTO THE CONCRETE OR BOLTED TO THE CONCRETE STRUCTURE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE SELECTED COVERS FOR ENGINEER APPROVAL.

7. PLACE MANHOLES ON 12" OF COMPACTED BEDDING. PLACE CATCH BASINS ON 8"

18" APPROVED BACKFILL TAMPED IN MAX. 6" LAYERS EXCEPT AS OTHERWISE SPECIFIED PIPE DIA. "D" #57 WASHED STONE 0.50 O.D. INCIDENTAL TO ITEM D-701

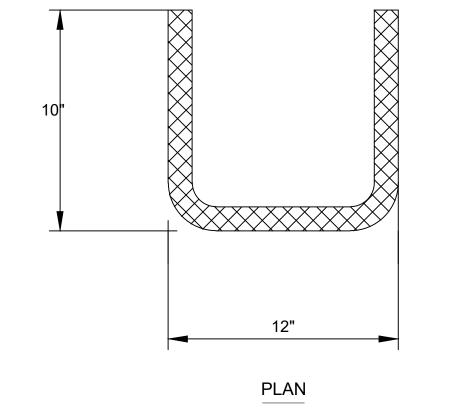
1. ALL RCP JOINTS AND PICK HOLES SHALL BE

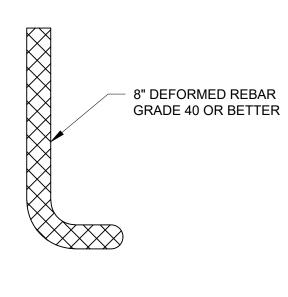
WRAPPED WITH A MINIMUM OF 3 LF OF NON-WOVEN FILTER FABRIC.

PRECAST CATCH BASIN

2. COST IS INCIDENTAL TO ITEM D-701.

PIPE BEDDING FOR R.C.P.





SIDE ELEVATION



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METAL STEP DETAIL **NO SCALE** 

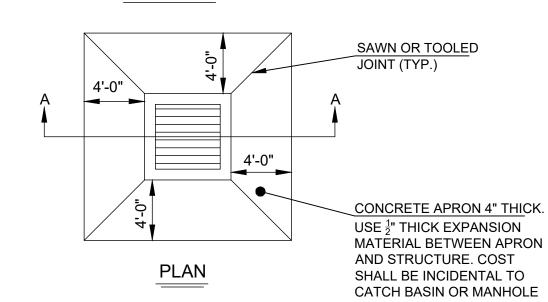
**ELEVATION** 

- 8" AB BEDDING

@ 95% RC

- STEPS DIFFERING IN DIMENSIONS, CONFIGURATION, OR MATERIALS FROM THOSE SHOWN MAY ALSO BE USED PROVIDED THE CONTRACTOR HAS FURNISHED THE ENGINEER WITH DETAILS OF THE PROPOSED STEPS AND HAS RECEIVED WRITTEN APPROVAL FROM THE ENGINEER FOR THE USE OF SUCH STEPS.
- 2. ALL STEPS SHALL PROTRUDE 7' FROM INSIDE FACE OF STRUCTURE
- 3. STEPS SHALL BE PLACED 15" CENTER TO CENTER ON WALL.

NORMAL DITCH SLOPE WELDED WIRE FABRIC 6x6 W1.4 x W1.4 4'-0" SECTION A-A



**CONCRETE APRON DETAIL NO SCALE** 

#### NOTES:

1. CONCRETE APRON SHALL BE INSTALLED ON NEW CATCH BASINS AND MANHOLES.

AIRP( GE DI

ISSUED FOR BID

REV. 1: 1/20/2025 ADDITION OF INVERT NOTE

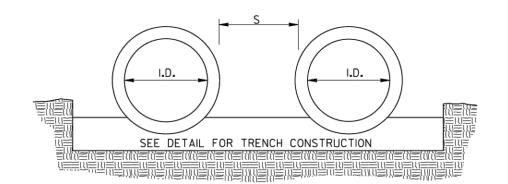
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M&H NO.: 0119700-210463.01 DATE: OCTOBER 22, 2024 DESIGNED BY: NJH DRAWN BY: NJH

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SHEET CONTENTS STORM DETAILS

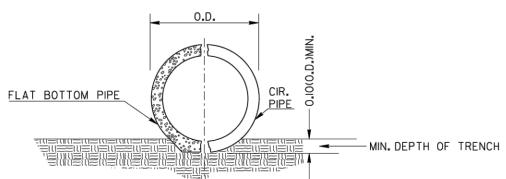
#### MULTIPLE PIPE CULVERT SPACING



S=ONE INSIDE DIAMETER OF PIPE, OR 3 FEET, WHICHEVER IS SMALLER.
FOR PIPE ARCH CULVERTS, SUBSTITUTE SPAN FOR INSIDE DIAMETER.

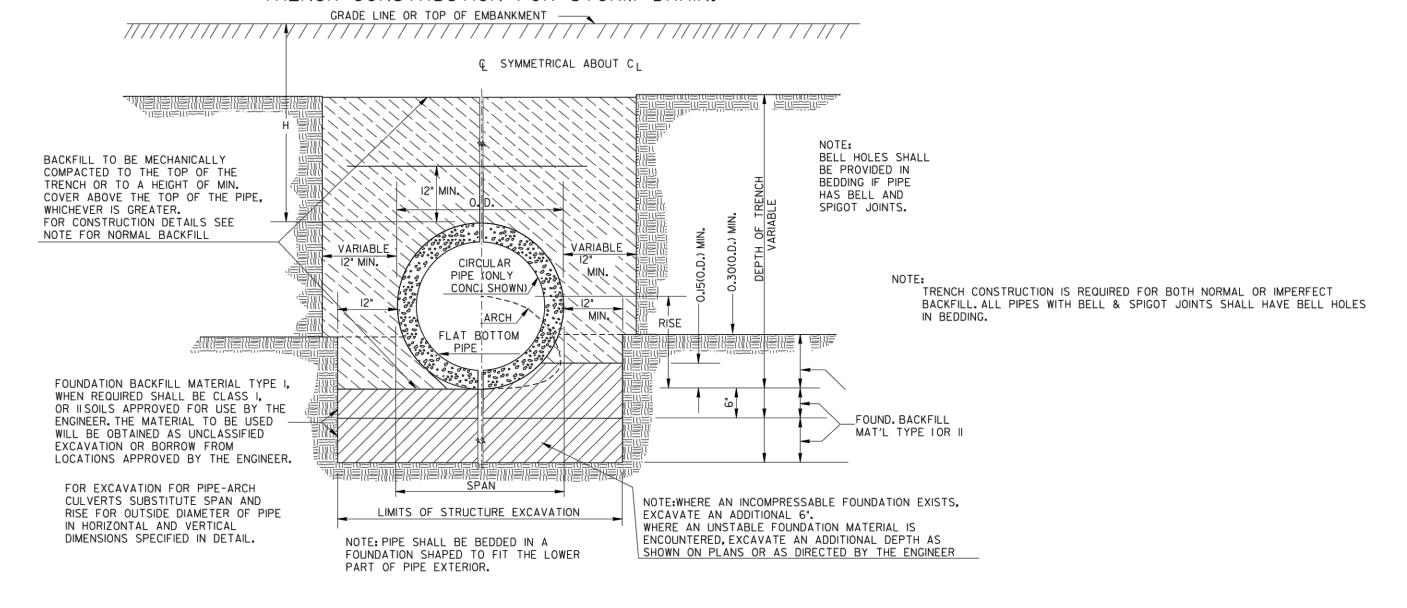
FOR MULTIPLE LINES OF C.M. PIPE WITH METAL FLARED END SECTIONS, S MAY BE INCREASED ENOUGH TO AVOID OVERLAP OF END SECTION WINGTIPS, LOCATION OF METAL END SECTION SHOULD BE DETERMINED BEFORE PLACEMENT

#### TRENCH CONSTRUCTION FOR SIDE DRAIN

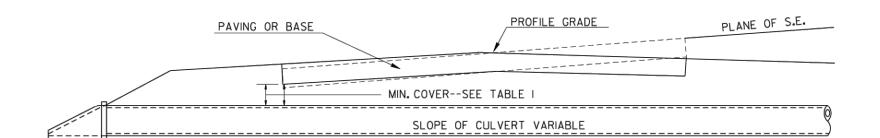


SYMMETRICAL ABOUT CL NOTE: THE PIPE SHALL BE BEDDED TO LINE AND GRADE IN A FIRM FOUNDATION SHAPED TO FIT THE LOWER PART OF THE PIPE EXTERIOR. WHERE ROCK EXISTS, EXCAVATE AND BACKFILL WITH COMPRESSABLE MATERIAL (UNCLASSIFIED EXCAVATION) A MINIMUM OF 6" BELOW THE PIPE.

#### TRENCH CONSTRUCTION FOR STORM DRAIN.



#### DETAIL SHOWING MINIMUM COVER FOR PIPE CULVERTS



#### NOTE:

- I. FOR FILL HEIGHT TABLES SEE SHEET 2 OF 3 AND SHEET 3 OF 3.
- 2. ONLY ONE CLASS OR THICKNESS OF PIPE WILL BE SPECIFIED FOR EACH INDIVIDUAL LOCATION. THE CLASS OR THICKNESS WILL BE DETERMINED BY THE MAXIMUM HEIGHT OF FILL.
- 3. PIPE IS DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SEVENTH EDITION, 2014

| 9-14-15<br>DATE                     | DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA                                                                                           |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| REM. IMPERFECT BACKFILL<br>REVISION | STANDARD  CONCRETE & METAL PIPE CULVERTS  SHEET LOF 3  (TRENCH CONSTRUCTION, BEDDING, BACKFILLING)  NO SCALE  REV. & REDR.: SEPT., 2001 |
| BJ0<br>BY                           | DES (SUBMITTED)                                                                                                                         |

STATE PROJECT NUMBER GA. | CSSTP-0009-00 (405) | <sub>120</sub> |

AUGUSTA

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REGIONAL AIRPORT

ISSUED FOR BID REV 1.: CONCRETE AND METAL PIPE DETAIL

NOT FOR CONSTRUCTION

0119700-210463.01 OCTOBER 22, 2024

DRAWN BY: NJH DO NOT SCALE DRAWINGS

STORM DETAILS

# AUGUSTA REGIONAL AIRPORT

SOUTHEAST DRAINAGE DITCH ENCLOSURE PH II

1501 AVIATION WAY AUGUSTA GA, 30906

PROJECT NUMBER: 0119700-210463.01

OCTOBER 22, 2024 ISSUED FOR BID

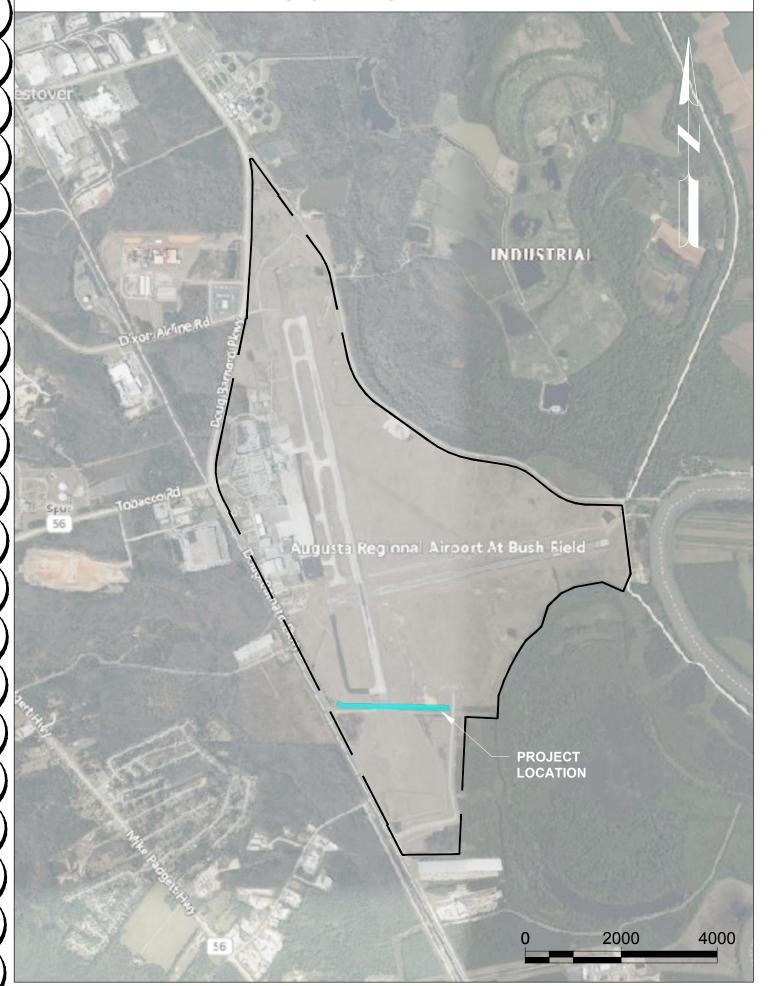
SHEET

ADDRESS: 1501 AVIATION WAY, AUGUSTA GA, 30906

PHONE #: 706-796-4010

| PROJECT D                | ATA TABLE                 |
|--------------------------|---------------------------|
| TOTAL SITE AREA          | 7.26                      |
| TOTAL DISTURBED AREA     | 7.26                      |
| EXISTING IMPERVIOUS AREA | N/A                       |
| PROPOSED IMPERVIOUS AREA | N/A                       |
| TAX MAP 14 DIGIT PIN     | 159-0-002-00-0            |
| CURRENT ZONING           | INDUSTRIAL, GEN. BUSINESS |
| PROPOSED LAND USE        | AIRPORT                   |
| REQUIRED SETBACKS        | N/A                       |

### LOCATION MAP





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ISSUED FOR BID REV. 1: SHEET INDEX, ADDITIONAL NOTES,

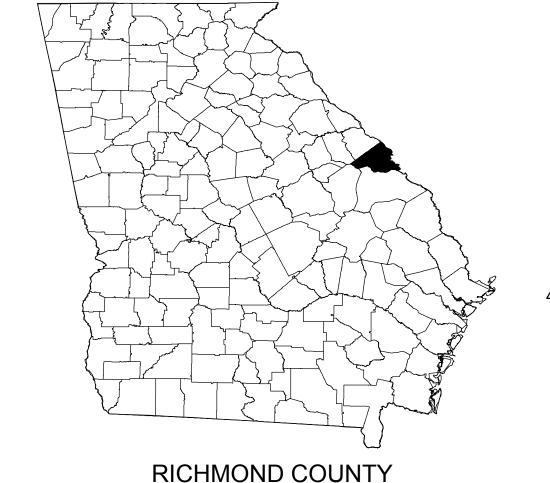
PROJECT DATA TABLE

NOT FOR CONSTRUCTION

0119700-210463.01 OCTOBER 22, 2024

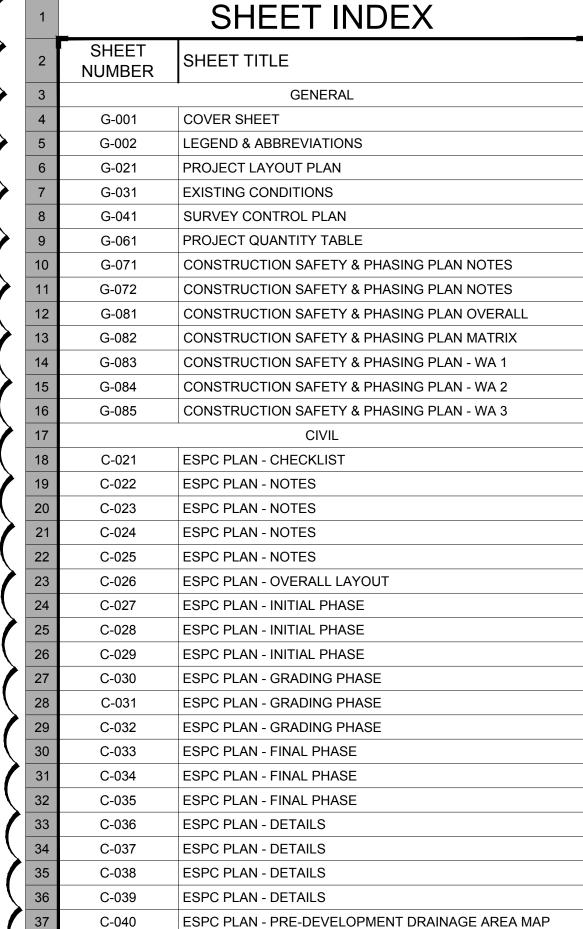
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SHEET CONTENTS **COVER SHEET** 



### **VICINITY MAP**

ALL MATERIALS USED SHALL BE IN ACCORDANCE WITH GEORGIA DEPARTMENT OF TRANSPORTATION, STATE OF GEORGIA, STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS, 2020 EDITION OR BY SPECIAL PROVISION, EXCEPT FOR ELECTRICAL ITEMS OF WORK WHICH SHALL BE IN ACCORDANCE WITH APPLICABLE FAA SPECIFICATIONS



ESPC PLAN - POST-DEVELOPMENT DRAINAGE AREA MAP

| 2  | NUMBER | SHEET TITLE                                           |
|----|--------|-------------------------------------------------------|
| 39 | C-052  | DEMOLITION PLAN STA 17+50 TO 26+00                    |
| 40 | C-051  | DEMOLITION PLAN STA 10+00 TO 17+50                    |
| 41 | C-053  | DEMOLITION PLAN STA 26+00 TO 34+50                    |
| 42 | C-101  | GRADING & DRAINAGE PLAN STA 10+00 TO 17+50            |
| 43 | C-102  | GRADING & DRAINAGE PLAN STA 17+50 TO 26+00            |
| 44 | C-103  | GRADING & DRAINAGE PLAN STA 26+00 TO 34+50 - BASE BID |
| 45 | C-104  | GRADING & DRAINAGE PLAN - BASE BID TIE-IN             |
| 46 | C-105  | GRADING & DRAINAGE PLAN STA 26+00 TO 34+50 - BID ALT  |
| 47 | C-106  | GRADING & DRAINAGE PLAN INLET HEADWALL                |
| 48 | C-107  | GRADING & DRAINAGE PLAN OUTLET HEADWALL               |
| 49 | C-441  | STORM PLAN & PROFILE STA 09+00 TO 21+75               |
| 50 | C-442  | STORM PLAN & PROFILE STA 21+75 TO 33+50               |
| 51 | C-443  | STORM PLAN & PROFILE - CONNECTIONS 1 & 2              |
| 52 | C-444  | STORM PLAN & PROFILE - CONNECTION 3                   |
| 53 | C-451  | STORM DETAILS                                         |
| 54 | C-452  | STORM DETAILS                                         |
| 55 | C-453  | STORM DETAILS                                         |
| 56 | C-454  | STORM DETAILS - HW-1 & HW-2                           |
| 57 | C-455  | STORM DETAILS                                         |
| 58 | C-901  | CROSS SECTIONS 9+75 TO 11+00                          |
| 59 | C-902  | CROSS SECTIONS 11+00 TO 12+50                         |
| 60 | C-903  | CROSS SECTIONS 12+75 TO 14+00                         |
| 61 | C-904  | CROSS SECTIONS 14+25 TO 15+50                         |
| 62 | C-905  | CROSS SECTIONS 15+75 TO 17+00                         |
| 63 | C-906  | CROSS SECTIONS 17+25 TO 18+50                         |
| 64 | C-907  | CROSS SECTIONS 18+75 TO 20+00                         |
| 65 | C-908  | CROSS SECTIONS 20+25 TO 21+50                         |
| 66 | C-909  | CROSS SECTIONS 21+75 TO 23+00                         |
| 67 | C-910  | CROSS SECTIONS 23+25 TO 24+50                         |
| 68 | C-911  | CROSS SECTIONS 24+75 TO 26+00                         |
| 69 | C-912  | CROSS SECTIONS 26+25 TO 27+50                         |
| 70 | C-913  | CROSS SECTIONS 27+75 TO 29+00                         |
| 71 | C-914  | CROSS SECTIONS 29+25 TO 30+50                         |
| 72 | C-915  | CROSS SECTIONS 30+75 TO 32+00                         |
| 73 | C-916  | CROSS SECTIONS 32+25 TO 33+50                         |

SHEET INDEX

C-916 CROSS SECTIONS 32+25 TO 33+50

UPDATES

DRAWN BY: NJH CHECKED BY: EJS DO NOT SCALE DRAWINGS

SHEET CONTENTS PROJECT QUANTITY **TABLE** 

G-061

| SPEC.    | ITEM                                                        | UNIT | QUANTITY |
|----------|-------------------------------------------------------------|------|----------|
|          | AGS SOUTHEAST DITCH PH II (BASE BID)                        |      |          |
| C-100.1  | Contractor Quality Control Program                          | LS   | 1        |
| C-102.1a | Installation, Maintenance, and Removal of Silt Fence        | LF   | 1650     |
| C-102.1b | Construct, Maintain, and Remove Inlet Sediment Trap         | EA   | 2        |
| C-102.1c | Construct, Maintain, and Remove Construction Exit           | EA   | 2        |
| C-102.1e | Construct, Maintain, and Remove Rock Dam                    | EA   | 1        |
| C-102.1f | Water Quality Monitoring and Sampling                       | EA   | 8        |
| C-102.1g | Water Quality Inspections                                   | EA   | 3        |
| C-102.1h | Erosion Control Mobilization                                | LS   | 1        |
| C-102.1i | Emergency Erosion Control Mobilization                      | LS   | 1        |
| C-102.1j | Rip Rap, Type III 18" Depth                                 | SY   | 80       |
| C-105.1  | Mobilization, Cleanup, and Demobilization                   | LS   | 1        |
| C-105.2  | Airfield Safety and Traffic Control                         | LS   | 1        |
| P-101.1  | Remove Existing 48-72" Storm Sewer Pipe                     | LF   | 570      |
| P-101.2  | Remove Existing Concrete Headwall                           | EA   | 2        |
| P-151.1  | Tree Clearing and Grubbing                                  | AC   | 2        |
| P-152.1  | Unclassified Excavation, Select Fill from Off-Site Material | CY   | 1810     |
| P-152.2  | Borrow Excavation, Select Fill from On-Site Material        | CY   | 7250     |
| P-152.3  | Unsuitable/Over excavation                                  | CY   | 1000     |
| D-701.1  | Concrete Sewer Pipe, 30-inch, Class V                       | LF   | 160      |
| D-701.2  | Concrete Sewer Pipe, 72-inch, Class V                       | LF   | 700      |
| D-701.3  | Concrete Sewer Pipe, 84-inch, Class V                       | LF   | 940      |
| D-751.1  | Airfield Inlet with Aircraft Rated Grate                    | EA   | 2        |
| D-751.2  | Airfield Manhole with Aircraft Rated Lid                    | EA   | 2        |
| D-751.3  | Connect New Storm Sewer Pipe to Existing Storm Pipe         | EA   | 2        |
| D-752.1  | Concrete Storm Headwall                                     | EA   | 2        |
| T-901.1  | Temporary Seeding                                           | AC   | 5        |
| T-901.2  | Permanent Seeding                                           | AC   | 5        |
| T-901.3  | Seeding, Staging Area                                       | AC   | 1        |
| T-904.1  | Sodding                                                     | SY   | 165      |
| T-905.1  | Topsoiling (Obtain on Site or Removed from Stockpile)       | CY   | 6900     |
| T-905.2  | Topsoiling, Staging Area                                    | CY   | 2762     |
| T-908.1  | Mulching                                                    | AC   | 5        |

| SPEC.                                       | ITEM                                                        | UNIT | QUANTITY |  |  |  |
|---------------------------------------------|-------------------------------------------------------------|------|----------|--|--|--|
| AGS SOUTHEAST DITCH PH II (BID ALTERNATE 1) |                                                             |      |          |  |  |  |
| C-100.1                                     | Contractor Quality Control Program                          | LS   | 1        |  |  |  |
| C-102.1a                                    | Installation, Maintenance, and Removal of Silt Fence        | LF   | 720      |  |  |  |
| C-102.1b                                    | Construct, Maintain, and Remove Inlet Sediment Trap         | EA   | 1        |  |  |  |
| C-102.1c                                    | Construct, Maintain, and Remove Construction Exit           | EA   | 1        |  |  |  |
| C-102.1d                                    | Construct, Maintain, and Remove Check Dam                   | EA   | 2        |  |  |  |
| C-102.1e                                    | Construct, Maintain, and Remove Rock Dam                    | EA   | 2        |  |  |  |
| C-102.1f                                    | Water Quality Monitoring and Sampling                       | EA   | 6        |  |  |  |
| C-102.1g                                    | Water Quality Inspections                                   | EA   | 2        |  |  |  |
| C-102.1h                                    | Erosion Control Mobilization                                | LS   | 1        |  |  |  |
| C-102.1i                                    | Emergency Erosion Control Mobilization                      | LS   | 1        |  |  |  |
| C-102.1j                                    | Rip Rap, Type III 18" Depth                                 | SY   | 930      |  |  |  |
| C-102.1k                                    | Erosion Control Blanket/Matting                             | SY   | 300      |  |  |  |
| C-105.1                                     | Mobilization, Cleanup, and Demobilization                   | LS   | 1        |  |  |  |
| C-105.2                                     | Airfield Safety and Traffic Control                         | LS   | 1        |  |  |  |
| P-101.1                                     | Remove Existing 48-72" Storm Sewer Pipe                     | LF   | 75       |  |  |  |
| P-101.2                                     | Remove Existing Concrete Headwall                           | EA   | 1        |  |  |  |
| P-152.1                                     | Unclassified Excavation, Select Fill from Off-Site Material | CY   | 2430     |  |  |  |
| P-152.2                                     | Borrow Excavation, Select Fill from On-Site Material        | CY   | 9720     |  |  |  |
| P-152.3                                     | Unsuitable/Over excavation                                  | CY   | 1000     |  |  |  |
| D-701.2                                     | Concrete Sewer Pipe, 72-inch, Class V                       | LF   | 200      |  |  |  |
| D-701.3                                     | Concrete Sewer Pipe, 84-inch, Class V                       | LF   | 700      |  |  |  |
| D-751.2                                     | Airfield Manhole with Aircraft Rated Lid                    | EA   | 1        |  |  |  |
| D-751.4                                     | Connect Storm Sewer Pipe to Existing Storm Structure        | EA   | 1        |  |  |  |
| D-752.1                                     | Concrete Storm Headwall                                     | EA   | 1        |  |  |  |
| T-901.1                                     | Temporary Seeding                                           | AC   | 4        |  |  |  |
| T-901.2                                     | Permanent Seeding                                           | AC   | 4        |  |  |  |
| T-901.3                                     | Seeding, Staging Area                                       | AC   | 1        |  |  |  |
| T-904.1                                     | Sodding                                                     | SY   | 80       |  |  |  |
| T-905.1                                     | Topsoiling (Obtain on Site or Removed from Stockpile)       | CY   | 6900     |  |  |  |
| T-905.2                                     | Topsoiling, Staging Area                                    | CY   | 2762     |  |  |  |
| T-908.1                                     | Mulching                                                    | AC   | 4        |  |  |  |