STATEMENT OF CREDIT AVAILABILITY

APPLICATION INFORMATION

Permit Type: NWP
USACE Permit Number: SAS- 2023 - 00522
Project Name: COV Old Clyattville Road NWP-14
Applicant: City of Valdosta
County: Lowndes
Impacted HUC: 3110203

CREDIT NEED

Stream Credit Type: N/A
Stream Credits Needed:

Wetland Credit Type: Non-Riverine
Wetland Credits Needed: 1.6

MITIGATION BANK NAMED

Bank Name: Cherry Creek Mitigation Bank
Bank Permit Number: SAS- 9900 - 10930
Primary Service Area HUC(s): 03110203
Secondary Service Area HUC(s): N/A
Stream Credit Type Utilized: N/A
Stream Credits Utilized: N/A
Wetland Credit Type Utilized: N/A
Wetland Credits Utilized: 1.6

Statement of Credit Availability
provided by applicant
10/19/2023.

The Bank Representative hereby authorizes the Applicant to name the mitigation bank listed above as a source of compensatory mitigation in its U.S. Army Corps of Engineers (Corps) permit application for the above referenced project. The credits listed from the mitigation bank are currently available for purchase and have been reserved by the Bank Representative for use by the Applicant. In order to finalize the credit purchase, the Bank Representative must submit an updated credit ledger showing the sale (debit) and any other required closing documentation to the Corps.

Bank Representative:

By: Gregory P. Smith

Name: Gregory P. Smith
Date: 10/17/2023

As the Applicant, I understand that failure to purchase mitigation credits as required by the Corps may result in a suspension or revocation of the permit and/or civil or criminal enforcement actions by the Corps or the U.S. Environmental Protection Agency.

Applicant:

By: [signature]
Name:
Date:

Note 1: Potential mitigation credits that have not been released for sale will only be available for reservation at the discretion of the Corps.

Note 2: If the above agreement cannot be finalized by either party (Banker or Applicant), both parties will need to immediately coordinate with the Corps to ensure that an alternative compensatory mitigation plan is proposed to offset project impacts.

Note 3: If credits are being purchased from multiple mitigation banks, then a Statement of Credit Availability is required from each mitigation bank.

TTL
4589 Val North Drive
Valdosta, GA 31602
229.244.8619
www.TTLUSA.com

August 21, 2023

Erosion and Sedimentation Control Unit
Attn: Georgia Environmental Protection Division
2 Martin Luther King Jr. Drive, SW
Atlanta, GA 30334

Subject: **Application for a 25-Foot Vegetative Buffer Encroachment**
Proposed Old Clyattville Road Widening
(Gil Harbin Industrial Blvd. to Mud Swamp)
Valdosta, Lowndes County, Georgia
TTL Project No.: 21-07-00563.00

TTL, Inc. (TTL) respectfully submits this Application for a 25-Foot Vegetative Buffer Encroachment for impacts to State Waters associated with the proposed widening of Old Clyattville Road from Gil Harbin Industrial Blvd. to Mud Swamp in Valdosta, Lowndes County, Georgia. Lovell Engineering has contracted with TTL to act on behalf of the City of Valdosta in the processing of this authorization. This application is submitted under DNR Rule 391-3-7.05(2)(h). The buffer impacts include piping of approximately 670 linear feet (±0.045 acres) of State Waters associated with the widening of Old Clyattville Road.

TTL representatives look forward to working with you on this project.

Sincerely,

TTL, Inc.

Melissa Norris
Melissa R. Norris, P.G.
Project Professional III

Christopher Terrell
Christopher Terrell, P.W.S
Natural Resource Regional Leader

Enclosed: *Application for a 25-Foot Vegetative Buffer Encroachment Submittal Package*

APPLICATION FOR A 25-FOOT VEGETATIVE BUFFER ENCROACHMENT ON DESIGNATED WARM WATERS OF THE STATE

OLD CLYATTVILLE ROAD WIDENING
(GIL HARBIN INDUSTRIAL BLVD TO MUD SWAMP)
VALDOSTA, LOWNDES COUNTY, GEORGIA

Submitted to:

Lovell Engineering Associates
Attn: Mr. Jeff Lovell, P.E.
3998 Inner Perimeter Road
Valdosta, Georgia 31602

Prepared by:

TTL, Inc.
4589 Val North Drive
Valdosta, Georgia 31602

Project No. 21-07-00563.00

August 21, 2023

TTL

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4. Aquatic Resources Delineation Map
5. Buffer Impacts Map
6. FEMA Flood Hazard Map

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2. Selected Site Photographs
3. Lovell Engineering – Site Plans
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APPLICATION FOR A 25-FOOT VEGETATIVE BUFFER ENCROACHMENT ON DESIGNATED WARM WATERS OF THE STATE

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

BV-092-23-01

REVISED MAY 2016

APPLICATION FOR A 25-FOOT VEGETATIVE BUFFER ENCROACHMENT ON DESIGNATED WARM WATERS OF THE STATE

(Required prior to conducting land disturbing activities within the State-mandated 25-foot buffer in accordance with the Erosion and Sedimentation Act of 1975, as amended, O.C.G.A. 12-7-6(b)(15))

Property Owner's Name *(Person)*: City of Valdosta (COV)

Company Name *(if applicable)*: City of Valdosta c/o TTL, Inc.

Current Mailing Address: 300 North Lee Street, Valdosta, GA 31602 Benjamin O'Dowd City Engineer

Telephone: 229-259-3530 E-Mail: bodowd@valdostacity.com

Contact Person's Name and Address: Melissa R. Norris, P.G.

4589 Val North Drive, Valdosta, GA 31602

Contact Person's Telephone: 229-244-8619 E-Mail: mnorris@ttlusa.com

Contact Person's Company Name *(if applicable)*: TTL, Inc.

Project Name: COV – Old Clyattville Road Widening

Total Project Disturbed Acreage: ±14 acres

Type of Project: Road Widening

Buffer Variance Criteria *(391-3-7.05(2)(a) – (k))*: 391-3-7.05(2)(h)

Location of Buffer Impacts:

City *(list only if the buffer impacts are located within jurisdictional boundaries of the municipality)*: 34,499.52 ft^2 ✓

County *(list only if the buffer impacts are located within jurisdictional boundaries of the county)*: Lowndes

GPS Coordinates *(decimal degrees)*: Latitude: 30.79914 Longitude: -83.28845

Watershed Name and 8-digit HUC *(Hydrologic Unit Code)*: Alapahoochee River; 8-digit HUC 03110202 ✓ ALAPAHA

ALAPAHA or WITHLACOOCHEE ✓

Detailed Directions to Project *(attach location map and USGS quad sheet)*: From Interstate I-75, take Exit 13. The project area is located approximately 0.4 miles east on Old Clyattville Road, just across the Mud Swamp Bridge crossing.

Name of State water(s) Impacted: Unnamed road-side ditch - Discharges to Mud Swamp

(if unnamed, indicate the first named waterbody that this State water flows into)

Total Area of Buffer Disturbance *(square feet)*: 34,499.52

Total Length of Buffer Disturbance *(linear feet)*: 670

Signature: BO'Dowd **Date:** 9-7-23

1) **Pursuant to DNR Rule 391-3-7.05, buffer variance applications will be reviewed by the Director only where the applicant provides reasonable evidence that impacts to the buffer have been avoided or minimized to the fullest extent practicable and only for the following criteria:**

(a) The project involves the construction or repair of an existing infrastructure project or a structure that, by its nature, must be located within the buffer. Such structures include, but are not limited to dams, public water supply intake structures, detention/retention ponds, waste water discharges, docks including access ways, boat launches including access ways, and stabilization of areas of public access to water; or

(b) The project will result in the restoration or enhancement to improve water quality and/or aquatic habitat quality; or

(c) Buffer intrusion is necessary to provide reasonable access to a property or properties; or

(d) The intrusion is for water and sewer lines that cannot reasonably be placed outside the buffer, and stream crossings and vegetative disturbance are minimized; or

(e) Crossing for utility lines, including but not limited to gas, liquid, power, telephone, and other pipelines, provided that the number of crossings and the amount of vegetative disturbance are minimized; or

(f) Recreational foot trails and viewing areas, providing that impacts to the buffer are minimal; or

(g) The project involves construction of one (1) single family home for residential use by the owner of the subject property and, at the time of adoption of this rule, there is no opportunity to develop the home under any reasonable design configuration unless a buffer variance is granted. Variances will be considered for such single family homes only if construction is initiated or local government approval is obtained prior to January 10, 2005; or

(h) For non-trout waters, the proposed land disturbing activity within the buffer will require a permit from the United States Army Corps of Engineers under Section 404 of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1344, and the Corps of Engineers has approved a mitigation plan to be implemented as a condition of such a permit; or

(i) For non-trout waters, a plan is provided for buffer intrusion that shows that, even with the proposed land disturbing activity within the buffer, the completed project will result in maintained or improved water quality downstream of the project; or

(j) For non-trout waters, the project with a proposed land disturbing activity within the buffer is located in, or upstream and within ten linear miles of, a stream segment listed as impaired under Section 303(d) of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1313(d) and a plan is provided that shows that the completed project will result in maintained or improved water quality in such listed stream segment and that the project has no adverse impact relative to the pollutants of concern in such stream segment; or

(k) The proposed land disturbing activity within the buffer is not eligible for a permit from the United States Army Corps of Engineers under Section 404 of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1344, but includes required mitigation in accordance with the current EPD *Buffer Mitigation Guidance* document, and involves:

(1) piping, filling or re-routing of non-trout waters that are not jurisdictional Waters of the U.S.; or

(2) stream buffer impacts due to new infrastructure projects adjacent to State waters (jurisdictional and non-jurisdictional Waters of the U.S.). This criterion shall not apply to maintenance and/or modification to existing infrastructure, which are covered under 391-3-7.05(2)(a).

NOTE: Projects that include "streambank or shoreline stabilization" (e.g., criterion (a)) or "streambank restoration" (e.g., criterion (b)) should adhere to the most current guidance documents: *Streambank and Shoreline Stabilization Guidance*, *Guidelines for Streambank Restoration* and *Streambank and Shoreline Stabilization – Techniques to Control Erosion and Protect Property*.

Projects reviewed under criteria (h), (i), (j) or (k) should adhere to the most current EPD guidance document, *Buffer Mitigation Guidance*, when applicable. All guidance documents are available on the EPD website, www.epd.georgia.gov.

2) **Mail completed buffer variance application to:** Erosion and Sedimentation Control Unit
Georgia Environmental Protection Division
2 Martin Luther King Jr Drive SW, Suite 1462
Atlanta, GA 30334

NOTE: APPLICATIONS MUST BE ON THE MOST CURRENT FORMS PROVIDED BY EPD.

3) **Address all items on the attached Buffer Impact Checklist and submit the completed checklist and other pertinent information with the buffer variance application to EPD.**

NOTE: INCOMPLETE APPLICATIONS WILL BE RETURNED TO THE APPLICANT.

4) **Within 60 days of receipt of a complete buffer variance application, EPD will either provide written comments to the applicant or propose to issue a buffer variance. EPD may request additional information related to the project necessary to effectively evaluate the buffer variance application. When EPD proposes to issue a buffer variance, the application process will continue in the following order:**

(a) EPD will issue a public notice.

(b) The public notice shall describe the proposed buffer encroachment, the location of the project, where the public can review site plans, and where comments should be sent.

(c) The public shall have 30 days to comment on the proposed buffer variance.

(d) Public notices are posted on EPD's website at https://epd.georgia.gov/public-advisories-requests-state-waters-buffer-variance.

BUFFER IMPACT CHECKLIST

Pursuant to DNR Rule 391-3-7.05, all buffer variance applications must include the following information. All narrative descriptions, calculations and documentation must be provided on the Buffer Impact Checklist form below or in a separate report. All plans, letters from Local Issuing Authorities, copies of USACE permit applications, mitigation calculations for the appropriate criteria and permit approvals and site maps should be submitted as attachments:

Y / N / NA

Y (1) Narrative description of the project, with details of the buffer disturbance, including estimated length of time for the disturbance and justification for why the disturbance is necessary.

Y (2) Delineate the total area (square feet) and length (linear feet) for each criterion and Calculate the totals for all buffer disturbances.

N/A (3) Letter from the Local Issuing Authority (LIA), when applicable, stating that the LIA has visited the site and determined the presence of State waters that have a point of wrested vegetation that require a buffer and that a buffer variance is required as per the local erosion and sedimentation control ordinance.

N/A (4) For projects within the buffer of or upstream and within one **linear** mile of impaired stream segments on Georgia's "305(b)/303(d) List Documents (Final)," documentation that the project will have no adverse impacts relative to the pollutants of concern and if applicable, documentation that the project will be in compliance with the TMDL Implementation Plan(s).

N/A (5) For all **minor buffer impacts*** (as defined in DNR Rules 391-3-7.01), a **Re-Vegetation Plan** with a descriptive narrative as described in the EPD guidance document, *Streambank and Shoreline Stabilization*, and/or a plan for permanent vegetation as per the *Manual for Erosion and Sedimentation Control in Georgia*.

Y (6) For all **major buffer impacts*** (as defined in DNR Rules 391-3-7.01), a **Buffer Mitigation Plan** with a descriptive narrative addressing impacts to critical buffer functions based on an evaluation of existing buffer conditions and predicted post buffer conditions pursuant to DNR Rule 391-3-7.05(7).

Y (7) For variance requests under DNR Rules 391-3-7.05(2)(h),(i), (j) and (k), the application must include documentation that the project will mitigate buffer disturbances based on the EPD guidance document, *Buffer Mitigation Guidance*, addressing post-development total suspended solids (TSS), stormwater runoff reduction, water quality protection and aquatic/buffer habitat protection.

N/A (8) For variance requests under DNR Rules 391-3-7.05(2)(i) and (j), the application must include the following:

(a) Documentation that post-development stormwater management systems conform to the minimum standards for water quality, channel protection, overbank flood protection and extreme flood protection as established in the *Georgia Stormwater Management Manual* or the equivalent and if applicable, the *Coastal Stormwater Supplement to the Georgia Stormwater Management Manual*.

(b) Documentation that existing water quality will be maintained or improved based on predicted pollutant loadings under pre- and post-development conditions as estimated by models accepted by EPD.

(c) For projects within the buffer of or upstream and within ten **linear** miles of impaired stream segments on Georgia's "305(b)/303(d) List Documents (Final)," documentation that the project will have no adverse impacts relative to the pollutants of concern as estimated by models accepted by EPD and if applicable, documentation that the project will be in compliance with the TMDL

Implementation Plan(s).

BUFFER IMPACT CHECKLIST

Pursuant to DNR Rule 391-3-7.05, all buffer variance applications must include the following information. All narrative descriptions, calculations and documentation must be provided on the Buffer Impact Checklist form below or in a separate report. All plans, letters from Local Issuing Authorities, copies of USACE permit applications, mitigation calculations for the appropriate criteria and permit approvals and supporting documentation, and site maps should be submitted as attachments:

Y / N / NA

Y (9) For variance requests under DNR Rule 391-3-7.05(2)(h), a copy of the permit application and mitigation calculations as submitted to the United States Army Corps of Engineers (USACE) under Section 404 of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1344.

N/A (10) For variance requests under DNR Rule 391-3-7.05(2)(k)(1), the application must include documentation from the USACE verifying the water bodies identified in the application are **non-jurisdictional** Waters of the U.S. under Section 404 of the Clean Water Act.

Y (11) Narrative description of the shape, size, topography, slope, soils, vegetation and other physical characteristics of the property.

Y (12) Any other reasonable information related to the project that may be deemed necessary to effectively evaluate the variance request.

Y (13) **Site Map** that includes locations of all State waters, wetlands, floodplain boundaries and other natural features, as determined by a field survey.

Y (14) **Erosion, Sedimentation and Pollution Control Plan** with a dated and numbered detailed **Site Plan** delineating the locations of all structures, impervious surfaces, and the boundaries of the area of soil disturbance, both inside and outside of the buffer. Submit only the cover sheet and the sheets of the Erosion, Sedimentation and Pollution Control Plan that pertain to the buffer impacts.

NOTE: THE EXACT AREA OF THE BUFFER TO BE IMPACTED MUST BE ACCURATELY AND CLEARLY INDICATED ON THE PLANS.

Y (15) **Stormwater Control Plan** once site stabilization is achieved, when required by a local stormwater ordinance.

NOTES:

Minor Buffer Impact, as defined in DNR Rules 391-3-7.01, means an impact that upon completion yields no additional above ground, man-made materials or structures within the buffer, and maintains the original grade, and results in less than 5,000 square feet of buffer impacts per stream crossing and/or less than 5,000 square feet of buffer impacts per individual area of encroachment for each project.

Major Buffer Impact, as defined in DNR Rules 391-3-7.01, means any impact that does not meet the definition of **Minor Buffer Impact**.

ADDITIONAL PROJECT INFORMATION

Property Description

The project consists of widening approximately 0.6 miles of Old Clyattville Road. The area is depicted on the U.S. Geological Survey (USGS) 7.5-minute Topographic Map of Valdosta, Georgia (Figure 1). According to the USGS Topographic Map, the elevation at the site ranges from approximately 170 to 210 feet above mean sea level, with a downward topographic gradient generally to the south, towards Mud Swamp. As depicted on Figure 2, the Project transverses from Gil Harbin Industrial Blvd. to Mud Swamp and has an approximate central location of latitude 30.79914 and longitude -83.28845. The review area consists primarily of maintained, grassed right-of-way. A NRCS map of the soils located on the site with the associated hydric rating is presented in Figure 3 and summarized in Table 1 below.

Table 1: Soil Map Units Classifications

Map Unit Symbol	Description	Hydric Rating
Jo	Johnson loam	Hydric
Le	Leefield loamy sand, 0 to 2 percent slopes	Predominantly Nonhydric
SuC2	Sunsweet sandy loam, 5 to 8 percent slopes	Nonhydric
TfA	Tifton loamy sand, 0 t 2 percent slopes	Nonhydric
TfB	Tifton loamy sand, 2 to 5 percent slopes	Nonhydric

The State Waters feature, identified as D-1, is located adjacent to the northern right-of-way of Old Clyattville Road. The feature originates as a stormwater from the parking area of SAFT and enters the Old Clyattville Road right-of-way south of SAFT, at an approximate location of latitude 30.797848 and longitude -83.287356. The feature exhibits bank instability and downcutting through the sandy soils, within the northern section of reach. Additionally, the northern portion of D-1 exhibits geomorphic stream features and wrested vegetation consistent with State Water requiring a buffer, while the southern portion of D-1 supports wetland vegetation and functions primarily as a wetland (see Figure 4 and NCDWQ Stream Identification Forms - Attachment 1). The current buffer associated with D-1 consists of maintained grassed right-of-way, with sections of bare soil subject to high erosion potential. Selected site photographs are included as Attachment 2.

Project Description

The proposed widening of Old Clyattville Road is driven by the anticipated increase in traffic and commercial development in the surrounding area. The proposed culverting of the identified ditch feature (D-1) will aide in addressing erosion and sedimentation issues associated with the feature. The City of Valdosta desires to permanently impact 0.095 acre of man-made ditch which meets the "relatively permanent standard," and meets the definition of an (a)(3) tributary, (man-altered, or man-made water body that flows directly into (a)(1) waters: Mud Swamp). The impacts require a permit from the U.S. Army Corps of Engineers (USACE) under Section 404 of the federal Water Pollution Control Act

Amendment of 1972. A copy of the complete project plan set, as provided by Lovell Engineering, is included as Attachment 3. A copy of the USACE Pre-Construction Notification (PCN)/Nationwide Permit (NWP) Verification Letter (SAS-2023-00522, dated August 11, 2023) is included as Attachment 4.

The impacts to D-1 include the installation of 60-inch culverts for the 1,409 linear feet of ditch (including 670 linear feet of State Waters) to address current/anticipated erosion and sedimentation issues. The review area includes impacts as described below:

Table 2: Impact Calculations

Feature ID	Area (acres)	Length (linear feet)	Impact Area (acres)	Impact Description
D-1 (State Waters Requiring a Buffer)	0.045	670	0.045	Culverting
D-1 (Wetland Ditch)	0.051	739	0.051	
WA	0.397	—	None	None
WB	0.442	—		

USACE Coordination

The review corridor contains approximately 1.13 acres of forested wetland, and approximately 0.096 acres (1,409 linear feet) of man-made ditches. The boundaries of the wetlands and ditches are presented on Figure 7 – Aquatic Resource Delineation Map, which is included in the AR Delineation Report (Attachment 1 of the PCN/NWP-14 Submittal), dated May 26, 2023. The AR Delineation Report and associated Jurisdictional Determination (JD) request are included with the PCN submittal.

Mitigation Plan

Based on the USACE PCN/NWP-14 Verification, the proposed road widening project will not meet the USACE 0.10-acre mitigation threshold for wetland impacts; therefore, no compensatory mitigation is required by the USACE for the proposed project.

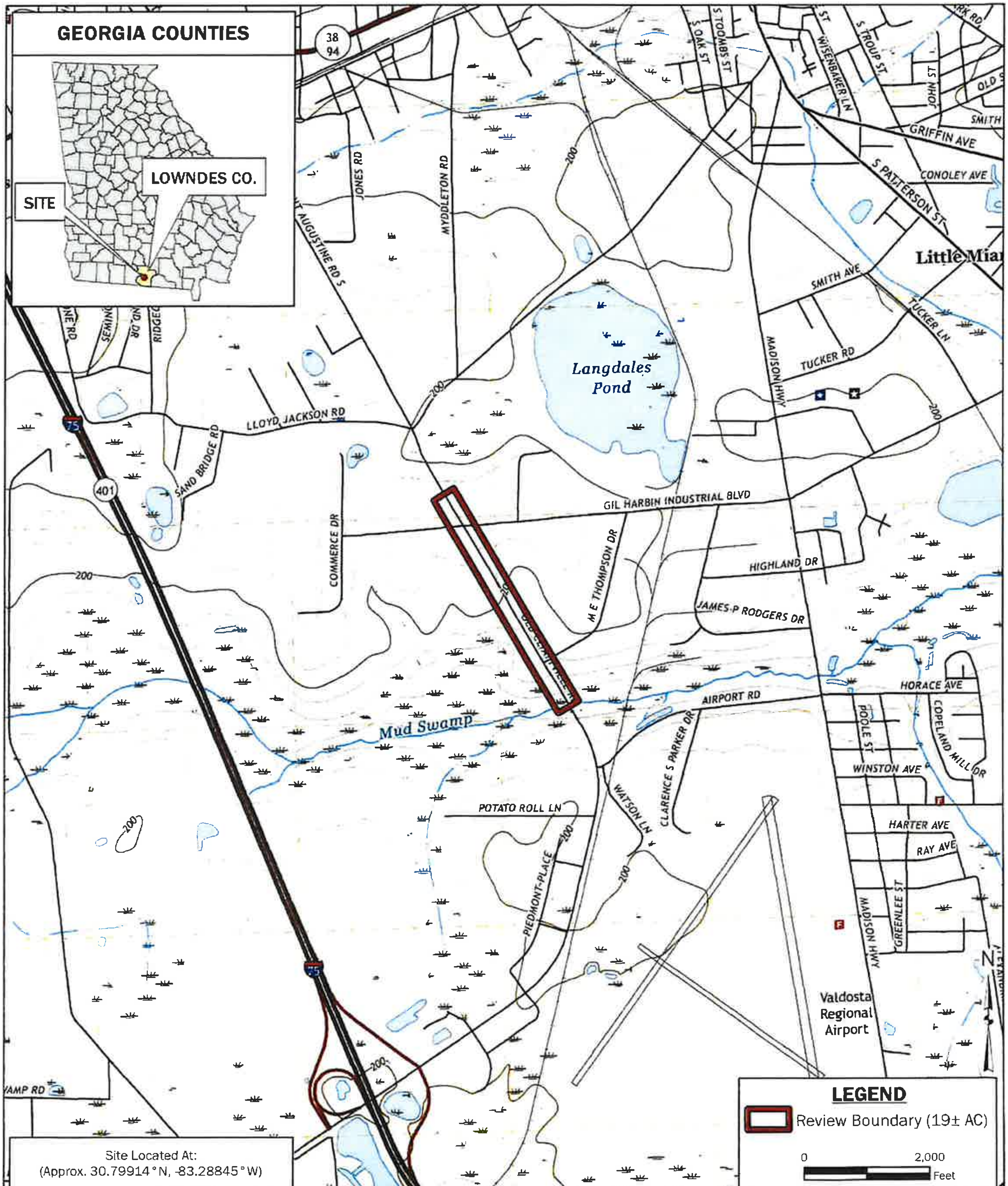
However, per the GADNR Buffer Mitigation Guidance (May 2022), Post-development total suspended solids (TSS) stormwater runoff reduction, and water quality protection components must be addressed on-site, or preservation is required as a substitute. Project space is limited to the current roadway and immediately adjacent right-of-way. Based on the limited space for the road widening project, the COV is not able to address the TSS and stormwater runoff reduction and water quality protection components on-site. Therefore, the COV intends to purchase mitigation credits as a substitute. The project is located in the Withlacoochee Primary Service Area (PSA) and in the 03110202 8-digit Hydrologic Unit Code. There are no mitigation banks with stream credits that service the 03110202 8-digit Hydrologic Unit Code Primary or Secondary service area. Therefore, per the GADNR Buffer Mitigation Guidance (May 2022), the COV intends to purchase out of kind, wetland credits, as described below.

Wetland Credit Calculations

Buffer Area	0.792 acres / 34,499.52 ft²	Wetland Credits:
	(34,499.52 ft² X 4 credits/acre) / 43,560 ft² =	3.168
	3.168 credits X 2.5 (factor for off-site) =	7.92
	7.92 credits X 1.2 multiplier for hydro & WQP =	9.504
	9.504 – 7.92 =	1.584

Mitigation Bank information is included in Attachment 5.

FIGURES



TTL

FIGURE 1: SITE LOCATION & TOPOGRAPHIC MAP

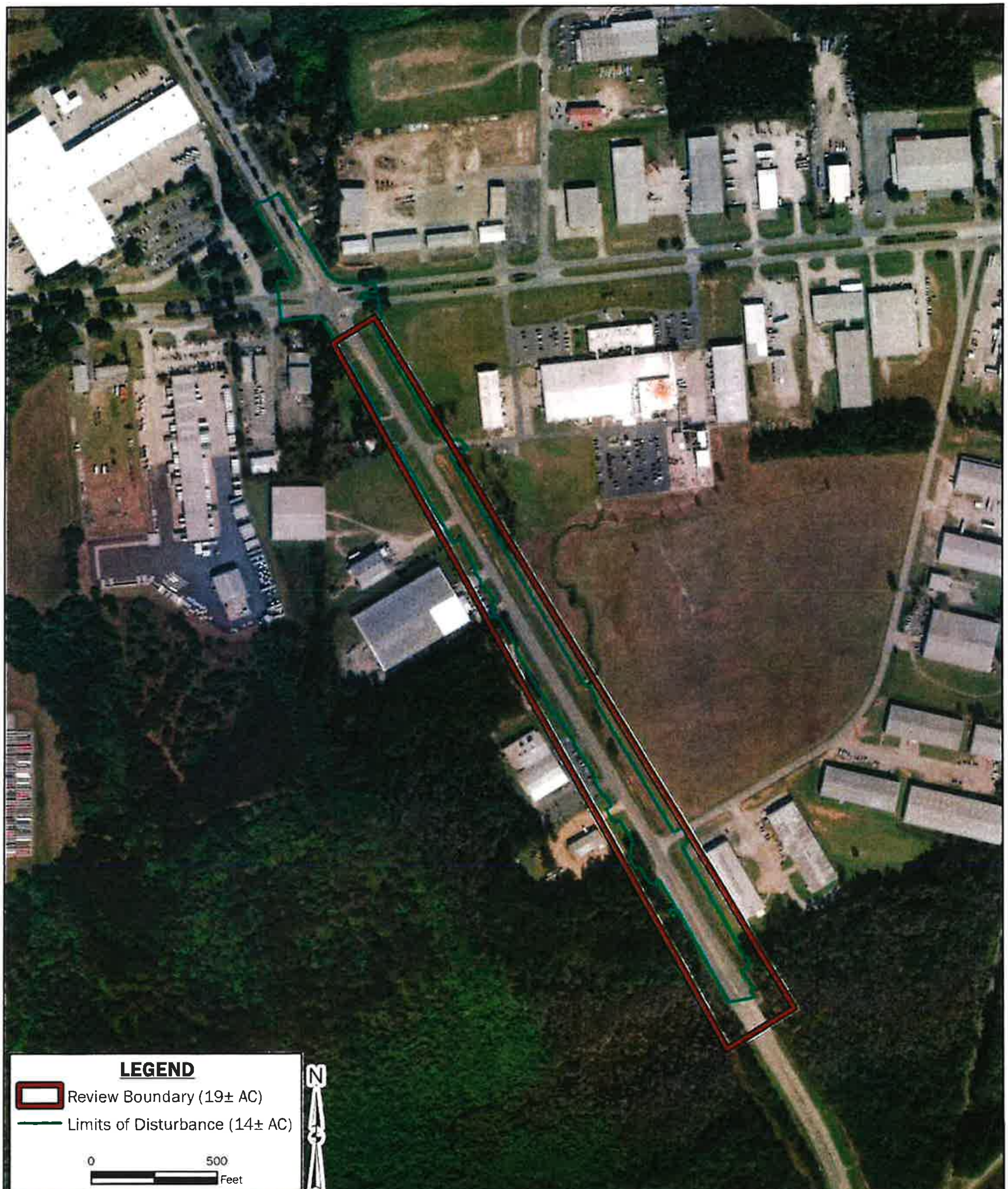
LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD STATE BUFFER VARIANCE

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: Valdosta, Georgia, USGS 7.5 Minute Quadrangle Map, 2020 (10-ft Contour Interval).

DRAWN BY: OEK
CHECKED BY: MRN
DRAWING DATE: 7/20/2023
REVISION DATE: N/A
TTL JOB NO.: 21-07-00563.00
APPROX. SCALE: 1 in = 2,000 ft



TTL

FIGURE 2: SITE LOCATION & AERIAL PHOTOGRAPH

LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD STATE BUFFER VARIANCE

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: Maxar Technologies, Vivid Imagery 11/19/2020 (0.31 m Resolution)

DRAWN BY: DEK
CHECKED BY: MRN
DRAWING DATE: 7/24/2023
REVISION DATE: N/A
TTL JOB NO.: 21-07-00563.00
APPROX. SCALE: 1 in = 500 ft

Map Unit Symbol	Description	Hydric Percentage	Hydric Description
Jo	Johnston loam	100	Hydric
Le	Leefield loamy sand, 0 to 2 percent slopes	5	Predominantly Nonhydric
SuC2	Sunsweet sandy loam, 5 to 8 percent slopes, eroded	0	Nonhydric
TfA	Tifton loamy sand, 0 to 2 percent slopes	0	Nonhydric
TfB	Tifton loamy sand, 2 to 5 percent slopes	0	Nonhydric

TTL

FIGURE 3: NRCS HYDRIC SOILS RATING MAP

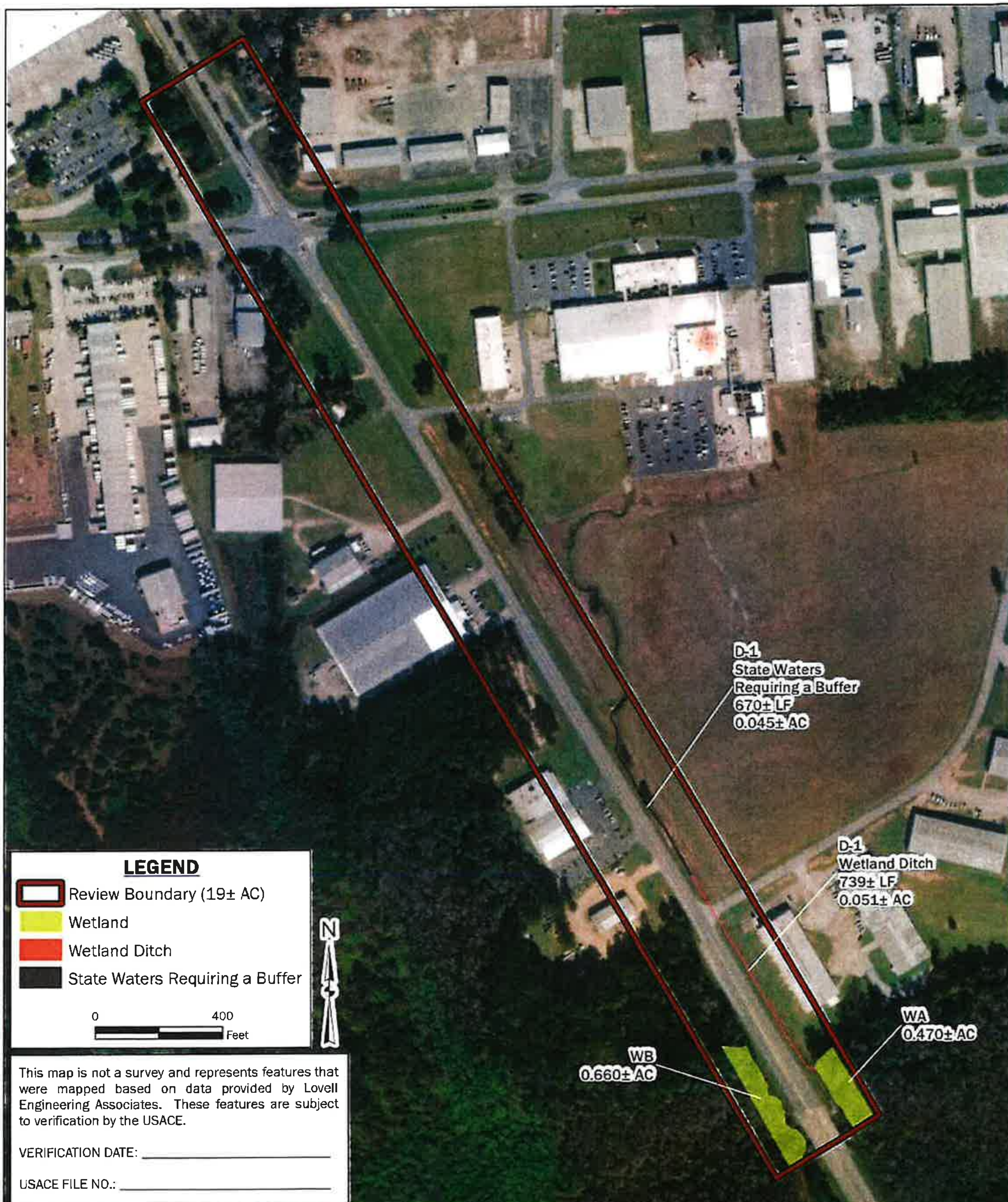
LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD STATE BUFFER VARIANCE

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: Maxar Technologies, Vivid Imagery 11/19/2020 (0.31 m Resolution)

DRAWN BY: DEK
CHECKED BY: MRN
DRAWING DATE: 7/20/2023
REVISION DATE: N/A
TTL JOB NO. 21-07-00563.00
APPROX. SCALE: 1 in = 600 ft



TTL

FIGURE 4: AQUATIC RESOURCES DELINEATION MAP

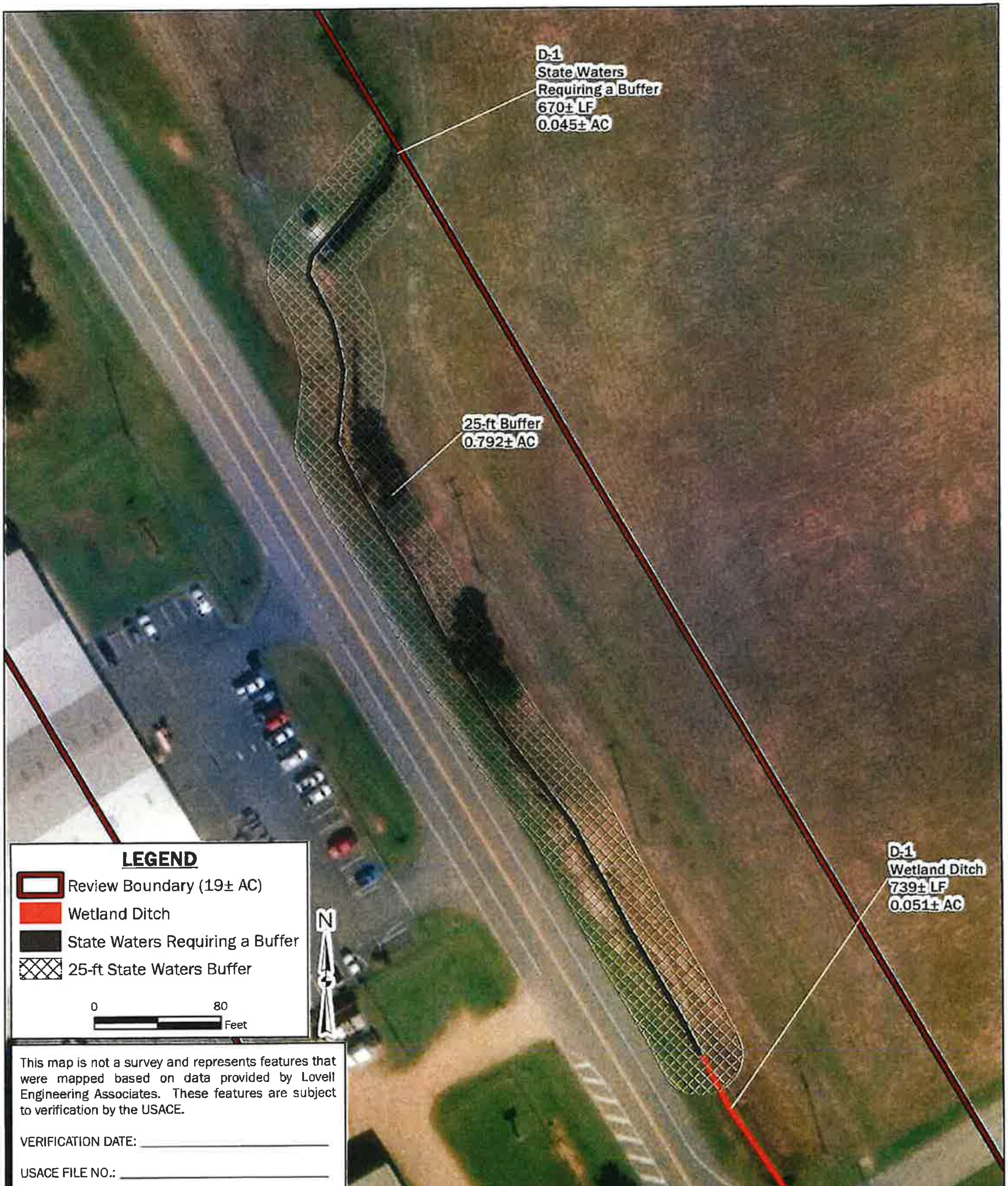
LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD STATE BUFFER VARIANCE

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: Maxar Technologies, Vivid Imagery 11/19/2020 (0.31 m Resolution)

DRAWN BY: DEK
CHECKED BY: MRN
DRAWING DATE: 7/20/2023
REVISION DATE: N/A
TTL JOB NO.: 21-07-00563.00
APPROX. SCALE: 1 in = 400 ft



This map is not a survey and represents features that were mapped based on data provided by Lovell Engineering Associates. These features are subject to verification by the USACE.

VERIFICATION DATE: ____________________

USACE FILE NO.: ____________________

TTL

FIGURE 5: BUFFER IMPACTS MAP

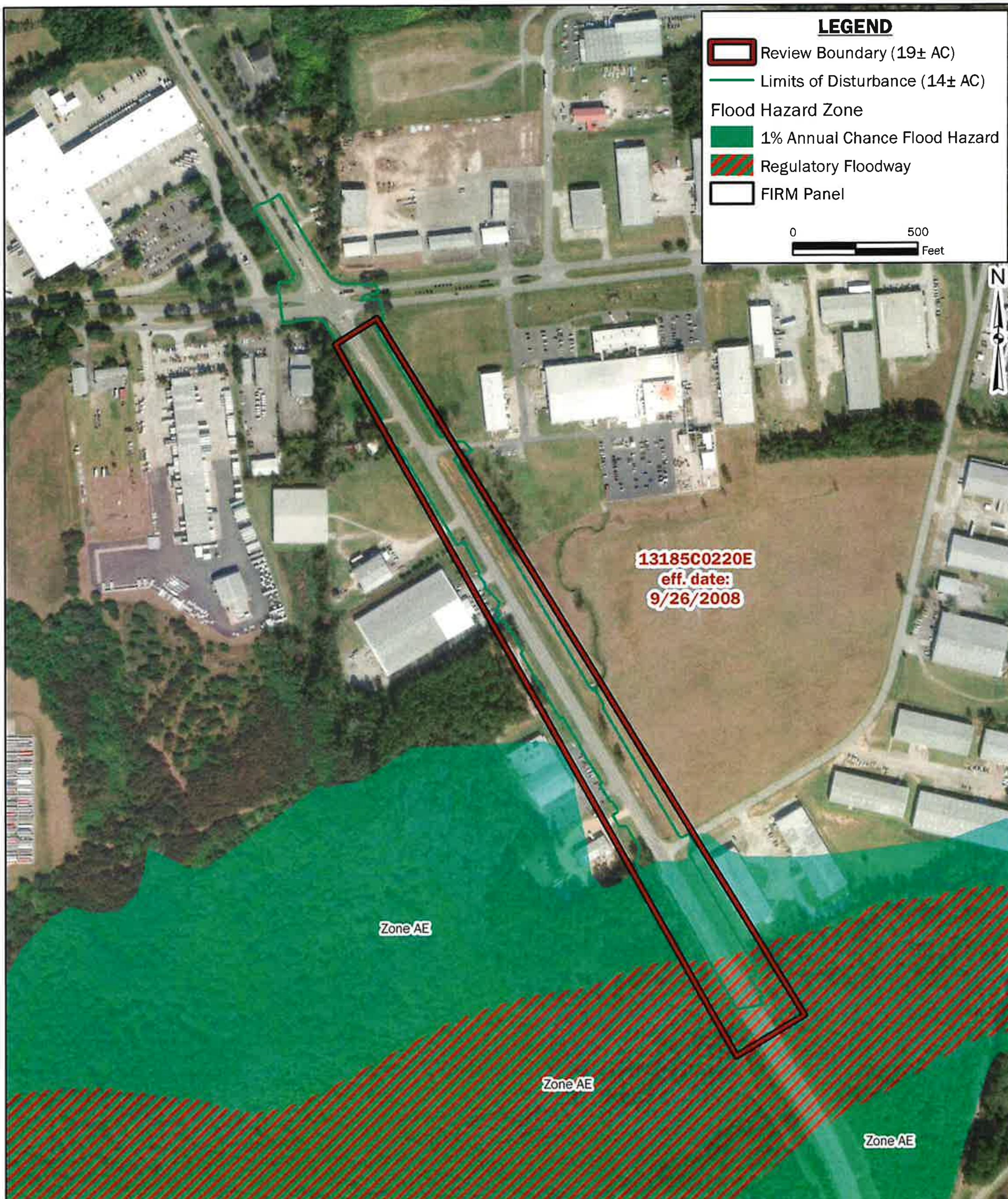
LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD STATE BUFFER VARIANCE

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: Maxar Technologies, Vivid Imagery 11/19/2020 (0.31 m Resolution)

DRAWN BY: DEK
CHECKED BY: MRN
DRAWING DATE: 7/20/2023
REVISION DATE: N/A
TTL JOB NO. 21-07-00563.00
APPROX. SCALE: 1 in = 80 ft



TTL

FIGURE 6: FEMA FLOOD HAZARD MAP

LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD STATE BUFFER VARIANCE

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: Maxar Technologies, Vivid Imagery 11/19/2020 (0.31 m Resolution)

DRAWN BY: JDM
CHECKED BY: MRN
DRAWING DATE: 9/7/2023
REVISION DATE: N/A
TTL JOB NO.: 21-07-00563.00
APPROX. SCALE: 1 in = 500 ft

ATTACHMENTS

ATTACHMENT 1
NCDWQ STREAM IDENTIFICATION FORMS

NC DWQ Stream Identification Form Version 4.11

Stream ID: D-1 Lower

Date: 06/30/2023	**Project/Site:** COV - OCR Widening	**Latitude:** 30.795955	
Evaluator: TTL, Inc. (M. Norris)	**County:** Lowndes	**Longitude:** -83.286076	
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 17.00	**Stream Determination:** Intermittent	*e.g. Quad Name:*	

A. Geomorphology (Subtotal = 2.00)	Absent	Weak	Moderate	Strong
1[a.] Continuity of channel bed and bank	0	1 ✔	2	3
2. Sinuosity of channel along thalweg	0 ✔	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0 ✔	1	2	3
4. Particle size of stream substrate	0 ✔	1	2	3
5. Active/relict floodplain	0 ✔	1	2	3
6. Depositional bars or benches	0 ✔	1	2	3
7. Recent alluvial deposits	0	1 ✔	2	3
8. Headcuts	0 ✔	1	2	3
9. Grade control	0 ✔	0.5	1	1.5
10. Natural valley	0 ✔	0.5	1	1.5
11. Second or greater order channel	No = 0 ✔		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 5.50)				
12. Presence of Baseflow	0	1 ✔	2	3
13. Iron oxidizing bacteria	0 ✔	1	2	3
14. Leaf litter	1.5	1 ✔	0.5	0
15. Sediment on plants or debris	0 ✔	0.5	1	1.5
16. Organic debris lines or piles	0	0.5 ✔	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3 ✔	

C. Biology (Subtotal = 9.50)				
18. Fibrous roots in streambed	3	2	1 ✔	0
19. Rooted upland plants in streambed	3 ✔	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1 ✔	2	3
21. Aquatic Mollusks	0	1 ✔	2	3
22. Fish	0 ✔	0.5	1	1.5
23. Crayfish	0	0.5	1 ✔	1.5
24. Amphibians	0	0.5	1 ✔	1.5
25. Algae	0 ✔	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75	✔ OBL = 1.5	Other = 0	

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Identification Form Version 4.11

Stream ID: D-1 Upper

Date:	06/30/2023	**Project/Site:**	COV - OCR Widening	**Latitude:**	30.797612
Evaluator:	TTL, Inc. (M. Norris)	**County:**	Lowndes	**Longitude:**	-82.287144
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	27.00	**Stream Determination:**	Intermittent	*e.g. Quad Name:*	

A. Geomorphology (Subtotal = 8.00)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	1	2 ✔	3
2. Sinuosity of channel along thalweg	0	1 ✔	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1 ✔	2	3
4. Particle size of stream substrate	0	1 ✔	2	3
5. Active/relict floodplain	0	1 ✔	2	3
6. Depositional bars or benches	0	1 ✔	2	3
7. Recent alluvial deposits	0	1	2 ✔	3
8. Headcuts	0 ✔	1	2	3
9. Grade control	0 ✔	0.5	1	1.5
10. Natural valley	0 ✔	0.5	1	1.5
11. Second or greater order channel	No = 0 ✔		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 8.00)	Absent	Weak	Moderate	Strong
12. Presence of Baseflow	0	1	2 ✔	3
13. Iron oxidizing bacteria	0 ✔	1	2	3
14. Leaf litter	1.5	1 ✔	0.5	0
15. Sediment on plants or debris	0	0.5 ✔	1	1.5
16. Organic debris lines or piles	0	0.5 ✔	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3 ✔	

C. Biology (Subtotal = 11.00)	Absent	Weak	Moderate	Strong
18. Fibrous roots in streambed	3	2 ✔	1	0
19. Rooted upland plants in streambed	3 ✔	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1 ✔	2	3
21. Aquatic Mollusks	0	1 ✔	2	3
22. Fish	0	0.5 ✔	1	1.5
23. Crayfish	0	0.5	1 ✔	1.5
24. Amphibians	0	0.5	1 ✔	1.5
25. Algae	0 ✔	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75	✔ OBL = 1.5	Other = 0	

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

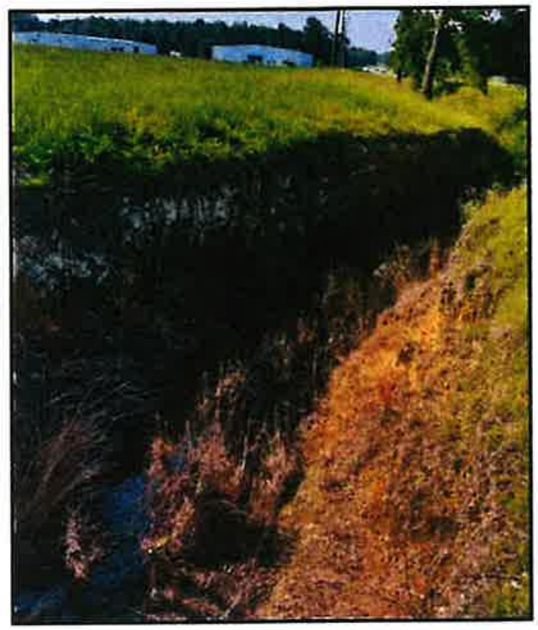
Sketch:

ATTACHMENT 2
SELECTED SITE PHOTOGRAPHS

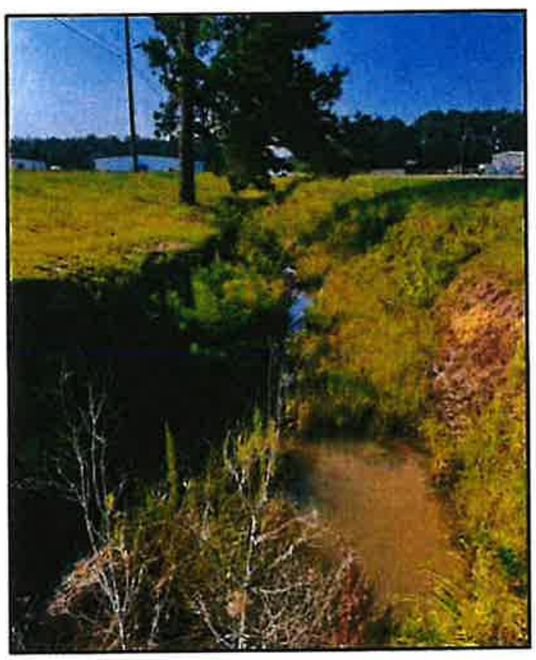
Site Photographs

State Buffer Variance Application – COV Old Clyattville Road Widening – TTL Project No. 21-07-00563.01
Valdosta, Lowndes County, Georgia
Photos taken June 30, 2023

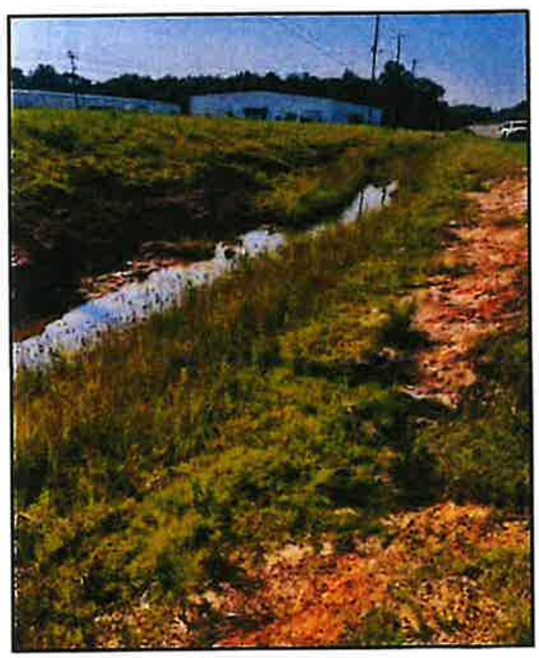
Photograph 1: Upper reach of D-1.



Photograph 2: Upper reach of D-1.



Photograph 3: Upper reach of D-1.

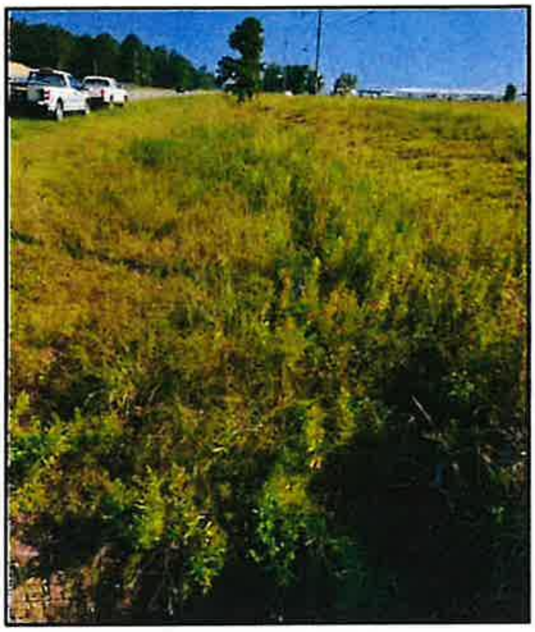


Photograph 4: Upper reach of D-1.

TTL

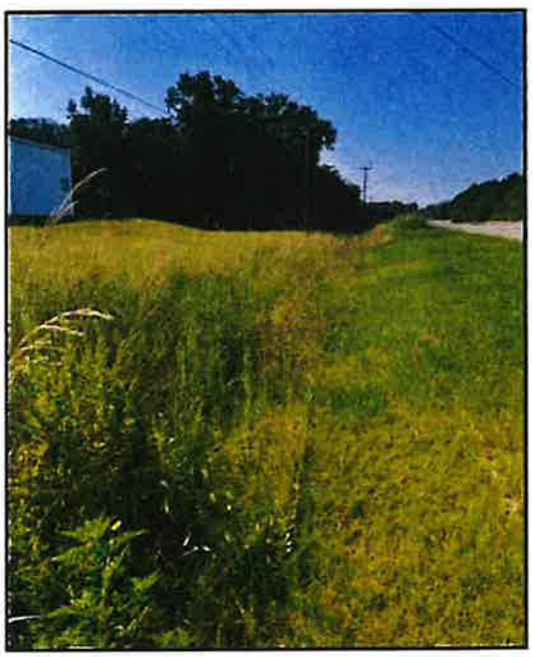
Site Photographs

State Buffer Variance Application – COV Old Clyattville Road Widening – TTL Project No. 21-07-00563.01
Valdosta, Lowndes County, Georgia
Photos taken June 30, 2023



Photograph 5: Lower reach of D-1.

Photograph 6: Lower reach of D-1.



Photograph 7: Lower reach of D-1.

Photograph 8: Lower reach of D-1.

ATTACHMENT 3
SITE PLANS (LOVELL ENGINEERING)

OLD CLYATTVILLE ROAD WIDENING

FOR

VALDOSTA
A City Without Limits

SOUTHERN GEORGIA TIA TRANSPORTATION INVESTMENT ACT Your Penny, Your Progress

LEA PROJECT NUMBER 0026-40
PI # 0016285
SUBMITTAL DATE: MARCH 24, 2023
CITY OF VALDOSTA, GEORGIA

CONTACT INFORMATION

CITY OF VALDOSTA
ENGINEERING DEPT. - BEN O'DOWD, PE 229-259-3530
UTILITIES DEPT. - BRAD EYRE 229-259-3592

LEA
CIVIL DESIGNER - DALE ARROWOOD, CPESC
PROJECT ENGINEER - CLAYTON MILLIGAN, PE
PRINCIPAL-IN-CHARGE - JEFF LOVELL, PE

24-HOUR CONTACT
NAME
TITLE
ADDRESS
PHONE #

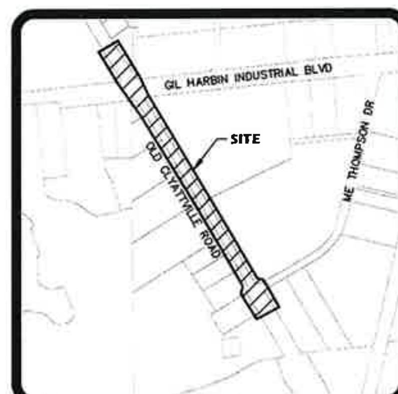
CONTRACTOR SHALL SCHEDULE AN EROSION CONTROL INSPECTION WITH THE DESIGN PROFESSIONAL WITHIN 7 DAYS OF BEGINNING CONSTRUCTION.

NOT FOR CONSTRUCTION UNLESS SIGNED BY CITY ENGINEER OR AUTHORIZED REPRESENTATIVE.

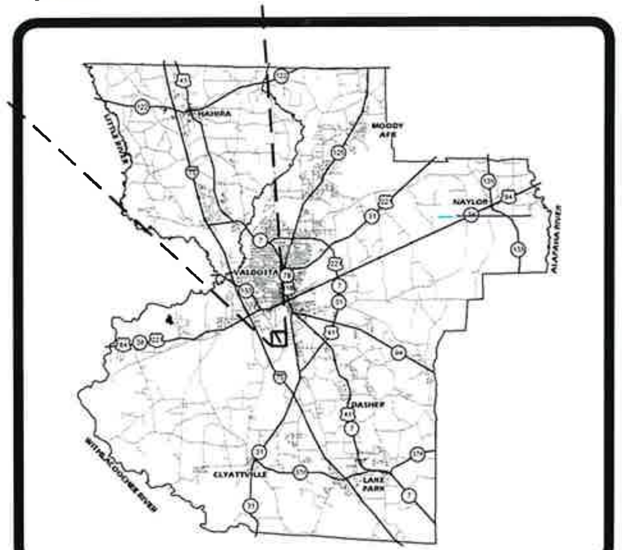
SIGNED ____________________
DATE ____________________

CITY OF VALDOSTA OFFICIALS

DISTRICT 1	VIVIAN MILLER-CODY
DISTRICT 2	SANDRA TOOLEY
DISTRICT 3	THOMAS B. MCINTYRE
DISTRICT 4	ERIC HOWARD
DISTRICT 5	TIMOTHY H. CARROLL
DISTRICT 6	ANDREW GIBBS
COUNCIL AT LARGE	BEN H. NORTON
CITY ENGINEER	BENJAMIN O'DOWD, PE
CITY MAYOR	SCOTT J. MATHESON



1" = 1,000'



LOCATION MAP
N.T.S.

LEA
CIVIL • AGRICULTURAL • ENVIRONMENTAL
GA CORP#0419099 • FL CORP#F04000002135
P.O. Box 2830 • 3998 Inner Perimeter Road • Valdosta, GA 31604
Telephone: 229-253-0900 • Fax: 229-253-1842 • E-mail: lea@lea-pc.com

LEGEND

	EXISTING	PROPOSED
GAS LINE		GAS
WATER LINE		W
SEWER LINE		SS
FORCE MAIN		FM
OVERHEAD POWER		OHP
UNDERGROUND POWER		UGP
UNDERGROUND CABLE		UGC
CONTOUR		100
RIGHT-OF-WAY LINE	R/W	R/W
STORM PIPE		
PROPERTY LINE		
EASEMENT		
FENCE		
SPOT ELEV.		
FLOW ARROW		
FIRE HYDRANT		
WATER VALVE		
WATER FIRE DEPARTMENT		
WATER METER		
WATER SERVICE		
CLEANOUT		
SEWER MANHOLE		
STORM CATCHBASIN		
STORM GRATE INLET		
STORM HEADWALL		
FLARED END SECTION		
UTILITY POLE		
GAS VALVE		
MAILBOX		

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Fax: 229-253-1842
E-mail: lea@lea-pc.com

OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE 11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS

DATE	DESCRIPTION

811 Know what's below. Call before you dig.
IF YOU DIG GEORGIA... CALL US FIRST!
UTILITIES PROTECTION CENTER
IT'S THE LAW
www.gaupc.com

SCALE:	N.T.S.
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO.	0026-40

GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

COVER

1-001

S:\0026-40 (City of Valdosta, Old Clyattville Road Widening)\DWG-PRODUCTION\1-001-Cover.dwg 6/7/2023 2:53 PM

CLEARING AND GRADING NOTES:

1. ALL STRUCTURES, FENCES, CONCRETE, ASPHALT, AND UTILITIES NOT DESIGNATED TO BE SAVED WITHIN THE CLEARING LIMITS ARE TO BE REMOVED.
2. CONTRACTOR TO FILL ALL HOLES CREATED BY THE REMOVAL OF STRUCTURES, FENCES, AND TREES AND RETURN THOSE AREAS TO NATURAL GRADE.
3. THE CONTRACTOR SHALL COMPLY WITH APPLICABLE CODES, ORDINANCES, RULES, REGULATIONS AND LAWS OF LOCAL, MUNICIPAL, STATE OR FEDERAL AUTHORITIES HAVING JURISDICTION OVER THE PROJECT. ALL REQUIRED PERMITS OF A TEMPORARY NATURE SHALL BE OBTAINED FOR CONSTRUCTION OPERATIONS BY THE CONTRACTOR.
4. GRUBBING SHALL CONSIST OF COMPLETELY REMOVING ROOTS, STUMPS, TRASH AND OTHER DEBRIS FROM ALL GRADED AREAS SO THAT TOPSOIL IS FREE OF ROOTS AND DEBRIS. TOPSOIL IS TO BE LEFT SUFFICIENTLY CLEAN SO THAT FURTHER PICKING AND RAKING WILL NOT BE REQUIRED.
5. ALL STUMPS, ROOTS, FOUNDATIONS AND PLANKING EMBEDDED IN THE GROUND SHALL BE REMOVED AND DISPOSED OF. PILING AND BUTTS OF UTILITY POLES SHALL BE REMOVED TO A MINIMUM DEPTH OF TWO FEET BELOW THE LIMITS OF EXCAVATION FOR STRUCTURES, TRENCHES AND ROADWAYS OR TWO FEET BELOW FINISH GRADE, WHICHEVER IS LOWER.
6. SURFACE ROCKS AND BOULDERS SHALL BE GRUBBED FROM THE SOIL AND REMOVED FROM THE SITE IF NOT SUITABLE AS RIP RAP.
7. ANY WORK PERTAINING TO UTILITY POLES SHALL COMPLY WITH THE REQUIREMENTS OF THE APPROPRIATE UTILITY.
8. THE DEBRIS RESULTING FROM THE CLEARING AND GRUBBING OPERATION SHALL BE HAULED TO A DISPOSAL SITE SECURED BY THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL REQUIREMENTS OF FEDERAL, STATE, COUNTY AND MUNICIPAL REGULATIONS. NO DEBRIS OF ANY KIND SHALL BE DEPOSITED IN ANY STREAM OR BODY OF WATER, OR IN ANY STREET OR ALLEY. NO DEBRIS SHALL BE DEPOSITED UPON ANY PRIVATE PROPERTY EXCEPT WITH WRITTEN CONSENT OF THE PROPERTY OWNER. A COPY OF WRITTEN CONSENT SHALL BE PROVIDED TO THE OWNER FOR PERMANENT RECORDS. IN NO CASE SHALL ANY MATERIAL OR DEBRIS BE LEFT ON THE PROJECT, SHOVED ONTO ABUTTING PRIVATE PROPERTIES OR BURIED ON THE PROJECT.
9. ALL GROWTH OF TREES, OTHER VEGETATION AND OBJECTIONABLE DEBRIS SHALL BE CLEARED AND GRUBBED FROM THE PROPOSED PAVED AREAS, BUILDING AREAS, LOCATION OF PROPOSED UTILITIES, AS WELL AS AREAS INDICATED TO BE GRADED ON THE PLANS.
10. ALL TREES, BRANCHES, VEGETATION AND DEBRIS SHALL BE DISPOSED OF IN A LEGAL MANNER ACCEPTABLE TO THE OWNER AND ENGINEER. BURNING PERMIT WILL BE OBTAINED BY THE CONTRACTOR AT OWN EXPENSE.
11. CONTRACTOR SHALL REMOVE TOPSOIL TO ITS ENTIRE DEPTH FROM ALL AREAS TO BE GRADED AND/OR FILLED. CONTRACTOR SHALL STOCKPILE OR REMOVE THE TOPSOIL FROM THE SITE AT OWNER'S DIRECTION.
12. ROADWAYS, EASEMENTS, AND SPECIAL FILL AREAS TO BE GRADED AND COMPACTED TO THE FINISHED SUBGRADE OR GRADES AS SHOWN ON THE PLANS.
13. IF UNSUITABLE MATERIAL IS ENCOUNTERED WITHIN THE ROADWAY, PARKING AREA OR ANY SPECIAL FILL AREA, IT SHALL BE REMOVED FROM THE ENTIRE PROPOSED PAVED AREA OR FILL AREA AND REPLACED WITH SELECT BACKFILL WHICH IS SUITABLE FOR ROADWAY (OR BUILDING SITE) CONSTRUCTION AS PER 'GDOT' REQUIREMENTS AND ANY SPECIAL REQUIREMENTS OF THE CITY, OWNER, ENGINEER, AND ANY AFFECTED GOVERNMENTAL AGENCIES.
14. FILL AND BACKFILL MATERIAL SHALL BE COMPACTED TO 98% STD. PROCTOR DENSITY AT OPTIMUM MOISTURE ±2% UNLESS SPECIFIED OTHERWISE ON THE PLAN.
15. ALL GRADING OPERATIONS SHALL BE DONE IN SUCH A MANNER SO AS TO PROVIDE POSITIVE DRAINAGE AT ALL TIMES.
16. ALL GRADES SHOWN ON PLANS ARE FINAL GRADE. GRADING CONTRACTOR SHALL COORDINATE WITH LANDSCAPE CONTRACTOR TO ENSURE POSITIVE DRAINAGE THROUGHOUT SITE.
17. CONTRACTOR SHALL INSTALL ALL STORM SEWER PIPE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
18. ALL UNSUITABLE MATERIALS EXCAVATED/DISCOVERED AS A RESULT OF UTILITY INSTALLATION, STORM PIPE INSTALLATION, AND GRADING THAT ARE LOCATED INSIDE THE RIGHT-OF-WAY SHALL BE REMOVED AND GDOT APPROVED STRUCTURAL FILL USED TO BACKFILL.

GENERAL CONSTRUCTION NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE WITH CITY OF VALDOSTA LAND DEVELOPMENT REGULATIONS.
2. WHILE WORKING WITHIN CITY OF VALDOSTA RIGHT OF WAY, EASEMENTS, OR ANY OTHER AREA WITHIN THE CONSTRUCTION LIMITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING & GRUBBING AND THE REMOVAL OF ALL DEBRIS.
3. CONTRACTOR SHALL HAVE ALL EROSION CONTROL MEASURES IN PLACE PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO NOTIFY UTILITY PROTECTION CENTER A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION.
5. CONTRACTOR TO VERIFY ALL HORIZONTAL & VERTICAL LOCATIONS OF ALL EXISTING AND PROPOSED STRUCTURES PRIOR TO CONSTRUCTION.
6. CONTRACTOR TO NOTIFY ENGINEER OF ANY CONFLICTS IN THE PLANS PRIOR TO AND DURING CONSTRUCTION. FAILURE TO NOTIFY ENGINEER WILL RESULT IN CONTRACTOR RESPONSIBILITY TO REPAIR AT OWN EXPENSE.
7. CONTRACTOR RESPONSIBLE FOR ALL DAMAGED UTILITIES DURING CONSTRUCTION.
8. PEDESTRIAN AND LOCAL TRAFFIC SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. SAFETY DEVICES AND FLAGGERS WILL BE PROVIDED AT CONTRACTOR EXPENSE.
9. CONTRACTOR SHALL NOTIFY CITY OF VALDOSTA ENGINEERING DEPARTMENT A MINIMUM OF 24 HOURS PRIOR TO THE BEGINNING OF EACH PHASE OF CONSTRUCTION.
10. CONTRACTOR SHALL NOTIFY CITY OF VALDOSTA UTILITY DEPARTMENT A MINIMUM OF 24 HOURS PRIOR TO ANY CONNECTIONS TO THE CITY UTILITY SYSTEM.
11. CONTRACTOR TO PROVIDE ALL CONSTRUCTION STAKING.
12. A MINIMUM OF 18" OF VERTICAL AND 10' HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ALL UTILITIES.
13. ALL EXTENSIONS AND ADDITIONS TO THE CITY OF VALDOSTA UTILITY SYSTEM WILL BE PERFORMED BY A GEORGIA LICENSED UTILITY CONTRACTOR.
14. ANY CROSS CONNECTION TO THE CITY OF VALDOSTA WATER SYSTEM IS PROHIBITED.
15. PRIOR TO PROJECT BIDDING, THE CONTRACTOR SHALL CLARIFY WITH THE OWNER/ENGINEER ANY DISCREPANCY THAT EXISTS BETWEEN THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, CONSTRUCTION DRAWINGS, AND/OR PROJECT SPECIFICATIONS, REGARDLESS OF ANY LANGUAGE IN THE CONTRACT DOCUMENTS, CONSTRUCTION DRAWINGS, AND/OR PROJECT SPECIFICATIONS THAT SUGGESTS ONE SUPERSEDES THE OTHER(S).

UTILITY CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL PROVIDE AS-BUILTS AS REQUIRED BY THE MUNICIPALITY.
2. ALL SANITARY SEWER SERVICES SHALL BE TERMINATED AT THE R/W OR CONNECTED TO EXISTING SERVICE.
3. ALL WATER SERVICES SHALL BE TERMINATED AT THE R/W OR CONNECTED TO EXISTING SERVICE.
4. ALL WATER AND SEWER PIPE MATERIALS SHALL COMPLY WITH THE LATEST CODES AND SPECIFICATIONS OF THE LOCAL MUNICIPALITY OR UTILITY AUTHORITY.
5. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE SUITABILITY OF PIPE MATERIALS WITH THE LOCAL MUNICIPALITY OR UTILITY AUTHORITY PRIOR TO PURCHASE.
6. THRUST BLOCKS SHALL BE INSTALLED AT ALL BENDS AND TEES PER DETAIL ON SHEET 59.
7. THE CONTRACTOR SHALL VERIFY VERTICAL LOCATION OF ALL UTILITIES, EXISTING & PROPOSED, PRIOR TO INSTALLATION TO ENSURE NO CONFLICTS WILL OCCUR BETWEEN SANITARY AND STORM SEWER MAINS.
8. THE CONTRACTOR SHALL PRESSURE TEST AND CHLORINATE THE WATER MAIN USING THE MINIMUM GUIDELINES PROVIDED BY THE LOCAL MUNICIPALITY GOVERNING THIS PROJECT.
9. SAMPLING POINTS SHALL BE INSTALLED EVERY 1200' ON THE WATER MAIN.
10. ALL ELECTRICAL AND TELEPHONE LINES TO BE SIZED PER ELECTRIC COMPANY AND TELEPHONE COMPANY STANDARDS TO ENSURE PROPER INSTALLATION.
11. THE CONTRACTOR SHALL VERIFY ALL EXISTING STORM STRUCTURE FLOW DIRECTIONS, HORIZONTAL AND VERTICAL LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
12. THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN CONFLICTS OCCUR.
13. THE CONTRACTOR SHALL INSTALL ALL STORM SEWER PIPE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

DRAWING INDEX

SHEET NO.	DRAWING NO.	DESCIPTION
1	1-001	COVER
2 - 3	2-001 - 2-002	INDEX / OVERALL PROJECT
4	5-001	TYPICAL SECTIONS
5 - 8	11-001 - 11-004	EXISTING SURVEY
9 - 13	13-001 - 13-005	CONSTRUCTION PLAN
14 - 21	15-001 - 15-008	MAINLINE PROFILE
22 - 27	22-001 - 22-006	DRAINAGE PROFILES
28 - 42	23-001 - 23-015	CROSS SECTIONS
43 - 49	24-001 - 24-007	UTILITY PLANS
50 - 53	26-001 - 26-004	SIGNAGE & MARKING PLAN
54 - 58	27-000 - 27-004	SIGNAL PLANS
59 - 65	41-001 - 41-003	DETAILS
66 - 68	51-001 - 51-003	ESPC DETAILS
69 - 74	54-001 - 54-009	ESPC PLAN

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P.O. Box 2830
3998 Inner Perimeter Road
Valdosta, GA 31604
Telephone: 229-253-0900
Fax: 229-253-1842
E-mail: lea@lea-pc.com

OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE 11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS	
DATE	DESCRIPTION

811
Know what's **below.**
Call before you dig.
IF YOU DIG GEORGIA... CALL US FIRST!
UTILITIES PROTECTION CENTER
IT'S THE LAW
www.gaupc.com

SCALE:	N.T.S.
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO.	0026-40

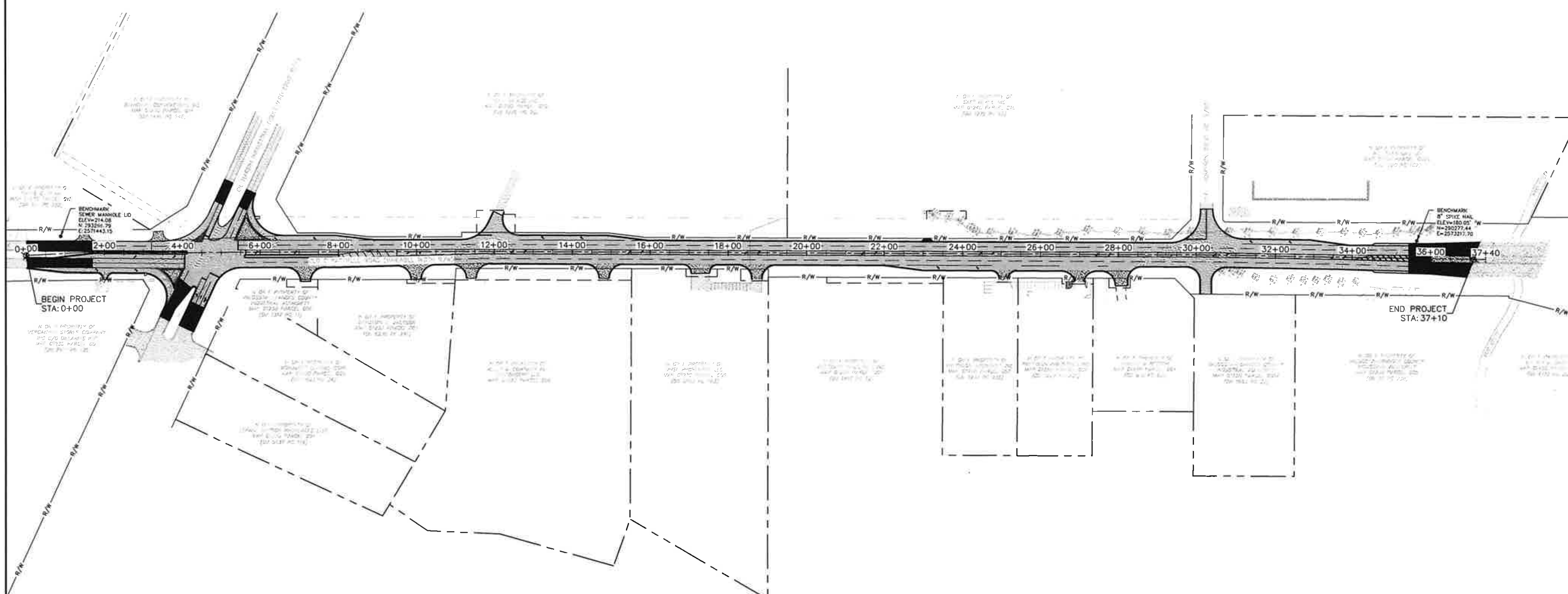
GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MILLIKAN DRAFT

GSWCC LEVEL II CERT. #49262

INDEX (SHEET 1 OF 1)

2-001

S:\0026-40 (City of Valdosta, Old Clyattville Road Widening)\DWG-PRODUCTION\2-001-Index.dwg 6/7/2023 1:55 PM



SURVEY PROVIDED BY:

G&L
SURVEYING ■ MAPPING

NOTE:

1. 811 DESIGN TICKET #210603–002963 & 210316–005148.
2. THERE ARE WETLAND AS SHOWN WITHIN THE PROJECT AREA.

LEA
CIVIL ■ AGRICULTURAL ■ ENVIRONMENTAL
GA CORP# 0419089
FL CORP# F04000002135
P.O. Box 2830
3998 Inner Perimeter Road
Valdosta, GA 31604
Telephone: 229-253-0900
Fax: 229-253-1842
E-mail: lea@lea-pc.com

OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE
11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS	
DATE	DESCRIPTION

GRAPHIC SCALE
0 70 140 280
(IN FEET)
1 INCH = 140 FEET

NORTH

SCALE:	1"=140'
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO.	0026-40

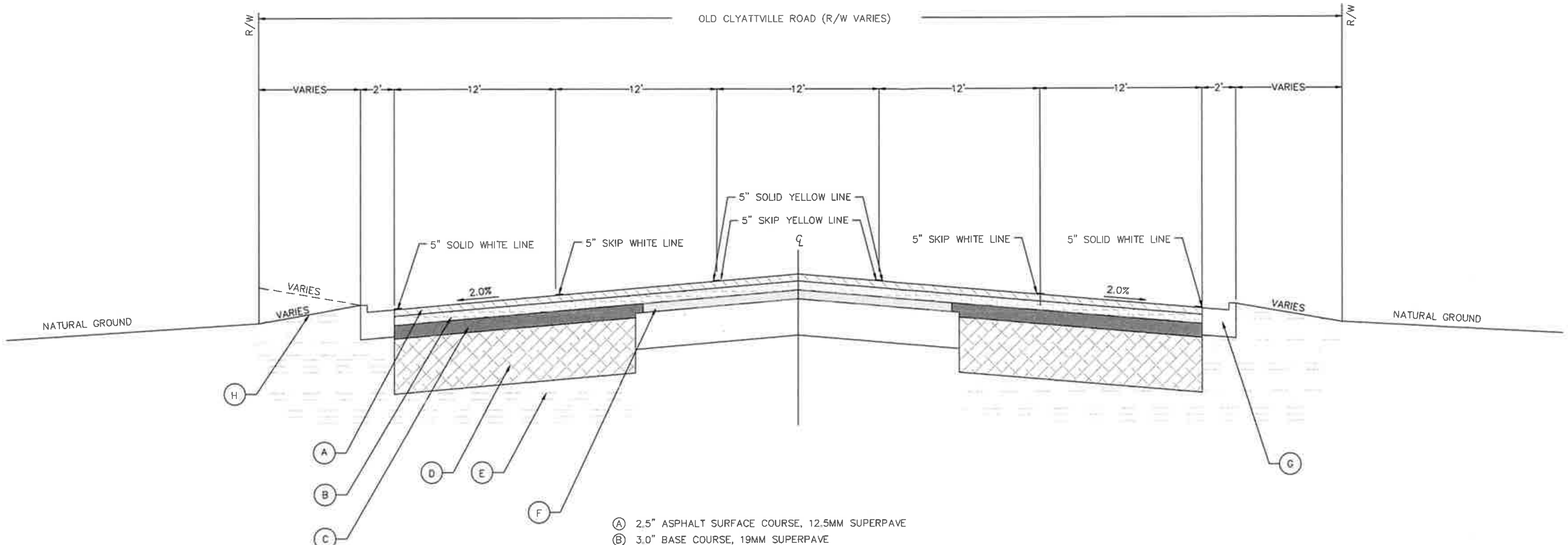
GEORGIA REGISTERED PROFESSIONAL ENGINEER
MICHAEL CLAYTON MILLIGAN
DRAFT

GSWCC LEVEL II CERT. #49262

OVERALL PROJECT MAP

2-002

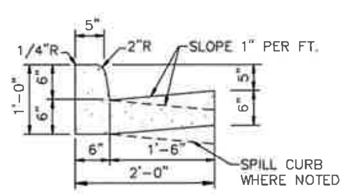
3 OF 74 SHEETS



Ⓐ 2.5" ASPHALT SURFACE COURSE, 12.5MM SUPERPAVE
Ⓑ 3.0" BASE COURSE, 19MM SUPERPAVE
Ⓒ 4.0" BASE COURSE, 25MM SUPERPAVE
Ⓓ 12" GAB BASE COURSE
Ⓔ UPPER 12" SUBGRADE COMPACTED TO 95% STANDARD PROCTOR
Ⓕ EXISTING ASPHALT
Ⓖ 24" CURB AND GUTTER
Ⓗ SLOPE AWAY FROM CURB UNLESS SHOWN OTHERWISE ON PLANS

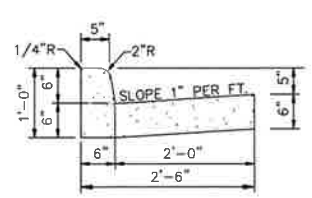
OLD CLYATTVILLE ROAD TYPICAL SECTION

N.T.S.



24" CONCRETE CURB & GUTTER

N.T.S.

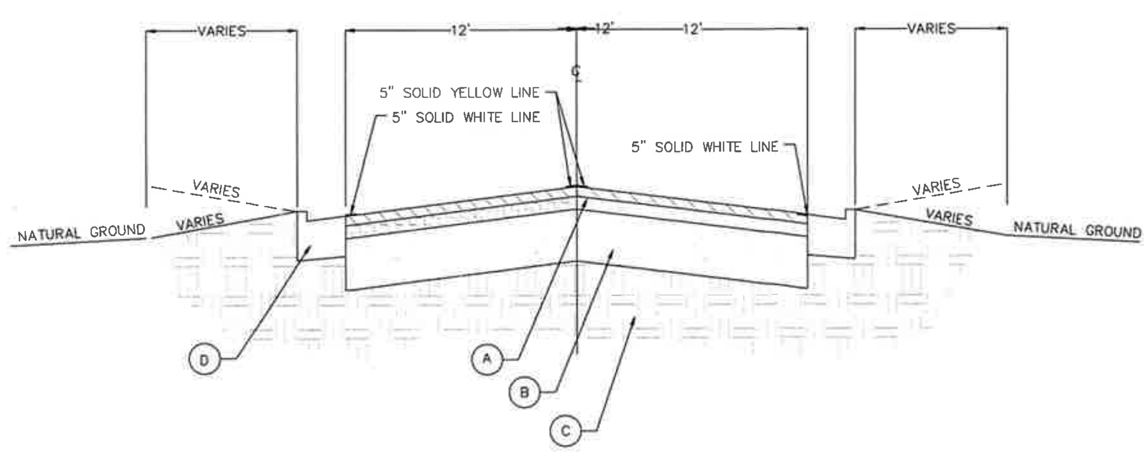


NOTE:

1. ONLY USED IN GIL HARBIN ROAD INTERSECTION

30" CONCRETE CURB & GUTTER

N.T.S.



Ⓐ MILL ASPHALT (MIN 1.5") AND OVERLAY (DEPTH VARIES) 2.5" ASPHALT SURFACE COURSE, 12.5MM SUPERPAVE
Ⓑ EXISTING BASE COURSE
Ⓒ UPPER 12" SUBGRADE COMPACTED TO 95% STANDARD PROCTOR
Ⓓ 24" CURB AND GUTTER

MILL & OVERLAY TYPICAL SECTION

N.T.S.

NOTES:

1. OLD CLYATTVILLE ROAD IS CLASSIFIED AS A PRINCIPAL ARTERIAL.
2. POSTED SPEED LIMIT TO BE 45 MPH.
3. CONTRACTOR TO INSTALL RAISED PAVEMENT MARKERS BASED ON MUTCD GUIDELINES.
4. UNLESS NOTED OTHERWISE ON THE PLANS, THE INTENT IS FOR THE PROPOSED ROAD SECTION TO FOLLOW THE EXISTING CENTERLINE ALIGNMENT AND ELEVATION PROFILE. THE NEW CENTERLINE ELEVATION AND ROAD SURFACE WILL BE 5.5 INCHES ABOVE THE EXISTING CENTERLINE ELEVATION AND SURFACE UNLESS NOTED OTHERWISE.
5. SEE SHEET 62 FOR DRIVEWAY DETAILS.

PAVING NOTES:

1. CONTRACTOR TO INSTALL ALL UTILITY CONDUIT AND IRRIGATION SLEEVES PRIOR TO PAVING.
2. ALL SUBGRADE, BASE, AND PAVEMENT OPERATIONS SHOULD MEET THE MINIMUM REQUIREMENTS OF THE CURRENT EDITION OF GDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF TRANSPORTATION SYSTEMS"

TITLE	GDOT SPEC SECTION:
SUBGRADE CONSTRUCTION	209
SOIL-CEMENT CONSTRUCTION	301
GRADED AGG. BASE CONSTR.	310
HOT MIX ASPHALTIC CONCRETE	400
PORTLAND CEMENT CONCRETE	430

3. ALL STRIPING SHALL BE THERMOPLASTIC IN ACCORDANCE WITH CURRENT GDOT STANDARDS & MUTCD STANDARDS.

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OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE
11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS

DATE	DESCRIPTION

SCALE:	N.T.S.
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO.	0026-40

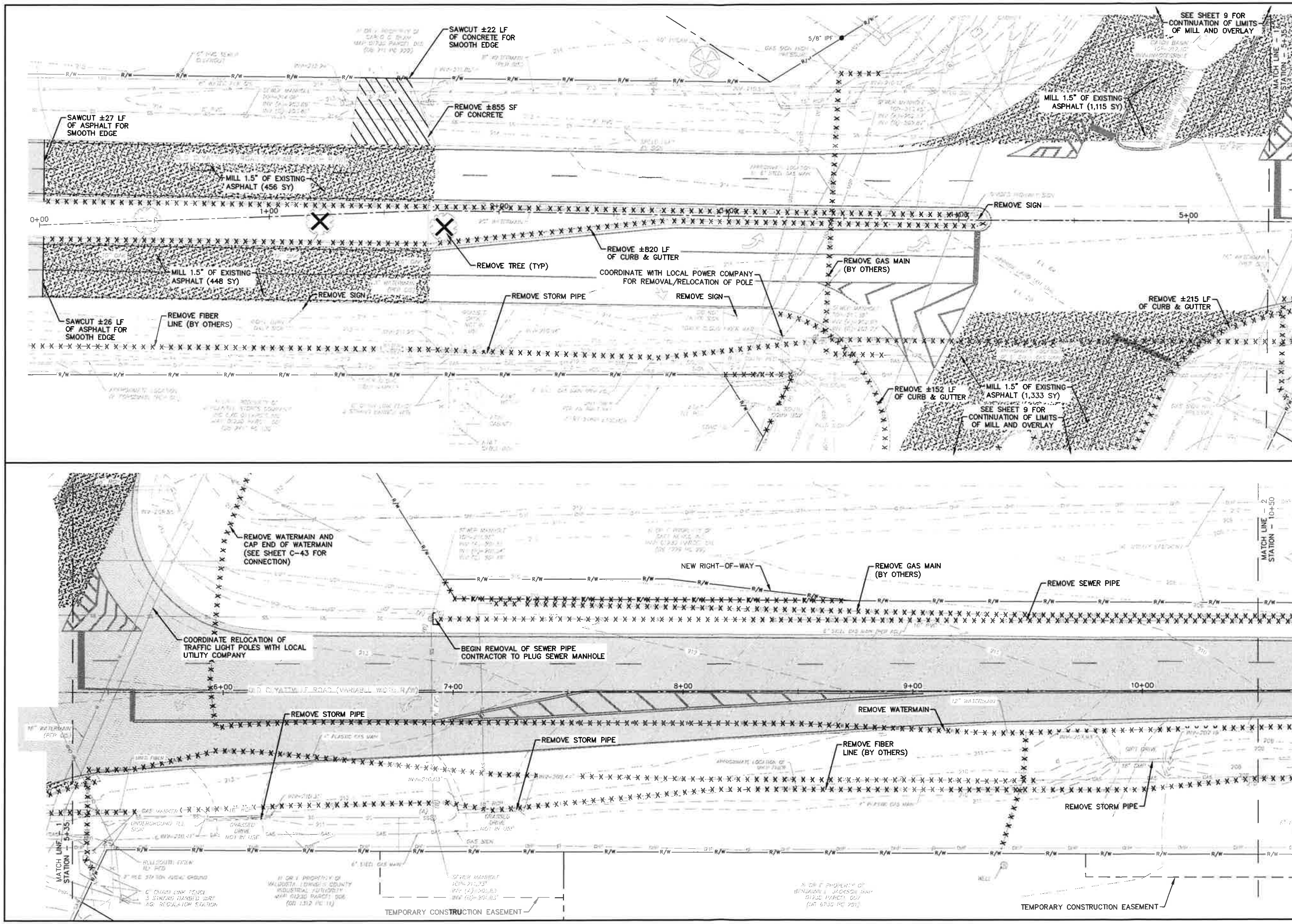
GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MILLICAN DRAFT

GSWCC LEVEL II CERT. #49262

TYPICAL SECTIONS

5-001

S:\0026-40 (City of Valdosta, Old Clyattville Road Widening)\DWG-PRODUCTION\5-001-Typical Sections.dwg 6/7/2023 1:55 PM



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OLD CLYATTVILLE ROAD WIDENING
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GRAPHIC SCALE

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(IN FEET)
1 INCH = 20 FEET

NORTH

SCALE:	1"=20'
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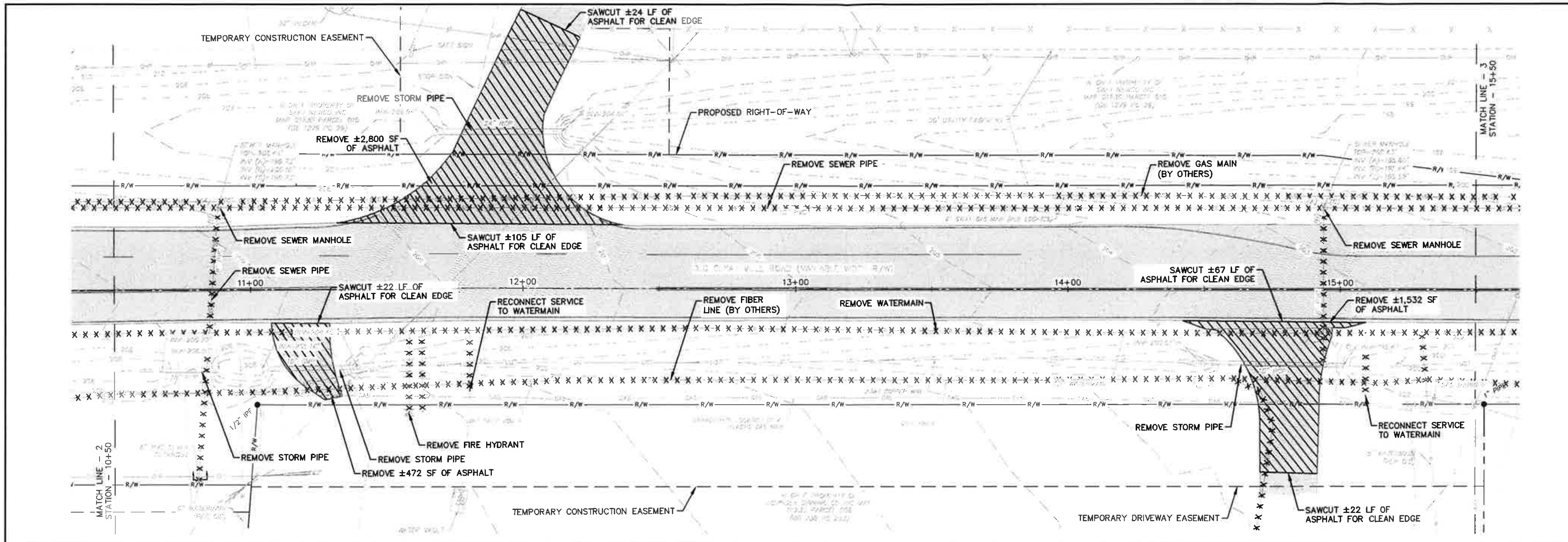
GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLICAN DRAFT

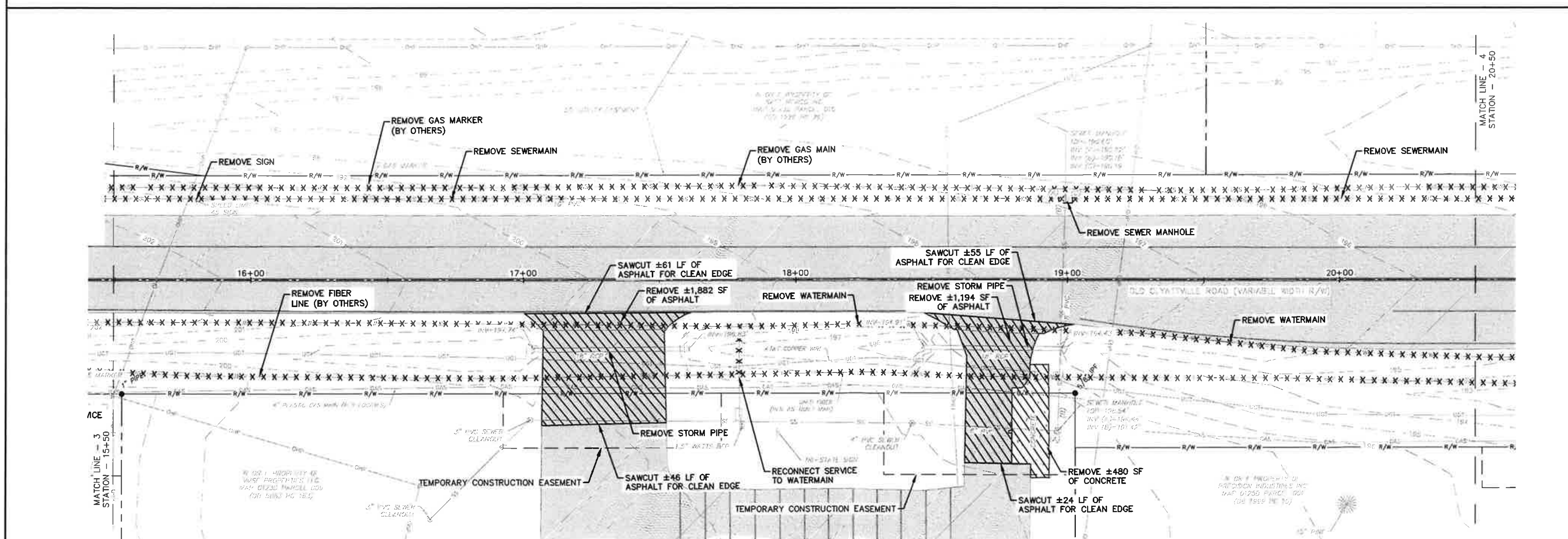
GSWCC LEVEL II CERT. #49262

EXISTING SURVEY (STA 0+00 - 10+50)

11-001

5 OF 74 SHEETS





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OLD CLYATTVILLE ROAD WIDENING
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GEORGIA REGISTERED PROFESSIONAL ENGINEER DRAFT CLAYTON MILLIKAN

GSWCC LEVEL II CERT. #49262

EXISTING SURVEY (STA 10+50 - 20+50)

11-002

6 OF 74 SHEETS

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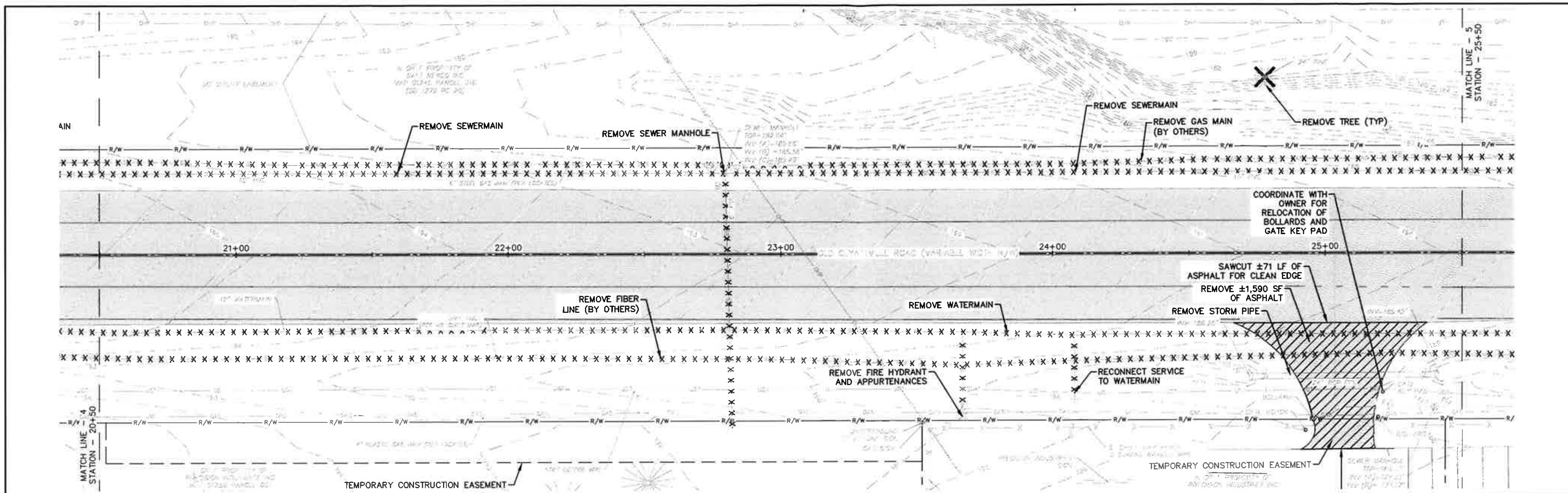

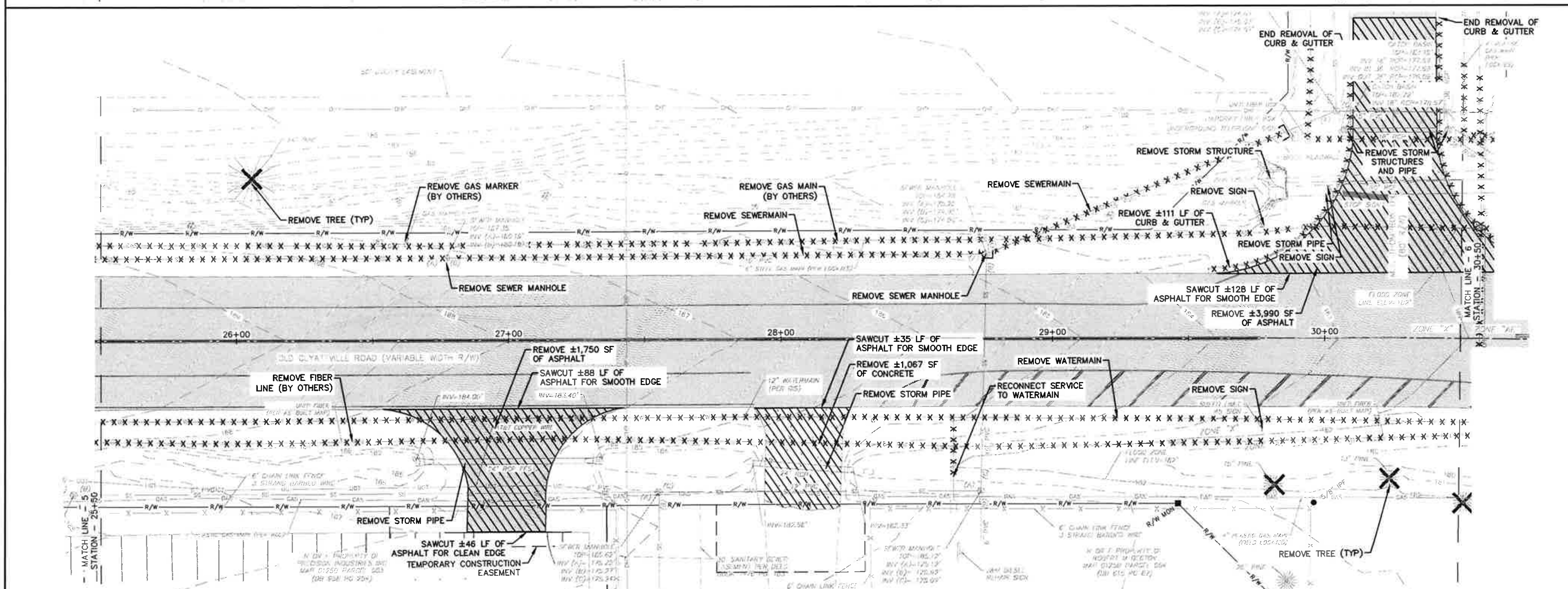

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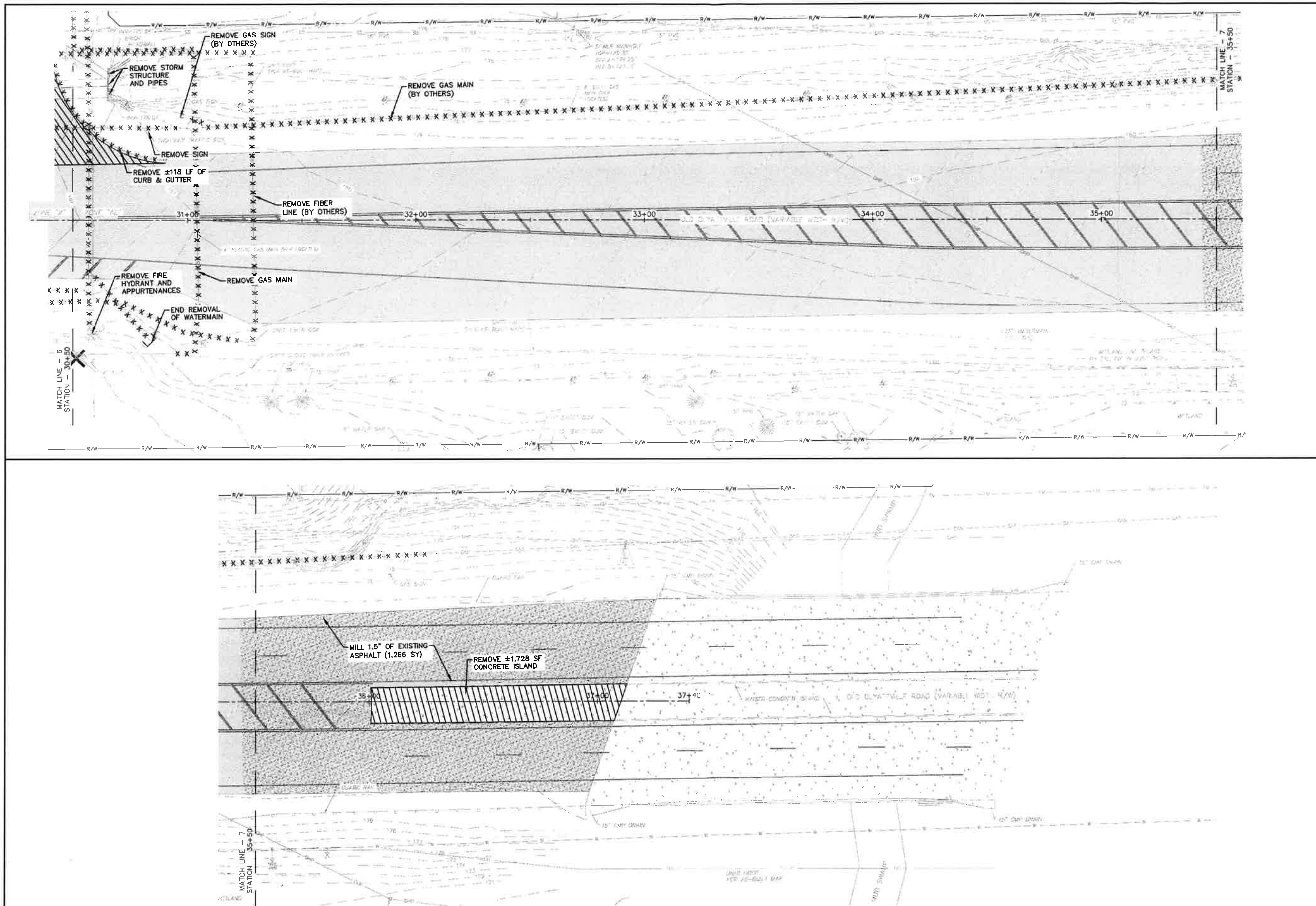
GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

EXISTING SURVEY
(STA 20+50 - 30+50)

11-003

7 OF 74 SHEETS



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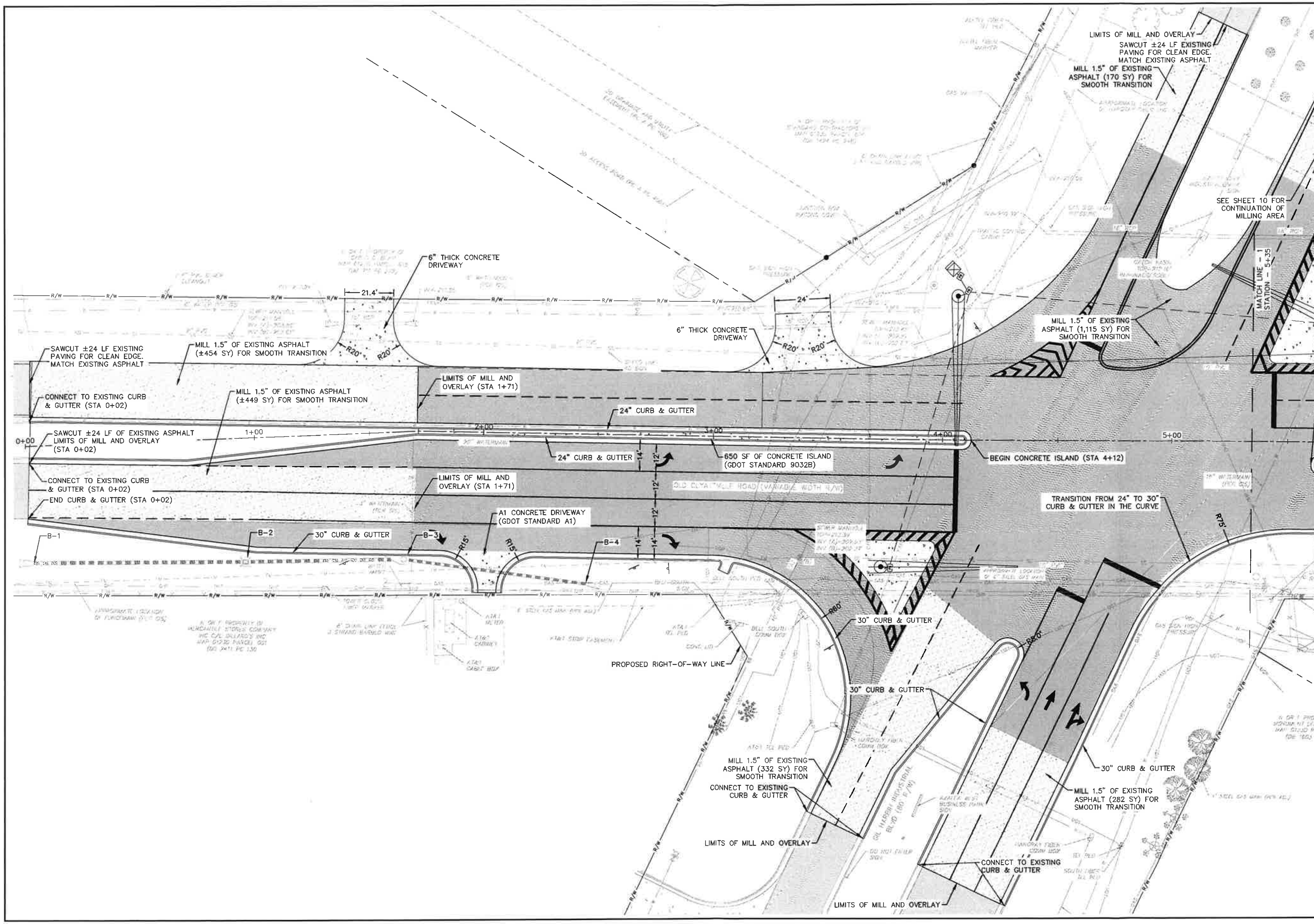
GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MELKAN
DRAFT

GSWCC LEVEL II CERT. #49262

EXISTING SURVEY
(STA 30+50 - END)

11-004

8 OF 74 SHEETS



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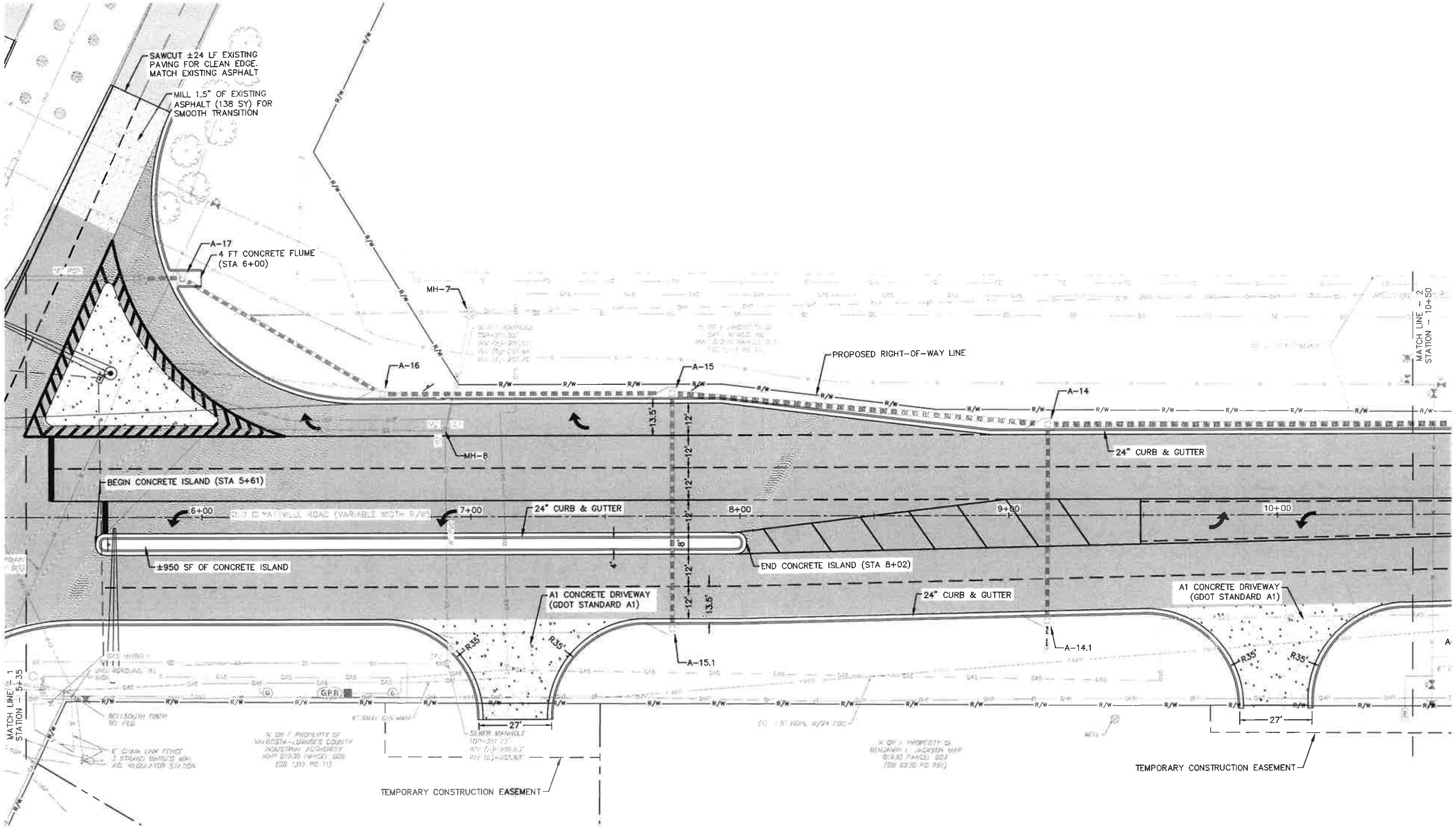
GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

CONSTRUCTION PLAN (STA 0+00 - 5+35)

13-001



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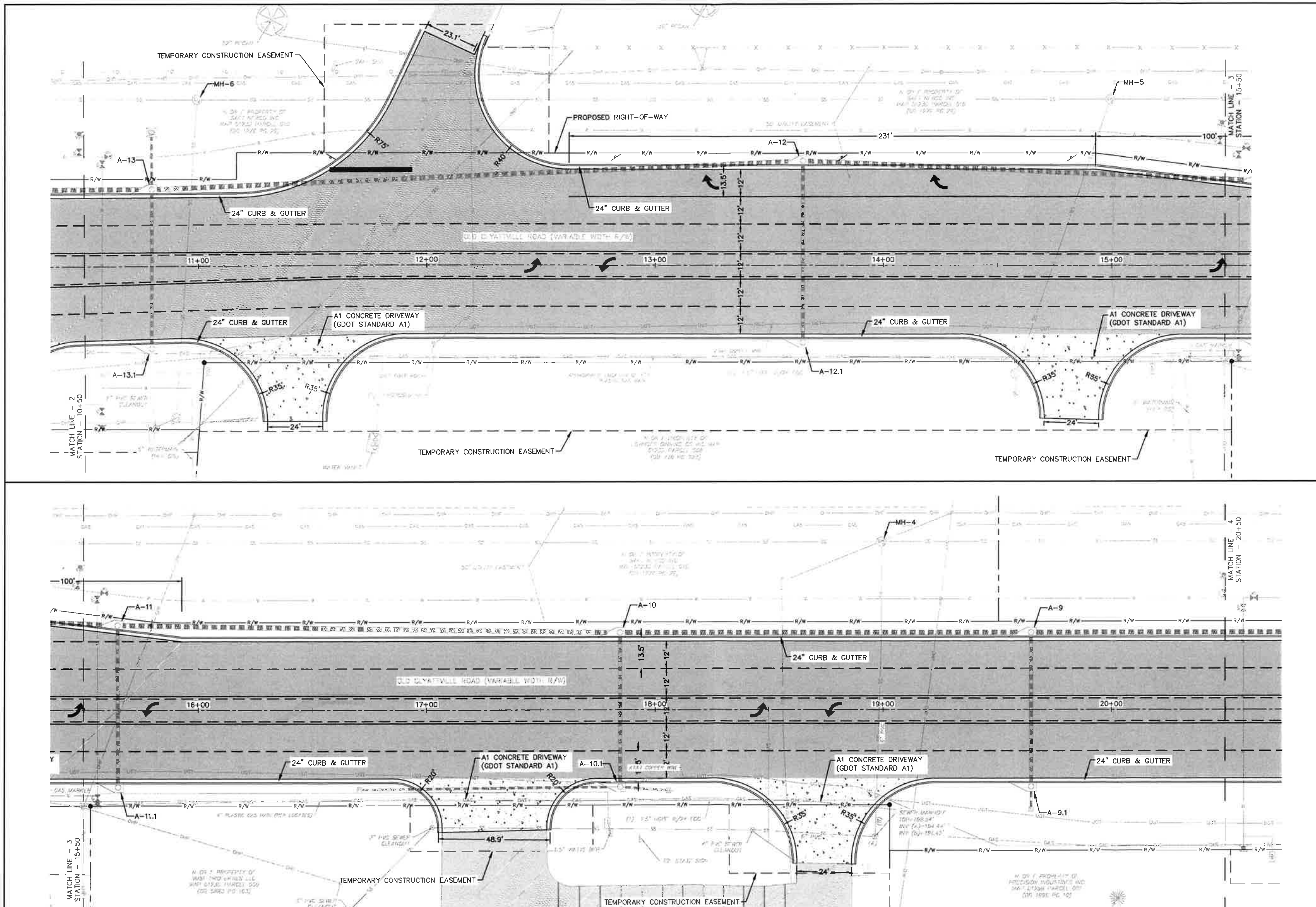
GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

CONSTRUCTION PLAN (STA 5+35 - 10+50)

13-002

10 OF 74 SHEETS



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GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

CONSTRUCTION PLAN
(STA 10+50 - 20+50)

13-003

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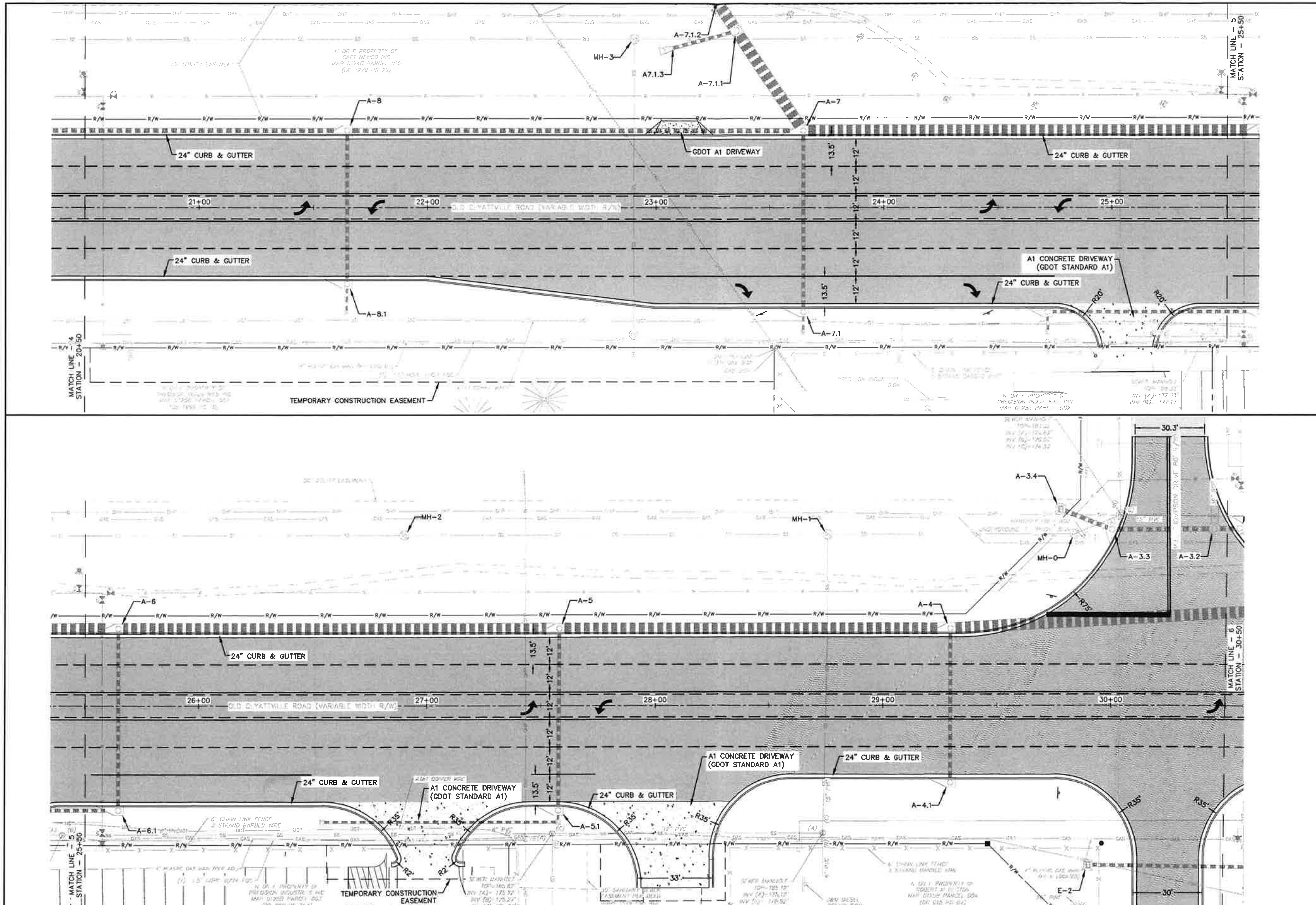

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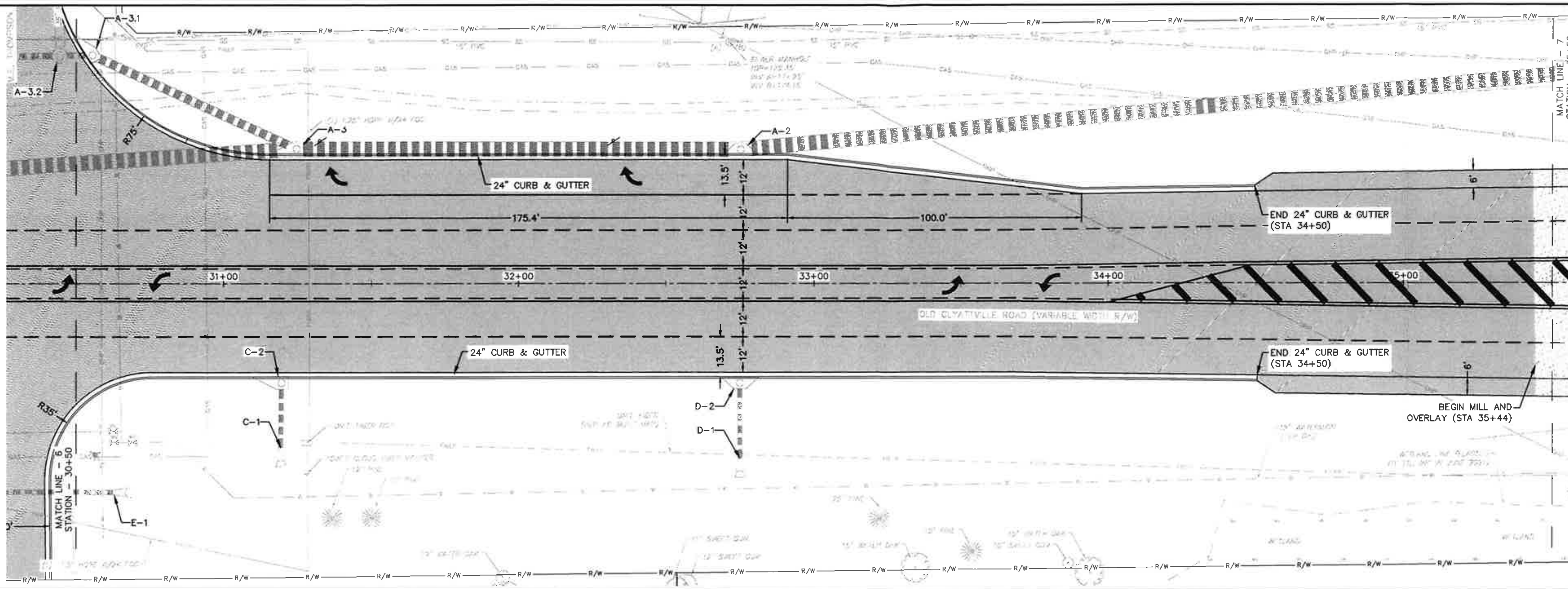
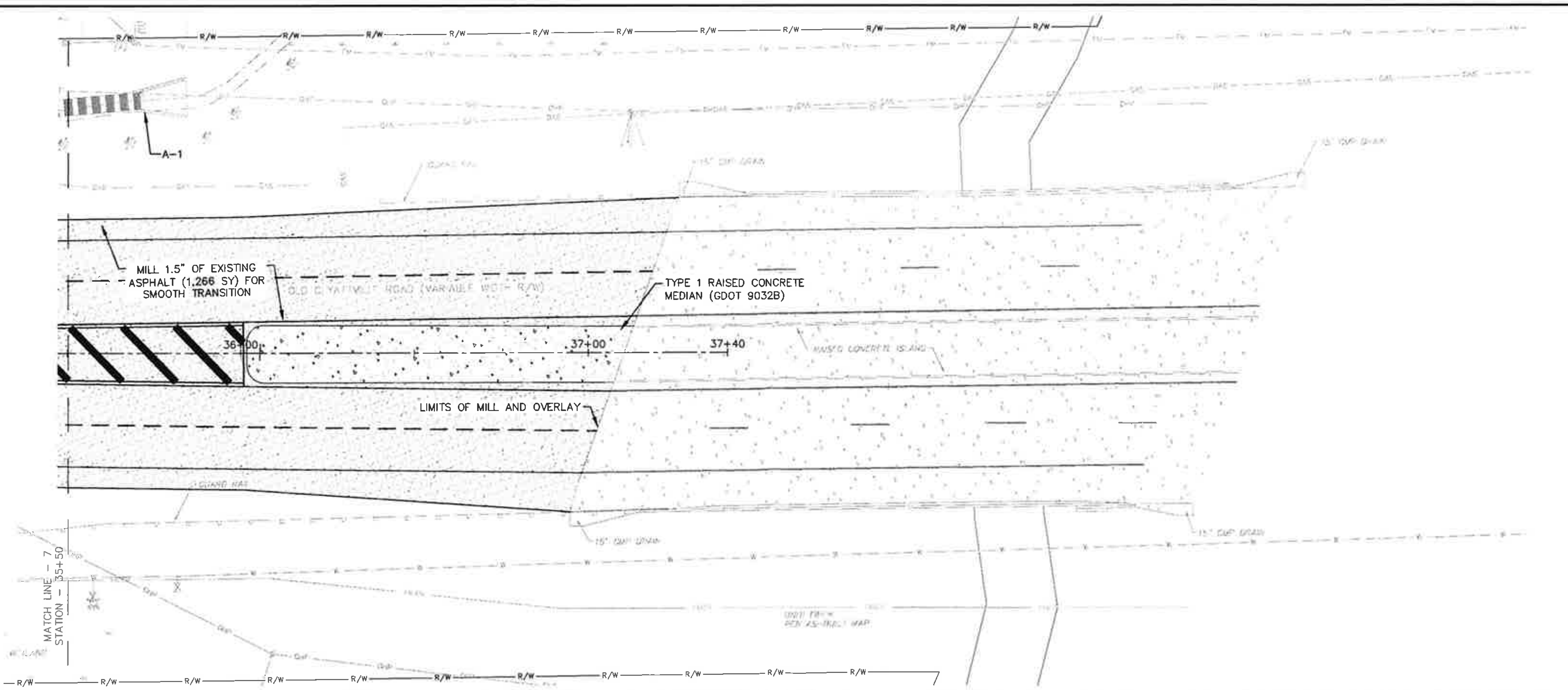
GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

CONSTRUCTION PLAN
(STA 20+50 - 30+50)

13-004





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OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE
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GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIGAN
DRAFT

GSWCC LEVEL II CERT. #49262

CONSTRUCTION PLAN
(STA 30+50 - END)

13-005

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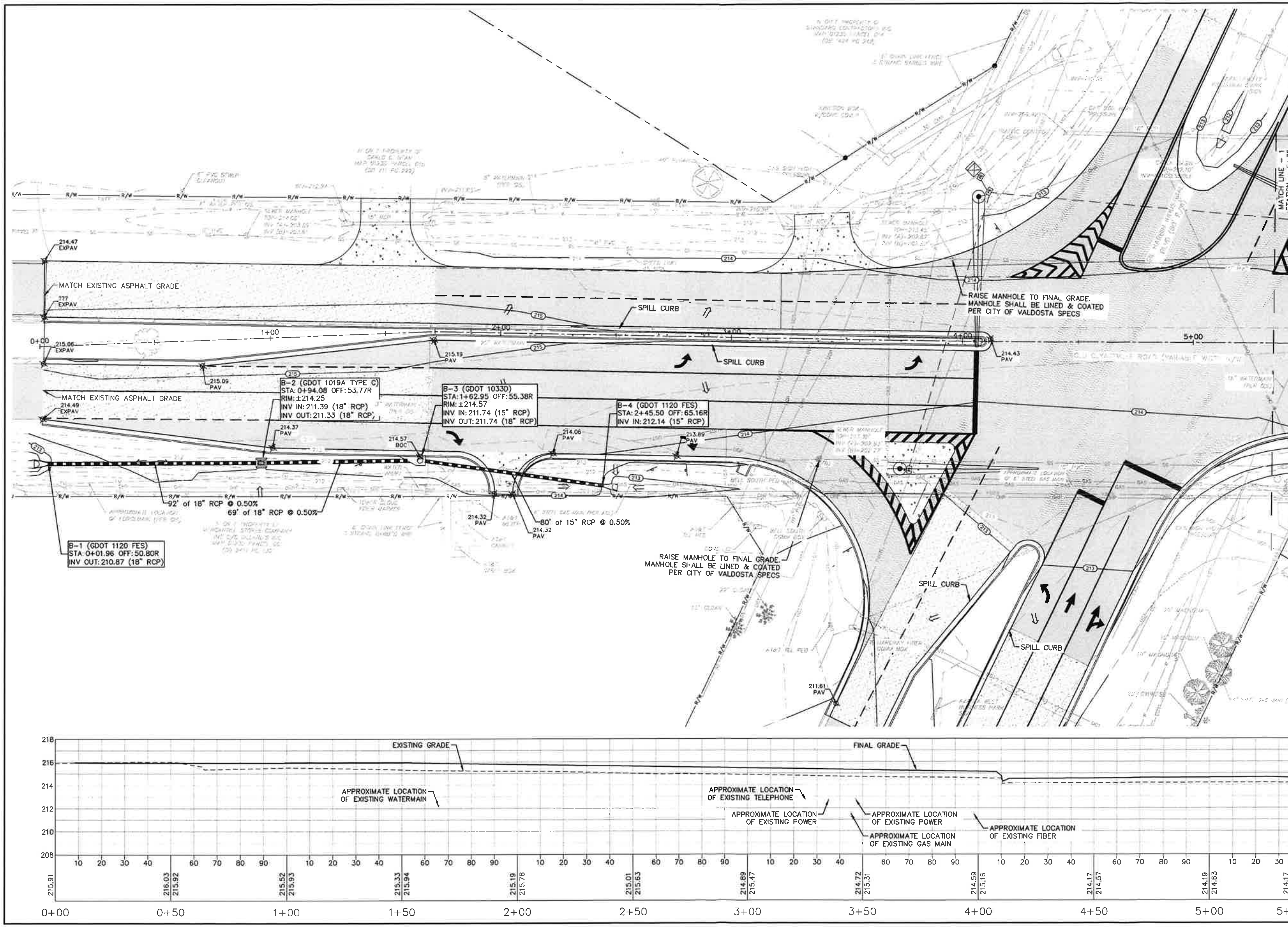

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1 INCH = 4 FEET (VERT)

NORTH

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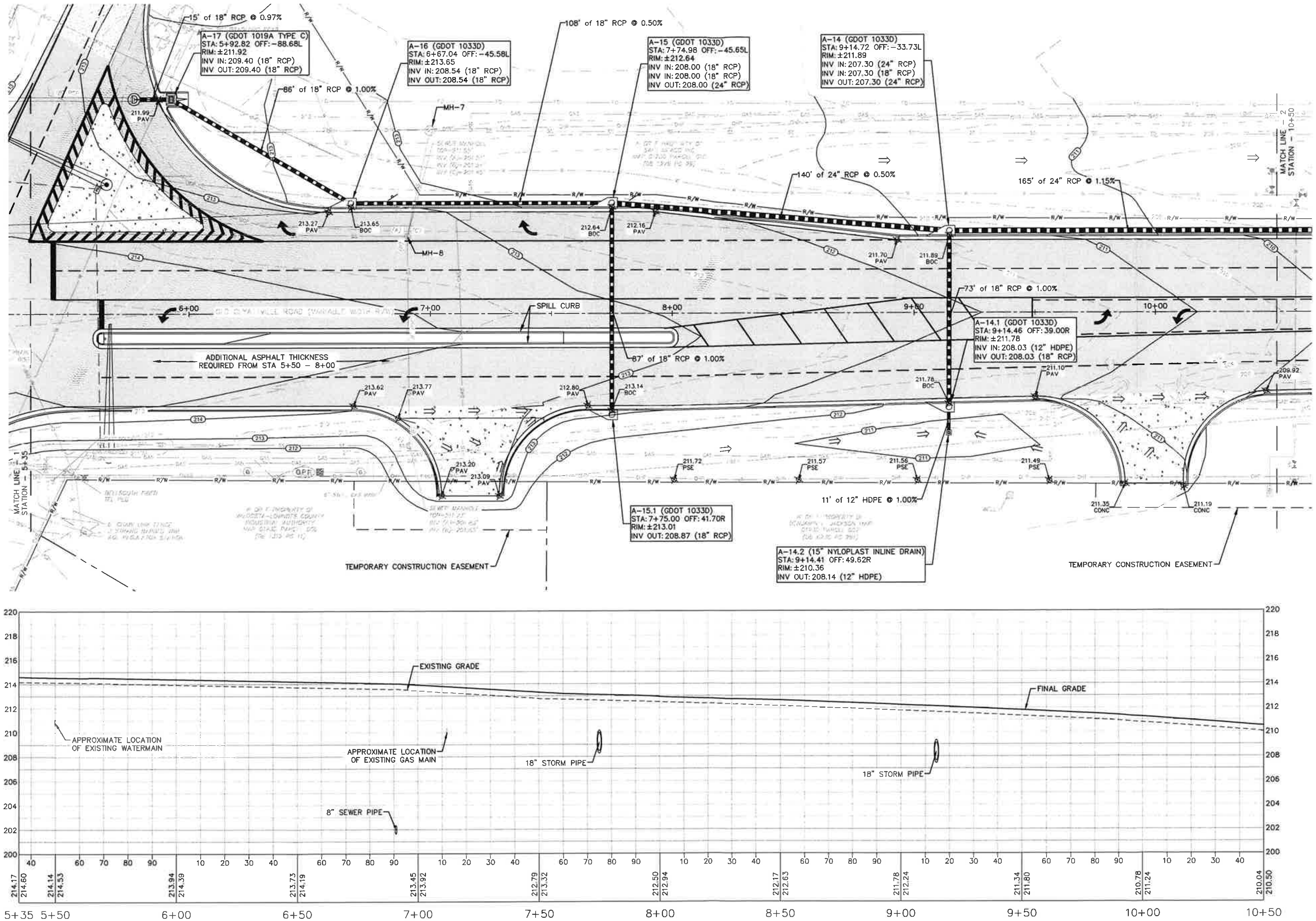
GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MILLIKAN DRAFT

GSWCC LEVEL II CERT. #49262

MAINLINE PROFILE (STA 0+00 - 5+35)

15-001



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GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIGAN DRAFT

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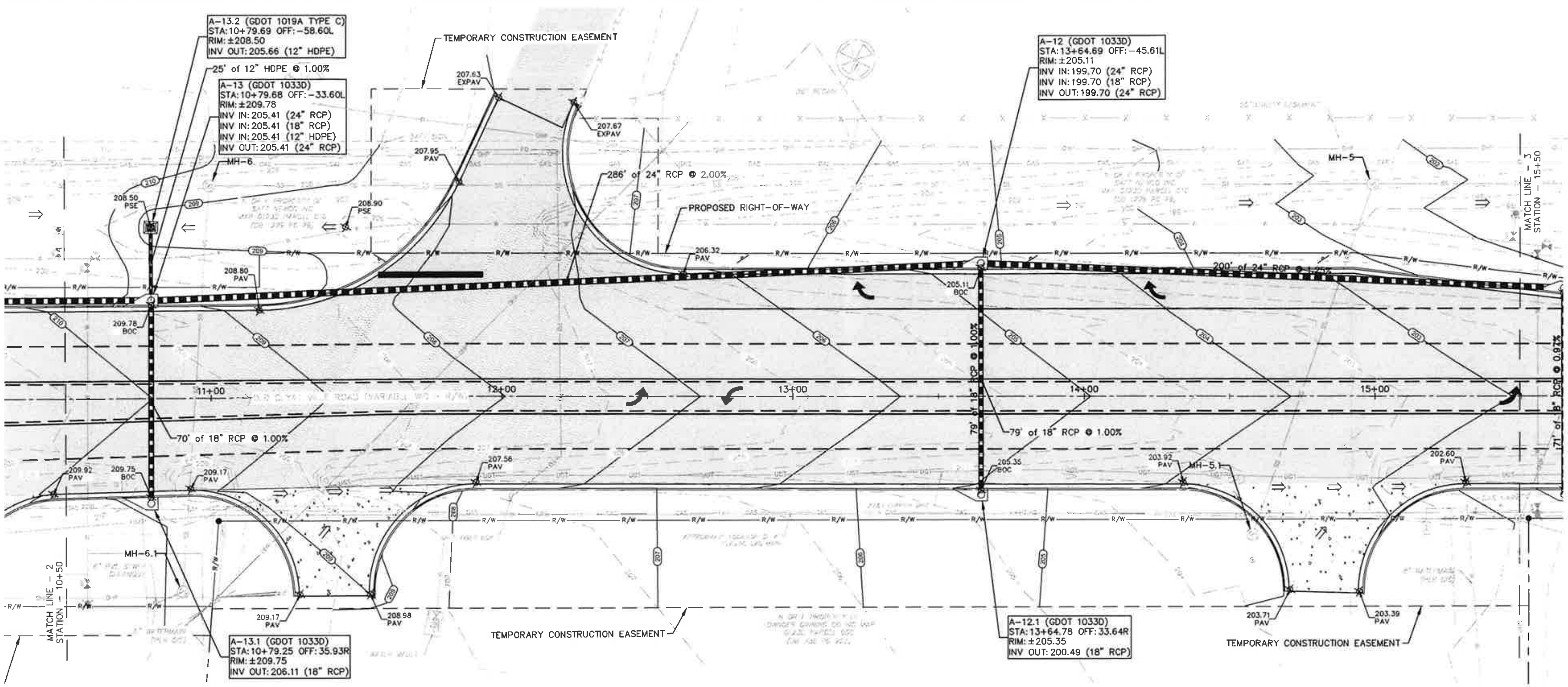
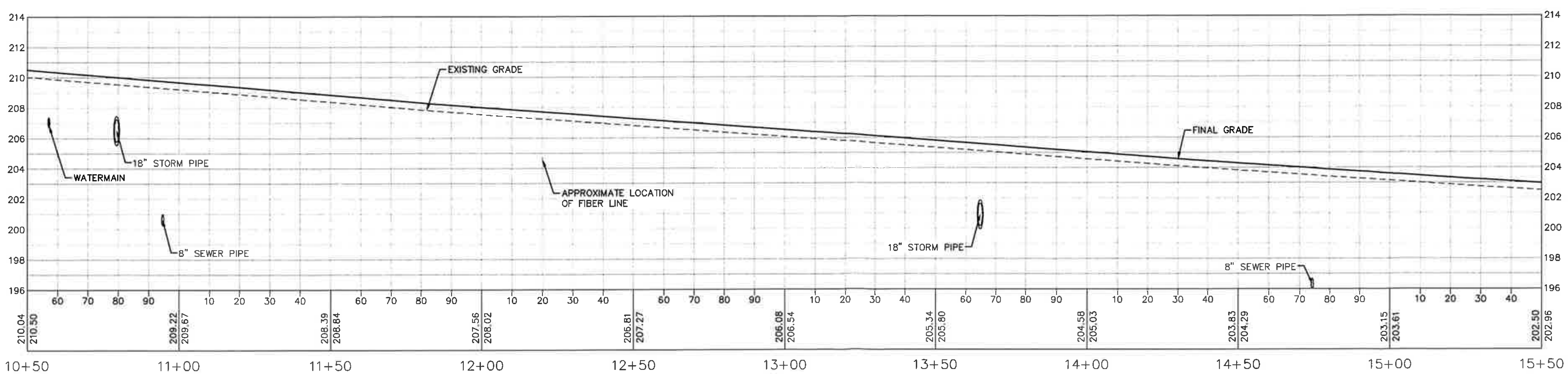
MAINLINE PROFILE
(STA 5+35 - 10+50)

15-002





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GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIKAN DRAFT

GSWCC LEVEL II CERT. #49262

MAINLINE PROFILE
(STA 10+50 - 15+50)

15-003

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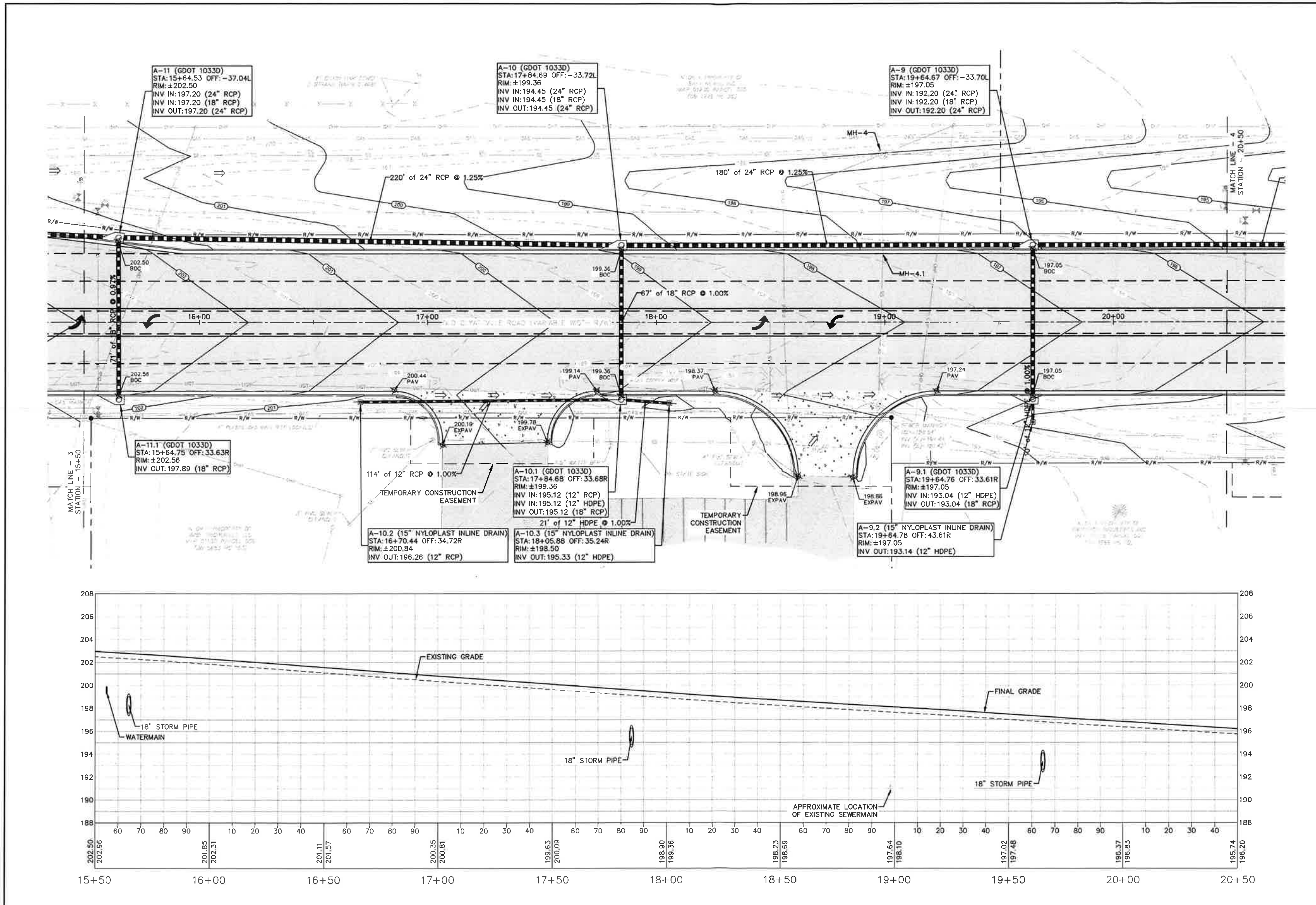

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GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

MAINLINE PROFILE
(STA 15+50 - 20+50)

15-004

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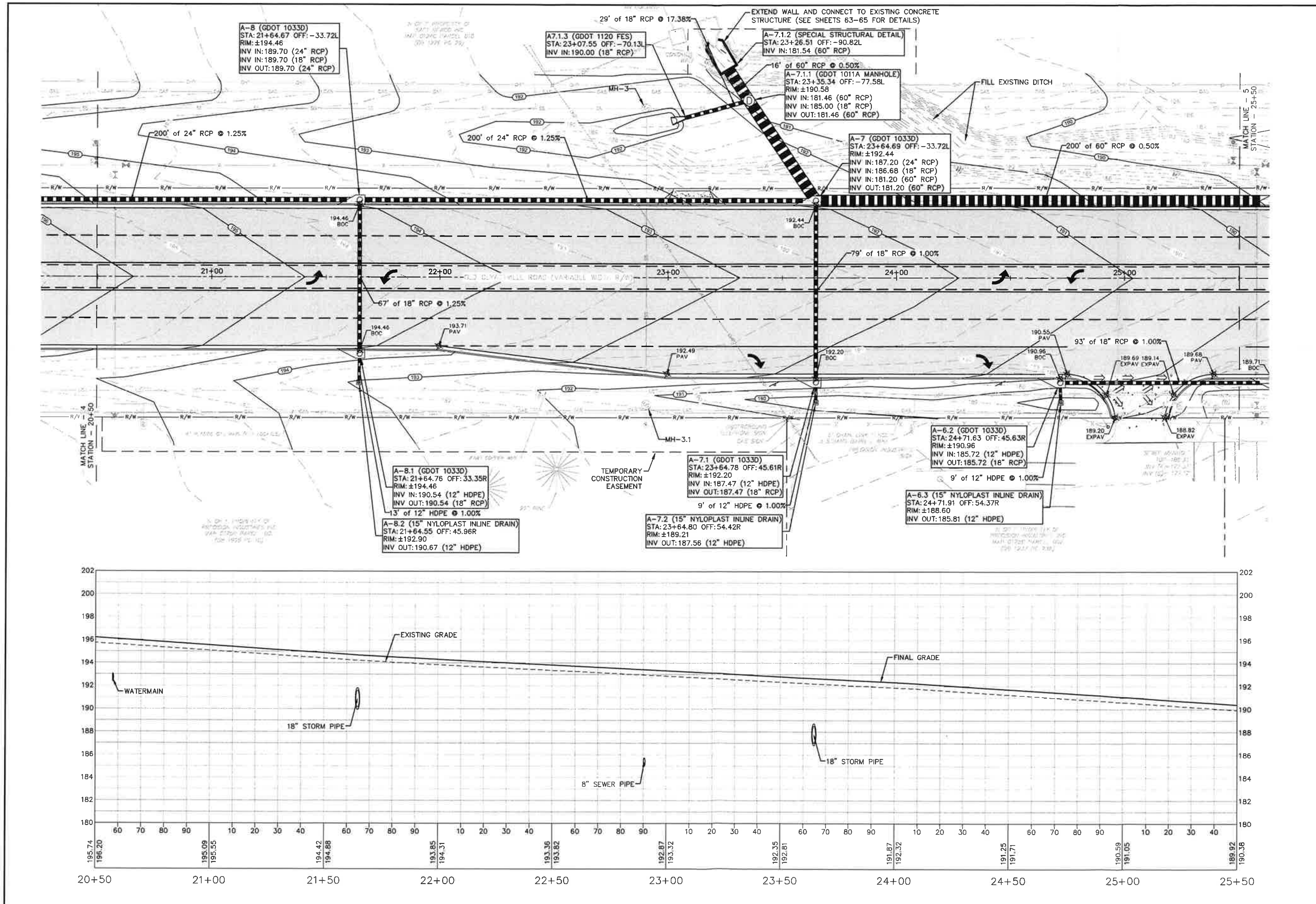

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GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MELLKAN DRAFT

GSWCC LEVEL II CERT. #49262

MAINLINE PROFILE (STA 20+50 - 25+50)

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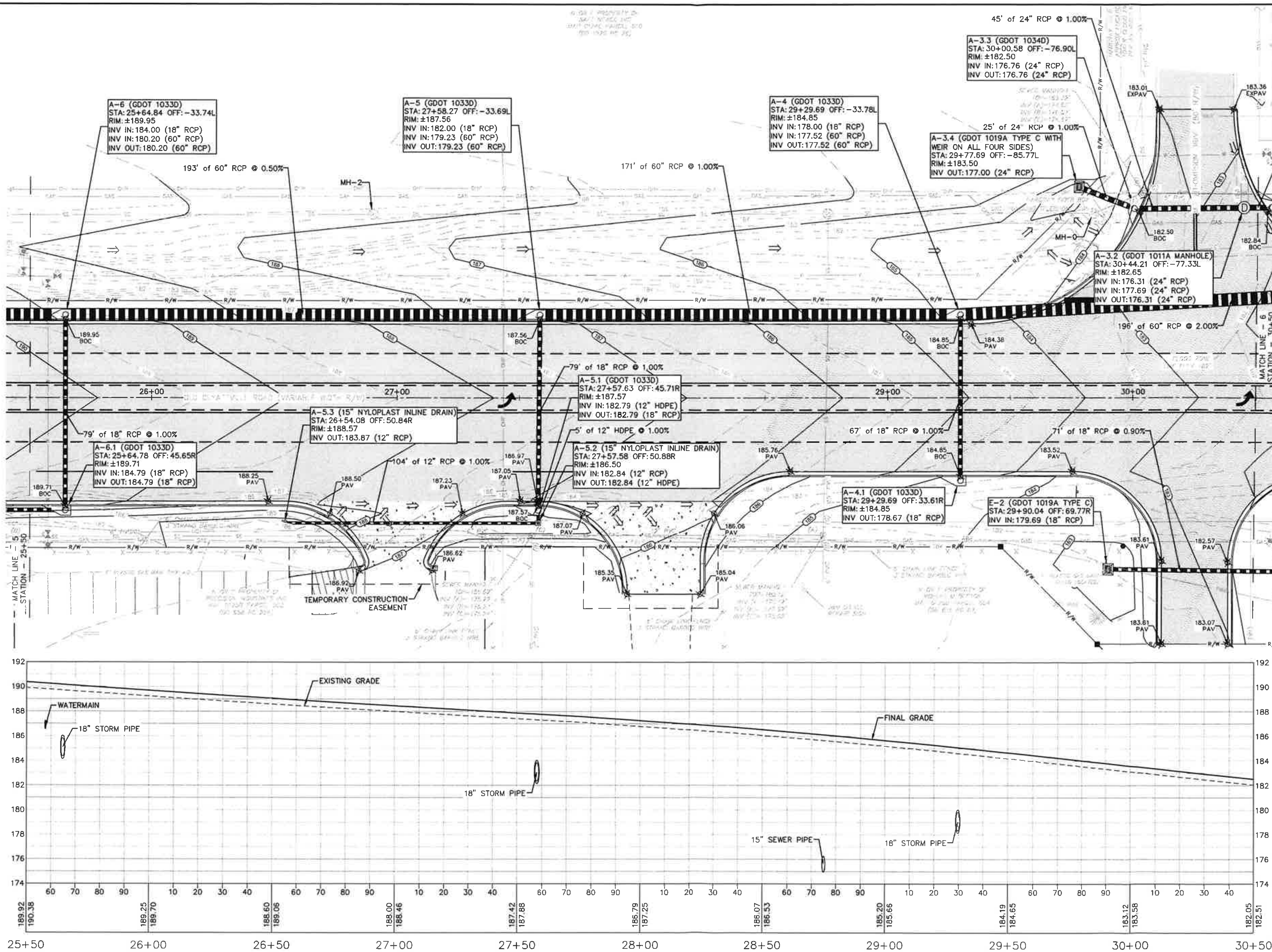

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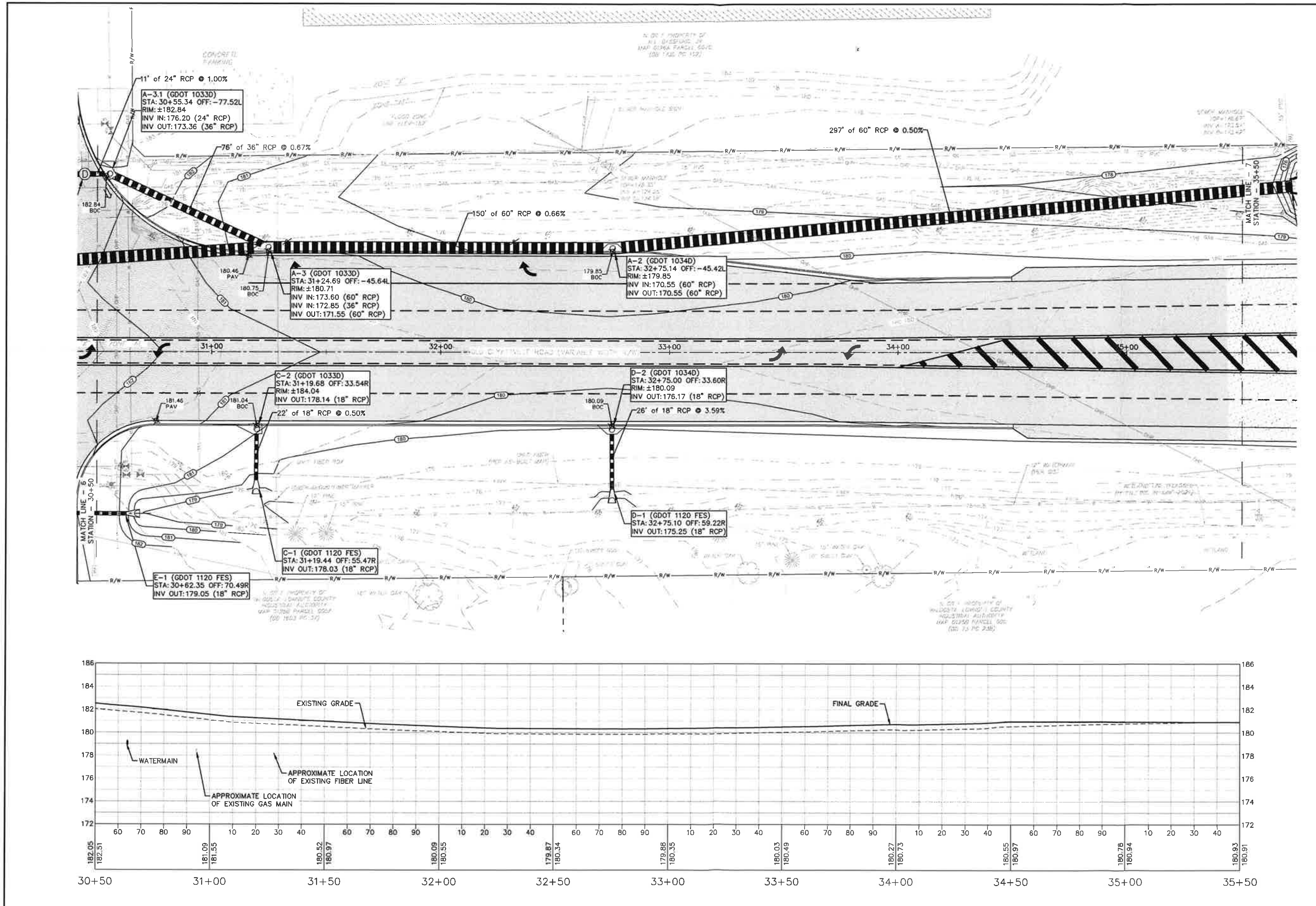
GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MILLKAN DRAFT

GSWCC LEVEL II CERT. #49262

MAINLINE PROFILE (STA 25+50 - 30+50)

15-006

S:\0026-40 (City of Valdosta, Old Clyattville Road Widening)\DWG-PRODUCTION\15-Mainline Profile.dwg 6/7/2023 2:10 PM



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GA CORP# 0419099
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P.O. Box 2830
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Telephone: 229-253-0900
Fax: 229-253-1842
E-mail: lea@lea-pc.com

OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE
11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS

DATE	DESCRIPTION

GRAPHIC SCALE
0 10 20 40
(IN FEET)
1 INCH = 20 FEET (HOR)
1 INCH = 4 FEET (VERT)

NORTH

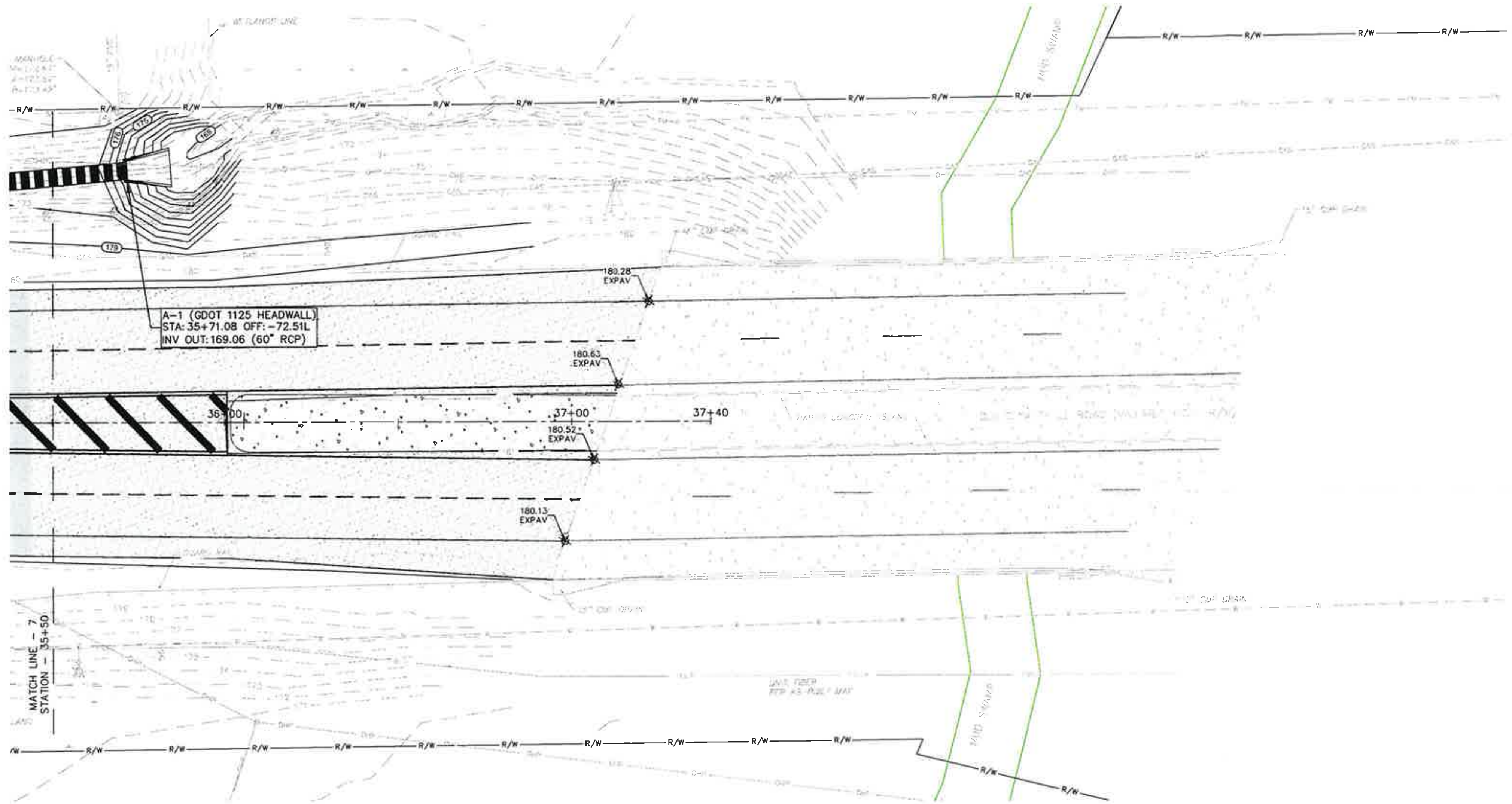
SCALE:	1"=20'
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO.	0026-40

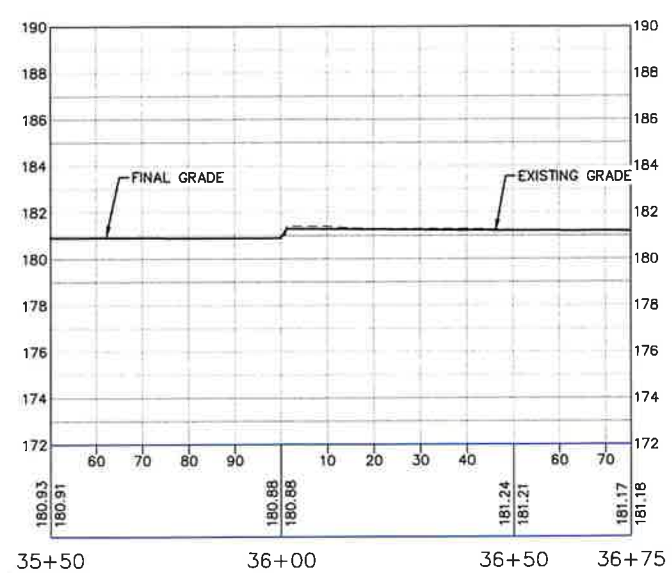
GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

MAINLINE PROFILE
(STA 30+50 - 35+50)

15-007





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GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIKAN DRAFT

GSWCC LEVEL II CERT. #49262

MAINLINE PROFILE (STA 35+50 - 40+50)

15-008

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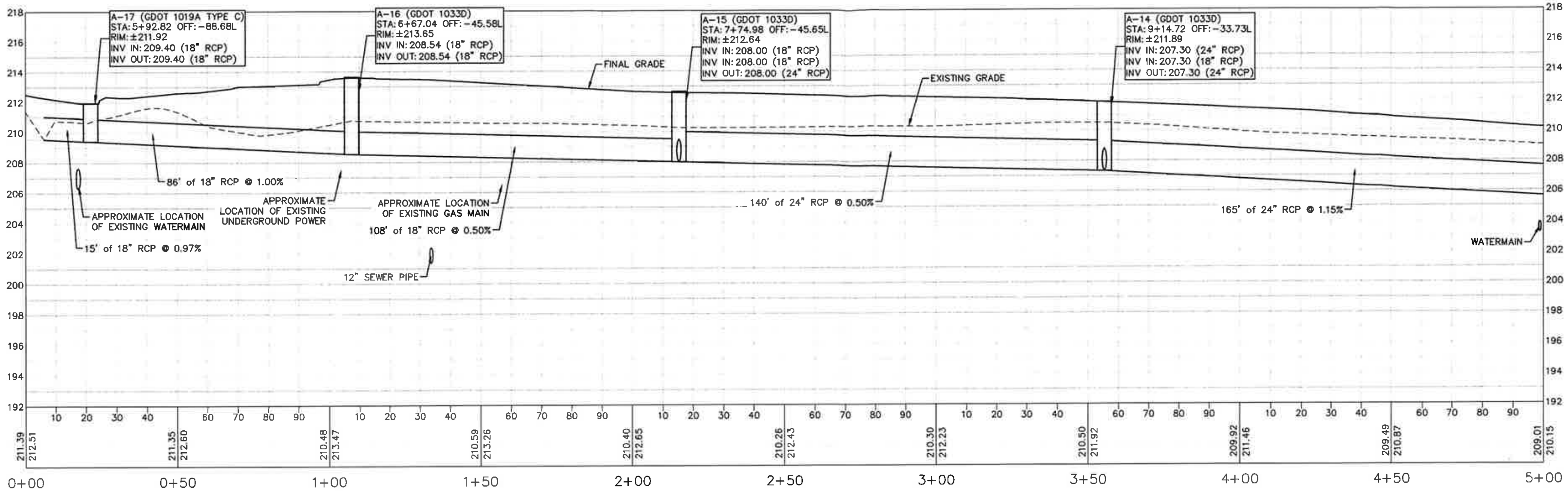
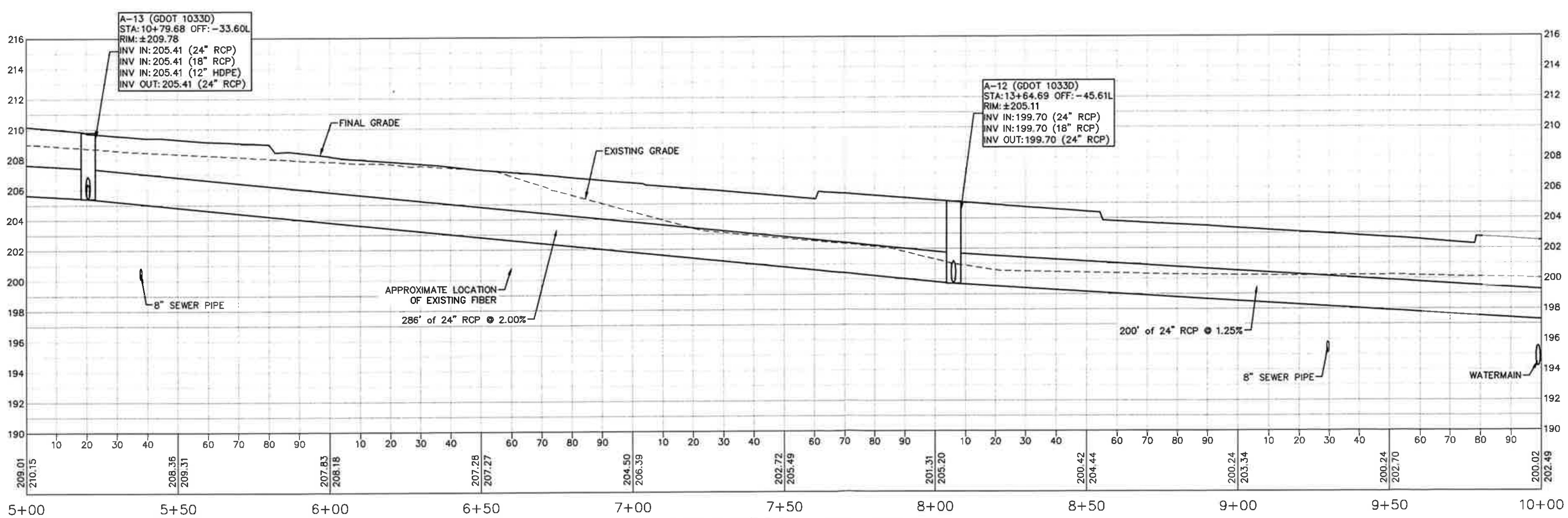


STORM A (STA 0+00 - 5+00)



STORM A (STA 5+00 - 10+00)

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GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIGAN — DRAFT

GSWCC LEVEL II CERT. #49262

DRAINAGE PROFILES STORM A (SHEET 1 OF 3)

22-001

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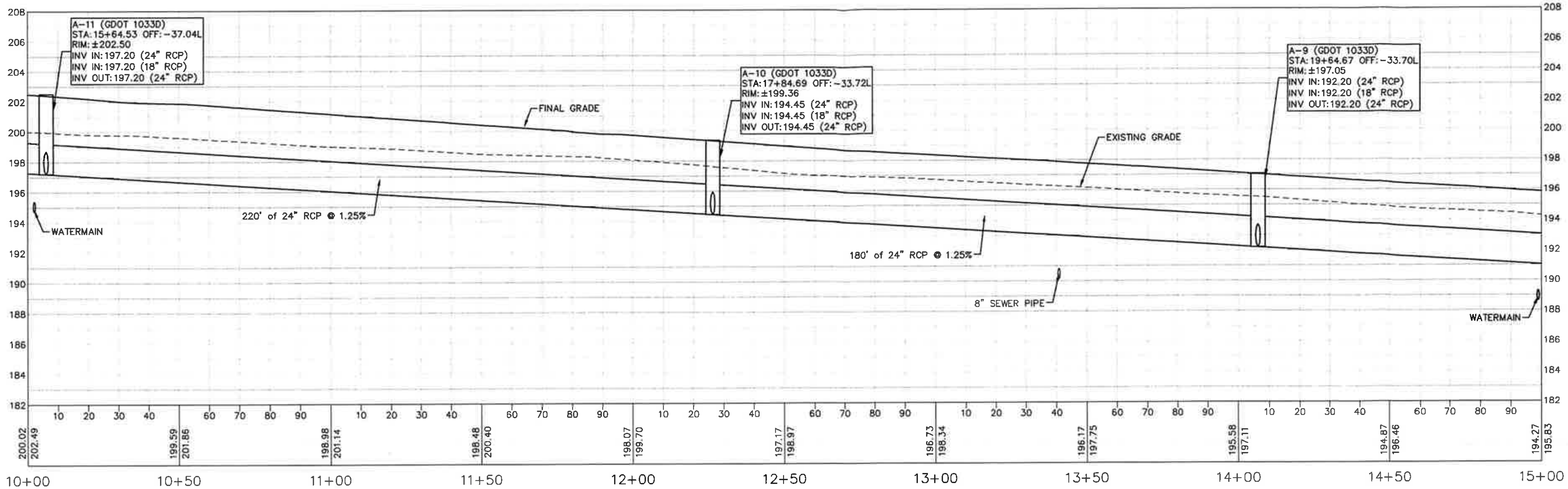
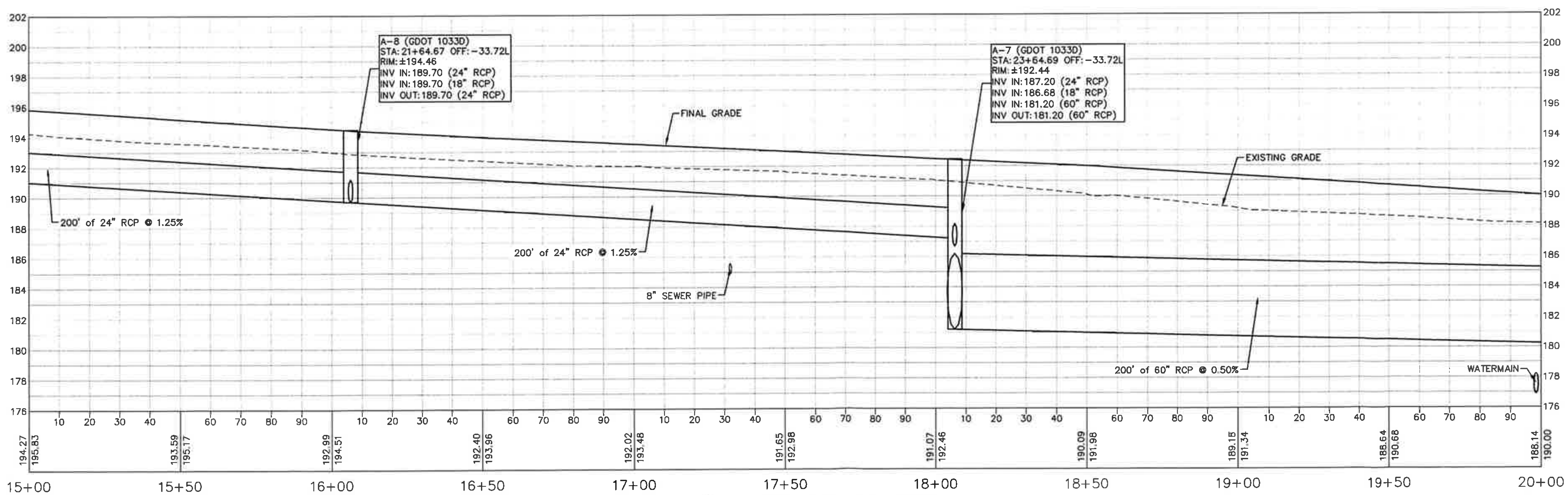


STORM A (STA 10+00 - 15+00)



STORM A (15+00 - 20+00)

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GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

DRAINAGE PROFILES
STORM A
(SHEET 2 OF 3)

22-002

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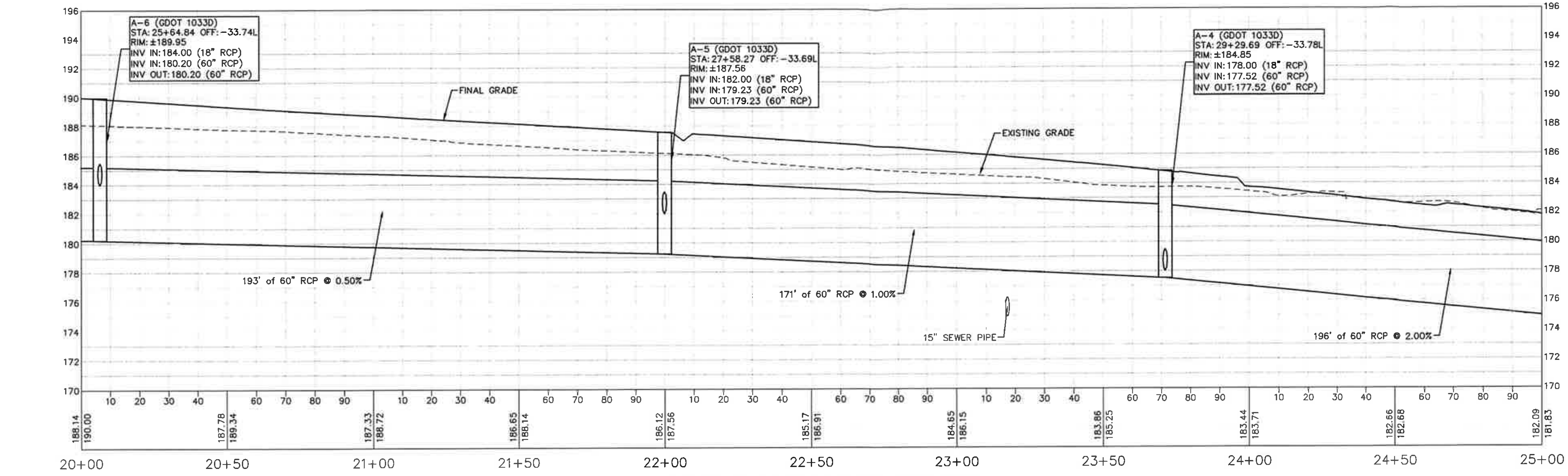
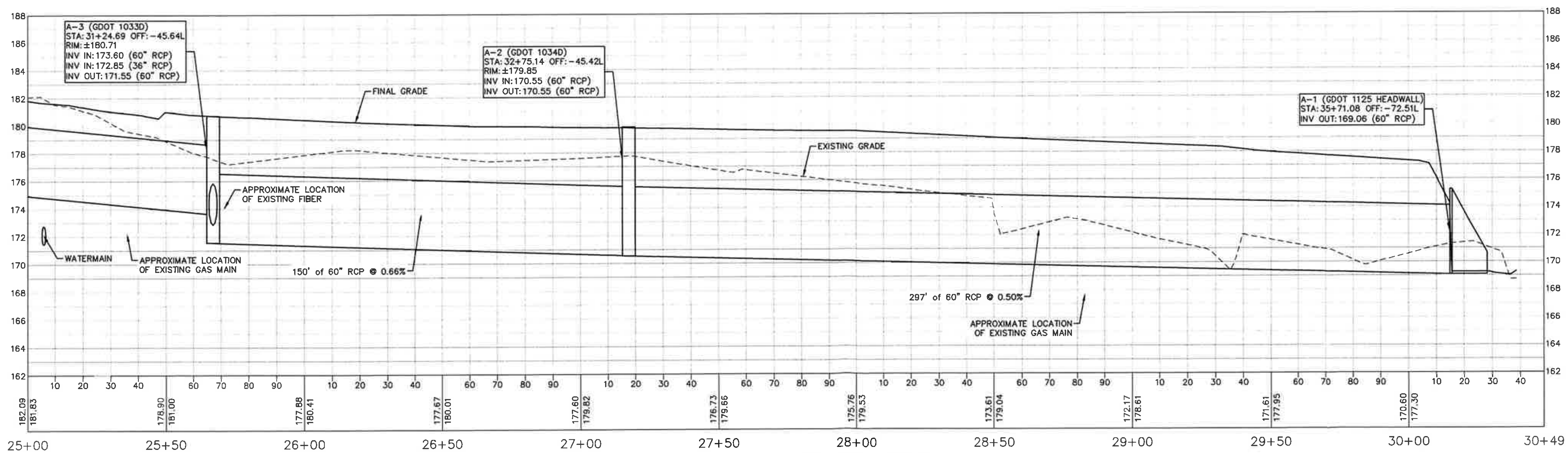


STORM A (STA 20+00 - 25+00)



STORM A (STA 25+00 - END)

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GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

DRAINAGE PROFILES STORM A (SHEET 3 OF 3)

22-003

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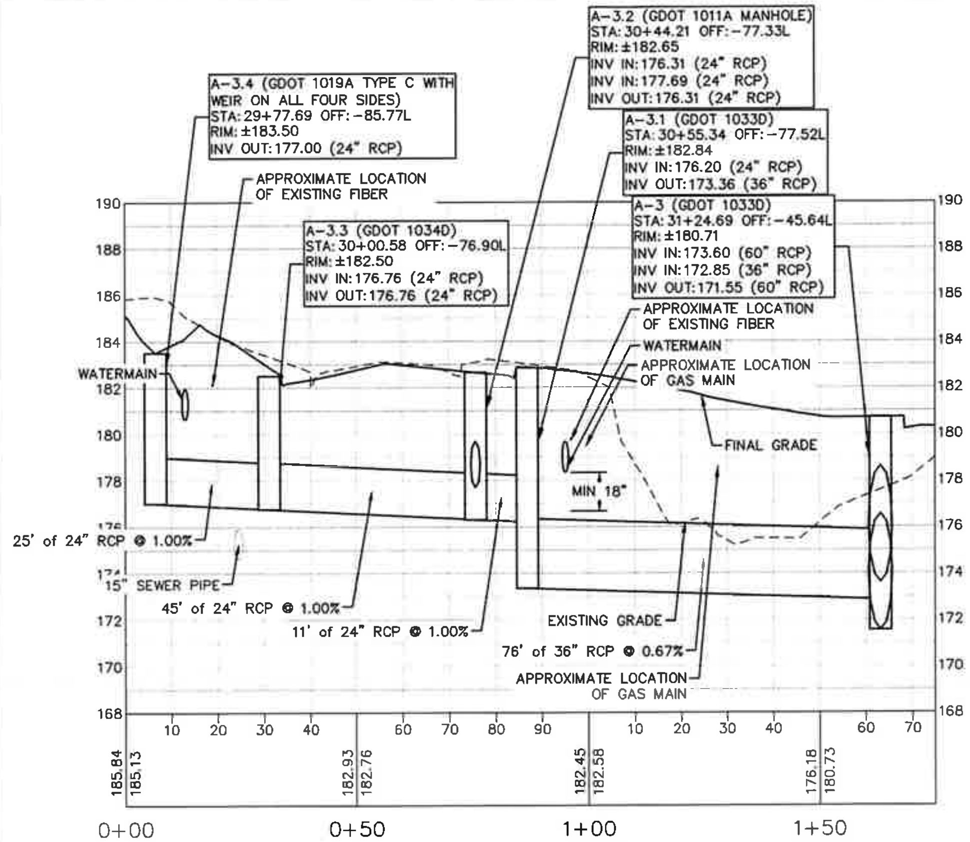
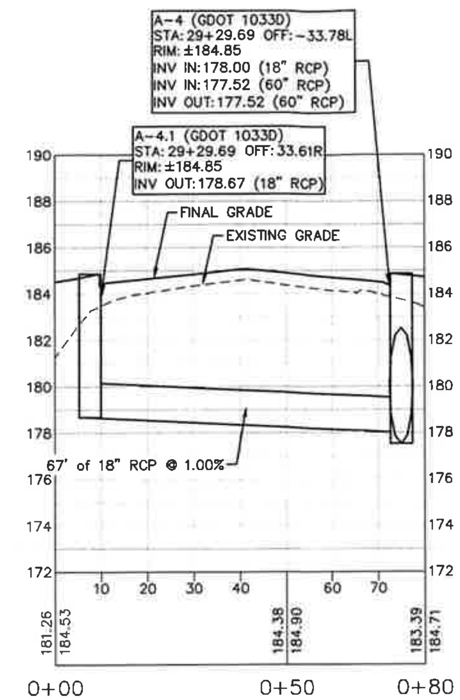
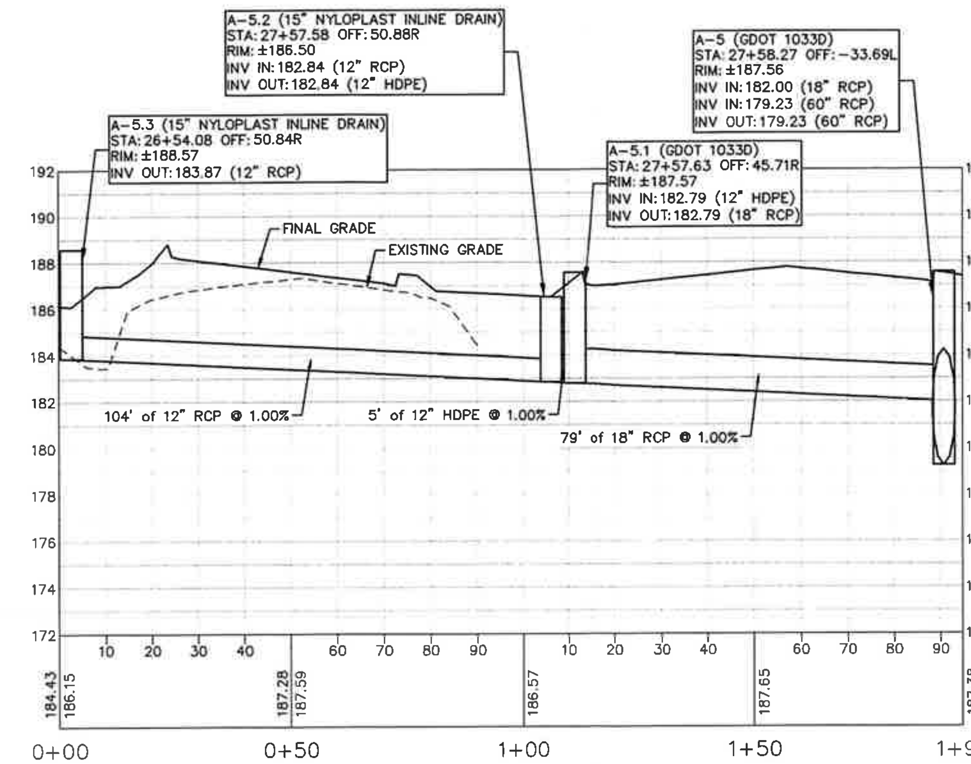


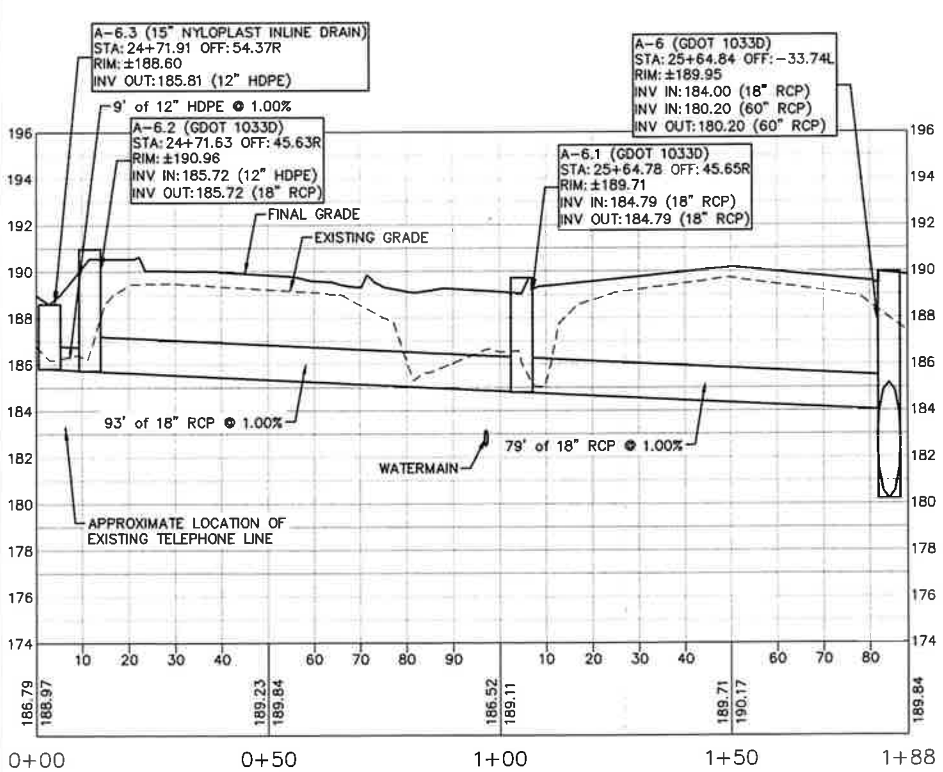
STORM A-3.4 TO A-3



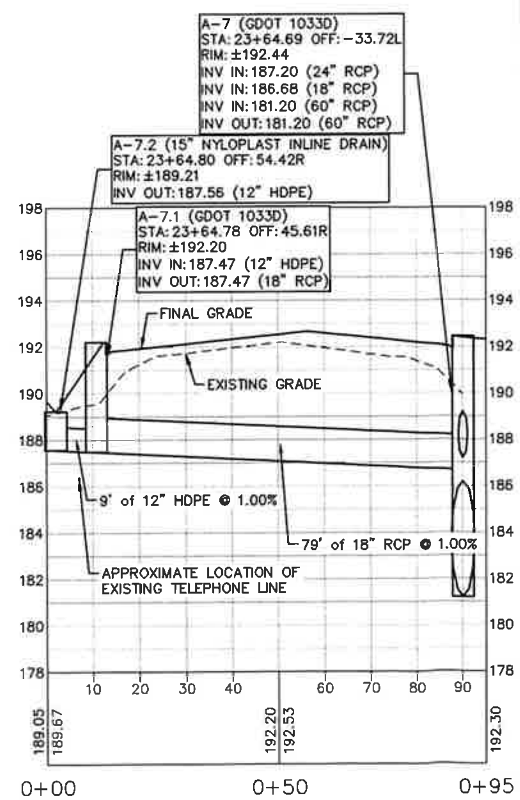
STORM A-4.1 TO A-4



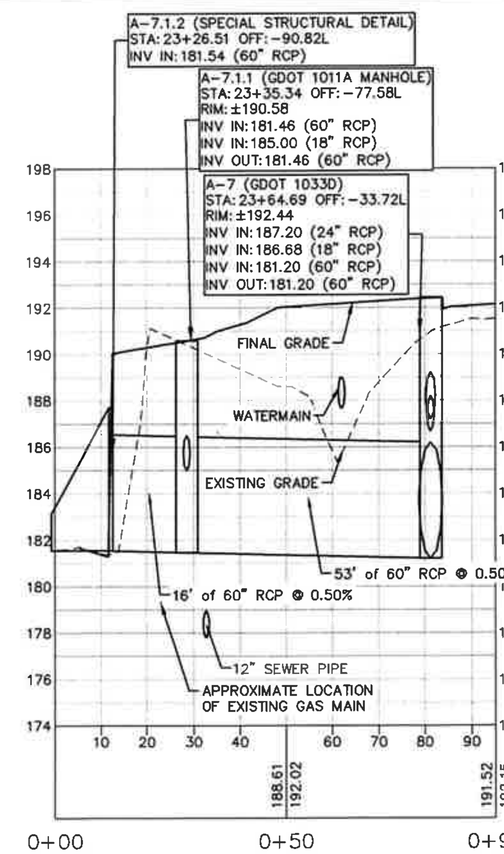
STORM A-5.3 TO A-5



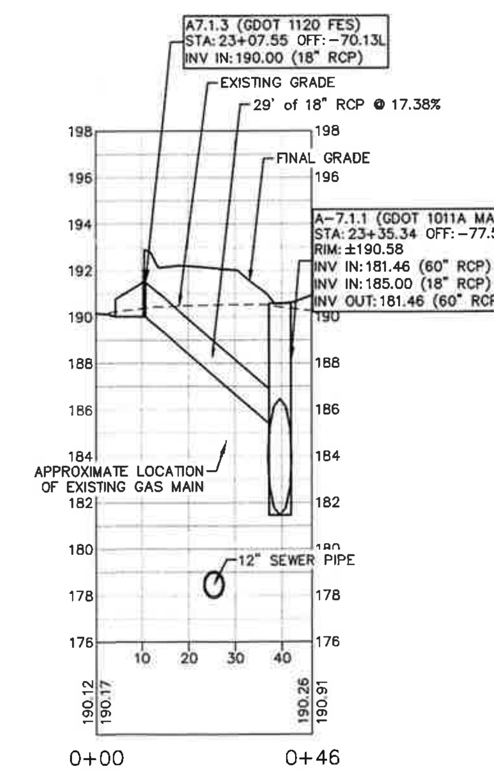
STORM A-6.2 TO A-6



STORM A-7.1 TO A-7



STORM A-7.1.1 TO A-7



STORM A-7.1.2 TO A-7.1.1

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OLD CLYATTVILLE ROAD WIDENING
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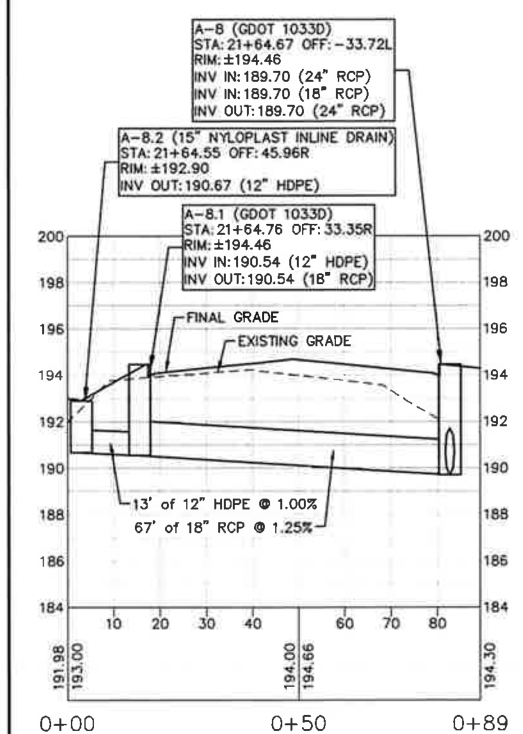
GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MILLIGAN DRAFT

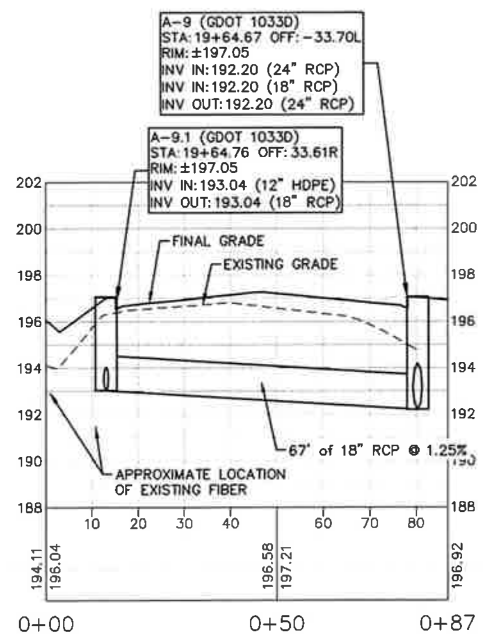
GSWCC LEVEL II CERT. #49262

DRAINAGE PROFILES

22-004



STORM A-8.1 TO A-8



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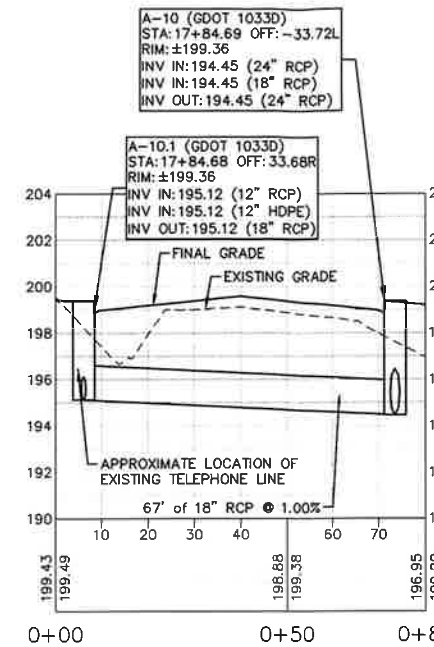
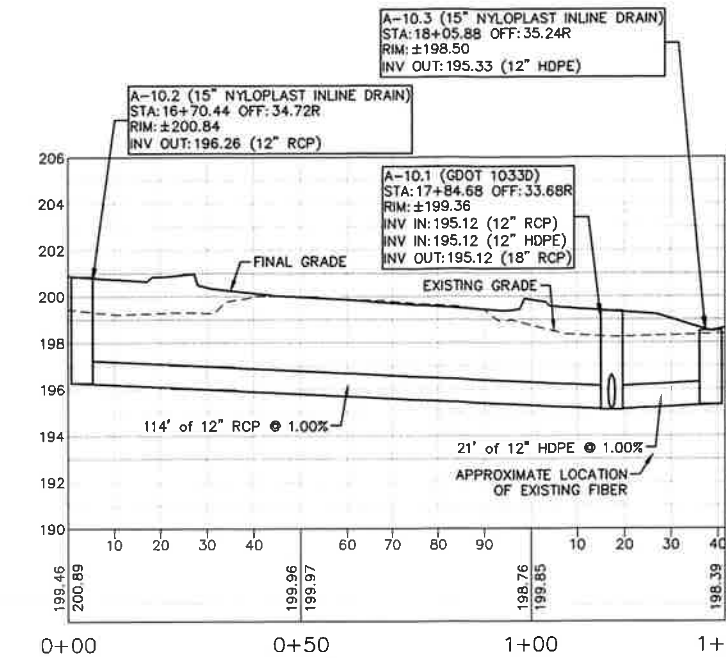
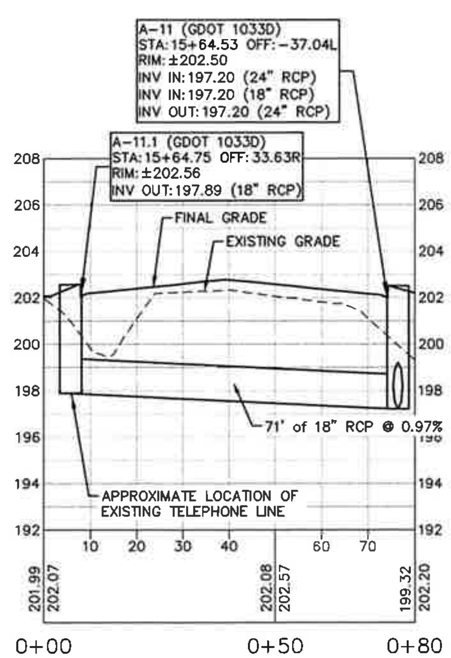


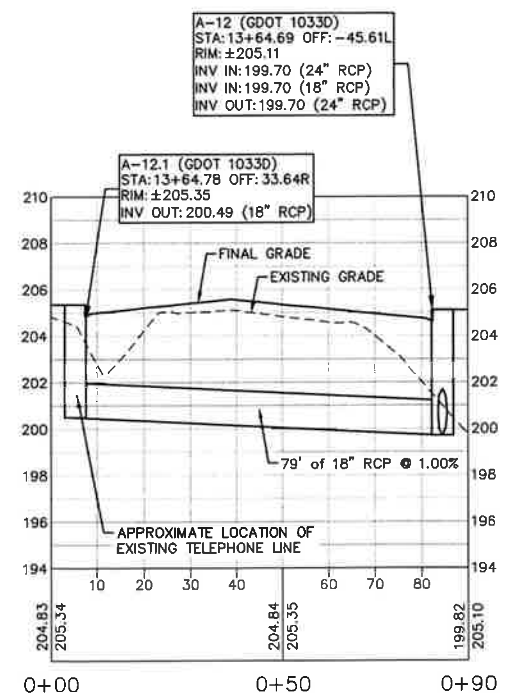
STORM A-10.1 TO A-10



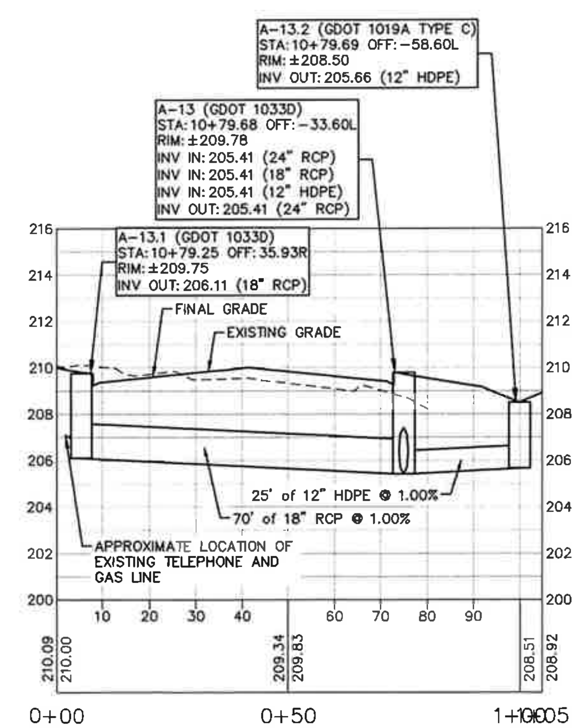
STORM A-10.2 TO A-10.3



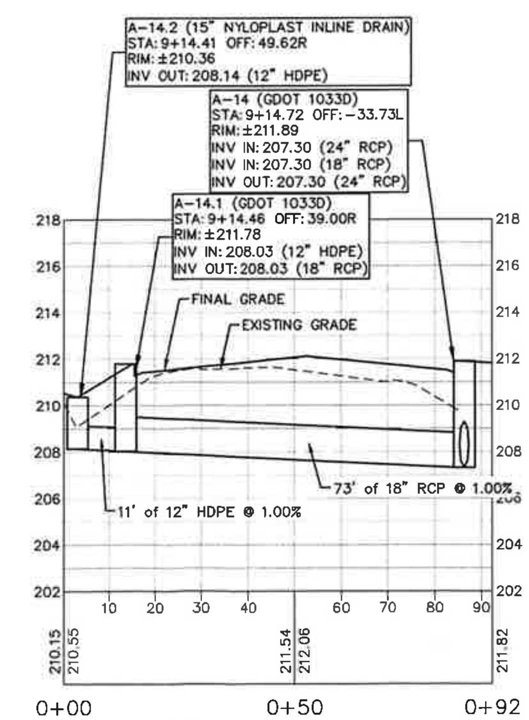
STORM A-11.1 TO A-11



STORM A-12.1 TO A-12



STORM A-13.1 TO A-13.2



STORM A-14.2 TO A-14

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OLD CLYATTVILLE ROAD WIDENING
PI#0016285

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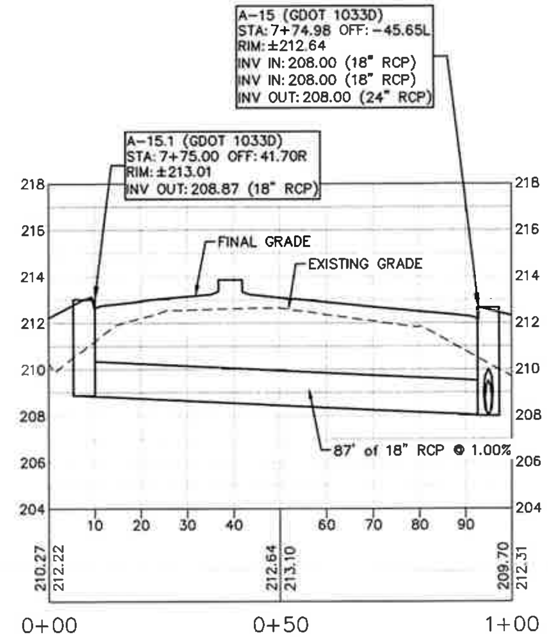
GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MELBAN DRAFT

GSWCC LEVEL II CERT. #49262

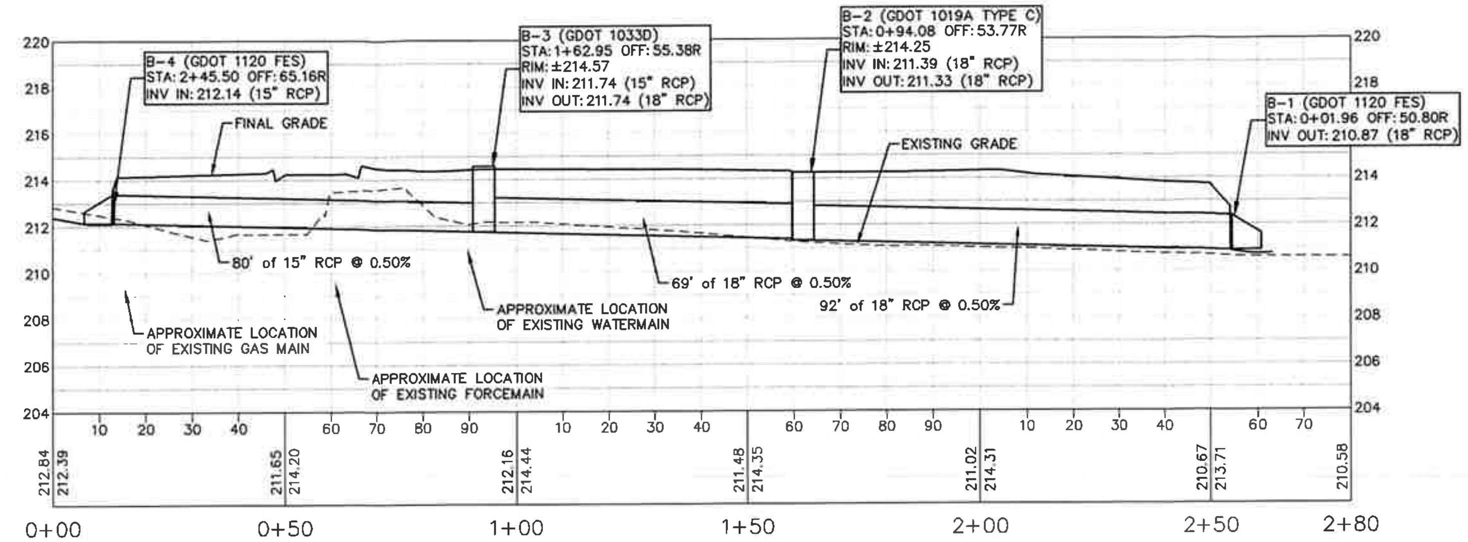
DRAINAGE PROFILES

22-005

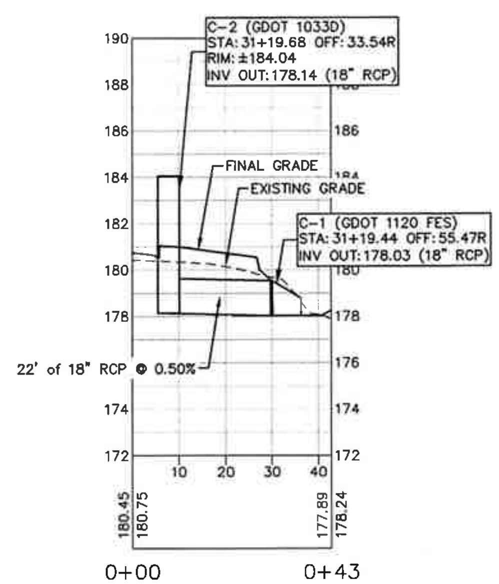
26 OF 74 SHEETS



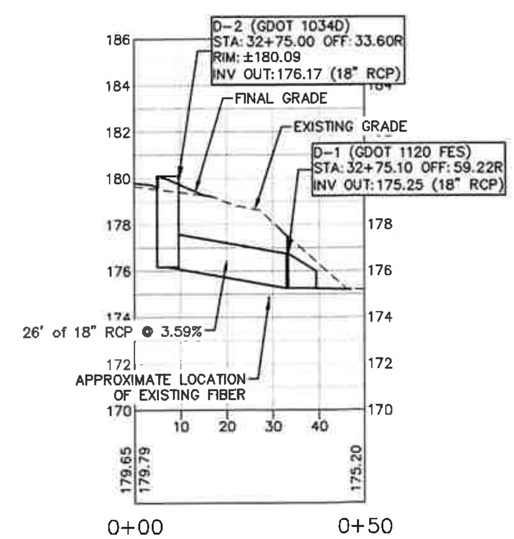
STORM A-15.1 TO A-15



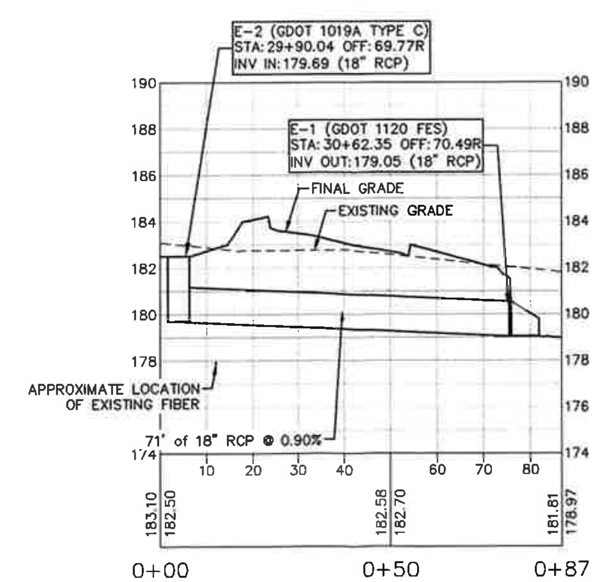
STORM B-4 TO B-1



STORM C-2 TO C-1



STORM D-2 TO D-1



STORM E-2 TO E-1

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OLD CLYATTVILLE ROAD WIDENING
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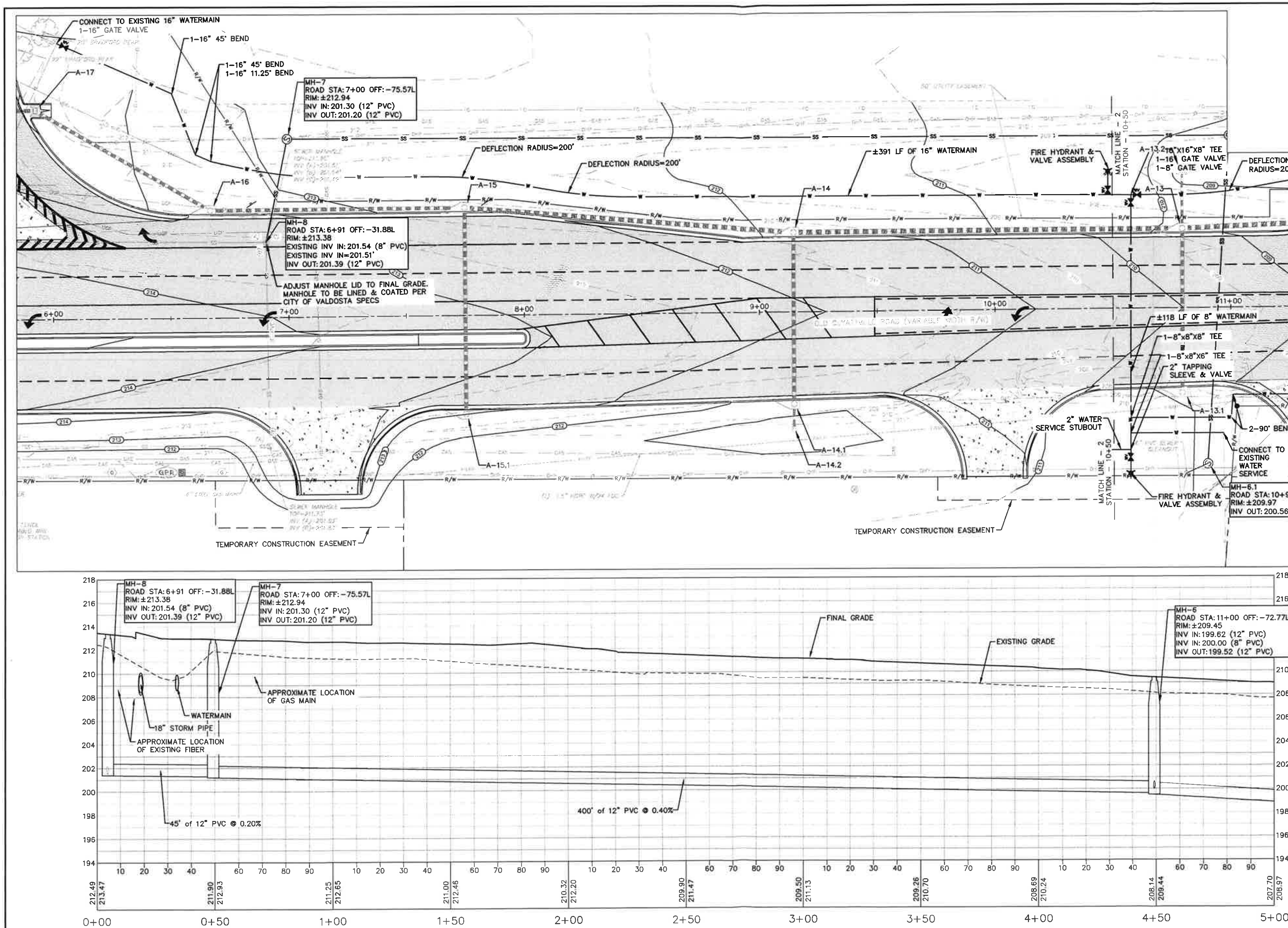
GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

DRAINAGE PROFILES
STORM B, C, D, & E

22-006

S:\0026-40 (City of Valdosta, Old Clyattville Road Widening)\DWG-PRODUCTION\22-Drainage Profiles.dwg 6/7/2023 2:16 PM



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GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MILLICAN DRAFT

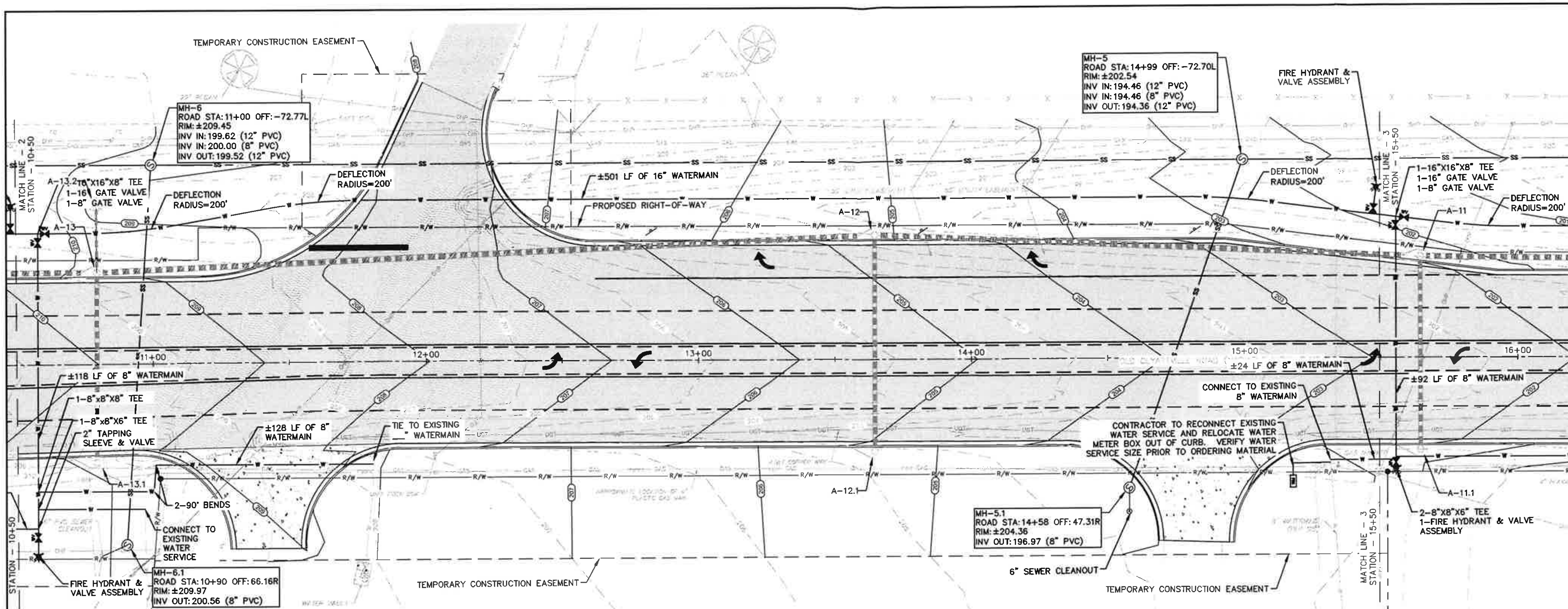
GSWCC LEVEL II CERT. #49262

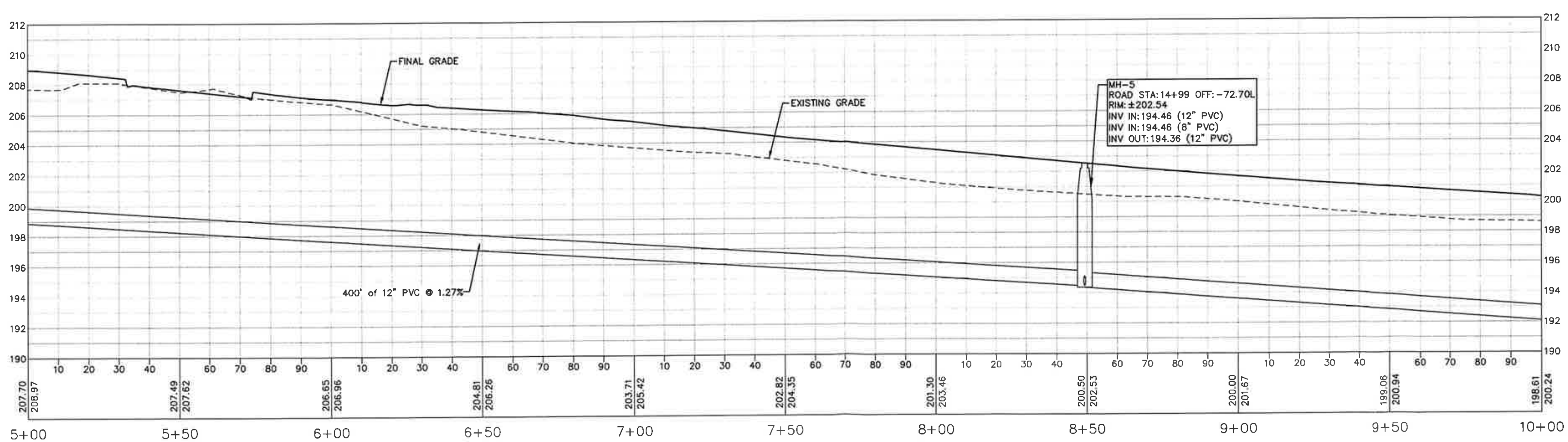
UTILITY PLANS (ROAD STA 0+00 - 5+00)

24-001

43 OF 74 SHEETS

S:\0026-40 (City of Valdosta, Old Clyattville Road Widening)\DWG-PRODUCTION\24-Utility Plans.dwg 6/7/2023 2:22 PM





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GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

UTILITY PLANS (ROAD STA 5+00 - 10+00)

24-002

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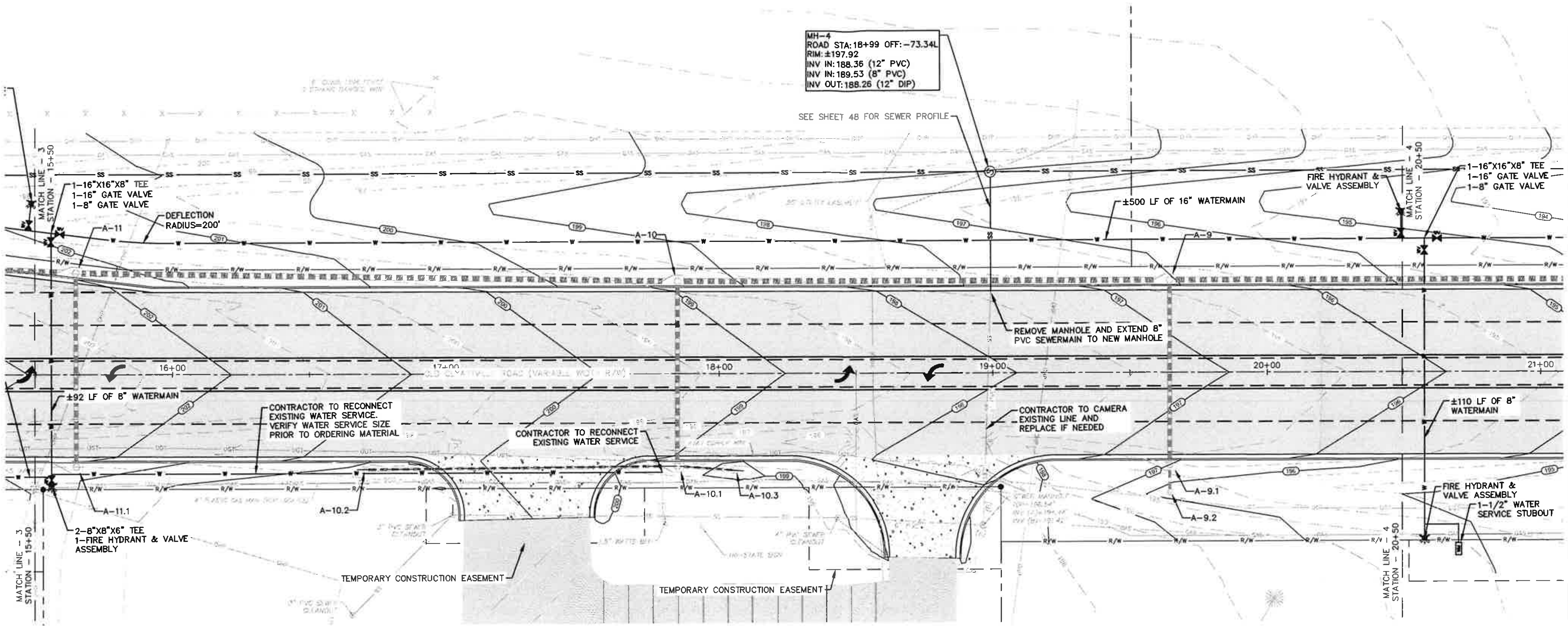

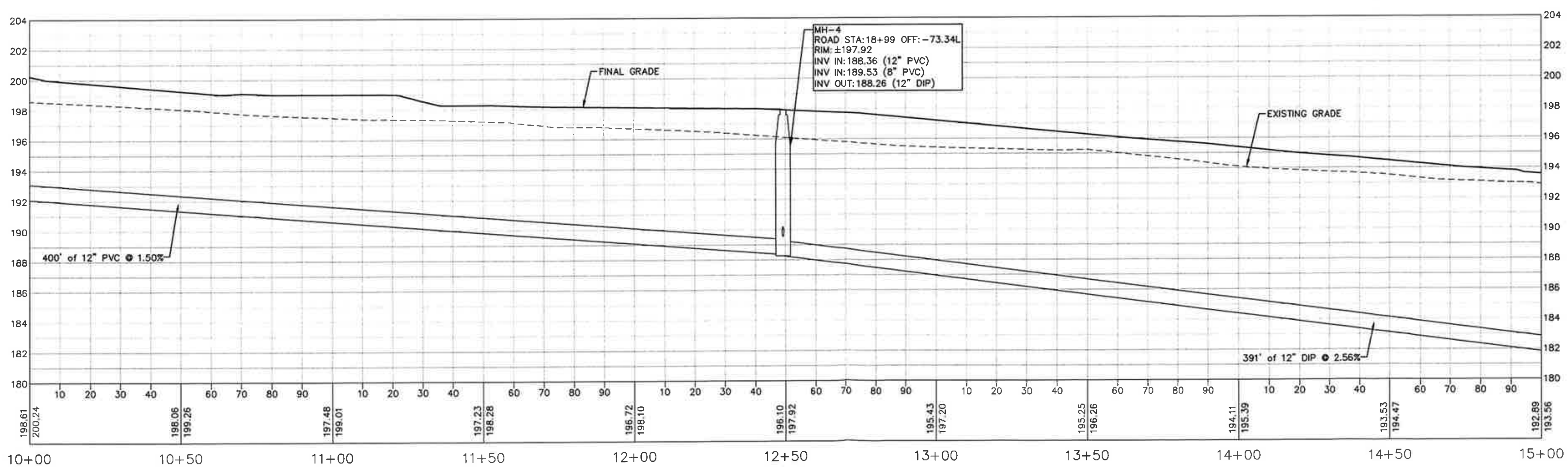

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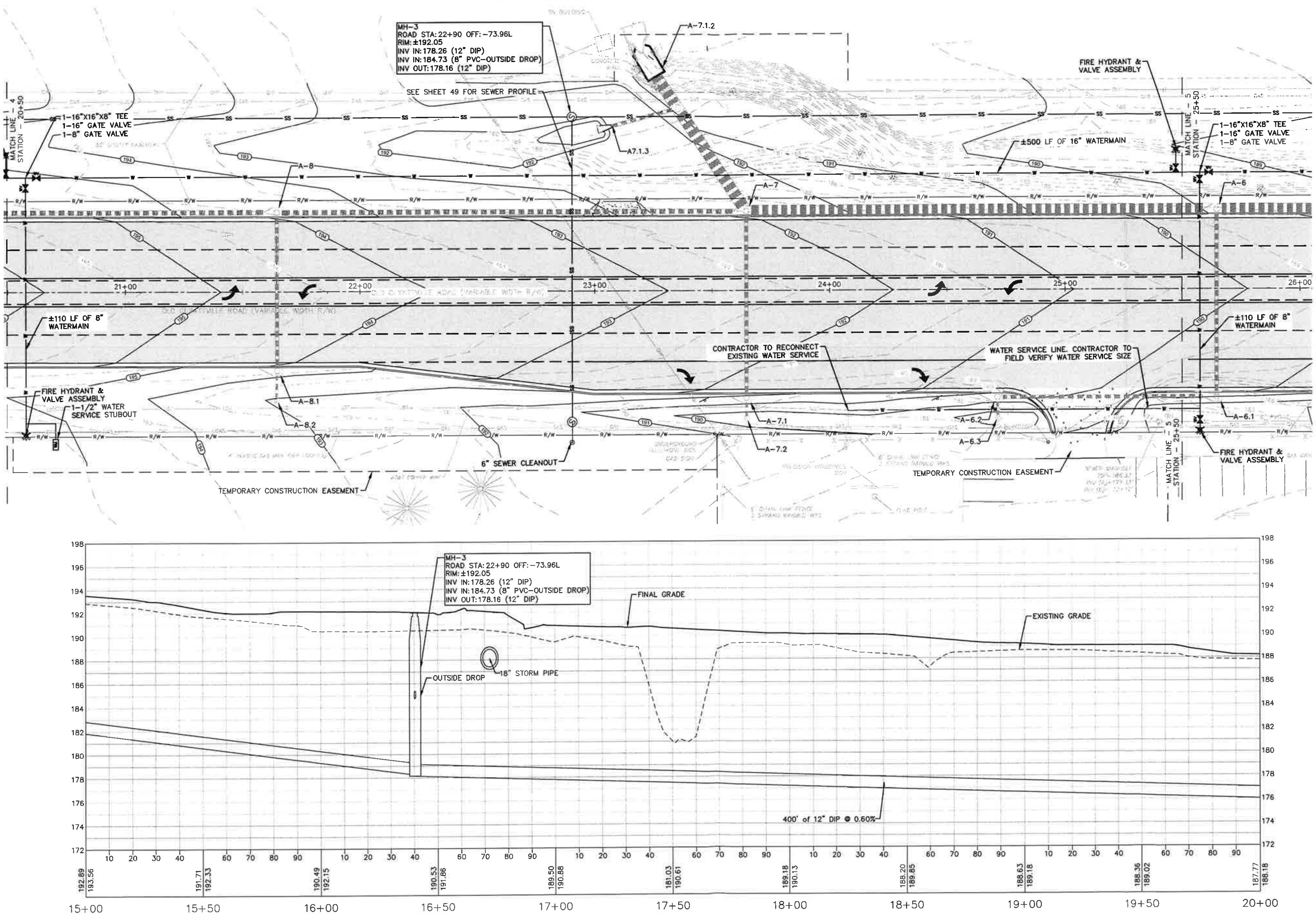
GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

UTILITY PLANS (ROAD STA 10+00 - 15+00)

24-003



CIVIL • AGRICULTURAL • ENVIRONMENTAL

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FL CORP# F04000002135
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Valdosta, GA 31604
Telephone: 229-253-0900
Fax: 229-253-1842
E-mail: lea@lea-pc.com

OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE
11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS	
DATE	DESCRIPTION

GRAPHIC SCALE

0 10 20 40

(IN FEET)
1 INCH = 20 FEET (HOR)
1 INCH = 4 FEET (VERT)

NORTH

SCALE:	1"=20'
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO.	0026-40

GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

UTILITY PLANS (ROAD STA 15+00 - 20+00)

24-004

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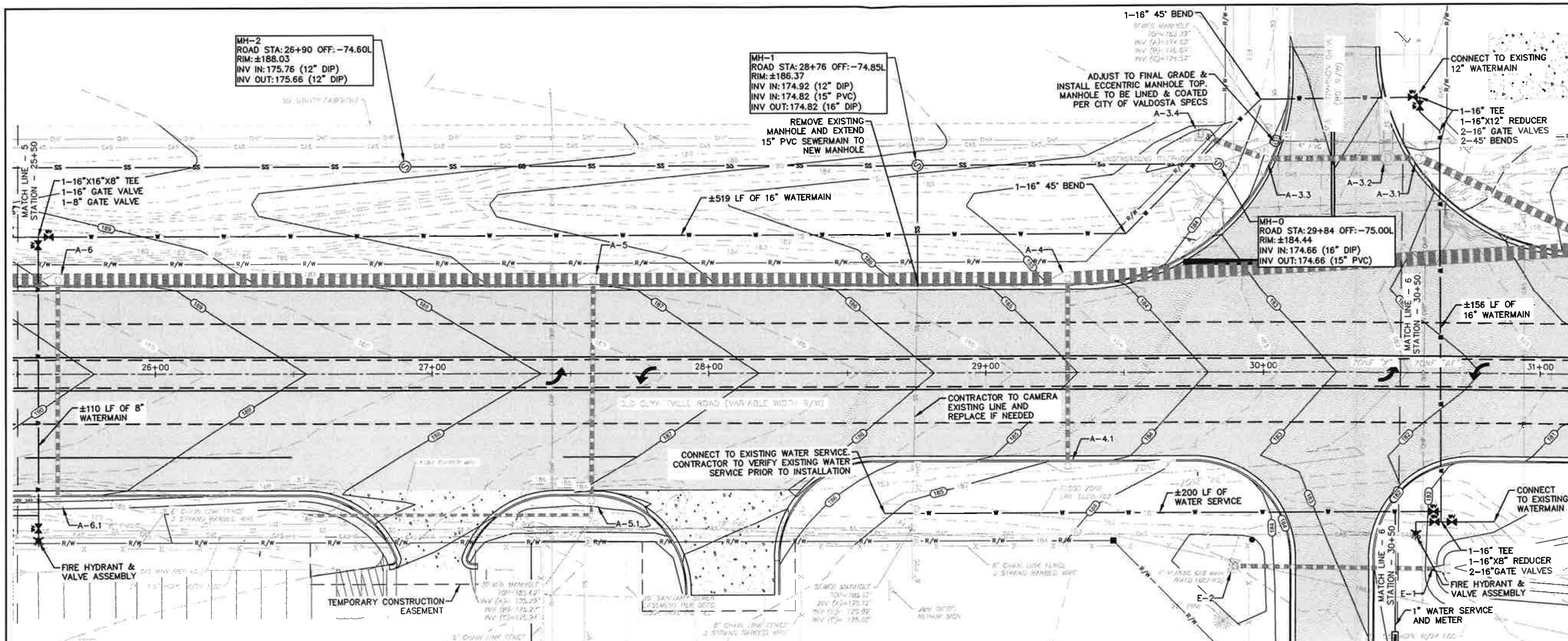

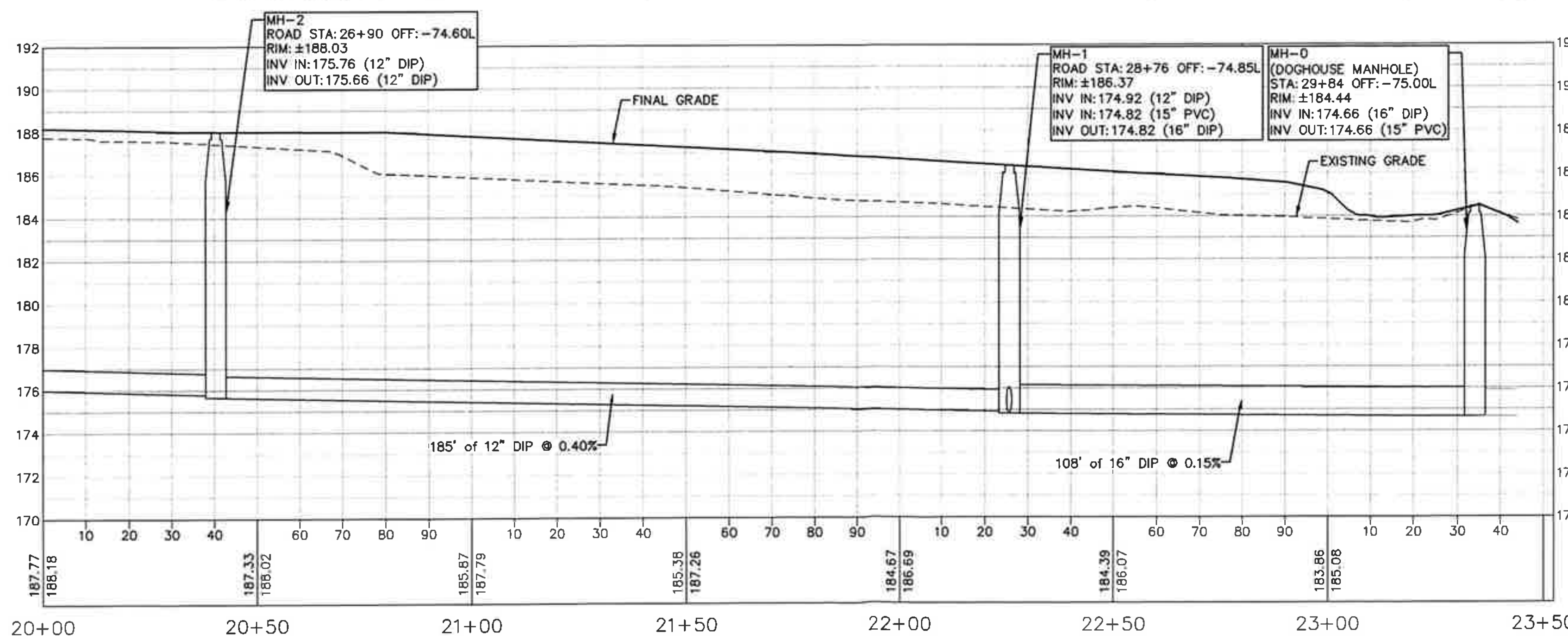

STA 20+00 TO END

LEA
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OLD CLYATTVILLE ROAD WIDENING
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SUBMITTAL DATE:	03-24-23
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GEORGIA REGISTERED PROFESSIONAL ENGINEER CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

UTILITY PLANS (ROAD STA 20+00 - END)

24-005

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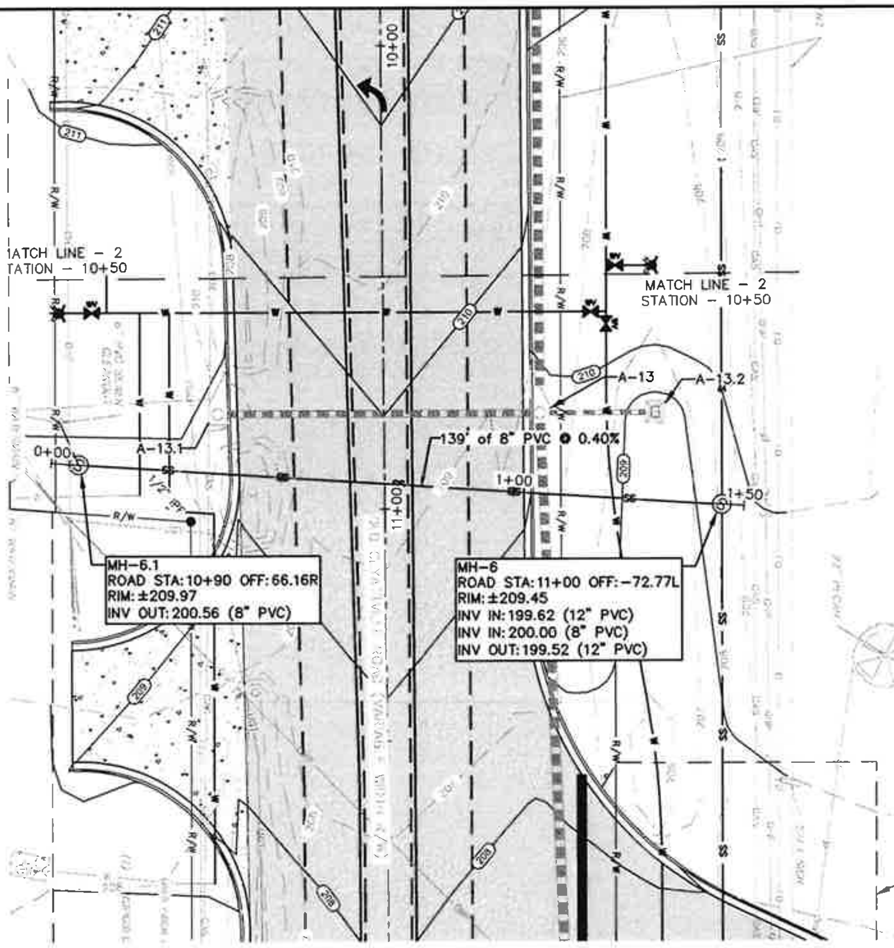

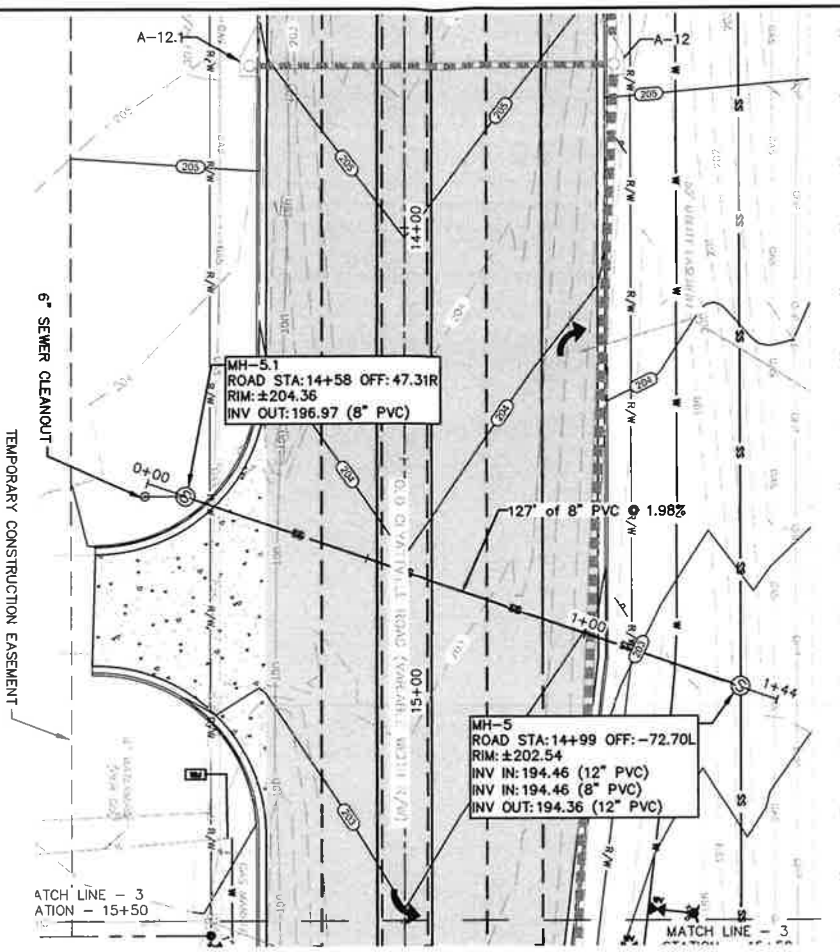

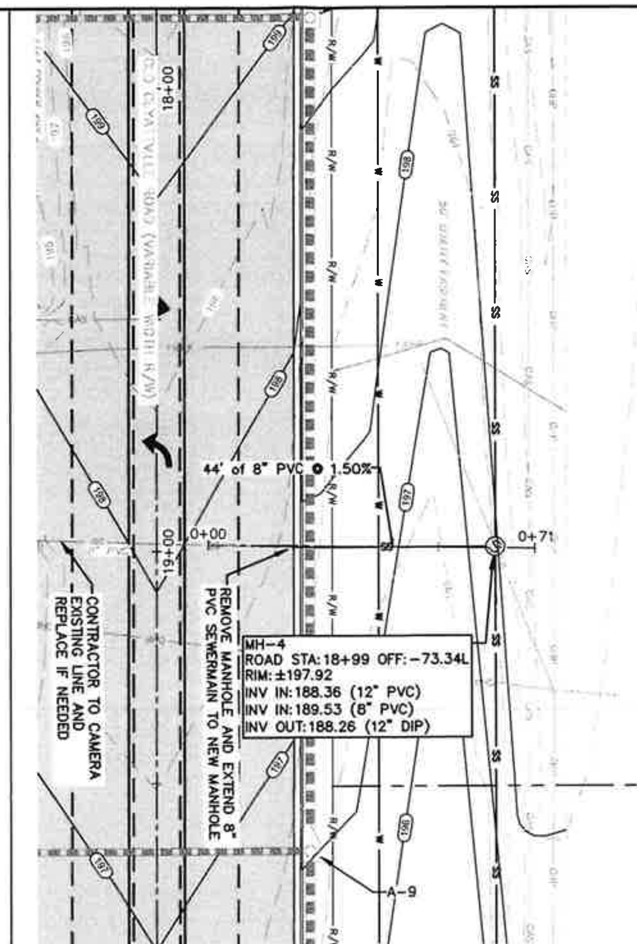

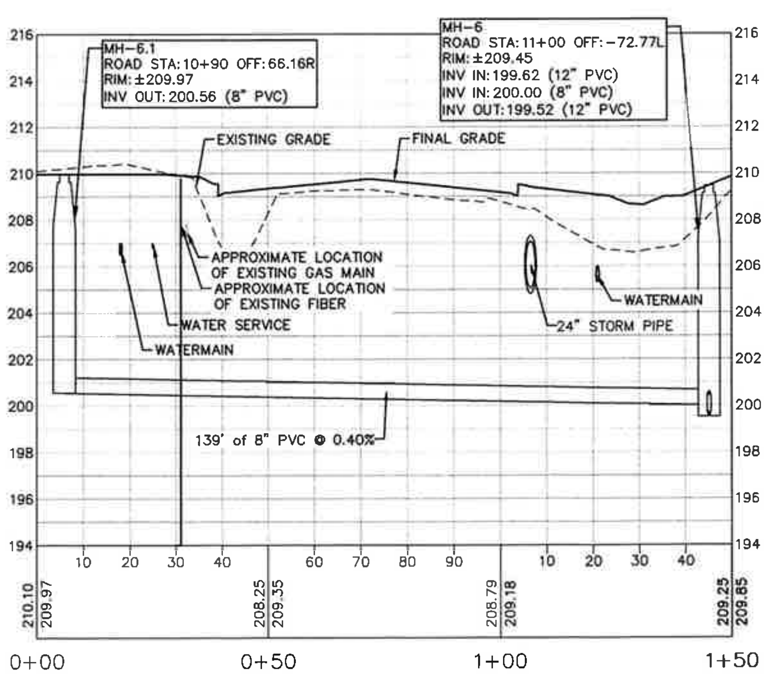

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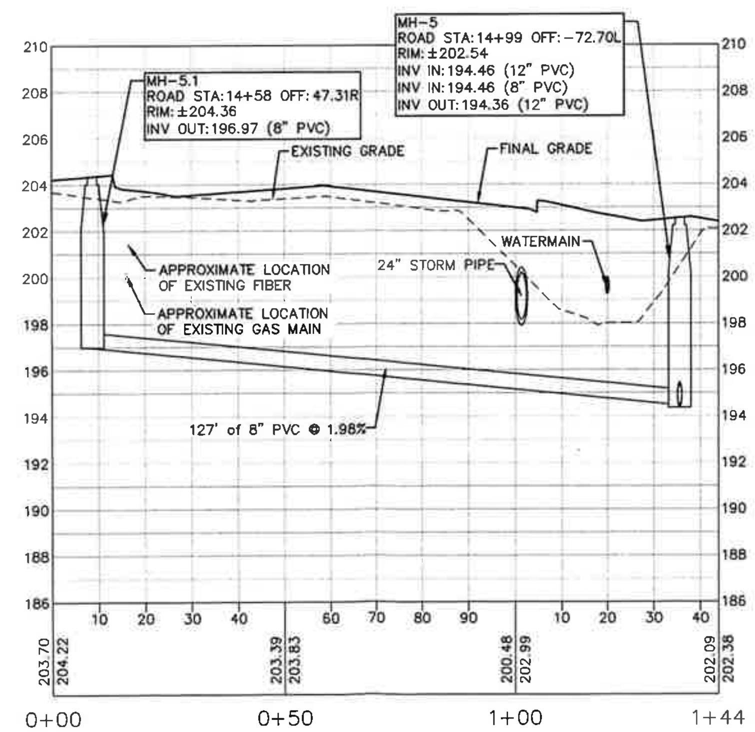

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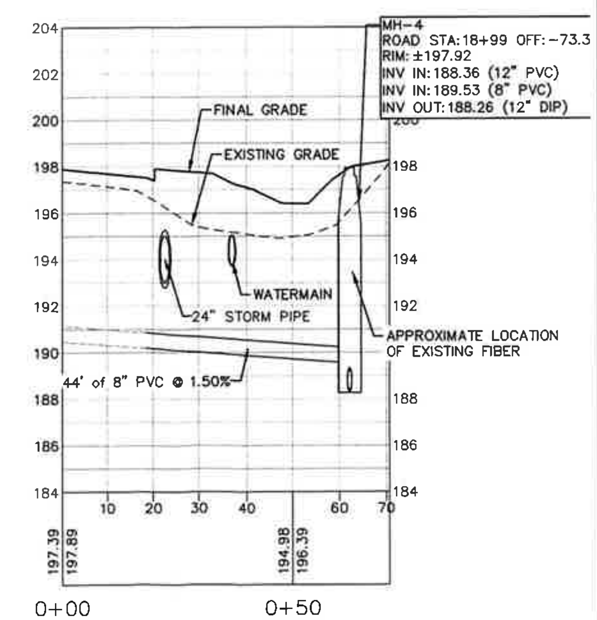

SEWER TIE TO MH-4

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OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE
11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS

DATE	DESCRIPTION

GRAPHIC SCALE
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(IN FEET)
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1 INCH = 4 FEET (VERT)

SCALE:	1"=20'
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
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GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIGAN DRAFT

GSWCC LEVEL II CERT. #49262

UTILITY PLANS
(MH 3.1, 4.1, & 1)

24-006

48 OF 74 SHEETS

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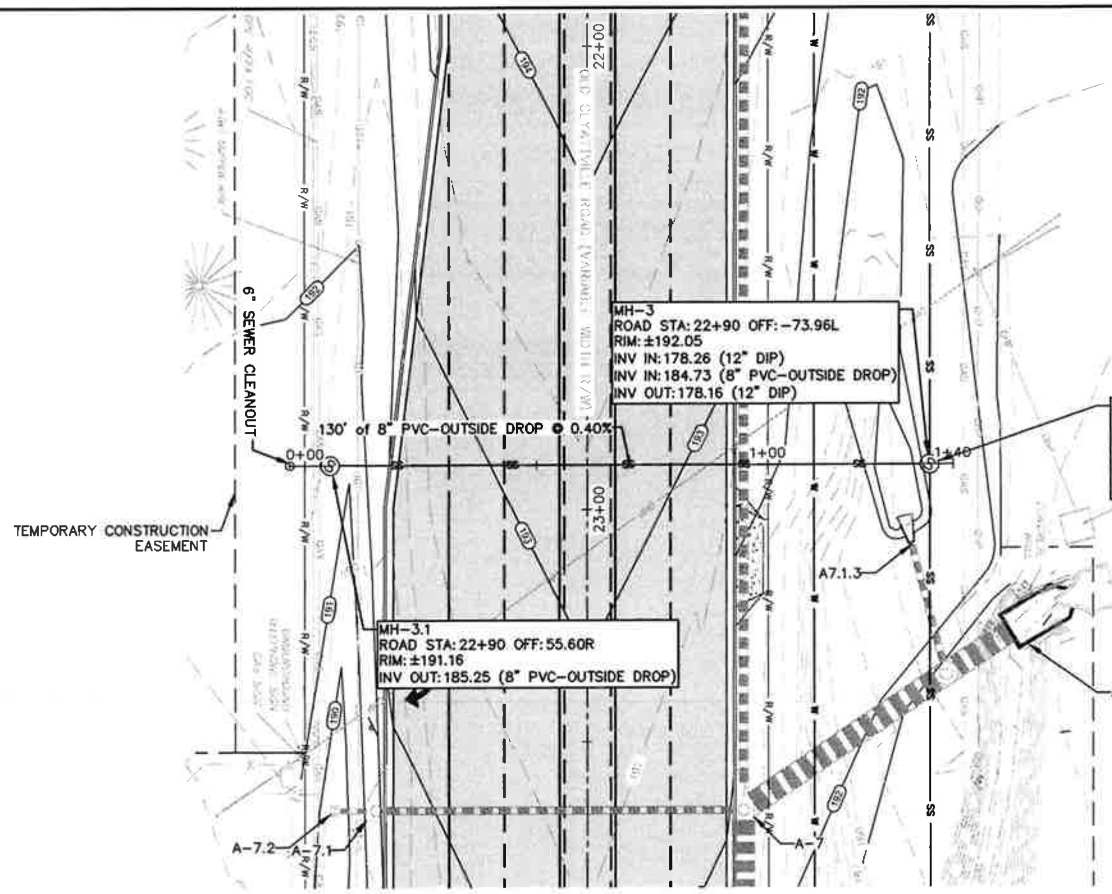

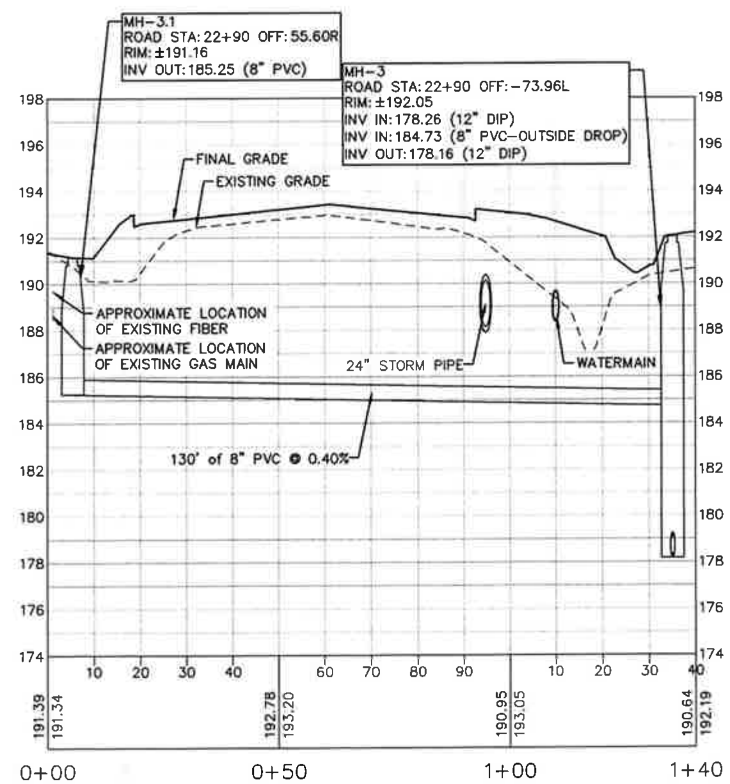

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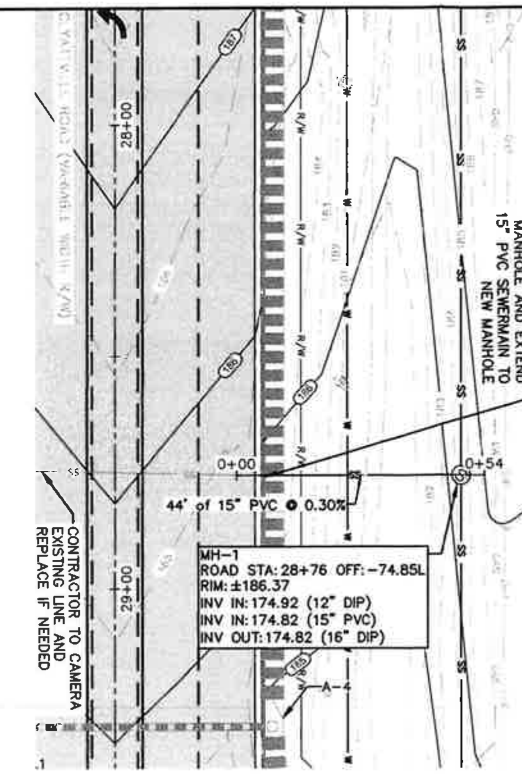

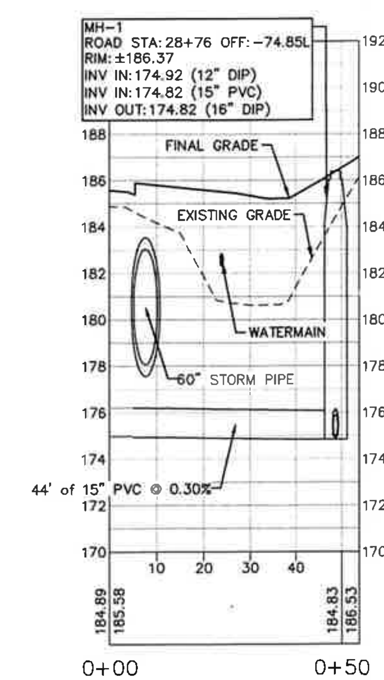

EXISTING LINE TO MH-1

LEA
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GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL CLAYTON MILLIGAN
DRAFT

GSWCC LEVEL II CERT. #49262

UTILITY PLANS
(MH 4.2 TO MH 4.1)

24-007

S:\0026-40 (City of Valdosta, Old Clyattville Road Widening)\DWG-PRODUCTION\24-Utility Plans.dwg 6/7/2023 2:23 PM

SITE SUMMARY

24 HOUR CONTACT: TBD
PRIMARY PERMITTEE:
City of Valdosta
Ben O'Dowd
300 N. Lee Street
Valdosta, GA 31601
bodowd@valdostacity.com
229-259-3530

TOTAL SITE AREA (ACRES): ±14.1 Acres
TOTAL DISTURBED AREA (ACRES): ±14.1 Acres

SITE NAME and DESCRIPTION OF CONSTRUCTION ACTIVITY:
Old Clyattville Road Widening
The proposed site is located along a portion of Old Clyattville Road between Gil Harbin and Mud Swamp (Begin N: 30.803144 W: 83-291143, End N: 30.794780 W: 83.285504) in Lowndes County, Valdosta, Georgia. The site is currently an existing highway. There are jurisdictional wetlands on the site. The proposed work includes clearing, grading, road construction, and installation of infrastructure. A portion of the site is within a 100-year flood plain. The site is in Land Lot 29 & 34 of the 11th Land District. The project is proposed to begin in January 2024 with project completion estimated in January 2025.

NAME OF INITIAL RECEIVING WATER:
- City of Valdosta Storm System
- Mud Swamp Basin

WATER QUALITY SAMPLING LOCATIONS:
Location #1–Outfall of Structure A-1
A turbidity limit of 50 NTUs has been established for this location based on the following criteria:
- Warm Water Fishery
- Construction Site Size: 10.01 – 25 ACRES
- Surface water drainage area: 0–4.99 mi^2

RUNOFF COEFFICIENT OR PEAK FLOW:
PRE-DEVELOPMENT= [XXX]
POST-DEVELOPMENT= [XXX]

GENERAL ESPC NOTES

1. **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.**
2. **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.**
3. **ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.**
4. 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.
5. The design professional who prepared the ES&PC plan is to inspect the installation of the initial sediment storage requirements, perimeter control BMPs, and sediment basins within 7 days after installation.
6. 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.
7. Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit.
8. This ES&PC plan is in compliance with waste disposal, sanitary sewer, or septic tank regulations.
9. All construction shall be in accordance with City of Valdosta standards and specifications.
10. All erosion control measures shall be inspected by the contractor daily. Any damages observed shall be repaired by the end of that day.
11. Contractor shall be responsible for installing the minimum required erosion control measures as shown on plans. Contractor is also responsible for ensuring compliance with NPDES law.
12. The contractor is to verify all elevations of proposed structures as shown to ensure positive drainage prior to any construction.
13. **ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY FIELD INSPECTOR.**
14. Upon completion of the project and receipt of certificate of occupancy, the contractor shall remove all temporary erosion control measures and dispose of them unless noted on plans.

EROSION AND SEDIMENT CONTROLS

SEQUENCE OF MAJOR ACTIVITIES: Initial sediment storage requirements and perimeter control BMPs
1. Clearing, grubbing, rough grading
2. Maintenance of best management practices on-going throughout project
3. Demolition of existing structures
4. Intermediate grading and drainage BMPs
5. Infrastructure construction
6. Final grading
7. Final BMPs

BUFFER ENCROACHMENTS:
- A Buffer Encroachment is not needed for this project.
- A Buffer variance is not required for this project.

SEDIMENT BASINS:
"For common drainage locations a temporary (or permanent) sediment basin providing at least 1800 cubic feet (67 cubic yards) of storage per acre drained, or equivalent control measures, shall be provided until final stabilization of the site." Implementation and maintenance of sediment basins shall be conducted according to paragraph IV.D.3.a.(3) of Permit GAR 100002.

or REASON WHY NOT INSTALLED

STABILIZATION MEASURES
A stabilized construction exit (Co) shall be provided to help reduce vehicle tracking of sediments. Paved streets used to access the site and those within shall be swept as needed to remove any excess mud, dirt or rock tracked from the site. Dump trucks hauling material from the construction site shall be covered with tarpaulins. Silt fencing (Sd1) shall be utilized downstream of all disturbed areas. Temporary sediment traps (Sd2) shall be installed around all stormwater structures. Check dams (Cd) shall be installed in areas of concentrated flow. Dust control (Du) shall be utilized on all disturbed areas. Temporary and permanent grassing (Ds2, Ds3) shall be applied according to the schedule shown in the specifications for the practice. Stabilization measures shall be initiated as soon as practicable but in no case later than 14 days after construction has temporarily or permanently ceased.

POST-CONSTRUCTION BMPs
Stormwater detention ponds and vegetated swales are permanent measures that will be installed to control pollutants after construction operations are complete. Velocity dissipation devices will be placed at discharge locations and along the length of any outflow channel in order to provide a non-erosive flow so that the natural physical and biological characteristics and functions of the water course are maintained and protected. The installation of these devices may be subject to Section 404 of the federal Clean Water Act.

OTHER CONTROLS

TIMING OF CONTROLS/MEASURES:
All control measures shall be implemented according to the construction schedule shown in the Sequence of Major Activities section.

NON-STORMWATER DISCHARGES:
It is expected that the following non-stormwater discharges will occur from the site during the construction period
- Water from water line flushings and fire hydrants.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- Uncontaminated ground water (from dewatering excavation).

All non-stormwater discharges shall be directed to a sediment basin prior to discharge.

POTENTIAL POLLUTANTS:
The following potential pollutants typically identified with construction may be present on-site. Pollution prevention measures implemented as part of this plan will reduce the potential for contact of these pollutants with stormwater.
- Petroleum products
- Construction debris
- Silt
- Fertilizers
- Paints and related materials
- Chlorinated water line flushings
- Sanitary waste

SPILL PREVENTION:
Material management practices:
Good Housekeeping: The following good housekeeping practices shall be followed on-site during the construction project.
- An effort shall be made to store only enough of any product utilized on-site as is required to do the job.
- All materials stored on-site shall be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
- Building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site, provide cover (e.g. plastic sheeting, temporary roofs) to minimize the exposure of these products to precipitation and to stormwater, or a similarly effective means designed to minimize the discharge of pollutants from these areas. Minimization of exposure is not required in cases where exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk to stormwater contamination (such as final products and materials intended for outdoor use).
- Products shall be kept in their original containers with the original manufacturer's label.
- Substances shall not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product shall be used up before disposing of the container.
- Manufacturer's recommendations for proper use and disposal shall be followed.
- The site superintendent shall inspect daily to ensure proper use and disposal of materials on-site.

Hazardous Products:
- Hazardous products used on-site shall be kept in original containers unless they are not resealable.
- Original labels and safety data sheets (MSDSs) shall be retained on site.
- Surplus hazardous products shall be disposed of according to Federal, State, and Local guidelines.

Fertilizers:
- Fertilizers used for enhancement of stabilization measures shall be applied according to applicable rate schedules.
- Fertilizers shall be "worked" into the soil to minimize exposure to stormwater.
- Fertilizer materials stored on-site shall be managed in a manner to reduce the potential for stormwater contamination.

Paints:
- Paint materials on-site shall be stored in tightly sealed containers.
- Excess paint and paint waste shall be disposed of according to applicable Federal, State, and Local guidelines.

SPILL CONTROL PRACTICES:
In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices shall be followed for spill prevention and cleanup:
- Manufacturers' recommended methods for spill cleanup shall be clearly posted and site personnel shall be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup shall be kept in material storage area on-site.
- All spills shall be cleaned up immediately after discovery.
- Spills of toxic or hazardous material shall be reported to the appropriate Federal, State, or local government agency, regardless of the size.
- The spill prevention plan shall be adjusted to include measures to prevent spills from reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the clean up measures shall also be included.

The site superintendent responsible for the day-to-day operations shall be the spill prevention and cleanup coordinator.

WASTE DISPOSAL:
- Waste Materials:

All trash and construction debris from the site shall be deposited in a dumpster. The dumpster shall be emptied when full. No construction waste materials shall be buried on-site. All personnel shall be instructed regarding the correct procedure for waste disposal. All waste disposal practices shall be conducted in accordance with State and/or local waste disposal regulations.
- Hazardous Waste:

All hazardous waste materials shall be disposed of in the manner specified by State or local regulation or by the manufacturer. Site personnel shall be instructed in these practices and the Project Superintendent, the individual who manages day-to-day site operations, shall be responsible for seeing that these practices are followed.
- Sanitary Waste:

Sanitary waste generated from portable units shall be emptied as required to provide for sanitary conditions. All sanitary waste disposal practices shall be conducted in accordance with State and/or local waste disposal regulations.

INSPECTIONS AND RECORD KEEPING

The following is the complete requirements of inspections and record keeping as stated in Part IV.D.4.a of the Permit:

4. Inspections.
a. Permittee 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 fourteen (14) 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 is submitted to EPD) 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. 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).

(5). Based on the results of each inspection, the site description and the pollution prevention and control measures identified in the Erosion, Sedimentation and Pollution 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 statement 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 of this permit.

SAMPLING FREQUENCY AND REPORTING OF RESULTS

The following is the complete requirements of inspections and record keeping as stated in Part IV.D.6.d and Part IV.E of the Permit:

Part IV.D.6.d Sampling Frequency
(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 stormwater discharge to a monitored receiving water and/or from a monitored outfall location within 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 stormwater 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 stormwater discharge that occurs during normal business hours as defined in this permit 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 representative sampling location;
(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 stormwater discharge that occurs during normal business hours as defined in this permit 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 representative 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-storm event inspections determine that BMPs are properly designed, installed and maintained;
(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.

Part IV.E Reporting

1. The applicable permittees are required to submit the sampling results to the EPD 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. Sampling and analysis of any stormwater discharge(s) or the receiving water(s) beyond the minimum frequency stated in this permit must be reported in a similar manner to the EPD. Sampling reports must be submitted to EPD using the electronic submittal service provided by EPD. Sampling reports must be submitted to EPD until such time as a NOT is submitted in accordance with Part VI.
2. 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
   i. Certification statement that sampling was conducted as per the Plan.
3. 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.

RETENTION OF RECORDS

The following is the complete requirements of retention of records as stated in Part IV.F of the Permit:

Part IV.F 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 VI:
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.2. 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.

SAMPLING PROCEDURES AND ANALYTICAL TESTING METHODS

1. 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; 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.

Sample Type
- 1.1. Sample containers should be labeled prior to collecting the samples.
- 1.2. Samples should be well mixed before transferring to a secondary container.
- 1.3. 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.
- 1.4. 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.

2. Sampling Points
- 2.1. Ideally the samples should be taken from the horizontal and vertical center of the receiving water(s) or the stormwater outfall channel(s).
- 2.2. Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall stormwater channel.
- 2.3. The sampling container should be held so that the opening faces upstream.
- 2.4. The samples should be kept free from floating debris.

NOTICE OF TERMINATION

Upon final stabilization, A Notice of Termination shall be submitted to GA EPD in accordance with Permit GAR 100002 on forms provided by EPD (if available) or in the format outlined in the permit.

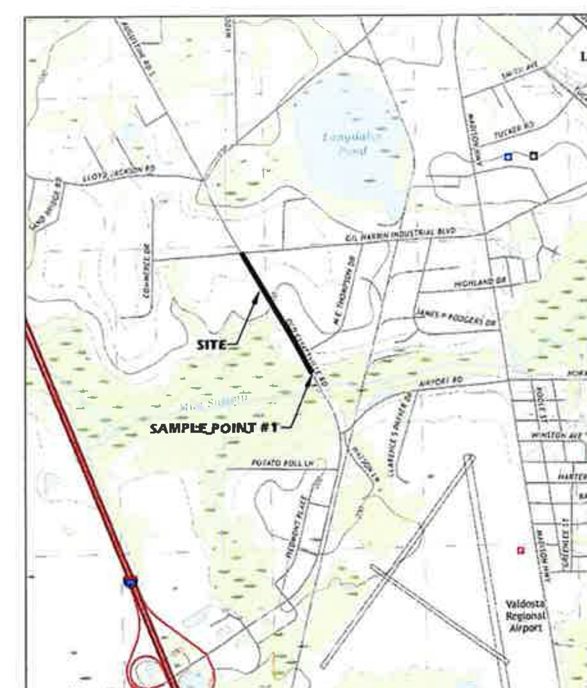
DESIGN PROFESSIONAL CERTIFICATION

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.

" 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. GAR100002."

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for the monitoring of all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent steams and other water bodies."

Clayton Milligan, P.E.
Level II Certification # 00000049262
GA PE# 34187



USGS MAP
N.T.S.

CIVIL • AGRICULTURAL • ENVIRONMENTAL
GA CORP# 0419099
FL CORP# F04000002135
P.O. Box 2830
3998 Inner Perimeter Road
Valdosta, GA 31604
Telephone: 229-253-0900
Fax: 229-253-1642
E-mail: lea@lea-pc.com

OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE 11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS	
DATE	DESCRIPTION

Know what's **below.** **Call** before you dig.
IF YOU DIG GEORGIA... CALL US FIRST!
UTILITIES PROTECTION CENTER
IT'S THE LAW
www.gaupc.com

SCALE:	N.T.S.
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO.	0026-40

DRAFT

ESPC DETAILS (SHEET 1 OF 3)

51-001

S:\0026-40 (City of Valdosta, Old Clyattville Road Widening)\DWG-PRODUCTION\51-001 ESPC Notes.dwg 8/7/2023 2:38 PM

Du DUST CONTROL ON DISTURBED AREAS

DEFINITION

CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITES, ROADS AND DEMOLITION SITES.

PURPOSE

TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES AND REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY BE HARMFUL OR INJURIOUS TO HUMAN HEALTH, WELFARE, OR SAFETY, OR TO ANIMALS OR PLANT LIFE.

CONDITIONS

THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST WHERE ON AND OFF-SITE DAMAGE MAY OCCUR WITHOUT TREATMENT.

METHODS AND MATERIALS

A. TEMPORARY METHODS

MULCHES: SEE STANDARD DS1 – DISTURBED AREA STABILIZATION (WITH MULCHING ONLY) IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, CURRENT EDITION. SYNTHETIC RESINS MAY BE USED INSTEAD OF ASPHALT TO BIND MULCH MATERIAL. TACKIFIERS, BINDERS, AND RESINS SUCH AS CURASOL OR TERRATACK SHOULD BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

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

SPRAY-ON ADHESIVES: THESE ARE USED ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

TILLAGE: THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

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

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

B. PERMANENT METHODS

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

TOPSOILING: THIS ENTAILS COVERING THE SURFACE WITH LESS EROSIVE SOIL MATERIAL.

STONE: COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

ADHESIVE	WATER DILUTION	TYPE OF NOZZLE	APPLICATION RATE (Gallons/Acre)
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1,200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN-IN-WATER EMULSION	4:1	FINE SPRAY	300

EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL MINIMIZE THE AREAS TO BE DISTURBED SIMULTANEOUSLY.
2. A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES.
3. THE CONTRACTOR SHALL VERIFY WITH ENGINEER THE NOTICE OF INTENT HAS BEEN SUBMITTED TO EPD PRIOR TO CONSTRUCTION.
4. TREE PROTECTION FENCING SHOULD BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBANCE ACTIVITY AND MAINTAINED UNTIL FINAL LANDSCAPE IS INSTALLED. THE TREE PROTECTION FENCING SHOULD BE INSPECTED DAILY. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.
5. AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES, THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN PROFESSIONAL. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT DESIGN PROFESSIONAL APPROVES THE INSTALLATION OF SAID EROSION CONTROL MEASURES. IF UNFORESEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTION.
6. ALL DISTURBED AREAS LEFT MULCHED AFTER 30 DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION.
7. SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED PER REQUIREMENTS OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".
8. THE CONSTRUCTION AREA SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.
9. DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES AND THEREFORE LIMITED DURATIONS, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED.
10. SEDIMENT SHALL NOT BE WASHED INTO INLETS. IT SHALL BE REMOVED FROM THE SEDIMENT TRAPS AND DISPOSED OF AND STABILIZED SO THAT IT WILL NOT ENTER THE INLETS AGAIN.
11. EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. 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.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING BARRIERS AT THE TOE OF ALL SLOPES UNDER CONSTRUCTION. THESE BARRIERS SHALL BE AS SHOWN IN THE PLANS. THESE BARRIERS MAY BE RELOCATED AND REUSED AFTER PERMANENT SLOPE STABILIZATION BECOMES FULLY ESTABLISHED. AS THEY ARE RELOCATED, ANY DEFECTIVE MATERIALS IN THE BARRIER SHALL BE REPLACED. IN ADDITION, ALL DEBRIS AND SILT AT THE PREVIOUS LOCATION SHALL BE REMOVED.
13. CUT AND FILL SLOPES ARE NOT TO EXCEED 2H:1V.
14. ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF TEN FEET OR GREATER, AND CUTS AND FILLS WITHIN STREAM BUFFERS, SHALL BE STABILIZED WITH SOD. SEE SEPARATE DETAILS FOR ADDITIONAL INFORMATION.
15. TYPE "A" SILT FENCE SHALL BE PLACED AT THE TOE OF ALL DIRT STOCKPILE AREAS.
16. CHECK DAMS SHALL BE INSTALLED IN AREAS OF CONCENTRATED FLOWS AS SHOWN ON THE PLAN.
17. **ALL DRAINAGE SWALES SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.**
18. **ALL GRADED AREAS SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.**
19. **ALL ROADWAY AND PARKING SHOULDERS SHOULD BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.**
20. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
21. UPON COMPLETION OF THE PROJECT AND RECEIPT OF CERTIFICATE OF OCCUPANCY, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND DISPOSE OF THEM UNLESS NOTED ON PLANS.

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

DEFINITION

THE ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDLINGS FOR SEASONAL PROTECTION ON DISTURBED OR DENUDED AREAS.

PURPOSE

- TO REDUCE RUNOFF AND SEDIMENT DAMAGE OF DOWNSTREAM RESOURCES
- TO PROTECT THE SOIL SURFACE FROM EROSION
- TO IMPROVE WILDLIFE HABITAT
- TO IMPROVE AESTHETICS
- TO IMPROVE TILTH, INFILTRATION AND AERATION AS WELL AS ORGANIC MATTER FOR PERMANENT PLANTINGS.

CONDITIONS

THIS PRACTICE IS APPLICABLE ON AREAS SUBJECT TO EROSION FOR UP TO SIX MONTHS OR UNTIL THE ESTABLISHMENT OF FINISHED GRADE OR PERMANENT VEGETATIVE COVER. TEMPORARY VEGETATIVE MEASURES SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ENSURE ECONOMICAL AND EFFECTIVE STABILIZATION.

SPECIFICATIONS

1. GRADING AND SHAPING
   1.1. EXCESSIVE WATER RUN-OFF MUST BE CONTROLLED BY PLANNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BASINS AND OTHERS.
   1.2. NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.
2. SEEDBED PREPARATION
   2.1. WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED.
   2.2. WHEN USING CONVENTIONAL OR HAND-SEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAIN.
   2.3. WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH UNDISTURBED CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.
3. LIME AND FERTILIZER
   3.1. AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. APPLY AGRICULTURAL LIME AT A RATE OF ONE TON PER ACRE. GRADED AREAS REQUIRE LIME APPLICATION.
   3.2. SOILS CAN BE TESTED TO DETERMINE IF FERTILIZER IS NEEDED. ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED.
   3.3. ON SOILS OF VERY LOW FERTILITY, USE 500 TO 700 POUNDS OF 10-10-10 FERTILIZER OR THE EQUIVALENT PER ACRE (12-16 LBS./1,000SQ.FT.). IF THE SITE WILL PERMIT, APPLY BEFORE LAND PREPARATION AND DISK, RIP OR CHISEL TO INCORPORATE.
4. SEEDING: SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR.
5. IRRIGATION
   5.1. DURING TIMES OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION.
   5.2. THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL ENSURE GERMINATION OF THE SEED.
   5.3. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

SEEDING RATES FOR TEMPORARY SEEDING

SPECIES	ALONE		IN MIXTURE		PLANTING DATES **
	RATE PER 1,000 SQ.FT.	RATE PER ACRE *	RATE PER 1,000 SQ.FT.	RATE PER ACRE *	COASTAL AREA
Barley	3.3 lbs.	3 bushels	0.6 lbs.	1/2 bushel	9/1-12/31
Annual Lespedeza	0.9 lbs.	40 lbs.	0.2 lbs.	10 lbs.	1/15-3/15
Weeping Lovegrass	0.1 lbs.	4 lbs.	0.05 lbs.	2 lbs.	2/14-6/15
Browntop Millet	0.9 lbs.	40 lbs.	0.2 lbs.	10 lbs.	4/1-7/15
Pearl Millet	1.1 lbs.	50 lbs.	NOT RECOMMENDED FOR MIXTURES		4/1-8/31
Oats	2.9 lbs.	4 bushels	0.7 lbs.	1 bushel	9/1-11/30
Rye	3.9 lbs.	3 bushels	0.6 lbs.	1/2 bushel	9/1-2/28
Ryegrass	0.9 lbs.	40 lbs.	NOT TO BE USED IN MIXTURES		8/15-3/31
Sudangrass	1.4 lbs.	60 lbs.	NOT RECOMMENDED FOR MIXTURES		3/1-7/31
Triticale	3.3 lbs.	3 bushels	0.6 lbs.	1/2 bushel	1/1-1/31, 9/15-10/15, 12/15-12/31
Wheat	4.1 lbs.	3 bushels	0.7 lbs.	1/2 bushel	10/15-1/31

* UNUSUAL SITE CONDITIONS MAY REQUIRE HEAVIER SEEDING RATES
** SEEDING DATES MAY NEED TO BE ALTERED TO FIT TEMPERATURE VARIATIONS AND CONDITIONS.

CONSTRUCTION SCHEDULE

ACTIVITY	JAN 2024	FEB 2024	MAR 2024	APR 2024	MAY 2024	JUN 2024	JUL 2024	AUG 2024	SEP 2024	OCT 2024	NOV 2024	DEC 2024	JAN 2025
CLEARING & GRUBBING	X												
EROSION CONTROL DEVICES	X	X	X	X	X	X	X	X	X	X	X	X	X
GRADING	X	X	X										
BUILDING CONSTRUCTION					X	X	X	X	X	X	X	X	X
STORM DRAINAGE	X	X	X										
WATER, SEWER, UTILITIES		X	X	X									
PAVING					X								
FINE GRADING & LANDSCAPING					X								
TEMPORARY GRASSING AND TYPE OF GRASS	PEARL MILLET (APR–AUG) RYEGRASS, ANNUAL (SEP–MAR)												
FINAL GRASSING	SEE NOTE BELOW												

NOTE: FINAL GRASSING SHALL CONSIST OF SODDING ALL DISTURBED AREAS AFTER BUILDING CONSTRUCTION IS COMPLETED. IF ALL AREAS ARE NOT SODDED, THE FOLLOWING GRASSES SHALL BE PLANTED UNTIL PERMANENT VEGETATIVE COVER CAN BE ESTABLISHED:
BROWNTOP MILLET-JUNE THROUGH OCTOBER
UNHULLED BERMUDA-NOVEMBER THROUGH JANUARY
HULLED BERMUDA-FEBRUARY THROUGH MAY

Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

DEFINITION

THE PLANTING OF PERENNIAL VEGETATION SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON EXPOSED AREAS FOR FINAL PERMANENT STABILIZATION. PERMANENT PERENNIAL VEGETATION SHALL BE USED TO ACHIEVE FINAL STABILIZATION.

PURPOSE

- TO PROTECT THE SOIL FROM EROSION
- TO REDUCE DAMAGE FROM SEDIMENT AND RUNOFF TO DOWNSTREAM AREAS.
- TO IMPROVE WILDLIFE HABITAT AND VISUAL RESOURCES.
- TO IMPROVE AESTHETICS.

REQUIREMENT FOR REGULATORY COMPLIANCE

THIS PRACTICE SHALL BE APPLIED IMMEDIATELY TO ROUGH GRADED AREAS THAT WILL BE UNDISTURBED FOR LONGER THAN SIX MONTHS. THIS PRACTICE OR SODDING SHALL BE APPLIED TO ALL AREAS AT FINAL GRADE. "FINAL STABILIZATION" MEANS THAT ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED, AND THAT 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). FINAL STABILIZATION APPLIES TO EACH PHASE OF CONSTRUCTION. FOR LINEAR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL OR SILVICULTURAL PURPOSES, FINAL STABILIZATION MAY BE ACCOMPLISHED BY STABILIZING THE DISTURBED LAND FOR ITS AGRICULTURAL OR SILVICULTURAL USE. UNTIL THIS STANDARD IS SATISFIED AND PERMANENT CONTROL MEASURES AND FACILITIES ARE OPERATIONAL, INTERIM STABILIZATION MEASURES AND TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL NOT BE REMOVED.

CONDITIONS

PERMANENT PERENNIAL VEGETATION IS USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS, AND OTHER DENUDED AREAS.

CONSTRUCTION SPECIFICATIONS

1. GRADING AND SHAPING
   1.1. GRADING AND SHAPING MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT.
   1.2. WHEN CONVENTIONAL SEEDING AND FERTILIZING ARE TO BE DONE, GRADE AND SHAPE WHERE FEASIBLE AND PRACTICAL, SO THAT EQUIPMENT CAN BE USED SAFELY AND EFFICIENTLY DURING SEEDBED PREPARATION, SEEDING, MULCHING, AND MAINTENANCE OF VEGETATION.
2. LIME AND FERTILIZER RATES AND ANALYSIS
   2.1. AGRICULTURAL LIME IS REQUIRED AT THE RATE OF ONE TO TWO TONS PER ACRE UNLESS SOIL TESTS INDICATE OTHERWISE. GRADED AREAS REQUIRE LIME APPLICATION. IF LIME IS APPLIED WITHIN SIX MONTHS OF PLANTING PERMANENT PERENNIAL VEGETATION, ADDITIONAL LIME IS NOT REQUIRED. AGRICULTURAL LIME SHALL BE WITHIN THE SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF AGRICULTURE.
   2.2. LIME SPREAD BY CONVENTIONAL EQUIPMENT SHALL BE "GROUND LIMESTONE". GROUND LIMESTONE IS DOLOMITIC LIMESTONE GROUND SO THAT 90 PERCENT OF THE MATERIAL WILL PASS THROUGH A 10-MESH SIEVE, NOT LESS THAN 50 PERCENT WILL PASS THROUGH A 50-MESH SIEVE AND NOT LESS THAN 25 PERCENT WILL PASS THROUGH A 100-MESH SIEVE.
   2.3. AGRICULTURAL LIME SPREAD BY HYDRAULIC SEEDING EQUIPMENT SHALL BE "FINELY GROUND LIMESTONE". FINELY GROUND LIMESTONE IS DOLOMITIC LIMESTONE GROUND SO THAT 98 PERCENT OF THE MATERIAL WILL PASS THROUGH A 20-MESH SIEVE AND NOT LESS THAN 70 PERCENT WILL PASS THROUGH A 100-MESH SIEVE.
3. LIME AND FERTILIZER APPLICATION
   3.1. WHEN HYDRAULIC SEEDING EQUIPMENT IS USED, THE INITIAL FERTILIZER SHALL BE MIXED WITH SEED, INNOCULANT (IF NEEDED), AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH AND APPLIED IN A SLURRY. THE INNOCULANT, IF NEEDED, SHALL BE MIXED WITH THE SEED PRIOR TO BEING PLACED INTO THE HYDRAULIC SEEDER. THE SLURRY MIXTURE WILL BE SPREAD UNIFORMLY OVER THE AREA WITHIN ONE HOUR AFTER BEING PLACED IN THE HYDROSEEDER.
   3.2. FINELY GROUND LIMESTONE WILL BE MIXED WITH WATER AND APPLIED IMMEDIATELY AFTER MULCHING IS COMPLETED OR IN COMBINATION WITH THE TOP DRESSING.
   3.3. WHEN CONVENTIONAL PLANTING IS TO BE DONE, LIME AND FERTILIZER SHALL BE APPLIED UNIFORMLY IN ONE OF THE FOLLOWING WAYS:
      3.3.1. APPLY BEFORE LAND PREPARATION SO THAT IT WILL BE MIXED WITH THE SOIL DURING SEEDBED PREPARATION.
      3.3.2. MIX WITH THE SOIL USED TO FILL THE HOLES, DISTRIBUTE IN FURROWS.
      3.3.3. BROADCAST AFTER STEEP SURFACES ARE SCARIFIED, PITTED OR TRENCHED.
      3.3.4. A FERTILIZER PELLET SHALL BE PLACED AT ROOT DEPTH IN THE CLOSING HOLE BESIDE EACH PINE TREE SEEDLING.
4. PLANT SELECTION
   4.1. PLANTS SHALL BE SELECTED ON THE BASIS OF SPECIES CHARACTERISTICS, SITE AND SOIL CONDITIONS, PLANNED USE AND MAINTENANCE OF THE AREA; TIME OF YEAR OF PLANTING, METHOD OF PLANTING; AND THE NEEDS AND DESIRES OF THE LAND USER.
   4.2. SOME PERENNIAL SPECIES ARE EASILY ESTABLISHED AND CAN BE PLANTED ALONE. EXAMPLES OF THESE ARE COMMON BERMUDA AND WEEPING LOVEGRASS.
   4.3. OTHER PERENNIALS SUCH AS BAHIA GRASS AND SERICEA LESPEDEZA, ARE SLOW TO BECOME ESTABLISHED AND SHOULD BE PLANTED WITH ANOTHER PERENNIAL SPECIES. THE ADDITIONAL SPECIES WILL PROVIDE QUICK COVER AND AMPLE SOIL PROTECTION UNTIL THE TARGET PERENNIAL SPECIES BECOME ESTABLISHED.
   4.4. PLANT SELECTION MAY ALSO INCLUDE ANNUAL COMPANION CROPS. ANNUAL COMPANION CROPS SHOULD BE USED ONLY WHEN THE PERENNIAL SPECIES ARE NOT PLANTED DURING THEIR OPTIMUM PLANTING PERIOD. A COMMON MIXTURE IS BROWN TOP MILLET WITH COMMON BERMUDA IN MID-SUMMER. CARE SHOULD BE TAKEN IN SELECTING COMPANION CROP SPECIES AND SEEDING RATES BECAUSE ANNUAL CROPS WILL COMPETE WITH PERENNIAL SPECIES FOR WATER, NUTRIENT AND GROWING SPACE. A HIGH SEEDING RATE OF THE COMPANION CROP MAY PREVENT THE ESTABLISHMENT OF PERENNIAL SPECIES.
   4.5. RYEGRASS SHALL NOT BE USED IN ANY SEEDING MIXTURES CONTAINING PERENNIAL SPECIES DUE TO ITS ABILITY TO OUT-COMPETE DESIRED SPECIES CHOSEN FOR PERMANENT PERENNIAL COVER.
5. SEEDBED PREPARATION
   5.1. SEEDBED PREPARATION MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS USED. WHEN CONVENTIONAL SEEDING IS TO BE USED, SEEDBED PREPARATION WILL BE DONE AS FOLLOWS FOR BROADCAST PLANTINGS:
   5.2. TILLAGE AT A MINIMUM, SHALL ADEQUATELY LOOSEN THE SOIL TO A DEPTH OF 4 TO 6 INCHES; ALLEVIATE COMPACTION; INCORPORATE LIME AND FERTILIZER; SMOOTH AND FIRM THE SOIL; ALLOW FOR THE PROPER PLACEMENT OF SEED, SPRIGS, OR PLANTS; AND ALLOW FOR THE ANCHORING OF STRAW OR HAY MULCH IF A DISK IS USED.
   5.3. TILLAGE MAY BE DONE WITH ANY SUITABLE EQUIPMENT.
   5.4. TILLAGE SHOULD BE DONE ON THE CONTOUR WHERE FEASIBLE.
   5.5. ON SLOPES TOO STEEP FOR THE SAFE OPERATION OF TILLAGE EQUIPMENT, THE SOIL SURFACE WILL BE PITTED OR TRENCHED ACROSS THE SLOPE WITH APPROPRIATE HAND TOOLS TO PROVIDE TWO PLACES 6 TO 8 INCHES APART IN WHICH SEED MAY LODGE AND GERMINATE. HYDRAULIC SEEDING MAY ALSO BE USED.
6. PLANTING
   6.1. HYDRAULIC SEEDING
   MIX THE SEED, INOCULANT, FERTILIZER, AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH WITH WATER AND APPLY IN A SLURRY UNIFORMLY OVER THE AREA TO BE TREATED. APPLY WITHIN ONE HOUR AFTER THE MIXTURE IS MADE.
   6.2. CONVENTIONAL SEEDING
   SEEDING WILL BE DONE ON A FRESHLY PREPARED AND FIRMED SEEDBED. FOR BROADCAST PLANTING, USE A CULTIPACKER-SEEDER, DRILL, ROTARY SEEDER, OTHER MECHANICAL SEEDER, OR HAND SEEDING TO DISTRIBUTE THE SEED UNIFORMLY OVER THE AREA TO BE TREATED. COVER THE SEED LIGHTLY WITH 1/8 TO 1/4 INCH OF SOIL FOR SMALL SEED AND 1/2 TO 1 INCH FOR LARGE SEED WHEN USING A CULTIPACKER OR OTHER SUITABLE EQUIPMENT.
   6.3. NO-TILL SEEDING
   NO-TILL SEEDING IS PERMISSIBLE INTO ANNUAL COVER CROPS WHEN PLANTING IS DONE FOLLOWING MATURITY OF THE COVER CROP OR IF THE TEMPORARY COVER STAND IS SPARSE ENOUGH TO ALLOW ADEQUATE GROWTH OF THE PERMANENT (PERENNIAL) SPECIES. THE SEED MUST BE UNIFORMLY DISTRIBUTED AND PLANTED AT THE PROPER DEPTH.
7. MULCHING
   7.1. MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED.
   7.2. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2½ TONS PER ACRE. SERICEA LESPEDEZA HAY SHALL BE APPLIED AT THE RATE OF 3 TONS PER ACRE.
   7.3. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING.
   7.4. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER, SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 3/4:1 OR STEEPER.
   7.5. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED.
   7.6. BITUMINOUS TREATED ROVING MAY BE APPLIED ON PLANTED AREAS ON SLOPES, IN DITCHES OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED ROVING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
   7.7. WOOD CELLULOSE AND WOOD PULP FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE EVENLY DISPERSED WHEN AGITATED IN WATER. THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL METERING AND AID IN UNIFORM APPLICATION DURING SEEDING.
8. IRRIGATION
   8.1. IF WATER IS APPLIED, IT MUST BE AT A RATE NOT CAUSING RUNOFF AND EROSION. THOROUGHLY WET THE SOIL TO A DEPTH THAT WILL ENSURE GERMINATION OF THE SEED.
9. USE AND MANAGEMENT
   9.1. MOW SERICEA LESPEDEZA ONLY AFTER FROST TO ENSURE THAT THE SEEDS ARE MATURE. MOW BETWEEN NOVEMBER AND MARCH.
   9.2. BERMUDAGRASS AND BAHIAGRASS MAY BE MOWED AS DESIRED. MAINTAIN AT LEAST 6 INCHES OF TOP GROWTH UNDER ANY USE AND MANAGEMENT. MODERATE USE OF TOP GROWTH IS BENEFICIAL AFTER ESTABLISHMENT.
   9.3. EXCLUDE TRAFFIC UNTIL THE PLANTS ARE WELL ESTABLISHED.

SEEDING RATES FOR PERMANENT VEGETATION

SPECIES	ALONE		WITH OTHER PERENNIALS		PLANTING DATES **
	RATE PER 1,000 SQ.FT.	RATE PER ACRE *	RATE PER 1,000 SQ.FT.	RATE PER ACRE *	COASTAL AREA
Pensacola Bahia	1.4 lbs.	60 lbs.	0.7 lbs.	30 lbs.	1/1-12/31
Common Bermuda (Hulled seed)	0.2 lbs.	10 lbs.	0.7 lbs.	6 lbs.	2/14-6/30
Common Bermuda (Unhulled seed)***	0.2 lbs.	10 lbs.	0.1 lbs.	6 lbs.	11/1-1/31
Sericea Lespedeza (scarified)	1.4 lbs.	60 lbs.	1.4 lbs.	60 lbs.	2/14-6/15
Sericea Lespedeza (unscarified)	1.7 lbs.	75 lbs.	1.7 lbs.	75 lbs.	1/1-12/31
Lespedeza (scarified)	1.4 lbs.	60 lbs.	1.4 lbs.	60 lbs.	2/14-5/31
Weeping Lovegrass****	0.1 lbs.	4 lbs.	0.05 lbs.	2 lbs.	2/1-6/15
Panicgrass, Atlantic Coastal	0.5 lbs.	20.0 lbs.	0.5 lbs.	20.0 lbs.	2/1-4/30
Sunflower 'Aztec'	0.2 lbs.	10 lbs.	0.2 lbs.	10 lbs.	4/1-5/31

* UNUSUAL SITE CONDITIONS MAY REQUIRE HEAVIER SEEDING RATES.
** SEEDING DATES MAY NEED TO BE ALTERED TO FIT TEMPERATURE VARIATIONS AND CONDITIONS.
*** PLANT WITH TEMPORARY COVER SUCH AS WINTER ANNUALS.
**** DROUGHT TOLERANT. GROWS WELL WITH SERICEA LESPEDEZA ON ROADBANKS.

FERTILIZER REQUIREMENTS

SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs/ac. 1000 lbs/ac. 400 lbs/ac.	50-100 lbs/ac 1/2/ – 30 lbs/ac.
Cool season grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 lbs/ac. 1000 lbs/ac. 400 lbs/ac.	0-50 lbs/ac. 1/ – –
Warm season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs/ac. 800 lbs/ac. 400 lbs/ac.	50-100 lbs/ac. 2/3/ 50-100 lbs/ac 2/ 30 lbs/ac.
Warm season grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 lbs/ac. 1000 lbs/ac. 400 lbs/ac.	50 lbs/ac. 3/ – –

1/ APPLY IN SPRING FOLLOWING SEEDING.
2/ APPLY IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.
3/ APPLY WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.

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OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE 11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

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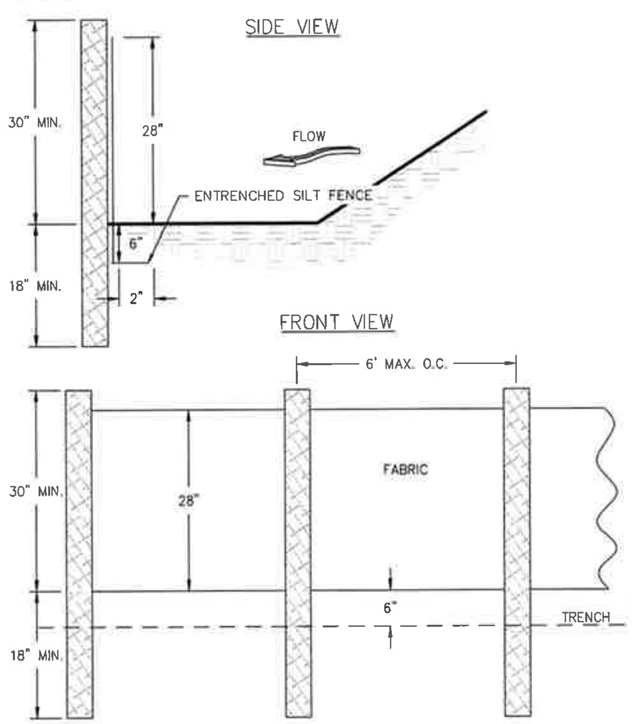
DRAFT

ESPC DETAILS (SHEET 2 OF 3)

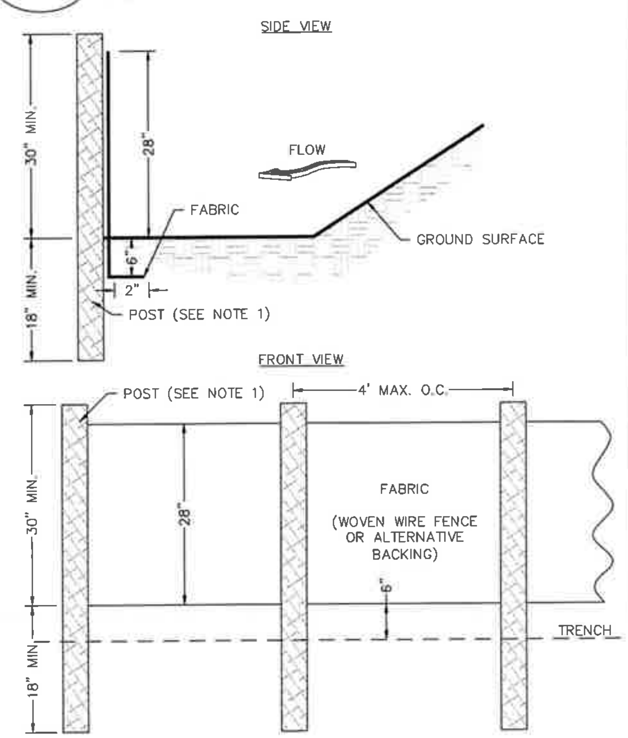
51-002

Sd1-NS SEDIMENT BARRIER - NON-SENSITIVE
N.T.S.



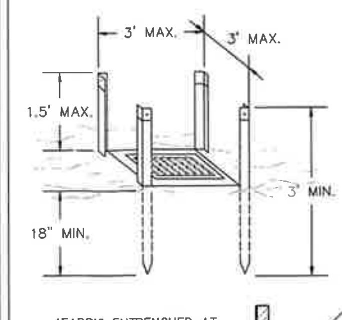
NOTES:
1. USE 1.5" X 1.5" OAK POSTS, 3" DIAMETER SOFTWOOD DOWELS, 2" X 4" SOFTWOOD BOARDS, OR 1.15 LB/FT (MIN.) STEEL POSTS.

Sd1-S SEDIMENT BARRIER - SENSITIVE
N.T.S.

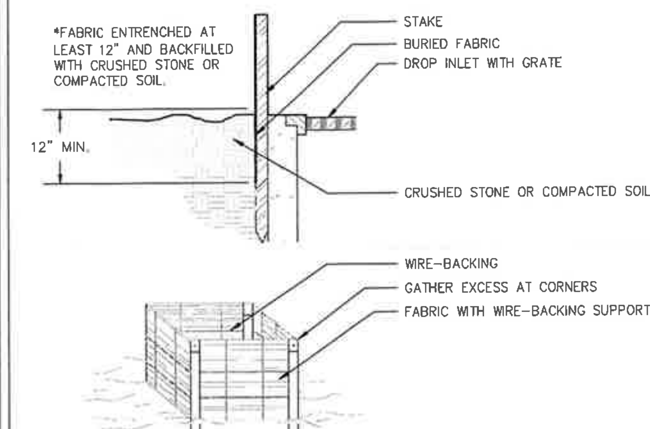


NOTES:
1. USE 2" X 2" OAK POSTS OR 1.15 LB/FT STEEL POSTS
2. 2 ROWS OF TYPE S SHALL BE PLACED A MINIMUM OF 36" APART.

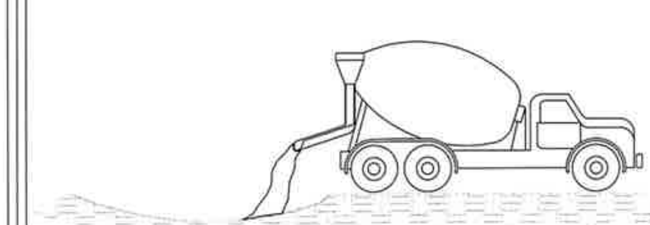
Sd2-F FABRIC INLET PROTECTION
N.T.S.



NOTES
1. DESIGN IS FOR SLOPES NO GREATER THAN 5% (NOT DESIGNED FOR CONCENTRATED FLOWS).
2. THE STEEL POSTS SUPPORTING THE SILT FENCE MATERIAL SHOULD BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET (MAXIMUM OF 3' APART).
3. THE STEEL POSTS SHOULD BE SECURELY DRIVEN AT LEAST 18" DEEP.
4. THE FABRIC SHOULD BE ENTRENCHED AT LEAST 12" AND THEN BACKFILLED WITH CRUSHED STONE OR COMPACTED SOIL.

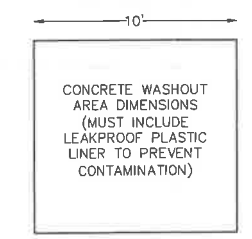


CONCRETE TRUCK WASHDOWN
N.T.S.



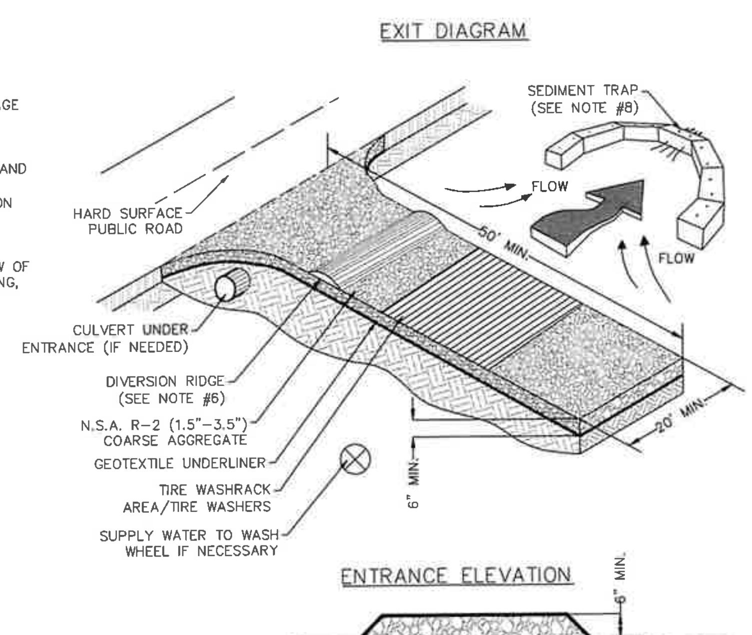
NOTE:

1. ADVISE CONCRETE TRUCK DRIVERS OF THE DESIGNATED WASH-OUT AREAS BEFORE THEY START THE JOB.
2. EXCAVATE PIT LARGE ENOUGH TO CONTAIN WASHDOWN WATER. THIS MUST BE AWAY FROM STORM DRAINS AND WATERWAYS.
3. WASHDOWN CHUTE, HOPPER, AND REAR OF VEHICLE ONLY. DO NOT WASH OUT DRUM.
4. ENSURE THAT ALL WASHDOWN WATER STAYS IN PIT.
5. DISPOSE OF SETTLED, HARDENED CONCRETE IN GARBAGE WITH OTHER CONSTRUCTION DEBRIS.
6. NEVER DISPOSE OF WASHDOWN WATER IN STREETS, STORM DRAINS, OR STREAMS.
7. CONCRETE WASHDOWN AREA MUST INCLUDE A LEAKPROOF LINER.

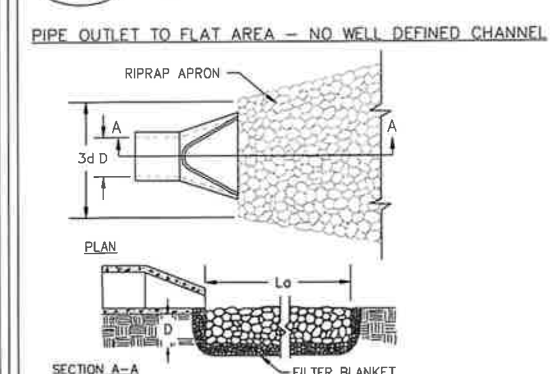


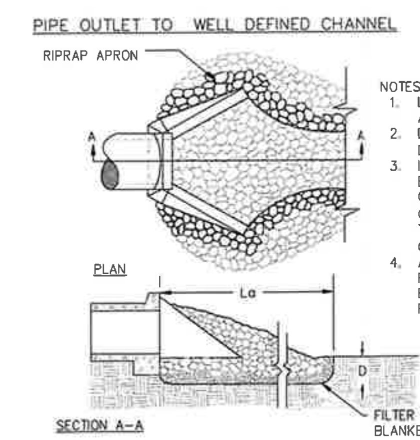
Co CONSTRUCTION EXIT
N.T.S.

NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVES MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.



St STORM DRAIN OUTLET PROTECTION
N.T.S.





NOTES:
1. Lo IS THE LENGTH OF THE RIPRAP APRON.
2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.

OUTLET PROTECTION DIMENSIONS

OUTLET	PIPE DIA. (ft.)	FLOW RATE (cfs)	VELOCITY (fps)	TAILWATER CONDITION	APRON LEN. (Lo, ft.)	WIDTH AT HEADWALL (W, ft)	DOWNSTREAM WIDTH (W_2, ft)	AVG. STONE DIA. (d50, ft)	STONE DEPTH (D, ft)
A-1	5.0	138.0	9.0	MIN	30	15	35	0.9	1.8
B-1	1.5	1.1	2.9	MIN	9	4.5	10.5	0.3	0.6
C-1	1.5	1.2	3.0	MIN	9	4.5	10.5	0.3	0.6
D-1	1.5	2.2	5.3	MIN	9	4.5	10.5	0.3	0.6
E-1	1.5	0.6	2.5	MIN	9	4.5	10.5	0.3	0.6

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OLD CLYATTVILLE ROAD WIDENING
PI#0016285

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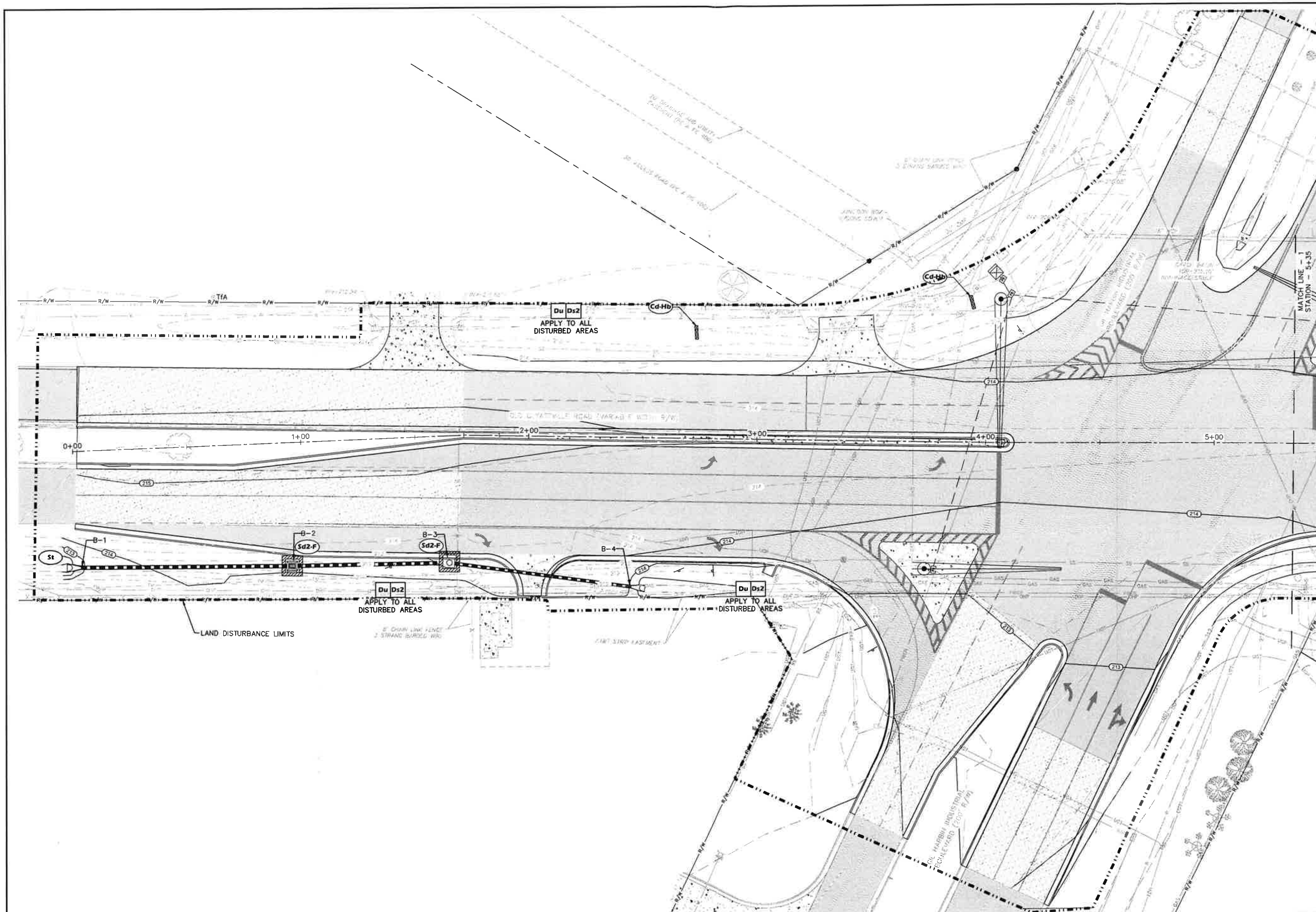
ESPC DETAILS
(SHEET 3 OF 3)

51-003



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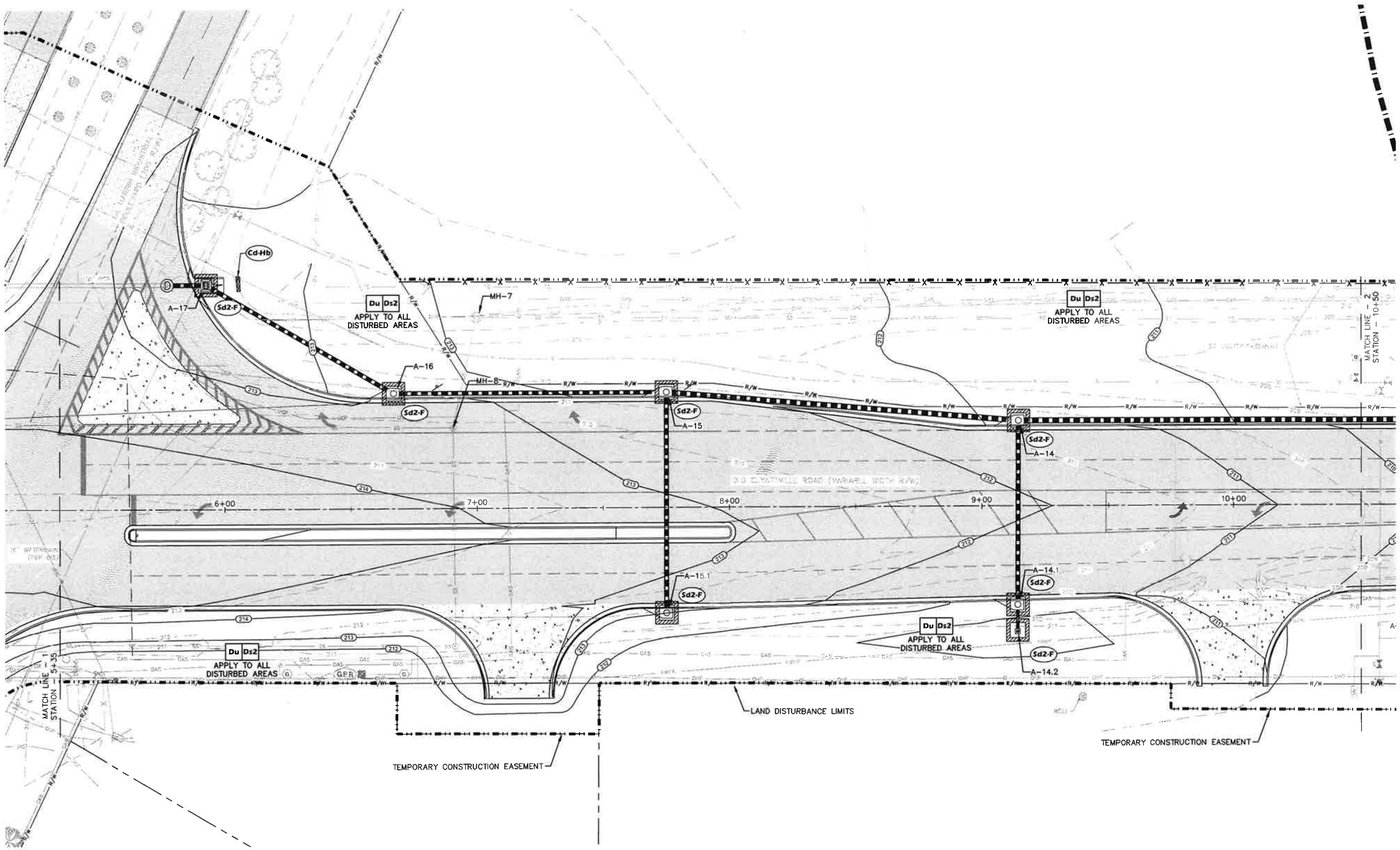
ESPC PLAN
(STA 0+00 - 5+35)

54-001



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ESPC PLAN
(STA 5+35 - 10+50)

54-002

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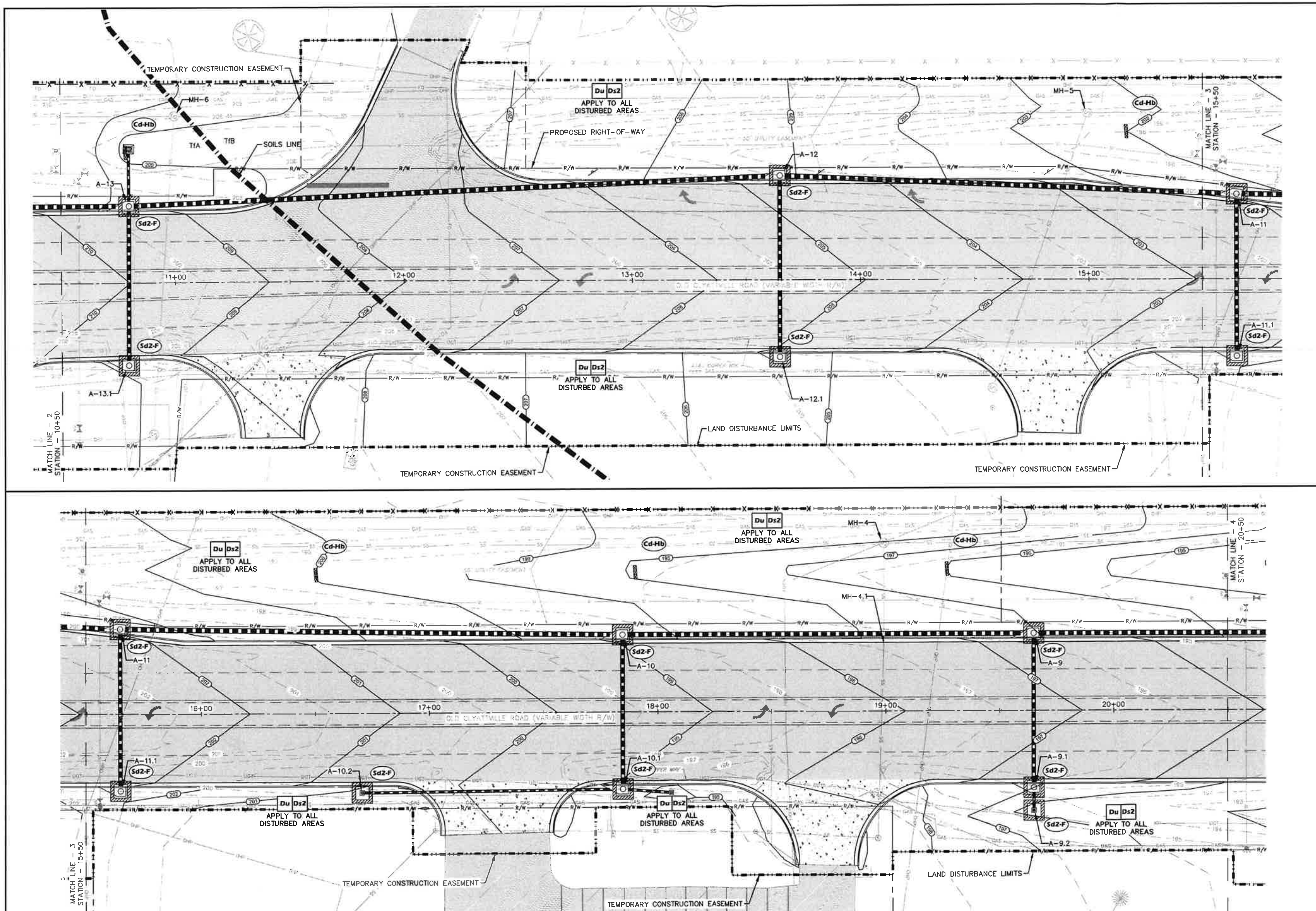

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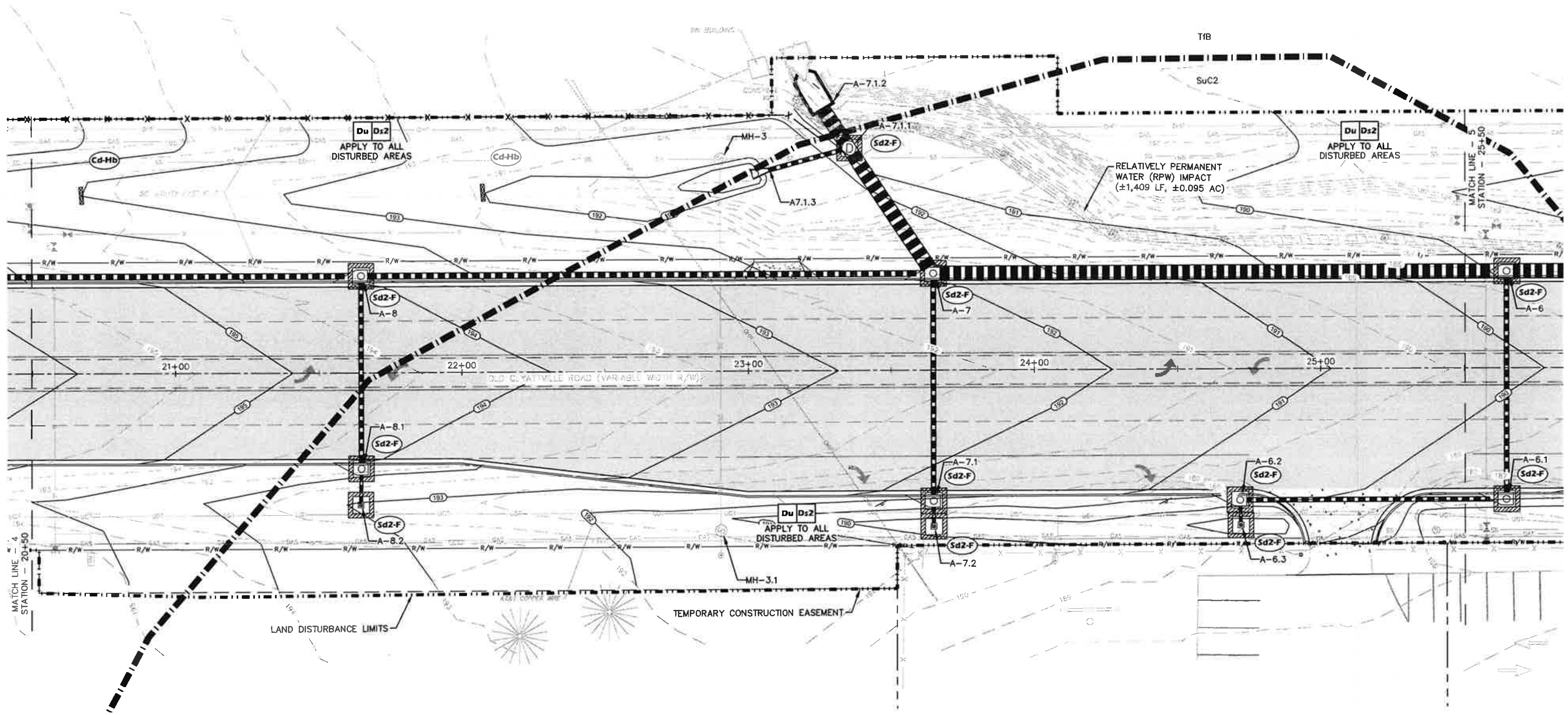
54-003



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54-004

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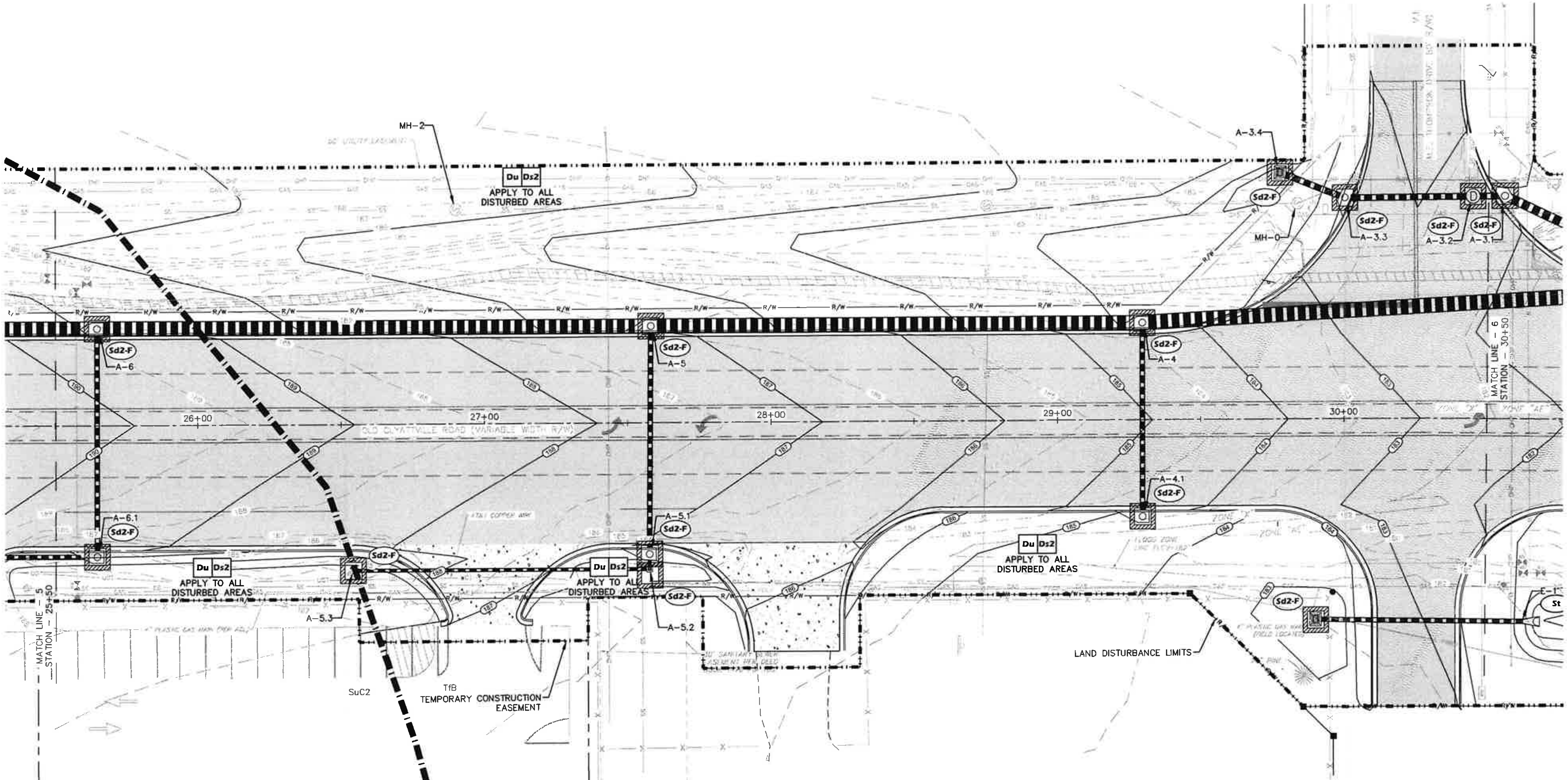

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(STA 25+50 - 30+50)

54-005

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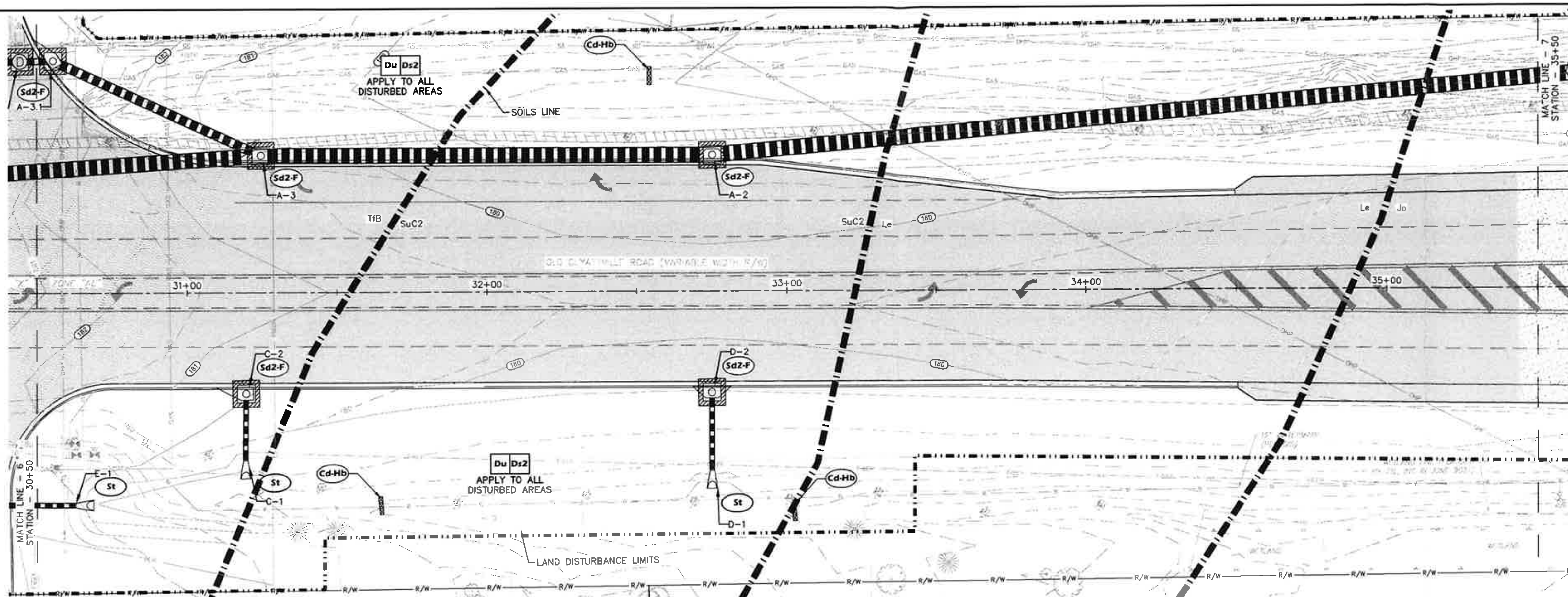

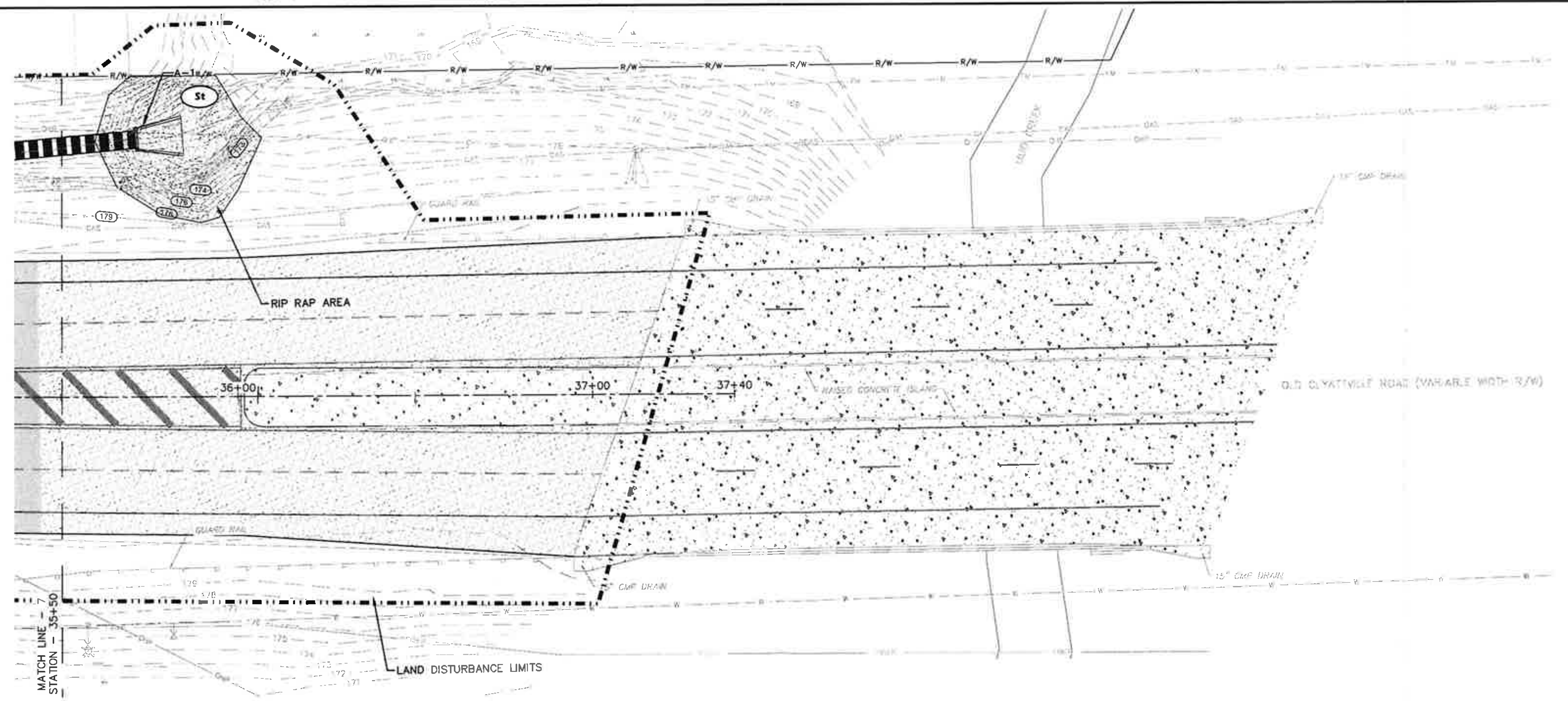

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(STA 30+50 - END)

54-006

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ATTACHMENT 4

USACE PCN/NWP-14 VERIFICATION LETTER

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SAVANNAH DISTRICT
100 W. OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3604

August 11, 2023

Regulatory Division
SAS-2023-00522

Mr. Benjamin O'Dowd
City of Valdosta
300 North Lee Street
Valdosta, Georgia 31602

Dear Mr. O'Dowd:

I refer to the Pre-Construction Notification and Preliminary Jurisdictional Determination (JD) request received June 29, 2023, requesting verification for use of Nationwide Permit (NWP) 14 to permanently impact 0.095 acre of ditch associated with the widening of Old Clyattville Road from Gil Harbin Industrial Boulevard to Mud Swamp. The project site is located in the City of Valdosta, Lowndes County, Georgia (Latitude 30.7991, Longitude -83.2885). The request was submitted on your behalf by Ms. Melissa Norris of TTL, Inc. This project has been assigned number SAS-2023-00522 and it is important that you refer to this number in all communication concerning this matter.

We have completed a preliminary JD for the site. The aquatic resources within the review area may be waters of the United States within the jurisdiction of Section 404 of the Clean Water Act (33 United States Code § 1344) and/or Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). The placement of dredged or fill material into any waterways and/or their adjacent wetlands or mechanized land clearing of those aquatic resources may require prior Department of the Army authorization pursuant to Section 404.

The enclosed exhibit entitled, "Figure 7: Aquatic Resources Delineation Map, Lovell Engineering Associates, Old Clyattville Road Widening, Valdosta, Lowndes County, Georgia," dated 5/8/2023, identifies the delineation limits of all aquatic resources within the review area. The wetlands were delineated in accordance with criteria contained in the 1987 "Corps of Engineers Wetland Delineation Manual," as amended by the most recent regional supplements to the manual. This delineation will remain valid for a period of 5 years unless new information warrants revision prior to that date.

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the

Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

Preliminary JDs are advisory in nature and may not be appealed (see 33 Code of Federal Regulations 331.2). If you are not in agreement with this preliminary JD, then you may request an approved JD for your project site or review area.

If you intend to sell property that is part of a project that requires Department of the Army Authorization, it may be subject to the Interstate Land Sales Full Disclosure Act. The Property Report required by Housing and Urban Development Regulation must state whether, or not a permit for the development has been applied for, issued or denied by the U.S. Army Corps of Engineers (Part 320.3(h) of Title 33 of the Code of Federal Regulations).

We have completed coordination with other federal and state agencies as described in Part C (32)(d) of our NWP Program, published in the December 27, 2021, Federal Register, Vol. 86, No. 245, Pages 73522-73583 (86 FR). The NWPs and Savannah District's Regional Conditions for NWPs can be found on our website at http://www.sas.usace.army.mil/Missions/Regulatory/Permitting/GeneralPermits/NationwidePermits.aspx. During our coordination procedure, no adverse comments regarding the proposed work were received.

As a result of our evaluation of your project, we have determined that the proposed activity is authorized under NWP 14 as described in Part B of the NWP Program. Your use of this NWP is valid only if:

a. The activity is conducted in accordance with the information submitted and meets the conditions applicable to the NWP, as described at Part C of the NWP Program and the Savannah District's Regional Conditions for NWPs.

b. You shall obtain and comply with all appropriate federal, state, and local authorizations required for this type of activity. A stream buffer variance may be required from the Georgia Department of Natural Resources, Environmental Protection Division (Georgia EPD), as defined in the Georgia Erosion and Sedimentation Control Act of 1975, as amended. Information concerning variances can be obtained at the Georgia EPD's website at www.epd.georgia.gov, or by calling (404) 463-1511.

c. The project shall be constructed in accordance with the enclosed plans and drawings entitled, "Old Clyattville Road Widening, PI#0016285, ESPC Plan, 54-001 through 54-006," dated 03-24-23.

d. You shall notify the Corps, in writing, at least 10 days in advance of commencement of work authorized by this permit.

e. You fill out and sign the enclosed certification and return it to our office within 30 days of completion of the activity authorized by this permit.

This proposal was reviewed in accordance with Section 7 of the Endangered Species Act. Based on the information we have available, we have determined that the project "may affect, but is not likely to adversely affect" wood stork (*Mycteria americana*) and eastern indigo snake (*Drymarchon couperi*). Additionally, we have determined that the project will have "no effect" on Suwannee alligator snapping turtle (*Macrochelys suwanniensis*). Authorization of an activity by a NWP does not authorize the "take" of threatened or endangered species. In the absence of separate authorization, both lethal and non-lethal "takes" of protected species are in violation of the Endangered Species Act. See Part (C) of 86 FR for more information.

This verification is valid until the NWP is modified, reissued or revoked. All of the existing NWPs are scheduled to expire on March 14, 2026. It is incumbent upon you to remain informed of changes to the NWPs. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP is modified or revoked, you will have 12 months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP.

This authorization should not be construed to mean that any future projects requiring Department of the Army authorization would necessarily be authorized. Any new proposal, whether associated with this project or not, would be evaluated on a case-by-case basis. Any prior approvals would not be a determining factor in making a decision on any future request. Revisions to your proposal may invalidate this authorization. In the event changes to this project are contemplated, I recommend that you coordinate with us prior to proceeding with the work.

This communication does not relieve you of any obligation or responsibility for complying with the provisions of any other laws or regulations of other federal, state or local authorities. It does not affect your liability for any damages or claims that may arise as a result of the work. It does not convey any property rights, either in real estate or material, or any exclusive privileges. It also does not affect your liability for any interference with existing or proposed federal projects. If the information you have submitted and on which the Corps bases its determination/decision of authorization under the NWP is later found to be in error, this determination may be subject to modification, suspension, or revocation.

A copy of this letter is being provided via email to the following party: Ms. Melissa Norris, TTL, Inc., at mnorris@ttlusa.com

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

If you have any questions, please call me at (229) 430-8566.

Sincerely,

Tyrone Ragan

Tyrone Ragan
Regulatory Specialist, Management Branch

Enclosures

Regulatory Division

CERTIFICATION OF COMPLIANCE
WITH
DEPARTMENT OF THE ARMY
NATIONWIDE PERMIT 14

PERMIT FILE NUMBER: SAS-2023-00522

PERMITTEE ADDRESS: Mr. Benjamin O'Dowd, City of Valdosta, 300 North Lee Street Valdosta, Georgia 31602.

LOCATION OF WORK: The project site is located along Old Clyattville Road from Gil Harbin Industrial Boulevard to Mud Swamp, in the City of Valdosta, Lowndes County, Georgia (Latitude 30.7991, Longitude -83.2885).

PROJECT DESCRIPTION: The widening of Old Clyattville Road from Gil Harbin Industrial Boulevard to Mud Swamp.

ACRES AND/OR LINEAR FEET OF WATERS OF THE UNITED STATES IMPACTED: 0.095 acre of ditch.

DATE WORK IN WATERS OF UNITED STATES COMPLETED:

COMPENSATORY MITIGATION REQUIRED: N/A.

DATE MITIGATION COMPLETED OR PURCHASED (include name of bank): N/A.

I understand that the permitted activity is subject to a U.S. Army Corps of Engineers' Compliance Inspection. If I fail to comply with the permit conditions at Part C of the Nationwide Permit Program, published in the December 27, 2021, Federal Register, Vol. 86, No. 245, Pages 73522-73583 (86 FR), it may be subject to suspension, modification or revocation.

I hereby certify that the work authorized by the above referenced permit as well as any required mitigation (if applicable) has been completed in accordance with the terms and conditions of the said permit.

__________________________ _______________

Signature of Permittee Date

TTL

FIGURE 2: SITE LOCATION & AERIAL PHOTOGRAPH

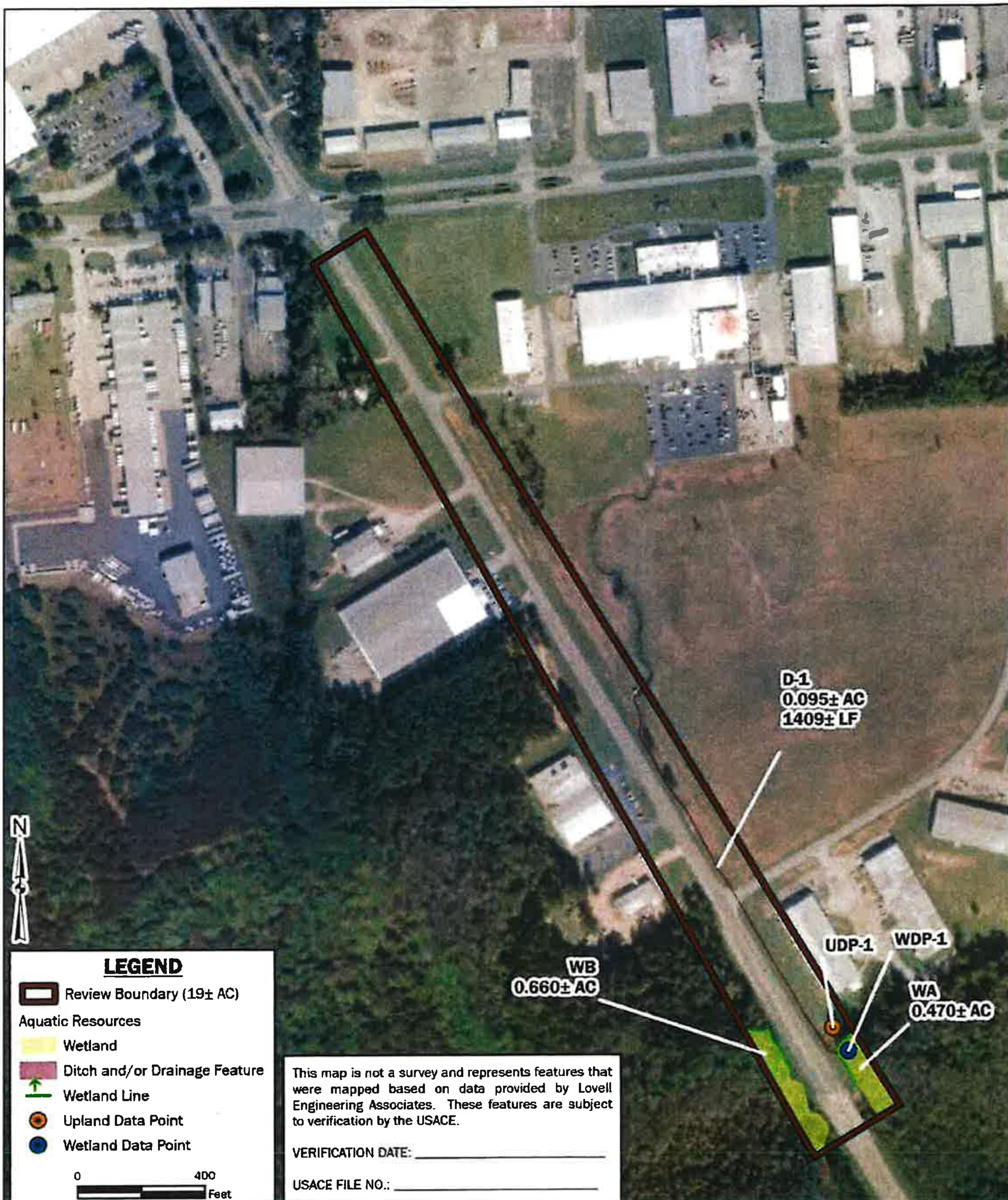
LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD WIDENING

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: Maxar Technologies, Vivid Imagery 11/19/2020 (0.31 m Resolution)

DRAWN BY: JDM
CHECKED BY: DEK
DRAWING DATE: 5/1/2023
REVISION DATE: N/A
TTL JOB NO.: 21 07 00563.00
APPROX. SCALE: 1 in = 500 ft



This map is not a survey and represents features that were mapped based on data provided by Lovell Engineering Associates. These features are subject to verification by the USACE.

VERIFICATION DATE: ______________________

USACE FILE NO.: ______________________

TTL

FIGURE 7: AQUATIC RESOURCES DELINEATION MAP

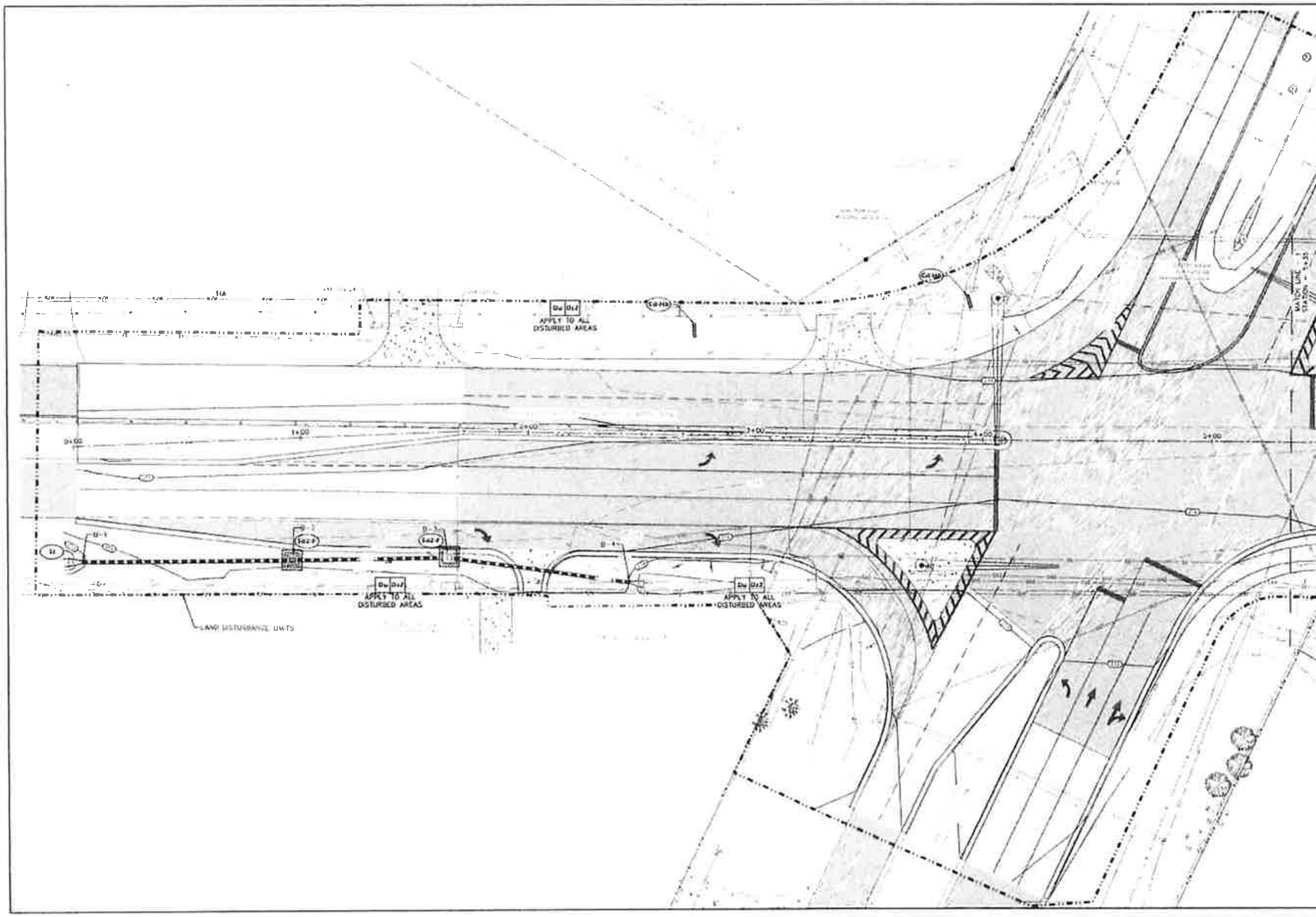
LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD WIDENING

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: Maxar Technologies, Vivid Imagery 11/19/2020 (0.31 m Resolution)

DRAWN BY: JDM
CHECKED BY: DEK
DRAWING DATE: 5/8/2023
REVISION DATE: N/A
TTL JOB NO.: 21-07-00563.00
APPROX. SCALE: 1 inch = 400 Ft



LEA

OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 54 & 29 OF THE 11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS DATE	DESCRIPTION

GRAPHIC SCALE

(IN FEET)
1 INCH = 20 FEET

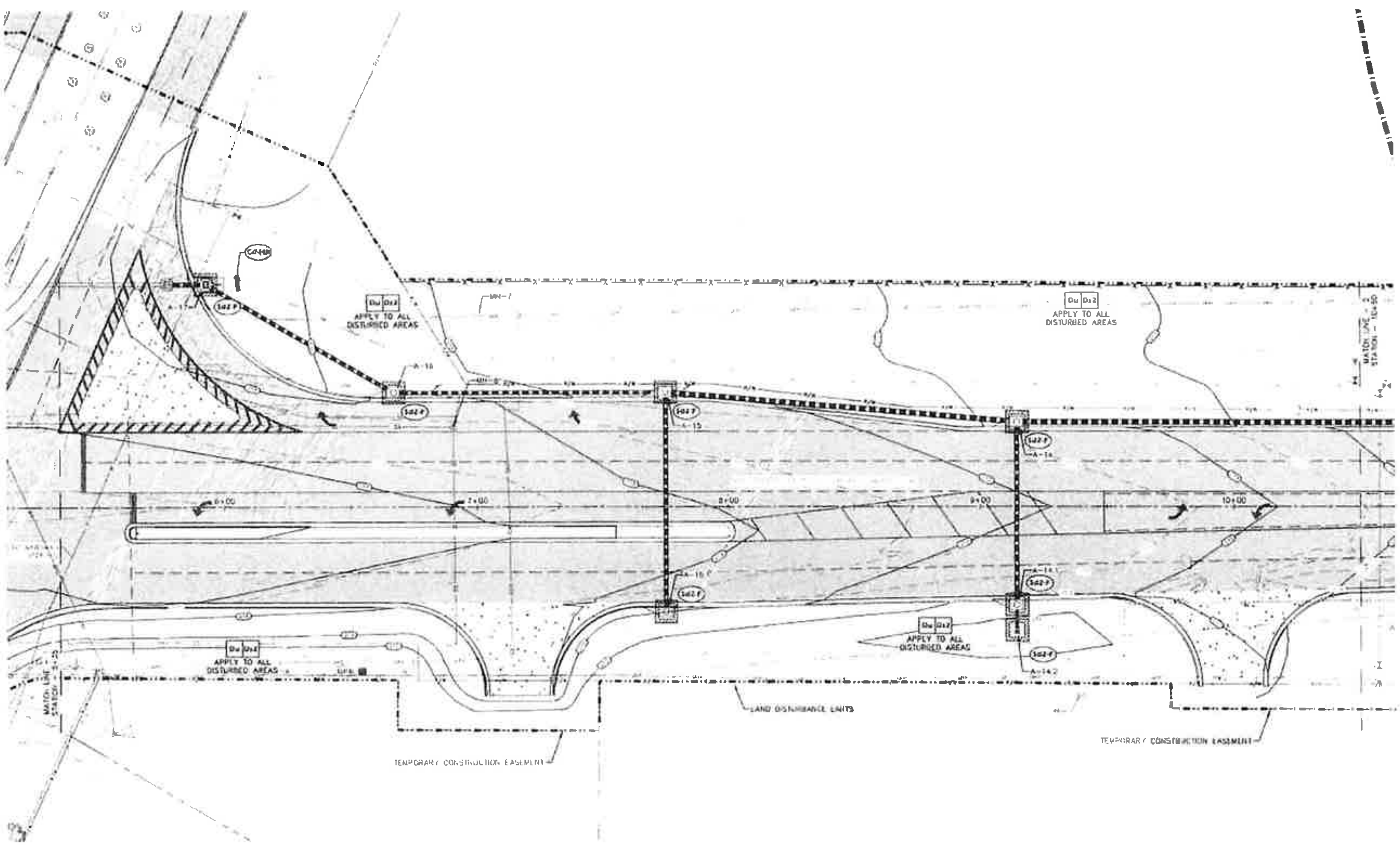
SCALE:	1"=20
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO.	002640

DRAFT

ESPC PLAN
(STA 0+00 - 5+35)

54-001

69 OF 74 SHEETS



LEA

OLD CLYATTVILLE ROAD WIDENING

PI#0016285

LAND LOT 66 & 29 OF THE
11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS DATE	DESCRIPTION

GRAPHIC SCALE

(IN FEET)
1 INCH = 20 FEET

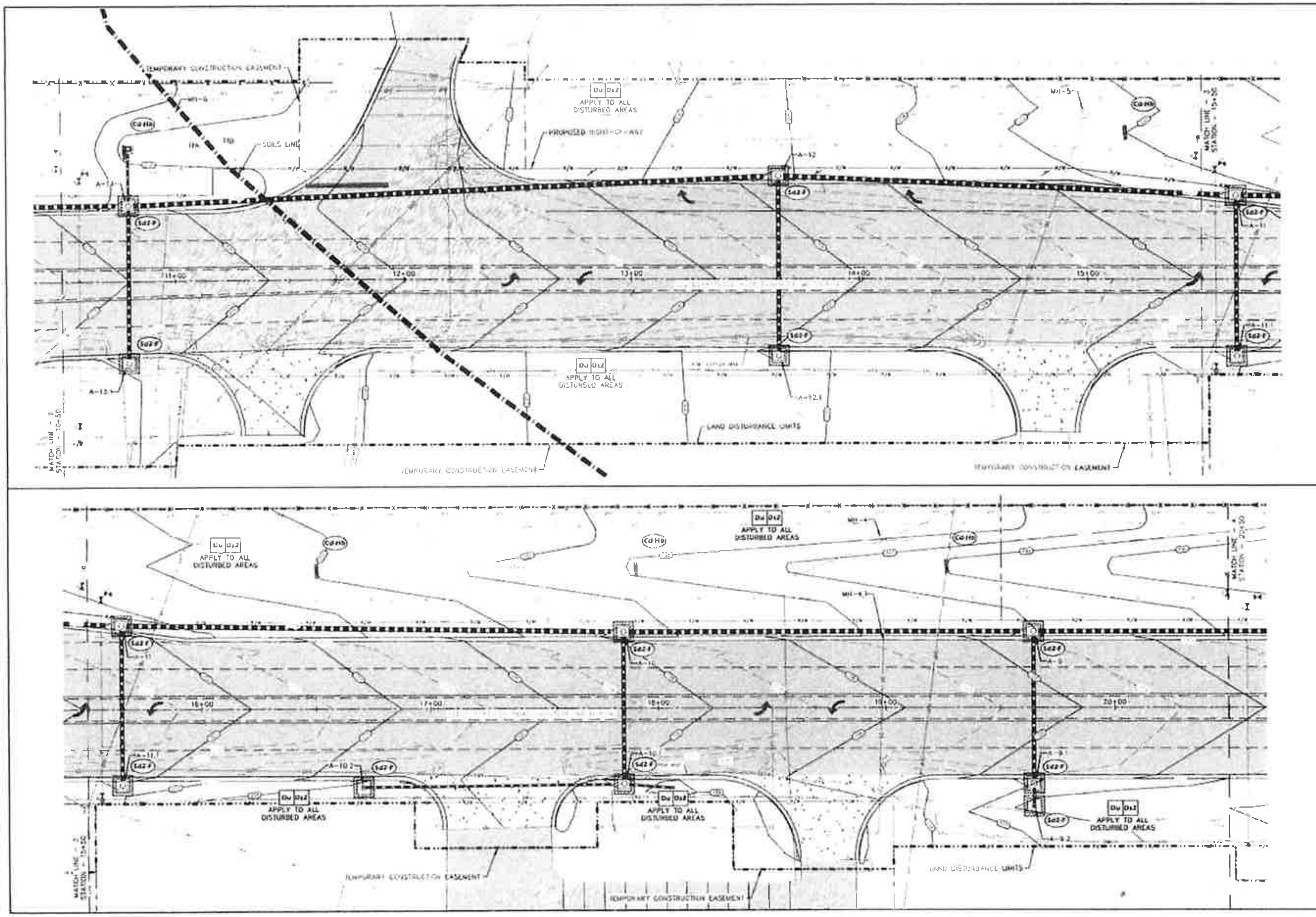
SCALE:	1"=20
DESIGNED BY:	DSA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO:	0026-40

DRAFT

ESPC PLAN
(STA 5+35 - 10+50)

54-002

70 OF 24 SHEETS



LEA

OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE 11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS DATE	DESCRIPTION

GRAPHIC SCALE
0 10 20 40
(IN FEET)
1 INCH = 20 FEET

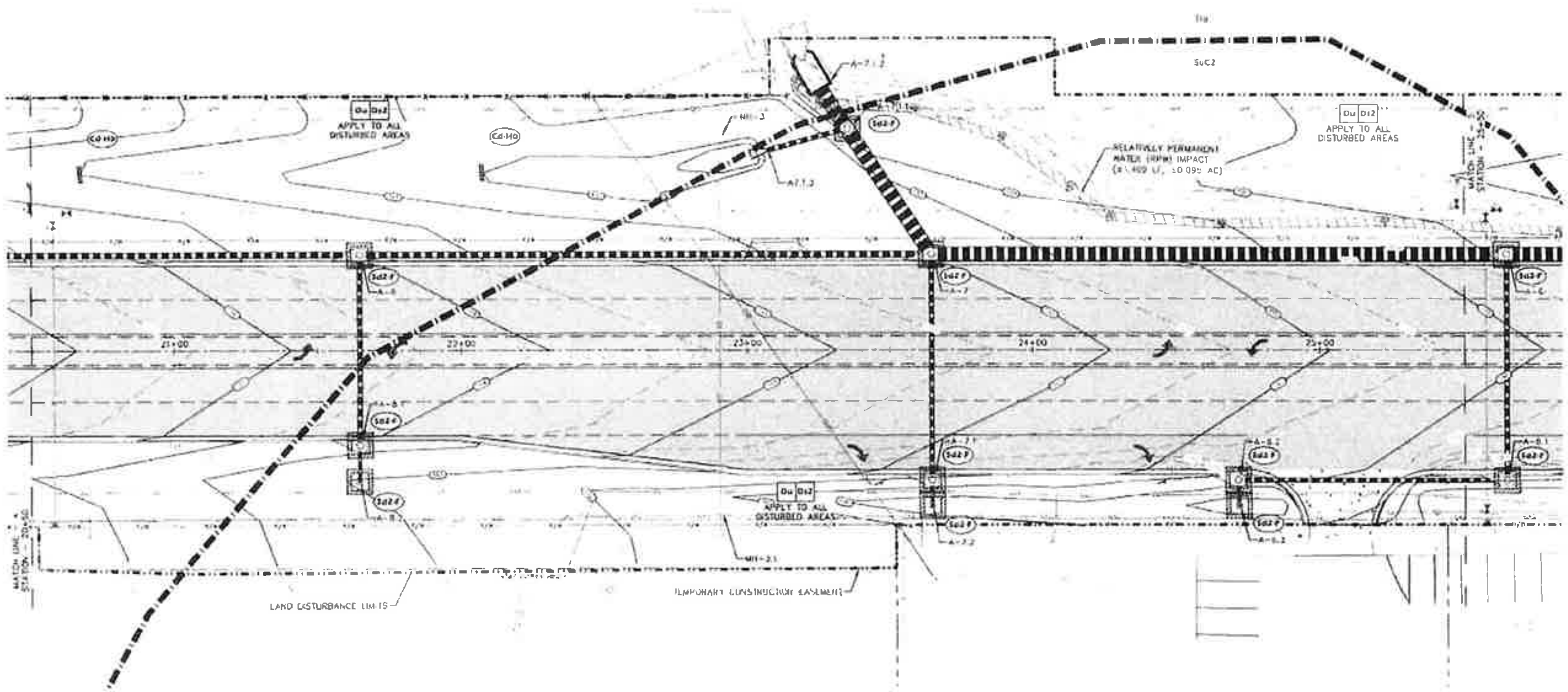
SCALE	1"=20
DESIGNED BY:	BEA
CHECKED BY:	MEM
SUBMITTAL DATE	03-24-23
JOB NO.	0028-40

DRAFT

ESPC PLAN
(STA 10+50 - 20+50)

54-003

F1 OF 74 SHEETS



OLD CLYATTVILLE ROAD WIDENING PI#0016285

LAND LOT 64 & 39 OF THE 11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS DATE	DESCRIPTION

GRAPHIC SCALE

0 10 20 40

(IN FEET)
1 INCH = 20 FEET

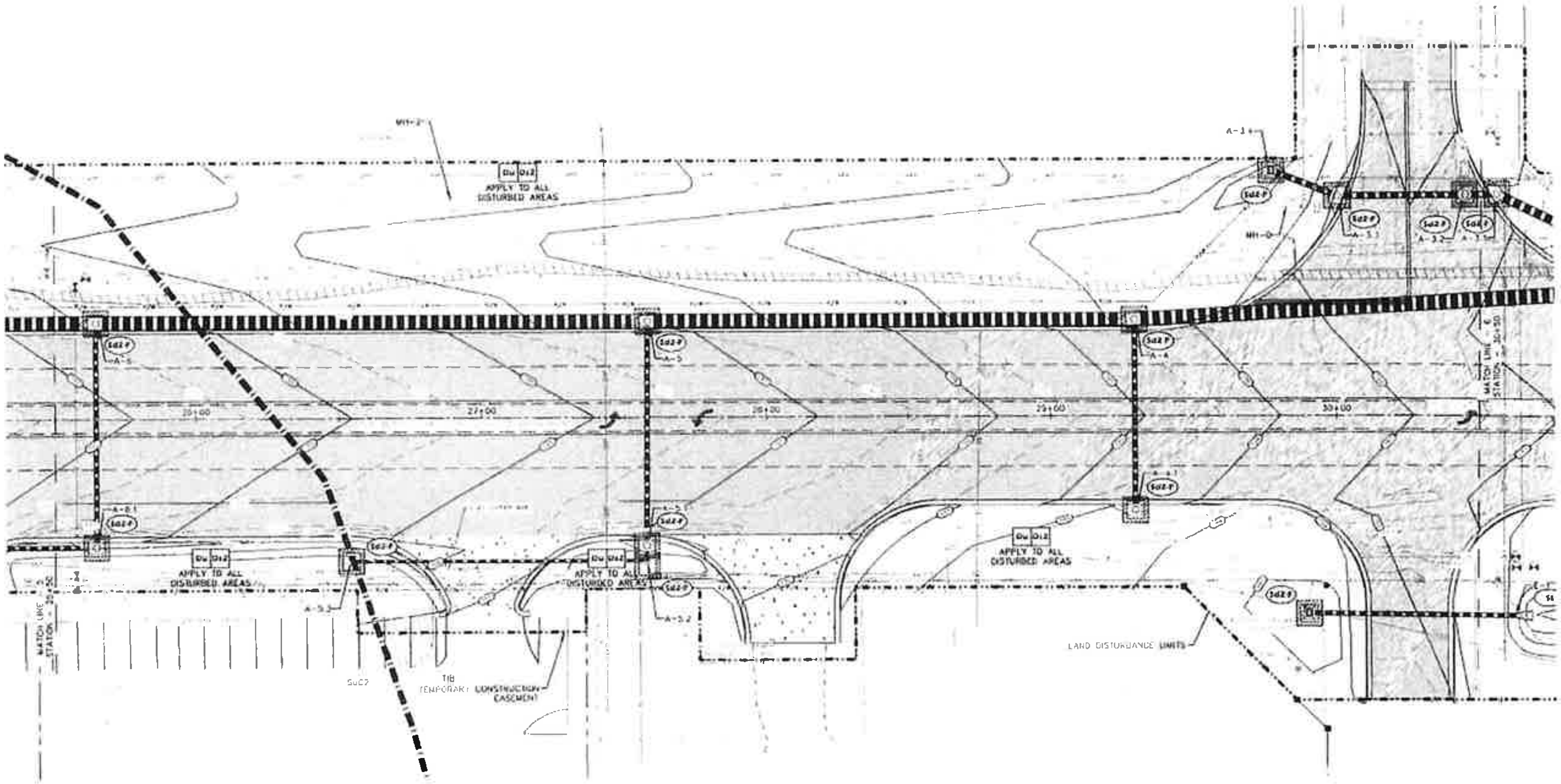
SCALE:	1"=20
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	02-24-23
JOB NO.	0026-40

DRAFT

ESPC PLAN (STA 20+50 - 25+50)

54-004

72 OF 74 SHEETS



OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE 11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS DATE	DESCRIPTION

GRAPHIC SCALE
(IN FEET)
1 INCH = 20 FEET

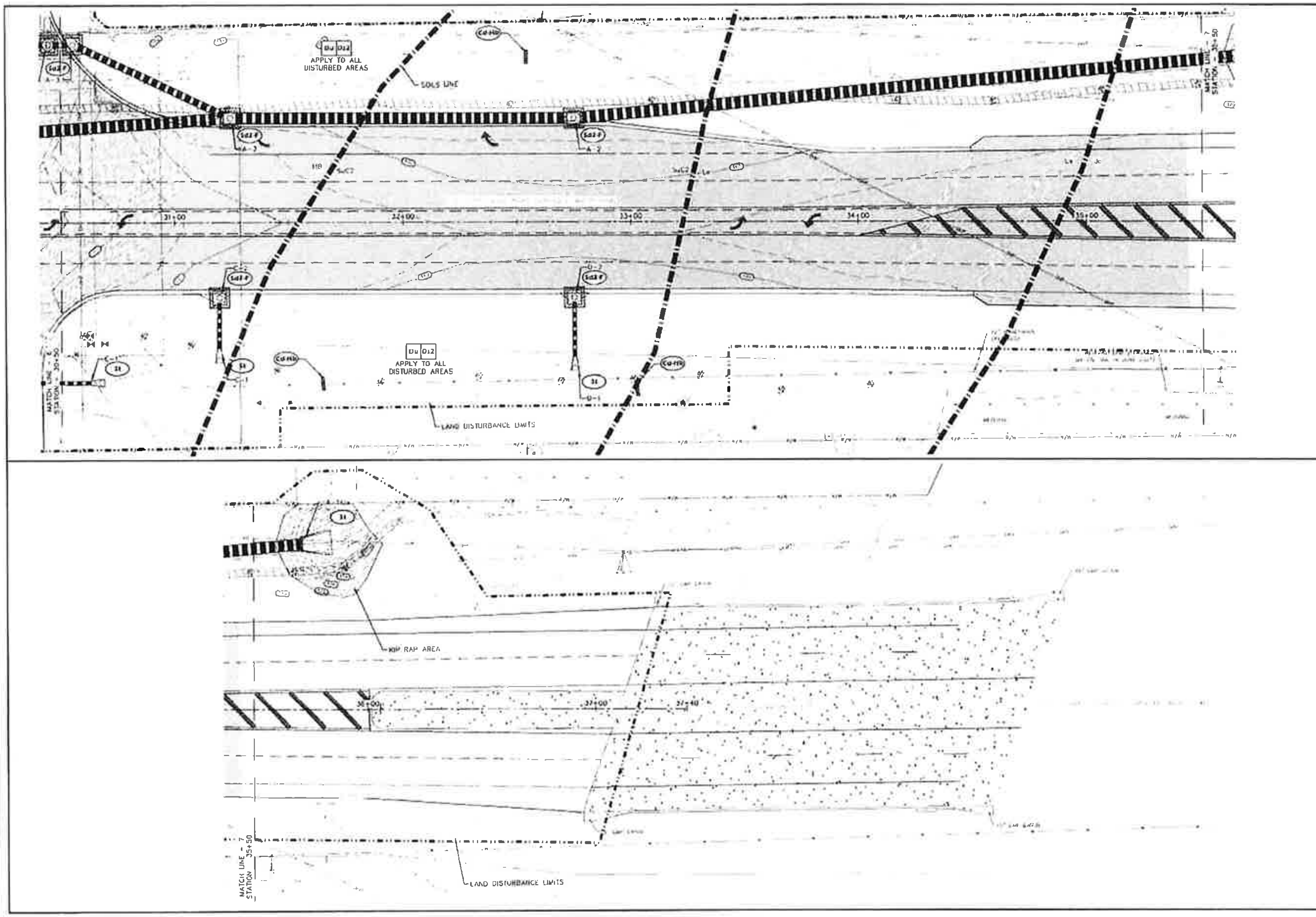
SCALE:	1"=20
DESIGNED BY:	DBA
CHECKED BY:	MCM
SUBMITTAL DATE:	05-24-23
JOB NO.	0028-40

DRAFT

ESPC PLAN
(STA 25+50 - 30+50)

54-005

33 OF 74 SHEETS



LEA

OLD CLYATTVILLE ROAD WIDENING

PI#0016285

LAND LOT 54 & 79 OF THE 11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS	
DATE	DESCRIPTION

GRAPHIC SCALE

0 10 20 40

(IN FEET)
1 INCH = 20 FEET

SCALE:	1"=20'
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO:	0025-40

DRAFT

ESPC PLAN
(STA 30+50 - END)

54-006

54 OF 74 SHEETS

PRE-CONSTRUCTION NOTIFICATION
NATIONWIDE PERMIT 14

OLD CLYATTVILLE ROAD WIDENING
(GIL HARBIN INDUSTRIAL BLVD TO MUD SWAMP)
VALDOSTA, LOWNDES COUNTY, GEORGIA

Submitted to:

Lovell Engineering Associates
Attn: Mr. Jeff Lovell, P.E.
3998 Inner Perimeter Road
Valdosta, Georgia 31602

Prepared by:

TTL, Inc.
4589 Val North Drive
Valdosta, Georgia 31602

Project No. 21-07-00563.00

June 13, 2023

TABLE OF CONTENTS

USACE PRE-CONSTRUCTION NOTIFICATION

ADDITIONAL PROJECT INFORMATION

FIGURES

1. Site Location and Topographic Map
2. Site Location Map and Aerial Photograph
3. Client-provided Design Drawings
   3A. Location Map
   3B. Wetland Impact Map

ATTACHMENTS

1. Aquatic Resource Delineation Report
2. Threatened and Endangered Species Review
3. Cultural Resources Desktop Review

USACE PRE-CONSTRUCTION NOTIFICATION

U.S. Army Corps of Engineers (USACE)

NATIONWIDE PERMIT PRE-CONSTRUCTION NOTIFICATION (PCN)

33 CFR 330. The proponent agency is CECW-CO-R.

Form Approved - OMB No. 0710-0003 Expires: 02-28-2022

DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Regulatory Program of the Corps of Engineers (Corps); Final Rule 33 CFR 320-332.

Principal Purpose Information provided on this form will be used in evaluating the nationwide permit pre-construction notification.

Routine Uses This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of the agency coordination process.

Disclosure Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued.

The public reporting burden for this collection of information, 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PLEASE DO NOT RETURN YOUR RESPONSE TO THE ABOVE EMAIL.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (*see sample drawings and/or instructions*) and be submitted to the district engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE (*agent is not required*)
First - Benjamin Middle - Last - O'Dowd	First - Melissa Middle - R Last - Norris
Company - City of Valdosta	Company - TTL, Inc
Company Title -	E-mail Address - mnorris@ttlusa.com
E-mail Address - bodowd@valdostacity.com	
6. APPLICANT'S ADDRESS	**9. AGENT'S ADDRESS**
Address- 300 North Lee Street	Address- 4589 Val North Drive
City - Valdosta State - GA Zip - 31602 Country - US	City - Valdosta State - GA Zip - 31602 Country - US
7. APPLICANT'S PHONE NOs. with AREA CODE	**10. AGENT'S PHONE NOs. with AREA CODE**
a. Residence; b. Business 229-259-3530; c. Fax; d. Mobile	a. Residence; b. Business 229-244-8619; c. Fax; d. Mobile 229-415-5570

STATEMENT OF AUTHORIZATION

11. I hereby authorize, Melissa Norris / TTL, Inc. to act in my behalf as my agent in the processing of this nationwide permit pre-construction notification and to furnish, upon request, supplemental information in support of this nationwide permit pre-construction notification.

BO'Dowd — SIGNATURE OF APPLICANT

6-14-23 — DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME or TITLE (*see instructions*)

Old Clyattville Road Widening (Gil Harbin Industrial Blvd. to Mud Swamp)

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY	
13. NAME OF WATERBODY, IF KNOWN (*if applicable*) unnamed - man-made ditch (D-1)	14. PROPOSED ACTIVITY STREET ADDRESS (*if applicable*) Old Clyattville Road (Gil Harbin Industrial Blvd. to Mud Swamp)
15. LOCATION OF PROPOSED ACTIVITY (*see instructions*) Latitude °N 30.79914 Longitude °W -83.28845	City: Valdosta State: GA Zip: 31602

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (*see instructions*)

State Tax Parcel ID

Municipality

Section

Township

Range

17. DIRECTIONS TO THE SITE

From Interstate I-75 take Exit 13; head east onto Old Clyattville Road. The project area is located approximately 1.5 miles from I-75, across Mud Swamp bridge.

18. IDENTIFY THE SPECIFIC NATIONWIDE PERMIT(S) YOU PROPOSE TO USE

NWP-14

19. DESCRIPTION OF PROPOSED NATIONWIDE PERMIT ACTIVITY (*see instructions*)

The project consists of the widening of Old Clyattville Road from Gil Harbin Industrial Blvd to Mud Swamp. Based on the site plans provided by LEA, the proposed road widening activities will permanently impact approximately 0.095 acres (1,409 linear feet) of jurisdictional ditch (D-1). The impacts include the installation of 60-inch culverts for the 1,409 linear feet of ditch to address current/ anticipated erosion and sedimentation issues. Client-provided plan and profile drawings for the project are included in the attached figure set. Additional information is provided in the attached Additional Project Information Sheets.

20. DESCRIPTION OF PROPOSED MITIGATION MEASURES (*see instructions*)

Based on review of project plans and client provided site drawings, the proposed Old Clyattville Road Widening will not meet the 0.10-acre mitigation threshold.

21. PURPOSE OF NATIONWIDE PERMIT ACTIVITY (*Describe the reason or purpose of the project, see instructions*)

The proposed lift station is being constructed to address anticipated increase in traffic and commercial development in the surrounding area. The proposed culverting of the identified ditch feature (D-1) will aide in addressing erosion and sedimentation issues.

22. QUANTITY OF WETLANDS, STREAMS, OR OTHER TYPES OF WATERS DIRECTLY AFFECTED BY PROPOSED NATIONWIDE PERMIT ACTIVITY (*see instructions*)

Acres	Linear Feet	Cubic Yards Dredged or Discharged
0.095	1,409	

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site.

23. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. (*see instructions*)

N/A

24. If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and requires pre-construction notification, explain how the compensatory mitigation requirement in paragraph (c) of general condition 23 will be satisfied, or explain why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required for the proposed activity.

Based on review of project plans and client provide site drawings, the proposed Clyattville Road Widening Project will not meet the 0.10-acre mitigation threshold.

25. Is any portion of the nationwide permit activity already complete? ☐ Yes ☒ No If Yes, describe the completed work:

26. List the name(s) of any species listed as endangered or threatened under the Endangered Species Act that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. (see *instructions*)

No evidence of the federally listed threatened, endangered or candidate species was observed during the site reconnaissance conducted by TTL on March 12, 2021. Impacts to T&E species from the proposed project are not anticipated. Additional description of T&E Species Review is included in the attached Additional Project Information sheets. A copy of the USFWS Species List is included in Attachment 2.

27. List any historic properties that have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic property or properties. (see *instructions*)

A Desktop Cultural Resource Survey was conducted for the subject property by TerraXplorations (TerraX) dated May 19, 2023. A copy of the cultural resource review is included as Attachment 3. Additional information is provided in the attached Additional Project Information Sheets.

28. For a proposed NWP activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, identify the Wild and Scenic River or the "study river":

N/A

29. If the proposed NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, have you submitted a written request for section 408 permission from the Corps district having jurisdiction over that project? ☐ Yes ☐ No

If "yes", please provide the date your request was submitted to the Corps district: N/A

30. If the terms of the NWP(s) you want to use require additional information to be included in the PCN, please include that information in this space or provide it on an additional sheet of paper marked Block 30. (see *instructions*)

N/A

31. Pre-construction notification is hereby made for one or more nationwide permit(s) to authorize the work described in this notification. I certify that the information in this pre-construction notification is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

[signature]	6-14-23	Melissa Norris	June 13, 2023
SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE

The pre-construction notification must be signed by the person who desires to undertake the proposed activity (applicant) and, if the statement in Block 11 has been filled out and signed, the authorized agent.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

ADDITIONAL PROJECT INFORMATION

General Description

The project consists of widening approximately 0.6 miles of Old Clyattville Road. The area is depicted on the U.S. Geological Survey (USGS) 7.5-minute Topographic Map of Valdosta, Georgia (Figure 1). According to the USGS Topographic Map, the elevation at the site ranges from approximately 170 to 210 feet above mean sea level. As depicted on Figure 2, the Project transverses from Gil Harbin Industrial Blvd. to Mud Swamp and has an approximate central location of latitude 30.79914 and longitude -83.28845.

The City of Valdosta desires to permanently impact 0.095 acre of man-made ditch which meets the "relatively permanent standard," and meets the definition of an (a)(3) tributary, (man-altered, or man-made water body that flows directly into (a)(1) waters: Mud Swamp). Intermediate portions of D-1 exhibit geomorphic stream features and wrested vegetation consistent with State Water requiring a buffer, while portions of D-1 support wetland vegetation and function primarily as a wetland. The impacts to D-1 include the installation of 60-inch culverts for the 1,409 linear feet of ditch to address current/anticipated erosion and sedimentation issues. The review area includes impacts as described below:

Feature ID	Area (acres)	Length (linear feet)	Impact Area (acres)	Impact Description
D-1	0.095	1,409	0.095	Culverting
WA	0.397	—	None	None
WB	0.442	—	None	None

Client-provided plan and profile drawings for the project are included in the attached figure set.

AR Delineation

The review corridor contains approximately 1.13 acres of forested wetland, and approximately 0.095 acres (1,409 linear feet) of man-made ditches. The boundaries of the wetlands and ditches are presented on Figure 7 – Aquatic Resource Delineation Map, which is included in the AR Delineation Report (Attachment 1), dated May 26, 2023. The AR Delineation Report and associated Jurisdictional Determination (JD) request is included with this PCN submittal.

Both the National Wetlands Inventory (NWI) map and Natural Resources Conservation Service (NRCS) soils maps were considered during delineation. The NWI map identified forested wetlands present on portions of the site. The NRCS map is provided as Figure 4 and the NWI map is provided as Figure 5 within the AR Delineation Report. Selected site photographs are in Appendix B of the AR Delineation Report.

Block 20 - Mitigation Plan

Based on review of project plans and client provide site drawings, the proposed Pump Station Project will not meet the 0.10-acre mitigation threshold. Therefore, no compensatory mitigation is required.

Block 26 - Threatened and Endangered Species Review

According to information maintained by the United States Fish and Wildlife Service website, five (5) federally listed threatened, endangered, or candidate species can be found in or near the project area in Valdosta, Lowndes County, Georgia.

Group	Common Name	Status	Habitat
Birds	Whooping Crane	Experimental Population, Non-essential	No Critical habitat has been designated for this species.
	Wood Stork	Threatened	No Critical habitat has been designated for this species.
Reptiles	Eastern Indigo Snake	Threatened	No Critical habitat has been designated for this species.
	Suwannee Alligator Snapping Turtle	Proposed Threatened	No Critical habitat has been designated for this species.
Insects	Monarch Butterfly	Candidate	No Critical habitat has been designated for this species.

TTL completed the IPaC Regulatory Review to evaluate potential impacts from the project to listed species. The following two (2) determination keys were available for this project:

- Wood Stork Determination Key, and
- Clearance to proceed with Federally-Insured Loan and Grant Project Request (Not applicable).

Based on the IPaC submission output, the proposed project is consistent with a "May Affect, Not Likely to Adversely Affect" determination for the wood stork. Additionally, no evidence of above-listed federally listed threatened, endangered or candidate species, or their associated suitable habitats, was observed during the site reconnaissance conducted by TTL on March 12, 2021. A copy of the USFWS Species List, and the Wood Stork Determination Key Consistency Letter are included in Attachment 2.

Block 27- Historical Properties Coordination

A Desktop Cultural Resource Survey was conducted for the subject property by TerraXplorations (TerraX) dated May 19, 2023. Based on review of the Desktop Cultural Resource Survey, as provided by TerraX, four (4) previous surveys were identified within a 1-kilometer (km) radius of the proposed project area. Three of the identified surveys intersect with the project area (6984, 6987 and 12343). The surveys indicated that no significant archaeological resources were found within the proposed project's area of potential environmental effect.

Examinations of the GNAHRGIS database identified 10 previously recorded archaeological sites within the 1-km search radius. None of these archaeological sites intersect with the proposed project area.

The Georgia and Florida Railroad (GAF) mainline was identified as a rail line located within the 1-km search radius that is recommended eligible for NRHP inclusion under Criteria A, B, and C. The GAF mainline does not intersect with the proposed project area

- Wisenbaker Cemetery was identified adjacent to the northeast of the Old Clyattville Road/Gil Harbin Industrial Boulevard intersection, as depicted on Figure 3 of the TerraX Cultural Resource Survey. TerraX noted, the historic cemetery dates to the late nineteenth and early twentieth century. According to Find-A-Grave, there are 12 burials within the Wisenbaker Cemetery, the earliest of which dates to 1863. TTL understands that The City of Valdosta is aware of the extent of the cemetery, and the Old Clyattville Road Widening Project has been designed to avoid the identified cemetery.

Based on the presence of historic structures on the historic topographic maps and aerial images, as well as the proximity of the proposed project area to Mud Swamp, TerraX opines there is potential for previously undetected historic and precontact archaeological material to be present within the proposed project area. Furthermore, the presence of a historic cemetery within the project area suggests there is a high likelihood of historic resources within the proposed project area. TerraX recommend avoidance of the Wisenbaker Cemetery in accordance with State Cemetery Law (OCCA 36-72).

A copy of the cultural resource review and attachments is included in Attachment 3.

FIGURES

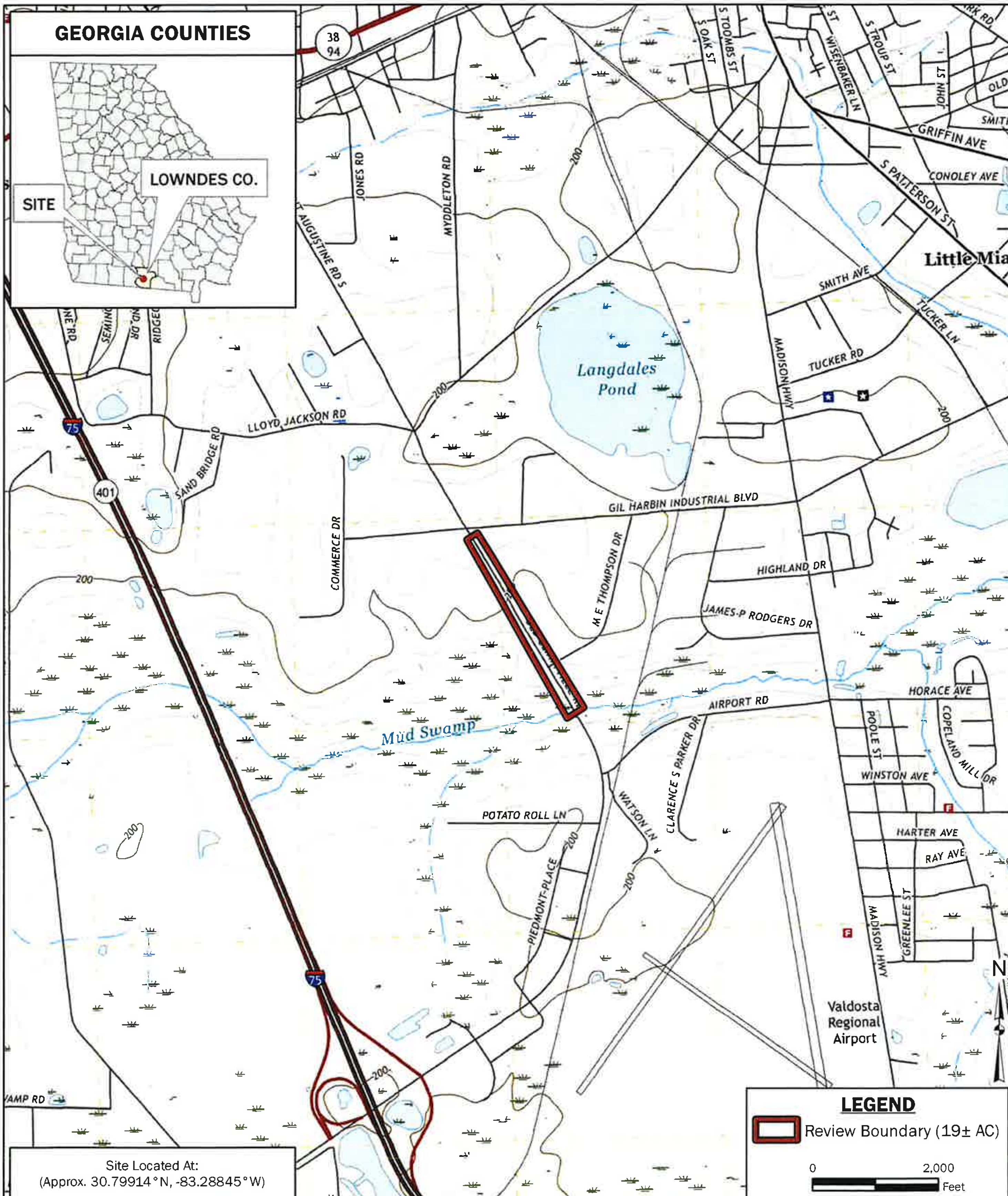


FIGURE 1: SITE LOCATION & TOPOGRAPHIC MAP

LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD WIDENING

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: Valdosta, Georgia, USGS 7.5 Minute Quadrangle Map, 2020 (10-ft Contour Interval).

DRAWN BY: JDM
CHECKED BY: DEK
DRAWING DATE: 5/1/2023
REVISION DATE: N/A
TTL JOB NO.: 21-07-00563.00
APPROX. SCALE 1 in = 2,000 ft

TTL

FIGURE 2: SITE LOCATION & AERIAL PHOTOGRAPH

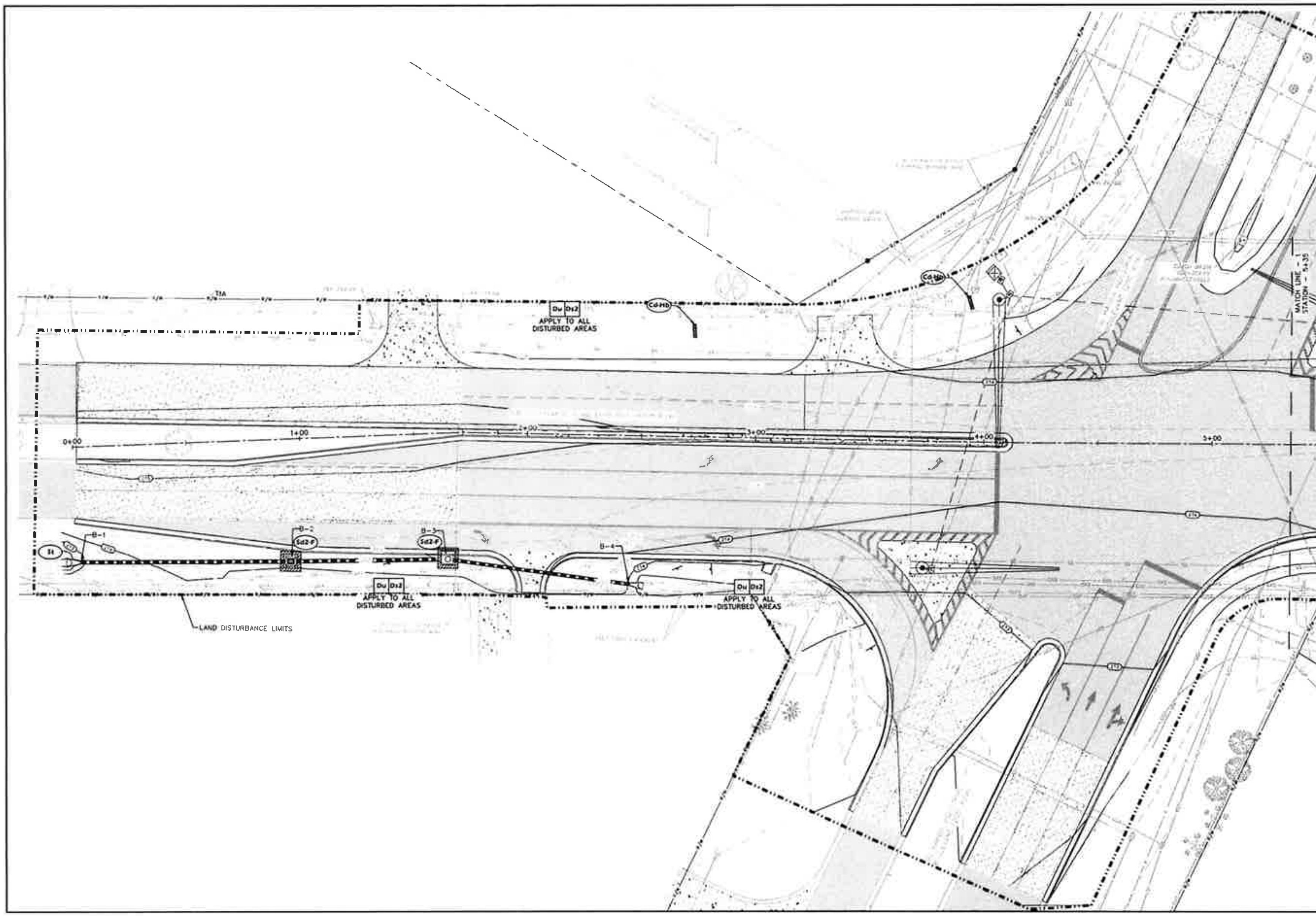
LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD WIDENING

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: Maxar Technologies, Vivid Imagery 11/19/2020 (0.31 m Resolution)

DRAWN BY: JDM
CHECKED BY: DEK
DRAWING DATE: 5/1/2023
REVISION DATE: N/A
TTL JOB NO.: 21-07-00563.00
APPROX. SCALE: 1 in = 500 ft



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OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE
11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS	
DATE	DESCRIPTION

GRAPHIC SCALE
0 10 20 40
(IN FEET)
1 INCH = 20 FEET

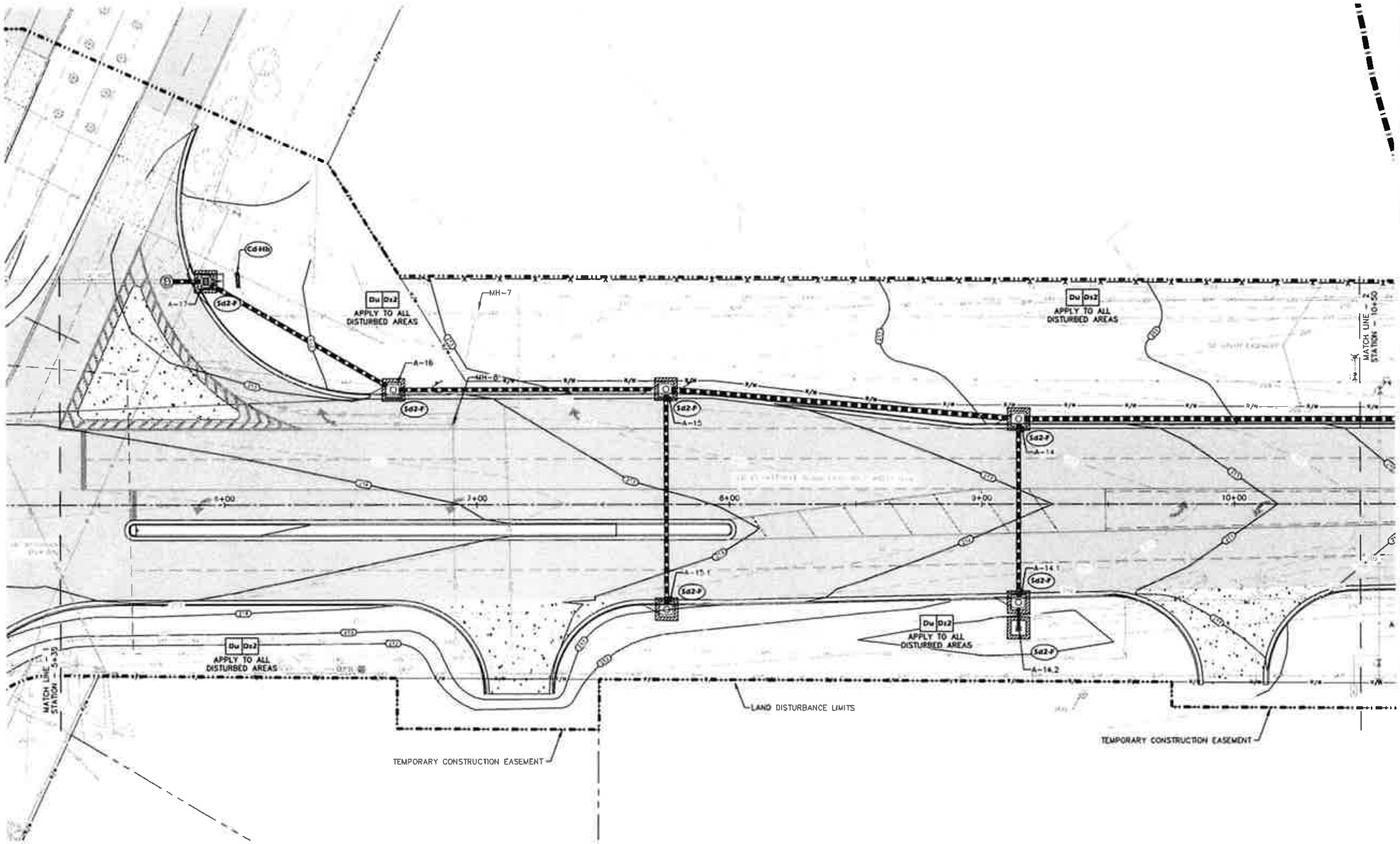
NORTH

SCALE:	1"=20'
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	01-24-23
JOB NO.	0026-40

DRAFT

ESPC PLAN
(STA 0+00 - 5+35)

54-001



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OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 84 & 29 OF THE 11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS	
DATE	DESCRIPTION

GRAPHIC SCALE
0 10 20 40
(IN FEET)
1 INCH = 20 FEET

NORTH

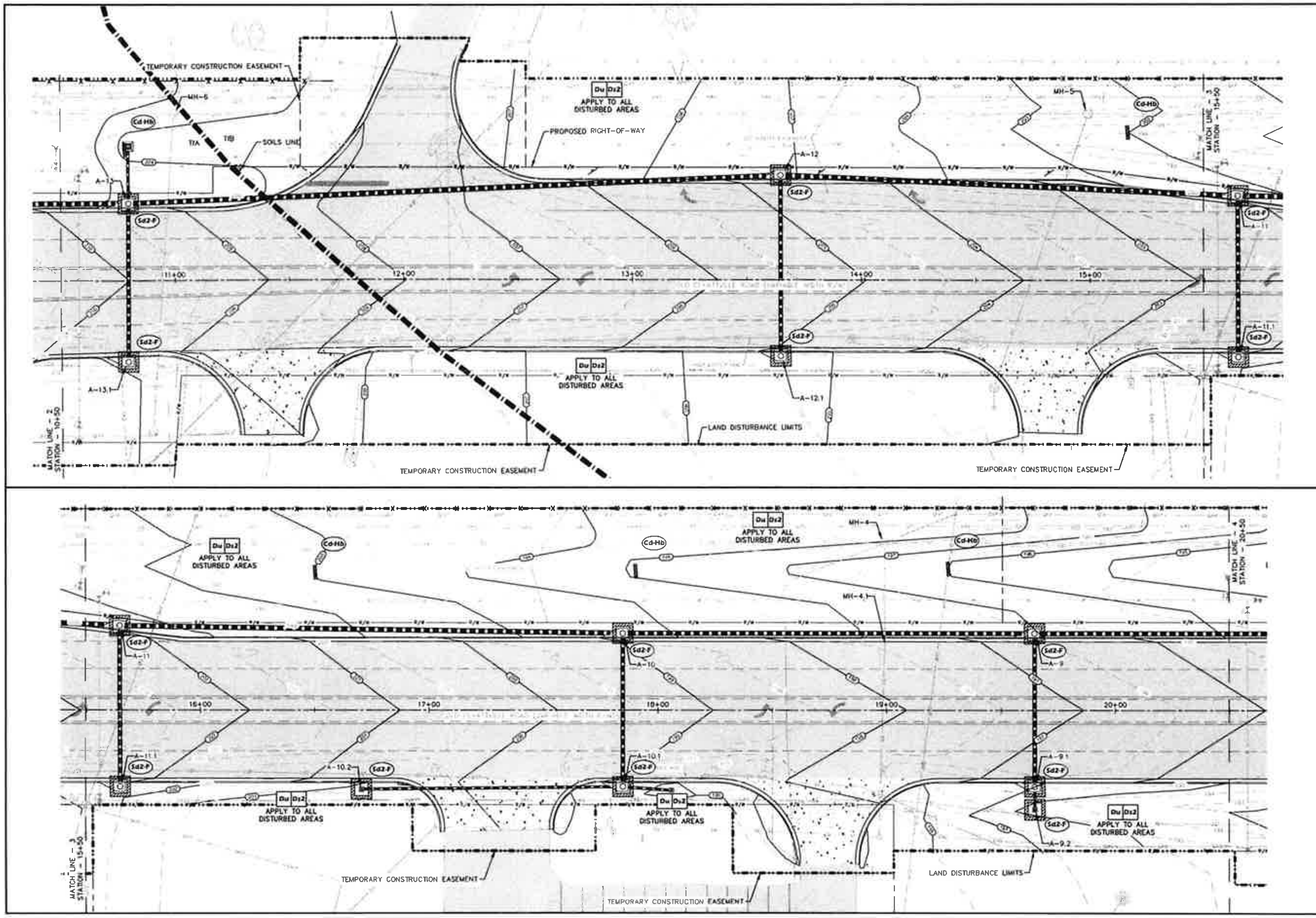
SCALE:	1"=20'
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO.	0026-40

DRAFT

ESPC PLAN
(STA 5+35 - 10+50)

54-002

70 OF 74 SHEETS



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OLD CLYATTVILLE ROAD WIDENING
PI#0016285

LAND LOT 64 & 29 OF THE
11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS DATE	DESCRIPTION

GRAPHIC SCALE
0 10 20 40
(IN FEET)
1 INCH = 20 FEET

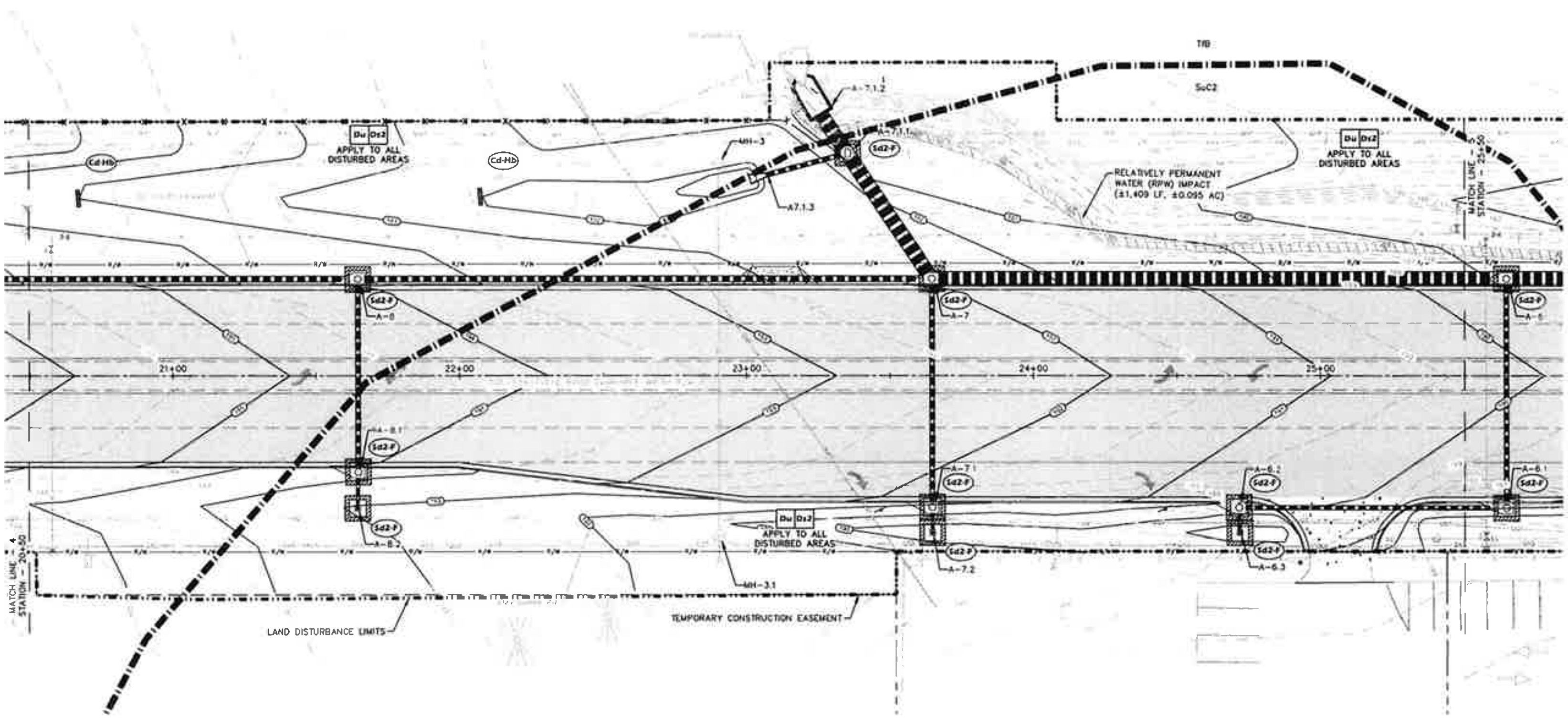
NORTH

SCALE:	1"=20'
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO.	0026-40

DRAFT

ESPC PLAN
(STA 10+50 - 20+50)

54-003



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OLD CLYATTVILLE ROAD WIDENING PI#0016285

LAND LOT 64 & 29 OF THE
11TH LAND DISTRICT
CITY OF VALDOSTA
LOWNDES COUNTY
STATE OF GEORGIA

REVISIONS	
DATE	DESCRIPTION

GRAPHIC SCALE

0 10 20 40

(IN FEET)
1 INCH = 20 FEET

NORTH

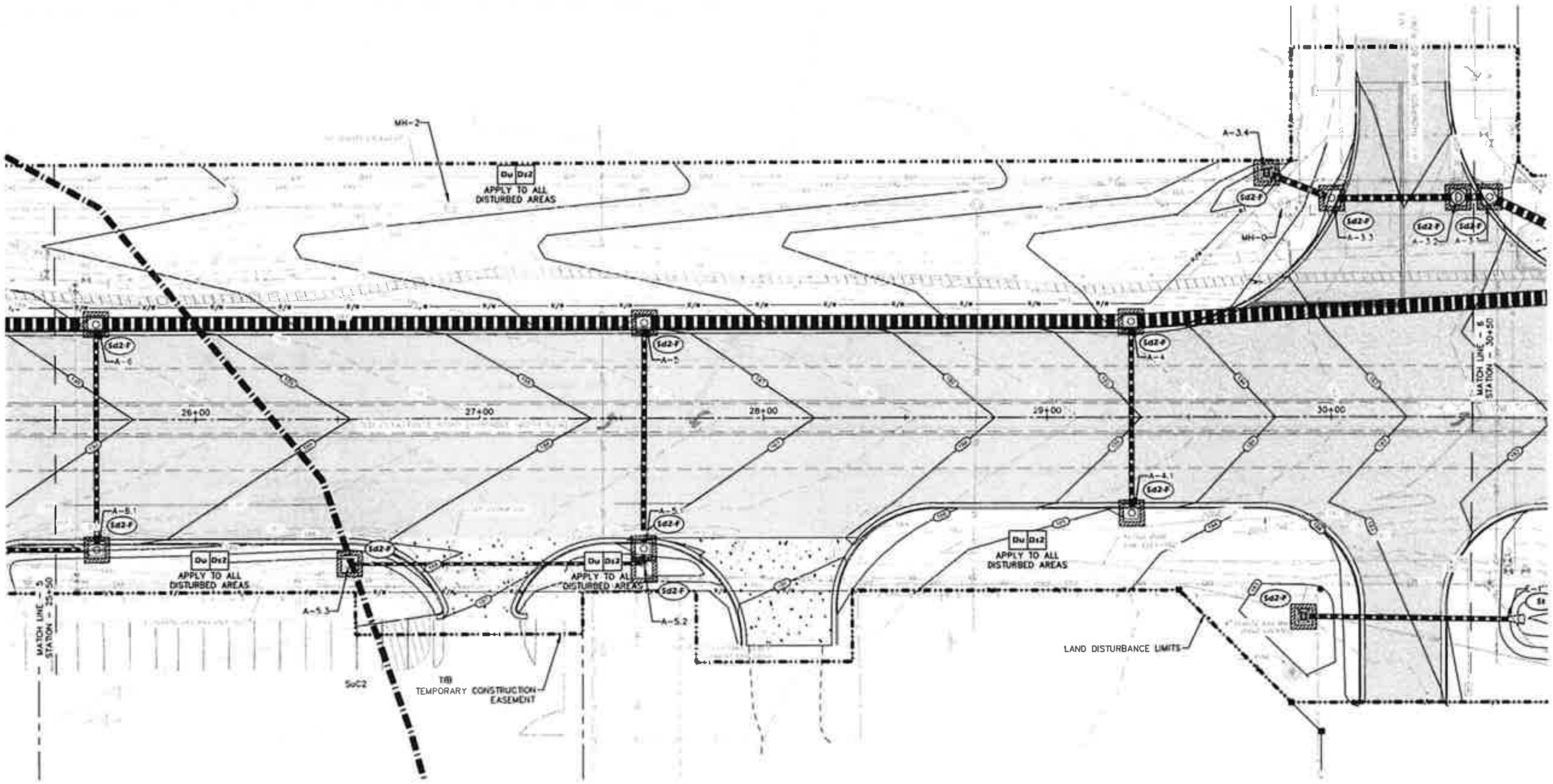
SCALE:	1"=20'
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO.	0026-40

DRAFT

ESPC PLAN
(STA 20+50 - 25+50)

54-004

72 OF 74 SHEETS



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OLD CLYATTVILLE ROAD WIDENING
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LAND LOT 84 & 29 OF THE
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1 INCH = 20 FEET

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SCALE:	1"=20
DESIGNED BY:	DEA
CHECKED BY:	MCM
SUBMITTAL DATE:	03-24-23
JOB NO.	0026-00

DRAFT

ESPC PLAN
(STA 25+50 - 30+50)

54-005

73 OF 74 SHEETS

ATTACHMENT 1
AQUATIC RESOURCE DELINEATION REPORT

AQUATIC RESOURCES DELINEATION REPORT

OLD CLYATTVILLE ROAD WIDENING
(GIL HARBIN INDUSTRIAL BLVD TO MUD SWAMP)
VALDOSTA, LOWNDES COUNTY, GEORGIA

Submitted to:

Lovell Engineering Associates
Attn: Mr. Jeff Lovell, P.E.
3998 Inner Perimeter Road
Valdosta, Georgia 31602

Prepared by:

TTL, Inc.
4589 Val North Drive
Valdosta, Georgia 31602

Project No. 21-07-00563.00

May 26, 2023

TTL

SIGNATURE OF ENVIRONMENTAL PROFESSIONALS

TTL, Inc. has performed an Aquatic Resources delineation in general conformance with the scope and limitations of the *U. S. Army Corps of Engineers Wetland Delineation Manual, 1987 Edition*, and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region Version 2.0* (2010). Identification of ephemeral, intermittent and perennial streams has been performed in general conformance with methodology outlined in *Methodology for Identification of Intermittent and Perennial Streams and their Origins, Version 4.11* (2010).

Melissa Norris

Melissa R. Norris, P.G.
Project Professional

May 26, 2023
Date

Christopher Terrell

Chris Terrell, P.W.S.
Natural Resources Project Manager

May 26, 2023
Date

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APPENDICES

Appendix A	Antecedent Precipitation Tool Output U.S. Drought Monitor – Georgia Palmer Drought Index
Appendix B	Selected Site Photographs and Historical Aerial Photographs
Appendix C	U.S. Army Corps of Engineers Wetland Determination Data Forms
Appendix D	USACE Savannah District Request for Corps of Engineers Jurisdictional Determination (JD) and/or Delineation Review Form

1.0 INTRODUCTION

TTL, Inc. (TTL) was contracted by the Lovell Engineering Associates (LEA) to perform an Aquatic Resources (AR) Delineation associated with the proposed widening of Old Clyattville Road from Gil Harbin Industrial Blvd. to Mud Swamp in Valdosta, Lowndes County, Georgia (Figure 1). The road paving is being performed by the City of Valdosta. TTL conducted the field activities for this project on March 12, 2021.

Activities within jurisdictional Waters of the U.S. (WOTUS) are regulated by the U.S. Army Corps of Engineers (USACE). Authority to permit discharges (fill) within jurisdictional wetlands or non-navigable WOTUS is granted under Section 404 of the Clean Water Act (CWA) of 1972. Authority to permit work and placement of structures in navigable WOTUS is granted under Sections 9 and 10 of the Rivers and Harbors Act of 1899. For regulatory purposes under the CWA, wetlands are defined by the USACE as:

> Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

2.0 SITE DESCRIPTION

The roadway project consists of approximately 0.6 miles (3,183 linear feet) located directly adjacent to the Old Clyattville Road corridor. The area is depicted on the U.S. Geological Survey (USGS) 7.5-minute Topographic Map of Valdosta, Georgia (Figure 1). According to the USGS Topographic Map, the elevation at the site ranges from approximately 170 to 210 feet above mean sea level. Figure 2 depicts the USGS Lidar Elevation and Hillshade Map from approximately 170 to 210 ft AMSL.

The Project transverses along Old Clyattville Road from Gil Harbin Industrial Blvd. to Mud Swamp and has an approximate central location of latitude 30.79914 and longitude -83.28845. TTL identified two (2) wetland areas and one (1) ditch feature within the review area. The primary sources of hydrology for the delineation area are rainfall and groundwater. Figure 3 depicts the Site Location and Aerial Photograph.

3.0 LITERATURE AND RECORDS REVIEW

Prior to conducting the field effort, TTL performed a literature and records review to develop an understanding of the potential for the presence of AR on the subject site or surrounding properties. These data sources and the review findings are described below.

3.1 Hydric Soils

The Natural Resources Conservation Service (NRCS) maintains a database of soil types (map units) for most areas of the U.S. (NRCS, 2023). The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit which represents a large area dominated by one or more major types of soil. Map units are further classified with a rating of hydric, partially hydric or non-hydric. Map units are useful for planning purposes to provide an overall understanding of the soils that occur in a general area. However, due to the natural variability of the landscape, direct observation of the soils profile is necessary to identify hydric soil indicators.

A classification of hydric means that the soil components listed for a given map unit are rated as being hydric. “Predominantly hydric” means that more than 66 percent to less than 100 percent of soil components are hydric. "Partially hydric" means that more than 33 percent to less than 65 percent of soil components are hydric. “Predominantly non-hydric” means that more than 0 percent and less than 32 percent of soil components are hydric. "Not hydric" means that all soil components are rated as not hydric. "Unknown hydric" indicates that at least one component is not rated so a definitive rating for the map unit cannot be made. A NRCS map of the soils located on the site with the associated hydric rating is presented in Figure 4 and summarized in Table 1 below.

Table 1: Soil Map Units Classifications

Map Unit Symbol	Description	Hydric Rating
Jo	Johnson loam	Hydric
Le	Leefield loamy sand, 0 to 2 percent slopes	Predominantly Nonhydric
SuC2	Sunsweet sandy loam, 5 to 8 percent slopes	Nonhydric
TfA	Tifton loamy sand, 0 t 2 percent slopes	Nonhydric
TfB	Tifton loamy sand, 2 to 5 percent slopes	Nonhydric

3.2 National Wetland Inventory

The U.S. Fish and Wildlife Service (USFWS) created and maintains the National Wetland Inventory (NWI) database of information on the characteristics, extent, and status of the wetlands and deepwater habitats within the U.S. This information is useful for planning purposes and provides an overall understanding of the habitats that may be present in or around the site. The NWI classifies habitat types as marine, estuarine, riverine, lacustrine or palustrine with additional modifiers as appropriate to identify the water regime, water chemistry, soil or other characteristics based on Classification of Wetlands and Deepwater Habitats of the U.S. (Cowardin, 1979).

TTL reviewed the NWI data for the site using the USFWS NWI Wetlands Mapper web-based tool to determine the potential for wetlands to exist within the project area. The USFWS NWI Mapper identified approximately one (1) wetland feature within the vicinity delineation area boundary. Figure 5 depicts the NWI Map, and Table 2 summarizes the habitat below.

Table 2: NWI Classifications

Map Unit Symbol	Description of Habitat
PFO1C	Palustrine; Forested; Broad-Leaved Deciduous; Seasonally Flooded
PFO4/1A	Palustrine; Forested; Needle-Leaved Evergreen / Broad-Leaved Deciduous; Temporarily Flooded
PFO4/1B	Palustrine; Forested; Needle-Leaved Evergreen / Broad-Leaved Deciduous; Saturated
PSS3B	Palustrine; Scrub-Shrub; Broad-Leaved Evergreen; Saturated
R5UBH	Riverine; Unknown Perennial; Unconsolidated Bottom; Permanently Flooded

3.3 Hydrologic Unit Code

Each hydrologic unit is identified by a unique hydrologic unit code (HUC) consisting of two to 12 digits based on the six levels of classification in the hydrologic system (USGS & USDA 2013). The U.S. is divided and sub-divided into successively smaller hydrologic units which are classified into six levels: region, sub-region, basin, sub-basin, watershed, and sub-watershed. The project is located within the western portion of the Suwannee basin 6-Digit HUC 031102 (Figure 6). The project is located within the Alapaha subbasin 8-Digit HUC 03110202, and within the Upper Mud Swamp subwatershed 12-Digit HUC 031102021001.

3.4 Normal Weather Conditions

TTL calculates a subject site's normal weather conditions before performing site work to understand whether aquatic features in the landscape may exhibit certain characteristics related to current and near past hydrologic regime. TTL utilizes the USACE Antecedent Precipitation Tool (APT) Version 1.0 to evaluate climatological parameters when determining and documenting whether precipitation and other climatic variables are within the normal periodic range (i.e., seasonally, annually) for the delineation area. Included with the APT output are the Palmer Drought Severity Index (PDSI) and the WebWIMP Climatic Water Balance. The APT output indicates the following:

- APT Result –13 Normal Conditions
- Drought Index (PDSI) – Normal
- WebWIMP H2O Balance – Wet Season

The Palmer Drought Severity Index provided by National Oceanic and Atmospheric Administration (NOAA) is accessed at http://www.ncdc.noaa.gov/oa/climate/research/prelim/drought/palmer.html and was used to cross-reference the APT results. The Palmer Drought Severity Index indicates that the region of the site experienced "mid-range" conditions during the weeks prior to the site visit.

As an additional cross-reference, the U.S. Drought Monitor was accessed and evaluated. The U.S. Drought Monitor is produced through a partnership between the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture (USDA), and NOAA. The most recent update of the U.S. Drought Monitor (March 16, 2021) Map of Georgia exhibited no drought conditions in the general vicinity of the review area.

The APT output, Palmer Drought Severity Index Map, and U.S Drought Monitor Map of Georgia are included in Appendix A.

4.0 WETLAND AND WATERS DELINEATION

4.1 Wetland Identification Methodology

TTL utilizes the *U.S. Army Corps of Engineers Wetland Delineation Manual* (USACE, 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* (USACE, 2010) technical guidelines for determining the presence of wetlands. This determination requires that a positive wetland indicator be present for each of the three parameters (hydrology, soil, and vegetation), with the exception of areas altered by recent human activities or natural events. During field activities, TTL assessed the project area for the presence of hydrophytic vegetation and used a Dutch hand-auger to evaluate the project area for the presence of hydric soils. TTL examined the soil for hydric soil indicators as identified in the *Field Indicators of Hydric Soils in the United States, V. 8.2* (NRCS, 2018). Additionally, TTL observed the project area for indications of inundated or saturated soils, water marks, drift lines, crayfish burrows, sediment deposits and other wetland hydrology indicators. TTL used *Wetland Determination Data Forms – Atlantic and Gulf Coastal Plain Region Version 2.0* to record field conditions for the soil, vegetation and hydrology for wetlands and uplands located on the site. One data point was established in each habitat type observed within the review area.

TTL traversed the delineation area on foot and placed orange flagging labeled with Upland Data Point (UDP) or Wetland Data Point (WDP) to identify the data point locations. The location of the data point flagging was mapped with a Trimble DA2 GNSS receiver via ArcGIS Field Maps and Trimble Mobile Manager on TDC600 using DA2 Catalyst Corrections, which was set to sub-meter tolerances. Features were manually digitized in ArcGIS using the flag locations; geographic coordinates and area quantities were calculated using ArcGIS "area" function. Figure 7 depicts the AR Delineation Map.

4.2 Wetland Findings

The project area contains two (2) wetland areas (WA and WB) consisting of approximately 1.13 acres. The boundaries of the wetland areas and data point locations are depicted on Figure 7. Selected photographs of our field observations are provided in Appendix B. Wetland Determination Data Forms are included in Appendix C. Table 3 summarizes the wetland findings below.

Table 3: Wetland Summary

Wetland ID	Cowardin Habitat Description	Area (acres)
WA	Palustrine; Forested; Broad-Leaved Deciduous; Seasonally Flooded	0.470
WB	Palustrine; Forested; Broad-Leaved Deciduous; Seasonally Flooded	0.660

Two (2) potentially jurisdictional wetlands (WA and WB), were identified within the project review area. Several primary indicators of hydrology, including surface water, saturation and water-stained leaves were identified in the mapped areas. Soils observed within the wetland areas met hydric soil indicators (F3 – Depleted Matrix, F6 – Redox Dark Surface and F8 – Redox Depressions). Numerous hydrophytic plant species including Swamp Tupelo (*Nyssa biflora*), Southern Bayberry (*Morella cerifera*), and Cinnamon Fern (*Osmundastrum cinnamomeum*) were observed as dominant vegetation.

TTL considers the wetlands (WA and WB) to represent jurisdictional features.

4.3 Streams Identification and Methodology

When observed, TTL utilizes the *North Carolina Division of Water Quality (NC DWQ)– Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11, September 1, 2010 (NC Method)* technical guideline to determine the most appropriate classification of each subject stream. This technical guideline for stream identification is the preferred methodology for distinguishing between intermittent and perennial streams in the southeast United States and requires evaluation of 26 attributes of the stream and assigning a numeric score to each on the *NC DWQ Stream Identification Form Version 4.11*. A four-tiered, weighted scale is utilized for evaluating and scoring the features categorized in sets of geomorphic, hydrologic, and biological attributes. Additionally, TTL utilized the *Regulatory Guidance Letter No. 05-05*: *Ordinary High Water Mark Identification* (USACE, 2005) as the basis for the delineation, mapping, and linear footage/areal estimations of on-site streams.

4.4 Streams Findings

TTL did not identify streams within the review area. TTL identified one (1) man-made ditch consisting of approximately 1,409 linear feet as follows:

Table 4: Stream Summary

ID	Description	Area (Acres)	Length (linear feet)
D-1	Man-made Ditch	0.095	1,409

TTL's opinion that D-1 is a man-made ditch which represents a relatively permanent water feature that flows directly into (a)(1) waters: Mud Swamp. Based on review of historical aerial photography, D-1 was constructed between 1974 and 1979, during the development of the SAFT facility to the northeast. However, TTL opines that D-1 represents a USACE jurisdictional feature. Intermediate portions of D-1 exhibit geomorphic stream features and wrested vegetation consistent with State Water requiring a buffer, while portions of D-1 support wetland vegetation and function primarily as a wetland. Selected site photographs and historical aerial photographs are included in Appendix B.

4.5 Open Waters

TTL evaluated the delineation area for open waters based on the below definition. The 1986/1988 regulatory definition of WOTUS [40 CFR 230.3(s)] included inland open waters under the following:

"3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:

a. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

c. Which are used or could be used for industrial purposes by industries in interstate commerce;

4. All impoundments of waters otherwise defined as waters of the United States under this definition;"

Historically, open waters (e.g. lakes, ponds, and impoundments) were considered "*deepwater aquatic habitats*" in the USACE 1987 Wetland Delineation Manual (1987 Manual). The jurisdictional nature of open waters is therefore evaluated during all AR delineations. The 1987 Manual states the following regarding deepwater aquatic habitats:

"a. Definition. Deepwater aquatic habitats are areas that are permanently inundated at mean annual water depths >6.6 ft or permanently inundated areas >6.6 ft in depth that do not support rooted-emergent or woody plant species.
b. Diagnostic environmental characteristics. Deepwater aquatic habitats have the following diagnostic environmental characteristics:
(1) Vegetation. No rooted-emergent or woody plant species are present in these permanently inundated areas.
(2) Soil. The substrate technically is not defined as a soil if the mean water depth is >6.6 ft or if it will not support rooted emergent or woody plants."

TTL did not observe open water features within the review area.

4.6 Jurisdictional Determination Request

Any person, firm, or agency (including Federal, state, and local government agencies) planning to work in WOTUS, or discharge (dump, place, deposit) dredged or fill material in WOTUS, must first obtain a permit from the USACE. Recently, the definition of regulated WOTUS has been re-evaluated by the USACE and other federal agencies to better define what water bodies may be considered jurisdictional under the Federal Clean Water Act (CWA). Traditionally navigable waters, relatively permanent tributaries of navigable waters, and wetlands that abut these features are considered jurisdictional under the CWA and require that a permit be obtained prior to commencing alterations. In light of recent studies and court rulings, the USACE may also assert jurisdiction for less-permanent tributaries, headwaters and adjacent wetlands that connect to downstream permanent waters. Additionally, the USACE has the authority to apply a "significant nexus standard" to assert jurisdiction for water features which do not necessarily have a surface connection to downstream waters. The significant nexus standard includes consideration of chemical, physical, and biological factors of a water feature and is typically applied on a case-specific basis.

The USACE has the sole authority to determine whether wetlands or water features are "jurisdictional" and therefore subject to regulatory jurisdiction under Section 404 of the Clean Water Act. Under certain circumstances, wetland areas are considered non-jurisdictional because they lack a significant nexus with other wetlands or WOTUS.

It is TTL's opinion that jurisdictional features are present within the review area. However, the USACE has sole authority of determining whether wetlands or water features exist on the Site. Upon your approval, TTL will submit the Preliminary Jurisdictional Determination form and copy of the Aquatic Resources Delineation report to the USACE for final determination. If the USACE is not engaged regarding a jurisdictional determination and/or delineation review, TTL is neither responsible for the final determination of jurisdictional features within the project review area, nor responsible for violations associated with unauthorized activities that may occur within areas deemed jurisdictional by the USACE at a later time.

5.0 CONCLUSIONS

- Approximately 1.13 acres of potentially jurisdictional wetlands were identified within the delineation area.
- Approximately 0.095 acres (1,409 linear feet) of potentially jurisdictional man-made ditch meeting the "relatively permanent standard" were identified within the delineation area.
- Upon approval by the client, TTL will submit the request for a Preliminary Jurisdictional Delineation (PJD) from the USACE.

6.0 RELIANCE/LIMITATIONS

Please note that the conclusions and recommendations of this report are based solely on the field conditions observed at the site. All information (written or electronic) from TTL concerning TTL's work is for the sole use and reliance of the City of Valdosta c/o Lovell Engineering Associates, and applicable regulatory agencies. TTL intends no third party beneficiaries (express or implied) and copies of such information received by any third parties are NOT for reliance unless TTL first receives a signed Secondary Client Agreement from the third party.

7.0 REFERENCES

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FIGURES

Figure 1	Site Location and Topographic Map
Figure 2	LiDAR Elevation & Hillshade Map
Figure 3	Site Location & Aerial Photograph
Figure 4	NRCS Hydric Soil Rating Map
Figure 5	National Wetland Inventory (NWI) Map
Figure 6	Hydrologic Unit Code (HUC) Map
Figure 7	Aquatic Resources Delineation Map

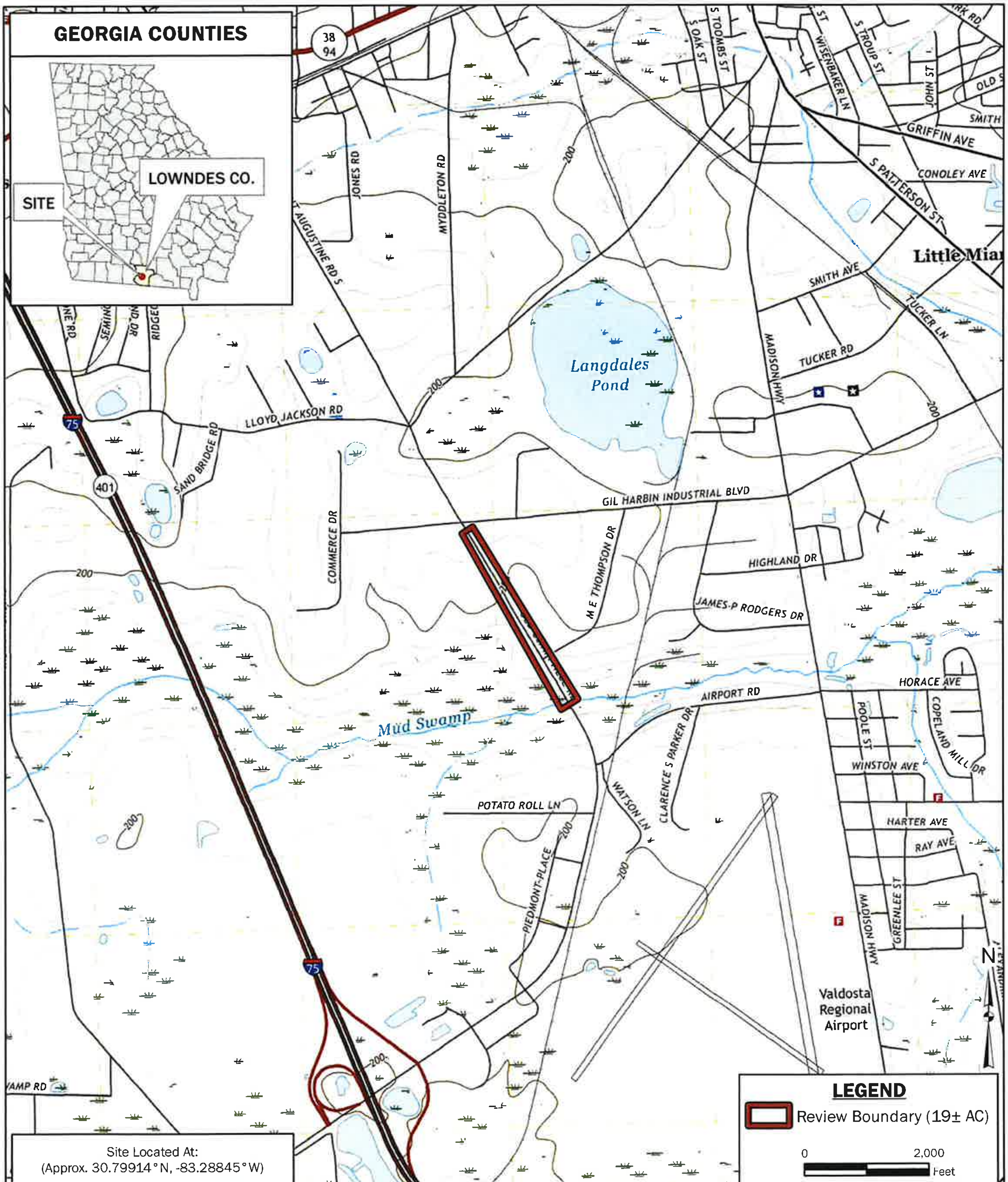
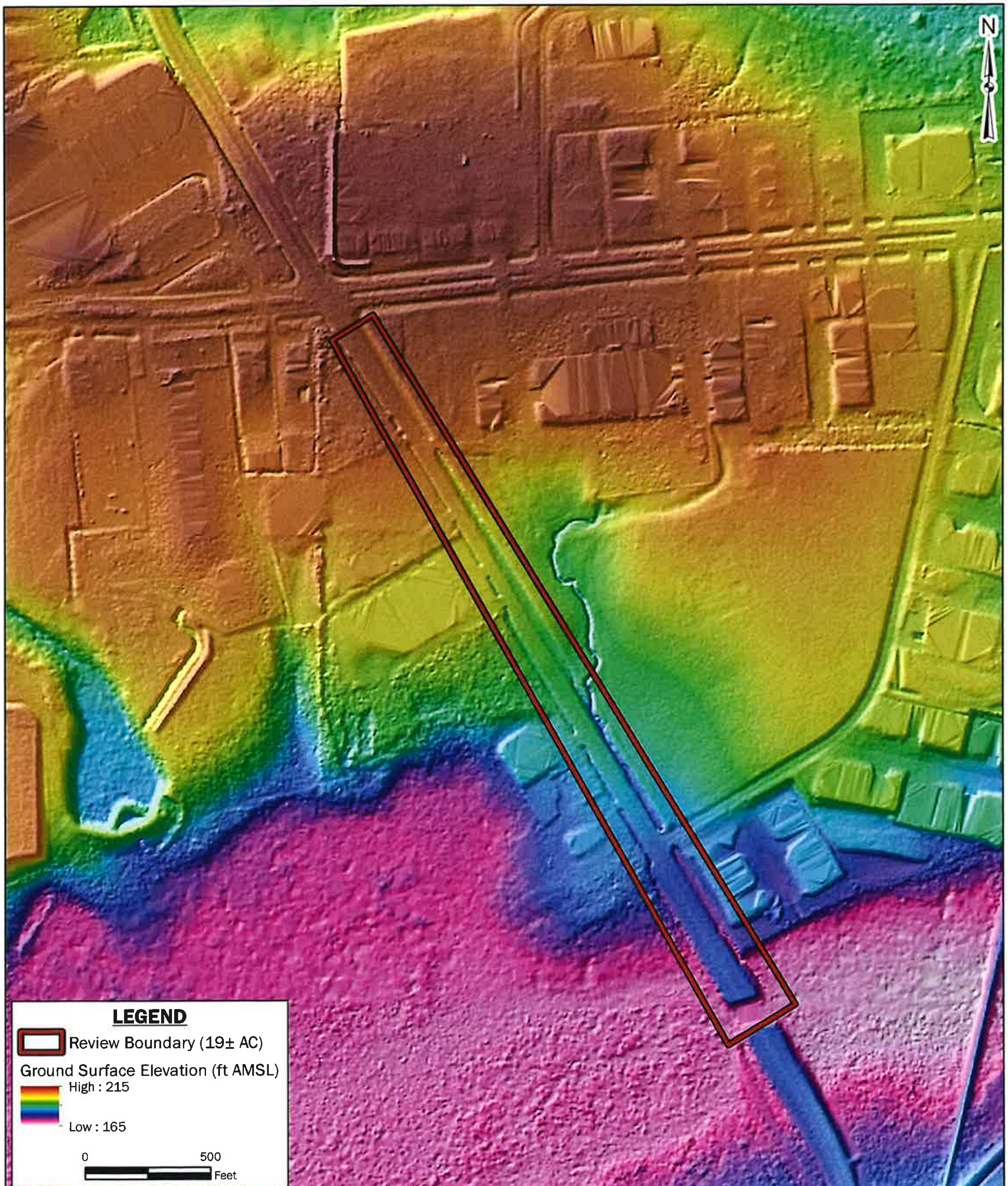


FIGURE 1: SITE LOCATION & TOPOGRAPHIC MAP

LOVELL ENGINEERING ASSOCIATES
OLD CLYATTVILLE ROAD WIDENING
VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: Valdosta, Georgia, USGS 7.5 Minute Quadrangle Map, 2020 (10-ft Contour Interval).

DRAWN BY: JDM	
CHECKED BY: DEK	
DRAWING DATE 5/1/2023	
REVISION DATE: N/A	
TTL JOB NO.: 21-07-00563.00	
APPROX. SCALE	1 in = 2,000 ft



TTL

FIGURE 2: LIDAR ELEVATION& HILLSHADE MAP

LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD WIDENING

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: NOAA Office for Coastal Management, City of Valdosta, GA, LiDAR Elevations & Hillshade Derivative, 2017 (4 ft Resolution).

DRAWN BY: JDM	
CHECKED BY: DEK	
DRAWING DATE: 5/1/2023	
REVISION DATE: N/A	
TTL JOB NO.: 21-07-00563.00	
APPROX. SCALE:	1 in = 500 ft

TTL

FIGURE 3: SITE LOCATION & AERIAL PHOTOGRAPH

LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD WIDENING

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: Maxar Technologies. Vivid Imagery 11/19/2020 (0.31 m Resolution)

DRAWN BY: JDM	
CHECKED BY: DEK	
DRAWING DATE: 5/1/2023	
REVISION DATE: N/A	
TTL JOB NO.: 21-07-00563.00	
APPROX. SCALE	1 in = 500 ft

Map Unit Symbol	Description	Hydric Percentage	Hydric Description
Jo	Johnston loam	100	Hydric
Le	Leefield loamy sand, 0 to 2 percent slopes	5	Predominantly Nonhydric
SuC2	Sunsweet sandy loam, 5 to 8 percent slopes, eroded	0	Nonhydric
TfA	Tifton loamy sand, 0 to 2 percent slopes	0	Nonhydric
TfB	Tifton loamy sand, 2 to 5 percent slopes	0	Nonhydric

TTL

FIGURE 4: NRCS HYDRIC SOILS RATING MAP

LOVELL ENGINEERING ASSOCIATES
OLD CLYATTVILLE ROAD WIDENING
VALDOSTA, LOWNDES COUNTY, GEORGIA
BASEMAP: Maxar Technologies, Vivid Imagery 11/19/2020 (0.31 m Resolution)

DRAWN BY: JDM	
CHECKED BY: DEK	
DRAWING DATE 4/28/2023	
REVISION DATE: N/A	
TTL JOB NO.: 21-07-00563.00	
APPROX. SCALE	1 in = 600 ft

Map Unit Symbol	Description
PFO1C	Palustrine; Forested; Broad-Leaved Deciduous; Seasonally Flooded
PFO4/1A	Palustrine; Forested; Needle-Leaved Evergreen / Broad-Leaved Deciduous; Temporarily Flooded
PFO4/1B	Palustrine; Forested; Needle-Leaved Evergreen / Broad-Leaved Deciduous; Saturated
PSS3B	Palustrine; Scrub-Shrub; Broad-Leaved Evergreen; Saturated
R5UBH	Riverine; Unknown Perennial; Unconsolidated Bottom; Permanently Flooded

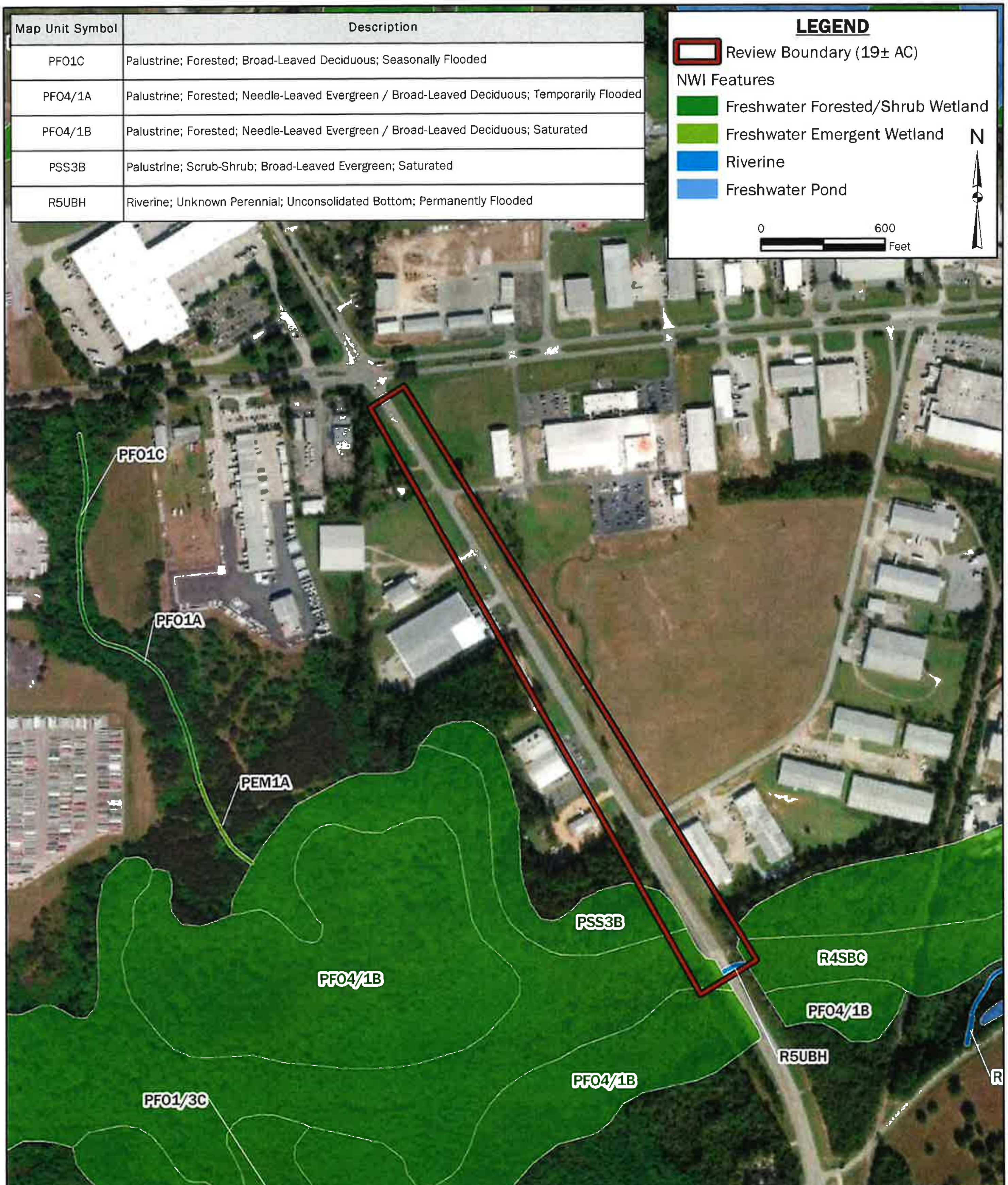


FIGURE 5: NATIONAL WETLAND INVENTORY (NWI) MAP

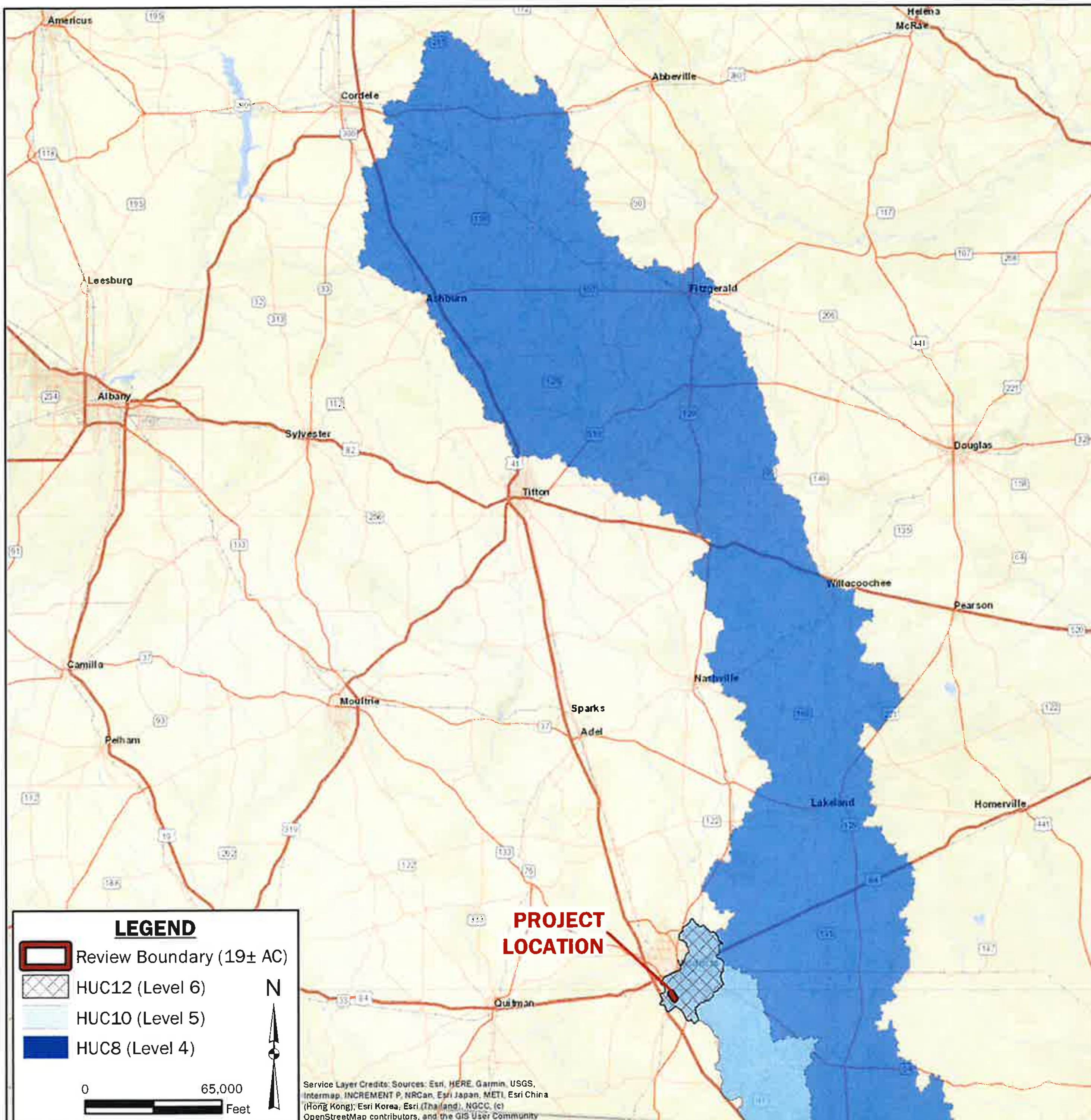
LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD WIDENING

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: Maxar Technologies, Vivid Imagery 11/19/2020 (0.31 m Resolution)

DRAWN BY: JDM	
CHECKED BY: DEK	
DRAWING DATE: 4/28/2023	
REVISION DATE: N/A	
TTL JOB NO.: 21-07-00563.00	
APPROX. SCALE:	1 in = 600 ft



	LEVEL	HUC	NAME
REGION	1	03	South Atlantic-Gulf Region
SUBREGION	2	0311	Suwannee
BASIN	3	031102	Suwannee
SUBBASIN	4	03110202	Alapaha
WATERSHED	5	0311020210	Alapahoochee River
SUBWATERSHED	6	031102021001	Upper Mud Swamp

TTL

FIGURE 6: HYDROLOGIC UNIT CODE (HUC) MAP

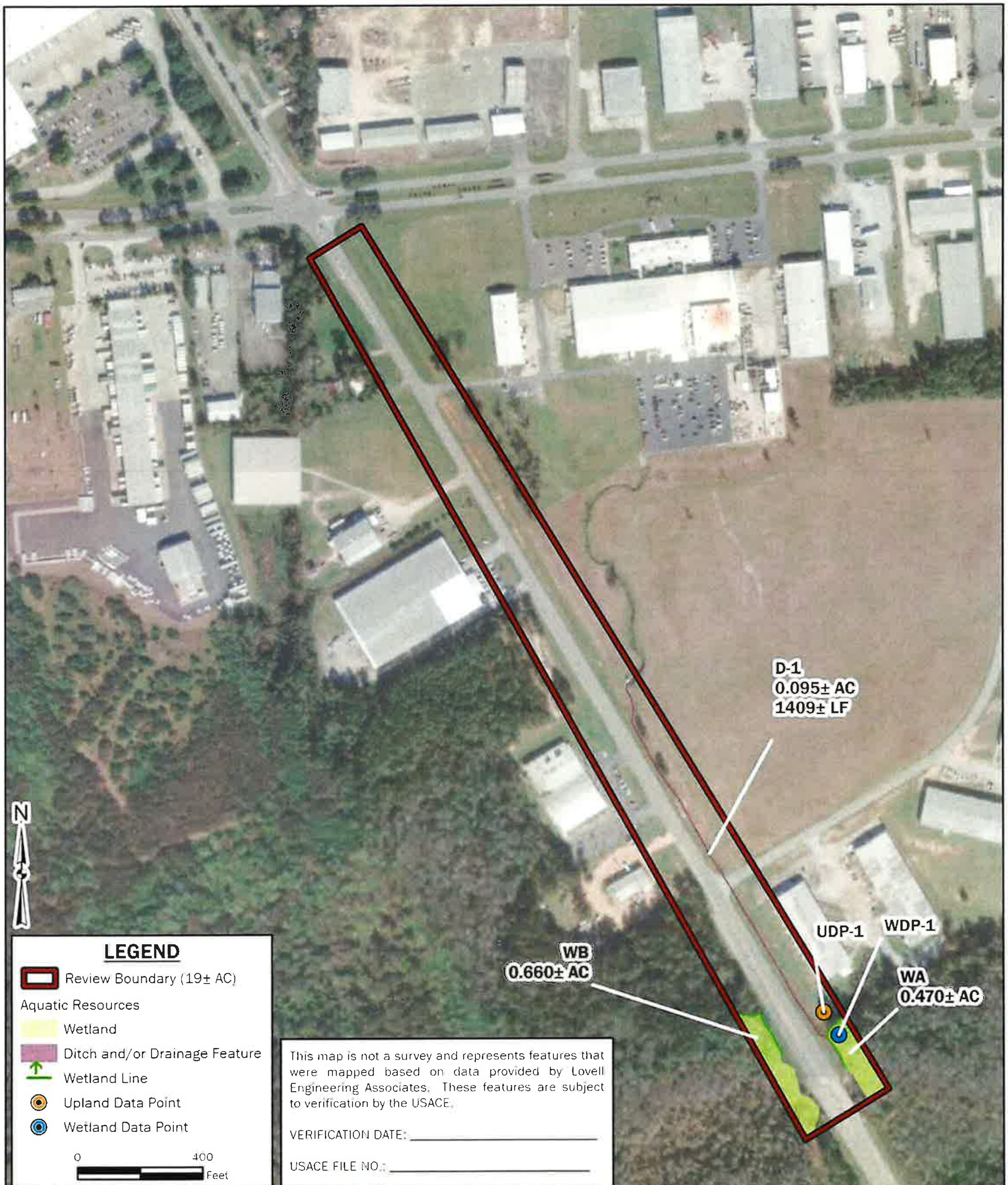
LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD WIDENING

VALDOSTA, LOWNDES COUNTY, GEORGIA

BASEMAP: ESRI World Street Maps (See Service Layer Credits)

DRAWN BY: JDM	
CHECKED BY: DEK	
DRAWING DATE: 5/1/2023	
REVISION DATE: N/A	
TTL JOB NO.: 21-07-00563.00	
APPROX. SCALE: 1 in = 65,000 ft	



TTL

FIGURE 7: AQUATIC RESOURCES DELINEATION MAP

LOVELL ENGINEERING ASSOCIATES

OLD CLYATTVILLE ROAD WIDENING

VALDOSTA, LOWNDES COUNTY, GEORGIA

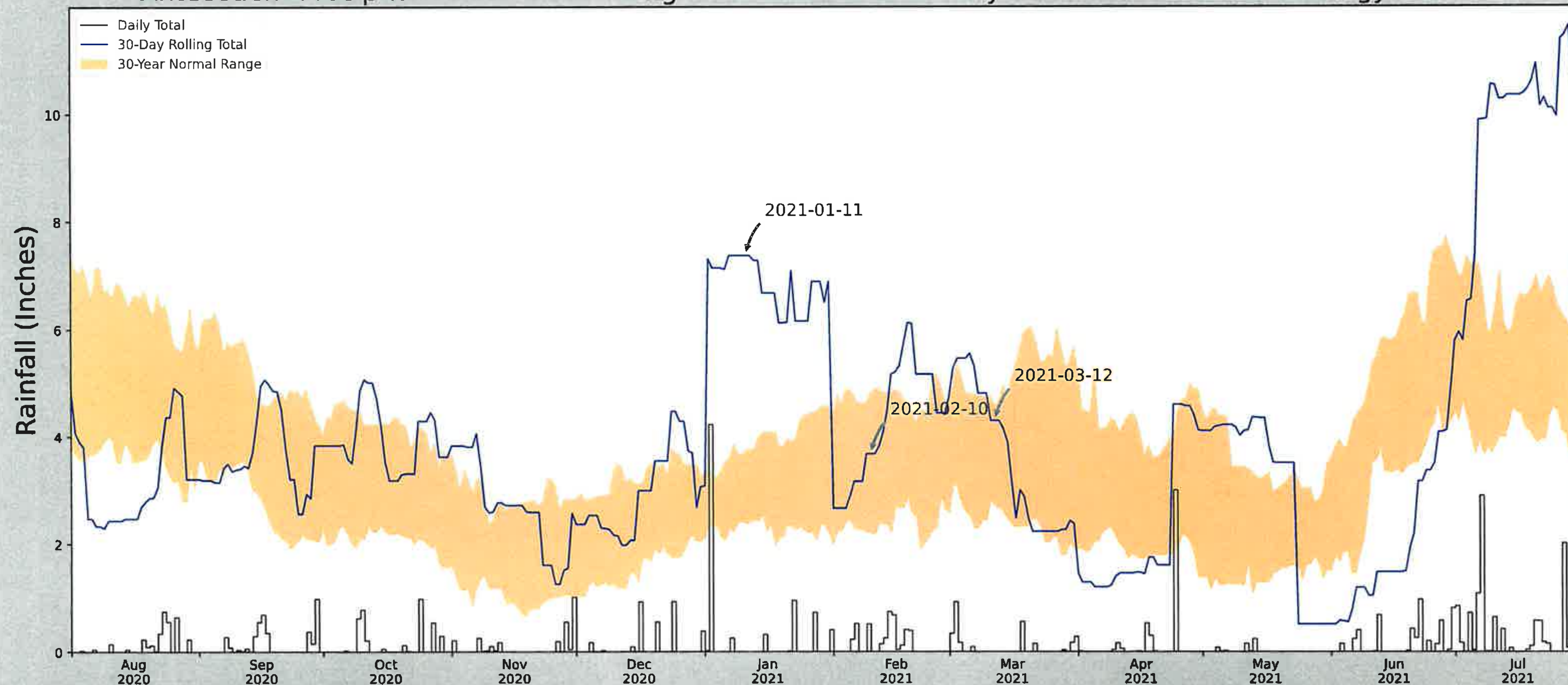
BASEMAP: Maxar Technologies, Vivid Imagery 11/19/2020 (0.31 m Resolution)

DRAWN BY: JDM
CHECKED BY: DEK
DRAWING DATE: 5/8/2023
REVISION DATE: N/A
TTL JOB NO.: 21-07-00563.00
APPROX. SCALE: 1 inch = 400 Ft

APPENDIX A

Antecedent Precipitation Tool Output
U.S. Drought Monitor – Georgia
Palmer Drought Index

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	30.79914, -83.28845
Observation Date	2021-03-12
Elevation (ft)	197.958
Drought Index (PDSI)	Normal
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2021-03-12	2.709449	4.574016	4.291339	Normal	2	3	6
2021-02-10	2.208268	4.830709	3.669291	Normal	2	2	4
2021-01-11	2.385039	3.755512	7.366142	Wet	3	1	3
Result							Normal Conditions - 13

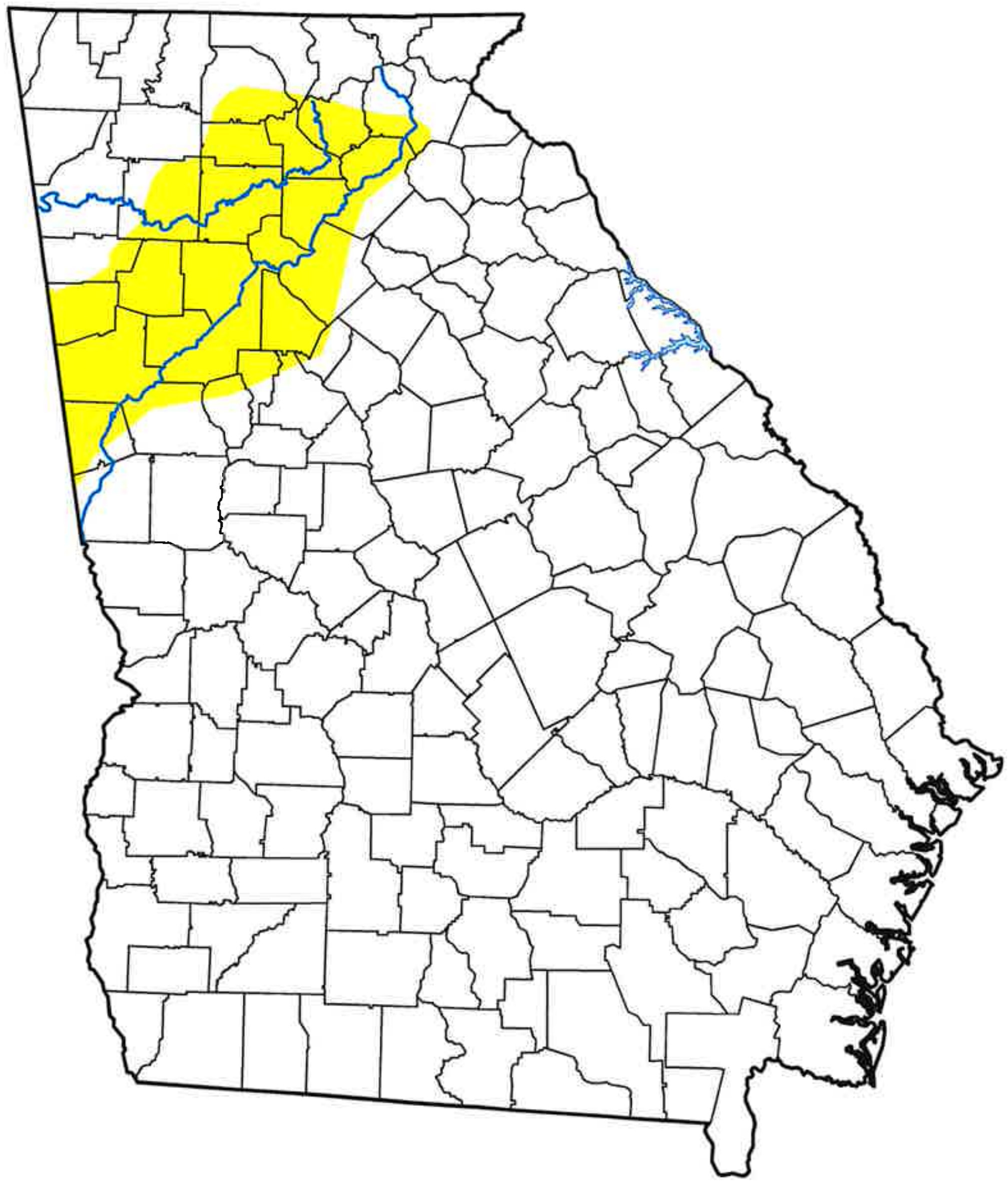
Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
VALDOSTA RGNL AP	30.7764, -83.2739	192.913	1.793	5.045	0.816	11290	90
VALDOSTA 3.1 S	30.8043, -83.2771	190.945	1.937	1.968	0.875	3	0
VALDOSTA 2 S	30.8056, -83.2736	265.092	2.018	72.179	1.054	19	0
VALDOSTA 4.7 SW	30.8112, -83.3432	220.144	4.764	27.231	2.274	1	0
VALDOSTA 4.8 WSW	30.8302, -83.3553	152.887	6.095	40.026	2.987	2	0
QUITMAN 2 NW	30.7836, -83.5692	185.039	17.536	7.874	8.029	38	0

U.S. Drought Monitor

Georgia



March 16, 2021

(Released Thursday, Mar. 18, 2021)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	90.31	9.69	0.00	0.00	0.00	0.00
Last Week *03-09-2021*	90.34	9.66	0.00	0.00	0.00	0.00
3 Months Ago *12-15-2020*	60.37	39.63	0.00	0.00	0.00	0.00
Start of Calendar Year *12-29-2020*	65.78	34.22	0.00	0.00	0.00	0.00
Start of Water Year *09-29-2020*	97.20	2.80	0.00	0.00	0.00	0.00
One Year Ago *03-17-2020*	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

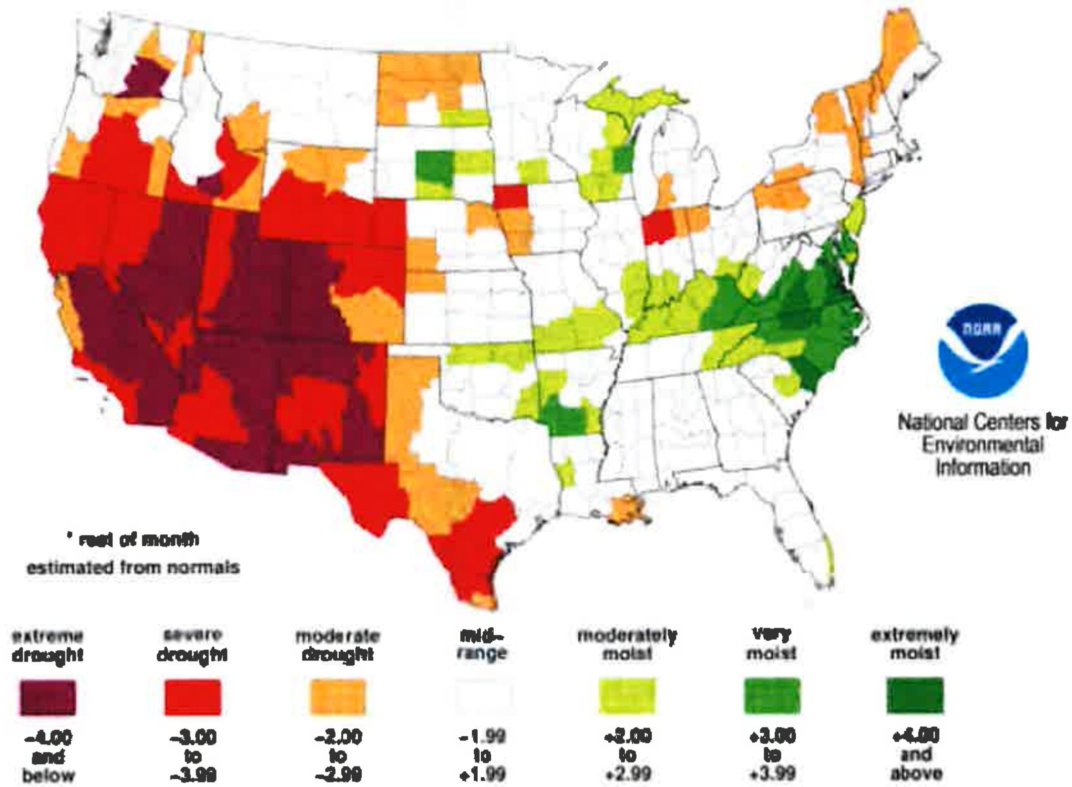
Author:

Brad Pugh
CPC/NOAA

droughtmonitor.unl.edu

Palmer Hydrological Drought Index
Long–Term (Hydrological) Conditions

March 2021: through March 13 2021*



Site Photographs

Aquatic Resources Delineation – Old Clyattville Road (Gil Harbin Industrial Blvd to Mud Swamp) – TTL Project No. 21-07-00563.00
Valdosta, Lowndes County, Georgia
Photos taken March 12, 2021

Photograph 1: View of wetland WB.

Photograph 2: View of wetland WA

Photograph 3: View of Wetland Data Point (WDP-1) location.

Photograph 4: View of Upland Data Point (UDP-1) location.

TTL

Photograph 5: View of upper reach of D-1, exiting SAFT property.

Photograph 6: View of upper reach of D-1. Photograph taken facing south.

Photograph 7: View of lower reach of D-1. Photograph taken facing south.

Photograph 8 View of lower reach of D-1. Photograph taken facing south.

Old Clyattville Road

Old Clyattville Road

Valdosta, GA 31601

Inquiry Number: 7317693.1

April 26, 2023

The EDR Aerial Photo Decade Package

EDR®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

04/26/23

Site Name:	Client Name:
Old Clyattville Road	TTL, Inc
Old Clyattville Road	4589 Valnorth Drive
Valdosta, GA 31601	Valdosta, GA 31602-0000
EDR Inquiry # 7317693.1	Contact: Melissa Norris

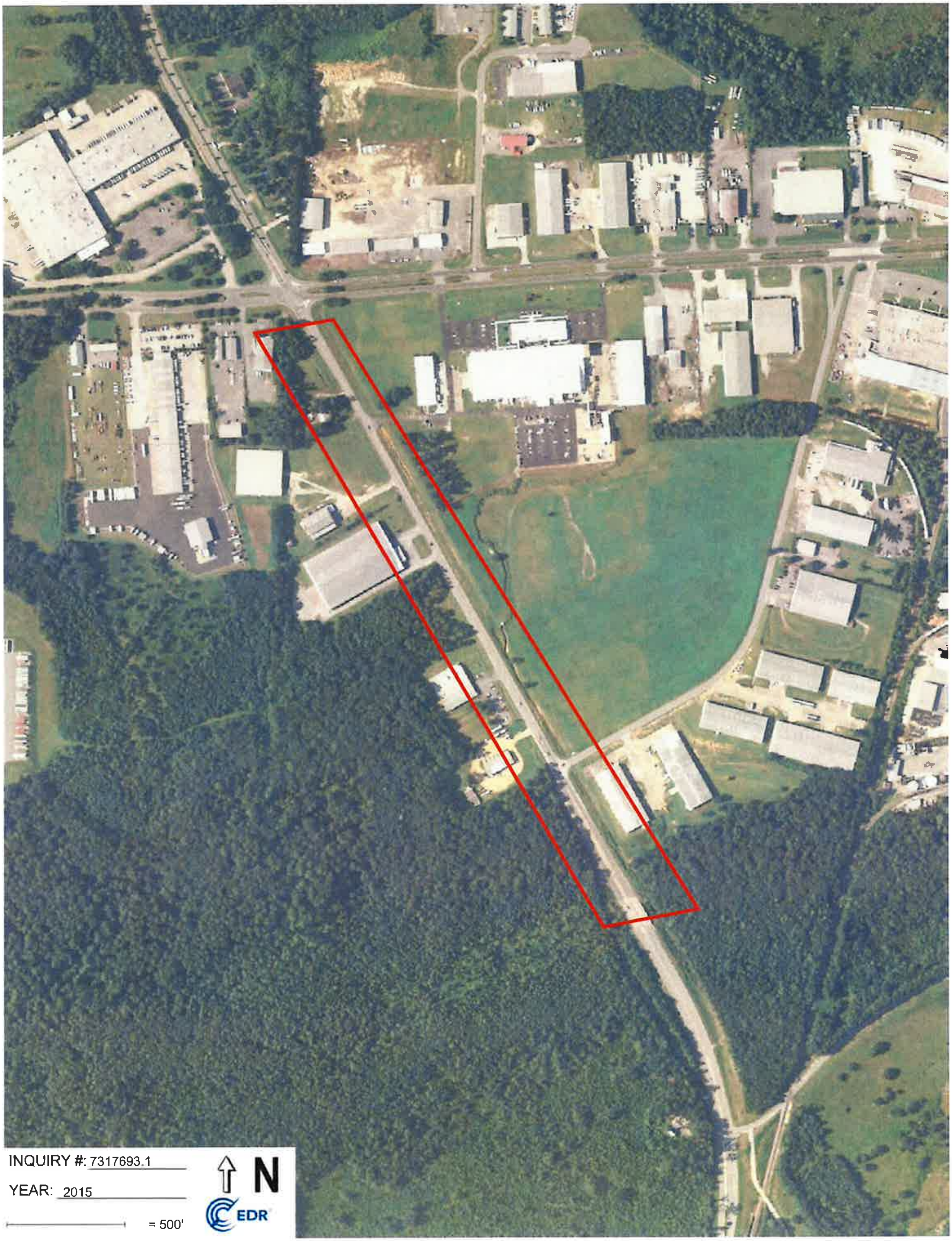
Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2019	1"=500'	Flight Year: 2019	USDA/NAIP
2015	1"=500'	Flight Year: 2015	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2007	1"=500'	Flight Year: 2007	USDA/NAIP
1999	1"=500'	Acquisition Date: January 01, 1999	USGS/DOQQ
1993	1"=500'	Acquisition Date: February 01, 1993	USGS/DOQQ
1983	1"=500'	Flight Date: February 09, 1983	USDA
1979	1"=500'	Flight Date: November 14, 1979	USDA
1974	1"=500'	Flight Date: February 17, 1974	USDA
1967	1"=500'	Flight Date: November 18, 1967	USDA
1956	1"=500'	Flight Date: February 23, 1956	USDA
1943	1"=500'	Flight Date: April 03, 1943	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.


INQUIRY #: 7317693.1
YEAR: 2019
= 500'
N
EDR



INQUIRY #: 7317693.1

YEAR: 2015

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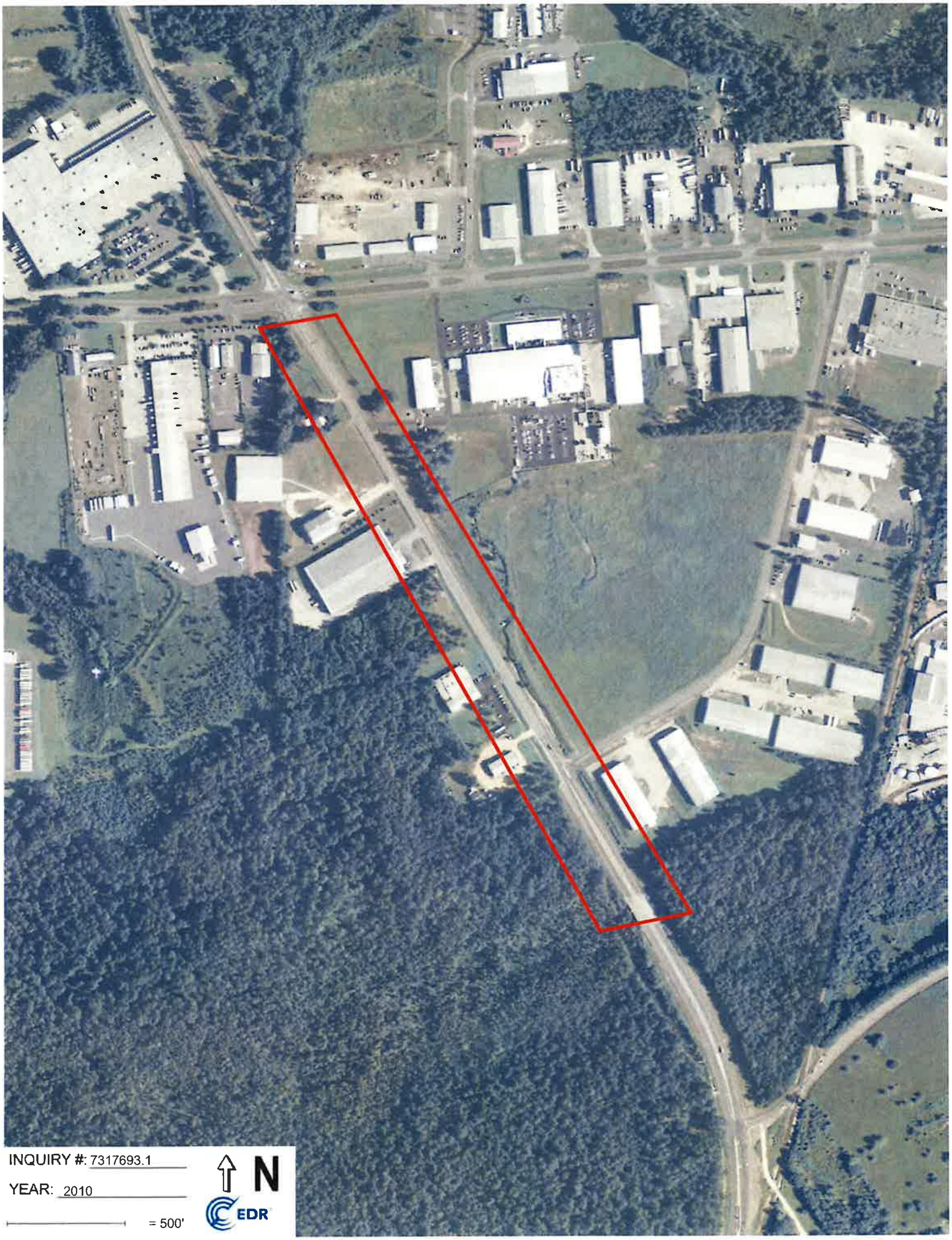
EDR



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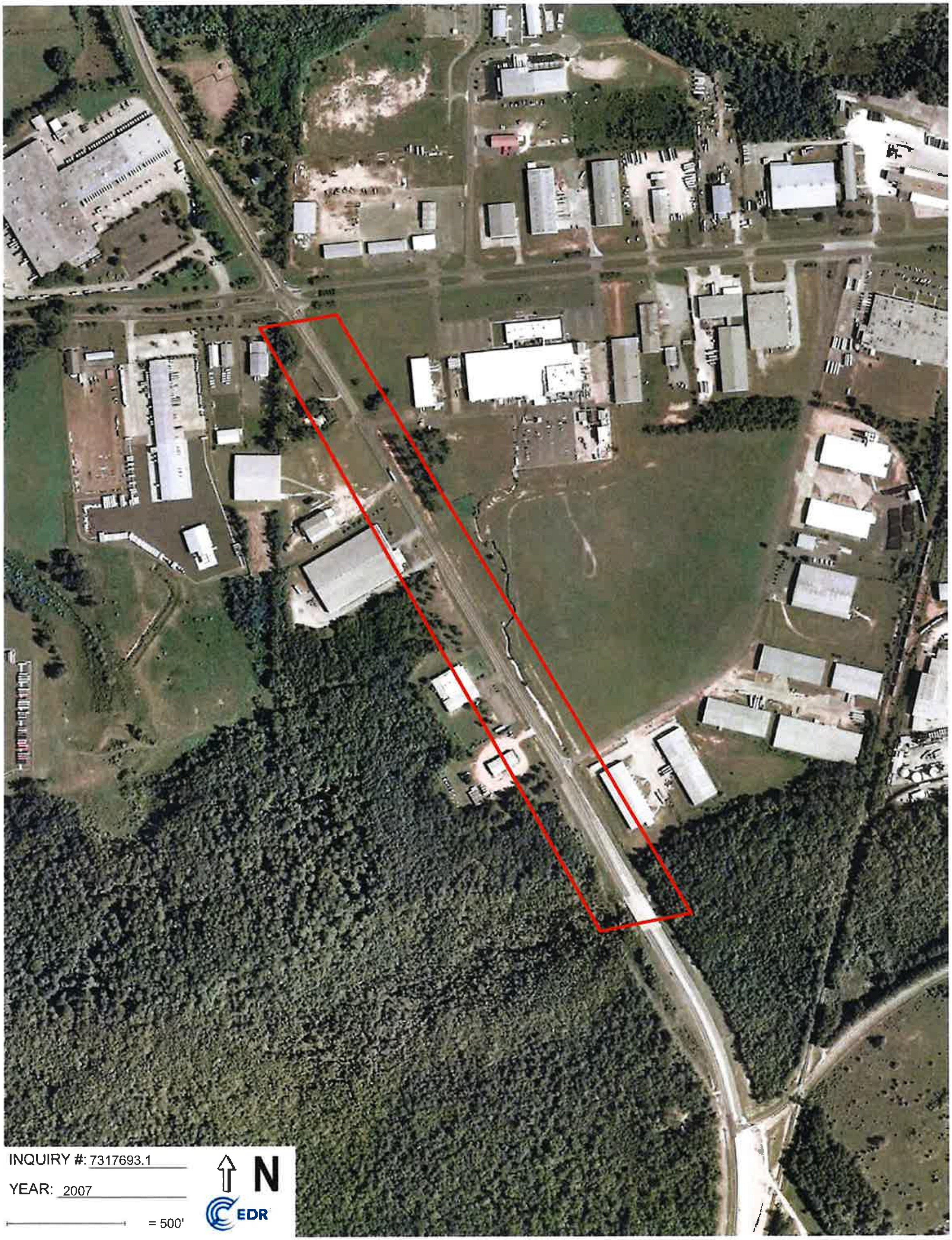
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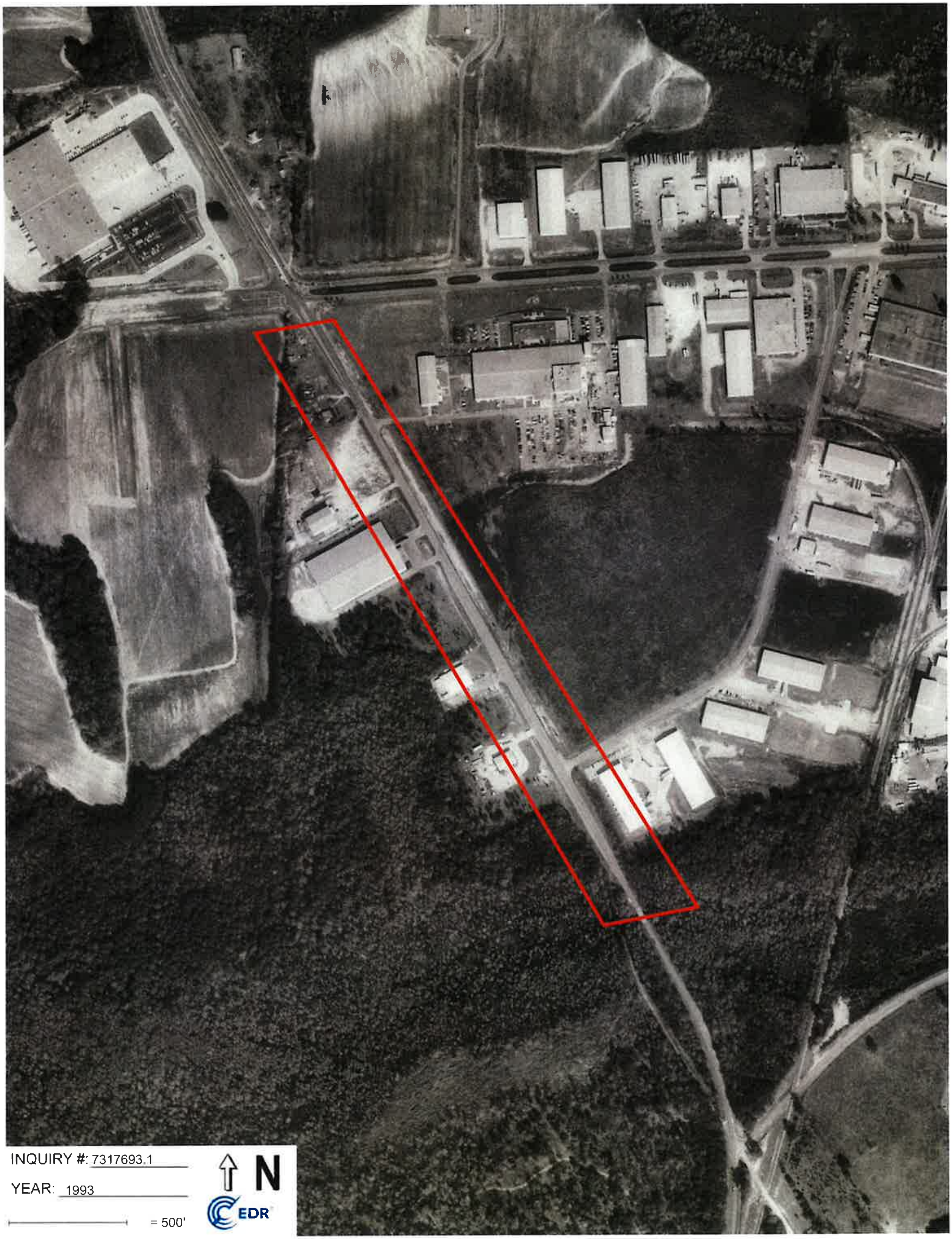

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EDR

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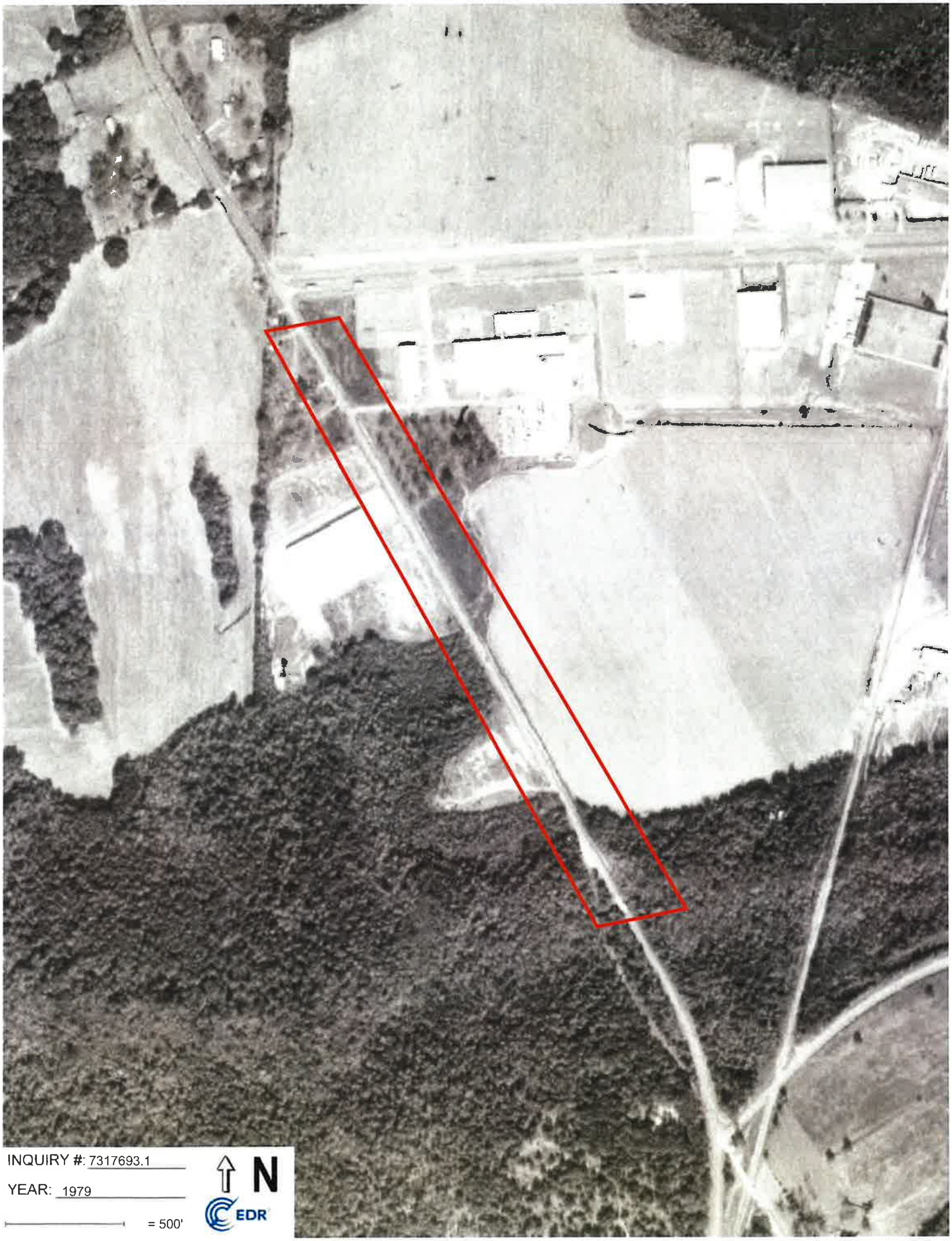
YEAR: 1983

= 500'

N

EDR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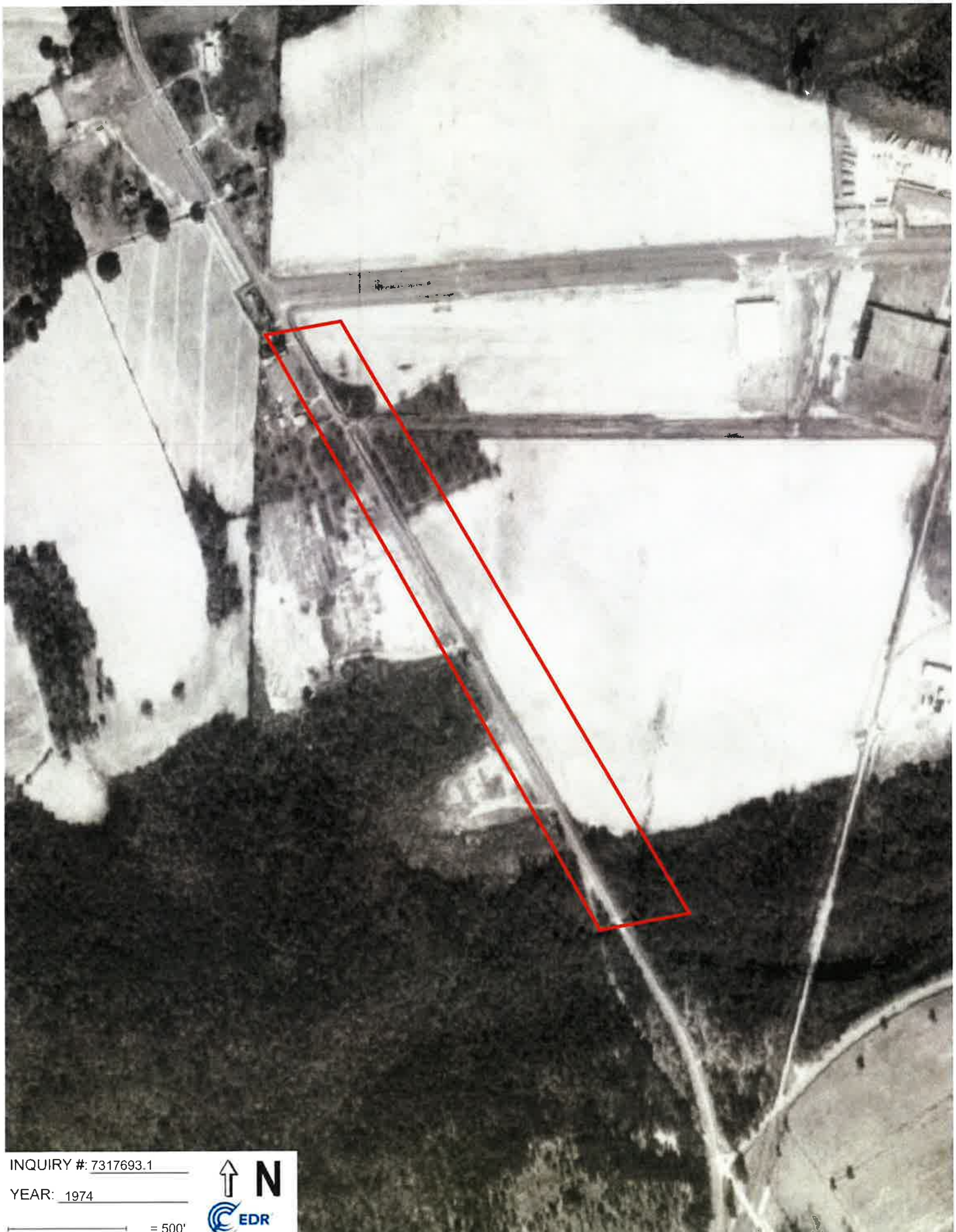

INQUIRY #: 7317693.1

YEAR: 1974

= 500'

N

EDR

APPENDIX C

U.S. Army Corps of Engineers Wetland Determination Data Forms

U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region** See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R	***OMB Control #: 0710-0024, Exp: 11/30/2024*** ***Requirement Control Symbol EXEMPT:*** ***(Authority: AR 335-15, paragraph 5-2a)***

Project/Site: Old Clyattville Road (Gil Harbin Industrial Blvd to Mud Swamp) City/County: Valdosta/Lowndes Sampling Date: 3/12/2021

Applicant/Owner: City of Valdosta c/o Lovell Engineering State: GA Sampling Point: UDP-1

Investigator(s): M. Norris Section, Township, Range: ______

Landform (hillside, terrace, etc.): ______ Local relief (concave, convex, none): None Slope (%): ______

Subregion (LRR or MLRA): LRR P Lat: 30.795347 Long: -83.285467 Datum: ______

Soil Map Unit Name: Leefield loamy sand, 0 to 2 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ___ (If no, explain in Remarks.)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes x No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ___	**Is the Sampled Area within a Wetland?** **Yes** ___ **No** X
Hydric Soil Present?	Yes ___	No X	
Wetland Hydrology Present?	Yes ___	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ___	No x	Depth (inches): ___	
Water Table Present?	Yes ___	No x	Depth (inches): ___	
Saturation Present? (includes capillary fringe)	Yes ___	No x	Depth (inches): ___	**Wetland Hydrology Present?** **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: UDP-1

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus nigra*	50	Yes	FAC
2. *Magnolia grandiflora*	20	Yes	FAC
3.			
4.			
5.			
6.			
	70	=Total Cover	
50% of total cover: 35		20% of total cover:	14

Sapling Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus nigra*	25	Yes	FAC
2. *Magnolia grandiflora*	20	Yes	FAC
3.			
4.			
5.			
6.			
	45	=Total Cover	
50% of total cover: 23		20% of total cover:	9

Shrub Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Serenoa repens*	15	Yes	FACU
2. *Morella cerifera*	15	Yes	FAC
3. *Ligustrum japonicum*	10	Yes	FAC
4.			
5.			
6.			
	40	=Total Cover	
50% of total cover: 20		20% of total cover:	8

Herb Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Morella cerifera*	15	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	15	=Total Cover	
50% of total cover: 8		20% of total cover:	3

Woody Vine Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Smilax glauca*	10	Yes	FAC
2. *Vitis rotundifolia*	10	Yes	FAC
3.			
4.			
5.			
	20	=Total Cover	
50% of total cover: 10		20% of total cover:	4

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 9 (A)

Total Number of Dominant Species Across All Strata: 10 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 90.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	175	x 3 =	525
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	190 (A)		585 (B)

Prevalence Index = B/A = 3.08

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: UDP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
1-5	10YR 5/3	100					Loamy/Clayey	
5-20	10YR 4/6	100					Loamy/Clayey	
20-24	10YR 5/6	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Organic Bodies (A6) **(LRR P, T, U)**
___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
___ Muck Presence (A8) **(LRR U)**
___ 1 cm Muck (A9) **(LRR P, T)**
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Coast Prairie Redox (A16) **(MLRA 150A)**
___ Sandy Mucky Mineral (S1) **(LRR O, S)**
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) **(LRR P, S, T, U)**
___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
___ Thin Dark Surface (S9) **(LRR S, T, U)**
___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
___ Loamy Mucky Mineral (F1) **(LRR O)**
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)
___ Marl (F10) **(LRR U)**
___ Depleted Ochric (F11) **(MLRA 151)**
___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
___ Umbric Surface (F13) **(LRR P, T, U)**
___ Delta Ochric (F17) **(MLRA 151)**
___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

___ 1 cm Muck (A9) **(LRR O)**
___ 2 cm Muck (A10) **(LRR S)**
___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: ______
Depth (inches): ______

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Old Clyattville Road (Gil Harbin Industrial Blvd to Mud Swamp) City/County: Valdosta/Lowndes Sampling Date: 3/12/2021

Applicant/Owner: City of Valdosta c/o Lovell Engineering State: GA Sampling Point: WDP-1

Investigator(s): M. Norris Section, Township, Range: ____

Landform (hillside, terrace, etc.): Flood plain Local relief (concave, convex, none): slighly concave Slope (%): 0-2%

Subregion (LRR or MLRA): LRR P Lat: 30.795146 Long: -83.285315 Datum: ____

Soil Map Unit Name: Johnston loam NWI classification: PF01C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ___	**Is the Sampled Area within a Wetland?** **Yes** X **No** ___
Hydric Soil Present?	Yes X No ___	
Wetland Hydrology Present?	Yes X No ___	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- x Surface Water (A1)
- x High Water Table (A2)
- x Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- x Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- x Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- x Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- x Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- x FAC-Neutral Test (D5)
- x Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes x	No ___	Depth (inches): ___
Water Table Present?	Yes x	No ___	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes x	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: WDP-1

Tree Stratum (Plot size: 30)

	Absolute % Cover	Dominant Species?	Indicator Status
1. *Nyssa biflora*	75	Yes	OBL
2.			
3.			
4.			
5.			
6.			
	75	=Total Cover	

50% of total cover: 38 20% of total cover: 15

Sapling Stratum (Plot size: 30)

	Absolute % Cover	Dominant Species?	Indicator Status
1. *Nyssa biflora*	30	Yes	OBL
2. *Quercus nigra*	10	Yes	FAC
3.			
4.			
5.			
6.			
	40	=Total Cover	

50% of total cover: 20 20% of total cover: 8

Shrub Stratum (Plot size: 30)

	Absolute % Cover	Dominant Species?	Indicator Status
1. *Morella cerifera*	20	Yes	FAC
2.			
3.			
4.			
5.			
6.			
	20	=Total Cover	

50% of total cover: 10 20% of total cover: 4

Herb Stratum (Plot size: 30)

	Absolute % Cover	Dominant Species?	Indicator Status
1. *Chasmanthium laxum*	15	Yes	FACW
2. *Woodwardia areolata*	10	Yes	OBL
3. *Osmundastrum cinnamomeum*	10	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	35	=Total Cover	

50% of total cover: 18 20% of total cover: 7

Woody Vine Stratum (Plot size:)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

50% of total cover: 20% of total cover:

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	115	x 1 =	115
FACW species	25	x 2 =	50
FAC species	30	x 3 =	90
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	170 (A)		255 (B)

Prevalence Index = B/A = 1.50

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes X No ___

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: WDP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
4-10	10YR 2/1	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___________

Depth (inches): ___________

Hydric Soil Present? Yes X No ___

Remarks:

The presence of a reduced matrix within 12" of the soil surface indicates that this soil is hydric based on the hydric soil definition: "a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part".

APPENDIX D

USACE Savannah District Request for Corps of Engineers Jurisdictional Determination (JD) and/or Delineation Review Form

US Army Corps of Engineers Savannah District

SAS APPENDIX 1: Request for Corps of Engineers Jurisdictional Determination (JD) and/or Delineation Review

I. Reason for request: (check as many as applicable)

☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.

☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.

☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.

☑ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.

☐ I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 1O list and/or is subject to the ebb and flow of the tide.

☐ A Corps JD is required in order to obtain my local/state authorization.

☐ I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.

☐ I believe that the site may be comprised entirely of dry land.

☐ Other:____

II. I am requesting that the U.S. Army Corps of Engineers, Savannah District, provide me with the following:

☐ **Delineation Review of Aquatic Resources** - Concurrence with an aquatic resource delineation is a written notification from the Corps concurring, not concurring, or commenting on the aquatic resource boundaries, or limits, delineated on a property.

☑ **Preliminary Jurisdictional Determination** - (PJD). A PJD is defined in Corps regulations at 33 CFR 331.2, as "written indications that there may be waters of the United States on a parcel". When the Corps provides a PJD, the Corps is making no legally binding determination of any type regarding whether jurisdiction exists over the particular aquatic resource in question.

☐ **Approved Jurisdictional Determination** - (AJD) An AJD is defined in Corps regulations at 33 CFR 331.2. A definitive, official determination that there are, or that there are not, jurisdictional aquatic resources on a parcel.

☐ I am unclear as to what I would like to request and require additional information to inform my decision.

III. Property/Owner Information. Please complete **ALL** of the following information for the property under review:

SECTION 1

Parcel Number of Property: Old Clyattville Road (Gil Harbin Industrial Blvd. to Mud Swamp)

Lat. 30.79914 Long. - 83.28845 (in decimal degrees)

Parcel Address: Old Clyattville Road (Gil Harbin Industrial Blvd. to Mud Swamp)

Parcel City : Valdosta Parcel County: Lowndes Zip: 31602

Size of Review Area: 19 Acre(s) 3,183 Linear feet

SECTION 2

LANDOWNER NAME	AUTHORIZED AGENT'S NAME
First: Jeff	First: Melissa
Last: Lovell	Last: Norris
Company: City of Valdosta c/oLovell Engineering	Company: TTL, Inc.
Email Address: jeff.lovell@lea-pc.com	Email Address: mnorris@ttlusa.com
Address: P.O. Box 1963	Address: 4589 Val North Drive
City: Valdosta	City: Valdosta
State: GA Zip: 31603	State: GA Zip: 31602
Phone: (229) 253-0900 Ext. 121	Phone: (229)244-8619

PROPERTY ACCESS PERMISSION, AKNOWLEDGEMENT OF 18 U.S.C. SECTION 10001 AND STATEMENT OF AGENT AUTHORIZATION

Initial ONLY One:

N/A By signing below, I certify that I am the owner of record of the property referenced in III, Section 1 above, and I hereby authorize representatives of the U.S. Army Corps of Engineers, Savannah District, to enter the property for purposes of conducting on-site inspections, and issuing an aquatic resource delineation concurrence and/or a jurisdictional determination. My signature shall also be an affirmation that I possess the requisite property rights to request a delineation review and/or a jurisdictional determination on the property referenced in III - Section 1. Further, I authorize the agent in III - Section 2, to act on my behalf in the processing of this request and to furnish supplemental information in support of this request.

By signing below, I certify that I am acting as the duly authorized agent of the owner of record of the property referenced in III, Section 1 above, and have been given the authority to: 1) request a delineation review and/or a jurisdictional determination (JD) on the property referenced in III - Section 1, and 2) authorize representatives of the U.S. Army Corps of Engineers, Savannah District, to enter the property for purposes of conducting on-site inspections, and issuing an aquatic resource delineation concurrence and/or a jurisdictional determination. I understand that I may be required to provide documentary evidence of my authority to request a delineation review and/or JD, and/or to grant Corps of Engineers personnel access to the property.

Please Print Name Legibly: Melissa R. Norris, P.G.

Signature Melissa Norris Date: 5/26/2023

* Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers: Final Rule for 33 CFR Parts 320-332.
Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.
Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.
Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD:

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: TTL, Inc. on behalf of Lovell Engineerinç

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

CORPS USE ONLY - FILE NUMBER ASSIGNED BY CORPS OFFICE

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: GEORGIA County/parish/borough: Lowndes City: Valdosta

Center coordinates of site (lat/long in degree decimal format):

Lat.: xx.xxx° Long.: yy.yyy° 30.79914-83.28845

Universal Transverse Mercator:

Name of nearest waterbody: Mud Swamp

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination. Date:

☐ Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
1 WA	30.795146	-83.285909	0.470 acres	forested wetland	Pre JD or Delineation Only
2 WB	30.7948	-83.285909	0.660 acres	forested wetland	Pre JD or Delineation Only
D-1	30.796725	-83.286573	0.095 acres / 1,409 linear ft	man-made ditch - relatively perm. water	Pre JD or Delineation Only

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.

2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there *"may be"* waters of the U.S. and/or that there *"may be"* navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- [x] Maps, plans, plots or plat submitted by or on behalf of the PJD requestor: Map: See Figures attached to AR Delineation Report dated 5/26/2023
- [x] Data sheets prepared/submitted by or on behalf of the PJD requestor.
  - [ ] Office concurs with data sheets/delineation report.
  - [ ] Office does not concur with data sheets/delineation report. Rationale: ______.
- [ ] Data sheets prepared by the Corps: ________.
- [ ] Corps navigable waters' study: ____________.
- [x] U.S. Geological Survey Hydrologic Atlas: Figure 6.
  - [ ] USGS NHD data.
  - [ ] USGS 8 and 12 digit HUC maps.
- [x] U.S. Geological Survey map(s). Cite scale & quad name: Figure 1 - Valdosta, Georgia 7.5 min.
- [x] Natural Resources Conservation Service Soil Survey. Citation: Figure 4.
- [x] National wetlands inventory map(s). Cite name: Figure 5.
- [ ] State/local wetland inventory map(s): ____________.
- [ ] FEMA/FIRM maps: ________________.
- [ ] 100-year Floodplain Elevation is: ____. (National Geodetic Vertical Datum of 1929)
- [x] Photographs: [x] Aerial (Name & Date): Figure 3.
  or [x] Other (Name & Date): Site Photographs, March 12, 2021 (Appendix B)
- [ ] Previous determination(s). File no. and date of response letter: __________.
- [ ] Other information (please specify): ______________.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of Regulatory staff member completing PJD	Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]

[1] Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

ATTACHMENT 2
THREATENED AND ENDANGERED SPECIES REVIEW

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Georgia Ecological Services Field Office
355 East Hancock Avenue
Room 320
Athens, GA 30601-2523
Phone: (706) 613-9493 Fax: (706) 613-6059

In Reply Refer To:
Project Code: 2023-0086358
Project Name: Old Clyattville Road Widening

May 25, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Thank you for your request for information on federally listed species and important wildlife habitats that may occur in your project area. The U.S. Fish and Wildlife Service (Service) has responsibility for certain species of wildlife under the Endangered Species Act (ESA) of 1973 as amended (16 USC 1531 et seq.), the Migratory Bird Treaty Act (MBTA) as amended (16 USC 701-715), Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Bald and Golden Eagle Protection Act (BGEPA) as amended (16 USC 668-668c). We are providing the following guidance to assist you in determining which federally imperiled species may or may not occur within your project area and to recommend some conservation measures that can be included in your project design if you determine those species or designated critical habitat may be affected by your proposed project.

FEDERALLY-LISTED SPECIES AND DESIGNATED CRITICAL HABITAT

Attached is a list of endangered, threatened, and proposed species that may occur in your project area. Your project area may not necessarily include all or any of these species. Under the ESA, it is the responsibility of the Federal action agency, project proponent, or their designated representative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service, to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally listed threatened or endangered fish or wildlife species without the appropriate permit. If you need additional information to assist in your effect determination, please contact the Service.

If you determine that your proposed action may affect federally listed species, please consult with the Service. Through the consultation process, we will analyze information contained in a biological assessment or equivalent document that you provide. If your proposed action is associated with Federal funding or permitting, consultation will occur with the Federal agency under section 7(a)(2) of the ESA. Otherwise, an incidental take permit pursuant to section 10(a)(1)(B) of the ESA (also known as a Habitat Conservation Plan) may be necessary to exempt harm or harass federally listed threatened or endangered fish or wildlife species. For more information regarding formal consultation and HCPs, please see the Service's Section 7 Consultation Library and Habitat Conservation Plans Library Collections.

Action Area. The scope of federally listed species compliance not only includes direct effects, but also any indirect effects of project activities (e.g., equipment staging areas, offsite borrow material areas, or utility relocations). The action area is the spatial extent of an action's direct and indirect modifications or impacts to the land, water, or air (50 CFR 402.02). Large projects may have effects to land, water, or air outside the immediate footprint of the project, and these areas should be included as part of the action area. Effects to land, water, or air outside of a project footprint could include things like lighting, dust, smoke, and noise. To obtain a complete list of species, the action area should be uploaded or drawn in IPaC rather than just the project footprint.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. An updated list may be requested through IPaC.

How to Submit a Project Review Package. If you determine that your action may affect any federally listed species and would like technical assistance from our office, please send us a complete project review package. A step by step guide is available at the Georgia Ecological Services Project Planning and Review page (https://www.fws.gov/office/georgia-ecological-services/project-planning-review).

Beginning April 1, 2023, requests for threatened and endangered species project reviews must be submitted to our office using the process described below. (If you are not emailing us to submit a project for review, your email will be forwarded to the appropriate staff.) This is a three-step process. All steps must be completed to ensure your project is reviewed by a biologist in our office and you receive a timely response. In brief the steps are:
Step 1. Request an official species list for your project through IPaC (Done!)
Step 2. Complete applicable Determination Keys
Step 3. Send your complete project project review package to **GAES_Assistance@FWS.gov** for review if no dKey is applicable or all aspects of the project are not addressed by dKeys, i.e. a species returned by IPaC does not have a dKey to address impacts to it. A complete project review package should include:

1. A description of the proposed action, including any measures intended to avoid, minimize, or offset effects of the action. The description shall provide sufficient detail to assess the effects of the action on listed species and critical habitat, such as the purpose of the action; duration and timing of the action; location (latitude and longitude); specific activities involving disturbance to land, water, and air, and how they will be carried out; current description of areas to be affected directly or indirectly by the action; and maps, drawings, or similar schematics of the action.
2. An updated Official Species List and dKey results
3. Biological Assessments (may include habitat assessments and information on the presence of listed species in the action area);
4. Description of effects of the action on species in the action area and, if relevant, effect determinations for species and critical habitat;
5. Conservation measures and any other available information related to the nature and scope of the proposed action relevant to its effects on listed species or designated critical habitat (e.g., management plans related to stormwater, vegetation, erosion and sediment plans). Visit the Georgia Conservation Planning Toolbox (https://www.fws.gov/story/conservation-tools-georgia) for information about conservation measures.
6. In the email subject line, use the following format to include the Project Code from your IPaC species list and the county in which the project is located (Example: Project Code: 2023-0049730 Gwinnett Co.). For Georgia Department of Transportation related projects, please work with the Office of Environmental Services ecologist to determine the appropriate USFWS transportation liaison.

The Georgia Ecological Services Field Office will send a response email within approximately 30 days of receipt with technical assistance or further recommendations for specific species.

WETLANDS AND FLOODPLAINS

Under Executive Orders 11988 and 11990, Federal agencies are required to minimize the destruction, loss, or degradation of wetlands and floodplains, and preserve and enhance their natural and beneficial values. These habitats should be conserved through avoidance, or mitigated to ensure that there would be no net loss of wetlands function and value. We encourage you to use the National Wetland Inventory (NWI) maps in conjunction with ground-truthing to identify wetlands occurring in your project area. The Service's NWI program website (https://www.fws.gov/program/national-wetlands-inventory) integrates digital map data with other resource information. We also recommend you contact the U.S. Army Corps of Engineers for permitting requirements under section 404 of the Clean Water Act if your proposed action could impact floodplains or wetlands.

MIGRATORY BIRDS

The MBTA prohibits the taking of migratory birds, nests, and eggs, except as permitted by the Service's Migratory Birds Program (https://fws.gov/program/migratory-birds). To minimize the likelihood of adverse impacts to migratory birds, we recommend construction activities occur outside the general bird nesting season from March through August, or that areas proposed for construction during the nesting season be surveyed, and when occupied, avoided until the young have fledged.

We recommend review of Birds of Conservation Concern to fully evaluate the effects to the birds at your site. This list identifies birds that are potentially threatened by disturbance and construction. It can be found at the Service's Migratory Birds Conservation Library Collection (https://fws.gov/library/collections/migratory-bird-conservation-documents).

Information related to best practices and migratory birds can be found at the Service's Avoiding and Minimizing Incidental Take of Migratory Birds Library Collection (https://fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds).

BALD AND GOLDEN EAGLES

The bald eagle (*Haliaeetus leucocephalus*) was delisted under the ESA on August 9, 2007. Both the bald eagle and golden eagle (*Aquila chrysaetos*) are still protected under the MBTA and BGEPA. The BGEPA affords both eagles protection in addition to that provided by the MBTA, in particular, by making it unlawful to "disturb" eagles. Under the BGEPA, the Service may issue limited permits to incidentally "take" eagles (e.g., injury, interfering with normal breeding, feeding, or sheltering behavior nest abandonment). For information on bald and golden eagle management guidelines, we recommend you review information provided at the Service's Bald and Golden Eagle Management Library Collection (https://fws.gov/library/collections/bald-and-golden-eagle-management).

NATIVE BATS

If your species list includes Indiana bat (*Myotis sodalis*) or northern long-eared bat (*M. septentrionalis*) and the project is expected to impact forested habitat that is appropriate for maternity colonies of these species, forest clearing should occur outside of the period when bats may be present. Federally listed bats could be actively present in forested landscapes from April

1 to October 15 of any year and have non-volant pups from May 15 to July 31 in any year. Non-volant pups are incapable of flight and are vulnerable to disturbance during that time.

Indiana, northern long-eared, and gray (*M. grisescens*) bats are all known to utilize bridges and culverts in Georgia. If your project includes maintenance, construction, or any other modification or demolition to transportation structures, a qualified individual should complete a survey of these structures for bats and submit your findings via the Georgia Bats in Bridges cell phone application, free on Apple and Android devices. Please include these findings in any biological assessment(s) or other documentation that is submitted to our office for technical assistance or consultation.

Additional information can be found at Georgia Ecological Services' Conservation Planning Toolbox and Bat Conservation in Georgia pages.

MONARCH BUTTERFLY

On December 20, 2020, the Service determined that listing the Monarch butterfly (*Danaus plexippus*) under the Endangered Species Act is warranted but precluded at this time by higher priority listing actions. With this finding, the monarch butterfly becomes a candidate for listing. The Service will review its status each year until we are able to begin developing a proposal to list the monarch.

As it is a candidate for listing, the Service welcomes conservation measures for this species. Recommended, and voluntary, conservation measures for projects in Georgia can be found at our Monarch Conservation in Georgia (https://www.fws.gov/project/monarch-conservation-georgia) page.

EASTERN INDIGO SNAKE

The Standard Protection Measures for the Eastern Indigo Snake (*Drymarchon couperi*) include educational materials and training that can help protect the species by making staff working on a project site aware of their presence and traits. In Georgia, indigo snakes are closely associated with the state-listed gopher tortoise (*Gopherus polyphemus*), a reptile that excavates extensive underground burrows that provide the snake shelter from winter cold and summer desiccation.

SOLAR ENERGY DEVELOPMENT

The Georgia Low Impact Solar Siting Tool (LISST) is available as a map layer in IPaC (Find it in the “Layers” Box > “Environmental Data”) and as a web application to provide project managers with the data to identify areas that may be preferred for low impact development. The tool seeks to support the acceleration of large-scale solar development in areas with less impact to the environment.

STATE AGENCY COORDINATION

Additional information that addresses at-risk or high priority natural resources can be found in the State Wildlife Action Plan (https://georgiawildlife.com/WildlifeActionPlan), at Georgia Department of Natural Resources, Wildlife Resources Division Biodiversity Portal (https://georgiawildlife.com/conservation/species-of-concern), Georgia's Natural, Archaeological, and

Historic Resources GIS portal (https://www.gnahrgis.org/gnahrgis/index.do), and the Georgia Ecological Services HUC10 Watershed Guidance page.

Thank you for your concern for endangered and threatened species. We appreciate your efforts to identify and avoid impacts to listed and sensitive species in your project area. For further consultation on your proposed activity, please email gaes_assistance@fws.gov and reference the project county and your Service Project Tracking Number.

This letter constitutes Georgia Ecological Services' general comments under the authority of the Endangered Species Act.

Attachment(s):

- Official Species List
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Georgia Ecological Services Field Office
355 East Hancock Avenue
Room 320
Athens, GA 30601-2523
(706) 613-9493

PROJECT SUMMARY

Project Code: 2023-0086358
Project Name: Old Clyattville Road Widening
Project Type: Road/Hwy - Maintenance/Modification
Project Description: The project consist of widening Old Clyattville Road from Gil Harbin to Mud Swamp.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@30.79863075,-83.28808329589388,14z

Counties: Lowndes County, Georgia

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Whooping Crane *Grus americana* Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non-Essential
Wood Stork *Mycteria americana* Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8477	Threatened

REPTILES

NAME	STATUS
Eastern Indigo Snake *Drymarchon couperi* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/646	Threatened
Suwannee Alligator Snapping Turtle *Macrochelys suwanniensis* Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10891	Proposed Threatened

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Kestrel *Falco sparverius paulus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31
Bachman's Sparrow *Aimophila aestivalis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6177	Breeds May 1 to Sep 30

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31
Brown-headed Nuthatch *Sitta pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jul 15
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will *Antrostomus vociferus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
Painted Bunting *Passerina ciris* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 25 to Aug 15
Prairie Warbler *Dendroica discolor* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Swallow-tailed Kite *Elanoides forficatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence ()

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ( )
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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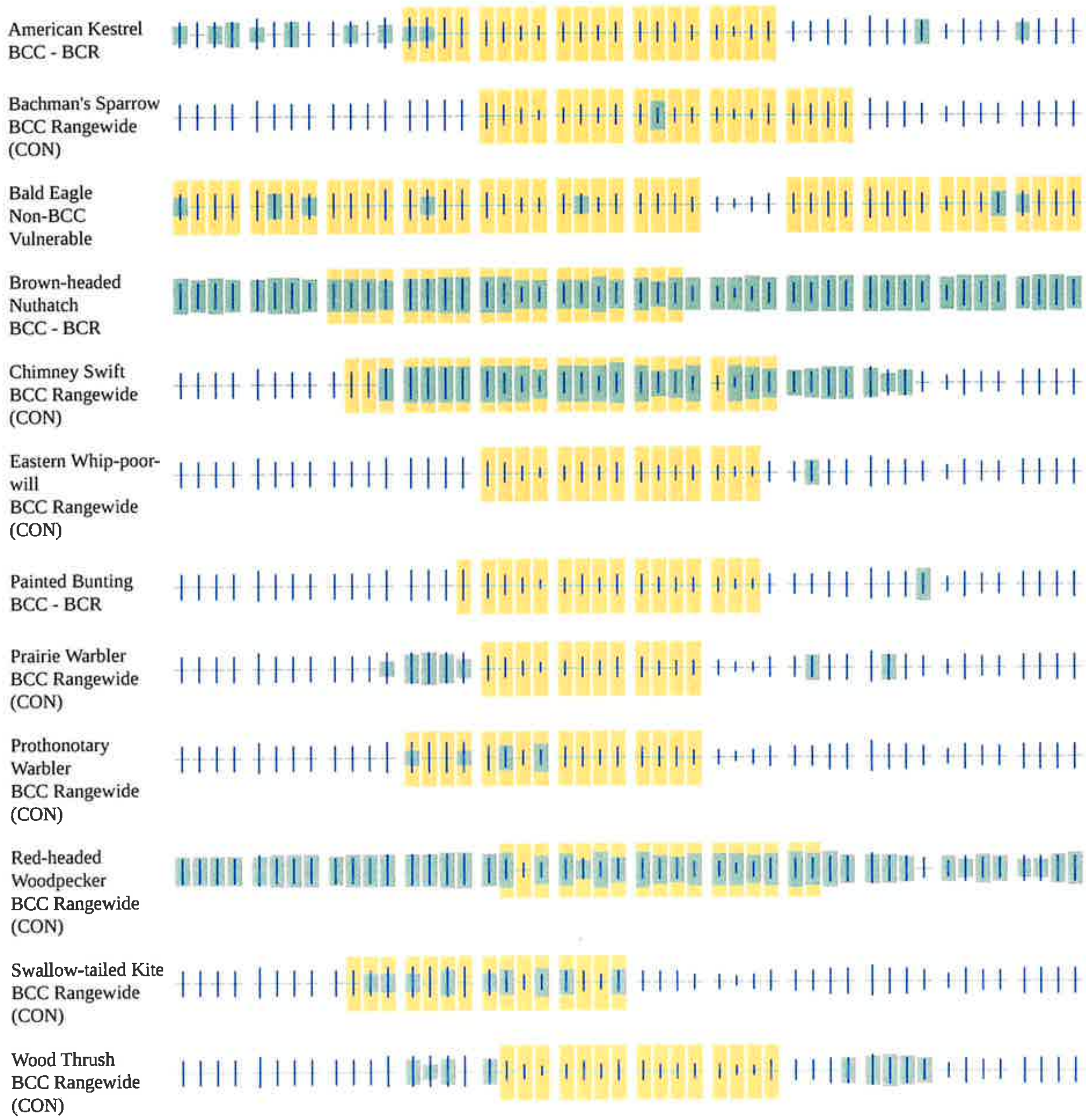
probability of presence   breeding season | survey effort   — no data

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC



Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

MIGRATORY BIRDS FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report
The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no

data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER FORESTED/SHRUB WETLAND

- PSS3B
- PFO4/1B
- PFO1C
- PFO4/1A

RIVERINE

- R5UBH

IPAC USER CONTACT INFORMATION

Agency: Valdosta city
Name: Melissa Norris
Address: 4589 Val North Drive
City: Valdosta
State: GA
Zip: 31602
Email mnorris@ttlusa.com
Phone: 2292448619

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Georgia Ecological Services Field Office
355 East Hancock Avenue
Room 320
Athens, GA 30601-2523
Phone: (706) 613-9493 Fax: (706) 613-6059

May 25, 2023

In Reply Refer To:
Project code: 2023-0086358
Project Name: Old Clyattville Road Widening

Please provide this document to the Corps with your permit application.

Subject: Consistency letter for the project named 'Old Clyattville Road Widening' for the threatened wood stork, that may occur in your proposed project location, pursuant to the Wood Stork Determination Key.

To whom it may concern:

On May 25, 2023, Melissa Norris used the IPaC determination key ‘Wood Stork Determination Key’; dated May 01, 2023, in the U.S. Fish and Wildlife Service's online IPaC tool, to evaluate potential impacts to the wood stork from a project named 'Old Clyattville Road Widening' in (shown below).This letter is provided pursuant to the Service’s authority under the Endangered Species Act of 1973, as amended (ESA) (87 Stat. 884; 16 U.S.C. 1531et seq.).

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@30.79863075,-83.28808329589388,14z

The following description was provided for the project 'Old Clyattville Road Widening':

The project consist of widening Old Clyattville Road from Gil Harbin to Mud Swamp.

Based upon your IPaC submission, the proposed project is consistent with a May Affect, Not Likely to Adversely Affect determination for the wood stork because on an individual basis projects impacting less than 0.5 acres of suitable foraging habitat generally will not have a measurable effect on wood storks.

Please be advised that it is the U.S. Army Corps of Engineers' (Corps) responsibility to make final effect determinations for potential impacts resulting from actions they conduct or permit and to confirm that your project is consistent with the aforementioned guidance.

The validity of this Not Likely to Adversely Affect determination is contingent upon a representative from your action agency formally requesting concurrence from the Service.

To request concurrence, the action agency should log into IPaC using their agency email account and click "Request Concurrence". They will need to enter the record locator **047-126938725**.

If later modifications are made to the project, additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary.

This IPaC-generated letter <u>only</u> applies to the wood stork and **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Eastern Indigo Snake *Drymarchon couperi* Threatened
- Monarch Butterfly *Danaus plexippus* Candidate
- Suwannee Alligator Snapping Turtle *Macrochelys suwanniensis* Proposed Threatened
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

ADDITIONAL CONSIDERATIONS FOR NON-FEDERALLY LISTED SPECIES

- **Bald Eagle Nest Issues.** If any project related activities are proposed to occur **within 660 feet** of an active or alternate bald eagle (Haliaeetus leucocephalus) nest during the nesting season (October 1 through May 15), we recommend the applicant or their designated agent review the information available for eagle management at https://www.fws.gov/birds/management/managed-species/eagle-management.php. Information is available for avoidance and minimization of impacts, and permitting options, if necessary.
- **Migratory Bird Issues.** To ensure there no violations to the Migratory Bird Treaty Act or State regulation, in the event any native birds are using the structures for nesting, we recommend the applicant or their designated agent coordinate with the appropriate Service office https://www.fws.gov/program/migratory-birds and the Georgia Department of Natural Resources Non-Game Division so that impacts can be avoided and/or minimized.

QUALIFICATION INTERVIEW

1. Does the proposed action require a permit (nationwide, general, or individual permits) from the U.S. Army Corps of Engineers?

   Yes
2. [Semantic] Is the action within 2,500 feet of an active wood stork nesting colony?

   Automatically answered
   No
3. Are you an employee of the U.S. Army Corps of Engineers?

   No
4. Has the U.S. Fish and Wildlife Service's Georgia Field Office (FWS-GA) provided documentation stating project impacts to listed wood storks were likely to be minimal (FWS-GA signed letter or sticker, T&E survey where FWS-GA provided concurrence with negative findings, or similar documentation)?

   No
5. Is there suitable wood stork foraging habitat (SFH) within the project area?

   Note: SFH contains patches of relatively open (< 25%) aquatic vegetation, calm water, and a permanent or seasonal water depth between 2 and 15 inches. Examples of SFH include, but are not limited to, freshwater marshes, seasonally flooded roadside or agricultural ditches, narrow tidal creeks or shallow tidal pools, managed impoundments, and depressions in cypress heads and swamp sloughs.

   Yes
6. Will the project affect suitable wood stork foraging habitat?

   Yes
7. Will the project impact greater than 0.5 acres of suitable wood stork foraging habitat?

   No

DETERMINATION KEY DESCRIPTION: WOOD STORK DECISION KEY

This key was last updated in IPaC on [Date, 2021]. Keys are subject to periodic revision. This key is for determining effects to the threatened wood stork resulting from U.S. Army Corps of Engineers' (Corps) permit applications. The purpose of this Key is to assist IPaC users in making appropriate effects determinations for threatened wood stork resulting from U.S. Army Corps of Engineers' (Corps) permit applications pursuant to section 7 of the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 et seq.) The Key is intended to streamline consultation with the U.S. Fish and Wildlife Service (Service) when the proposed action can be walked through the Key and the appropriate conclusion is the proposed action will have no effect or may affect but not likely to adversely affect the wood stork. For projects where the Service believes that further evaluation of the proposed project is necessary, the Key recommends contacting the local field office and requesting consultation. The Service intends to develop decision keys in the future to provide technical assistance for section 7 consultation for other listed species. Therefore, the Service highly recommends continuing to check this site for improvements and additional streamlining opportunities for other listed species.

The Service is the lead Federal Agency charged with the protection and conservation of Federal Trust Resources, including threatened and endangered species and migratory birds, in accordance with section 7 of the Act, the Bald and Golden Eagle Protection Act, (16 U.S.C. 668-668d) (Eagle Act), and the Migratory Bird Treaty Act (40 Stat. 755; 16 U.S.C. 701 et seq.). If a proposed project has the potential to effect bald and golden eagles, or other migratory birds, additional consultation with the Migratory Bird office may be necessary, please visit: https://www.fws.gov/program/migratory-birds.

This key is based on the following documents:
The Corp's Determination Guidance for Endangered & Threatened Species (EDGES)
Central and North Peninsular Florida 2008 wood stork consultation key
South Florida 2010 wood stork consultation key

CONTACT INFORMATION FOR GEORGIA SUB-OFFICES

West Georgia Sub-Office
P.O. Box 52560
Ft. Benning, Georgia 31995-2560
(706) 544-6030

Coastal Georgia Sub-Office
4980 Wildlife Drive NE
Townsend, Georgia 31331
(912) 832-8739

All Offices: gaes_assistance@fws.gov

IPAC USER CONTACT INFORMATION

Agency: Valdosta city
Name: Melissa Norris
Address: 4589 Val North Drive
City: Valdosta
State: GA
Zip: 31602
Email mnorris@ttlusa.com
Phone: 2292448619

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

ATTACHMENT 3
DESKTOP CULTURAL RESOURCES REVIEW LETTER

TERRAXPLORATIONS

Leading the Future in Recording America's Past

May 19, 2023

Melissa Norris
Project Professional
TTL
4589 Val North Dr.
Valdosta, GA 31602

Re: *Desktop Cultural Resources Environmental Screening Survey for the Proposed Old Clyattville Road Widening Project in Lowndes County, Georgia.*

Ms. Norris,

Per your request for a desktop survey to locate previously recorded cultural resources within and/or near the proposed Old Clyattville Road Widening Project (26.7 acres[ac]) located in Lowndes County, Georgia, TerraXplorations, Inc. (TerraX) provides the following information.

BACKGROUND RESEARCH

A literature and document search was conducted in order to gather pertinent background information regarding the subject property and its surroundings. This research included inspection of the Georgia Archaeological Site File (GASF) database (GASF 2023), Georgia's Natural, Archaeological, and Historic Resources Geographic Information System (GNAHRGIS) database (GNAHRGIS 2023), the Georgia Cemetery Locator (2021), the National Register of Historic Places (NRHP) (National Park Service [NPS] 2023), and various available historic maps (Nationwide Environmental Title Research [NETR] 2023; United States Geological Survey [USGS] 2023). The proposed project area depicted in this desktop consists of 26.7 ac located in Lowndes County, Georgia (Figures 1 and 2).

A search of the GASF and GNAHRGIS database identified four previous cultural resources surveys within a 1-km search radius of the potential project area (Figure 3; Table 1). Of these four cultural resource surveys, three are Georgia Department of Transportation (GDOT) Interdepartment Correspondence Letters (6984, 6987, and 12343) and one is a Phase I Archaeological Survey report (973). Of the four surveys, three intersect with the proposed project area; GASF Report Nos. 6984, 6987, and 12343. Brief summaries of these reports are listed below.

GASF Report No. 6984. GASF Report No. 6984 is a GDOT Interdepartment Correspondence Letter from 1987 and concerned the widening of St. Augustine Road and Old Clyattville Road between River Street to Industrial Boulevard. The methods are not described within the report, but the report states that a Level II archaeological survey was conducted, which is equivalent to a Phase I archaeological survey. The investigation found no significant archaeological resources within the proposed project corridor (Bowen 1987).

GASF Report No. 6987. GASF Report No. 6987 is a GDOT Interdepartment Correspondence Letter from 1996 and concerned the replacement of the bridge over Mud Swamp along County Route (CR) 785. The methods are not described within the report, but the report states that a Level II archaeological survey was

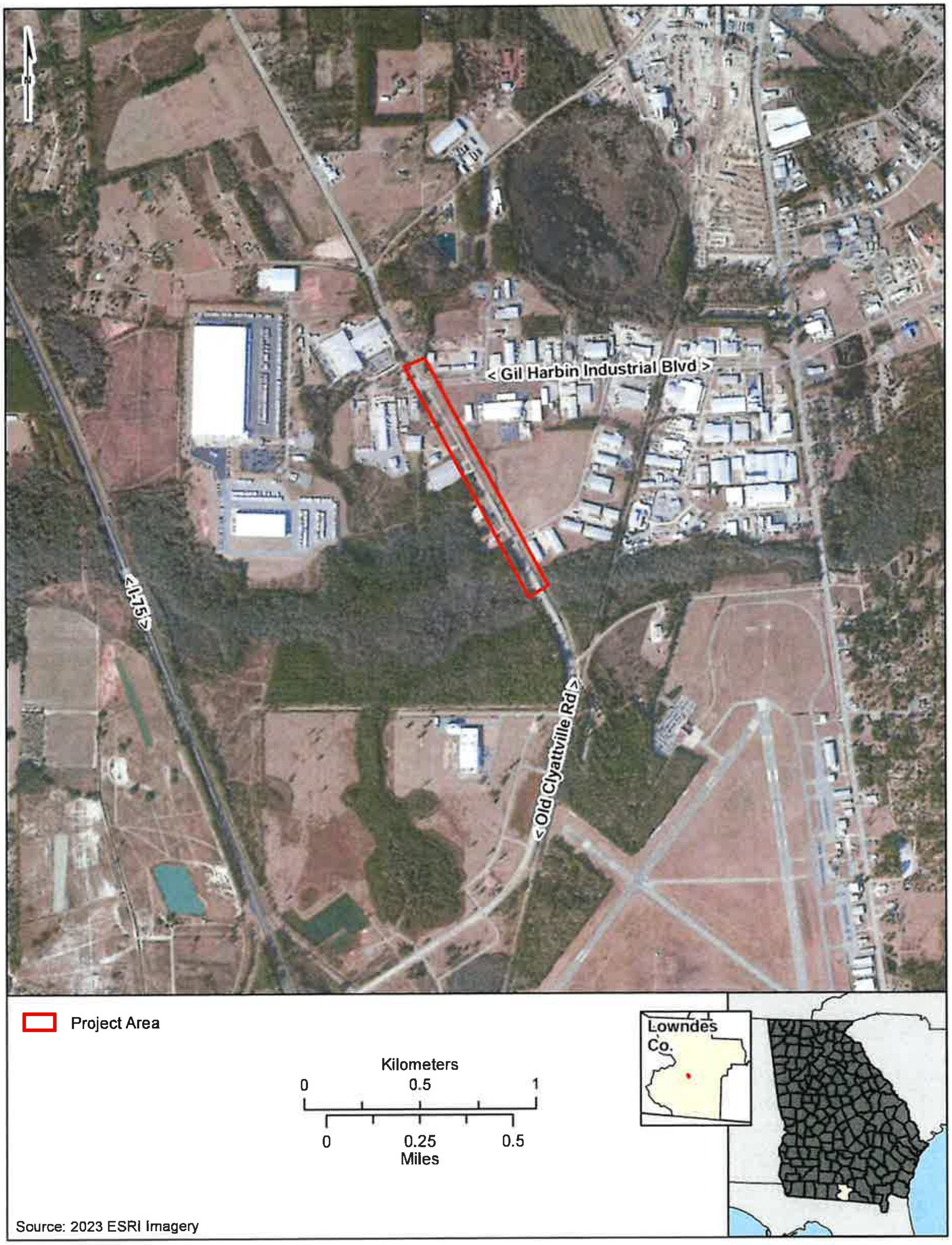


Figure 1. *Aerial image showing the proposed project area.*

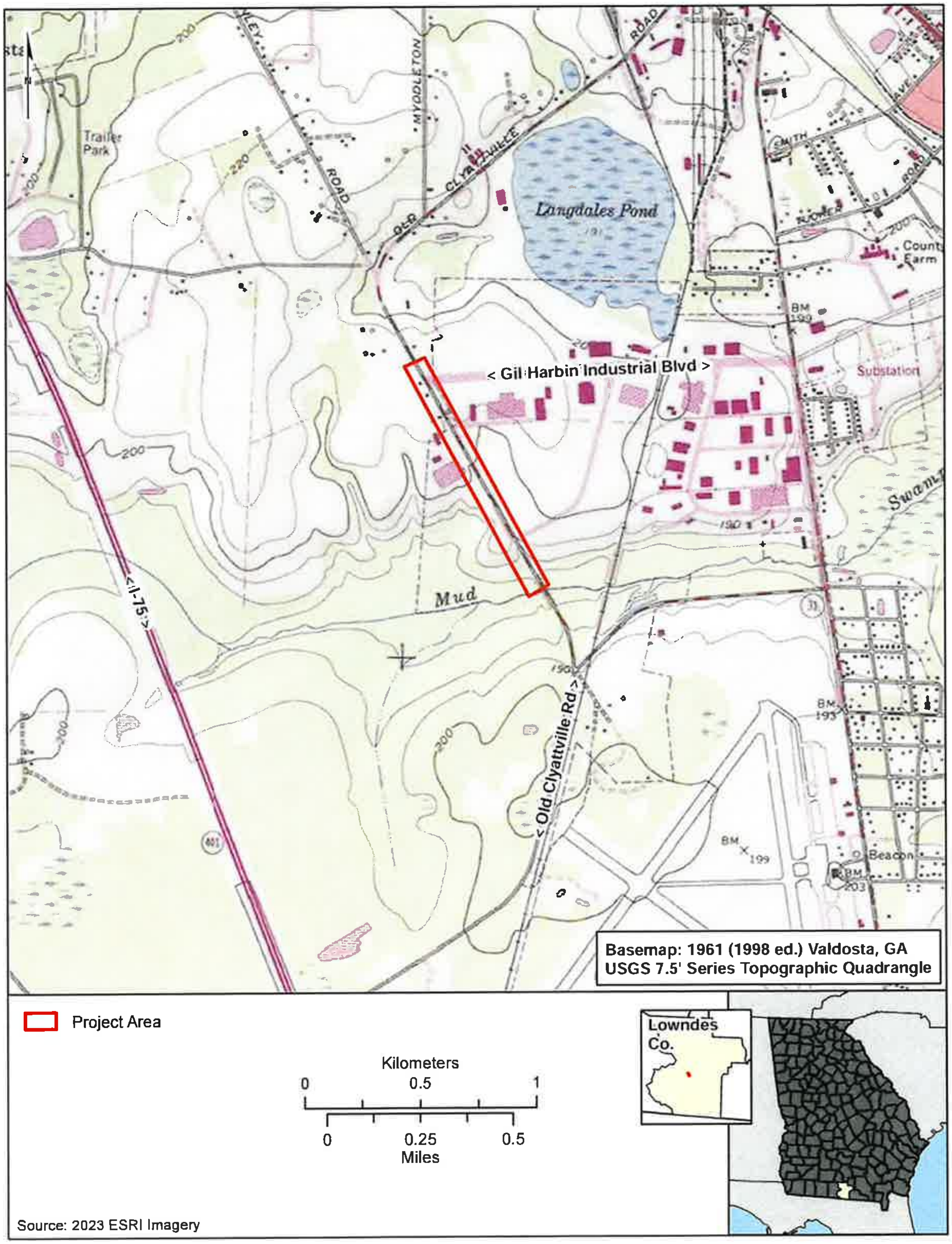


Figure 2. *Topographic map showing the proposed project area.*

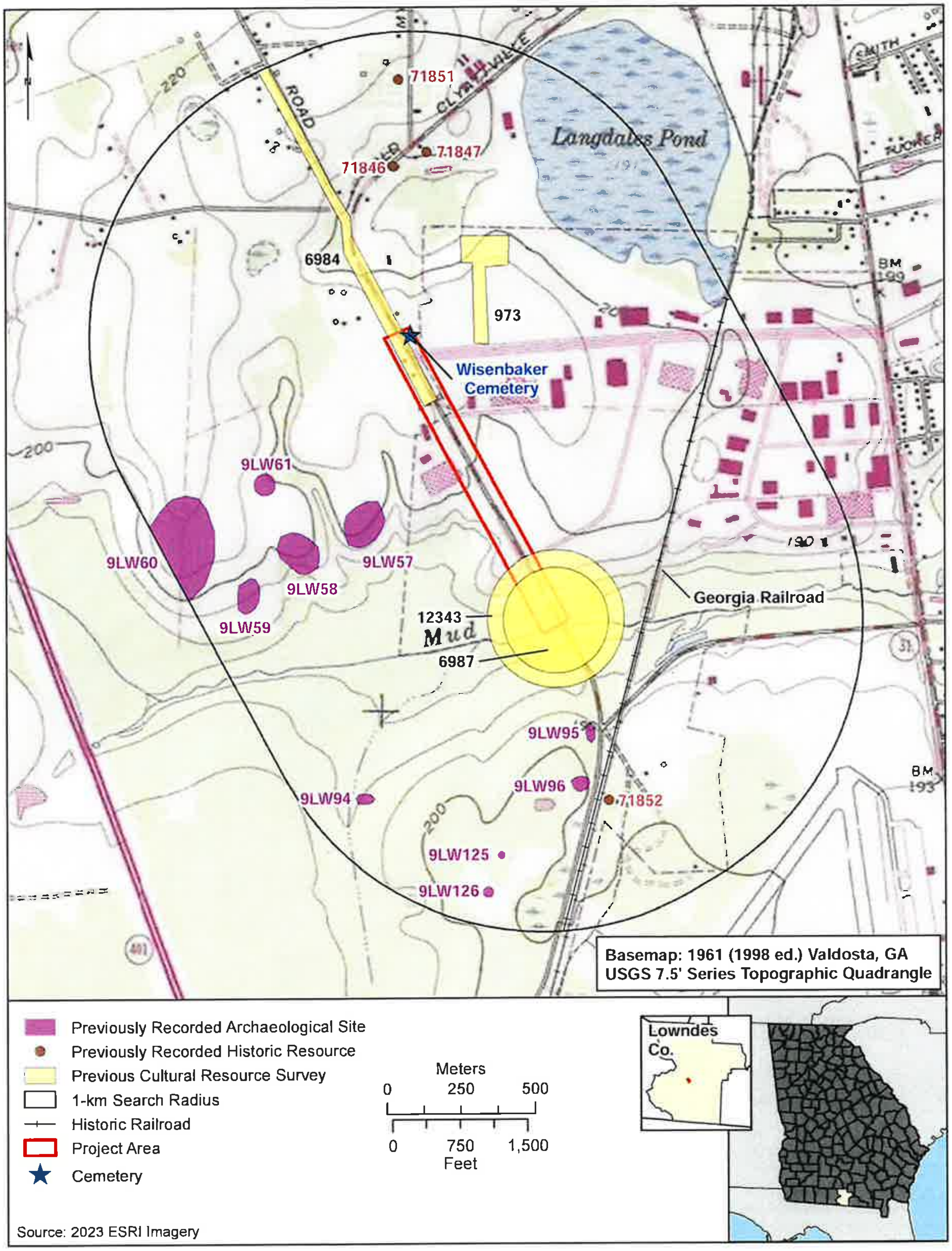


Figure 3. Topographic map showing previous cultural resource surveys, previously recorded archaeological sites, a historic railroad, and a historic cemetery within a 1-km radius of the proposed project area.

Table 1. Previous Cultural Resource Surveys Within a 1-km Search Radius of the Proposed Project Area.		
Survey Number	Report Title	Author and Year
973	*Phase I Archaeological Survey of the Proposed Site of the Azalea Park 115/25 KV Substation, Lowndes County, Georgia.*	Ruple 1991
6984	*Archaeology Assessment of Project MR-4915 (2&3) and FR-32-2(14), Lowndes County.*	Bowen 1987
6987	*Archaeological Assessment of Project BRM-4915 (6), Lowndes County.*	Duff 1996
12343	*Archaeological Re-assessment of Project BRMLB-4915 (6), Lowndes County.*	Duff 1997

*Gray denotes previous cultural resource surveys that intersect with the survey area.

conducted, which is equivalent to a Phase I archaeological survey. The investigation found that no significant archaeological resources were found within the proposed project's area of potential environmental effect (Duff 1996).

GASF Report No. 12343. GASF Report No. 12343 is an Interdepartment Correspondence Letter from 1996 that re-assessed the archaeological resources for the proposed project associated with GASF Report No. 6987. The report states that a Level II archaeological survey was conducted, which is equivalent to a Phase I archaeological survey. The re-assessment again found that no significant archaeological resources were found within the proposed project's area of potential environmental effect (Duff 1997).

Examinations of the GNAHRGIS database identified 10 previously recorded archaeological sites within the 1-km search radius (see Figure 3; Table 2). None of these archaeological sites intersect with the proposed project area. The sites are described below.

Site 9LW57. Site 9LW57, measuring 172-x-100 m, is an Early Archaic lithic scatter documented by Valdosta State University in 1995. The site is located on a terrace overlooking Mud Swamp approximately 470 meters (m) south-southwest of the intersection of Industrial Boulevard and Old Clyattville Road. A Bolen PPK was found at the site. The site was recommended ineligible for NRHP inclusion (O'Quinn 1995a).

Site 9LW58. Site 9LW58, measuring 150-x-70 m, is a Middle to Late Archaic lithic scatter documented by Valdosta State University in 1995. The site is located on a terrace overlooking Mud Swamp approximately 670 m southwest of the intersection of Industrial Boulevard and Old Clyattville Road. The site was recommended ineligible for NRHP inclusion (O'Quinn 1995b).

Site 9LW59. Site 9LW59, measuring 100-x-110 m, is a Middle to Late Archaic lithic scatter documented by Valdosta State University in 1995. The site is located on a terrace overlooking Mud Swamp approximately 900 m southwest of the intersection of Industrial Boulevard and Old Clyattville Road. The site was recommended ineligible for NRHP inclusion (O'Quinn 1995c).

Site 9LW60. Site 9LW60, measuring 500-x-300 m, is an Archaic lithic scatter documented by Valdosta State University in 1995. The site is located on a terrace overlooking Mud Swamp approximately 840 m southwest of the intersection of Industrial Boulevard and Old Clyattville Road. The site was recommended ineligible for NRHP inclusion (O'Quinn 1995d).

Table 2. Previously Recorded Archaeological Sites Within 1-km of the Proposed Project Area.				
Site	Components	Site Type	NRHP Status	Recording Entity and Date
9LW57	Precontact	Early Archaic Lithic Scatter	Recommended Ineligible	O'Quinn - 1995
9LW58	Precontact	Middle to Late Archaic Lithic Scatter	Recommended Ineligible	O'Quinn - 1995
9LW59	Precontact	Middle to Late Archaic Lithic Scatter	Recommended Ineligible	O'Quinn - 1995
9LW60	Precontact	Archaic Lithic Scatter	Recommended Ineligible	O'Quinn - 1995
9LW61	Historic	Early 19th-Century Ceramic Scatter	Recommended Ineligible	O'Quinn - 1995
9LW94	Precontact	Unknown Precontact Lithic Scatter	Unknown	Kirkland - 2007
9LW95	Precontact; Historic	Unknown Precontact Ceramic Scatter; Early to Mid 20th-Century Ceramic Scatter	Recommended Ineligible	Kirkland - 2007
9LW96	Precontact	Unknown Precontact Lithic Scatter	Recommended Ineligible	Kirkland - 2007
9LW125	Precontact	Unknown Precontact Lithic Scatter	Recommended Ineligible	Macek - 2014
9LW126	Precontact; Historic	Unknown Precontact Lithic Scatter; Early to Mid 20th-Century Ceramic Scatter	Recommended Ineligible	Macek - 2014

Site 9LW61. Site 9LW61, measuring 90-x-60 m, is an early nineteenth-century ceramic scatter documented by Valdosta State University in 1995. The site is located on a terrace overlooking Mud Swamp approximately 600 m southwest of the intersection of Industrial Boulevard and Old Clyattville Road. The site was recommended ineligible for NRHP inclusion (O'Quinn 1995e).

Site 9LW94. Site 9LW94, measuring 120 m in length, is an unknown precontact lithic scatter documented by Southeastern Horizons, Inc., in 2007. The site is located on an upland plain approximately 670 m west of Old Clyattville Road. The site's NRHP eligibility is listed as unknown because the site could not be delineated to the east and west due to survey area constraints (Kirkland 2007a).

Site 9LW95. Site 9LW95, measuring 60 m in length, is an unknown precontact and early- to mid-twentieth-century ceramic scatter documented by Southeastern Horizons, Inc., in 2007. The site is located on an upland plain west of the intersection of Airport Road and Clyattville Road. The site was recommended ineligible for NRHP inclusion (Kirkland 2007b).

Site 9LW96. Site 9LW96, measuring 125 m in length, is an unknown precontact lithic scatter documented by Southeastern Horizons, Inc., in 2007. The site is located on an upland plain approximately 550 m south of Mud Creek. The site was recommended ineligible for NRHP inclusion (Kirkland 2007c).

Site 9LW125. Site 9LW125, measuring 5-x-5 m, is an unknown precontact lithic scatter documented by TRC Environmental Corporation in 2014. The site is located on a terrace approximately 360 m southwest of the intersection of Potato Roll Lane and Old Clyattville Road. The site was recommended ineligible for NRHP inclusion (Macek 2014a).

Site 9LW126. Site 9LW126, measuring 5-x-5 m, is an unknown precontact lithic scatter and early- to mid-twentieth-century ceramic scatter documented by TRC Environmental Corporation in 2014. The site is located on a terrace approximately 470 m south-southwest of the intersection of Potato Roll Lane and Old Clyattville Road. The site was recommended ineligible for NRHP inclusion (Macek 2014b).

A review of the NRHP (NPS 2023) found no NRHP-listed properties or districts within the 1-km search radius.

A review of historic railroads in Lowndes County found one railway that falls within the 1-km search radius (see Figure 3). The Georgia and Florida Railroad (GAF) mainline stretches from Greenwood, South Carolina through Valdosta to Madison, Florida. The GAF dates to between 1906 and 1911 and is recommended eligible for NRHP inclusion under Criteria A, B, and C. The GAF mainline, which falls within the 1-km search radius, is considered a contributing feature for the GAF's NRHP eligibility (Storey et al. 2019). The GAF mainline does not intersect with the proposed project area.

A review of topographic maps, aerial images, and the Georgia Cemetery Locator (2021) identified one cemetery within the 1-km search radius (see Figure 3). A brief summary of the cemetery is provided below.

Wisenbaker Cemetery. The Wisenbaker Cemetery is located northeast of the intersection of Industrial Boulevard and Old Clyattville Road. The historic cemetery dates to the late nineteenth century and early twentieth century. According to FindAGrave, there are 12 burials within the Wisenbaker Cemetery, the earliest of which dates to 1863 (FindAGrave 2023). The Wisenbaker Cemetery falls within the proposed project area.

A review of the GNAHRGIS database yielded four historic resources within the 1-km search radius (see Figures 3; Table 3). All four of these historic resources are residential dwellings spanning from c. 1899 to c. 1952. The building resource subgroups for these historic resources include Bungalow (Resource Nos. 71846, 71847, and 71852) and Georgian Cottage (Resource No. 71851). No NRHP eligibility status was determined for all four resources. None of these historic resources intersect with the proposed project area.

Lastly, a review of historic maps was conducted for evidence of previous historic structures located within the proposed project area. The 1961 (1965 edition [ed.]) Valdosta, Georgia USGS 7.5' series topographic quadrangle depicts four structures within the northern portion of the proposed project area (Figure 4). The 1961 (1977, 1988, and 1998 eds.) Valdosta, Georgia 7.5' series topographic quadrangles depict five structures within the northern portion of the proposed project area. Additionally, the proposed project area lies along

Table 3. Previously Recorded Historic Resources Within a 1-km Search Radius of the Proposed Project Area.

Resource Number	Resource Name	Address	Date of Significance	Architectural Style	NRHP Eligibility
71846	n/a	1303 Old Clyattville Road	c. 1952	No Academic Style	Not Determined
71847	n/a	1277 Old Clyattville Road	c. 1950	No Academic Style	Not Determined
71851	n/a	1010 Middleton Road	c. 1899	No Academic Style	Not Determined
71852	n/a	1793 Watson's Lane	c. 1924	No Academic Style	Not Determined

high ground just north of Mud Swamp, a freshwater resource. High ground near a freshwater resource tend to be preferred locations for precontact settlements, which suggests that there is a potential for precontact sites to be present within the proposed project area (NETR 2023; USGS 2023). Historic aerials from 1952 through 1956 depict five visible structures within the proposed project area. The proposed project area is mainly composed of agricultural land (NETR 2023).

Based on the presence of historic structures on the historic topographic maps and aerial images, as well as the proximity of the proposed project area to Mud Swamp, there is potential for previously undetected historic and precontact archaeological material to be present within the proposed project area. Furthermore, the presence of a historic cemetery within the project area suggests there is a high likelihood of historic resources within the proposed project area. TerraX appreciates the opportunity to provide this information to you. If you have any questions, please do not hesitate to contact us.

Sincerely,

April K. Smith, PhD, RPA
TerraXplorations
Principal Investigator
asmith@terraxplorations.com

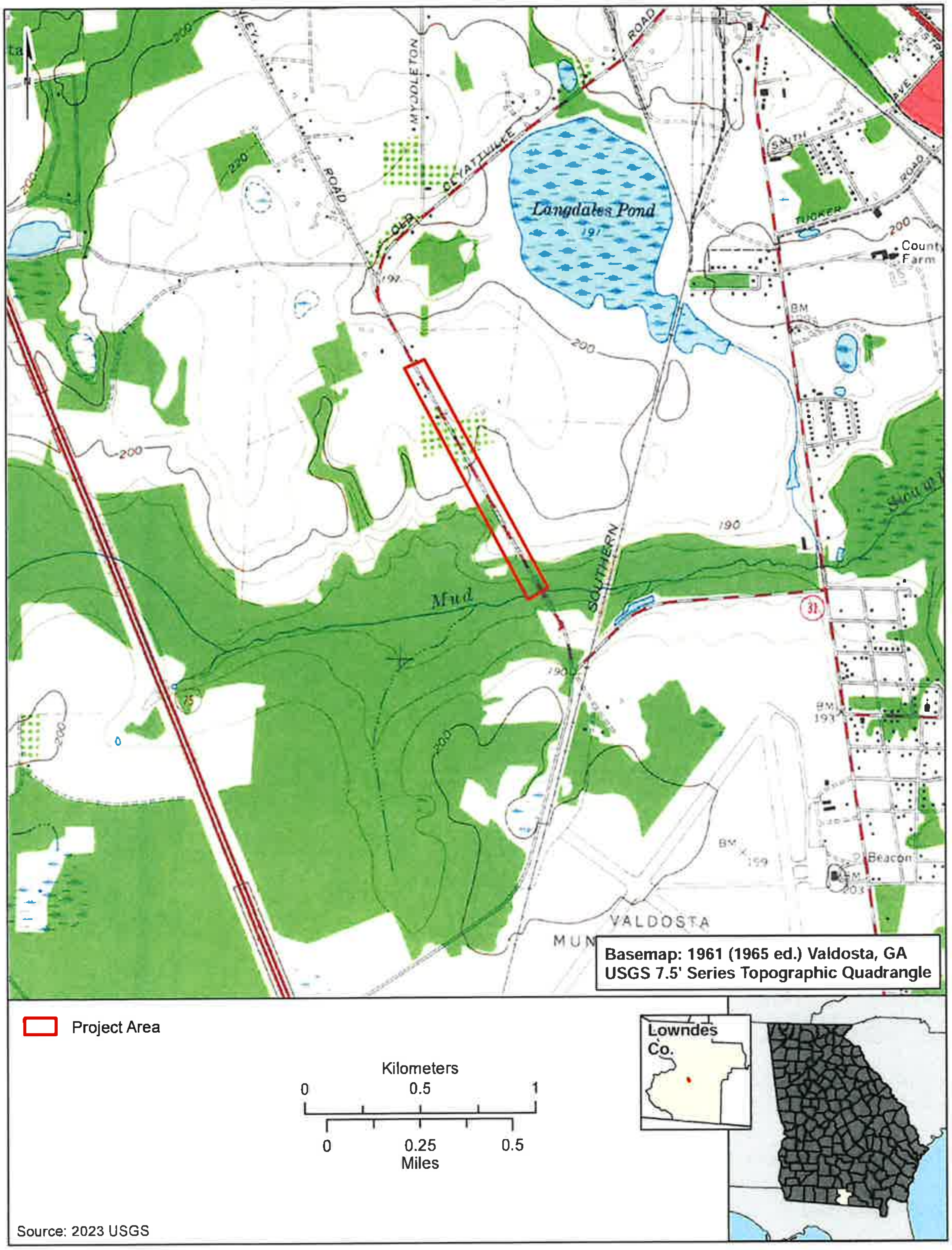


Figure 4. *Historic 1961 (1965 ed.) Valdosta, Georgia USGS 7.5' series topographic quadrangle showing the proposed project area.*

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1996 *Archaeological Assessment of Project BRM-4915 (6), Lowndes County.* Georgia Department of Transportation Interdepartment Correspondence Letter. Copies available from the Georgia Archaeological Site File, Athens. GASF Report No. 6987.

1997 *Archaeological Re-assessment of Project BRMLB-4915 (6), Lowndes County.* Georgia Department of Transportation Interdepartment Correspondence Letter. Copies available from the Georgia Archaeological Site File, Athens. GASF Report No. 12343.

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1995c Site 9LW59. Georgia Archaeological Site Form. Copies available from the Georgia Archaeological Site File, Athens.

1995d Site 9LW60. Georgia Archaeological Site Form. Copies available from the Georgia Archaeological Site File, Athens.

1995e Site 9LW61. Georgia Archaeological Site Form. Copies available from the Georgia Archaeological Site File, Athens.

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2023 topoView. Electronic document, https://ngmdb.usgs.gov/topoview/, accessed May 18, 2023.

ATTACHMENT 5
MITIGATION BANK INFORMATION

About the Results +

State:	Georgia
County:	Lowndes(GA)
8-Digit Hydrologic Unit Code:	03110202
USFWS Field Office:	Georgia
USACE District:	Savannah
NMFS Region:	Southeast
BLM State Office:	Eastern States
Banks/Sites in Primary Service Area	3
Banks/Sites in Secondary Service Area	0
Banks/Sites in Tertiary Service Area	0
ILF Program Advance Credits	0

Search Criteria:
Including ONLY **approved, public** banks, ILF sites, NRDA sites, umbrella sites, BLM project sites, and ILF programs **with defined credit classifications**
Excluding single client banks, ILF sites, NRDA sites, umbrella sites, and BLM project sites
Excluding banks, ILF sites, NRDA sites, umbrella sites, BLM project sites, and ILF programs **with zero available credits**
Including bank, ILF site, NRDA site, umbrella site, and BLM project site service areas of rank **Primary, Secondary, Tertiary**
Including ILF programs **with Stream credits**

Found banks, ILF sites, NRDA sites, umbrella sites, BLM Project sites, and ILF programs by 8-digit HUC

HUC8	State	District	Service Area Rank	Credit Type	Bank/Program
03110202	Georgia	Savannah	Primary Service Area	Stream, Wetland	Cherry Creek
03110202	Georgia	Savannah	Primary Service Area	Wetland	Cecil Bay
03110202	Georgia	Savannah	Primary Service Area	Stream	Jackson Farms ILF Mitigation Site

Banks/Sites in Primary Service Area

Bank Name: 1 - Cecil Bay

Bank Type:	Private Commercial
HUCS:	03110202
Total Acres:	911.546
Distance to impact:	20 Miles
USACE Permit No:	SAS-9900-02230
Bank States:	Georgia
Bank Sponsor:	**Williams Investment Company** 1221 W 4th St Adel, GA 31620 Email: winco1@windstream.net
Bank Sponsor POC:	

Resource Environmental Solutions (RES)
1551 Jennings Mill Road, Unit 1400-B
Watkinsville, GA 30677
Email: gacredits@res.us
Phone: (706) 850-2171

Regulatory Bank Manager:

Terry Kobs
1104 North Westover Blvd., Unit 9
Albany, GA 31707
Email: Terry.c.kobs@usace.army.mil
Phone: (229) 430-8567
Fax: (229) 430-8569

Credit Type	Credit Classifications	Assessment Method	Available Credits	Jurisdiction
Wetland	Wetlands	Savannah SOP March 2004	3576.14	Federal

Notes:

Bank Name: 2 - Cherry Creek

Bank Type: Private Commercial
HUCS: 03110202
Total Acres: 530.9
Distance to impact: 8 Miles
USACE Permit No: SAS-9900-10930
Bank States: Georgia
Comments: This bank's stream totals17,371.2 Linear Feet.
Bank Sponsor: **Cherry Creek Properties, Inc**
230 West Highway 37
Lakeland, GA 31635

Bank Sponsor POC:

Ms. Jennifer Pahl
1305 Lakes Parkway
Suite 110
Lawrenceville, GA 30043
Email: jpahl@corblu.com
Phone: (770) 682-9731
Cell Phone: (413) 537-3230

Greg P. Smith
President
Corblu Ecology Group, LLC
1305 Lakes Parkway, Suite 110
Lawrenceville, GA 30043
Email: gsmith@corblu.com
Phone: (770) 682-9731

Regulatory Bank Manager:

Justin Hammonds
1025 Buford Dam Road
Buford, GA 30518
Email: Justin.A.Hammonds@usace.army.mil
Phone: (678) 804-5227

Credit Type	Credit Classifications	Assessment Method	Available Credits	Jurisdiction
Wetland	Wetlands	Savannah SOP March 2004	67.52	Federal

Notes:

Bank Name: 3 - Jackson Farms ILF Mitigation Site

Bank Type: Private Nonprofit
HUCS: 03110202
Total Acres: 80
Distance to impact: 51 Miles
USACE Permit No: SAS-2011-00779
Bank States: Georgia
Bank Sponsor: **Georgia-Alabama Land Trust**
226 Old Ladiga Road
Piedmont, AL 36272, AL 36272

Bank Sponsor POC:

Mr. Trey Evans
Blueway LLC
1551 Jennings Mill Road, Suite 1400B
Watkinsville, GA 30677
Email: trey@bluewayland.com
Phone: (404) 376-4698

Regulatory Bank Manager:

Justin Hammonds
1025 Buford Dam Road
Buford, GA 30518
Email: Justin.A.Hammonds@usace.army.mil
Phone: (678) 804-5227

Credit Type	Credit Classifications	Assessment Method	Available Credits	Jurisdiction
Stream	Stream (2004)	Savannah SOP March 2004	65120.76	Federal

Notes:

Banks/Sites in Secondary Service Area

No results found.

Banks/Sites in Tertiary Service Area

No results found.

ILF Program Advance Credits

No results found.

Melissa Norris

From: Greg Smith <gsmith@corblu.com>
Sent: Thursday, July 20, 2023 7:47 AM
To: Melissa Norris
Cc: Jenny Pahl
Subject: RE: [External] City of Valdosta Mitigation Credits

Hi Melissa,
The City of Valdosta has some wetland credits available from Cherry Creek, but not stream. You will need to try to find another bank in the PSA or SSA and if there are no stream credits there, you will need to coordinate a purchase with GALT/ILF. Please let me know if you have any questions. Thanks
Greg

Gregory. P. Smith
Corblu Ecology Group, LLC
(Office) 770-682-9731
(Mobile) 770-653-5668

From: Melissa Norris <mnorris@ttlusa.com>
Sent: Wednesday, July 19, 2023 4:30 PM
To: Greg Smith <gsmith@corblu.com>
Subject: City of Valdosta Mitigation Credits

Hi Greg,
I am working with the City of Valdosta on the coordination of a NWP (SAS-2023-00522) that is going to require 2,894 legacy stream credits (non-perennial). It is my understanding that the City of Valdosta may have credits with Corblu, which they can use for this project. If the stream credits area available, can you please execute the attached SOCA for the issuance of this permit?

Thank you,
Melissa

Melissa R. Norris, P.G.
Project Professional
Office: 229.244.8619
Cell: 229.415.5570
mnorris@ttlusa.com
4589 Val North Dr.
Valdosta, GA 31602
https://link.edgepilot.com/s/869f6604/6m7ToNpPJE_46lx6_aj6Xw?u=http://www.ttlusa.com/

TTL