ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOWNDES COUNTY & GDOT STANDARDS AND SPECIFICATIONS

AXIS ENGINEERING CONSULTANTS

# CENTERLINE AND RIGHT OF WAY PLANS

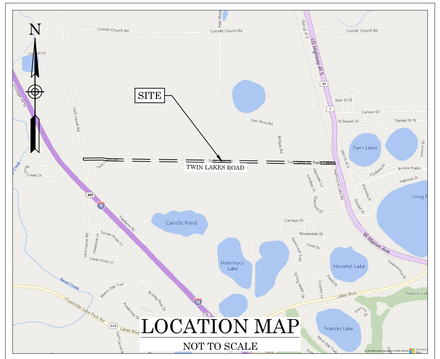
FOR

# CR 390 / TWIN LAKES ROAD PAVING IMPROVEMENTS

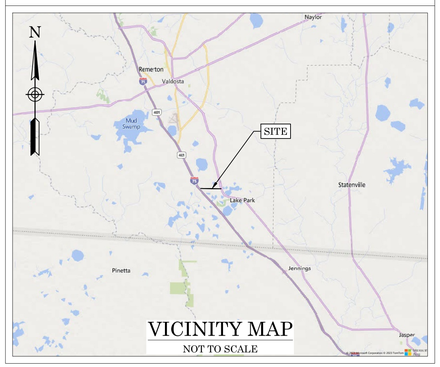
## LOWNDES COUNTY, GEORGIA

PREPARED FOR:

## LOWNDES COUNTY BOARD OF COMMISIONERS




LOCATION MAP
NOT TO SCALE




VICINITY MAP
NOT TO SCALE

| REVISION TABLE | |
|---|---|
| DATE | REVISIONS |
| 2/06/2024 | 1. REVISE PARCEL LABELS FOR PARCELS 2 AND 3 TO READ AS TRACTS 1, 2, 3, ETC. VERSES A, B, C, ETC. (EX. PARCEL 2 - TRACT 1 INSTEAD OF PARCEL 2A) ON PLANS AND LINE TABLES<br>2. LOCATE EXISTING RESIDENCE STRUCTURE ON PARCEL 20 AND ADD DIMENSION FROM PROPOSED RIGHT-OF-WAY.<br>3. SHOW EXISTING DRIVEWAY OFF TWIN LAKES ROAD INTO PARCEL 20.<br>4. LOCATE EXISTING WELL HOUSE ON PARCEL 19 AND ADD DIMENSION FROM PROPOSED RIGHT-OF-WAY. |
| 12/6/2024 | REV. PER COUNTY COMMENTS |
| 8/18/2025 | REV. PER COUNTY COMMENTS |
| 9/19/2025 | REV. PER COUNTY COMMENTS |
| 10/24/2025 | REV. PER COUNTY COMMENTS |
| 1/29/2026 | REV. PER COUNTY COMMENTS |
| 3/4/2026 | REV. PER COUNTY COMMENTS |
| 3/20/2026 | ISSUED FOR CONSTRUCTION |

LOWNDES COUNTY, GEORGIA
BOARD of COMMISSIONERS
1825

| SITE DATA TABLE | |
|---|---|
| OWNER DEVELOPER | LOWNDES COUNTY BOARD OF COMMISIONERS<br>327 NORTH ASHLEY STREET<br>VALDOSTA, GEORGIA 31601<br>(229) 671-2442<br>commissioner@lowndescounty.com |
| PROJECT LOCATION | TWIN LAKES ROAD (CR. 390)<br>LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |
| DISTURBED AREA | 13.7 ACRES |

TIA
TRANSPORTATION INVESTMENT ACT

DATE:
OCTOBER 2024

IGTIA # 2300996
PI # 0016280
SGRC - 119

| Sheet List Table | |
|---|---|
| Sheet Number | Sheet Title |
| C1.0 | PROJECT COVER |
| C2.0 | GENERAL NOTES |
| C3.0 | OVERALL SITE MAP |
| C4.0 - C4.6 | EXISTING CONDITIONS & DEMOLITION PLAN |
| C5.0 | WATER MAIN EXTENSION PLAN & PROFILE (BEGINNING OF PROJECT) |
| C6.0 - C6.13 | ROADWAY PLAN & PROFILE |
| C6.14 | WATERMAIN EXTENSION PLAN (END OF PROJECT) |
| C7.0 - C7.14 | ROADWAY CROSS SECTIONS |
| C8.0 - C8.6 | EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN |
| C9.0 -C9.2 | EROSION, SEDIMENTATION, & POLLUTION CONTROL NOTES |
| C10.0 - C10.1 | CONSTRUCTION DETAILS |
| C11.0 - C11.1 | EROSION CONTROL DETAILS |

## CONTACT INFORMATION

LOWNDES COUNTY
ENGINEERING DEPARTMENT
CHAD MCLEOD
(229) 671-2424

AXIS ENGINEERING CONSULTANTS, LLC
PROJECT MANAGER
MATTHEW INMAN, PE
(229) 638-8595

## LOWNDES COUNTY OFFICIALS

| | |
|---|---|
| CHAIRMAN | BILL SLAUGHTER |
| DISTRICT 1 | JOYCE EVANS |
| DISTRICT 2 | SCOTT ORENSTEIN |
| DISTRICT 3 | MARK WISENBAKER |
| DISTRICT 4 | DEMARCUS MARSHALL |
| DISTRICT 5 | MICHAEL SMITH |
| COUNTY MANAGER | PAIGE DUKES |
| COUNTY ENGINEER | MIKE FLETCHER, PE |
| COUNTY DIRECTOR OF ENGINEERING | CHAD MCLEOD |

**APPROVED:** _____
CHERYL H. BREWER TIA RIGHT OF WAY MANAGER DATE
LOCATION AND DESIGN APPROVAL DATE:

GEORGIA811
www.Georgia811.com

| WEST CONSTRUCTION EXIT | EAST CONSTRUCTION EXIT |
|---|---|
| GPS LOCATION | GPS LOCATION |
| LATITUDE: 30.6977° N | LATITUDE: 30.6973° N |
| LONGITUDE: 83.2398° W | LONGITUDE: 83.2111° W |

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

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.

| LEVEL II DESIGN PERSONNEL | 0000000885 LEVEL II CERTIFICATION NO. | 3/20/2026 DATE |
|---|---|---|

REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
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| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
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AXIS ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

PROJECT COVER

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEP009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030411
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW INMAN

GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION

B. Matthew Inman
LEVEL II CERTIFIED DESIGN PROFESSIONAL

CERTIFICATION NUMBER: 0000000885
ISSUED: 06/01/2025 EXPIRES: 06/01/2028

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C1.0

Z:\Shared\AEC\Projects\2025\25-25014 Twin Lakes Rd Paving Lowndes Co, GA\DWG\61012C_A01.dwg - 3/20/2026 8:33 AM

## GENERAL PROJECT NOTES:

1. LOWNDES COUNTY SHALL BE RESPONSIBLE FOR ASSURING ALL REQUIRED PERMITS ARE OBTAINED PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE LOCAL AUTHORITY HAVING JURISDICTION AND / OR THE LOCAL DEPARTMENT OF TRANSPORTATION.
2. THE CONTRACTOR SHALL REVIEW ALL CONSTRUCTION DOCUMENTS AND REPORTS TO BECOME FAMILIAR WITH THE PROPOSED PROJECT. THE CONTRACTOR SHALL OBTAIN FIRST HAND KNOWLEDGE OF THE PROJECT AREA.
3. ALL DATA SHOWN HEREON ARE BASED UPON FIELD INVESTIGATION AND / OR ENGINEERS KNOWLEDGE OF THE PROJECT AREA. THIS DATA SHALL BE USED AS INFORMATION ONLY AND IN NO WAY GUARANTEE OR BIND THE ENGINEER AS TO ACTUAL FIELD CONDITIONS.
4. UNDERGROUND UTILITY INFORMATION SHOWN HEREON ARE BASED ON ABOVE GROUND STRUCTURES AND / OR GROUND MARKINGS BY OTHERS. THE ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON.
5. THE CONTRACTOR SHALL PROVIDE 72 HOUR NOTICE TO THE UTILITIES PROTECTION CENTER PRIOR TO CONSTRUCTION COMMENCEMENT OR EXCAVATION. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA AND REPAIR ANY UTILITIES DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER/DEVELOPER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING FOR ALL VARIATIONS / DISCREPANCIES IN UTILITY INFORMATION SHOWN HEREON.
6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER WITHIN 24 HOURS OF ANY VARIATIONS, DISCREPANCIES, AND / OR CONFLICTS FOR ALL INFORMATION SHOWN HEREON AND / OR UNSATISFACTORY FIELD CONDITIONS AS RELATED TO THE PROJECT SCOPE. NO WORK SHALL COMMENCE UNTIL VARIATIONS, DISCREPANCIES, CONFLICTS, AND UNSATISFACTORY FILED CONDITIONS ARE RESOLVED.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL SIGNS, POST, AND MOUNTING HARDWARE. LOWNDES COUNTY IS RESPONSIBLE FOR ALL FENCE AND GATE REMOVAL AND NEW INSTALLATION.
8. ALL DRIVEWAYS MUST BE FIELD VERIFIED.
9. THE CONTRACTOR IS RESPONSIBLE FOR STAKING THE PROJECT.
10. THE CONTRACTOR IS RESPONSIBLE FOR DIGGING EASEMENTS TO MAINTAIN POSITIVE DRAINAGE.
11. THE CONTRACTOR IS TO REMOVE FIRE HYDRANTS, PLUG WATER MAIN, AND LEAVE THEM ON SITE FOR LOWNDES COUNTY TO PICK UP.
12. LOWNDES COUNTY WILL HANDLE ALL UTILITY RELOCATES.
13. THE CONTRACTOR SHALL PROVIDE ACCURATE AS-BUILTS ON CLEAN COPIES OF CONSTRUCTION PLANS AND ELECTRONICAL COPIES AS WELL. UTILITY AS-BUILTS SHOULD SHOW ACTUAL INSTALLED LOCATIONS OF MAINS, HYDRANTS AND SERVICES, CROSSES, & TEES. SERVICES SHALL BE STATIONED FROM MANHOLES FOR SEWER. ALL MANHOLES PIPE INVERTS AND TOP ELEVATIONS SHOULD BE SHOWN. ALL EXISTING UTILITIES DISCOVERED DURING CONSTRUCTION SHALL BE NOTED ON AS-BUILTS AS TO HORIZONTAL AND VERTICAL LOCATION.
14. CONTRACTOR RESPONSIBLE FOR VERIFYING FIELD LOCATIONS OF WATER SERVICE TAPS AND CONNECTING TO NEW WATER MAIN.
15. ALL DRAINAGE EASEMENTS SHALL BE CLEANED AND GRADED TO PROVIDE POSITIVE DRAINAGE.
16. SIGNS SHALL NOT BE TAKEN DOWN UNLESS REPLACED BY TEMPORARY SIGNS AND/OR PERMANENT SIGNAGE.

## PROJECT SITE NOTES:

1. THE PLAT OF ROW ACQUISITION WAS PROVIDED BY FOLSOM SURVEYING LLC AND DATED 24 APRIL 2023. A COPY CAN BE PROVIDED UPON WRITTEN REQUEST.
2. REPORTS:
   A. NO GEOTECHNICAL INVESTIGATION HAS BEEN PERFORMED FOR THE PROJECT AREA. THE CONTRACTOR SHALL NOTIFY THE ENGINEER WITHIN 24 HOURS OF ANY UNSUITABLE SUBSURFACE MATERIAL ENCOUNTERED DURING CONSTRUCTION.
   B. NO HYDROLOGY REPORT HAS BEEN PREPARED.
3. THE PROPOSED PROJECT CONSIST OF THE CONSTRUCTION OF AN ASPHALT THOROUGHFARE.
4. THE PROPOSED DEVELOPMENT IS LOCATED AT TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636. HORIZONTAL DATA SHOWN HEREON IS BASED ON NAD83 GEORGIA STATE PLANES, WEST ZONE, US FOOT. VERTICAL DATA SHOWN HEREON IS BASED ON NAVD 88(12B).
5. THE TOTAL PROJECT LENGTH IS 1.71 MILES: WITH A DISTURBED AREA OF 13.7 ACRES.
6. WETLANDS HAVE BEEN IDENTIFIED ON SITE AND DELINEATED BY RED OAKS ENVIRONMENTAL AND APPROVED BY THE ARMY CORPS ON 7/11/2025. A WETLAND INVENTORY MAP CAN BE PROVIDED UPON WRITTEN REQUEST.
7. NO STATE WATERS HAVE BEEN IDENTIFIED ON OR WITHIN 200' FEET OF THE PROJECT AREA
8. THE RECEIVING WATERS FOR THIS PROJECT HAVE BEEN IDENTIFIED AS BEVEL CREEK.
9. NO IMPAIRED WATERS HAVE BEEN IDENTIFIED WITHIN 1 MILE OF THE PROJECT AREA.
10. THE PROPERTY SHOWN HEREON IS LOCATED IN FLOOD ZONE X AS PER FLOOD INSURANCE RATE MAP FOR LOWNDES COUNTY, GEORGIA, AND SHOWN ON MAP NO. 13185C0350E, WITH AN EFFECTIVE DATE OF 09/26/2008. FLOOD ZONE X DENOTES AREA OF MINIMAL FLOOD HAZARD.

## PROJECT CONTACTS:

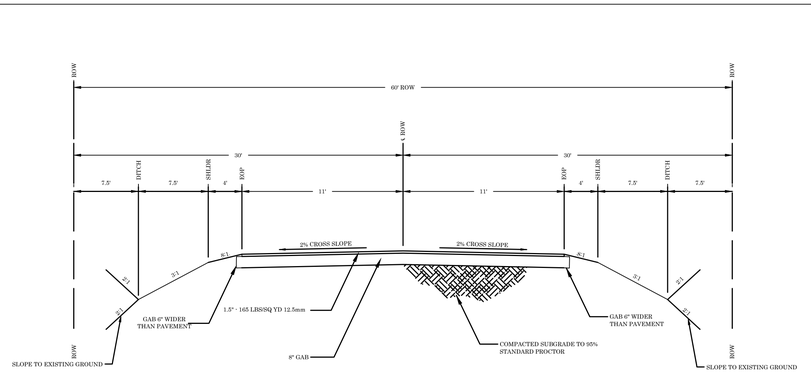
1. OWNER / DEVELOPER:
   LOWNDES COUNTY BOARD OF COMMISIONERS
   327 NORTH ASHLEY STREET
   VALDOSTA, GEORGIA 31601
   PHONE: (229) 671-2442
   commissioner@lowndescounty.com
2. ENGINEER OF RECORD:
   MATTHEW INMAN, P.E.
   AXIS ENGINEERING CONSULTANTS , LLC.
   2704 NORTH OAK STREET, BUILDING P
   VALDOSTA, GEORGIA 31602
   PHONE: (229) 638-8595
   minman@aesllc.us
3. PROJECT MANAGER:
   JESSE V. MITCHELL, P.E.
   AXIS ENGINEERING CONSULTANTS, LLC.
   2704 NORTH OAK STREET, BUILDING P
   VALDOSTA, GEORGIA 31602
   PHONE: (229) 638-8595
   jmitchell@aesllc.us
4. 24-HOUR EROSION, SEDIMENTATION, & POLLUTION CONTROL CONTACT:
   CHAD MCLEOD
   (229) 561-2639

### PROPOSED LINE LEGEND

| | |
|---|---|
| PROPERTY LINE | |
| RIGHT-OF-WAY | |
| EASEMENT | |
| SETBACK / BUFFER | |
| OVERHEAD ELECTRIC | P |
| OVERHEAD TELEPHONE | T |
| OVERHEAD COMMUNICATION | COM |
| OVERHEAD TRAFFIC SIGNAL | TS |
| UNDERGROUND ELECTRIC | P P |
| UNDERGROUND TELEPHONE | T T |
| UNDERGROUND COMMUNICATION | COM |
| UNDERGROUND TRAFFIC SIGNAL | TS TS |
| BUILDING LINE | |
| SANITARY SEWER | SS |
| SANITARY SEWER FORCE MAIN | FM |
| STORM SEWER | |
| WATER LINE | W |
| NATURAL GAS | GAS GAS |
| SURFACE MAJOR CONTOUR | |
| SURFACE MINOR CONTOUR | |
| DITCH / SWALE | >> >> |
| ORANGE CONSTRUCTION FENCE | |
| SILT FENCE | X X |
| LIMITS OF DISTURBANCE | |

### PROPOSED SYMBOL LEGEND

| | | |
|---|---|---|
| POWER POLE, LIGHT POLE (PP, LP) | PP | LP |
| BACK FLOW PREVENTER (RPZ, DDCV) | RPZ | DDCV |
| FIRE DEPT. CONNECTION / POST INDICATOR VALVE | FDC | PIV |
| FIRE HYDRANT / HOSE BIBB | HYD | HB |
| METERS (WM, GM) | WM | GM |
| VALVES (WV, GV) | WV | GV |
| CLEANOUT (ST CO, SS CO) | ST CO | SS CO |
| MANHOLES (STMH, SSMH) | ST | SS |
| GRATE INLETS (GI, HGI) | 2'x2' | 2'x2' |
| CURB INLETS (DWCI, SWCI) | | |
| FLARED/SAFTY END SECTION (FES, SES) | | |
| HEADWALL (HW) | | |
| OUTLET CONTROL STRUCTURE (OCS) | | |
| SIGNS | | |
| DIRECTIONAL TRAFFIC ARROWS | | |
| BOLLARD | | |




STREET SECTION (TYPICAL) - 60' ROW
NOT TO SCALE

GEORGIA811 www.Georgia811.com

| No. | DATE | REVISIONS DESCRIPTION |
|---|---|---|
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 12/9/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |


AXIS ENGINEERING CONSULTANTS
LEESBURG • VALDOSTA • WARNER ROBINS


# GENERAL NOTES

TWIN LAKES ROAD PAVING IMPROVEMENTS

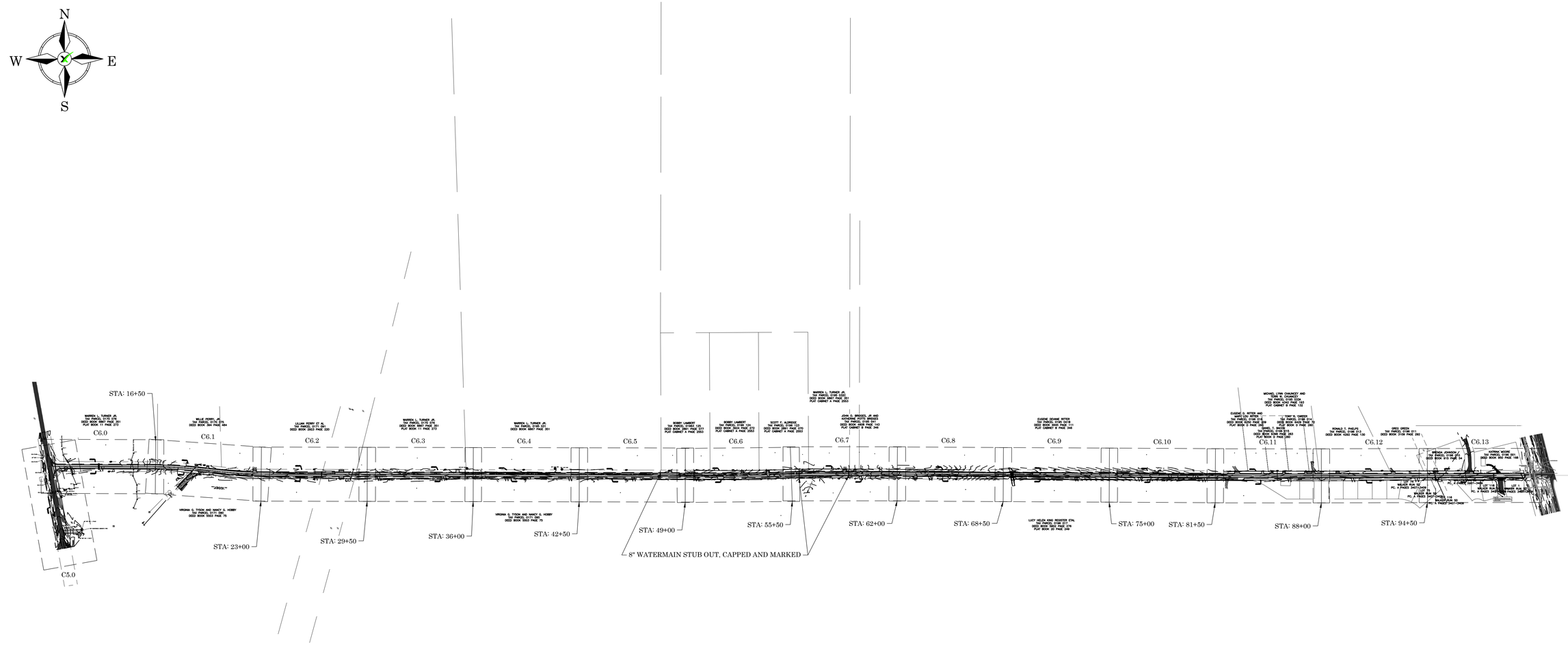
GEORGIA — AXIS ENGINEERING CONSULTANTS — PEF009117 — 06/30/2026 — CERTIFICATE OF AUTHORIZATION

GEORGIA — REGISTERED — No. PE030417 — PROFESSIONAL — 3/20/2026 — ENGINEER — M. MATTHEW INMAN

| | |
|---|---|
| PROJECT NO. | 25-25014 |
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.

C2.0




GEORGIA811 www.Georgia811.com

300' 150' 0' 300'
GRAPHIC SCALE 1" = 300'

| REVISIONS | | |
|---|---|---|
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AXIS
ENGINEERING CONSULTANTS
LEESBURG | VALDOSTA | WARNER ROBINS

# OVERALL SITE MAP

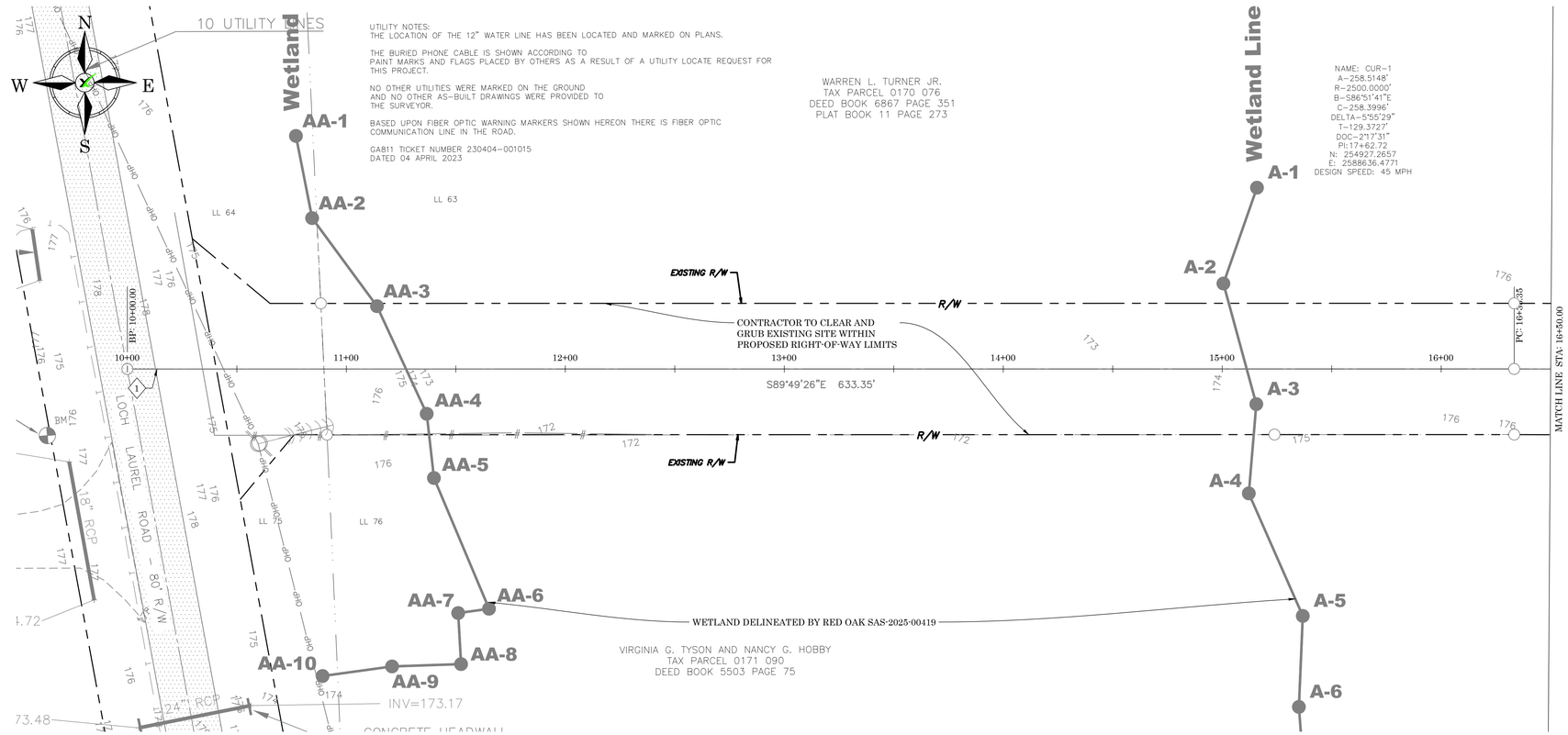
## TWIN LAKES ROAD PAVING IMPROVEMENTS

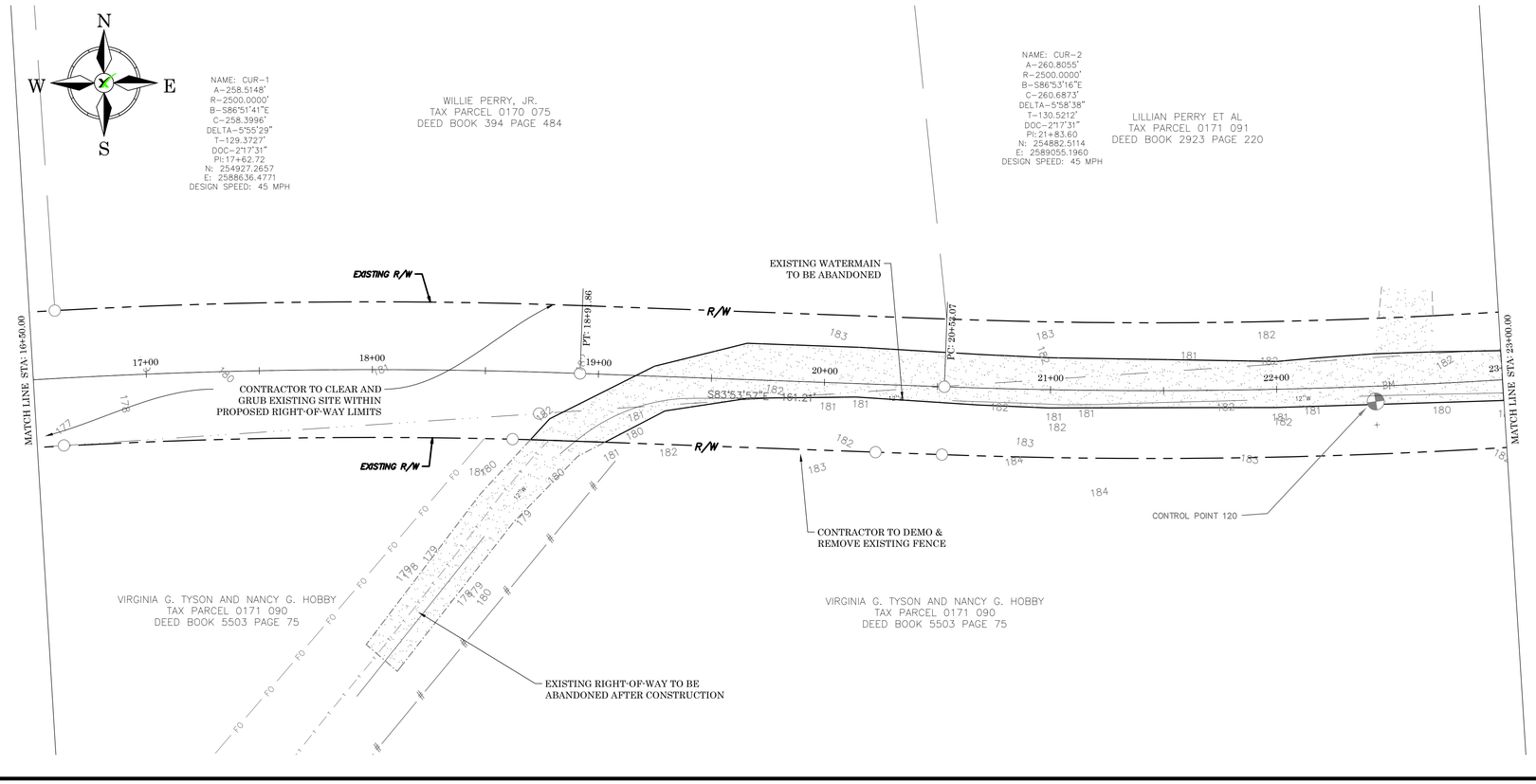
GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW LYMAN

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C3.0




| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## EXISTING CONDITIONS & DEMOLITION NOTES:

1. THE PLAT OF ROW ACQUISITION WAS PROVIDED BY FOLSOM SURVEYING LLC AND DATED 24 APRIL 2023. A COPY CAN BE PROVIDED UPON WRITTEN REQUEST.
2. THE CONTRACTOR SHALL REVIEW ALL DOCUMENTS AND OBTAIN FIRST HAND KNOWLEDGE OF THE PROJECT AREA. IF ANY DISCREPANCY ARE DISCOVERED NOTIFY THE ENGINEER IN WRITING WITHIN 24 HOURS.
3. THE CONTRACTOR SHALL PROVIDE 72 HOUR NOTICE THE THE UTILITIES PROTECTION CENTER PRIOR TO CONSTRUCTION COMMENCEMENT OR EXCAVATION. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA AND REPAIR ANY UTILITIES DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER/DEVELOPER.
4. LOWNDES COUNTY WILL HANDLE ALL UTILITY RELOCATIONS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY UTILITIES DAMAGED DURING DEMOLITION AND/OR CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
6. THE CONTRACTOR SHALL COORDINATE ALL UTILITY DISCONNECTIONS / INTERRUPTIONS WITH THE UTILITY OWNER.
7. THE CONTRACTOR SHALL COORDINATE WITH UTILITY OWNERS ON ALL CONFLICTS.
8. THE CONTRACTOR SHALL PROVIDE APPROPRIATE SECURITY FEATURES (WARNING, DIVERSIONS, BARRIERS, ETC.) TO SECURE THE PROJECT AREA. THE CONTRACTOR SHALL PROVIDE / MAINTAIN THE ADEQUATE PEDESTRIAN ACCESS AROUND THE PROJECT AREA.
9. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PROTECT ALL TREES NOT SHOWN HEREON TO BE REMOVED AND PROVIDE ADEQUATE TREE PROTECTION AROUND THE CRITICAL ROOT ZONE FOR SUCH TREES.
10. ALL ITEMS INDICATED HEREON TO BE REMOVED / DEMOLISHED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF PROPERLY UNLESS OTHERWISE STATED WITHIN THE CONSTRUCTION CONTRACT.
11. ALL EXISTING ASPHALT / CONCRETE PAVEMENT & CURB SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR / REPLACEMENT OF ANY DAMAGED AREAS.
12. DEMOLITION ACTIVITIES ARE NOT EXPECTED TO INCLUDE THE REMOVAL OF HAZARDOUS MATERIALS. IN THE EVENT THAT HAZARDOUS MATERIALS ARE ENCOUNTERED OR SUSPECTED, CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF THE MATERIAL AND LOCATION.
13. AT THE END OF EACH DAYS' WORK, REMOVE ANY DEBRIS (RESULTING FROM CONTRACTOR'S DEMOLITION OPERATIONS) THAT IS NOT WITHIN THE CONTRACTOR CONSTRUCTION LIMITS.
14. CONTRACTOR IS REQUIRED TO NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES OR CONFLICTS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES.
15. MAILBOXES ARE TO BE RELOCATED, BUT SHALL ALWAYS REMAIN IN OPERATION UNTIL RELOCATION IS COMPLETE.

## HATCH LEGEND:

- EXISTING ASPHALT PAVEMENT
- EXISTING CONCRETE PAVEMENT
- EXISTING DIRT/SOIL ROADWAY
- TREE REMOVAL
- TP — TREE PROTECTION — To protect desirable trees from injury during construction activity.

## KEY NOTES:

1. SAWCUT EXISTING ASPHALT/CONCRETE FOR SMOOTH TRANSITION

SURVEY CONTROL POINTS

| PointNo. | Northing(Y) | Easting(X) | Elev(Z) | Description |
|---|---|---|---|---|
| 1 | 254846.1200 | 2596922.4583 | 175.46 | 1\2RBFWC |
| 3 | 254883.3376 | 2595839.2101 | 181.57 | 1\2RBFWC-B |
| 8 | 254882.5209 | 2595348.9975 | 182.76 | 1\2RBFWC-C |
| 13 | 254875.3868 | 2594887.9748 | 179.41 | RBPWC D |
| 18 | 254881.8448 | 2594416.5867 | 171.88 | RBPWC E |
| 19 | 254886.6675 | 2593948.1325 | 167.41 | RBPWC F |
| 20 | 254892.0224 | 2593242.6185 | 173.71 | RBPWC G |
| 21 | 254888.4777 | 2592856.3183 | 173.02 | RBPWC H |
| 22 | 254875.8243 | 2592317.9510 | 172.03 | RBPWC I |
| 26 | 254867.4898 | 2591827.9529 | 178.05 | RBPWC J |
| 31 | 254860.1197 | 2591235.5701 | 178.03 | RBPWC K |
| 34 | 254864.5681 | 2590480.2681 | 181.22 | RBPWC L |
| 35 | 254857.7805 | 2589719.4129 | 179.07 | RBFWC M |
| 120 | 254876.6004 | 2589115.2196 | 181.55 | RBFWC N |
| 122 | 254583.0449 | 2588446.7875 | 176.56 | RBFWC O |
| 132 | 254507.4397 | 2587921.6986 | 179.36 | NLF |
| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

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30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

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AXIS ENGINEERING CONSULTANTS
LEESBURG | ALDOSTA | WARNER ROBINS

# EXISTING CONDITIONS & DEMOLITION PLAN

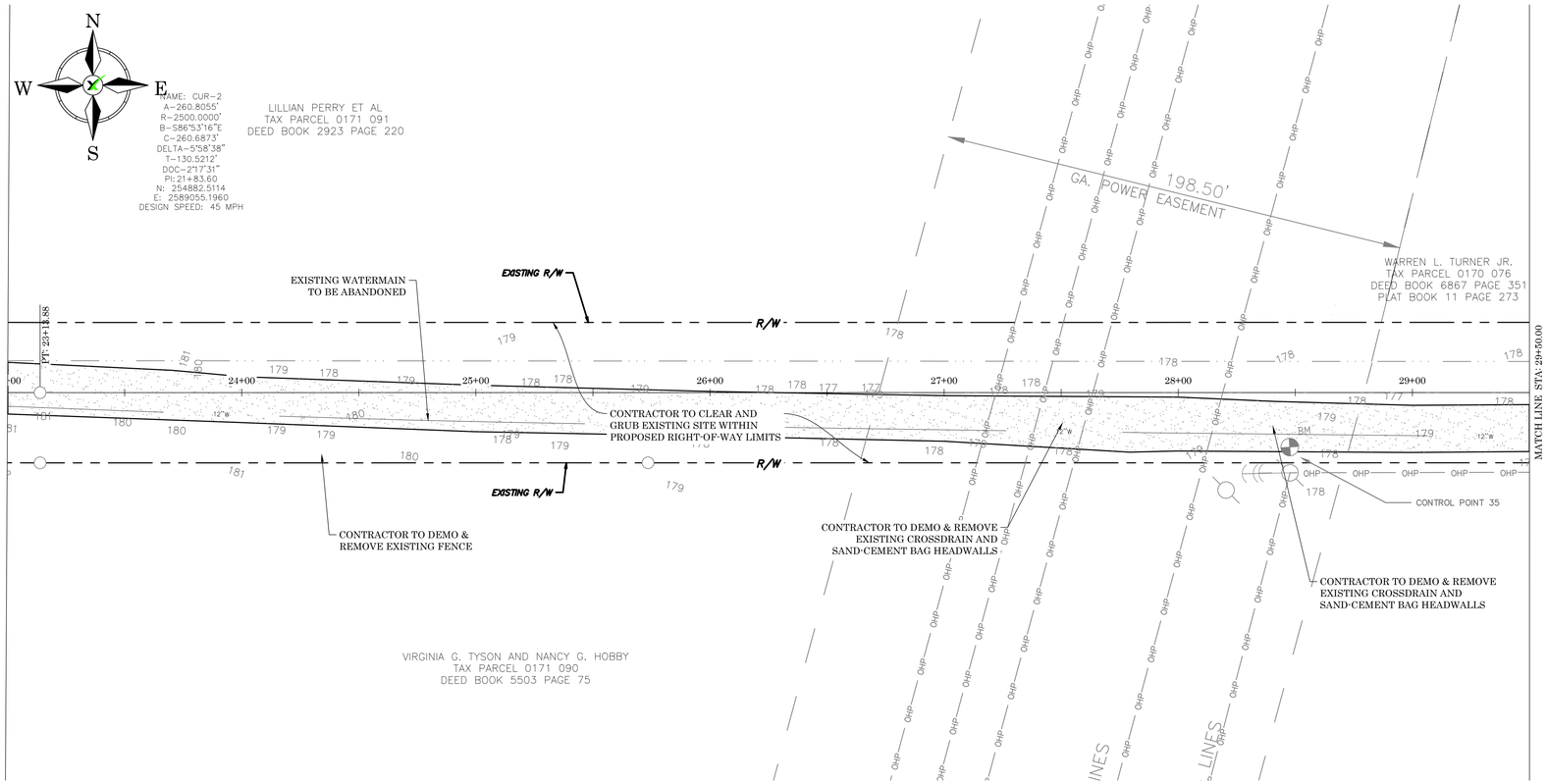
TWIN LAKES ROAD PAVING IMPROVEMENTS

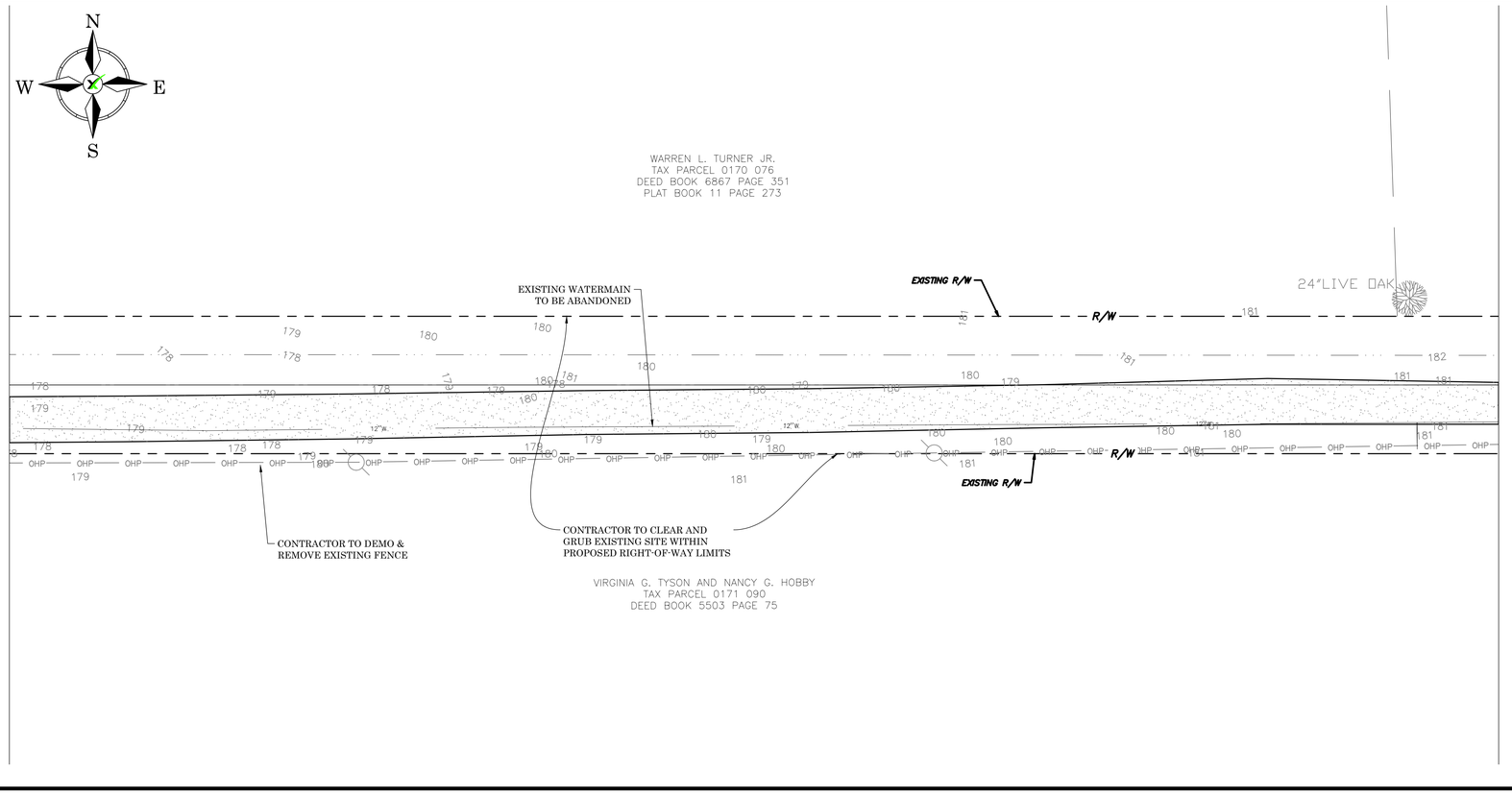
GEORGIA — AXIS ENGINEERING CONSULTANTS — PEF009117 — 06/30/2026 — CERTIFICATE OF AUTHORIZATION

GEORGIA — REGISTERED — No. PE030417 — PROFESSIONAL — 3/20/2026 — ENGINEER — BY: MATTHEW J. VANNY

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C4.0




| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## EXISTING CONDITIONS & DEMOLITION NOTES:

1. THE PLAT OF ROW ACQUISITION WAS PROVIDED BY FOLSOM SURVEYING LLC AND DATED 24 APRIL 2023. A COPY CAN BE PROVIDED UPON WRITTEN REQUEST.
2. THE CONTRACTOR SHALL REVIEW ALL DOCUMENTS AND OBTAIN FIRST HAND KNOWLEDGE OF THE PROJECT AREA. IF ANY DISCREPANCY ARE DISCOVERED NOTIFY THE ENGINEER IN WRITING WITHIN 24 HOURS.
3. THE CONTRACTOR SHALL PROVIDE 72 HOUR NOTICE THE THE UTILITIES PROTECTION CENTER PRIOR TO CONSTRUCTION COMMENCEMENT OR EXCAVATION. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA AND REPAIR ANY UTILITIES DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER/DEVELOPER.
4. LOWNDES COUNTY WILL HANDLE ALL UTILITY RELOCATIONS.
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10. ALL ITEMS INDICATED HEREON TO BE REMOVED / DEMOLISHED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF PROPERLY UNLESS OTHERWISE STATED WITHIN THE CONSTRUCTION CONTRACT.
11. ALL EXISTING ASPHALT / CONCRETE PAVEMENT & CURB SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR / REPLACEMENT OF ANY DAMAGED AREAS.
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13. AT THE END OF EACH DAYS' WORK, REMOVE ANY DEBRIS (RESULTING FROM CONTRACTOR'S DEMOLITION OPERATIONS) THAT IS NOT WITHIN THE CONTRACTOR CONSTRUCTION LIMITS.
14. CONTRACTOR IS REQUIRED TO NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES OR CONFLICTS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES.
15. MAILBOXES ARE TO BE RELOCATED, BUT SHALL ALWAYS REMAIN IN OPERATION UNTIL RELOCATION IS COMPLETE.

## HATCH LEGEND:

- EXISTING ASPHALT PAVEMENT
- EXISTING CONCRETE PAVEMENT
- EXISTING DIRT/SOIL ROADWAY
- TREE REMOVAL
- TP — TREE PROTECTION — To protect desirable trees from injury during construction activity.

## KEY NOTES:

1. SAWCUT EXISTING ASPHALT/CONCRETE FOR SMOOTH TRANSITION

SURVEY CONTROL POINTS

| PointNo. | Northing(Y) | Easting(X) | Elev(Z) | Description |
|---|---|---|---|---|
| 1 | 254846.1200 | 2596922.4583 | 175.46 | 1\2RBFWC |
| 3 | 254883.3376 | 2595839.2101 | 181.57 | 1\2RBFWC-B |
| 8 | 254882.5209 | 2595348.9975 | 182.76 | 1\2RBFWC-C |
| 13 | 254875.3868 | 2594887.9748 | 179.41 | RBPWC D |
| 18 | 254881.8448 | 2594416.5867 | 171.88 | RBPWC E |
| 19 | 254886.6675 | 2593948.1325 | 167.41 | RBPWC F |
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| 34 | 254864.5681 | 2590480.2681 | 181.22 | RBPWC L |
| 35 | 254857.7805 | 2589719.4129 | 179.07 | RBFWC M |
| 120 | 254876.6004 | 2589115.2196 | 181.55 | RBFWC N |
| 122 | 254583.0449 | 2588446.7875 | 176.56 | RBFWC O |
| 132 | 254507.4397 | 2587921.6986 | 179.36 | NLF |
| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

| REVISIONS | | |
|---|---|---|
| No. | DATE | DESCRIPTION |
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 12/9/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG | ALDOSTA | WARNER ROBINS

# EXISTING CONDITIONS & DEMOLITION PLAN

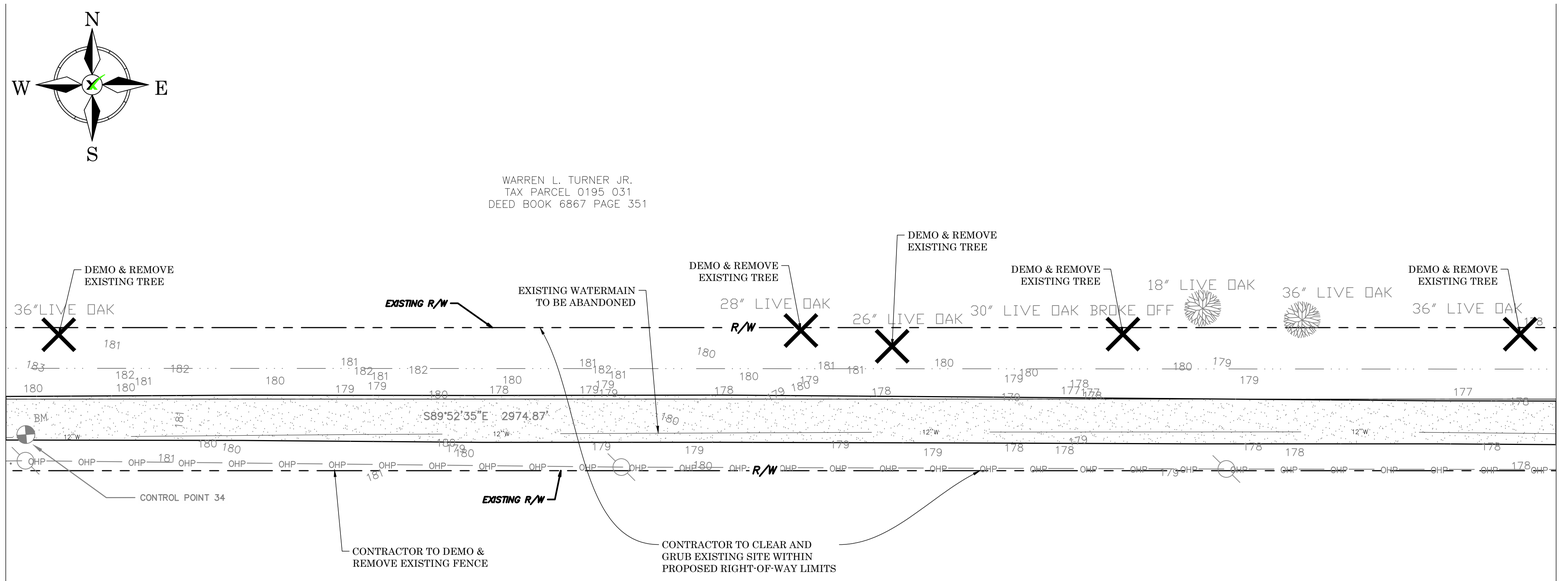
## TWIN LAKES ROAD PAVING IMPROVEMENTS

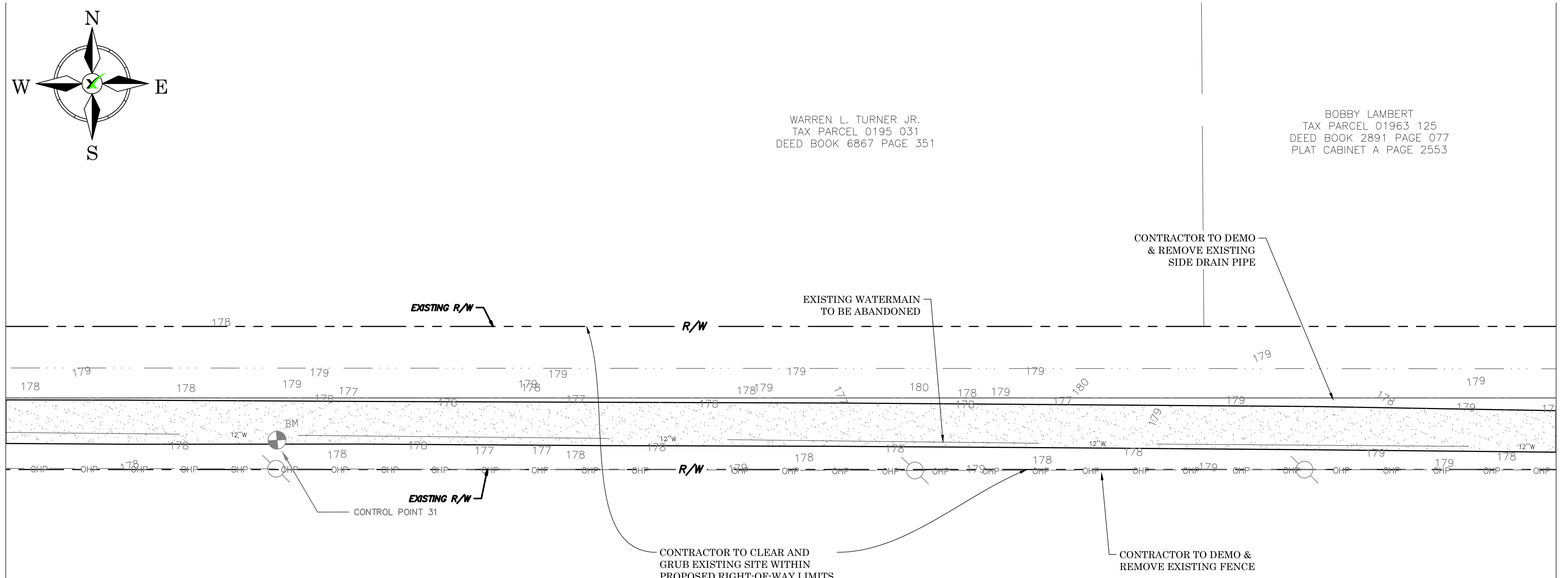
GEORGIA — AXIS ENGINEERING CONSULTANTS — PEF009117 — 06/30/2026 — CERTIFICATE OF AUTHORIZATION

GEORGIA — REGISTERED — No. PE030417 PROFESSIONAL — 3/20/2026 — ENGINEER — MATTHEW J. SWAN

| | |
|---|---|
| PROJECT NO. | 25-25014 |
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.
C4.1




| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

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- EXISTING CONCRETE PAVEMENT
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## KEY NOTES:

1. SAWCUT EXISTING ASPHALT/CONCRETE FOR SMOOTH TRANSITION

SURVEY CONTROL POINTS

| PointNo. | Northing(Y) | Easting(X) | Elev(Z) | Description |
|---|---|---|---|---|
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| 3 | 254883.3376 | 2595839.2101 | 181.57 | 1\2RBFWC-B |
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| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
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| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 12/9/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG | WALDOSTA | WARNER ROBINS

# EXISTING CONDITIONS & DEMOLITION PLAN

## TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA — AXIS ENGINEERING CONSULTANTS PEP009117 06/30/2026 — CERTIFICATE OF AUTHORIZATION

GEORGIA — REGISTERED No. PE030417 PROFESSIONAL 3/20/2026 — ENGINEER — BY: MATTHEW VARNER

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C4.2

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| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## EXISTING CONDITIONS & DEMOLITION NOTES:

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## KEY NOTES:

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SURVEY CONTROL POINTS

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| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

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GRAPHIC SCALE 1" = 30'

REVISIONS

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| 5 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

# EXISTING CONDITIONS & DEMOLITION PLAN

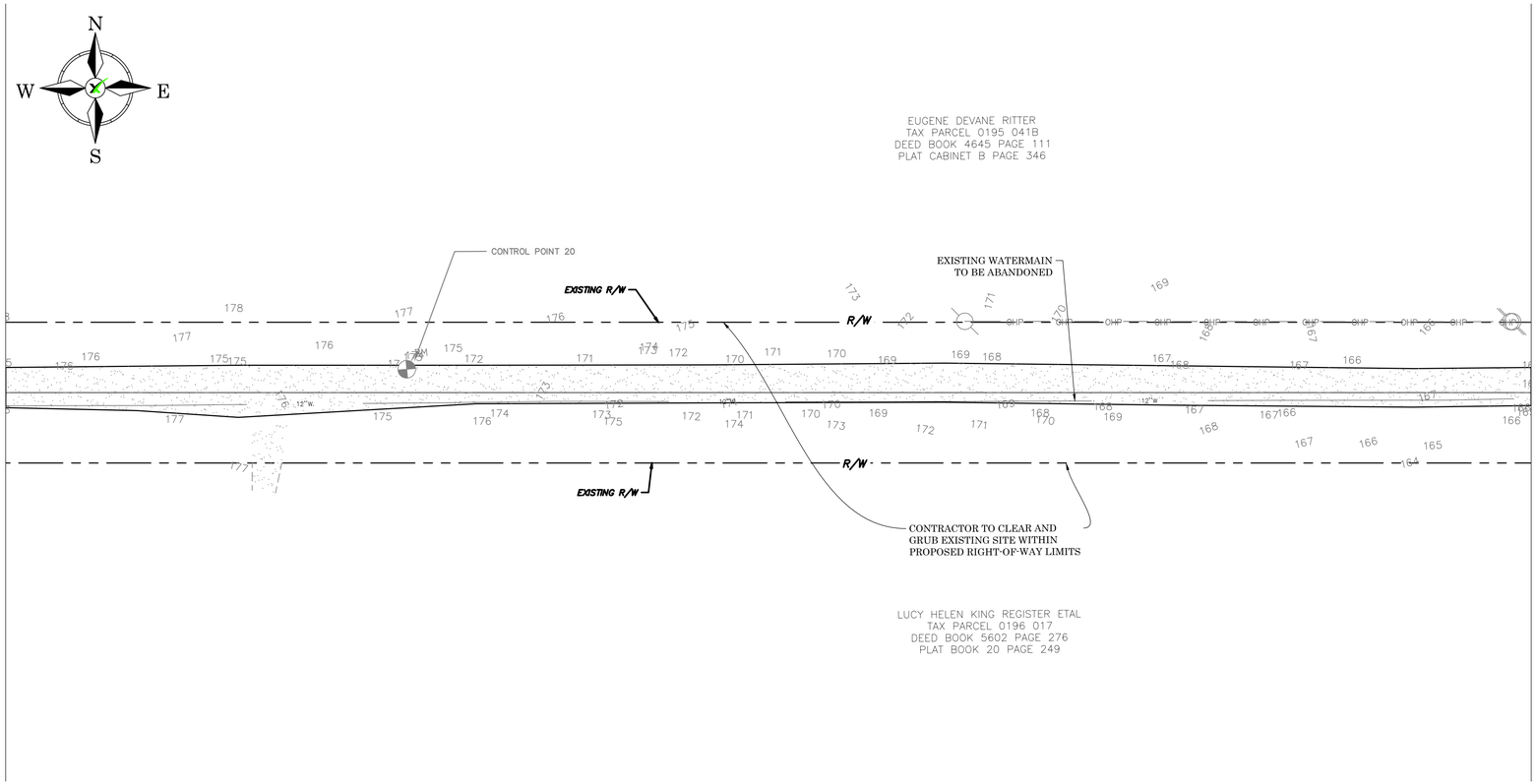
## TWIN LAKES ROAD PAVING IMPROVEMENTS

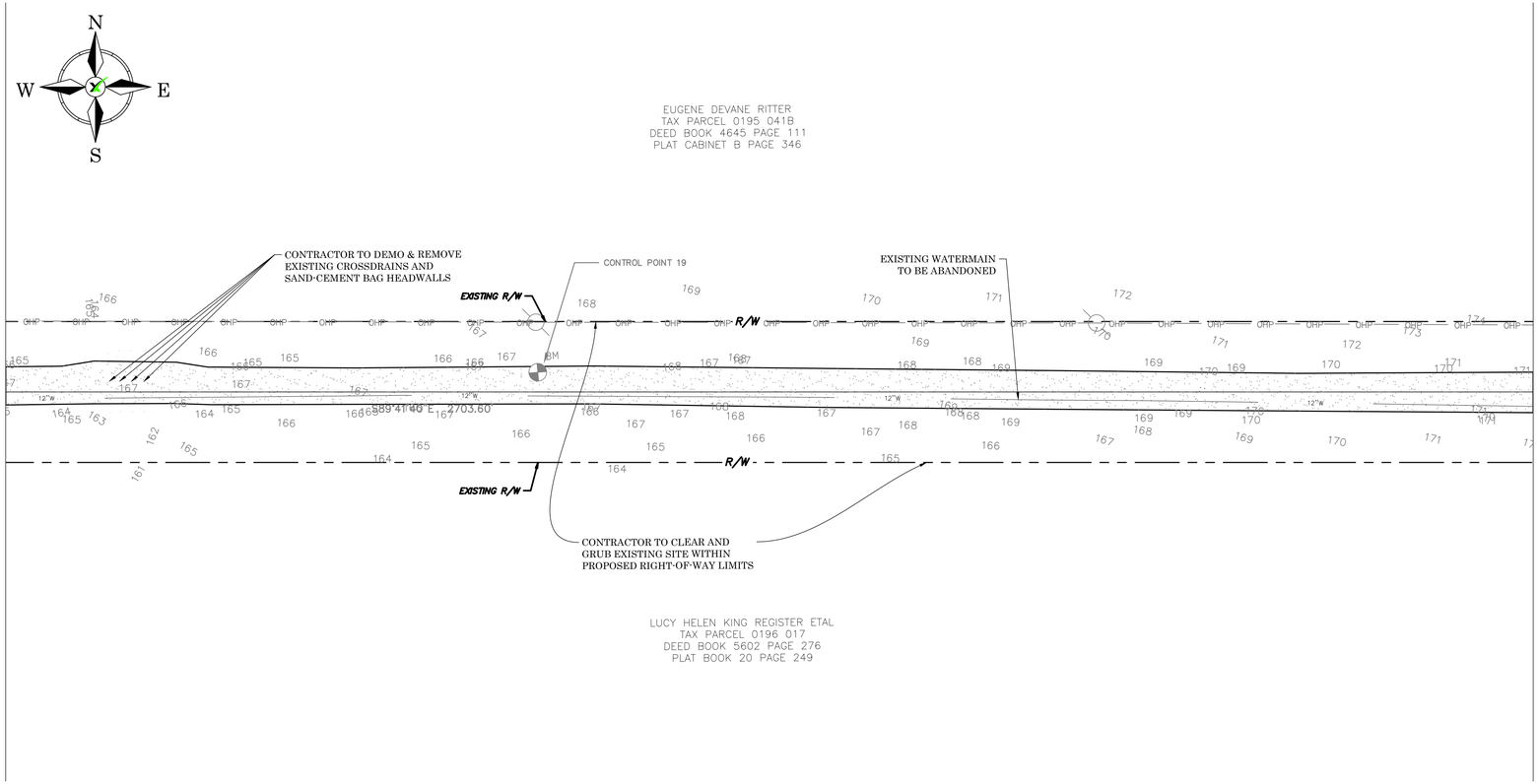
GEORGIA — AXIS ENGINEERING CONSULTANTS PEP009117 06/30/2026 — CERTIFICATE OF AUTHORIZATION

GEORGIA — REGISTERED No. PE030411 PROFESSIONAL 3/20/2026 ENGINEER — BY: MATTHEW VARNER

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C4.3




| SITE INFORMATION | |
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| PROJECT LENGTH | 1.71 MILES |

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| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS ENGINEERING CONSULTANTS
LEESBURG | VALDOSTA | WARNER ROBINS

# EXISTING CONDITIONS & DEMOLITION PLAN

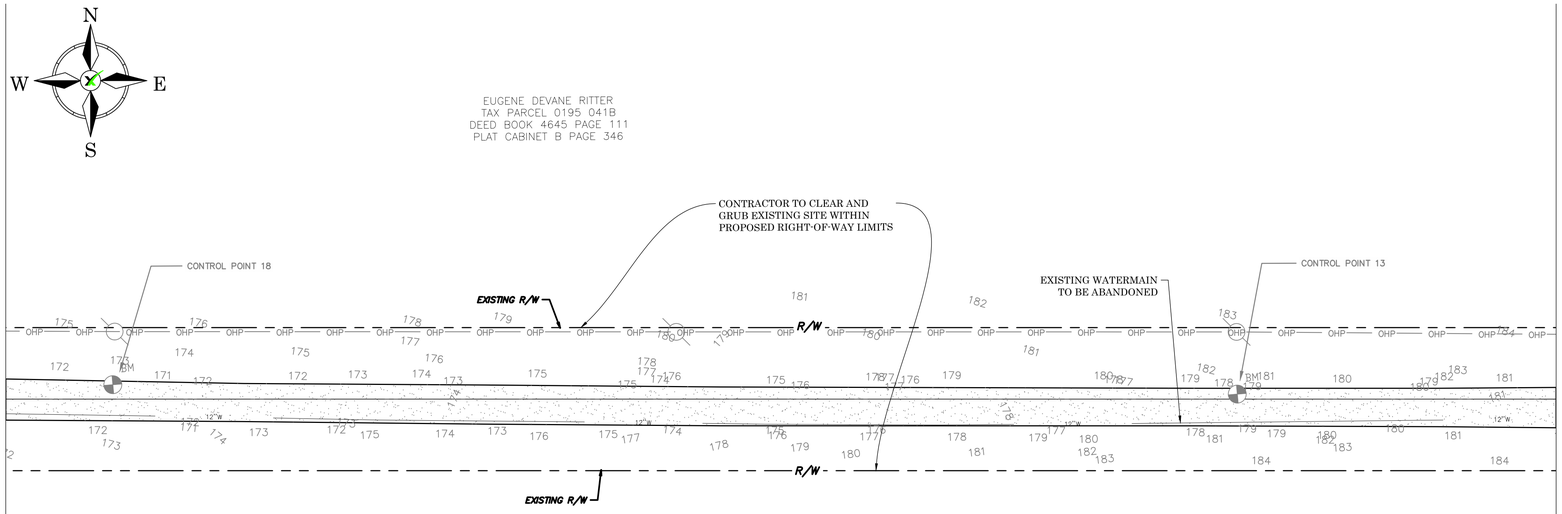
## TWIN LAKES ROAD PAVING IMPROVEMENTS

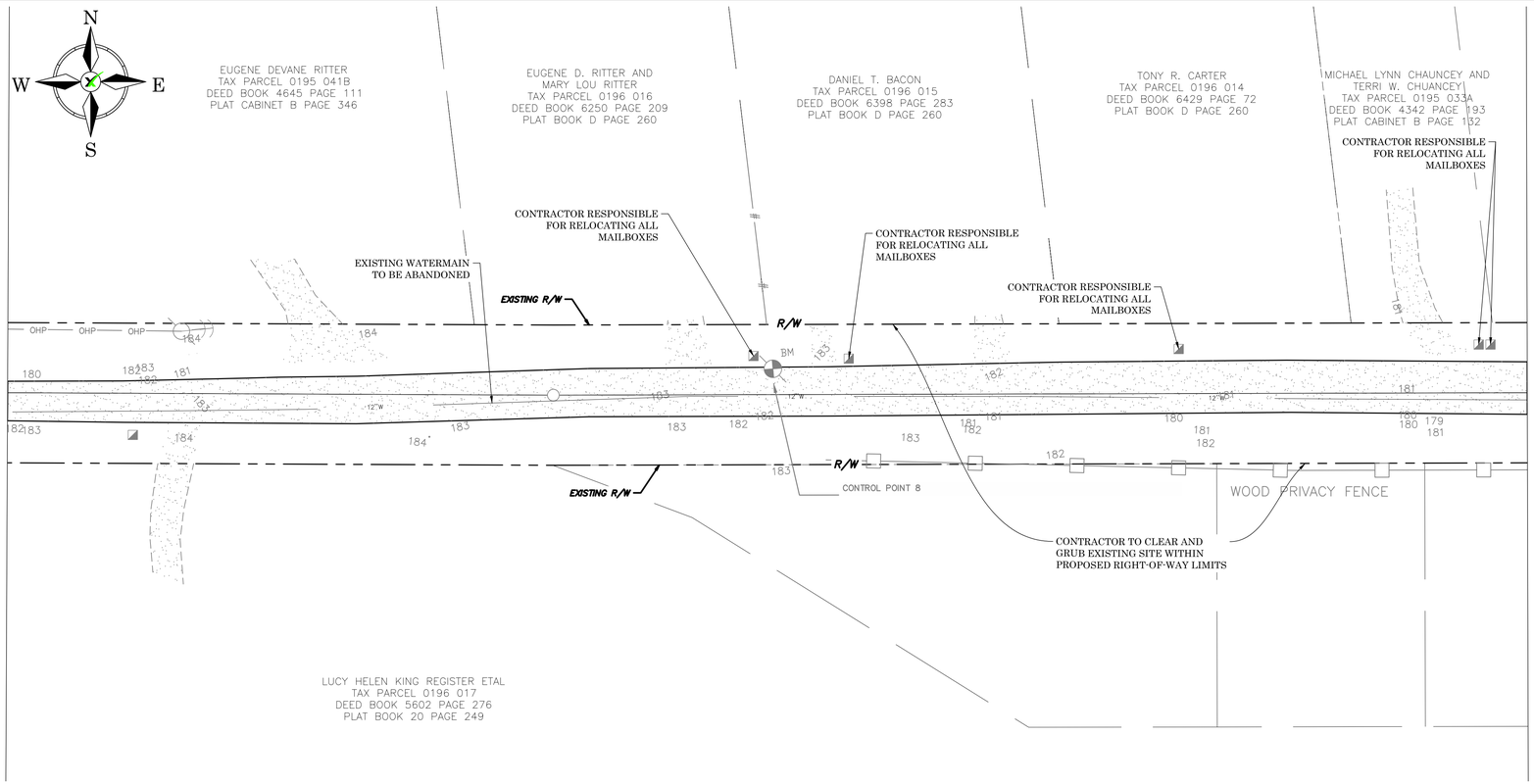
GEORGIA — AXIS ENGINEERING CONSULTANTS PEP009117 06/30/2026 — CERTIFICATE OF AUTHORIZATION

GEORGIA — REGISTERED No. PE030417 PROFESSIONAL 3/20/2026 ENGINEER — BY: MATTHEW VARNER

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C4.4




| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## EXISTING CONDITIONS & DEMOLITION NOTES:

1. THE PLAT OF ROW ACQUISITION WAS PROVIDED BY FOLSOM SURVEYING LLC AND DATED 24 APRIL 2023. A COPY CAN BE PROVIDED UPON WRITTEN REQUEST.
2. THE CONTRACTOR SHALL REVIEW ALL DOCUMENTS AND OBTAIN FIRST HAND KNOWLEDGE OF THE PROJECT AREA. IF ANY DISCREPANCY ARE DISCOVERED NOTIFY THE ENGINEER IN WRITING WITHIN 24 HOURS.
3. THE CONTRACTOR SHALL PROVIDE 72 HOUR NOTICE THE THE UTILITIES PROTECTION CENTER PRIOR TO CONSTRUCTION COMMENCEMENT OR EXCAVATION. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA AND REPAIR ANY UTILITIES DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER/DEVELOPER.
4. LOWNDES COUNTY WILL HANDLE ALL UTILITY RELOCATIONS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY UTILITIES DAMAGED DURING DEMOLITION AND/OR CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
6. THE CONTRACTOR SHALL COORDINATE ALL UTILITY DISCONNECTIONS / INTERRUPTIONS WITH THE UTILITY OWNER.
7. THE CONTRACTOR SHALL COORDINATE WITH UTILITY OWNERS ON ALL CONFLICTS.
8. THE CONTRACTOR SHALL PROVIDE APPROPRIATE SECURITY FEATURES (WARNING, DIVERSIONS, BARRIERS, ETC.) TO SECURE THE PROJECT AREA. THE CONTRACTOR SHALL PROVIDE / MAINTAIN THE ADEQUATE PEDESTRIAN ACCESS AROUND THE PROJECT AREA.
9. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PROTECT ALL TREES NOT SHOWN HEREON TO BE REMOVED AND PROVIDE ADEQUATE TREE PROTECTION AROUND THE CRITICAL ROOT ZONE FOR SUCH TREES.
10. ALL ITEMS INDICATED HEREON TO BE REMOVED / DEMOLISHED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF PROPERLY UNLESS OTHERWISE STATED WITHIN THE CONSTRUCTION CONTRACT.
11. ALL EXISTING ASPHALT / CONCRETE PAVEMENT & CURB SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR / REPLACEMENT OF ANY DAMAGED AREAS.
12. DEMOLITION ACTIVITIES ARE NOT EXPECTED TO INCLUDE THE REMOVAL OF HAZARDOUS MATERIALS. IN THE EVENT THAT HAZARDOUS MATERIALS ARE ENCOUNTERED OR SUSPECTED, CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF THE MATERIAL AND LOCATION.
13. AT THE END OF EACH DAYS' WORK, REMOVE ANY DEBRIS (RESULTING FROM CONTRACTOR'S DEMOLITION OPERATIONS) THAT IS NOT WITHIN THE CONTRACTOR CONSTRUCTION LIMITS.
14. CONTRACTOR IS REQUIRED TO NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES OR CONFLICTS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES.
15. MAILBOXES ARE TO BE RELOCATED, BUT SHALL ALWAYS REMAIN IN OPERATION UNTIL RELOCATION IS COMPLETE.

## HATCH LEGEND:

- EXISTING ASPHALT PAVEMENT
- EXISTING CONCRETE PAVEMENT
- EXISTING DIRT/SOIL ROADWAY
- TREE REMOVAL
- TP TREE PROTECTION — To protect desirable trees from injury during construction activity.

## KEY NOTES:

1. SAWCUT EXISTING ASPHALT/CONCRETE FOR SMOOTH TRANSITION

SURVEY CONTROL POINTS

| PointNo. | Northing(Y) | Easting(X) | Elev(Z) | Description |
|---|---|---|---|---|
| 1 | 254846.1200 | 2596922.4583 | 175.46 | 1\2RBFWC |
| 3 | 254883.3376 | 2595839.2101 | 181.57 | 1\2RBFWC-B |
| 8 | 254882.5209 | 2595348.9975 | 182.76 | 1\2RBFWC-C |
| 13 | 254875.3868 | 2594887.9748 | 179.41 | RBPWC D |
| 18 | 254881.8448 | 2594416.5867 | 171.88 | RBPWC E |
| 19 | 254886.6675 | 2593948.1325 | 167.41 | RBPWC F |
| 20 | 254892.0224 | 2593242.6185 | 173.71 | RBPWC G |
| 21 | 254888.4777 | 2592856.3183 | 173.02 | RBPWC H |
| 22 | 254875.8243 | 2592317.9510 | 172.03 | RBPWC I |
| 26 | 254867.4898 | 2591827.9529 | 178.05 | RBPWC J |
| 31 | 254860.1197 | 2591235.5701 | 178.03 | RBPWC K |
| 34 | 254864.5681 | 2590480.2681 | 181.22 | RBPWC L |
| 35 | 254857.7805 | 2589719.4129 | 179.07 | RBFWC M |
| 120 | 254876.6004 | 2589115.2196 | 181.55 | RBFWC N |
| 122 | 254583.0449 | 2588446.7875 | 176.56 | RBFWC O |
| 132 | 254507.4397 | 2587921.6986 | 179.36 | NLF |
| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
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| 5 | 12/9/2025 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS ENGINEERING CONSULTANTS
LEESBURG\VALDOSTA\WARNER ROBINS

# EXISTING CONDITIONS & DEMOLITION PLAN

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA CERTIFICATE OF AUTHORIZATION — AXIS ENGINEERING CONSULTANTS PEP009117 06/30/2026

GEORGIA REGISTERED No. PE030411 PROFESSIONAL 3/20/2026 ENGINEER — BY: MATTHEW VANMAN

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C4.5

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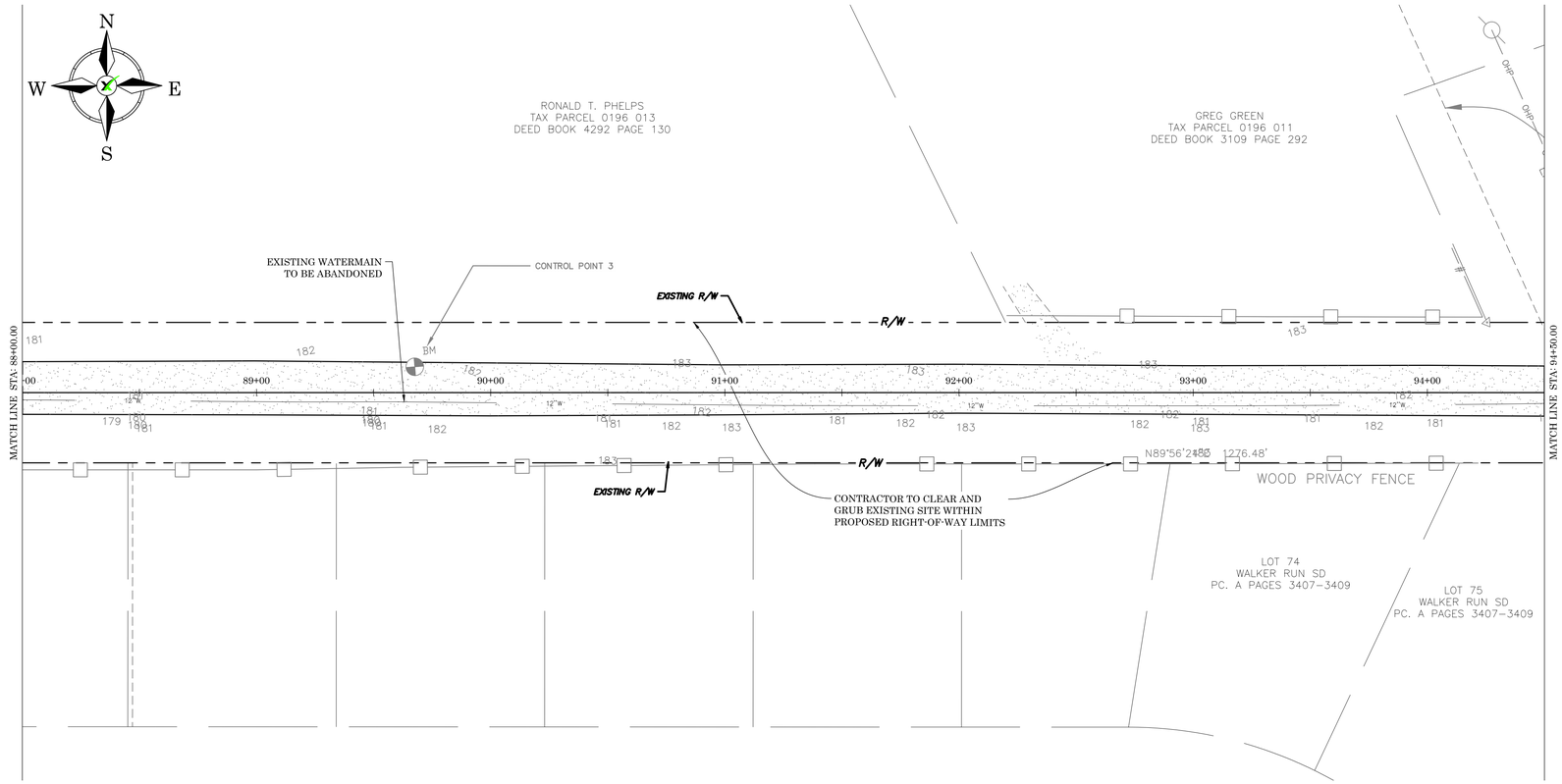


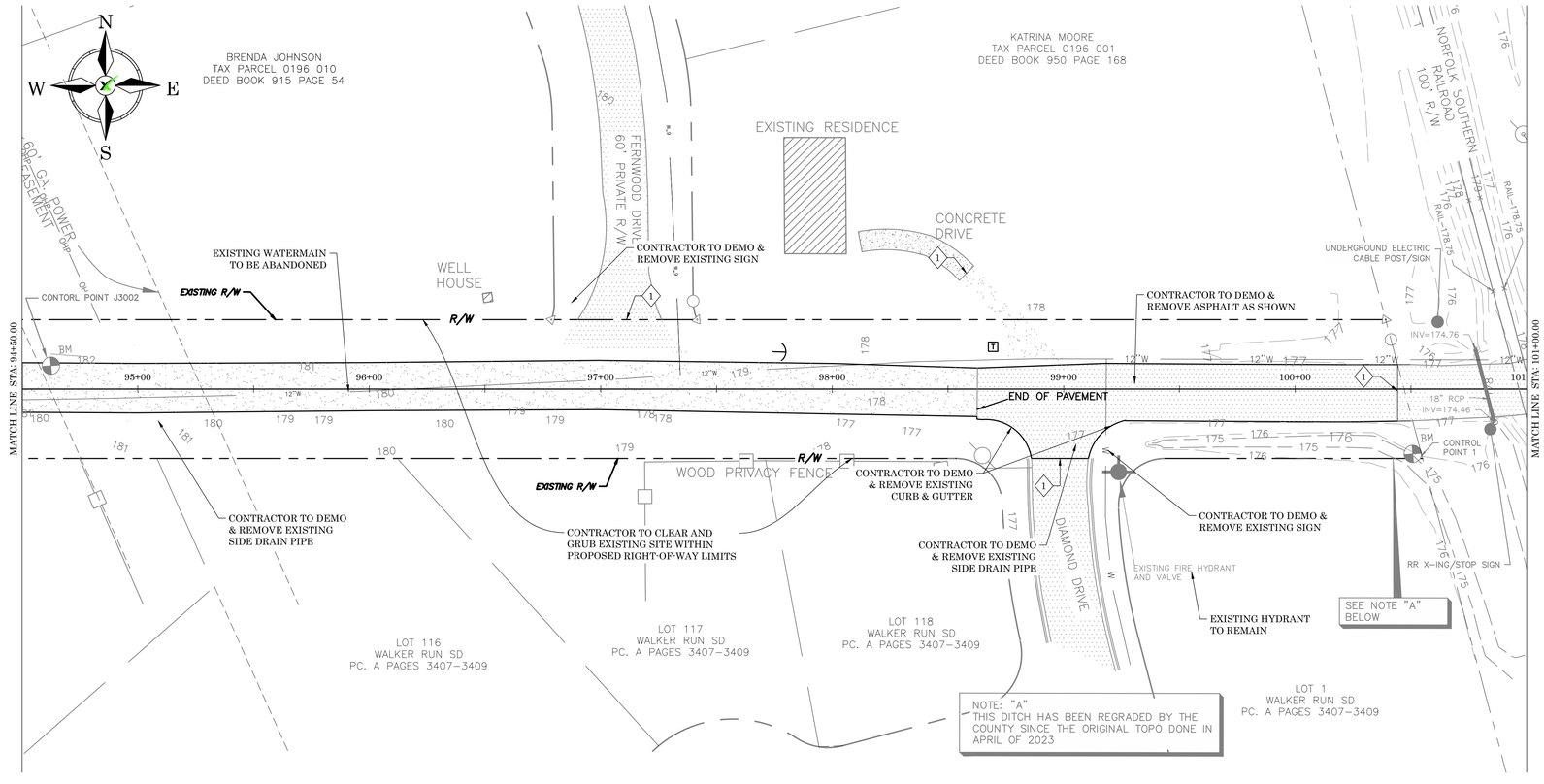


| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

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## HATCH LEGEND:

- EXISTING ASPHALT PAVEMENT
- EXISTING CONCRETE PAVEMENT
- EXISTING DIRT/SOIL ROADWAY
- TREE REMOVAL
- TP — TREE PROTECTION — To protect desirable trees from injury during construction activity.

## KEY NOTES:

1. SAWCUT EXISTING ASPHALT/CONCRETE FOR SMOOTH TRANSITION

SURVEY CONTROL POINTS

| PointNo. | Northing(Y) | Easting(X) | Elev(Z) | Description |
|---|---|---|---|---|
| 1 | 254846.1200 | 2596922.4583 | 175.46 | 1\2RBFWC |
| 3 | 254883.3376 | 2595839.2101 | 181.57 | 1\2RBFWC-B |
| 8 | 254882.5209 | 2595348.9975 | 182.76 | 1\2RBFWC-C |
| 13 | 254875.3868 | 2594887.9748 | 179.41 | RBPWC D |
| 18 | 254881.8448 | 2594416.5867 | 171.88 | RBPWC E |
| 19 | 254886.6675 | 2593948.1325 | 167.41 | RBPWC F |
| 20 | 254892.0224 | 2593242.6185 | 173.71 | RBPWC G |
| 21 | 254888.4777 | 2592856.3183 | 173.02 | RBPWC H |
| 22 | 254875.8243 | 2592317.9510 | 172.03 | RBPWC I |
| 26 | 254867.4898 | 2591827.9529 | 178.05 | RBPWC J |
| 31 | 254860.1197 | 2591235.5701 | 178.03 | RBPWC K |
| 34 | 254864.5681 | 2590480.2681 | 181.22 | RBPWC L |
| 35 | 254857.7805 | 2589719.4129 | 179.07 | RBFWC M |
| 120 | 254876.6004 | 2589115.2196 | 181.55 | RBFWC N |
| 122 | 254583.0449 | 2588446.7875 | 176.56 | RBFWC O |
| 132 | 254507.4397 | 2587921.6986 | 179.36 | NLF |
| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 12/9/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG • VALDOSTA • WARNER ROBINS

# EXISTING CONDITIONS & DEMOLITION PLAN

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA — AXIS ENGINEERING CONSULTANTS — PEF009117 — 06/30/2026 — CERTIFICATE OF AUTHORIZATION

GEORGIA — REGISTERED — No. PE030417 PROFESSIONAL — 3/20/2026 — ENGINEER — BY: MATTHEW T. SWAN

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C4.6

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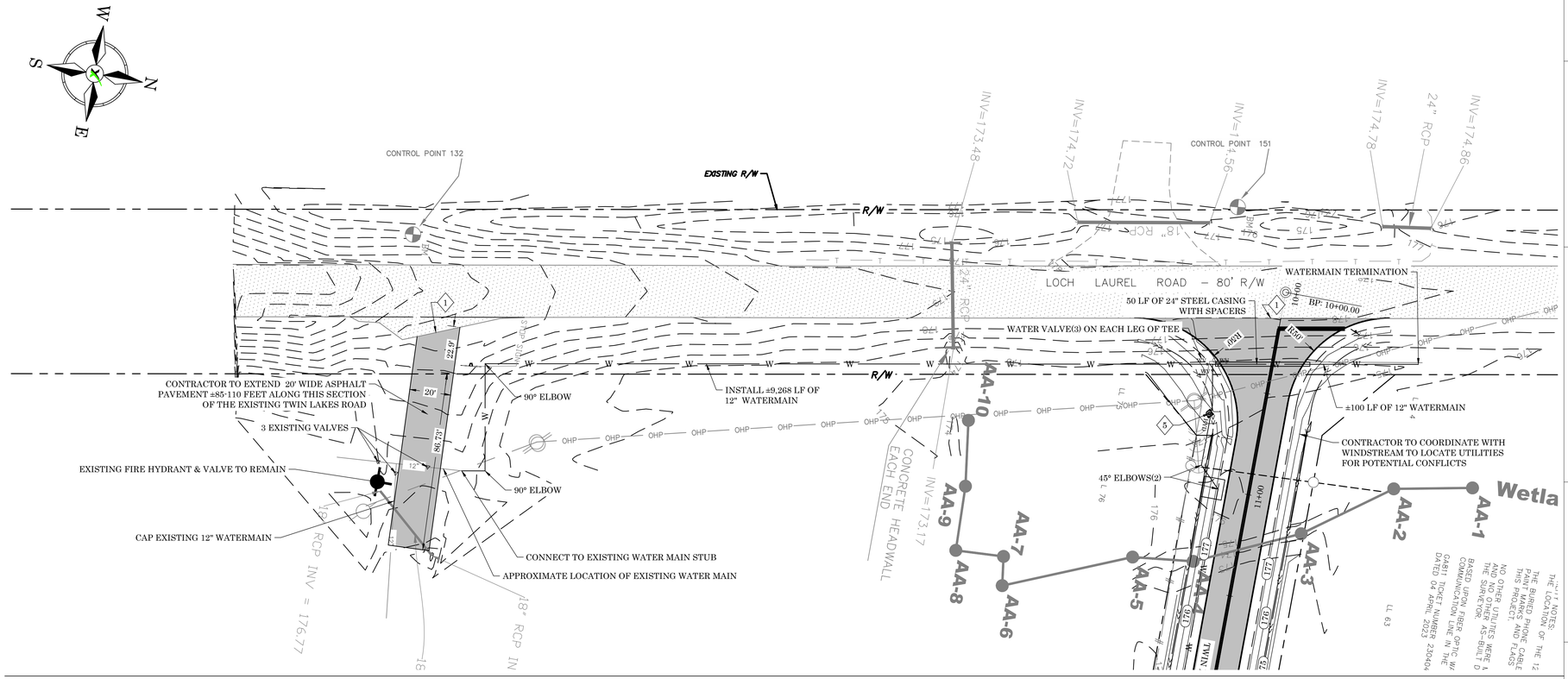


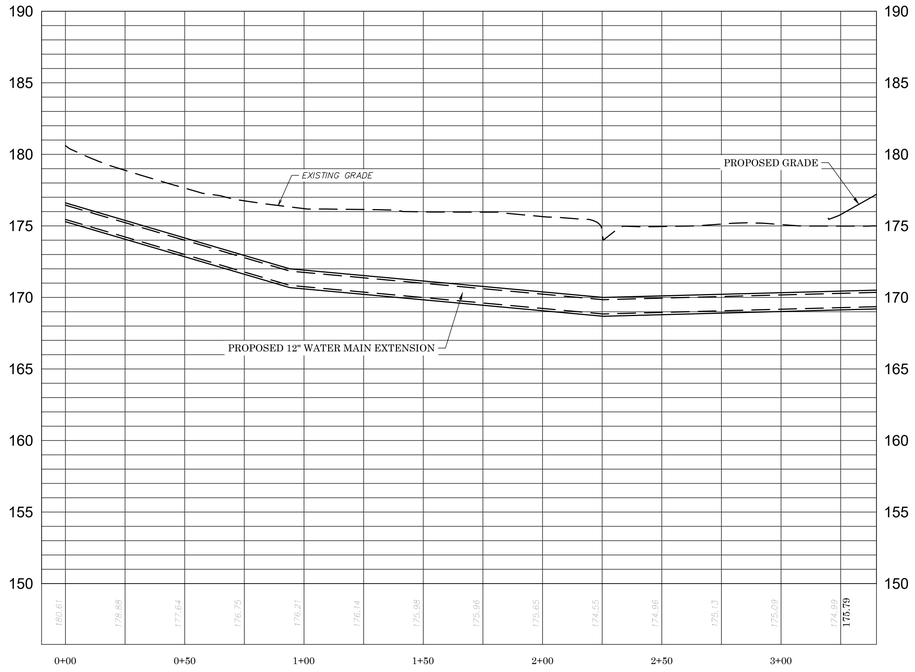


Water Main
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## GENERAL SITE NOTES:

1. ALL SIGNS AND STRIPING SHALL CONFIRM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - LATEST EDITION AND/OR DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
2. ALL DIMENSIONS ARE MEASURED FROM THE CENTERLINE OF ROADWAY TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
3. HORIZONTAL DATA SHOWN HEREON IS BASED ON NAD83 GEORGIA STATE PLANES, WEST ZONE, US FOOT. VERTICAL DATA SHOWN HEREON IS BASED ON NAVD 88(12B).
4. LOWNDES COUNTY WILL HANDLE ALL UTILITY RELOCATIONS.
5. CONTRACTOR RESPONSIBLE FOR RELOCATING MAILBOXES.

## PAVING, GRADING, & DRAINAGE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL FILL MATERIAL. FILL MATERIAL SHALL BE CLEAN AND FREE OF ALL DEBRIS AND ORGANIC MATERIAL. SUITABLE FILL MATERIAL SHALL BE PLACED IN LIFTS OF 8" OR LESS AND COMPACTED TO 95% STANDARD PROCTOR.
2. THE CONTRACTOR SHALL GRADE THE SITE TO PROVIDE POSITIVE DRAINAGE AS INDICATED BY THE PROPOSED ELEVATIONS, CONTOURS, AND DRAINAGE SLOPE ARROWS.
3. FINISHED GRADE ELEVATIONS SHOWN ARE TOP OF PAVEMENT AND/OR BOTTOM OF DITCH.
4. CONTRACTOR SHALL ADJUST ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, VALVE BOXES, ECT.) TO FINISHED GRADE ELEVATIONS.
5. FINAL GRADES SHALL BE FLUSH WITH THE EDGE OF PAVEMENT.
6. SEE DETAILS FOR TYPICAL PAVEMENT SECTIONS.

## HATCH LEGEND:

- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- EXISTING ASPHALT PAVEMENT
- EXISTING DIRT/SOIL ROADWAY
- EXISTING CONCRETE PAVEMENT

## SPOT GRADE LEGEND:

- 150.00 — EXISTING GRADE
- (150.00) — PROPOSED GRADE
- HP:150.00 — PROPOSED HIGH POINT
- LP:150.00 — PROPOSED LOW POINT

## KEY NOTES:

1. PROVIDE SMOOTH TRANSITION TO EXISTING GRADE
2. 24" SOLID WHITE STOP BAR: THERMOPLASTIC
3. 5" SOLID WHITE EDGE STRIPING: HIGH BUILD
4. 5" SOLID DOUBLE YELLOW STRIPING: HIGH BUILD: WITH 2 EA TYPE 1 (YELLOW) RPMs @ 40' SPACING
5. FIRE HYDRANT ASSEMBLY AND GATE VALVE

SURVEY CONTROL POINTS

| PointNo. | Northing(Y) | Easting(X) | Elev(Z) | Description |
|---|---|---|---|---|
| 1 | 254846.1200 | 2596922.4583 | 175.46 | 1\2RBFWC |
| 3 | 254883.3376 | 2595839.2101 | 181.57 | 1\2RBFWC-B |
| 8 | 254882.5209 | 2595348.9975 | 182.76 | 1\2RBFWC-C |
| 13 | 254875.3868 | 2594887.9748 | 179.41 | RBPWC D |
| 18 | 254881.8448 | 2594416.5867 | 171.88 | RBPWC E |
| 19 | 254886.6675 | 2593948.1325 | 167.41 | RBPWC F |
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| 120 | 254876.6004 | 2589115.2196 | 181.55 | RBFWC N |
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| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

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| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

REVISIONS

AXIS
ENGINEERING CONSULTANTS
LEESBURG ▪ VALDOSTA ▪ WARNER ROBINS

# WATER MAIN EXTENSION PLAN & PROFILE

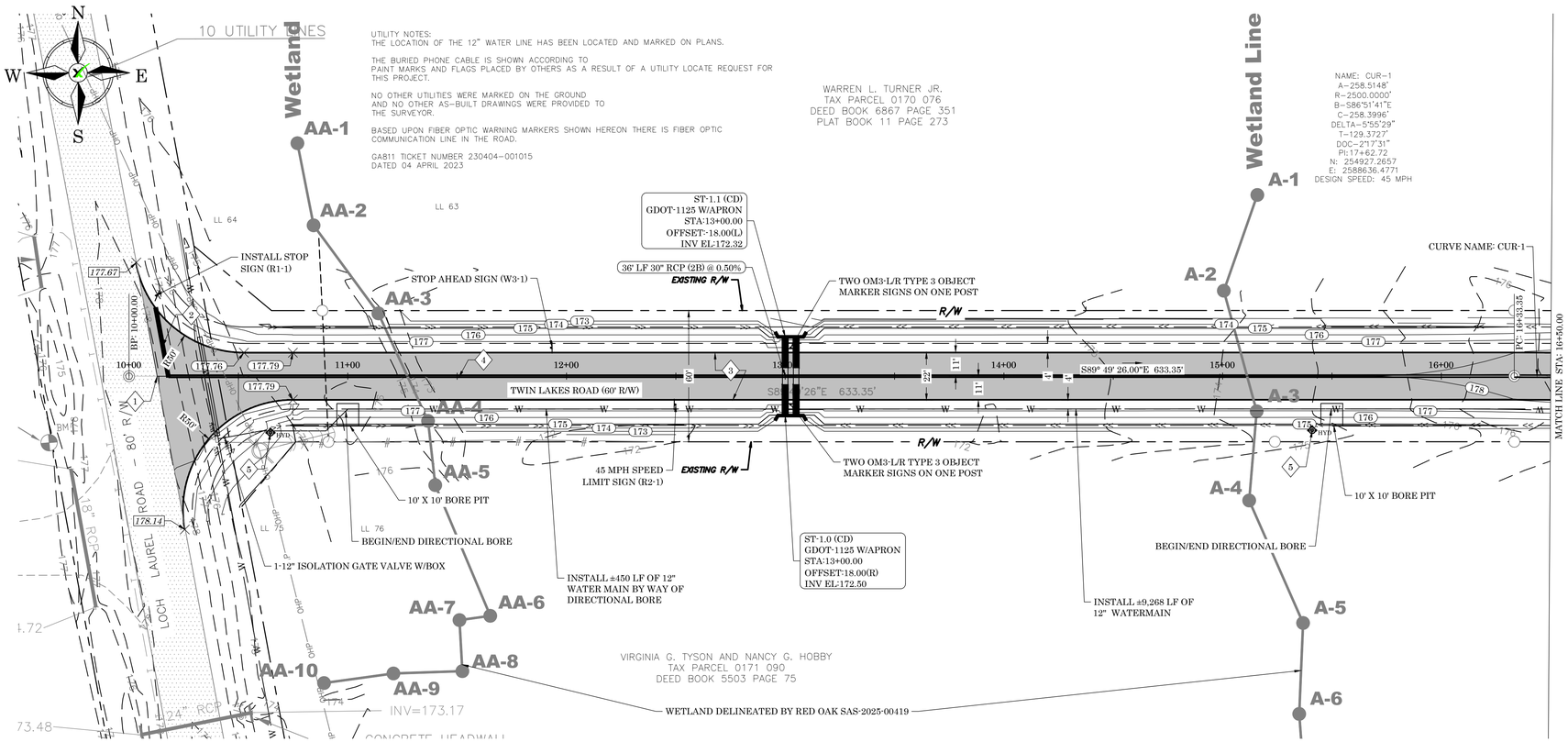
TWIN LAKES ROAD PAVING IMPROVEMENTS

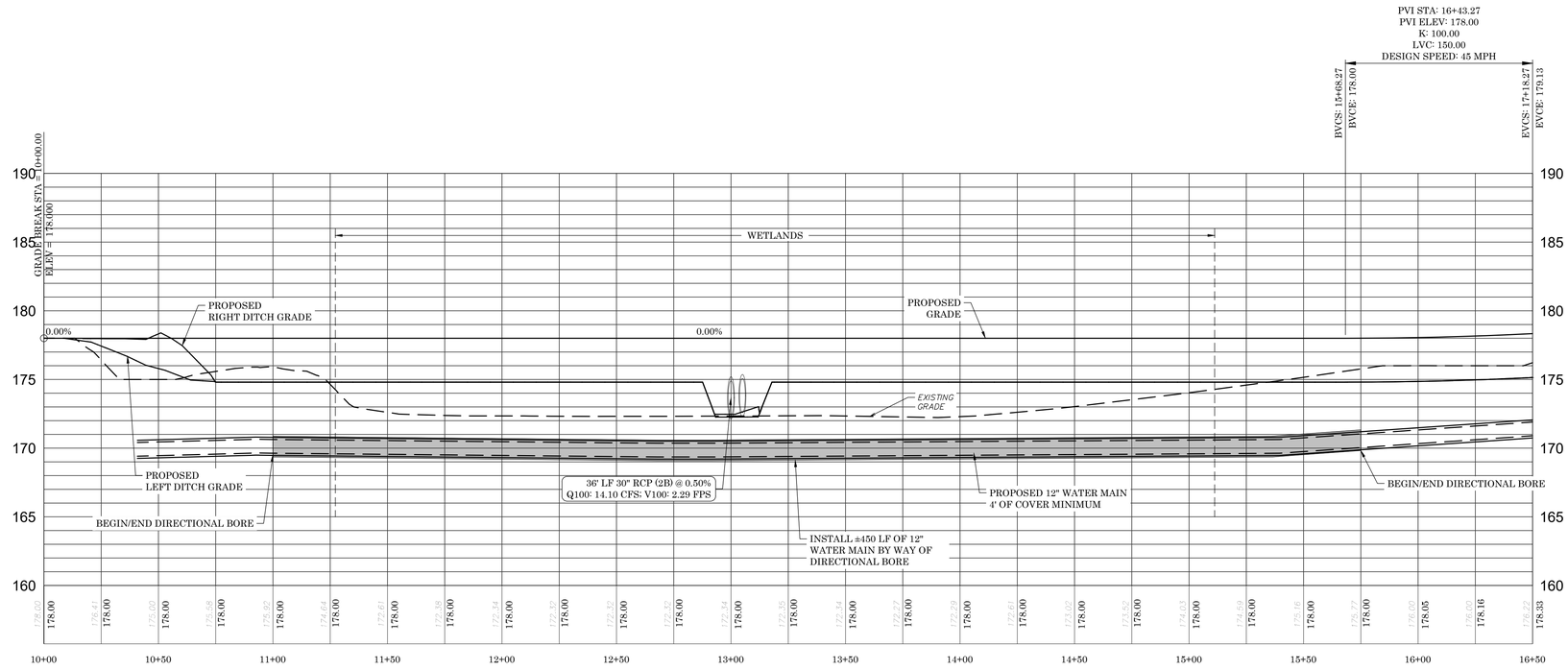
GEORGIA — AXIS ENGINEERING CONSULTANTS — PEP009117 — 06/30/2026 — CERTIFICATE OF AUTHORIZATION

GEORGIA — REGISTERED — No. PE030411 — PROFESSIONAL — 3/20/2026 — ENGINEER — BY: MATTHEW VARNER

| | |
|---|---|
| PROJECT NO. | 25-25014 |
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.
C5.0




TWIN LAKES ROAD ALIGNMENT
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## GENERAL SITE NOTES:

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| 120 | 254876.6004 | 2589115.2196 | 181.55 | RBFWC N |
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| 132 | 254507.4397 | 2587921.6986 | 179.36 | NLF |
| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

| REVISIONS | | |
|---|---|---|
| No. | DATE | DESCRIPTION |
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 12/9/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

# ROADWAY PLAN & PROFILE
## TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA — AXIS ENGINEERING CONSULTANTS PEP009117 06/30/2026 CERTIFICATE OF AUTHORIZATION

GEORGIA — REGISTERED No. PE030417 PROFESSIONAL 3/20/2026 ENGINEER — BY: MATTHEW VARNER

| | |
|---|---|
| PROJECT NO. | 25-25014 |
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.
C6.0

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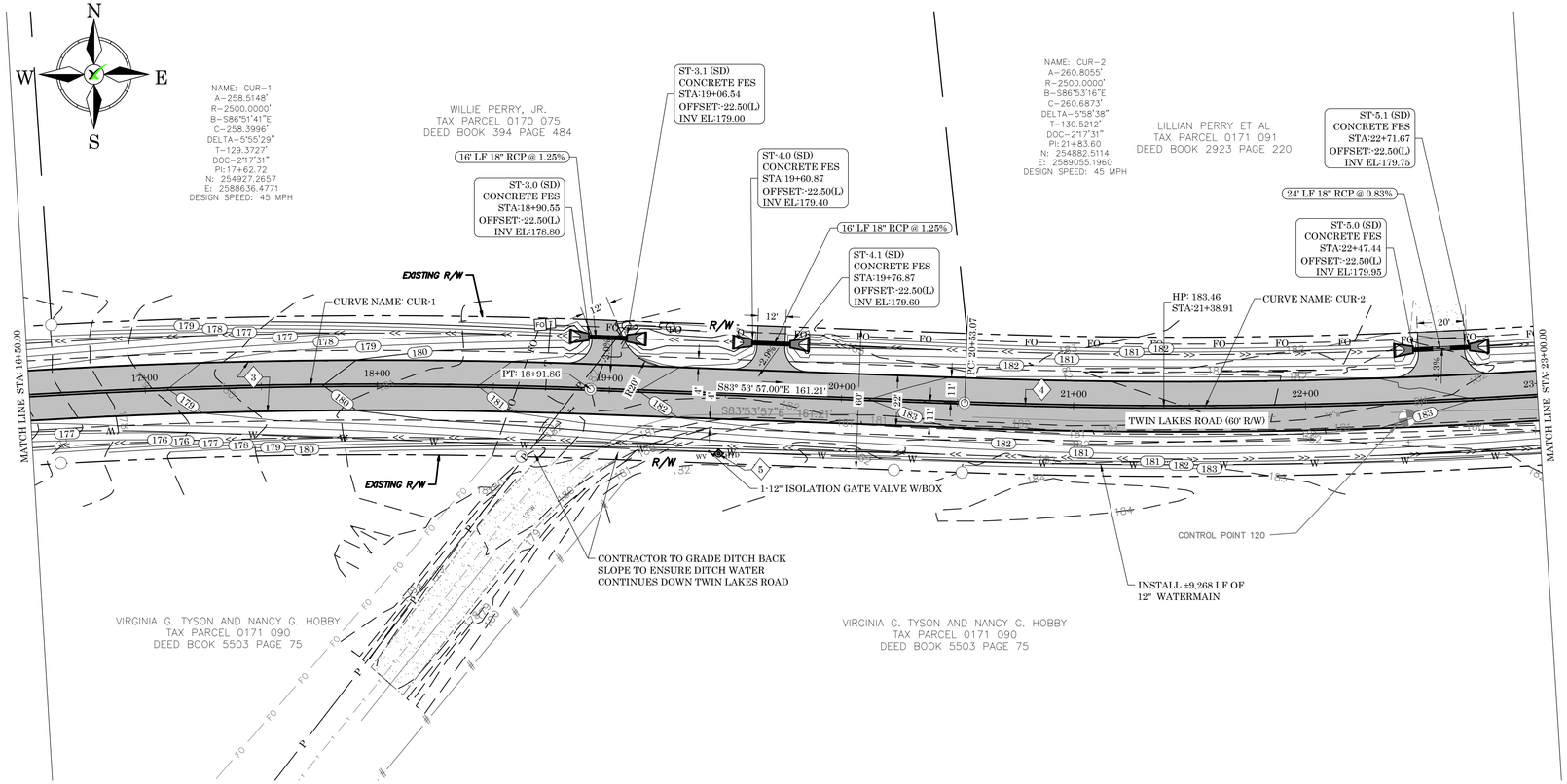


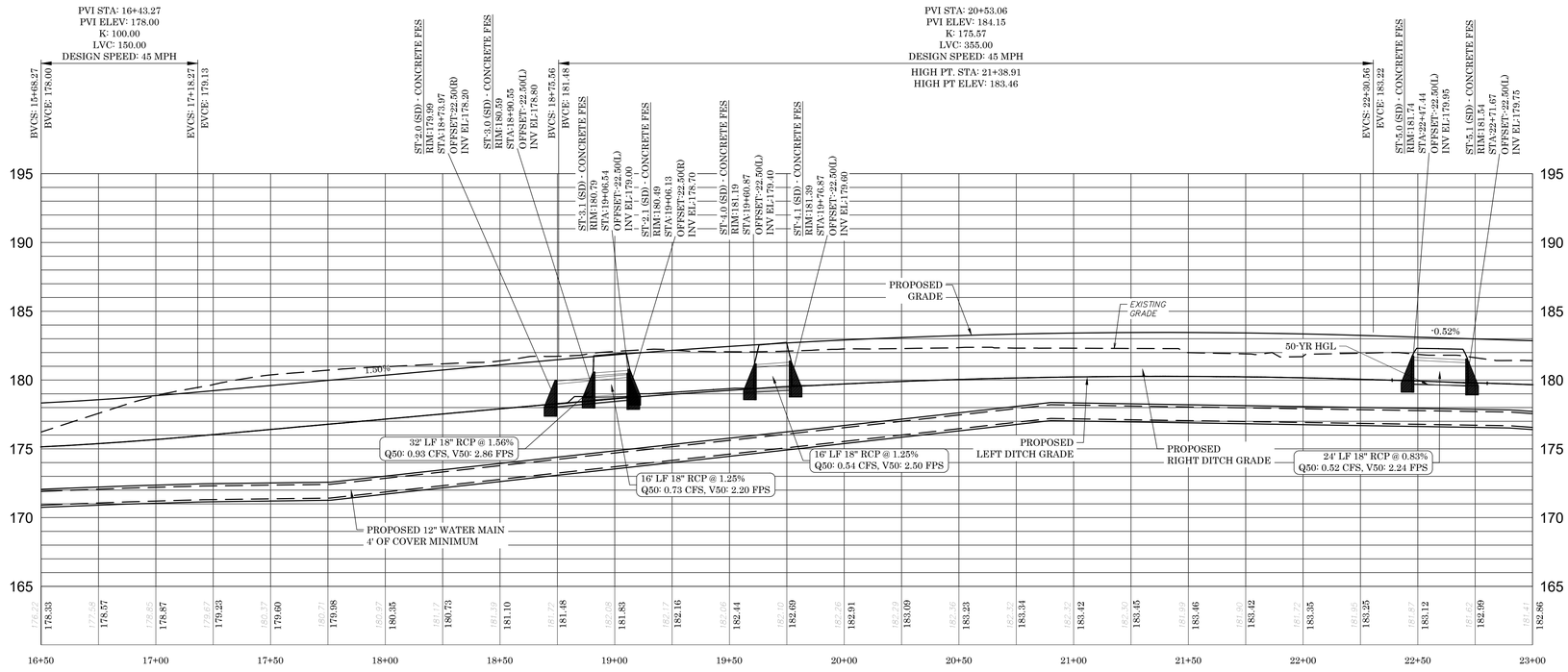


TWIN LAKES ROAD ALIGNMENT
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## GENERAL SITE NOTES:

1. ALL SIGNS AND STRIPING SHALL CONFIRM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - LATEST EDITION AND/OR DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
2. ALL DIMENSIONS ARE MEASURED FROM THE CENTERLINE OF ROADWAY TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
3. HORIZONTAL DATA SHOWN HEREON IS BASED ON NAD83 GEORGIA STATE PLANES, WEST ZONE, US FOOT. VERTICAL DATA SHOWN HEREON IS BASED ON NAVD 88(12B).
4. LOWNDES COUNTY WILL HANDLE ALL UTILITY RELOCATIONS.
5. CONTRACTOR RESPONSIBLE FOR RELOCATING MAILBOXES.

## PAVING, GRADING, & DRAINAGE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL FILL MATERIAL. FILL MATERIAL SHALL BE CLEAN AND FREE OF ALL DEBRIS AND ORGANIC MATERIAL. SUITABLE FILL MATERIAL SHALL BE PLACED IN LIFTS OF 8" OR LESS AND COMPACTED TO 95% STANDARD PROCTOR.
2. THE CONTRACTOR SHALL GRADE THE SITE TO PROVIDE POSITIVE DRAINAGE AS INDICATED BY THE PROPOSED ELEVATIONS, CONTOURS, AND DRAINAGE SLOPE ARROWS.
3. FINISHED GRADE ELEVATIONS SHOWN ARE TOP OF PAVEMENT AND/OR BOTTOM OF DITCH.
4. CONTRACTOR SHALL ADJUST ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, VALVE BOXES, ECT.) TO FINISHED GRADE ELEVATIONS.
5. FINAL GRADES SHALL BE FLUSH WITH THE EDGE OF PAVEMENT.
6. SEE DETAILS FOR TYPICAL PAVEMENT SECTIONS.

## HATCH LEGEND:

- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- EXISTING ASPHALT PAVEMENT
- EXISTING DIRT/SOIL ROADWAY
- EXISTING CONCRETE PAVEMENT

## SPOT GRADE LEGEND:

- 150.00 — EXISTING GRADE
- (150.00) — PROPOSED GRADE
- HP:150.00 — PROPOSED HIGH POINT
- LP:150.00 — PROPOSED LOW POINT

## KEY NOTES:

1. PROVIDE SMOOTH TRANSITION TO EXISTING GRADE
2. 24" SOLID WHITE STOP BAR: THERMOPLASTIC
3. 5" SOLID WHITE EDGE STRIPING: HIGH BUILD
4. 5" SOLID DOUBLE YELLOW STRIPING: HIGH BUILD: WITH 2 EA TYPE 1 (YELLOW) RPMs @ 40' SPACING
5. FIRE HYDRANT ASSEMBLY AND GATE VALVE

SURVEY CONTROL POINTS

| PointNo. | Northing(Y) | Easting(X) | Elev(Z) | Description |
|---|---|---|---|---|
| 1 | 254846.1200 | 2596922.4583 | 175.46 | 1\2RBFWC |
| 3 | 254883.3376 | 2595839.2101 | 181.57 | 1\2RBFWC-B |
| 8 | 254882.5209 | 2595348.9975 | 182.76 | 1\2RBFWC-C |
| 13 | 254875.3868 | 2594887.9748 | 179.41 | RBPWC D |
| 18 | 254881.8448 | 2594416.5867 | 171.88 | RBPWC E |
| 19 | 254886.6675 | 2593948.1325 | 167.41 | RBPWC F |
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| 132 | 254507.4397 | 2587921.6986 | 179.36 | NLF |
| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

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GRAPHIC SCALE 1" = 30'

REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

# ROADWAY PLAN & PROFILE
## TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA — AXIS ENGINEERING CONSULTANTS — PEP009117 — 06/30/2026 — CERTIFICATE OF AUTHORIZATION

GEORGIA — REGISTERED — No. PE030417 — PROFESSIONAL — 3/20/2026 — ENGINEER — JAMES V. MATTHEW

| | |
|---|---|
| PROJECT NO. | 25-25014 |
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.
C6.1

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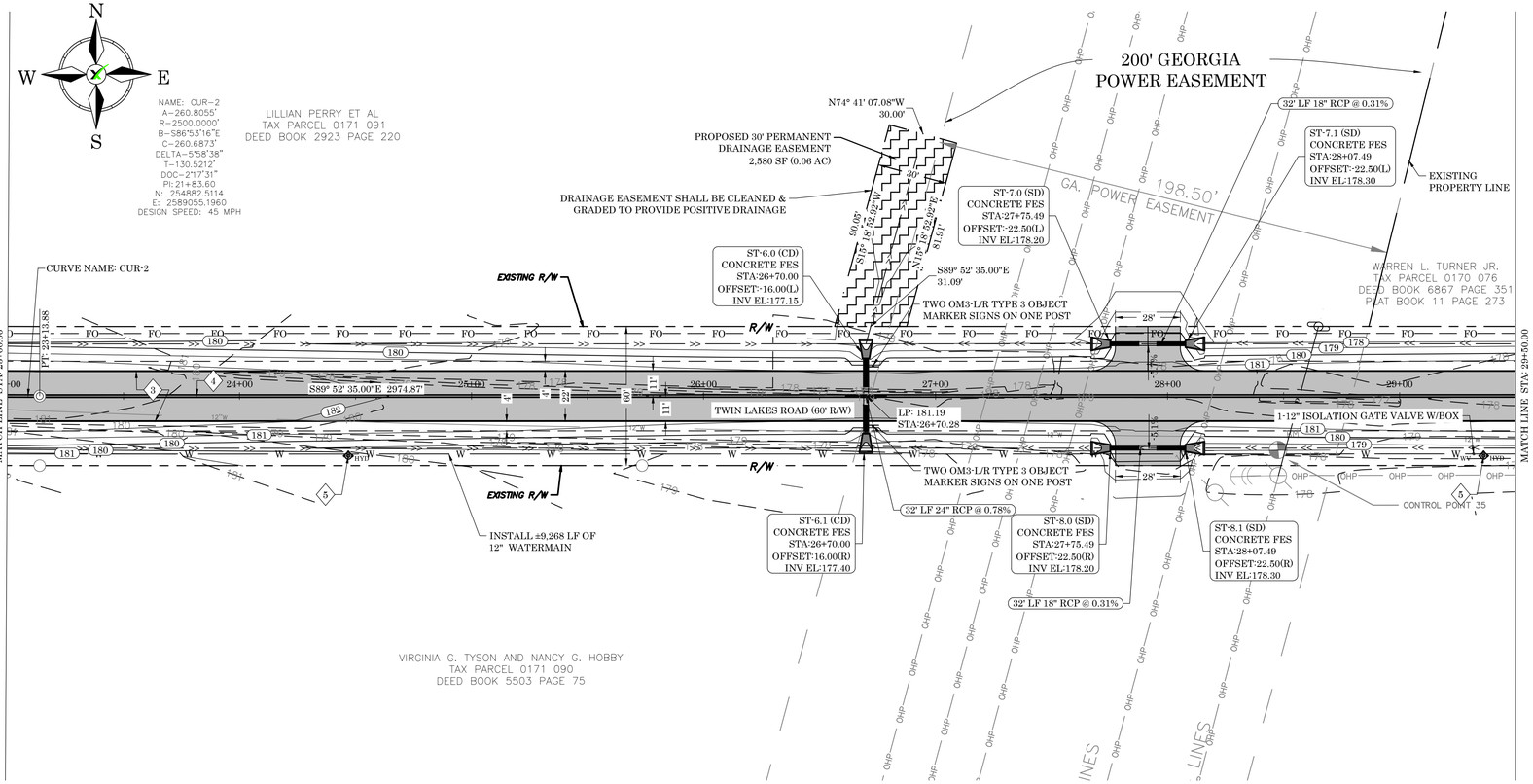


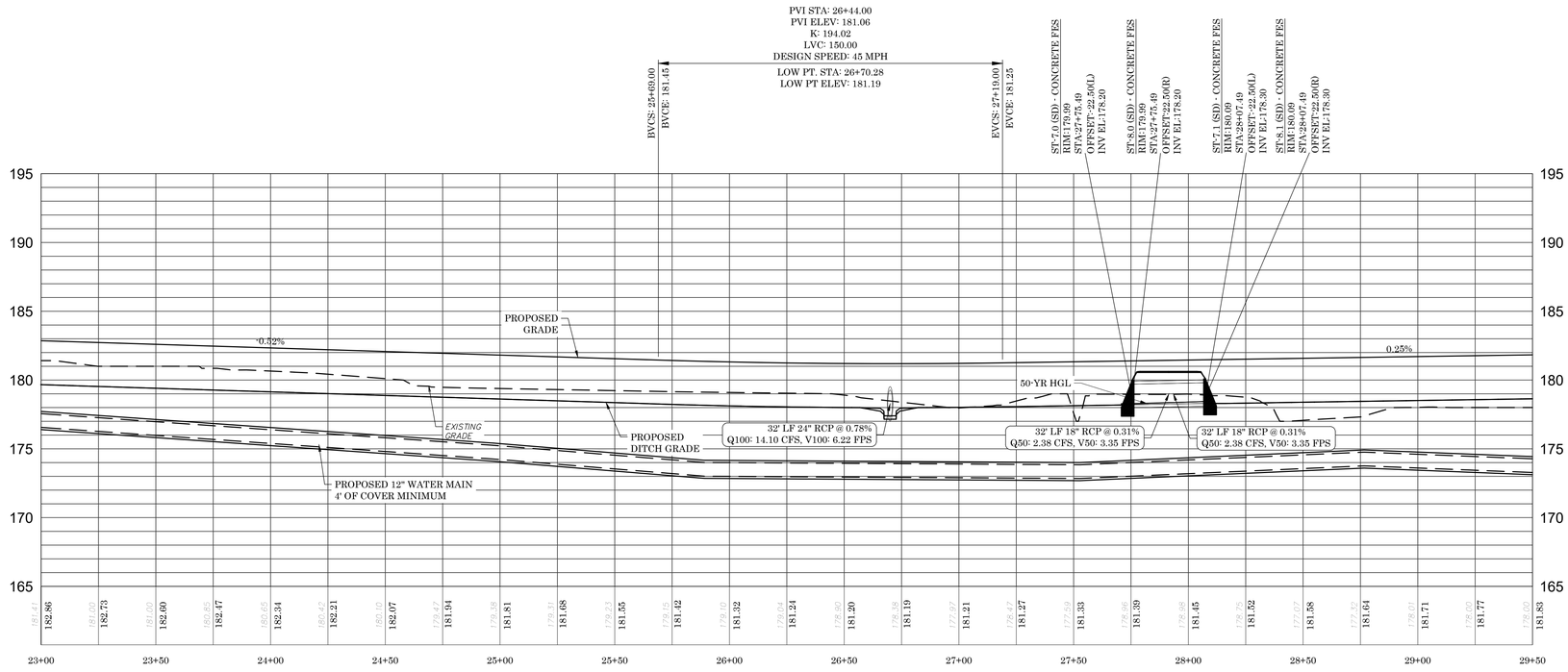


TWIN LAKES ROAD ALIGNMENT
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## GENERAL SITE NOTES:

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5. FINAL GRADES SHALL BE FLUSH WITH THE EDGE OF PAVEMENT.
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| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

| REVISIONS | | |
|---|---|---|
| No. | DATE | DESCRIPTION |
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
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| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG WALDOSTA WARNER ROBINS

# ROADWAY PLAN & PROFILE
## TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEP009117
CERTIFICATE OF AUTHORIZATION
06/30/2026

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
M. MATTHEW VANN

| | |
|---|---|
| PROJECT NO. | 25-25014 |
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.
C6.2

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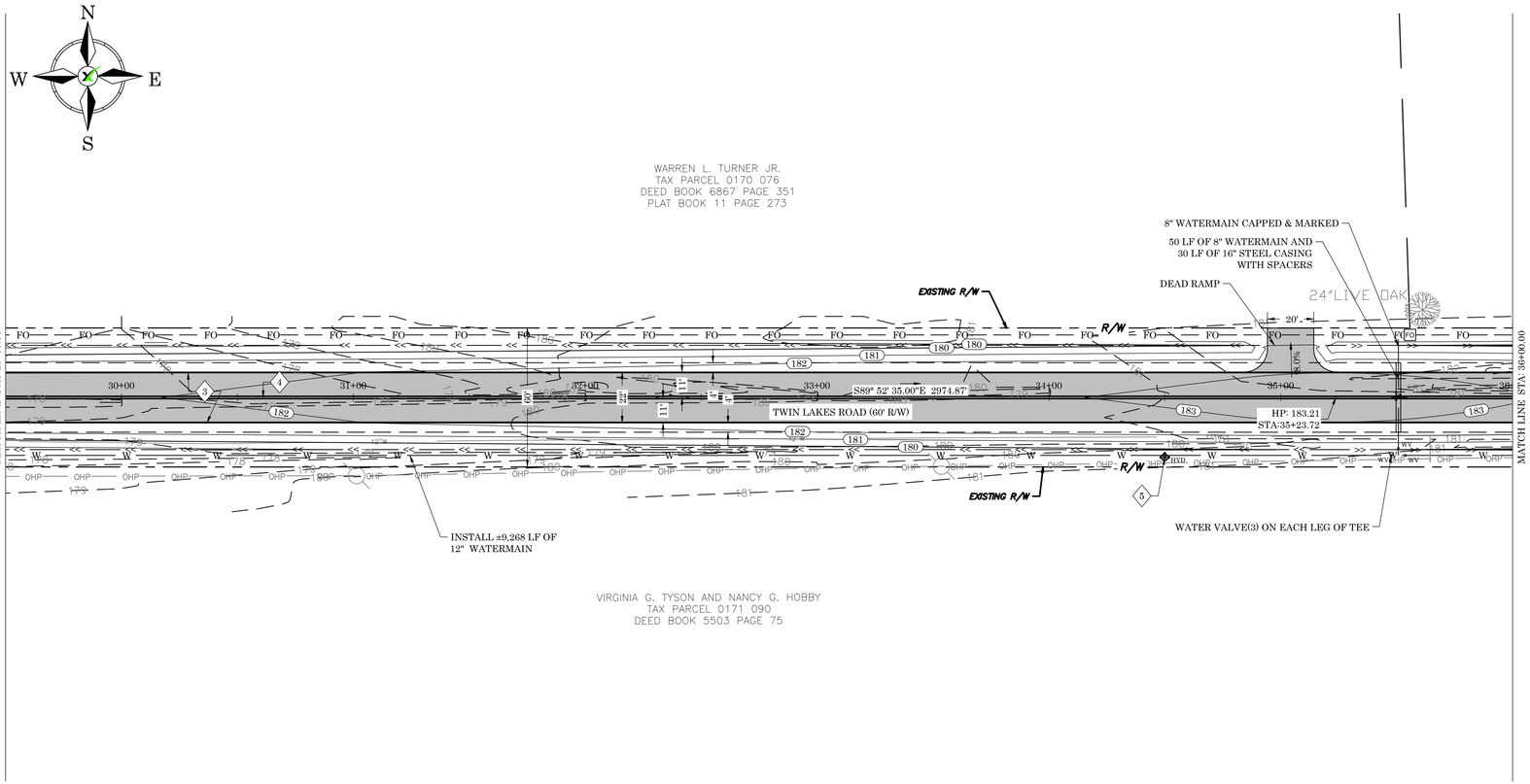


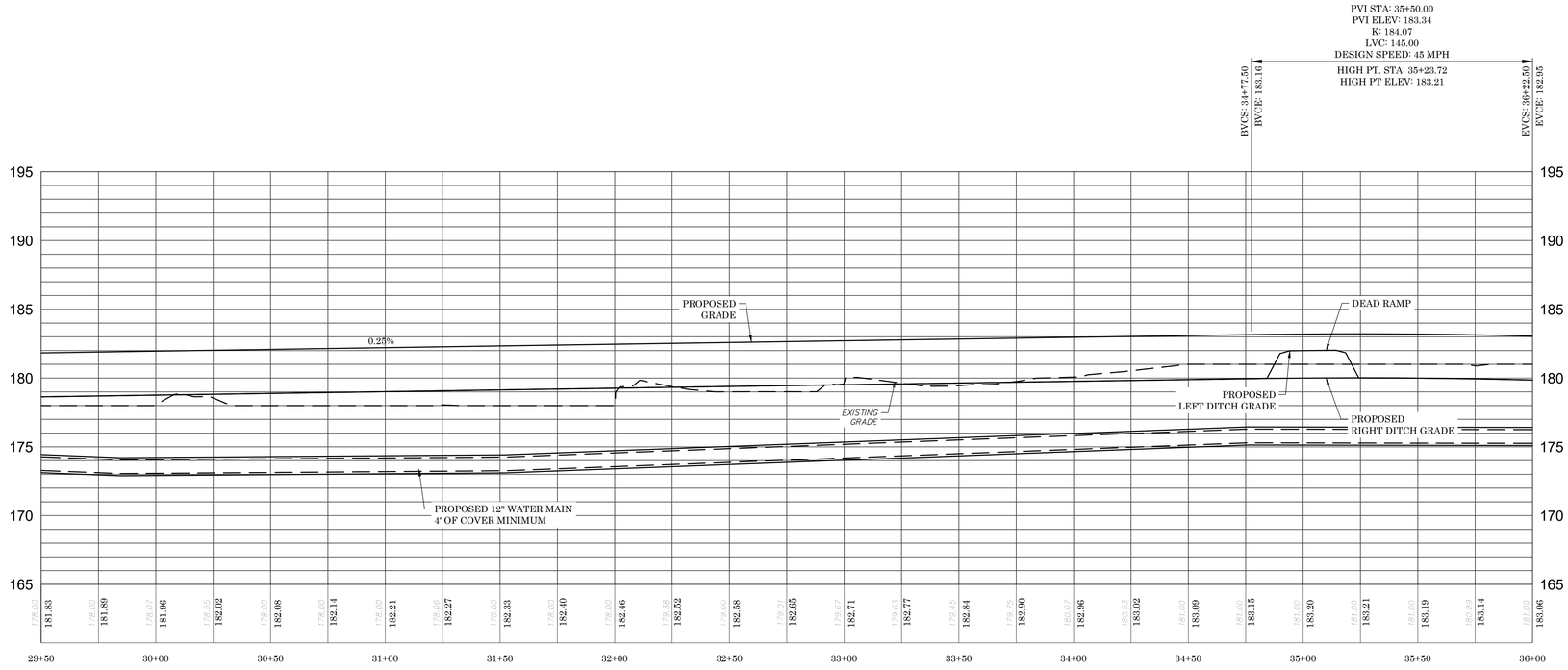


TWIN LAKES ROAD ALIGNMENT
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## GENERAL SITE NOTES:

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## HATCH LEGEND:

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GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

REVISIONS

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| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

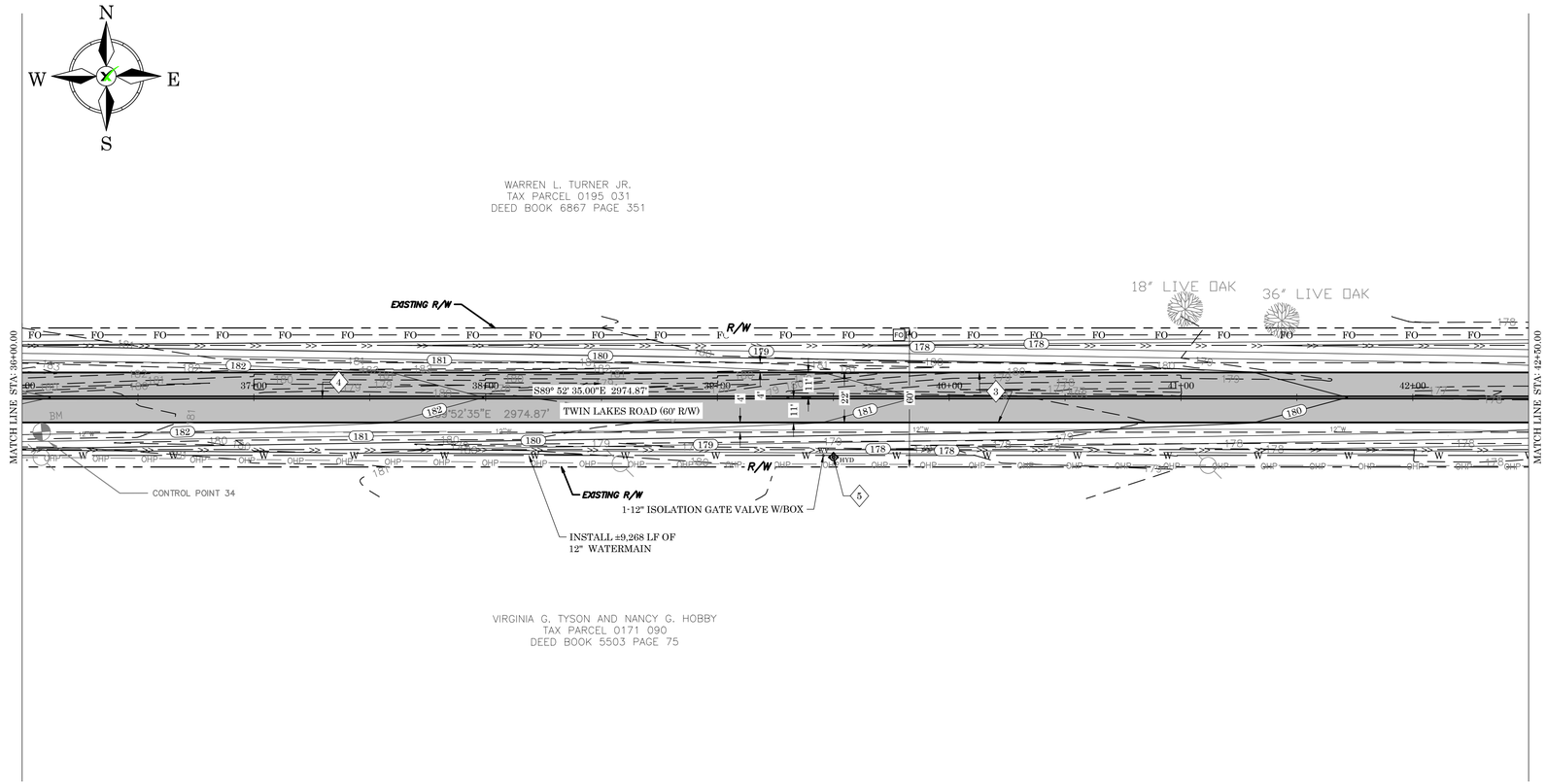
# ROADWAY PLAN & PROFILE
## TWIN LAKES ROAD PAVING IMPROVEMENTS

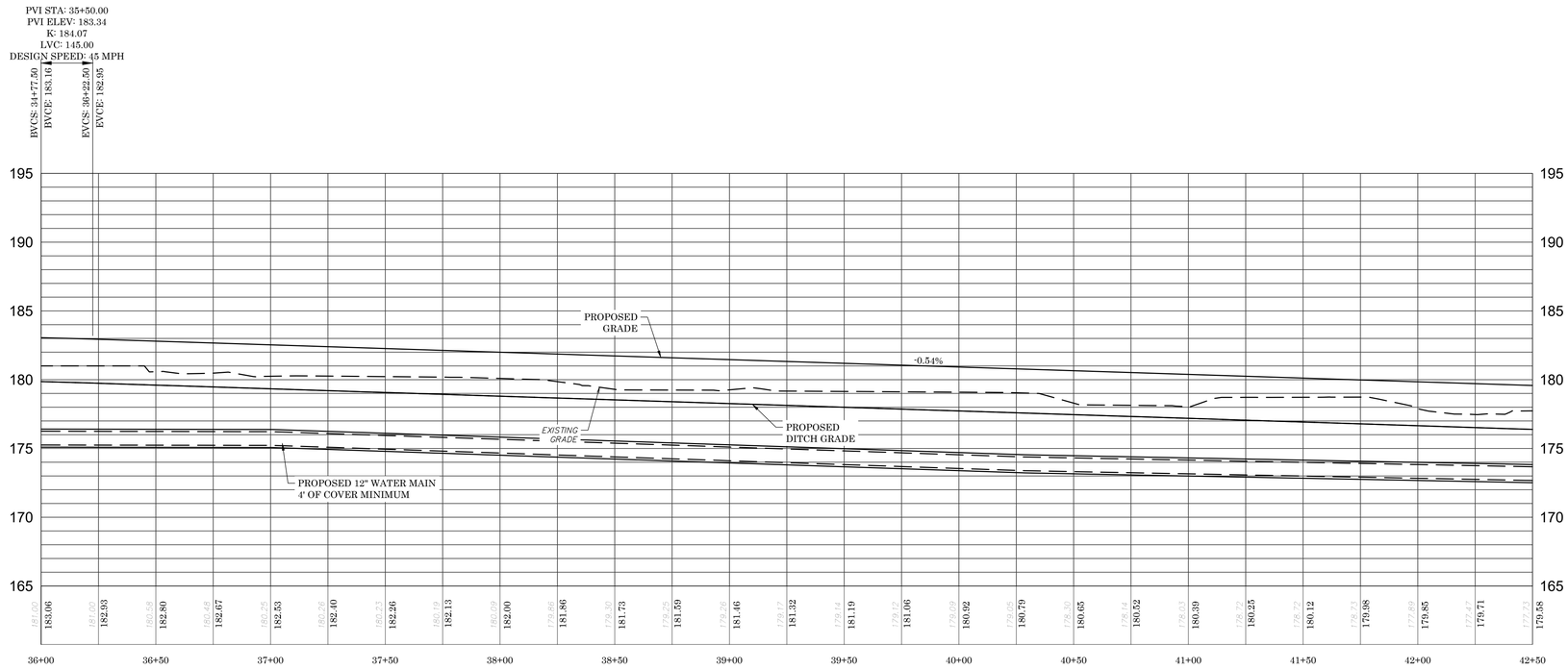
GEORGIA — AXIS ENGINEERING CONSULTANTS — PEP009117 — CERTIFICATE OF AUTHORIZATION — 06/30/2026

GEORGIA — REGISTERED — No. PE030417 — PROFESSIONAL — 3/20/2026 — ENGINEER — BY: MATTHEW LAMAR

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C6.3




TWIN LAKES ROAD ALIGNMENT
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

| SITE INFORMATION | |
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- EXISTING ASPHALT PAVEMENT
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5. FIRE HYDRANT ASSEMBLY AND GATE VALVE

SURVEY CONTROL POINTS

| PointNo. | Northing(Y) | Easting(X) | Elev(Z) | Description |
|---|---|---|---|---|
| 1 | 254846.1200 | 2596922.4583 | 175.46 | 1\2RBFWC |
| 3 | 254883.3376 | 2595839.2101 | 181.57 | 1\2RBFWC-B |
| 8 | 254882.5209 | 2595348.9975 | 182.76 | 1\2RBFWC-C |
| 13 | 254875.3868 | 2594887.9748 | 179.41 | RBPWC D |
| 18 | 254881.8448 | 2594416.5867 | 171.88 | RBPWC E |
| 19 | 254886.6675 | 2593948.1325 | 167.41 | RBPWC F |
| 20 | 254892.0224 | 2593242.6185 | 173.71 | RBPWC G |
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| 34 | 254864.5681 | 2590480.2681 | 181.22 | RBPWC L |
| 35 | 254857.7805 | 2589719.4129 | 179.07 | RBPWC M |
| 120 | 254876.6004 | 2589115.2196 | 181.55 | RBFWC N |
| 122 | 254583.0449 | 2588446.7875 | 176.56 | RBFWC O |
| 132 | 254507.4397 | 2587921.6986 | 179.36 | NLF |
| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

REVISIONS

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| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
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| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

# ROADWAY PLAN & PROFILE

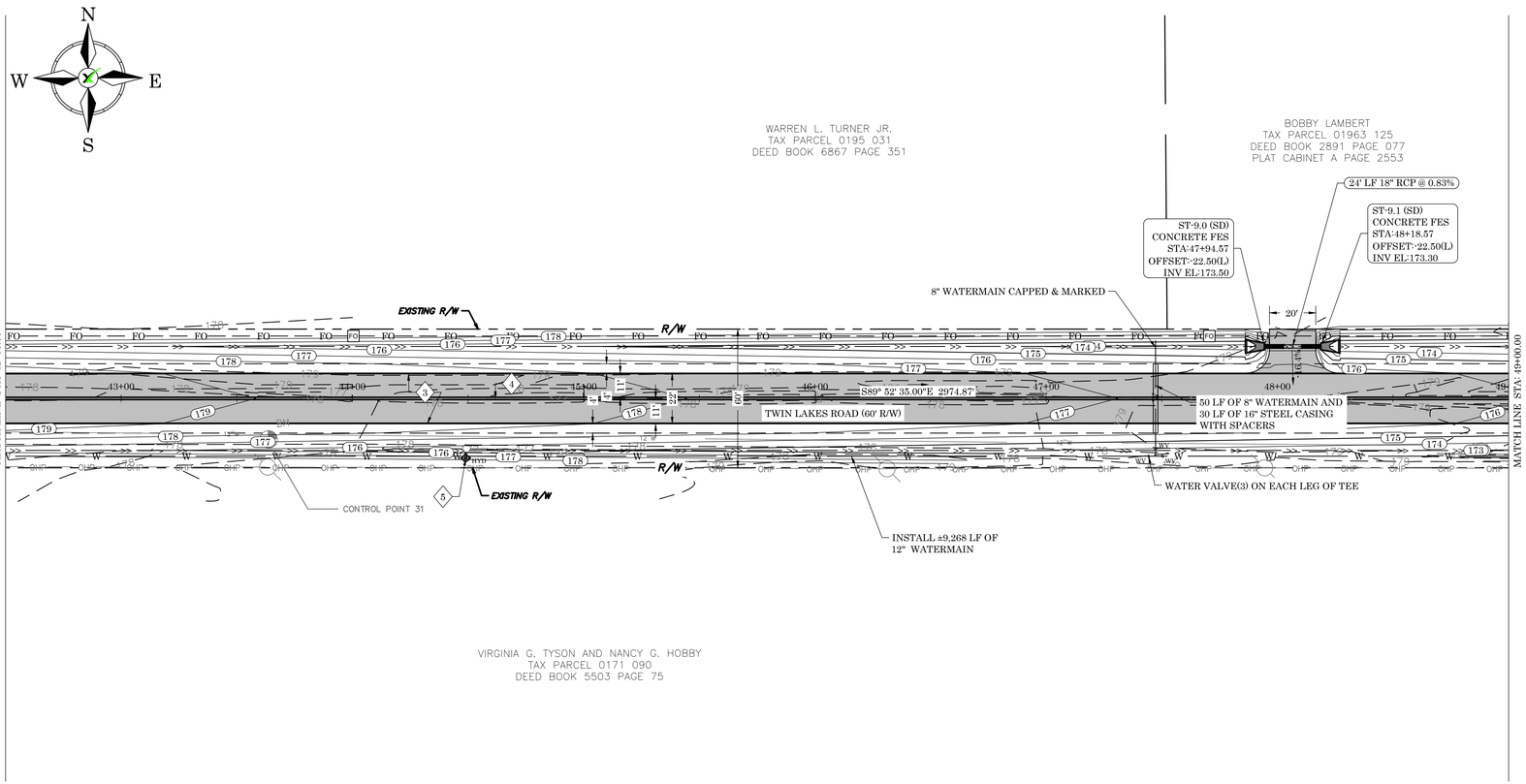
TWIN LAKES ROAD PAVING IMPROVEMENTS

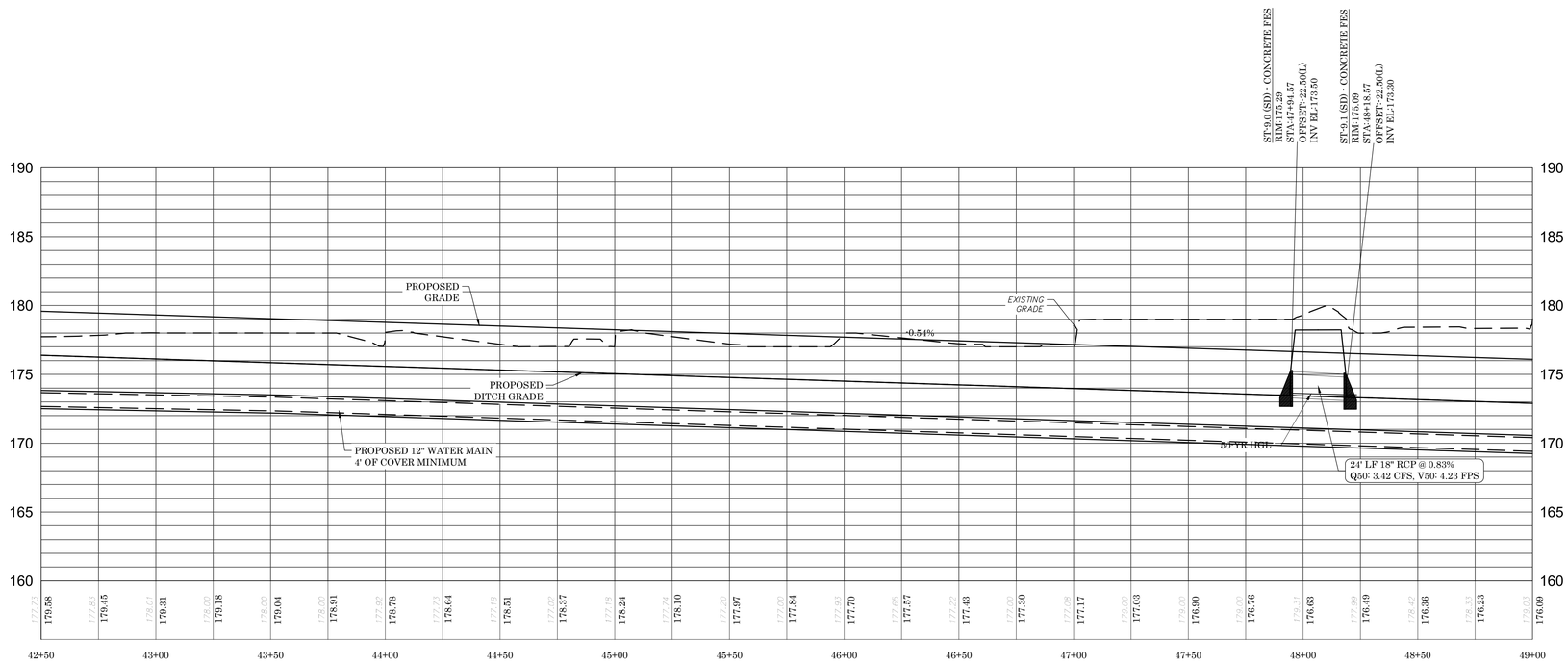
GEORGIA
AXIS ENGINEERING CONSULTANTS
PEP009117
CERTIFICATE OF AUTHORIZATION
06/30/2026

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
J. MATTHEW LAMAR

| | |
|---|---|
| PROJECT NO. | 25-25014 |
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.
C6.4




TWIN LAKES ROAD ALIGNMENT
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## GENERAL SITE NOTES:

1. ALL SIGNS AND STRIPING SHALL CONFIRM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - LATEST EDITION AND/OR DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
2. ALL DIMENSIONS ARE MEASURED FROM THE CENTERLINE OF ROADWAY TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
3. HORIZONTAL DATA SHOWN HEREON IS BASED ON NAD83 GEORGIA STATE PLANES, WEST ZONE, US FOOT. VERTICAL DATA SHOWN HEREON IS BASED ON NAVD 88(12B).
4. LOWNDES COUNTY WILL HANDLE ALL UTILITY RELOCATIONS.
5. CONTRACTOR RESPONSIBLE FOR RELOCATING MAILBOXES.

## PAVING, GRADING, & DRAINAGE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL FILL MATERIAL. FILL MATERIAL SHALL BE CLEAN AND FREE OF ALL DEBRIS AND ORGANIC MATERIAL. SUITABLE FILL MATERIAL SHALL BE PLACED IN LIFTS OF 8" OR LESS AND COMPACTED TO 95% STANDARD PROCTOR.
2. THE CONTRACTOR SHALL GRADE THE SITE TO PROVIDE POSITIVE DRAINAGE AS INDICATED BY THE PROPOSED ELEVATIONS, CONTOURS, AND DRAINAGE SLOPE ARROWS.
3. FINISHED GRADE ELEVATIONS SHOWN ARE TOP OF PAVEMENT AND/OR BOTTOM OF DITCH.
4. CONTRACTOR SHALL ADJUST ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, VALVE BOXES, ECT.) TO FINISHED GRADE ELEVATIONS.
5. FINAL GRADES SHALL BE FLUSH WITH THE EDGE OF PAVEMENT.
6. SEE DETAILS FOR TYPICAL PAVEMENT SECTIONS.

## HATCH LEGEND:

- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- EXISTING ASPHALT PAVEMENT
- EXISTING DIRT/SOIL ROADWAY
- EXISTING CONCRETE PAVEMENT

## SPOT GRADE LEGEND:

- 150.00 — EXISTING GRADE
- (150.00) — PROPOSED GRADE
- HP:150.00 — PROPOSED HIGH POINT
- LP:150.00 — PROPOSED LOW POINT

## KEY NOTES:

1. PROVIDE SMOOTH TRANSITION TO EXISTING GRADE
2. 24" SOLID WHITE STOP BAR: THERMOPLASTIC
3. 5" SOLID WHITE EDGE STRIPING: HIGH BUILD
4. 5" SOLID DOUBLE YELLOW STRIPING: HIGH BUILD: WITH 2 EA TYPE 1 (YELLOW) RPMs @ 40' SPACING
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SURVEY CONTROL POINTS

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| 132 | 254507.4397 | 2587921.6986 | 179.36 | NLF |
| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

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| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

# ROADWAY PLAN & PROFILE
## TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEP009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
BY: MATTHEW VARNER

| | |
|---|---|
| PROJECT NO. | 25-25014 |
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.
C6.5

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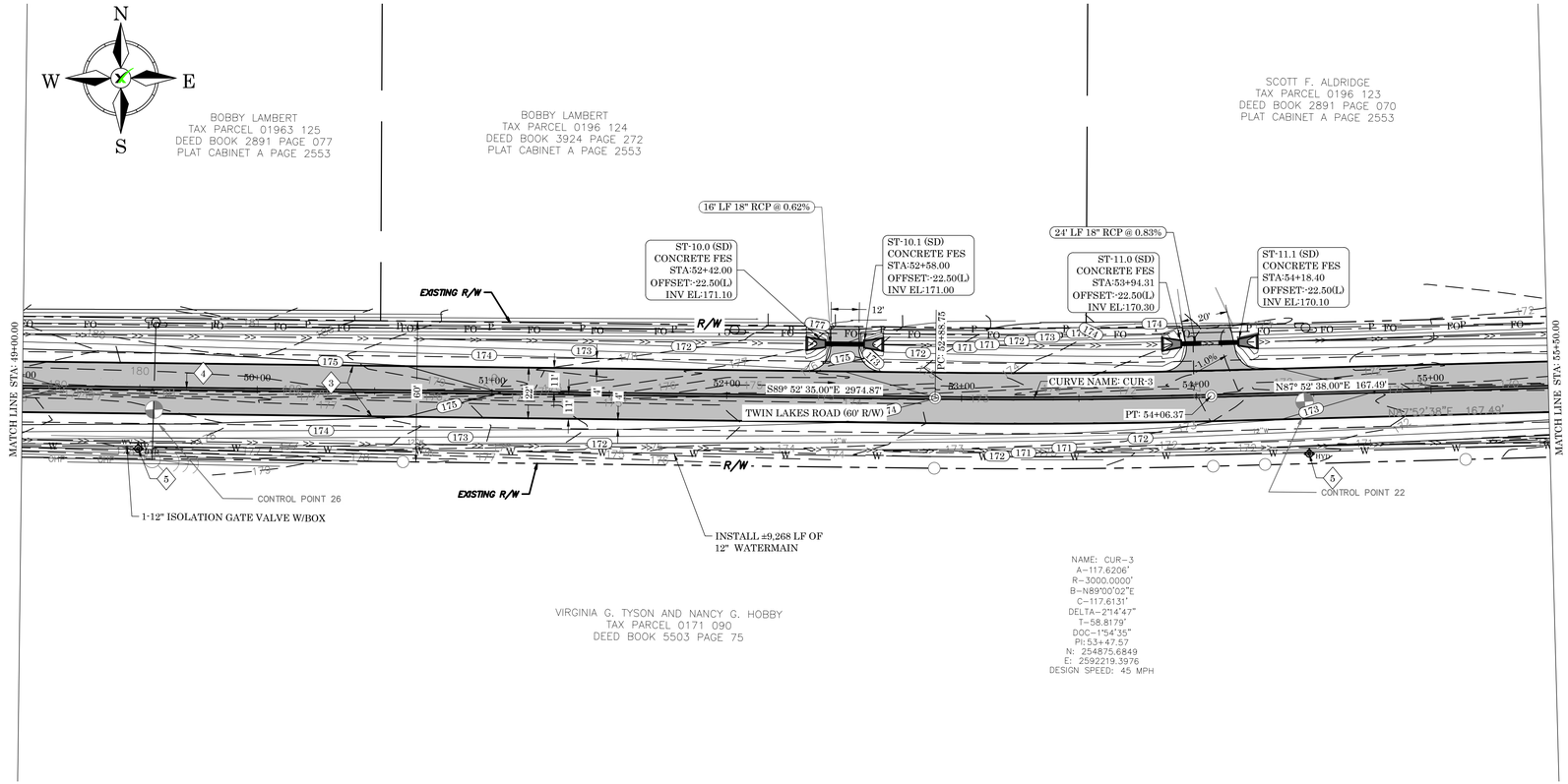


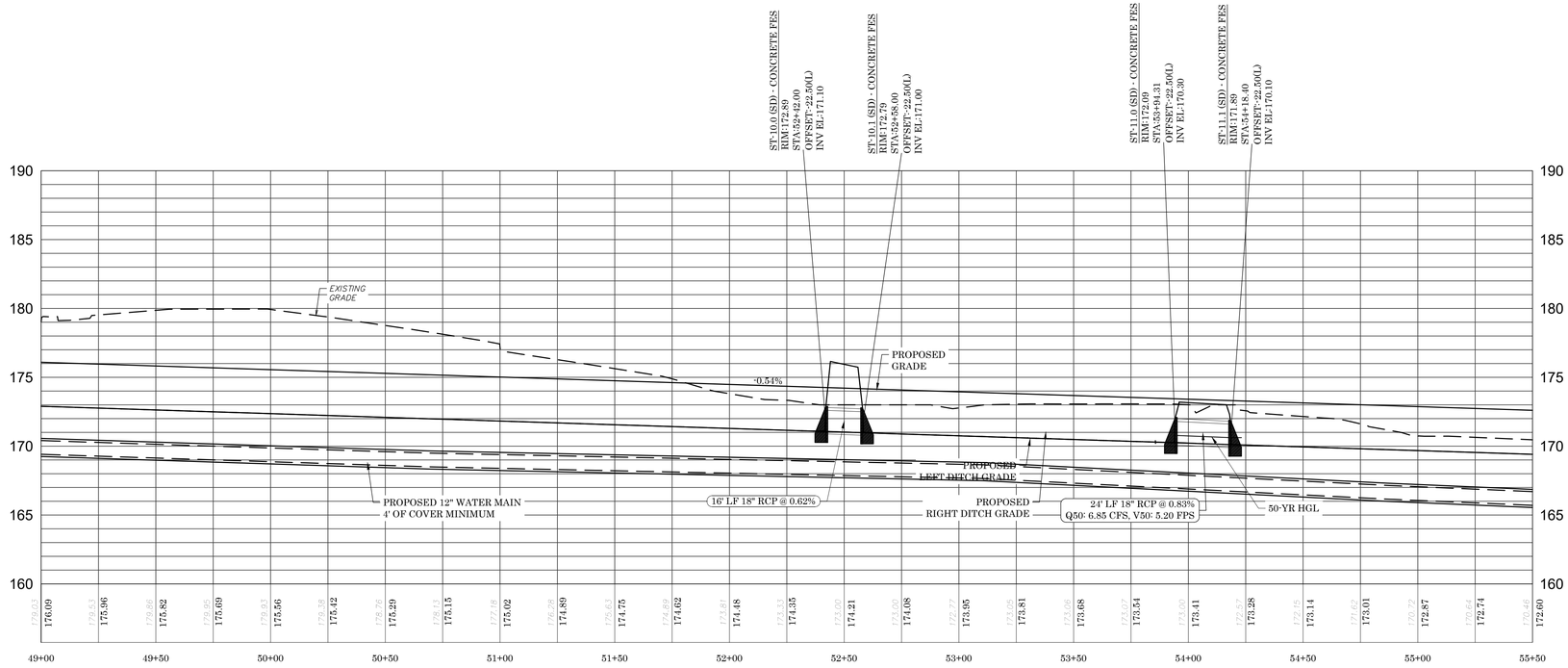


TWIN LAKES ROAD ALIGNMENT
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## GENERAL SITE NOTES:

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GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

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| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

# ROADWAY PLAN & PROFILE

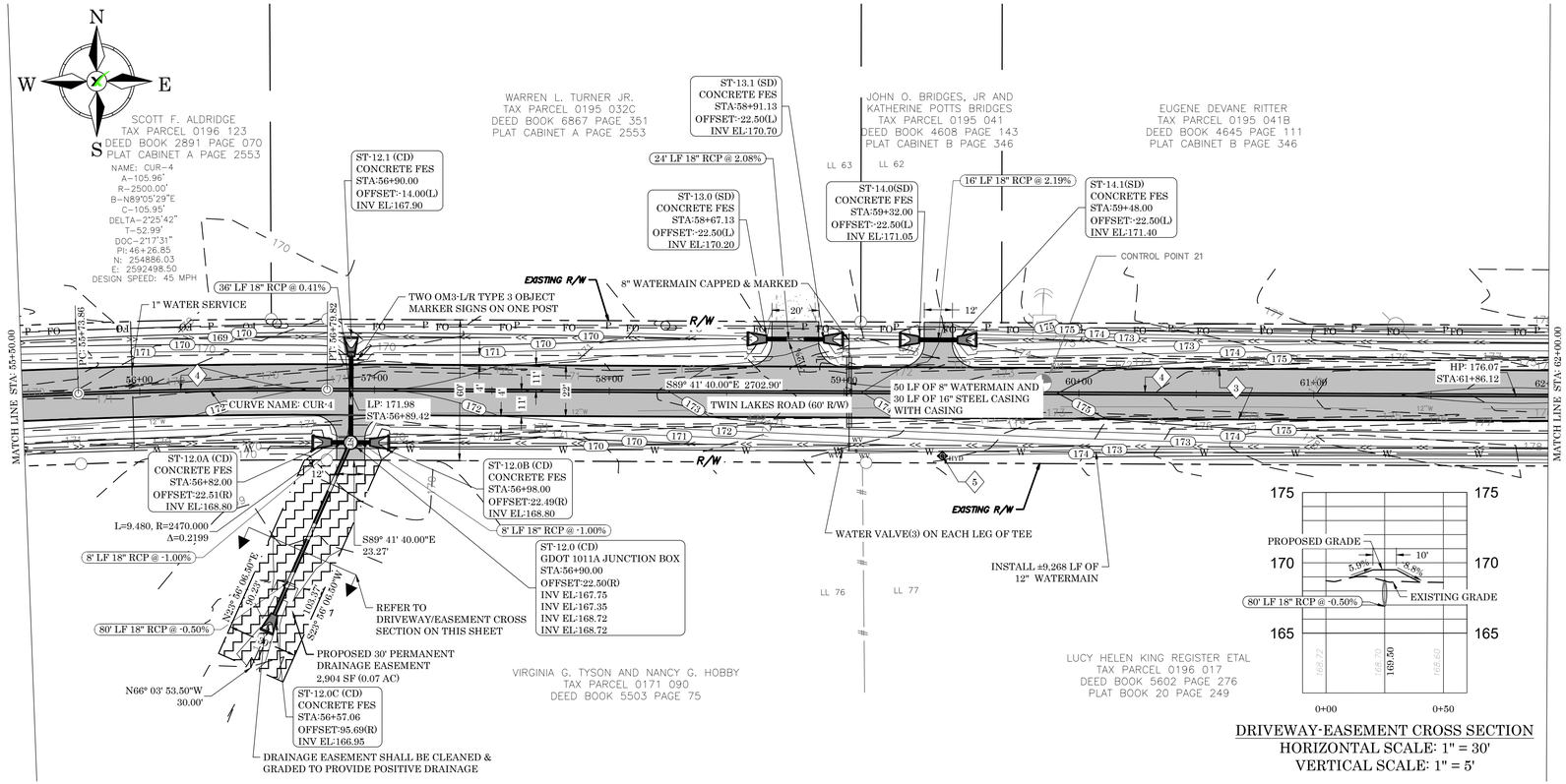
TWIN LAKES ROAD PAVING
IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEP009117
CERTIFICATE OF AUTHORIZATION
06/30/2026

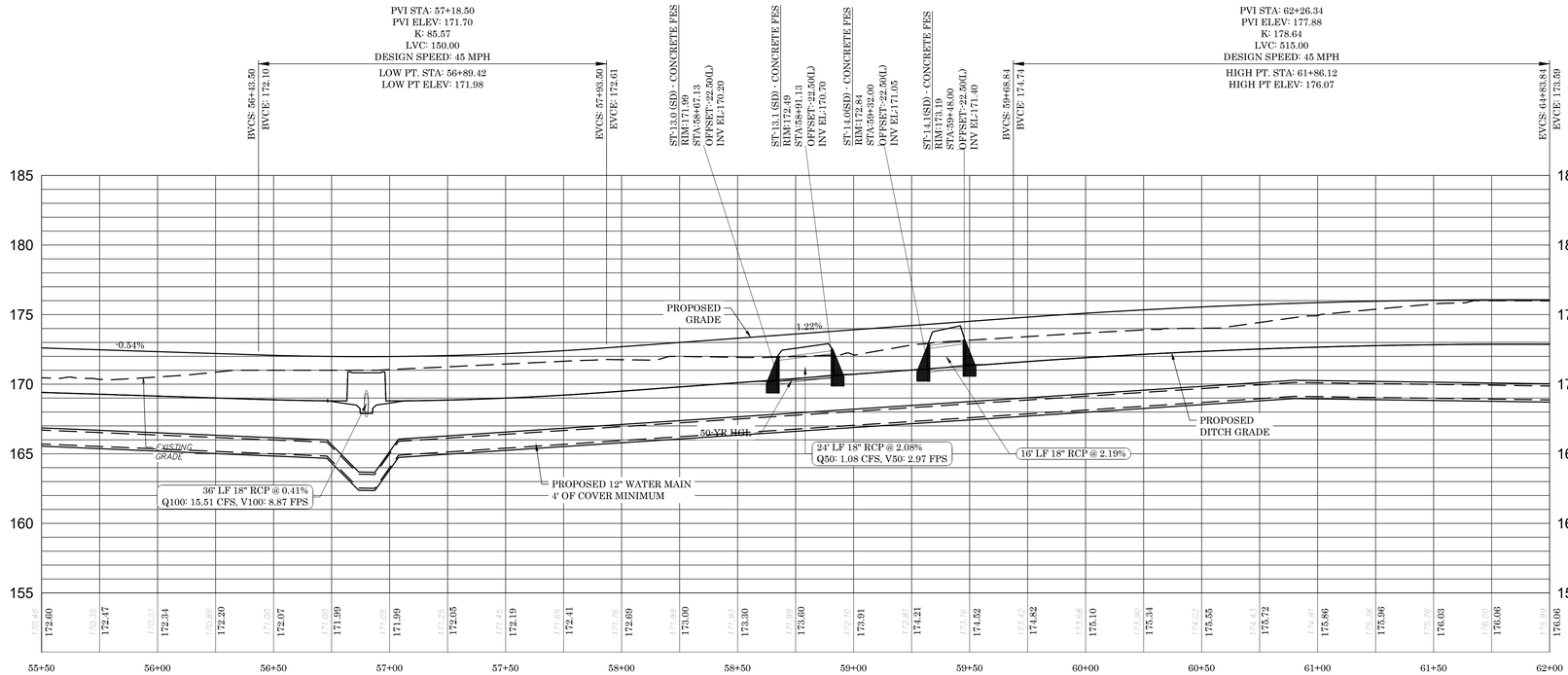
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
MATTHEW VARNER

| | |
|---|---|
| PROJECT NO. | 25-25014 |
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.
C6.6




DRIVEWAY-EASEMENT CROSS SECTION
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'




TWIN LAKES ROAD ALIGNMENT
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VERTICAL SCALE: 1" = 5'

| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

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| CHECK BY: | JVM |

SHEET NO.
C6.7

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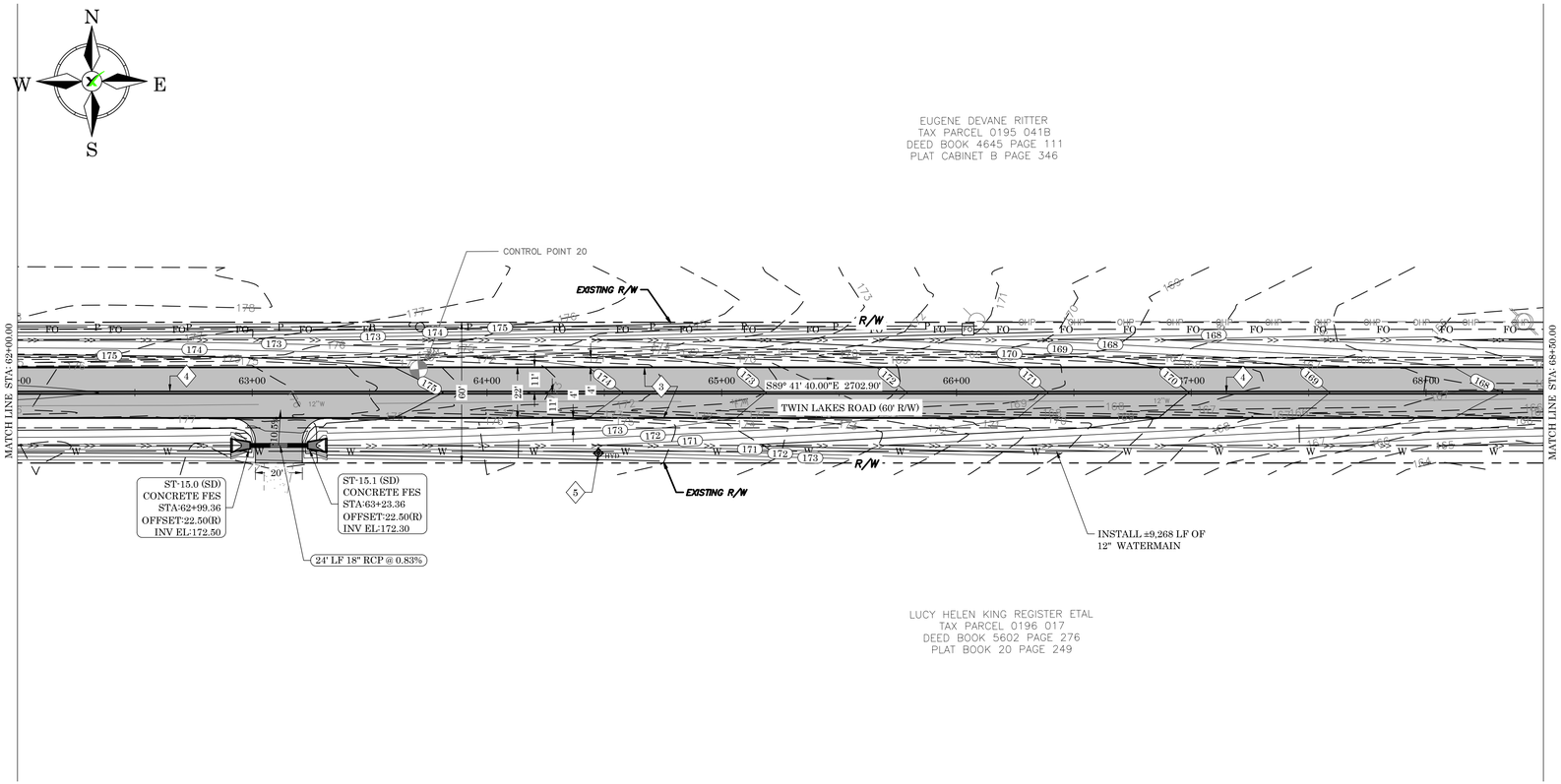


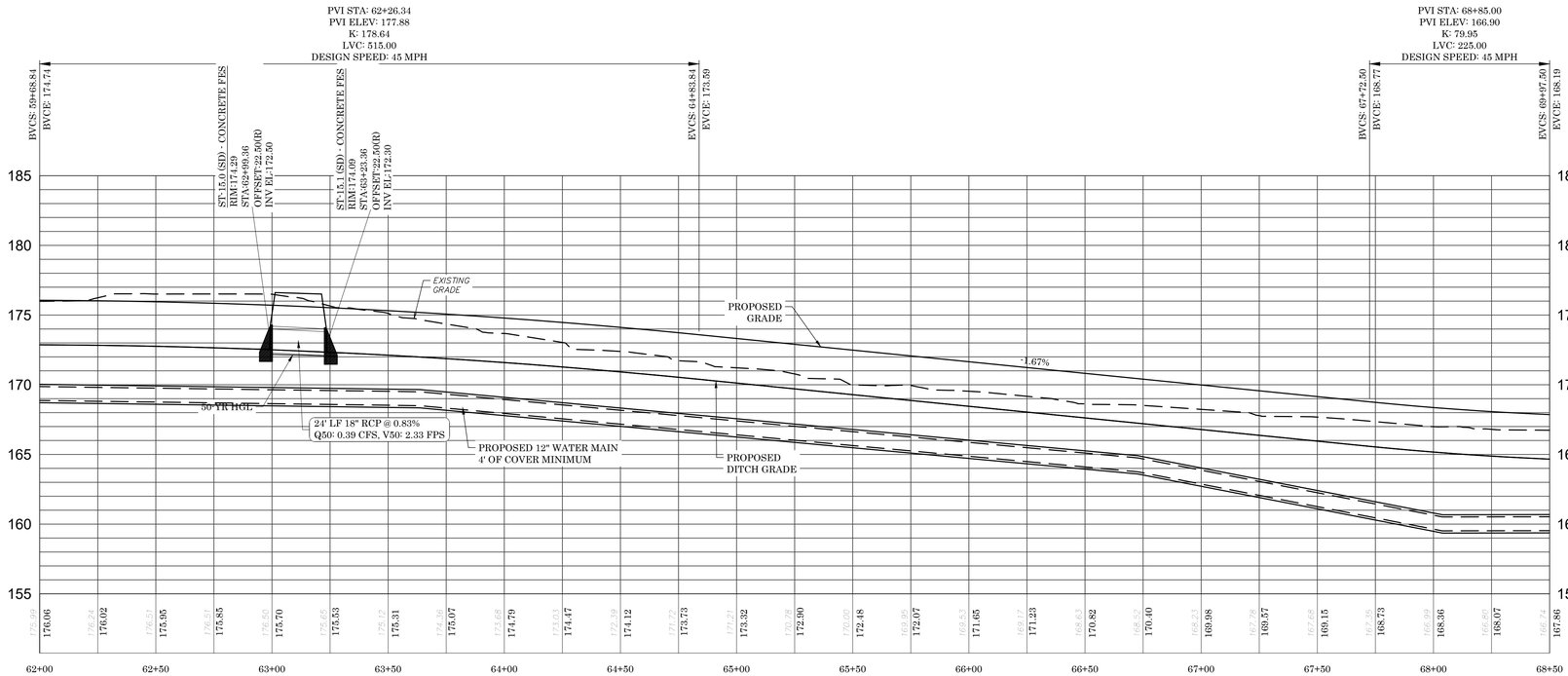


TWIN LAKES ROAD ALIGNMENT
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VERTICAL SCALE: 1" = 5'

| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

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5. FINAL GRADES SHALL BE FLUSH WITH THE EDGE OF PAVEMENT.
6. SEE DETAILS FOR TYPICAL PAVEMENT SECTIONS.

## HATCH LEGEND:

- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- EXISTING ASPHALT PAVEMENT
- EXISTING DIRT/SOIL ROADWAY
- EXISTING CONCRETE PAVEMENT

## SPOT GRADE LEGEND:

- 150.00 — EXISTING GRADE
- (150.00) — PROPOSED GRADE
- HP:150.00 — PROPOSED HIGH POINT
- LP:150.00 — PROPOSED LOW POINT

## KEY NOTES:

1. PROVIDE SMOOTH TRANSITION TO EXISTING GRADE
2. 24" SOLID WHITE STOP BAR: THERMOPLASTIC
3. 5" SOLID WHITE EDGE STRIPING: HIGH BUILD
4. 5" SOLID DOUBLE YELLOW STRIPING: HIGH BUILD: WITH 2 EA TYPE 1 (YELLOW) RPMs @ 40' SPACING
5. FIRE HYDRANT ASSEMBLY AND GATE VALVE

SURVEY CONTROL POINTS

| PointNo. | Northing(Y) | Easting(X) | Elev(Z) | Description |
|---|---|---|---|---|
| 1 | 254846.1200 | 2596922.4583 | 175.46 | 1\2RBFWC |
| 3 | 254883.3376 | 2595839.2101 | 181.57 | 1\2RBFWC-B |
| 8 | 254882.5209 | 2595348.9975 | 182.76 | 1\2RBFWC-C |
| 13 | 254875.3868 | 2594887.9748 | 179.41 | RBPWC D |
| 18 | 254881.8448 | 2594416.5867 | 171.88 | RBPWC E |
| 19 | 254886.6675 | 2593948.1325 | 167.41 | RBPWC F |
| 20 | 254892.0224 | 2593242.6185 | 173.71 | RBPWC G |
| 21 | 254888.4777 | 2592856.3183 | 173.02 | RBPWC H |
| 22 | 254875.8243 | 2592317.9510 | 172.03 | RBPWC I |
| 26 | 254867.4898 | 2591827.9529 | 178.05 | RBPWC J |
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| 34 | 254864.5681 | 2590480.2681 | 181.22 | RBPWC L |
| 35 | 254857.7805 | 2589719.4129 | 179.07 | RBPWC M |
| 120 | 254876.6004 | 2589115.2196 | 181.55 | RBPWC N |
| 122 | 254583.0449 | 2588446.7875 | 176.56 | RBPWC O |
| 132 | 254507.4397 | 2587921.6986 | 179.36 | NLF |
| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
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| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG\VALDOSTA\WARNER ROBINS

# ROADWAY PLAN & PROFILE
## TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEP009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
BY: MATTHEW VANMAN

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C6.8

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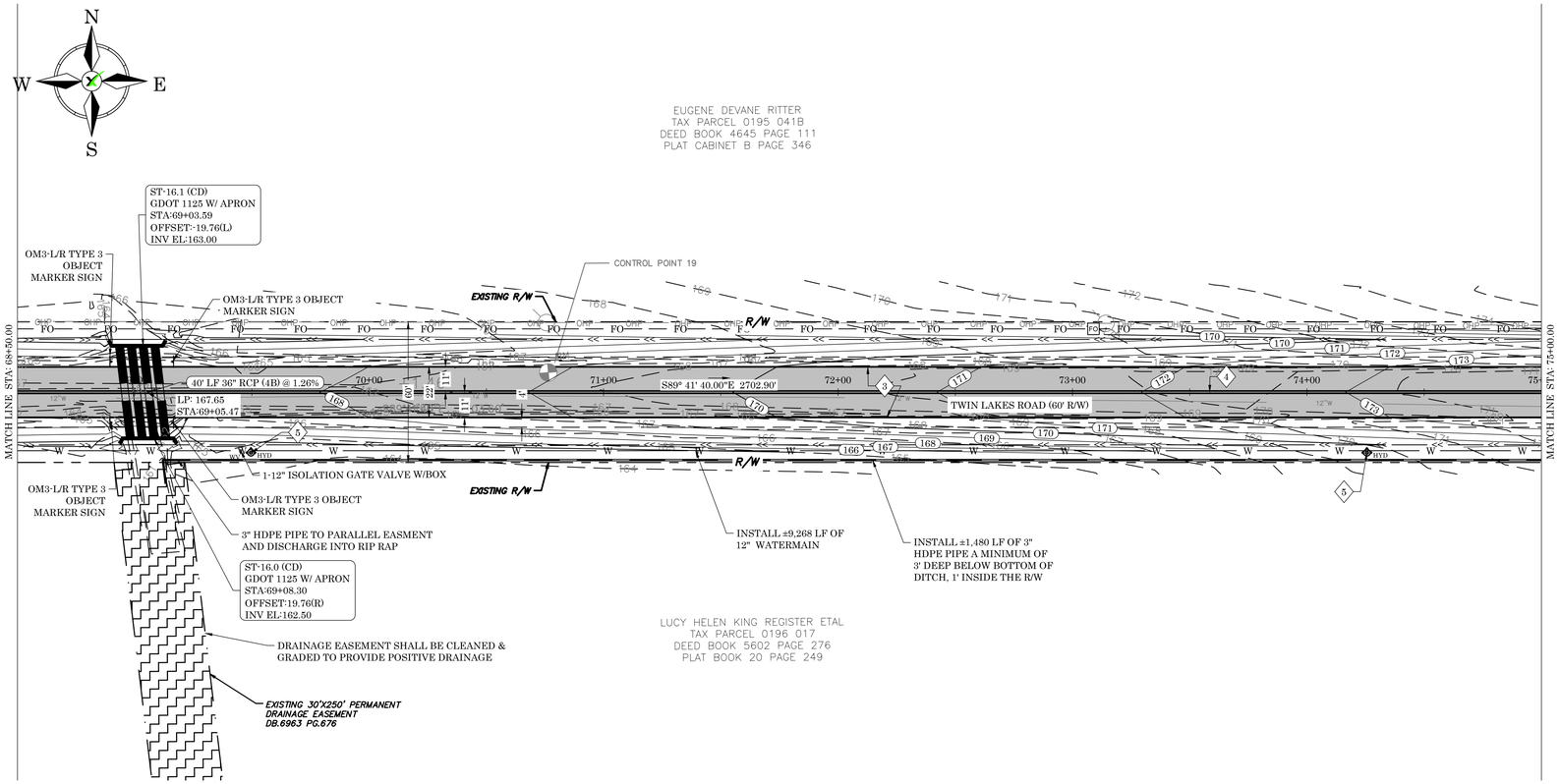


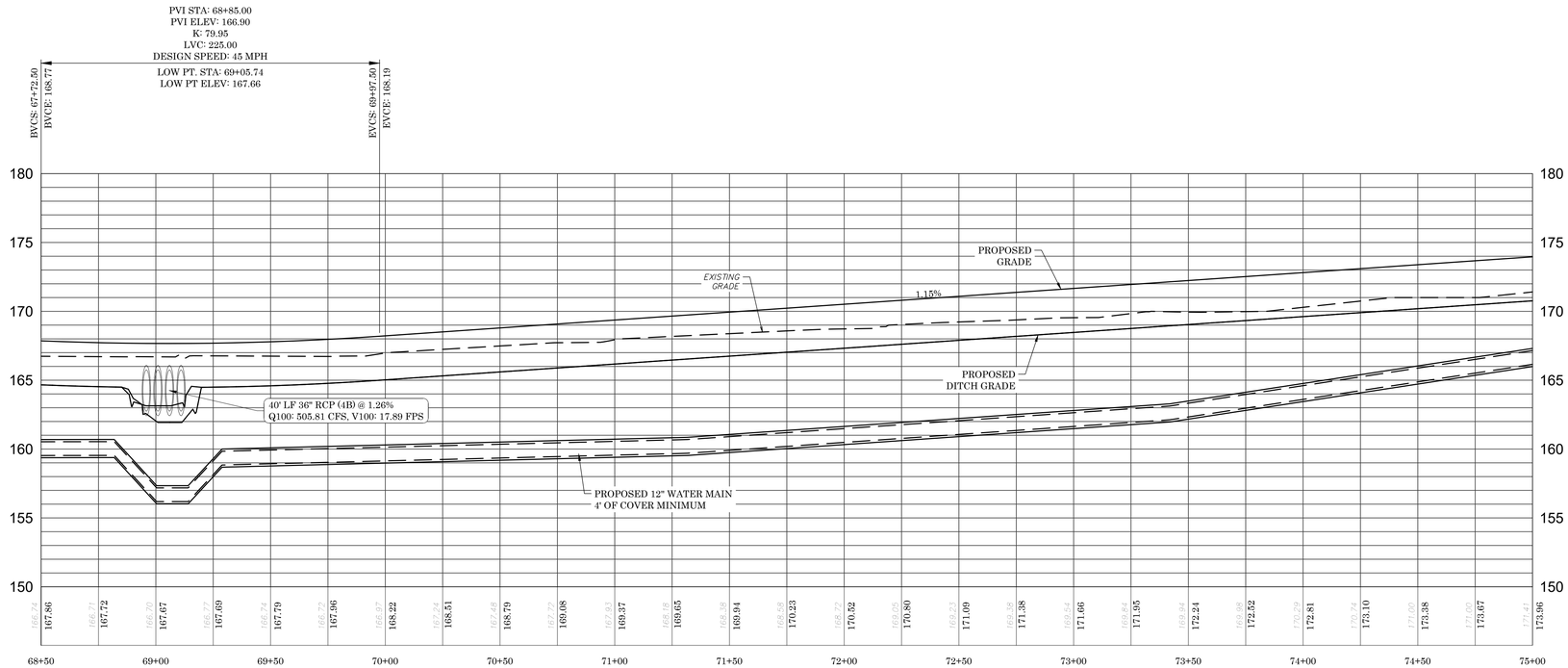


TWIN LAKES ROAD ALIGNMENT
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## GENERAL SITE NOTES:

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GEORGIA811 www.Georgia811.com

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AXIS
ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

# ROADWAY PLAN & PROFILE

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA — AXIS ENGINEERING CONSULTANTS — PEP009117 — 06/30/2026 — CERTIFICATE OF AUTHORIZATION

GEORGIA — REGISTERED — No. PE030417 — PROFESSIONAL — 3/20/2026 — ENGINEER — M. MATTHEW VANMAN

| | |
|---|---|
| PROJECT NO. | 25-25014 |
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.
C6.9

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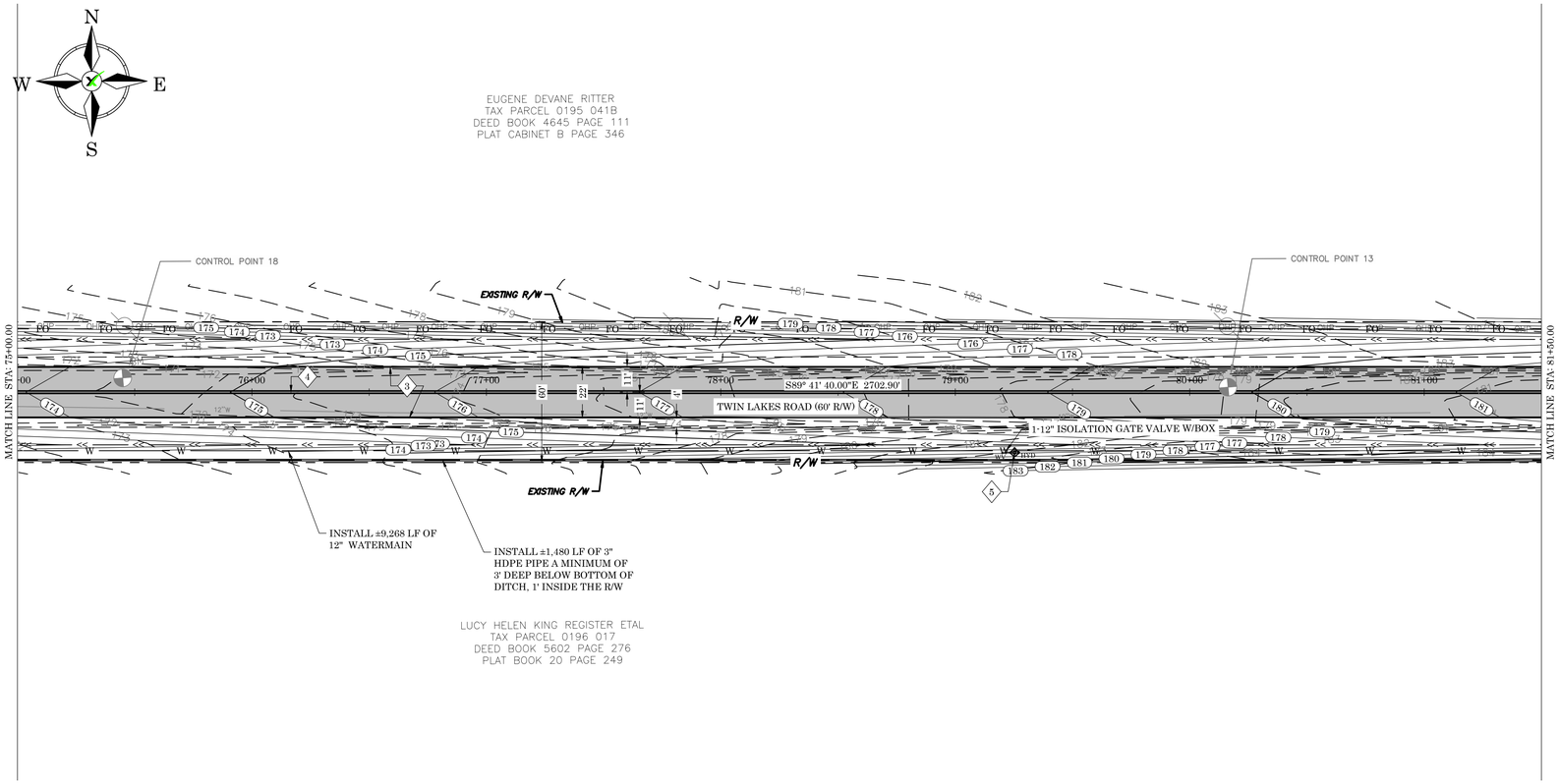


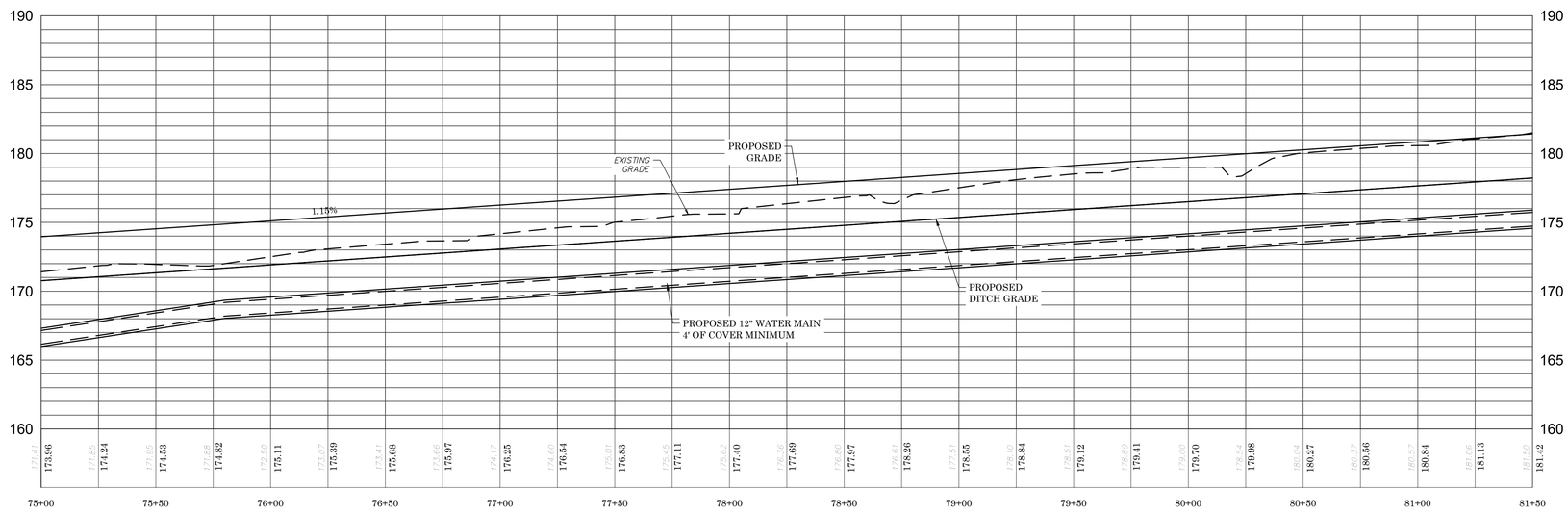


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| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

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AXIS
ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

# ROADWAY PLAN & PROFILE

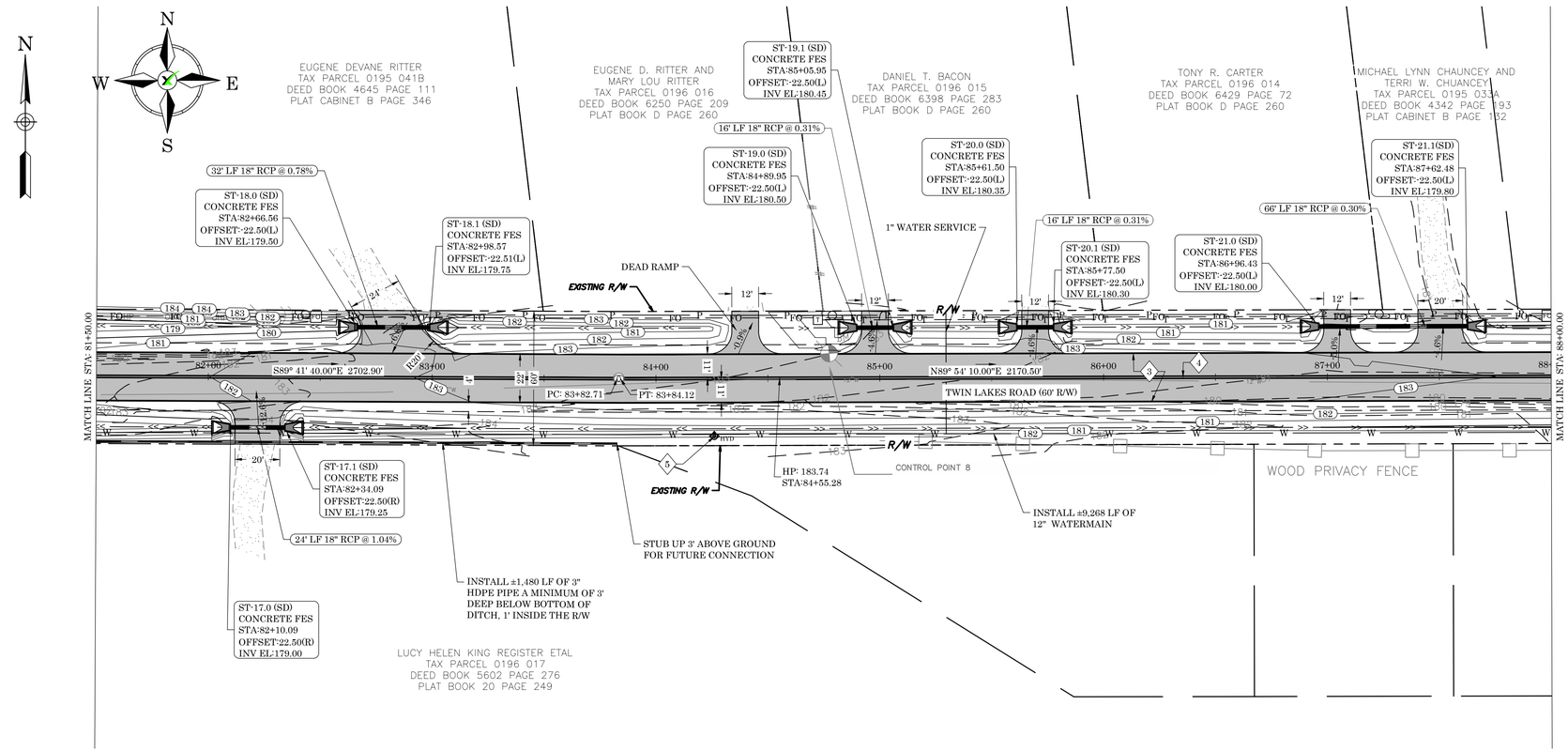
TWIN LAKES ROAD PAVING IMPROVEMENTS

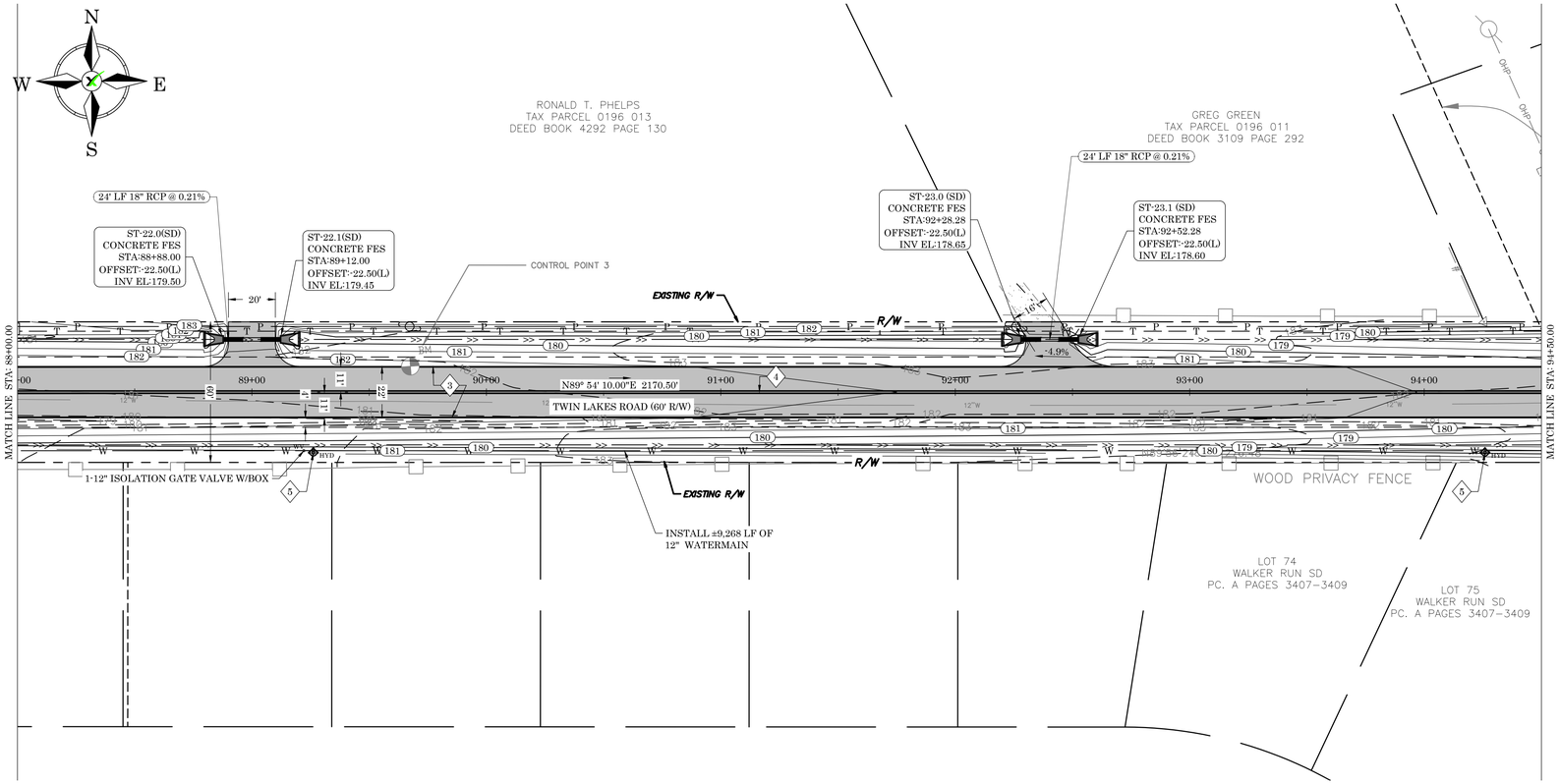
GEORGIA — AXIS ENGINEERING CONSULTANTS — PEPO09117 — 06/30/2026 — CERTIFICATE OF AUTHORIZATION

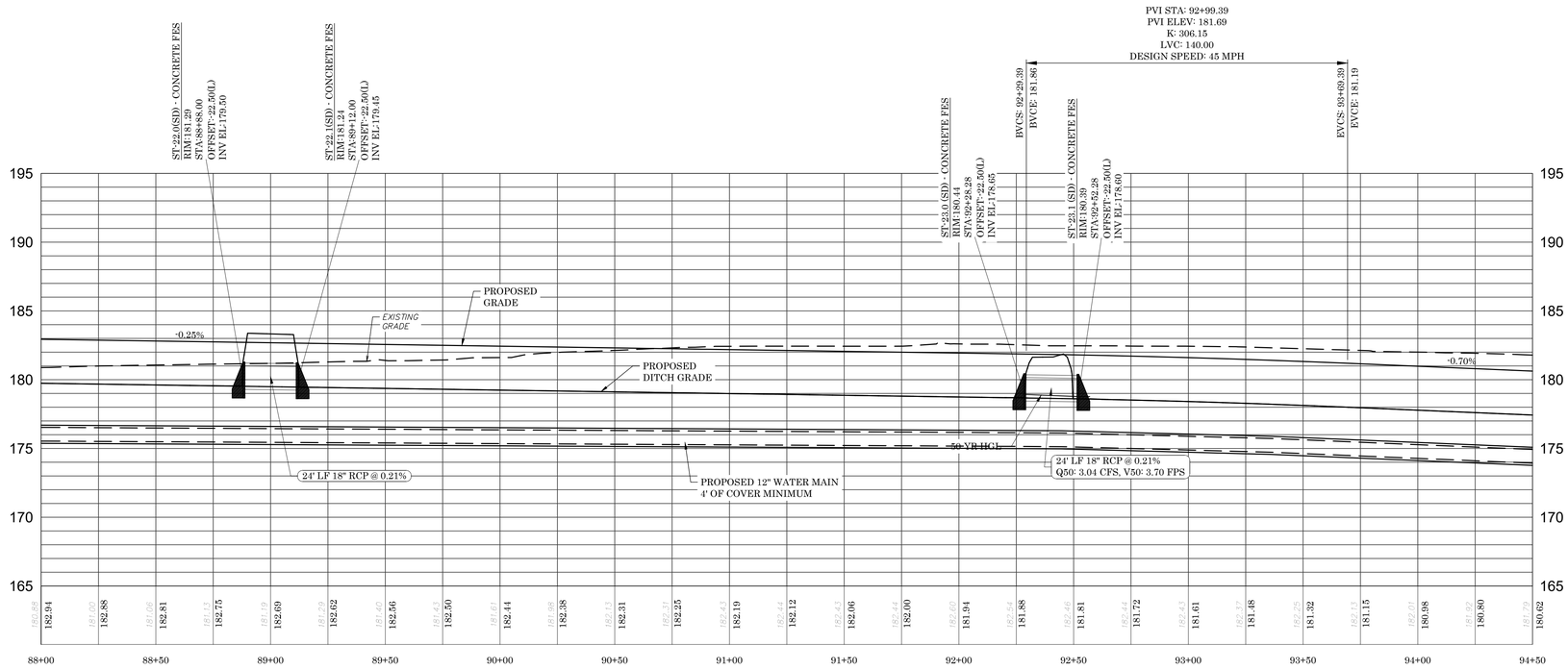
GEORGIA — REGISTERED — No. PE030417 — PROFESSIONAL — 3/20/2026 — ENGINEER — BY: MATTHEW VARNER

| | |
|---|---|
| PROJECT NO. | 25-25014 |
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.
C6.10


N
W
E
S
EUGENE DEVANE RITTER
TAX PARCEL 0195 041B
DEED BOOK 4645 PAGE 111
PLAT CABINET B PAGE 346
EUGENE D. RITTER AND
MARY LOU RITTER
TAX PARCEL 0196 016
DEED BOOK 6250 PAGE 209
PLAT BOOK D PAGE 260
DANIEL T. BACON
TAX PARCEL 0196 015
DEED BOOK 6398 PAGE 283
PLAT BOOK D PAGE 260
TONY R. CARTER
TAX PARCEL 0196 014
DEED BOOK 6429 PAGE 72
PLAT BOOK D PAGE 260
MICHAEL LYNN CHAUNCEY AND
TERRI W. CHUANCEY
TAX PARCEL 0195 033A
DEED BOOK 4342 PAGE 193
PLAT CABINET B PAGE 152
LUCY HELEN KING REGISTER ETAL
TAX PARCEL 0196 017
DEED BOOK 5602 PAGE 276
PLAT BOOK 20 PAGE 249
MATCH LINE STA: 81+50.00
MATCH LINE STA: 88+40.00
TWIN LAKES ROAD (60' R/W)
S89° 41' 40.00"E 2702.90'
N89° 54' 10.00"E 2170.50'
PC: 83+82.71
PT: 83+84.12
EXISTING R/W
DEAD RAMP
1" WATER SERVICE
WOOD PRIVACY FENCE
CONTROL POINT 8
HP: 183.74
STA:84+55.28
INSTALL ±9,268 LF OF
12" WATERMAIN
STUB UP 3' ABOVE GROUND
FOR FUTURE CONNECTION
INSTALL ±1,480 LF OF 3"
HDPE PIPE A MINIMUM OF 3'
DEEP BELOW BOTTOM OF
DITCH, 1' INSIDE THE R/W
ST-18.0 (SD)
CONCRETE FES
STA:82+66.56
OFFSET:-22.50(L)
INV EL:179.50
ST-18.1 (SD)
CONCRETE FES
STA:82+98.57
OFFSET:-22.51(L)
INV EL:179.75
ST-19.1 (SD)
CONCRETE FES
STA:85+05.95
OFFSET:-22.50(L)
INV EL:180.45
ST-19.0 (SD)
CONCRETE FES
STA:84+89.95
OFFSET:-22.50(L)
INV EL:180.50
ST-20.0 (SD)
CONCRETE FES
STA:85+61.50
OFFSET:-22.50(L)
INV EL:180.35
ST-20.1 (SD)
CONCRETE FES
STA:85+77.50
OFFSET:-22.50(L)
INV EL:180.30
ST-21.0 (SD)
CONCRETE FES
STA:86+96.43
OFFSET:-22.50(L)
INV EL:180.00
ST-21.1(SD)
CONCRETE FES
STA:87+62.48
OFFSET:-22.50(L)
INV EL:179.80
ST-17.0 (SD)
CONCRETE FES
STA:82+10.09
OFFSET:22.50(R)
INV EL:179.00
ST-17.1 (SD)
CONCRETE FES
STA:82+34.09
OFFSET:22.50(R)
INV EL:179.25
32' LF 18" RCP @ 0.78%
16' LF 18" RCP @ 0.31%
66' LF 18" RCP @ 0.30%
24' LF 18" RCP @ 1.04%
20'
12'
24'
40'
-4.82%
-4.16%
-4.06%
-4.10%
-4.16%
-4.06%
-4.10%
-4.16%
-4.06%
-4.10

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| 13 | 254875.3868 | 2594887.9748 | 179.41 | RBPWC D |
| 18 | 254881.8448 | 2594416.5867 | 171.88 | RBPWC E |
| 19 | 254886.6675 | 2593948.1325 | 167.41 | RBPWC F |
| 20 | 254892.0224 | 2593242.6185 | 173.71 | RBPWC G |
| 21 | 254888.4777 | 2592856.3183 | 173.02 | RBPWC H |
| 22 | 254875.8243 | 2592317.9510 | 172.03 | RBPWC I |
| 26 | 254867.4898 | 2591827.9529 | 178.05 | RBPWC J |
| 31 | 254860.1197 | 2591235.5701 | 178.03 | RBPWC K |
| 34 | 254864.5681 | 2590480.2681 | 181.22 | RBPWC L |
| 35 | 254857.7805 | 2589719.4129 | 179.07 | RBPWC M |
| 120 | 254876.6004 | 2589115.2196 | 181.55 | RBFWC N |
| 122 | 254583.0449 | 2588446.7875 | 176.56 | RBFWC O |
| 132 | 254507.4397 | 2587921.6986 | 179.36 | NLF |
| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC-A |

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

| REVISIONS | | |
|---|---|---|
| No. | DATE | DESCRIPTION |
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 12/9/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG\VALDOSTA\WARNER ROBINS

# ROADWAY PLAN & PROFILE

TWIN LAKES ROAD PAVING
IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEP009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
BY: MATTHEW VARNER

| | |
|---|---|
| PROJECT NO. | 25-25014 |
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.
C6.12

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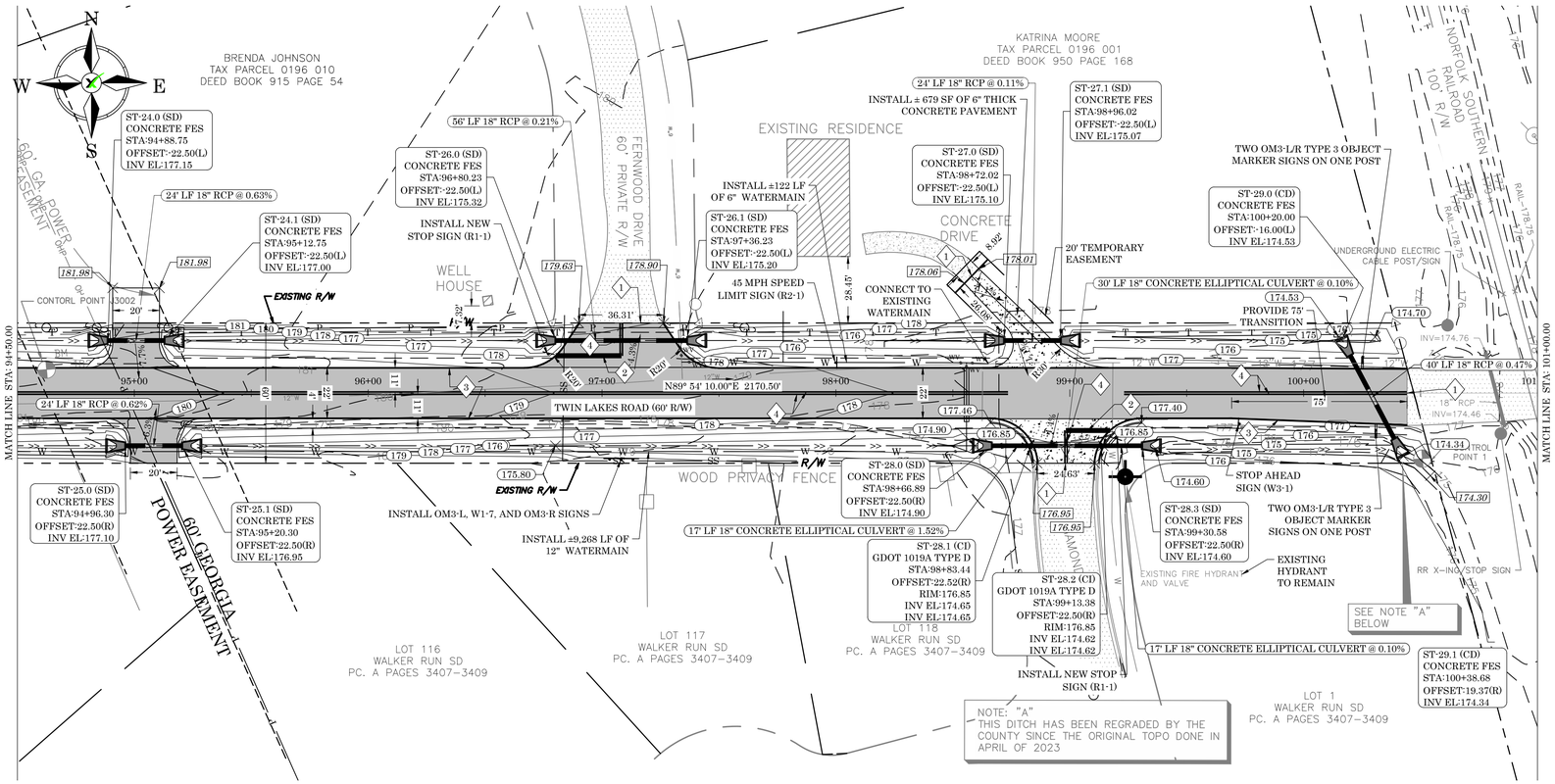


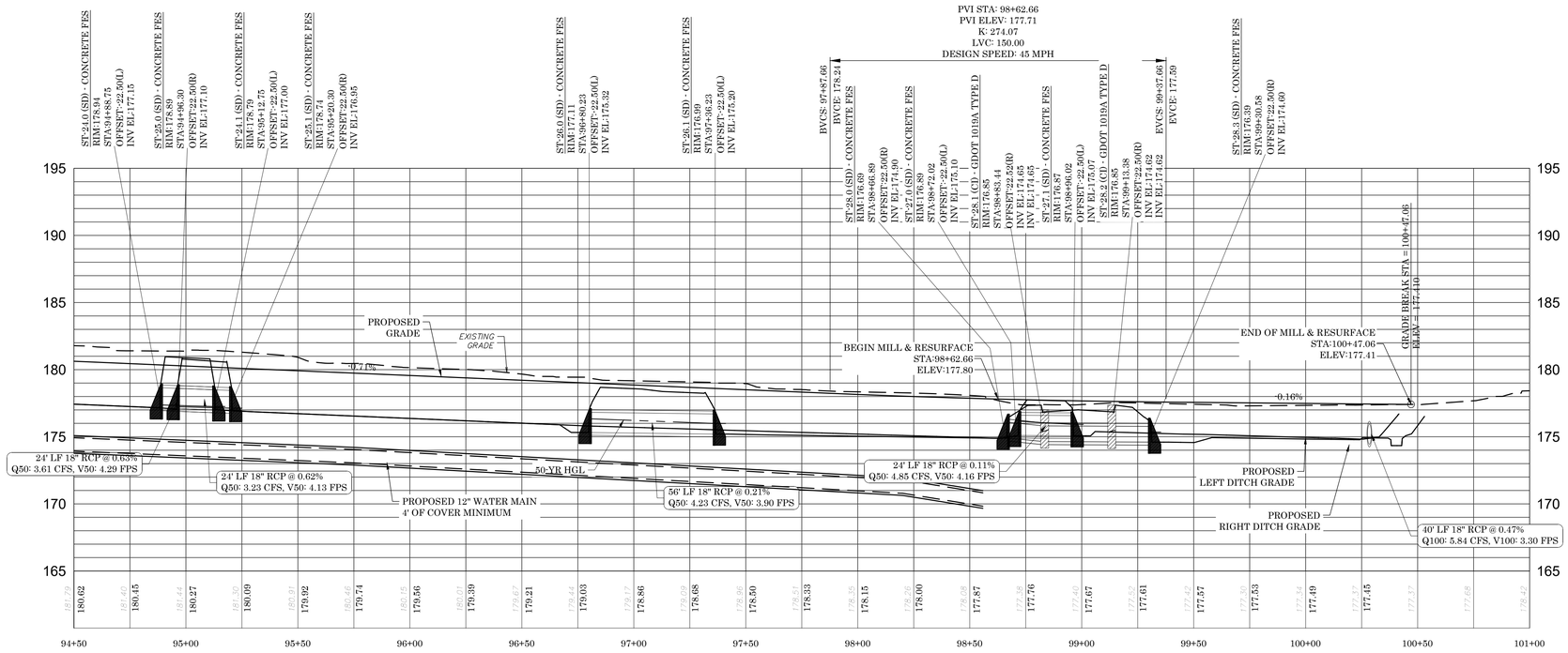


TWIN LAKES ROAD ALIGNMENT
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## GENERAL SITE NOTES:

1. ALL SIGNS AND STRIPING SHALL CONFIRM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - LATEST EDITION AND/OR DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
2. ALL DIMENSIONS ARE MEASURED FROM THE CENTERLINE OF ROADWAY TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
3. HORIZONTAL DATA SHOWN HEREON IS BASED ON NAD83 GEORGIA STATE PLANES, WEST ZONE, US FOOT. VERTICAL DATA SHOWN HEREON IS BASED ON NAVD 88(12B).
4. LOWNDES COUNTY WILL HANDLE ALL UTILITY RELOCATIONS.
5. CONTRACTOR RESPONSIBLE FOR RELOCATING MAILBOXES.

## PAVING, GRADING, & DRAINAGE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL FILL MATERIAL. FILL MATERIAL SHALL BE CLEAN AND FREE OF ALL DEBRIS AND ORGANIC MATERIAL. SUITABLE FILL MATERIAL SHALL BE PLACED IN LIFTS OF 8" OR LESS AND COMPACTED TO 95% STANDARD PROCTOR.
2. THE CONTRACTOR SHALL GRADE THE SITE TO PROVIDE POSITIVE DRAINAGE AS INDICATED BY THE PROPOSED ELEVATIONS, CONTOURS, AND DRAINAGE SLOPE ARROWS.
3. FINISHED GRADE ELEVATIONS SHOWN ARE TOP OF PAVEMENT AND/OR BOTTOM OF DITCH.
4. CONTRACTOR SHALL ADJUST ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, VALVE BOXES, ECT.) TO FINISHED GRADE ELEVATIONS.
5. FINAL GRADES SHALL BE FLUSH WITH THE EDGE OF PAVEMENT.
6. SEE DETAILS FOR TYPICAL PAVEMENT SECTIONS.

## HATCH LEGEND:

- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- EXISTING ASPHALT PAVEMENT
- EXISTING DIRT/SOIL ROADWAY
- EXISTING CONCRETE PAVEMENT

## SPOT GRADE LEGEND:

- 150.00 — EXISTING GRADE
- (150.00) — PROPOSED GRADE
- HP:150.00 — PROPOSED HIGH POINT
- LP:150.00 — PROPOSED LOW POINT

## KEY NOTES:

1. PROVIDE SMOOTH TRANSITION TO EXISTING GRADE
2. 24" SOLID WHITE STOP BAR: THERMOPLASTIC
3. 5" SOLID WHITE EDGE STRIPING: HIGH BUILD
4. 5" SOLID DOUBLE YELLOW STRIPING: HIGH BUILD: WITH 2 EA TYPE 1 (YELLOW) RPMs @ 40' SPACING
5. FIRE HYDRANT ASSEMBLY AND GATE VALVE

SURVEY CONTROL POINTS

| PointNo. | Northing(Y) | Easting(X) | Elev(Z) | Description |
|---|---|---|---|---|
| 1 | 254846.1200 | 2596922.4583 | 175.46 | 1\2RBFWC |
| 3 | 254883.3376 | 2595839.2101 | 181.57 | 1\2RBFWC–B |
| 8 | 254882.5209 | 2595348.9975 | 182.76 | 1\2RBFWC–C |
| 13 | 254875.3868 | 2594887.9748 | 179.41 | RBPWC D |
| 18 | 254881.8448 | 2594416.5867 | 171.88 | RBPWC E |
| 19 | 254886.6675 | 2593948.1325 | 167.41 | RBPWC F |
| 20 | 254892.0224 | 2593242.6185 | 173.71 | RBPWC G |
| 21 | 254888.4777 | 2592856.3183 | 173.02 | RBPWC H |
| 22 | 254875.8243 | 2592317.9510 | 172.03 | RBPWC I |
| 26 | 254867.4898 | 2591827.9529 | 178.05 | RBPWC J |
| 31 | 254860.1197 | 2591235.5701 | 178.03 | RBPWC K |
| 34 | 254864.5681 | 2590480.2681 | 181.22 | RBPWC L |
| 35 | 254857.7805 | 2589719.4129 | 179.07 | RBFWC M |
| 120 | 254876.6004 | 2589115.2196 | 181.55 | RBFWC N |
| 122 | 254583.0449 | 2588446.7875 | 176.56 | RBFWC O |
| 132 | 254507.4397 | 2587921.6986 | 179.36 | NLF |
| 151 | 254899.3271 | 2587837.1262 | 176.52 | NLF |
| J3002 | 254883.2459 | 2596334.0909 | 181.89 | 1\2RBFWC–A |

GEORGIA811 www.Georgia811.com

GRAPHIC SCALE 1" = 30'

REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

# ROADWAY PLAN & PROFILE

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA — AXIS ENGINEERING CONSULTANTS — PEP009117 — 06/30/2026 — CERTIFICATE OF AUTHORIZATION

GEORGIA — MATTHEW J. VARNER — No. PE030417 — PROFESSIONAL ENGINEER — 3/20/2026

| | |
|---|---|
| PROJECT NO. | 25-25014 |
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.
C6.13

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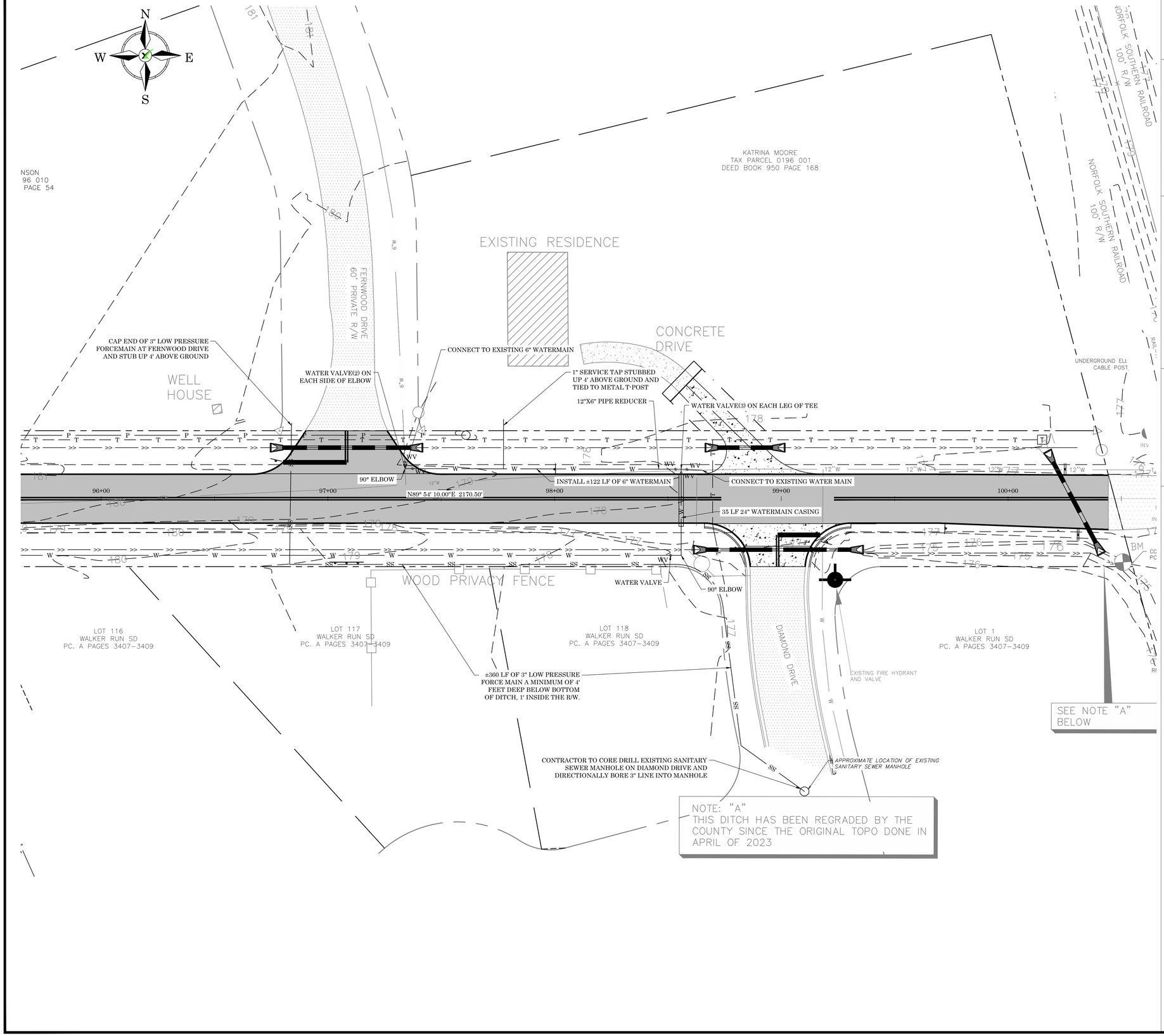


| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |

## GENERAL SITE NOTES:

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4. LOWNDES COUNTY WILL HANDLE ALL UTILITY RELOCATIONS.
5. CONTRACTOR RESPONSIBLE FOR RELOCATING MAILBOXES.

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## HATCH LEGEND:

- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- EXISTING ASPHALT PAVEMENT
- EXISTING DIRT/SOIL ROADWAY
- EXISTING CONCRETE PAVEMENT

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 12/9/2025 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |


AXIS
ENGINEERING CONSULTANTS
LEESBURG ALDOSTA WARNER ROBINS


# WATERMAIN EXTENSION PLAN

## TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
MATTHEW J. MAY
No. PE036117
PROFESSIONAL
3/20/2026
ENGINEER

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C6.14

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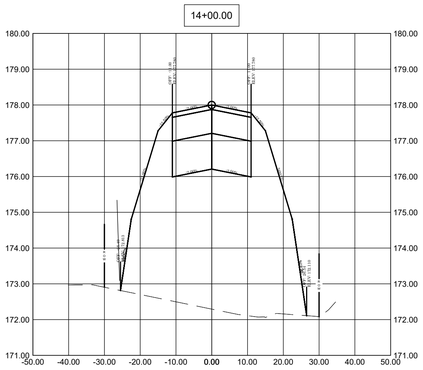


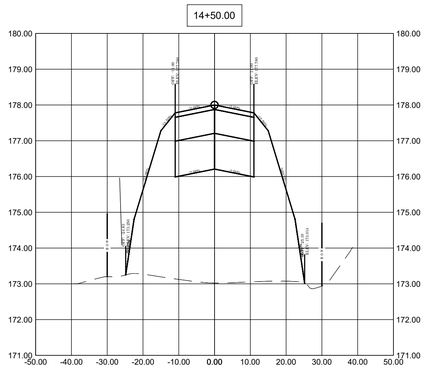


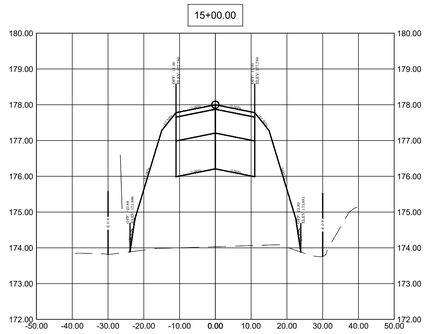


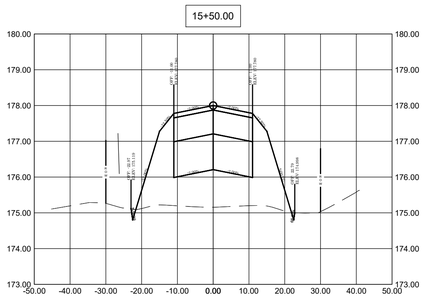


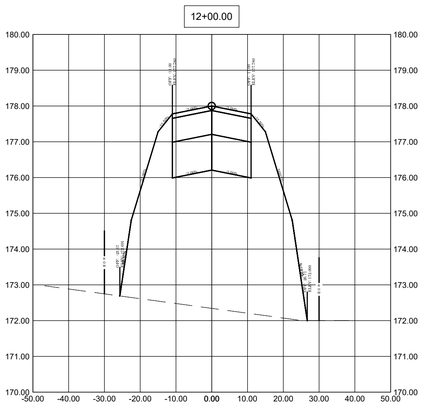


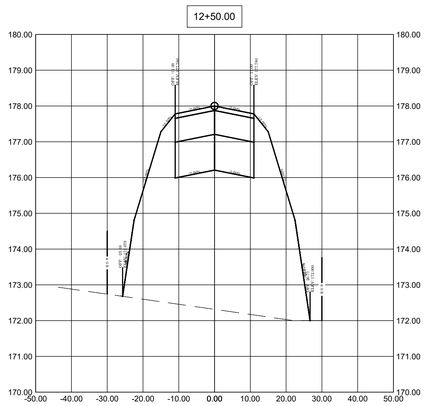


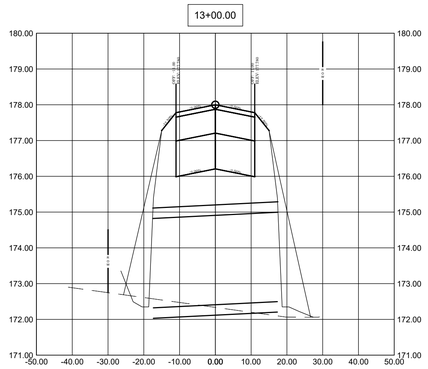


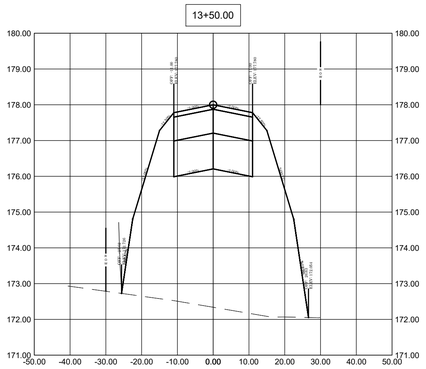


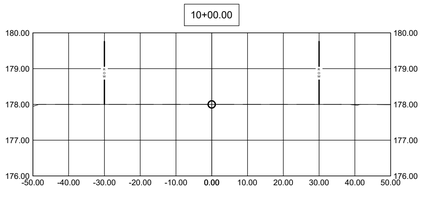


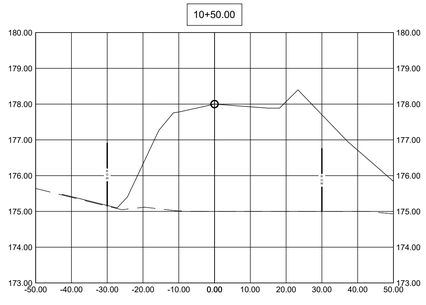


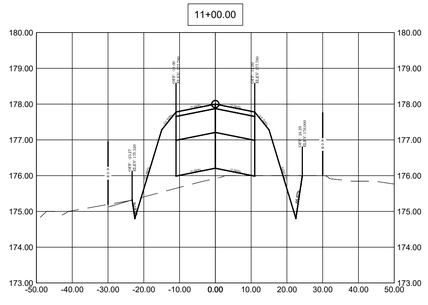


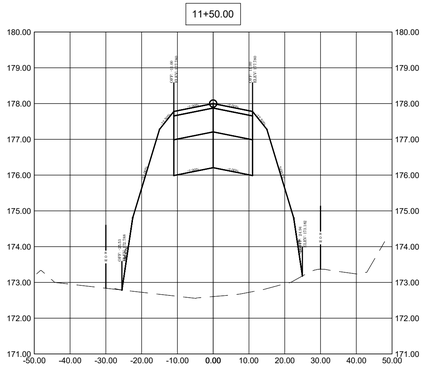


TWIN LAKES ROAD (CR 390) CROSS SECTIONS
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

GRAPHIC SCALE 1" = 20'

REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 2/28/2025 | REV. PER COUNTY COMMENTS |
| 3 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 4 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 5 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 6 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/4/2026 | REV. PER COUNTY COMMENTS |

AXIS
ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

# ROADWAY CROSS SECTIONS

## TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE009117
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW LYMAN

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C7.0

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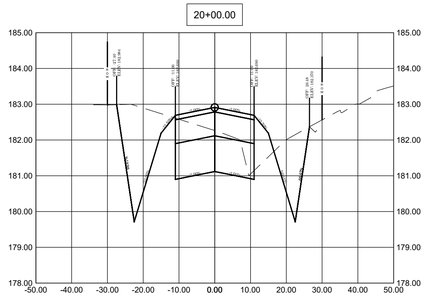


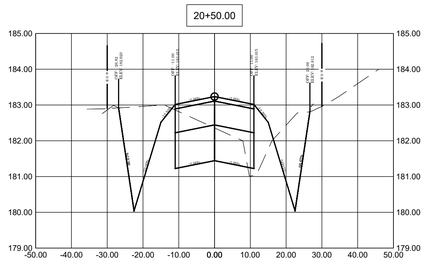


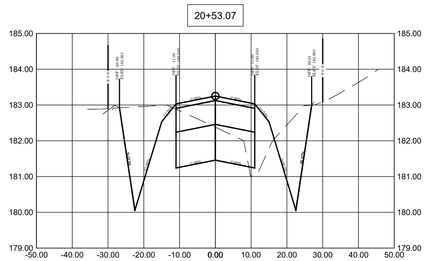


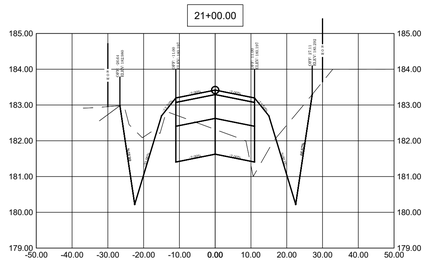


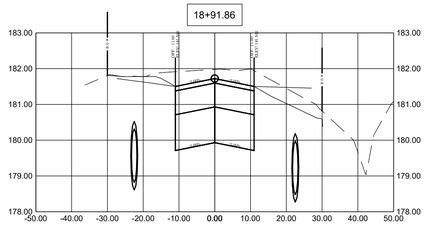


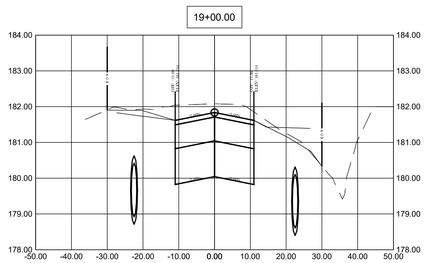


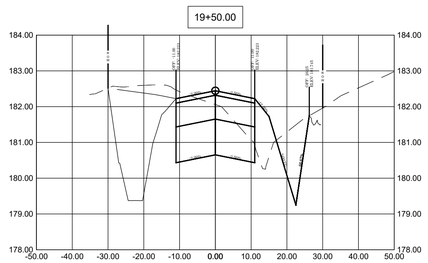


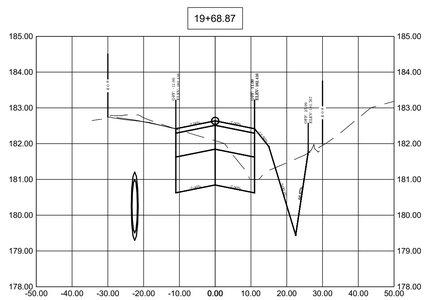


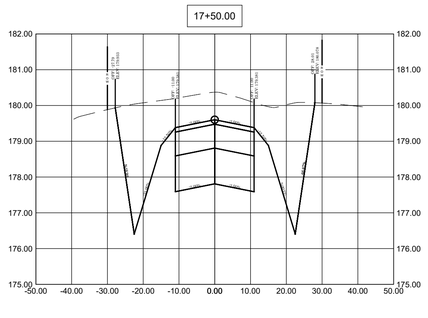


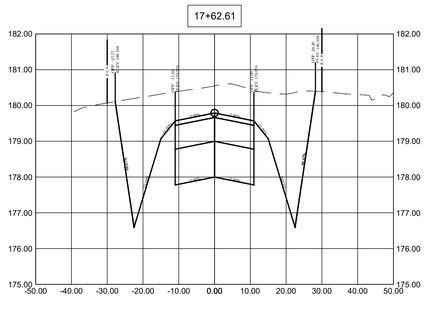


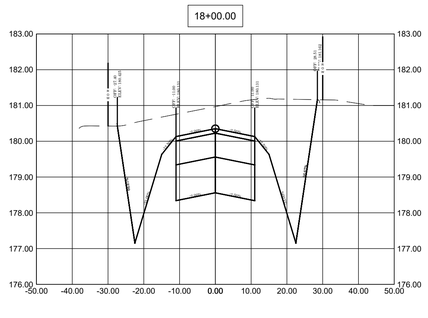


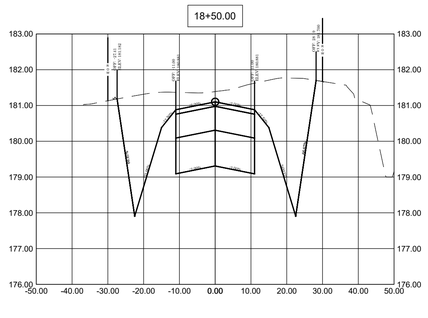


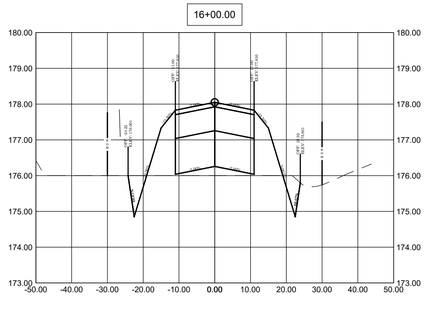


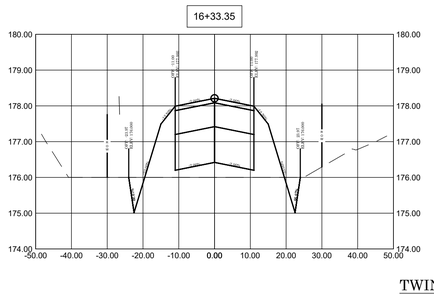


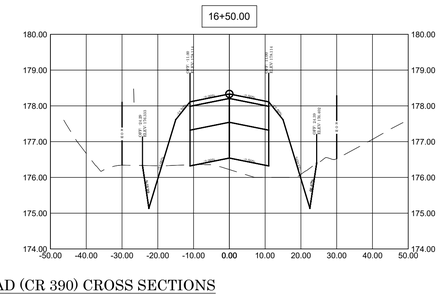


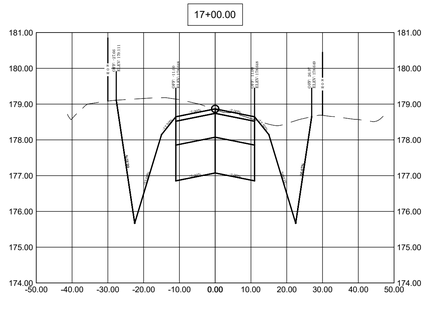


TWIN LAKES ROAD (CR 390) CROSS SECTIONS
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

GRAPHIC SCALE 1" = 20'

REVISIONS

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| 7 | 3/4/2026 | REV. PER COUNTY COMMENTS |

AXIS
ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

# ROADWAY CROSS SECTIONS

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW LYMAN

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C7.1

GEORGIA811 www.Georgia811.com

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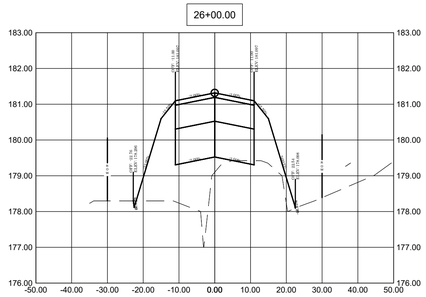


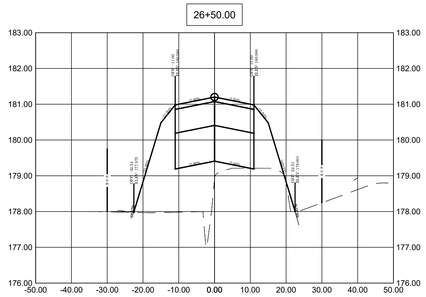


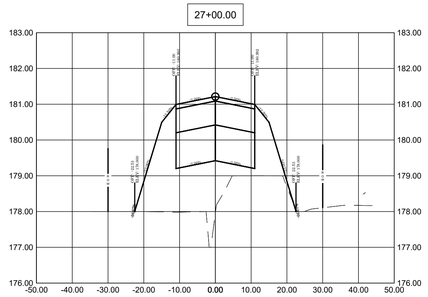


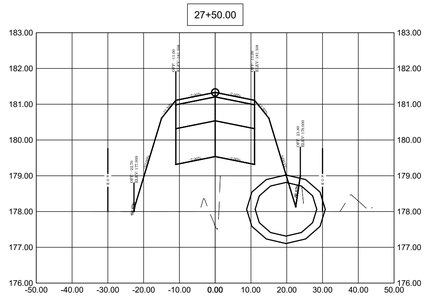


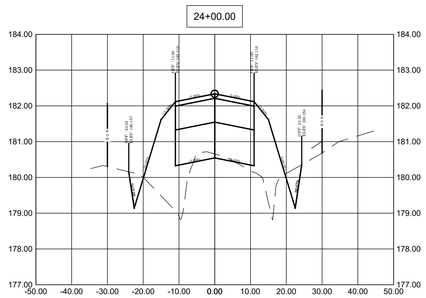


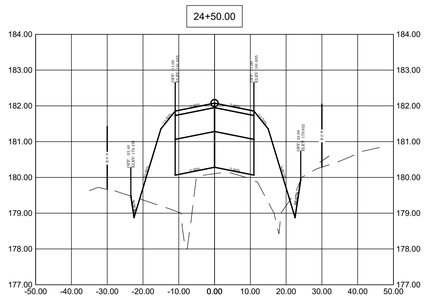


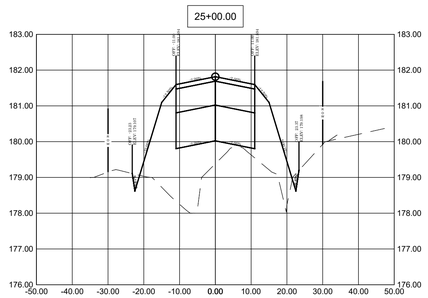


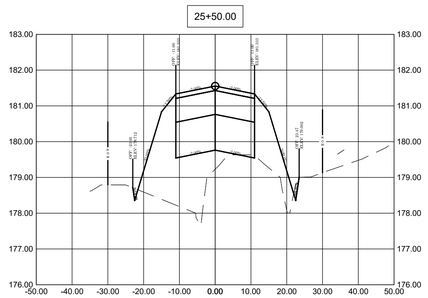


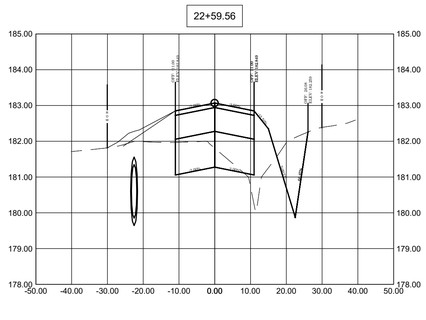


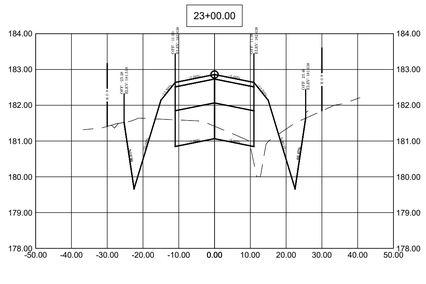


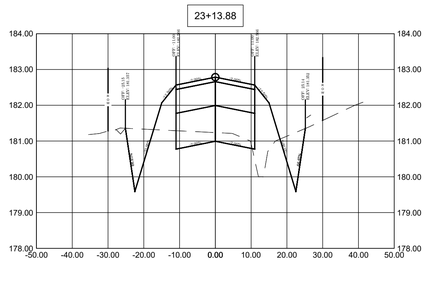


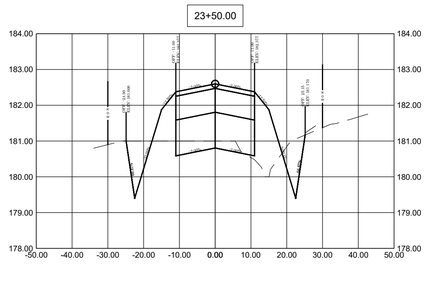


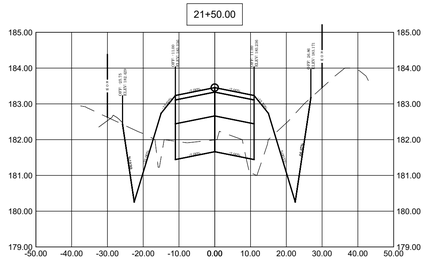


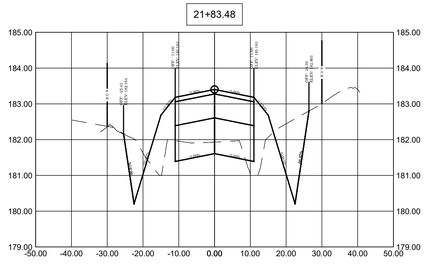


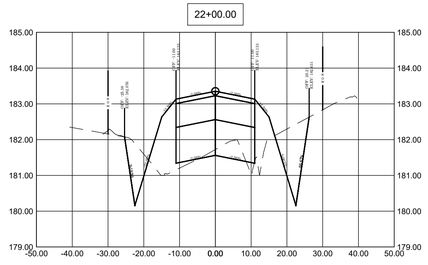


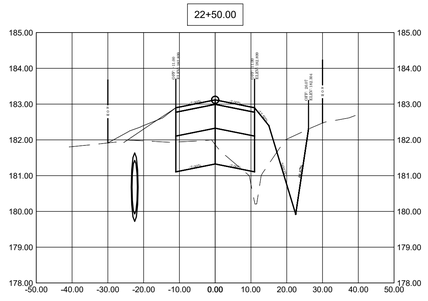


TWIN LAKES ROAD (CR 390) CROSS SECTIONS
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

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20' 10' 0' 20'
GRAPHIC SCALE 1" = 20'

REVISIONS

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AXIS
ENGINEERING CONSULTANTS
LEESBURG | ALDOSTA | WARNER ROBINS

# ROADWAY CROSS SECTIONS

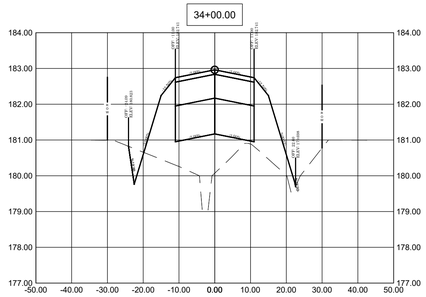
TWIN LAKES ROAD PAVING IMPROVEMENTS

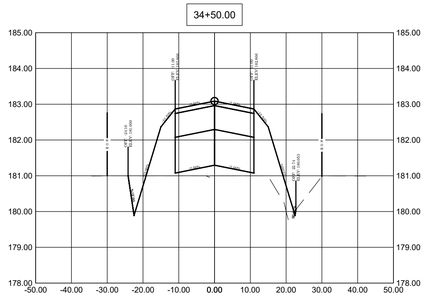
GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

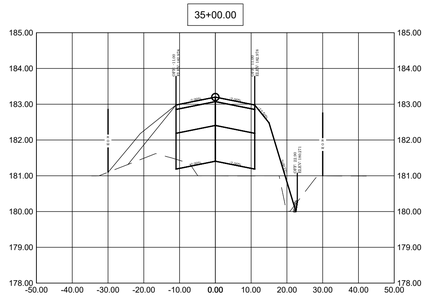
GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
MATTHEW J. SMAY

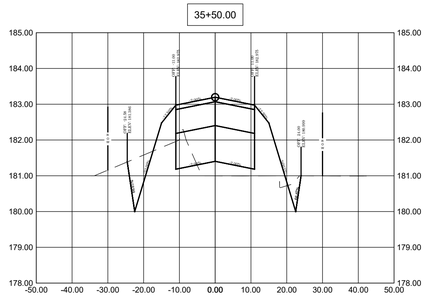
PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

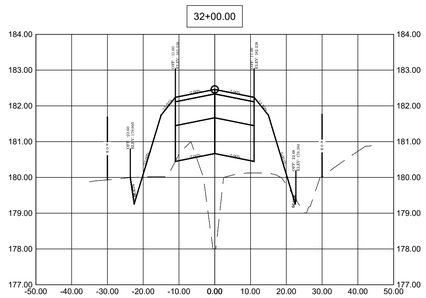
SHEET NO.
C7.2

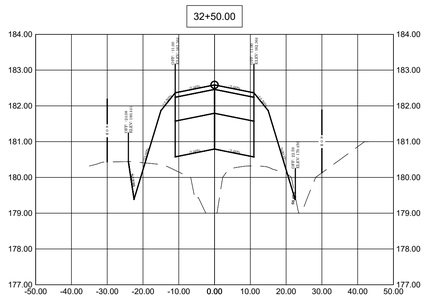


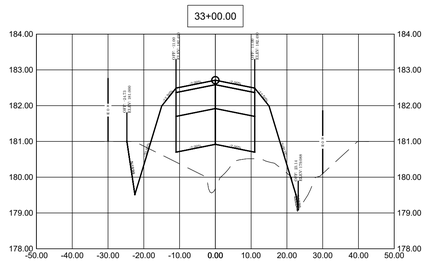



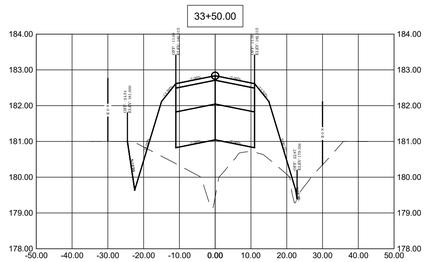



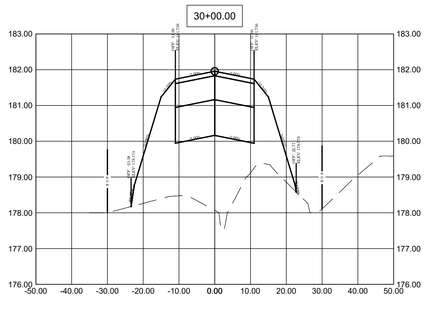



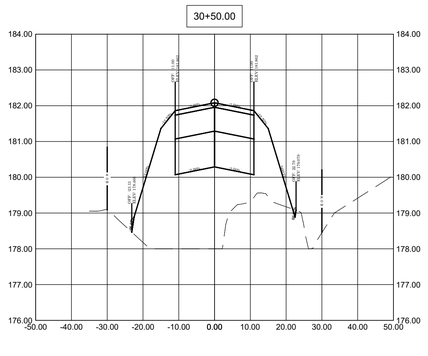



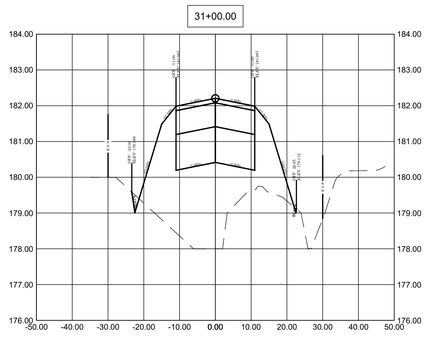



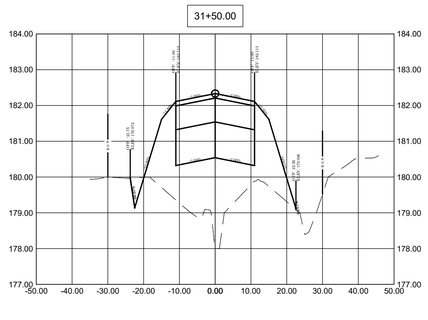



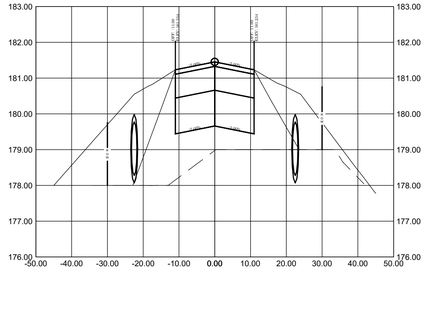



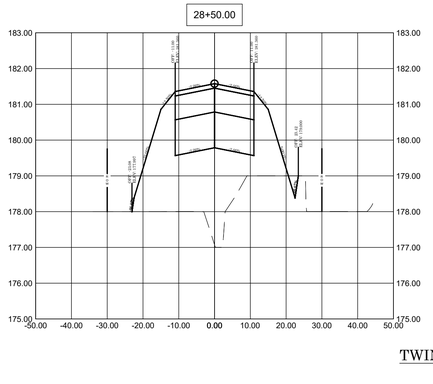



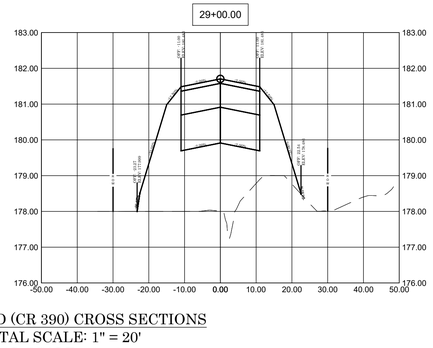



TWIN LAKES ROAD (CR 390) CROSS SECTIONS
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AXIS
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LEESBURG | ALDOSTA | WARNER ROBINS

# ROADWAY CROSS SECTIONS

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA REGISTERED
No. PE030417
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B. MATTHEW TSMAN

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SHEET NO.
C7.3

GEORGIA811 www.Georgia811.com

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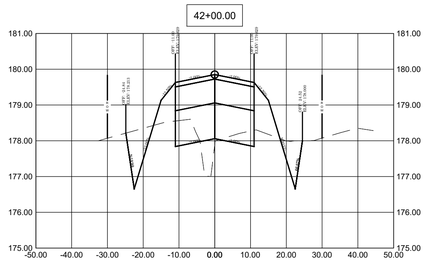


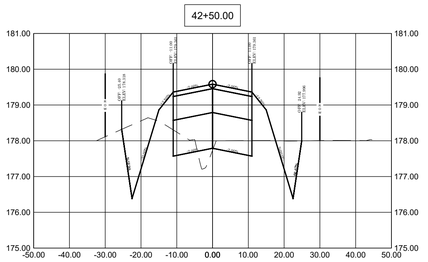


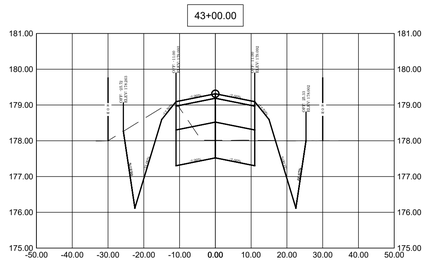


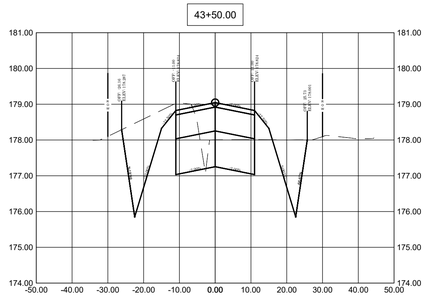


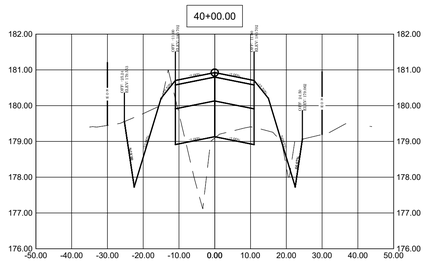


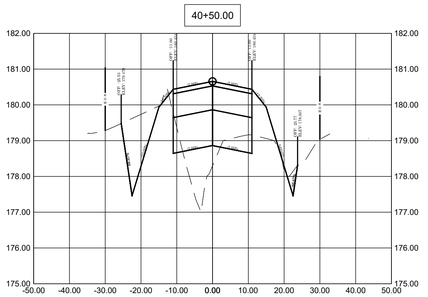


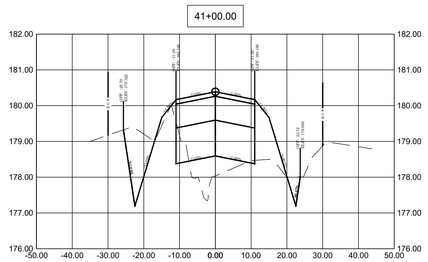


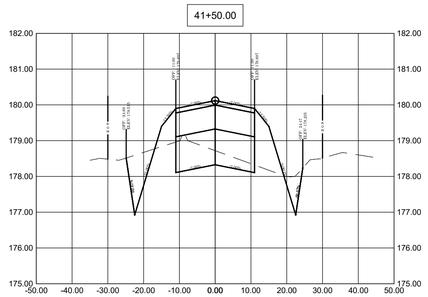


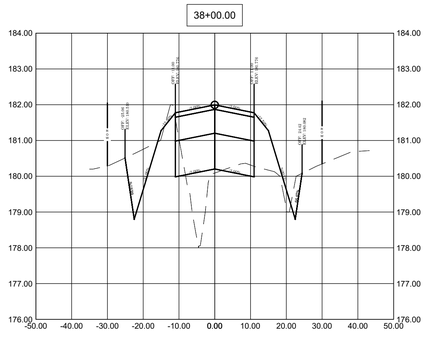


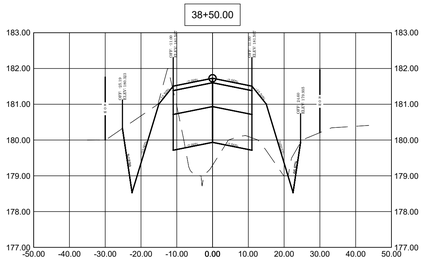


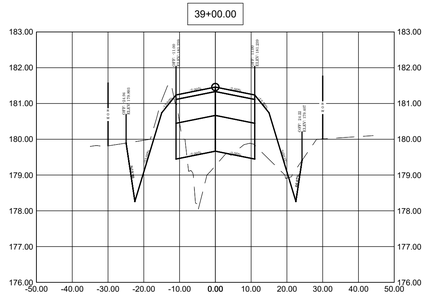


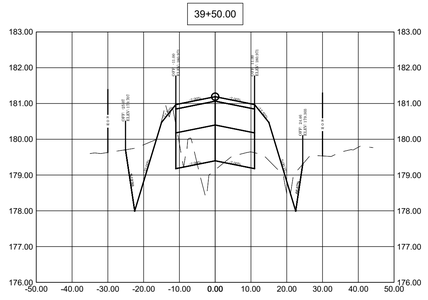


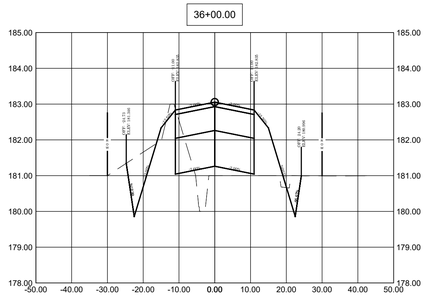


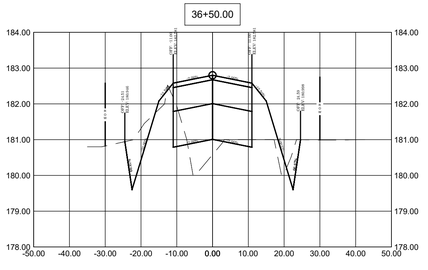


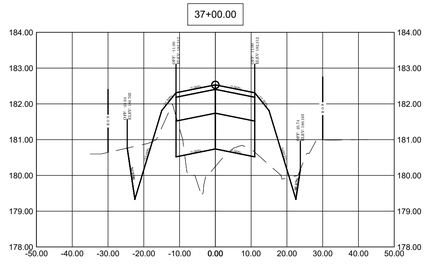


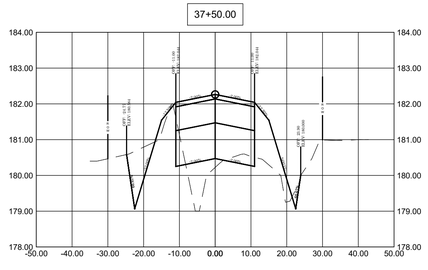


TWIN LAKES ROAD (CR 390) CROSS SECTIONS
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

GRAPHIC SCALE 1" = 20'

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REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 2/28/2025 | REV. PER COUNTY COMMENTS |
| 3 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 4 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 5 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 6 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/4/2026 | REV. PER COUNTY COMMENTS |

AXIS
ENGINEERING CONSULTANTS
LEESBURG/ALDOSTA/WARNER ROBINS

# ROADWAY CROSS SECTIONS

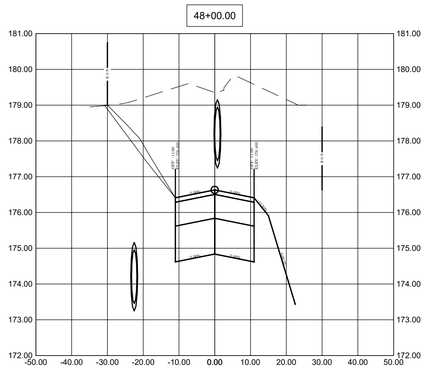
TWIN LAKES ROAD PAVING IMPROVEMENTS

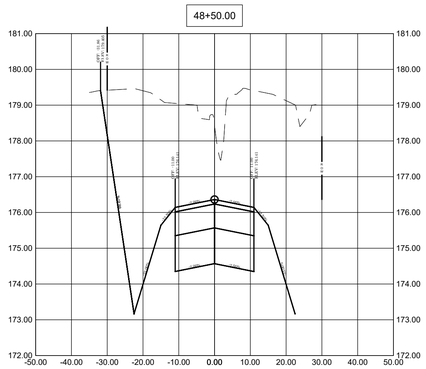
GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

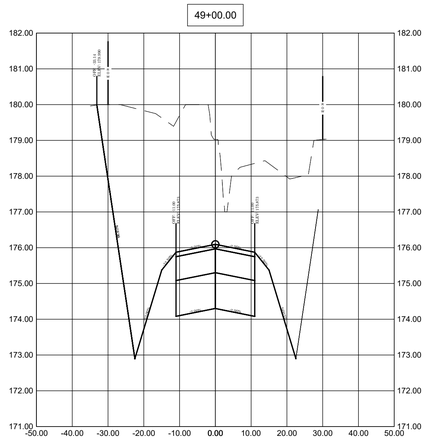
GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW LYMAN

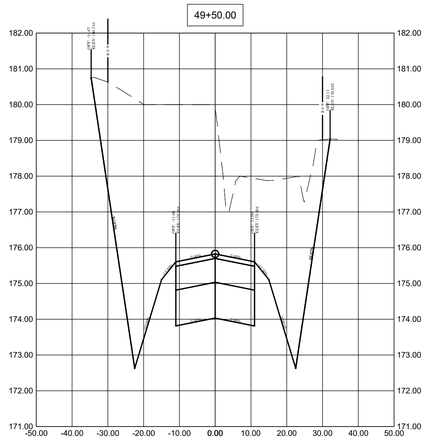
PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

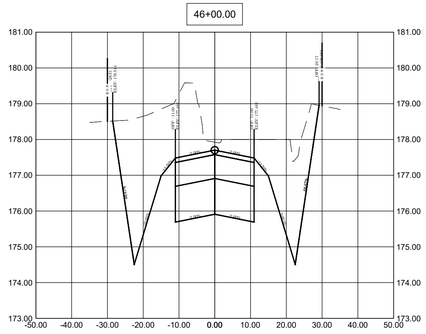
SHEET NO.
C7.4

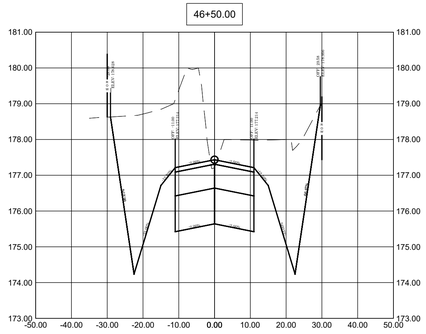


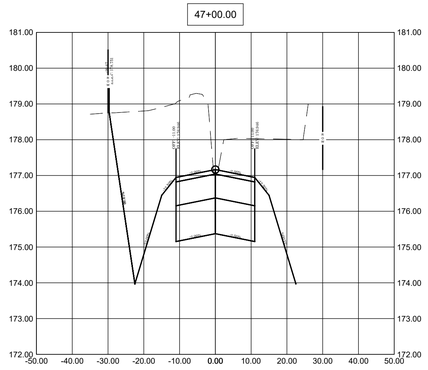



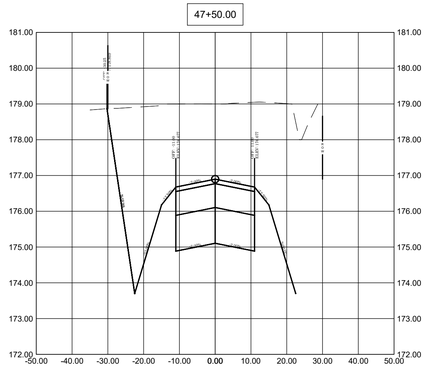



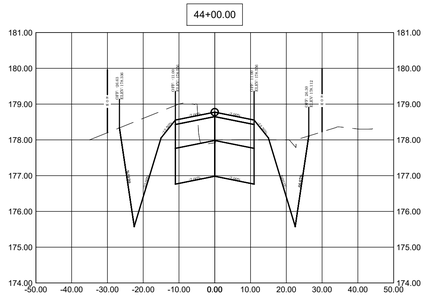



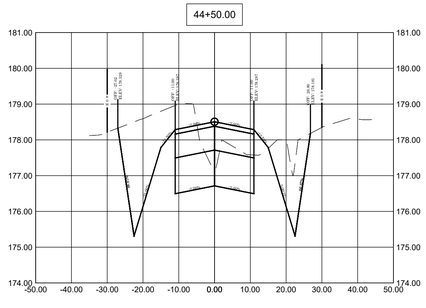



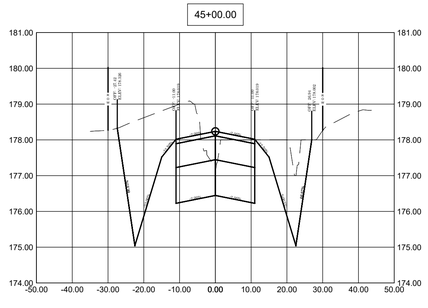



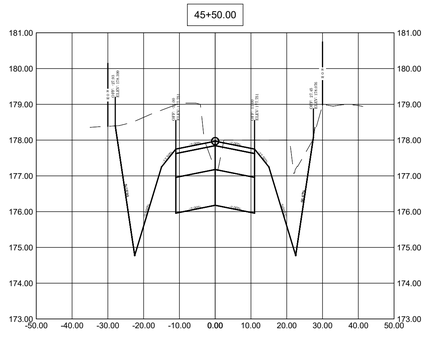




TWIN LAKES ROAD (CR 390) CROSS SECTIONS
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

GRAPHIC SCALE 1" = 20'

REVISIONS

| No. | DATE | DESCRIPTION |
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AXIS ENGINEERING CONSULTANTS
LEESBURG/VALDOSTA/WARNER ROBINS

# ROADWAY CROSS SECTIONS

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF000117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE036117
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW LAMAY

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C7.5

GEORGIA811 www.Georgia811.com

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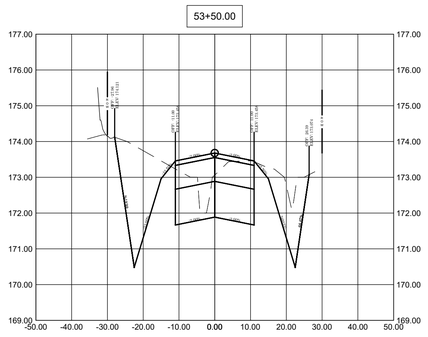


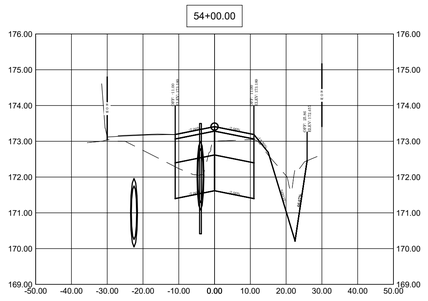


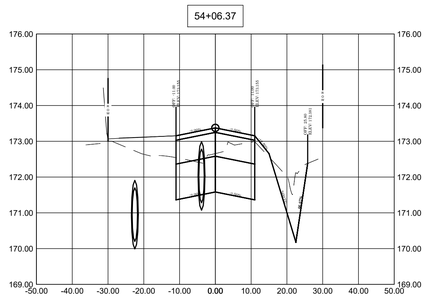


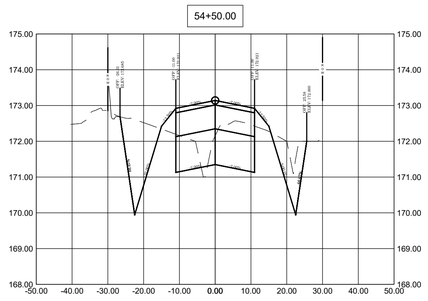


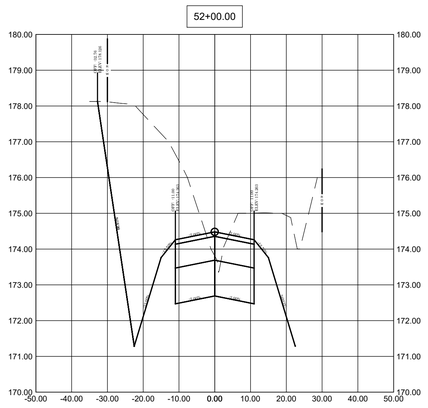


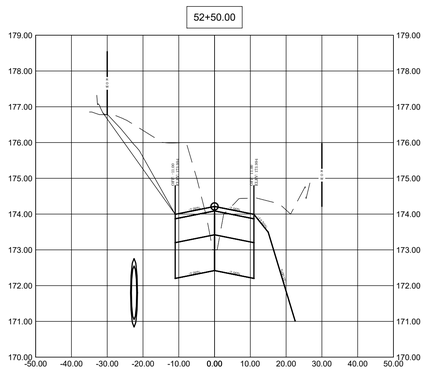


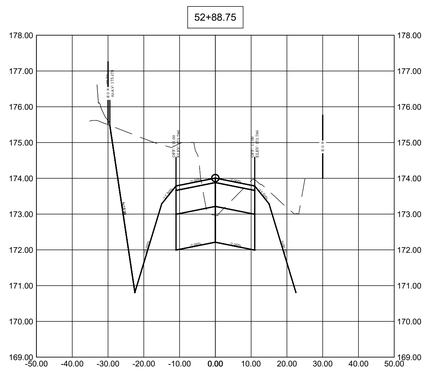


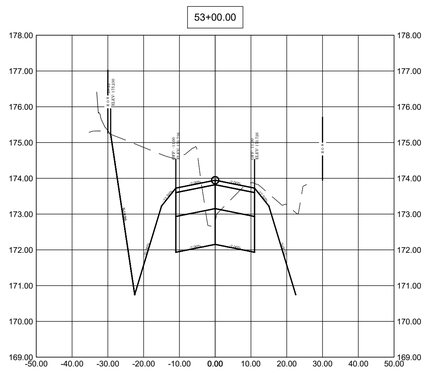


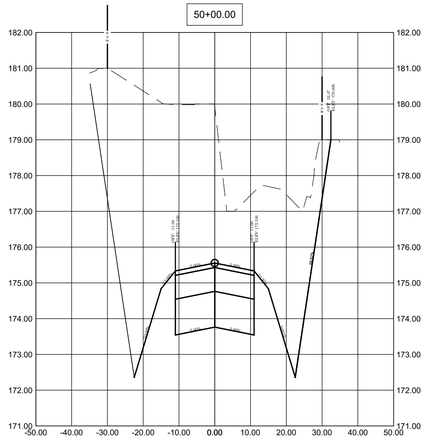


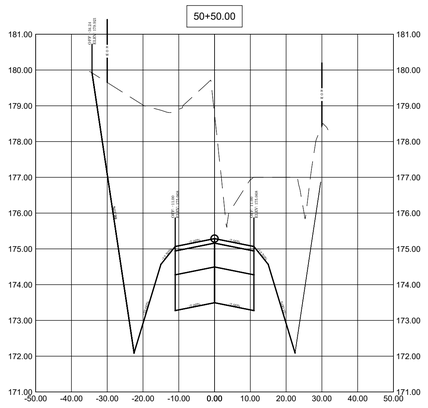


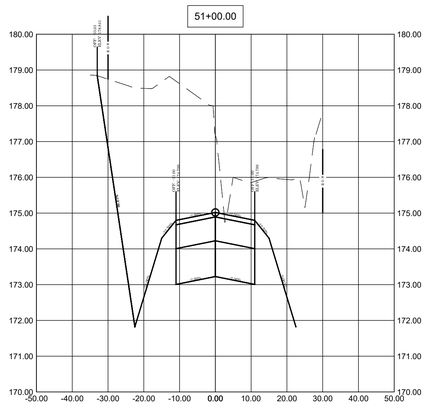


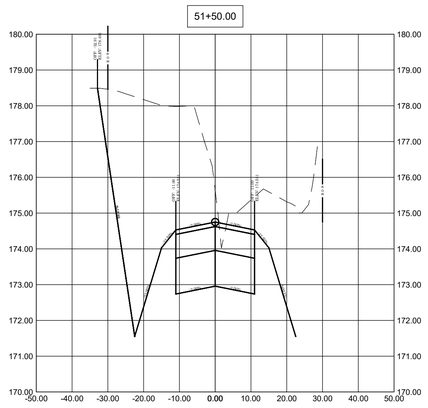


TWIN LAKES ROAD (CR 390) CROSS SECTIONS
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

GEORGIA811 www.Georgia811.com

20' 10' 0' 20'
GRAPHIC SCALE 1" = 20'

REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 2/28/2025 | REV. PER COUNTY COMMENTS |
| 3 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 4 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 5 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 6 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/4/2026 | REV. PER COUNTY COMMENTS |

AXIS ENGINEERING CONSULTANTS
LEESBURG | ALDOSTA | WARNER ROBINS

# ROADWAY CROSS SECTIONS

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE036117
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW LYMAN

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C7.6

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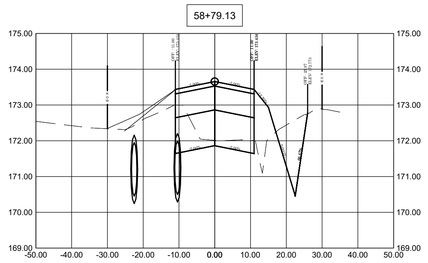


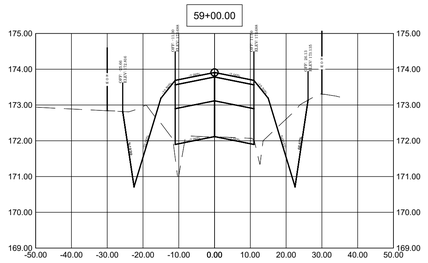


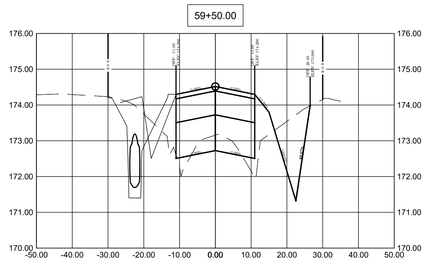


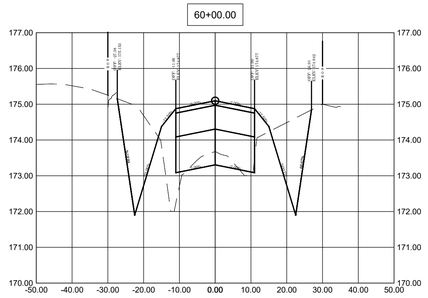


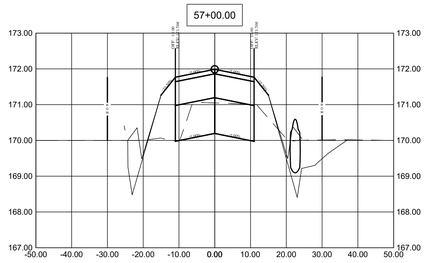


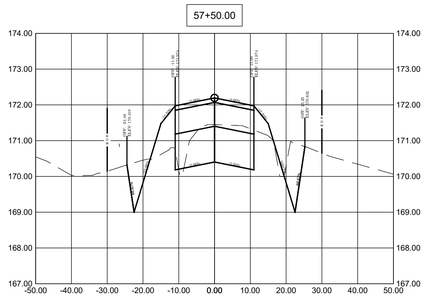


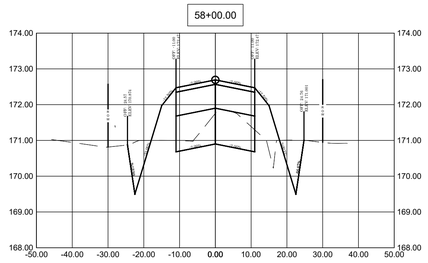


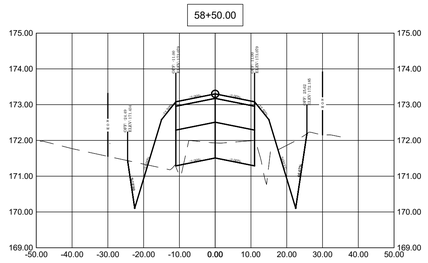


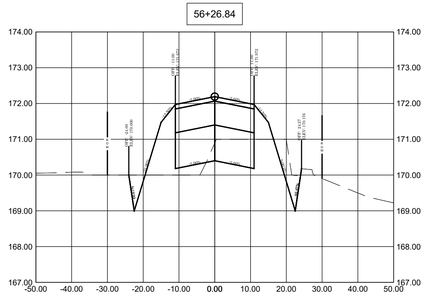


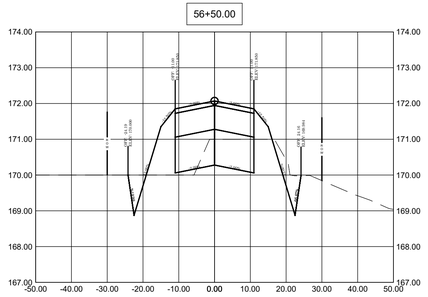


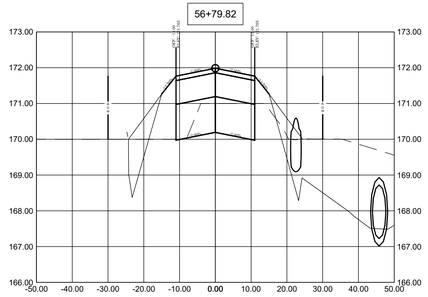


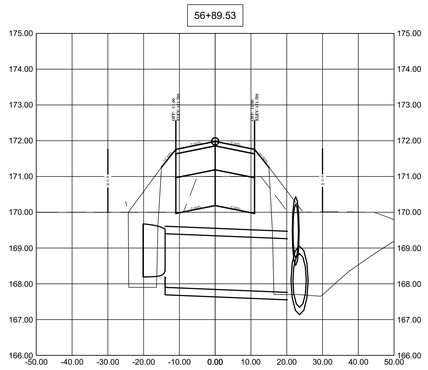


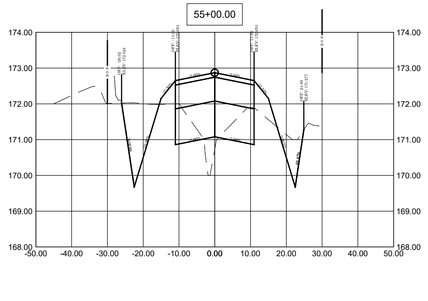


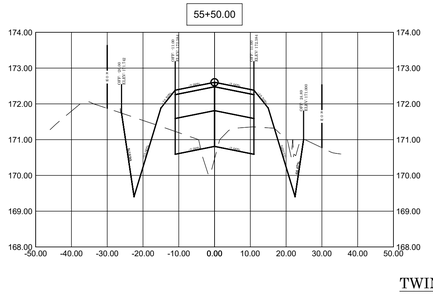


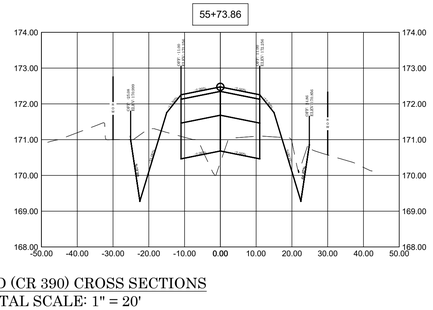


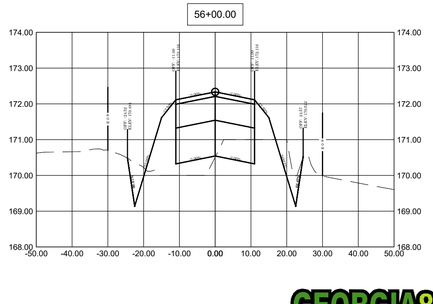


TWIN LAKES ROAD (CR 390) CROSS SECTIONS
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

GEORGIA811 www.Georgia811.com

20' 10' 0' 20'
GRAPHIC SCALE 1" = 20'

REVISIONS

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AXIS ENGINEERING CONSULTANTS
LEESBURG | ALDOSTA | WARNER ROBINS

# ROADWAY CROSS SECTIONS

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE036417
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW LAMAY

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C7.7

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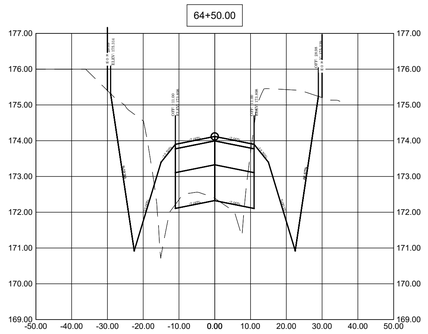


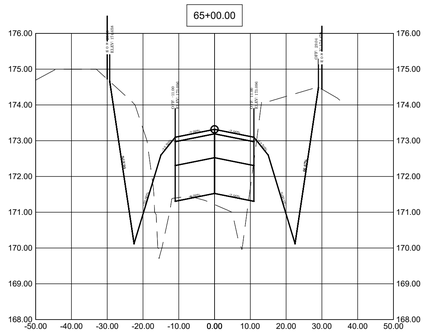


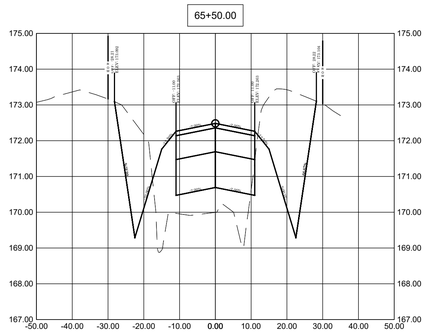


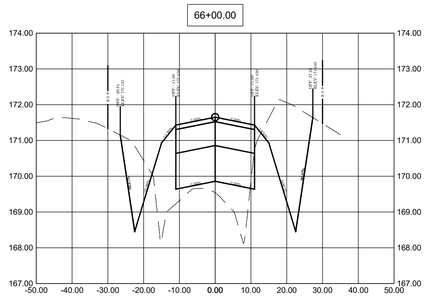


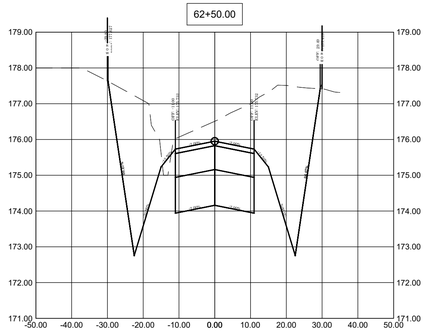


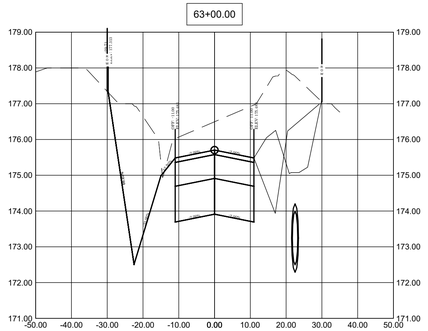


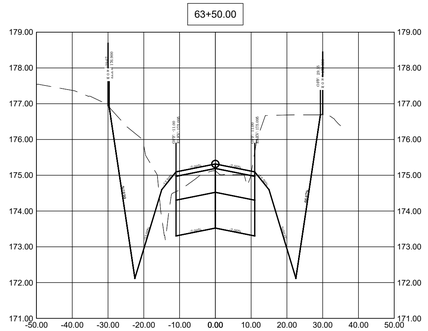


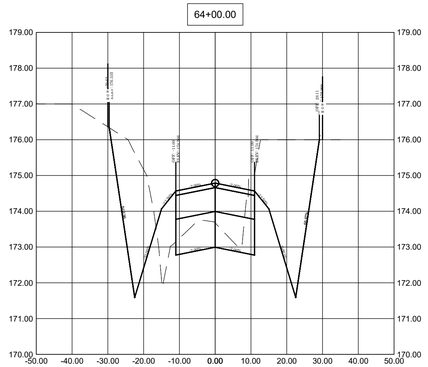


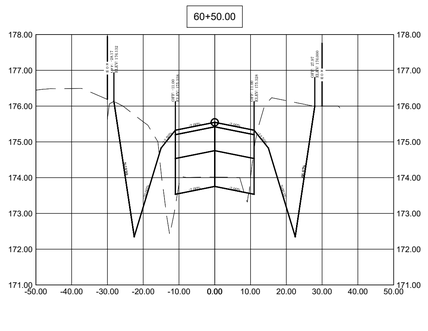


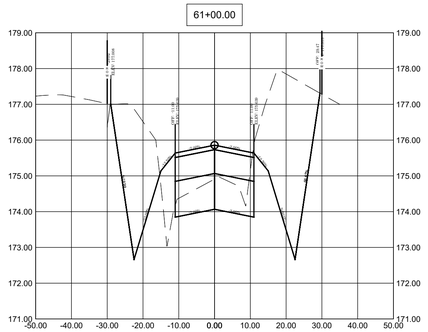


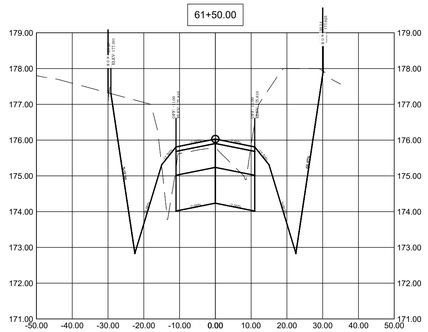


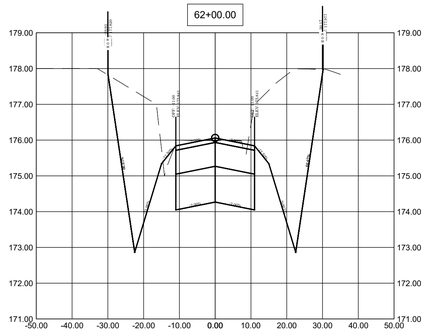


TWIN LAKES ROAD (CR 390) CROSS SECTIONS
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

GRAPHIC SCALE 1" = 20'

REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 2/28/2025 | REV. PER COUNTY COMMENTS |
| 3 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 4 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 5 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 6 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/4/2026 | REV. PER COUNTY COMMENTS |

AXIS
ENGINEERING CONSULTANTS
LEESBURG ▲ ALDOSTA ▲ WARNER ROBINS

# ROADWAY CROSS SECTIONS

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF000117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
M. MATTHEW VARNER

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C7.8

GEORGIA811 www.Georgia811.com

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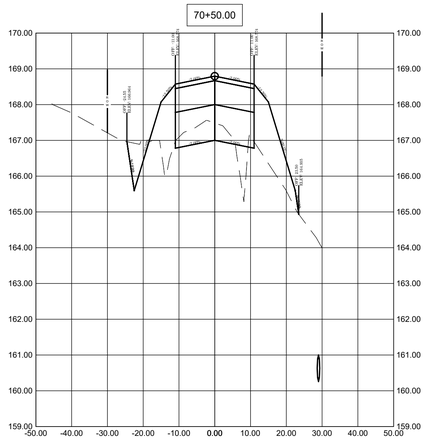


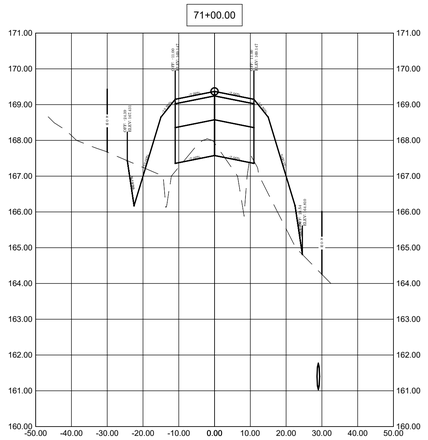


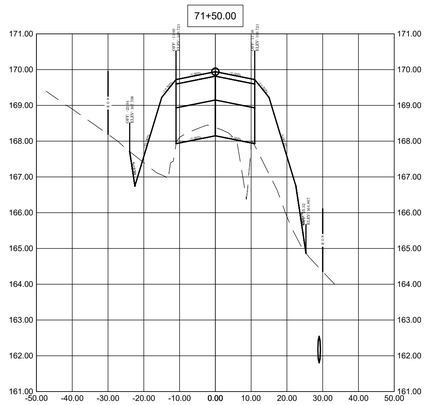


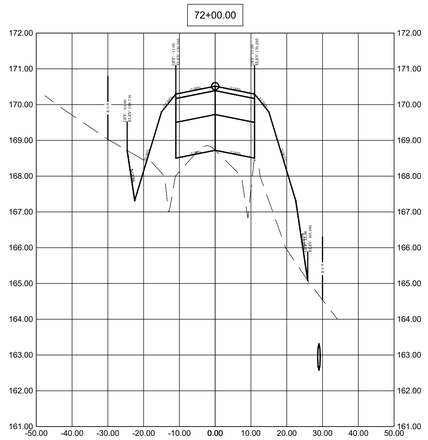


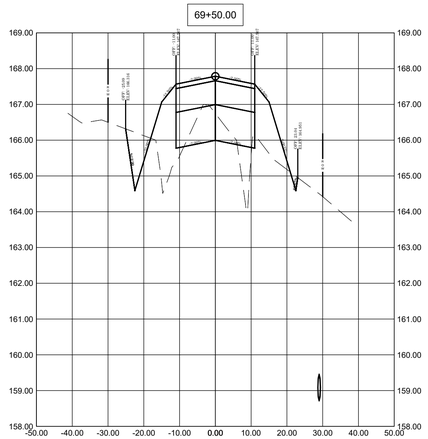


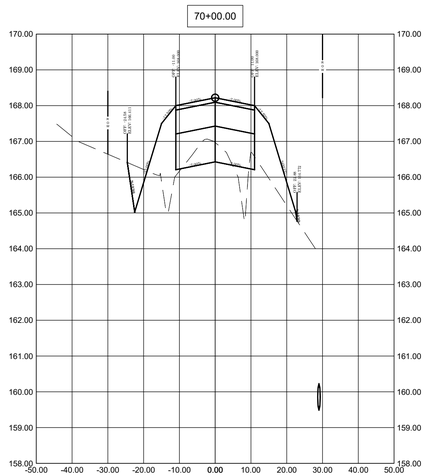


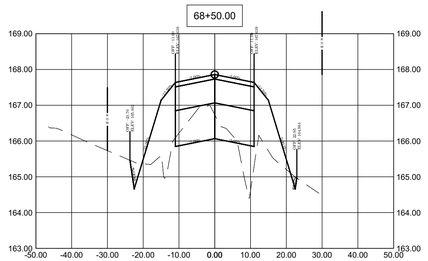


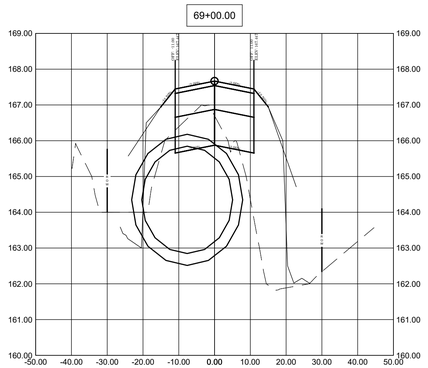


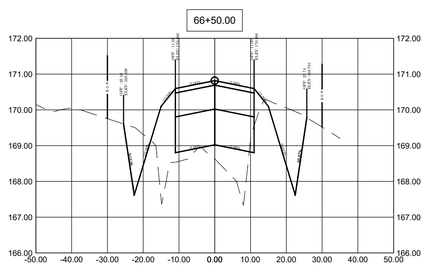


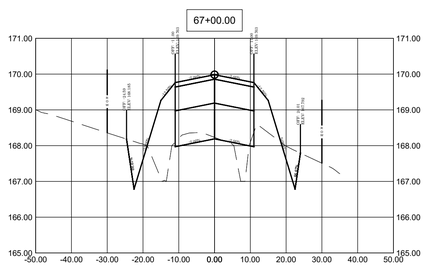


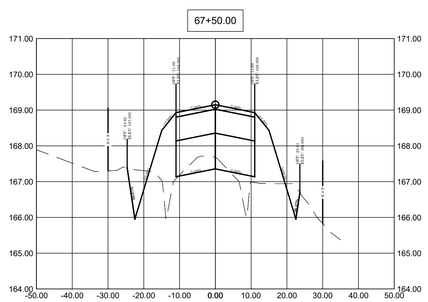


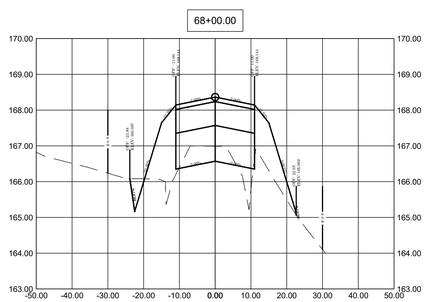


TWIN LAKES ROAD (CR 390) CROSS SECTIONS
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

GEORGIA811 www.Georgia811.com

20' 10' 0' 20'
GRAPHIC SCALE 1" = 20'

REVISIONS

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AXIS
ENGINEERING CONSULTANTS
LEESBURG WALDOSTA WARNER ROBINS

# ROADWAY CROSS SECTIONS

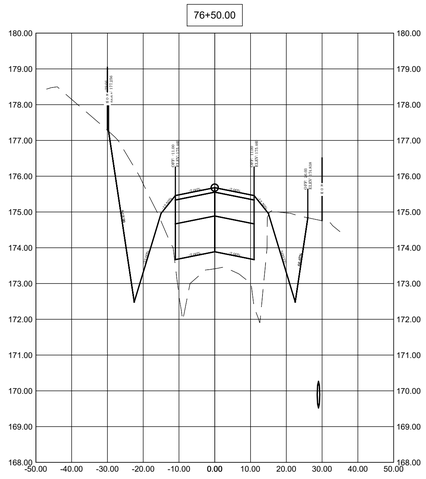
TWIN LAKES ROAD PAVING IMPROVEMENTS

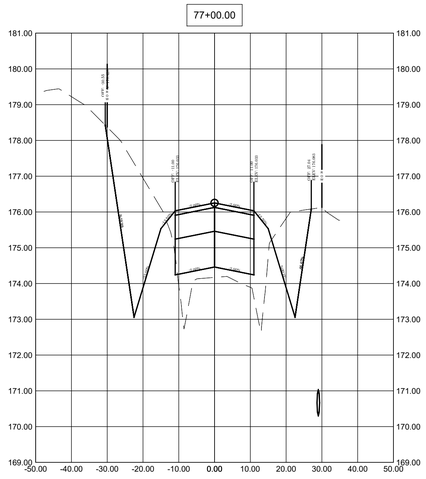
GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

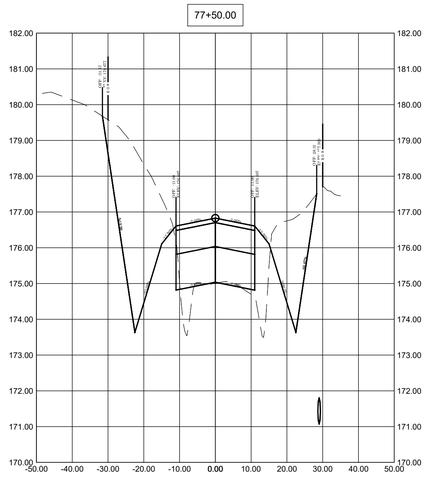
GEORGIA
REGISTERED
No. PE009417
PROFESSIONAL
3/20/2026
ENGINEER
J. MATTHEW LEMAY

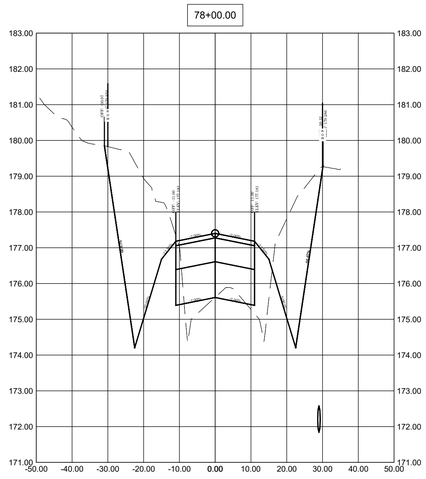
PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

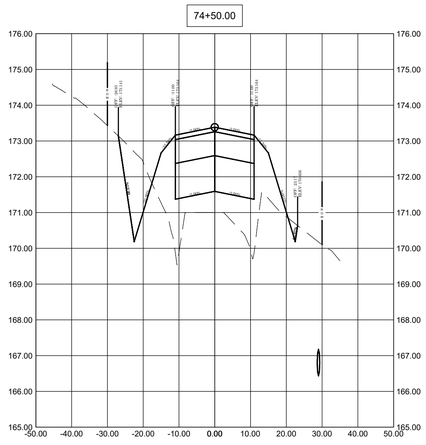
SHEET NO.
C7.9

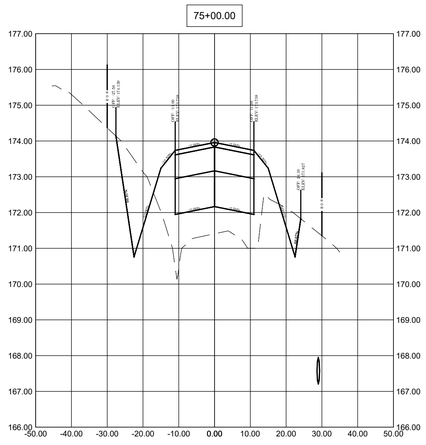


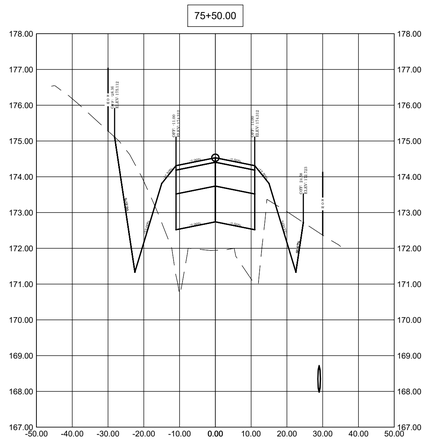



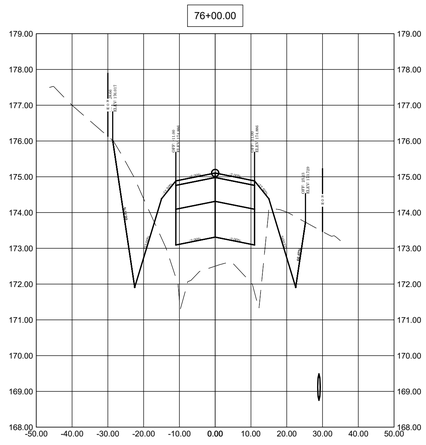



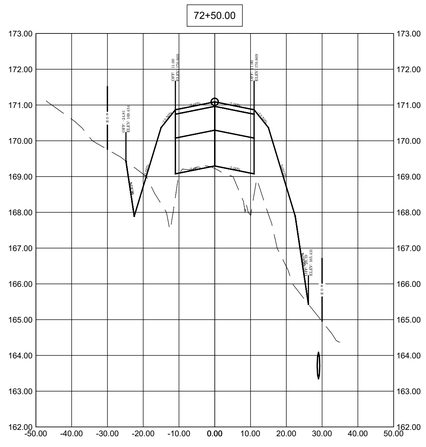



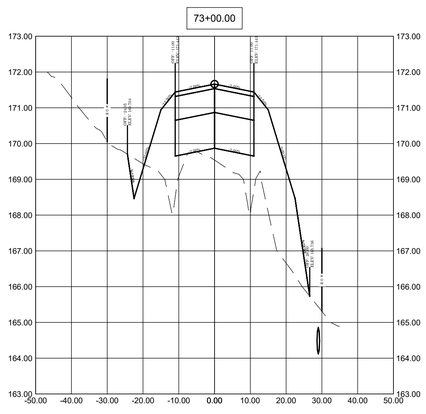



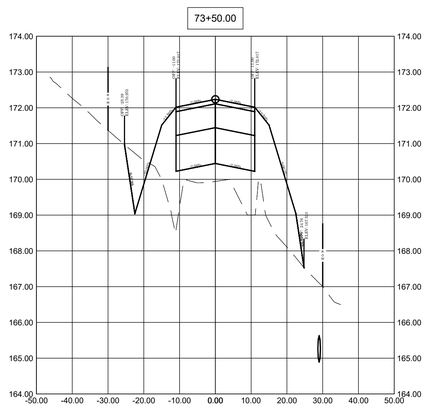



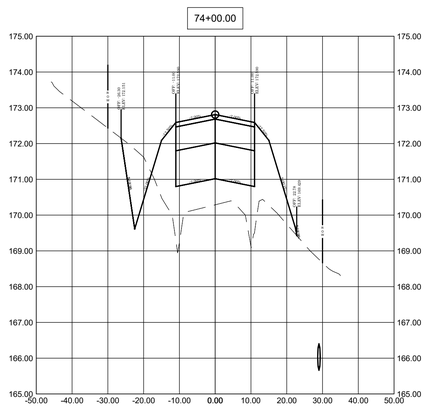




TWIN LAKES ROAD (CR 390) CROSS SECTIONS
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

GEORGIA811 www.Georgia811.com

20' 10' 0' 20'
GRAPHIC SCALE 1" = 20'

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| 7 | 3/4/2026 | REV. PER COUNTY COMMENTS |

AXIS
ENGINEERING CONSULTANTS
LEESBURG WALDOSTA WARNER ROBINS

# ROADWAY CROSS SECTIONS

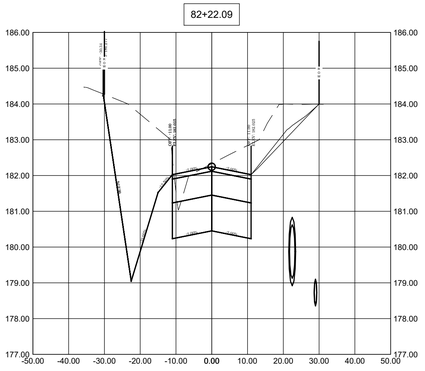
TWIN LAKES ROAD PAVING IMPROVEMENTS

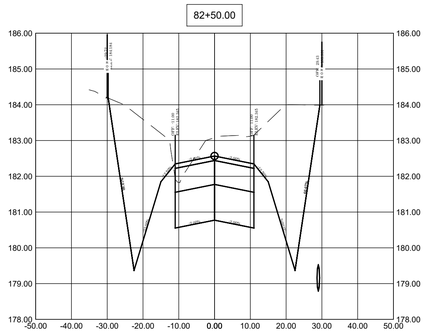
GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

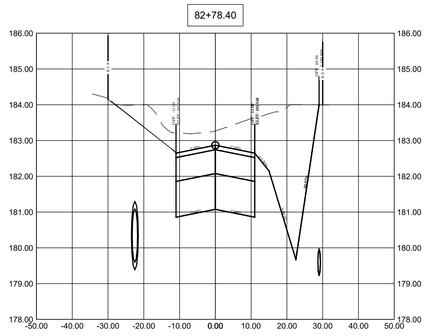
GEORGIA REGISTERED
No. PE009417
PROFESSIONAL
3/20/2026
ENGINEER
J. MATTHEW MAY

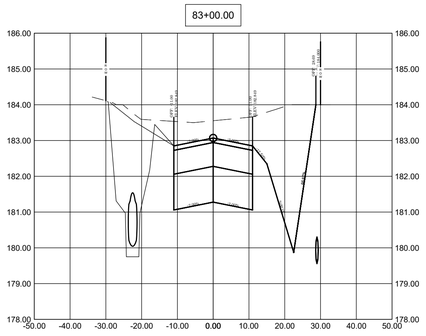
PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

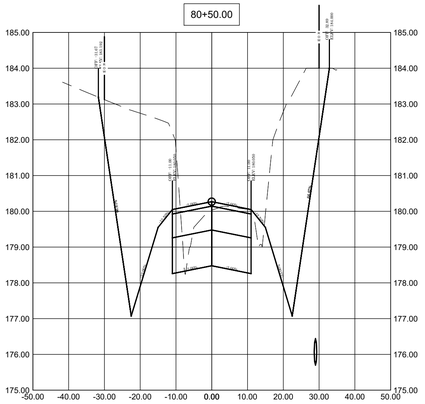
SHEET NO.
C7.10

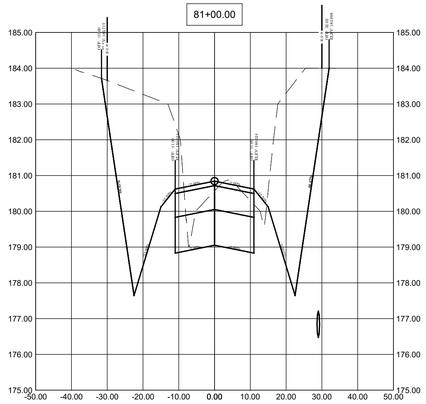


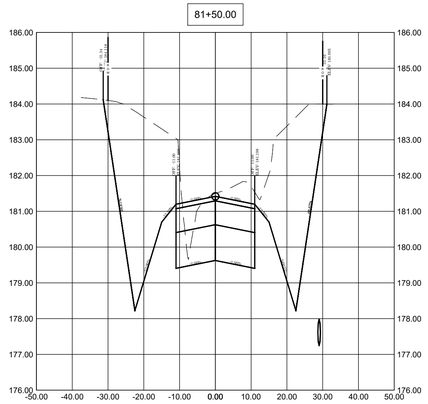



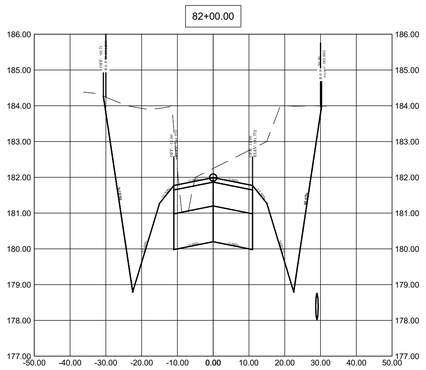



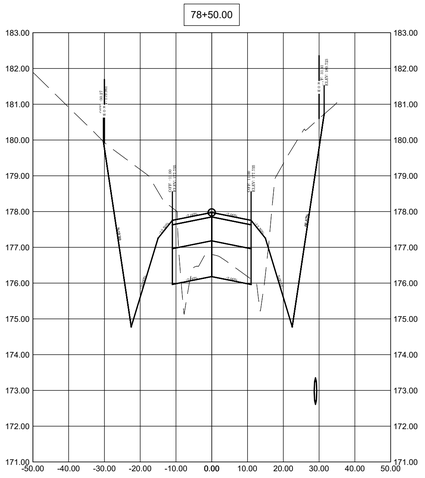



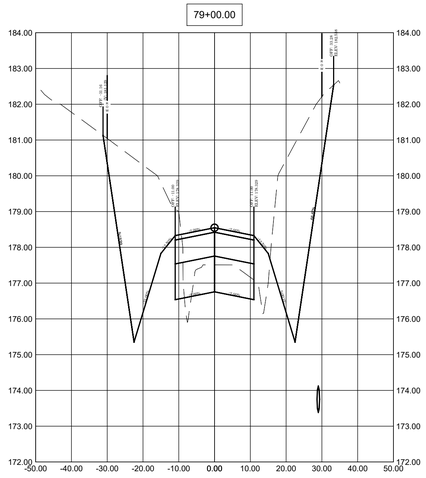



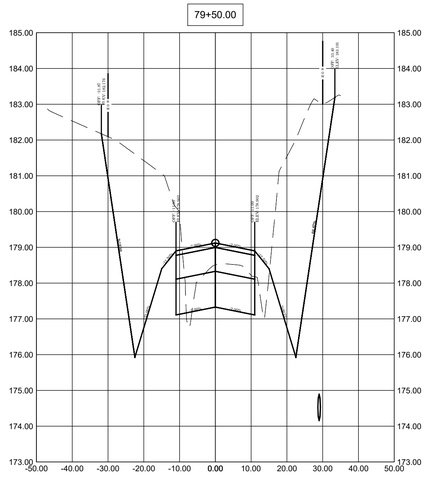



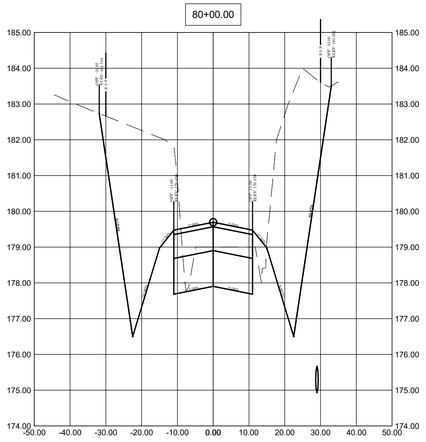




TWIN LAKES ROAD (CR 390) CROSS SECTIONS
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

GRAPHIC SCALE 1" = 20'

REVISIONS

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| 6 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/4/2026 | REV. PER COUNTY COMMENTS |

AXIS
ENGINEERING CONSULTANTS
LEESBURG WALDOSTA WARNER ROBINS

# ROADWAY CROSS SECTIONS

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

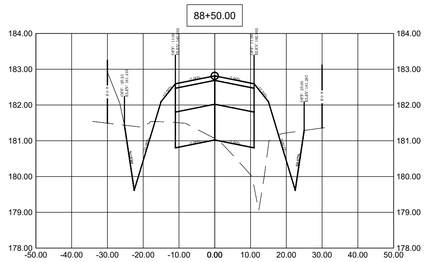
GEORGIA
REGISTERED
No. PE036417
PROFESSIONAL
3/20/2026
ENGINEER
M. MATTHEW LYMAN

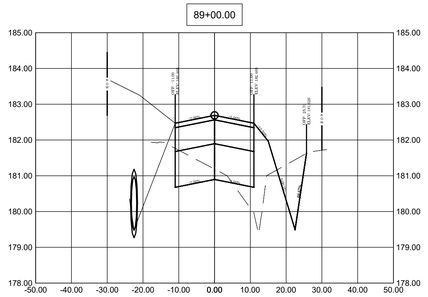
PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

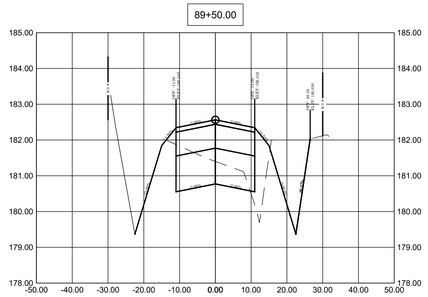
SHEET NO.
C7.11

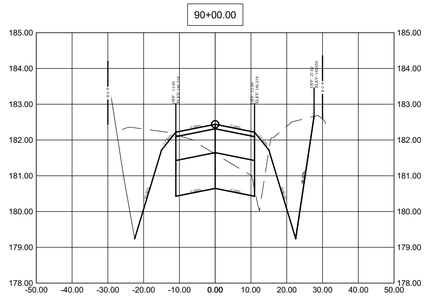
GEORGIA811 www.Georgia811.com

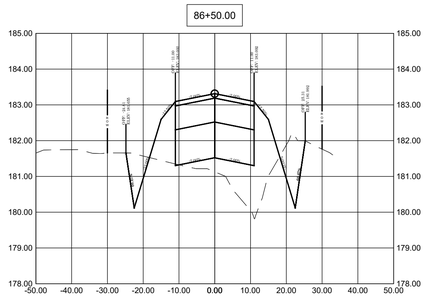
Z:\Shared\AEC\Projects\2025\25-25014 Twin Lakes Rd Paving Lowndes Co, GA\DWG\61012C_S01.dwg - 3/20/2026 8:39 AM

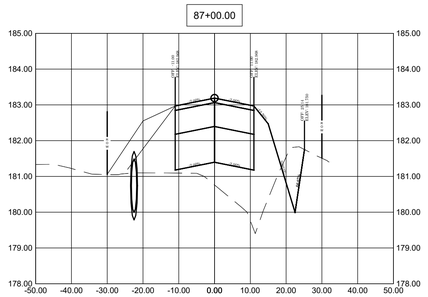


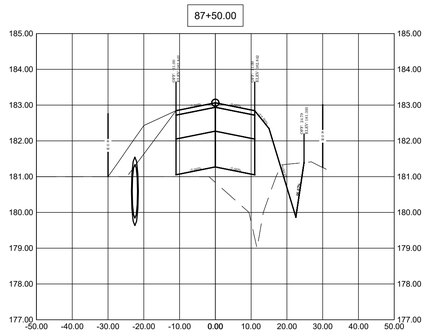



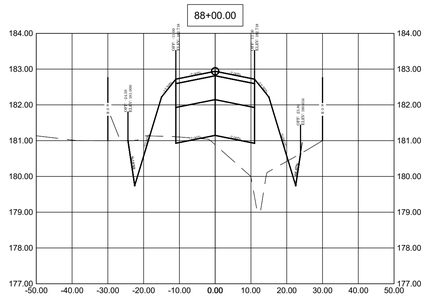



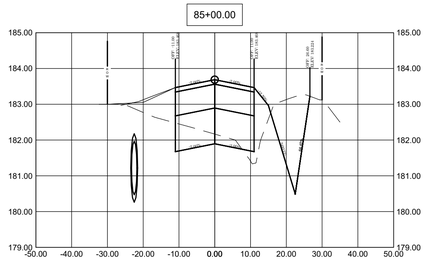



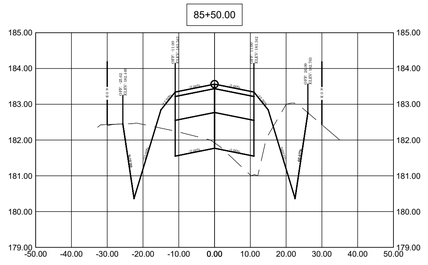



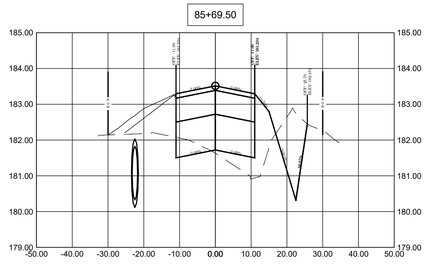



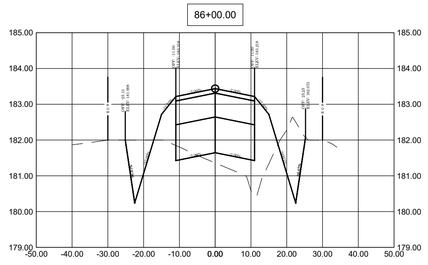



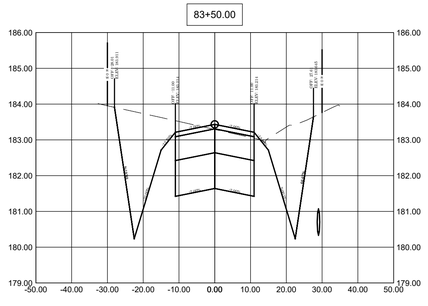



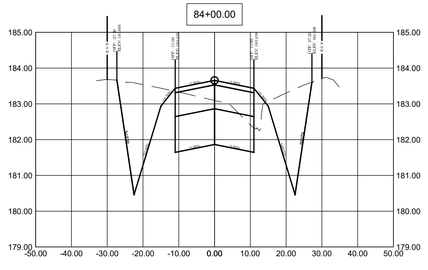



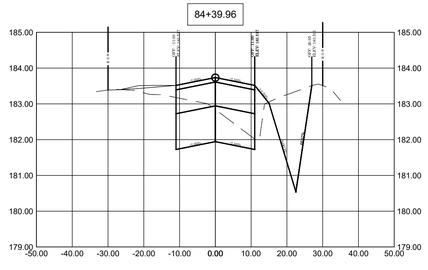



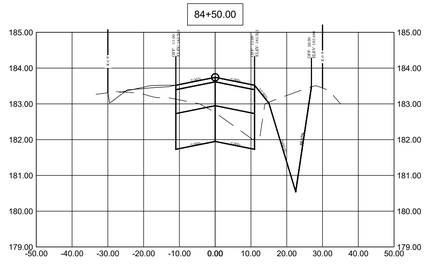




TWIN LAKES ROAD (CR 390) CROSS SECTIONS
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

GRAPHIC SCALE 1" = 20'

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# ROADWAY CROSS SECTIONS

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW TSMAY

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C7.12

GEORGIA811 www.Georgia811.com

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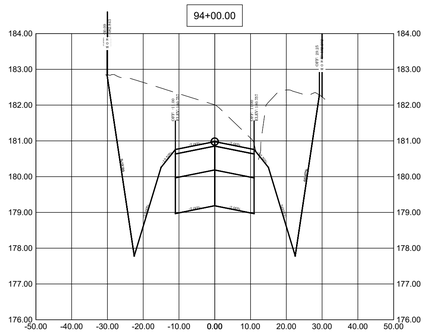


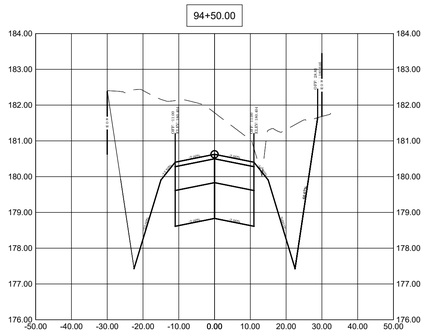


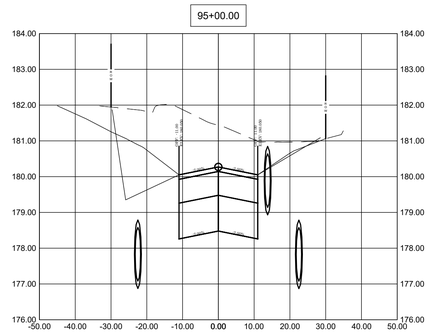


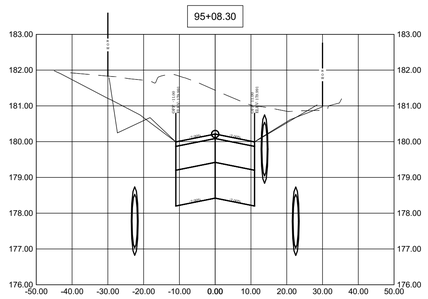


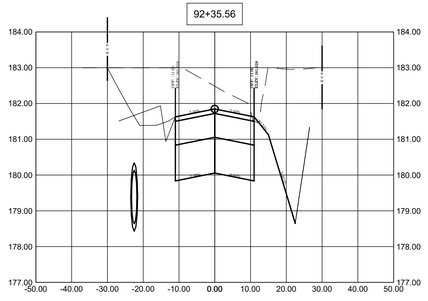


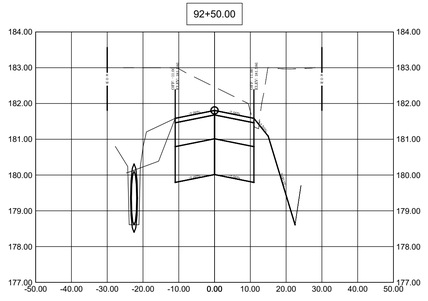


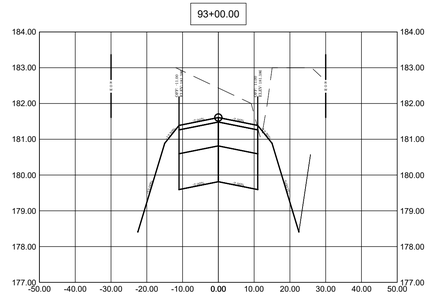


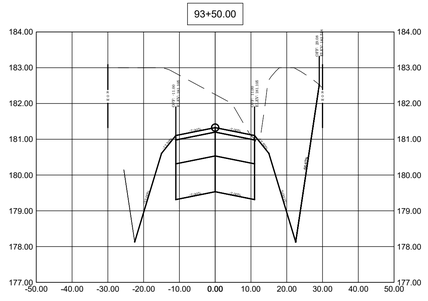


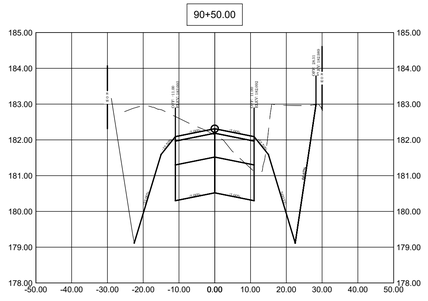


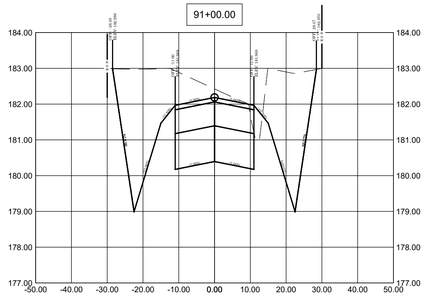


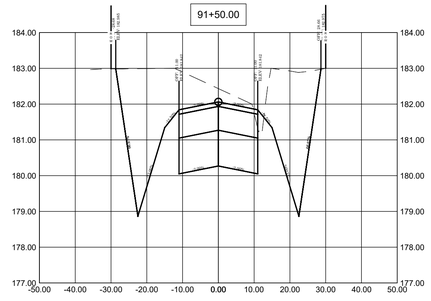


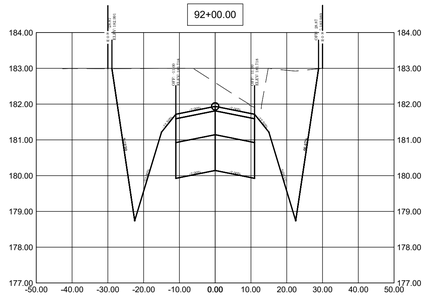


TWIN LAKES ROAD (CR 390) CROSS SECTIONS
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GRAPHIC SCALE 1" = 20'

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LEESBURG\VALDOSTA\WARNER ROBINS

# ROADWAY CROSS SECTIONS

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW TSMAN

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C7.13

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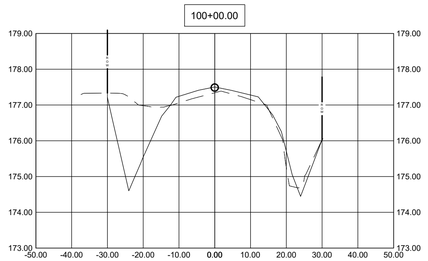


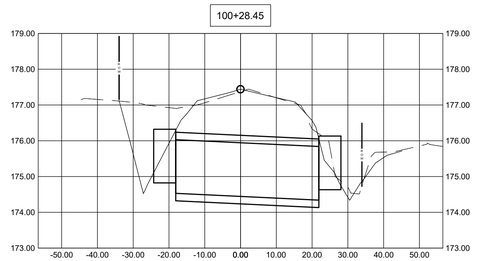


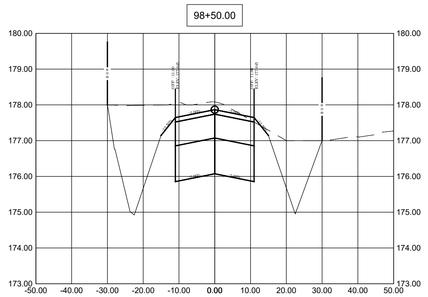


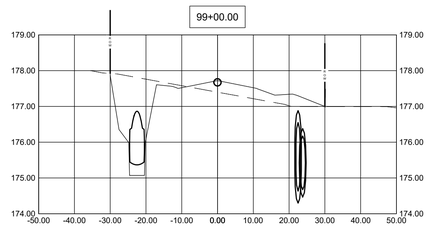


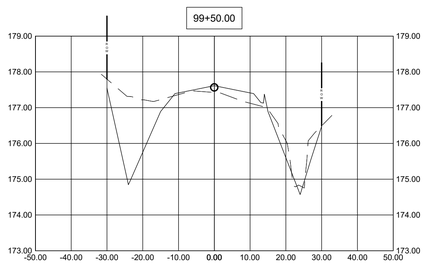


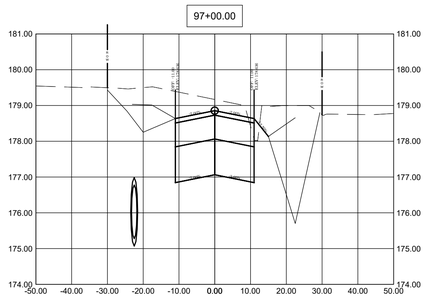


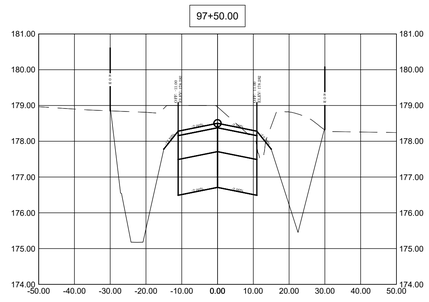


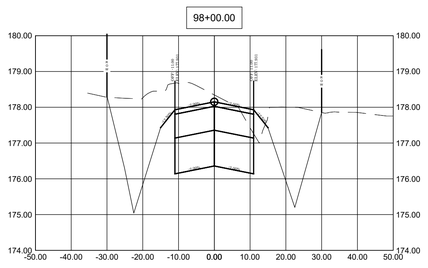


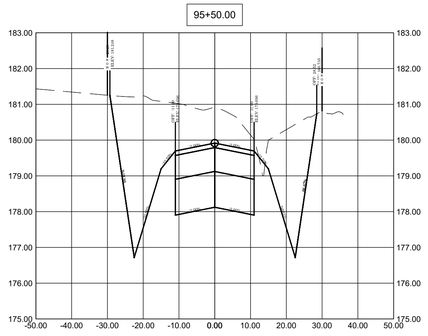


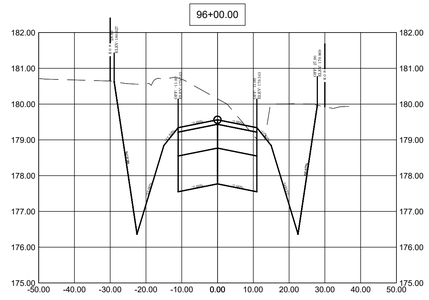


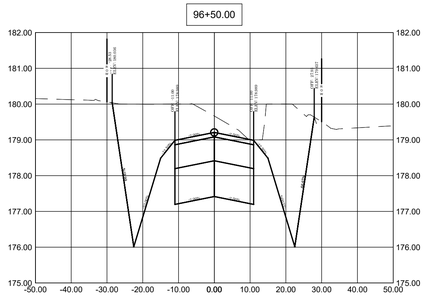


TWIN LAKES ROAD (CR 390) CROSS SECTIONS
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LEESBURG | ALDOSTA | WARNER ROBINS

# ROADWAY CROSS SECTIONS

TWIN LAKES ROAD PAVING IMPROVEMENTS

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AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
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ENGINEER
J. MATTHEW VINAY

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
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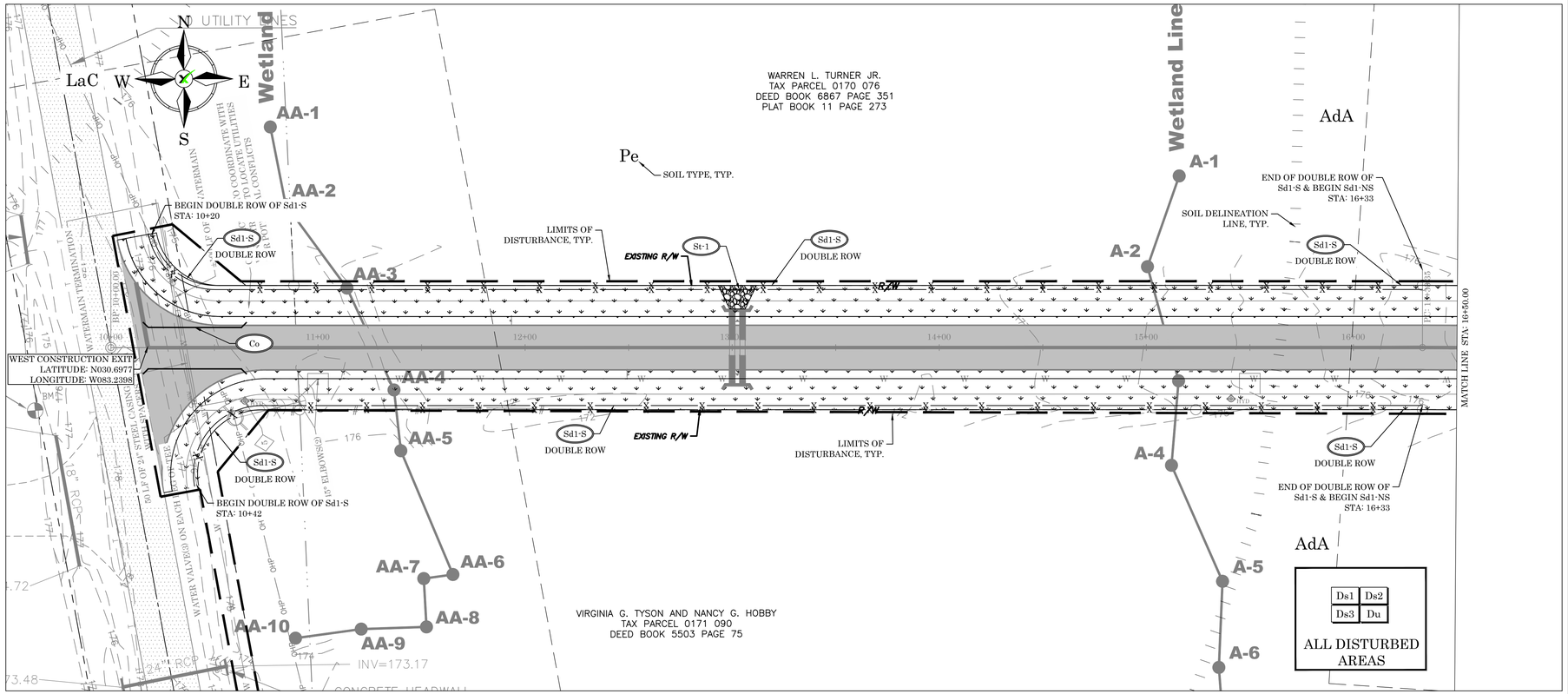


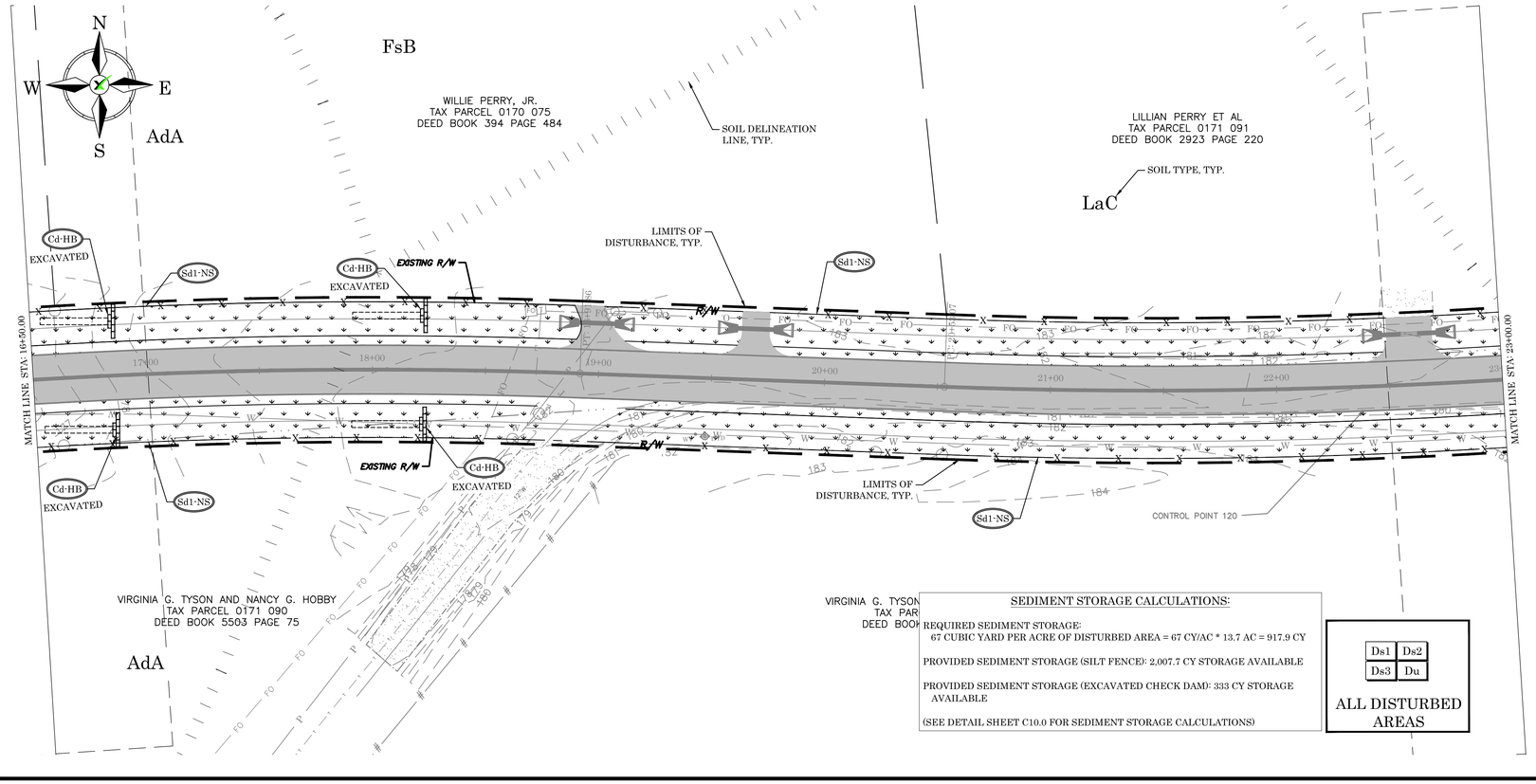


| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |
| DISTURBED AREA | 13.7 ACRES |

## EROSION, SEDIMENTATION, & POLLUTION CONTROL NOTES:

1. THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS WITHIN 7 DAYS AFTER INSTALLATION.
2. 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.
3. 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.
4. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
5. 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.
6. 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.
7. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
8. THE CONTRACTOR SHALL INSTALL ALL PERIMETER CONTROL BMPS AND CONSTRUCTION EXIT PRIOR TO ANY LAND DISTURBING ACTIVITIES.
9. THE CONTRACTOR SHALL PROVIDE DUST CONTROL FOR THE PROJECT AREA AS NEEDED BASED ON PROJECT CONDITIONS.
10. THE CONTRACTOR SHALL PERFORM DAILY INSPECTIONS / MAINTENANCE OF ALL EROSION CONTROL BMPS. SEDIMENT LADEN RUNOFF SHALL BE CONTAINED AND TREATED ON SITE.
11. WHEN APPROPRIATE THE CONTRACTOR SHALL INSTALL PERMANENT VEGETATIVE SEEDING ON ALL DISTURBED AREAS.
12. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY BMPS ONCE FINAL STABILIZATION HAS BEEN MET.

## STRUCTURAL PRACTICES

| CODE | PRACTICE | DETAIL | MAP SYMBOL | DESCRIPTION |
|---|---|---|---|---|
| Co | CONSTRUCTION EXIT | | | A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets. |
| Sd1 | SEDIMENT BARRIER | | | A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence. |
| St | STORMDRAIN OUTLET PROTECTION | | | A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff. |
| Tr | TREE PROTECTION | | | To protect desirable trees from injury during construction activity. |
| Cd | CHECKDAM | | | A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow. |
| CWA | CONCRETE WASHOUT AREA | | CWA | A washdown area for tools, concrete mixer chutes, hoppers and rear of vehicles. |

## VEGETATIVE PRACTICES

| CODE | PRACTICE | DETAIL | MAP SYMBOL | DESCRIPTION |
|---|---|---|---|---|
| Ds1 | DISTURBED AREA STABILIZATION (WITH MULCHING ONLY) | | Ds1 | Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover. |
| Ds2 | DISTURBED AREA STABILIZATION (WITH TEMP. SEEDING) | | Ds2 | Establishing a temporary vegetative cover with fast growing seedings on disturbed areas. |
| Ds3 | DISTURBED AREA STABILIZATION (WITH PERM.SEEDING) | | Ds3 | Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas. |
| Du | DUST CONTROL ON DISTURBED AREAS | | Du | Controlling surface and air movement of dust on construction site, roadways and similar sites. |

## HATCH LEGEND:

SEEDED AREA

## NRCS WEB SOIL SURVEY

| SYMBOL | NAME | HYDROLOGIC SOIL GROUP | UNIFIED SOIL CLASSIFICATION | DEPTH |
|---|---|---|---|---|
| AdA | Albany sand, 0% - 2% slopes | A / D | SC-SM, SP-SM, SM, SC, CL | 0 - 80 |
| FsB | Fuquay loamy sand, 0% - 5% slopes | B | SM, SC-SM, SC | 0 - 65 |
| LaC | Lakeland sand, 0% - 8% slopes | A | SP-SM, SM | 0 - 80 |
| Pe | Pelham loamy sand, 0% - 2% slopes, frequently flooded | B / D | SC-SM, SM, CL, SC, CL | 0 - 80 |

## SEDIMENT STORAGE CALCULATIONS:

REQUIRED SEDIMENT STORAGE:
67 CUBIC YARD PER ACRE OF DISTURBED AREA = 67 CY/AC * 13.7 AC = 917.9 CY

PROVIDED SEDIMENT STORAGE (SILT FENCE): 2,007.7 CY STORAGE AVAILABLE

PROVIDED SEDIMENT STORAGE (EXCAVATED CHECK DAM): 333 CY STORAGE AVAILABLE

(SEE DETAIL SHEET C10.0 FOR SEDIMENT STORAGE CALCULATIONS)

GRAPHIC SCALE 1" = 30'

| REVISIONS | | |
|---|---|---|
| No. | DATE | DESCRIPTION |
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 12/9/2025 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |


AXIS
ENGINEERING CONSULTANTS
LEESBURG ▲ ALDOSTA ▲ WARNER ROBINS


# EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN

## TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW INMAN

GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION
B. Matthew Inman
LEVEL II CERTIFIED DESIGN PROFESSIONAL
CERTIFICATION NUMBER: 0000000885
ISSUED: 06/01/2025 EXPIRES: 06/01/2028

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C8.0

GEORGIA811 www.Georgia811.com

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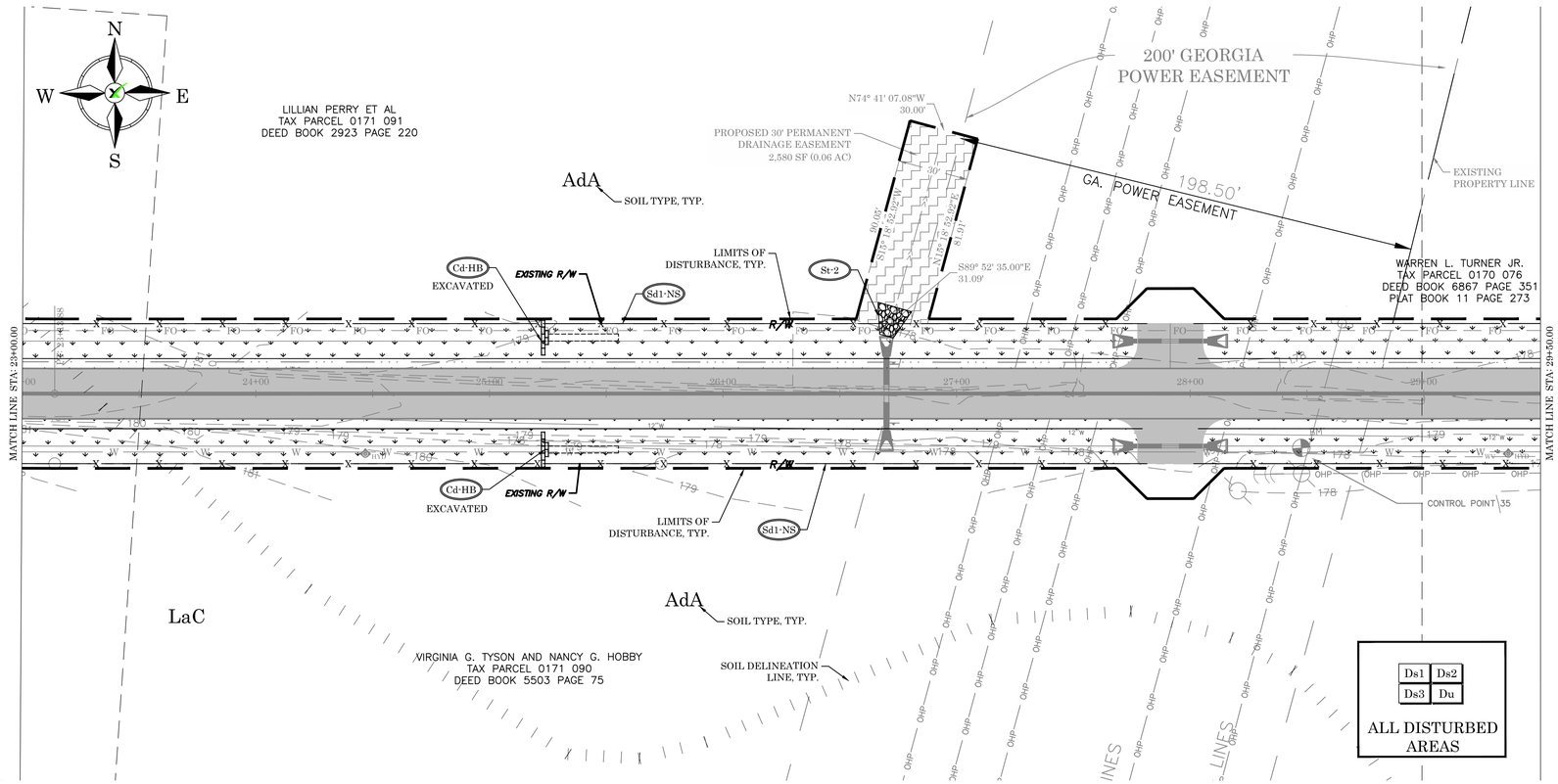


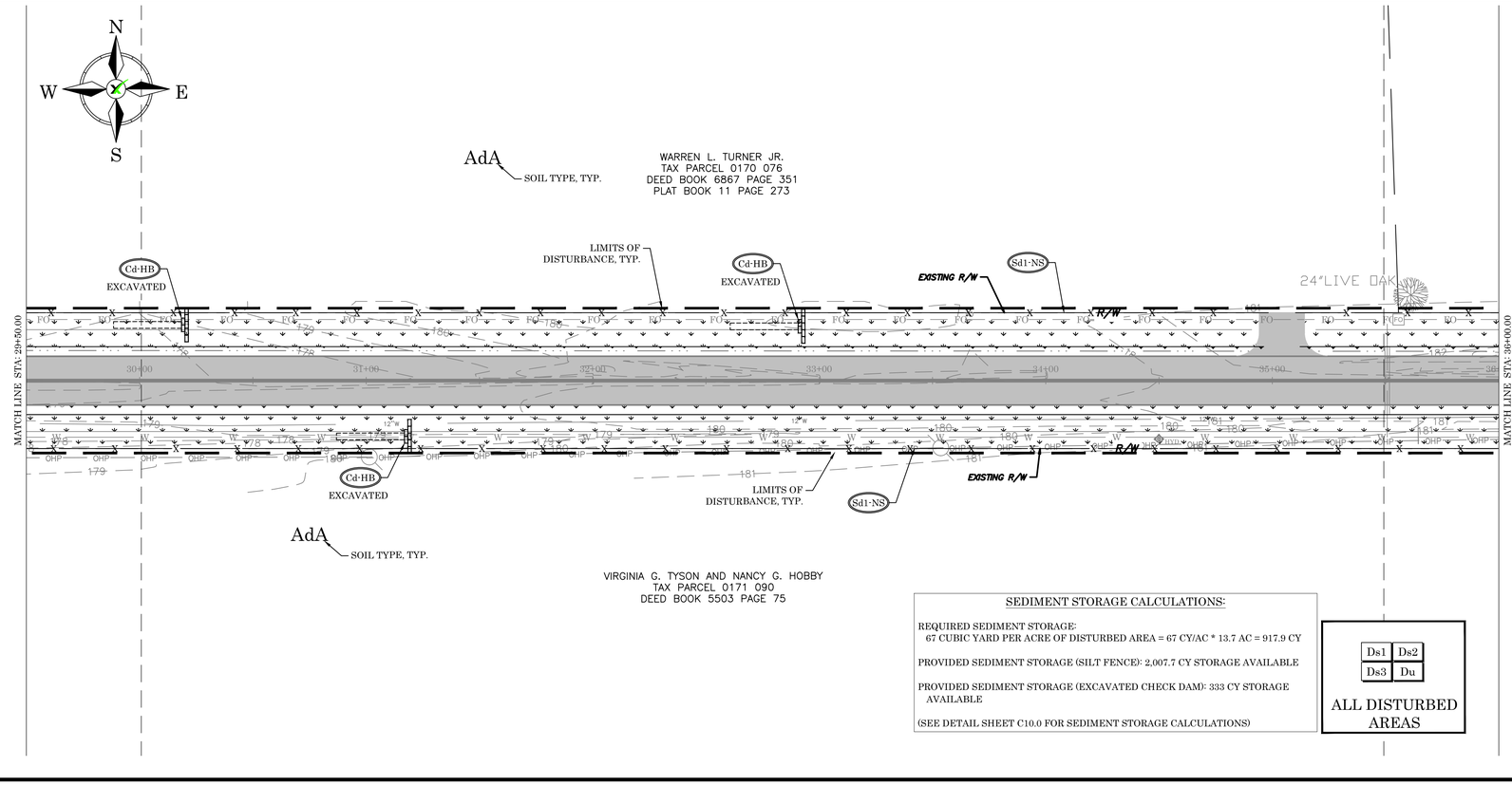


| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |
| DISTURBED AREA | 13.7 ACRES |

## EROSION, SEDIMENTATION, & POLLUTION CONTROL NOTES:

1. THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS WITHIN 7 DAYS AFTER INSTALLATION.
2. 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.
3. 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.
4. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
5. 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.
6. 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.
7. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
8. THE CONTRACTOR SHALL INSTALL ALL PERIMETER CONTROL BMPS AND CONSTRUCTION EXIT PRIOR TO ANY LAND DISTURBING ACTIVITIES.
9. THE CONTRACTOR SHALL PROVIDE DUST CONTROL FOR THE PROJECT AREA AS NEEDED BASED ON PROJECT CONDITIONS.
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12. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY BMPS ONCE FINAL STABILIZATION HAS BEEN MET.

## STRUCTURAL PRACTICES

| CODE | PRACTICE | DETAIL | MAP SYMBOL | DESCRIPTION |
|---|---|---|---|---|
| Co | CONSTRUCTION EXIT | | | A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets. |
| Sd1 | SEDIMENT BARRIER | | | A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence. |
| St | STORMDRAIN OUTLET PROTECTION | | | A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff. |
| Tr | TREE PROTECTION | | | To protect desirable trees from injury during construction activity. |
| Cd | CHECKDAM | | | A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow. |
| CWA | CONCRETE WASHOUT AREA | | | A washdown area for tools, concrete mixer chutes, hoppers and rear of vehicles. |

## VEGETATIVE PRACTICES

| CODE | PRACTICE | DETAIL | MAP SYMBOL | DESCRIPTION |
|---|---|---|---|---|
| Ds1 | DISTURBED AREA STABILIZATION (WITH MULCHING ONLY) | | Ds1 | Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover. |
| Ds2 | DISTURBED AREA STABILIZATION (WITH TEMP. SEEDING) | | Ds2 | Establishing a temporary vegetative cover with fast growing seedings on disturbed areas. |
| Ds3 | DISTURBED AREA STABILIZATION (WITH PERM SEEDING) | | Ds3 | Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas. |
| Du | DUST CONTROL ON DISTURBED AREAS | | Du | Controlling surface and air movement of dust on construction site, roadways and similar sites. |

## HATCH LEGEND:

SEEDED AREA

## SEDIMENT STORAGE CALCULATIONS:

REQUIRED SEDIMENT STORAGE:
67 CUBIC YARD PER ACRE OF DISTURBED AREA = 67 CY/AC * 13.7 AC = 917.9 CY

PROVIDED SEDIMENT STORAGE (SILT FENCE): 2,007.7 CY STORAGE AVAILABLE

PROVIDED SEDIMENT STORAGE (EXCAVATED CHECK DAM): 333 CY STORAGE AVAILABLE

(SEE DETAIL SHEET C10.0 FOR SEDIMENT STORAGE CALCULATIONS)

## NRCS WEB SOIL SURVEY

| SYMBOL | NAME | HYDROLOGIC SOIL GROUP | UNIFIED SOIL CLASSIFICATION | DEPTH |
|---|---|---|---|---|
| AdA | Albany sand, 0% - 2% slopes | A / D | SC-SM, SP-SM, SM, SC, CL | 0 - 80 |
| FsB | Fuquay loamy sand, 0% - 5% slopes | B | SM, SC-SM, SC | 0 - 65 |
| LaC | Lakeland sand, 0% - 8% slopes | A | SP-SM, SM | 0 - 80 |
| Pe | Pelham loamy sand, 0% - 2% slopes, frequently flooded | B / D | SC-SM, SM, CL, SC, CL | 0 - 80 |

GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

REVISIONS

| No. | DATE | DESCRIPTION |
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| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 12/9/2025 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG WALDOSTA WARNER ROBINS

# EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN

TWIN LAKES ROAD PAVING IMPROVEMENTS

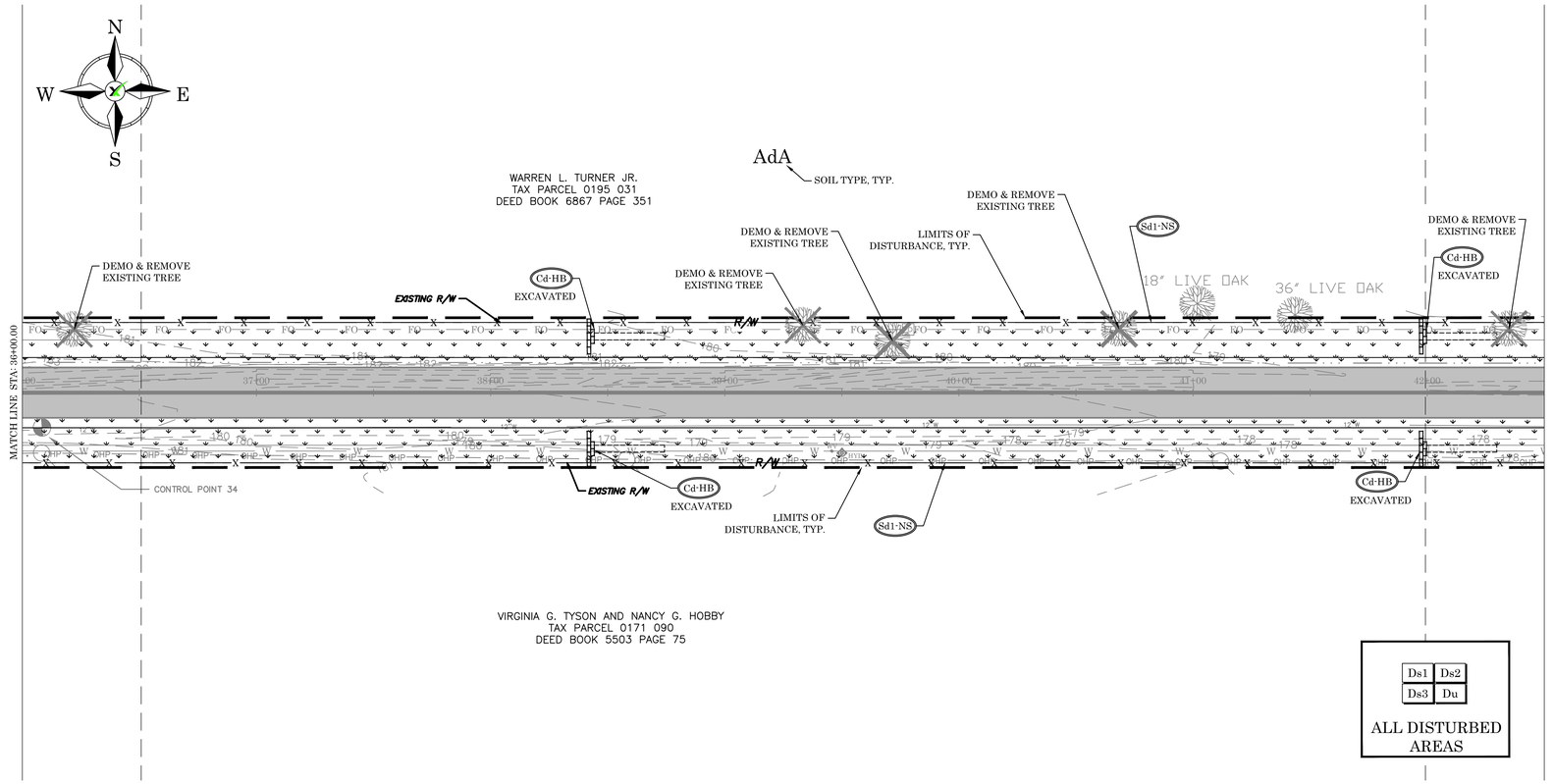
GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

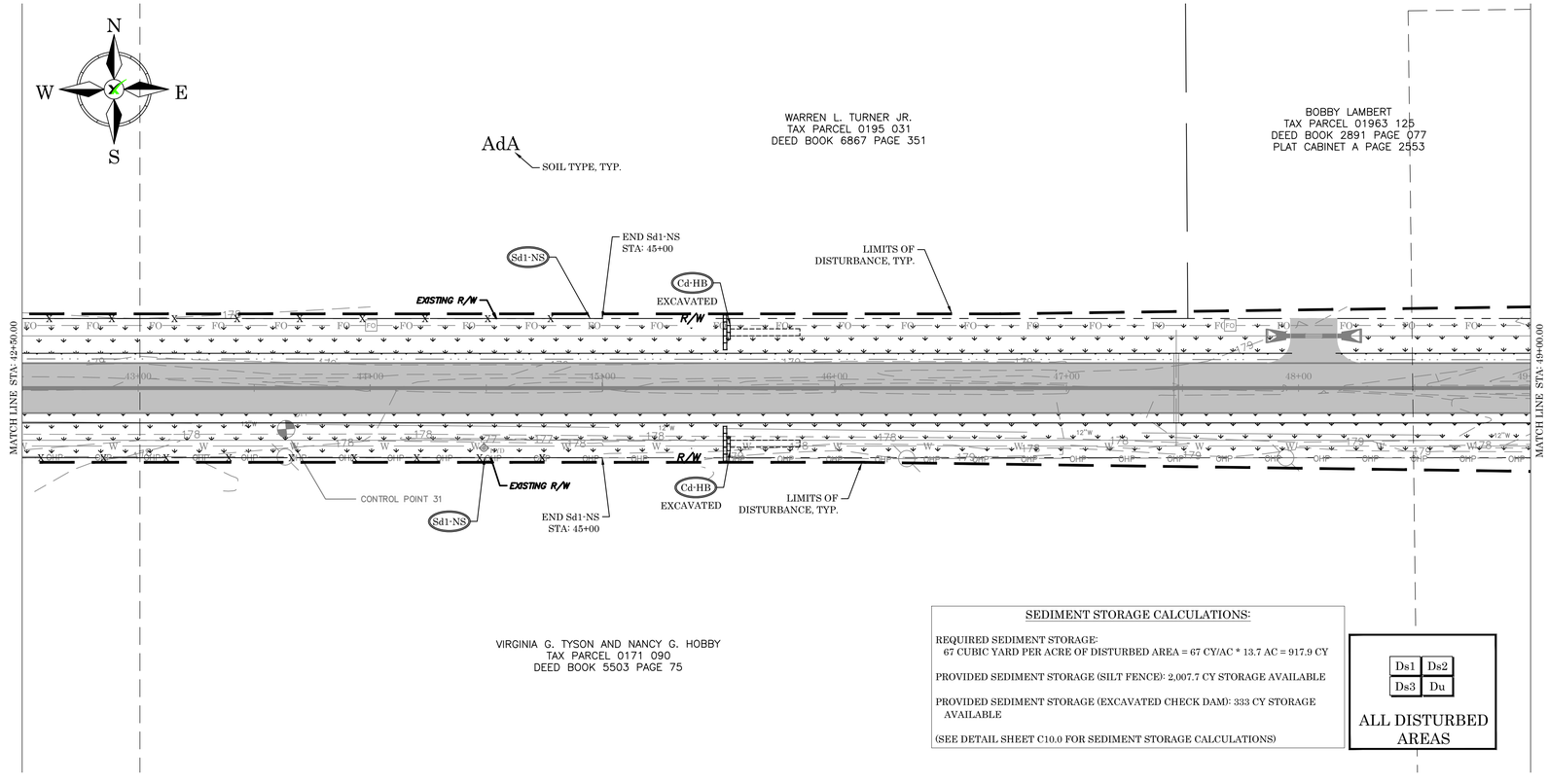
GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW INMAN

GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION
B. Matthew Inman
LEVEL II CERTIFIED DESIGN PROFESSIONAL
CERTIFICATION NUMBER: 0000000885
ISSUED: 06/01/2025 EXPIRES: 06/01/2028

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C8.1




## SEDIMENT STORAGE CALCULATIONS:

REQUIRED SEDIMENT STORAGE:
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PROVIDED SEDIMENT STORAGE (EXCAVATED CHECK DAM): 333 CY STORAGE AVAILABLE

(SEE DETAIL SHEET C10.0 FOR SEDIMENT STORAGE CALCULATIONS)

| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |
| DISTURBED AREA | 13.7 ACRES |

## EROSION, SEDIMENTATION, & POLLUTION CONTROL NOTES:

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## STRUCTURAL PRACTICES

| CODE | PRACTICE | DETAIL | MAP SYMBOL | DESCRIPTION |
|---|---|---|---|---|
| Co | CONSTRUCTION EXIT | | | A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets. |
| Sd1 | SEDIMENT BARRIER | | | A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence. |
| St | STORMDRAIN OUTLET PROTECTION | | | A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff. |
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## VEGETATIVE PRACTICES

| CODE | PRACTICE | DETAIL | MAP SYMBOL | DESCRIPTION |
|---|---|---|---|---|
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| Ds2 | DISTURBED AREA STABILIZATION (WITH TEMP. SEEDING) | | Ds2 | Establishing a temporary vegetative cover with fast growing seedings on disturbed areas. |
| Ds3 | DISTURBED AREA STABILIZATION (WITH PERM SEEDING) | | Ds3 | Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas. |
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## HATCH LEGEND:

SEEDED AREA

## NRCS WEB SOIL SURVEY

| SYMBOL | NAME | HYDROLOGIC SOIL GROUP | UNIFIED SOIL CLASSIFICATION | DEPTH |
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GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

REVISIONS

| No. | DATE | DESCRIPTION |
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| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
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| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG ▲ ALDOSTA ▲ WARNER ROBINS

# EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW INMAN

GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION

B. Matthew Inman
LEVEL II CERTIFIED DESIGN PROFESSIONAL

CERTIFICATION NUMBER: 0000000885
ISSUED: 06/01/2025 EXPIRES: 06/01/2028

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C8.2

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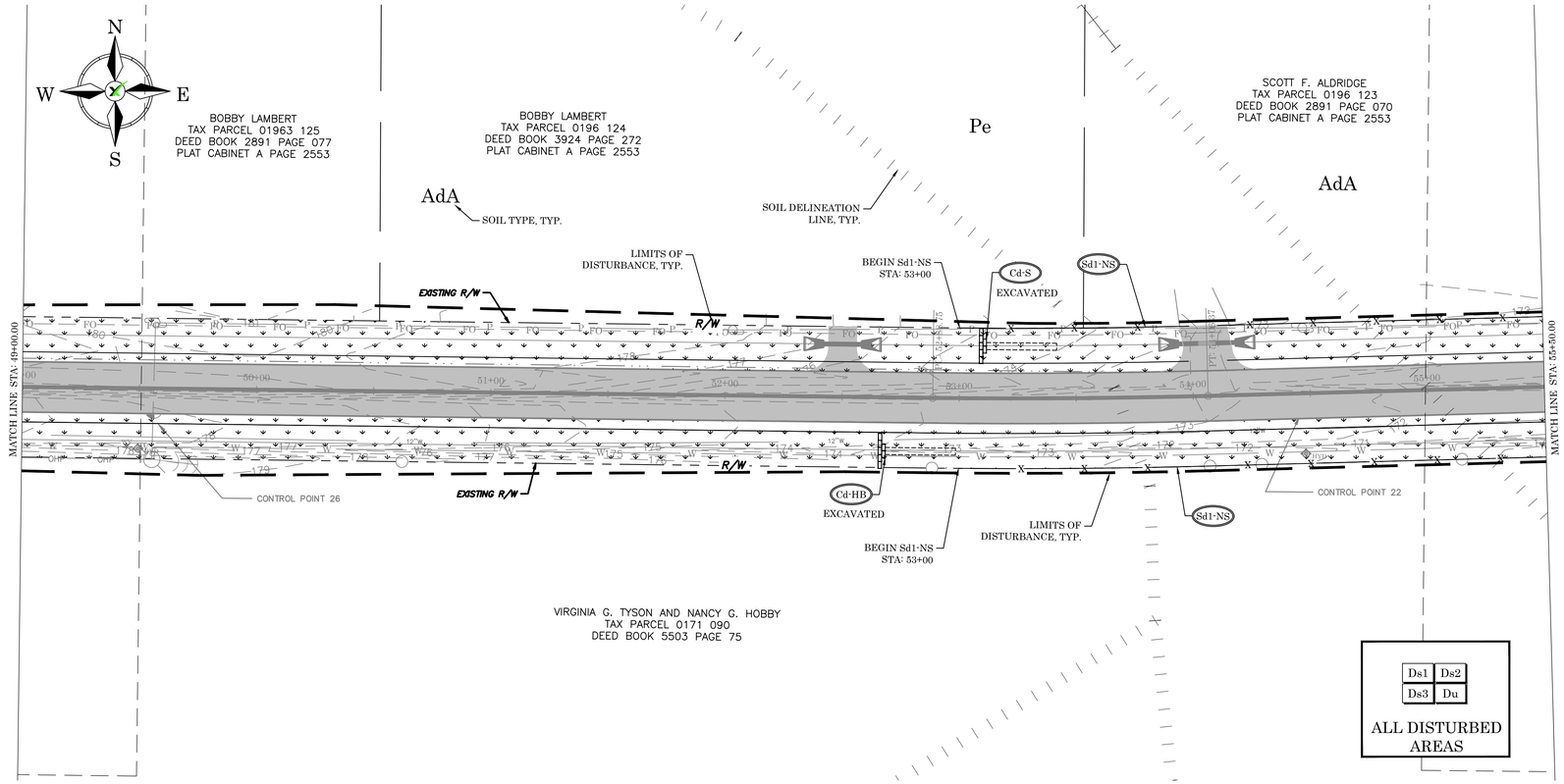


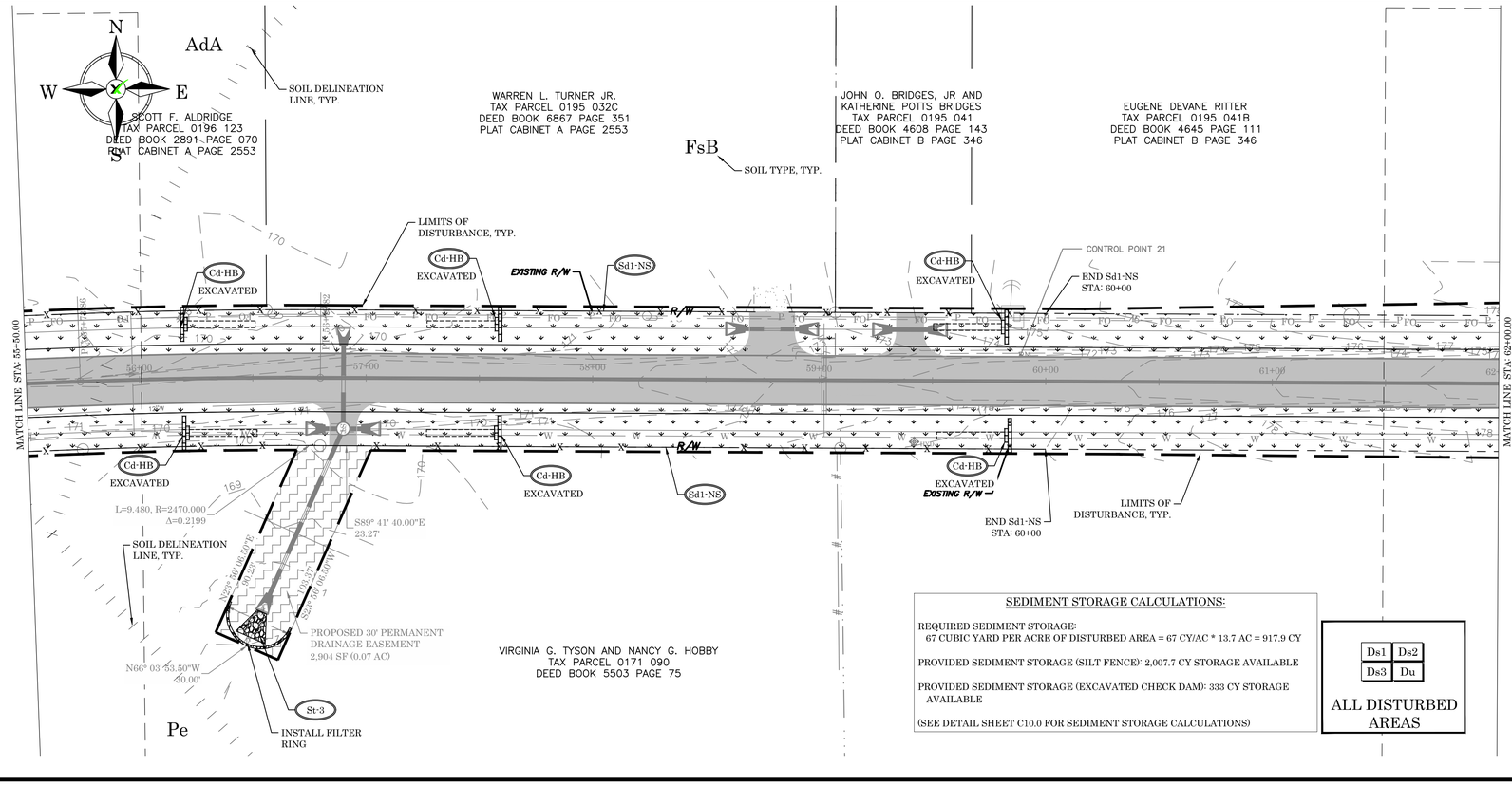


| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |
| DISTURBED AREA | 13.7 ACRES |

## EROSION, SEDIMENTATION, & POLLUTION CONTROL NOTES:

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## STRUCTURAL PRACTICES

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## HATCH LEGEND:

SEEDED AREA

## SEDIMENT STORAGE CALCULATIONS:

REQUIRED SEDIMENT STORAGE:
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PROVIDED SEDIMENT STORAGE (SILT FENCE): 2,007.7 CY STORAGE AVAILABLE

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(SEE DETAIL SHEET C10.0 FOR SEDIMENT STORAGE CALCULATIONS)

## NRCS WEB SOIL SURVEY

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GEORGIA811 www.Georgia811.com

30' 15' 0' 30'
GRAPHIC SCALE 1" = 30'

REVISIONS

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| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG • WALDOSTA • WARNER ROBINS

# EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA — AXIS ENGINEERING CONSULTANTS PEF009117 06/30/2026 — CERTIFICATE OF AUTHORIZATION

GEORGIA — REGISTERED No. PE030417 PROFESSIONAL 3/20/2026 ENGINEER B. MATTHEW INMAN

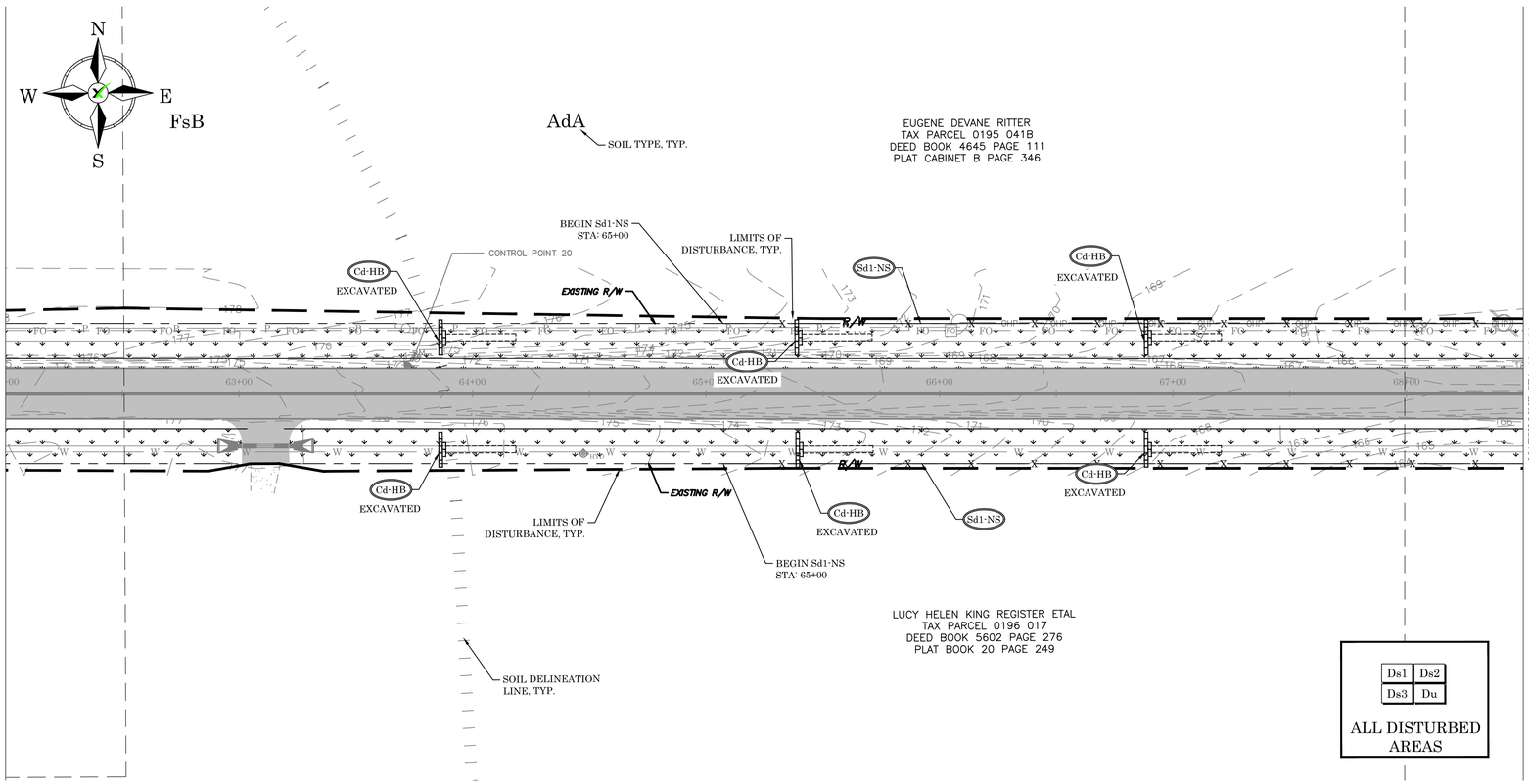
GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION

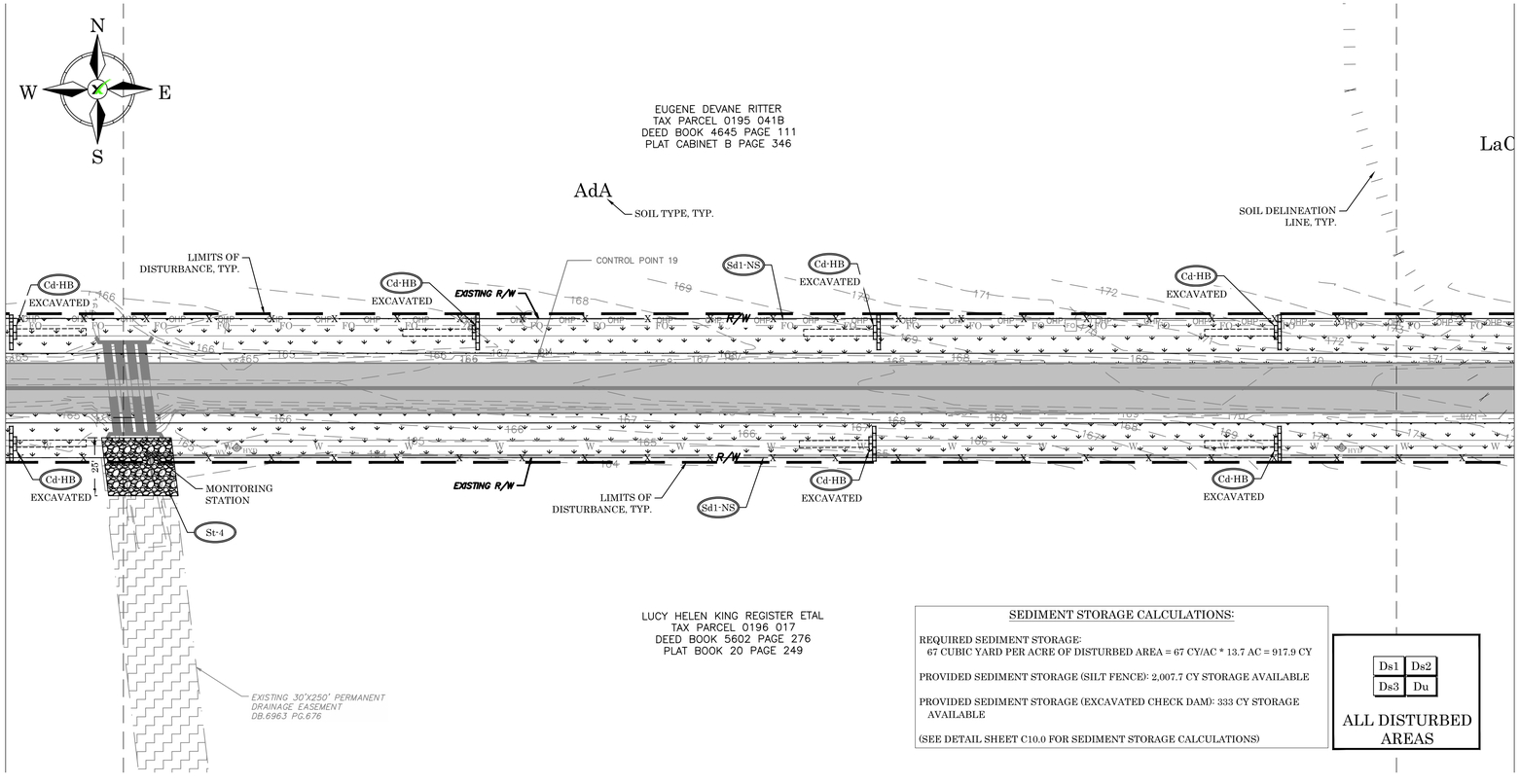
B. Matthew Inman
LEVEL II CERTIFIED DESIGN PROFESSIONAL

CERTIFICATION NUMBER: 0000000885
ISSUED: 06/01/2025 EXPIRES: 06/01/2028

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C8.3




| SITE INFORMATION | |
|---|---|
| PROJECT ADDRESS | TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636 |
| PROJECT LENGTH | 1.71 MILES |
| DISTURBED AREA | 13.7 ACRES |

## EROSION, SEDIMENTATION, & POLLUTION CONTROL NOTES:

1. THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS WITHIN 7 DAYS AFTER INSTALLATION.
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6. 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.
7. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
8. THE CONTRACTOR SHALL INSTALL ALL PERIMETER CONTROL BMPS AND CONSTRUCTION EXIT PRIOR TO ANY LAND DISTURBING ACTIVITIES.
9. THE CONTRACTOR SHALL PROVIDE DUST CONTROL FOR THE PROJECT AREA AS NEEDED BASED ON PROJECT CONDITIONS.
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11. WHEN APPROPRIATE THE CONTRACTOR SHALL INSTALL PERMANENT VEGETATIVE SEEDING ON ALL DISTURBED AREAS.
12. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY BMPS ONCE FINAL STABILIZATION HAS BEEN MET.

## STRUCTURAL PRACTICES

| CODE | PRACTICE | DETAIL | MAP SYMBOL | DESCRIPTION |
|---|---|---|---|---|
| Co | CONSTRUCTION EXIT | | | A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets. |
| Sd1 | SEDIMENT BARRIER | | | A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence. |
| St | STORMDRAIN OUTLET PROTECTION | | | A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff. |
| Tr | TREE PROTECTION | | | To protect desirable trees from injury during construction activity. |
| Cd | CHECKDAM | | | A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow. |
| CWA | CONCRETE WASHOUT AREA | | CWA | A washdown area for tools, concrete mixer chutes, hoppers and rear of vehicles. |

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| Du | DUST CONTROL ON DISTURBED AREAS | | Du | Controlling surface and air movement of dust on construction site, roadways and similar sites. |

## HATCH LEGEND:

SEEDED AREA

## NRCS WEB SOIL SURVEY

| SYMBOL | NAME | HYDROLOGIC SOIL GROUP | UNIFIED SOIL CLASSIFICATION | DEPTH |
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## SEDIMENT STORAGE CALCULATIONS:

REQUIRED SEDIMENT STORAGE:
67 CUBIC YARD PER ACRE OF DISTURBED AREA = 67 CY/AC * 13.7 AC = 917.9 CY

PROVIDED SEDIMENT STORAGE (SILT FENCE): 2,007.7 CY STORAGE AVAILABLE

PROVIDED SEDIMENT STORAGE (EXCAVATED CHECK DAM): 333 CY STORAGE AVAILABLE

(SEE DETAIL SHEET C10.0 FOR SEDIMENT STORAGE CALCULATIONS)

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# EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN

## TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
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PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030417
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CERTIFICATION NUMBER: 0000000885
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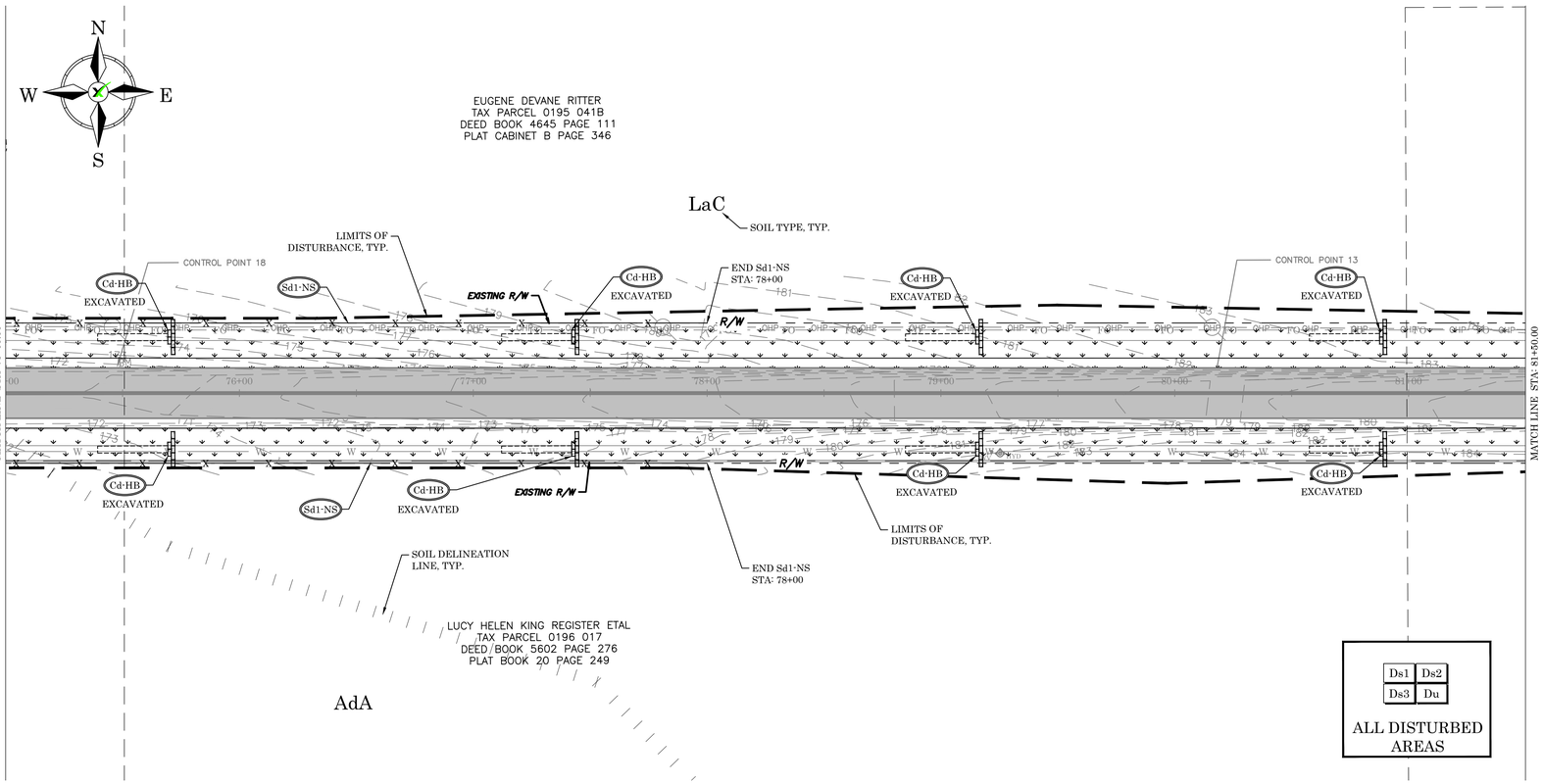
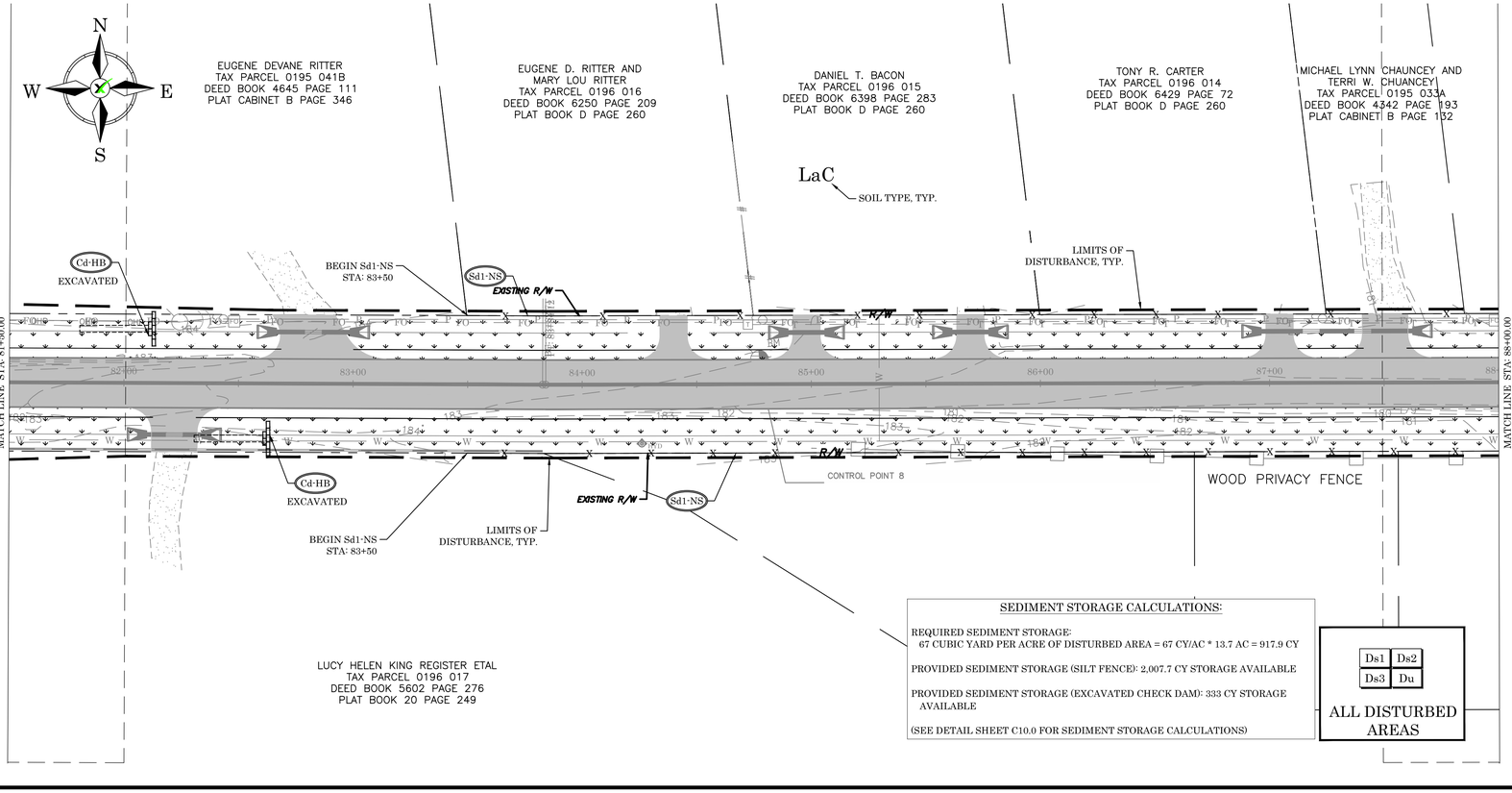
PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C8.4




| SITE INFORMATION | |
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LEESBURG ▲ ALDOSTA ▲ WARNER ROBINS

# EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW INMAN

GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION

B. Matthew Inman
LEVEL II CERTIFIED DESIGN PROFESSIONAL

CERTIFICATION NUMBER: 0000000885
ISSUED: 06/01/2025 EXPIRES: 06/01/2028

PROJECT NO. 25-25014
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CHECK BY: JVM

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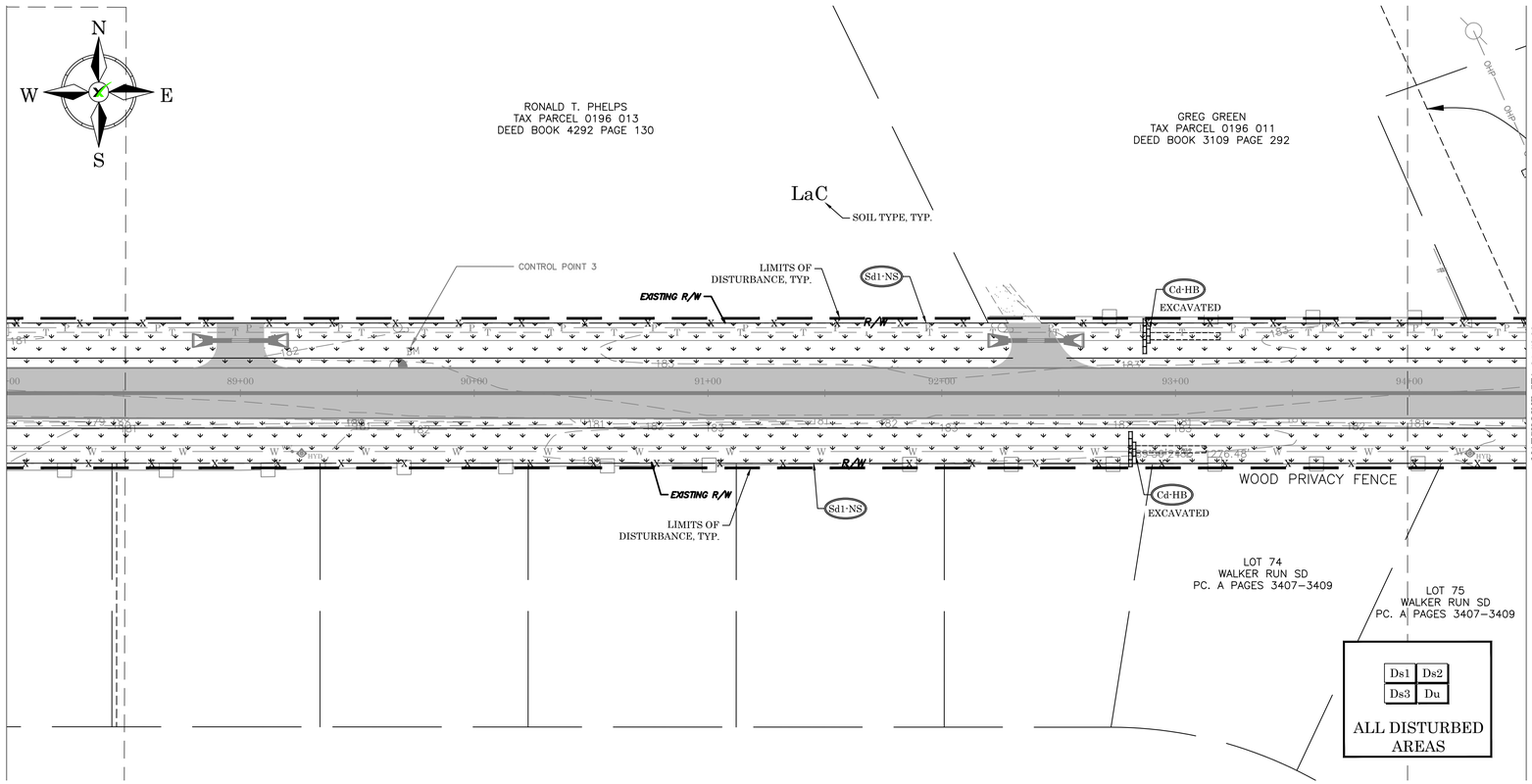
C8.5

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DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C8.6

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## EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
## INFASTRUCTURE CONSTRUCTION PROJECTS

**SWCD:** ALAPAMA

**Project Name:** TWIN LAKES ROAD PAVING IMPROVEMENTS **Address:** TWIN LAKES ROAD (CR. 390), LAKE PARK, GEORGIA 31636

**Local Issuing Authority:** LOWNDES COUNTY **Date on Plans:** 3/20/2026

**Name & email of person filling out checklist:** MATTHEW INMAN, P.E. (MINMAN@AESLLC.US)

| Plan Included Page # Y/N | | TO BE SHOWN ON ES&PC PLAN |
|---|---|---|
| C9.0 | Y | 1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed) |
| C6.0-C6.2 C11.0 | Y | 2 Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and Level II number must be on each sheet pertaining to ES&PC plan or the Plan will not be reviewed) |
| C9.0 | Y | 3 The name and phone number of the 24-hour contact responsible for erosion, sedimentation and pollution controls. |
| C9.0 | Y | 4 Provide the name, address, email address, and phone number of primary permittee. |
| C6.0 Ch.2 | Y | 5 Note total and disturbed acreages of the project or phase under construction. |
| C9.0 | Y | 6 Provide the GPS locations of the beginning and end of the Infastructure project. Give the Latitude and Longitude in decimal degrees. |
| C6.0-C6.2 C11.0 | Y | 7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions. |
| C9.0 | Y | 8 Description of the nature of construction activity and existing site conditions. |
| C1.0 | Y | 9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary. |
| C9.0 | Y | 10 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected. |
| C9.0 | Y | 11 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on **Part IV page 21** of the permit. |
| C9.0 | Y | 12 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on **Part IV page 20** of the permit. * |
| C1.0 | Y | 13 Design professional certification statement and signature that the permittee's ES&PC Plan provides for representative sampling as stated on **Part IV.D.6.c.(3) page 37** of the permit as applicable. * |
| C6.0 Ch.2 | Y | 14 Clearly note the statement that "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." in accordance with **Part IV.A.5 page 26** of the permit. * |
| C6.0 Ch.2 | Y | 15 Clearly note the statement that "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." |
| NONE | N | 16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required. |
| C6.0 Ch.2 | Y | 17 Clearly note the statement that "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." * |
| C6.0 Ch.2 | Y | 18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit." * |
| C6.0 Ch.2 | Y | 19 Clearly note statement that "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." |
| C6.0 Ch.2 | Y | 20 Clearly note statement that "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." |
| C6.0 Ch.2 | Y | 21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding." |
| NONE | N | 22 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of a Biota Impaired Stream Segment must comply with Part III. C. of the permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment. * |
| NONE | N | 23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in Item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan. * |
| NONE | N | 24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited. * |
| C9.0 | Y | 25 Provide BMPs for the remediation of all petroleum spills and leaks. |
| C9.0 | Y | 26 Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed. * |
| C9.0 | Y | 27 Description of practices to provide cover for building materials and building products on site. * |
| C9.0 | Y | 28 Description of the practices that will be used to reduce the pollutants in storm water discharges. * |
| C9.0 | Y | 29 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization). |
| C9.2 | Y | 30 Provide complete requirements of Inspections and record keeping by the primary permittee. * |
| C9.2 | Y | 31 Provide complete requirements of Sampling Frequency and Reporting of sampling results. * |
| C9.2 | Y | 32 Provide complete details for Retention of Records as per Part IV.F. of the permit. * |
| C9.2 | Y | 33 Description of analytical methods to be used to collect and analyze the samples from each location. * |
| C9.0 | Y | 34 Appendix B rationale for NTU values at all outfall sampling points where applicable. * |
| C6.0 Ch.2 | Y | 35 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged also provide a summary chart of the justification and analysis for the representative sampling as applicable. * |
| C6.0 Ch.2 | Y | 36 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all of the BMPs into a single phase. * |
| C6.0 Ch.2 | Y | 37 Graphic scale and North arrow. |
| C6.0 Ch.2 | Y | 38 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following: |

| | |
|---|---|
| Existing Contours | USGS 1": 2000' Topographical Sheets |
| Proposed Contours | 1": 400' Centerline Profile |

| | | |
|---|---|---|
| NONE | N | 39 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by GAEPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.georgia.gov. |
| NONE | N | 40 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition. * |
| NONE | N | 41 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact. |
| C6.0 Ch.2 | Y | 42 Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site. |
| NONE | N | 43 Delineation and acreage of contributing drainage basins on the project site. |
| NONE | N | 44 Delineate on-site drainage and off-site watersheds using USGS 1": 2000' topographical sheets. |
| NONE | N | 45 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed. |
| C6.0 Ch.2 | Y | 46 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points. |
| C6.0 Ch.2 | Y | 47 Soil series for the project site and their delineation. |
| C6.0 Ch.2 | Y | 48 The limits of disturbance for each phase of construction. |
| C6.0 Ch.2 | Y | 49 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual included for structural BMPs and all calculations used by the storage design professional to obtain the required sediment when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan. |
| C6.0 Ch.2 | Y | 50 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend. |
| C11.0 | Y | 51 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia. |
| C6.0 Ch.2 | Y | 52 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of the year that seeding will take place and for the appropriate geographic region of Georgia. |

* If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream, the * checklist items would be N/A.

**Effective January 1, 2025**

## MITIGATION OF SITE POLLUTANTS

| NAME OF POLLUTANT | MITIGATION METHOD/BMP |
|---|---|
| SEDIMENT | CONSTRUCTION EXIT |
| | SILT FENCE |
| | INLET PROTECTION |
| | MULCH/GRASSING |
| PETROLEUM PRODUCTS | SEE ES&PC NOTES ON THIS SHEET |
| BUILDING MATERIALS | SEE ES&PC NOTES ON THIS SHEET |
| CONCRETE | SEE INTERMEDIATE EROSION AND SEDIMENTATION CONTROL NOTES |

### WATERS SUPPORTING WARM WATER FISHERIES

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

SEE APPENDIX B

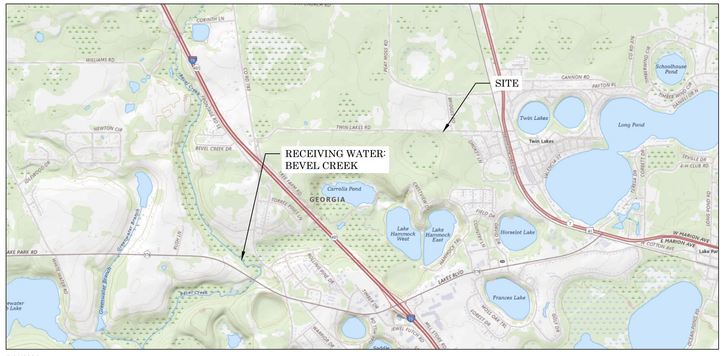
## ACTIVITY SCHEDULE

ANTICIPATED START DATE: 04/01/2026

ANTICIPATED END DATE: 04/02/2027

| ACTIVITY | MONTH 1-2 | MONTH 3-4 | MONTH 5-6 | MONTH 7-8 | MONTH 9-10 | MONTH 10-12 |
|---|---|---|---|---|---|---|
| INSTALLATION & MAINTENANCE OF INITIAL BMPS | | | | | | |
| CLEARING & GRUBBING | | | | | | |
| INSTALLATION & MAINTENANCE OF INTERMEDIATE BMPS | | | | | | |
| GRADING, STORMWATER, & UTILITY INSTALLATION | | | | | | |
| BUILDING CONSTRUCTION | | | | | | |
| FINAL GRADING, PAVING, & FINAL BMP INSTALLATION | | | | | | |
| REMOVAL OF ALL TEMPORARY BMPS | | | | | | |

## RECEIVING WATERS




6/23/2025

RECEIVING WATERS MAP

NOT TO SCALE

PRIMARY PERMITTEE:

LOWNDES COUNTY BOARD OF COMMISIONERS
327 NORTH ASHLEY STREET
VALDOSTA, GEORGIA 31601
PHONE: (229) 671-2442
COMMISSIONER@LOWNDESCOUNTY.COM

24-HOUR EMERGENCY CONTACT:

CHAD MCLEOD
PHONE: (229) 561-2639

### ES&PC NOTES:

1. FOR 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 MINIMUZE 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).
2. WASTE DISPOSAL. LOCATE WASTE COLLECTION AREAS AWAY FROM STREETS, GUTTERS, WATERCOURSES AND STORM DRAINS. WASTE COLLECTION AREAS, SUCH AS DUMPSTERS, ARE OFTEN BEST LOCATED NEAR CONSTRUCTION SITE ENTRANCES TO MINIMIZE TRAFFIC ON DISTURBED SOILS. THE PLAN SHOULD INCLUDE SECONDARY CONTAINMENT AROUND LIQUID WASTE COLLECTION AREAS TO FURTHER MINIMIZE THE LIKELIHOOD OF CONTAMINATED DISCHARGES. SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
3. ALL PERMITEES ARE REQUIRED TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING TRENCHES AND EXCAVATIONS. DISCHARGES ARE PROHIBITS UNLESS MANAGED BY APPROPRIATE CONTROLS.
4. IF ANY PETROLEUM PRODUCTS ARE KEPT ON SITE, THEN THEY SHALL BE KEPT IN A SECURE AREA AND MONITORED DAILY FOR ANY SPILLS OR LEAKS AND NOTED IN THE SAME DAY IN THE DAILY REPORT.
5. IF ANY PETROLEUM PRODUCTS ARE SPILLED OR LEAK ON SITE THEY ARE TO IMMEDIATELY BE TREATED WITH OIL-DRI OR A COMPARABLE PRODUCT. AFTER TREATMENT, THE CONTAMINATED ABSORBENT MUST BE DISPOSED OF IN COMPLIANCE WITH GEORGIA EPD AND DEPARTMENT OF NATURAL RESOURCES REGULATIONS.
6. IF ANY PETROLEUM OR HARMFUL PRODUCTS ENTERS STATE WATERS OR ANY TRANSPORTATION TO STATE WATERS OF ANY DISCERNIBLE AMOUNT, THE SPILL SHALL BE REPORTED TO THE DEPARTMENT OF NATURAL RESOURCES EMERGENCY OPERATION CENTER AT 1-800-424-8802.
7. IF ANY PETROLEUM OR HARMFUL PRODUCTS ARE STORED ON SITE THEN THEY SHALL BE PLACED AS FAR FROM WETLANDS, DRAINAGE DITCHES, STORMWATER SYSTEMS, AND OTHER ENVIRONMENTALLY SENSITIVE AREAS AS POSSIBLE TO PROVIDE AS MUCH PROTECTION AS POSSIBLE. THESE AREAS SHOULD BE SURROUNDED BY BERMS OR OTHER PROTECTIVE MEASURES TO ENSURE THE CAPTURE OF ANY MATERIAL SHOULD LEAKS OR SPILLS OCCUR.
8. STABILIZATION OF THE SITE DURING CONSTRUCTION WITH PERMANENT VEGETATION SUCH AS (Ds3) WILL BE INSTALLED IN ACCORDANCE WITH THE GRASSING SCHEDULE TO OPTIMIZE GROWTH TO STABILIZE THE SITE ONCE CONSTRUCTION IS COMPLETE AND WILL CONTROL ANY POSSIBLE POLLUTANTS FROM THE SITE.
9. THE EXISTING CONDITIONS OF THE SITE CONTAINS DIRT THOROUGHFARE. THE PROPOSED USE OF THE SITE IS ASPHALT THOROUGHFARE, WITH ASSOCIATED PAVING, SANITARY, STORM, AND OTHER UTILITY INFRASTRUCTURE.
10. THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS WITHIN 7 DAYS AFTER INSTALLATION.
11. 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.
12. 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.
13. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
14. 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.
15. 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.
16. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
17. THE RECEIVING WATERS FOR THIS SITE HAS BEEN IDENTIFIED AS BEVEL CREEK.

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 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.

| 0000000885 | 3/20/2026 |
|---|---|
| LEVEL II CERTIFICATION NO. | DATE |

LEVEL II DESIGN PERSONNEL

WEST CONSTRUCTION EXIT
GPS LOCATION
LATITUDE: 30.6977° N
LONGITUDE: 83.2398° W

EAST CONSTRUCTION EXIT
GPS LOCATION
LATITUDE: 30.6973° N
LONGITUDE: 83.2117° W

REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |


AXIS ENGINEERING CONSULTANTS
LEESBURG VALDOSTA WARNER ROBINS


# EROSION, SEDIMENTATION, & POLLUTION CONTROL NOTES

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEP009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW INMAN

GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION

B. Matthew Inman
LEVEL II CERTIFIED DESIGN PROFESSIONAL

CERTIFICATION NUMBER: 0000000885
ISSUED 06/01/2025 EXPIRES 06/01/2028

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C9.0

# GENERAL NPDES PERMIT NO. GAR100002

## (PERMIT EFFECTIVE AUGUST 1, 2023 - JULY 31, 2028)

Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN

A SITE-SPECIFIC EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN (PLAN) SHALL BE DESIGNED, INSTALLED AND MAINTAINED FOR THE ENTIRE CONSTRUCTION ACTIVITY COVERED BY THIS PERMIT. THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN MUST BE PREPARED BY A DESIGN PROFESSIONAL AS DEFINED BY THIS PERMIT. ALL PERSONS INVOLVED IN PLAN PREPARATION SHALL HAVE COMPLETED THE APPROPRIATE CERTIFICATION COURSE, PURSUANT TO O.C.G.A. 12-7-19(B), APPROVED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION. THE DESIGN PROFESSIONAL PREPARING THE PLAN MUST INCLUDE AND SIGN THE FOLLOWING CERTIFICATION IN THE PLAN:

> "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."

THE PLAN SHALL INCLUDE ANY ADDITIONAL CERTIFICATIONS REGARDING THE DESIGN PROFESSIONAL'S SITE VISIT IN ACCORDANCE WITH THE RULES FOR EROSION AND SEDIMENTATION CONTROL PROMULGATED BY THE BOARD OF NATURAL RESOURCES:

> "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."

THE PLAN SHALL INCLUDE, AS A MINIMUM, BEST MANAGEMENT PRACTICES, INCLUDING SOUND CONSERVATION AND ENGINEERING PRACTICES TO PREVENT AND MINIMIZE EROSION AND RESULTANT SEDIMENTATION, WHICH ARE CONSISTENT WITH, AND NO LESS STRINGENT THAN, THOSE PRACTICES CONTAINED IN THE "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 AND O.C.G.A. 12-7-6, AS WELL AS THE FOLLOWING:

(i). EXCEPT AS PROVIDED IN PART IV.(iii). BELOW, NO CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED WITHIN A 25 FOOT BUFFER ALONG THE BANKS OF ALL STATE WATERS, AS MEASURED HORIZONTALLY FROM THE POINT WHERE VEGETATION HAS BEEN WRESTED BY NORMAL STREAM FLOW OR WAVE ACTION, EXCEPT WHERE THE DIRECTOR HAS DETERMINED TO ALLOW A VARIANCE THAT IS AT LEAST AS PROTECTIVE OF NATURAL RESOURCES AND THE ENVIRONMENT IN ACCORDANCE WITH THE PROVISIONS OF O.C.G.A. 12-7-6, OR WHERE A DRAINAGE STRUCTURE OR A ROADWAY DRAINAGE STRUCTURE MUST BE CONSTRUCTED, PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED IN THE PROJECT PLANS AND SPECIFICATIONS AND ARE IMPLEMENTED, OR ALONG ANY EPHEMERAL STREAM, OR WHERE BULKHEADS AND SEAWALLS MUST BE CONSTRUCTED TO PREVENT THE EROSION OF THE SHORELINE ON LAKE OCONEE AND LAKE SINCLAIR. THE BUFFER SHALL NOT APPLY TO THE FOLLOWING ACTIVITIES PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND ARE IMPLEMENTED:

(1) PUBLIC DRINKING WATER SYSTEM RESERVOIRS:
(2) FENCES:
(3) STREAM CROSSINGS FOR WATER LINES AND SEWER LINES, PROVIDED THAT THE STREAM CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, AND NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER:
(4) STREAM CROSSINGS FOR ANY UTILITY LINES OF ANY ELECTRIC MEMBERSHIP CORPORATION OR MUNICIPAL ELECTRICAL SYSTEM OR ANY PUBLIC UTILITY UNDER THE REGULATORY JURISDICTION OF THE PUBLIC SERVICE COMMISSION, ANY UTILITY UNDER THE REGULATORY JURISDICTION OF THE FEDERAL ENERGY REGULATORY COMMISSION, ANY CABLE TELEVISION SYSTEM AS DEFINED IN CODE SECTION 36-18-1, OR ANY AGENCY OR INSTRUMENTALITY OF THE UNITED STATES ENGAGED IN THE GENERATION, TRANSMISSION OR DISTRIBUTION OF POWER, PROVIDED THAT: (a) THE STREAM CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, (b) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER AND (c) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT LOCATED WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT:
(5) STREAM CROSSINGS FOR AERIAL UTILITY LINES, PROVIDED THAT: (a) THE NEW UTILITY LINE RIGHT-OF-WAY WIDTH DOES NOT EXCEED 200 LINEAR FEET, (b) UTILITY LINES ARE ROUTED AND CONSTRUCTED SO AS TO MINIMIZE THE NUMBER OF STREAM CROSSINGS AND DISTURBANCES TO THE BUFFER, (c) ONLY TREES AND TREE DEBRIS ARE REMOVED FROM WITHIN THE BUFFER RESULTING IN ONLY MINOR SOIL EROSION (I.E., DISTURBANCE TO UNDERLYING VEGETATION IS MINIMIZED), AND (D) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER. THE PLAN SHALL INCLUDE A DESCRIPTION OF THE STREAM CROSSINGS WITH DETAILS OF THE BUFFER DISTURBANCE INCLUDING AREA AND LENGTH OF BUFFER DISTURBANCE, ESTIMATED LENGTH OF TIME OF BUFFER DISTURBANCE, AND JUSTIFICATION:
(6) RIGHT-OF-WAY POSTS, GUY-WIRES, ANCHORS, SURVEY MARKERS AND THE REPLACEMENT OR MAINTENANCE OF EXISTING UTILITY STRUCTURES WITHIN THE CURRENT RIGHT-OF-WAY UNDERTAKEN OR FINANCED IN WHOLE OR IN PART BY THE DEPARTMENT OF TRANSPORTATION, THE GEORGIA HIGHWAY AUTHORITY OR THE STATE ROAD AND TOLLWAY AUTHORITY OR UNDERTAKEN BY ANY COUNTY OR MUNICIPALITY, PROVIDED THAT: (a) THE AREA OF LAND DISTURBANCE DOES NOT EXCEED 100 SQUARE FEET PER STRUCTURE, (b) THE AREA OF BUFFER VEGETATION TO BE CUT (NOT GRUBBED) DOES NOT EXCEED 1,000 SQUARE FEET PER STRUCTURE, (c) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER AND (d) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT LOCATED WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT: AND
(7) RIGHT-OF-WAY POSTS, GUY-WIRES, ANCHORS, SURVEY MARKERS AND THE REPLACEMENT OR MAINTENANCE OF EXISTING UTILITY STRUCTURES WITHIN THE CURRENT RIGHT-OF-WAY UNDERTAKEN BY ANY ELECTRIC MEMBERSHIP CORPORATION OR MUNICIPAL ELECTRICAL SYSTEM OR ANY PUBLIC UTILITY UNDER THE REGULATORY JURISDICTION OF THE PUBLIC SERVICE COMMISSION, ANY UTILITY UNDER THE REGULATORY JURISDICTION OF THE FEDERAL ENERGY REGULATORY COMMISSION, ANY CABLE TELEVISION SYSTEM AS DEFINED IN CODE SECTION 36-18-1, OR ANY AGENCY OR INSTRUMENTALITY OF THE UNITED STATES ENGAGED IN THE GENERATION, TRANSMISSION OR DISTRIBUTION OF POWER, PROVIDED THAT: (a) THE AREA OF LAND DISTURBANCE DOES NOT EXCEED 100 SQUARE FEET PER STRUCTURE, (b) THE AREA OF BUFFER VEGETATION TO BE CUT (NOT GRUBBED) DOES NOT EXCEED 1,000 SQUARE FEET PER STRUCTURE, (c) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER AND (d) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT LOCATED WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT.

(ii). NO CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED WITHIN A 50 FOOT BUFFER, AS MEASURED HORIZONTALLY FROM THE POINT WHERE VEGETATION HAS BEEN WRESTED BY NORMAL STREAM FLOW OR WAVE ACTION, ALONG THE BANKS OF ANY STATE WATERS CLASSIFIED AS "TROUT STREAMS" EXCEPT WHEN APPROVAL IS GRANTED BY THE DIRECTOR FOR ALTERNATE BUFFER REQUIREMENTS IN ACCORDANCE WITH THE PROVISIONS OF O.C.G.A. 12-7-6, OR WHERE A ROADWAY DRAINAGE STRUCTURE MUST BE CONSTRUCTED: PROVIDED, HOWEVER, THAT SMALL SPRINGS AND STREAMS CLASSIFIED AS 'TROUT STREAMS' WHICH DISCHARGE AN AVERAGE ANNUAL FLOW OF 25 GALLONS PER MINUTE OR LESS SHALL HAVE A 25 FOOT BUFFER OR THEY MAY BE PIPED, AT THE DISCRETION OF THE PERMITTEE, PURSUANT TO THE TERMS OF A RULE PROVIDING FOR A GENERAL VARIANCE PROMULGATED BY THE BOARD OF NATURAL RESOURCES INCLUDING NOTIFICATION OF SUCH TO EPD AND THE LOCAL ISSUING AUTHORITY OF THE LOCATION AND EXTENT OF THE PIPING AND PRESCRIBED METHODOLOGY FOR MINIMIZING THE IMPACT OF SUCH PIPING AND FOR MEASURING THE VOLUME OF WATER DISCHARGED BY THE STREAM. ANY SUCH PIPE MUST STOP SHORT OF THE DOWNSTREAM PERMITTEE'S PROPERTY, AND THE PERMITTEE MUST COMPLY WITH THE BUFFER REQUIREMENT FOR ANY ADJACENT TROUT STREAMS. THE BUFFER SHALL NOT APPLY TO THE FOLLOWING ACTIVITIES PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND ARE IMPLEMENTED:

(1) PUBLIC DRINKING WATER SYSTEM RESERVOIRS:
(2) FENCES:
(3) STREAM CROSSINGS FOR WATER LINES AND SEWER LINES, PROVIDED THAT THE STREAM CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, AND NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER:
(4) STREAM CROSSINGS FOR ANY UTILITY LINES OF ANY ELECTRIC MEMBERSHIP CORPORATION OR MUNICIPAL ELECTRICAL SYSTEM OR ANY PUBLIC UTILITY UNDER THE REGULATORY JURISDICTION OF THE PUBLIC SERVICE COMMISSION, ANY UTILITY UNDER THE REGULATORY JURISDICTION OF THE FEDERAL ENERGY REGULATORY COMMISSION, ANY CABLE TELEVISION SYSTEM AS DEFINED IN CODE SECTION 36-18-1, OR ANY AGENCY OR INSTRUMENTALITY OF THE UNITED STATES ENGAGED IN THE GENERATION, TRANSMISSION OR DISTRIBUTION OF POWER, PROVIDED THAT: (a) THE STREAM CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, (b) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER AND (c) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT LOCATED WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT:
(5) STREAM CROSSINGS FOR AERIAL UTILITY LINES, PROVIDED THAT: (a) THE NEW UTILITY LINE RIGHT-OF-WAY WIDTH DOES NOT EXCEED 200 LINEAR FEET, (b) UTILITY LINES ARE ROUTED AND CONSTRUCTED SO AS TO MINIMIZE THE NUMBER OF STREAM CROSSINGS AND DISTURBANCES TO THE BUFFER, (c) ONLY TREES AND TREE DEBRIS ARE REMOVED FROM WITHIN THE BUFFER RESULTING IN ONLY MINOR SOIL EROSION (I.E., DISTURBANCE TO UNDERLYING VEGETATION IS MINIMIZED), AND (d) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER. THE PLAN SHALL INCLUDE A DESCRIPTION OF THE STREAM CROSSINGS WITH DETAILS OF THE BUFFER DISTURBANCE INCLUDING AREA AND LENGTH OF BUFFER DISTURBANCE, ESTIMATED LENGTH OF TIME OF BUFFER DISTURBANCE, AND JUSTIFICATION:
(6) RIGHT-OF-WAY POSTS, GUY-WIRES, ANCHORS, SURVEY MARKERS AND THE REPLACEMENT OR MAINTENANCE OF EXISTING UTILITY STRUCTURES WITHIN THE CURRENT RIGHT-OF-WAY UNDERTAKEN OR FINANCED IN WHOLE OR IN PART BY THE DEPARTMENT OF TRANSPORTATION, THE GEORGIA HIGHWAY AUTHORITY OR THE STATE ROAD AND TOLLWAY AUTHORITY OR UNDERTAKEN BY ANY COUNTY OR MUNICIPALITY, PROVIDED THAT: (a) THE AREA OF LAND DISTURBANCE DOES NOT EXCEED 100 SQUARE FEET PER STRUCTURE, (b) THE AREA OF BUFFER VEGETATION TO BE CUT (NOT GRUBBED) DOES NOT EXCEED 1,000 SQUARE FEET PER STRUCTURE, (c) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER AND (d) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT LOCATED WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT: AND
(7) RIGHT-OF-WAY POSTS, GUY-WIRES, ANCHORS, SURVEY MARKERS AND THE REPLACEMENT OR MAINTENANCE OF EXISTING UTILITY STRUCTURES WITHIN THE CURRENT RIGHT-OF-WAY UNDERTAKEN BY ANY ELECTRIC MEMBERSHIP CORPORATION OR MUNICIPAL ELECTRICAL SYSTEM OR ANY PUBLIC UTILITY UNDER THE REGULATORY JURISDICTION OF THE PUBLIC SERVICE COMMISSION, ANY UTILITY UNDER THE REGULATORY JURISDICTION OF THE FEDERAL ENERGY REGULATORY COMMISSION, ANY CABLE TELEVISION SYSTEM AS DEFINED IN CODE SECTION 36-18-1, OR ANY AGENCY OR INSTRUMENTALITY OF THE UNITED STATES ENGAGED IN THE GENERATION, TRANSMISSION OR DISTRIBUTION OF POWER, PROVIDED THAT: (a) THE AREA OF LAND DISTURBANCE DOES NOT EXCEED 100 SQUARE FEET PER STRUCTURE, (b) THE AREA OF BUFFER VEGETATION TO BE CUT (NOT GRUBBED) DOES NOT EXCEED 1,000 SQUARE FEET PER STRUCTURE, (c) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER AND (d) THE ENTITY IS NOT A SECONDARY PERMITTEE FOR A PROJECT LOCATED WITHIN A COMMON DEVELOPMENT OR SALE UNDER THIS PERMIT.

(iv). EXCEPT AS PROVIDED ABOVE, FOR BUFFERS REQUIRED PURSUANT TO PART IV.(i). AND (ii) AND (iii), NO CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED WITHIN A BUFFER AND A BUFFER SHALL REMAIN IN ITS NATURAL, UNDISTURBED, STATE OF VEGETATION UNTIL ALL LAND-DISTURBING ACTIVITIES ON THE CONSTRUCTION SITE ARE COMPLETED. DURING COVERAGE UNDER THIS PERMIT, A BUFFER CANNOT BE THINNED OR TRIMMED OF VEGETATION AND A PROTECTIVE VEGETATIVE COVER MUST REMAIN TO PROTECT WATER QUALITY AND AQUATIC HABITAT AND A NATURAL CANOPY MUST BE LEFT IN SUFFICIENT QUANTITY TO KEEP SHADE ON THE STREAM BED OR MARSH.

THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN SHALL IDENTIFY ALL POTENTIAL SOURCES OF POLLUTION WHICH MAY REASONABLY BE EXPECTED TO AFFECT THE QUALITY OF STORMWATER DISCHARGES FROM THE CONSTRUCTION SITE. IN ADDITION, THE PLAN SHALL DESCRIBE AND THE APPLICABLE PERMITTEE SHALL ENSURE THE IMPLEMENTATION OF PRACTICES WHICH WILL BE USED TO REDUCE THE POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY AT THE SITE AND TO ASSURE COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT. THE APPLICABLE PERMITTEE MUST IMPLEMENT AND MAINTAIN THE PROVISIONS OF THE PLAN REQUIRED UNDER THIS PART AS A CONDITION OF THIS PERMIT.

EXCEPT AS PROVIDED IN PART IV.A.2., A SINGLE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN MUST BE PREPARED BY THE PRIMARY PERMITTEE FOR THE INFRASTRUCTURE CONSTRUCTION PROJECT.

A. DEADLINES FOR PLAN PREPARATION AND COMPLIANCE.

1. EXCEPT AS PROVIDED IN PART IV.A.2 AND PART IV.A.6., THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN SHALL BE COMPLETED PRIOR TO SUBMITTING THE NOI AND PRIOR TO CONDUCTING ANY CONSTRUCTION ACTIVITY BY ANY PERMITTEE.

2. FOR CONSTRUCTION ACTIVITIES THAT BEGAN ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT AND WERE SUBJECT TO THE REGULATIONS UNDER THE PREVIOUS PERMIT, THE PERMITTEE(S) SHALL CONTINUE TO OPERATE UNDER THE EXISTING PLAN.

3. FOR CONSTRUCTION ACTIVITIES THAT BEGIN AFTER THE EFFECTIVE DATE OF THIS PERMIT, THE PRIMARY PERMITTEE SHALL BE REQUIRED TO PREPARE THE PLAN FOR THAT PHASE OF THE INFRASTRUCTURE DEVELOPMENT THAT CORRESPONDS WITH THE NOI BEING SUBMITTED AND THE PRIMARY PERMITTEE(S) SHALL IMPLEMENT THE PLAN ON OR BEFORE THE DAY CONSTRUCTION ACTIVITIES BEGIN.

4. ADDITIONAL PLAN SUBMITTALS.

a. FOR ALL PROJECTS IDENTIFIED UNDER PART I.C.1.B., IN A JURISDICTION WHERE THERE IS NO CERTIFIED LOCAL ISSUING AUTHORITY REGULATING THAT PROJECT, A SINGLE COPY OF THE PLAN MUST BE SUBMITTED TO THE EPD WATERSHED PROTECTION BRANCH AND A SECOND COPY OF THE PLAN MUST BE SUBMITTED TO THE APPROPRIATE EPD DISTRICT OFFICE PRIOR TO OR CONCURRENT WITH THE NOI SUBMITTAL. THE SECOND COPY OF THE PLAN MUST BE SUBMITTED ELECTRONICALLY AS A PORTABLE DOCUMENT FORMAT (PDF) FILE THROUGH THE ELECTRONIC SUBMITTAL SERVICE PROVIDED BY EPD, OR BY RETURN RECEIPT CERTIFIED MAIL OR SIMILAR SERVICE AS A PDF ON CD-ROM OR OTHER STORAGE DEVICE TO THE APPROPRIATE EPD DISTRICT OFFICE. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF THE SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATIVE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH A TIME AS A NOTICE OF TERMINATION (NOT) IS SUBMITTED IN ACCORDANCE WITH PART VI. THE EPD WATERSHED PROTECTION BRANCH WILL REVIEW PLANS FOR DEFICIENCIES USING THE APPLICABLE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN CHECKLIST ESTABLISHED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED

b. FOR ALL PROJECTS WHERE THE CONSTRUCTION ACTIVITY AS INDICATED ON THE EXISTING NOI HAS CHANGED, THE AMENDED PLANS MUST BE SUBMITTED IN ACCORDANCE WITH PART IV.A.4.A. IN ADDITION, THE PERMITTEE MUST SUBMIT A MODIFICATION NOI IN ACCORDANCE WITH PART II.

5. FOR INFRASTRUCTURE PROJECTS THAT BEGIN CONSTRUCTION ACTIVITY AFTER THE EFFECTIVE DATE OF THIS PERMIT, THE PRIMARY PERMITTEE MUST RETAIN THE DESIGN PROFESSIONAL WHO PREPARED THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, OR AN ALTERNATIVE DESIGN PROFESSIONAL APPROVED BY EPD IN WRITING, TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS WITHIN SEVEN (7) DAYS AFTER INSTALLATION. ALTERNATIVELY, FOR LINEAR INFRASTRUCTURE PROJECTS, THE PRIMARY PERMITTEE MUST RETAIN THE DESIGN PROFESSIONAL WHO PREPARED THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, OR AN ALTERNATIVE DESIGN PROFESSIONAL APPROVED BY EPD IN WRITING, TO INSPECT (a) THE INSTALLATION OF THE SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS FOR THE "INITIAL SEGMENT" OF THE LINEAR INFRASTRUCTURE PROJECT AND (b) ALL SEDIMENT BASINS WITHIN THE ENTIRE LINEAR INFRASTRUCTURE PROJECT WITHIN SEVEN (7) DAYS AFTER INSTALLATION. FOR THE PURPOSES OF THE SPECIFIC REQUIREMENTS IN PART IV.A.5., THE DISTURBED ACREAGE OF THE "INITIAL SEGMENT" OF A LINEAR INFRASTRUCTURE PROJECT MUST BE EQUAL TO OR GREATER THAN 10% OF THE TOTAL ESTIMATED DISTURBED ACREAGE FOR THE LINEAR INFRASTRUCTURE PROJECT BUT NOT LESS THAN ONE (1) ACRE. THE DESIGN PROFESSIONAL SHALL DETERMINE IF THESE BMPS HAVE BEEN INSTALLED AND ARE BEING MAINTAINED AS DESIGNED. THE DESIGN PROFESSIONAL SHALL REPORT THE RESULTS OF THE INSPECTION TO THE PRIMARY PERMITTEE WITHIN SEVEN (7) DAYS AND THE PERMITTEE MUST CORRECT ALL DEFICIENCIES WITHIN TWO (2) BUSINESS DAYS OF RECEIPT OF THE INSPECTION REPORT FROM THE DESIGN PROFESSIONAL UNLESS WEATHER RELATED SITE CONDITIONS ARE SUCH THAT ADDITIONAL TIME IS REQUIRED.

6. FOR STORM- OR EMERGENCY-RELATED REPAIR WORK, THE PERMITTEE SHALL IMPLEMENT APPROPRIATE BMPS AND CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER. IF THE STORM- OR EMERGENCY-RELATED REPAIR WORK WILL NOT BE COMPLETED WITHIN SIXTY (60) DAYS OF COMMENCEMENT OF CONSTRUCTION ACTIVITY, A SINGLE COPY OF THE PLAN SHALL BE SUBMITTED TO EPD AND THE PERMITTEE SHALL COMPLY WITH ALL REQUIREMENTS OF THIS PERMIT ON THE SIXTY-FIRST (61ST) DAY.

B. SIGNATURE AND PLAN REVIEW.

1. THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN SHALL BE SIGNED IN ACCORDANCE WITH PART IV., AND BE RETAINED ON THE SITE (OR, IF NOT POSSIBLE, AT A READILY ACCESSIBLE LOCATION) WHICH GENERATES THE STORMWATER DISCHARGE IN ACCORDANCE WITH PART IV.F. OF THIS PERMIT.

2. THE PRIMARY PERMITTEE SHALL MAKE PLANS AVAILABLE UPON REQUEST TO THE EPD; TO DESIGNATED OFFICIALS OF THE LOCAL GOVERNMENT REVIEWING SOIL EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, GRADING PLANS, OR STORMWATER MANAGEMENT PLANS; OR IN THE CASE OF A STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY WHICH DISCHARGES THROUGH A MUNICIPAL SEPARATE STORM SEWER SYSTEM WITH AN NPDES PERMIT, TO THE LOCAL GOVERNMENT OPERATING THE MUNICIPAL SEPARATE STORM SEWER SYSTEM.

3. EPD MAY NOTIFY THE PRIMARY PERMITTEE AT ANY TIME THAT THE PLAN DOES NOT MEET ONE OR MORE OF THE MINIMUM REQUIREMENTS OF THIS PART. WITHIN SEVEN (7) DAYS OF SUCH NOTIFICATION (OR AS OTHERWISE PROVIDED BY EPD), THE PRIMARY PERMITTEE SHALL MAKE THE REQUIRED CHANGES TO THE PLAN AND SHALL SUBMIT TO EPD EITHER THE AMENDED PLAN OR A WRITTEN CERTIFICATION THAT THE REQUESTED CHANGES HAVE BEEN MADE.

C. KEEPING PLANS CURRENT. THE PRIMARY PERMITTEE(S) SHALL AMEND THEIR PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT (I.E., THOSE BMPS WHERE THE DESIGN IS BASED UPON RAINFALL INTENSITY, DURATION AND RETURN FREQUENCY OF STORMS) OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM SOURCES IDENTIFIED UNDER PART IV.D.3. OF THIS PERMIT. AMENDMENTS TO THE PLAN MUST BE CERTIFIED BY A DESIGN PROFESSIONAL AS PROVIDED IN THIS PERMIT.

D. CONTENTS OF PLAN. THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN SHALL INCLUDE, AS A MINIMUM, BEST MANAGEMENT PRACTICES, INCLUDING SOUND CONSERVATION AND ENGINEERING PRACTICES TO PREVENT AND MINIMIZE EROSION AND RESULTANT SEDIMENTATION, WHICH ARE CONSISTENT WITH, AND NO LESS STRINGENT THAN, THOSE PRACTICES CONTAINED IN THE "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, AS WELL AS THE FOLLOWING:

1. CHECKLIST. EACH PLAN SHALL INCLUDE A COMPLETED EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN CHECKLIST ESTABLISHED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION (GSWCC) AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED AND AMENDMENTS TO THE APPLICABLE CHECKLIST AS APPROVED BY THE GSWCC UP UNTIL THE DATE OF THE NOI SUBMITTAL. THE APPLICABLE CHECKLISTS ARE AVAILABLE ON THE GSWCC WEBSITE.

2. SITE DESCRIPTION. EACH SITE-SPECIFIC PLAN SHALL PROVIDE A DESCRIPTION OF POLLUTANT SOURCES AND OTHER INFORMATION AS INDICATED:

a. A DESCRIPTION OF THE NATURE OF THE CONSTRUCTION ACTIVITY;

b. A DETAILED DESCRIPTION AND CHART OR TIMELINE OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH DISTURB SOILS FOR MAJOR PORTIONS OF THE SITE (I.E., INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER BMPS, CLEARING AND GRUBBING ACTIVITIES, EXCAVATION ACTIVITIES, GRADING ACTIVITIES, INFRASTRUCTURE ACTIVITIES, IMMEDIATE AND FINAL STABILIZATION ACTIVITIES);

c. ESTIMATES OF THE TOTAL AREA OF THE SITE AND THE TOTAL AREA OF THE SITE THAT IS EXPECTED TO BE DISTURBED BY EXCAVATION, GRADING, OR OTHER ACTIVITIES;

d. AN ESTIMATE OF THE RUNOFF COEFFICIENT OR PEAK DISCHARGE FLOW OF THE SITE PRIOR TO THE CONSTRUCTION ACTIVITIES AND AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED AND EXISTING DATA DESCRIBING THE SOIL OR THE QUALITY OF ANY DISCHARGE FROM THE SITE;

e. A SITE-SPECIFIC MAP OR SERIES OF DRAWINGS INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED AFTER MAJOR GRADING ACTIVITIES, AREAS OF SOIL DISTURBANCE, AN OUTLINE OF AREAS WHICH ARE NOT TO BE DISTURBED, THE LOCATION OF MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS IDENTIFIED IN THE PLAN, THE LOCATION OF AREAS WHERE STABILIZATION PRACTICES ARE EXPECTED TO OCCUR, SURFACE WATERS (INCLUDING WETLANDS), AND LOCATIONS WHERE STORMWATER IS DISCHARGED TO A SURFACE WATER; AND

f. IDENTIFY THE RECEIVING WATER(S) AND AREAL EXTENT OF WETLAND ACREAGE AT THE SITE;

3. CONTROLS. EACH PLAN SHALL INCLUDE A DESCRIPTION OF APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE INCLUDING: (1) INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS, (2) INTERMEDIATE GRADING AND DRAINAGE BMPS, AND (3) FINAL BMPS. FOR CONSTRUCTION SITES WHERE THERE WILL BE NO MASS GRADING AND THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS, INTERMEDIATE GRADING AND DRAINAGE BMPS, AND FINAL BMPS ARE THE SAME, THE PLAN MAY COMBINE ALL OF THE BMPS INTO A SINGLE PHASE PLAN. THE PLAN WILL INCLUDE APPROPRIATE STAGING AND ACCESS REQUIREMENTS FOR CONSTRUCTION EQUIPMENT. THE PLAN WILL CLEARLY DESCRIBE FOR EACH MAJOR ACTIVITY IDENTIFIED IN PART IV.D.2.B., APPROPRIATE CONTROL MEASURES AND THE TIMING DURING THE CONSTRUCTION PROCESS THAT THE MEASURES WILL BE IMPLEMENTED. THE PRIMARY PERMITTEE IS ENCOURAGED TO UTILIZE THE DOCUMENT, DEVELOPING YOUR STORMWATER POLLUTION PREVENTION PLAN: A GUIDE FOR CONSTRUCTION SITES, EPA 833-R-060-04, MAY 2007, WHEN PREPARING THE PLAN. THE DESCRIPTION AND IMPLEMENTATION OF CONTROLS SHALL ADDRESS THE FOLLOWING MINIMUM COMPONENTS:

(a). EROSION AND SED

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c. OTHER CONTROLS.

(1). WASTE DISPOSAL, LOCATE WASTE COLLECTION AREAS AWAY FROM STREETS, GUTTERS, WATERCOURSES AND STORM DRAINS. WASTE COLLECTION AREAS, SUCH AS DUMPSTERS, ARE OFTEN BEST LOCATED NEAR CONSTRUCTION SITE ENTRANCES TO MINIMIZE TRAFFIC ON DISTURBED THE PLAN SHOULD INCLUDE SECONDARY CONTAINMENT AROUND LIQUID WASTE COLLECTION AREAS TO FURTHER MINIMIZE THE LIKELIHOOD OF CONTAMINATED DISCHARGES. SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

(2). FOR 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).

(3). OFF-SITE VEHICLE TRACKING OF DIRT, SOILS, AND SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED OR ELIMINATED TO THE MAXIMUM EXTENT PRACTICAL. THE PLAN SHALL INCLUDE THE BEST MANAGEMENT PRACTICE TO BE IMPLEMENTED AT THE SITE OR CONSTRUCTION ACTIVITY.

(4). NOTHING IN THIS PERMIT RELIEVES A PERMITTEE FROM ANY OBLIGATIONS TO COMPLY WITH ALL APPLICABLE STATE AND/OR LOCAL REGULATIONS OF WASTE DISPOSAL, SANITARY SEWER, SEPTIC AND PETROLEUM STORAGE SYSTEMS.

(5). THE PLAN SHALL INCLUDE BEST MANAGEMENT PRACTICES FOR THE REMEDIATION OF ALL PETROLEUM SPILLS AND LEAKS AS APPROPRIATE.

(6). THE PLAN SHALL INCLUDE BEST MANAGEMENT PRACTICES FOR CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF VEHICLES. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED. ADDITIONAL INFORMATION ABOUT BEST MANAGEMENT PRACTICES FOR CONCRETE WASHOUT IS AVAILABLE AT THE USEPA WEBSITE.

(7). ALL PERMITTEES ARE REQUIRED TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING TRENCHES AND EXCAVATIONS. DISCHARGES ARE PROHIBITED UNLESS MANAGED BY APPROPRIATE CONTROLS.

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 V.G.2. OF THIS PERMIT.

5. MAINTENANCE. THE PLAN SHALL INCLUDE A DESCRIPTION OF PROCEDURES TO ENSURE THE TIMELY MAINTENANCE OF VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THE SITE PLAN.

6. SAMPLING REQUIREMENTS. THIS PERMIT REQUIRES THE MONITORING OF NEPHELOMETRIC TURBIDITY IN RECEIVING WATER(S) OR OUTFALLS IN ACCORDANCE WITH THIS PERMIT. THE FOLLOWING PROCEDURES CONSTITUTE EPD'S GUIDELINES FOR SAMPLING TURBIDITY.

a. *SAMPLING REQUIREMENTS* SHALL INCLUDE THE FOLLOWING:

(1). A USGS TOPOGRAPHIC MAP, A TOPOGRAPHIC MAP OR A DRAWING (REFERRED TO AS A TOPOGRAPHIC MAP) THAT IS A SCALE EQUAL TO OR MORE DETAILED THAN A 1:24000 MAP SHOWING THE LOCATION OF THE INFRASTRUCTURE CONSTRUCTION: (a) THE LOCATION OF ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES AS SHOWN ON A USGS TOPOGRAPHIC MAP, AND ALL OTHER PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES LOCATED DURING MANDATORY FIELD VERIFICATION, INTO WHICH THE STORMWATER IS DISCHARGED AND (b) THE RECEIVING WATER AND/OR OUTFALL SAMPLING LOCATIONS FOR EACH REPRESENTATIVE STORMWATER OUTFALL. WHEN THE PERMITTEE HAS CHOSEN TO USE A USGS TOPOGRAPHIC MAP AND THE RECEIVING WATER(S) IS NOT SHOWN ON THE USGS TOPOGRAPHIC MAP, THE LOCATION OF THE RECEIVING WATER(S) MUST BE HAND-DRAWN ON THE USGS TOPOGRAPHIC MAP FROM WHERE THE STORMWATER(S) ENTERS THE RECEIVING WATER(S) TO THE POINT WHERE THE RECEIVING WATER(S) COMBINES WITH THE FIRST BLUE LINE STREAM SHOWN ON THE USGS TOPOGRAPHIC MAP;

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

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

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

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

(1). SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.

(2). SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.

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

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

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

c. *SAMPLING POINTS.*

(1). FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES SHOWN ON THE USGS TOPOGRAPHIC MAP AND ALL OTHER FIELD VERIFIED PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES, OR ALL OUTFALLS INTO SUCH STREAMS AND OTHER WATER BODIES, OR A COMBINATION THEREOF. HOWEVER, PROVIDED FOR IN AND IN ACCORDANCE WITH PART IV.D.6.C.(2). OF THIS PERMIT, PRIMARY PERMITTEES ON AN INFRASTRUCTURE CONSTRUCTION PROJECT MAY SAMPLE THE REPRESENTATIVE PERENNIAL AND INTERMITTENT STREAMS, OTHER WATER BODIES OR OUTFALLS, OR A COMBINATION THEREOF. SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORMWATER OUTFALLS USING THE FOLLOWING MINIMUM GUIDELINES:

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

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

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

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

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

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

(G). PERMITTEES DO NOT HAVE TO SAMPLE SHEET FLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION, STABILIZED SHALL MEAN, FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES, 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). FOR INFRASTRUCTURE 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.

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

(2). FOR INFRASTRUCTURE CONSTRUCTION PROJECTS. THE PERMITTEE IS NOT REQUIRED TO SAMPLE A PERENNIAL OR INTERMITTENT STREAM OR OTHER WATER BODIES (OR THE ASSOCIATED OUTFALL, IF APPLICABLE) IF THE DESIGN PROFESSIONAL PREPARING THE PLAN CERTIFIES THAT AN INCREASE IN THE TURBIDITY OF A SPECIFIC IDENTIFIED RECEIVING WATER TO BE SAMPLED WILL BE REPRESENTATIVE OF THE INCREASE IN THE TURBIDITY OF A SPECIFIC IDENTIFIED UN-SAMPLED RECEIVING WATER. A WRITTEN JUSTIFICATION AND DETAILED ANALYSIS SHALL BE PREPARED BY THE DESIGN PROFESSIONAL JUSTIFYING SUCH PROPOSED SAMPLING. A SUMMARY CHART OF THE JUSTIFICATION AND ANALYSIS FOR THE REPRESENTATIVE SAMPLING MUST BE INCLUDED ON THE PLAN. THE JUSTIFICATION AND ANALYSIS SHALL INCLUDE THE LOCATION AND DESCRIPTION OF THE SPECIFIED SAMPLED AND UN-SAMPLED RECEIVING WATER AND SHALL CONTAIN A DETAILED COMPARISON AND DISCUSSION OF EACH SUCH RECEIVING WATER IN THE FOLLOWING AREAS:

(A). SITE LAND DISTURBANCES AND CHARACTERISTICS:

(B). RECEIVING WATER WATERSHED SIZES AND CHARACTERISTICS: AND

(C). SITE AND WATERSHED RUNOFF CHARACTERISTICS UTILIZING THE METHODS IN APPENDIX A-1 (UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE'S TR-55, URBAN HYDROLOGY FOR SMALL WATERSHEDS) OF THE MOST RECENT VERSION OF THE "MANUAL FOR EROSION AND SEDIMENTATION CONTROL IN GEORGIA" FOR THE VARIOUS PRECIPITATION EVENTS AND ANY OTHER SUCH CONSIDERATIONS NECESSARY TO SHOW THAT THE INCREASE IN THE TURBIDITY OF A SPECIFIC IDENTIFIED SAMPLED RECEIVING WATER WILL BE REPRESENTATIVE OF THE INCREASES IN THE TURBIDITY OF A SPECIFIC IDENTIFIED UN-SAMPLED RECEIVING WATERS.

(3). FOR INFRASTRUCTURE CONSTRUCTION PROJECTS, WHEN THE PERMITTEE DETERMINES THAT SOME RECEIVING WATER(S) WILL NOT BE SAMPLED DUE TO REPRESENTATIVE SAMPLING, THE DESIGN PROFESSIONAL MAKING THIS DETERMINATION AND PREPARING THE PLAN MUST INCLUDE AND SIGN THE FOLLOWING CERTIFICATION IN THE PLAN:

"I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR THE MONITORING OF: (a) 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, OR (b) WHERE ANY SUCH SPECIFIC IDENTIFIED PERENNIAL OR INTERMITTENT STREAM AND OTHER WATER BODY IS NOT PROPOSED TO BE SAMPLED, I HAVE DETERMINED IN MY PROFESSIONAL JUDGMENT, UTILIZING THE FACTORS REQUIRED IN THE GENERAL NPDES PERMIT NO GAR100002, THAT THE INCREASE IN THE TURBIDITY OF EACH SPECIFIC IDENTIFIED SAMPLED RECEIVING WATER WILL BE REPRESENTATIVE OF THE INCREASE IN THE TURBIDITY OF A SPECIFIC IDENTIFIED UN-SAMPLED RECEIVING WATER."

(4). FOR INFRASTRUCTURE CONSTRUCTION PROJECTS, IF AT ANY TIME DURING THE LIFE OF THE PROJECT A SELECTED RECEIVING WATER NO LONGER REPRESENTS ANOTHER RECEIVING WATER, THEN THE PERMITTEE SHALL SAMPLE THE LATTER RECEIVING WATER UNTIL SELECTION OF AN ALTERNATIVE REPRESENTATIVE RECEIVING WATER.

(5). FOR INFRASTRUCTURE CONSTRUCTION PROJECTS, IF AT ANY TIME DURING THE LIFE OF THE PROJECT A RECEIVING WATER IS DETERMINED NOT TO BE REPRESENTED AS CERTIFIED IN THE PLAN, THE PERMITTEE SHALL SAMPLE THAT RECEIVING WATER UNTIL A NOTICE OF TERMINATION IS SUBMITTED OR UNTIL THE APPLICABLE PHASE IS STABILIZED IN ACCORDANCE WITH THIS PERMIT.

(6). FOR INFRASTRUCTURE CONSTRUCTION PROJECTS, MONITORING OBLIGATIONS SHALL CEASE FOR ANY PHASE OF THE PROJECT THAT HAS BEEN STABILIZED IN ACCORDANCE WITH PART IV.D.6.C.(1).(G).

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.

7. NON-STORMWATER DISCHARGES. EXCEPT FOR FLOWS FROM FIRE FIGHTING ACTIVITIES,SOURCES OF NON-STORMWATER LISTED IN PART III.A.2. OF THIS PERMIT THAT ARE COMBINED WITH STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY MUST BE IDENTIFIED IN THE PLAN. THE PLAN SHALL IDENTIFY AND ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE.

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.

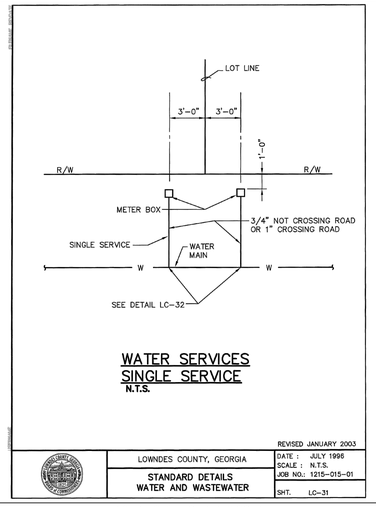
2. ALL SAMPLING REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:

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.

F. RETENTION OF RECORDS

1. THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AV




## WATER SERVICES SINGLE SERVICE
N.T.S.

REVISED JANUARY 2003

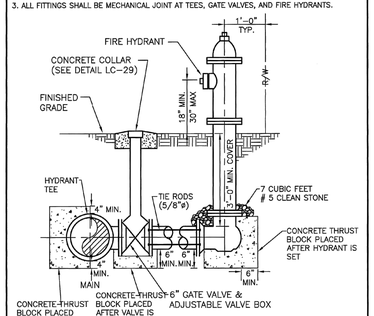
| LOWNDES COUNTY, GEORGIA | DATE : JULY 1996 |
|---|---|
| STANDARD DETAILS WATER AND WASTEWATER | SCALE : N.T.S. |
| | JOB NO.: 1215-015-01 |
| | SHT. LC-31 |

WATER SERVICES · LOWNDES COUNTY
NOT TO SCALE

1. ALL FIRE HYDRANT LEADS TO BE 6" HDPE WITH MECHANICAL JOINTS. VERIFY LOCATION WITH FIELD ENGINEER.

2. WHERE THRUST BLOCKS CANNOT BE POURED AGAINST UNDISTURBED EARTH, COLLARS ARE TO BE PLACED AROUND BELLS AND CONNECTED BY 5/8" TIE RODS.

3. ALL FITTINGS SHALL BE MECHANICAL JOINT AT TEES, GATE VALVES, AND FIRE HYDRANTS.



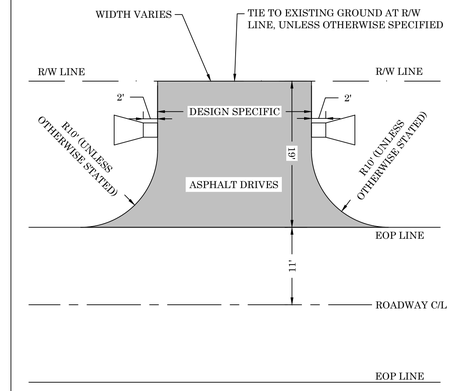

## FIRE HYDRANT
N.T.S.

NOTE: A BLUE RAISED PAVEMENT MARKER SHALL BE INSTALLED WITH HYDRANT ALONG APPROPRIATE ROADWAY CENTERLINE WHEN APPLICABLE.

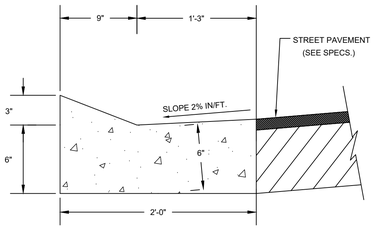
REVISED JUNE 2009

| LOWNDES COUNTY, GEORGIA | DATE : JULY 1996 |
|---|---|
| STANDARD DETAILS WATER AND WASTEWATER | SCALE : N.T.S. |
| | JOB NO.: 1215-015-01 |
| | SHT. LC-23 |

FIRE HYDRANT DETAIL · LOWNDES COUNTY
NOT TO SCALE

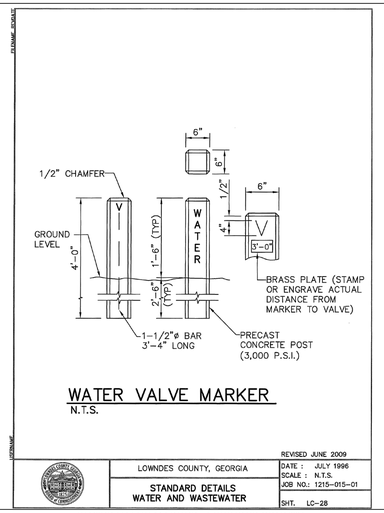



DRIVEWAY DETAIL
NOT TO SCALE




NOTES:
1. CONCRETE SHALL BE A MINIMUM OF 3,000 PSI COMPRESSIVE STRENGTH @ 28 DAYS.
2. BASE COMPACTION UNDER CURB TO BE 98% (ASTM D698).
3. CONTRACTION JOINTS TO BE SAW CUT NO LATER THAN 24 HOURS AFTER THE POUR.

24" MIAMI CURB & GUTTER DETAIL
NOT TO SCALE

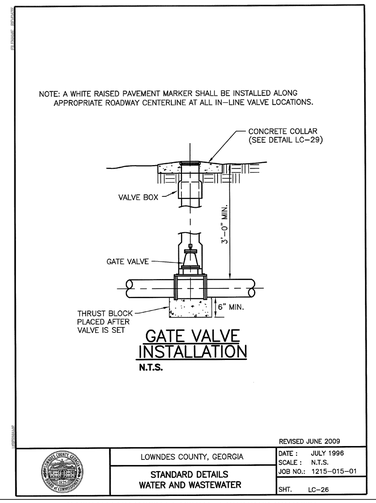



## WATER VALVE MARKER
N.T.S.

REVISED JUNE 2009

| LOWNDES COUNTY, GEORGIA | DATE : JULY 1996 |
|---|---|
| STANDARD DETAILS WATER AND WASTEWATER | SCALE : N.T.S. |
| | JOB NO.: 1215-015-01 |
| | SHT. LC-28 |

WATER VALVE MARKER · LOWNDES COUNTY
NOT TO SCALE

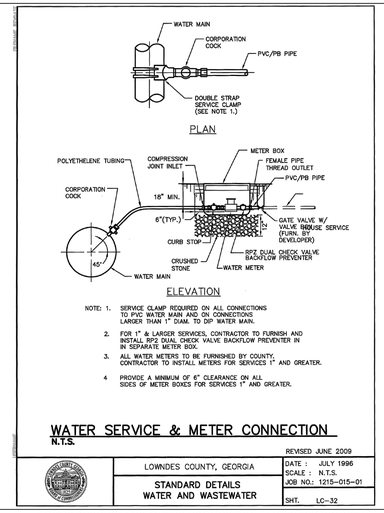



## GATE VALVE INSTALLATION
N.T.S.

REVISED JUNE 2009

| LOWNDES COUNTY, GEORGIA | DATE : JULY 1996 |
|---|---|
| STANDARD DETAILS WATER AND WASTEWATER | SCALE : N.T.S. |
| | JOB NO.: 1215-015-01 |
| | SHT. LC-26 |

GATE VALVE INSTALLATION · LOWNDES COUNTY
NOT TO SCALE

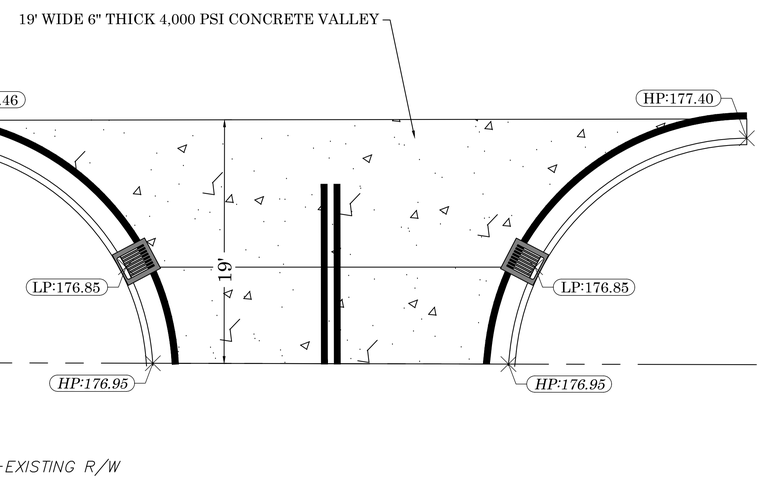



## WATER SERVICE & METER CONNECTION
N.T.S.

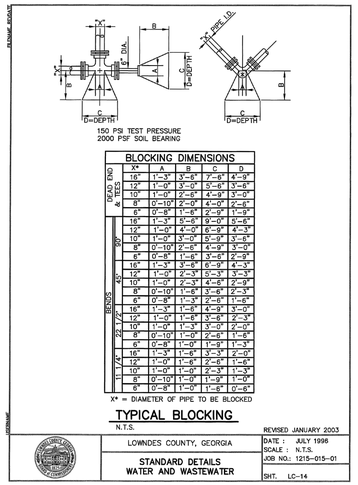
REVISED JUNE 2009

| LOWNDES COUNTY, GEORGIA | DATE : JULY 1996 |
|---|---|
| STANDARD DETAILS WATER AND WASTEWATER | SCALE : N.T.S. |
| | JOB NO.: 1215-015-01 |
| | SHT. LC-32 |

WATER SERVICE AND METER CONNECTION · LOWNDES COUNTY
NOT TO SCALE




CONCRETE VALLEY AT DIAMOND DRIVE DETAIL
NOT TO SCALE




| BLOCKING DIMENSIONS | | | | | |
|---|---|---|---|---|---|
| | X* | A | B | C | D |
| HEAD END | 16" | 1'-3" | 3'-8" | 7'-6" | 4'-9" |
| | 12" | 1'-0" | 3'-0" | 5'-6" | 3'-6" |
| | 10" | 1'-0" | 2'-5" | 4'-9" | 3'-0" |
| | 8" | 0'-10" | 2'-0" | 4'-0" | 2'-6" |
| | 6" | 0'-8" | 1'-6" | 2'-9" | 1'-9" |
| 45° BENDS | 16" | 1'-3" | 5'-6" | 9'-0" | 5'-9" |
| | 12" | 1'-0" | 4'-0" | 6'-9" | 4'-3" |
| | 10" | 1'-0" | 3'-0" | 5'-9" | 3'-6" |
| | 8" | 0'-10" | 2'-6" | 4'-9" | 3'-0" |
| | 6" | 0'-8" | 1'-6" | 3'-6" | 2'-9" |
| 22 1/2° BENDS | 16" | 1'-3" | 3'-6" | 6'-9" | 4'-3" |
| | 12" | 1'-0" | 2'-3" | 5'-3" | 3'-3" |
| | 10" | 1'-0" | 2'-3" | 4'-6" | 2'-9" |
| | 8" | 0'-10" | 1'-6" | 3'-6" | 2'-3" |
| | 6" | 0'-8" | 1'-3" | 2'-6" | 1'-6" |
| 11 1/4° BENDS | 16" | 1'-3" | 1'-6" | 4'-9" | 3'-0" |
| | 12" | 1'-0" | 1'-6" | 3'-6" | 2'-3" |
| | 10" | 1'-0" | 1'-3" | 3'-0" | 2'-0" |
| | 8" | 0'-10" | 1'-0" | 2'-6" | 1'-6" |
| | 6" | 0'-8" | 1'-0" | 1'-9" | 1'-3" |
| TEES | 16" | 1'-3" | 1'-6" | 3'-3" | 2'-0" |
| | 12" | 1'-0" | 1'-6" | 2'-6" | 1'-6" |
| | 10" | 1'-0" | 1'-6" | 2'-3" | 1'-3" |
| | 8" | 0'-10" | 1'-0" | 1'-9" | 1'-0" |
| | 6" | 0'-8" | 1'-0" | 1'-6" | 0'-6" |

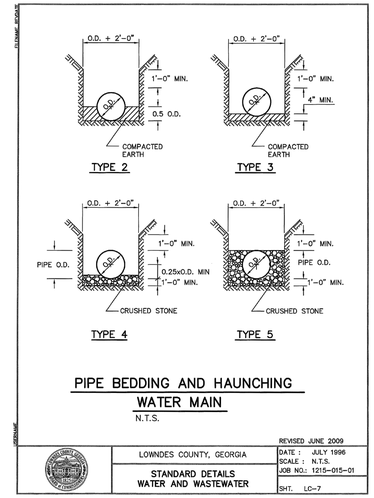
X* = DIAMETER OF PIPE TO BE BLOCKED

## TYPICAL BLOCKING
N.T.S.

REVISED JANUARY 2003

| LOWNDES COUNTY, GEORGIA | DATE : JULY 1996 |
|---|---|
| STANDARD DETAILS WATER AND WASTEWATER | SCALE : N.T.S. |
| | JOB NO.: 1215-015-01 |
| | SHT. LC-14 |

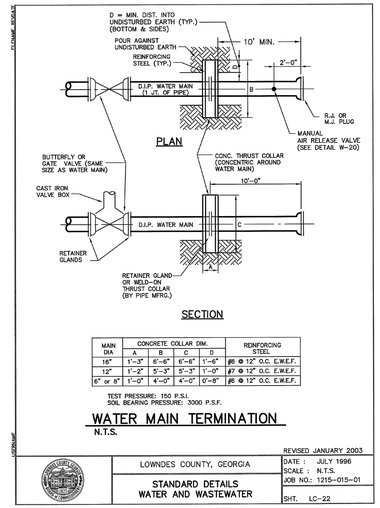
WATER MAIN BLOCKING · LOWNDES COUNTY
NOT TO SCALE




## PIPE BEDDING AND HAUNCHING WATER MAIN
N.T.S.

| LOWNDES COUNTY, GEORGIA | DATE : JULY 1996 |
|---|---|
| STANDARD DETAILS WATER AND WASTEWATER | SCALE : N.T.S. |
| | JOB NO.: 1215-015-01 |
| | SHT. LC-7 |

WATER MAIN BEDDING · LOWNDES COUNTY
NOT TO SCALE




| MAIN DIA | CONCRETE COLLAR DIM. A | B | C | D | REINFORCING STEEL |
|---|---|---|---|---|---|
| 16" | 1'-3" | 5'-6" | 6'-6" | 1'-6" | #5 @ 12" O.C. E.W.E.F. |
| 12" | 1'-2" | 5'-3" | 5'-3" | 1'-0" | #5 @ 12" O.C. E.W.E.F. |
| 6" or 8" | 1'-0" | 4'-0" | 4'-0" | 0'-8" | #5 @ 12" O.C. E.W.E.F. |

TEST PRESSURE: 150 P.S.I.
SOIL BEARING PRESSURE: 2000 P.S.F.

## WATER MAIN TERMINATION
N.T.S.

REVISED JANUARY 2003

| LOWNDES COUNTY, GEORGIA | DATE : JULY 1996 |
|---|---|
| STANDARD DETAILS WATER AND WASTEWATER | SCALE : N.T.S. |
| | JOB NO.: 1215-015-01 |
| | SHT. LC-22 |

WATER MAIN TERMINATION · LOWNDES COUNTY
NOT TO SCALE

| REVISIONS | | |
|---|---|---|
| No. | DATE | DESCRIPTION |
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG ▲ VALDOSTA ▲ WARNER ROBINS

# CONSTRUCTION DETAILS
TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
CERTIFICATE OF AUTHORIZATION
06/30/2026

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW TSMAY

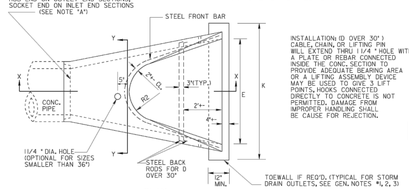
PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C10.0

| STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|
| GA. | | | |

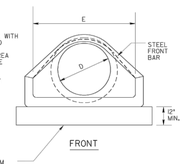
## CONCRETE FLARED END SECTION

END SECTION TO PIPE JOINT SHOWN AS TYPICAL; HUB END ON OUTLET END SECTIONS; SOCKET END ON INLET END SECTIONS (SEE NOTE "A")



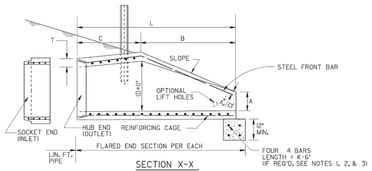

PLAN

INSTALLATION: (D OVER 30") CABLE, CHAIN, OR LIFTING PIN WILL EXTEND THRU 1 1/4" HOLE WITH A PLATE OR REBAR CONNECTED INSIDE THE CONC. SECTION TO PROVIDE ADEQUATE BEARING AREA OR A LIFTING ASSEMBLY DEVICE MAY BE USED TO GIVE 3 LIFT POINTS. HOOKS CONNECTED DIRECTLY TO REBAR ARE NOT PERMITTED. DAMAGE FROM IMPROPER HANDLING SHALL BE CAUSE FOR REJECTION.




FRONT

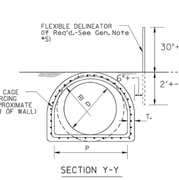
NOTE: DO NOT CUT CONCRETE PIPE. USE FULL LENGTH SECTIONS ONLY. RAMP SLOPE TO CONFORM WITH PIPE LENGTH AND END SECTION.




SECTION X-X

REINFORCING CAGE:

(L) WIRE FABRIC HAVING EQUAL STEEL AREA AS INNER CAGE FOR CLASS V PIPE, AASHTO M-170. (2) ALTERNATE 7 - 3 BARS SPACED 12"± LONGITUDINALLY WITH 9 - 2 BARS TRANSVERSELY AT 6" O.C. MAX. SPACING, SPOT WELDED OR TIED TO FORM CAGE. (BACK HOOS MAY BE OMITTED)




NOTE "A":
CONTRACTOR WILL INFORM PRODUCER IF CONCRETE FLARED END SECTION IS FOR INLET OR FOR OUTLET END. SOCKET (TONGUE OR SPIGOT) END IS REQUIRED FOR INLETS. HUB (GROOVE OR BELL) END IS REQUIRED FOR OUTLETS. SOCKET TO SOCKET OR HUB TO HUB JOINTS WILL NOT BE ACCEPTED UNLESS A REINFORCED CONCRETE COLLAR IS PLACED AROUND THE JOINT. NO PAYMENT BEING MADE FOR THE COLLAR.
FLARED END SECTIONS SHALL BE JOINTED TO PIPE WITH ALL SPACE IN THE JOINT FILLED WITH EITHER BITUMINOUS PLASTIC CEMENT OR PREFORMED PLASTIC GASKET (SEC. 848).

WALL THICKNESS (T) IS SHOWN AS NOMINAL AND MAY BE INCREASED AT PRODUCER'S OPTION FOR DESIRED JOINT DESIGN OR TO ALLOW A FLAT OUTSIDE BOTTOM ON THE FLARE, WITH INSIDE DIMENSIONS OF FLARE RETAINED AS SHOWN.

T = PIPE WALL THICKNESS (0.083D + 7"± TYPICAL)

### DIMENSIONS AND REINFORCING FOR CONCRETE FLARED END SECTIONS (+- 1" TOLERANCE)

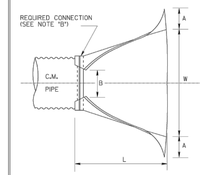
| PIPE DIA. | FRONT BAR | BACK RODS | SLOPE +- | A | B | C | L | E | P | R1 | R2 | OUTLET TOEWALL IF REQ'D. K+ E + 2" | CU.YDS. CONC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12" | 1-#3 x 5'-4" | NOT REQ'D. | 2.26 | 4" | 2'-0" | 4'-1" | 6'-1" | 2'-0" | 1'-8" | 10" | 9" | 4'-0" | .148 |
| 15" | 1-#3 x 6'-1" | NOT REQ'D. | 2.26 | 6" | 2'-3" | 3'-10" | 6'-1" | 2'-6" | 2'-0" | 11" | 11" | 4'-6" | .167 |
| 18" | 1-#3 x 7'-2" | NOT REQ'D. | 2.26 | 9" | 2'-7" | 3'-10" | 6'-1" | 3'-0" | 2'-3" | 1'-4" | 1'-0" | 5'-0" | .185 |
| 24" | 1-#3 x 9'-10" | NOT REQ'D. | 2.46 | 10" | 3'-8" | 2'-6" | 6'-2" | 4'-0" | 2'-9" | 1'-3" | 1'-2" | 6'-0" | .222 |
| 30" | 1-#4 x 8'-8" | NOT REQ'D. | 2.46 | 12" | 4'-6" | 1'-8" | 6'-2" | 5'-0" | 3'-1" | 1'-6" | 1'-3" | 7'-0" | .259 |
| 36" | 1-#4 x 13'-10" | 2-#4 x 6'-3" | 2.46 | 15" | 5'-3" | 2'-8" | 8'-2" | 6'-0" | 4'-0" | 2'-0" | 1'-8" | 8'-0" | .296 |
| 42" | 1-#4 x 13'-10" | 2-#4 x 7'-4" | 2.46 | 21" | 5'-3" | 2'-8" | 8'-2" | 6'-6" | 4'-6" | 2'-4" | 1'-10" | 8'-6" | .35 |

NOTE: SPECIFIED REINFORCING IS MINIMAL AND MAY BE INCREASED AT PRODUCERS OPTION TO AID CASTING & HANDLING. ALTERNATE REINFORCEMENT PERMITTED IF APPROVED.

* NOTE "C" AND "L" DIMENSION MAY BE MEASURED TO EITHER END OF JOINT CONNECTION AT PIPE.

## METAL FLARED END SECTION

(USE ONLY WITH COR. METAL PIPE)

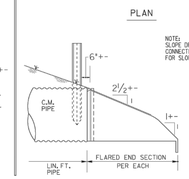


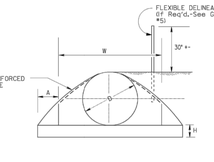

NOTE: GALVANIZED STEEL FLARED END SECTIONS ARE TO BE USED ONLY WITH CORRUGATED STEEL PIPE AND ALUMINUM FLARED END SECTIONS ARE TO BE USED ONLY WITH CORRUGATED ALUMINUM PIPE UNLESS OTHERWISE APPROVED BY D.O.T., OFFICE OF MATERIALS AND TESTS.

### FLARED END SECTION DIMENSIONS

| PIPE SIZE "D" | THICKNESS CAL.V. STEEL | THICKNESS ALUM. | A A= 0.40 D +- 1" | B B=0.5 D +- 1" | H H=0.250 D +- 1" (MIN.6") | L L=1.70 D +- 1'-1/2" | W W=2.00 D +- 2" |
|---|---|---|---|---|---|---|---|
| 12" | .064" | .060" | 5" | 6" | 6" | 1'-8" | 2'-0" |
| 15" | .064" | .060" | 6" | 7" | 6" | 2'-3" | 2'-6" |
| 18" | .064" | .060" | 7" | 9" | 6" | 2'-6" | 3'-0" |
| 24" | .064" | .060" | 9" | 11" | 6" | 3'-4" | 4'-0" |
| 30" | .079" | .105" | 11" | 13" | 7" | 4'-2" | 5'-0" |
| 36" | .079" | .105" | 13" | 15" | 9" | 5'-0" | 6'-0" |
| 42" | .109" | .164" | 15" | 17" | 10" | 5'-10" | 7'-0" |

NOTE: WHERE METAL FLARED END SECTIONS ARE USED WITH MULTIPLE PIPE LINES, THE STANDARD SPACING BETWEEN PIPES IS 0 OR 3 FT.; MAY HAVE TO BE INCREASED IS 1.75 D TYPICAL, TO PREVENT OVERLAP OF END SECTION WINGTIPS. SEE ALSO STD. 1030D.




SPECIAL NOTE:
FLARED END SECTIONS ARE NORMALLY LIMITED TO USE OUTSIDE THE CLEAR ZONE OR BEHIND BARRIER AND WHERE HYDRAULICS PERMIT. SEE OTHER STANDARDS OR DETAILS FOR TAPERED HEADWALLS, SAFETY SLOPE END SECTIONS OR OTHER PIPE END STRUCTURES.

GENERAL NOTES:

1. TOEWALLS ARE REQ'D. FOR OUTLETS OF CONC. STORM DRAINS, EXCEPT WHERE DITCH PAVING OR OTHER EROSION PROTECTION IS PROVIDED OR WHERE THE OUTLET VELOCITY IS LESS THAN 8 FT./SEC. TOEWALLS ARE NOT REQUIRED FOR SIDE DRAINS. SLOPE DRAINS OR INLETS OF STORM DRAINS THIS CRITERIA MAY BE VARIED WHERE SPECIFIED BY THE DESIGNER OR THE ENGINEER.
2. TOEWALLS WILL BE PAID FOR AS CU.YDS. OF CLASS "A" OR "B" CONCRETE, CONTRACTOR MAY ELECT TO CONSTRUCT TOE WALL WITH SAND CEMENT BAG RIPRAP OR STONE RIPRAP TO SAME MINIMUM DIMENSIONS WITH NO ADDITIONAL PAYMENT.
3. PRECAST TOEWALLS SHALL BE CL. "A" CONCRETE; CAST-IN-PLACE TOEWALLS MAY BE CL "A" OR "B" CONCRETE AND MAY BE TRENCH FORMED UNLESS WHERE PLANS ITEMIZE ONE CLASS OF CONCRETE AND CONTRACTOR ELECTS TO USE OTHER CLASS, NO ADDITIONAL PAYMENT IS MADE. NO PAYMENT IS MADE FOR STEEL IN TOEWALL.
4. CENTERLINE OF FLARED END SECTION WILL ALIGN WITH CENTERLINE OF PIPE, IF PIPE IS SKEWED, THE EMBANKMENT SLOPE WILL BE WARPED TO CONFORM WITH END SECTION.
5. FLEXIBLE DELINEATORS SHALL BE REQUIRED AT CROSS DRAIN FLARED END SECTIONS, BOTH INLET AND OUTLET. PAYMENT FOR FLARED END SECTION WILL INCLUDE DELINEATORS, SEE DETAIL AND NOTES BELOW. DELINEATORS NOT REQ'D. FOR SIDE DRAIN, SLOPE DRAIN, OR LONG PIPE.




NOTE:
DELINEATOR POST SHALL CONFORM TO SEC. 9II FOR FLEXIBLE DELINEATOR POST EXCEPT REFLECTIVE SHEETING IS NOT REQUIRED AND LENGTH IS 4'-6" FROM TOP TO BOTTOM POINT. ALTERNATES PERMITTED IF APPROVED BY D.O.T., LABORATORY.

SPECIAL NOTE:
PIPE SIZES (D) ARE "NOMINAL-MINIMUM" INSIDE DIAMETERS IN ACCORDANCE WITH GEORGIA STANDARD FOR PRE CULVERTS. "D" DIMENSION FOR FLARED END SECTION SHALL EQUAL THE "D" DIMENSION FOR CONNECTING PIPE CULVERT.

NOTE "B":
THE CONNECTION BETWEEN METAL FLARED END SECTION AND C.M. PIPE WILL BE ONE OF THE FOLLOWING:

(a) A STRAP BAND OR THREADED ROD PROVIDED BY THE MANUFACTURER WILL LOCK END SECTION ONTO PIPE, A CORRUGATION AT THE PIPE AND WILL BE NON-SPIRALED (PERPENDICULAR TO CL OF PIPE.)

(b) A DIMPLE BAND COLLAR WILL BE SHOP BOLTED TO END SECTION. PIPE WILL BE INSERTED INTO BAND COLLAR TO MEET THE END SECTION.

(c) A STUB PIPE WILL BE RIVITED TO THE END SECTION AND THE MAIN PIPE CONNECTED TO THE STUB WITH A NORMAL CONNECTING BAND.

(d) OTHER TYPE CONNECTION IF RECOMMENDED BY MANUFACTURER AND APPROVED BY THE D.O.T.

| REVISIONS | | |
|---|---|---|
| No. | DATE | DESCRIPTION |
| 1 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 2 | 8/19/2025 | REV. PER COUNTY COMMENTS |
| 3 | 8/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 12/29/2025 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |


AXIS ENGINEERING CONSULTANTS
LEESBURG | VALDOSTA | WARNER ROBINS


# CONSTRUCTION DETAILS
TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA CERTIFICATE OF AUTHORIZATION
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026

GEORGIA REGISTERED PROFESSIONAL ENGINEER
No. PE030417
B. MATTHEW LYMAN
3/20/2026

| PROJECT NO. | 25-25014 |
|---|---|
| DATE: | 10/18/2024 |
| DRAWN BY: | KR |
| CHECK BY: | JVM |

SHEET NO.
C10.1

FLARED END SECTIONS DETAIL - GDOT 1120
NOT TO SCALE

| STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|
| GA. | | | |

## DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

## STANDARD FLARED END SECTIONS FOR PIPES

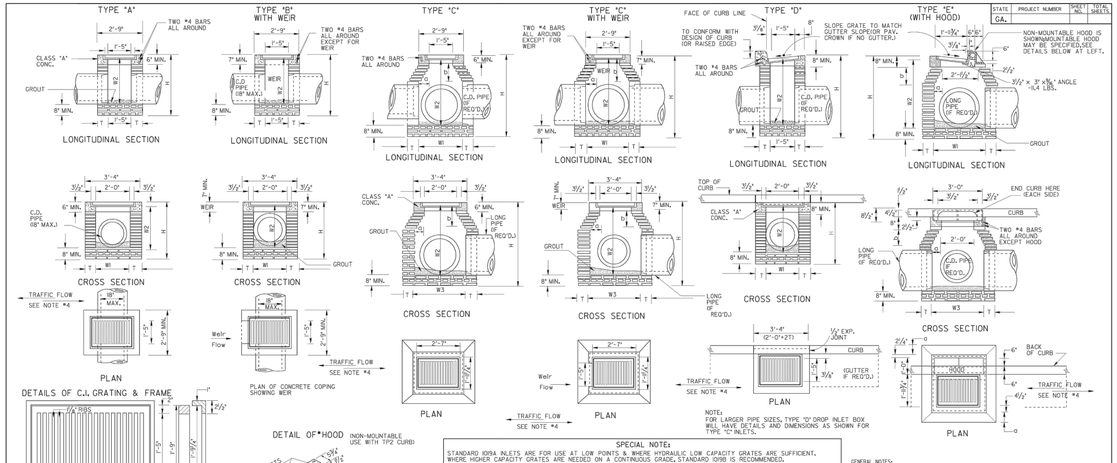
NO SCALE — REV. & REDR. SEPT., 1999

SUBMITTED: STATE ROAD & AIRPORT DESIGN ENGINEER
APPROVED: CHIEF ENGINEER

NUMBER 1120

REVISION: 6-9-06 REFLECTIVE SHEETING; 12-0-88 REVISION

DES. ____ REV. ____ DETA. ____ CHK. ____




NOTE: MINIMUM DIMENSIONS GIVEN IN TABLE BELOW ARE BASED UPON TYPICAL OUTSIDE DIAMETERS OF CONCRETE PIPES WITH NORMAL COVER AND CLEARANCES. THESE DIMENSIONS MAY BE MODIFIED IF SO DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER. DIMENSIONS GIVEN ARE MINIMUM EXCEPT FOR "H" WHICH IS MAXIMUM.

### TABLE OF MINIMUM DIMENSIONS FOR DROP INLETS

| D | TYPES "A" OR "B" BRICK OR REINF. CONC. W1 | W2 | H(MIN.) | TYPE "C" (BRICK) W1 | W2 | W3 | Q (MAX.) | b | H(MIN.) | TYPE "C" (R.C.P.) W1 | W2 | W3 | Q (MAX.) | b | H(MIN.) | TYPE "D" OR "E" (REINFORCED CONCRETE) W1 TYPE "D" | W1 TYPE "E" | W2 | W3 | Q (MAX.) | b | H(MIN.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6" | 2'-0" | 2'-7" | 3'-3½" | 2'-0" | 2'-10½" | 0'-4⅝" | 0'-1⅞" | 3'-6½" | 3'-3½" | 2'-0" | 3'-1" | 1'-0⅝" | 0'-1⅞" | 1'-6½" | 3'-3½" | 2'-0" | 2'-1" | 2'-7" | 2'-0" | 3½" | 6" | 3'-6" |
| 18" | 2'-0" | 2'-10" | 3'-7" | 2'-0½" | 3'-0½" | 0'-4⅝" | 0'-1⅞" | 4'-1" | 3'-7½" | 2'-0½" | 3'-3½" | 1'-0⅝" | 0'-1⅞" | 1'-6½" | 4'-1" | 2'-0" | 2'-1" | 3'-1" | 2'-0" | 3½" | 6" | 3'-9" |
| 24" | ~~ | ~~ | ~~ | 2'-10½" | 3'-3½" | 0'-5⅜" | 0'-1⅞" | 4'-4" | 3'-7½" | 2'-1" | 3'-5½" | 1'-0⅝" | 0'-1⅞" | 1'-6½" | 4'-4½" | 2'-0" | 2'-2" | 3'-3" | 2'-0" | 3½" | 6" | 4'-1" |
| 30" | ~~ | ~~ | ~~ | 3'-1½" | 4'-0½" | 0'-6⅝" | 0'-1⅞" | 5'-0" | 3'-10½" | 2'-3" | 3'-7½" | 1'-0⅝" | 0'-1⅞" | 1'-6½" | 5'-1" | 2'-0" | 2'-3" | 3'-5" | 2'-0" | 3½" | 6" | 4'-5" |
| 36" | ~~ | ~~ | ~~ | 3'-4½" | 4'-3½" | 0'-7⅝" | 0'-1⅞" | 5'-3" | 4'-0½" | 2'-4" | 3'-9½" | 1'-0⅝" | 0'-1⅞" | 1'-6½" | 5'-4⅜" | 2'-0" | 2'-4" | 3'-6" | 2'-0" | 3½" | 6" | 4'-8" |
| 42" | ~~ | ~~ | ~~ | 4'-1½" | 4'-10½" | 0'-8⅝" | 0'-1⅞" | 5'-9" | 4'-3½" | 2'-5½" | 3'-11½" | 1'-0⅝" | 0'-1⅞" | 1'-6½" | 5'-7½" | 2'-0" | 2'-5" | 3'-8" | 2'-0" | 3½" | 6" | 5'-0" |
| 48" | ~~ | ~~ | ~~ | 4'-5" | 5'-1½" | 0'-9⅝" | 0'-1⅞" | 6'-0" | 4'-6½" | 2'-7" | 4'-1½" | 1'-0⅝" | 0'-1⅞" | 1'-6½" | 6'-0" | 2'-0" | 2'-6" | 3'-9" | 2'-0" | 3½" | 6" | 5'-3" |
| 54" | ~~ | ~~ | ~~ | 5'-0" | 5'-8½" | 0'-10⅝" | 0'-1⅞" | 6'-6" | 4'-9½" | 2'-8½" | 4'-3½" | 1'-0⅝" | 0'-1⅞" | 1'-6½" | 6'-3" | 2'-0" | 2'-7" | 3'-10½" | 2'-0" | 3½" | 6" | 5'-6" |
| 60" | ~~ | ~~ | ~~ | 5'-3½" | 6'-0½" | 0'-11⅝" | 0'-1⅞" | 6'-9" | 5'-0½" | 2'-9½" | 4'-5½" | 1'-0⅝" | 0'-1⅞" | 1'-6½" | 6'-6" | 2'-0" | 2'-8" | 4'-0" | 2'-0" | 3½" | 6" | 5'-9" |
| | ~~ | ~~ | ~~ | 6'-0" | 7'-1½" | 1'-1⅝" | 0'-1⅞" | 7'-3½" | 5'-3½" | 2'-11" | 4'-7½" | 1'-0⅝" | 0'-1⅞" | 1'-6½" | 6'-9" | 2'-0" | 2'-10" | 4'-1½" | 2'-0" | 3½" | 6" | 5'-11" |

NOTES:
1. CONCRETE WALLS WILL BE REINFORCED WITH #4 BARS 12" O.C. BOTH WAYS, BUT WHERE H IS OVER 9 FT., AND PIPE "D" OVER 30" I.D., THE HORIZONTAL STEEL, WHICH IS MORE THAN 9 FT. DEEP WILL BE INCREASED TO 6" SPACINGS, 6" CONC. BOTTOM SLABS WILL BE REINFORCED WITH #4 BARS 12" O.C. BOTH WAYS.
2. FOR PRECAST ALTERNATES, SEE STD. 1019-A PRECAST AND/OR STD. 1040 PRECAST AND BUILT-IN-PLACE COMPONENTS MAY BE USED IN COMBINATIONS WHICH PROVIDE PROPER FITS AND STRUCTURAL ADEQUACY.

GENERAL NOTES:
1. SPECIFICATIONS: GEORGIA STANDARD AND CURRENT EDITION, AND SUPPLEMENTS THERETO.
2. ½" EXPANSION JOINT WILL BE REQUIRED WHERE RIGID PAVEMENT, CONCRETE SIDEWALK OR CONCRETE GUTTER MEETS DROP INLETS.
3. ALIGNMENT, NUMBER AND SIZES OF PIPES SHOWN ARE ONLY TYPICAL. SEE PLANS FOR ACTUAL PIPE LAYOUT REQUIREMENTS.
4. ALL TYPE DROP INLETS WILL BE CONSTRUCTED (AS SHOWN), SO THAT THE GRATE BARS ARE PERPENDICULAR TO THE FLOW OF TRAFFIC EXCEPT ON LIMITED ACCESS PROJECTS OR WHERE BICYCLES ARE PROHIBITED.
5. BRICK MASONRY WITH CLASS "A" CONC. TOP PORTION IS SHOWN AS STANDARD CONSTRUCTION WITH ALTERNATES PERMITTED AS SHOWN, BOTTOM SLAB MAY BE 8" MIN. NON-REINFORCED CONCRETE, 8" BRICK OR 6" MIN. REINFORCED CONCRETE, SEE APPLICABLE STANDARDS FOR ALTERNATE PRECAST CONSTRUCTION.

SPECIAL NOTE:
STANDARD 1019A INLETS ARE FOR USE AT LOW POINTS & WHERE HYDRAULIC LOW CAPACITY GRATES ARE SUFFICIENT. WHERE HIGHER CAPACITY GRATES ARE NEEDED ON A CONTINUOUS GRADE, STANDARD 1019B IS RECOMMENDED.

NOTE: DESIGN ALTERNATES WILL BE SIMILAR TO THAT SHOWN FOR BRICK MASONRY.

* CONTRACTOR SHALL SPECIFY EITHER MOUNTABLE OR NON-MOUNTABLE TO FOUNDRY IF HOOD IS REQUIRED.

## DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

## STANDARD DROP INLETS (BUILT-IN-PLACE)

SCALE AS SHOWN — REV. & REDR. AUG., 1999

SUBMITTED: STATE ROAD & AIRPORT DESIGN ENGR.
APPROVED: CHIEF ENGINEER

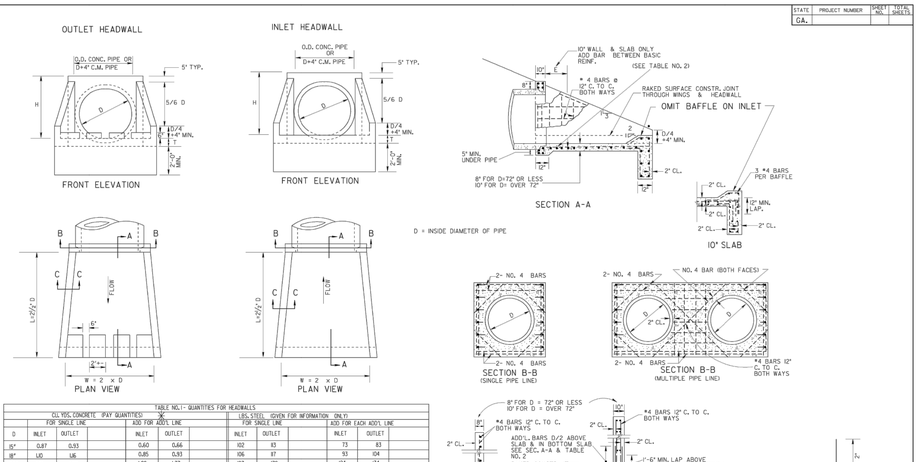
NUMBER 1019A

REVISION

DES. ____ REV. ____ DETA. ____ CHK. ____

STANDARD DROP INLETS DETAIL - GDOT 1019A TYPE D
NOT TO SCALE

| STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|
| GA. | | | |




### TABLE NO.1 - QUANTITIES FOR HEADWALLS

| D | CU.YDS. CONCRETE "PAY QUANTITIES" FOR SINGLE LINE INLET | FOR SINGLE LINE OUTLET | ADD FOR ADD'L LINE INLET | ADD FOR ADD'L LINE OUTLET | LBS. STEEL (GIVEN FOR INFORMATION ONLY) FOR SINGLE LINE INLET | FOR SINGLE LINE OUTLET | ADD FOR EACH ADD'L LINE INLET | ADD FOR EACH ADD'L LINE OUTLET |
|---|---|---|---|---|---|---|---|---|
| 15" | 0.87 | 0.93 | 0.60 | 0.66 | 102 | 83 | 73 | 83 |
| 18" | 1.01 | 1.15 | 0.85 | 0.93 | 106 | 97 | 93 | 104 |
| 24" | 1.61 | 1.69 | 1.29 | 1.37 | 127 | 128 | 124 | 134 |
| 30" | 2.21 | 2.32 | 1.83 | 1.96 | 170 | 180 | 154 | 164 |
| 36" | 2.92 | 3.05 | 2.49 | 2.63 | 238 | 254 | 196 | 212 |
| 42" | 3.73 | 3.87 | 3.20 | 3.27 | 290 | 306 | 218 | 247 |
| 48" | 4.62 | 4.80 | 3.58 | 3.74 | 335 | 351 | 265 | 281 |
| 54" | 5.63 | 5.83 | 4.17 | 4.38 | 407 | 428 | 311 | 340 |
| 60" | 6.72 | 6.95 | 4.82 | 5.01 | 456 | 477 | 360 | 378 |
| 72" | 9.22 | 9.48 | 6.24 | 6.46 | 623 | 645 | 475 | 494 |
| 84" | 11.84 | 12.21 | 8.05 | 8.29 | 767 | 839 | 637 | 664 |
| 96" | 14.88 | 15.21 | 10.13 | 10.41 | 788 | 850 | 1023 | 1350 |

NOTES:
QUANTITIES SHOWN WILL BE ACTUAL PAY QUANTITIES FOR CLASS "A" CONCRETE, INCLUDING REINFORCED STEEL. NO ADJUSTMENT WILL BE MADE FOR AS BUILT QUANTITIES.

D = INSIDE DIAMETER OF PIPE CULVERT

H = D + 10" MIN. FOR C.M. PIPE
H = D + PIPE WALL THICKNESS + 8" FOR CONC. PIPE (0.5 D + 9" TYP.)

T = 8" FOR D = 72" OR LESS
T = 10" FOR D = OVER 72"

| TABLE NO. 2 | | |
|---|---|---|
| D | 1 ADDL.BAR | C |
| 84" | #4 | 3" |
| 96" | #4 | 8" |

## DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

## STANDARD TAPERED INLET HEADWALL - OUTLET HEADWALL (BUILT-IN-PLACE)

NO SCALE — REV. & REDR. OCT., 1999

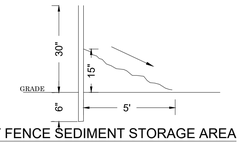
SUBMITTED: STATE ROAD & AIRPORT DESIGN ENGR.
APPROVED: CHIEF ENGINEER

NUMBER 1125

REVISION

DES. ____ REV. ____ DETA. ____ CHK. ____

TAPERED INLET HEADWALL DETAIL - GDOT 1125
NOT TO SCALE




## SILT FENCE SEDIMENT STORAGE AREA

NOT TO SCALE

SILT FENCE STORAGE CALCULATION:

1. DISTURBED AREA = 13.7 AC
2. REQUIRED SEDIMENT STORAGE = 67 CY/AC * DISTURBED AREA
   REQUIRED SEDIMENT STORAGE = 67 CY/AC * 13.7 AC
   REQUIRED SEDIMENT STORAGE = 917.9 CY = 24,783.3 CF
3. ASSUME SEDIMENT DEPTH OF 15" AGAINST SILT FENCE DETERMINE REQUIRED SURFACE AREA (HALF OF EXPOSED HEIGHT)
4. SAmin = REQUIRED SEDIMENT STORAGE/ SEDIMENT DEPTH
   SAmin = 24,783.3 CF/ 1.25 FT
   SAmin = 19,926.6 SF
5. DETERMINE IF ADEQUATE SEDIMENT STORAGE AREA ALONG SILT FENCE IS POSSIBLE.
   LENGTH OF SILT FENCE - NS (L) = 15,972.1-FT
   LENGTH OF SILT FENCE - S (L) = 1,374.2-FT

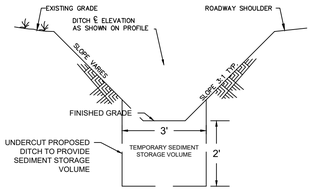
   DEPTH OF SEDIMENT (D) = 15" (1.25-FT)
   WIDTH OF SEDIMENT STORAGE AREA (W) = 5-FT

   ½ L x D x W = 54,207.2 CF = 2,007.7 CY

   2,007.7 CY OF SEDIMENT STORAGE IS AVAILABLE IN THE SILT FENCE.

SILT FENCE SEDIMENT STORAGE CALCULATIONS

SILT FENCE SEDIMENT STORAGE CALCULATIONS
NOT TO SCALE




## ROADSIDE DITCH SEDIMENT STORAGE AREA

NOT TO SCALE

DITCH CHECK DAM SEDIMENT STORAGE CALCULATION:

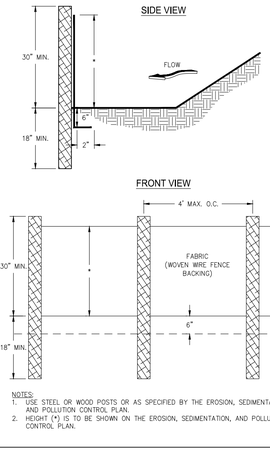
1. DISTURBED AREA = 13.7 AC
2. REQUIRED SEDIMENT STORAGE = 67 CY/AC * DISTURBED AREA
   REQUIRED SEDIMENT STORAGE = 67 CY/AC * 13.7 AC
   REQUIRED SEDIMENT STORAGE = 917.9 CY = 24,783 CF
3. ASSUME SEDIMENT DEPTH OF 2' BEHIND DITCH CHECKDAMS AND 30' ALONG THE CENTERLINE OF THE DITCH
4. DETERMINE IF ADEQUATE SEDIMENT STORAGE AREA ALONG UNDERCUT DITCHES IS POSSIBLE.
5. NUMBER OF DITCH CHECKDAMS = 50
   LENGTH OF UNDERCUT DITCH PER CHECKDAM = 30'
   DEPTH OF SEDIMENT = 2'
   WIDTH OF SEDIMENT STORAGE AREA = 3'
   PROVIDED STORAGE PER CHECKDAM = 2'X3'X30' = 180 CF = 6.67 CY
   AVAILABLE SEDIMENT STORAGE = 9,000 CF

   9,000 CF = 333 CY OF SEDIMENT STORAGE IS AVAILABLE IN THE DITCH CHECKDAMS.

DITCH CHECK DAM SEDIMENT STORAGE CALCULATIONS

CHECK DAM - HAY BALE SEDIMENT STORAGE CALCULATIONS
NOT TO SCALE

## SILT FENCE - TYPE SENSITIVE

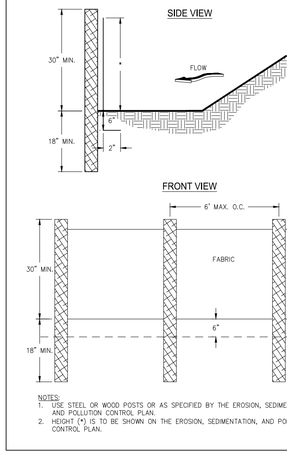



NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

Sd1-S

SILT FENCE - SENSITIVE
NOT TO SCALE

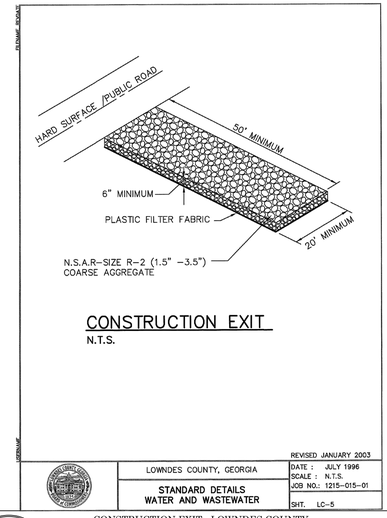
## SILT FENCE - TYPE NON-SENSITIVE




NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

Sd1-NS

SILT FENCE - NON-SENSITIVE
NOT TO SCALE




## CONSTRUCTION EXIT

N.T.S.

REVISED JANUARY 2003

LOWNDES COUNTY, GEORGIA

STANDARD DETAILS
WATER AND WASTEWATER

DATE : JULY 1996
SCALE : N.T.S.
JOB NO.: 1215-015-01
SHT. LC-5

Co

CONSTRUCTION EXIT - LOWNDES COUNTY
NOT TO SCALE

DEFINITION

Controlling surface and air movement of dust on construction sites, roads, and demolition sites.

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.

METHOD AND MATERIALS

A. TEMPORARY METHODS

Mulches. See standard Ds1 - Disturbed Area Stabilization (With Mulching Only). Synthetic resins may be used instead of asphalt to bind mulch material. Refer to standard Tb-Tackifiers and Binders. 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. Refer to standard Tb-Tackifiers and Binders.

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, snow fences, burlap fences, crate walls, bales of hay and similar material 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.

Calcium Chloride. Apply at rate that will keep surface moist. May need retreatment.

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. See standard Tp - Topsoiling.

Stone. Cover surface with crushed stone or coarse gravel. See standard Cr-Construction Road Stabilization.

Du

DUST CONTROL ON DISTURBED AREAS

DUST CONTROL ON DISTURBED AREAS
NOT TO SCALE

DEFINITION

Applying plant residues or other suitable materials, produced on the site if possible, to the soil surface.

CONDITIONS

Mulch or temporary grassing shall be applied to all exposed areas within 14 days of disturbance. Mulch can be used as a singular erosion control device for up to six months, but it shall be applied at the appropriate depth, depending on the material used, anchored, and have a continuous 90% cover or greater of the soil surface. Maintenance shall be required to maintain appropriate depth and 90% cover. Temporary vegetation may be employed instead of mulch if the area will remain undisturbed for less than six months. If an area will remain undisturbed for greater than six months, permanent vegetative techniques shall be employed.

SPECIFICATIONS

MULCHING WITHOUT SEEDING
This standard applies to grades or cleared areas where seedings may not have a suitable growing season to produce an erosion retardant cover, but can be stabilized with a mulch cover.

Site Preparation
1. Grade to permit the use of equipment for applying and anchoring mulch.
2. Install needed erosion control measures as required such as dikes, diversions, berms, terraces and sediment ti
3. Loosen compact soil to a minimum depth of 3 inches.

Mulching Materials
Select one of the following materials and apply at the depth indicated:
1. Dry straw or hay shall be applied at a depth of 2 to 4 inches providing complete soil coverage. One advantage of this material is easy application.
2. Wood waste (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain on site, be chipped, and applied as mulch. This method of mulching can greatly reduce erosion control costs.
3. Cutback asphalt (slow curing) shall be applied at 1200 gallons per acre (or 1/4 gallon per sq.yd.).
4. Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and reused.

Applying Mulch
When mulch is used without seeding, mulch shall be applied to provide full coverage of the exposed area.
1. Dry straw or hay mulch and wood chips shall be applied uniformly by hand or by mechanicalequipment.
2. If the area will eventually be covered with perennial vegetation, 20-30 pounds of nitrogen per acre in addition to the normal amount shall be applied to offset the uptake of nitrogen caused by the decomposition of the organic mulches.
3. Cutback asphalt shall be applied uniformly. Care should be taken in areas of pedestrian traffic due to problems of "tracking in" or damage to shoes, clothing, etc.
4. Apply polyethylene film on exposed areas.

Anchoring Mulch
1. Straw or hay mulch can be pressed into the soil with a disk harrow with the disk set straight or with a special "packer disk." Disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but to press it into the soil leaving much of it in an erect position. Straw or hay mulch shall be anchored immediately
after application. Straw or hay mulch spread with special blower-type equipment may be anchored with emulsified asphalt (Grade AE-5 or SS-1). The asphalt emulsion shall be sprayed onto the mulch as it is ejected from the machine. Use
100 gallons of emulsified asphalt and 100 gallons of water per ton of mulch. Tackifers and binders can be substituted for emulsified asphalt. Please refer to specification Tb -Tackifers and Binders. Plastic mesh or netting with mesh no larger than one inch by one inch shall be installed according to manufacturer's specifications.
2. Netting of the appropriate size shall be used to anchor wood waste. Openings of the netting shall not be larger than the average size of the wood waste chips.
3. Polyethylene film shall be anchor trenched at the top as well as incrementally as necessary.

Ds1

DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

DISTURBED AREA STABILIZATION (WITH MULCHING)
NOT TO SCALE

DEFINITION

The establishment of temporary vegetative cover with fast growing seedings for seasonal protection on disturbed or denuded areas.

CONDITIONS

Temporary grassing, instead of mulch, can be applied to rough graded areas that will be exposed for less than six months. Temporary vegetative measures should be coordinated with permanent measures to assure economical and effective stabilization. Most types of temporary vegetation are ideal to use as companion crops until the permanent vegetation is established. eeded.

### SEEDING RATES FOR TEMPORARY SEEDING

| SPECIES | RATE Per 1,000 sq.ft. | RATE Per Acre * | PLANTING DATES ** |
|---|---|---|---|
| Rye | 3.9 pounds | 3 bu. | 9/1-3/1 |
| Ryegrass | 0.9 pound | 40 lbs. | 8/15-4/1 |
| Annual Lespedeza | 0.9 pound | 40 lbs. | 1/15-3/15 |
| Weeping Lovegrass | 0.1 pound | 4 lbs. | 2/15-6/15 |
| Sudangrass | 1.4 pounds | 60 lbs. | 3/1-8/1 |
| Browntop Millet | 0.9 pound | 40 lbs. | 4/1-7/15 |
| Wheat | 4.1 pounds | 3 bu. | 9/15-2/1 |

* Unusual site conditions may require heavier seeding rates
** Seeding dates may need to be altered to fit temperture variations and conditions.

Ds2

DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

SPECIFICATIONS

Grading and Shaping

Excessive water run-off shall be reduced by properly designed and installed erosion control practices such as closed drains, ditches, dikes, diversions, sediment barriers and others.

No shaping or grading is required if slopes can be stabilized by hand-seeded vegetation or if hydraulic seeding equipment is to be used.

Seedbed Preparation

When a hydraulic seeder is used, seedbed preparation is not required. When using conventional or handseeding, seedbed preparation is not required if the soil material is loose and not sealed by rainfall.

When soil has been sealed by rainfall or consists of smooth cut slopes, the soil shall be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate.

Lime and Fertilizer

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. Soils can be tested to determine if fertilizer is needed. On reasonably fertile soils or soil material, fertilizer is not required. For soils with very low fertility, 500 to 700 pounds of 10-10-10 fertilizer or the equivalent per acre (12-16 lbs./1,000 sq. ft.) shall be applied. Fertilizer should be applied before land preparation and incorporated with a disk, ripper or chisel.

Seeding

Select a grass or grass-legume mixture suitable to the area and season of the year. Seed shall be applied uniformly by hand, cyclone seeder, drill, cultipacker seeder, or hydraulic seeder (slurry including seed and fertilizer). Drill or cultipacker seeders should normally place seed one-quarter to one-half inch deep. Appropriate depth of planting is ten times the seed diameter. Soil should be "raked" lightly to cover seed with soil if seeded by hand.

Mulching

Temporary vegetation can, in most cases, be established without the use of mulch. Mulch without seeding should be considered for short term protection. Refer to Ds1 - Disturbed Area Stabilization (With Mulching Only).

Irrigation

During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to a depth that will insure germination of the seed. Subsequent applications should be made when needed.

DISTURBED AREA STABILIZATION (TEMPORARY SEEDING)
NOT TO SCALE

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.

CONDITIONS

Permanent perennial vegetation is used to provide a protective cover for exposed areas including cuts, fills, dams, and other denuded areas.

SPECIFICATIONS

Grading and Shaping

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.

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 the vegetation.

oncentrations of water that will cause excessive soil erosion shall be diverted to a safe outlet. Diversions and other treatment practices shall conform with the appropriate standards and specifications.

Seedbed Preparation

Seedbed preparation may not be required where hydraulic seeding and fertilizing equipment is to be used. When conventional seeding is to be used, seedbed preparation will be done as follows:

Broadcast plantings

1. 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 to be used.
2. Tillage may be done with any suitable equipment.
3. Tillage should be done on the contour where feasible.
4. On slopes too steep for the safe operation of tillage equipment, the soil surface shall 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.

Individual Plants

1. Where individual plants are to be set, the soil shall be prepared by excavating holes, opening furrows, or dibble planting.
2. For nursery stock plants, holes shall be large enough to accommodate roots without crowding.
3. Where pine seedlings are to be planted, subsoil under the row 36 inches deep on the contour four to six months prior to planting. Subsoiling should be done when the soil is dry, preferably in August or September.

Planting

Hydraulic Seeding

Mix the seed (innoculated if needed), 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.

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.

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. No-till seeding shall be done with appropriate no-till seeding equipment. The seed must be uniformly distributed and planted at the proper depth.

Individual Plants

Shrubs, vines and sprigs may be planted with appropriate planters or hand tools. Pine trees shall be planted manually in the subsoil furrow. Each plant shall be set in a manner that will avoid crowding the roots. Nursery stock plants shall be planted at the same depth or slightly deeper than they grew at the nursery. The tips of vines and sprigs must be at or slightly above the ground surface. Where individual holes are dug, fertilizer shall be placed in the bottom of the hole, two inches of soil shall be added and the plant shall be set in the hole.

Mulching

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:

1. 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 2 1/2 tons per acre.
2. 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. Drystraw or dry hay shall be applied (at the rate indicated above) after hydraulic seeding.
3. 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.
4. Serices lespedeza hay containing mature seed shall be applied at a rate of three tons per acre.
5. Pine straw or pine bark shall be applied at a thickness of 3 inches for bedding purposes. Other suitable materials in sufficient quantity may be used where ornamentals or other ground covers are planted. This is not appropriate for seeded areas.
6. When using temporary erosion control blankets or block sod, mulch is not required.
7. 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.

Wood cellulose and wood pulp fibers shall not obtain 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.

Applying Mulch

Straw or hay mulch will be spread uniformly within 24 hours after seeding and/or planting. The mulch may be spread by blower-type spreading equipment, other spreading equipment or by hand. Mulch shall be applied to cover 75% of the soil surface.

Wood cellulose or wood fiber mulch shall be applied uniformly with hydraulic seeding equipment.

Anchoring Mulch

Anchor straw or hay mulch immediately after application by one of the following methods:
1. Emulsified asphalt can be (a) sprayed uniformly onto the mulch as it is ejected from the blower machine or (b) sprayed on the mulch immediately following mulch application when straw or hay is spread by methods other than special blower equipment.

The combination of asphalt emulsion and water shall consist of a homogeneous mixture satisfactory for spraying. The mixture shall consist of 100 gallons of grade SS-1h or CSS-1h emulsified asphalt and 100 gallons of water per ton of mulch.
Care shall be taken at all times to protect state waters, the public, adjacent property, pavements, curbs, sidewalks, and all other structures from asphalt discoloration.
2. Hay and straw mulch shall be pressed into the soil immediately after the mulch is spread. A special "packer disk" or disk harrow with the disks set straight may be used. The disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disks shall be dull enough to press the mulch into the ground without cutting it, leaving much of it in an erect position. Mulch shall not be plowed into the soil.
3. Synthetic tackifiers or binders approved by DOT shall be applied in conjunction with or immediately after the mulch is spread. Synthetic tackifiers shall be mixed and applied according to manufacturer's specifications. Refer to Tb - Tackifiers and Binders.
4. Rye or wheat can be included with Fall and Winter plantings to stabilize the mulch. They shall be applied at a rate of one-quarter to one half bushel per acre.
5. Plastic mesh or netting with mesh no larger than one inch by one inch may be needed to anchor straw or hay mulch on unstable soils and concentrated flow areas. These materials shall be installed and anchored according to manufacturer's specifications.

Irrigation

Irrigation shall be applied at a rate that will not cause runoff.

### SEEDING RATES FOR PERMANENT SEEDING

| SPECIES | RATE Per 1,000 sq.ft. | RATE Per Acre * | PLANTING DATES ** |
|---|---|---|---|
| BAHIA | 1.4 POUNDS | 60 LBS. | 1/1-12/31 |
| BERMUDA | 0.2 POUND | 10 LBS. | 2/15-7/1 |
| CENTIPEDE | BLOCK SOD ONLY | BLOCK SOD ONLY | 4/1-7/1 |
| LESPEDEZA | 1.7 POUNDS | 75 LBS. | 1/1-12/31 |
| WEEPING LOVE GRASS | 0.1 POUND | 4 LBS. | 2/1-6/15 |
| SWITCH GRASS | 0.9 POUND | 40 LBS. | 3/15-6/1 |

* Unusual site conditions may require heavier seeding rates
** Seeding dates may need to be altered to fit temperature variations and conditions.

DISTURBED AREA STABILIZATION (PERMANENT VEGETATION)
NOT TO SCALE

Ds3

DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG ALDOSTA WARNER ROBINS

# EROSION CONTROL DETAILS

## TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER
B. MATTHEW INMAN

2
GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION

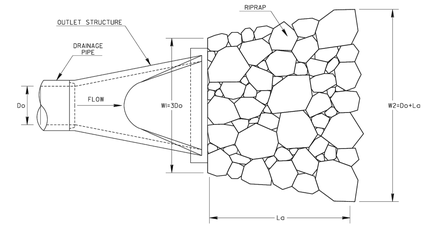
B. Matthew Inman
Level II Certified Design Professional
Certification Number: 00000000885
Issued: 06/01/2025 Expires: 06/01/2028

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

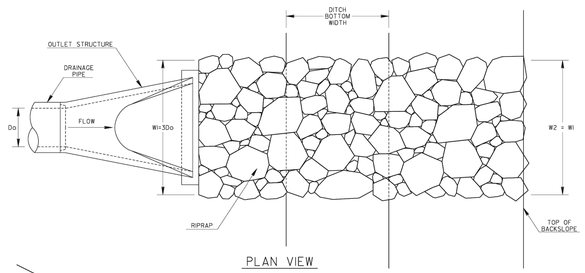
SHEET NO.
C11.0

| STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|
| GA. | | | |

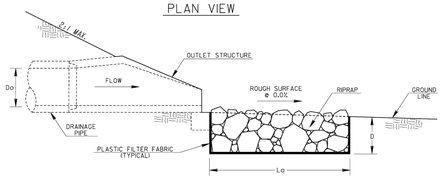
## OUTLET TO FLAT AREA



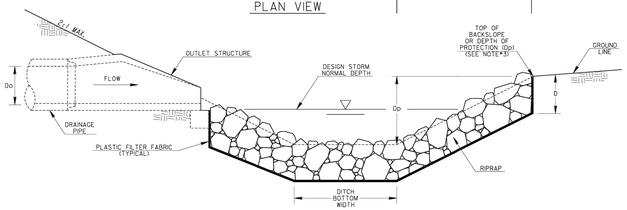

## OUTLET PERPENDICULAR TO WELL-DEFINED CHANNEL




### PLAN VIEW




### PLAN VIEW




### PROFILE VIEW

### PROFILE VIEW

GENERAL NOTES:

1. RIPRAP OUTLET PROTECTION SHOULD BE USED TO REDUCE A DRAINAGE STRUCTURE'S DISCHARGE VELOCITY. RIPRAP OUTLET PROTECTION IS SHOWN FOR GEORGIA STANDARD 620, BUT IS INSTALLED SIMILARLY FOR OTHER DRAINAGE OUTLET STRUCTURES.
2. RIPRAP OUTLET PROTECTION SHALL BE DESIGNED IN ACCORDANCE WITH THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA'. THE DESIGNER SHALL PROVIDE THE FOLLOWING IN THE PLANS: PIPE DIAMETER (Do), FLOW RATE OF DESIGN STORM (Q), VELOCITY (V), TAILWATER CONDITION (Tw), APRON LENGTH (Lo), APRON WIDTH AT DRAINAGE STRUCTURE (Wi), APRON WIDTH DOWNSTREAM (W2), AVERAGE STONE DIAMETER (d50), INSTALLATION DEPTH (D), AND TYPE OF RIPRAP WITH QUANTITY.

   THE MINIMUM DESIGN FOR RIPRAP OUTLET PROTECTION SHALL BE THE 25-YEAR STORM EVENT, BUT LARGER STORMS ARE RECOMMENDED.
3. THE APRON WIDTHS SHALL BE THE SAME WHEN THE DRAINAGE STRUCTURE DISCHARGES PERPENDICULAR INTO A WELL-DEFINED CHANNEL. THE LENGTH SHALL EXTEND ACROSS THE CHANNEL AND UP TO THE TOP OF THE CHANNEL BACKSLOPE OR 1-FOOT ABOVE THE NORMAL DEPTH OF THE CHANNEL'S DESIGN STORM (WHICHEVER IS LESS). THE DESIGNER SHALL PROVIDE THE DEPTH OF PROTECTION (Dp) IF THE APRON DOES NOT EXTEND TO THE TOP OF THE BACKSLOPE.
4. IF THE OUTLET HYDRAULICS REQUIRE A d50<=0.70 FEET, TYPE-3 RIPRAP MAY BE USED. IF THE OUTLET HYDRAULICS REQUIRE A d50<=1.20 FEET, TYPE-I RIPRAP SHOULD BE USED. IF THE OUTLET HYDRAULICS REQUIRE A d50>1.20 FEET, THE DESIGNER SHALL DESIGN AND PROVIDE A SPECIAL DETAIL FOR APPROPRIATE OUTLET PROTECTION.
5. PLASTIC FILTER FABRIC IS REQUIRED UNDERNEATH RIPRAP APRON.
6. PAYMENT FOR RIPRAP SHALL BE MEASURED IN SQUARE YARDS FOR SPECIFIED INSTALLATION DEPTH. PAYMENT FOR PLASTIC FILTER FABRIC SHALL BE MEASURED IN SQUARE YARDS CONSISTENT WITH RIPRAP QUANTITY AND PAID FOR SEPARATELY.

Do = PIPE DIAMETER
Q = DESIGN STORM FLOW RATE
V = DESIGN STORM VELOCITY
Tw = TAILWATER CONDITION/DESIGN STORM NORMAL DEPTH
Lo = APRON LENGTH
Wi = APRON WIDTH UPSTREAM
W2 = APRON WIDTH DOWNSTREAM
d50 = AVERAGE STONE DIAMETER
D = INSTALLATION DEPTH
Dp = DEPTH OF PROTECTION

| RIPRAP TYPE | REQUIRED d50 (FT) | MIN. DEPTH "D" (IN) |
|---|---|---|
| 1 | ≤1.20 | 36 |
| 3 | ≤0.67 | 18 |

| DATE | REVISION | BY |
|---|---|---|
| | | |

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAILS

RIPRAP OUTLET PROTECTION (SHEET 1 OF 2)

NO SCALE 4-22-2016

DESIGNED JLE
DRAWN JLE
TRACED ____
CHECKED ____

NUMBER D-55A

St

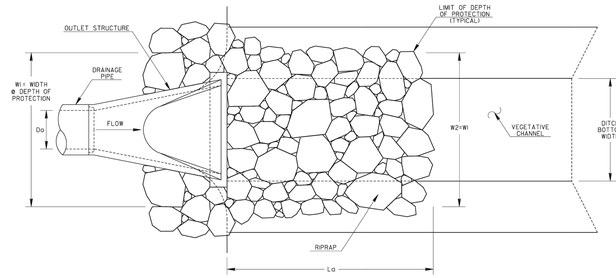
RIRRAP OUTLET PROTECTION DETAIL (1 OF 2)
NOT TO SCALE

St

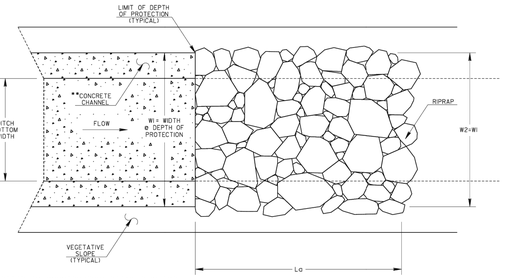
RIRRAP OUTLET PROTECTION DETAIL (1 OF 2)
NOT TO SCALE

| STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|
| GA. | | | |

## OUTLET PARALLEL TO WELL-DEFINED CHANNEL

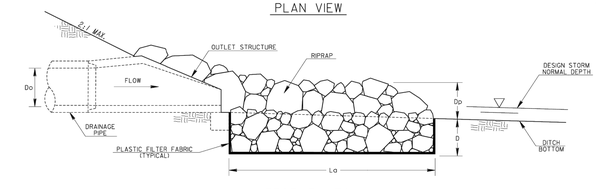



## CONCRETE CHANNEL TO RIPRAP TRANSITION

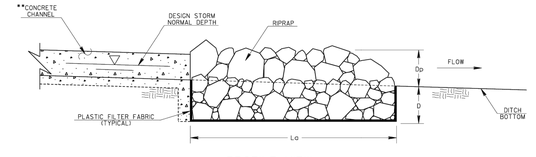



**REFER TO CONSTRUCTION DETAIL D-10 FOR CONCRETE DITCH PAVING INFORMATION

### PLAN VIEW




### PLAN VIEW




### PROFILE VIEW

### PROFILE VIEW

GENERAL NOTES:

1. RIPRAP OUTLET PROTECTION SHOULD BE USED TO REDUCE A DRAINAGE STRUCTURE'S DISCHARGE VELOCITY. RIPRAP OUTLET PROTECTION IS SHOWN FOR GEORGIA STANDARD 620, BUT IS INSTALLED SIMILARLY FOR OTHER DRAINAGE OUTLET STRUCTURES. RIPRAP OUTLET PROTECTION IS SHOWN FOR A CONCRETE DITCH, BUT IS INSTALLED SIMILARLY TO TRANSITION FROM OTHER CHANNEL LININGS.
2. RIPRAP OUTLET PROTECTION SHALL BE DESIGNED IN ACCORDANCE WITH THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA'. THE DESIGNER SHALL PROVIDE THE FOLLOWING IN THE PLANS: PIPE DIAMETER (Do), FLOW RATE OF DESIGN STORM (Q), VELOCITY (V), TAILWATER CONDITION (Tw), APRON LENGTH (Lo), APRON WIDTH AT DRAINAGE STRUCTURE (Wi), APRON WIDTH DOWNSTREAM (W2), AVERAGE STONE DIAMETER (d50), INSTALLATION DEPTH (D), AND TYPE OF RIPRAP WITH QUANTITY.

   THE MINIMUM DESIGN FOR RIPRAP OUTLET PROTECTION SHALL BE THE 25-YEAR STORM EVENT, BUT LARGER STORMS ARE RECOMMENDED.
3. THE APRON WIDTHS SHALL BE THE SAME WHEN THE DRAINAGE STRUCTURE DISCHARGES PARALLEL INTO A WELL-DEFINED CHANNEL. THE APRON WIDTHS IN THIS CASE SHALL REPRESENT THE WIDTH AT THE DEPTH OF PROTECTION. THE RIPRAP SHALL BE INSTALLED TO THE TOP OF CHANNEL OR 1-FOOT ABOVE THE NORMAL DEPTH OF THE CHANNEL'S DESIGN STORM (WHICHEVER IS LESS). THE DESIGNER SHALL PROVIDE THE DEPTH OF PROTECTION (Dp) IF THE RIPRAP SHOULD NOT BE INSTALLED TO THE TOP OF THE CHANNEL. RIPRAP SHOULD ALSO BE INSTALLED TO ARMOR CHANNEL CORNER AT THE OUTLET STRUCTURE.
4. IF THE OUTLET HYDRAULICS REQUIRE A d50<=0.70 FEET, TYPE-3 RIPRAP MAY BE USED. IF THE OUTLET HYDRAULICS REQUIRE A d50<=1.20 FEET, TYPE-I RIPRAP SHOULD BE USED. IF THE OUTLET HYDRAULICS REQUIRE A d50>1.20 FEET, THE DESIGNER SHALL DESIGN AND PROVIDE A SPECIAL DETAIL FOR APPROPRIATE OUTLET PROTECTION.
5. PLASTIC FILTER FABRIC IS REQUIRED UNDERNEATH RIPRAP APRON.
6. PAYMENT FOR RIPRAP SHALL BE MEASURED IN SQUARE YARDS FOR SPECIFIED INSTALLATION DEPTH. PAYMENT FOR PLASTIC FILTER FABRIC SHALL BE MEASURED IN SQUARE YARDS CONSISTENT WITH RIPRAP QUANTITY AND PAID FOR SEPARATELY.

Do = PIPE DIAMETER
Q = DESIGN STORM FLOW RATE
V = DESIGN STORM VELOCITY
Tw = TAILWATER CONDITION/DESIGN STORM NORMAL DEPTH
Lo = APRON LENGTH
Wi = APRON WIDTH UPSTREAM AT DEPTH OF PROTECTION
W2 = APRON WIDTH DOWNSTREAM AT DEPTH OF PROTECTION
d50 = AVERAGE STONE DIAMETER
D = INSTALLATION DEPTH
Dp = DEPTH OF PROTECTION

| RIPRAP TYPE | REQUIRED d50 (FT) | MIN. DEPTH "D" (IN) |
|---|---|---|
| 1 | ≤1.20 | 36 |
| 3 | ≤0.67 | 18 |

| DATE | REVISION | BY |
|---|---|---|
| | | |

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAILS

RIPRAP OUTLET PROTECTION (SHEET 2 OF 2)

NO SCALE 4-22-2016

DESIGNED JLE
DRAWN JLE
TRACED ____
CHECKED ____

NUMBER D-55B

St

RIPRAP OUTLET PROTECTION DETAIL (2 OF 2)
NOT TO SCALE

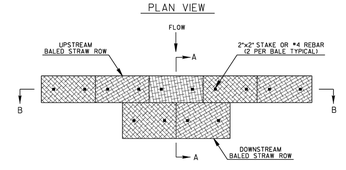
St

RIPRAP OUTLET PROTECTION DETAIL (2 OF 2)
NOT TO SCALE

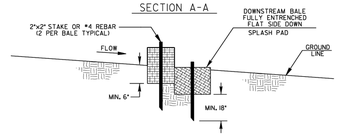
| STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|
| GA. | | | |

## BALED STRAW CHECK DAM

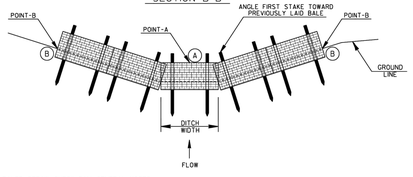
### PLAN VIEW




### SECTION A-A




### SECTION B-B

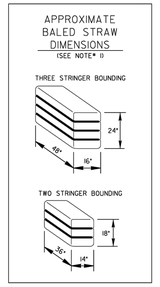



SPECIAL NOTES:

1. BALED STRAW AND COMPOST FILTER SOCK CHECK DAMS MAY BE USED FOR FLOWS UP TO 2.0 CFS OR DRAINAGE AREAS UP TO 1.0 ACRE, IF THESE ITEMS ARE USED IN DRAINAGE AREAS GREATER THAN 1.0 ACRE, FLOWS GREATER THAN 2.0 CFS, OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM AT THE DOWNSTREAM DISCHARGE POINT SHALL BE USED IN CONJUNCTION WITH BALED STRAW OR COMPOST FILTER SOCK CHECK DAMS.
2. BALED STRAW AND COMPOST FILTER SOCK CHECK DAMS SHALL NOT BE PLACED WITHIN FLOWING STREAMS OR IN A TIDAL AREA BELOW HIGH TIDE.

### APPROXIMATE BALED STRAW DIMENSIONS

(SEE NOTE* 1)



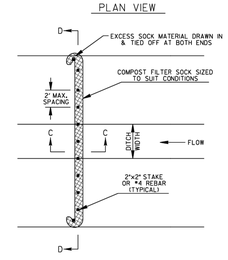

BALED STRAW CHECK DAM GENERAL NOTES:

1. BALED STRAW DIMENSIONS MAY VARY. ASSUME APPROXIMATE DIMENSIONS OF 14"Wx18"Hx36"L FOR A TWO STRINGER AND 16"Wx24"Hx48"L FOR A THREE STRINGER. BALES SHOULD BE BOUND WITH WIRE OR NYLON INSTEAD OF TWINE.
2. BALES SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING THE ADJACENT BALES. THE TOP OF THE UPSTREAM BALES IN THE CENTER OF CHANNEL SHOULD BE LEVEL AND SET AT THE SAME ELEVATION. THE DOWNSTREAM BALES SHOULD BE ENTRENCHED EVEN WITH THE CHANNEL BOTTOM.
3. THE GROUND LINE AT POINT-B SHALL ALWAYS BE AT MINIMUM OF 6 INCHES ABOVE POINT-A.
4. REMOVE SEDIMENT ONCE THE ACCUMULATED HEIGHT HAS REACHED HALF THE STORAGE HEIGHT.
5. INSTALLATION MAY BE ADJUSTED SLIGHTLY TO MEET FIELD CONDITIONS; HOWEVER, SPLASH PAD IS REQUIRED.

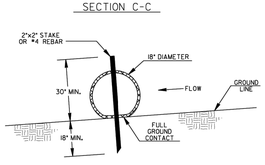
PAY ITEMS:
163-0529 CONSTRUCT & REMOVE TEMPORARY SEDIMENT BARRIER OR BALED STRAW CHECK DAM (LF)
165-0041 MAINTENANCE OF CHECK DAMS - ALL TYPES (LF)

## COMPOST FILTER SOCK CHECK DAM

### PLAN VIEW

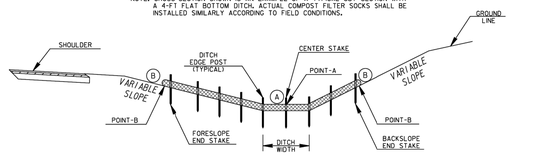



### SECTION C-C




### SECTION D-D

NOTE: CROSS-SECTION SHOWN IS AN EXAMPLE OF A TYPICAL CUT SECTION WITH A 4-FT FLAT BOTTOM DITCH. ACTUAL COMPOST FILTER SOCKS SHALL BE INSTALLED SIMILARLY ACCORDING TO FIELD CONDITIONS.




COMPOST FILTER SOCK CHECK DAM GENERAL NOTES:

1. THE CONTRACTOR MAY ELECT TO USE 18" DIAMETER COMPOST FILTER SOCK CHECK DAMS IN LIEU OF BALED STRAW CHECK DAMS. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE CONSTRUCTION, REMOVAL, OR MAINTENANCE OF COMPOST FILTER SOCK CHECK DAMS.
2. COMPOST FILTER MEDIA SHALL MEET THE SPECIFICATIONS IN THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA'. THE CONTRACTOR SHALL PROVIDE VERIFICATION OF MEETING SPECIFICATIONS IF REQUESTED.
3. THE GROUND LINE AT POINT-B SHALL BE A MINIMUM OF 6 INCHES ABOVE POINT-A.
4. ENSURE COMPOST FILTER SOCK HAS FULL CONTACT WITH GROUND SURFACE. PLACE ONE STAKE AT THE CENTER OF CHANNEL, AT THE TOE OF FORESLOPE AND BACKSLOPE, AND AT THE ENDS OF DEVICE. STAKES SHALL HAVE A MAXIMUM SPACING OF 2 FEET.
5. REMOVE SEDIMENT ONCE THE ACCUMULATED HEIGHT HAS REACHED HALF THE STORAGE HEIGHT.

| DATE | REVISION | BY |
|---|---|---|
| | | |

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAILS

BALED STRAW & COMPOST FILTER SOCK CHECK DAMS FOR EROSION CONTROL

NO SCALE 4-22-2016

DESIGNED JLE
DRAWN JLE
TRACED ____
CHECKED ____

NUMBER D-52

Cd-HB

GDOT HAY BALE CHECK DAM DETAIL
NOT TO SCALE

## REVISIONS

| No. | DATE | DESCRIPTION |
|---|---|---|
| 2 | 8/18/2025 | REV. PER COUNTY COMMENTS |
| 3 | 9/19/2025 | REV. PER COUNTY COMMENTS |
| 4 | 10/24/2025 | REV. PER COUNTY COMMENTS |
| 5 | 1/29/2026 | REV. PER COUNTY COMMENTS |
| 6 | 3/4/2026 | REV. PER COUNTY COMMENTS |
| 7 | 3/20/2026 | ISSUED FOR CONSTRUCTION |

AXIS
ENGINEERING CONSULTANTS
LEESBURG ▲ ALDOSTA ▲ WARNER ROBINS

# EROSION CONTROL DETAILS

TWIN LAKES ROAD PAVING IMPROVEMENTS

GEORGIA
AXIS ENGINEERING CONSULTANTS
PEF009117
06/30/2026
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
B. MATTHEW INMAN
No. PE030417
PROFESSIONAL
3/20/2026
ENGINEER

GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION

B. Matthew Inman
LEVEL II CERTIFIED DESIGN PROFESSIONAL

CERTIFICATION NUMBER: 0000000885
ISSUED: 06/01/2025 EXPIRES: 06/01/2028

PROJECT NO. 25-25014
DATE: 10/18/2024
DRAWN BY: KR
CHECK BY: JVM

SHEET NO.
C11.1

Z:\Shared\AEC\Projects\2025\25-25014 Twin Lakes Rd Paving Lowndes Co, GA\DWG\61012C_A01.dwg - 3/20/2026 8:42 AM