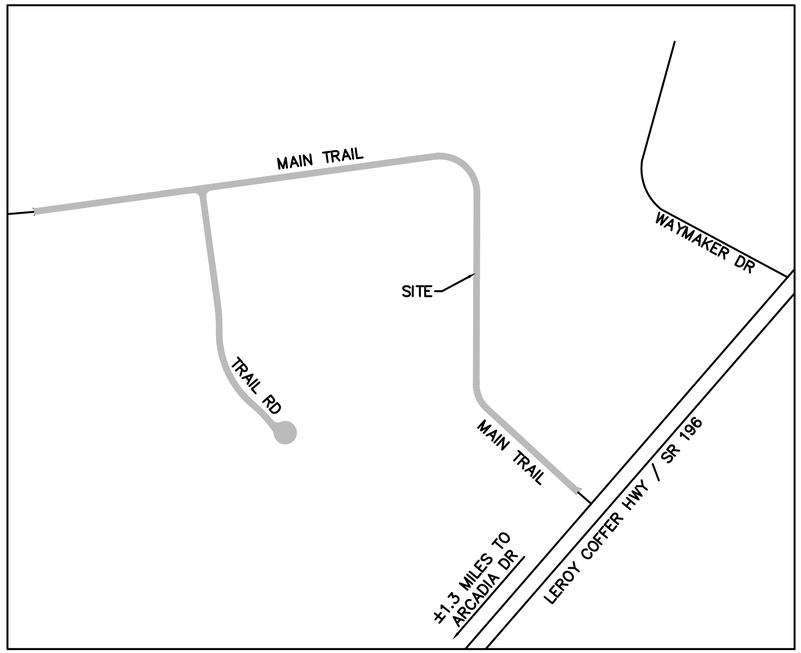
MAIN TRAIL ROADWAY IMPROVEMENTS
FOR
THE TRAILS SUBDIVISIONS
LIBERTY COUNTY, GEORGIA

OWNER
LIBERTY COUNTY, BOARD OF COMMISSIONERS
112 NORTH MAIN STREET
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TRENT LONG
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VICINITY MAP N.T.S.

ENGINEER
T. R. LONG ENGINEERING, P.C.
114 NORTH COMMERCE STREET
HINESVILLE, GEORGIA 31313
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C7.4	DRIVEWAY DETAILS

BEGINNING: N31° 50' 35.12", W81°29'03.92"
END: N31° 50' 25.04", W81° 28' 41.62"
DISTURBED ACREAGE: 5.47 AC.
TOTAL SITE ACREAGE: 10.51 AC.

DRAWING LEGEND

DESCRIPTION	PROPOSED	EXISTING
RIGHT OF WAY	R/W	R/W
EDGE OF PAVEMENT		
DITCH CENTERLINE		
SANITARY SEWER	8"S	8"S
WATER LINE	10"W	10"W
FORCE MAIN	FM	FM
UNDERGROUND GAS LINE	8"G	8"G
CONTOURS	81	81
STORM DRAINAGE PIPE		
ELEVATION	FG: 78.15	X 81.90
SILT FENCE NON-SENSITIVE	Sd1-NS	
SILT FENCE SENSITIVE	Sd1-S	
INLET PROTECTION	Sd2-F	
CHECK DAM- HAY BALE	Cd-Hb	
CHECK DAM - RIP RAP	Cd-Rp	
CONSTRUCTION EXIT	Cs	
STORM OUTLET PROTECTION	St	
SILT FENCE		
MULCHING	Ds1	
TEMPORARY GRASSING	Ds2	
PERMANENT GRASSING	Ds3	
FIRE HYDRANT		
SEWER MANHOLE	S	S
WATER VALVE	W	W
DRAINAGE FLOW		
WATER METER		
BENCHMARK		
WELL	W	W
GUY POLE		
IRON PIN	SET I.P.S	FOUND I.P.F
TELEPHONE PEDESTAL		TEL
POWER POLE		

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LIBERTY COUNTY, GEORGIA

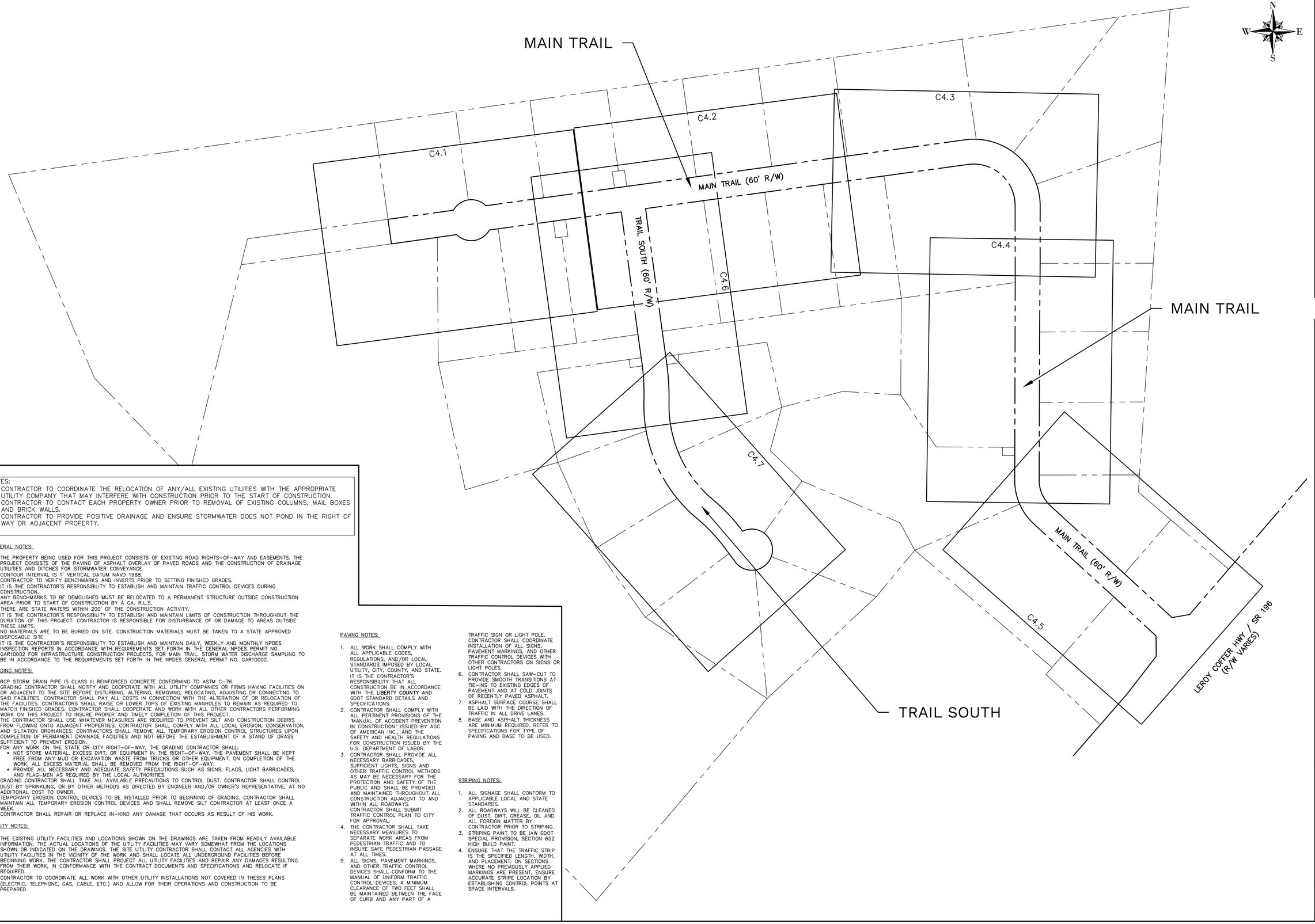
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COVER SHEET

REVISIONS:
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
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Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\2025-231 Exhibit.dwg
Plotted By: Trent Long
Plotted Date: Sep 29, 2026 - 8:03am



NOTES:
1. CONTRACTOR TO COORDINATE THE RELOCATION OF ANY/ALL EXISTING UTILITIES WITH THE APPROPRIATE UTILITY COMPANY THAT MAY INTERFERE WITH CONSTRUCTION PRIOR TO THE START OF CONSTRUCTION.
2. CONTRACTOR TO CONTACT EACH PROPERTY OWNER PRIOR TO REMOVAL OF EXISTING COLUMNS, MAIL BOXES AND BRICK WALLS.
3. CONTRACTOR TO PROVIDE POSITIVE DRAINAGE AND ENSURE STORMWATER DOES NOT POND IN THE RIGHT OF WAY OR ADJACENT PROPERTY.

GENERAL NOTES:

1. THE PROPERTY BEING USED FOR THIS PROJECT CONSISTS OF EXISTING ROAD RIGHTS-OF-WAY AND EASEMENTS. THE PROJECT CONSISTS OF THE PAVING OF ASPHALT OVERLAY OF PAVED ROADS AND THE CONSTRUCTION OF DRAINAGE UTILITIES AND DITCHES FOR STORMWATER CONVEYANCE.
2. CONTOUR INTERVAL IS 1' VERTICAL DATUM NAVD 1988.
3. CONTRACTOR TO VERIFY BENCHMARKS AND INVERTS PRIOR TO SETTING FINISHED GRADES.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ESTABLISH AND MAINTAIN TRAFFIC CONTROL DEVICES DURING CONSTRUCTION.
5. ANY BENCHMARKS TO BE DEMOLISHED MUST BE RELOCATED TO A PERMANENT STRUCTURE OUTSIDE CONSTRUCTION AREA PRIOR TO START OF CONSTRUCTION BY A GA. R.L.S.
6. THERE ARE STATE WATERS WITHIN 200' OF THE CONSTRUCTION ACTIVITY.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ESTABLISH AND MAINTAIN LIMITS OF CONSTRUCTION THROUGHOUT THE DURATION OF THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR DISTURBANCE OF OR DAMAGE TO AREAS OUTSIDE THESE LIMITS.
8. NO MATERIALS ARE TO BE BURIED ON SITE. CONSTRUCTION MATERIALS MUST BE TAKEN TO A STATE APPROVED DISPOSABLE SITE.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ESTABLISH AND MAINTAIN DAILY, WEEKLY AND MONTHLY NPDES INSPECTION REPORTS IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN THE GENERAL NPDES PERMIT NO. GAR10002 FOR INFRASTRUCTURE CONSTRUCTION PROJECTS, FOR MAIN TRAIL. STORM WATER DISCHARGE SAMPLING TO BE IN ACCORDANCE TO THE REQUIREMENTS SET FORTH IN THE NPDES GENERAL PERMIT NO. GAR10002.

GRADING NOTES:

1. RCP STORM DRAIN PIPE IS CLASS III REINFORCED CONCRETE CONFORMING TO ASTM C-76.
2. GRADING CONTRACTOR SHALL NOTIFY AND COOPERATE WITH ALL UTILITY COMPANIES OR FIRMS HAVING FACILITIES ON OR ADJACENT TO THE SITE BEFORE DISTURBING, ALTERING, REMOVING, RELOCATING, ADJUSTING OR CONNECTING TO SAID FACILITIES. CONTRACTOR SHALL PAY ALL COSTS IN CONNECTION WITH THE ALTERATION OF OR RELOCATION OF THE FACILITIES. CONTRACTORS SHALL RAISE OR LOWER TOPS OF EXISTING MANHOLES TO REMAIN AS REQUIRED TO MATCH FINISHED GRADES. CONTRACTOR SHALL COOPERATE AND WORK WITH ALL OTHER CONTRACTORS PERFORMING WORK ON THIS PROJECT TO INSURE PROPER AND TIMELY COMPLETION OF THIS PROJECT.
3. THE CONTRACTOR SHALL USE WHATEVER MEASURES ARE REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL COMPLY WITH ALL LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. CONTRACTORS SHALL REMOVE ALL TEMPORARY EROSION CONTROL STRUCTURES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND NOT BEFORE THE ESTABLISHMENT OF A STAND OF GRASS SUFFICIENT TO PREVENT EROSION.
4. FOR ANY WORK ON THE STATE OR CITY RIGHT-OF-WAY, THE GRADING CONTRACTOR SHALL:
   - NOT STORE MATERIAL, EXCESS DIRT, OR EQUIPMENT IN THE RIGHT-OF-WAY. THE PAVEMENT SHALL BE KEPT FREE FROM ANY MUD OR EXCAVATION WASTE FROM TRUCKS OR OTHER EQUIPMENT. ON COMPLETION OF THE WORK, ALL EXCESS MATERIAL SHALL BE REMOVED FROM THE RIGHT-OF-WAY.
   - PROVIDE ALL NECESSARY AND ADEQUATE SAFETY PRECAUTIONS SUCH AS SIGNS, FLAGS, LIGHT BARRICADES, AND FLAG-MEN AS REQUIRED BY THE LOCAL AUTHORITIES.
6. GRADING CONTRACTOR SHALL TAKE ALL AVAILABLE PRECAUTIONS TO CONTROL DUST. CONTRACTOR SHALL CONTROL DUST BY SPRINKLING, OR BY OTHER METHODS AS DIRECTED BY ENGINEER AND/OR OWNER'S REPRESENTATIVE, AT NO ADDITIONAL COST TO OWNER.
7. TEMPORARY EROSION CONTROL DEVICES TO BE INSTALLED PRIOR TO BEGINNING OF GRADING. CONTRACTOR SHALL MAINTAIN ALL TEMPORARY EROSION CONTROL DEVICES AND SHALL REMOVE SILT CONTRACTOR AT LEAST ONCE A WEEK.
8. CONTRACTOR SHALL REPAIR OR REPLACE IN-KIND ANY DAMAGE THAT OCCURS AS RESULT OF HIS WORK.

UTILITY NOTES:

1. THE EXISTING UTILITY FACILITIES AND LOCATIONS SHOWN ON THE DRAWINGS ARE TAKEN FROM READILY AVAILABLE INFORMATION. THE ACTUAL LOCATIONS OF THE UTILITY FACILITIES MAY VARY SOMEWHAT FROM THE LOCATIONS SHOWN OR INDICATED ON THE DRAWINGS. THE SITE UTILITY CONTRACTOR SHALL CONTACT ALL AGENCIES WITH UTILITY FACILITIES IN THE VICINITY OF THE WORK AND SHALL LOCATE ALL UNDERGROUND FACILITIES BEFORE BEGINNING WORK. THE CONTRACTOR SHALL PROJECT ALL UTILITY FACILITIES AND REPAIR ANY DAMAGES RESULTING FROM THEIR WORK, IN CONFORMANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS AND RELOCATE IF REQUIRED.
2. CONTRACTOR TO COORDINATE ALL WORK WITH OTHER UTILITY INSTALLATIONS NOT COVERED IN THESES PLANS (ELECTRIC, TELEPHONE, GAS, CABLE, ETC.) AND ALLOW FOR THEIR OPERATIONS AND CONSTRUCTION TO BE PREPARED.

PAVING NOTES:

1. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, REGULATIONS, AND/OR LOCAL STANDARDS IMPOSED BY LOCAL UTILITY, CITY, COUNTY, AND STATE. IT IS THE CONTRACTOR'S RESPONSIBILITY THAT ALL CONSTRUCTION BE IN ACCORDANCE WITH THE **LIBERTY COUNTY** AND GDOT STANDARD DETAILS AND SPECIFICATIONS.
2. CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY AGC OF AMERICAN INC., AND THE SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION ISSUED BY THE U.S. DEPARTMENT OF LABOR.
3. CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL METHODS AS MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC AND SHALL BE PROVIDED AND MAINTAINED THROUGHOUT ALL CONSTRUCTION ADJACENT TO AND WITHIN ALL ROADWAYS. CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN TO CITY FOR APPROVAL.
4. THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO SEPARATE WORK AREAS FROM PEDESTRIAN TRAFFIC AND TO INSURE SAFE PEDESTRIAN PASSAGE AT ALL TIMES.
5. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. A MINIMUM CLEARANCE OF TWO FEET SHALL BE MAINTAINED BETWEEN THE FACE OF CURB AND ANY PART OF A TRAFFIC SIGN OR LIGHT POLE. CONTRACTOR SHALL COORDINATE INSTALLATION OF ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES WITH OTHER CONTRACTORS ON SIGNS OR LIGHT POLES.
6. CONTRACTOR SHALL SAW-CUT TO PROVIDE SMOOTH TRANSITIONS AT TIE-INS TO EXISTING EDGES OF PAVEMENT AND AT COLD JOINTS OF RECENTLY PAVED ASPHALT.
7. ASPHALT SURFACE COURSE SHALL BE LAID WITH THE DIRECTION OF TRAFFIC IN ALL DRIVE LANES.
8. BASE AND ASPHALT THICKNESS ARE MINIMUM REQUIRED. REFER TO SPECIFICATIONS FOR TYPE OF PAVING AND BASE TO BE USED.

STRIPING NOTES:

1. ALL SIGNAGE SHALL CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.
2. ALL ROADWAYS WILL BE CLEANED OF DUST, DIRT, GREASE, OIL AND ALL FOREIGN MATTER BY CONTRACTOR PRIOR TO STRIPING.
3. STRIPING PAINT TO BE IAW GDOT SPECIAL PROVISION, SECTION 652 HIGH BUILD PAINT.
4. ENSURE THAT THE TRAFFIC STRIP IS THE SPECIFIED LENGTH, WIDTH, AND PLACEMENT. ON SECTIONS WHERE NO PREVIOUSLY APPLIED MARKINGS ARE PRESENT, ENSURE ACCURATE STRIPE LOCATION BY ESTABLISHING CONTROL POINTS AT SPACE INTERVALS.

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

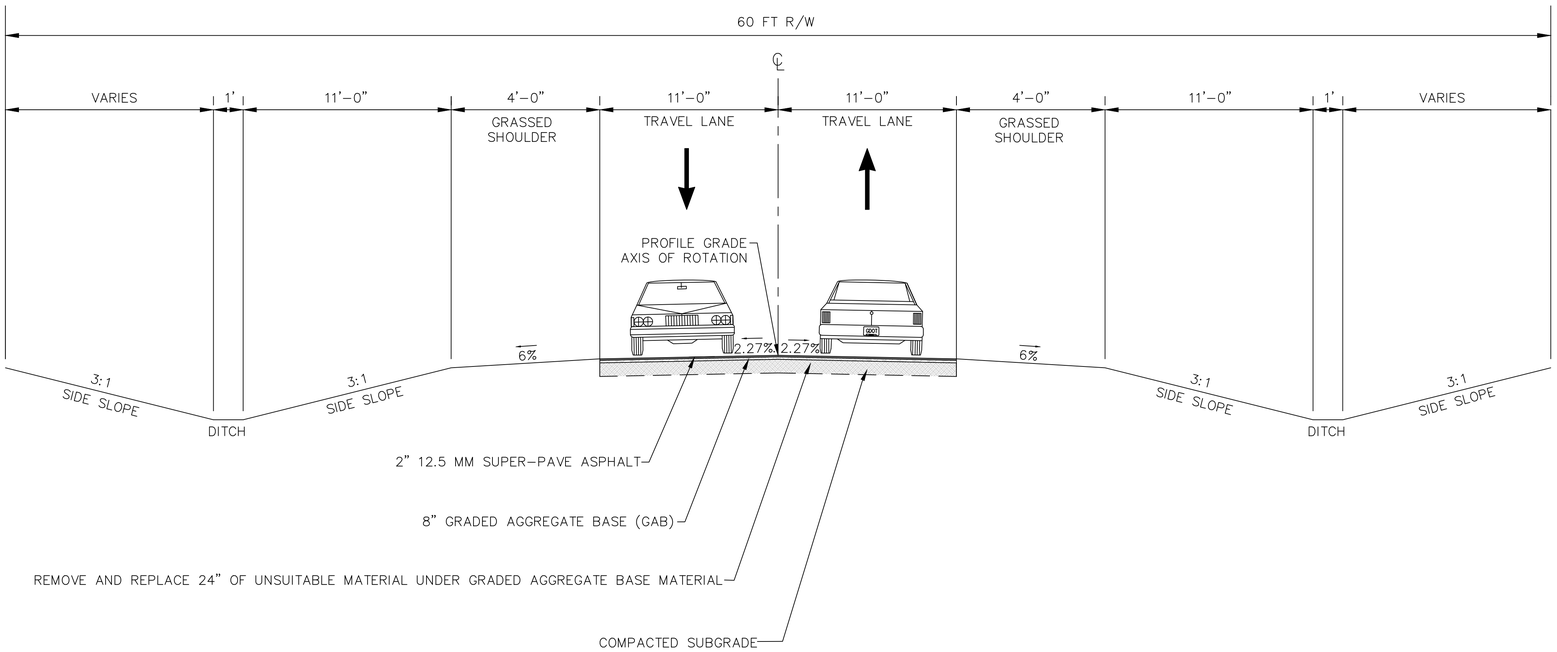
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SHEET INDEX & GENERAL NOTES

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Plotted By: Stephen Long
Plotted Date: Sep 29, 2026 - 3:21pm



ROADWAY CROSS SECTION DETAIL
N.T.S.

NOTES:

SUBGRADE PREPARATION:
1. REMOVE ORGANIC SOILS AND UNDERCUT EXISTING SUBGRADE TO PROVIDE A MINIMUM 24–INCH THICK LAYER OF CLEAN, ORGANIC–FREE, DRAINED, COMPACTED, APPROVED COARSE–GRAINED SOIL BELOW THE PROPOSED PAVEMENT SECTION.
2. MAINTAIN A MINIMUM 24–INCH SEPARATION BETWEEN THE BOTTOM OF THE PROPOSED PAVEMENT SECTION AND UNDERLYING CLAY STRATA.
3. WHERE ORGANIC SOILS EXTEND MORE THAN 24 INCHES BELOW THE PROPOSED PAVEMENT SECTION, CONTINUE UNDERCUTTING UNTIL SUITABLE MATERIAL IS ENCOUNTERED AS DIRECTED BY THE ENGINEER.
4. UNDERCUTTING AND REPLACEMENT MAY EXTEND TO DEPTHS OF 3 FEET OR MORE BELOW THE EXISTING PAVEMENT SECTION IN SOME AREAS AT THE DIRECTION OF THE ENGINEER.

EARTHWORK:
5. AFTER REMOVAL OF THE EXISTING ASPHALT SECTION, UNDERCUT TO A MINIMUM DEPTH OF 24 INCHES BELOW THE BOTTOM OF THE PLANNED NEW PAVEMENT SECTION.
6. INSPECT THE EXPOSED SUBGRADE AFTER UNDERCUTTING AND PERFORM ADDITIONAL UNDERCUTTING WHERE ORGANIC OR UNSUITABLE SOILS ARE ENCOUNTERED AS DIRECTED BY THE ENGINEER.
7. COMPACT THE EXPOSED SUBGRADE IN PLACE AND PROOF–ROLL PRIOR TO PLACEMENT OF BACKFILL OR PAVEMENT MATERIALS.
8. STABILIZE UNSTABLE SUBGRADE BY ADDITIONAL UNDERCUTTING AND REPLACEMENT WITH APPROVED COMPACTED BACKFILL OR APPROVED STABILIZATION FABRIC.
9. PLACE BACKFILL IN MAXIMUM 8 TO 10 INCH LOOSE LIFTS AND COMPACT EACH LIFT TO THE REQUIRED DENSITY.

PAVEMENT SECTION:
10. LIGHT–DUTY PAVEMENT SHALL CONSIST OF A MINIMUM 2–INCH 12.5 MM SUPERPAVE SURFACE COURSE OVER A MINIMUM 8–INCH GRADED AGGREGATE BASE COURSE.
11. PROVIDE A MINIMUM 24–INCH THICK LAYER OF CLEAN, DRAINED, COMPACTED COARSE–GRAINED SOIL SUBGRADE BELOW THE PAVEMENT SECTION.
    COMPACT THE 24–INCH SUBGRADE LAYER TO A MINIMUM OF 95 PERCENT OF ASTM D–1557 MAXIMUM DRY DENSITY.
12. EXISTING SANDY SUBGRADE MAY REMAIN WHERE IT IS ORGANIC–FREE, A MINIMUM 24 INCHES THICK, PROVIDES THE REQUIRED SEPARATION FROM UNDERLYING CLAY, IS COMPACTED TO 95 PERCENT OF ASTM D–1557 MAXIMUM DRY DENSITY, AND PASSES PROOF–ROLLING.
13. THE RECOMMENDED PAVEMENT SECTION IS BASED ON AN ASSUMED MINIMUM SUBGRADE CBR VALUE OF 8.

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LIBERTY COUNTY, GEORGIA

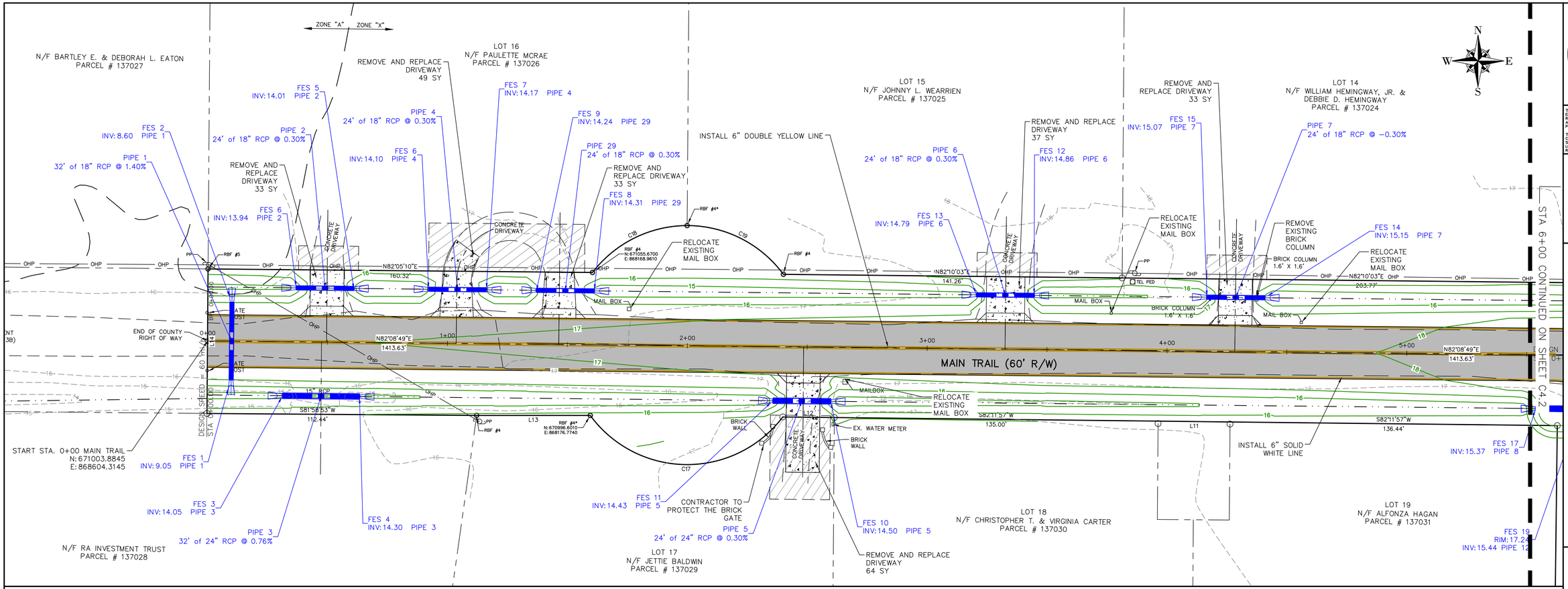
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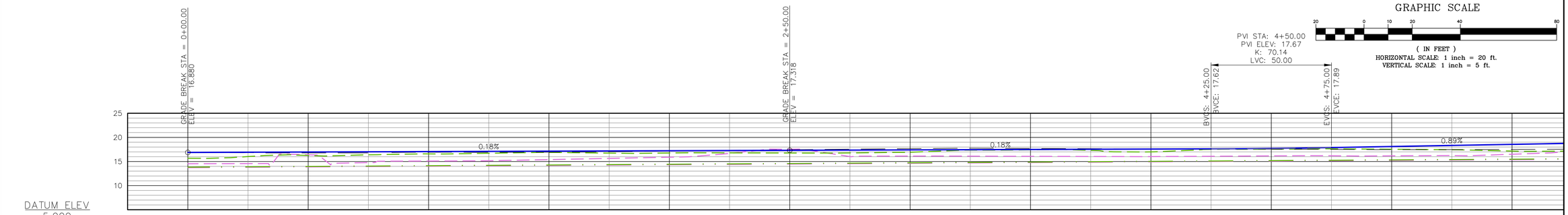
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Drawing No.: Exhibit
Plotted Date: Sep 28, 2026 - 3:21pm





DATUM ELEV
5.000
MAIN TRAIL PROFILE

	0+00	0+50	1+00	1+50	2+00	2+50	3+00	3+50	4+00	4+50	5+00	5+50
CENTERLINE EXISTING ELEV	16.88	16.78	16.91	16.94	17.19	17.45	17.67	17.72	17.63	17.56	17.47	17.49
CENTERLINE PROPOSED ELEV	16.880	16.967	17.055	17.143	17.230	17.318	17.405	17.493	17.581	17.713	18.112	18.556
LEFT DITCH	15.68	16.25	16.58	16.88	16.76	16.76	16.92	17.43	17.00	17.55	17.54	17.17
LEFT DITCH	13.825	13.975	14.125	14.275	14.425	14.575	14.725	14.875	15.025	15.175	15.325	15.475
RIGHT DITCH	14.54	16.39	15.09	15.40	15.90	17.53	16.13	16.08	16.02	16.16	16.17	16.51
RIGHT DITCH	13.725	13.875	14.025	14.175	14.325	14.475	14.625	14.775	14.925	15.075	15.225	15.375

-0+25 0+00 0+50 1+00 1+50 2+00 2+50 3+00 3+50 4+00 4+50 5+00 5+50

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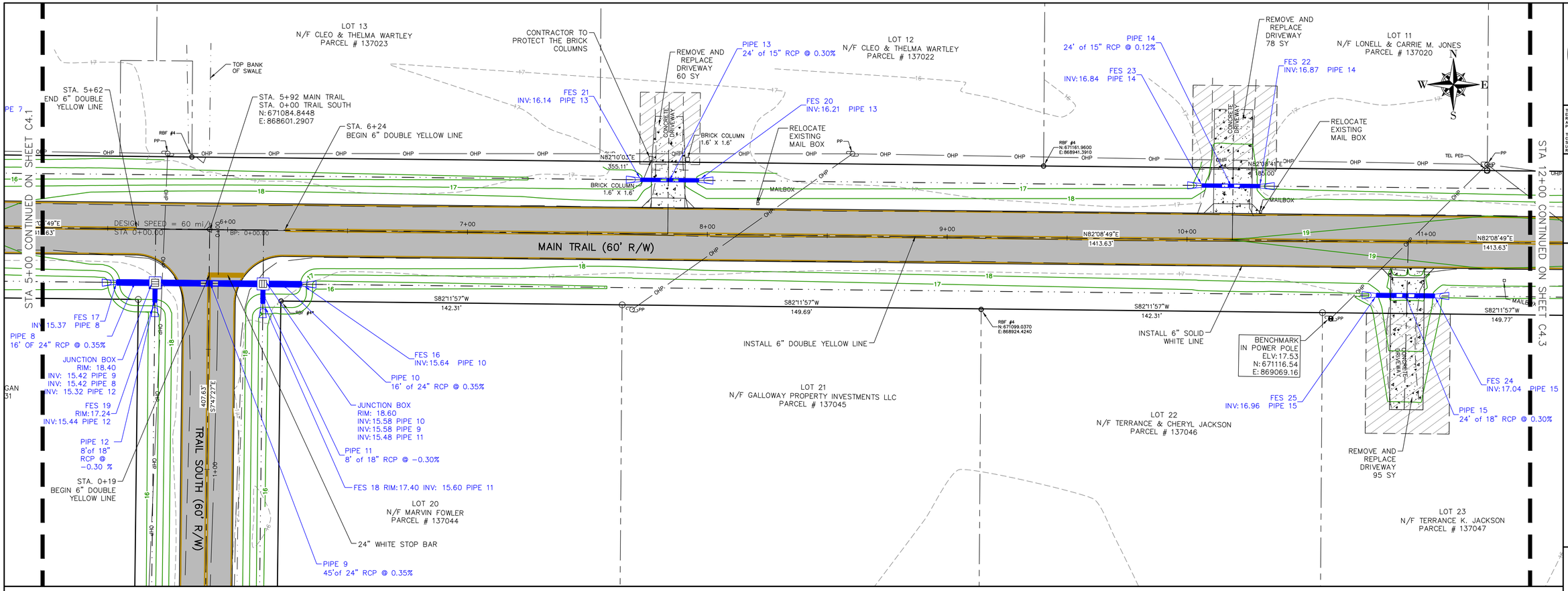
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MAIN TRAIL PLAN & PROFILE

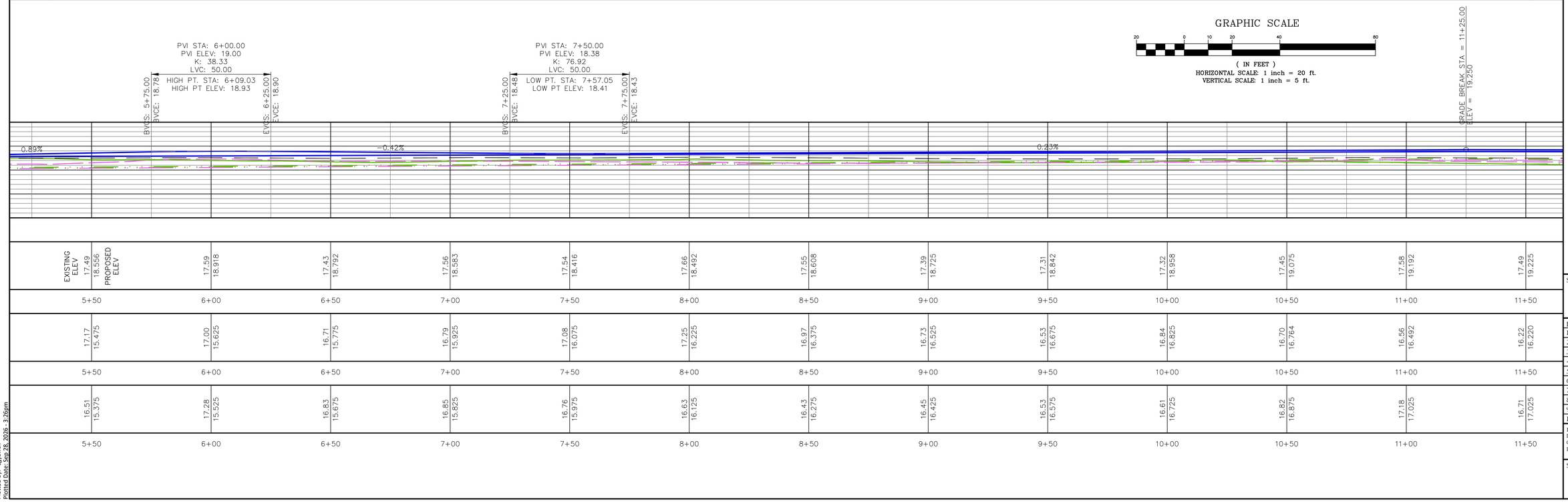
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EXISTING ELEV	17.49	17.59	17.43	17.56	17.54	17.66	17.55	17.39	17.31	17.32	17.45	17.58	17.49
PROPOSED ELEV	18.556	18.918	18.792	18.583	18.416	18.492	18.608	18.725	18.842	18.958	19.075	19.192	19.225
	17.17	17.00	16.71	16.79	17.08	17.25	16.97	16.73	16.53	16.84	16.70	16.56	16.22
	15.475	15.625	15.775	15.925	16.075	16.225	16.375	16.525	16.675	16.825	16.764	16.492	16.220
	16.51	17.28	16.83	16.85	16.76	16.63	16.43	16.45	16.53	16.61	16.82	17.18	16.71
	15.375	15.525	15.675	15.825	15.975	16.125	16.275	16.425	16.575	16.725	16.875	17.025	17.025

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GSWCC# 00000002134

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(912) 368-5664

STATESBORO:
302 S. College Avenue
Statesboro, Georgia 30458
(912) 335-1046

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www.trlongeng.com

MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

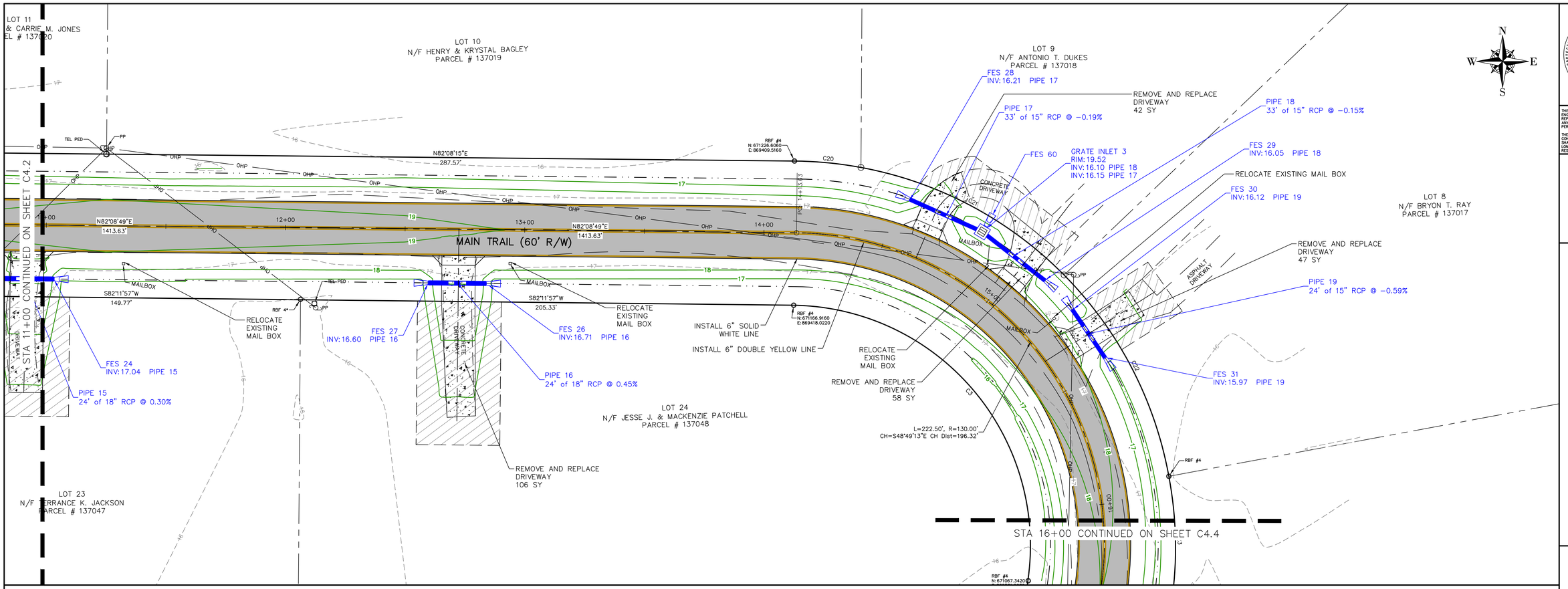
SHEET NAME:
MAIN TRAIL PLAN & PROFILE

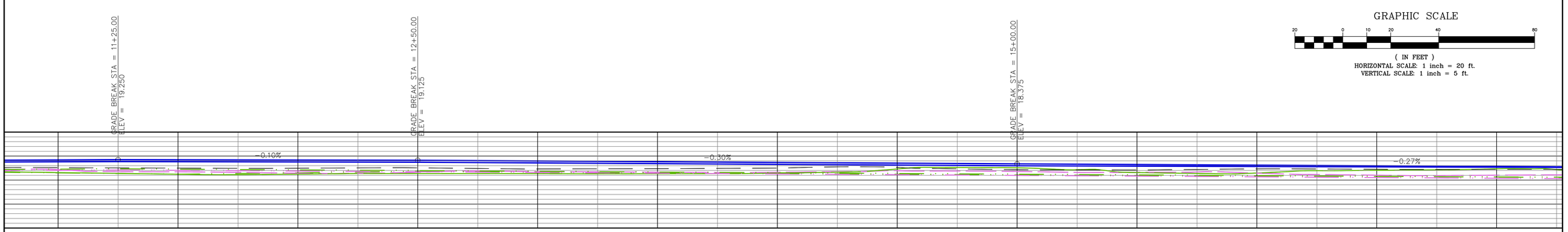
REVISIONS:
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C4.2

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWGS\CONST\2025-231 GRA DRA.dwg
Plotted By: tlong
Plotted Date: Sep 28, 2026 - 3:26pm





GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
HORIZONTAL SCALE: 1 inch = 20 ft.
VERTICAL SCALE: 1 inch = 5 ft.

	11+00	11+50	12+00	12+50	13+00	13+50	14+00	14+50	15+00	15+50	16+00	16+50	17+00
EXISTING ELEV	17.58	17.49	17.46	17.55	17.32	17.37	17.50	17.63	17.17	17.10	17.33	17.26	17.23
PROPOSED ELEV	19.192	19.225	19.175	19.125	18.975	18.825	18.675	18.525	18.375	18.240	18.106	17.971	17.837
	11+00	11+50	12+00	12+50	13+00	13+50	14+00	14+50	15+00	15+50	16+00	16+50	17+00
	16.56	16.22	16.24	16.36	16.34	16.32	16.46	17.32	17.55	16.56	16.46	17.04	17.34
	16.492	16.220	16.522	16.825	16.675	16.525	16.375	16.225	16.075	15.971	15.867	15.763	15.660
	11+00	11+50	12+00	12+50	13+00	13+50	14+00	14+50	15+00	15+50	16+00	16+50	17+00
	17.18	16.71	16.44	16.62	16.75	16.64	16.62	16.96	16.80	16.61	16.45	16.02	16.02
	17.025	17.025	16.875	16.725	16.575	16.425	16.275	16.125	15.975	15.825	15.675	15.525	15.375
	11+00	11+50	12+00	12+50	13+00	13+50	14+00	14+50	15+00	15+50	16+00	16+50	17+00

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

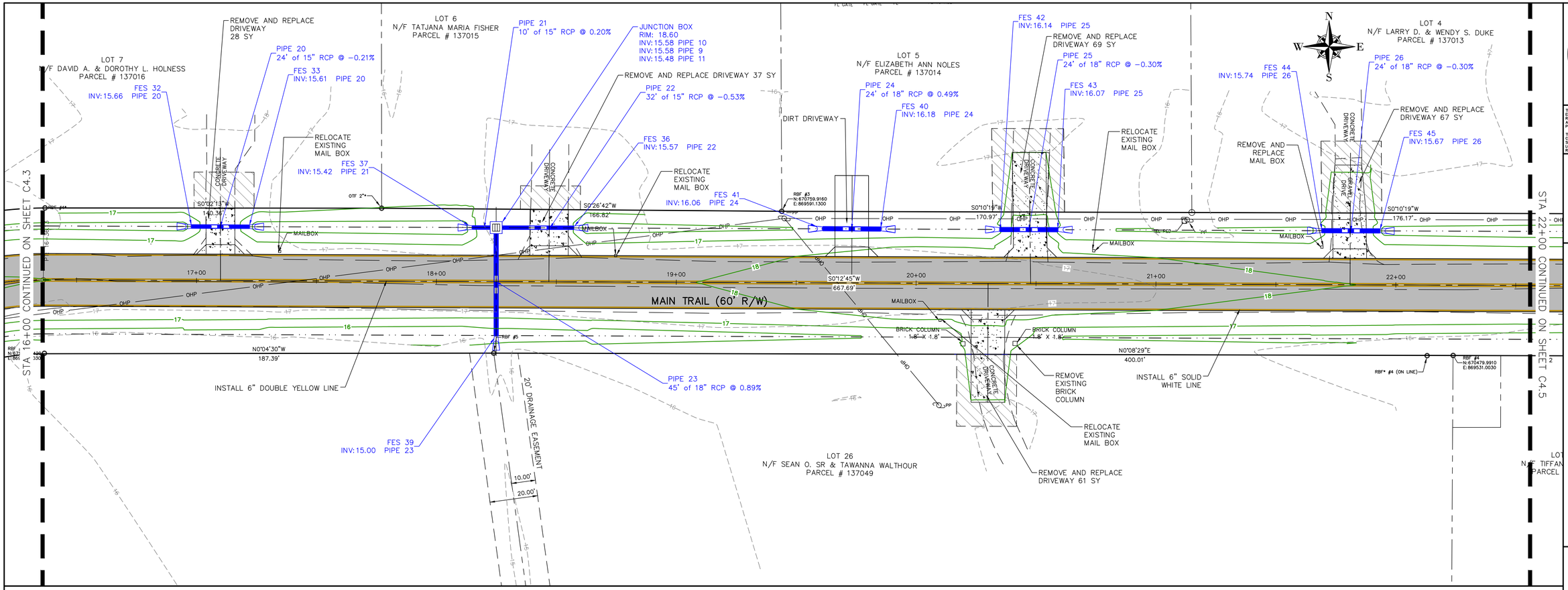
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MAIN TRAIL PLAN & PROFILE

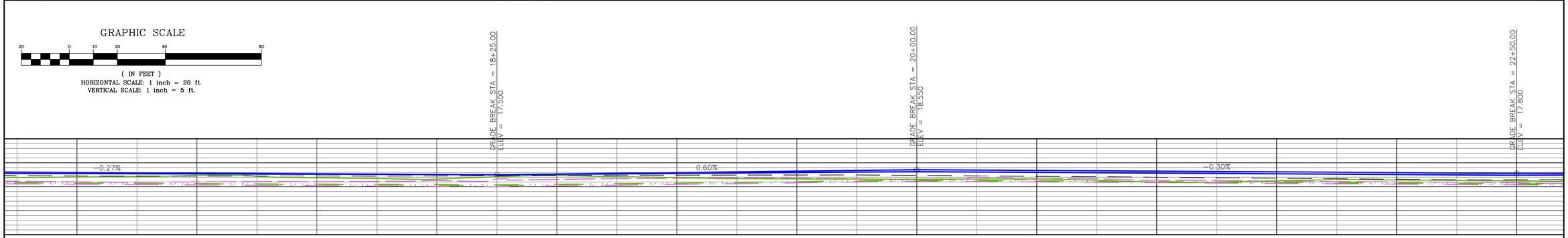
REVISIONS:
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

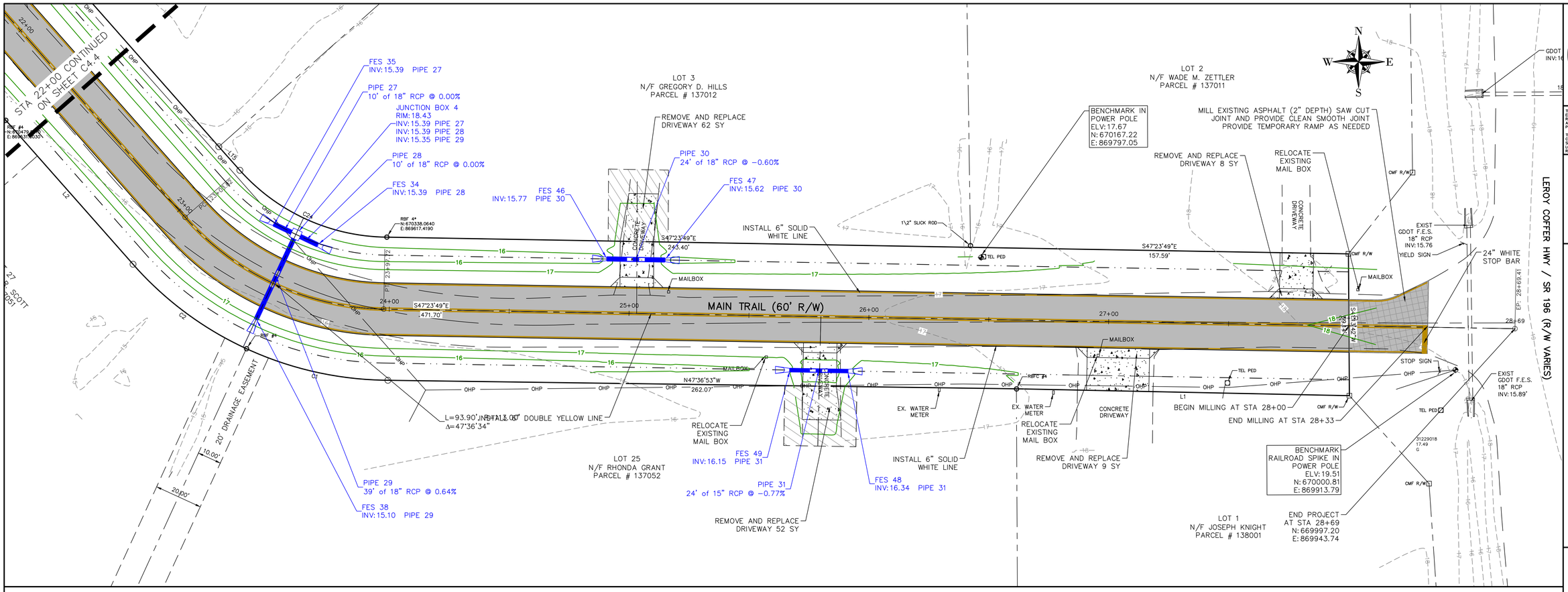
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C4.3

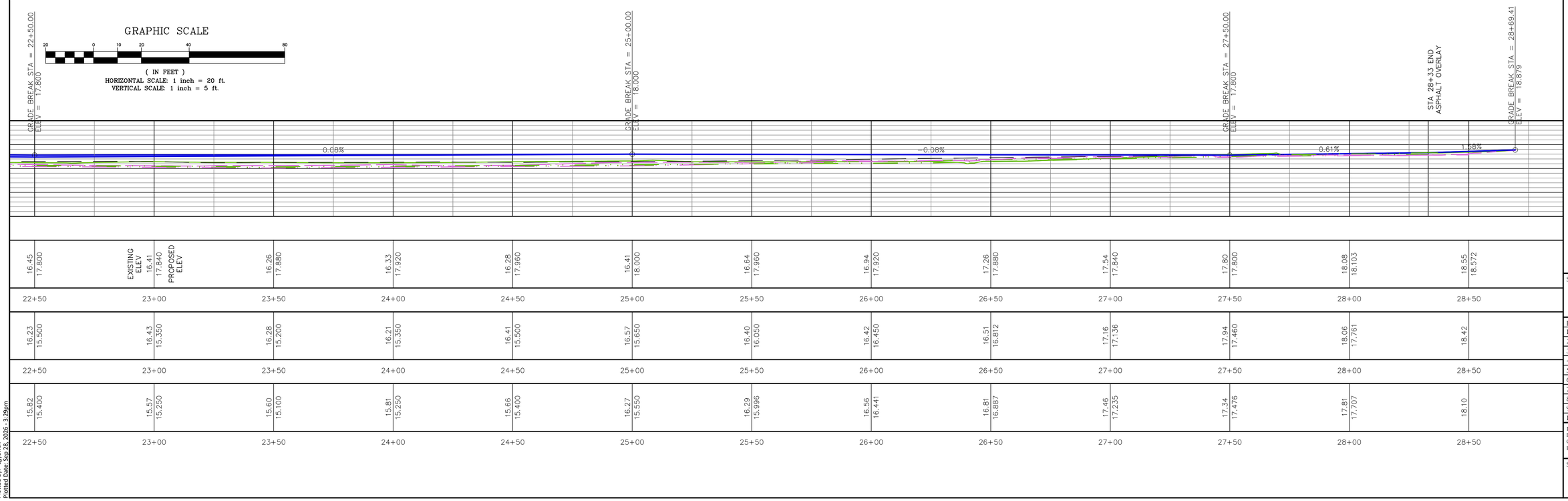
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Plotted By: Tyler Long
Plotted Date: Sep 28, 2026 - 3:28pm


LOT 7
N/F DAVID A. & DOROTHY L. HOLNESS
PARCEL # 137016
LOT 6
N/F TATJANA MARIA FISHER
PARCEL # 137015
LOT 5
N/F ELIZABETH ANN NOLES
PARCEL # 137014
LOT 4
N/F LARRY D. & WENDY S. DUKE
PARCEL # 137013
LOT 26
N/F SEAN O. SR & TAWANNA WALTHOUR
PARCEL # 137049
STA 16+00 CONTINUED ON SHEET C4.3
STA 22+00 CONTINUED ON SHEET C4.5
MAIN TRAIL (60' R/W)
REMOVE AND REPLACE DRIVEWAY 28 SY
PIPE 20
24' of 15" RCP @ -0.21%
FES 33
INV: 15.61 PIPE 20
FES 32
INV: 15.66 PIPE 20
RELOCATE EXISTING MAIL BOX
FES 37
INV: 15.42 PIPE 21
PIPE 21
10' of 15" RCP @ 0.20%
JUNCTION BOX
RIM: 18.60
INV: 15.58 PIPE 10
INV: 15.58 PIPE 9
INV: 15.48 PIPE 11
REMOVE AND REPLACE DRIVEWAY 37 SY
PIPE 22
32' of 15" RCP @ -0.53%
FES 36
INV: 15.57 PIPE 22
RELOCATE EXISTING MAIL BOX
FES 41
INV: 16.06 PIPE 24
PIPE 24
24' of 18" RCP @ 0.49%
FES 40
INV: 16.18 PIPE 24
DIRT DRIVEWAY
FES 42
INV: 16.14 PIPE 25
REMOVE AND REPLACE DRIVEWAY 69 SY
PIPE 25
24' of 18" RCP @ -0.30%
FES 43
INV: 16.07 PIPE 25
RELOCATE EXISTING MAIL BOX
FES 44
INV: 15.74 PIPE 26
PIPE 26
24' of 18" RCP @ -0.30%
REMOVE AND REPLACE DRIVEWAY 67 SY
FES 45
INV: 15.67 PIPE 26
REMOVE AND REPLACE MAIL BOX
PIPE 23
45' of 18" RCP @ 0.89%
FES 39
INV: 15.00 PIPE 23
INSTALL 6" DOUBLE YELLOW LINE
INSTALL 6" SOLID WHITE LINE
REMOVE EXISTING BRICK COLUMN
RELOCATE EXISTING MAIL BOX
REMOVE AND REPLACE DRIVEWAY 61 SY
20' DRAINAGE EASEMENT
10.00'
20.00'
CONCRETE DRIVEWAY
GRAVEL DRIVE
MAILBOX
BRICK COLUMN 1.8' X 1.8'
RBF #3 N:670759.9160 E:869591.1300
RBF #4 N:670479.9910 E:869531.0030
RBF #5
RBF #22 N:671 E:869
RBF* #4 (ON LINE)
S0°02'13"W 140.34'
S0°26'42"W 166.82'
S0°12'45"W 667.69'
S0°10'19"W 170.97'
S0°10'19"W 176.17'
N0°04'30"W 187.39'
N0°08'29"E 400.01'
OHP
OTF
17+00
18+00
19+00
20+00
21+00
22+00


GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
HORIZONTAL SCALE: 1 inch = 20 ft.
VERTICAL SCALE: 1 inch = 5 ft.
GRADE BREAK STA = 18+25.00
ELEV = 17.500
GRADE BREAK STA = 20+00.00
ELEV = 18.550
GRADE BREAK STA = 22+50.00
ELEV = 17.800
-0.27%
0.60%
-0.30%

| | | |





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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

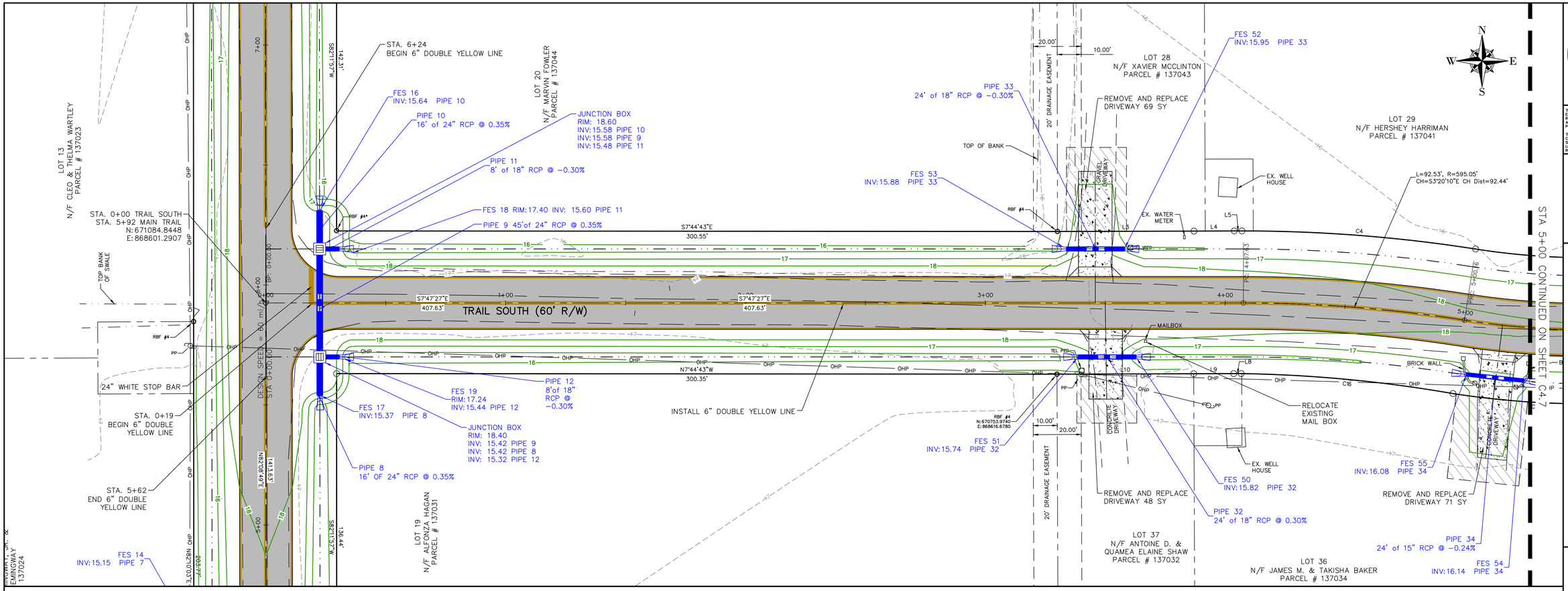
SHEET NAME:
MAIN TRAIL PLAN & PROFILE

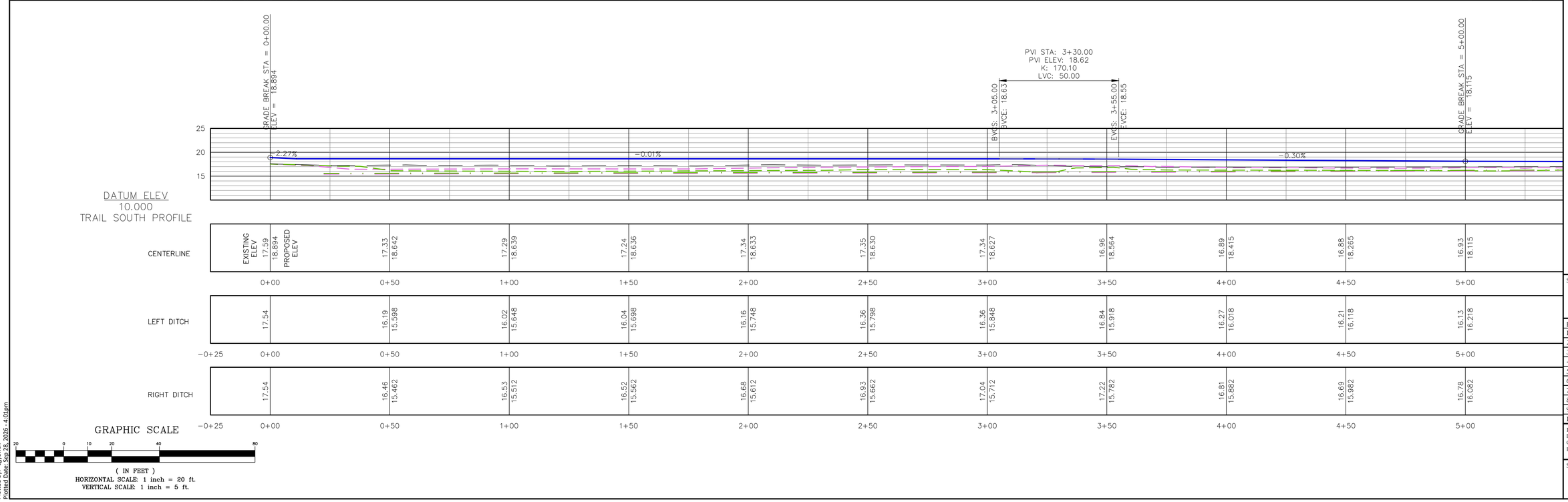
REVISIONS:
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C4.5

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\000-DRAWINGS\DWG\CONST\2025-231 GRA DRA1.dwg
Printed By: rgoodall
Plotted Date: Sep 28, 2026 - 3:29pm





GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

HORIZONTAL SCALE: 1 inch = 20 ft.

VERTICAL SCALE: 1 inch = 5 ft.

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

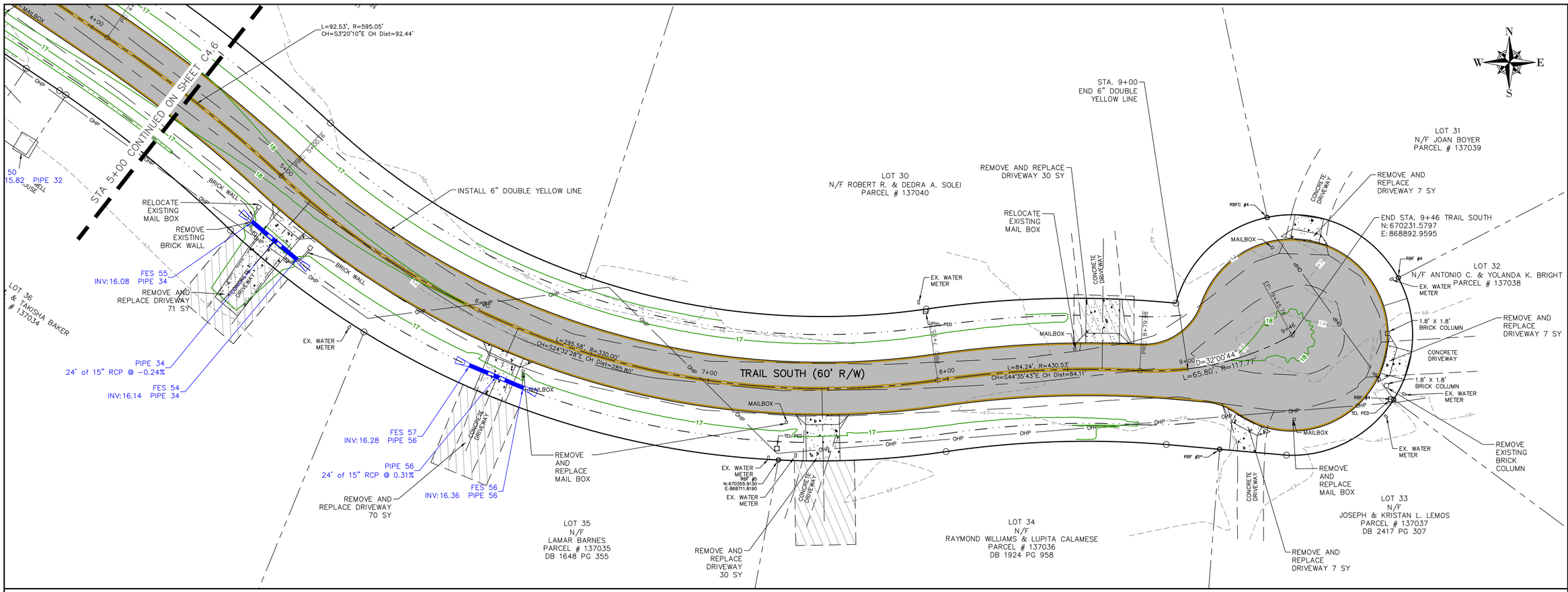
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TRAIL SOUTH PLAN & PROFILE

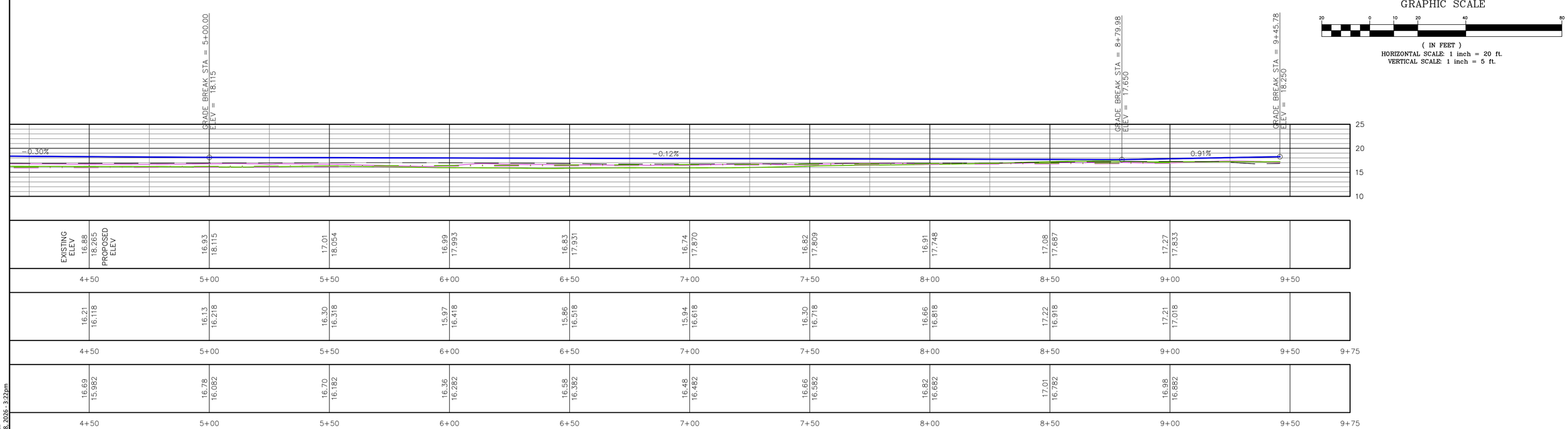
REVISIONS:
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C4.6

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\CONST\2025-231 GRA DRA.dwg
Plotted By: tlong
Plotted Date: Sep 28, 2026 - 4:01pm





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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

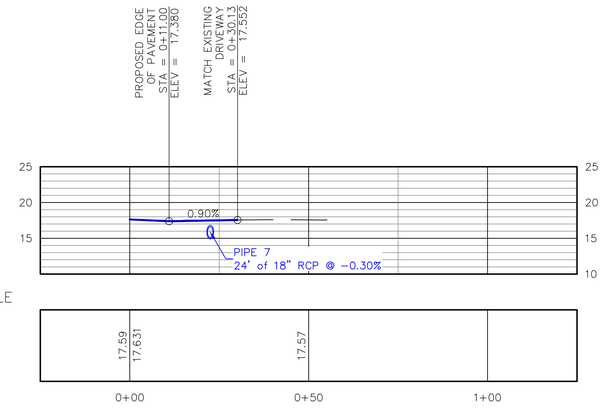
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TRAIL SOUTH PLAN & PROFILE

REVISIONS:
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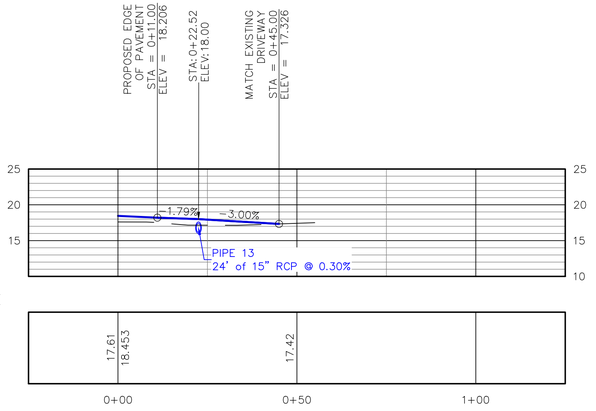
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DRAWN BY: TRL
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PROJECT #: 2025-231

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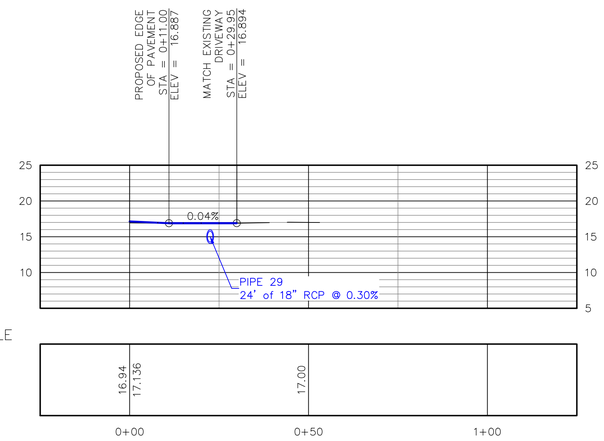
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Plotted By: Tyler Long
Plotted Date: Sep 28, 2026 - 3:22pm



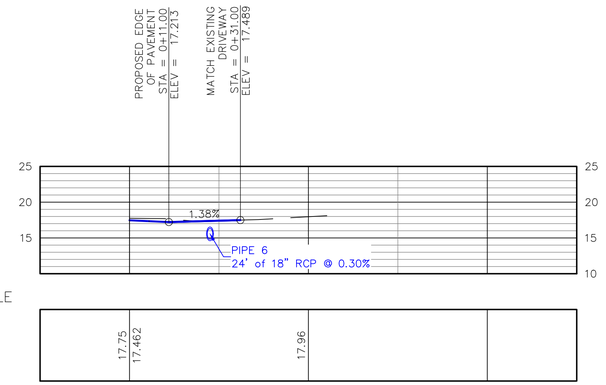
DATUM ELEV
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DRIVEWAY STA 4+28 (1) PROFILE
MAIN TRAIL



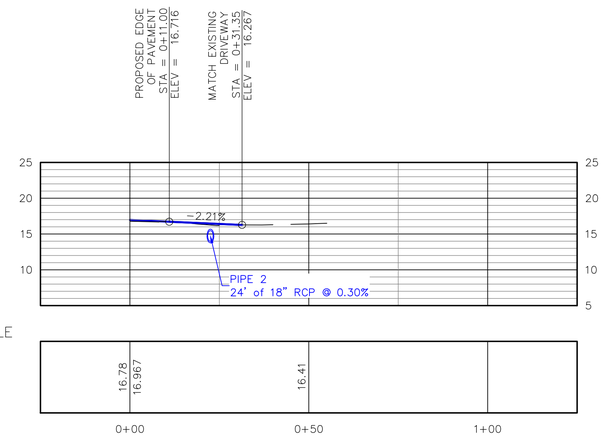
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DRIVEWAY STA 7+83.87 (1) PROFILE
MAIN TRAIL



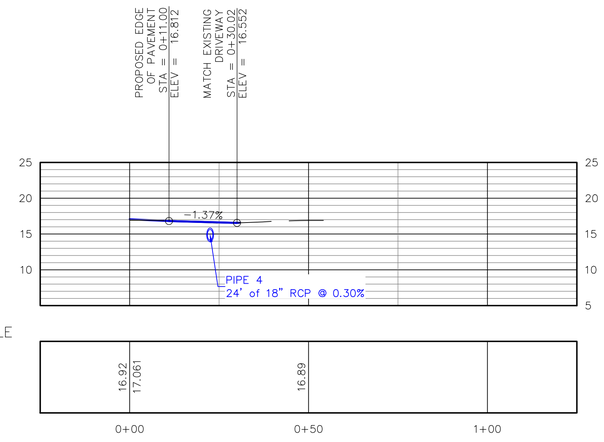
DATUM ELEV
5.000
DRIVEWAY STA 1+46 PROFILE
MAIN TRAIL



DATUM ELEV
10.000
DRIVEWAY STA 3+32 (1) PROFILE
MAIN TRAIL



DATUM ELEV
5.000
DRIVEWAY STA 0+49 PROFILE
MAIN TRAIL



DATUM ELEV
5.000
DRIVEWAY STA 1+03 PROFILE
MAIN TRAIL

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
HORIZONTAL SCALE: 1 inch = 20 ft.
VERTICAL SCALE: 1 inch = 5 ft.

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

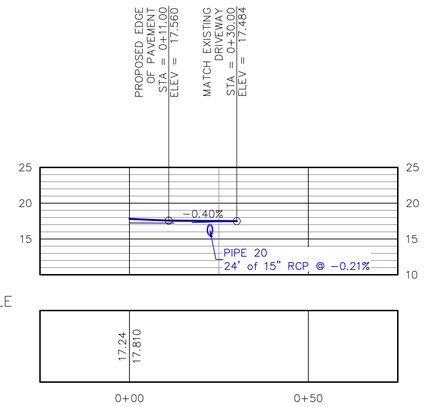
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DRIVEWAY PROFILES

REVISIONS:
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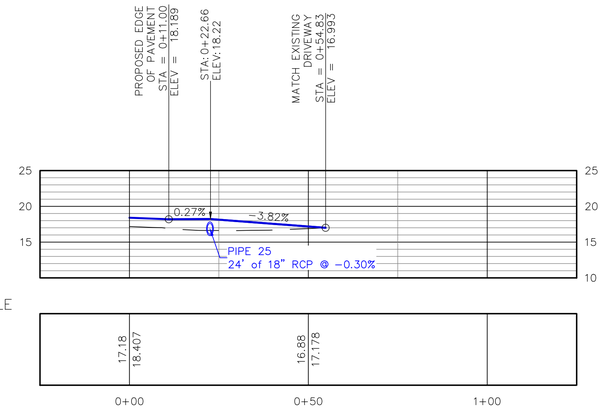
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DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C4.8

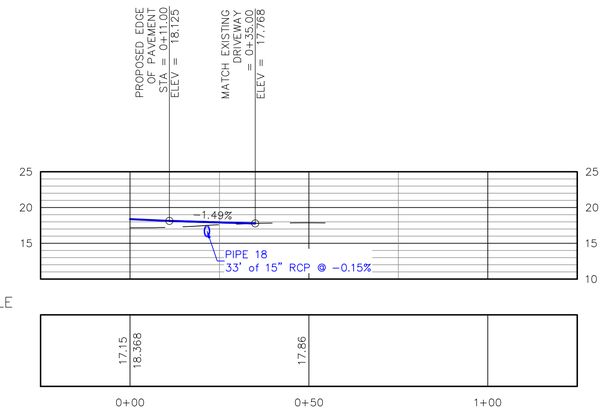
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Prepared By: tmoore
Plotted Date: Sep 28, 2026 - 3:15pm



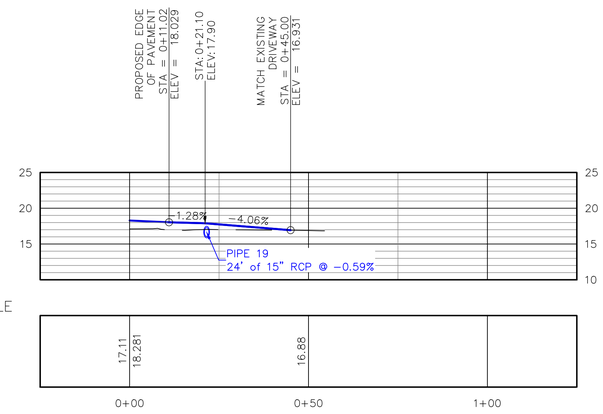
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DRIVEWAY STA 17+10 PROFILE
MAIN TRAIL



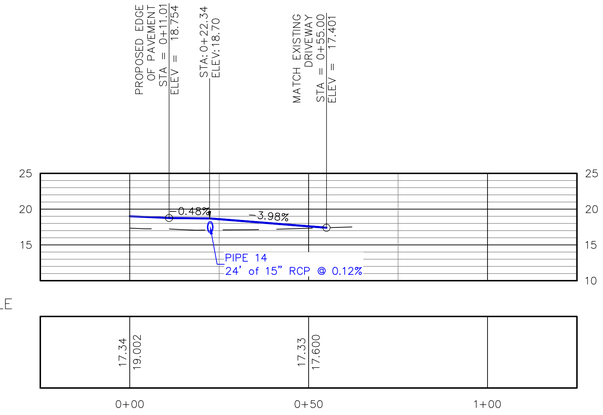
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DRIVEWAY STA 20+46.43 PROFILE
MAIN TRAIL



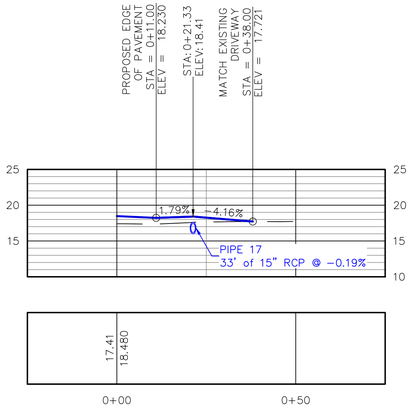
DATUM ELEV
10.000
DRIVEWAY STA 15+01 (1) PROFILE
MAIN TRAIL



DATUM ELEV
10.000
DRIVEWAY STA 15+35 PROFILE
MAIN TRAIL



DATUM ELEV
10.000
DRIVEWAY STA 10+17 (2) PROFILE
MAIN TRAIL



DATUM ELEV
10.000
DRIVEWAY STA. 14+65 PROFILE
MAIN TRAIL

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
HORIZONTAL SCALE: 1 inch = 20 ft.
VERTICAL SCALE: 1 inch = 5 ft.

HINESVILLE:
114 North Commerce Street
Hinesville, Georgia 31313
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GSWCC# 0000002134

MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

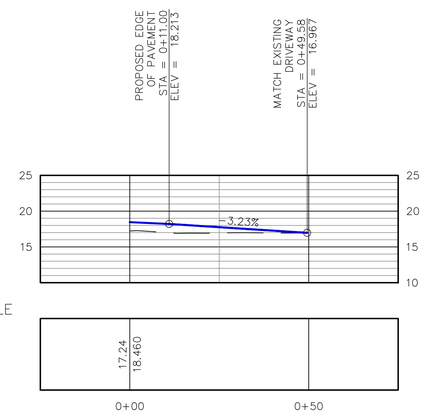
SHEET NAME:
DRIVEWAY PROFILES

REVISIONS:
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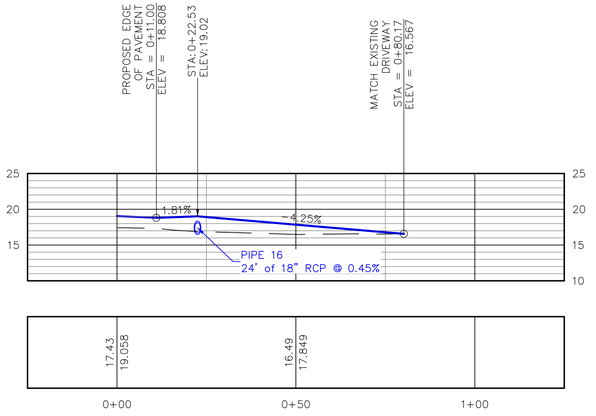
INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
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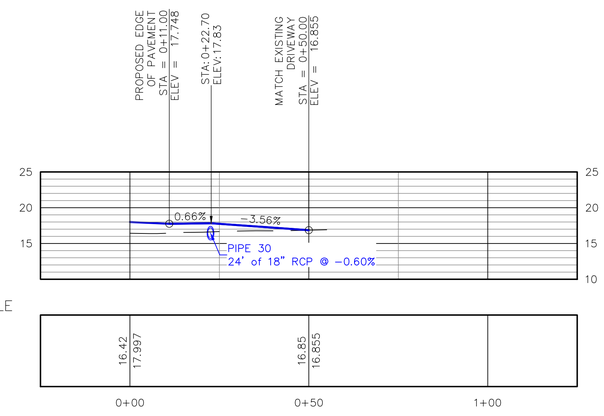
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Plotted By: Tyler Long
Plotted Date: Sep 28, 2026 - 3:25pm



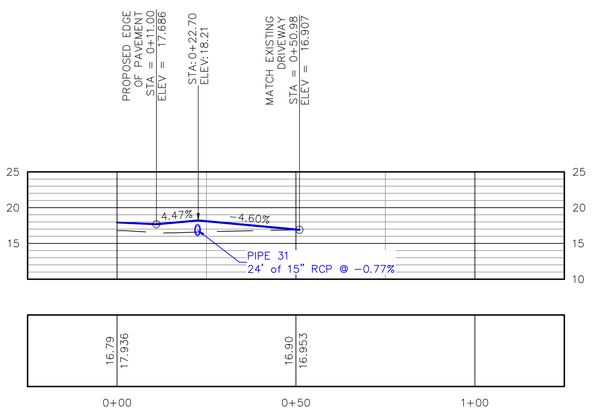
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DRIVEWAY STA 20+30 RT PROFILE
MAIN TRAIL



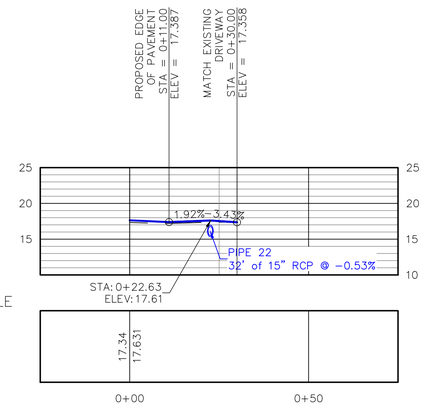
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DRIVEWAY STA 12+72 RT PROFILE
MAIN TRAIL



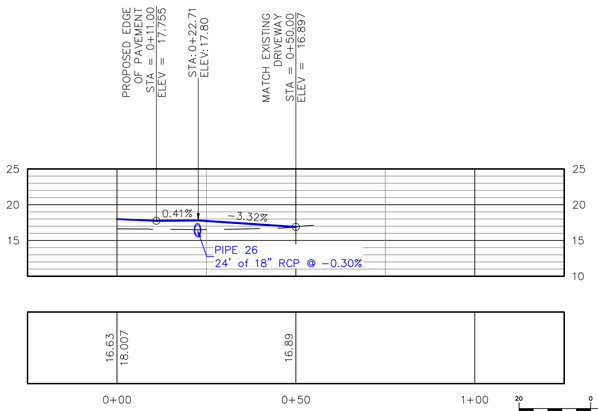
DATUM ELEV
10.000
DRIVEWAY STA 25+03 PROFILE
MAIN TRAIL



DATUM ELEV
10.000
DRIVEWAY STA 25+80 RT PROFILE
MAIN TRAIL



DATUM ELEV
10.000
DRIVEWAY STA 18+46 PROFILE
MAIN TRAIL



DATUM ELEV
10.000
DRIVEWAY STA 21+81 PROFILE
MAIN TRAIL

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

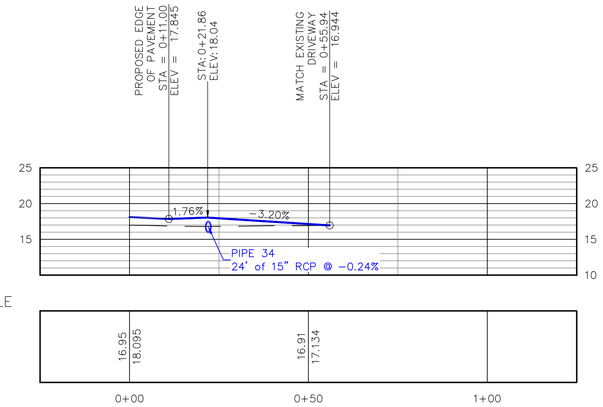
SHEET NAME:
DRIVEWAY PROFILES

REVISIONS:
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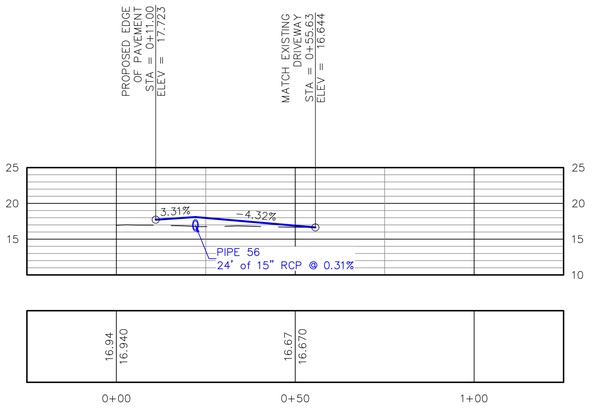
INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
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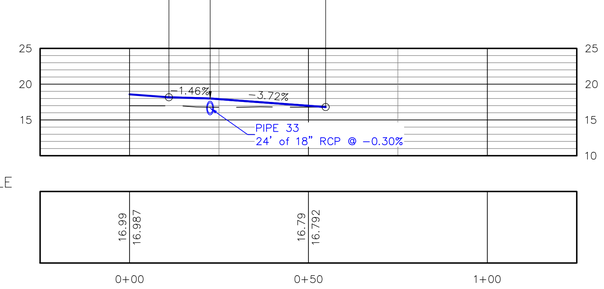
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Plotted By: rtrowell
Plotted Date: Sep 28, 2026 - 3:22pm



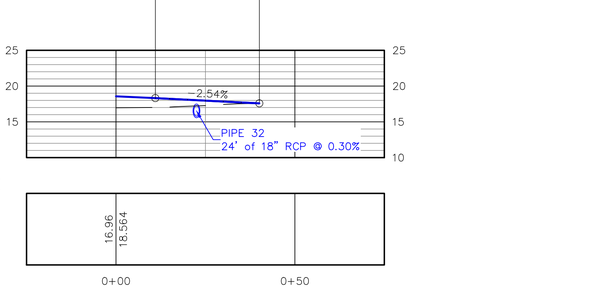
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TRAIL SOUTH



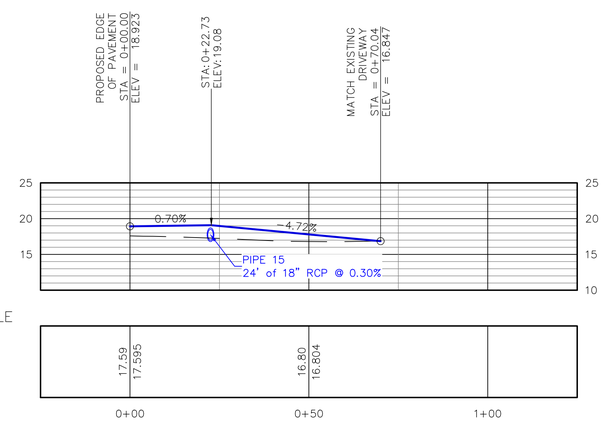
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DRIVEWAY STA 6+17 RT PROFILE



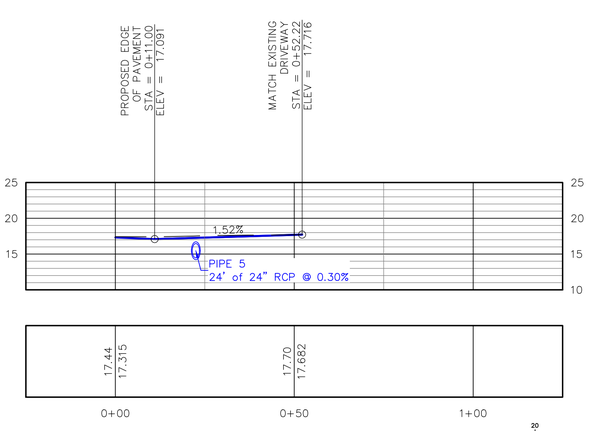
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DRIVEWAY STA 3+45 LT PROFILE
TRAIL SOUTH



DATUM ELEV
10.000
DRIVEWAY STA 3+50 RT PROFILE
TRAIL SOUTH



DATUM ELEV
10.000
DRIVEWAY STA 10+92 RT PROFILE
MAIN TRAIL



DATUM ELEV
10.000
DRIVEWAY STA 2+50 RIGHT PROFILE
MAIN TRAIL

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

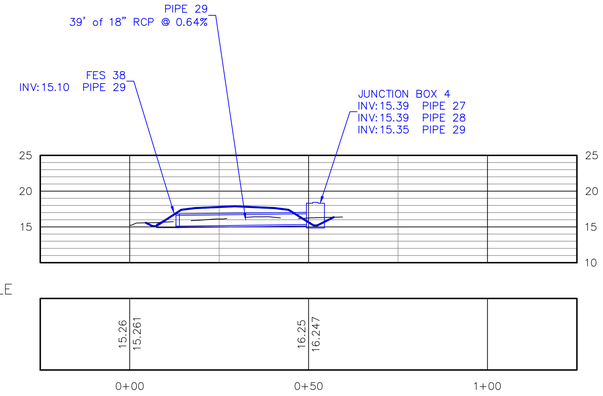
SHEET NAME:
DRIVEWAY PROFILES

REVISIONS:
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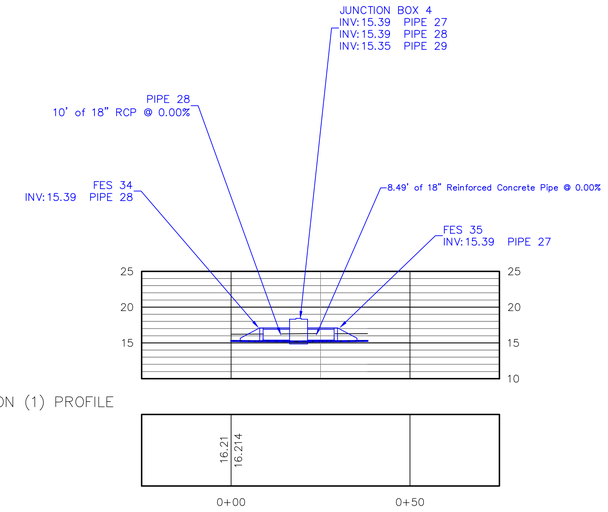
INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C4.11

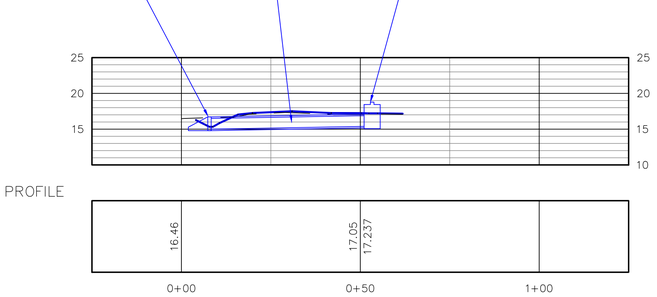
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Project Manager: Will Hall
Plotted Date: Sep 28, 2026 - 3:13pm



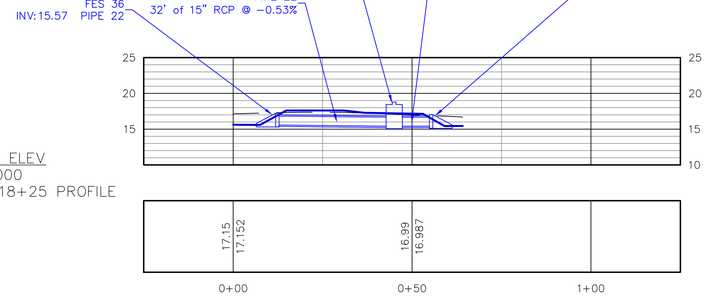
DATUM ELEV
10.000
DRIVEWAY STA 23+50 JUNCTION PROFILE



DATUM ELEV
10.000
DRIVEWAY STA 23+50 JUNCTION (1) PROFILE



DATUM ELEV
10.000
DRIVEWAY STA 18+25 JUNCTION PROFILE

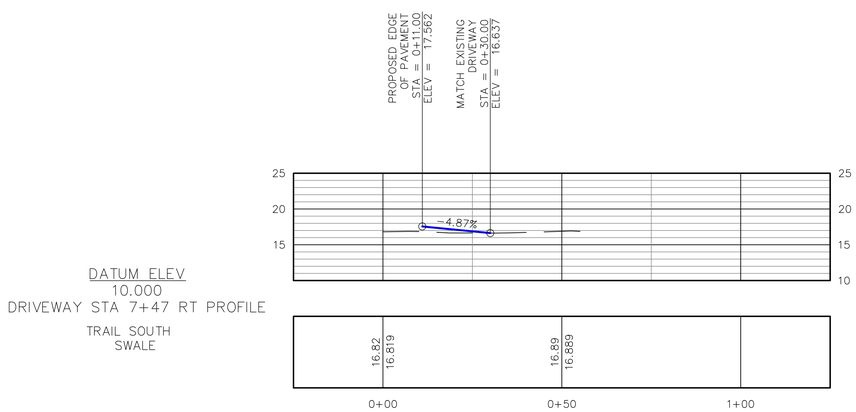


DATUM ELEV
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DRIVEWAY STA 18+25 PROFILE

GRAPHIC SCALE

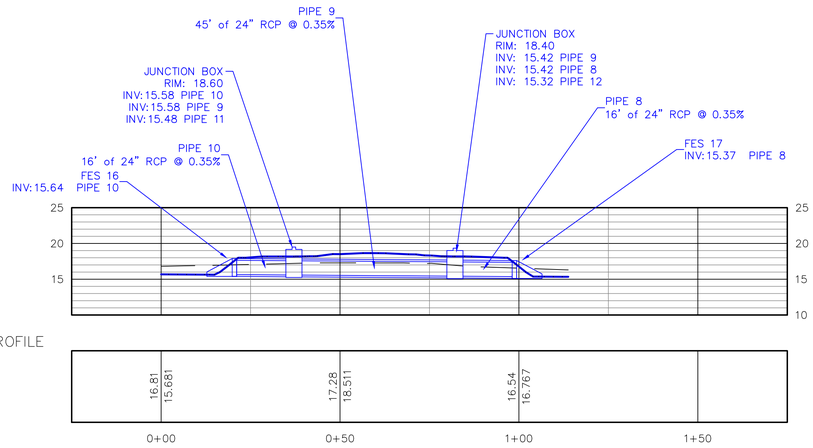
20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.



DATUM ELEV
10.000
DRIVEWAY STA 7+47 RT PROFILE

TRAIL SOUTH
SWALE



DATUM ELEV
10.000
STA 6+00 MAIN JUNCTION PROFILE

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

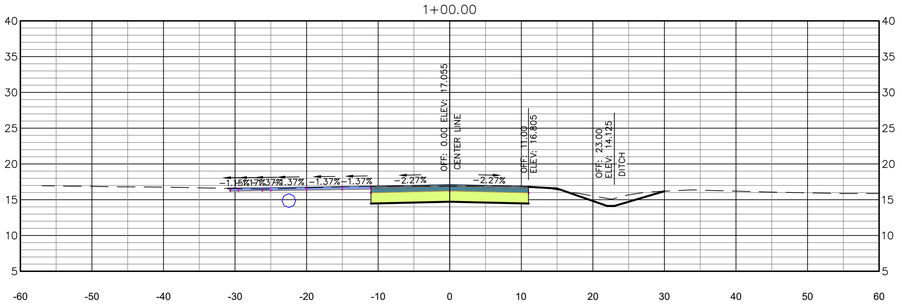
SHEET NAME:
DRAINAGE PROFILES

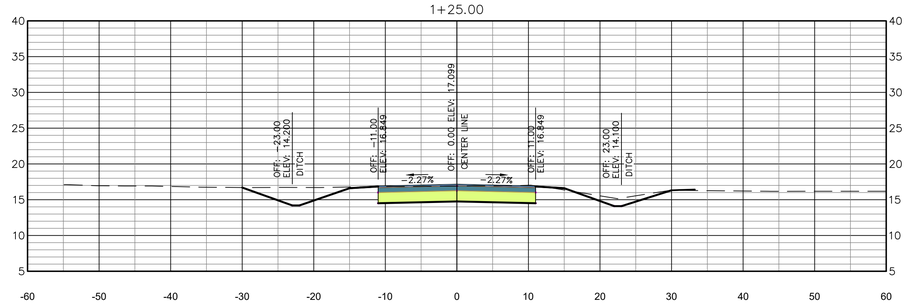
REVISIONS:
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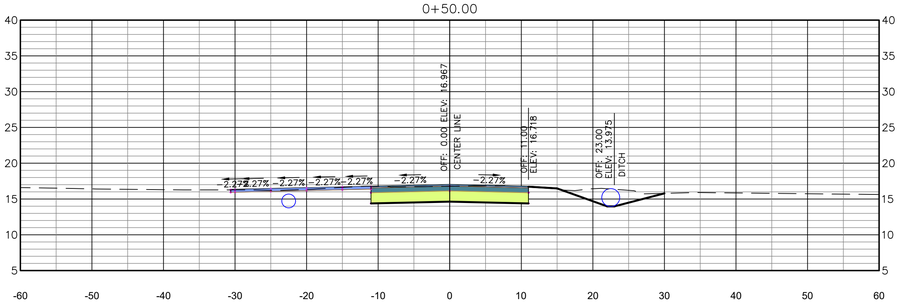
INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

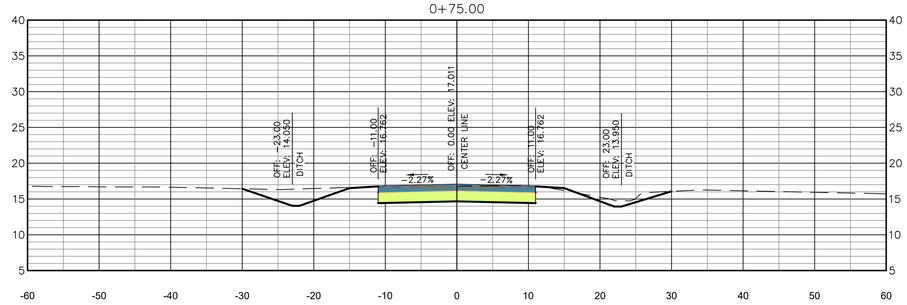
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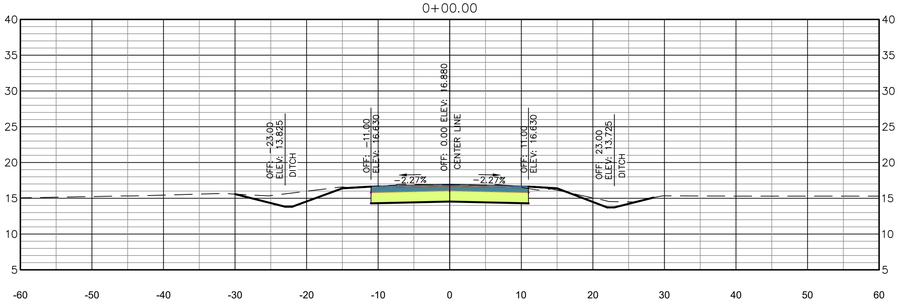
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Plotted Date: Sep 26, 2026 - 3:08pm

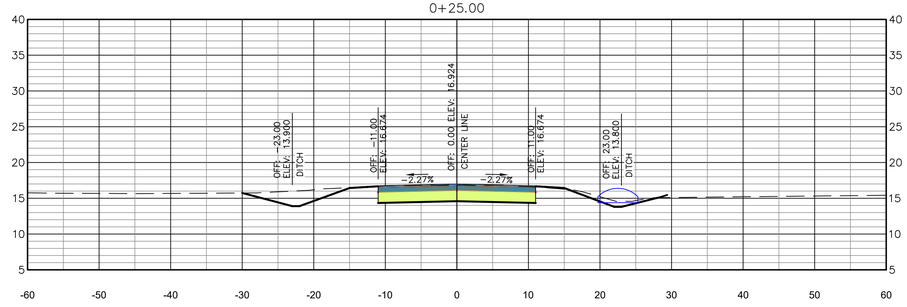












GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

TAX PARCEL NUMBER: CITY, COUNTY, STATE

SHEET NAME:
MAIN TRAIL CROSS SECTIONS

REVISIONS:
1.
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C4.13

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\9000-DRAWINGS\DWG\BASE\2025-231 XSCTN.dwg
Plotted By: Wyatt Hall
Plotted Date: Sep 28, 2026 - 3:13pm

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

TAX PARCEL NUMBER: CITY, COUNTY, STATE

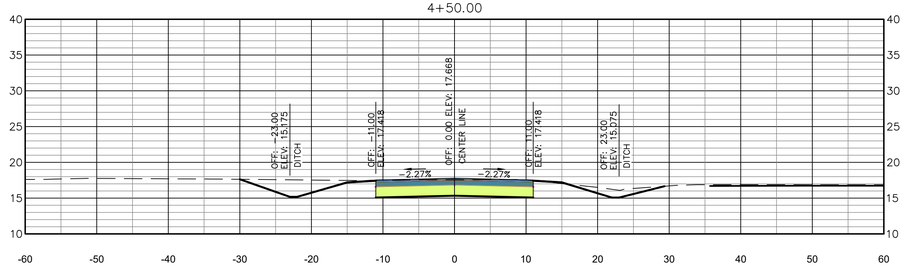
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MAIN TRAIL CROSS SECTIONS

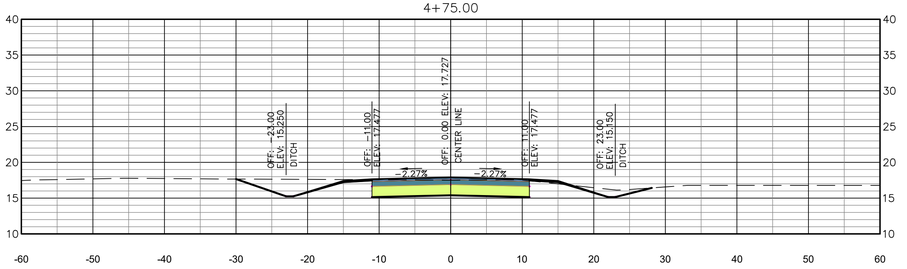
REVISIONS:
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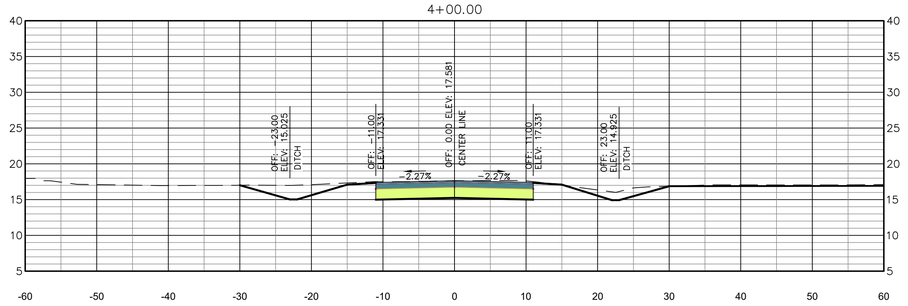
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DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

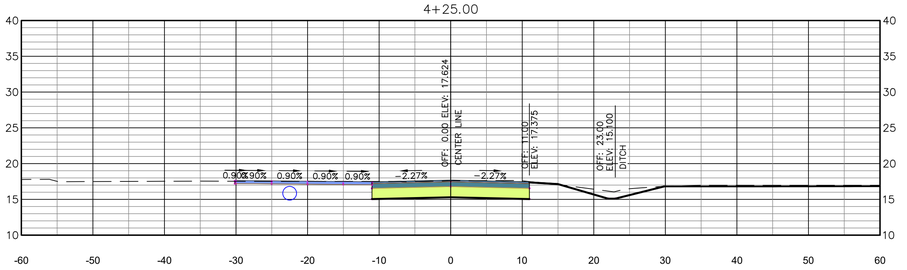
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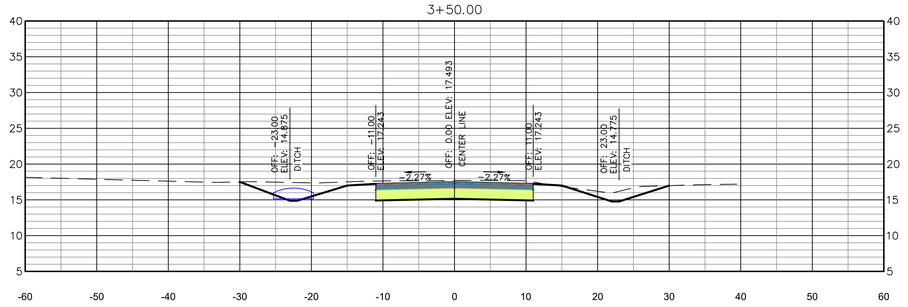
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Plotted By: Tyler Long
Plotted Date: Sep 28, 2026 - 3:14pm

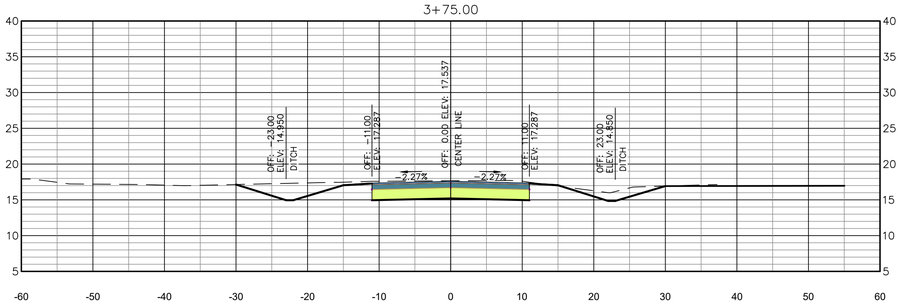


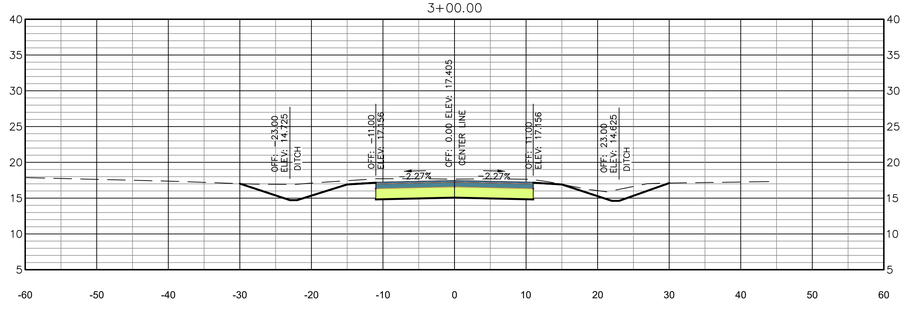


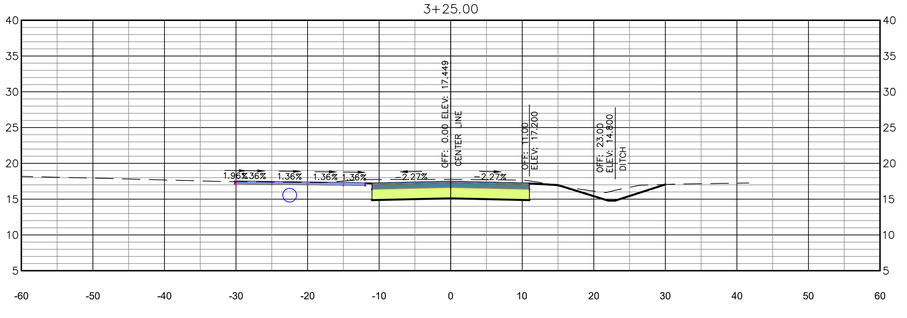












GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

TAX PARCEL NUMBER: CITY, COUNTY, STATE

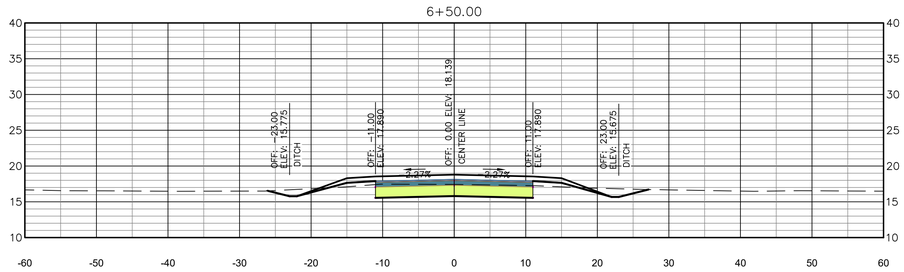
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MAIN TRAIL CROSS SECTIONS

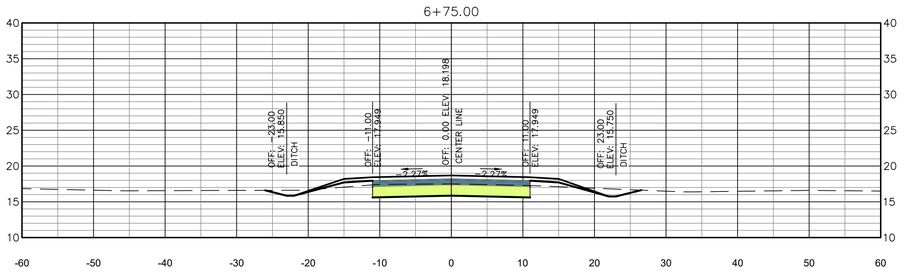
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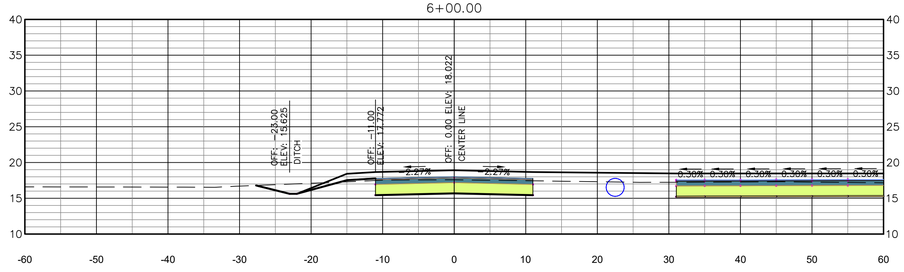
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DRAWN BY: TRL
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PROJECT #: 2025-231

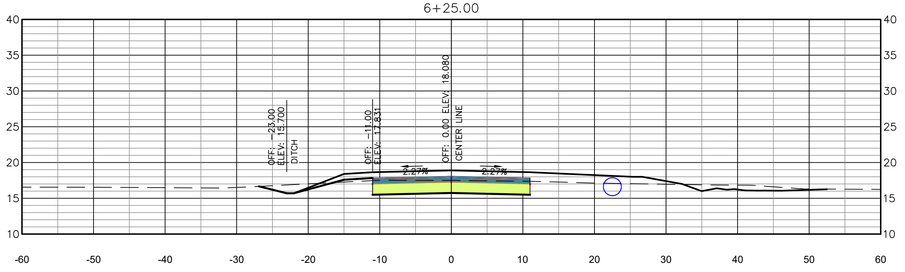
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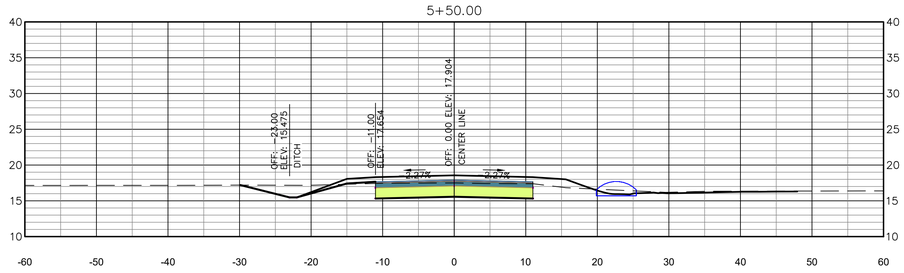
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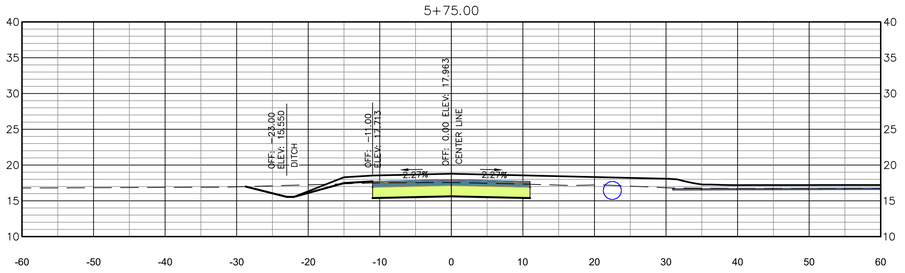


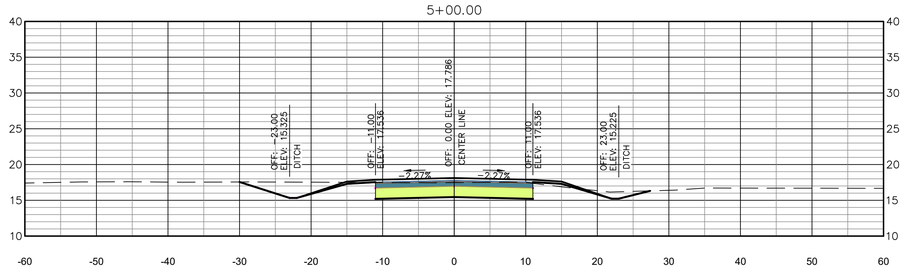


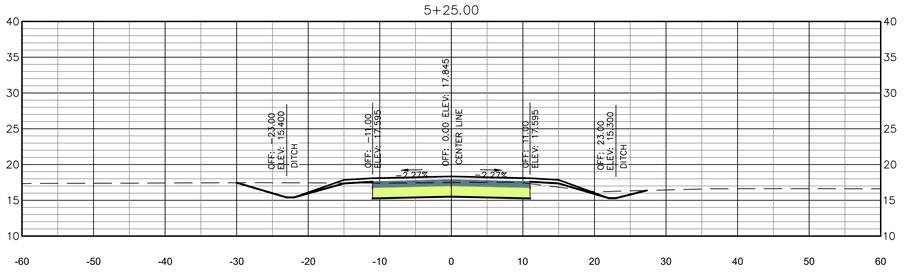












GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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Plotted By: Spowell
Plotted Date: Sep 28, 2026 - 3:19pm

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

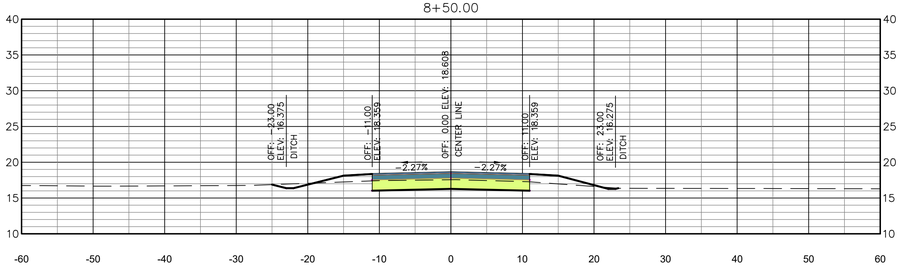
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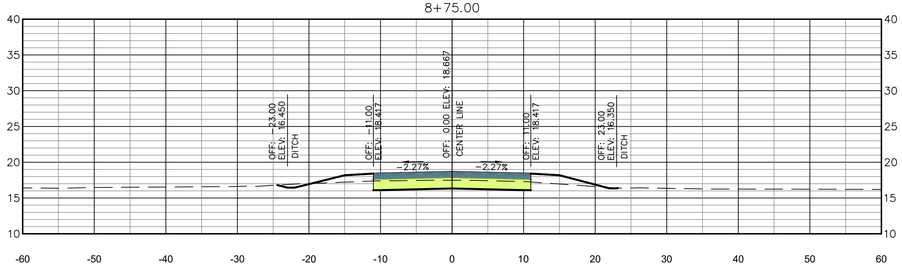
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MAIN TRAIL CROSS SECTIONS

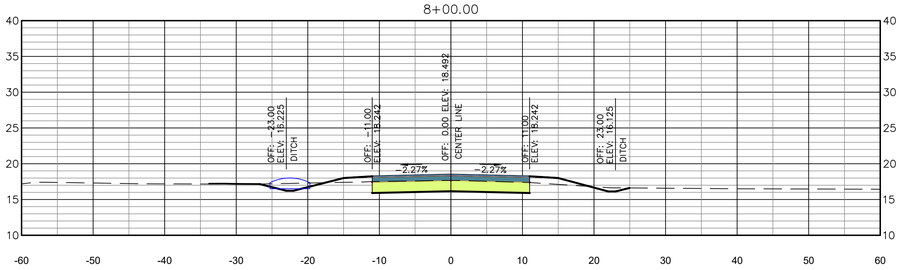
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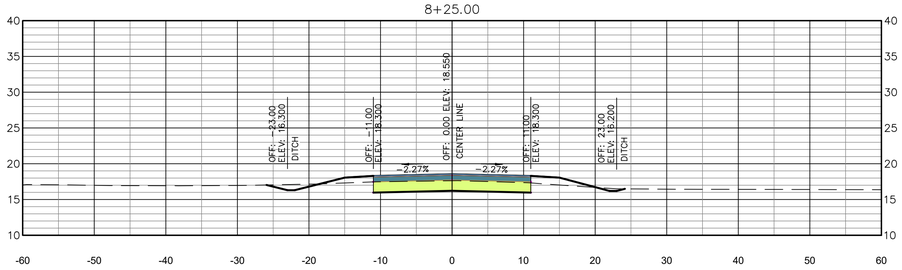
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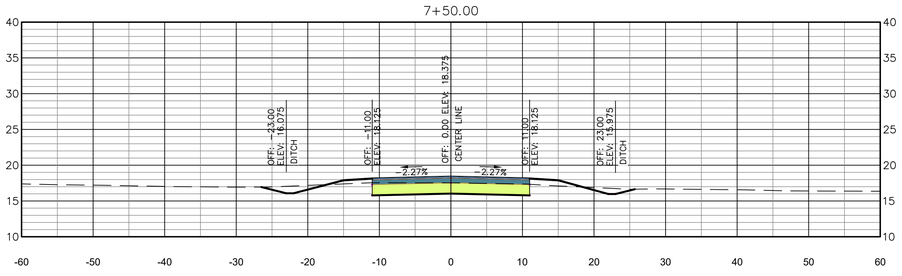
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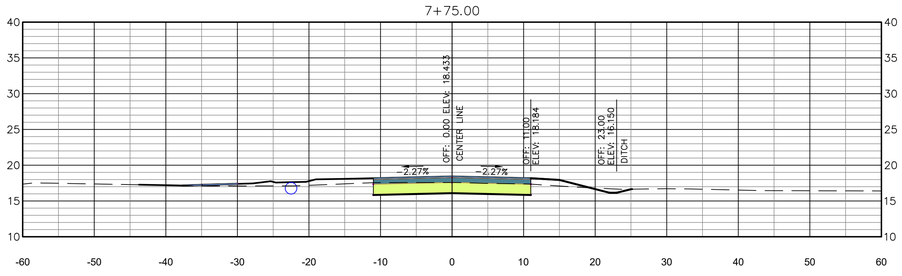








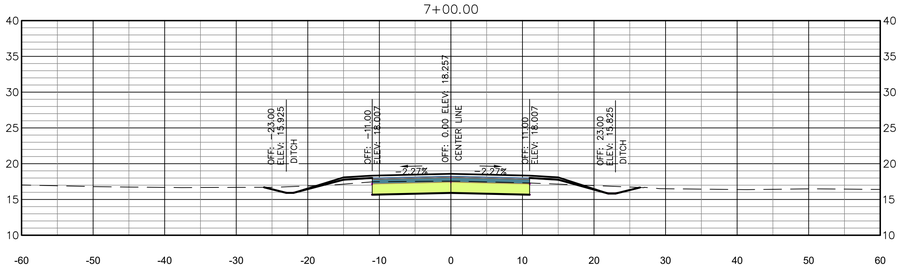


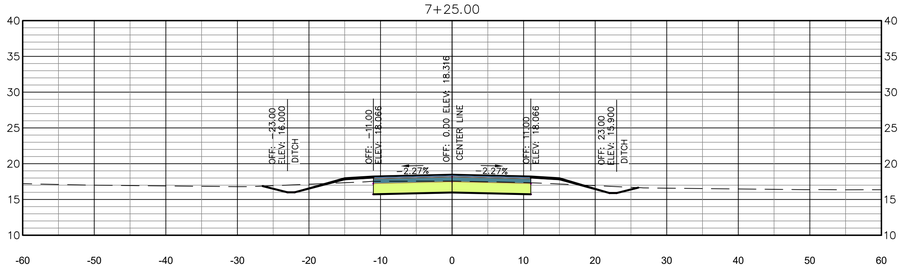


GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.





Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\BASE\2025-231 XSCTN.dwg
Plotted By: Jonathan Powell
Plotted Date: Sep 28, 2026 - 3:15pm

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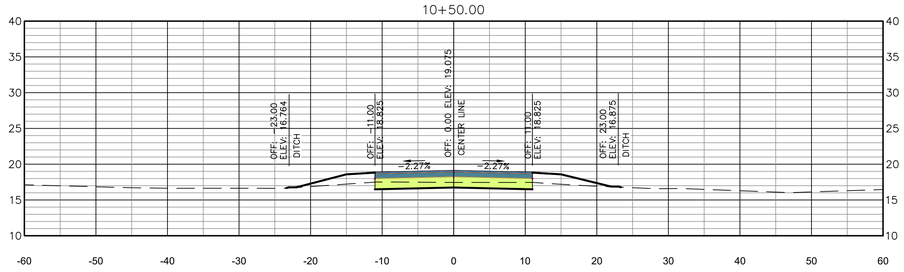
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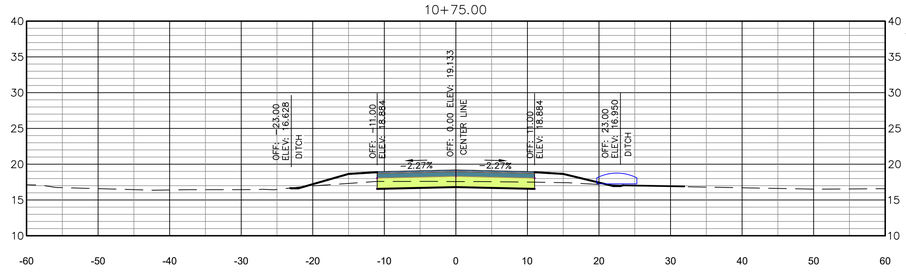
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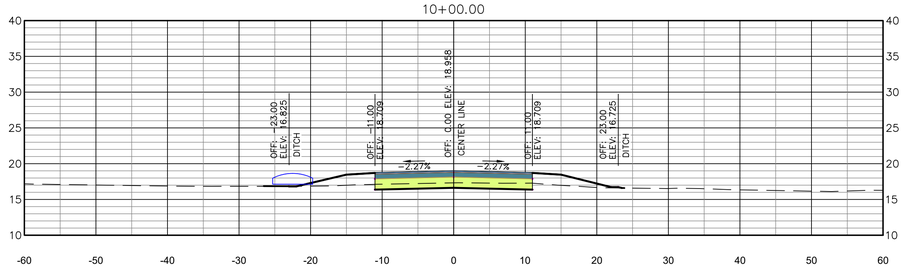
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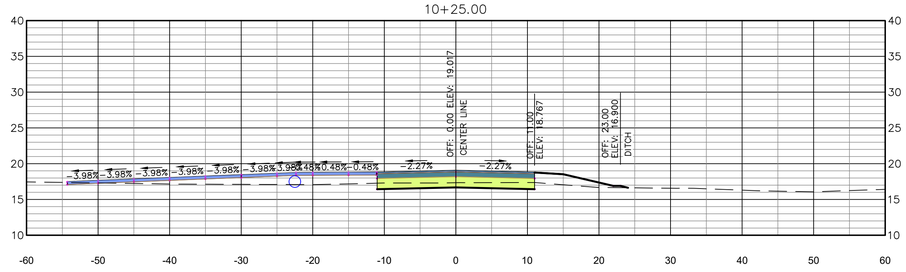
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PROJECT #: 2025-231

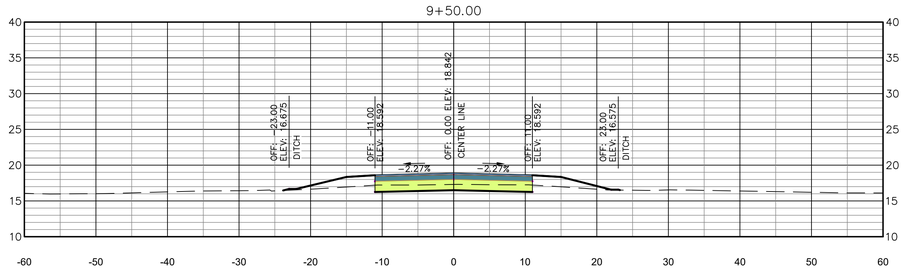
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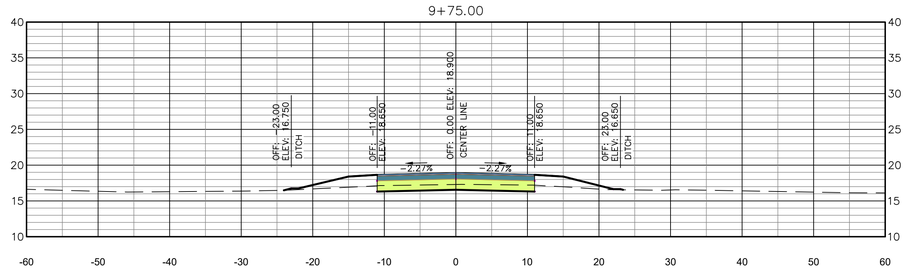


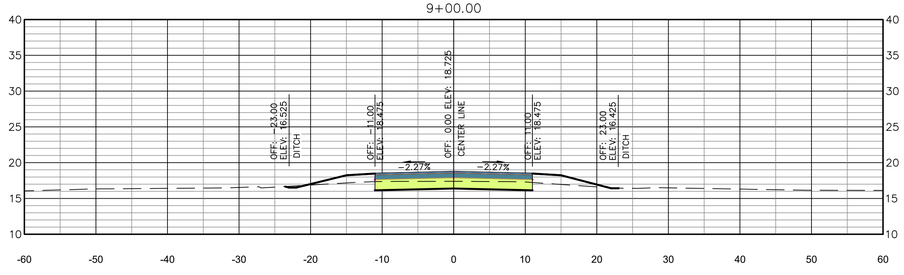


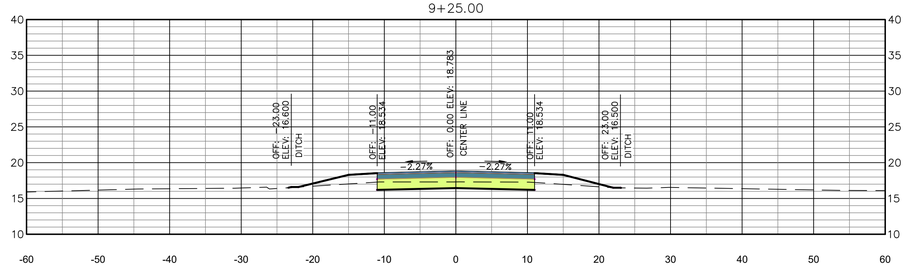














GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

TAX PARCEL NUMBER: CITY, COUNTY, STATE

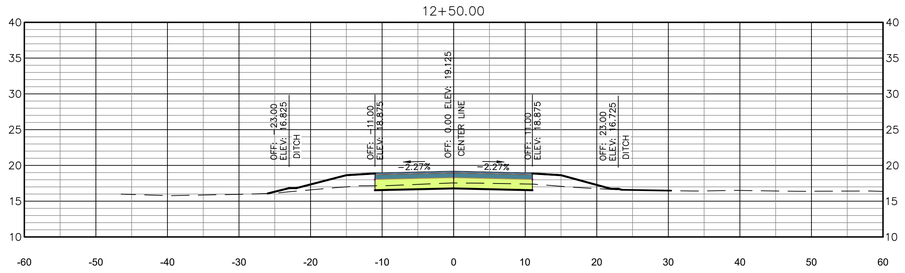
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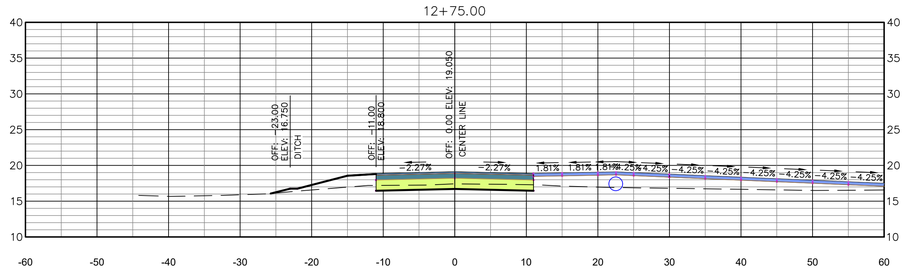
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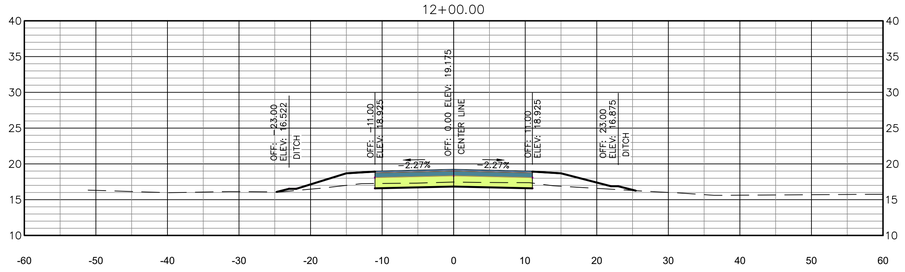
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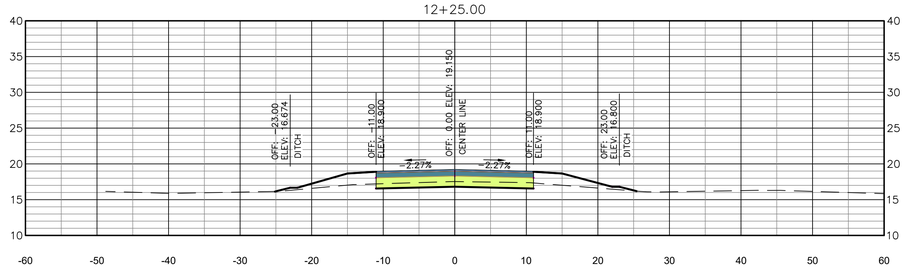
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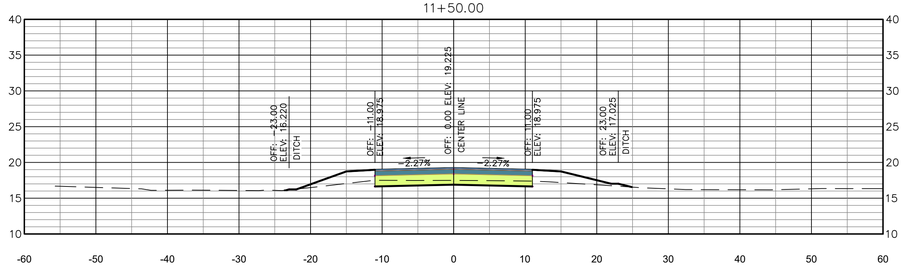
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Plotted Date: Sep 28, 2026 - 3:29pm

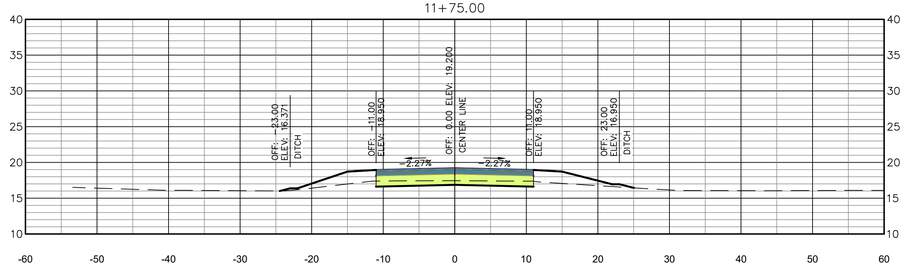


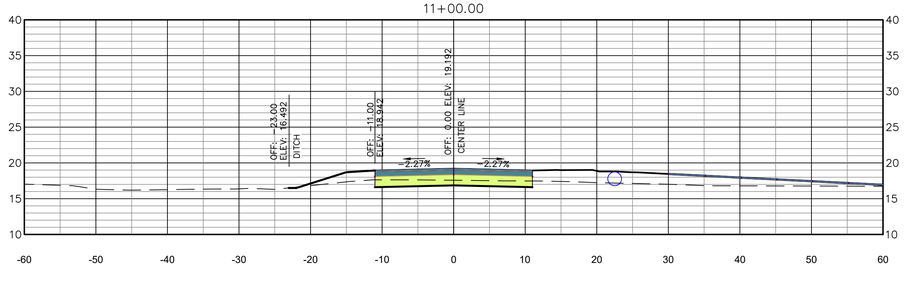


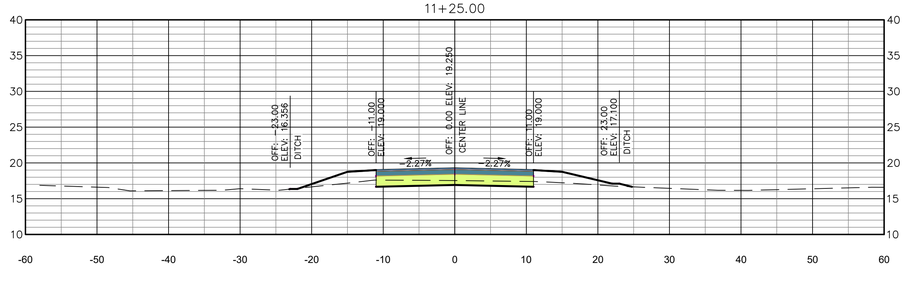












GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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TAX PARCEL NUMBER: CITY, COUNTY, STATE

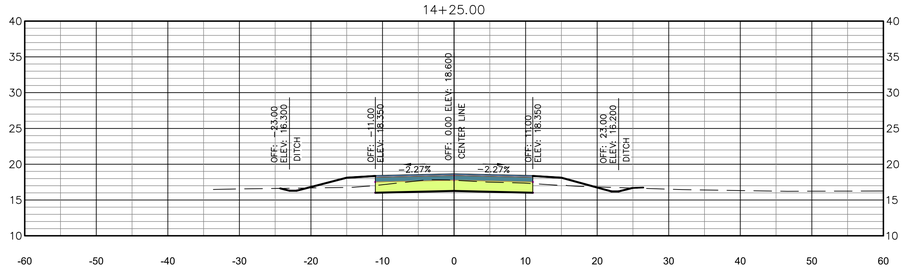
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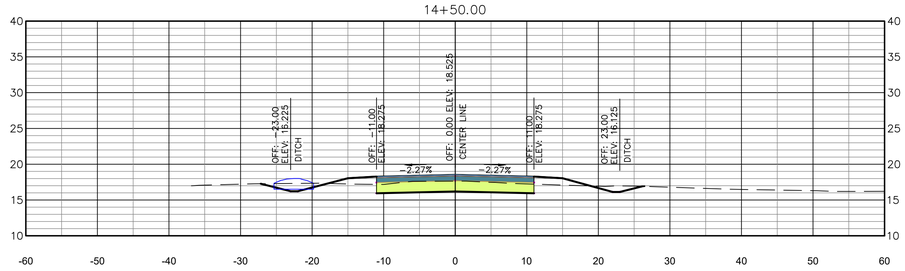
REVISIONS:
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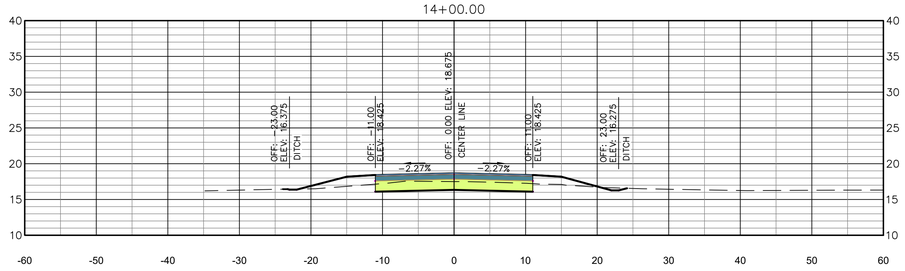
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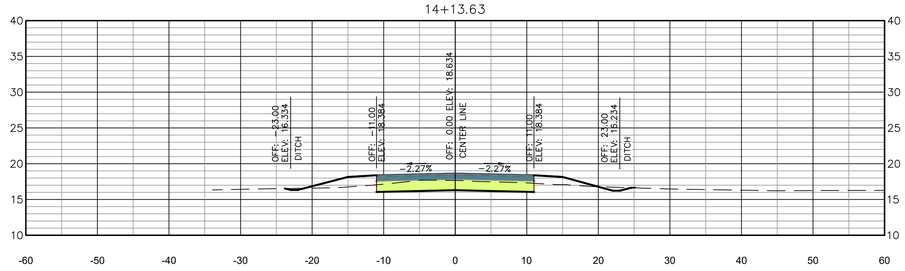
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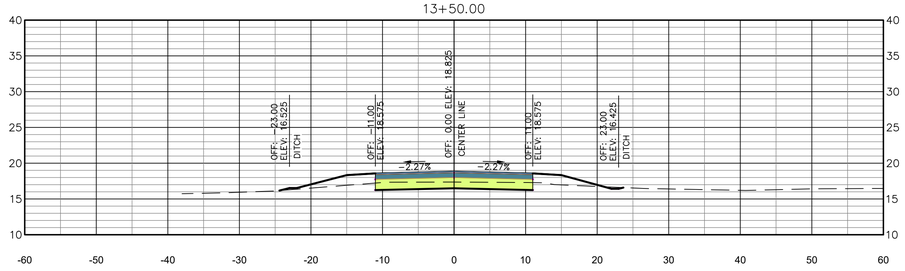
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Plotted Date: Sep 28, 2026 - 3:13pm

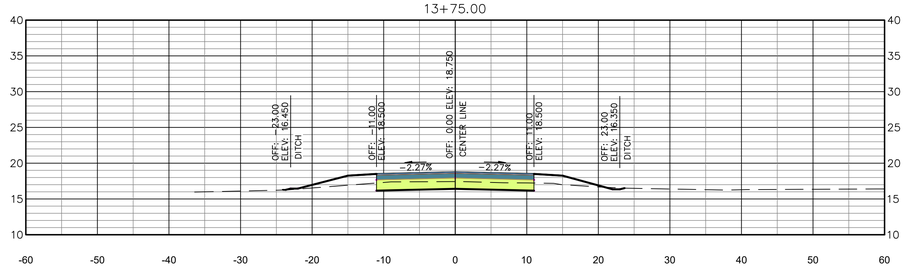


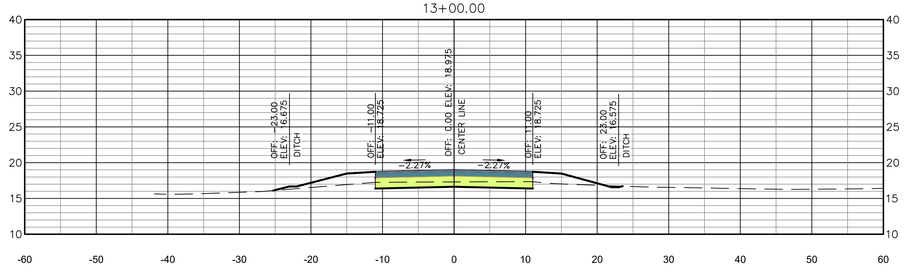


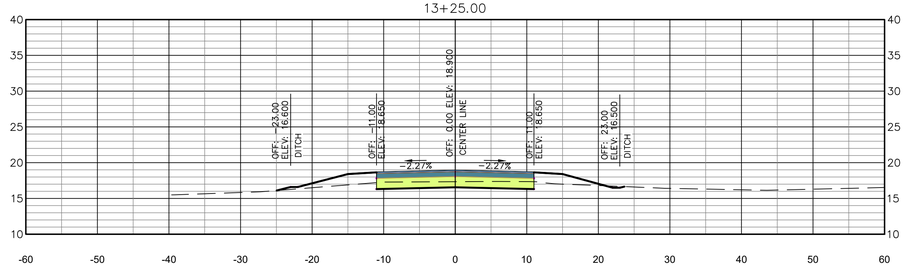












GRAPHIC SCALE

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(IN FEET)
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TAX PARCEL NUMBER: CITY, COUNTY, STATE

SHEET NAME:
MAIN TRAIL CROSS SECTIONS

REVISIONS:
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C4.20

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Plotted By: Spowell
Plotted Date: Sep 28, 2026 - 3:18pm

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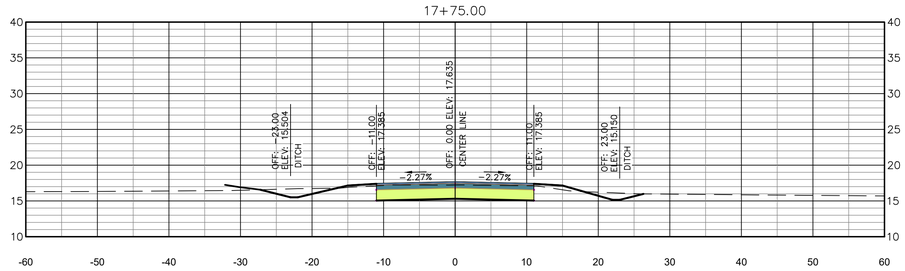
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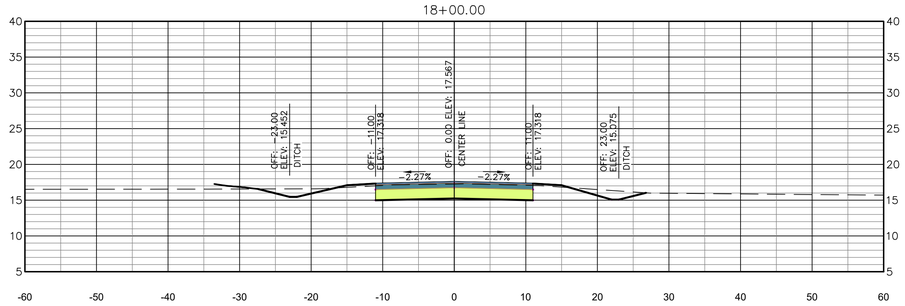
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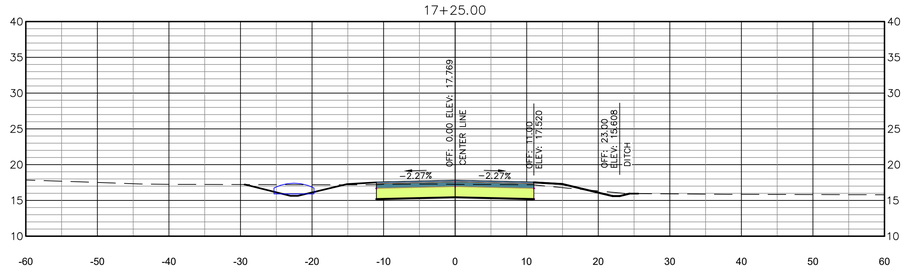
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CHECKED BY: TRL
PROJECT #: 2025-231

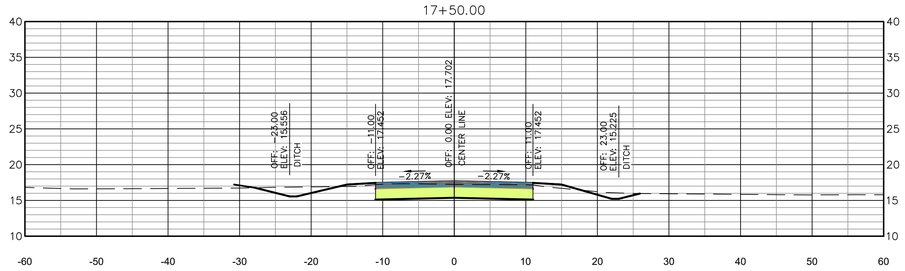
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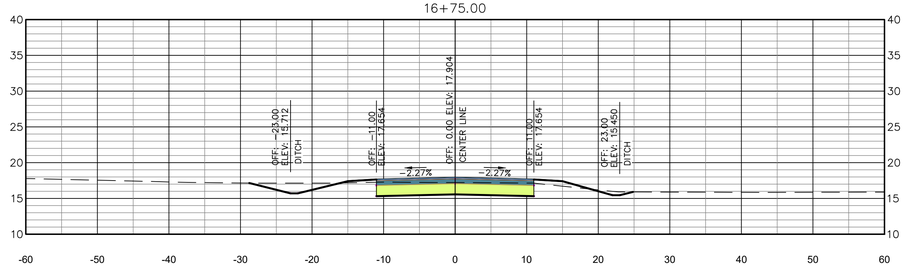
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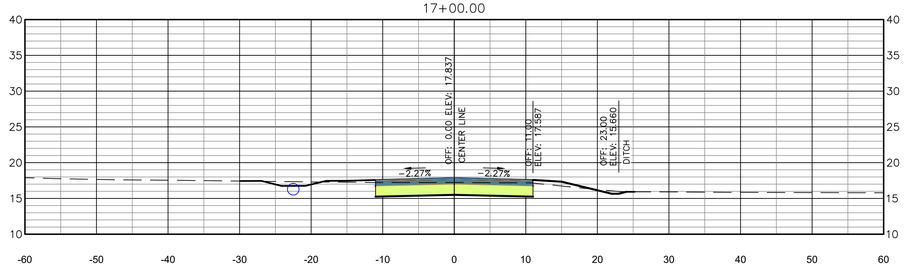


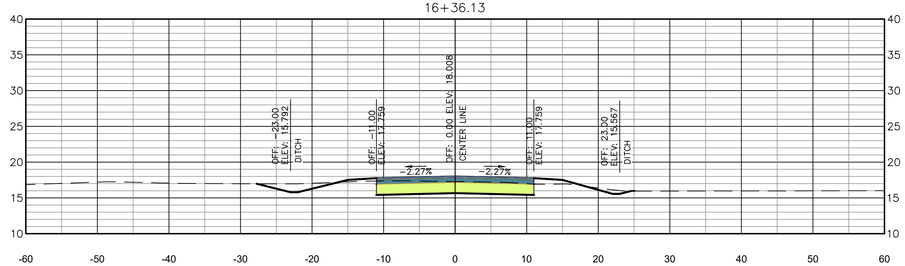


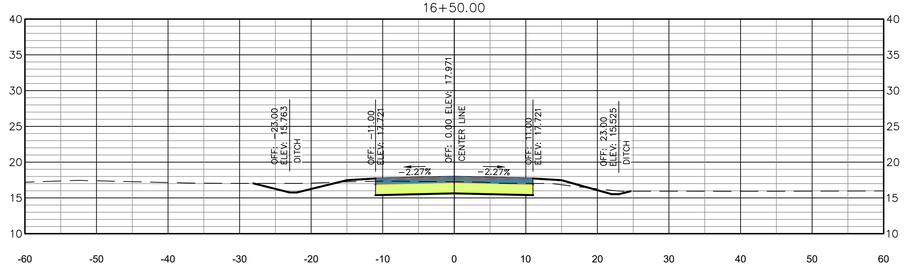














GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

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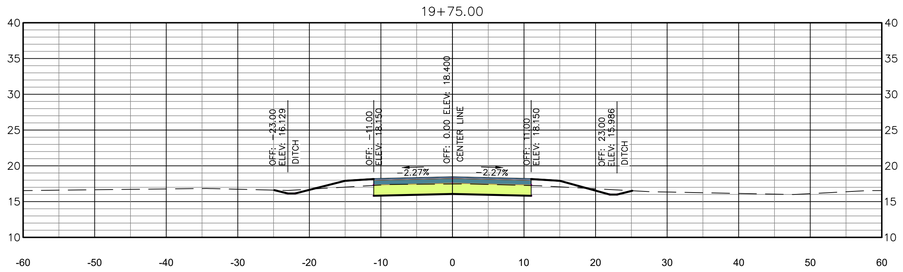
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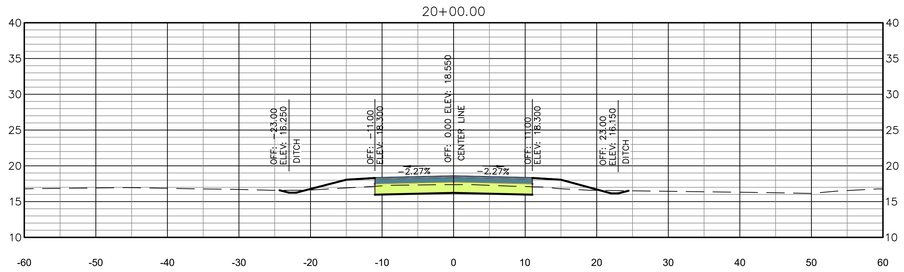
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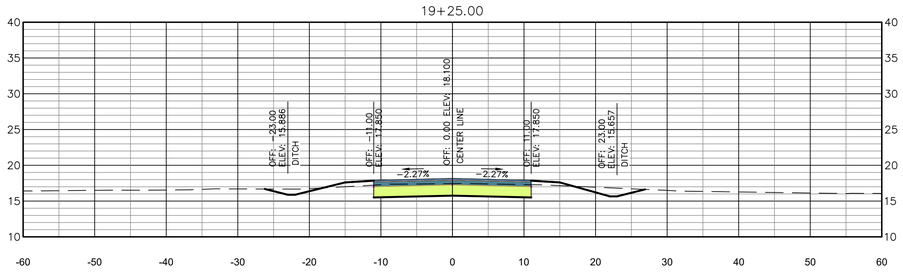
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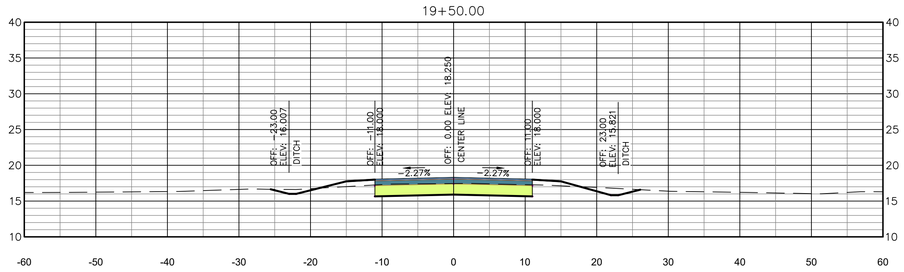
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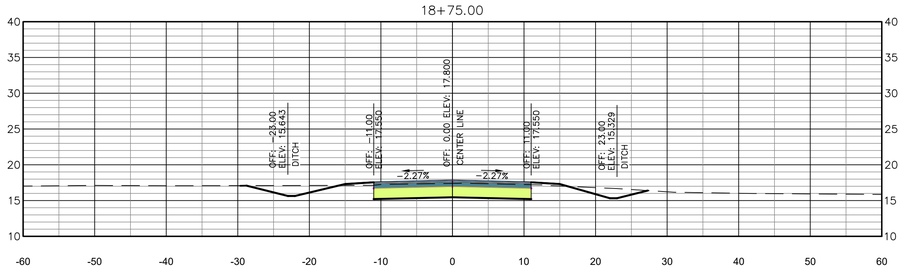
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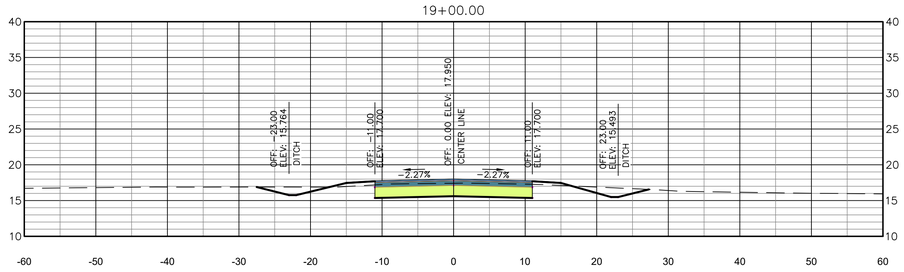


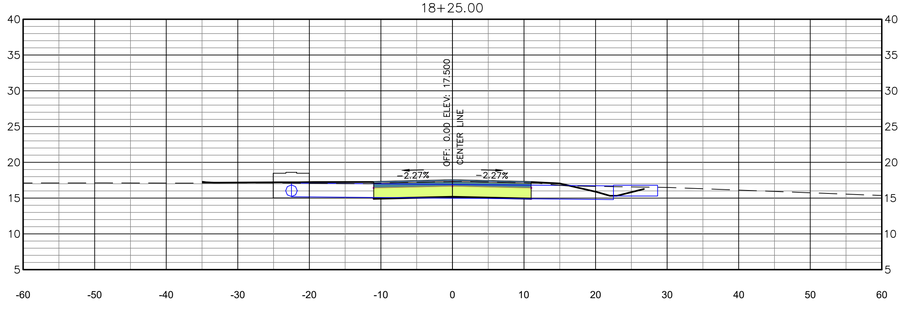








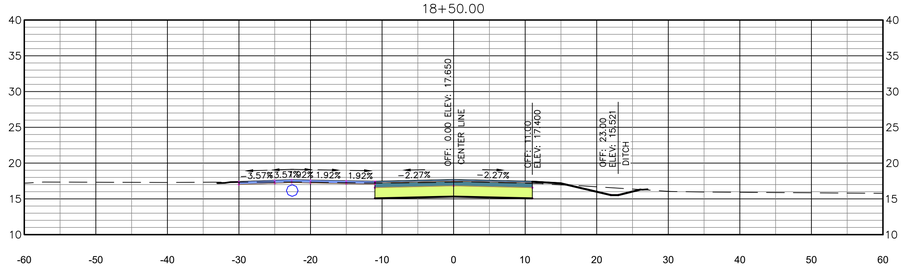




GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
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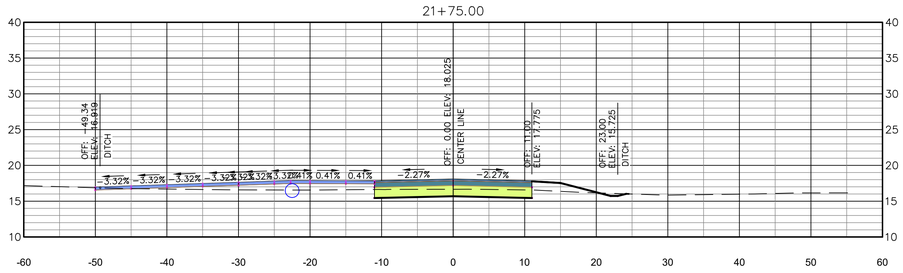
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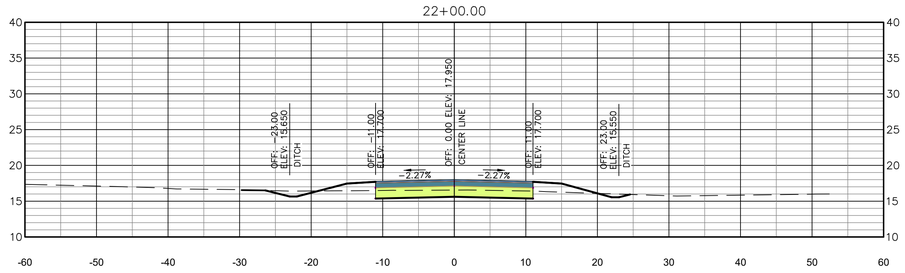
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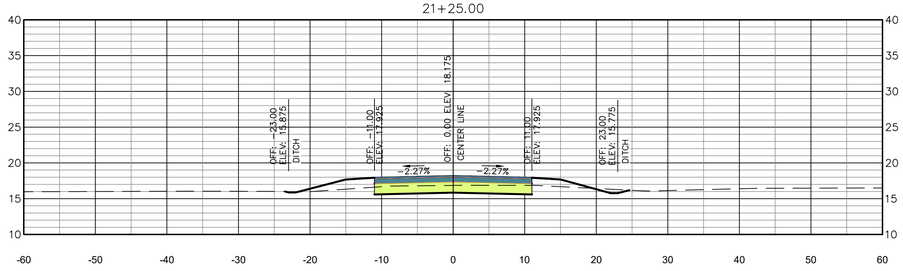
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DRAWN BY: TRL
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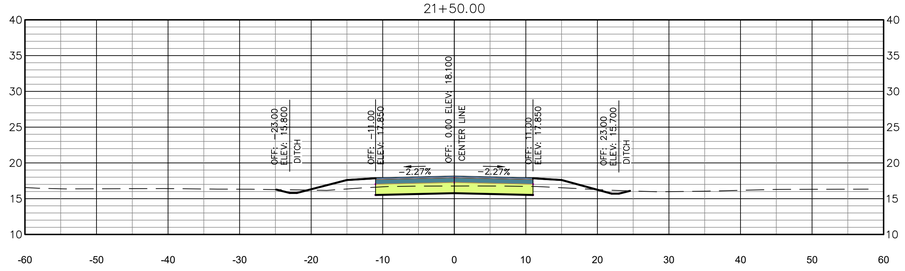
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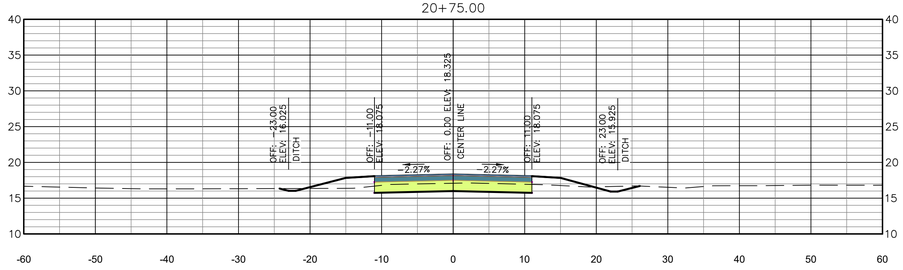
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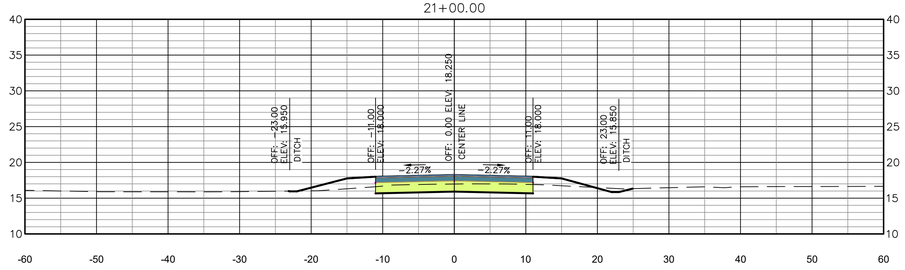


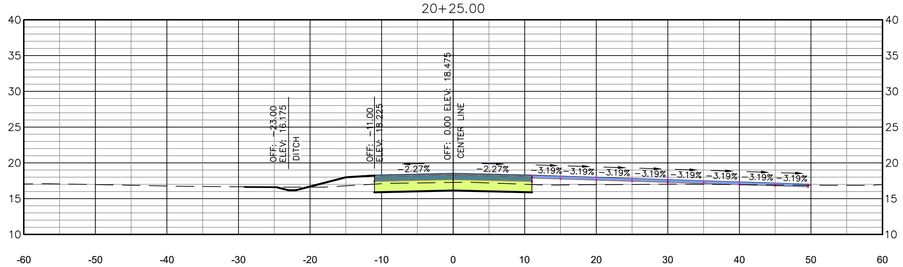


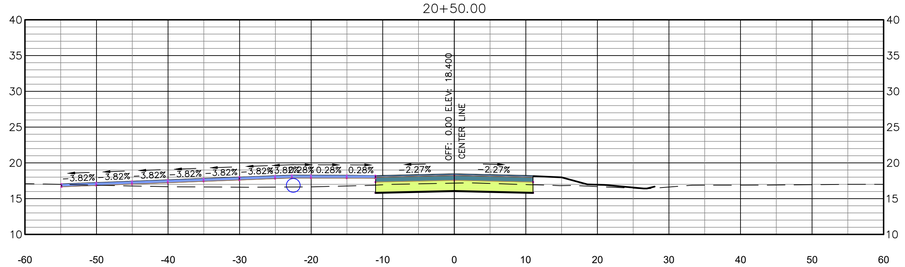












GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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Plotted By: Stephen Powell
Plotted Date: Sep 28, 2026 - 3:20pm

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

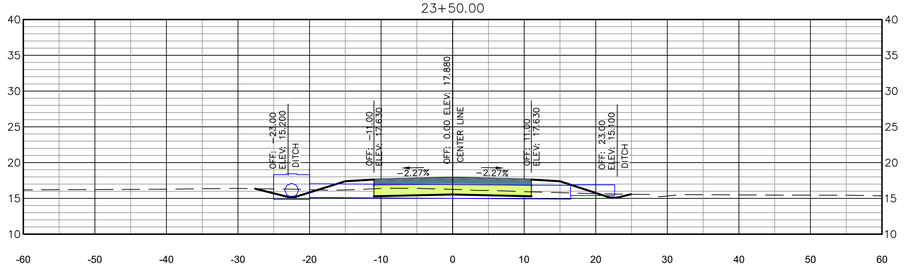
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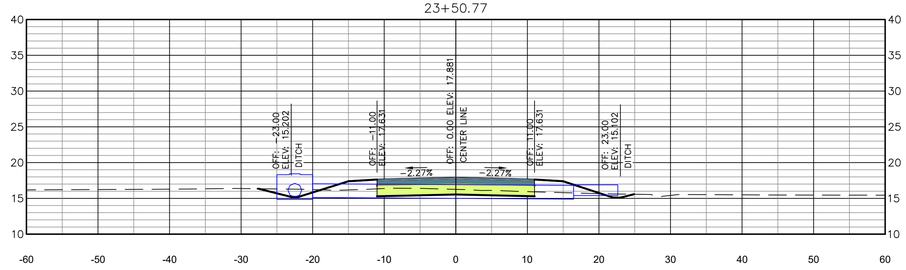
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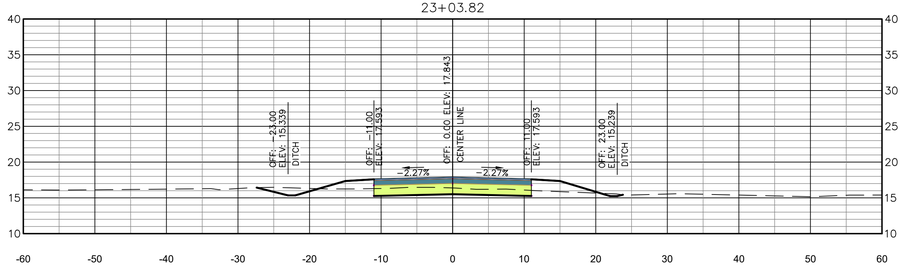
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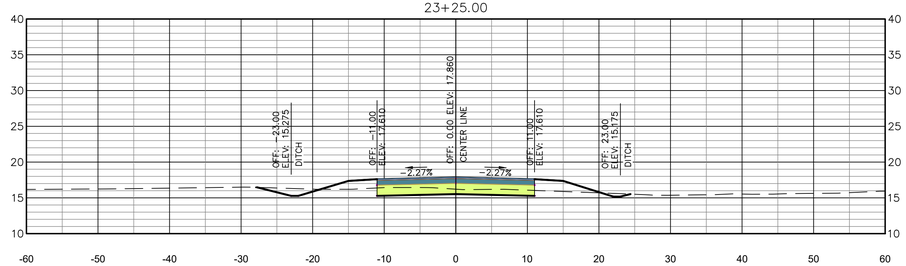
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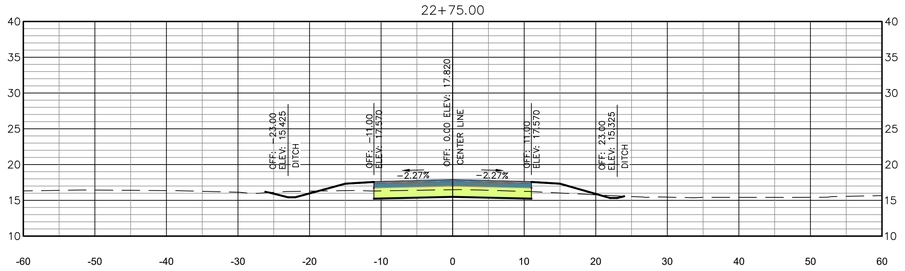
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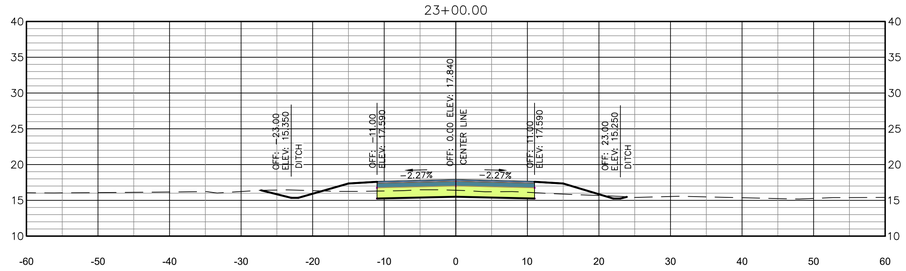


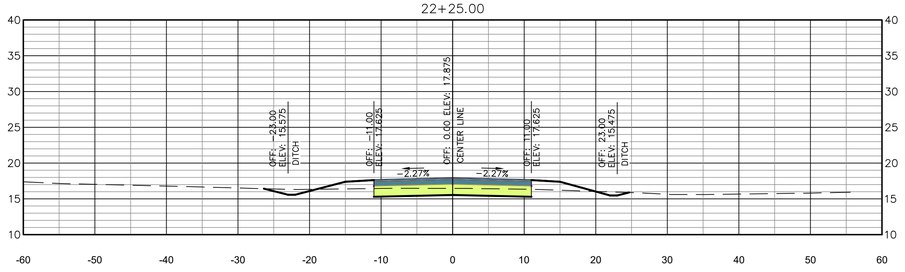


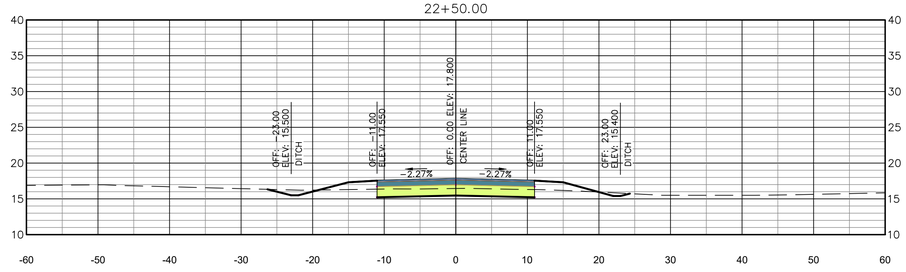












GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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Plotted By: Jonathan Powell
Plotted Date: Sep 28, 2026 - 3:10pm

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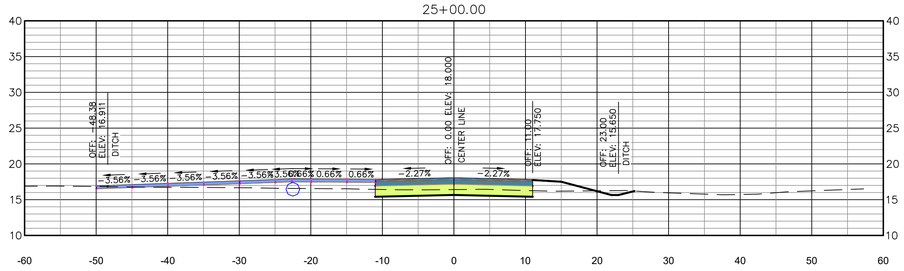
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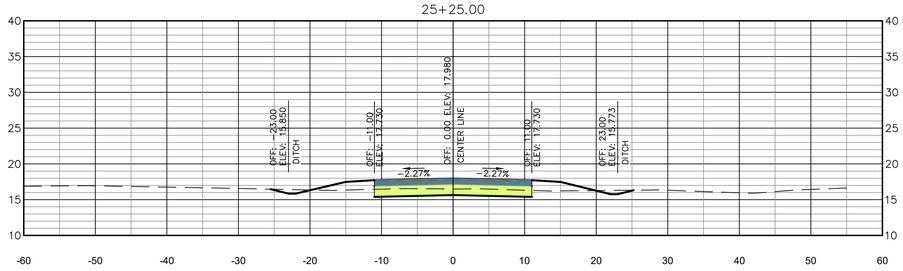
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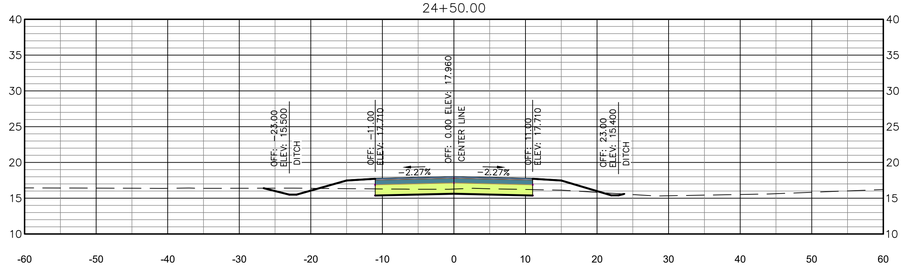
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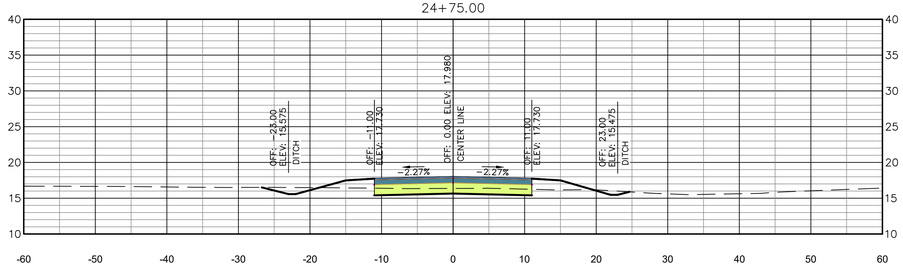
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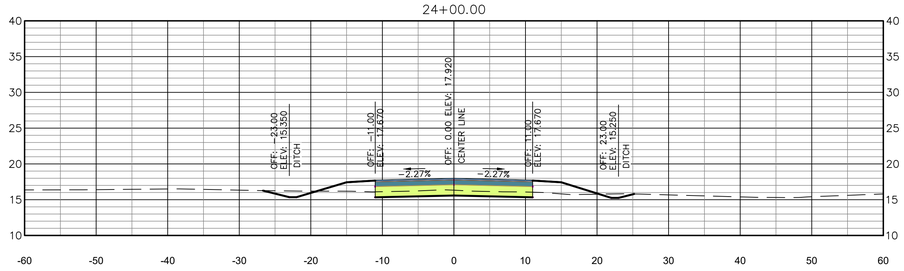
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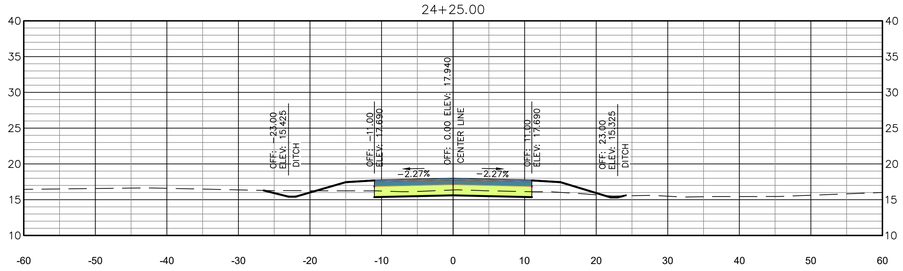


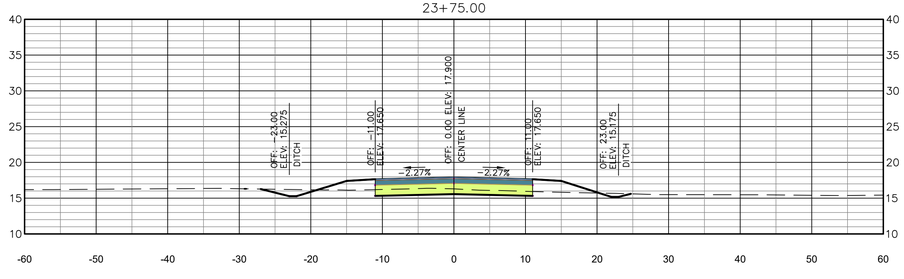


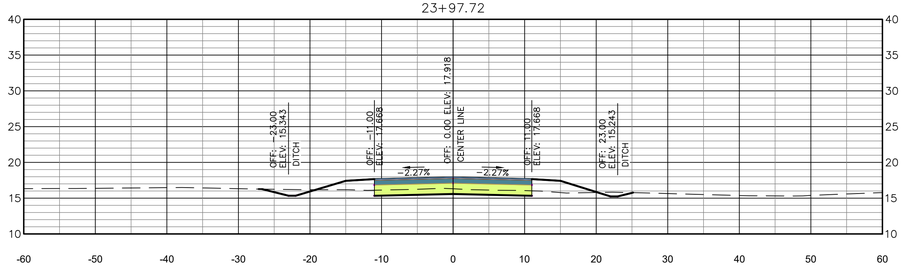


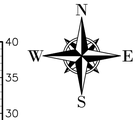












GRAPHIC SCALE



(IN FEET)
1 inch = 10 ft.

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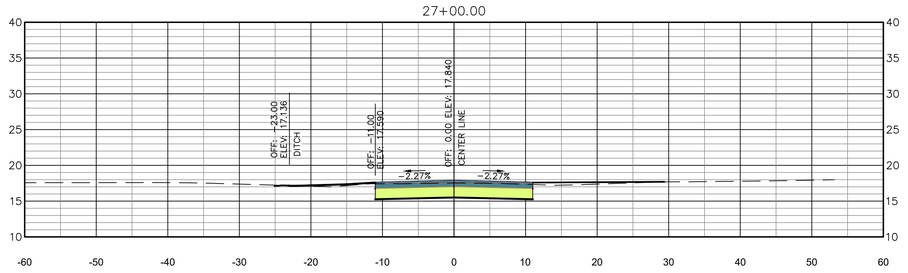
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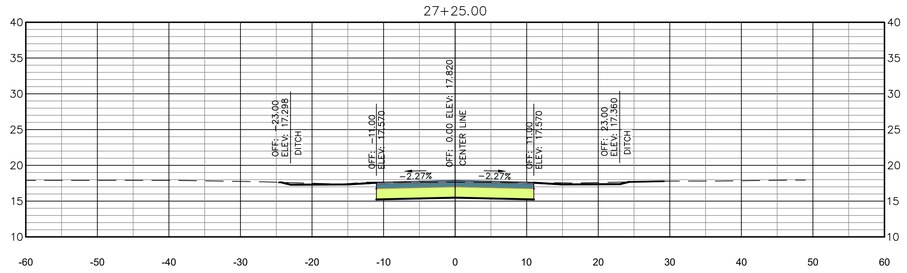
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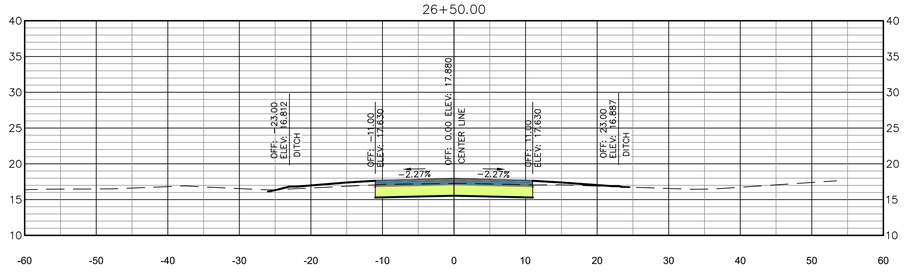
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DRAWN BY: TRL
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PROJECT #: 2025-231

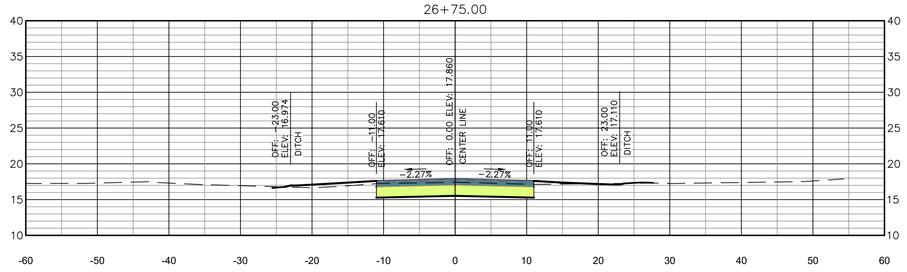
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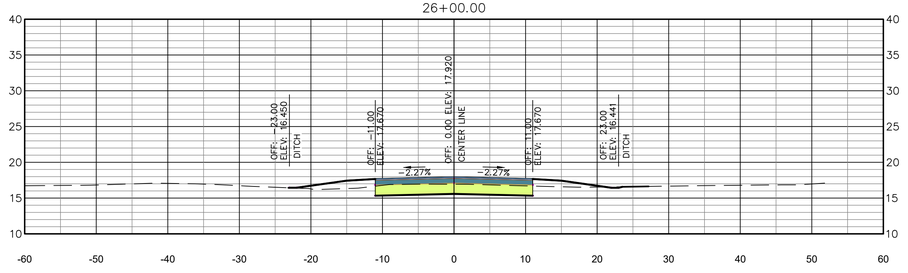
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Plotted Date: Sep 28, 2026 - 3:22pm

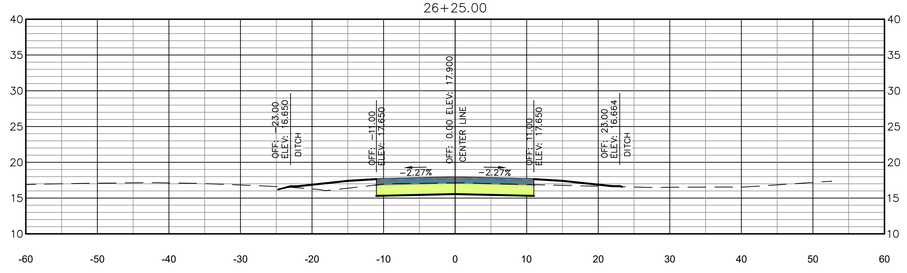


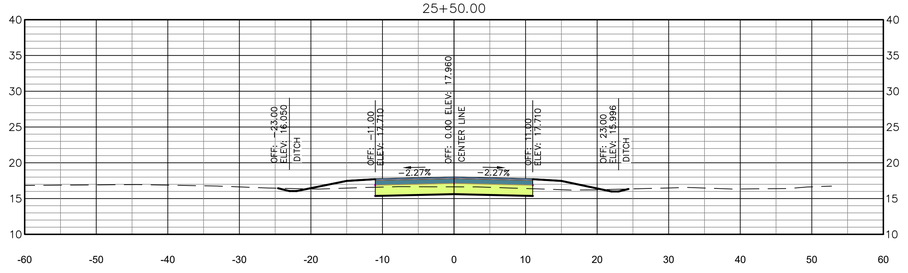


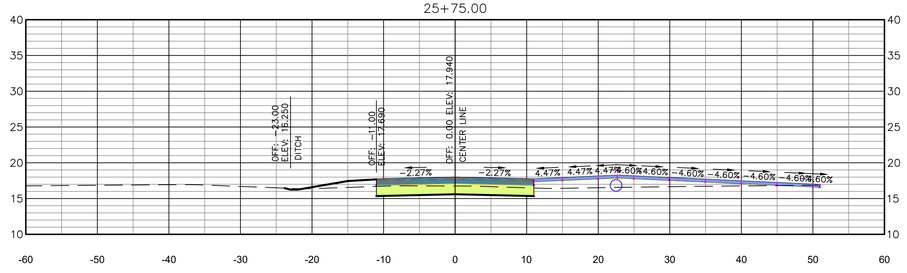


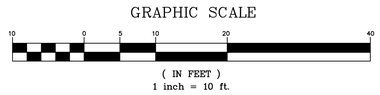












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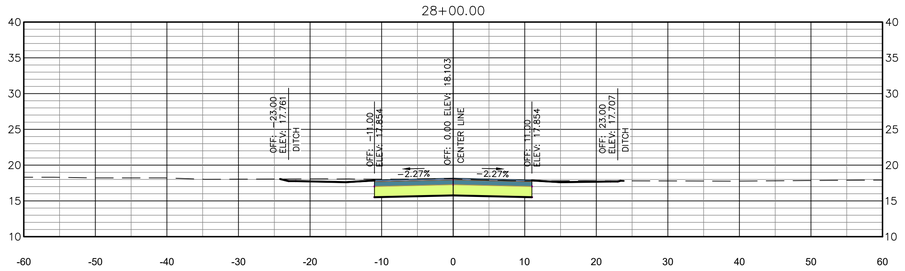
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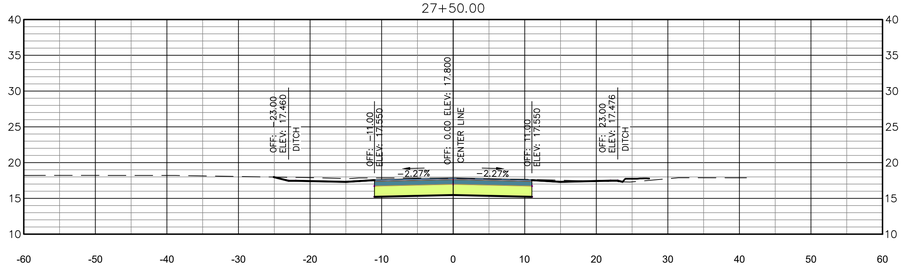
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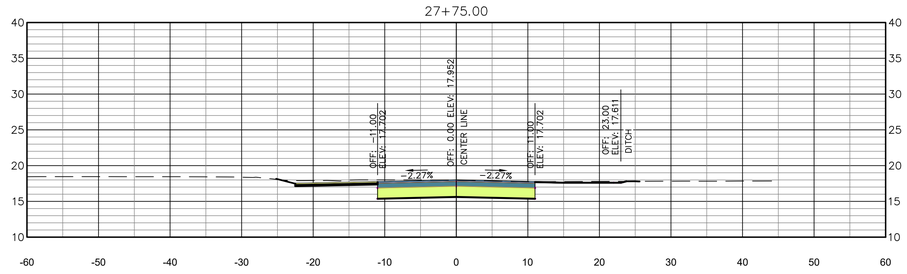
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C4.27







GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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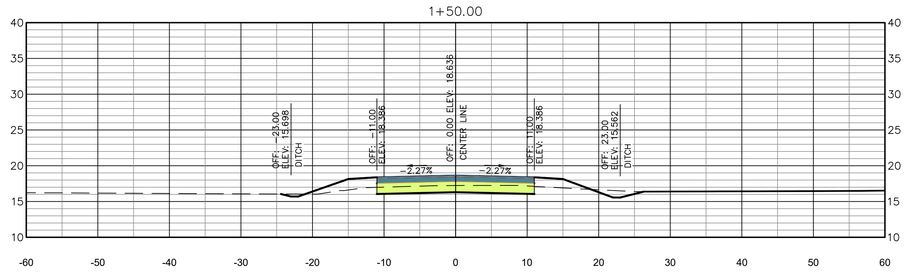
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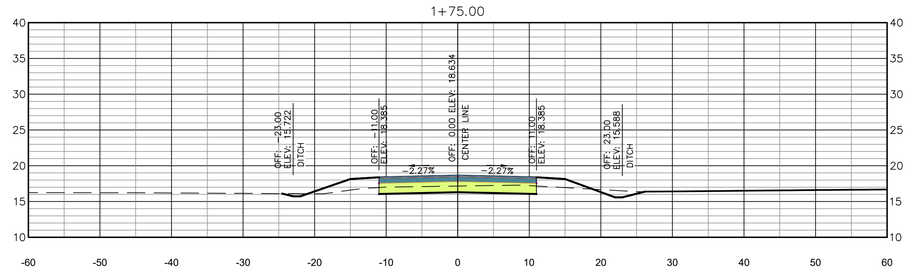
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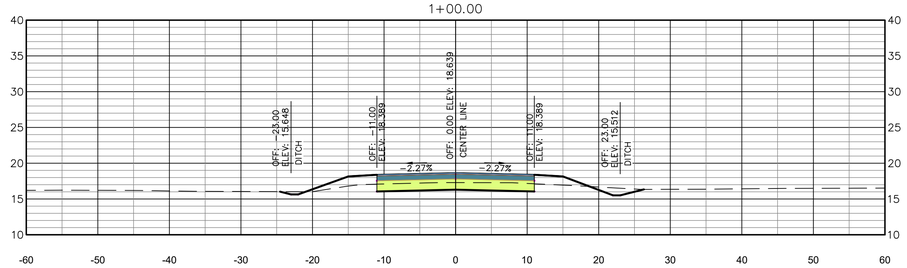
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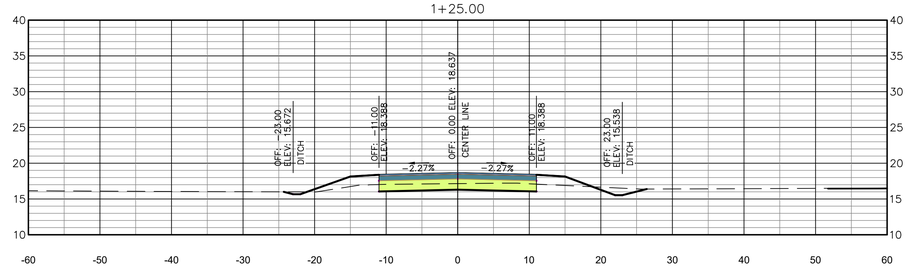
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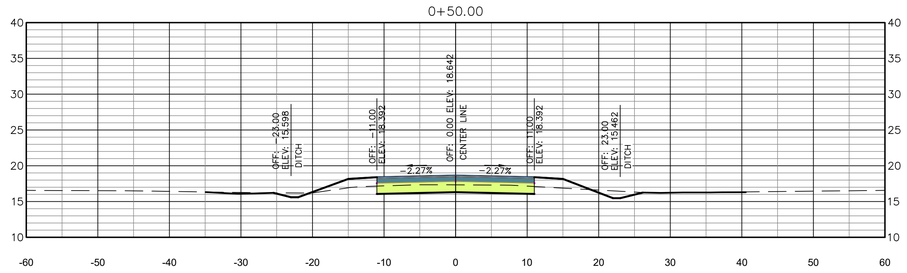
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Plotted By: Tyler Lowell
Plotted Date: Sep 28, 2026 - 3:12pm

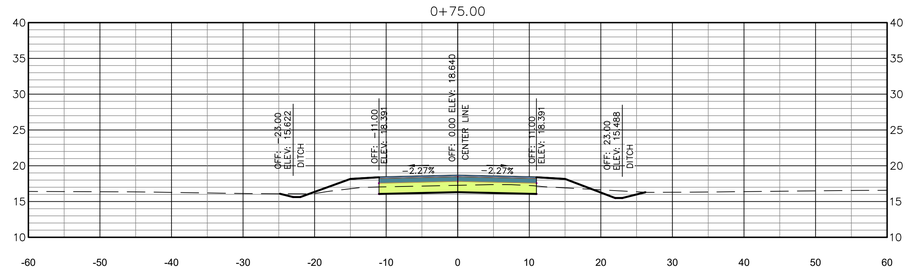












GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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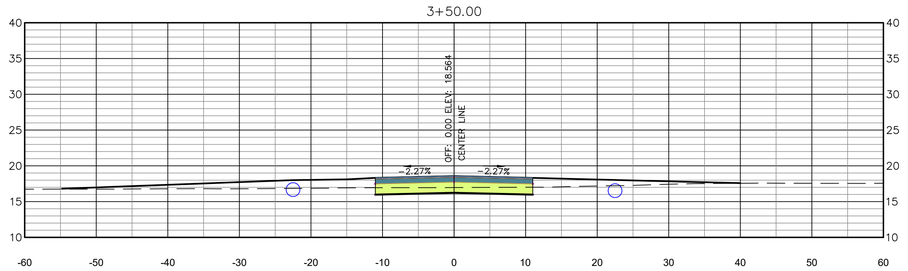
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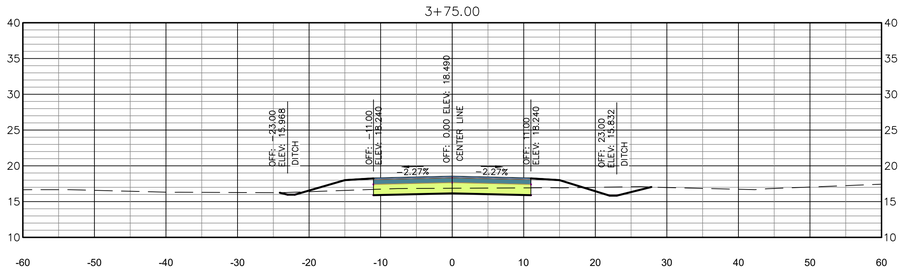
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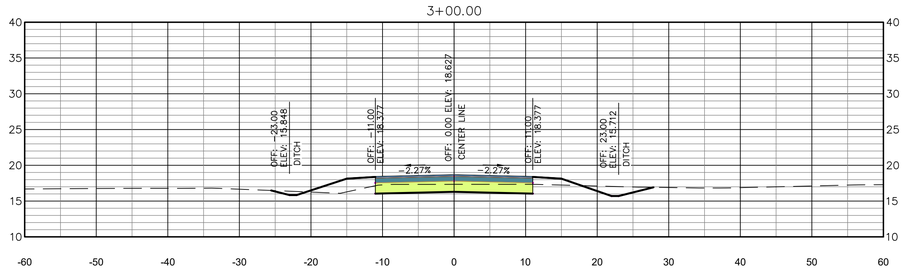
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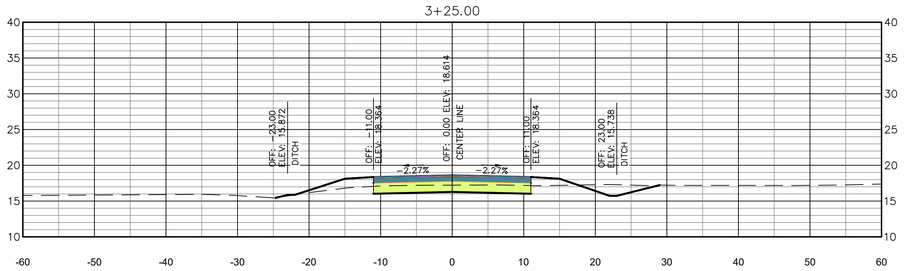
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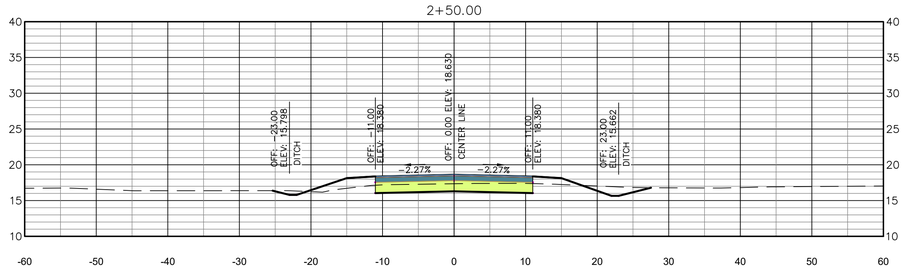
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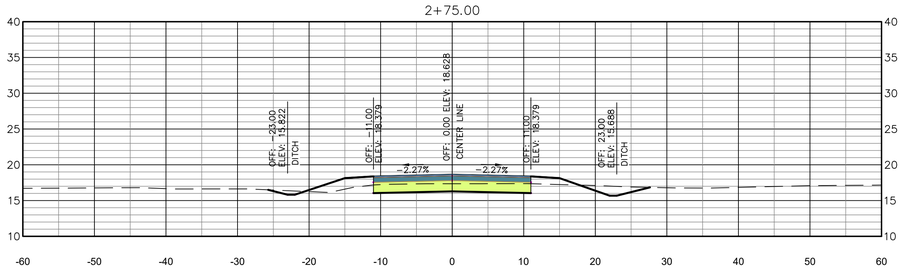


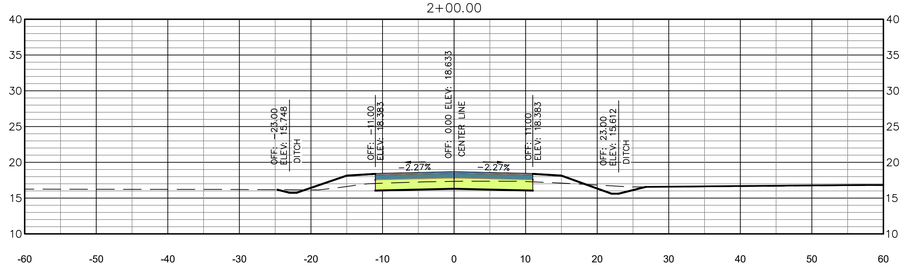


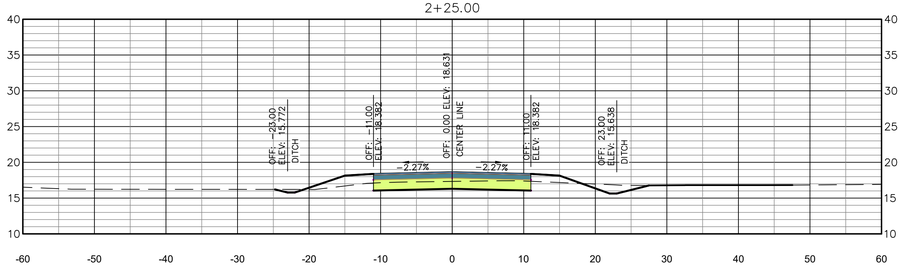












GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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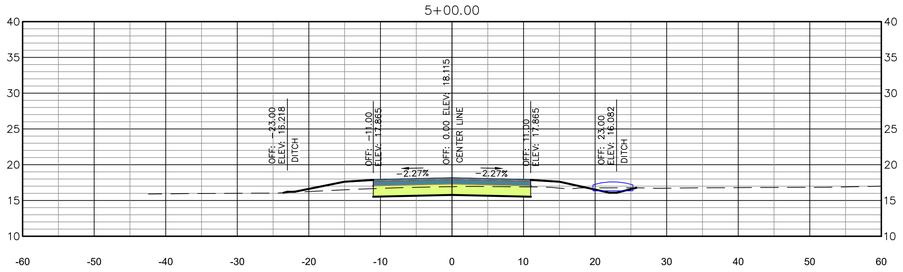
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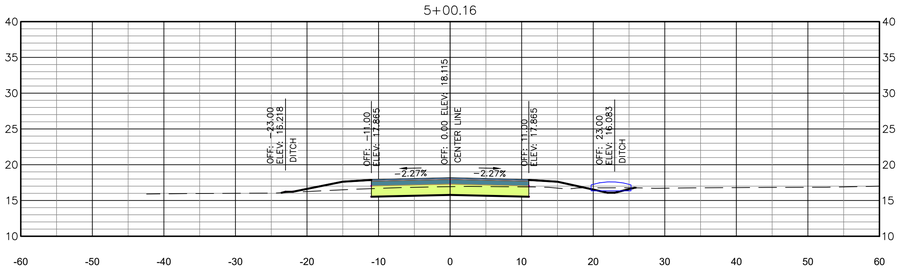
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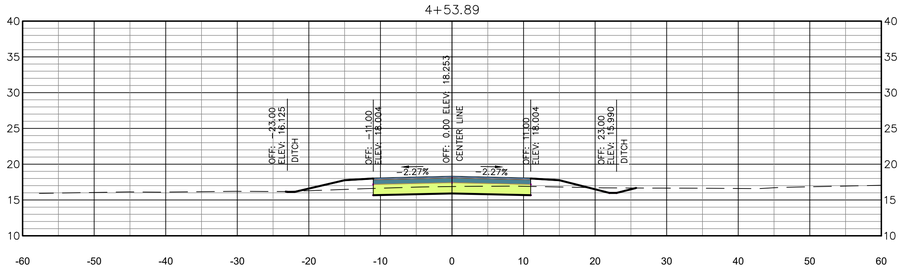
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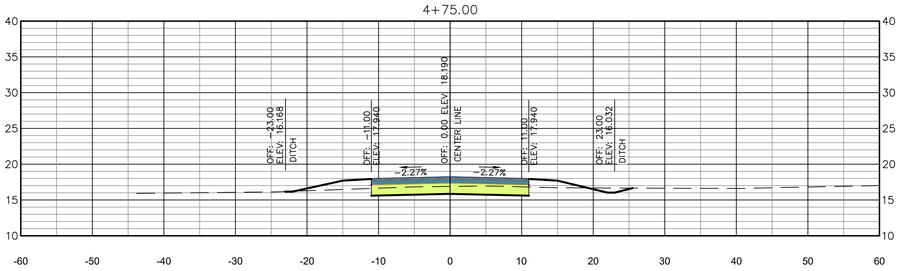
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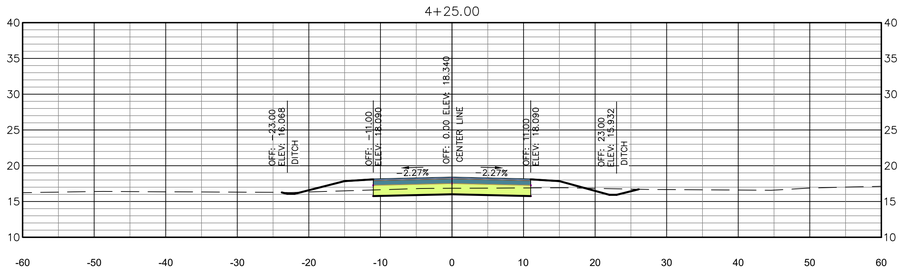
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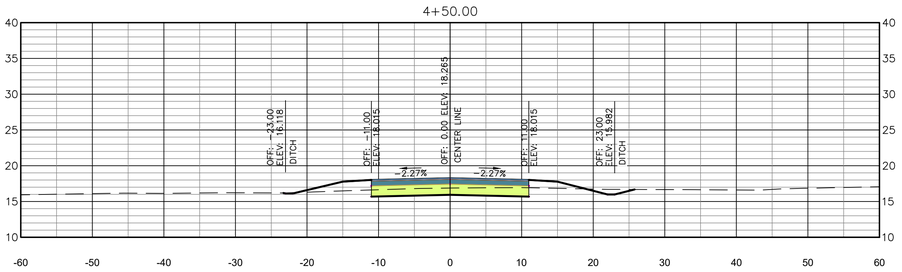








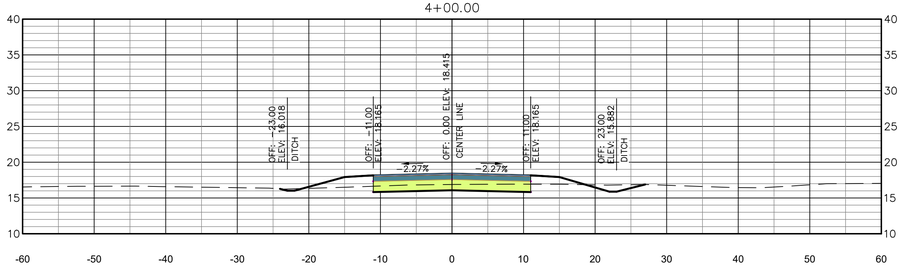


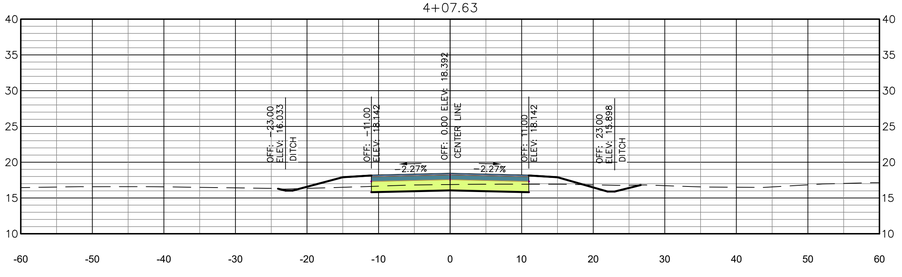


GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.





Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\BASE\2025-231 XSCTN.dwg
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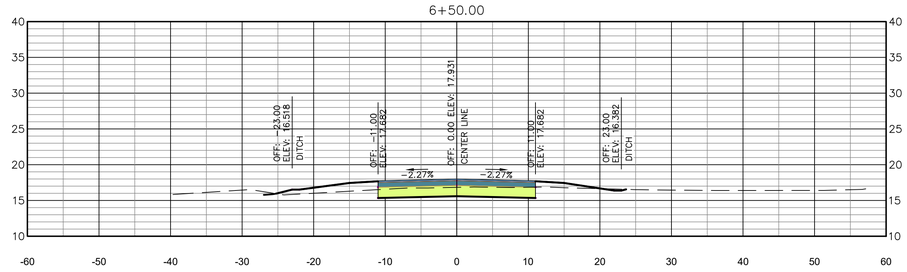
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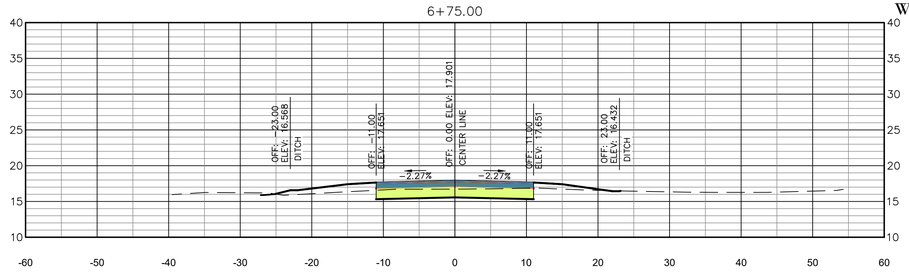
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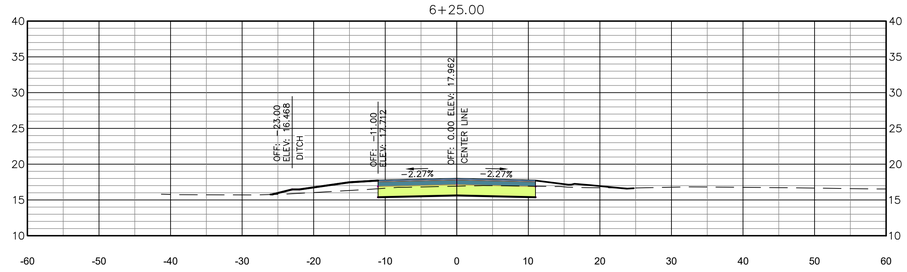
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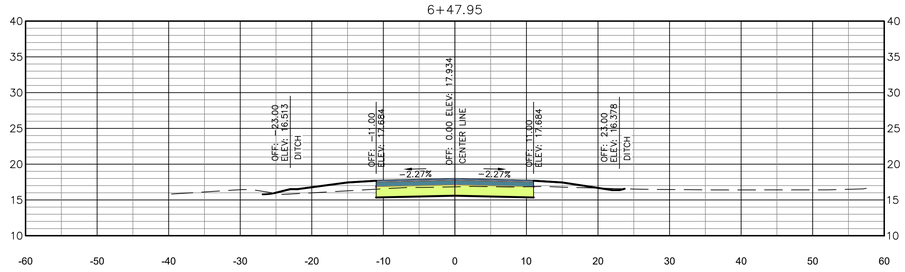
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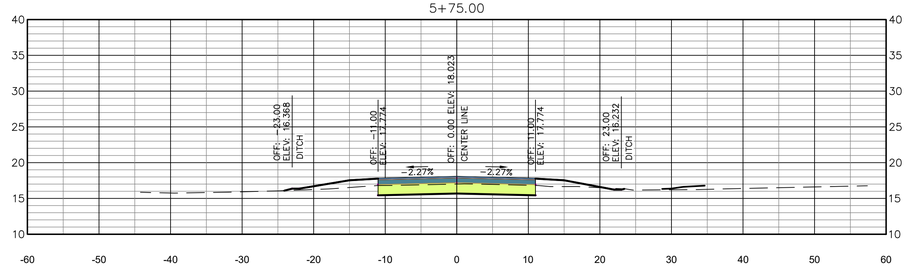
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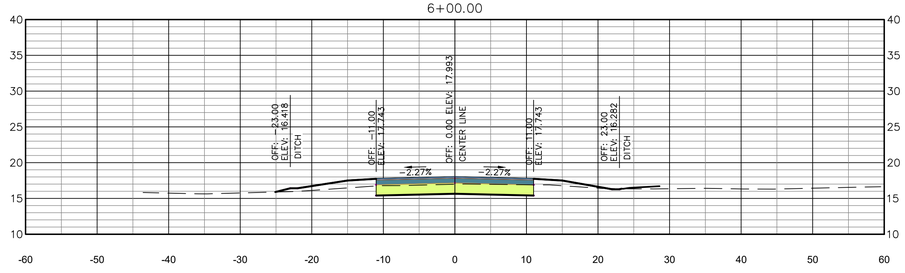


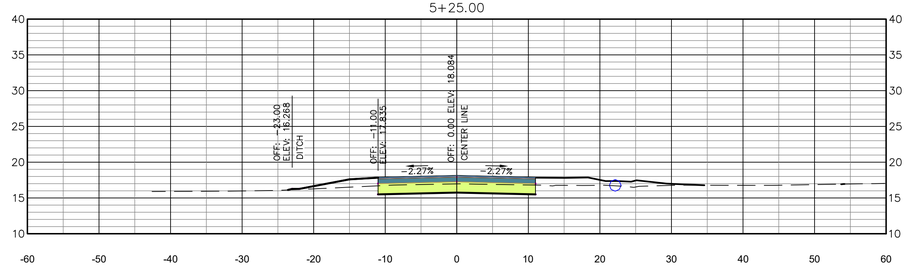


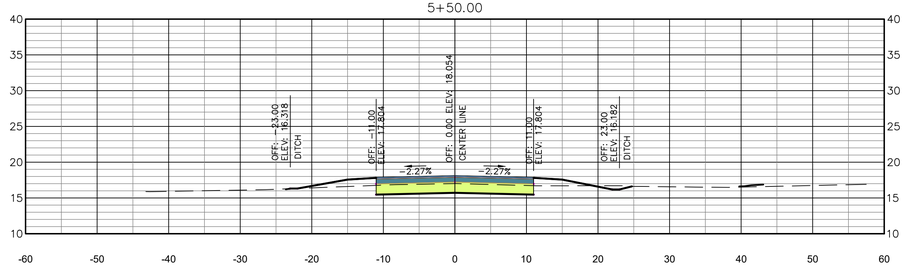














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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

TAX PARCEL NUMBER: CITY, COUNTY, STATE

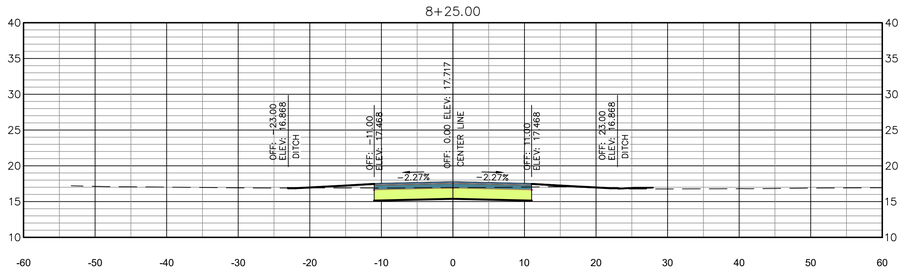
SHEET NAME:
TRAIL SOUTH CROSS SECTIONS

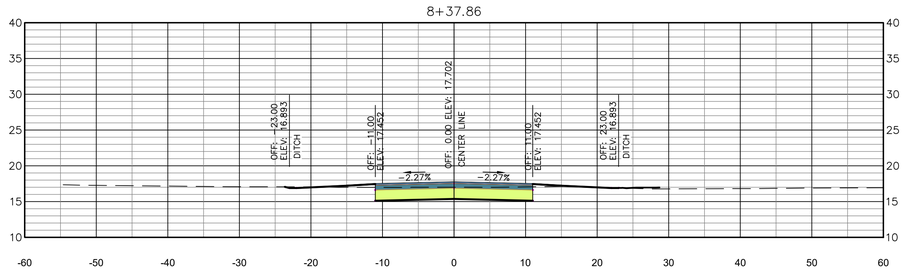
REVISIONS:
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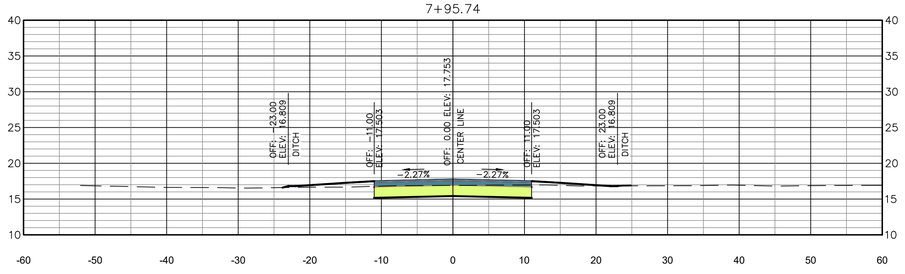
INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

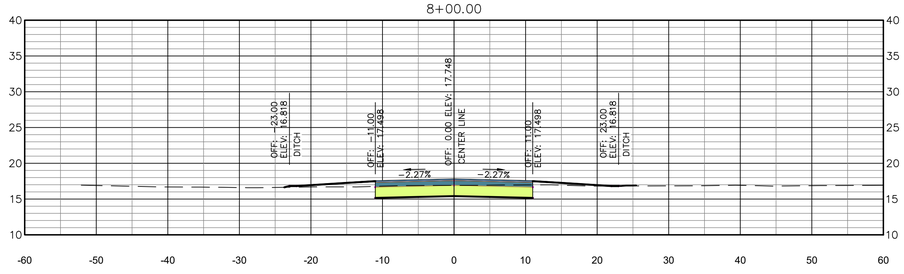
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C4.32

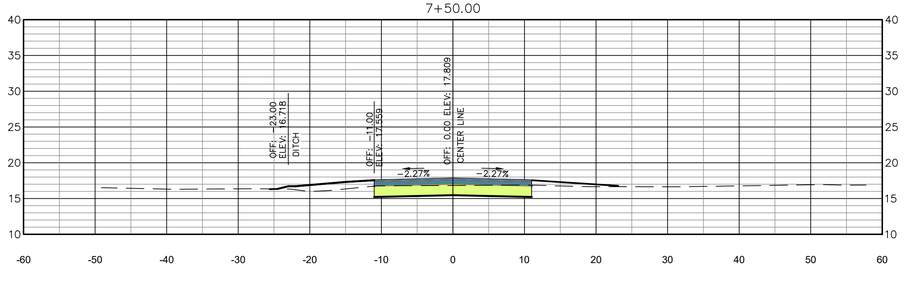
Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\BASE\2025-231 XSCTN.dwg
Plotted By: Spowell
Plotted Date: Sep 28, 2026 - 3:17pm

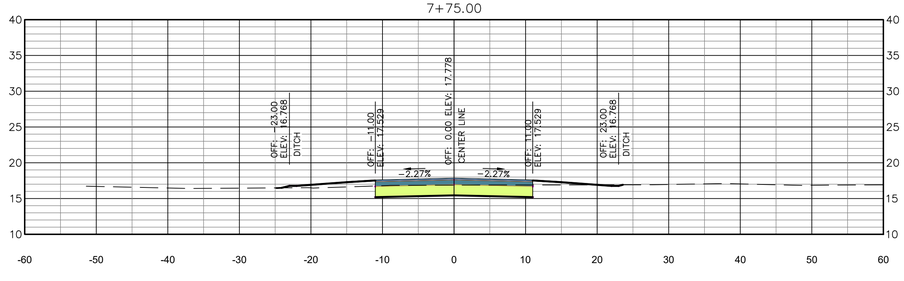


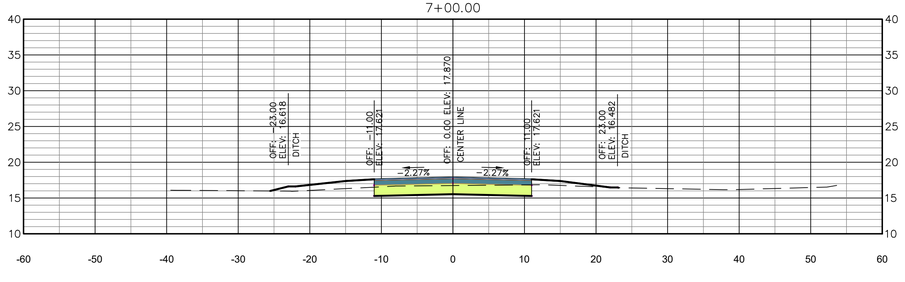


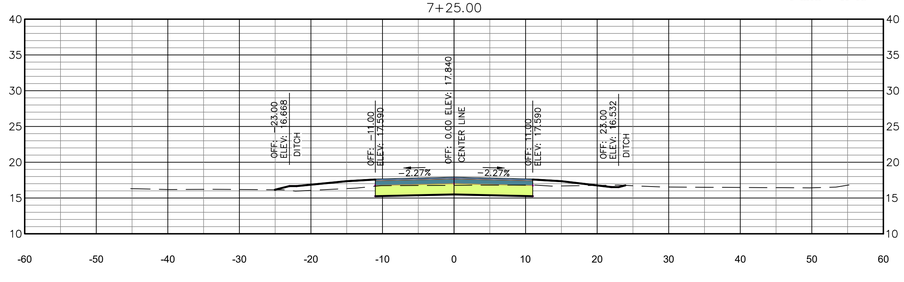












GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

GEORGIA811.COM DIAL 811

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GSWCC# 0000002134

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114 North Commerce Street
Hinesville, Georgia 31313
(912) 368-5664

STATESBORO:
302 S. Zetterower Avenue
Statesboro, Georgia 30458
(912) 335-1046

TRLONG ENGINEERING, P.C.

www.trlongeng.com

MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

TAX PARCEL NUMBER: CITY, COUNTY, STATE

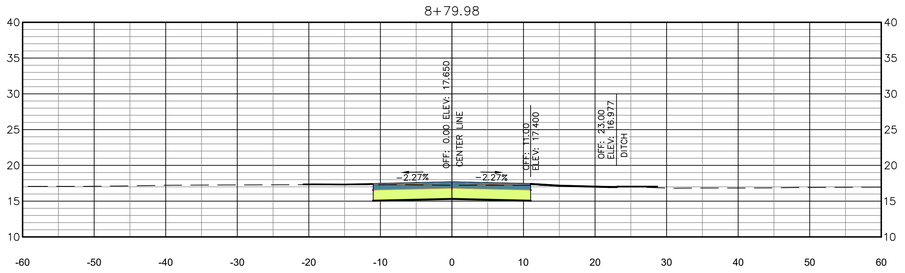
SHEET NAME:
TRAIL SOUTH CROSS SECTIONS

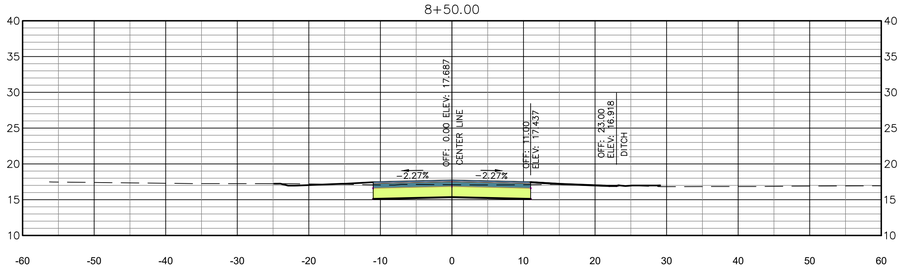
REVISIONS:
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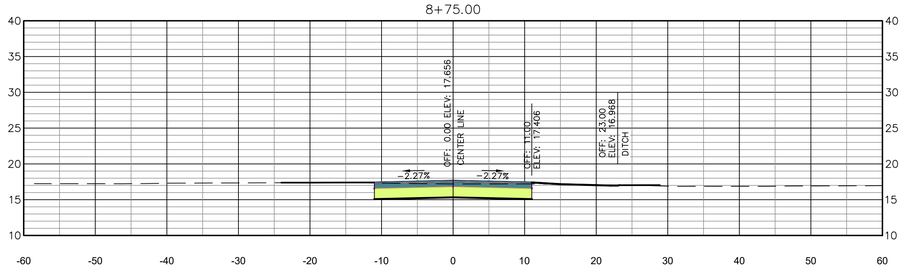
INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C4.33

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\BASE\2025-231 XSCTN.dwg
Plotted By: Jonathan Howell
Plotted Date: Sep 28, 2026 - 3:24pm







GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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(912) 335-1046

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

TAX PARCEL NUMBER: CITY, COUNTY, STATE

SHEET NAME:
TRAIL SOUTH CROSS SECTIONS

REVISIONS:
1.
2.
3.
4.
5.
6.
7.
8.
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C4.34

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\BASE\2025-231 XSCTN.dwg
Plotted By: Spowell
Plotted Date: Sep 28, 2026 - 3:09pm

N/F BARTLEY E. & DEBORAH L. EATON
PARCEL # 137027

N/F PAULETTE MCRAE
PARCEL # 137026

LOT 15
N/F JOHNNY L. WEARRIEN
PARCEL # 137025

LOT 14
N/F WILLIAM HEMINGWAY, JR. &
DEBBIE D. HEMINGWAY
PARCEL # 137024

INSTALL SINGLE ROW
TYPE NS SILT FENCE

LIMIT OF DISTURBANCE

CONCRETE DRIVEWAY

BRICK COLUMN
1.6' X 1.6'

MAIL BOX

GATE POST

END OF COUNTY
RIGHT OF WAY

15" RCP

RCP 15"
INV. 13.95'

RCP 15"
INV. 14.29'

S81°58'53"W
112.44'

N82°05'10"E
160.32'

N82°10'03"E
141.26'

N82°10'03"E
203.77'

BRICK COLUMN
1.6' X 1.6'

MAIN TRAIL (60' R/W)

STA 6+00 CONTINUED ON THIS SHEET

MAILBOX

BRICK WALL

EX. WATER METER

CONCRETE WASHOUT AREA
(SEE SITE DETAILS)

S82°11'57"W
135.00'

S82°11'57"W
136.44'

LOT 18
N/F CHRISTOPHER T. & VIRGINIA CARTER
PARCEL # 137030

LOT 19
N/F ALFONZA HAGAN
PARCEL # 137031

N/F RA INVESTMENT TRUST
PARCEL # 137028

LOT 17
N/F JETTIE BALDWIN
PARCEL # 137029

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

LOT 13
N/F CLEO & THELMA WARTLEY
PARCEL # 137023

LOT 12
N/F CLEO & THELMA WARTLEY
PARCEL # 137022

LOT 11
N/F LONELL & CARRIE M. JONES
PARCEL # 137020

STA 5+00 CONTINUED ON THIS SHEET

STA 12+00 CONTINUED ON SHEET C6.2

N82°10'03"E
355.11'

N8°08'41"E
185.00

S82°11'57"W
142.31'

S82°11'57"W
149.69'

S82°11'57"W
142.31'

S82°11'57"W
149.77'

BENCHMARK
IN POWER POLE
ELV: 17.53
N: 671116.54
E: 869069.16

TRAIL SOUTH (60' R/W)

LOT 21
N/F GALLOWAY PROPERTY INVESTMENTS LLC
PARCEL # 137045

LOT 22
N/F TERRANCE & CHERYL JACKSON
PARCEL # 137046

LOT 20
N/F MARVIN FOWLER
PARCEL # 137044

LOT 23
N/F TERRANCE K. JACKSON
PARCEL # 137047

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

Ds1 Ds2 Du

Sd1–NS

Cd–HB

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(912) 335-1046

TRLONG ENGINEERING, P.C.
www.trlongeng.com

MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

SHEET NAME:
INITIAL ES&PC MAIN TRAIL

REVISIONS:
1.
2.
3.
4.
5.
6.
7.
8.
9.
10

INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C6.1

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\CONST\2025-231 ESPC.dwg
Layout Tab: Sheet C6.1
Plotted Date: Sep 28, 2026 - 3:21pm

& CARRIE M. JONES
CEL # 137020

LOT 10
N/F HENRY & KRYSTAL BAGLEY
PARCEL # 137019

LOT 9
N/F ANTONIO T. DUKES
PARCEL # 137018

LOT 8
N/F BRYON T. RAY
PARCEL # 137017

LOT 24
N/F JESSE J. & MACKENZIE PATCHELL
PARCEL # 137048

LOT 23
N/F TERRANCE K. JACKSON
PARCEL # 137047

LOT 7
N/F DAVID A. & DOROTHY L. HOLNESS
PARCEL # 137016

LOT 6
N/F TATJANA MARIA FISHER
PARCEL # 137015

LOT 5
N/F ELIZABETH ANN NOLES
PARCEL # 137014

LOT 4
N/F LARRY D. & WENDY
PARCEL # 13701

LOT 26
N/F SEAN O. SR & TAWANNA WALTHOUR
PARCEL # 137049

MAIN TRAIL (60' R/W)

STA 11+00 CONTINUED ON SHEET C6.1

STA 16+00 CONTINUED ON THIS SHEET

STA 16+00 CONTINUED ON THIS SHEET

STA 12+00 CONTINUED ON SHEET C6.2

INSTALL SINGLE ROW TYPE NS SILT FENCE

LIMIT OF DISTURBANCE

Ds1
Ds2
Du

Sd1-NS

N82°08'15"E
287.57'

S82°11'57"W
149.77'

S82°11'57"W
205.33'

S6°02'13"W
140.36'

S0°26'42"W
166.82'

S0°10'19"W
170.97'

S0°10'19"W
176.17'

N00°04'30"W
187.39'

N00°08'29"E
400.01'

C20

C23

C25

CONCRETE DRIVEWAY

ASPHALT DRIVEWAY

GRAVEL DRIVE

MAILBOX

TOP BANK OF SWALE

BRICK COLUMN
1.8' X 1.8'

20' DRAINAGE EASEMENT
10.00'
20.00'

TOP OF BANK

OHP

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

N
W E
S

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(912) 335-1046

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

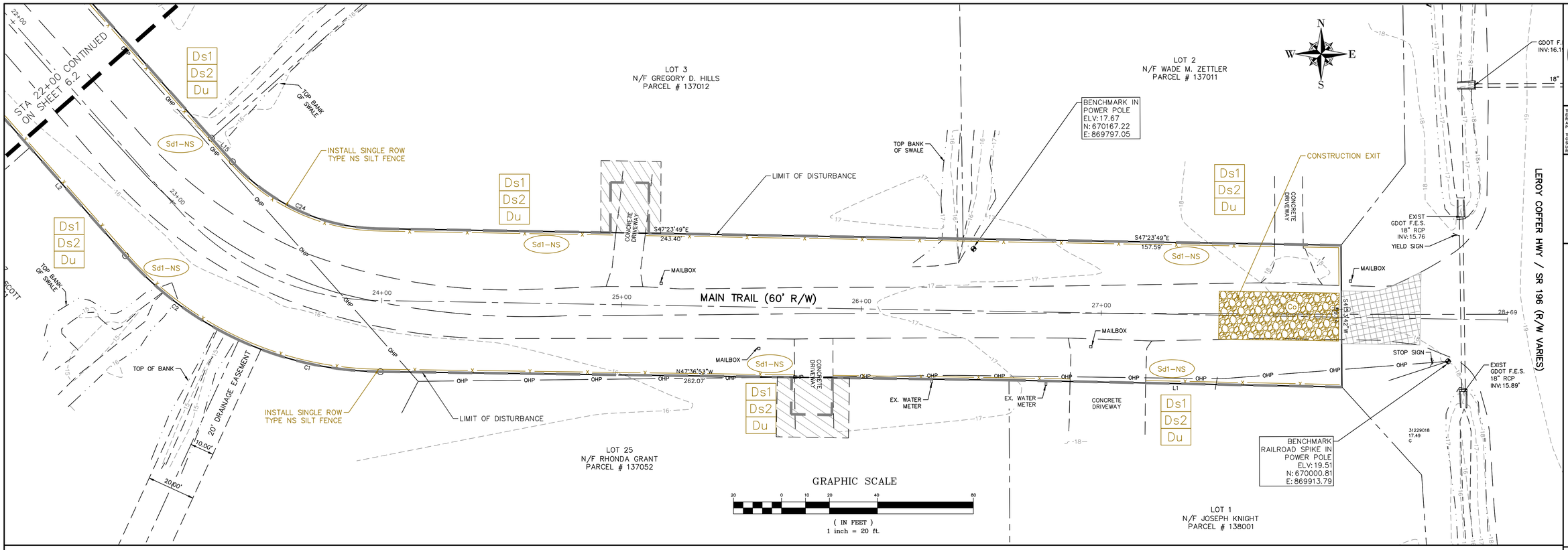
SHEET NAME:
INITIAL ES&PC MAIN TRAIL

REVISIONS:
1.
2.
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C6.2

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\CONST\2025-231 ESPC.dwg
Plotted By: Ronald Long
Plotted Date: Sep 28, 2026 - 3:24pm



Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\CONST\2025-231 ESPC.dwg
Plotted By: Tyler Long
Plotted Date: Sep 28, 2026 - 3:27pm

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Statesboro, Georgia 30458
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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

SHEET NAME:
INITIAL ES&PC MAIN TRAIL

REVISIONS:
1.
2.
3.
4.
5.
6.
7.
8.
9.
10

INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C6.3

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

LOT 13
N/F CLEO & THELMA WARTLEY
PARCEL # 137023

LOT 20
N/F MARVIN FOWLER
PARCEL # 137044

LOT 28
N/F XAVIER MCCLINTON
PARCEL # 137043

LOT 29
N/F HERSHEY HARRIMAN
PARCEL # 137041

LOT 19
N/F LEONZA HAGAN
PARCEL # 137031

LOT 37
N/F ANTOINE D. &

LOT 36
N/F TAKISHA BAKER
& # 137034

LOT 35
N/F
LAMAR BARNES
PARCEL # 137035
DB 1648 PG 355

LOT 34
N/F
RAYMOND WILLIAMS & LUPITA CALAMESE
PARCEL # 137036
DB 1924 PG 958

LOT 33
N/F
JOSEPH & KRISTAN L. LEMOS
PARCEL # 137037
DB 2417 PG 307

LOT 32
N/F ANTONIO C. & YOLANDA K. BRIGHT
PARCEL # 137038

LOT 31
N/F JOAN BOYER
PARCEL # 137039

LOT 30
N/F ROBERT R. & DEDRA A. SOLEI
PARCEL # 137040

TRAIL SOUTH (60' R/W)

STA 5+00 CONTINUED ON THIS SHEET

S87°47'57"W 142.37'
S87°47'57"W 136.47'
S7°44'43"E 300.55'
N7°44'43"W 300.35'

20' DRAINAGE EASEMENT
10.00'
20.00'

TOP OF BANK
TOP BANK OF SWALE
LIMIT OF DISTURBANCE
INSTALL SINGLE ROW TYPE NS SILT FENCE
Sd1-NS
Ds1 Ds2 Du
OHP
EX. WELL HOUSE
EX. WATER METER
MAILBOX
BRICK WALL
CONCRETE DRIVEWAY
1.8' X 1.8' BRICK COLUMN

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

TRLONG ENGINEERING, P.C.
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Hinesville, Georgia 31313
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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

SHEET NAME:
INITIAL ES&PC TRAIL SOUTH

REVISIONS:
1.
2.
3.
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6.
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8.
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C6.4

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\CONST\2025-231 ESPC.dwg
Plotted By: Tyler Long
Plotted Date: Sep 28, 2026 - 3:09pm

INSTALL STORM DRAIN OUTLET PROTECTION RIP RAP OVER GEOTEXTILE FABRIC USE 6" STONE La=10'

INSTALL STORM DRAIN OUTLET PROTECTION RIP RAP OVER GEOTEXTILE FABRIC USE 6" STONE La=8'

INSTALL SINGLE ROW TYPE NS SILT FENCE

INSTALL STORM DRAIN OUTLET PROTECTION RIP RAP OVER GEOTEXTILE FABRIC USE 6" STONE La=10'

INSTALL STORM DRAIN OUTLET PROTECTION RIP RAP OVER GEOTEXTILE FABRIC USE 6" STONE La=10'

INSTALL SINGLE ROW TYPE NS SILT FENCE

STA 6+00 CONTINUED ON THIS SHEET

DESIGN SPEED = 60 mi/h
STA 0+00.00 BP: 0+00.00

MAIN TRAIL (60' R/W)

CONCRETE DRIVEWAY

CONCRETE WASHOUT AREA (SEE SITE DETAILS)

INSTALL STORM DRAIN OUTLET PROTECTION RIP RAP OVER GEOTEXTILE FABRIC USE 6" STONE La=10'

INSTALL SINGLE ROW TYPE NS SILT FENCE

INSTALL STORM DRAIN OUTLET PROTECTION RIP RAP OVER GEOTEXTILE FABRIC USE 6" STONE La=10'

LIMIT OF DISTURBANCE

INSTALL STORM DRAIN OUTLET PROTECTION RIP RAP OVER GEOTEXTILE FABRIC USE 6" STONE La=10'

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

STA 5+00 CONTINUED ON THIS SHEET

LOT 13
N/F CLEO & THELMA WARTLEY
PARCEL # 137023

LOT 12
N/F CLEO & THELMA WARTLEY
PARCEL # 137022

LOT 11
N/F LONELL & WARDELL JONES
PARCEL # 137

INSTALL STORM DRAIN OUTLET PROTECTION RIP RAP OVER GEOTEXTILE FABRIC USE 6" STONE La=10'

INSTALL SINGLE ROW TYPE NS SILT FENCE

LIMIT OF DISTURBANCE

BENCHMARK
IN POWER POLE
ELV: 17.53
N:671116.54
E: 669069.16

INSTALL STORM DRAIN OUTLET PROTECTION RIP RAP OVER GEOTEXTILE FABRIC USE 6" STONE La=10'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

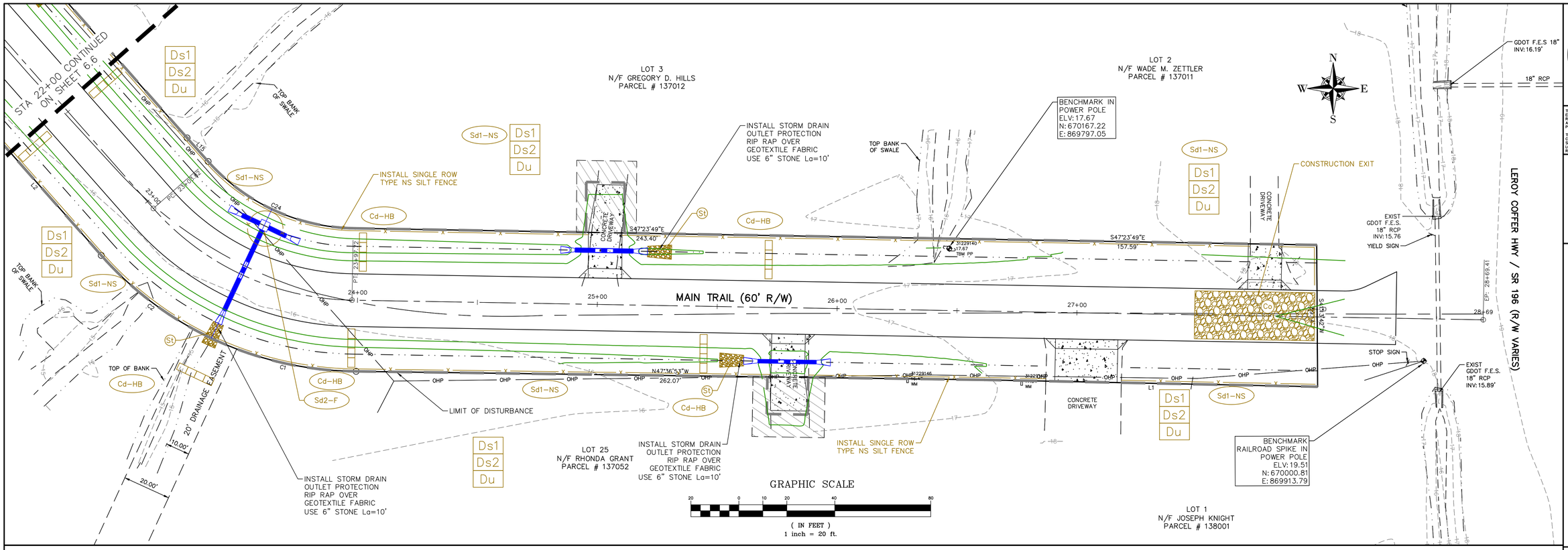
SHEET NAME:
INTERMEDIATE ES&PC MAIN TRAIL

REVISIONS:
1.
2.
3.
4.
5.
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7.
8.
9.
10

INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C6.6

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\CONST\2025-231 ESPC.dwg
Plotted By: Tyler Long
Plotted Date: Sep 28, 2026 - 3:08pm



HINESVILLE:
114 North Commerce Street
Hinesville, Georgia 31313
(912) 368-5664

STATESBORO:
302 Savannah Avenue
Statesboro, Georgia 30458
(912) 335-1046

TRLONG ENGINEERING, P.C.
www.trlongeng.com

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GSWCC# 00000002134

MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

SHEET NAME:
INTERMEDIATE ES&PC MAIN TRAIL

REVISIONS:
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C6.7

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\CONST\2025-231 ESPC.dwg
Plotted By: Tyler Long
Plotted Date: Sep 28, 2026 - 3:23pm

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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GSWCC# 00000002134

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(912) 368-5664

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Statesboro, Georgia 30458
(912) 335-1046

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LOT 13
N/F CLEO & THELMA WARTLEY
PARCEL # 137023

LOT 20
N/F MARVIN FOWLER
PARCEL # 137044

LOT 28
N/F XAVIER MCCLINTON
PARCEL # 137043

LOT 29
N/F HERSHEY HARRIMAN
PARCEL # 137041

LOT 19
N/F LEONZA HAGAN
PARCEL # 137031

LOT 36
N/F TAKISHA BAKER
137034

LOT 35
N/F
LAMAR BARNES
PARCEL # 137035
DB 1648 PG 355

LOT 34
N/F
RAYMOND WILLIAMS & LUPITA CALAMESE
PARCEL # 137036
DB 1924 PG 958

LOT 33
N/F
JOSEPH & KRISTAN L. LEMOS
PARCEL # 137037
DB 2417 PG 307

LOT 30
N/F ROBERT R. & DEDRA A. SOLEI
PARCEL # 137040

LOT 31
N/F JOAN BOYER
PARCEL # 137039

LOT 32
N/F ANTONIO C. & YOLANDA K. BRIGHT
PARCEL # 137038

LOT 37
N/F ANTOINE D. &

TRAIL SOUTH (60' R/W)

DESIGN SPEED = 60 mi/h
STA 0+00.00

STA 5+00 CONTINUED ON THIS SHEET

20' DRAINAGE EASEMENT

S27°41'57"W 142.37'

S7°44'43"E 300.55'

N7°44'43"W 300.35'

Sd2-F
Sd1-NS
Cd-HB
Ds1 Ds2 Du
St

INSTALL SINGLE ROW TYPE NS SILT FENCE

INSTALL STORM DRAIN OUTLET PROTECTION RIP RAP OVER GEOTEXTILE FABRIC USE 6" STONE La=10'

TOP OF BANK

TOP BANK OF SWALE

EX. WELL HOUSE

GRAVEL DRIVEWAY

CONCRETE DRIVEWAY

BRICK WALL

LIMIT OF DISTURBANCE

1.8' X 1.8' BRICK COLUMN

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

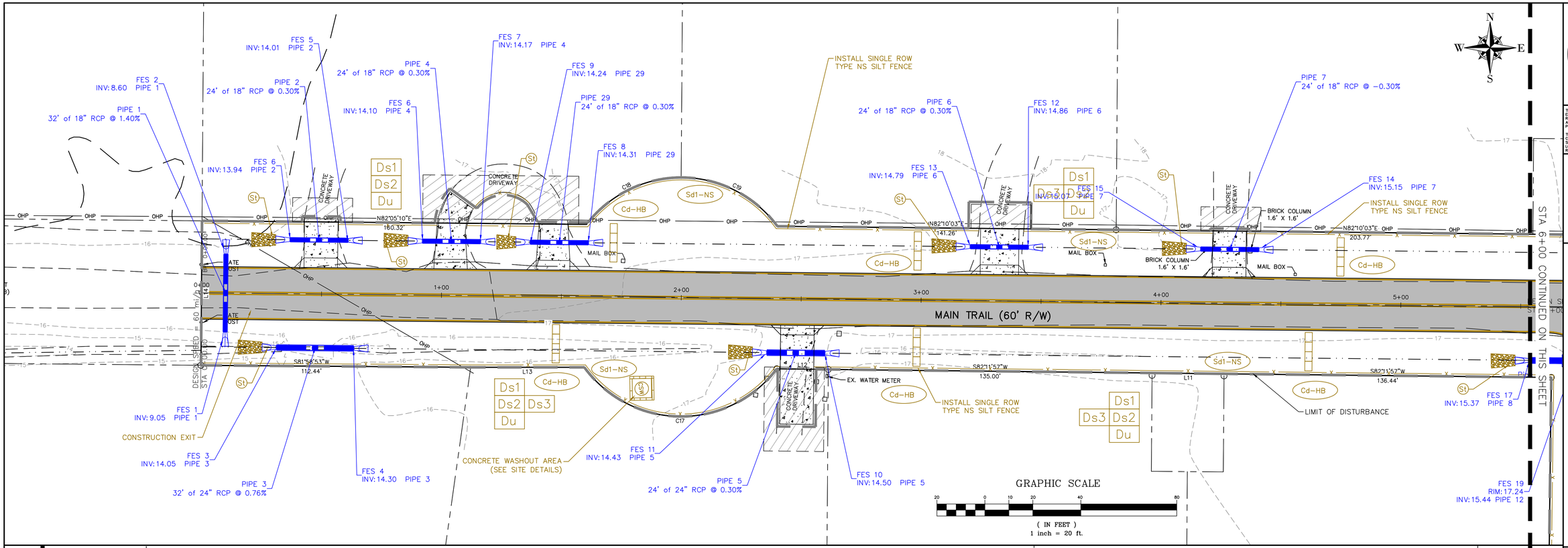
SHEET NAME:
INTERMEDIATE ES&PC TRAIL SOUTH

REVISIONS:
1.
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C6.8

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\CONST\2025-231 ESPC.dwg
Drawn By: tlong
Plotted Date: Sep 28, 2026 - 3:25pm



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GSWC# 0000002134

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114 North Commerce Street
Hinesville, Georgia 31313
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STATESBORO:
302 S. Main Avenue
Statesboro, Georgia 30458
(912) 335-1046

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

SHEET NAME:
FINAL ES&PC MAIN TRAIL

REVISIONS:
1.
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C6.9

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\CONST\2025-231 ESPC.dwg
Printed By: BRENDEN WALKER
Plotted Date: Sep 28, 2026 - 3:26pm

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

LOT 11
& CARRIE M. JONES
EL # 137020

LOT 10
N/F HENRY & KRYSTAL BAGLEY
PARCEL # 137019

LOT 9
N/F ANTONIO T. DUKES
PARCEL # 137018

LOT 8
N/F BRYON T. RAY
PARCEL # 137017

LOT 23
N/F TERRANCE K. JACKSON
PARCEL # 137047

LOT 24
N/F JESSE J. & MACKENZIE PATCHELL
PARCEL # 137048

STA 11+00 CONTINUED ON SHEET C6.9

STA 16+00 CONTINUED ON THIS SHEET

MAIN TRAIL (60' R/W)

INSTALL SINGLE ROW TYPE NS SILT FENCE

LIMIT OF DISTURBANCE

FES 24 INV: 17.04 PIPE 15

PIPE 15 24' of 18" RCP @ 0.30%

FES 27 INV: 16.60 PIPE 16

FES 26 INV: 16.71 PIPE 16

PIPE 16 24' of 18" RCP @ 0.45%

FES 28 INV: 16.21 PIPE 17

PIPE 17 33' of 15" RCP @ -0.19%

FES 60

GRATE INLET 3 RIM: 19.52 INV: 16.10 PIPE 18 INV: 16.15 PIPE 17

PIPE 18 33' of 15" RCP @ -0.15%

FES 29 INV: 16.05 PIPE 18

FES 30 INV: 16.12 PIPE 19

PIPE 19 24' of 15" RCP @ -0.59%

FES 31 INV: 15.97 PIPE 19

CONCRETE DRIVEWAY

ASPHALT DRIVEWAY

STA 16+00 CONTINUED ON THIS SHEET

LOT 7
/F DAVID A. & DOROTHY L. HOLNESS
PARCEL # 137016

LOT 6
N/F TATJANA MARIA FISHER
PARCEL # 137015

LOT 5
N/F ELIZABETH ANN NOLES
PARCEL # 137014

LOT 4
N/F LARRY D. & WENDY S. DUKE
PARCEL # 137013

LOT 26
N/F SEAN O. SR & TAWANNA WALTHOUR
PARCEL # 137049

PIPE 20 24' of 15" RCP @ -0.21%

FES 33 INV: 15.61 PIPE 20

FES 32 INV: 15.66 PIPE 20

PIPE 21 10' of 15" RCP @ 0.20%

JUNCTION BOX RIM: 18.60 INV: 15.58 PIPE 10 INV: 15.58 PIPE 9 INV: 15.48 PIPE 11

PIPE 22 32' of 15" RCP @ -0.53%

FES 36 INV: 15.57 PIPE 22

FES 37 INV: 15.42 PIPE 21

FES 41 INV: 16.06 PIPE 24

PIPE 23 45' of 18" RCP @ 0.89%

FES 39 INV: 15.00 PIPE 23

FES 42 INV: 16.14 PIPE 25

PIPE 25 24' of 18" RCP @ -0.30%

PIPE 24 24' of 18" RCP @ 0.49%

FES 40 INV: 16.18 PIPE 24

FES 43 INV: 16.07 PIPE 25

FES 44 INV: 15.74 PIPE 26

PIPE 26 24' of 18" RCP @ -0.30%

FES 45 INV: 15.67 PIPE 26

20' DRAINAGE EASEMENT
10.00'
20.00'

STA 12+00 CONTINUED ON SHEET C6.11

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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GEORGIA811.COM DIAL 811

GSWCC# 00000002134

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114 North Commerce Street
Hinesville, Georgia 31313
(912) 368-5664

STATESBORO:
302 S. Main Street Avenue
Statesboro, Georgia 30458
(912) 335-1046

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www.trlongeng.com

MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

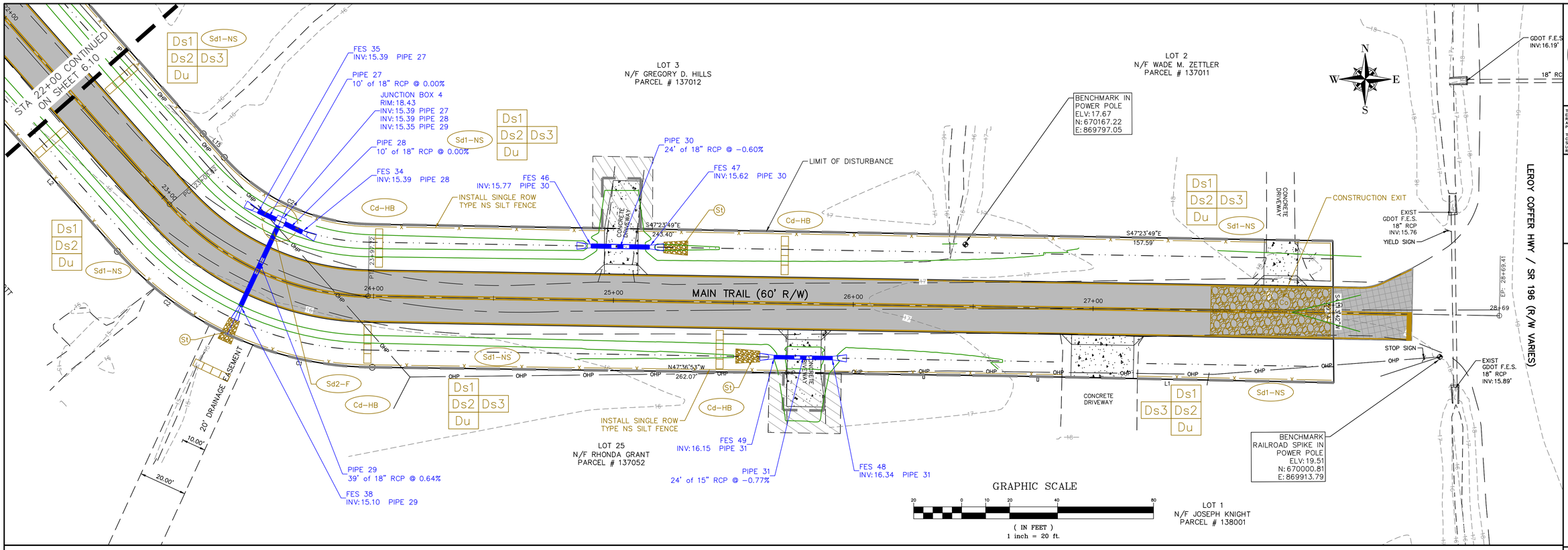
SHEET NAME:
FINAL ES&PC MAIN TRAIL

REVISIONS:
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C6.10

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\CONST\2025-231 ESPC.dwg
Drawn By: tlong
Plotted Date: Sep 28, 2026 - 3:58pm



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GSWCC# 00000002134

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Hinesville, Georgia 31313
(912) 368-5664

STATESBORO:
302 S. College Avenue
Statesboro, Georgia 30458
(912) 335-1046

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

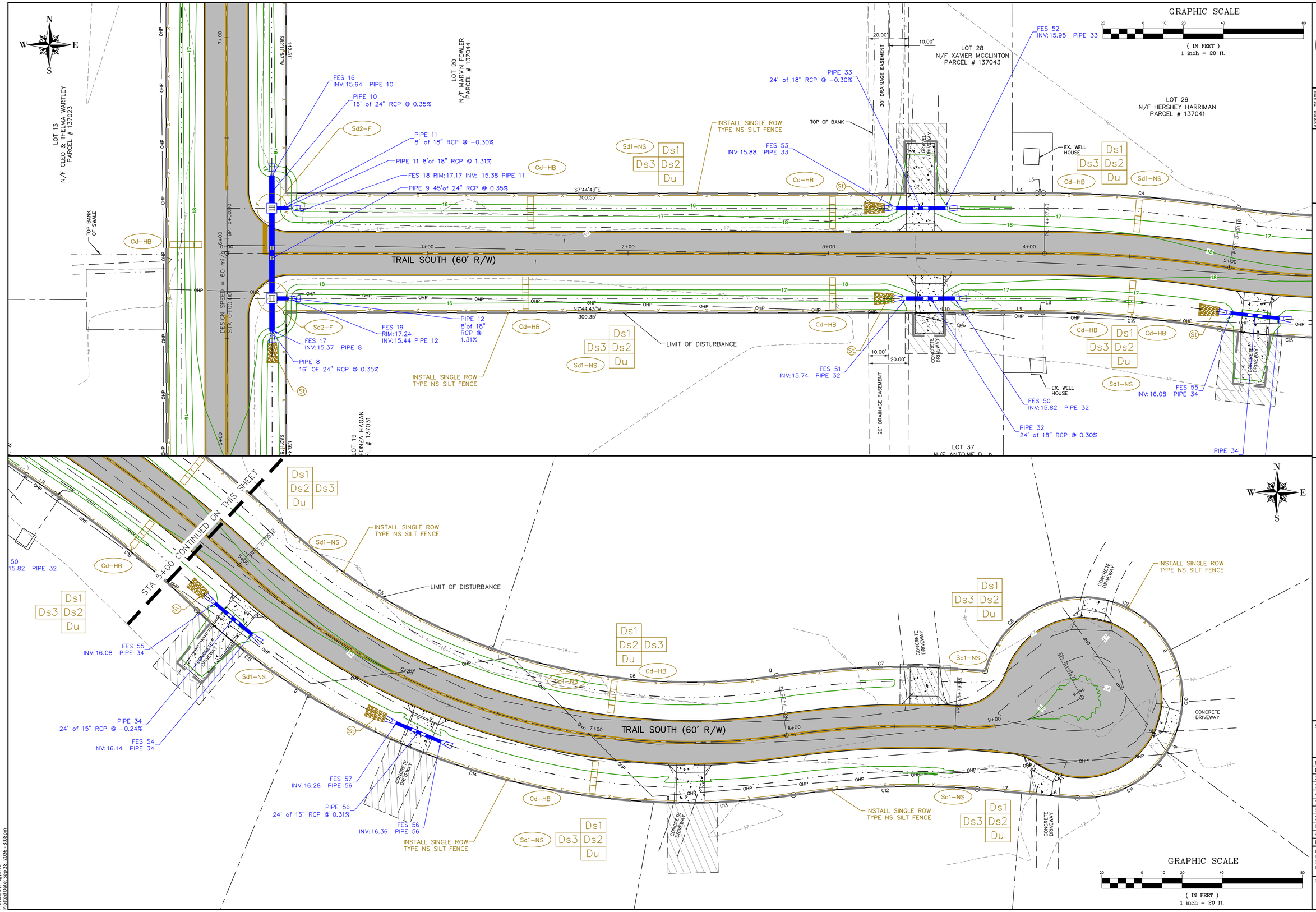
SHEET NAME:
FINAL ES&PC MAIN TRAIL

REVISIONS:
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C6.11

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\CONST\2025-231 ESPC.dwg
Plotted By: Kenneth Powell
Plotted Date: Sep 28, 2026 - 3:28pm



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GSWCC# 00000002134

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Hinesville, Georgia 31313
(912) 368-5664

STATESBORO:
302 Savannah Avenue
Statesboro, Georgia 30458
(912) 335-1046

TRLONG ENGINEERING, P.C.

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

SHEET NAME:
FINAL ES&PC TRAIL SOUTH

REVISIONS:
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INITIAL DATE: 02/26/2022
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2025-231

SHEET NUMBER:
C6.12

Drawing File: G:\ACTIVE PROJECTS\2025-231 H - Main Trail Roadway Repairs\900-DRAWINGS\DWG\CONST\2025-231 ESPC.dwg
Drawing Sheet: Sheet1
Plotted Date: Sep 28, 2026 - 3:08pm

PROJECT INFORMATION

PROJECT TITLE: MAIN TRAIL ROADWAY IMPROVEMENTS

OWNER: LIBERTY COUNTY, BOARD OF COMMISSIONERS

112 NORTH MAIN STREET
HINESVILLE, GEORGIA 31313
(912)876-2164

24 HOUR CONTACT: TRENT LONG
(912) 368-5664
TRLONG@TRLONGENG.COM

ENGINEER: T.R. LONG ENGINEERING, P.C.
114 NORTH COMMERCE ST.
HINESVILLE, GEORGIA 31313
(912) 368-5664

GOVERNING AUTHORITY: LIBERTY COUNTY
112 N. MAIN STREET
HINESVILLE, GA 31313
(912) 876-8454

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
STAND ALONE CONSTRUCTION PROJECTS

SWCD: COASTAL GEORGIA
PROJECT NAME: MAIN TRAIL ROADWAY IMPROVEMENTS ADDRESS: GODLEY ROAD
CITY/COUNTY: PORT WENTWORTH, CHATHAM COUNTY DATE ON PLANS: 02/26/2022
NAME & EMAIL OF PERSON FILLING OUT CHECKLIST: TRENT LONG, trlong@trlongeng.com

EROSION, SEDIMENT, & POLLUTION CONTROL PLAN CHECKLIST

1. *REQUIREMENT: 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.*

   RESPONSE: **THE 2026 EROSION, SEDIMENT AND POLLUTION CONTROL PLAN CHECKLIST FOR INFRASTRUCTURE WAS USED FOR THIS PROJECT.**

2. *REQUIREMENT: LEVEL II CERTIFICATION NUMBER ISSUED BY THE COMMISSION, SIGNATURE AND SEAL OF THE CERTIFIED DESIGN PROFESSIONAL.*

   RESPONSE: **THE LEVEL II CERTIFICATION NUMBER ISSUED BY THE COMMISSION, SIGNATURE AND SEAL OF THE CERTIFIED DESIGN PROFESSIONAL IS FOUND ON THE UPPER RIGHT HAND SIDE OF ALL SHEETS.**

3. *REQUIREMENT: THE NAME AND PHONE NUMBER OF THE 24-HOUR LOCAL CONTACT RESPONSIBLE FOR EROSION, SEDIMENTATION AND POLLUTION CONTROLS.*

   RESPONSE: **THE NAME AND PHONE NUMBER OF THE 24-HOUR LOCAL CONTACT IS SHOWN IN THE ABOVE "PROJECT INFORMATION" SECTION.**

4. *REQUIREMENT: PROVIDE THE NAME, ADDRESS, EMAIL ADDRESS AND PHONE NUMBER OF THE PRIMARY PERMITTEE.*

   RESPONSE: **THE NAME, ADDRESS AND PHONE NUMBER OF THE PRIMARY PERMITTEE IS SHOWN ABOVE ON THE "PROJECT INFORMATION" SECTION.**

5. *REQUIREMENT: NOTE TOTAL AND DISTURBED ACREAGE OF THE PROJECT OR PHASE UNDER CONSTRUCTION.*

   RESPONSE: THE TOTAL ACREAGE OF THE SITE IS 10.51 AND THE DISTURBED ACREAGE IS 5.47

6. *REQUIREMENT: PROVIDE THE GPS LOCATIONS OF THE BEGINNING AND END OF THE INFRASTRUCTURE PROJECT. GIVE THE LATITUDE AND LONGITUDE IN DECIMAL DEGREES.*

   RESPONSE: **THE GPS LOCATIONS OF THE BEGINNING OF THE PROJECT IS N31°50'35.12", W81°29'03.92" AND END OF THE PROJECT IS N31°50'25.04", W81°28'41.62" .**

7. *REQUIREMENT: INITIAL DATE OF THE PLAN AND THE DATES OF ANY REVISIONS MADE TO THE PLAN INCLUDING THE ENTITY WHO REQUESTED THE REVISIONS.*

   RESPONSE: **THE INITIAL DATE AND ANY REVISIONS ARE ON THE BOTTOM RIGHT SIDE OF ALL SHEETS**

8. *REQUIREMENT: DESCRIPTION OF THE NATURE OF CONSTRUCTION ACTIVITY AND EXISTING SITE CONDITIONS..*

   RESPONSE: **THE PROJECT CONSISTS OF ROADWAY IMPROVEMENTS TO MAIN TRAIL AND SOUTH TRAIL, INCLUDING PAVEMENT RECONSTRUCTION, SHOULDER REBUILDING, DRIVEWAY TIE-INS, STORM DRAINAGE IMPROVEMENTS, GRADING, AND ASSOCIATED EROSION AND SEDIMENT CONTROL MEASURES. THE EXISTING SITE CONSISTS OF PAVED RESIDENTIAL ROADWAYS, ROADSIDE DITCHES, RESIDENTIAL DRIVEWAYS, AND EXISTING STORM DRAINAGE FACILITIES.**

9. *REQUIREMENT: PROVIDE VICINITY MAP SHOWING SITE'S RELATION TO SURROUNDING AREAS. INCLUDE DESIGNATION OF SPECIFIC PHASE, IF NECESSARY.*

   RESPONSE: **A VICINITY MAP IS SHOWN ON THE TITLE SHEET OF THESE PLANS.**

10. *REQUIREMENT: IDENTIFY THE PROJECT RECEIVING WATERS AND DESCRIBE ALL SENSITIVE ADJACENT AREAS INCLUDING STREAMS, LAKES, RESIDENTIAL AREAS, WETLANDS, ETC. WHICH MAY BE AFFECTED.*

    RESPONSE: **STORMWATER RUNOFF FROM THE PROJECT SITE IS CONVEYED THROUGH EXISTING AND PROPOSED ROADSIDE DITCHES AND STORM DRAINAGE FACILITIES TO A TRIBUTARY OF CAY CREEK.**

11. *REQUIREMENT: 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.*

    RESPONSE: **PLEASE SEE THE DESIGN PROFESSIONAL'S CERTIFICATION SECTION ON THIS SHEET.**

12. *REQUIREMENT: 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.*

    RESPONSE: **PLEASE SEE THE DESIGN PROFESSIONAL'S 7 DAY VISIT CERTIFICATION ON SECTION ON THIS SHEET.**

13. *REQUIREMENT: DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE PERMITTEE'S ES&PC PLAN PROVIDES REPRESENTATIVE SAMPLING AS STATED ON PART IV.D.6.c(3) PAGE 37 OF THE PERMIT AS APPLICABLE.*

    RESPONSE: **PLEASE SEE THE DESIGN PROFESSIONAL'S 7 DAY VISIT CERTIFICATION ON SECTION ON THIS SHEET.**

14. *REQUIREMENT: 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 AND PERIMETER CONTROL BMPS WITHIN 7 DAYS AFTER INSTALLATION." IN ACCORDANCE WITH PART IV.A.5 PAGE 26 OF THE PERMIT.*

    RESPONSE: **PLEASE SEE THE DESIGN PROFESSIONAL'S 7 DAY VISIT CERTIFICATION ON SECTION ON THIS SHEET.**

15. *REQUIREMENT: 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."*

    RESPONSE: **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 WITH 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.**

16. *REQUIREMENT: PROVIDE A DESCRIPTION OF ANY BUFFER ENCROACHMENTS AND INDICATE WHETHER A BUFFER VARIANCE IS REQUIRED.*

    RESPONSE: **THIS PROJECT SHOULD NOT ENCROACH ON ANY BUFFERS.**

17. *REQUIREMENT: 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."*

    RESPONSE: **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.**

18. *REQUIREMENT: CLEARLY NOTE THE STATEMENT THE "WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT."*

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

19. *REQUIREMENT: CLEARLY NOTE THE 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."*

    RESPONSE: **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.**

20. *REQUIREMENT: 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."*

    RESPONSE: **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.**

21. *REQUIREMENT: CLEARLY NOTE THE STATEMENT "ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING."*

    RESPONSE: **ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING. SEE MULCHING AND VEGETATIVE PLAN REQUIREMENTS ON DETAIL SHEETS.**

22. *REQUIREMENT: 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 AN 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.*

    RESPONSE: **NO CONSTRUCTION ACTIVITY WILL DISCHARGE IN STORM WATER INTO AN IMPAIRED STREAM OR 1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATER SHED AS, ANY PORTION OF AN BIOTA IMPAIRED STREAM SEGMENT. THE SITE IS NOT LOCATED WITHIN ONE MILE OF AN IMPAIRED STREAM.**

23. *REQUIREMENT: 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.*

    RESPONSE: **NO TMDL IMPLEMENTATION PLAN IS NEEDED FOR THIS SITE.**

24. *REQUIREMENT: 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.*

    RESPONSE: **A CONCRETE WASHOUT AREA HAS BEEN ILLUSTRATED ON EACH EROSION CONTROL SHEET. NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON-SITE.**

25. *REQUIREMENT: PROVIDE BMPS FOR THE REMEDIATION OF ALL PETROLEUM SPILLS AND LEAKS.*

    RESPONSE:

- **CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.**
- **MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.**
- **SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.**
- **ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS.**
- **FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.**
- **FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.**
- **FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.**
- **FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.**
- **THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1320 GALLONS OF PETROLEUM IS STORED ON-SITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL.**

26. *REQUIREMENT: 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.*

    RESPONSE:

- **DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)**
  - **a. USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS, AND OTHER DENUDED AREAS.**
  - **b. FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES, AT LEAST 70% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION OR EQUIVALENT PERMANENT STABILIZATION MEASURES.**
  - **c. PERMANENT VEGETATION SHALL CONSIST OF: PLANTED TREES, SHRUBS, PERENNIAL VINES; A CROP OF PERENNIAL VEGETATION APPROPRIATE FOR THE REGION, SUCH THAT WITHIN THE GROWING SEASON A 70% COVERAGE BY PERENNIAL VEGETATION SHALL BE ACHIEVED**
  - **d. USE CONVENTIONAL PLANTING METHODS WHEN POSSIBLE.**
  - **e. WHEN MIXED PLANTINGS ARE DONE DURING MARGINAL PLANTING PERIODS, COMPANION CROPS SHALL BE USED.**
  - **f. IRRIGATION SHOULD BE USED WHEN THE SOIL IS DRY OR WHEN SUMMER PLANTINGS ARE DONE.**
  - **g. LOW MAINTENANCE PLANTS, AS WELL AS NATIVES, SHOULD BE USED TO ENSURE LONG-LASTING EROSION CONTROL.**
  - **h. MOWING SHOULD NOT BE PERFORMED DURING QUAIL NESTING SEASON (MAY TO SEPTEMBER).**
  - **i. WILDLIFE PLANTINGS SHOULD BE INCLUDED IN CRITICAL AREA PLANTINGS.**
  - **j. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT.**
  - **k. AGRICULTURAL LIME IS REQUIRED AT THE RATE OF ONE TO TWO TONS PER ACRE UNLESS SOIL TESTS INDICATE OTHERWISE. GRADED AREAS REQUIRE LIME APPLICATION. IF LIME IS ALLIED WITHIN SIX MONTHS OF PLANTING PERMANENT PERENNIAL VEGETATION, ADDITIONAL LIME IS NOT REQUIRED.**
  - **l. AGRICULTURAL LIME SHALL BE WITHIN THE SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF AGRICULTURE. LIME SPREAD BY CONVENTIONAL EQUIPMENT SHALL BE "GROUND LIMESTONE" AND LIME SPREAD BY HYDRAULIC SEEDING EQUIPMENT SHALL BE "FINELY GROUND LIMESTONE."**
  - **m. WHEN HYDRAULIC SEEDING EQUIPMENT IS USED, THE INITIAL FERTILIZER SHALL BE MIXED WITH SEED, INNOCULANT (IF NEEDED), AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH AND APPLIED IN A SLURRY. THE INNOCULANT, IF NEEDED, SHALL BE MIXED WITH THE SEED PRIOR TO BEING PLACED INTO THE HYDRAULIC SEEDER. THE SLURRY MIXTURE WILL BE AGITATED DURING APPLICATION TO KEEP THE INGREDIENTS THOROUGHLY MIXED. THE MIXTURE WILL BE SPREAD UNIFORMLY OVER THE AREA WITHIN ONE HOUR AFTER BEING PLACED IN THE HYDROSEEDER.**
  - **n. WHEN CONVENTIONAL PLANTING IS TO BE DONE, LIME AND FERTILIZER SHALL BE APPLIED UNIFORMLY IN ONE OF THE FOLLOWING WAYS: 1. APPLY BEFORE LAND PREPARATION SO THAT IT WILL BE MIXED WITH THE SOIL DURING SEEDBED PREPARATION. 2. MIX WITH THE SOIL USED TO FILL THE HOLES, DISTRIBUTE IN FURROWS. 3. BROADCAST AFTER STEEP SURFACES ARE SCARIFIED, PITTED OR TRENCHED. 4. A FERTILIZER PELLET SHALL BE PLACED AT ROOT DEPTH IN THE CLOSING HOLE BESIDE EACH PINE TREE SEEDLING.**
  - **o. MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. 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.**
  - **p. MOW SERICEA LESPEDEZA ONLY AFTER FROST TO ENSURE THAT THE SEEDS ARE MATURE. MOW BETWEEN NOVEMBER AND MARCH. BERMUDAGRASS, BAHIAGRASS AND TALL FESCUE MAY BE MOWED AS DESIRED. MAINTAIN AT LEAST 6 INCHES OF TOP GROWTH UNDER ANY USE AND MANAGEMENT. MODERATE USE OF TOP GROWTH IS BENEFICIAL AFTER ESTABLISHMENT. EXCLUDE TRAFFIC UNTIL THE PLANTS ARE WELL ESTABLISHED. BECAUSE OF THE QUAIL NESTING SEASON, MOWING SHOULD NOT TAKE PLACE BETWEEN MAY AND SEPTEMBER.**
  - **q. APPLY ONE TON OF AGRICULTURAL LIME EVERY 4 TO 6 YEARS OR AS INDICATED BY SOIL TESTS. SOIL TESTS CAN BE CONDUCTED TO DETERMINE MORE ACCURATE REQUIREMENTS IF DESIRED.**

- **VEGETATED WATERWAY OR STORMWATER CONVEYANCE**
  - **a. A NATURAL OR CONSTRUCTED CHANNEL THAT IS SHAPED OR GRADED TO REQUIRED DIMENSIONS AND ESTABLISHED IN SUITABLE VEGETATION FOR THE STABLE CONVEYANCE OF RUNOFF WITHOUT CAUSING DAMAGE EITHER BY EROSION OR BY FLOODING.**
  - **b. THIS STANDARD APPLIES TO ALL SITES WHERE ADDED CHANNEL CAPACITY AND/OR STABILIZATION IS REQUIRED TO CONTROL EROSION RESULTING FROM CONCENTRATED RUNOFF AND WHERE SUCH CONTROL CAN BE ACHIEVED BY THIS PRACTICE ALONE OR IN COMBINATION WITH OTHERS**
  - **c. THE MINIMUM CAPACITY SHALL BE THAT REQUIRED TO CONVEY THE PEAK RUNOFF EXPECTED FROM A 25-YEAR, 24-HOUR STORM OR THE STORM SPECIFIED IN THE GSWCC EROSION AND SEDIMENT CONTROL MANUAL.**
  - **d. CONSTRUCTION SPECIFICATIONS**
    - **d.1. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE WATERWAY.**
    - **d.2. THE WATERWAY OR OUTLET SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN. IT WILL BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW. IF THE CHANNEL MUST HAVE EROSION PROTECTION OTHER THAN VEGETATION, THE LINING SHALL NOT COMPROMISE THE CAPACITY OF THE EMERGENCY SPILLWAY, I.E. THE CHANNEL SHALL BE OVER-EXCAVATED SO THAT THE LINING WILL BE FLUSH WITH THE SLOPE SURFACE.**
    - **d.3. FILLS SHALL BE COMPACTED AS NEEDED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETED WATERWAY.**
    - **d.4. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO THAT IT WILL NOT INTERFERE WITH WATERWAY FUNCTIONING.**
    - **d.5. STABILIZATION: APPLICABLE VEGETATIVE STANDARDS SHALL BE FOLLOWED FOR TIME OF SEEDING, SPRIGGING OR SODDING, LIMING AND FERTILIZING, AND SITE AND SEEDBED PREPARATION. EROSION CONTROL BLANKETS OR MATTING OR SOD SHALL BE USED TO AID IN THE ESTABLISHMENT OF VEGETATION. INSTALLATION METHODS SHOULD FOLLOW MANUFACTURER RECOMMENDATIONS.**
  - **e. MULCHING SHALL BE A REQUIREMENT FOR ALL SEEDED OR SPRIGGED CHANNELS. TEMPORARY PROTECTION DURING ESTABLISHMENT SHOULD BE PROVIDED WHEN CONDITIONS PERMIT THROUGH TEMPORARY DIVERSIONS OR OTHER MEANS TO DISPOSE OF WATER.**

27. DESCRIPTION OF PRACTICES TO PROVIDE COVER FOR BUILDING MATERIALS AND BUILDING PRODUCTS ON SITE.

    RESPONSE: **PLASTIC SHEETING OR TEMPORARY ROOFS TO BE UTILIZED TO COVER BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTE, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS IN ORDER TO MINIMIZE EXPOSURE TO PRECIPITATION AND TO STORMWATER.**

28. REQUIREMENT: DESCRIPTION OF THE PRACTICES THAT WILL BE USED TO REDUCE THE POLLUTANTS IN STORM WATER DISCHARGES.

    RESPONSE:

PRODUCT SPECIFIC PRACTICES

- **PETROLEUM BASED PRODUCTS - CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS, AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS, AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS, AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.**
- **POINTS/FINISHES/SOLVENTS - ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.**
- **CONCRETE TRUCK WASHING - A CONCRETE WASHOUT AREA HAS BEEN DETAILED FOR THIS SITE.**
- **FERTILIZER/HERBICIDES - THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR THE EROSION AND SEDIMENT CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS.**
- **BUILDING MATERIALS - NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTE DISPOSAL PROCEDURES**
- **PRIOR TO THE LAND DISTURBING CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE AREA SITE DEVELOPMENT INSPECTOR.**

OTHER PRACTICES

- **THE CONTRACTOR SHALL OBSERVE THE PROJECT SEQUENCE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO INSURE THAT LAND STRIPPED OF IT'S NATURAL COVER IS EXPOSED ONLY IN SMALL QUANTITIES.**
- **A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES.**
- **PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE AND ALL STREAM BUFFERS SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.**
- **THE FOLLOWING INITIAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY.**
  - **a. THE CONSTRUCTION EXIT, CONSISTING OF A MINIMUM PAD SIZE OF 20 FEET BY 50 FEET WITH A MINIMUM OF 6" THICK STONE, SHALL BE PLACED AS SHOWN ON THE PLAN. THE STONE SIZE SHOULD CONSIST OF COURSE AGGREGATE BETWEEN 1-1/2" & 3-1/2" IN DIAMETER AND OVERLAID ON A GEOTEXTILE UNDERLINER. THE GEOTEXTILE UNDERLINER SHALL MEET THE REQUIREMENTS OF AASHTO M288-96, SECTION 7.3 SEPARATION REQUIREMENTS.**
  - **b. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXITS, ALL PERIMETER EROSION CONTROL AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE INITIAL PHASE EROSION CONTROL PLAN.**
  - **c. SILT FENCE SHOULD BE INSTALLED AT THE PERIMETER OF THE DISTURBED AREA AS SHOWN ON THE PLAN. THE SILT FENCE SHOULD BE PLACED IN ACCORDANCE WITH THE MANUAL FOR EROSION CONTROL IN GEORGIA. THE SILT FENCE SHOULD BE KEPT ERECT AT ALL TIMES AND REPAIRED WHEN REQUESTED BY THE SITE INSPECTOR OR THE PROJECT DESIGN PROFESSIONAL OF RECORD. SILT SHOULD BE REMOVED WHEN ACCUMULATION REACHES 1/2 HEIGHT OF THE BARRIER. THE PERIMETER SILT FENCE SHOULD BE INSPECTED DAILY FOR ANY FAILURES. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.**
- **AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN PROFESSIONAL. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT DESIGN PROFESSIONAL APPROVES THE INSTALLATION OF SAID EROSION CONTROL MEASURES. IF UNFORESEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTION.**
- **AFTER APPROVAL OF THE INITIAL EROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CLEARING AND GRUBBING ACTIVITIES. AS CLEARING PERMITS, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT PONDS AND DIVERSION DIKES AS SHOWN ON THE INITAL PHASE PLAN TO CONTROL EROSION AND STORM WATER RUN OFF.**
- **NO BURN OR BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE WITHOUT WRITTEN PERMISSION BY THE OWNER AND/OR THE ENGINEER OF RECORD.**
- **ADDITIONAL SILT BARRIERS MUST BE PLACED AS SHOWN ON THE PLAN AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL TAKE PLACE UNTIL SILT BARRIER INSTALLATION AND SEDIMENT PONDS ARE CONSTRUCTED AS SHOWN ON THE INITAL PHASE EROSION CONTROL PLAN.**
- **MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE.**
- **ALL DISTURBED AREAS LEFT MULCHED AFTER 30 DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION.**
- **SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS

EROSION, SEDIMENT, & POLLUTION CONTROL PLAN CHECKLIST (CONTINUED)

30. *REQUIREMENT: PROVIDE COMPLETE REQUIREMENTS OF INSPECTIONS AND RECORD KEEPING BY THE PRIMARY PERMITTEE.**

RESPONSE:
• EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTE 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.

• 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.

• CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (a) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (b) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (c) STRUCTURAL CONTROL MEASURES, EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.a.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

• CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECTED AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION HAS BEEN SUBMITTED) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING 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).

• 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.

• 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 PROJECT 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 BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT

31. *REQUIREMENT: PROVIDE COMPLETE REQUIREMENTS OF SAMPLING FREQUENCY AND REPORTING OF SAMPLING RESULTS.**

RESPONSE:
SAMPLING FREQUENCY
• 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 IN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.

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

• 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 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 STORM WATER 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 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.**

REPORTING.
• THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C. BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT. SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT. UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS. SAMPLING AND ANALYSIS OF ANY STORM WATER 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. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. 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.

• ALL SAMPLING REPORTS RESULTS 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.

• 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.

32. *REQUIREMENT: PROVIDE COMPLETE DETAILS FOR RETENTION OF RECORDS AS PER PART IV.F. OF THE PERMIT.**

RESPONSE: **THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI:**
a. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;
b. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;
c. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT;
d. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
e. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT;
f. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT; AND
g. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(2) OF THIS PERMIT.

2. **COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, INSPECTION REPORTS, SAMPLING REPORTS (INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION) OR OTHER REPORTS REQUESTED BY THE EPD, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI. OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE**

33. *REQUIREMENT: DESCRIPTION OF ANALYTICAL METHODS TO BE USED TO COLLECT AND ANALYZE THE SAMPLES FROM EACH LOCATION.**

RESPONSE: **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 STORMWATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.**

a. SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.
b. SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.
c. 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.
d. 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 QUALIFIED EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.
e. SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV. E.

STORM WATER IS TO BE SAMPLED FOR NEPHELOMETRIC TURBIDITY UNITS (NTU) AT THE OUTFALL LOCATION. A DISCHARGE OF STORM WATER RUNOFF FROM DISTURBED AREAS WHERE BEST MANAGEMENT PRACTICES HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH CONDITION RESULTS IN THE TURBIDITY OF THE DISCHARGE EXCEEDING 50, THE VALUE THAT WAS SELECTED FROM APPENDIX B IN PERMIT NO. GAR100002. THE NTU IS BASED UPON THE SITE ACREAGE OF 5.47 ACRES FOR THE PROJECT SITE. THE SURFACE WATER DRAINAGE AREA OF 0.054 SQUARE MILES, AND RECEIVING WATER WHICH SUPPORTS WARM WATER FISHERIES.

34. REQUIREMENT: APPENDIX B RATIONALE FOR NTU VALUES AT ALL OUTFALL SAMPLING POINTS WHERE APPLICABLE.*

RESPONSE:

SURFACE WATER DRAINAGE AREA, SQUARE MILES

SITE ACREAGE	0–4.99	5–9.99	10–24.99	25–49.99	50–99.99	100–249.99	250–499.99	500+
1.00–10	75	150	200	400	750	750	750	750
10.01–25	50	100	100	200	300	500	750	750
25.01–50	50	50	100	100	200	300	750	750
50.01–100	50	50	50	100	100	150	300	600
100.01+	50	50	50	50	50	100	200	100

APPENDIX B
NEPHELOMETRIC TURBIDITY UNIT (NTU) TABLE

35. *REQUIREMENT: DELINEATE ALL SAMPLING LOCATIONS IF APPLICABLE. 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.**

RESPONSE: **FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORM WATER OUTFALLS USING THE FOLLOWING MINIMUM GUIDELINES:**
a. THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORM WATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.
b. THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORM WATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.
c. 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 STORM WATER CHANNEL.
e. THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.
f. THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.
g. PERMITTEES DO NOT HAVE TO SAMPLE SHEETFLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION, STABILIZED SHALL MEAN, FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY EPD FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR LANDSCAPED ACCORDING TO THE PLAN (UNIFORMLY COVERED WITH LANDSCAPING MATERIALS IN PLANNED LANDSCAPED AREAS), OR EQUIVALENT PERMANENT STABILIZATION MEASURES AS DEFINED IN THE MANUAL (EXCLUDING A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET CROP PERENNIALS APPROPRIATE FOR THE REGION).
h. ALL SAMPLING PURSUANT TO THIS PERMIT MUST BE DONE IN SUCH A WAY (INCLUDING GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING, AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORM WATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.3. OR III.D.4.., WHICHEVER IS APPLICABLE.

36. *REQUIREMENT: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.**

RESPONSE: **SEE ITEM 28 FOR A DESCRIPTION OF ALL INITIAL AND INTERMEDIATE BMPS AND ITEM 26 FOR A DESCRIPTION OF ALL FINAL BMPS. PLEASE SEE THE EROSION CONTROL PLAN TO SEE WHERE THESE BMPS ARE TO IMPLEMENTED.**

37. *REQUIREMENT: GRAPHIC SCALE AND NORTH ARROW.*

RESPONSE: **THE CORRECT GRAPHIC SCALE AND NORTH ARROW ARE SHOWN ON ALL SHEETS WHERE APPLICABLE.**

38. REQUIREMENT: 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

RESPONSE: **CONTOURS ARE SHOWN IN 1' INTERVALS.**

39. *REQUIREMENT: 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.ORG.*

RESPONSE: **NO ALTERNATIVE BMPS WILL BE USED.**

40. *REQUIREMENT: 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.**

RESPONSE: **NO ALTERNATIVE BMPS WILL BE USED.**

41. *REQUIREMENT: 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.*

RESPONSE: **THERE ARE NO 25-FOOT OR 50-FOOT UNDISTURBED BUFFERS REQUIRED FOR THE SITE. THERE ARE NO STATE WATERS ADJACENT TO THE SITE AND NO ADDITIONAL BUFFERS ARE REQUIRED BY THE LOCAL ISSUING AUTHORITY.**

42. *REQUIREMENT: DELINEATION OF ON-SITE WETLANDS AND ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE.*

RESPONSE: **THERE ARE NO ON-SITE WETLANDS AND STATE WATERS LOCATED ON AND WITHIN 200' OF THE SITE.**

43. *REQUIREMENT: DELINEATION AND ACREAGE OF CONTRIBUTING DRAINAGE BASINS ON THE PROJECT SITE.*

RESPONSE: **ALL DRAINAGE BASIN INFORMATION IS SHOWN IN THE HYDROLOGY STUDY PROVIDED WITH THESE PLANS.**

44. *REQUIREMENT: DELINEATE ON-SITE DRAINAGE AND OFF-SITE WATERSHEDS USING USGS 1"=2000' TOPOGRAPHICAL SHEETS.*

RESPONSE: **A HYDROLOGY REPORT INCLUDING A DRAINAGE NARRATIVE, DRAINAGE CALCULATIONS AND DELINEATION OF PRE AND POST DEVELOPED CONDITIONS IS PROVIDED WITH THESE PLANS ALONG WITH THE USGS TOPOGRAPHICAL SHEET.**

45. *REQUIREMENT: AN ESTIMATE OF THE RUNOFF COEFFICIENT OR PEAK DISCHARGE FLOW OF THE SITE PRIOR TO AND AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED.*

RESPONSE: **THE PRE-DEVELOPMENT RUNOFF COEFFICIENT IS 73. THE POST-DEVELOPMENT RUNOFF COEFFICIENT IS 73.**

46. *REQUIREMENT: STORM-DRAIN PIPE AND WEIR VELOCITIES WITH APPROPRIATE OUTLET PROTECTION TO ACCOMMODATE DISCHARGES WITHOUT EROSION. IDENTIFY/DELINEATE ALL STORM WATER DISCHARGE POINTS.*

RESPONSE: **THE STORM-DRAIN PIPE AND WEIR VELOCITIES ARE SHOWN ON THE EROSION CONTROL PLAN AS WELL AS APPROPRIATE OUTLET PROTECTION FOR EACH.**

47. *REQUIREMENT: SOIL SERIES FOR THE PROJECT SITE AND THEIR DELINEATION*

RESPONSE: **THE SOIL SERIES IS SHOWN ON THE INITIAL EROSION CONTROL PLAN.**

48. *REQUIREMENT: THE LIMITS OF DISTURBANCE FOR EACH PHASE OF CONSTRUCTION.*

RESPONSE: **THE LIMITS OF DISTURBANCE ARE SHOWN ON EACH EROSIONS CONTROL SHEET.**

49. *REQUIREMENT: 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 LOCATIN 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 VOLUME WHEN USING EQUIVALENT CONTROLS. WHEN DISCHARGING FROM SEDIMENT BASINS AND IMPOUNDMENTS, PERMITEES 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 FEASABLE, A WRITTEN JUSTIFICATION EXPLAINING THIS DECISION MUST BE INCLUDED IN THE PLAN.*

RESPONSE: THE REQUIRED SEDIMENT STORAGE IS (5.47 ACRES)(67CY/ACRE) = 366.49 CY. THE PROVIDED SEDIMENT STORA

DS1
DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

DEFINITION
APPLYING PLANT RESIDUES OR OTHER SUITABLE MATERIALS, PRODUCED ON THE SITE IF POSSIBLE, TO THE SOIL SURFACE.

PURPOSE
1. TO REDUCE RUNOFF EROSION
2. TO CONSERVE MOISTURE
3. TO PREVENT SURFACE COMPACTION OR CRUSTING
4. TO CONTROL UNDESIRABLE VEGETATION
5. TO INCREASE BIOLOGICAL ACTIVITY IN THE SOIL.

REQUIREMENT FOR REGULATORY COMPLIANCE
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 WLL 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 BARRIERS.
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. 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 MECHANICAL EQUIPMENT.
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. 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. TACKIFIERS, BINDERS AND HYDRAULIC MULCH WITH TACKIFIERS SPECIFICALLY DESIGNED FOR TACKING STRAW CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT. PLEASE REFER TO SPECIFICATION TACKIFIERS. 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.

APPLICATION RATE FOR EACH TYPE OF SOIL ENCOUNTERED ON THE SITE.

MULCHING: MULCHING IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCHING 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 A RATE OF 500 LBS PER ACRE. DRY STRAW R DRY HAY SHALL BE APPLIED AFTER HYDRAULIC SEEDING.
3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OF WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES GREATER THAN 3/4:1 OR STEEPER.
4. SERICEA 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" FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITIES 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, MULCHING IS NOT REQUIRED.

MULCHING
NOT TO SCALE
Ds1

DS2
DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

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

PURPOSE:
1. TO REDUCE RUNOFF AND SEDIMENT DAMAGE OF DOWN STREAM RESOURCES
2. TO PROTECT THE SOIL SURFACE FROM EROSION
3. TO IMPROVE WILDLIFE HABITAT
4. TO IMPROVE AESTHETICS
5. TO IMPROVE TILTH, INFILTRATION AND AERATION AS WELL AS ORGANIC MATTER FOR PERMANENT PLANTINGS

REQUIREMENT FOR REGULATORY COMPLIANCE:
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTUR– BANCE. TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO ROUGH GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. IF AN AREA IS EXPECTED TO BE UNDISTURBED FOR LONGER THAN SIX MONTHS, PERMANENT PERENNIAL VEGETATION SHALL BE USED. IF OPTIMUM PLANTING CONDITIONS FOR TEMPORARY GRASSING IS LACKING, MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, ANCHORED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE.

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.

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.

GRASSING TEMPORARY
NOT TO SCALE
Ds2

SEEDING RATES FOR TEMPORARY SEEDING.

SPECIES	RATE PER 1,000 SQ.FT.	RATE PER ACRE.*	PLANTING DATES**
RYE	3.9 LBS.	3 BU	9/1 – 3/1
RYE GRASS	0.9 LBS.	40 LBS.	8/15 – 4/1
ANNUAL LESPEDEZA	0.9 LBS.	40 LBS.	1/15 –9/15
WEEPING LOVEGRASS	0.1 LBS.	4 LBS.	2/15 – 6/15
SUNDANGRASS	1.4 LBS.	60 LBS.	3/1 – 8/1
BROWN MILLET	0.9 LBS.	40 LBS.	4/1 – 7/15
WHEAT	4.1 LBS.	3 BU	9/15 – 2/1

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

DU
DUST CONTROL ON DISTURBED AREAS

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

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.

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.

DUST CONTROL
NOT TO SCALE
Du

DS3
DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

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

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.
CONCENTRATIONS 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 (INOCULATED 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 ¼ INCH OF SOIL FOR SMALL SEED AND ½ 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 ½ 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. DRY STRAW 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 ½:1 OR STEEPER.
4. SERICEA 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" FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITIES 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 CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE EVENLY DISPERSED WHEN AGITATED IN WATER. THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL METERING AND AID IN UNIFORM APPLICATION DURING SEEDING.

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 F 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 GDOT 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.

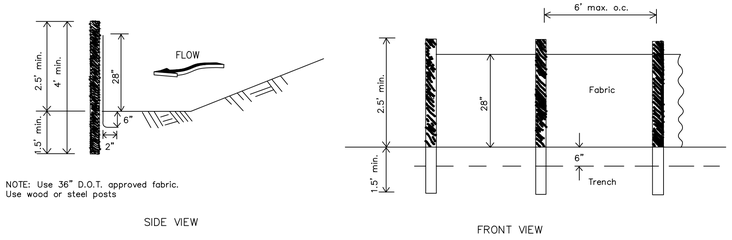
IRRIGATION
IRRIGATION SHALL BE APPLIED AT A RATE THAT WILL NOT CAUSE RUNOFF.

GRASSING PERMANENT
NOT TO SCALE
Ds3

TABLE 6–5.1 FERTILIZER REQUIREMENTS

TYPE OF SPECIES	YEAR	ANALYSIS FOR EQUIVALENT N–P–K	RATE	N TOP DRESSING RATE
1. COOL SEASON GRASSES	FIRST SECOND MAINTENANCE	6–12–12 6–12–12 10–10–10	1500 LBS./AC. 1000 LBS./AC. 400 LBS./AC.	50–100 LBS./AC. 1/2/ – 30
2. COOL SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6–12–12 0–10–10 0–10–10	1500 LBS./AC. 1000 LBS./AC. 400 LBS./AC.	0–50 LBS./AC. 1/ – –
3. GROUND COVERS	FIRST SECOND MAINTENANCE	10–10–10 10–10–10 10–10–10	1300 LBS./AC. 1300 LBS./AC. 1100 LBS./AC.	– – –
4. PINE SEEDLINGS	FIRST	20–10–6	ONE 21–GRAM PELLET PER SEEDING PLACED IN THE CLOSING HOLE	–
5. SHRUB LESPEDEZA	FIRST MAINTENANCE	0–10–10 0–10–10	700 LBS./AC. 700 LBS./AC.4/	– –
6. TEMPORARY COVER CROPS SEEDED ALONE	FIRST	10/10/2010	500 LBS./AC.	30 LB./ACRE/ 5/
7. WARM SEASON GRASSES	FIRST SECOND MAINTENANCE	6–12–12 6–12–12 10–10–10	1500 LBS./AC. 1000 LBS./AC. 400 LBS./AC.	50–100 LBS./AC. 2/6/ 50–100 LBS./AC. 2/ 30 LBS./AC.
8. WARM SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6–12–12 0–10–10 0–10–10	1500 LBS./AC. 1000 LBS./AC. 400 LBS./AC.	50 LBS./AC./6/

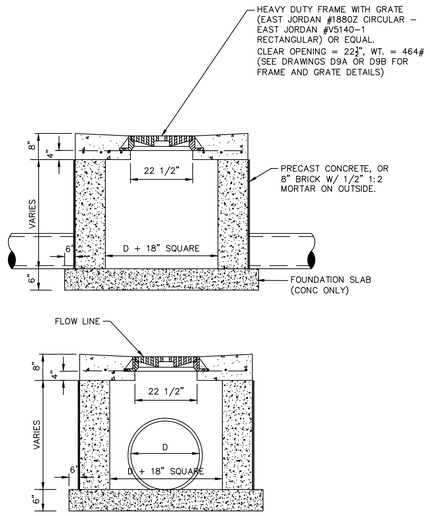
Month	Temporary Cover Ds2	Rate per Acre Seeded Alone	Rate per Acre Added To Mix	Permanent Cover Ds3	Rate per Acre Seeded Alone	Rate per Acre Added To Mix
January	Rye grass Rye	40 lbs. 3 bu.	–– .5 bu.	Unhulled Bermuda Sericea Lespedeza (1)	10 lbs. 75 lbs.	6 lbs. ––
February	Annual Lespedeza Rye grass Rye	40 lbs. 40 lbs. 3 bu.	10 lbs. –– .5 bu.	Unhulled Bermuda Sericea Lespedeza (1)	10 lbs. 75 lbs.	6 lbs. ––
March	Weeping Lovegrass Annual Lespedeza	4 lbs. 40 lbs.	2 lbs. 10 lbs.	Pensacola Bahia Hulled Bermuda Sericea Lespedeza (2)	60 lbs. 10 lbs. 60 lbs.	30 lbs. 6 lbs. ––
April	Weeping Lovegrass Sudan Grass	4 lbs. 60 lbs. 40 lbs.	2 lbs. –– 10 lbs.	Pensacola Bahia Weeping Lovegrass Hulled Bermuda Sericea Lespedeza (2)	60 lbs. 6 lbs. 10 lbs. 60 lbs.	30 lbs. 6 lbs. 6 lbs. ––
May	Weeping Lovegrass Sudan Grass	4 lbs. 60 lbs. 40 lbs.	2 lbs. –– 10 lbs.	Pensacola Bahia Weeping Lovegrass Hulled Bermuda Sericea Lespedeza (2)	60 lbs. 6 lbs. 10 lbs. 60 lbs.	30 lbs. 6 lbs. 6 lbs. ––
June	Pearl Millet Sudan Grass	50 lbs. 60 lbs. 40 lbs.	–– –– 10 lbs.	Pensacola Bahia Hulled Bermuda	60 lbs. 10 lbs.	30 lbs. 6 lbs.
July	Pearl Millet Sudan Grass	50 lbs. 60 lbs. 40 lbs.	–– –– 10 lbs.	Pensacola Bahia	60 lbs.	30 lbs.
August	Pearl Millet Rye	50 lbs. 3 bu.	–– .5 bu.	Pensacola Bahia	60 lbs.	30 lbs.
September	Rye grass Oats Wheat	40 lbs. 4 bu. 3 bu.	–– 1 bu. .5 bu.	Sericea Lespedeza (1)	75 lbs.	––
October	Rye grass Oats Wheat Rye Barley	40 lbs. 4 bu. 3 bu. 3 bu. 3 bu.	–– 1 bu. .5 bu. .5 bu. .5 bu.	Sericea Lespedeza (1)	75 lbs.	––
November	Rye grass Oats Wheat Rye Barley	40 lbs. 4 bu. 3 bu. 3 bu. 3 bu.	–– 1 bu. .5 bu. .5 bu. .5 bu.	Sericea Lespedeza (1) Unhulled Bermuda	75 lbs. 10 lbs.	–– 6 lbs.
December	Rye grass Oats Wheat Rye Barley	40 lbs. 4 bu. 3 bu. 3 bu. 3 bu.	–– 1 bu. .5 b



SILT FENCE – TYPE NS (Sd1-NS)

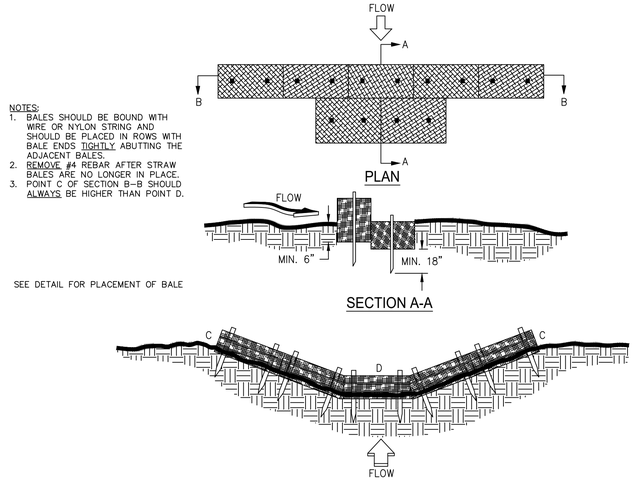
Non-Sensitive – Type A

NOT TO SCALE



JUNCTION BOX/GRATE INLET DETAIL

N.T.S.

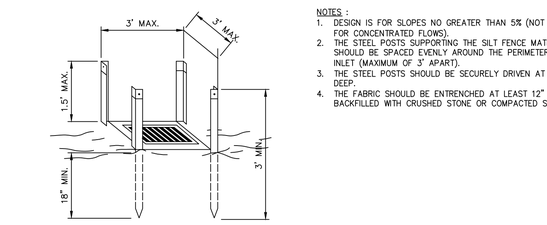


NOTES:
1. BALES SHOULD BE BOUND WITH WIRE OR NYLON STRING AND SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. REMOVE #4 REBAR AFTER STRAW BALES ARE NO LONGER IN PLACE.
3. POINT C OF SECTION B–B SHOULD ALWAYS BE HIGHER THAN POINT D.

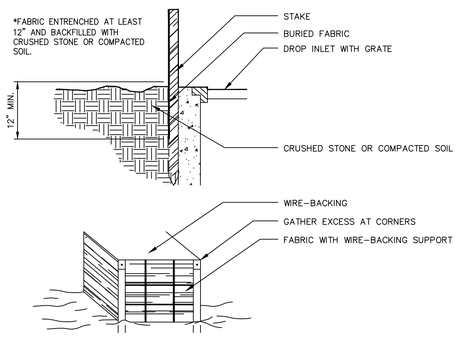
SEE DETAIL FOR PLACEMENT OF BALE

HAY BALE CHECK DAM (Cd-Hb)

NOT TO SCALE



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

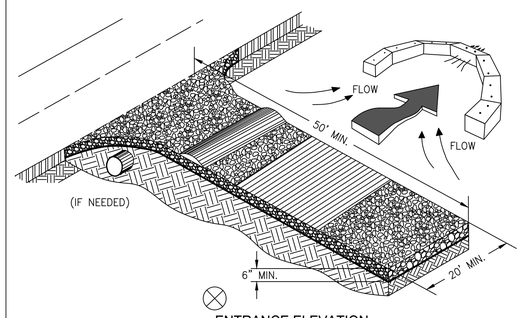


FABRIC AND SUPPORTING FRAME FOR INLET PROTECTION (Sd2-F)

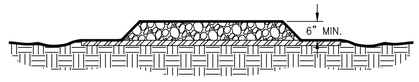
NOT TO SCALE

CRUSHED STONE CONSTRUCTION EXIT

EXIT DIAGRAM



ENTRANCE ELEVATION



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

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MAIN TRAIL ROADWAY IMPROVEMENTS FOR THE TRAILS SUBDIVISIONS

LIBERTY COUNTY, GEORGIA

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CHECKED BY: TRL
PROJECT #: 2025-231

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CONCRETE WASHOUT AREA

PURPOSE – PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM CONCRETE WASTE BY CONDUCTING WASHOUT OFFSITE, OR PERFORMING ONSITE WASHOUT IN A DESIGNATED AREA TO PREVENT POLLUTANTS FROM ENTERING SURFACE WATERS OR GROUNDWATER.

CONDITIONS OF USE – CONCRETE WASHOUT AREA BEST MANAGEMENT PRACTICES ARE IMPLEMENTED ON CONSTRUCTION PROJECTS WHERE:

- CONCRETE IS USED AS A CONSTRUCTION MATERIAL
- IT IS NOT POSSIBLE TO DISPOSE OF ALL CONCRETE WASTEWATER AND WASHOUT OFFSITE (READY MIX PLANT, ETC.),
- CONCRETE TRUCKS, PUMPERS, OR OTHER CONCRETE COATED EQUIPMENT ARE WASHED ONSITE.

DESIGN AND INSTALLATION SPECIFICATIONS

IMPLEMENTATION – THE FOLLOWING STEPS WILL HELP REDUCE STORMWATER POLLUTION FROM CONCRETE WASTES:
- PERFORM WASHOUT OF CONCRETE TRUCKS OFFSITE OR IN DESIGNATED CONCRETE WASHOUT AREAS ONLY.
- DO NOT WASH OUT CONCRETE TRUCKS ONTO THE GROUND, OR INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.
- DO NOT ALLOW EXCESS CONCRETE TO BE DUMPED ONSITE, EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS.
- CONCRETE WASHOUT AREAS MAY BE PREFABRICATED CONCRETE WASHOUT CONTAINERS, OR SELF-INSTALLED STRUCTURES (ABOVE-GRADE OR BELOW-GRADE).
- PREFABRICATED CONTAINERS ARE MOST RESISTANT TO DAMAGE AND PROTECT AGAINST SPILLS AND LEAKS. COMPANIES MAY OFFER DELIVERY SERVICE AND PROVIDE REGULAR MAINTENANCE AND DISPOSAL OF SOLID AND LIQUID WASTE.
- IF SELF-INSTALLED CONCRETE WASHOUT AREAS ARE USED, BELOW-GRADE STRUCTURES ARE PREFERRED OVER ABOVE-GRADE STRUCTURES BECAUSE THEY ARE LESS PRONE TO SPILLS AND LEAKS.
- SELF-INSTALLED ABOVE-GRADE STRUCTURES SHOULD ONLY BE USED IF EXCAVATION IS NOT PRACTICAL.

EDUCATION – THE FOLLOWING EDUCATION PRACTICES ARE RECOMMENDED:
- DISCUSS THE CONCRETE MANAGEMENT TECHNIQUES DESCRIBED IN THIS BEST MANAGEMENT PRACTICE WITH THE READY-MIX CONCRETE SUPPLIER BEFORE ANY DELIVERIES ARE MADE.
- EDUCATE EMPLOYEES AND SUBCONTRACTORS ON THE CONCRETE WASTE MANAGEMENT TECHNIQUES DESCRIBED IN THIS SECTION.
- ARRANGE FOR CONTRACTOR'S SUPERINTENDENT OR LEVEL 1A CERTIFIED PERSONNEL TO OVERSEE AND ENFORCE CONCRETE WASTE MANAGEMENT PROCEDURES.
- A SIGN SHOULD BE INSTALLED ADJACENT TO EACH TEMPORARY CONCRETE WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

CONTRACTS – INCORPORATE REQUIREMENTS FOR CONCRETE WASTE MANAGEMENT INTO CONCRETE SUPPLIER AND SUBCONTRACTOR AGREEMENTS.

LOCATION AND PLACEMENT – THE FOLLOWING GUIDELINES SHALL BE USED WHEN LOCATING AND PLACING THE CONCRETE WASH-OUT AREA:
- LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE AREAS SUCH AS STORM DRAINS, OPEN DITCHES, OR WATER BODIES, INCLUDING WETLANDS.
- ALLOW CONVENIENT ACCESS FOR CONCRETE TRUCKS, PREFERABLY NEAR THE AREA WHERE THE CONCRETE IS BEING POURED.
- IF TRUCKS NEED TO LEAVE A PAVED AREA TO ACCESS WASHOUT, PREVENT TRACK-OUT WITH A CONSTRUCTION EXIT.
- THE NUMBER OF FACILITIES YOU INSTALL SHOULD DEPEND ON THE EXPECTED DEMAND FOR STORAGE CAPACITY.
- ON LARGE SITES WITH EXTENSIVE CONCRETE WORK, WASHOUTS SHOULD BE PLACED IN MULTIPLE LOCATIONS FOR EASE OF USE BY CONCRETE TRUCK DRIVERS.

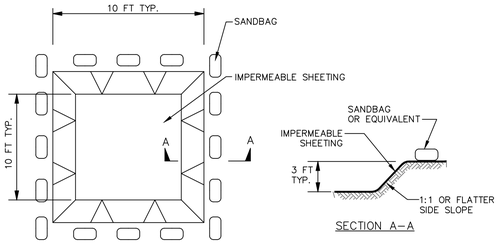
ONSITE TEMPORARY CONCRETE WASHOUT FACILITY, TRANSIT TRUCK WASHOUT PROCEDURES:
- TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE LOCATED A MINIMUM OF 50 FT. FROM SENSITIVE AREAS INCLUDING STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES.
- CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
  APPROXIMATELY 7 GALLONS OF WASH WATER ARE USED TO WASH ONE TRUCK CHUTE.
  APPROXIMATELY 50 GALLONS ARE USED TO WASH OUT THE HOPPER OF A CONCRETE PUMP TRUCK
- WASHOUT OF CONCRETE TRUCKS SHALL BE PERFORMED IN DESIGNATED AREAS ONLY.
- CONCRETE WASHOUT FROM CONCRETE PUMPER BINS CAN BE WASHED INTO CONCRETE PUMPER TRUCKS AND DISCHARGED INTO DESIGNATED WASHOUT AREA OR PROPERLY DISPOSED OF OFFSITE.
- ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF PER APPLICABLE SOLID WASTE REGULATIONS. DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.

TEMPORARY ABOVE-GRADE CONCRETE WASHOUT FACILITY
- TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAILS WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT., BUT WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

TEMPORARY BELOW-GRADE CONCRETE WASHOUT FACILITY
- TEMPORARY CONCRETE WASHOUT FACILITIES (TYPE BELOW GRADE) SHOULD BE CONSTRUCTED WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT. THE QUANTITY AND VOLUME SHOULD BE SUFFICIENT TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- PLASTIC LINING MATERIAL SHALL BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
- LINER SEAMS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- SOIL BASE SHALL BE PREPARED FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE PLASTIC LINING MATERIAL.

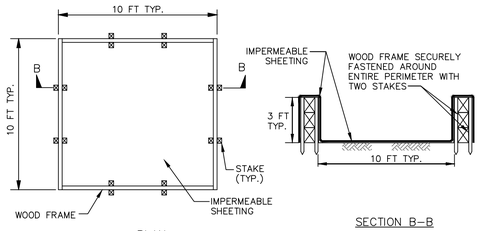
INSPECTION AND MAINTENANCE
- INSPECT AND VERIFY THAT CONCRETE WASHOUT BMPS ARE IN PLACE PRIOR TO THE COMMENCEMENT OF CONCRETE WORK.
- DURING PERIODS OF CONCRETE WORK, INSPECT DAILY TO VERIFY CONTINUED PERFORMANCE.
- CHECK OVERALL CONDITION AND PERFORMANCE.
- CHECK REMAINING CAPACITY (% FULL).
- IF USING SELF-INSTALLED WASHOUT FACILITIES, VERIFY PLASTIC LINERS ARE INTACT AND SIDEWALLS ARE NOT DAMAGED.
- IF USING PREFABRICATED CONTAINERS, CHECK FOR LEAKS.
- WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES.
- WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
- IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER.
- DO NOT DISCHARGE LIQUID OR SLURRY TO WATERWAYS, STORM DRAINS OR DIRECTLY ONTO GROUND.
- DO NOT USE SANITARY SEWER WITHOUT LOCAL APPROVAL.
- PLACE A SECURE, NON-COLLAPSING, NON-WATER COLLECTING COVER OVER THE CONCRETE WASHOUT FACILITY PRIOR TO PREDICTED WET WEATHER TO PREVENT ACCUMULATION AND OVERFLOW OF PRECIPITATION.
- REMOVE AND DISPOSE OF HARDENED CONCRETE AND RETURN THE STRUCTURE TO A FUNCTIONAL CONDITION. CONCRETE MAY BE REUSED ONSITE OR HAULED AWAY FOR DISPOSAL OR RECYCLING.
- WHEN YOU REMOVE MATERIALS FROM THE SELF-INSTALLED CONCRETE WASHOUT, BUILD A NEW STRUCTURE; OR, IF THE PREVIOUS STRUCTURE IS STILL INTACT, INSPECT FOR SIGNS OF WEAKENING OR DAMAGE, AND MAKE ANY NECESSARY REPAIRS. RE-LINE THE STRUCTURE WITH NEW PLASTIC AFTER EACH CLEANING.

REMOVAL OF TEMPORARY CONCRETE WASHOUT FACILITIES
- WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE, SLURRIES AND LIQUIDS SHALL BE REMOVED AND PROPERLY DISPOSED OF.
- MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
- HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.



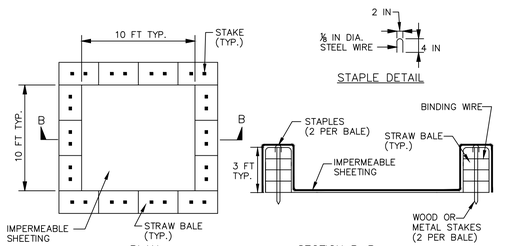
PLAN

EXCAVATED WASHOUT STRUCTURE



PLAN

WASHOUT STRUCTURE WITH WOOD PLANKS



PLAN SECTION B–B

NOTE: CAN BE TWO STACKED BALES OR PARTIALLY EXCAVATED TO REACH 3 FT DEPTH

WASHOUT STRUCTURE WITH STRAW BALES

CONSTRUCTION SPECIFICATIONS

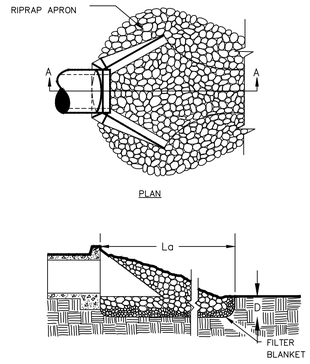
1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

NOTE: WASHOUT OF DRUM AT THE CONSTRUCTION SITE IS PROHIBITED

CONCRETE WASH DOWN AREA DETAIL (CSW)

NOT TO SCALE

ST–STORM DRAIN OUTLET PROTECTION RIP–RAP OVER GEOTEXTILE FABRIC						
ST #	W1	W2	La	d_{50}	D_{PIPE}	TW
1	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
2	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
3	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
4	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
5	4.5	6	8'	12"	24"	<0.5 D_{PIPE}
6	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
8	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
9	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
10	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
11	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
12	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
13	4.5'	6	5	12"	24"	<0.5 D_{PIPE}
14	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
15	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
16	4.5	6	10'	12"	24"	<0.5 D_{PIPE}
17	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
18	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
19	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
20	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
22	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
23	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
24	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}
25	4.5'	6	10'	12"	24"	<0.5 D_{PIPE}



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

RIPRAP OUTLET PROTECTION (St)

NOT TO SCALE

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LIBERTY COUNTY, GEORGIA

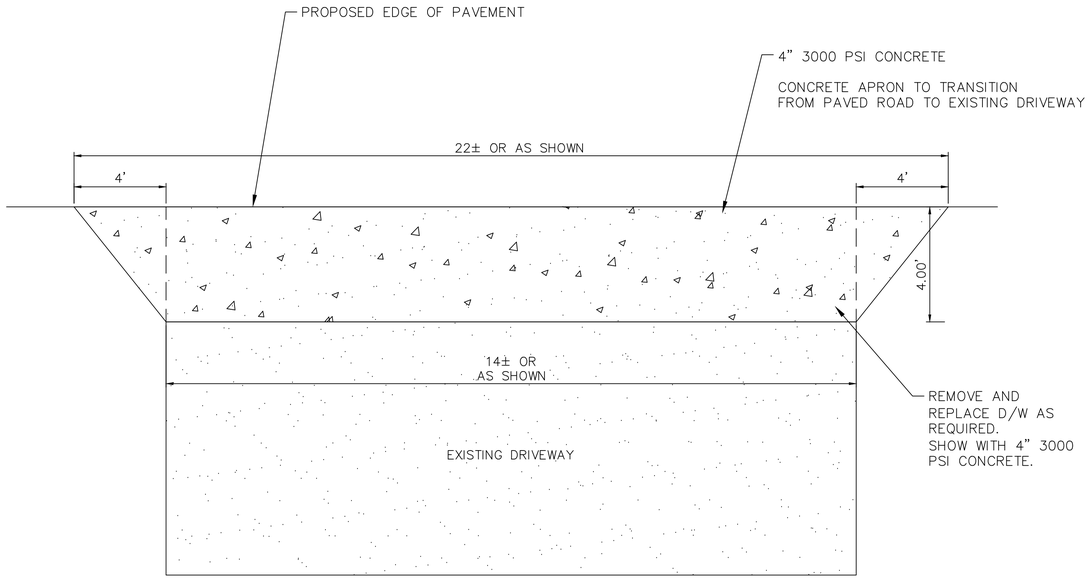
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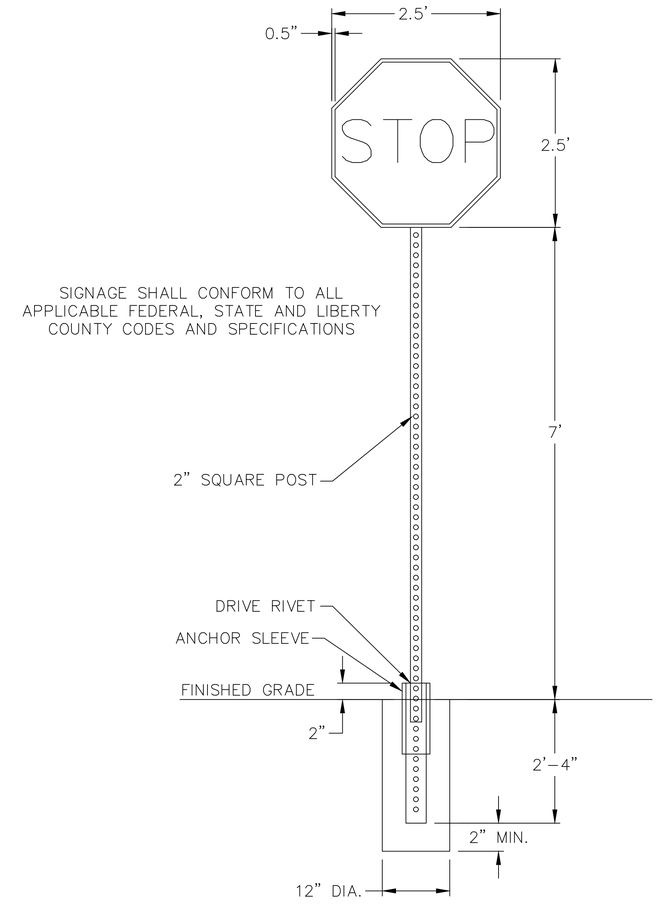
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CONCRETE DRIVEWAY APRON TYPICAL



STOP SIGN

N.T.S.

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LIBERTY COUNTY, GEORGIA

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DRIVEWAY DETAILS

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