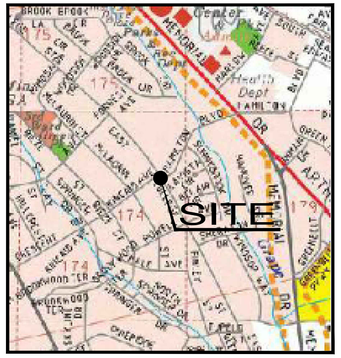
LOCATION MAP



9

STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED AT

KINCAID AVE AND HAMILTON BLVD

SPALDING COUNTY

JULY 2025 7

6 GPS LOCATION OF CONSTRUCTION EXIT
LATITUDE: 33.236031° N
LONGITUDE: 84.249658° W

5 TOTAL SITE AREA= 1.70 ACRES
DISTURBED AREA= *1.70 ACRES*

DRAWING LIST

1. Cover Sheet
2. General Notes
3. Existing Conditions/Demo Plan
4. Existing Conditions/Demo Plan
5. Existing Conditions/Demo Plan
6. Overall Site Plan
7. Site Plan
8. Site Plan
9. Site Plan
10. Overall Grading Plan
11. Grading Plan
12. Grading Plan
13. Utility Plan
14. Utility Plan
15. Storm Profile
16. Cross Sections Profile
17. Cross Sections Profile
18. Road Profile
19. NPDES Notes
20. NPDES Notes
21. Erosion Control Plan
22. Erosion Control Plan
23. Erosion Control Details
24. Erosion Control Details
25. Erosion Control Details
26. Construction Details
27. Construction Details
28. Construction Details
29. Inlet Basins
30. Landscaping Plan
31. Landscaping Details

PRINT PRIMARY PERMITTEE NAME — 24 HOUR CONTACT NUMBER

SIGNATURE PRIMARY PERMITTEE NAME — DATE

PRINT SECONDARY PERMITTEE NAME — 24 HOUR CONTACT NUMBER

SIGNATURE SECONDARY PERMITTEE NAME — DATE

PRINT TERTIARY PERMITTEE NAME — 24 HOUR CONTACT NUMBER

SIGNATURE TERTIARY PERMITTEE NAME — DATE

GEORGIA811
Utilities Protection Center, Inc.
Know what's **below.**
Call before you dig.

PREPARED BY

PARAGON CONSULTING GROUP

350 AIRPORT ROAD GRIFFIN, GA. 30224
PH. (770) 412-7700 FAX (770) 412-7744

24 HOUR CONTACT: 3 4
MARIZA ELLER
PH: 770-229-6603
MELLER@CITYOFGRIFFIN.COM
P.O. BOX T
SPALDING COUNTY, GA 30224

Revisions:		
No.		Date
1.	UPDATED CALL OUT ON SHEET 8	8/28/2025
2.	ADDED BRIDGE FOOTER AND HELICAL PILE SHEET 26	8/28/2025
3.	ADDED BRIDGE ABUTMENT DETAIL SHEET 28	8/28/2025

PARAGON
CONSULTING GROUP
an LA company
350 airport road griffin, georgia 30224
phone (770) 412-7700 www.pcgeng.com

STREET CONSTRUCTION PLANS FOR
KINCAID AND HAMILTON
INTERSECTION REALIGNMENT
LOCATED IN SPALDING COUNTY

SHEET:
COVER

COA #: PEF004167

GEORGIA REGISTERED No. PE013609 PROFESSIONAL ENGINEER MIKE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

01
SHEET 01 OF 31

STORM DRAINAGE NOTES

1. STORM DRAINAGE PIPE SHOWN HEREON SHALL BE REINFORCED CONCRETE PIPE.
2. PIPE CONNECTIONS AT C.B.'S, J.B.'S, ETC. SHALL BE GROUTED ON THE OUTSIDE AND INSIDE OF THE STRUCTURES.
3. HEADWALLS SHALL BE CONCRETE.
4. TRENCH BACKFILL MATERIAL SHALL BE FREE OF ROOTS, STUMPS, OR OTHER DEBRIS AND SHALL BE COMPACTED TO 95% STANDARD PROCTOR OR AS PER SPECIFICATIONS.
5. CATCH BASINS, DROP INLETS, AND JUNCTION BOXES SHALL HAVE PAVED INVERTS. MATCHING LOWEST INVERT & SLOPING UP TO 1/4 PIPE DIA.
6. SINGLE-WING CATCH BASINS SHALL CONFORM TO D.O.T. STANDARDS 1033D AND 1033D PRECAST SPECS.
7. DOUBLE-WING CATCH BASINS SHALL CONFORM TO D.O.T. STANDARDS 1034D AND 1034D PRECAST SPECS.
8. CONTRACTOR TO NOTIFY ENGINEER FOR ASSISTANCE IN LOCATING OUTFLOW HEADWALLS IF STAKED LOCATION IN THE FIELD DOES NOT ALIGN WITH NATURAL FEATURES AS INDICATED ON THE PLANS.
9. CONTRACTOR TO NOTIFY ENGINEER IF INVERTS ON OUTLET PIPES DO NOT MATCH EXISTING ELEVATIONS AS INDICATED ON PLANS.

GRADING NOTES

1. SPOT ELEVATIONS ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
2. CONTOURS ON PAVEMENT ARE TOP OF PAVEMENT.
3. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ALL UTILITIES BEFORE CONSTRUCTION AND VERIFYING LOCATION OF ALL UTILITIES SHOWN OR NOT SHOWN.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND COST OF THE RELOCATION OF ALL UTILITIES, ALONG THE RIGHT-OF-WAY AND ON SITE, ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT, SUCH AS, BUT NOT LIMITED TO, SIGNAL POLES, SIGNAL CONTROLS, DRAINAGE STRUCTURES, TRAFFIC SIGNS, UTILITY POLES, GUY WIRES, ETC.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL DEBRIS AS ACCEPTABLE TO THE OWNER AND ENGINEER AND IN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS.
6. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURBS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
7. SLOPES AND DISTURBED AREAS NOT COVERED BY BUILDING OR PAVEMENT SHALL BE GRADED SMOOTH AND RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR TO PROVIDE TOPSOIL IF NOT AVAILABLE ON SITE. THE AREAS SHALL BE SEEDED AND COVERED WITH MATTING AS DESIGNATED ON PLANS, FERTILIZED AND WATERED TO PROVIDE A HEARTY, MOWABLE STAND OF GRASS. SMALL ROCKS MUST BE REMOVED. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
8. EARTHWORK SHALL BE ON AN UNCLASSIFIED BASIS.
9. MAXIMUM SLOPES ON CUT OR FILL SECTIONS SHALL NOT EXCEED 2:1.
10. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50 FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY PERMITS.

GENERAL NOTES

1. CONTRACTOR IS TO COMPLY WITH ALL LOCAL BUILDING CODES AND REGULATIONS WHICH ARE PRESENTLY IN EFFECT.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED ABOUT THE LOCATION AND/OR ELEVATIONS OF EXISTING UTILITIES SHOWN ON THIS DRAWING. THEY ARE BASED UPON RECORDS FROM VARIOUS UTILITY COMPANIES, DEEDS AND PLATS OF RECORD, AND WHERE POSSIBLE, ACTUAL FIELD MEASUREMENTS. THIS INFORMATION IS NOT TO BE TAKEN AS EXACT NOR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 24 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF RESPECTIVE UTILITIES. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATION OF EXISTING UTILITIES WHICH MAY CONFLICT WITH PROPOSED IMPROVEMENTS. UPC# 1-800-282-7411
3. CONTRACTOR TO COORDINATE WITH POWER COMPANY PROVIDING TEMPORARY SERVICE DURING CONSTRUCTION IF REQUIRED.
4. CONTRACTOR SHALL ASSURE THAT ALL FINAL INSPECTIONS ARE MADE.
5. SIGNS SHALL BE PERMITTED THROUGH THE CITY/COUNTY AND ARE NOT PART OF THESE DOCUMENTS
6. A COPY OF THE APPROVED CONSTRUCTION PLANS SHALL BE KEPT ON THE JOB SITE AT ALL TIMES THAT CONSTRUCTION IS UNDER WAY.
7. IT IS THE DEVELOPER'S RESPONSIBILITY TO COMPLY WITH ALL STATE AND FEDERAL LAWS AND REGULATIONS THAT APPLY TO THE PROJECT.
8. PRIOR TO ISSUANCE OF A CLEARING AND GRUBBING PERMIT, THE DEVELOPER IS REQUIRED TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH CITY OF GRIFFIN . THE PROJECT DEVELOPER, DESIGN PROFESSIONAL, AND CONTRACTOR ARE REQUIRED TO ATTEND THE PRE-CONSTRUCTION CONFERENCE.
9. IT IS THE RESPONSIBILITY OF THE DEVELOPER TO ACQUIRE ANY OFFSITE EASEMENTS BEFORE CONSTRUCTION BEGINS. PERMIT ISSUANCE SHALL OCCUR AFTER ALL OFF-SITE EASEMENTS ARE OBTAINED. ANY OFF-SITE EASEMENTS FOR PUBLIC AND UTILITIES USE SHALL BE OBTAINED IN THE NAME OF THE CITY OF GRIFFIN.
10. INFORMATION REGARDING UNDERGROUND UTILITIES ON THESE PLANS IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL REQUEST A FIELD LOCATION THROUGH THE UTILITY PROTECTION CENTER AND ANY UTILITY OWNERS THOUGHT TO HAVE FACILITIES IN THE AREA. THE CONTRACTOR SHALL PROMPTLY COMPARE THESE FIELD-MARKED LOCATIONS WITH THE PROJECT PLANS AND THEN NOTIFY THE DESIGN PROFESSIONAL AND, IF NECESSARY, CITY OF GRIFFIN OF ANY ANTICIPATED PROBLEMS OR NEED FOR CHANGES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXCAVATE OR CAUSE THE UTILITY OWNER TO EXCAVATE FOR THE PURPOSE OF DETERMINING EXACT ELEVATIONS OR LOCATIONS AT UTILITY CROSSINGS AND OTHER CRITICAL LOCATIONS WELL IN ADVANCE OF THE WORK.
11. IT IS THE RESPONSIBILITY OF THE DEVELOPER AND HIS CONTRACTOR(S) TO COMPLY WITH CITY OF GRIFFIN DEVELOPMENT REGULATIONS. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF GRIFFIN SPECIFICATIONS.
12. IT IS THE DEVELOPER'S RESPONSIBILITY TO NOTIFY CITY OF GRIFFIN OFFICIALS FOR ALL REQUIRED INSPECTIONS. A 48 HOUR ADVANCE NOTIFICATION IS REQUIRED PRIOR TO INSPECTION BY THE CITY OF GRIFFIN.
13. GRADING SHALL BE DONE TO SUBGRADE ELEVATION. IT SHOULD BE NOTED THAT FINISH WITH SURFACE GRADES ARE SHOWN ON THIS PLAN, AND THE CONTRACTOR SHALL MAKE ALLOWANCES FOR PAVEMENT, STONE, AND SLAB THICKNESSES.
14. ALL FINISHED GRADING AND PAVING SHALL HAVE POSITIVE DRAINAGE.
15. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.
16. EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES WILL BE INSTALLED IF DEEMED NECESSARY BY ONSITE INSPECTION.
17. THE DISTURBED AREA AND THE DURATION OF EXPOSURE TO EROSIVE ELEMENTS SHALL BE KEPT TO A PRACTICABLE MINIMUM. TEMPORARY VEGETATION OR MULCHING SHALL BE EMPLOYED TO PROTECT EXPOSED CRITICAL AREAS DURING CONSTRUCTION.
18. PERMANENT VEGETATION SHALL BE ESTABLISHED AS SOON AS PRACTICABLE.
19. CONSTRUCTION EQUIPMENT MUST CROSS FLOWING STREAMS BY MEANS OF BRIDGES OR CULVERTS EXCEPT WHEN SUCH METHODS ARE NOT FEASIBLE. STREAM CROSSINGS ARE TO BE KEPT TO A MINIMUM.
20. STREAM BUFFERS ARE MEASURED FROM THE POINT WHERE THE VEGETATION HAS BEEN WRESTED BY THE NORMAL STREAM FLOW. THE BUFFER AREA SHALL REMAIN UNDISTURBED.
21. ALL CONSTRUCTION SHALL COMPLY WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.
22. MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE PROPERTY OWNER.

SITE NARRATIVE

1. BOUNDARY AND TOPOGRAPHICAL DATA TAKEN FROM INFORMATION PREPARED BY LAND ENGINEERING, INC. 1601 S ZACK HINTON PKWY, MCDONOUGH GEORGIA 30253
2. PROPERTY OWNER: CITY OF GRIFFIN
   CONTACT: 770-229-6603
3. TOTAL AREA OF SITE = 1.70 ACRES
4. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF GRIFFIN STANDARD SPECIFICATIONS AND REGULATIONS.
5. PERSONS USING THIS DRAWING SHOULD CONTACT LOCAL UTILITY COMPANIES FOR EXACT LOCATIONS OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
6. ALL DIMENSIONS ARE TO OUTSIDE FACE OF BUILDING (WHERE APPLICABLE) TO FACE OF CURB, OR AS OTHERWISE NOTED. SEE ARCH. DWGS. FOR BUILDING DIMENSIONS AND VERIFY WITH SITE PLAN.
7. OWNER/DEVELOPER CONTACT: CITY OF GRIFFIN
   770-229-6603
   P.O. BOX T
   SPALDING COUNTY, GA 30224
8. ALL PROPOSED ELEVATIONS ARE FINISHED GRADE ELEVATIONS.
9. THESE DOCUMENTS ARE FOR CONSTRUCTION PURPOSES ONLY AND ARE NOT INTENDED TO BE UTILIZE IN ANY WAY AS RECORD DOCUMENTS. AS-BUILT DRAWINGS REQUIRED BY GOVERNMENT AGENCIES MUST BE PROVIDED FROM FIELD RUN DATA PER THE SPECIFICATIONS OF THE GOVERNMENT AGENCY.

UTILITY NOTES

1. THE CITY OF GRIFFIN STANDARD SPECIFICATIONS AND DETAILS SHALL GOVERN ALL WATER AND SANITARY SEWER MAIN CONSTRUCTION.
2. THE BUILDING CONTRACTOR IS RESPONSIBLE FOR LOCATION, SIZE AND SPECIFICATIONS OF ALL ELECTRICAL TRANSFORMER PADS FROM THE LOCAL POWER COMPANY AND PROVIDING SERVICE FROM THE TRANSFORMER TO THE BUILDING.
3. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS AND IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION AT NO EXTRA COST TO THE OWNER.
4. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OR OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL PROVIDE SUPPORT SYSTEMS, SLOPING, BENCHING, AND OTHER MEANS OF PROTECTION. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.
5. SANITARY SEWER LATERAL PIPE SHALL BE SDR 26 ASTM 3034 FOR PIPES LESS THAN 12 FEET DEEP. PVC IN EASEMENT SHALL BE SDR 26 WITH A 6 INCH CLEAN OUT AT THE EASEMENT LIMIT.
6. SANITARY SEWER PIPE SHALL HAVE A MINIMUM DEPTH OF 6 FEET. PERCENTAGE OF GRADES LISTED FOR SANITARY SEWER LINES WERE CALCULATED FROM THE CENTERLINE OF ONE MANHOLE TO THE CENTERLINE OF THE NEXT MANHOLE.
7. SEWER SERVICE LATERALS SHALL BE COORDINATED WITH BUILDING PLANS. ANY DISCREPANCIES SHOULD BE CLARIFIED BEFORE INSTALLATION. SEWER SERVICE LATERALS ARE TO BE PERMANENTLY MARKED ON THE CURB.
8. 6 INCH AND LARGER SANITARY SEWER LINES ARE TO BE LOCATABLE, INCLUDING LATERALS.
9. MANHOLES REQUIRE KOR-N-SEAL OR EQUAL RUBBER BOOTS.
10. THE TOP ELEVATION OF MANHOLES CONSTRUCTED IN PAVED AREAS SHALL MATCH FINISH GRADE, AND SHALL HAVE TRAFFIC BEARING LIDS. THE TOP ELEVATION OF MANHOLES CONSTRUCTED IN GRASSED AREAS MUST MATCH FINISHED GRADE (UNLESS OTHERWISE NOTED). ALL EXISTING MANHOLES AND UTILITY BOXES SHALL BE ADJUSTED AS NECESSARY TO MATCH PROPOSED GRADING.
11. WATER MAINS 4 INCH DIAMETER AND LARGER SHALL BE C900 PVC WATER PIPE WITH 150 PSI PRESSURE RATING CONFORMING TO AWWA, AND UNIBELL PLASTIC PIPE STANDARD SPECIFICATIONS. FITTINGS 4 INCH AND LARGER SHALL BE DUCTILE IRON CONFORM WITH AWWA STANDARD SPECIFICATIONS.
12. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4 FEET OVER ALL WATER MAINS. BUILDING SERVICES SHALL HAVE A MINIMUM OF 30" OF COVER.
13. CONTRACTOR SHALL COORDINATE INSTALLATION OF WATER SERVICE WITH WATER DEPARTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION, PURCHASE, AND/OR FEES ASSOCIATED WITH ALL APPARATUS INCLUDING WATER METERS, BACK FLOW PREVENTERS, POST INDICATOR VALVES, AND ENCLOSURES.
14. THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF WATER AND SEWER LINE IS TEN FEET (10'). THE MINIMUM VERTICAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINES IS EIGHTEEN INCHES (18").
15. WATER SERVICE LEADS SHALL HAVE REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTOR AS INDICATED ON THE PLANS.
16. FIRE HYDRANTS SHALL CONFORM TO LOCAL REQUIREMENTS.
17. EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AND SHOULD BE VERIFIED FOR LOCATION AND NUMBER BY THE CONTRACTOR.
18. ELECTRIC, TELEPHONE AND GAS LINES, INCLUDING SERVICE LINES, ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE APPROPRIATE UTILITY COMPANIES SPECIFICATIONS.
19. CONTRACTOR TO COORDINATE INSTALLATION OF ALL UTILITIES BY OTHERS WITH HIS WORK.
20. PRIMARY ELECTRIC SERVICE IS PROVIDED BY THE POWER COMPANY. THIS INCLUDES THE TRANSFORMER, TRENCHING, AND BACKFILL. TRANSFORMER PAD AND FINAL COMPACTION OF THE TRENCH IS THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR COORDINATION AND FEES ASSOCIATED WITH POWER SERVICE AS WELL AS SECONDARY SERVICE.
21. GAS LINES ARE INDICATED FOR COORDINATION ONLY. CONTRACTOR IS RESPONSIBLE FOR COORDINATION AND FEES ASSOCIATED WITH GAS SERVICE. EXACT LOCATION WILL BE FIELD DETERMINED DURING CONSTRUCTION.

Allowable Leakage Table (gph/1,000 ft. of pipeline*)

Pipe Diameter (inches)	2	4	6	8	12
Maximum Leakage	0.21	0.43	0.64	0.85	1.28

If the pipeline under test contains sections of various diameters, the allowable leakage will be the sum of the computed leakage of each size.

Water Neutralizing Chemicals*

Chemical	Residual Chlorine Concentrations	Sulfur Dioxide (SO2)		Sodium Bisulfate (NaHSO3)		Sodium Sulfite (Na2SO3)		Sodium Thiosulfate (Na2S2O3H2O)	
	(mg/L)	lb	kg	lb	kg	lb	kg	lb	kg
Amounts	1	0.8	0.36	1.2	0.54	1.4	0.64	1.2	0.54
	2	1.7	0.77	2.5	1.13	2.9	1.32	2.4	1.09
	10	8.3	3.76	12.5	5.67	14.6	6.62	12.0	5.44
	50	41.7	18.91	62.6	28.39	73.0	33.11	60.0	27.22

*Amounts of chemicals required to neutralize various residual chlorine concentrations in 100,000 gallons (378.5 m^3) of water.

No.	Revisions:	Date
1.	UPDATED CALL OUT ON SHEET 8	8/28/2025
2.	ADDED BRIDGE FOOTER AND HELICAL PILE SHEET 26	8/28/2025
3.	ADDED BRIDGE ABUTMENT DETAIL SHEET 28	8/28/2025

PARAGON CONSULTING GROUP
an LM company
350 airport road griffin, georgia 30224
phone (770) 412-7700 www.pcgeng.com

STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

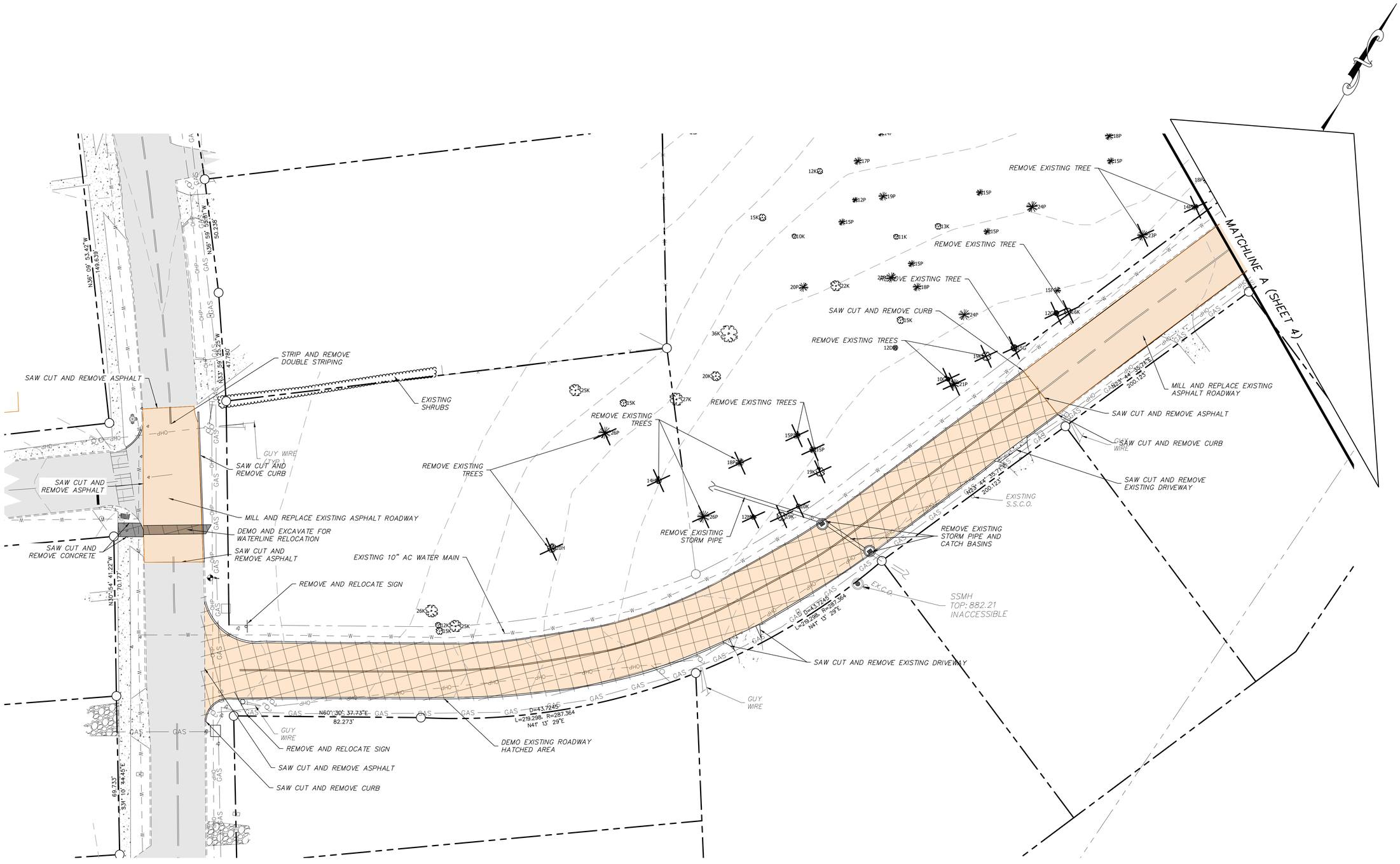
SHEET:
GENERAL NOTES

COA #: PEF004167

GEORGIA REGISTERED
No. PEF013220
PROFESSIONAL
ENGINEER
WADE T. STRICKLAND
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

02
SHEET 02 OF 31



EXISTING CONDITIONS / DEMOLITION PLAN

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NOTES

1. ALL EXISTING DEBRIS AND DEBRIS CREATED BY CONSTRUCTION ACTIVITIES TO BE REMOVE FROM THE SITE AND DISPOSED OF LEGALLY.
2. INSTALL ALL INITIAL BMP'S BEFORE ANY WORK IS PERFORMED ON SITE

No.	Revisions:	Date
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2.	ADDED BRIDGE FOOTER AND HELICAL PILE SHEET 26	8/28/2025
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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

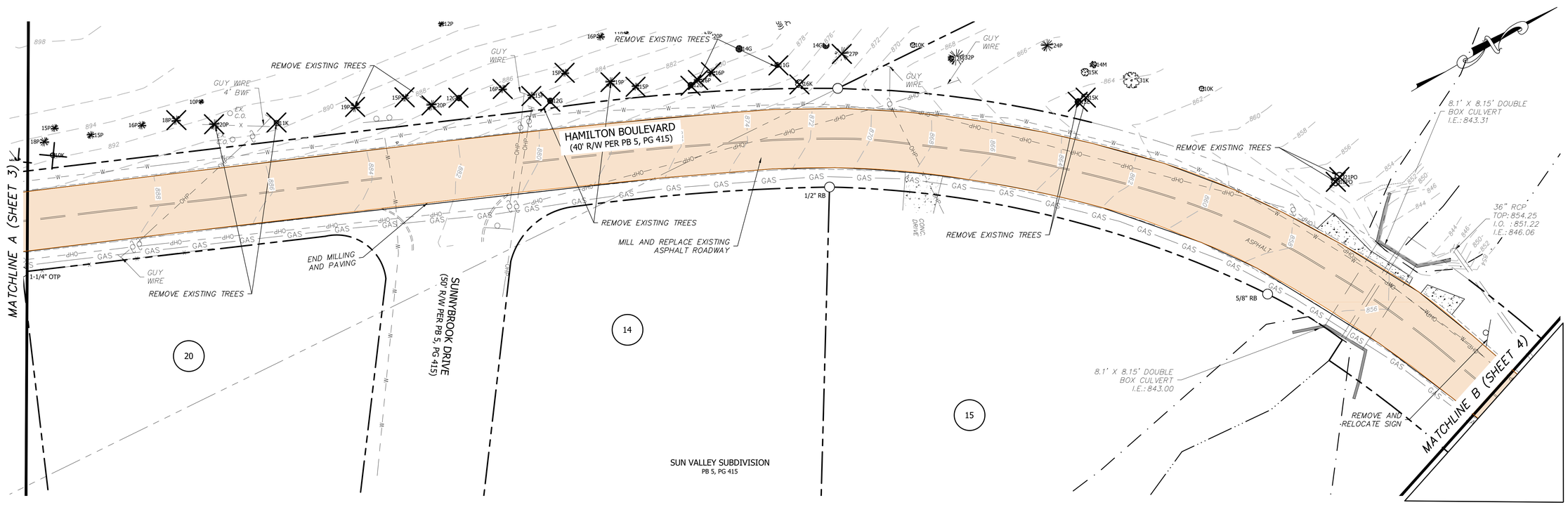
SHEET:
EXISTING CONDITIONS/ DEMOLITION PLAN

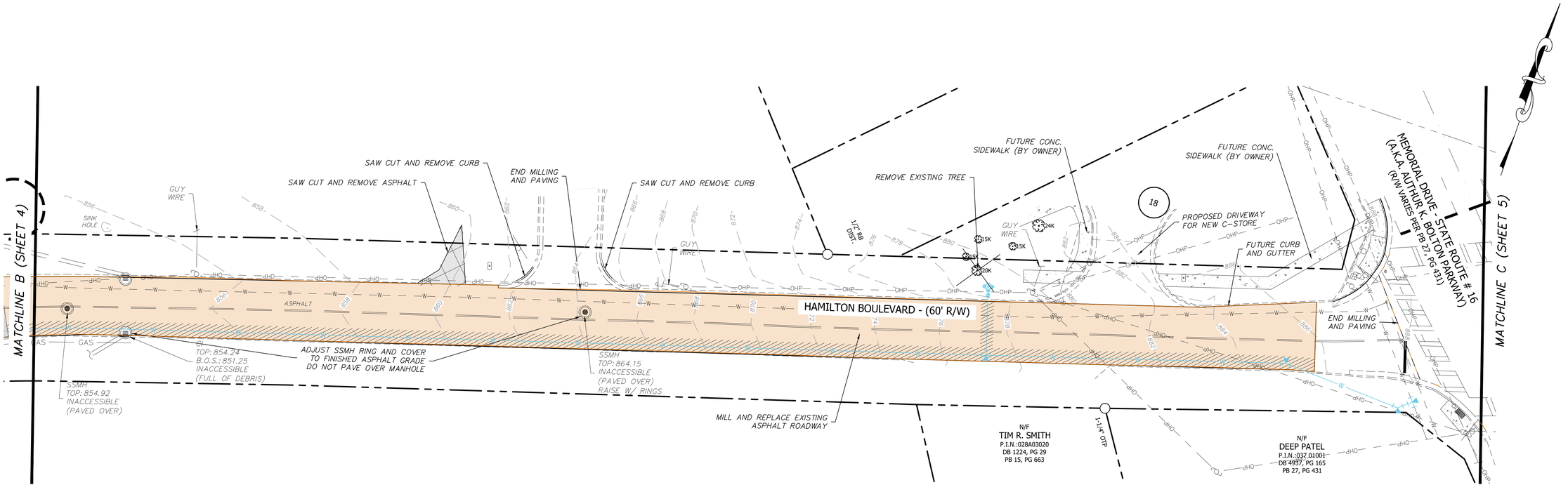
COA #: PEF004167

GEORGIA REGISTERED No. PE013620 PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

03
SHEET 03 OF 31





EXISTING CONDITIONS / DEMOLITION PLAN

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NOTES

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phone (770) 412-7700 www.pcgeng.com

STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

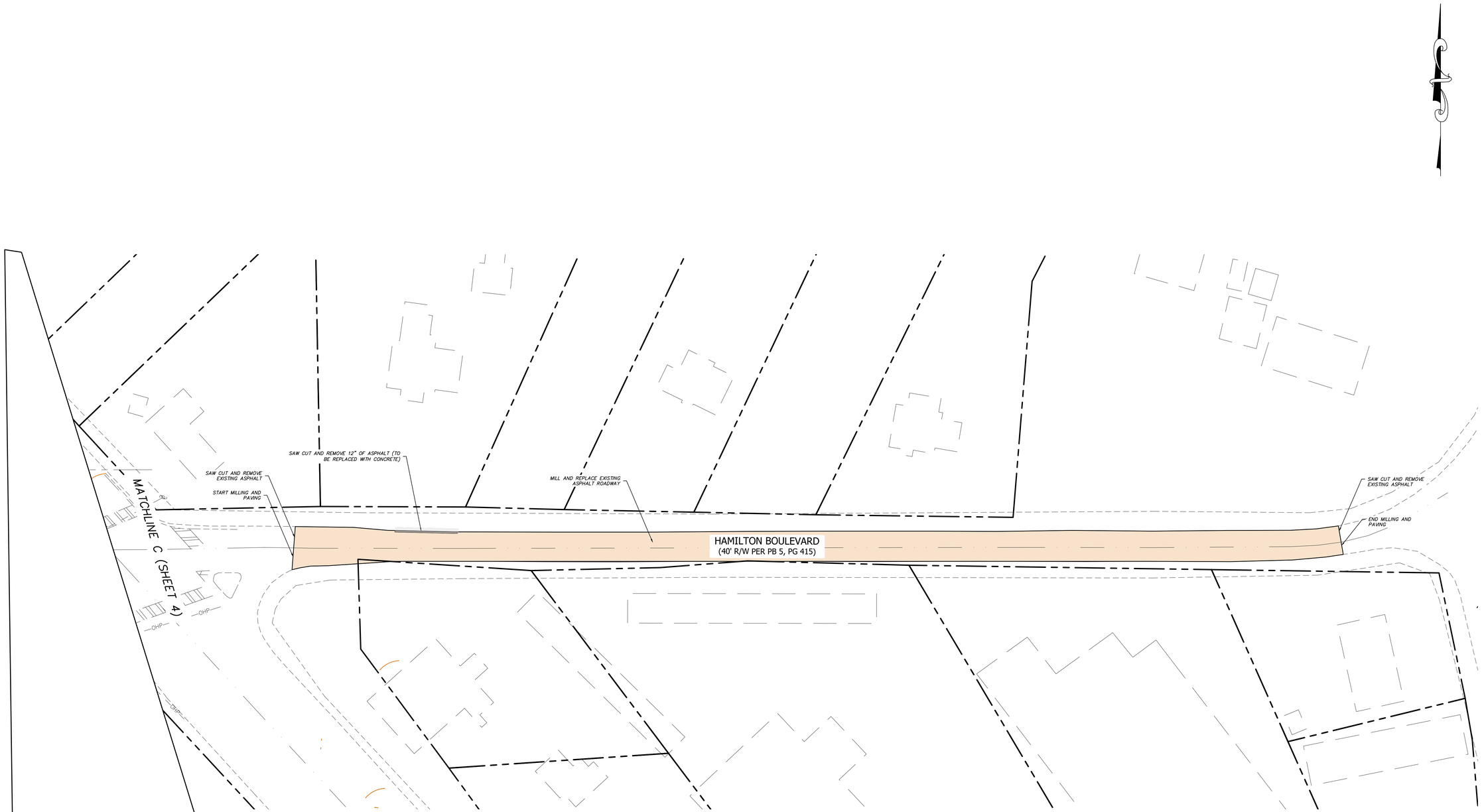
SHEET:
EXISTING CONDITIONS/ DEMOLITION PLAN

COA #: PEF004167

GEORGIA REGISTERED No. PE013020 PROFESSIONAL ENGINEER
WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

04
SHEET 04 OF 31



EXISTING CONDITIONS / DEMOLITION PLAN

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

NOTES

1. ALL EXISTING DEBRIS AND DEBRIS CREATED BY CONSTRUCTION ACTIVITIES TO BE REMOVE FROM THE SITE AND DISPOSED OF LEGALLY.
2. INSTALL ALL INITIAL BMP'S BEFORE ANY WORK IS PERFORMED ON SITE

No.	Revisions:	Date
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2.	ADDED BRIDGE FOOTER AND HELICAL PILE SHEET 26	8/28/2025
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CONSULTING GROUP
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350 airport road griffin, georgia 30224
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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

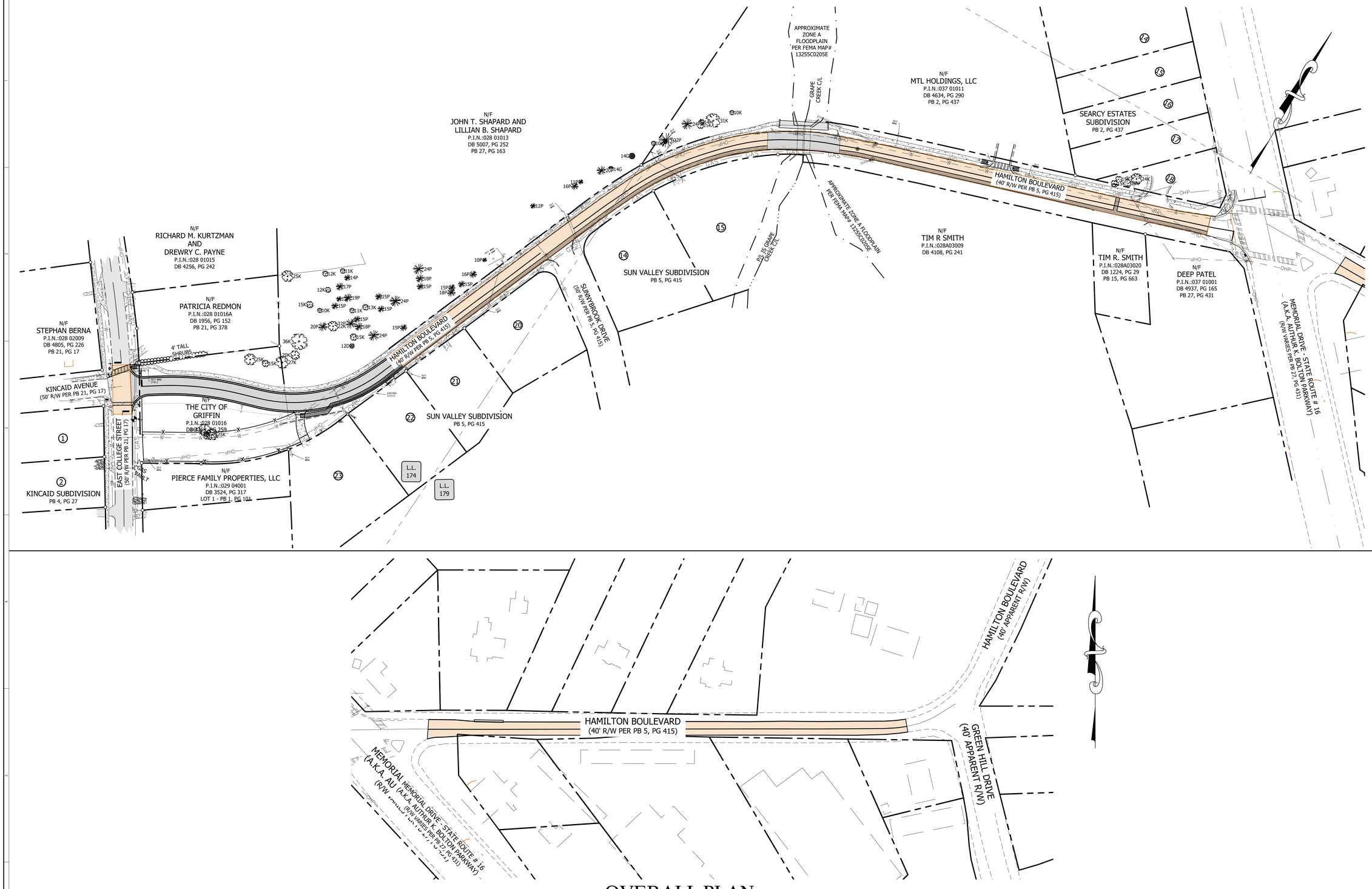
SHEET:
EXISTING CONDITIONS/ DEMOLITION PLAN

COA #: PEF004167

GEORGIA REGISTERED No. PEO30290 PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

05
SHEET 05 OF 31



OVERALL PLAN

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

No.	Revisions:	Date
1.	UPDATED CALL OUT ON SHEET 8	8/28/2025
2.	ADDED BRIDGE FOOTER AND HELICAL PILE SHEET 26	8/28/2025
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PARAGON
CONSULTING GROUP
an LA company
350 airport road griffin, georgia 30224
phone (770) 412-7700 www.pcgeng.com

STREET CONSTRUCTION PLANS FOR

KINCAID AVENUE AND HAMILTON BOULEVARD INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

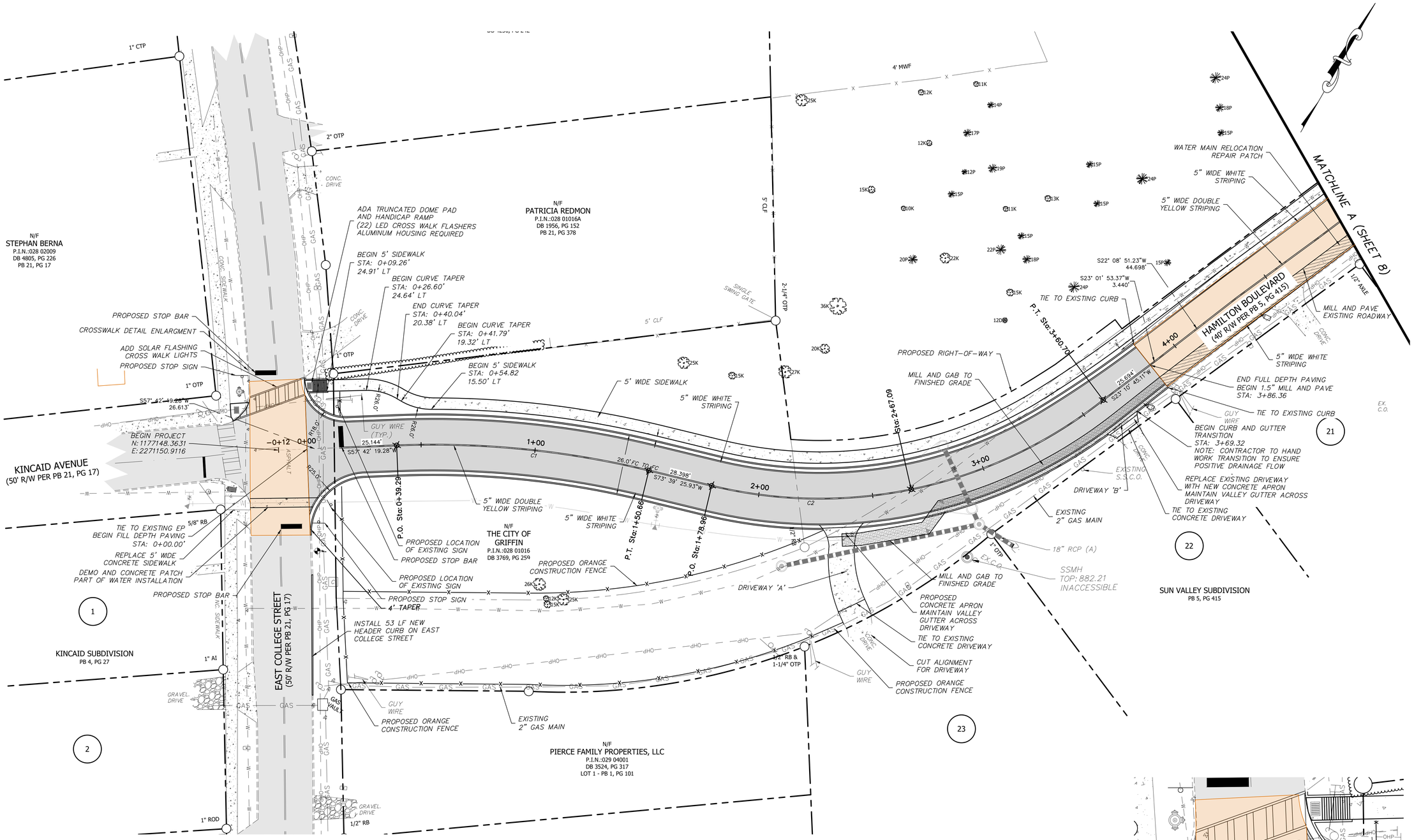
SHEET:
OVERALL PLAN

COA #: PEF004167

GEORGIA REGISTERED No. PE030220 PROFESSIONAL ENGINEER WADE T. STRICKLAND
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

06
SHEET 06 OF 31



CURVE 1	
DELTA:	15.9518
RADIUS:	400.00
LENGTH:	111.00
CHORD LENGTH:	111.36
CHORD BEARING:	N65°40'52.61"E

CURVE 2	
DELTA:	25.2205
RADIUS:	200.00
LENGTH:	88.036
CHORD LENGTH:	87.3273
CHORD BEARING:	N61°01'11"E

CURVE 3	
DELTA:	26.6353
RADIUS:	201.378
LENGTH:	93.615
CHORD LENGTH:	92.7747
CHORD BEARING:	N35°02'45"E

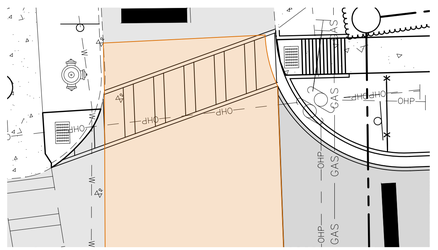
STREET CONSTRUCTION PLAN

41

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.



CROSSWALK DETAIL ENLARGMENT 1:10 SCALE

No.	Revisions:	Date
1.	UPDATED CALL OUT ON SHEET 8	8/28/2025
2.	ADDED BRIDGE FOOTER AND HELICAL PILE SHEET 26	8/28/2025
3.	ADDED BRIDGE ABUTMENT DETAIL SHEET 28	8/28/2025

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an LA company
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phone (770) 412-7700 www.pcgeng.com

STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

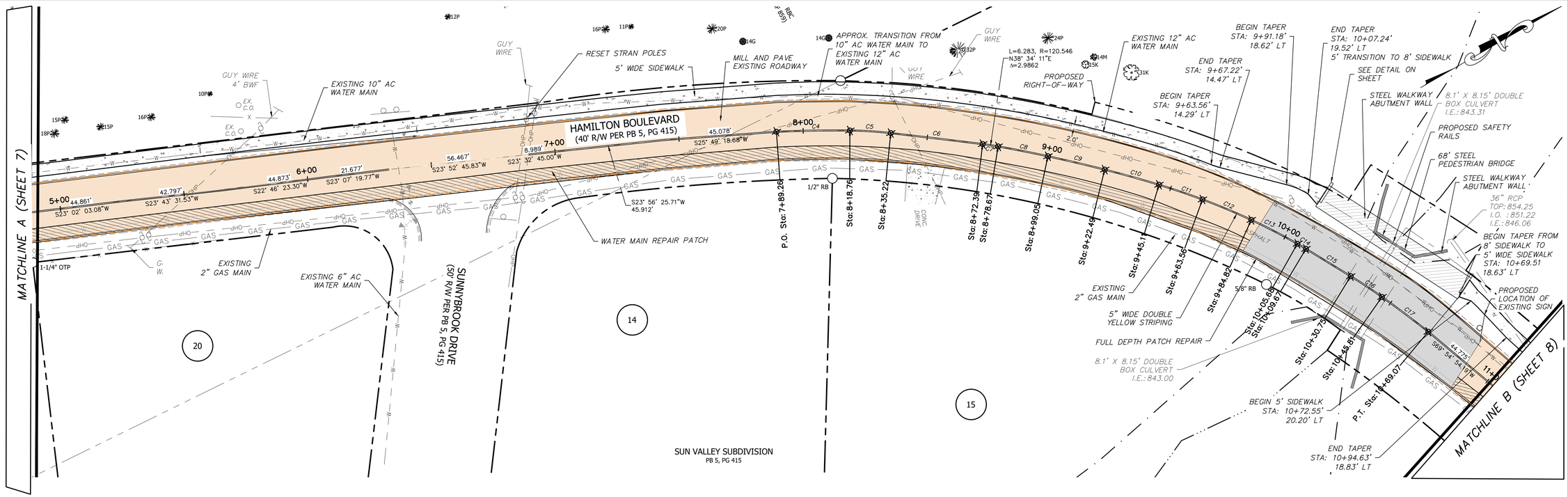
SHEET:
STREET CONSTRUCTION PLAN

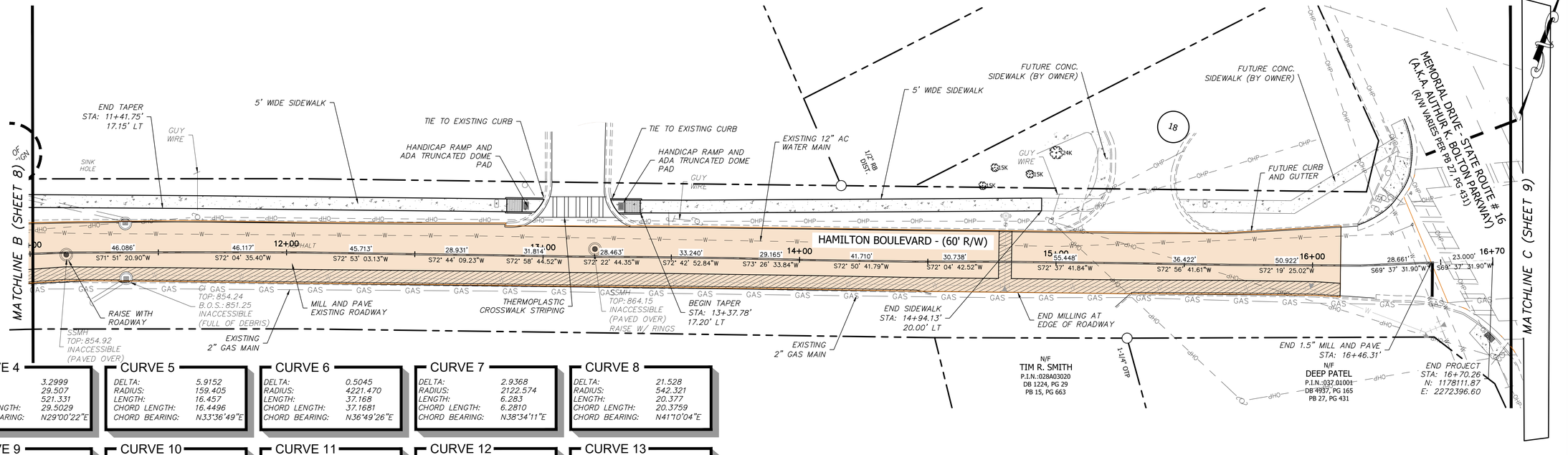
COA #: PEF004167

GEORGIA REGISTERED
No. PE030220
PROFESSIONAL
ENGINEER
WADE T. STRICKLAND
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

07
SHEET 07 OF 31





CURVE 4	
DELTA:	3.2999
RADIUS:	29.507
LENGTH:	521.331
CHORD LENGTH:	29.5029
CHORD BEARING:	N29°00'22"E

CURVE 5	
DELTA:	5.9152
RADIUS:	159.405
LENGTH:	16.457
CHORD LENGTH:	16.4496
CHORD BEARING:	N33°36'49"E

CURVE 6	
DELTA:	0.5045
RADIUS:	4221.470
LENGTH:	37.168
CHORD LENGTH:	37.1681
CHORD BEARING:	N36°49'26"E

CURVE 7	
DELTA:	2.9368
RADIUS:	2122.574
LENGTH:	6.283
CHORD LENGTH:	6.2810
CHORD BEARING:	N38°34'11"E

CURVE 8	
DELTA:	21.528
RADIUS:	542.321
LENGTH:	20.377
CHORD LENGTH:	20.3759
CHORD BEARING:	N41°10'04"E

CURVE 9	
DELTA:	1.9052
RADIUS:	705.020
LENGTH:	23.443
CHORD LENGTH:	23.442
CHORD BEARING:	N43°14'00"E

CURVE 10	
DELTA:	2.7568
RADIUS:	470.129
LENGTH:	22.620
CHORD LENGTH:	22.617
CHORD BEARING:	N45°35'14"E

CURVE 11	
DELTA:	3.3912
RADIUS:	311.694
LENGTH:	18.448
CHORD LENGTH:	17.445
CHORD BEARING:	N48°41'22"E

CURVE 12	
DELTA:	4.6031
RADIUS:	264.678
LENGTH:	21.264
CHORD LENGTH:	21.258
CHORD BEARING:	N52°43'07"E

CURVE 13	
DELTA:	4.7315
RADIUS:	20.859
LENGTH:	20.859
CHORD LENGTH:	20.853
CHORD BEARING:	N57°24'18"E

CURVE 14	
DELTA:	1.5081
RADIUS:	151.514
LENGTH:	3.988
CHORD LENGTH:	3.9878
CHORD BEARING:	N60°31'22"E

CURVE 15	
DELTA:	0.2852
RADIUS:	4234.282
LENGTH:	21.079
CHORD LENGTH:	21.079
CHORD BEARING:	N61°25'18"E

CURVE 16	
DELTA:	4.0227
RADIUS:	214.499
LENGTH:	15.060
CHORD LENGTH:	15.0567
CHORD BEARING:	N63°34'33"E

CURVE 17	
DELTA:	2.5871
RADIUS:	515.189
LENGTH:	23.263
CHORD LENGTH:	23.260
CHORD BEARING:	N66°53'22"E

STREET CONSTRUCTION PLAN

GRAPHIC SCALE

41

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

No.	Revisions:	Date
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350 airport road griffin, georgia 30224
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STREET CONSTRUCTION PLAN FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

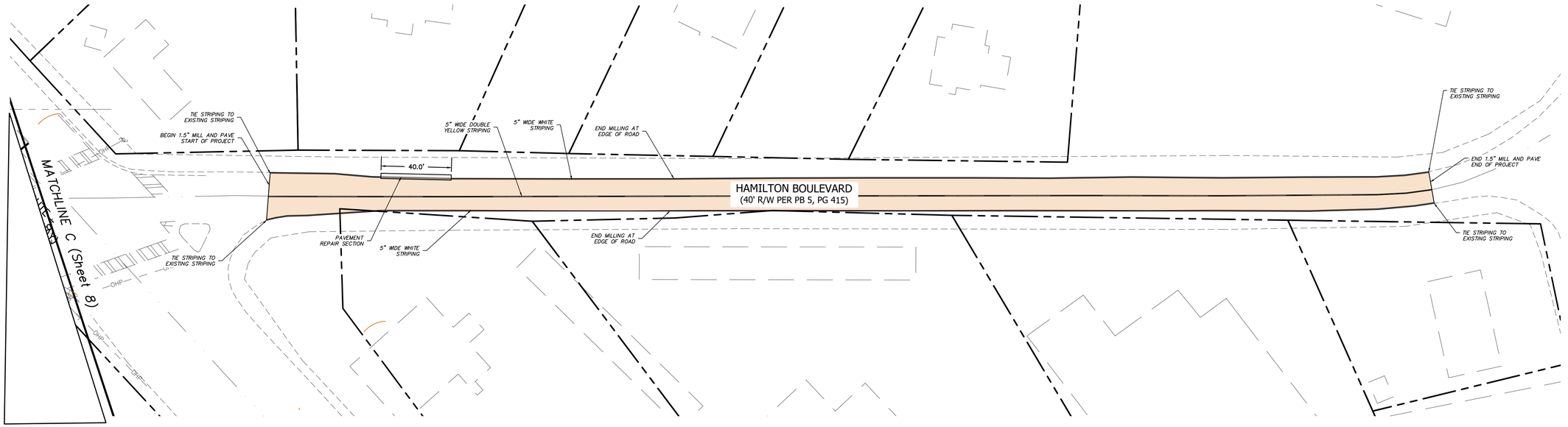
SHEET:
STREET CONSTRUCTION PLAN

COA #: PEF004167

GEORGIA REGISTERED No. PE013020 PROFESSIONAL ENGINEER MIKE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

08
SHEET 08 OF 31



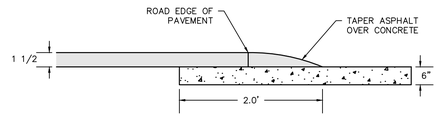
STREET CONSTRUCTION PLAN

41

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.



PAVEMENT REPAIR SECTION DETAIL

N.T.S.

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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

SHEET:
STREET CONSTRUCTION PLAN

COA #: PEF004167

GEORGIA REGISTERED No. PE013220 PROFESSIONAL ENGINEER TADE T. STROUD
7/28/25

GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

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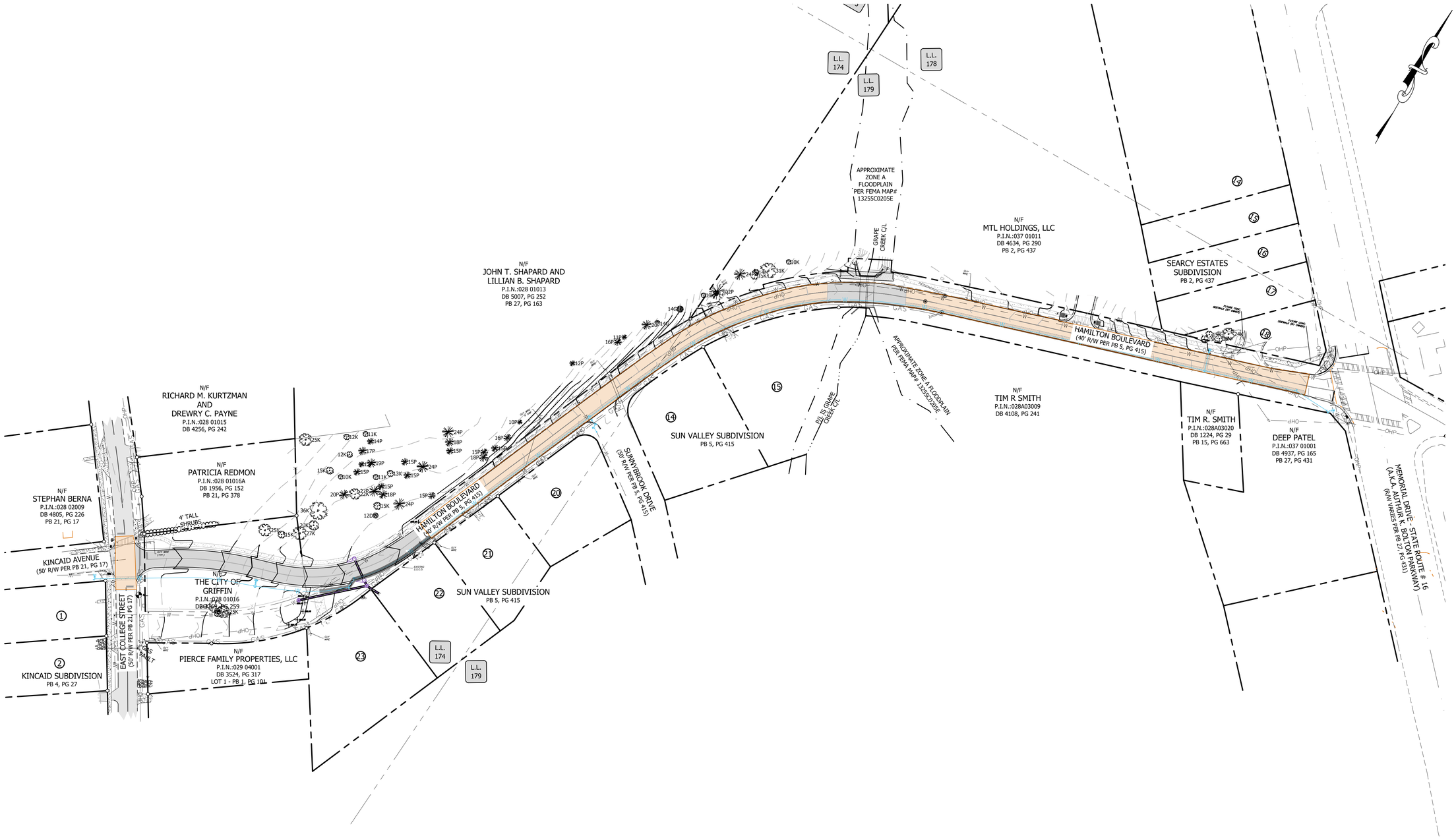
09
SHEET 09 OF 31



OVERALL GRADING PLAN

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

OVERALL GRADING PLAN FOR REFERENCE ONLY SEE ENLARGED PLAN SHEETS FOR EXISTING AND PROPOSED GRADES.

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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

SHEET:
OVERALL GRADING PLAN

COA #: PEF004167

GEORGIA REGISTERED No. PE013220 PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

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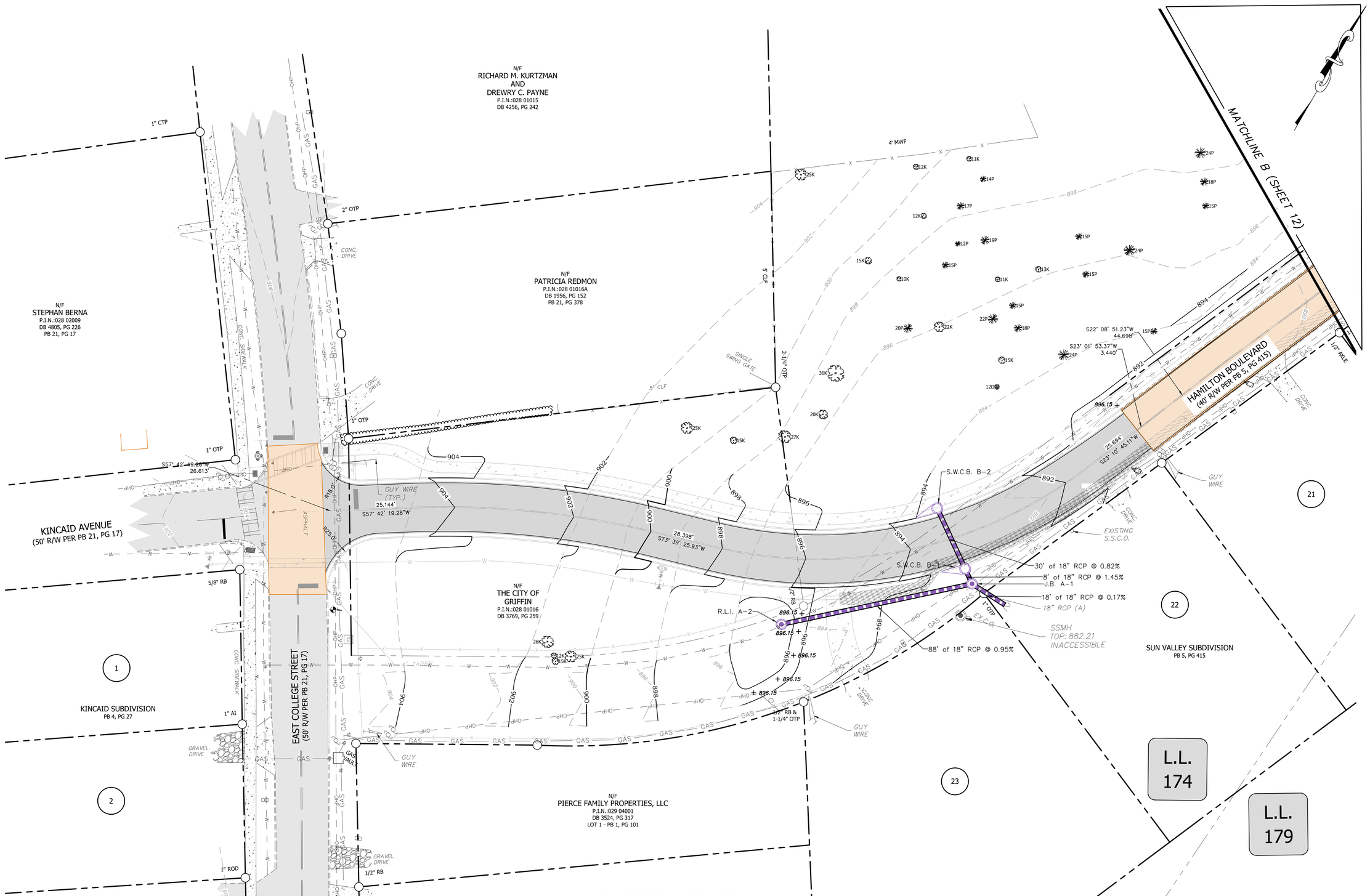
10
SHEET 10 OF 31



GRADING PLAN

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

38

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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

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These documents shall not be reused or modified in any way without the prior written authorization of Paragon Consulting Group, Inc.

SHEET:
GRADING PLAN

COA #: PEF004167

GEORGIA REGISTERED No. PEO30220 PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

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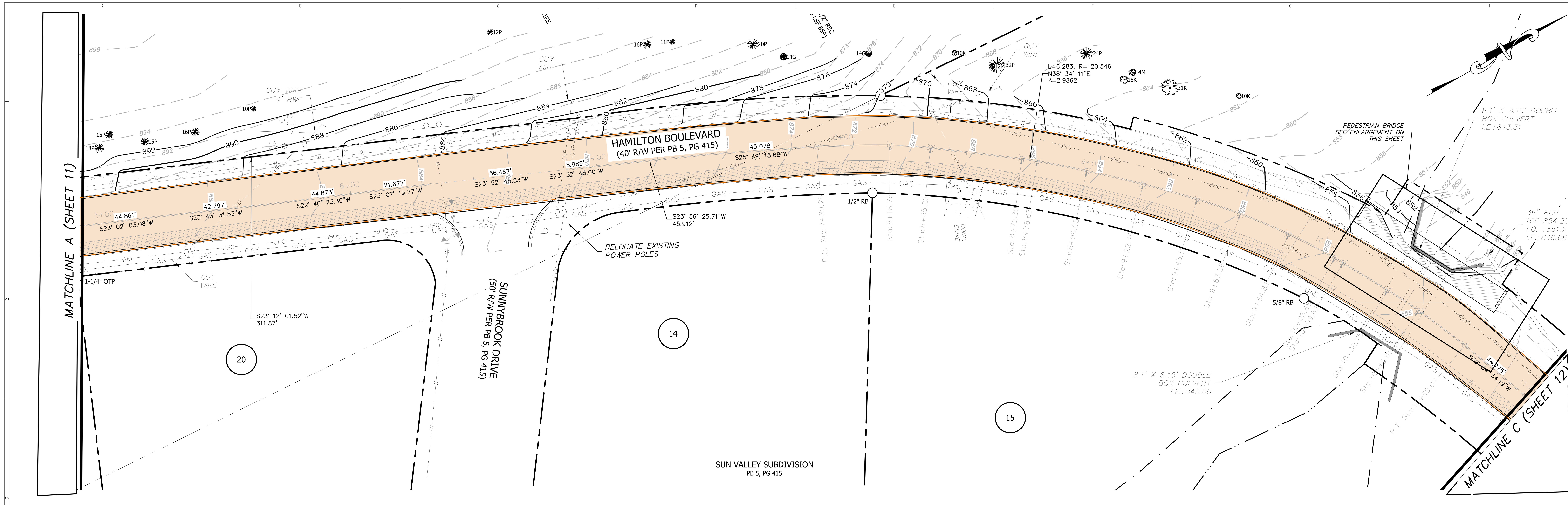
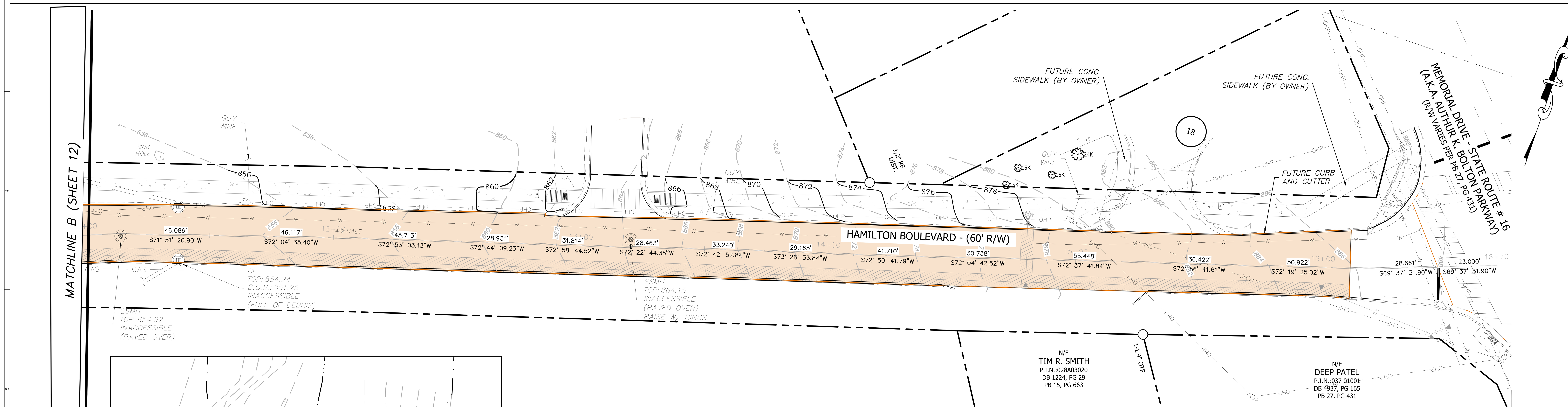
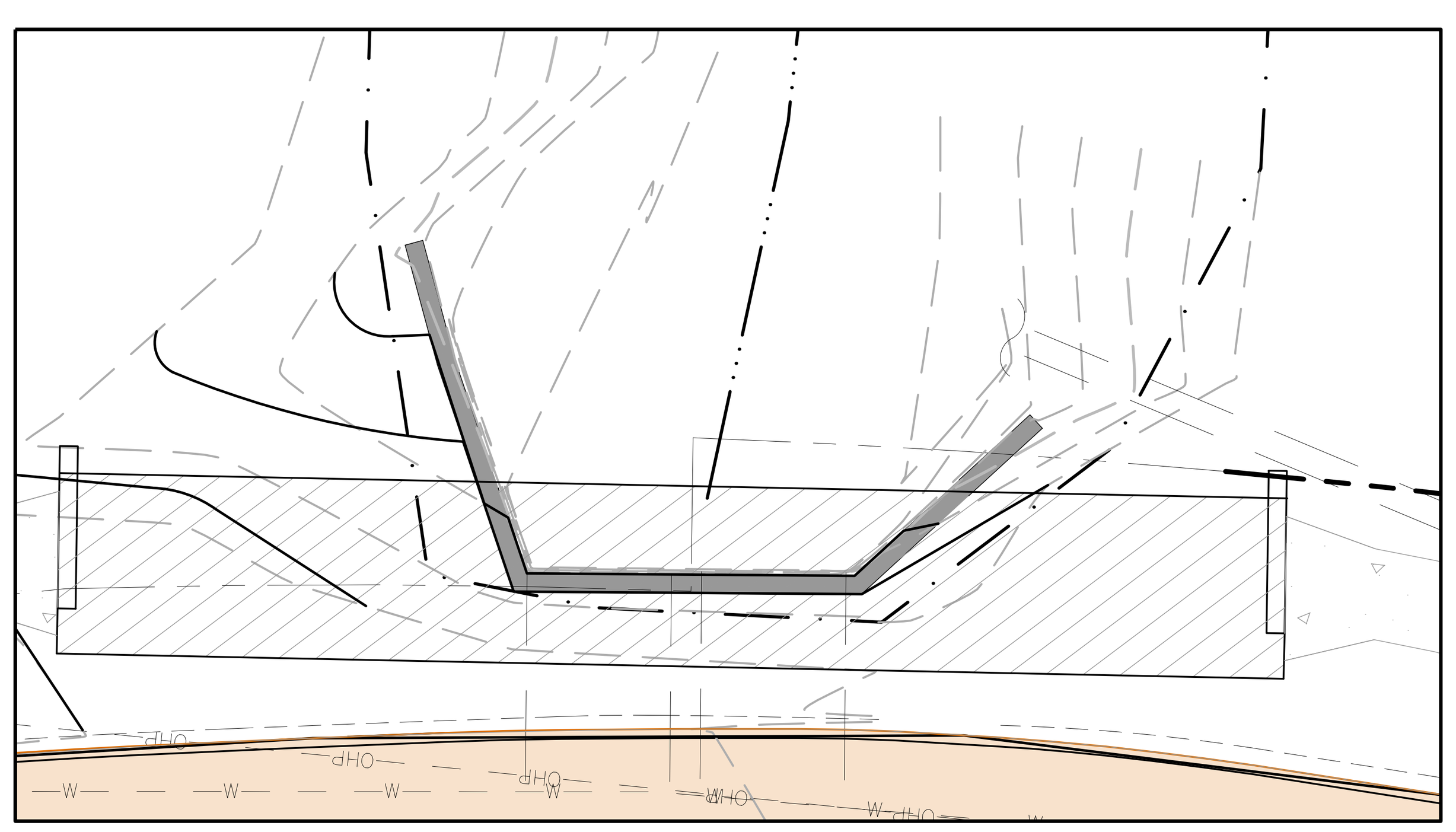
11
SHEET 11 OF 31







PEDESTRIAN BRIDGE ENGLARGEMENT

SCALE 1"=10'

GRADING PLAN

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

38

No.	Revisions:	Date
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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

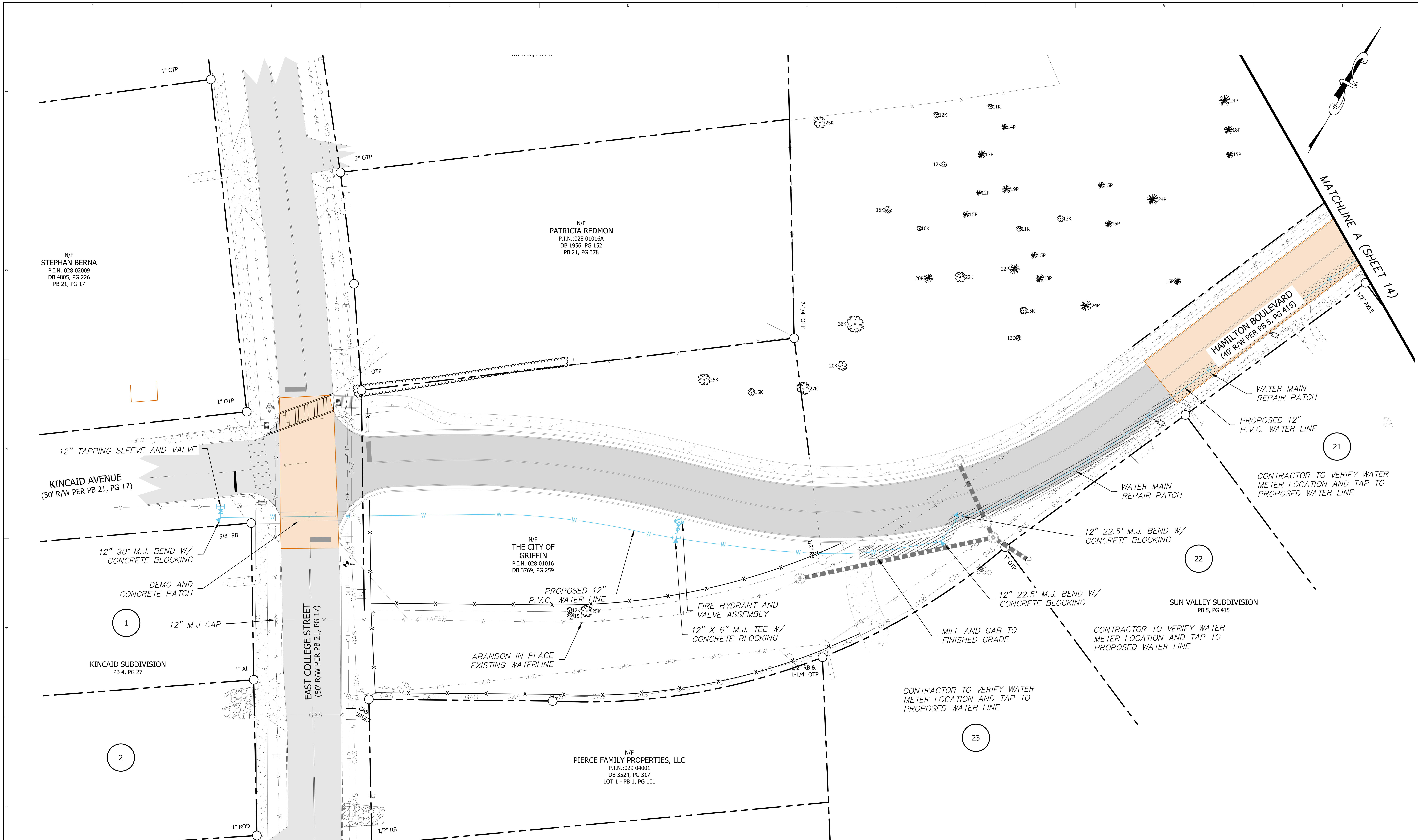
LOCATED IN SPALDING COUNTY

SHEET:
GRADING PLAN

COA #: PEF004167

GEORGIA REGISTERED PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No. PCG3152-24033	Issue Date: JULY 2025
Drawn By: KLB	Checked By: WTS



UTILITY PLAN

41

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

No.	Revisions:	Date
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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

SHEET:

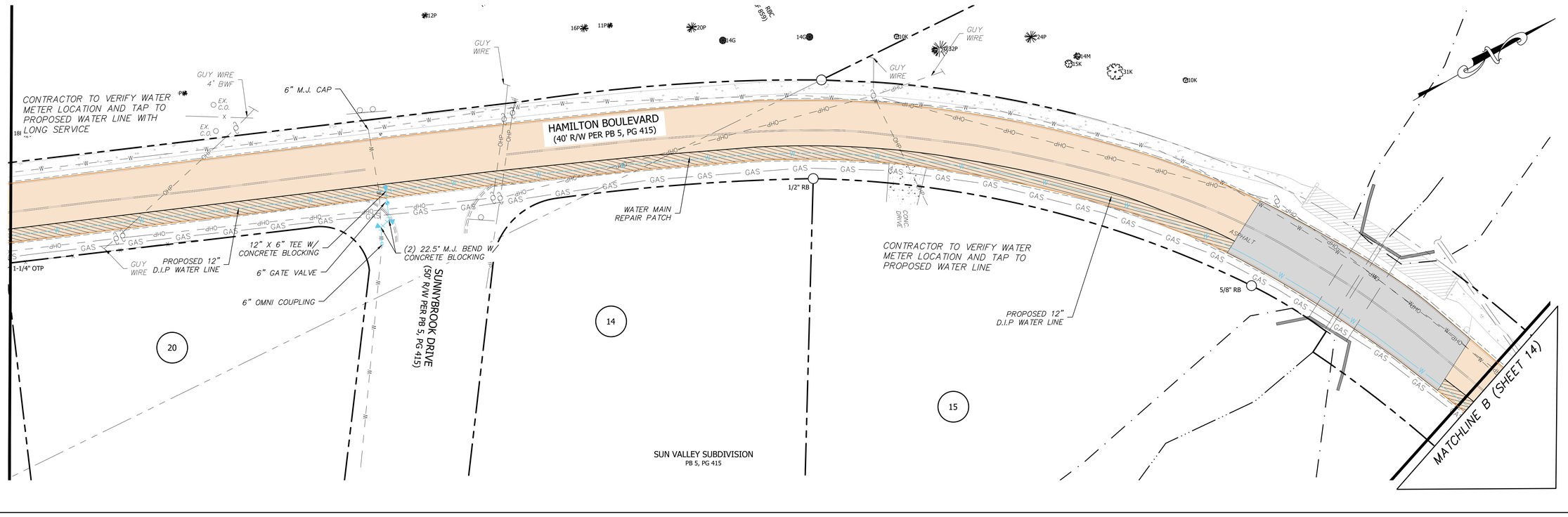
UTILITY PLAN 1

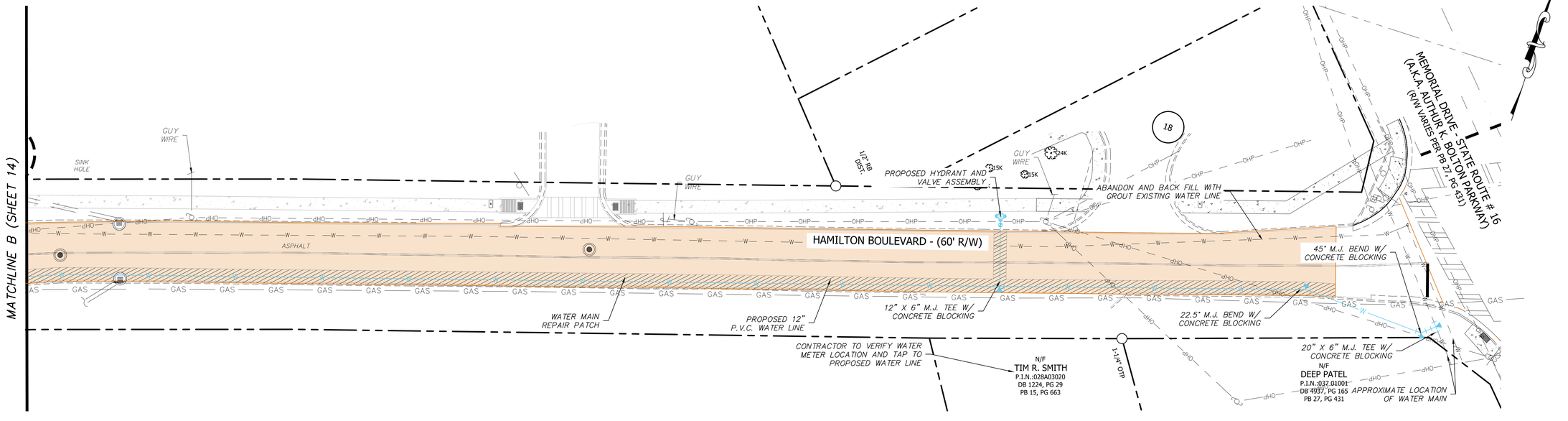
COA #: PEF004167

GEORGIA REGISTERED PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25

GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By:	Checked By:
KLB	WTS





UTILITY PLAN 2

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

41

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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

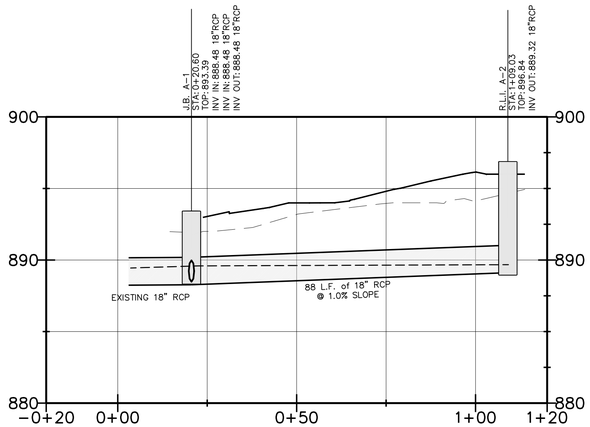
SHEET:
UTILITY PLAN 2

COA #: PEF004167

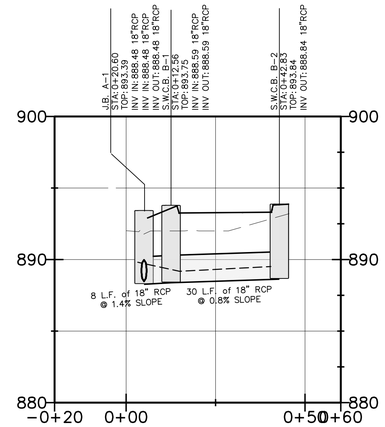
GEORGIA REGISTERED No. PE013020 PROFESSIONAL ENGINEER MADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

14
SHEET 14 OF 31



STORM DRAIN LINE 'A'
HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1"=5'



STORM DRAIN LINE 'B'
HORIZONTAL SCALE 1"=20'
VERTICAL SCALE 1"=5'

PIPE CHART

Line No.	Inlet ID	Line ID	Line Size (in)	Line Slope (%)	Flow Rate (cfs)	Vel Ave (ft/s)	Vel Up (ft/s)	Vel Dn (ft/s)	HGL Up (ft)	HGL Dn (ft)
1	J.B. A-1	A1 (EXISTING)	18	0.17	5.11	3.40	3.39	3.42	889.67	889.63
2	C.I. B-1	B1	18	1.03	3.79	3.31	4.34	2.29	889.33	889.81
3	C.I. B-2	B2	18	1.03	3.06	3.77	4.05	3.50	889.50 j	889.33
4	R.L.I. A-2	A2	18	0.95	1.32	1.98	3.15	0.80	889.75	889.81

*ALL PIPES ARE SIZED FOR THE 100 YR STORM

46

No.	Revisions:	Date
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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

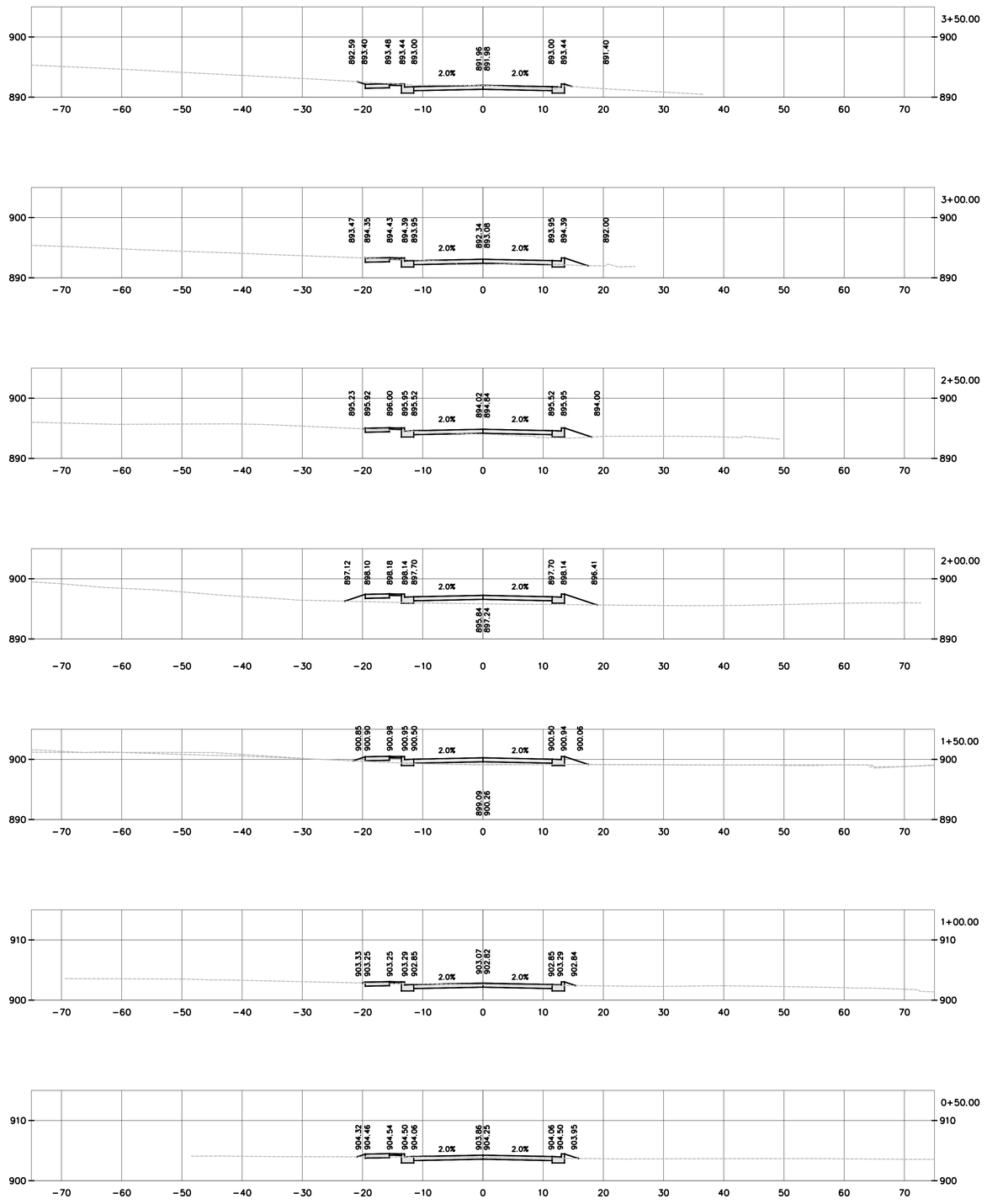
SHEET:
PROFILES

COA #: PEF004167

GEORGIA REGISTERED No. PE013020 PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

15
SHEET 15 OF 31



CROSS SECTIONS

HORIZONTAL SCALE 1" = 10'
VERTICAL SCALE 1"=10'

No.	Revisions:	Date
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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

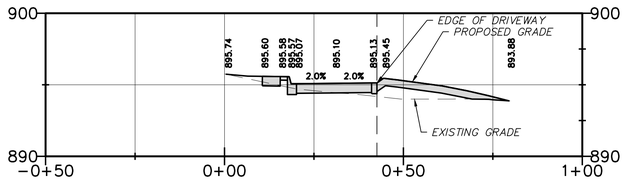
SHEET:
PLAN AND PROFILE

COA #: PEF004167

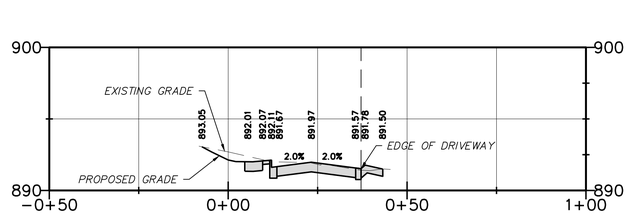
GEORGIA REGISTERED No. PE036220 PROFESSIONAL ENGINEER WADE T. STRICKLAND
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

16
SHEET 16 OF 31



DRIVEWAY "A" CROSS SECTION
HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1"=5'



DRIVEWAY "B" CROSS SECTION
HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1"=5'

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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

SHEET:
PLAN AND PROFILE

COA #: PEF004167

GEORGIA REGISTERED PE No. PE013220 PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

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PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

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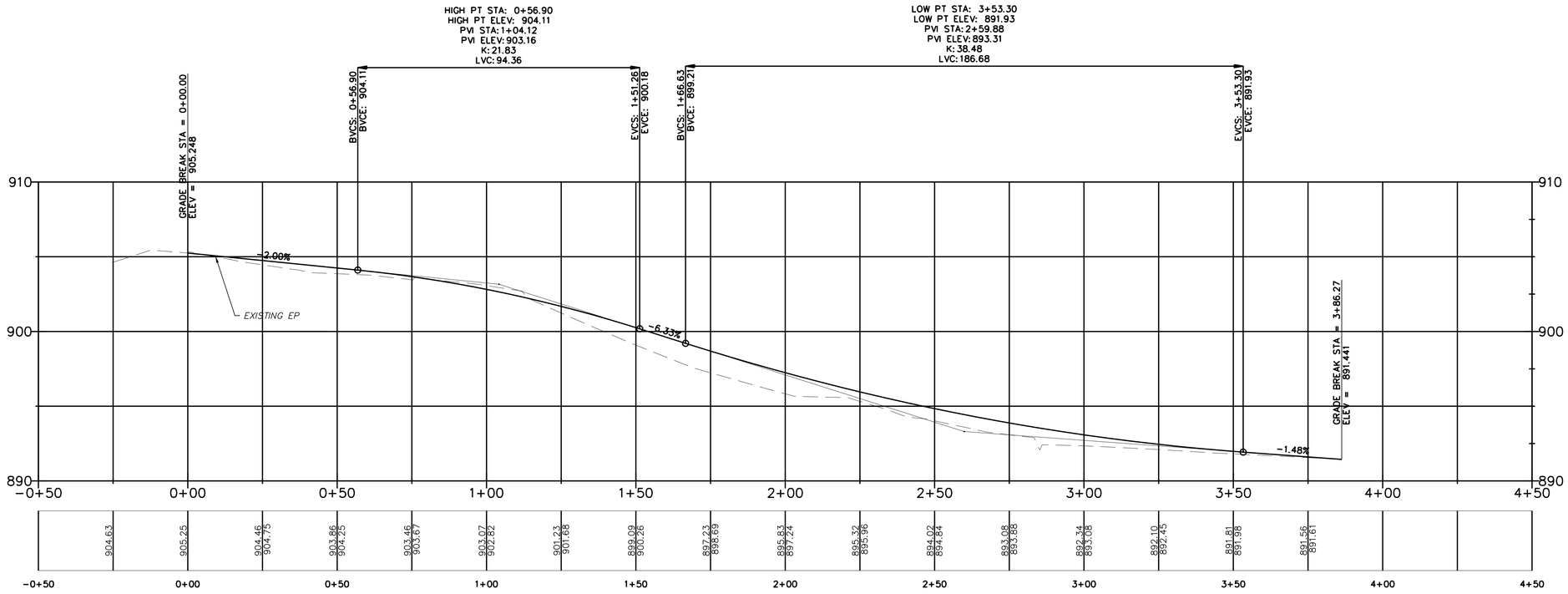
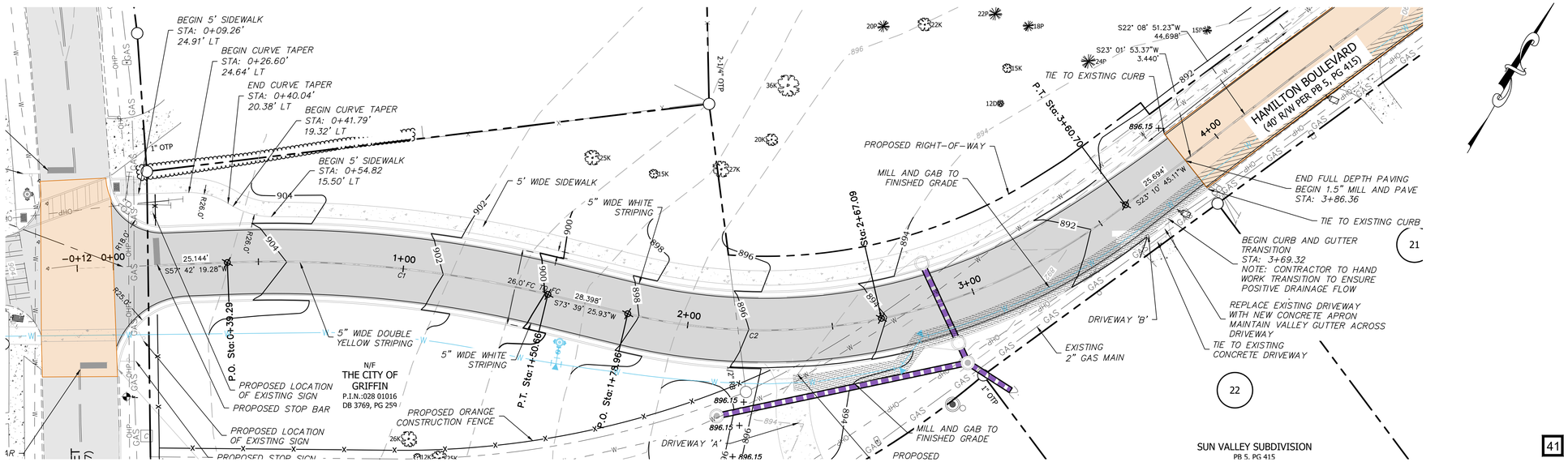
17
SHEET 17 OF 31



CENTERLINE ROAD PROFILE

HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1"=40'



GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

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KINCAID AND HAMILTON INTERSECTION REALIGNMENT

STREET CONSTRUCTION PLANS FOR

LOCATED IN SPALDING COUNTY

SHEET:
ROAD PROFILE

COA #: PEF004167

GEORGIA REGISTERED No. PE013220 PROFESSIONAL ENGINEER WADE T. STRICKLAND
7/28/25
GSWCC LEVEL II CERT. # 0000010472

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18
SHEET 18 OF 31

EROSION CONTROL NOTES

1. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL CONFORM TO THE LATEST EROSION AND SEDIMENT CONTROL REGULATIONS FOR THE STATE, COUNTY, OR CITY, AND THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.
2. WHEN ANY CONSTRUCTION BORDERS A DRAINAGE COURSE, THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY BUILDING OR OTHER EXCAVATION SPOILED DIRT, CONSTRUCTION TRASH OR DEBRIS, ETC. FROM THE DRAINAGE AREAS SHOWN HEREON IN AN EXPEDITIOUS MANNER AS CONSTRUCTION PROGRESSES.
3. EROSION CONTROL MEASURES TO BE PLACED AT TOE OF ALL CUT AND FILL SLOPES. SEE DETAIL FOR SILT FENCE SPECIFICATIONS.
4. SILT FENCE MUST MEET REQUIREMENTS OF THE SPECIFICATIONS CONTAINED IN THE CONSTRUCTION DETAILS OR AN EQUIVALENT PRODUCT APPROVED BY THE OWNER'S REPRESENTATIVE.
5. PRIOR TO ANY OTHER CONSTRUCTION A STABILIZED CONSTRUCTION ENTRANCE SITE MUST BE ESTABLISHED. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLE OR SITE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.
6. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS. IF WETLANDS EXIST ON-SITE, ANY CLEARING MUST BE IN ACCORDANCE WITH THE WETLANDS PERMIT.
7. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES/EXITS, ALL PERIMETER EROSION DEVICES AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
8. OWNER AGREES TO PROVIDE AND MAINTAIN OFF-STREET PARKING ON THE SUBJECT PROPERTY DURING THE ENTIRE CONSTRUCTION PERIOD.
9. THE CONSTRUCTION OF THE SITE WILL INITIATE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.
10. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO GROUND DISTURBANCE. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
11. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED. CONTRACTOR SHALL CLEAN OUT ALL SEDIMENT PONDS WHEN REQUIRED BY ENGINEER OR OWNER'S REPRESENTATIVE.
12. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 12" OF THE TOP OF THE SILT FENCE UTILIZED FOR EROSION CONTROL. IN THE SEDIMENTATION POND, SILT SHALL BE REMOVED WHEN A DEPTH OF 18" HAS ACCUMULATED AT THE OUTLET STRUCTURE.
13. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED.
14. A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE WHENEVER LAND DISTURBANCE ACTIVITY IS IN PROGRESS.
15. ALL OPEN SWALES MUST BE GRASSED AND LINED WITH MAT, IF DESIGNATED ON THE PLANS, AND RIP-RAP PLACED AS REQUIRED TO CONTROL EROSION. A MINIMUM OF 4.5 SQUARE YARDS OF 50-LB. STONES SHALL BE PLACED AT ALL DOWNSTREAM HEADWALLS. THE PLACEMENT OF RIP-RAP AT THE DOWNSTREAM HEADWALLS SHALL BE PLACED IMMEDIATELY UPON THE INSTALLATION OF PIPES AND DRAINAGE DITCHES.
16. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING.
17. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
18. EROSION AND SEDIMENT CONTROL SHALL BE THE CONTRACTOR'S RESPONSIBILITY FOR COMPLIANCE, INSTALLATION, MAINTENANCE AND REMOVAL AS REQUIRED BY THE REGULATIONS OF THE STATE. THE INSTALLATION OF THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS A FIRST STEP IN CONSTRUCTION.
19. CONTRACTOR TO MAINTAIN ON-SITE DAILY LOG OF ALL MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES. LOG SHALL BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES.
20. THE CONTRACTOR IS RESPONSIBLE TO SUBMIT THE NPDES NOTICE OF INTENT AND NOTICE OF TERMINATION TO THE APPROPRIATE STATE AGENCY.
21. ANY AMENDMENTS TO THE ES&PC PLANS WHICH HAVE SIGNIFICANT EFFECTS ON THE BMPS WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
22. WASTE MATERIALS SHALL NOT BE DISCHARGED TO STATE WATERS EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
23. THE ES&PC PLAN IS IN COMPLIANCE WITH ALL CURRENT WASTE DISPOSAL, SANITARY SEWER, AND/OR SEPTIC TANK REGULATIONS.
24. ANY LEAKS OR SPILLS OF PETROLEUM PRODUCTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTAIN, CONTROL, AND REMEDIATE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES, ORDINANCES, AND LAWS.
25. POLLUTANTS OR POTENTIALLY HAZARDOUS MATERIALS, SUCH AS FUELS, LUBRICANTS, LEAD PAINT, CHEMICALS OR BATTERIES, SHALL BE TRANSPORTED, STORED AND UTILIZED IN A MANNER TO PREVENT LEAKAGE OR SPILLAGE INTO THE ENVIRONMENT. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PROPER AND LEGAL DISPOSAL OF ALL SUCH MATERIALS.
26. ALL SAMPLE LOCATIONS AND SAMPLING METHODS ARE IN COMPLIANCE WITH THE NPDES GENERAL PERMIT GAR. 100001.
27. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE REMOVED UPON FINAL STABILIZATION OF THE PROJECT SITE. ALL DISTURBED AREAS ARE TO BE FINAL STABILIZED WITH PERENNIAL GRASSING, TREES, SHRUBS, AND/OR GROUNDCOVERS IN SUFFICIENT COVERAGE TO PREVENT EROSION OF THE SITE.
28. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCE PERMITS.
29. CONCRETE WASH-DOWN ACTIVITIES SHALL ONLY BE IMPLEMENTED IN AREAS PROVIDED BY THE CONTRACTOR PER THE EROSION CONTROL DETAIL. WASH OUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.
30. ALTERNATIVE BMPs ARE NOT IMPLEMENTED IN THIS PLAN.
31. BUILDING MATERIALS ARE TO BE STORED ELEVATED OFF THE GROUND AND COVERED WITH AN IMPERVIOUS MATERIAL.

CITY OF GRIFFIN E&S NOTES

1. A COPY OF THE APPROVED CONSTRUCTION PLANS SHALL BE KEPT ON THE JOB SITE AT ALL TIMES THAT CONSTRUCTIONIS UNDER WAY.
2. IT IS THE DEVELOPER'S RESPONSIBILITY TO COMPLY WITH ALL STATE AND FEDERAL LAWS AND REGULATIONS THAT APPLY TO THE PROJECT.
3. INFORMATION REGARDING UNDERGROUND UTILITIES ON THESE PLANS IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL REQUEST A FIELD LOCATION THROUGH THE UTILITY PROTECTION CENTER AND ANY UTILITY OWNERS THOUGHT TO HAVE FACILITIES IN THE AREA. THE CONTRACTOR SHALL PROMPTLY COMPARE THESE FIELD-MARKED LOCATIONS WITH THE PROJECT PLANS AND THEN NOTIFY THE DESIGN PROFESSIONAL AND, IF NECESSARY, THE CITY OF ANY ANTICIPATED PROBLEMS OR NEED FOR CHANGES.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXCAVATE OR CAUSE THE UTILITY OWNER TO EXCAVATE FOR THE PURPOSE OF DETERMINING EXACT ELEVATIONS OR LOCATIONS AT UTILITY CROSSINGS AND OTHER CRITICAL LOCATIONS WELL IN ADVANCE OF THE WORK.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH THE CITY OF GRIFFIN DEVELOPMENT REGULATIONS. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF GRIFFIN SPECIFICATIONS.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY CITY OFFICIALS FOR ALL REQUIRED INSPECTIONS. 48 HOUR ADVANCE NOTIFICATION IS REQUIRED PRIOR TO INSPECTION BY THE CITY.
7. GRADING SHALL BE DONE TO SUBGRADE ELEVATION. IT SHOULD BE NOTED THAT FINISHED SURFACE GRADES ARE SHOWN ON THIS PLAN, AND THE CONTRACTOR SHALL MAKE ALLOWANCES FOR PAVEMENT, STONE, AND SLAB THICKNESSES.
8. ALL FINISHED GRADING AND PAVING SHALL HAVE POSITIVE DRAINAGE.
9. ALL PERIMETER SEDIMENT BARRIERS, BARRIERS AT CLEARING LIMITS, AND SILT/DETENTION PONDS SHALL BE CONSTRUCTED PRIOR TO ISSUANCE OF GRADING PERMIT.
10. THE REMAINING EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.
11. EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES WILL BE INSTALLED IF DEEMED NECESSARY BY ONSITE INSPECTION.
12. THE DISTURBED AREA AND THE DURATION OF EXPOSURE TO EROSIVE ELEMENTS SHALL BE KEPT TO A PRACTICABLE MINIMUM. TEMPORARY VEGETATION OR MULCHING SHALL BE EMPLOYED TO PROTECT EXPOSED CRITICAL AREAS DURING CONSTRUCTION.
13. PERMANENT VEGETATION SHALL BE ESTABLISHED AS SOON AS PRACTICABLE.
14. STREAM BUFFERS ARE MEASURED FROM THE POINT WHERE THE VEGETATION HAS BEEN WRESTED BY THE NORMAL STREAM FLOW. THE BUFFER AREA SHALL REMAIN UNDISTURBED.
15. ALL CONSTRUCTION SHALL COMPLY WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.
16. MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE PROPERTY OWNER.

8

SITE NARRATIVE

1. THE SITE WORK PORTION OF CONSTRUCTION ACTIVITY FOR THIS SITE WILL CONSIST OF THE GRADING OF A CITY STREET REALIGNMENT AND CONSTRUCTION.

   THE RIGHT OF WAY IS LOCATED IN LAND LOT 50 OF THE 3rd DISTRICT, CITY OF GRIFFIN, GEORGIA
3. SITE AREA = 1.70 ACRES
   DISTURBED AREA= 1.70
4. BASED ON THE SITE SIZE BEING BETWEEN 1.00 AND 10 ACRES AND THE SURFACE WATER DRAINAGE AREA BEING LESS THAN 4.99 SQUARE MILES, THE OUTFALLS SHOULD HAVE AN NTU VALUE OF 75 OR LESS. OUTFALLS SHOULD BE MONITORED PER REQUIREMENTS OF GEN. NPDES PERMIT NO. GAR 100001

   CONSTRUCTION EXIT APPROXIMATE LOCATION: NORTH 33.236031 DEGREES , WEST 84.249658 DEGREES
5. NO BUFFER ENCROACHMENTS HAVE BEEN PROPOSED FOR THIS DEVELOPMENT. NO BUFFER VARIANCES ARE REQUIRED FOR THIS DEVELOPMENT.

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

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 COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

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

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

STORE NEW AND USED PETROLEUM PRODUCTS FOR VEHICLES IN COVERED AREAS WITH BERMS OR DIKES IN PLACE TO CONTAIN ANY SPILLS. IMMEDIATELY CONTAIN AND CLEAN UP ANY SPILLS WITH ABSORBENT MATERIALS. HAVE EQUIPMENT AVAILABLE IN FUEL STORAGE AREAS AND IN VEHICLES TO CONTAIN AND CLEAN UP ANY SPILLS THAT OCCUR.

SAMPLING SHALL BE CONDUCTED VIA AUTOMATICALLY OR GRAB AT SPECIFIED LOCATIONS IN A MANNER THAT IS IN COMPLIANCE WITH NPDES PERMIT NO. 100001. SUPPLEMENTAL INFORMATION ABOUT SAMPLING PROCEDURE WILL BE SUPPLIED AT THE TIME THAT NOTICE OF INTENT IS SUBMITTED.

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EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
INFRASTRUCTURE CONSTRUCTION PROJECTS

SWCD: TOWALIGA

PROJECT NAME: KINCAID & HAMILTON INTERSECTION ADDRESS: KINCAID AVE AND HAMILTON BLVD

CITY/COUNTY: CITY OF GRIFFIN DATE ON PLANS: JULY 2025

NAME & EMAIL OF PERSON FILLING OUT CHECKLIST: WADE STROUD, WSTROUD@LJA.COM

TO BE SHOWN ON ES&PC PLAN

PLAN PAGE #	INCLUDED Y/N		
P. 19	Y	1	The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed. Permit IV.D.1. pg 28.
P. 19	Y	2	Level II certification number issued by the Commission, signature and seal of the certified design professional. Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed. The Level II certification must be issued to the Design Professional, after completion of a GSWCC approved course, and whose signature and seal are on the Plan.
P. 1	Y	3	The name and phone number of the 24-hour contact responsible for erosion, sedimentation and pollution controls.
P. 1	Y	4	Provide the name, address, email address, and phone number of Primary Permittee.
P. 1 & 19	Y	5	Note total and disturbed acreages of the project or phase under construction.
P. 1 & 19	Y	6	Provide the GPS locations of the beginning and end of the infrastructure project. Give the Latitudes and Longitudes in decimal degrees.
P. 1	Y	7	Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
P. 1	Y	8	Descriptions of the nature of construction activity and existing site conditions.
P. 1	Y	9	Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
P. 19	Y	10	Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.
P. 19	Y	11	Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on Part IV page 21 of the permit.
P. 19	Y	12	Design professional's certification statement and signature that the Permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on Part IV page 21 of the permit. *
P. 19	Y	13	Design professional certification statement and signature that the Permittee's ES&PC Plan provides for representative sampling as stated on Part IV.D.6.c.(3). page 37 of the permit as applicable. *
P. 19	Y	14	Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect and certify the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation." *
P. 19	Y	15	Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."
P. 19	Y	16	Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
P. 19	Y	17	Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional." *
P. 19	Y	18	Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit." *
P. 16	Y	19	Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities."
P. 16	Y	20	Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."
P. 16	Y	21	Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."
P. 19	Y	22	Any construction activity which discharges storm water into a Biota Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as any portion of a Biota Impaired Stream Segment, must comply with Part III.C. of the permit. Include the completed Appendix 1 of this checklist with at least 4 of the chosen BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment. *
P. 19	Y	23	If a TMDL Implementation Plan for sediment has been finalized for the Biota 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.*
P. 19	Y	24	BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Include statement that washout of the drum at the construction site is prohibited. *
P. 19	Y	25	Provide BMPs for the remediation of all petroleum spills and leaks.
P. 17-19	Y	26	Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed. *
P. 19	Y	27	Description of practices to provide cover for building materials and building products on site.*
P. 17-19	Y	28	Description of the practices that will be used to reduce the pollutants in storm water discharges.*
P. 16	Y	29	Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, grading, infrastructure, temporary and final stabilization).
P. 16	Y	30	Provide complete requirements of Inspections and record keeping by the Primary Permittee*
P. 16	Y	31	Provide complete requirements of Sampling Frequency and Reporting of sampling results.*
P. 16	Y	32	Provide complete details for Retention of Records as per Part IV.F. of the permit.*
P. 16	Y	33	Description of analytical methods to be used to collect and analyze the samples from each location.*
P. 19	Y	34	Appendix B rationale for NTU values at all outfall sampling points where applicable.*
P. 17-18	Y	35	Delineate all sampling locations on all phases of the Plan, and perennial and intermittent streams and other water bodies into which storm water is discharged.*
P. 17-19	Y	36	A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial sediment storage requirements and initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all BMPs into a single phase plan.*
P. 17-18	Y	37	Graphic scale and North arrow.
P. 17-18	Y	38	Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:
			Existing Contours — USGS 1": 2000' Topographical Sheets
			Proposed Contours — 1" : 400' Centerline Profile
P. 19	Y	39	Use of Alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by GAEPD or the Georgia Soil and Water Conservation Commission). Refer to the Alternative BMP Guidance Document found at www.gaswcc.georgia.gov.
P. 19	Y	40	Use of Alternative BMP for application to the Equivalent BMP List. Refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition. *
P. 19	Y	41	Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State Waters and any additional buffers as required by the Local Issuing Authority. Clearly note and delineate all areas of impact.
P. 19	Y	42	Delineation of all State Waters and wetlands located on or within 200 feet of the project site.
P. 25	Y	43	Delineation and acreage of contributing drainage basins on the project site.
P. 25	Y	44	Delineate on-site drainage and off-site watersheds using USGS 1" :2000' topographical sheets.
P. 25	Y	45	Estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.
P. 11	Y	46	Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate at all storm water discharge points.
P. 17-19	Y	47	Soil series for the project site and their delineation.
P. 17-19	Y	48	The limits of disturbance for each phase of construction.
P. 25	Y	49	Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, Permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan.
P. 17-19	Y	50	Location of Best Management Practices that are consistent with, and no less stringent than, the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual Chapter 6, with legend.
P. 20-21	Y	51	Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.
P. 19	Y	52	Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.

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

Effective January 1, 2025.

PETROLEUM & PAINTS STORAGE & REMEDIATION

25

LOCAL STATE 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 FOR SPILL CLEAN UP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIAL AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, 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 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 560 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTER MEASURE PLAN BY THAT LICENSED PROFESSIONAL.

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 SECONDARY CONTAINMENT LINER TO PREVENT OR MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS, LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.

PAINTS/FINISHES/SOLVENTS-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 MATERIAL USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

SEE CORRESPONDING NPDES CHECKLIST NUMBERS ON PLAN SHEETS FOR LOCATION OF CHECKLIST ITEMS #

11

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

WADE T. STROUD, P.E. — DATE 07/28/2025

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I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100001.

WADE T. STROUD, P.E. — DATE 07/28/2025

ENGR STATE E&SC CERTIFICATION #: 0000058947, LEVEL II

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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

SHEET: NPDES NOTES

COA #: PEF004167

GEORGIA REGISTERED No. PE013622 PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

No.	Revisions:	Date
1.	UPDATED CALL OUT ON SHEET 8	8/28/2025
2.	ADDED BRIDGE FOOTER AND HELICAL PILE SHEET 26	8/28/2025
3.	ADDED BRIDGE ABUTMENT DETAIL SHEET 25	8/28/2025

19
SHEET 19 OF 31

NPDES NOTES

1. Checklist. Each plan shall include a completed Erosion, Sedimentation and Pollution Control Plan Checklist established by the Georgia Soil and Water Conservation Commission (GSWCC) as of January 1 of the year in which the land-disturbing activity was permitted and amendments to the applicable Checklist as approved by the GSWCC up until the date of the NOI submittal. The applicable checklists are available on the GSWCC website.

2. Site description. Each site-specific Plan shall provide a description of pollutant sources and other information as indicated:

a. A description of the nature of the construction activity;

b. A detailed description and chart or timeline of the intended sequence of major activities which disturb soils for major portions of the site (i.e., initial sediment storage requirements and perimeter BMPs, clearing and grubbing activities, excavation activities, grading activities, infrastructure activities, immediate and final stabilization activities);

c. Estimates of the total area of the site and the total area of the site that is expected to be disturbed by excavation, grading, or other activities;

d. An estimate of the runoff coefficient or peak discharge flow of the site prior to the construction activities and after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;

e. A site-specific map or series of drawings indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which are not to be disturbed, the location of major structural and nonstructural controls identified in the Plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where stormwater is discharged to a surface water; and

f. Identify the receiving water(s) and areal extent of wetland acreage at the site;

3. Controls. Each Plan shall include a description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial sediment storage

requirements and perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all of the BMPs into a single phase Plan. The Plan will include appropriate staging and access requirements for construction equipment. The Plan will clearly describe for each major activity identified in Part IV.D.2.b., appropriate control measures and the timing during the construction process that the measures will be implemented. The primary permittee is encouraged to utilize the document, Developing Your Stormwater Pollution Prevention Plan: A Guide for Construction Sites, EPA 833-R-060-04, May 2007, when preparing the Plan. The description and implementation of controls shall address the following minimum components:

a. Erosion and sediment controls.

(1). Stabilization measures. A description of interim and permanent stabilization measures, including site-specific scheduling of the implementation of the measures. Site plans should ensure that existing vegetation is preserved and that disturbed portions of the site are stabilized. Stabilization measures may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the Plan. Except as provided in paragraphs IV.D.5.(a).(1).(a). below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.

(a). Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently cease is precluded by snow cover or other adverse weather conditions, stabilization measures shall be initiated as soon as practicable.

(2). Structural practices. A description of structural practices to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

(3). Sediment basins. For common drainage locations a temporary (or permanent) sediment basin providing at least 1800 cubic feet (67 cubic yards) of storage per acre drained, or equivalent control measures, shall be provided until final

stabilization of the site. The 1800 cubic feet (67 cubic yards) of storage area per acre drained does not apply to flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. For drainage locations where a temporary sediment basin providing at least 1800 cubic feet (67 cubic yards) of storage per acre drained, or equivalent controls is not attainable, sediment traps, silt fences, wood mulch berms or equivalent sediment controls are required for all side slope and down slope boundaries of the construction area. When the sediment fills to a volume at most of 22 cubic yards per acre for each acre of drainage area, the sediment shall be removed to restore the original design volume. This sediment must be properly disposed. Sediment basins may not be feasible at some construction sites. Careful consideration must be used to determine when a sediment basin cannot be used and/or when 67 cubic yards of storage per acre drained is not attainable and a written justification explaining the decision(s) must be included in the Plan. Perennial and intermittent waters of the State shall not be used for temporary or permanent sediment detention.

When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan. Outlet structures that withdraw water from the surface are temporary BMPs and must be removed prior to submitting Notice of Termination. For construction activities where the NOI was submitted prior to January 1, 2014, this requirement of the permit is not applicable.

(4). Alternative BMPs. The use of alternative BMPs whose performance has been documented to be equivalent or superior to conventional BMPs as certified by a Design Professional may be allowed (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission).

(5). High performance BMPs. The use of infiltration trenches, seep berms, sand filters, dry wells, flocculants or coagulants, etc. for minimizing point source discharges except for large rainfall events is encouraged.

b. Stormwater management. A description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of stormwater management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. Operators are only responsible for the installation and maintenance of stormwater management measures prior to final stabilization of the site, and are not

responsible for maintenance after stormwater discharges associated with construction activity have been eliminated from the site.

(1). Such practices may include: stormwater detention structures (including wet ponds); stormwater retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on-site; and sequential systems (which combine several practices). The Plan shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed pre-development levels.

(2). Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel for the purpose of providing a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water(s)).

NPDES NOTES

(3). Installation and use of green infrastructure approaches and practices that mimic natural processes and direct stormwater where it can be infiltrated, evapotranspirated or re-used with significant utilization of soils and vegetation rather than traditional hardscape collection, conveyance and storage structures are encouraged to the maximum extent practicable. Green Infrastructure practices or approaches include permeable or porous paving, vegetated swales instead of curbs and gutters, green roofs, tree boxes, rain gardens, constructed wetlands, infiltration planters, vegetated median strips, protection and enhancement of riparian buffers and floodplains, and the overall reduction in site disturbance and impervious area. Design information on Green Infrastructure practices and other ways to manage stormwater can be found in the Georgia Stormwater Management Manual and the Coastal Stormwater Supplement. Additional information on Green Infrastructure can be found at the USEPA website.

c. Other controls.

(1). Waste disposal. Locate waste collection areas away from streets, gutters, watercourses and storm drains. Waste collection areas, such as dumpsters, are often best located near construction site entrances to minimize traffic on disturbed soils. The Plan should include secondary containment around liquid waste collection areas to further minimize the likelihood of contaminated discharges. Solid materials, including building materials, shall not be discharged to waters of the State, except as authorized by a Section 404 permit.

(2). For building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site, provide cover (e.g. plastic sheeting, temporary roofs) to minimize the exposure of these products to precipitation and to stormwater, or a similarly effective means designed to minimize the discharge

of pollutants from these areas. Minimization of exposure is not required in cases where exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk to stormwater contamination (such as final products and materials intended for outdoor use).

(3). Off-site vehicle tracking of dirt, soils, and sediments and the generation of dust shall be minimized or eliminated to the maximum extent practical. The Plan shall include the best management practice to be implemented at the site or construction activity.

(4). Nothing in this permit relieves a permittee from any obligations to comply with all applicable State and/or local regulations of waste disposal, sanitary sewer, septic and petroleum storage systems.

(5). The Plan shall include best management practices for the remediation of all petroleum spills and leaks as appropriate.

(6). The Plan shall include best management practices for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of vehicles. Washout of the drum at the construction site is prohibited. Additional information about best management practices for concrete washout is available at the USEPA website.

(7). All permittees are required to minimize the discharge of pollutants from dewatering trenches and excavations. Discharges are prohibited unless managed by appropriate controls.

4. Inspections.

a. Permittee requirements.

30

(1). Each day when any type of construction activity has taken place at a primary permittee's site, certified personnel provided by the primary permittee shall inspect: (a) all areas at the primary permittee's site where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment and (b) all locations at the primary permittee's site where vehicles enter or exit the site for evidence of off-site sediment tracking. These inspections must be conducted until a Notice of Termination is submitted.

(2). Measure and record rainfall within disturbed areas of the site that have not met final stabilization once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday. The data collected for the purpose of compliance with this permit shall be representative of the monitored activity. Measurement of rainfall may be suspended if all areas of the site have

undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region.

(3). Certified personnel (provided by the primary permittee) shall inspect the following at least once every fourteen (14) calendar days and within 24 hours of the end of a storm that is 0.5 inches rainfall or greater (unless such storm ends after 5:00 PM on any Friday or on any non-working Saturday, non-working Sunday or any non-working Federal holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first): (a) disturbed areas of the primary permittee's construction site; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region, the permittee must comply with Part IV.D.4.a.(4). These inspections must be conducted until a Notice of Termination is submitted.

(4). Certified personnel (provided by the primary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is submitted to EPD) the areas of the site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s).

(5). Based on the results of each inspection, the site description and the pollution prevention and control measures identified in the Erosion, Sedimentation and Pollution Control Plan, the Plan shall be revised as appropriate not later than seven (7) calendar days following each inspection. Implementation of such changes shall be made as soon as practical but in no case later than seven (7) calendar days following each inspection.

(6). A report of each inspection that includes the name(s) of certified personnel making each inspection, the date(s) of each inspection, construction phase (i.e., initial, intermediate or final), major observations relating to the implementation of the Erosion, Sedimentation and Pollution Control Plan, and actions taken in accordance with Part IV.D.4.a.(5). of the permit shall be made and retained at the site or be readily available at a designated alternate location until the entire site or

that portion of a construction site that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by end of the second business day and/or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify any incidents, the inspection report shall contain a statement that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit.

5. Maintenance. The Plan shall include a description of procedures to ensure the timely maintenance of vegetation, erosion and sediment control measures and other protective measures identified in the site plan.

6. Sampling Requirements. This permit requires the monitoring of nephelometric turbidity in receiving water(s) or outfalls in accordance with this permit. The following procedures constitute EPD's guidelines for sampling turbidity.

a. *Sampling Requirements* shall include the following:

31

NPDES NOTES

(1). A USGS topographic map, a topographic map or a drawing (referred to as a topographic map) that is a scale equal to or more detailed than a 1:24000 map showing the location of the infrastructure construction; (a) the location of all perennial and intermittent streams and other water bodies as shown on a USGS topographic map, and all other perennial and intermittent streams and other water bodies located during mandatory field verification, into which the stormwater is discharged and (b) the receiving water and/or outfall sampling locations for each representative stormwater outfall. When the permittee has chosen to use a USGS topographic map and the receiving water(s) is not shown on the USGS topographic map, the location of the receiving water(s) must be hand-drawn on the USGS topographic map from where the stormwater(s) enters the receiving water(s) to the point where the receiving water(s) combines with the first blue line stream shown on the USGS topographic map;

(2). A written narrative of site specific analytical methods used to collect and analyze the samples including quality control/quality assurance procedures. This narrative must include precise sampling methodology for each sampling location;

(3). When the permittee has determined that some or all outfalls will be sampled, a rationale must be included on the Plan for the NTU limit(s) selected from Appendix B. This rationale must include the size of the construction site, the calculation of the size of the surface water drainage area, and the type of receiving water(s) (i.e., trout stream or supporting warm water fisheries); and

(4). Any additional information EPD determines necessary to be part of the Plan. EPD will provide written notice to the permittee of the information necessary and the time line for submittal.

b. *Sample Type.* All sampling shall be collected by "grab samples" and the analysis of these samples must be conducted in accordance with methodology and test procedures established by 40 CFR Part 136 (unless other test procedures have been approved), the guidance document titled "NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001" and guidance documents that may be prepared by the EPD.

(1). Sample containers should be labeled prior to collecting the samples.

(2). Samples should be well mixed before transferring to a secondary container.

(3). Large mouth, well cleaned and rinsed glass or plastic jars should be used for collecting samples. The jars should be cleaned thoroughly to avoid contamination.

(4). Manual, automatic or rising stage sampling may be utilized. Samples required by this permit should be analyzed immediately, but in no case later than 48 hours after collection. However, samples from automatic samplers must be collected no later than the next business day after their accumulation, unless flow through automated analysis is utilized. If automatic sampling is utilized and the automatic sampler is not activated during the qualifying event, the permittee must utilize manual sampling or rising stage sampling during the next qualifying event. Dilution of samples is not required. Samples may be analyzed directly with a properly calibrated turbidimeter. Samples are not required to be cooled.

(5). Sampling and analysis of the receiving water(s) or outfalls beyond the minimum frequency stated in this permit must be reported to EPD as specified in Part IV.E.

c. *Sampling Points*.

(1). For construction activities the primary permittee must sample all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent streams and other water bodies, or all outfalls into such streams and other water bodies, or a combination thereof. However, provided for in and in accordance with Part IV.D.6.c.(2). of this permit, primary permittees on an infrastructure construction project may sample the representative perennial and intermittent streams, other water bodies or outfalls, or a combination thereof. Samples taken for the purpose of compliance with this permit shall be representative of the monitored activity and representative of the water quality of the receiving water(s) and/or the stormwater outfalls using the following minimum guidelines:

(a). The upstream sample for each receiving water(s) must be taken immediately upstream of the confluence of the first stormwater discharge from the permitted activity (i.e., the discharge farthest upstream at the site) but downstream of any other stormwater discharges not associated with the permitted activity. Where appropriate, several upstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the upstream turbidity value.

(b). The downstream sample for each receiving water(s) must be taken downstream of the confluence of the last stormwater discharge from the permitted activity (i.e., the discharge farthest downstream at the site) but upstream of any other stormwater discharge not associated with the permitted activity. Where appropriate, several downstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the downstream turbidity value.

(c). Ideally the samples should be taken from the horizontal and vertical center of the receiving water(s) or the stormwater outfall channel(s).

(d). Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall stormwater channel.

(e). The sampling container should be held so that the opening faces upstream.

(f). The samples should be kept free from floating debris.

(g). Permittees do not have to sample sheet flow that flows onto undisturbed natural areas or areas stabilized by the project. For purposes of this section, stabilized shall mean, for unpaved areas and areas not covered by permanent structures, 100% of the soil surface is uniformly covered in permanent vegetation with a density of 70% or greater, or landscaped according to the Plan (uniformly covered with landscaping materials in planned landscaped areas), or equivalent permanent stabilization measures as defined in the Manual (excluding a crop of annual vegetation and a seeding of target crop perennials appropriate for the region). For infrastructure construction projects on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by stabilizing the disturbed land for its agricultural or silvicultural use.

(h). All sampling pursuant to this permit must be done in such a way (including generally accepted sampling methods, locations, timing, and

frequency) as to accurately reflect whether stormwater runoff from the construction site is in compliance with the standard set forth in Parts III.D.3. or III.D.4., whichever is applicable.

(2). For infrastructure construction projects, the permittee is not required to sample a perennial or intermittent stream or other water bodies (or the associated outfall, if applicable) if the design professional preparing the Plan certifies that an increase in the turbidity of a specific identified receiving water to be sampled will be representative of the increase in the turbidity of a specific identified un-sampled receiving water. A written justification and detailed analysis shall be prepared by the design professional justifying such proposed sampling. A summary chart of the justification and analysis for the representative sampling must be included on the Plan. The justification and analysis shall include the location and description of the specified sampled and un-sampled receiving water and shall contain a detailed comparison and discussion of each such receiving water in the following areas:

(a). site land disturbances and characteristics;

(b). receiving water watershed sizes and characteristics; and

(c). site and watershed runoff characteristics utilizing the methods in Appendix A-1 (United States Department of Agriculture Soil Conservation Service's TR-55, Urban Hydrology for Small Watersheds) of the most recent version of the "Manual for Erosion and Sedimentation Control in Georgia" for the various precipitation events and any other such considerations necessary to show that the increase in the turbidity of a specific identified sampled receiving water will be representative of the increases in the turbidity of a specific identified un-sampled receiving waters.

NPDES NOTES

(3). For infrastructure construction projects, when the permittee determines that some receiving water(s) will not be sampled due to representative sampling, the design professional making this determination and preparing the Plan must include and sign the following certification in the Plan:

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for the monitoring of: (a) all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent steams and other water bodies, or (b) where any such specific identified perennial or intermittent stream and other water body is not proposed to be sampled, I have determined in my professional judgment, utilizing the factors required in the General NPDES Permit No. GAR100002, that the increase in the turbidity of each specific identified sampled receiving water will be representative of the increase in the turbidity of a specific identified un-sampled receiving water."

(4). For infrastructure construction projects, if at any time during the life of the project a selected receiving water no longer represents another receiving water, then the permittee shall sample the latter receiving water until selection of an alternative representative receiving water.

(5). For infrastructure construction projects, if at any time during the life of the project a receiving water is determined not to be represented as certified in the Plan, the permittee shall sample that receiving water until a Notice of Termination is submitted or until the applicable phase is stabilized in accordance with this permit.

(6). For infrastructure construction projects, monitoring obligations shall cease for any phase of the project that has been stabilized in accordance with Part IV.D.6.c.(1).(g).

d. *Sampling Frequency*.

33

(1). The primary permittee must sample in accordance with the Plan at least once for each rainfall event described below. For a qualifying event, the permittee shall sample at the beginning of any stormwater discharge to a monitored receiving water and/or from a monitored outfall location within forty-five (45) minutes or as soon as possible.

(2). However, where manual and automatic sampling are impossible (as defined in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the stormwater discharge.

(3). Sampling by the permittee shall occur for the following qualifying events:

(a). For each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a stormwater discharge that occurs during normal business hours as defined in this permit after all clearing and grubbing operations have been completed, but prior to completion of mass grading operations, in the drainage area of the location selected as the representative sampling location;

(b). In addition to (a) above, for each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a stormwater discharge that occurs during normal business hours as defined in this permit either 90 days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT, in the drainage area of the location selected as the representative sampling location, whichever comes first;

(c). At the time of sampling performed pursuant to (a) and (b) above, if BMPs in any area of the site that discharges to a receiving water or from an outfall are not properly designed, installed and maintained, corrective action shall be defined and implemented within two (2) business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours* until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are properly designed, installed and maintained;

(d). Where sampling pursuant to (a), (b) or (c) above is required but not possible (or not required because there was no discharge), the permittee, in accordance with Part IV.D.4.a.(6), must include a written justification in the inspection report of why sampling was not performed. Providing this justification does not relieve the permittee of any subsequent sampling obligations under (a), (b) or (c) above; and

(e). Existing construction activities, i.e., those that are occurring on or before the effective date of this permit, that have met the sampling required by (a) above shall sample in accordance with (b). Those existing construction activities that have met the sampling required by (b) above shall not be required to conduct additional sampling other than as required by (c) above.

*Note that the Permittee may choose to meet the requirements of (a) and (b) above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for sampling at any time of the day or week.

7. Non-stormwater discharges. Except for flows from fire fighting activities, sources of non-stormwater listed in Part III.A.2. of this permit that are combined with stormwater discharges associated with construction activity must be identified in the Plan. The Plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge.

E. Reporting.

32

1. The applicable permittees are required to submit the sampling results to the EPD by the fifteenth day of the month following the reporting period. Reporting periods are months during which samples are taken in accordance with this permit. Sampling results shall be in a clearly legible format. Upon written notification, EPD may require the applicable permittee to submit the sampling results on a more frequent basis. Sampling and analysis of any stormwater discharge(s) or the receiving water(s) beyond the minimum frequency stated in this permit must be reported in a similar manner to the EPD. Sampling reports must be submitted to EPD using the electronic submittal service provided by EPD. Sampling reports must be submitted to EPD until such time as a NOT is submitted in accordance with Part VI.

2. All sampling reports shall include the following information:

a. The rainfall amount, date, exact place and time of sampling or measurements;
b. The name(s) of the certified personnel who performed the sampling and measurements;
c. The date(s) analyses were performed;
d. The time(s) analyses were initiated;
e. The name(s) of the certified personnel who performed the analyses;
f. References and written procedures, when available, for the analytical techniques or methods used;
g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results;
h. Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU;" and
i. Certification statement that sampling was conducted as per the Plan.

3. All written correspondence required by this permit shall be submitted by return receipt certified mail (or similar service) to the appropriate District Office of the EPD according to the schedule in Appendix A of this permit. The permittee shall retain a copy of the proof of submittal at the construction site or the proof of submittal shall be readily available at a designated location from commencement of construction until such time as a NOT is submitted in accordance with Part VI.

NPDES NOTES

F. Retention of Records

32

1. 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.

ACTIVITY SCHEDULE 29

	MONTH 1	MONTH 2	MONTH 3	MONTH 4	MONTH 5
INITIAL PERIMETER AND SEDIMENT STORAGE BMP'S					
CLEARING AND GRUBBING					
EROSION CONTROL DEVICES					
GRADING					
TEMPORARY VEGETATION					
INFRASTRUCTURE CONSTRUCTION (INCL. UTILITIES)					
BASE					
PAVING					
SIDEWALK CONSTRUCTION					
FINE GRADING & LANDSCAPING					
PERMANENT VEGETATION					
REMOVE TEMP. EROSION CONTROL					
MAINTENANCE OF BMP's					

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

MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE PROPERTY OWNER.

PARAGON CONSULTING GROUP
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KINCAID AND HAMILTON INTERSECTION REALIGNMENT

STREET CONSTRUCTION PLANS FOR

LOCATED IN SPALDING COUNTY

SHEET:
NPDES NOTES

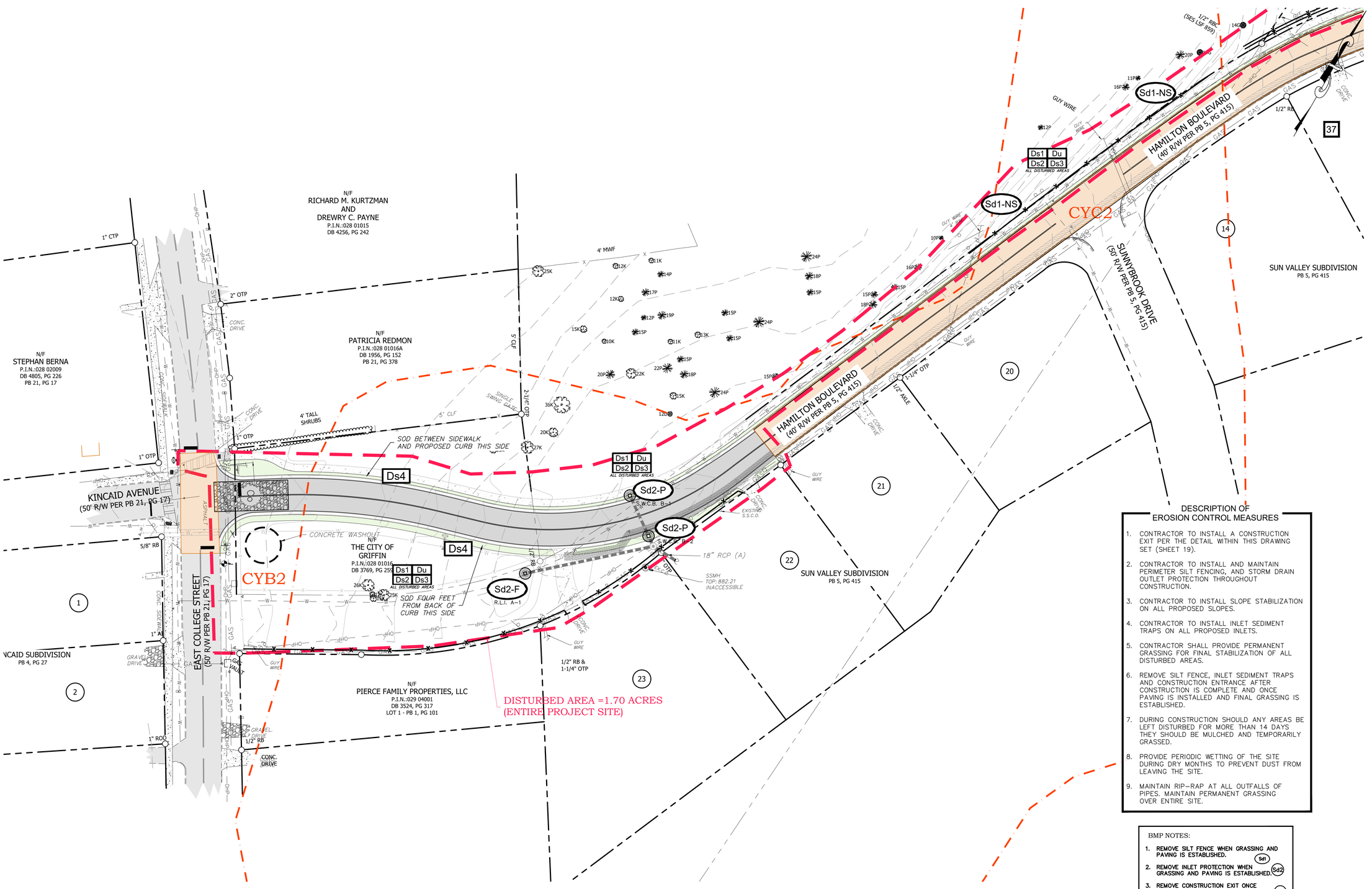
COA #: PEF004167

GEORGIA REGISTERED No. PE013220 PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

Revisions:

No.		Date
1.	UPDATED CALL OUT ON SHEET 8	8/28/2025
2.	ADDED BRIDGE FOOTER AND HELICAL PILE SHEET 26	8/28/2025
3.	ADDED BRIDGE ABUTMENT DETAIL SHEET 28	8/28/2025



EROSION & SEDIMENT CONTROL PLAN

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

26 28 35 36 37
38 47 48 49 50

DESCRIPTION OF EROSION CONTROL MEASURES

1. CONTRACTOR TO INSTALL A CONSTRUCTION EXIT PER THE DETAIL WITHIN THIS DRAWING SET (SHEET 19).
2. CONTRACTOR TO INSTALL AND MAINTAIN PERIMETER SILT FENCING, AND STORM DRAIN OUTLET PROTECTION THROUGHOUT CONSTRUCTION.
3. CONTRACTOR TO INSTALL SLOPE STABILIZATION ON ALL PROPOSED SLOPES.
4. CONTRACTOR TO INSTALL INLET SEDIMENT TRAPS ON ALL PROPOSED INLETS.
5. CONTRACTOR SHALL PROVIDE PERMANENT GRASSING FOR FINAL STABILIZATION OF ALL DISTURBED AREAS.
6. REMOVE SILT FENCE, INLET SEDIMENT TRAPS AND CONSTRUCTION ENTRANCE AFTER CONSTRUCTION IS COMPLETE AND ONCE PAVING IS INSTALLED AND FINAL GRASSING IS ESTABLISHED.
7. DURING CONSTRUCTION SHOULD ANY AREAS BE LEFT DISTURBED FOR MORE THAN 14 DAYS THEY SHOULD BE MULCHED AND TEMPORARILY GRASSED.
8. PROVIDE PERIODIC WETTING OF THE SITE DURING DRY MONTHS TO PREVENT DUST FROM LEAVING THE SITE.
9. MAINTAIN RIP-RAP AT ALL OUTFALLS OF PIPES. MAINTAIN PERMANENT GRASSING OVER ENTIRE SITE.

BMP NOTES:

1. REMOVE SILT FENCE WHEN GRASSING AND PAVING IS ESTABLISHED. (Sd1)
2. REMOVE INLET PROTECTION WHEN GRASSING AND PAVING IS ESTABLISHED. (Sd2)
3. REMOVE CONSTRUCTION EXIT ONCE GRADING IS COMPLETE AND ASPHALT IS INSTALLED. (Co)

No.	Revisions:	Date
1.	UPDATED CALL OUT ON SHEET 8	8/28/2025
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PARAGON
CONSULTING GROUP
an LA company
350 airport road griffin, georgia 30224
phone (770) 412-7700 www.pcgeng.com

STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

SHEET:
EROSION AND SEDIMENT CONTROL PLAN

COA #: PEF004167

GEORGIA REGISTERED
Lic. No. PE019220
PROFESSIONAL ENGINEER
WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
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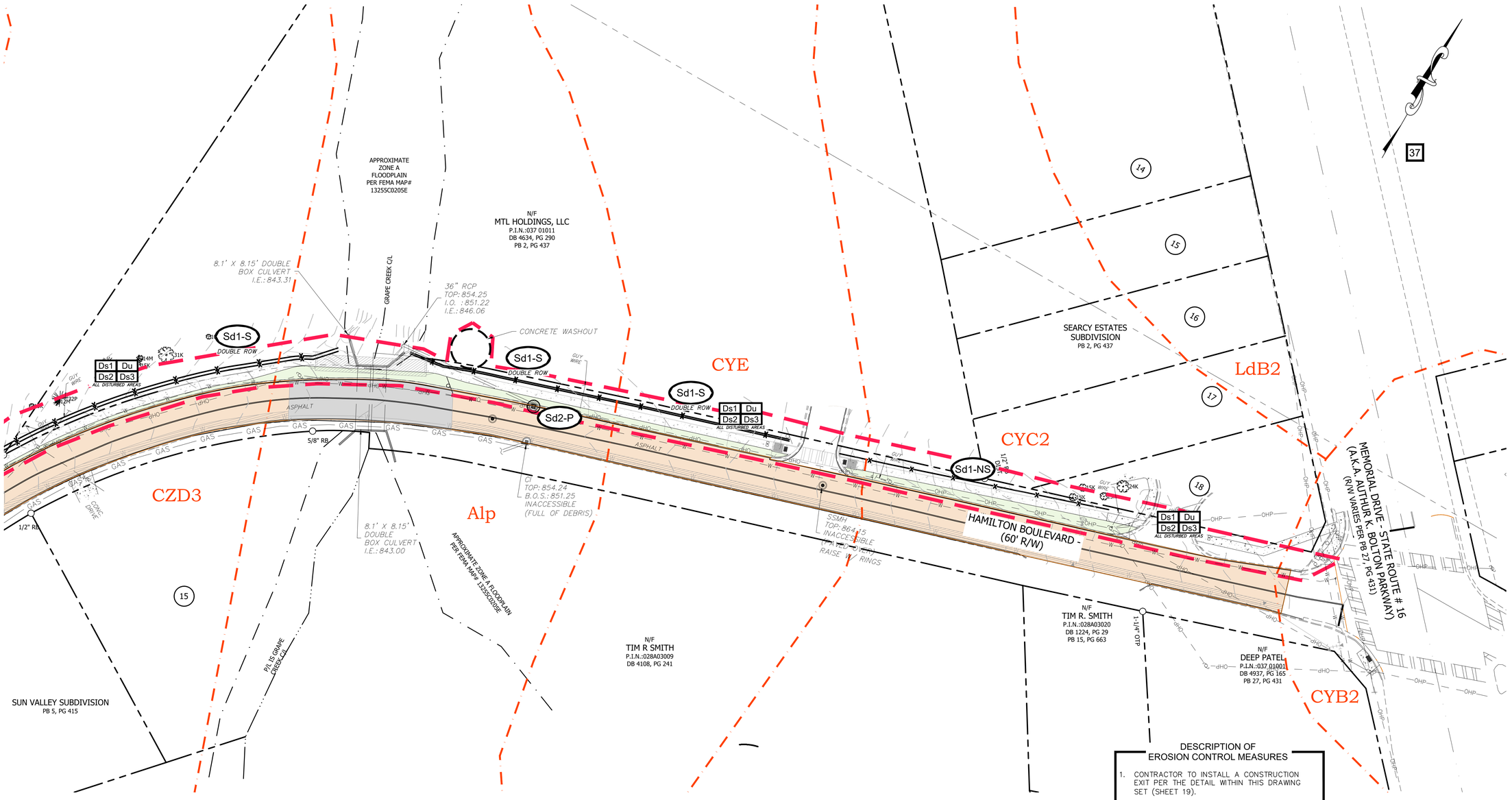
21
SHEET 21 OF 31



EROSION & SEDIMENT CONTROL PLAN

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

26 28 35 36 37
38 47 48 49 50

DESCRIPTION OF EROSION CONTROL MEASURES

1. CONTRACTOR TO INSTALL A CONSTRUCTION EXIT PER THE DETAIL WITHIN THIS DRAWING SET (SHEET 19).
2. CONTRACTOR TO INSTALL AND MAINTAIN PERIMETER SILT FENCING, AND STORM DRAIN OUTLET PROTECTION THROUGHOUT CONSTRUCTION.
3. CONTRACTOR TO INSTALL SLOPE STABILIZATION ON ALL PROPOSED SLOPES.
4. CONTRACTOR TO INSTALL INLET SEDIMENT TRAPS ON ALL PROPOSED INLETS.
5. CONTRACTOR SHALL PROVIDE PERMANENT GRASSING FOR FINAL STABILIZATION OF ALL DISTURBED AREAS.
6. REMOVE SILT FENCE, INLET SEDIMENT TRAPS AND CONSTRUCTION ENTRANCE AFTER CONSTRUCTION IS COMPLETE AND ONCE PAVING IS INSTALLED AND FINAL GRASSING IS ESTABLISHED.
7. DURING CONSTRUCTION SHOULD ANY AREAS BE LEFT DISTURBED FOR MORE THAN 14 DAYS THEY SHOULD BE MULCHED AND TEMPORARILY GRASSED.
8. PROVIDE PERIODIC WETTING OF THE SITE DURING DRY MONTHS TO PREVENT DUST FROM LEAVING THE SITE.
9. MAINTAIN RIP-RAP AT ALL OUTFALLS OF PIPES. MAINTAIN PERMANENT GRASSING OVER ENTIRE SITE.

BMP NOTES:

1. REMOVE SILT FENCE WHEN GRASSING AND PAVING IS ESTABLISHED. (Sd1)
2. REMOVE INLET PROTECTION WHEN GRASSING AND PAVING IS ESTABLISHED. (Sd2)
3. REMOVE CONSTRUCTION EXIT ONCE GRADING IS COMPLETE AND ASPHALT IS INSTALLED. (Co)

No.	Revisions:	Date
1.	UPDATED CALL OUT ON SHEET 8	8/28/2025
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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

SHEET:
EROSION AND SEDIMENT CONTROL PLAN

COA #: PEF004167

GEORGIA REGISTERED PE No. PE030220 PROFESSIONAL ENGINEER WADE T. STRICKLAND
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

22
SHEET 22 OF 31

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

PLANTING RATES BY RESOURCE AREA PLANTING DATES — OPTIMUM (heavy line); PERMISSIBLE BUT MARGINAL (light line)

SPECIES	BROADCAST RATES 2/ – PLS 3/ PER ACRE	PER 1000 SQ. FT.	RESOURCE AREA	REMARKS
MILLET, PEARL (PENNESETUM GLAUCUM) ALONE	50 LBS	1.1 LB	M–L P C	88,000 SEED PER POUND. QUICK DENSE COVER. MAY REACH 5 FEET IN HEIGHT. NOT RECOMMENDED FOR MIXTURES.
RYEGRESS, ANNUAL (LOLIUM TEMULENTUM) ALONE	40 LBS	0.9 LB	M–L P C	227,000 SEED PER POUND. DENSE COVER. VERY COMPETITIVE AND IS NOT TO BE USED IN MIXTURES.
SUDANGRASS (SORGHUM SUDANESE) ALONE	60 LBS	1.4 LB	M–L P C	55,000 SEED PER POUND. GOOD ON DROUGHTY SITES. NOT RECOMMENDED FOR MIXTURES.
MILLET, BROWNTOP (PANICUM FASCICULATUM) ALONE IN MIXTURES	40 LBS 10 LBS	0.9 LB 0.2 LB	M–L P C	137,000 SEED PER POUND. QUICK DENSE COVER. WILL PROVIDE TOO MUCH COMPETITION IN MIXTURES IF SEEDED AT HIGH RATES.

SPECIFICATIONS

A. GRADING AND SHAPING
1. EXCESSIVE WATER RUNOFF MUST BE CONTROLLED BY PLANNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BASINS AND OTHERS.

B. SEEDBED PREPARATION
1. WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED.
2. WHEN USING CONVENTIONAL OR HAND–SEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL.
3. WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH UNDISTURBED CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED, OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.

C. LIME AND FERTILIZER
1. AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. ALL GRADED AREAS REQUIRE LIME APPLICATION.
2. ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED IF VERIFIED BY SOIL ANALYSIS .
3. ON SOILS OF VERY LOW FERTILITY, USE 500 TO 700 POUNDS 10–10–10 FERTILIZER OR THE EQUIVALENT PER ACRE (12–16 LBS/1000 SQ. FT.). IF THE SITE WILL PERMIT, APPLY BEFORE LAND PREPARATION AND DISK, RIP, OR CHISEL TO INCORPORATE.

D. SEEDING
1. SELECT A GRASS OR GRASS–LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR.
2. APPLY SEED 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–HALF TO ONE INCH DEEP.

E. MULCHING
1. TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH. MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION. SEE Ds1 – DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).

F. IRRIGATION
1. IF WATER IS APPLIED, IT MUST BE AT A RATE NOT CAUSING RUNOFF AND EROSION. THOROUGHLY WET THE SOIL TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

* REVISED 7/01 PER 5TH EDITION OF MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA.

FERTILIZER RATES

SPECIES	YEARS TO APPLY FERTILIZE	N	P_2O_5	K_2O	N TOP–DRESSING
WEEPING LOVEGRASS AND	FIRST	60–90	120–180	120–180	50
VIRGATA OR SERICEA LESPEDEZA[19] SCARIFIED	SECOND	0	70–100	70–100	–
SERICEA LESPEDEZA SEEDBEARING HAY WITH	FIRST	60–90	120–180	120–180	50
OVERSEEDED WEEPING LOVEGRASS	SECOND	0	70–100	70–100	–
HULLED COMMON BERMUDAGRASS AND	FIRST	60–90	120–180	120–180	50
VIRGATA OR SERICEA LESPEDEZA[19]	SECOND	0	70–100	70–100	–
UNHULLED COMMON BERMUDAGRASS[18] AND	FIRST	60–90	120–180	120–180	50
SERICEA LESPEDEZA SEED HAY	SECOND	0	70–100	70–100	–
TALL FESCUEGRASS AND CLEAN COMBINE RUN	FIRST	60–90	120–180	120–180	0–50 IN SPRING
VIRGATA OR SERICEA LESPEDEZA[19]	SECOND	0	70–100	70–100	–
HULLED COMMON BERMUDAGRASS	FIRST	60–90	120–180	120–180	*50–100[14]*
UNHULLED COMMON BERMUDAGRASS	SECOND	36–48	72–96	72–96	*50–100[14]*
PENSACOLA BAHIAGRASS	FIRST	60–90	120–180	120–180	50–100
	SECOND	36–48	72–96	72–96	50–100
WILMINGTON BAHIAGRASS	FIRST	60–90	120–180	120–180	*50–100[14]*
	SECOND	36–48	72–96	72–96	*50–100[14]*
COASTAL OR COMMON BERMUDAGRASS	FIRST	60–90	120–180	120–180	*50–100[14]*
SPRIGS OR SOD PLUGS	SECOND	36–48	72–96	72–96	–
TALL FESCUE GRASS	FIRST	60–90	120–180	120–180	*50–100[14]* IN SPRING
(USE ON BETTER SITES)	SECOND	60	120	120	–
MIDLAND OR COMMON BERMUDAGRASS	FIRST	60–90	120–180	120–180	*50–100[14]*
SPRIGS OR SOD PLUGS	SECOND	36–48	72–96	72–96	–
SHRUB LESPEDEZA PLANTS	FIRST	10 LB OF 6–12–12 PER 100' OF ROW			
	SECOND	3 LB OF 0–14–14 PER 100' OF ROW			

AGRICULTURAL LIME RATES

ONE OR TWO TONS PER ACRE OR AS INDICATED BY SOIL TESTING.

MULCHING

DRY STRAW MULCH AT A RATE OF TWO TONS PER ACRE FOR PERMANENT VEGETATION WITHIN 24 HOURS AFTER SEEDING.

Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

MATERIAL	DEPTH
1. DRY STRAW OR GRASS HAY	2" TO 4"
2. WOOD WASTE (SAW DUST, BARK, CHIPS)	2" TO 3"
3. COMPLETELY COVER AREA WITH BLACK POLYETHYLENE FILM AND HOLD IN PLACE BY PLACING SOIL ON THE OUTER EDGE. (SOIL STOCKPILES)	

SEE DS1 SPECIFICATIONS IN MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.

** REVISED 7/01 PER 5TH EDITION OF MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA.*

52

Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)

PLANTING RATES BY RESOURCE AREA PLANTING DATES — OPTIMUM (heavy line); PERMISSIBLE BUT MARGINAL (light line)

SPECIES	BROADCAST RATES 2/ – PLS 3/ PER ACRE	PER 1000 SQ. FT.	RESOURCE AREA	REMARKS
BERMUDA, COMMON (CYNODON DACTYLON) HULLED SEED ALONE WITH OTHER PERENNIALS	 10 LBS 6 LBS	 0.2 LB 0.1 LB	P C	1,787,000 SEED PER POUND. QUICK COVER. LOW GROWING AND SOD FORMING. FULL SUN. GOOD FOR ATHLETIC FIELDS.
BERMUDA, COMMON (CYNODON DACTYLON) UNHULLED SEED WITH TEMPORARY COVER WITH OTHER PERENNIALS	 10 LBS 6 LBS	 0.2 LB 0.1 LB	P C	PLANT WITH WINTER ANNUALS. PLANT WITH TALL FESCUE.
CENTIPEDE (EREMOCHLOA OPHIUROIDES)	BLOCK SOD ONLY		P C	DROUGHT TOLERANT. FULL SUN OR PARTIAL SHADE. EFFECTIVE ADJACENT TO CONCRETE AND IN CONCENTRATED FLOW AREAS. IRRIGATION AS NEEDED UNTIL FULLY ESTABLISHED. DO NOT PLANT NEAR PASTURES. WINTERHARDY AS FAR NORTH AS ATHENS AND ATLANTA.
FESCUE, TALL (FESTUCA ARUNDINACEA) ALONE WITH OTHER PERENNIALS	 50 LBS 30 LBS	 1.1 LB 0.7 LB	M–L P	227,000 SEED PER POUND. USE ALONE ONLY ON BETTER SITES. NOT FOR DROUGHTY SOILS. MIX WITH PERENNIAL LESPEDEZAS OR CROWNVETCH. APPLY TOPDRESSING IN SPRING FOLLOWING FALL PLANTINGS. NOT FOR HEAVY USE AREAS OR ATHLETIC FIELDS.
LESPEDEZA, SERICEA (LESPEDEZA CUNEATA) SCARIFIED	 60 LBS	 1.4 LB	M–L P C	350,000 SEED PER POUND. WIDELY ADAPTED. LOW MAINTENANCE. MIX WITH WEEPING LOVEGRASS, COMMON BERMUDA, BAHIA, OR TALL FESCUE. TAKES 2 TO 3 YEARS TO BECOME FULLY ESTABLISHED. EXCELLENT ON ROAD BANKS. INOCULATE SEED WITH EL INOCULANT.
UNSCARIFIED	75 LBS	1.7 LB	M–L P C	MIX WITH TALL FESCUE OR WINTER ANNUALS.
SEED–BEARING HAY	3 TONS	138 LB	M–L P C	CUT WHEN SEED IS MATURE. BUT BEFORE IT SHATTERS. TALL FESCUE OR WINTER ANNUALS.
LOVEGRASS, WEEPING (ERAGROSTIS CURVULA) ALONE WITH OTHER PERENNIALS	 4 LBS 2 LBS	 0.1 LB 0.05 LB	M–L P C	1,500,000 SEED PER POUND. QUICK COVER. DROUGHT TOLERANT. GROWS WELL WITH SERICEA LESPEDEZA ON ROADBANKS.

SPECIFICATIONS

A. GRADING AND SHAPING
1. GRADING AND SHAPING IS NOT NORMALLY REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENTS.

B. SEEDBED PREPARATION
1. SEEDBED PREPARATION MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED.
2. WHEN CONVENTIONAL SEEDING IS TO BE USED, SEEDBED PREPARATION WILL BE DONE AS FOLLOWS:
   A. BROADCAST PLANTING
      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.

C. LIME AND FERTILIZER –– RATES AND ANALYSIS
1. WHERE PERMANENT VEGETATION IS TO BE ESTABLISHED, AGRICULTURAL LIME SHALL BE APPLIED AS INDICATED BY SOIL TEST OR AT THE RATE OF 1 TO 2 TONS PER ACRE. AGRICULTURAL LIME SHALL BE WITHIN THE SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF AGRICULTURE.
2. LIME SPREAD BY CONVENTIONAL EQUIPMENT WILL BE "GROUND LIMESTONE". GROUND LIMESTONE IS CALCITIC OR DOLOMITIC LIMESTONE GROUND SO THT 90 PERCENT OF THE MATERIAL WILL PASS THROUGH A 10–MESH SIEVE AND NOT LESS THAN 25 PERCENT WILL PASS THROUGH A 100–MESH SIEVE.
3. AGRICULTURAL LIME SPREAD BY HYDRAULIC SEEDING EQUIPMENT WILL BE "FINELY GROUND LIMESTONE". FINELY GROUND LIMESTONE IS CALCITIC OR DOLOMITIC LIMESTONE GROUND SO THAT 98 PERCENT OF THE MATERIAL WILL PASS THROUGH A 20–MESH SIEVE AND NOT LESS THAN 70 PERCENT WILL PASS THROUGH A 100–MESH SIEVE.

D. LIME FERTILIZER –– APPLICATION
1. WHEN HYDRAULIC SEEDING EQUIPMENT IS USED:
   A. THE INITIAL FERTILIZER WILL BE MIXED WITH SEED, INOCULANT (IF NEEDED) AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH AND APPLIED IN A SLURRY. THE SLURRY 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.
   B. FINELY GROUND LIMESTONE WILL BE MIXED WITH WATER AND APPLIED IMMEDIATELY AFTER MULCHING IS COMPLETED OR IN COMBINATION WITH THE TOP DRESSING.
2. WHEN CONVENTIONAL PLANTING IS TO BE DONE, LIME AND FERTILIZER WILL BE APPLIED UNIFORMLY IN ONE OF THE FOLLOWING WAYS:
   A. APPLY BEFORE LAND PREPARATION SO THAT IT WILL BE MIXED WITH THE SOIL DURING SEEDBED PREPARATION; OR,
   B. MIX WITH THE SOIL USED TO FILL THE HOLES, DISTRIBUTE IN FURROWS; OR
   C. BROADCAST AFTER STEEP SURFACES AND SCARIFIED, PITTED OR TRENCHED.
   D. A FERTILIZER PELLET WILL BE PLACED AT ROOT DEPTH.

* REVISED 7/01 PER 5TH EDITION OF MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA.

Ds4 DISTURBED AREA STABILIZATION (WITH SODDING)

TABLE 6–6.1. FERTILIZER REQUIREMENTS FOR SOIL SURFACE APPLICATION

FERTILIZER TYPE	FERTILIZER RATE (LBS/AC)	FERTILIZER RATE (LBS/FT^2)	SEASON
10/10/2010	1000	0.025	FALL

TABLE 6–6.2. SOD PLANTING REQUIREMENTS

GRASS	VARIETIES	RESOURCE AREA	GROWING SEASON
BERMUDAGRASS	COMMON TIFWAY TIFGREEN TIFLAWN	M–L,P,C P,C P,C P,C	WARM WEATHER
BAHIAGRASS	PENSACOLA	P,C	WARM WEATHER
CENTIPEDE	–	P,C	WARM WEATHER
ST. AUGUSTINE	COMMON BITTERBLUE RALEIGH	C	WARM WEATHER
ZOYSIA	EMERALD MYER	P,C	WARM WEATHER
TALL FESCUE	KENTUCKY	M–L,P	COOL WEATHER

TABLE 6–6.3. FERTILIZER REQUIREMENTS FOR SOD

TYPES OF SPECIES	PLANTING YEAR	FERTILIZER (N–P–K)	RATE (LBS/AC)	NITROGEN TOP DRESSING RATE (LBS/AC)
COOL SEASON GRASSES	FIRST SECOND MAINTENANCE	6/12/2012 6/12/2012 10/10/2010	1500 1000 400	50–100 – 30
COOL SEASON GRASSES	FIRST SECOND MAINTENANCE	6/12/2012 6/12/2012 10/10/2010	1500 800 400	50–100 50–100 30

* DERIVED FROM THE 5TH EDITION OF MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA.

5 10 22 23 41 42

TOTAL AREA OF SITE: 1.70 ACRES
TOTAL DISTURBED AREA: 1.70 ACRES

THE RECEIVING WATERS FOR THIS SITE IS GRAPE CREEK. AS PER FLOOD INSURANCE RATE MAP NUMBER 13255C 0205 E DATED JUNE 7, 2017, THIS SITE DOES NOT LIE WITHIN A FLOOD HAZARD AREA.

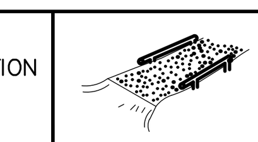
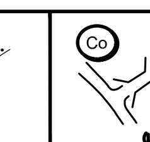
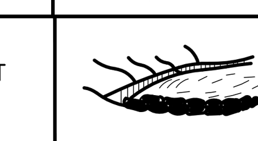
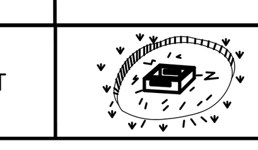
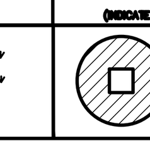
STORM WATER FROM THIS SITE DOES NOT DISCHARGE INTO AN IMPAIRED STREAM SEGMENT, OR WITHIN 1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT.

NO STATES WATERS OR WETLANDS ARE LOCATED WITHIN 200' OF THIS SITE.

LOCATED IN SPALDING COUNTY, GEORGIA

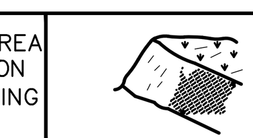
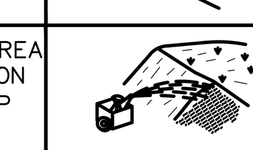
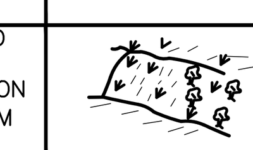
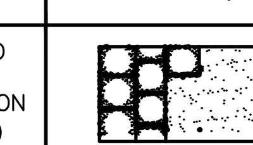
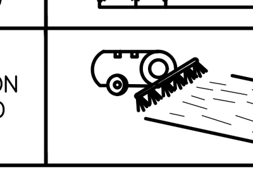
STRUCTURAL PRACTICES

26 28 36 50

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Co	CONSTRUCTION EXIT			A CRUSHED STONE PAD LOCATED AT THE CONSTRUCTION SITE EXIT TO PROVIDE A PLACE FOR REMOVING MUD FROM TIRES THEREBY PROTECTING PUBLIC STREETS.
Sd1	SEDIMENT BARRIER			A BARRIER TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. IT MAY BE SANDBAGS, BALES OF STRAW OR HAY, BRUSH, LOGS AND POLES, GRAVEL, OR A SILT FENCE.
Sd2	INLET SEDIMENT TRAP			AN IMPOUNDING AREA CREATED BY EXCAVATING AROUND A STORM DRAIN DROP INLET. THE EXCAVATED AREA WILL BE FILLED & STABILIZED ON COMPLETION OF CONSTRUCTION ACTIVITIES.

VEGETATIVE PRACTICES

26 28 36 50 52

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	ESTABLISHING TEMPORARY PROTECTION FOR DISTURBED AREAS WHERE SEEDLINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDING COVER.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP SEEDING)		Ds2	ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS ON DISTURBED AREAS.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)		Ds3	ESTABLISHING A PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON DISTURBED AREAS.
Ds4	DISTURBED AREA STABILIZATION (SODDING)		Ds4	A PERMANENT VEGETATIVE COVER USING SODS ON HIGHLY ERODABLE OR CRITICALLY ERODED LANDS.
Du	DUST CONTROL ON DISTURBED AREAS		Du	CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITE, ROADWAYS AND SIMILAR SITES.

47

Alp – CHEWACLA, CARTECAY, AND TOCCOA SOILS, 0 TO 2 PERCENT SLOPES, FREQUENTLY FLOODED

CYB2 – CECIL SANDY LOAM, 2 TO 6 PERCENT SLOPES, MODERATELY ERODED

CYC2 – CECIL SANDY LOAM, 6 TO 10 PERCENT SLOPES, MODERATELY ERODED

CYE – CECIL SANDY LOAM, 15 TO 25 PERCENT SLOPES

CZC3 – CECIL SANDY CLAY LOAM, 6 TO 10 PERCENT SLOPES, SEVERELY ERODED

CZD3 – CECIL SANDY CLAY LOAM, 10 TO 15 PERCENT SLOPES, SEVERELY ERODED

LdB2 – LIOYD SANDY LOAM, 2 TO 6 PERCENT SLOPES, ERODED

No.	Revisions:	Date
1.	UPDATED CALL OUT ON SHEET 8	8/28/2025
2.	ADDED BRIDGE FOOTER AND HELICAL PILE SHEET 26	8/28/2025
3.	ADDED BRIDGE ABUTMENT DETAIL SHEET 28	8/28/2025

PARAGON CONSULTING GROUP
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350 airport road griffin, georgia 30224
phone (770) 412-7700 www.pcgeng.com

STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

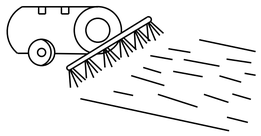
SHEET:
EROSION CONTROL DETAILS

COA #: PEF004167

GEORGIA REGISTERED No. PE034220 PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No. PCG3152-24033	Issue Date: JULY 2025
Drawn By: KLB	Checked By: WTS

Du — DUST CONTROL ON DISTURBED AREAS



METHODS AND MATERIALS

A. TEMPORARY METHODS:

MULCHES:
SEE STANDARD Ds1 – DISTURBED AREA STABILIZATION (WITH MULCHING ONLY). SYNTHETIC RESINS MAY BE USED INSTEAD OF ASPHALT TO BIND MULCH MATERIAL. REFER TO SPECIFICATION Tac – TACKIFIERS. RESINS SHOULD BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

VEGETATIVE COVER:
SEE SPECIFICATION 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 SPECIFICATION Tac – TACKIFIERS.

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

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

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

CALCIUM CHLORIDE:
APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

B. PERMANENT METHODS:

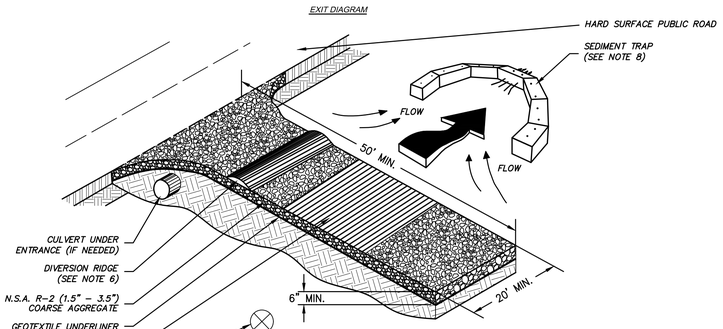
PERMANENT VEGETATION:
SEE SPECIFICATION Ds3 – DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION). EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.

TOPSOILING:
THIS ENTAILS COVERING THE SURFACE WITH LESS EROSIVE SOIL MATERIAL. SEE SPECIFICATION Tp – TOPSOILING.

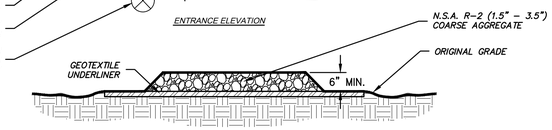
STONE:
COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. SEE SPECIFICATION Cr – CONSTRUCTION ROAD STABILIZATION.

CRUSHED STONE CONSTRUCTION EXIT

EXIT DIAGRAM



ENTRANCE ELEVATION

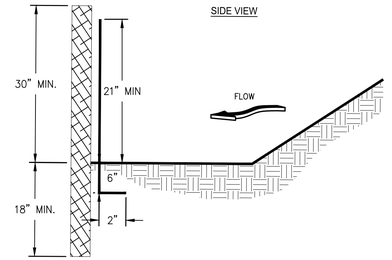


NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD 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.

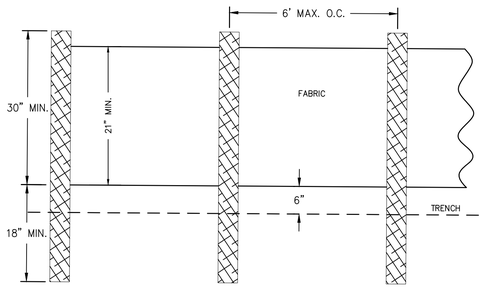
Co — CONSTRUCTION EXIT
N.T.S.

SILT FENCE - TYPE NON-SENSITIVE

SIDE VIEW

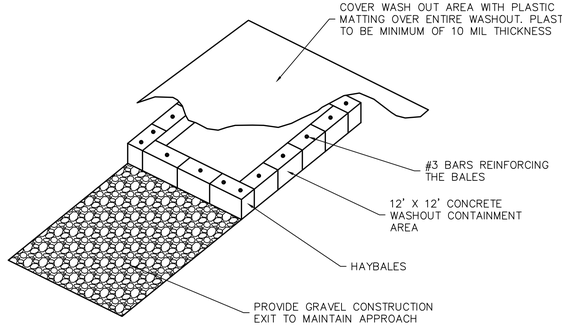


FRONT VIEW



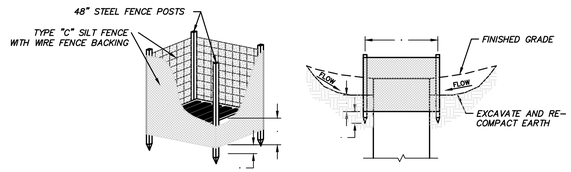
NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

Sd1 — SEDIMENT BARRIER DETAIL
N.T.S.

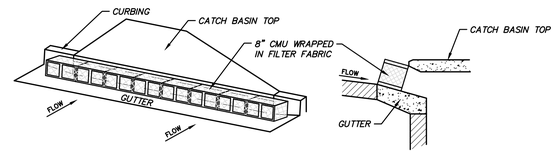


CONCRETE WASHOUT DETAIL
N.T.S.

EXCAVATED INLET PROTECTION



CURB INLET PROTECTION



Sd2 — INLET SEDIMENT TRAP
N.T.S.

51

No.	Revisions:	Date
1.	UPDATED CALL OUT ON SHEET 8	8/28/2025
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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

SHEET:
EROSION CONTROL DETAILS

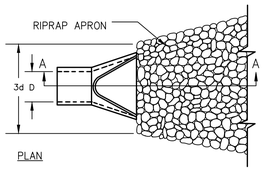
COA #: PEF004167

GEORGIA REGISTERED No. PE013220 PROFESSIONAL ENGINEER WADE T. STRICKLAND
7/28/25
GSWCC LEVEL II CERT. # 0000010472

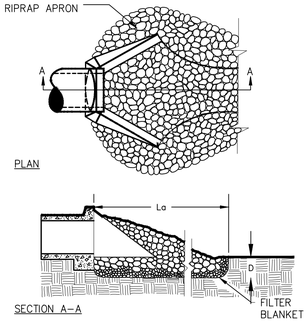
Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

24
SHEET 24 OF 31

PIPE OUTLET TO FLAT AREA
NO WELL DEFINED CHANNEL



PIPE OUTLET TO WELL
DEFINED CHANNEL



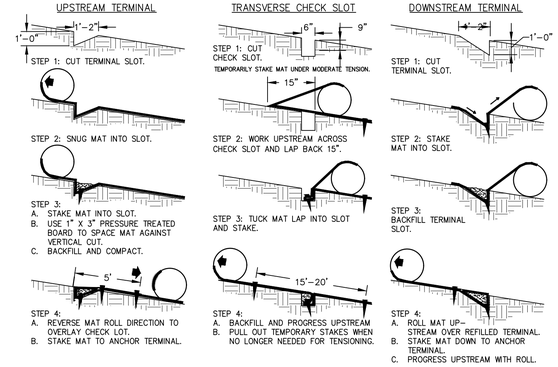
NOTES:

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

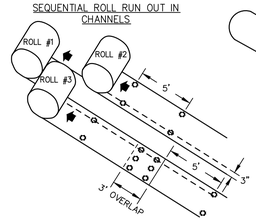
St **STORM DRAIN OUTLET PROECTION**
N.T.S.

TYPICAL INSTALLATION GUIDELINES FOR ROLLED EROSION CONTROL PRODUCTS (RECP)

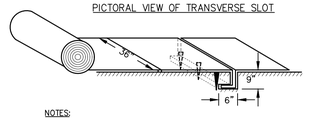
BLANKET AND MATTING CROSS-SECTIONS



SEQUENTIAL ROLL RUN OUT IN CHANNELS



PICTORAL VIEW OF TRANSVERSE SLOT



NOTES:

1. MATTING TO BE GREEN EXCELSIOR NET MATTING OR APPROVED EQUIVALENT STRAW/COCONUT MATTING.
2. START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.
3. FIRST ROLL IS CENTERED LONGITUDINALLY IN MID–CHANNEL AND PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT.
4. SUBSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND THE FIRST ROLL. USE THE CENTER ROLL FOR ALIGNMENT TO THE CHANNEL CENTER.
5. WORK OUTWARDS FROM THE CHANNEL CENTER TO THE EDGE.
6. USE 3" OVERLAPS AND STAKE AT 5' INTERVALS ALONG THE SEAMS.
7. USE 3' OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT THE LINING AT THE ROLL ENDS.

Ss **SLOPE STABILIZATION DETAIL**
N.T.S.

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KINCAID AND HAMILTON INTERSECTION REALIGNMENT

STREET CONSTRUCTION PLANS FOR

LOCATED IN SPALDING COUNTY

SHEET:
EROSION CONTROL DETAILS

COA #: PEF004167

GEORGIA REGISTERED No. PE013220 PROFESSIONAL ENGINEER WADE T. STRODE
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

25
SHEET 25 OF 31

51

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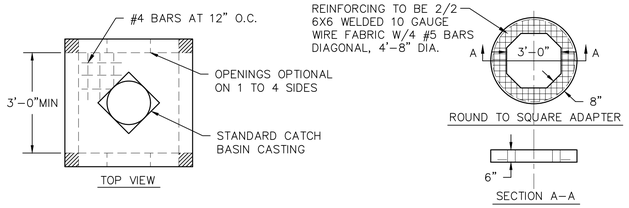
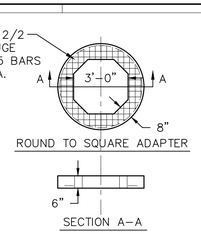
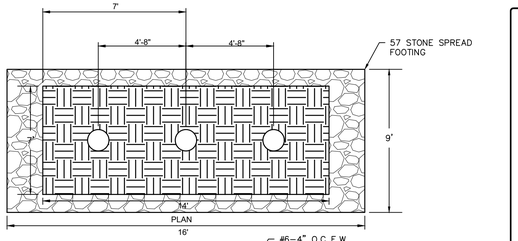
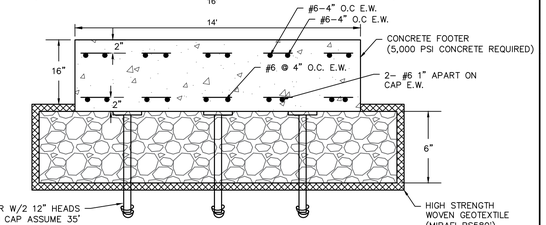
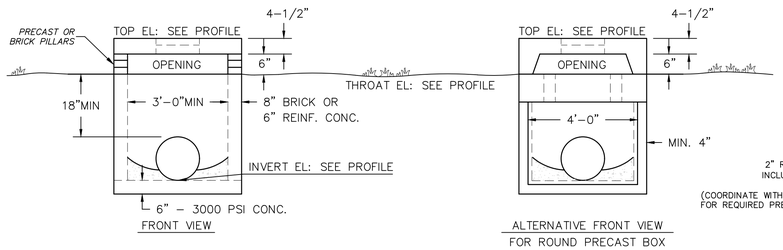






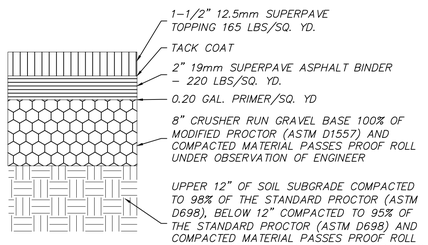


HELICAL PIER FOOTING DETAIL
N.T.S.



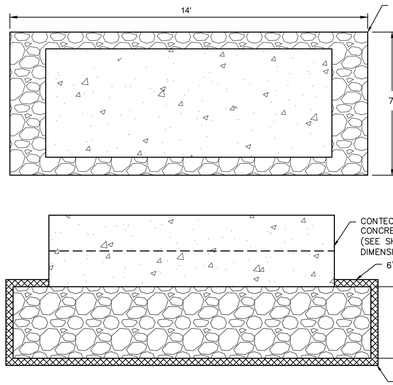
NOTE: BRICK OR MASONRY INVERT REQ'D.

RAISED LID INLET DETAIL
N.T.S.



COMPACT UPPER 2 FEET OF SUBGRADES CONSISTING OF APPROVED FILL IN 6" COMPACTED LIFTS.

PAVEMENT SECTION DETAILS
N.T.S.



PRECAST BRIDGE FOOTING DETAIL
N.T.S.

TECHNICAL DATA SHEET

MIRAFI RS580*i*

Now With Passive Moisture Management

MIRAFI RS580*i*, a high-modulus woven geosynthetic, serves as a comprehensive solution for soil reinforcement, confinement, separation, and filtration. Its construction integrates:

- black fibrillated polypropylene yarns for enhanced tensile strength
- orange anti-clogging yarns for filtration benefits
- blue wicking yarns for passive moisture management and an anti-capillary break

The geosynthetic's distinctive profile features an unparalleled ridge-to-valley design, ensuring surface roughness across its entire area. This design facilitates micro-interlocking through friction, fostering excellent interaction between the underlying subgrade and overlying materials.

The following performance properties are intended to establish requirements for quantifying the structural benefit of **MIRAFI** RS580*i*. As per the recommendations of AASHTO R50-09 *Standard Practice – Geosynthetic Reinforcement of the Aggregate Base Course of Flexible Pavement Structures* and FHWA NHI-07-092 *Geosynthetic Design & Construction Guidelines*, geosynthetic equivalencies should never be based strictly on index properties due to differences in polymers and manufacturing methods. **MIRAFI** RS580*i* has been fully calibrated in full-scale industry lead design methodologies for flexible pavement designs (AASHTO 93) and unpaved road designs incorporating geosynthetics.

TenCate Geosynthetics Americas (A Solmax Company) is accredited by Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP). **MIRAFI** RS580*i* meets Build America, Buy America Act, Pub. L. No. 117-58, div. G §§ 70901-52.

EMPIRICAL PERFORMANCE PROPERTIES	GUIDANCE / TEST METHOD	UNIT	CALIBRATION VALUE
Base Course Mₛ Improvement Factor[a]	AASHTO R50-09	---	1.4
Traffic Benefit Ratio: TBR[a,b]	AASHTO R50-09	---	9.0 / 13.1 / 39.0
GEOMETRIC PERFORMANCE PROPERTIES	**GUIDANCE / TEST METHOD**	**UNIT**	**VALUE**
Pore Size Distribution	ASTM D6767	microns	O_{90} = 394, O_{50} = 208
Intersection Coefficient: C_i[c]	ASTM D6706	---	0.90
Void Ratio, e	Calculated	---	0.77

MOISTURE MANAGEMENT SCALE

0 Recycled — 4 MIRAFI RS580*i* — 10 MIRAFI HUS

305 South Holland Drive Pendergrass, GA 30567
Tel +1 706 693 2226 www.tencategeo.us

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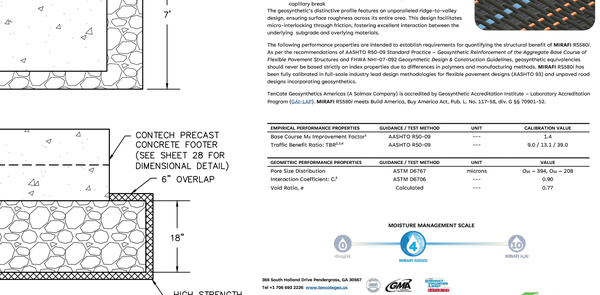
SOLMAX



RCP PIPE BEDDING — HDPE PIPE BEDDING

FILL MATERIAL COMPACTED TO 95% MAXIMUM DRY DENSITY.

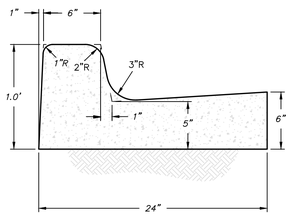
SELECT BACKFILL FREE OF CLUMPS, ROCK ETC., COMPACTED AT OPTIMUM MOISTURE CONTENT AND 95% STANDARD PROCTOR IN MAXIMUM 6" LAYERS.

FINE GRANULAR MATERIAL UNIFORMLY COMPACTED TO 95% STANDARD PROCTOR.

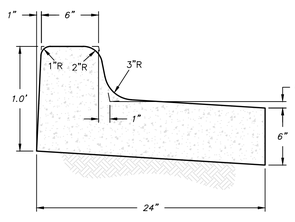
MINIMUM COVER SHALL BE 12" FROM TOP OF PIPE TO BOTTOM OF PAVEMENT BASE AT ITS CLOSEST POINT OR AS APPROVED BY ENGINEER.

*DIMENSION MAY NEED TO BE INCREASED BASED ON SOIL CONDITIONS AND DEPTH OF PIPE. EXCAVATION MUST MEET ALL O.S.H.A. GUIDELINES.

TYPICAL STORM DRAIN TRENCH DETAIL
N.T.S.



STANDARD (STD)

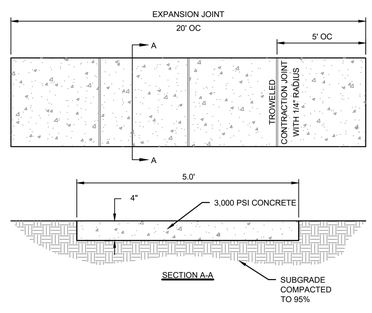


SPILLING CURB (SC)

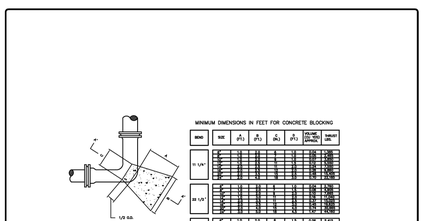
CONSTRUCTION NOTES

1. 1/2" PREFORMED EXPANSION JOINTS REQUIRED AT ALL STRUCTURES & CURB RETURNS.
2. MAXIMUM DISTANCE BETWEEN EXPANSION JOINTS = 40.0'.
3. DISTANCE BETWEEN DUMMY JOINTS = 10.0'.
4. CONCRETE STRENGTH = 3000 PSI, SLUMP = 2", FINISH SHALL BE SMOOTHED & EVENED WITH A WOODEN FLOAT.
5. OTHER CURB & GUTTER SECTIONS WILL BE EVALUATED AS APPROPRIATE BY THE ENGINEER.

CURB AND GUTTER DETAIL
N.T.S.



SIDEWALK DETAIL
N.T.S.


WATER MAIN
CONCRETE BLOCKING
MINIMUM DIMENSIONS IN FEET FOR CONCRETE BLOCKING
SIZE
TEE
1/8 BEND
1/16 BEND
1/32 BEND
PLUG OR CAP
SIZE
1/8 BEND
1/16 BEND
1/32 BEND
PLUG OR CAP
SECTION A-A
SECTION B-B
SECTION C-C
SECTION D-D
SECTION E-E
SECTION F-F
SECTION G-G
SECTION H-H
SECTION I-I
SECTION J-J
SECTION K-K
SECTION L-L
SECTION M-M
SECTION N-N
SECTION O-O
SECTION P-P
SECTION Q-Q
SECTION R-R
SECTION S-S
SECTION T-T
SECTION U-U
SECTION V-V
SECTION W-W
SECTION X-X
SECTION Y-Y
SECTION Z-Z
SECTION AA-AA
SECTION BB-BB
SECTION CC-CC
SECTION DD-DD
SECTION EE-EE
SECTION FF-FF
SECTION GG-GG
SECTION HH-HH
SECTION II-II
SECTION JJ-JJ
SECTION KK-KK
SECTION LL-LL
SECTION MM-MM
SECTION NN-NN
SECTION OO-OO
SECTION PP-PP
SECTION QQ-QQ
SECTION RR-RR
SECTION SS-SS
SECTION TT-TT
SECTION UU-UU
SECTION VV-VV
SECTION WW-WW
SECTION XX-XX
SECTION YY-YY
SECTION ZZ-ZZ
SECTION AAA-AAA
SECTION BBB-BBB
SECTION CCC-CCC
SECTION DDD-DDD
SECTION EEE-EEE
SECTION FFF-FFF
SECTION GGG-GGG
SECTION HHH-HHH
SECTION III-III
SECTION JJJ-JJJ
SECTION KKK-KKK
SECTION LLL-LLL
SECTION MMM-MMM
SECTION NNN-NNN
SECTION OOO-OOO
SECTION PPP-PPP
SECTION QQQ-QQQ
SECTION RRR-RRR
SECTION SSS-SSS
SECTION TTT-TTT
SECTION UUU-UUU
SECTION VVV-VVV
SECTION WWW-WWW
SECTION XXX-XXX
SECTION YYY-YYY
SECTION ZZZ-ZZZ
SECTION AAAA-AAAA
SECTION BBBB-BBBB
SECTION CCCC-CCCC
SECTION DDDD-DDDD
SECTION EEEE-EEEE
SECTION FFFF-FFFF
SECTION GGGG-GGGG
SECTION HHHH-HHHH
SECTION IIII-IIII
SECTION JJJJ-JJJJ
SECTION KKKK-KKKK
SECTION LLLL-LLLL
SECTION MMMM-MMMM
SECTION NNNN-NNNN
SECTION OOOO-OOOO
SECTION PPPP-PPPP
SECTION QQQQ-QQQQ
SECTION RRRR-RRRR
SECTION SSSS-SSSS
SECTION TTTT-TTTT
SECTION UUUU-UUUU
SECTION VVVV-VVVV
SECTION WWWW-WWWW
SECTION XXXX-XXXX
SECTION YYYY-YYYY
SECTION ZZZZ-ZZZZ
SECTION AAAAA-AAAAA
SECTION BBBBB-BBBBB
SECTION CCCCC-CCCCC
SECTION DDDDD-DDDDD
SECTION EEEEE-EEEEE
SECTION FFFFF-FFFFF
SECTION GGGGG-GGGGG
SECTION HHHHH-HHHHH
SECTION IIIII-IIIII
SECTION JJJJJ-JJJJJ
SECTION KKKKK-KKKKK
SECTION LLLLL-LLLLL
SECTION MMMMM-MMMMM
SECTION NNNNN-NNNNN
SECTION OOOOO-OOOOO
SECTION PPPPP-PPPPP
SECTION QQQQQ-QQQQQ
SECTION RRRRR-RRRRR
SECTION SSSSS-SSSSS
SECTION TTTTT-TTTTT
SECTION UUUUU-UUUUU
SECTION VVVVV-VVVVV
SECTION WWWWW-WWWWW
SECTION XXXXX-XXXXX
SECTION YYYYY-YYYYY
SECTION ZZZZZ-ZZZZZ
SECTION AAAAAA-AAAAAA
SECTION BBBBBB-BBBBBB
SECTION CCCCCC-CCCCCC
SECTION DDDDDD-DDDDDD
SECTION EEEEEE-EEEEEE
SECTION FFFFFF-FFFFFF
SECTION GGGGGG-GGGGGG
SECTION HHHHHH-HHHHHH
SECTION IIIIII-IIIIII
SECTION JJJJJJ-JJJJJJ
SECTION KKKKKK-KKKKKK
SECTION LLLLLL-LLLLLL
SECTION MMMMMM-MMMMMM
SECTION NNNNNN-NNNNNN
SECTION OOOOOO-OOOOOO
SECTION PPPPPP-PPPPPP
SECTION QQQQQQ-QQQQQQ
SECTION RRRRRR-RRRRRR
SECTION SSSSSS-SSSSSS
SECTION TTTTTT-TTTTTT
SECTION UUUUUU-UUUUUU
SECTION VVVVVV-VVVVVV
SECTION WWWWWW-WWWWWW
SECTION XXXXXX-XXXXXX
SECTION YYYYYY-YYYYYY
SECTION ZZZZZZ-ZZZZZZ
SECTION AAAAAAA-AAAAAAA
SECTION BBBBBBB-BBBBBBB
SECTION CCCCCCC-CCCCCCC
SECTION DDDDDD-DDDDDDD
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SECTION FFFFFFF-FFFFFFF
SECTION GGGGGGG-GGGGGGG
SECTION HHHHHHH-HHHHHHH
SECTION IIIIIII-IIIIIII
SECTION JJJJJJJ-JJJJJJJ
SECTION KKKKKKK-KKKKKKK
SECTION LLLLLLL-LLLLLLL
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SECTION RRRRRRR-RRRRRRR
SECTION SSSSSSS-SSSSSSS
SECTION TTTTTTT-TTTTTTT
SECTION UUUUUUU-UUUUUUU
SECTION VVVVVVV-VVVVVVV
SECTION WWWWWWW-WWWWWWW
SECTION XXXXXXX-XXXXXXX
SECTION YYYYYYY-YYYYYYY
SECTION ZZZZZZZ-ZZZZZZZ
SECTION AAAAAAAA-AAAAAAAA
SECTION BBBBBBBB-BBBBBBBB
SECTION CCCCCCCC-CCCCCCCC
SECTION DDDDDDDD-DDDDDDDD
SECTION EEEEEEEE-EEEEEEEE
SECTION FFFFFFFF-FFFFFFFF
SECTION GGGGGGGG-GGGGGGGG
SECTION HHHHHHHH-HHHHHHHH
SECTION IIIIIIII-IIIIIIII
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SECTION KKKKKKKK-KKKKKKKK
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SECTION VVVVVVVV-VVVVVVVV
SECTION WWWWWWWW-WWWWWWWW
SECTION XXXXXXXX-XXXXXXXX
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SECTION TTTTTTTTT-TTTTTTTTT
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SECTION XXXXXXXXX-XXXXXXXXX
SECTION YYYYYYYYY-YYYYYYYYY
SECTION ZZZZZZZZZ-ZZZZZZZZZ
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SECTION BBBBBBBBBB-BBBBBBBBBB
SECTION CCCCCCCCCC-CCCCCCCCCC
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SECTION EEEEEEEEEE-EEEEEEEEEE
SECTION FFFFFFFFFF-FFFFFFFFFF
SECTION GGGGGGGGGG-GGGGGGGGGG
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SECTION IIIIIIIIII-IIIIIIIIII
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SECTION IIIIIIIIIII-IIIIIIIIIII
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SECTION HHHHHHHHHHHHH-HHHHHHHHHHHHH
SECTION IIIIIIIIIIIII-IIIIIIIIIIIII
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SECTION TTTTTTTTTTTTT-TTTTTTTTTTTTT
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SECTION WWWWWWWWWWWWW-WWWWWWWWWWWWW
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SECTION HHHHHHHHHHHHHHH-HHHHHHHHHHHHHHH
SECTION IIIIIIIIIIIIIII-IIIIIIIIIIIIIII
SECTION JJJJJJJJJJJJJJJ-JJJJJJJJJJJJJJJ
SECTION KKKKKKKKKKKKKKK-KKKKKKKKKKKKKKK
SECTION LLLLLLLLLLLLLLL-LLLLLLLLLLLLLLL
SECTION MMMMMMMMMMMMMMM-MMMMMMMMMMMMMMM
SECTION NNNNNNNNNNNNNNN-NNNNNNNNNNNNNNN
SECTION OOOOOOOOOOOOOOO-OOOOOOOOOOOOOOO
SECTION PPPPPPPPPPPPPPP-PPPPPPPPPPPPPPP
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SECTION RRRRRRRRRRRRRRR-RRRRRRRRRRRRRRR
SECTION SSSSSSSSSSSSSSS-SSSSSSSSSSSSSSS
SECTION TTTTTTTTTTTTTTT-TTTTTTTTTTTTTTT
SECTION UUUUUUUUUUUUUUU-UUUUUUUUUUUUUUU
SECTION VVVVVVVVVVVVVVV-VVVVVVVVVVVVVVV
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SECTION XXXXXXXXXXXXXXX-XXXXXXXXXXXXXXX
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SECTION ZZZZZZZZZZZZZZZ-ZZZZZZZZZZZZZZZ
SECTION AAAAAAAAAAAAAAAA-AAAAAAAAAAAAAAAA
SECTION BBBBBBBBBBBBBBBB-BBBBBBBBBBBBBBBB
SECTION CCCCCCCCCCCCCCCC-CCCCCCCCCCCCCCCC
SECTION DDDDDDDDDDDDDDDD-DDDDDDDDDDDDDDDD
SECTION EEEEEEEEEEEEEEEE-EEEEEEEEEEEEEEEE
SECTION FFFFFFFFFFFFFFFF-FFFFFFFFFFFFFFFF
SECTION GGGGGGGGGGGGGGGG-GGGGGGGGGGGGGGGG
SECTION HHHHHHHHHHHHHHHH-HHHHHHHHHHHHHHHH
SECTION IIIIIIIIIIIIIIII-IIIIIIIIIIIIIIII
SECTION JJJJJJJJJJJJJJJJ-JJJJJJJJJJJJJJJJ
SECTION KKKKKKKKKKKKKKKK-KKKKKKKKKKKKKKKK
SECTION LLLLLLLLLLLLLLLL-LLLLLLLLLLLLLLLL
SECTION MMMMMMMMMMMMMMMM-MMMMMMMMMMMMMMMM
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SECTION OOOOOOOOOOOOOOOO-OOOOOOOOOOOOOOOO
SECTION PPPPPPPPPPPPPPPP-PPPPPPPPPPPPPPPP
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SECTION RRRRRRRRRRRRRRRR-RRRRRRRRRRRRRRRR
SECTION SSSSSSSSSSSSSSSS-SSSSSSSSSSSSSSSS
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SECTION UUUUUUUUUUUUUUUU-UUUUUUUUUUUUUUUU
SECTION VVVVVVVVVVVVVVVV-VVVVVVVVVVVVVVVV
SECTION WWWWWWWWWWWWWWWW-WWWWWWWWWWWWWWWW
SECTION XXXXXXXXXXXXXXXX-XXXXXXXXXXXXXXXX
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SECTION ZZZZZZZZZZZZZZZZ-ZZZZZZZZZZZZZZZZ
SECTION AAAAAAAAAAAAAAAAA-AAAAAAAAAAAAAAAAA
SECTION BBBBBBBBBBBBBBBBB-BBBBBBBBBBBBBBBBB
SECTION CCCCCCCCCCCCCCCCC-CCCCCCCCCCCCCCCCC
SECTION DDDDDDDDDDDDDDDDD-DDDDDDDDDDDDDDDDD
SECTION EEEEEEEEEEEEEEEEE-EEEEEEEEEEEEEEEEE
SECTION FFFFFFFFFFFFFFFFF-FFFFFFFFFFFFFFFFF
SECTION GGGGGGGGGGGGGGGGG-GGGGGGGGGGGGGGGGG
SECTION HHHHHHHHHHHHHHHHH-HHHHHHHHHHHHHHHHH
SECTION IIIIIIIIIIIIIIIII-IIIIIIIIIIIIIIIII
SECTION JJJJJJJJJJJJJJJJJ-JJJJJJJJJJJJJJJJJ
SECTION KKKKKKKKKKKKKKKKK-KKKKKKKKKKKKKKKKK
SECTION LLLLLLLLLLLLLLLLL-LLLLLLLLLLLLLLLLL
SECTION MMMMMMMMMMMMMMMMM-MMMMMMMMMMMMMMMMM
SECTION NNNNNNNNNNNNNNNNN-NNNNNNNNNNNNNNNNN
SECTION OOOOOOOOOOOOOOOOO-OOOOOOOOOOOOOOOOO
SECTION PPPPPPPPPPPPPPPPP-PPPPPPPPPPPPPPPPP
SECTION QQQQQQQQQQQQQQQQQ-QQQQQQQQQQQQQQQQQ
SECTION RRRRRRRRRRRRRRRRR-RRRRRRRRRRRRRRRRR
SECTION SSSSSSSSSSSSSSSSS-SSSSSSSSSSSSSSSSS
SECTION TTTTTTTTTTTTTTTTT-TTTTTTTTTTTTTTTTT
SECTION UUUUUUUUUUUUUUUUU-UUUUUUUUUUUUUUUUU
SECTION VVVVVVVVVVVVVVVVV-VVVVVVVVVVVVVVVVV
SECTION WWWWWWWWWWWWWWWWW-WWWWWWWWWWWWWWWWW
SECTION XXXXXXXXXXXXXXXXX-XXXXXXXXXXXXXXXXX
SECTION YYYYYYYYYYYYYYYYY-YYYYYYYYYYYYYYYYY
SECTION ZZZZZZZZZZZZZZZZZ-ZZZZZZZZZZZZZZZZZ
SECTION AAAAAAAAAAAAAAAAAA-AAAAAAAAAAAAAAAAAA
SECTION BBBBBBBBBBBBBBBBBB-BBBBBBBBBBBBBBBBBB
SECTION CCCCCCCCCCCCCCCCCC-CCCCCCCCCCCCCCCCCC
SECTION DDDDDDDDDDDDDDDDDD-DDDDDDDDDDDDDDDDDD
SECTION EEEEEEEEEEEEEEEEEE-EEEEEEEEEEEEEEEEEE
SECTION FFFFFFFFFFFFFFFFFF-FFFFFFFFFFFFFFFFFF
SECTION GGGGGGGGGGGGGGGGGG-GGGGGGGGGGGGGGGGGG
SECTION HHHHHHHHHHHHHHHHHH-HHHHHHHHHHHHHHHHHH
SECTION IIIIIIIIIIIIIIIIII-IIIIIIIIIIIIIIIIII
SECTION JJJJJJJJJJJJJJJJJJ-JJJJJJJJJJJJJJJJJJ
SECTION KKKKKKKKKKKKKKKKKK-KKKKKKKKKKKKKKKKKK
SECTION LLLLLLLLLLLLLLLLLL-LLLLLLLLLLLLLLLLLL
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SECTION NNNNNNNNNNNNNNNNNN-NNNNNNNNNNNNNNNNNN
SECTION OOOOOOOOOOOOOOOOOO-OOOOOOOOOOOOOOOOOO
SECTION PPPPPPPPPPPPPPPPPP-PPPPPPPPPPPPPPPPPP
SECTION QQQQQQQQQQQQQQQQQQ-QQQQQQQQQQQQQQQQQQ
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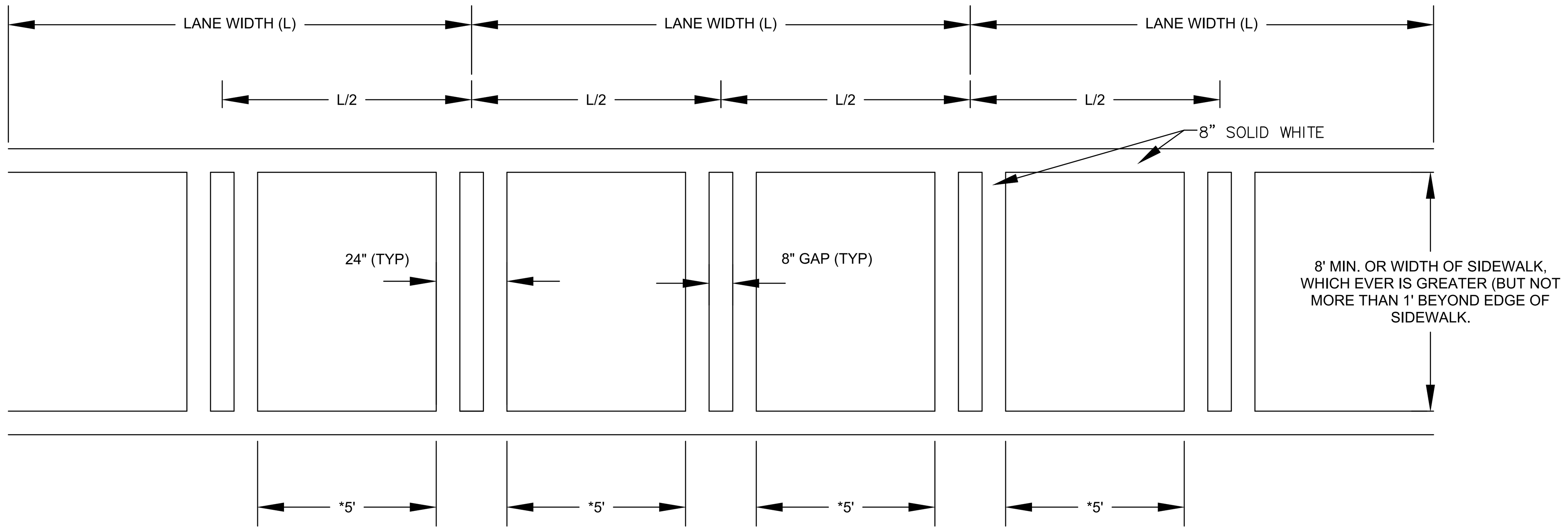
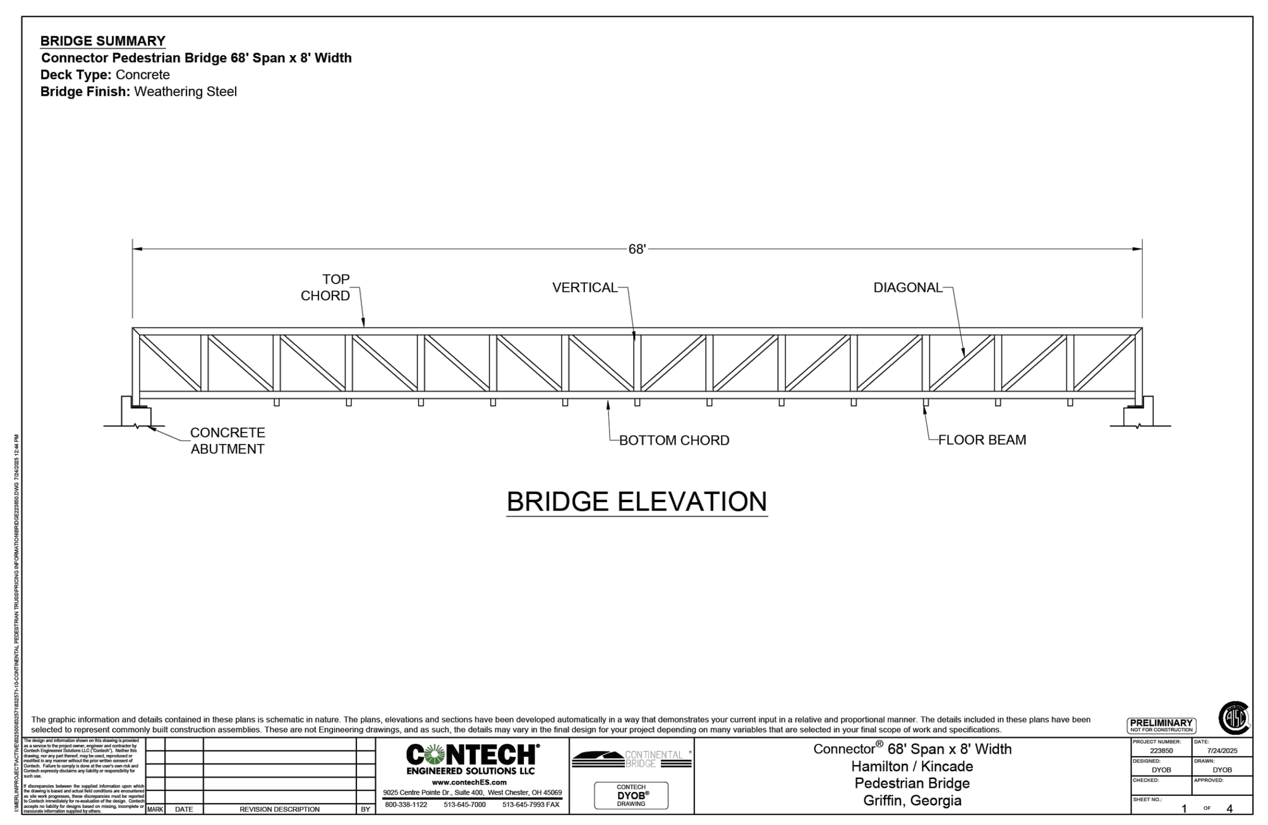
SECTION SSSSSSSSSSSSSSSSSS-SSSSSSSSSS

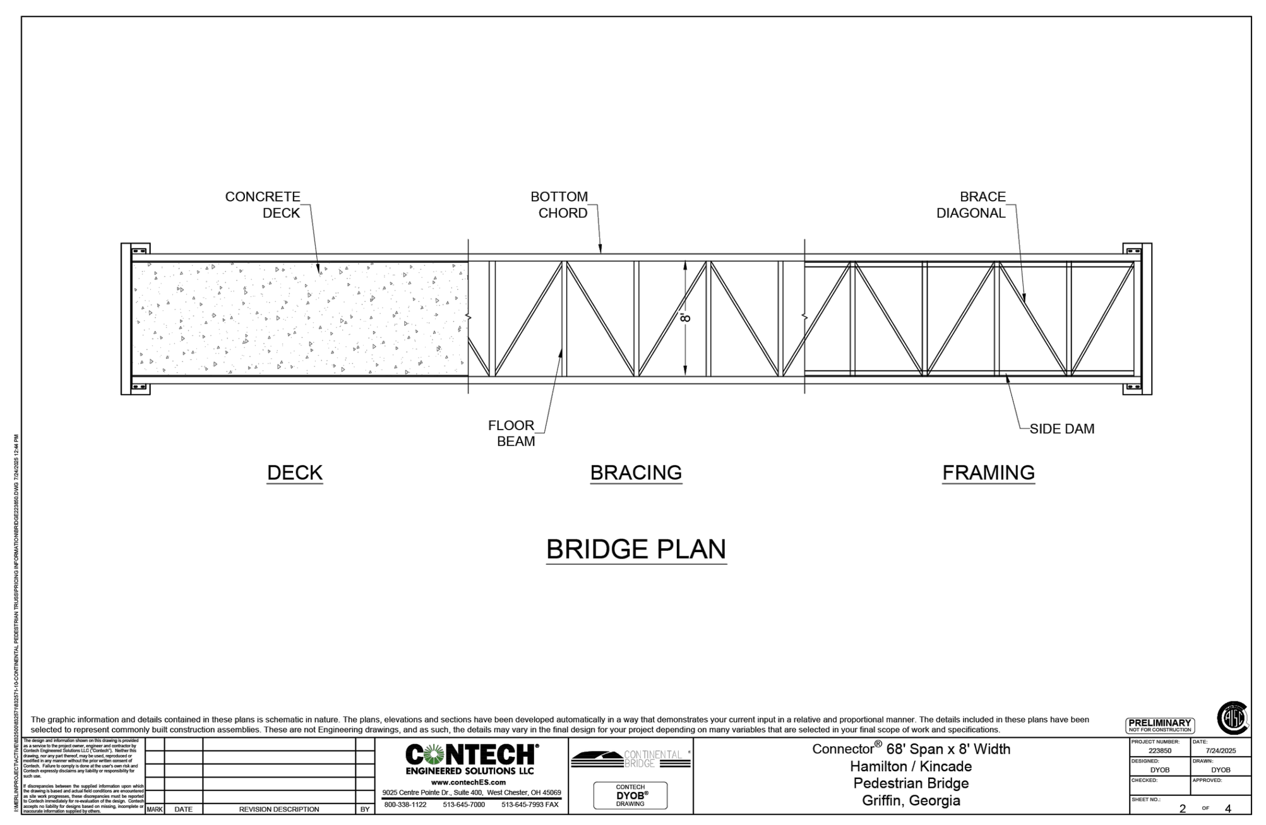


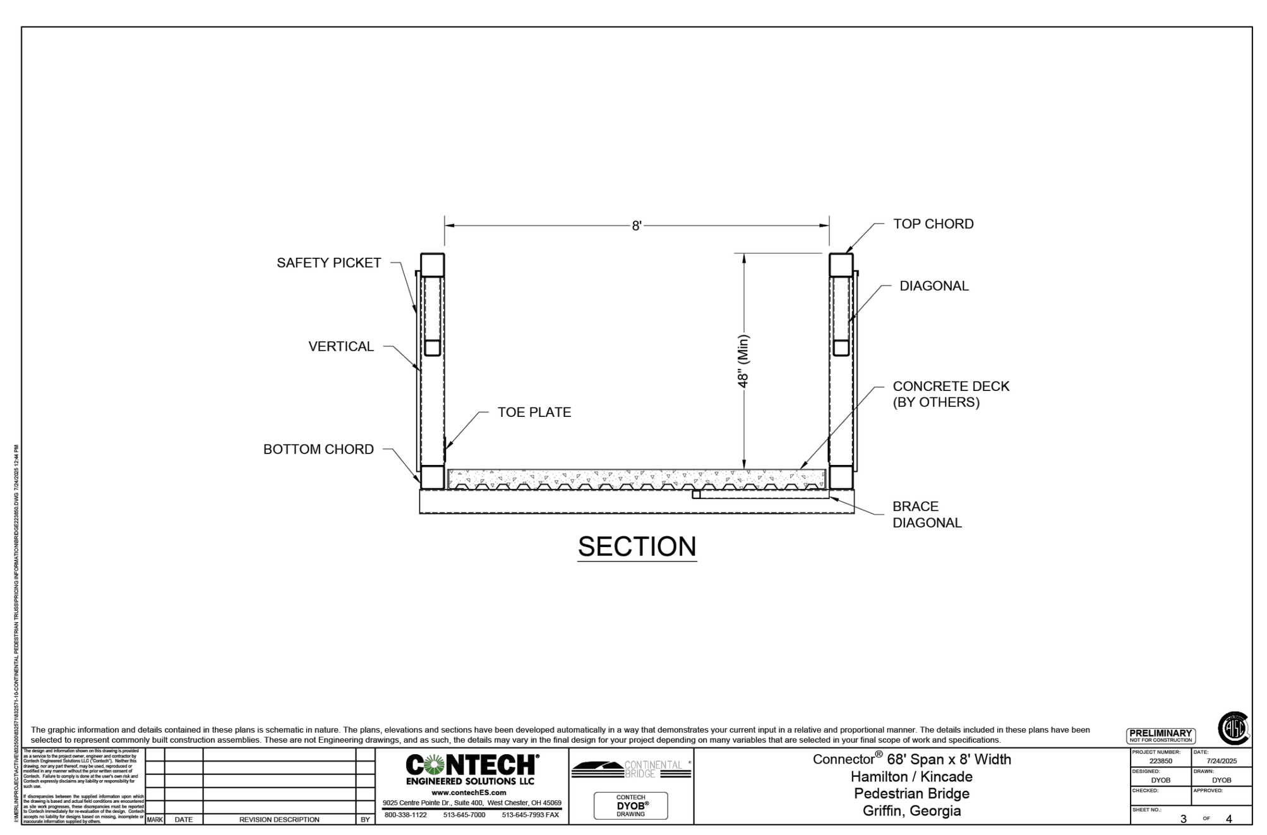
*USE WHERE THE LANE WIDTH EXCEEDS 12' OR WHERE LANE LINES HAVE BEEN OMITTED
* ALL PAINT TO BE THREMOPLASTIC FOR CROSSWALKS

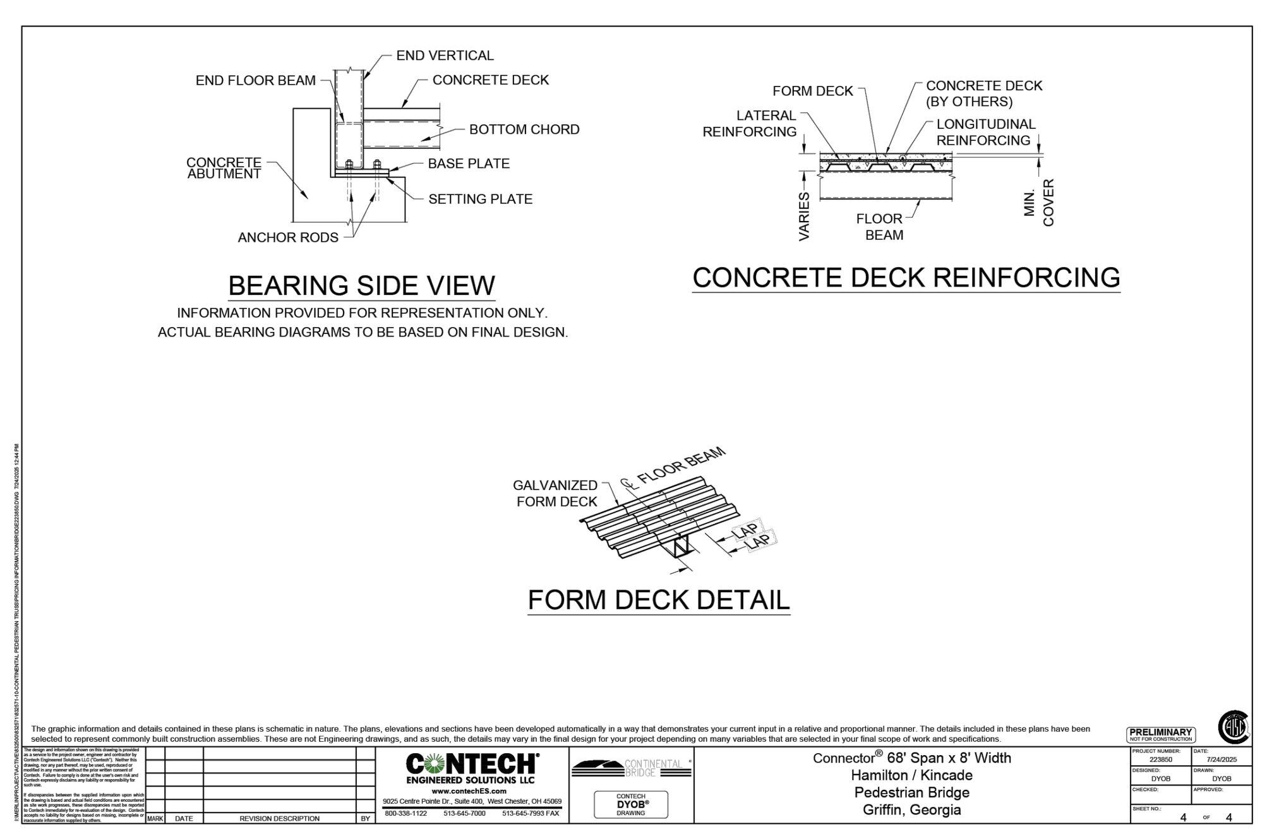
GDOT CROSSWALK DETAILS (T-11A)

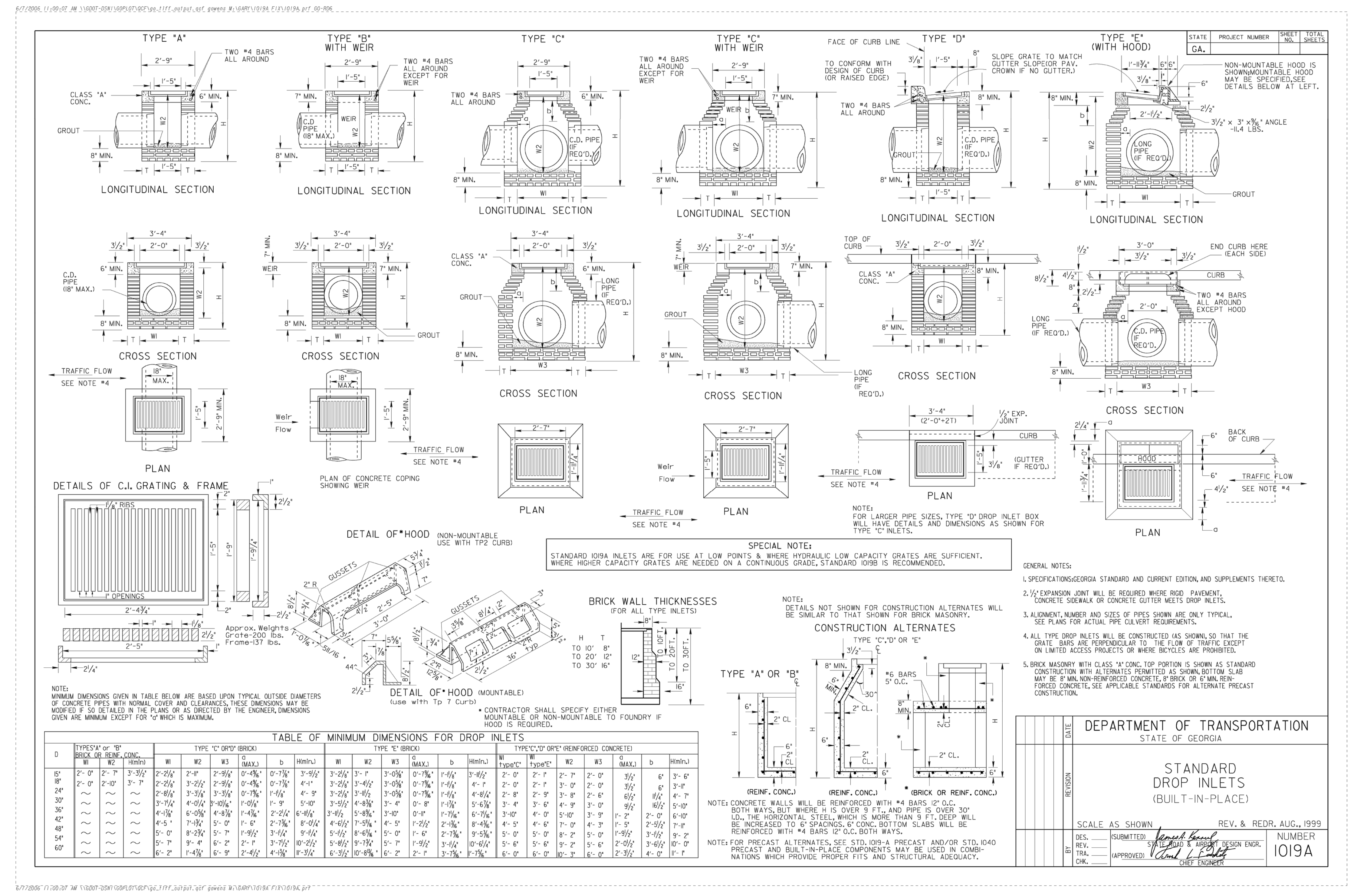
N.T.S.

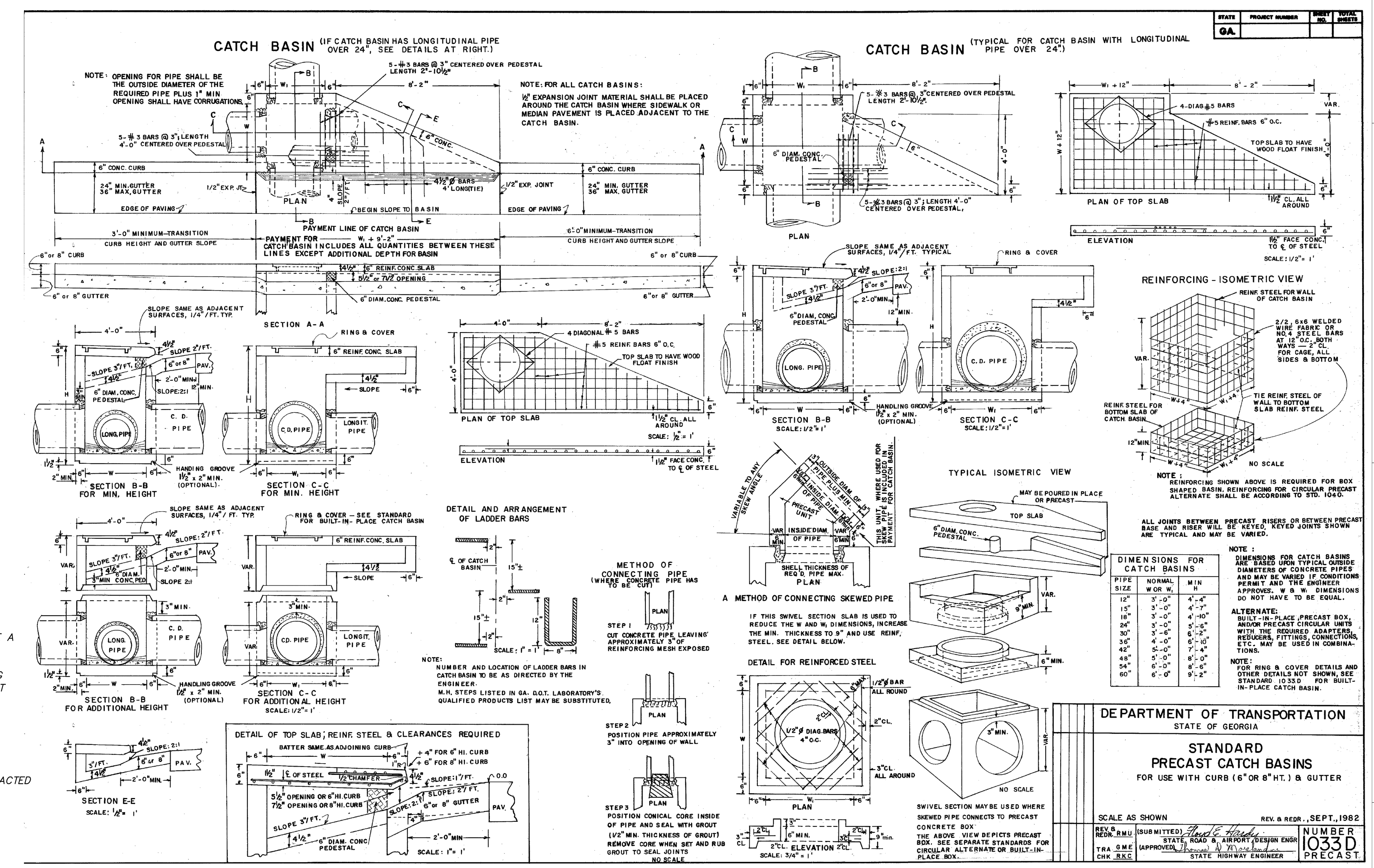

BRIDGE SUMMARY
Connector Pedestrian Bridge 68' Span x 8' Width
Deck Type: Concrete
Bridge Finish: Weathering Steel
68'
TOP CHORD
VERTICAL
DIAGONAL
CONCRETE ABUTMENT
BOTTOM CHORD
FLOOR BEAM
BRIDGE ELEVATION
CONTECH
Connector® 68' Span x 8' Width
Hamilton / Kincaid
Pedestrian Bridge
Griffin, Georgia



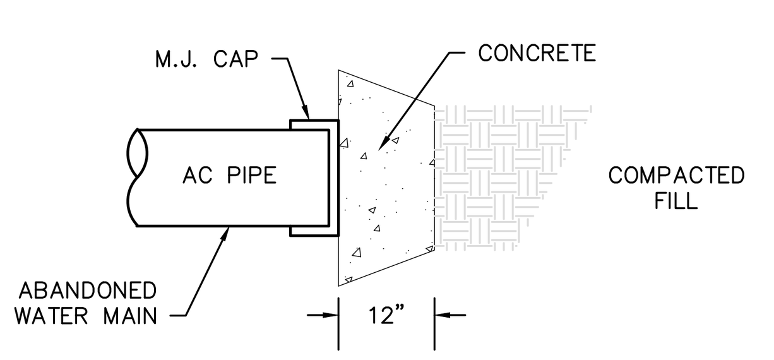



END VERTICAL
END FLOOR BEAM
CONCRETE DECK
BOTTOM CHORD
CONCRETE ABUTMENT
BASE PLATE
SETTING PLATE
ANCHOR RODS
BEARING SIDE VIEW
INFORMATION PROVIDED FOR REPRESENTATION ONLY
ACTUAL BEARING DIAGRAMS TO BE BASED ON FINAL DESIGN
FORM DECK
LATERAL REINFORCING
CONCRETE DECK (BY OTHERS)
LONGITUDINAL REINFORCING
FLOOR BEAM
CONCRETE DECK REINFORCING
GALVANIZED FORM DECK
FLOOR BEAM
FORM DECK DETAIL
CONTECH
Connector® 68' Span x 8' Width
Hamilton / Kincaide
Pedestrian Bridge
Griffin, Georgia


TYPE "A"
TYPE "B" WITH WEIR
TYPE "C"
TYPE "C" WITH WEIR
TYPE "D"
TYPE "E" (WITH HOOD)
LONGITUDINAL SECTION
CROSS SECTION
PLAN
DETAILS OF C.I. GRATING & FRAME
DETAIL OF HOOD
BRICK WALL THICKNESSES
CONSTRUCTION ALTERNATES
SPECIAL NOTE:
STANDARD IO19A INLETS ARE FOR USE AT LOW POINTS & WHERE HYDRAULIC LOW CAPACITY GRATES ARE SUFFICIENT. WHERE HIGHER CAPACITY GRATES ARE NEEDED ON A CONTINUOUS GRADE, STANDARD IO19B IS RECOMMENDED.
TABLE OF MINIMUM DIMENSIONS FOR DROP INLETS
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
STANDARD
DROP INLETS
(BUILT-IN-PLACE)
SCALE AS SHOWN
REV. & REDR. AUG., 1999
NUMBER
1019A


CATCH BASIN (IF CATCH BASIN HAS LONGITUDINAL PIPE OVER 24", SEE DETAILS AT RIGHT.)
CATCH BASIN (TYPICAL FOR CATCH BASIN WITH LONGITUDINAL PIPE OVER 24")
NOTE: FOR ALL CATCH BASINS:
1/2" EXPANSION JOINT MATERIAL SHALL BE PLACED AROUND THE CATCH BASIN WHERE SIDEWALK OR MEDIAN PAVEMENT IS PLACED ADJACENT TO THE CATCH BASIN.
PLAN
SECTION A-A
SECTION B-B FOR MIN. HEIGHT
SECTION C-C FOR MIN. HEIGHT
SECTION B-B FOR ADDITIONAL HEIGHT
SECTION C-C FOR ADDITIONAL HEIGHT
SECTION E-E
PLAN OF TOP SLAB
ELEVATION
REINFORCING - ISOMETRIC VIEW
TYPICAL ISOMETRIC VIEW
DETAIL AND ARRANGEMENT OF LADDER BARS
METHOD OF CONNECTING PIPE
A METHOD OF CONNECTING SKEWED PIPE
DETAIL FOR REINFORCED STEEL
DETAIL OF TOP SLAB, REINF. STEEL & CLEARANCES REQUIRED
NOTE:
REINFORCING SHOWN ABOVE IS REQUIRED FOR BOX SHAPED BASIN. REINFORCING FOR CIRCULAR PRECAST ALTERNATE SHALL BE ACCORDING TO STD. 1040.
ALL JOINTS BETWEEN PRECAST RISERS OR BETWEEN PRECAST BASE AND RISER WILL BE KEYED. KEYED JOINTS SHOWN ARE TYPICAL AND MAY BE VARIED.
DIMENSIONS FOR CATCH BASINS
PIPE SIZE / NORMAL W OR W1 / MIN H
12" 3'-0" 4'-4"
15" 3'-0" 4'-7"
18" 3'-0" 4'-10"
24" 3'-0" 5'-6"
30" 3'-6" 6'-2"
36" 4'-0" 6'-10"
42" 5'-0" 7'-4"
48" 5'-0" 8'-0"
54" 6'-0" 8'-6"
60" 6'-0" 9'-2"
NOTE:
DIMENSIONS FOR CATCH BASINS ARE BASED UPON TYPICAL OUTSIDE DIAMETERS OF CONCRETE PIPES AND MAY BE VARIED IF CONDITIONS PERMIT AND THE ENGINEER APPROVES. W & W1 DIMENSIONS DO NOT HAVE TO BE EQUAL.
ALTERNATE:
BUILT-IN-PLACE, PRECAST BOX, AND/OR PRECAST CIRCULAR UNITS WITH THE REQUIRED ADAPTERS, REDUCERS, FITTINGS, CONNECTIONS, ETC. MAY BE USED IN COMBINATIONS.
NOTE:
FOR RING & COVER DETAILS AND OTHER DETAILS NOT SHOWN, SEE STANDARD 1033D FOR BUILT-IN-PLACE CATCH BASIN.
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
STANDARD
PRECAST CATCH BASINS
FOR USE WITH CURB (6" OR 8" HT.) & GUTTER
SCALE AS SHOWN
REV. & REDR., SEPT., 1982
STATE ROAD & AIRPORT DESIGN ENGR
STATE HIGHWAY ENGINEER
NUMBER
1033D
PRECAST

49



WATER MAIN ABANDONMENT DETAILS

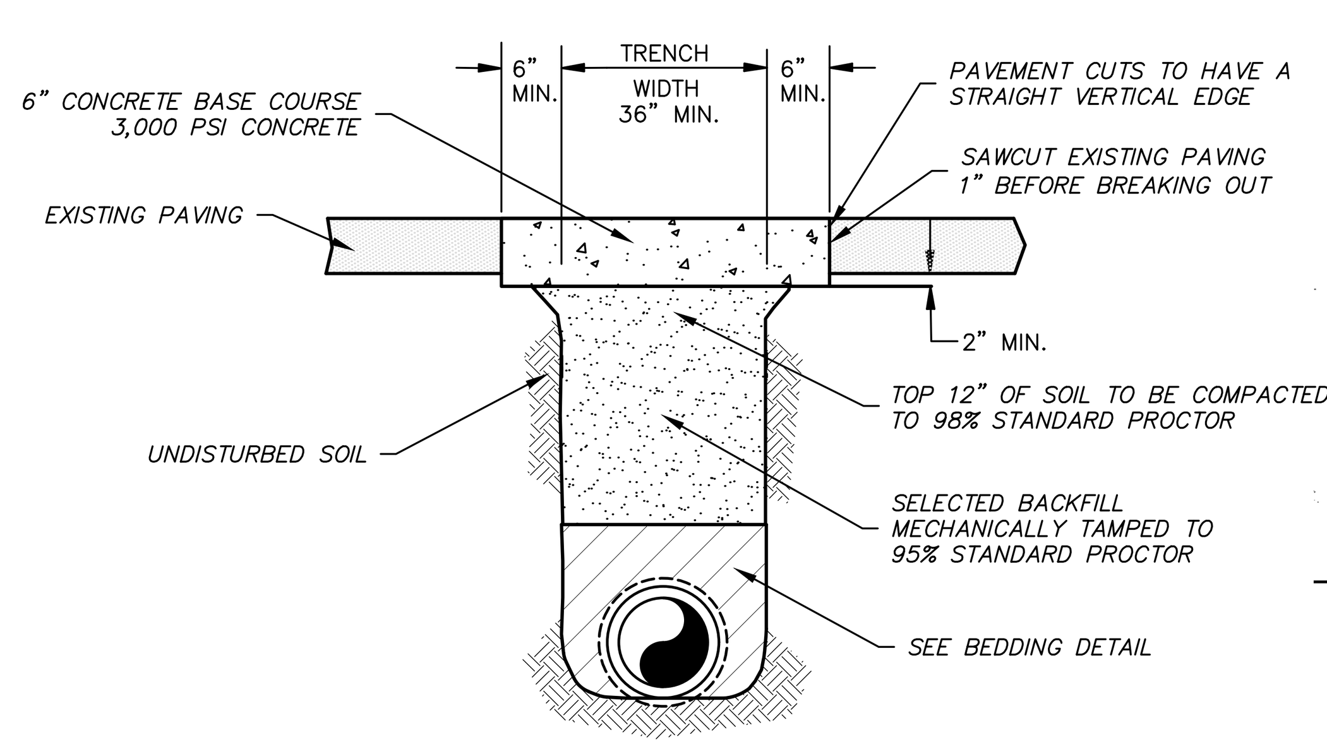
N.T.S.

TWO-WAY SOLAR MARKERS WITH WHITE WITH ALUMINUM HOUSING

LUMINOUS INTENSITY 5,000 MCD

L.E.D. CROSSWALK FLASHERS

N.T.S.


6" MIN.
TRENCH WIDTH 36" MIN.
6" MIN.
6" CONCRETE BASE COURSE 3,000 PSI CONCRETE
EXISTING PAVING
PAVEMENT CUTS TO HAVE A STRAIGHT VERTICAL EDGE
SAWCUT EXISTING PAVING 1" BEFORE BREAKING OUT
2" MIN.
TOP 12" OF SOIL TO BE COMPACTED TO 98% STANDARD PROCTOR
UNDISTURBED SOIL
SELECTED BACKFILL MECHANICALLY TAMPED TO 95% STANDARD PROCTOR
SEE BEDDING DETAIL

TYPICAL PAVEMENT PATCH AND TRENCH DETAIL

N.T.S.

NOTE: CONCRETE MAY BE POURED 1-1/2" BELOW ASPHALT FOR MILLING PURPOSES. ASPHALT TO BE MILLED 1-1/2" AND TOPPED WITH 1-1/2" OF 9.5 MM SUPERPAVE.

No.	Revisions:	Date
1.	UPDATED CALL OUT ON SHEET 8	8/28/2025
2.	ADDED BRIDGE FOOTER AND HELICAL PILE SHEET 26	8/28/2025
3.	ADDED BRIDGE ABUTMENT DETAIL SHEET 28	8/28/2025

PARAGON
CONSULTING GROUP
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350 airport road griffin, georgia 30224
phone (770) 412-7700 www.pcgeng.com

STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

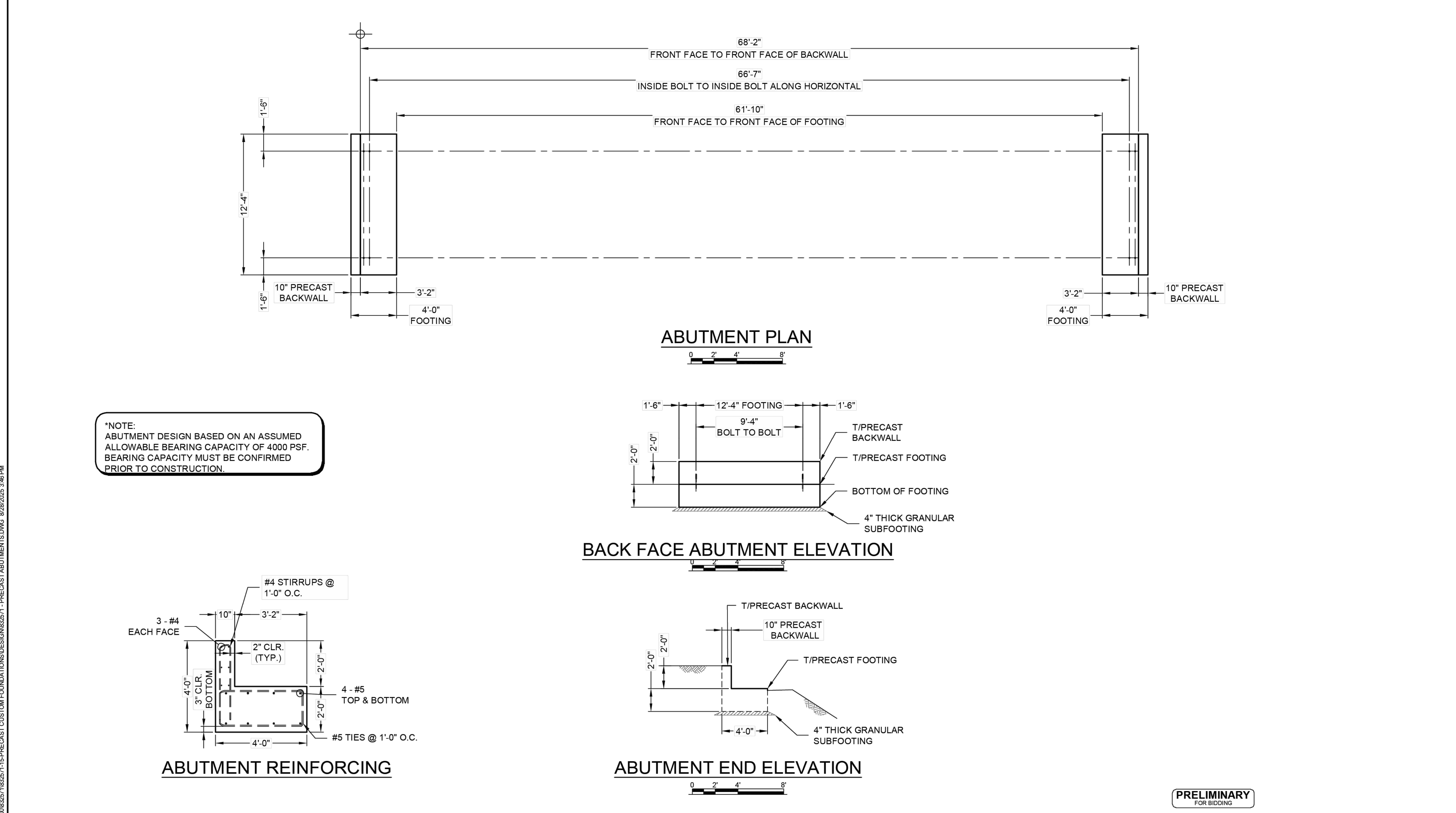
LOCATED IN SPALDING COUNTY

SHEET:
CONSTRUCTION DETAILS

COA #: PEF004167

GEORGIA REGISTERED No. PE034220 PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No. PCG3152-24033	Issue Date: JULY 2025
Drawn By: KLB	Checked By: WTS



MARK	DATE	REVISION DESCRIPTION	BY

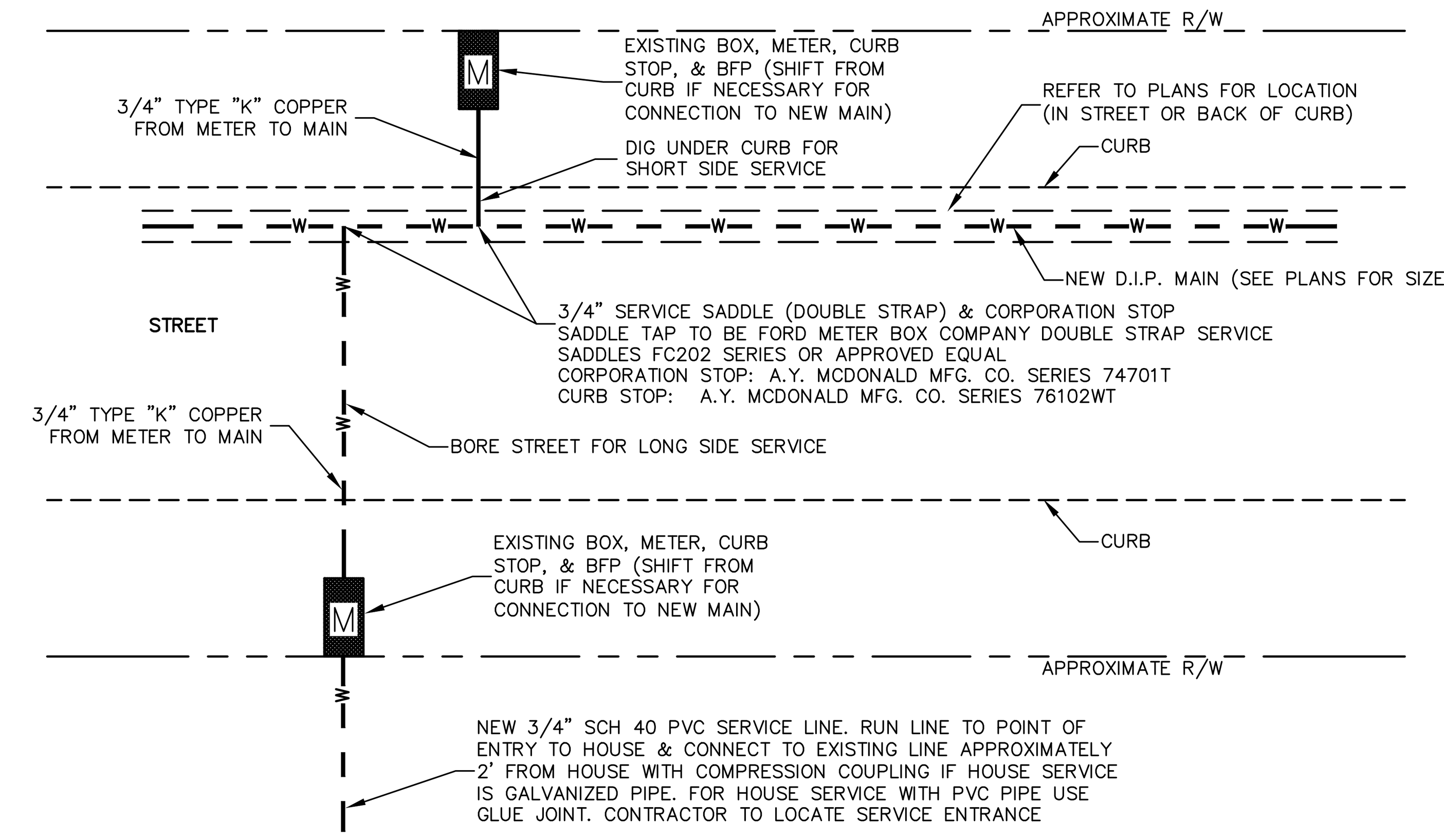
CONTECH ENGINEERED SOLUTIONS LLC — A QUIKRETE COMPANY
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

EXPRESS Foundations

PROPOSAL DRAWING

HAMILTON KINCADE
HAMILTON KINCADE
HAMILTON KINCADE
GRIFFIN, GEORGIA

PROJECT No.	SEQ. No.	DATE
832571	015	8/27/2025
DESIGNED: RKL	DRAWN: RKL	
CHECKED: XXX	APPROVED: PAC	
SHEET NO.: 1 OF 1		

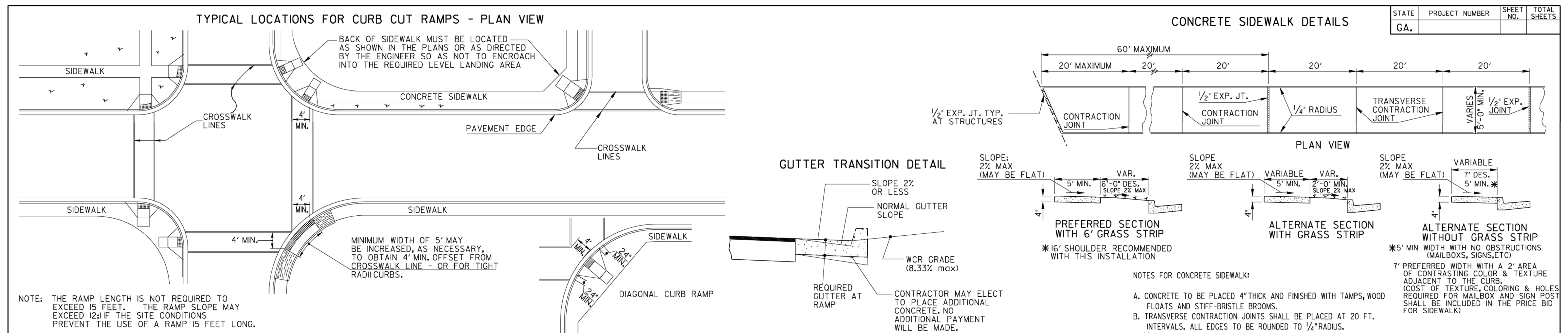


CDBG PROJECT – WATER SERVICE REHABILITATION DETAIL
N.T.S.

TYPICAL LOCATIONS FOR CURB CUT RAMPS - PLAN VIEW

CONCRETE SIDEWALK DETAILS

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			



NOTE: THE RAMP LENGTH IS NOT REQUIRED TO EXCEED 15 FEET. THE RAMP SLOPE MAY EXCEED 12:1 IF THE SITE CONDITIONS PREVENT THE USE OF A RAMP 15 FEET LONG.

NOTES FOR CONCRETE SIDEWALK:

A. CONCRETE TO BE PLACED 4" THICK AND FINISHED WITH TAMPS, WOOD FLOATS AND STIFF-BRISTLE BROOMS.
B. TRANSVERSE CONTRACTION JOINTS SHALL BE PLACED AT 20 FT. INTERVALS. ALL EDGES TO BE ROUNDED TO 1/4" RADIUS.
C. 1/2" EXPANSION JOINTS SHALL BE PLACED, WHERE SIDEWALK TIE INTO A STRUCTURE OR TERMINATE AT CURB, RAMPS OR DRIVEWAYS AND AT 60' INTERVALS.

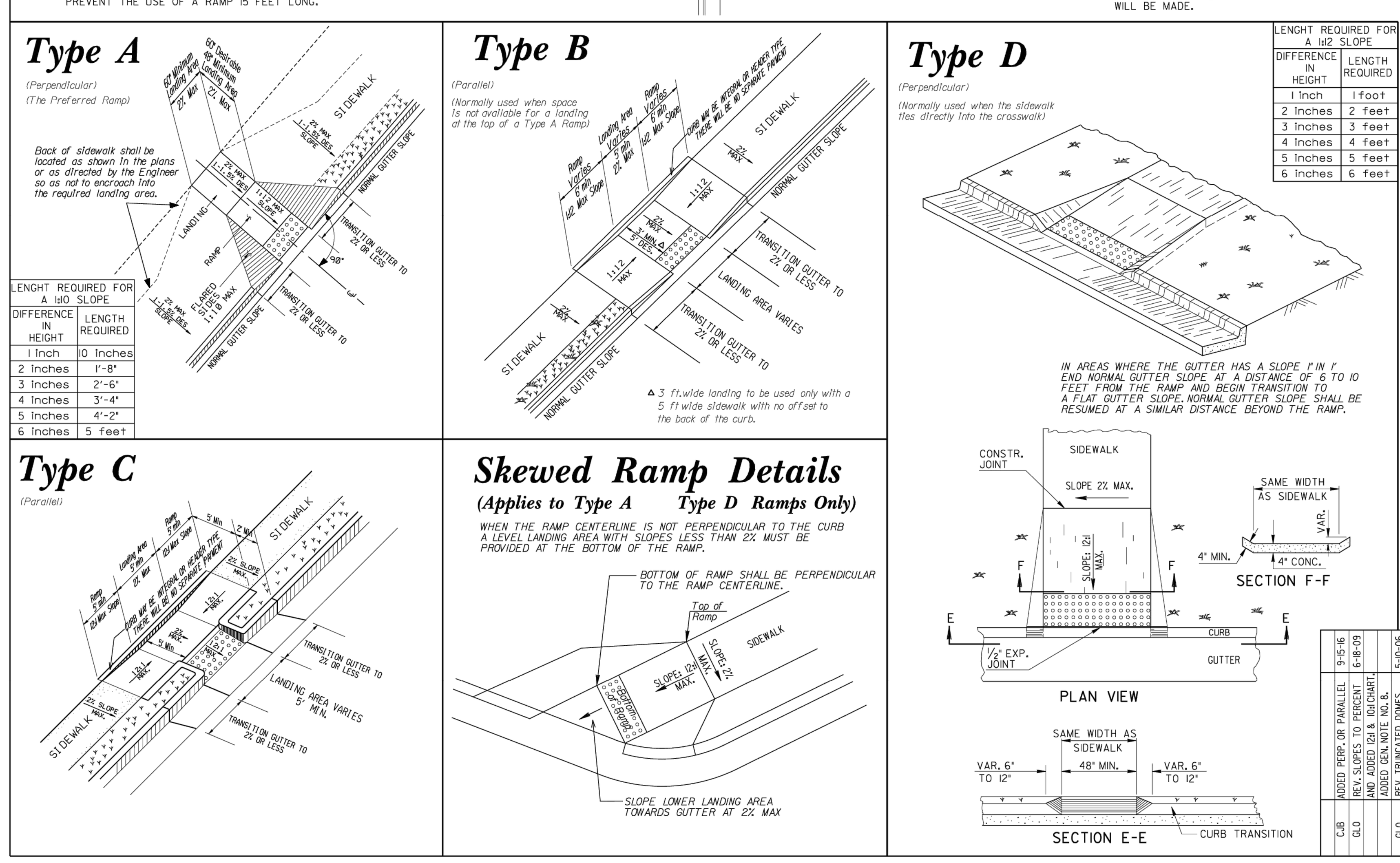
NOTES FOR CURB CUT RAMPS:

1. CURB CUT RAMPS WILL BE LOCATED AS FOLLOWS UNLESS PLANS OR CONTRACT SPECIFY OTHERWISE.
   a) AT ALL PEDESTRIAN CROSSWALKS WHERE CURB IS CONSTRUCTED OR REPLACED.
   b) WHERE THE SIDEWALK, CONCRETE OR UNPAVED, IS INTERRUPTED BY THE CURB AT TURNOUTS OR AT INTERSECTIONS.
   c) AT OTHER LOCATIONS SUCH AS HOSPITALS, NURSING HOMES, REST AREAS, ETC., WHERE THE CURB WOULD OTHERWISE BE AN OBSTRUCTION TO THE PHYSICALLY DISABLED.
2. RAMPS WILL BE CONSTRUCTED FROM CONCRETE. SPECIFICATIONS FOR RAMPS WILL BE THE SAME AS FOR CONCRETE SIDEWALK. RAMPS SHALL HAVE EITHER A ROUGH OR A TEXTURED FINISH.
3. DROP INLETS ARE NOT TO BE LOCATED DIRECTLY IN FRONT OF RAMPS. CATCH BASINS SHOULD BE LOCATED AT LEAST 10 FT. FROM RAMPS WHEN FEASIBLE.
4. WHERE RAMPS ARE LOCATED IN RADII, THE DIMENSIONS SHOWN FOR RAMP WIDTHS AND TAPERS ARE MEASURED PERPENDICULAR TO THE RAMP AND NOT ALONG THE CURVE.
5. WHERE UTILITY STRUCTURES CONFLICT, WHERE SIDEWALK GEOMETRY VARIES, AT SKEWED INTERSECTIONS, OR IN OTHER SPECIAL CASES, THE RAMP DESIGNS MAY BE MODIFIED BY THE DESIGNER OR ENGINEER, PROVIDED THAT THE WIDTH REMAINS A MINIMUM OF 48 INCHES, AND NO SLOPE ON THE ACCESSIBLE PART OF THE RAMP IS STEEPER THAN 12:1.
6. LIN. FT. OF CURB AND GUTTER WILL INCLUDE THE TRANSITIONED CURB IN FRONT OF RAMPS. SQ. YDS. OF CONCRETE SIDEWALK AND CONCRETE MEDIAN PAVING WILL INCLUDE RAMPS. NO ADDITIONAL PAYMENT WILL BE MADE FOR CURB RAMPS. NO ADDITIONAL PAYMENT WILL BE MADE FOR SAWING AND REMOVING EXISTING SIDEWALK OR CURB WHERE NECESSARY FOR RAMP CONSTRUCTION.
7. WHEN A CURB RAMP IS PLACED ON EXISTING PAVEMENT. THE PAVEMENT SHALL BE REMOVED TO PROVIDE A MINIMUM THICKNESS OF 3 INCHES OF CONCRETE AT ALL LOCATIONS. NO SEPARATE PAYMENT WILL BE MADE FOR REMOVAL OF THE PAVEMENT.
8. DETECTABLE WARNING SURFACES ARE REQUIRED ON ALL INTERSECTIONS WITH PUBLIC STREETS, SIGNALIZED COMMERCIAL DRIVEWAYS, AND COMMERCIAL DRIVEWAYS WITH AN AADT OF 25 VPD.

This Detail Replaces Ga Standard 9031W

Guidelines For Usage On Metric Projects

When these details are incorporated into plans and or projects that are being prepared or constructed in metric units, exact or precise conversion to metric units is not required. The dimensions shown that are in feet and inches may be converted to corresponding metric units using the following "Rounded-Off" conversion factors: 1" =25mm, 4"=100mm, and 12" or 1' =300mm. All measurement notes that refer to linear feet and square yards shall be interpreted to mean linear meters and square meters.



LENGHT REQUIRED FOR A 1:12 SLOPE	
DIFFERENCE IN HEIGHT	LENGTH REQUIRED
1 Inch	1 foot
2 Inches	2 feet
3 Inches	3 feet
4 Inches	4 feet
5 Inches	5 feet
6 Inches	6 feet

LENGHT REQUIRED FOR A 1:8 SLOPE	
DIFFERENCE IN HEIGHT	LENGTH REQUIRED
1 Inch	10 Inches
2 Inches	1'-8"
3 Inches	2'-6"
4 Inches	3'-4"
5 Inches	4'-2"
6 Inches	5 feet

DATE	REVISION
9-15-16	PERP. OR PARALLEL
6-18-09	SLOPES TO PERCENT
	ADDED 12:1 & 10:1 CHART
	GEN. NOTE NO. 8
5-10-06	TRUNCATED DOMES
2-21-03	REVISED
2-10-03	REVISED
7-29-02	REVISED
5-29-02	REVISED
5-23-02	REVISED
5-13-02	REVISED
4-29-02	REVISED
4-11-02	REVISED
4-3-02	REVISED
3-28-02	REVISED

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

SPECIAL DETAIL
CONCRETE SIDEWALK DETAILS
CURB CUT (WHEELCHAIR) RAMPS

NO SCALE — MARCH 12, 2002 — NUMBER A3

49

No.	Revisions:	Date
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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

SHEET:
CONSTRUCTION DETAILS

COA #: PEF004167

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. PE036220 WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

INLET BASIN Sd2-F C.I. B-2
0.78 AC
Cw = 0.47
I = 8.34
Q100= 3.06 CFS

INLET BASIN Sd2-F C.I. B-1
0.09 AC
Cw = 0.98
I = 8.34
Q100= 0.73 CFS

INLET BASIN Sd2-F RLI A-1
0.44 AC
Cw = 0.36
I = 8.34
Q100= 1.32 CFS

N/F
RICHARD M. KURTZMAN
AND
DREWRY C. PAYNE
P.I.N.:028 01015
DB 4256, PG 242

N/F
PATRICIA REDMON
P.I.N.:028 01016A
DB 1956, PG 152
PB 21, PG 378

N/F
STEPHAN BERNA
P.I.N.:028 02009
DB 4805, PG 226
PB 21, PG 17

N/F
THE CITY OF
GRIFFIN
P.I.N.:028 01016
DB 3769, PG 259

N/F
PIERCE FAMILY PROPERTIES, LLC
P.I.N.:029 04001
DB 3524, PG 317
LOT 1 - PB 1, PG 101

HAMILTON BOULEVARD
(40' R/W PER PB 5, PG 415)

SUN VALLEY SUBDIVISION
PB 5, PG 415

KINCAID AVENUE
(50' R/W PER PB 21, PG 17)

EAST COLLEGE STREET
(50' R/W PER PB 21, PG 17)

KINCAID SUBDIVISION
PB 4, PG 27

L.L. 174

L.L. 179

21 22 23 1 2

49

SD2-P C.B. B-5
EXCAVATED INLET SEDIMENT TRAP CALCULATIONS:
1. DRAINAGE AREA = 0.68 AC.
2. REQUIRED SEDIMENT STORAGE = 67 C.Y./AC. * DRAINAGE AREA
REQUIRED SEDIMENT STORAGE = 67 C.Y./AC. * 0.68 AC.
REQUIRED SEDIMENT STORAGE = 45.56 C.Y. = 1,230.12 C.F.
3. ASSUME EXCAVATION DEPTH (MINIMUM OF 1.5 FT.) = 4 FT.
4. ASSUME SLOPE OF SIDES (SHALL NOT BE STEEPER THAN 2:1) = 3:1
5. DETERMINE REQUIRED SURFACE AREA
SAmin = REQUIRED SEDIMENT STORAGE / EXCAVATION DEPTH
SAmin = 1,230.12 C.F. / 4 FT.
SAmin = 307.53 S.F.
6. ASSUME SHAPE OF EXCAVATION AND DETERMINE DIMENSIONS.
(A RECTANGULAR SHAPE WITH 2:1 LENGTH TO WIDTH RATIO IS RECOMMENDED.)
SHAPE: SQUARE
DIMENSIONS: L = 18 FT. W = 18 FT. DIAMETER (IF APPLICABLE) = N/A FT.

INLET BASIN MAP

GRAPHIC SCALE

43 44 45

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PARAGON
CONSULTING GROUP
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350 airport road griffin, georgia 30224
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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

SHEET:
INLET BASIN

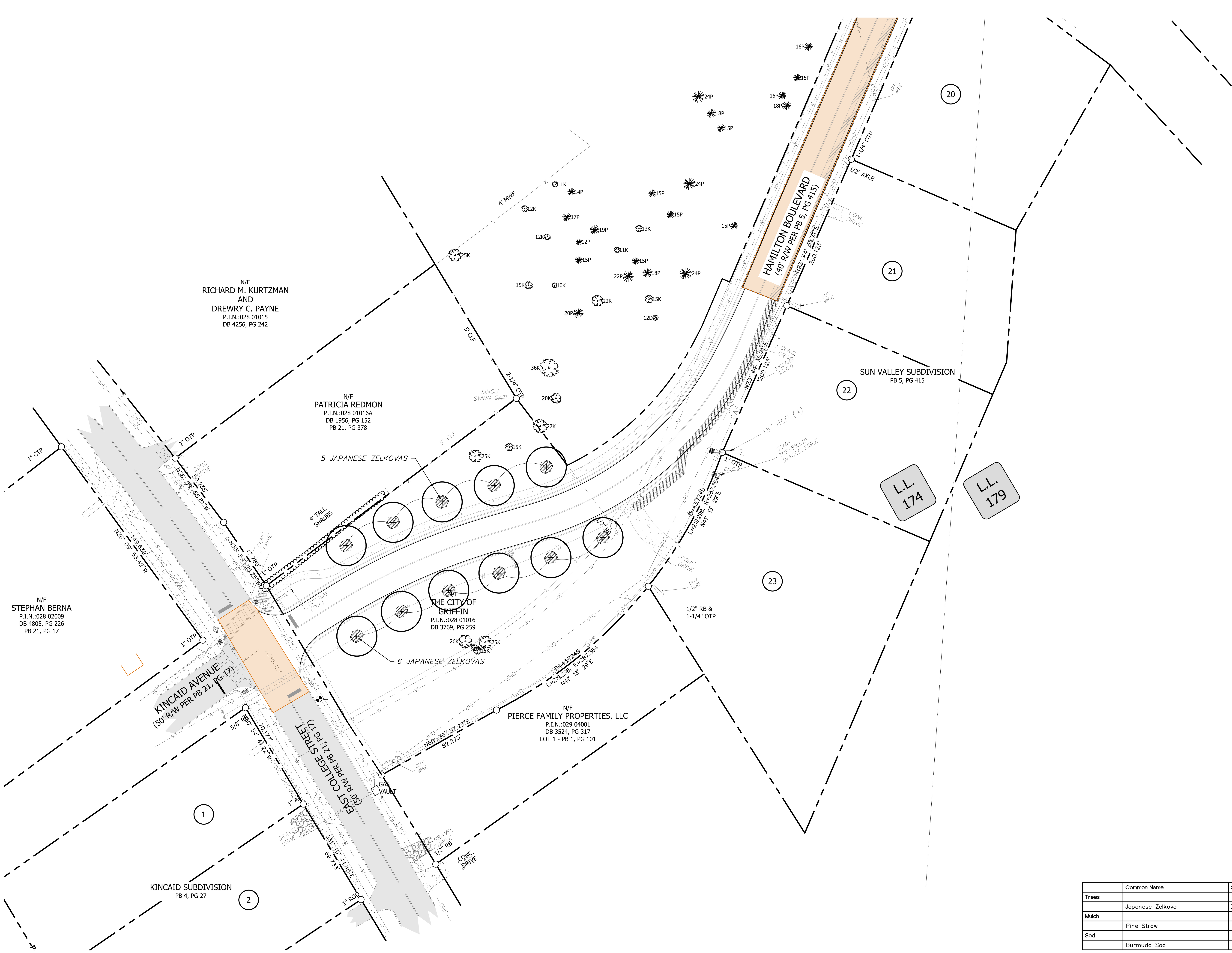
COA #: PEF004167

GEORGIA REGISTERED No. PE013620 PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 10000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

No.	Revisions:	Date
1.	UPDATED CALL OUT ON SHEET 8	8/28/2025
2.	ADDED BRIDGE FOOTER AND HELICAL PILE SHEET 26	8/28/2025
3.	ADDED BRIDGE ABUTMENT DETAIL SHEET 28	8/28/2025

29
SHEET 29 OF 31



LANDSCAPE/ TREE PROTECTION PLAN

GRAPHIC SCALE

(IN FEET)
1 inch = XX ft.

PLANTING SCHEDULE

	Common Name	Scientific Name	Planting Size	Quantity	Spacing
Trees					
	Japanese Zelkova	Zelkova Serrata	3" CAL.	11	As shown
Mulch					
	Pine Straw			560 SF	
Sod					
	Burmuda Sod	Tiftway 419		5,800 SF	

* SEE EROSION CONTROL PLANS FOR SOD LOCATION

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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

SHEET:
LANDSCAPE PLAN

COA #: PEF004167

GEORGIA REGISTERED PROFESSIONAL ENGINEER WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No. PCG3152-24033	Issue Date: JULY 2025
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LANDSCAPE NOTES

LANDSCAPE SPECIFICATIONS

1. SCOPE OF WORK

THE WORK SHALL CONSIST OF SOIL PREPARATION,FINISH GRADING, AND PLANTING; INCLUDING ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, NECESSARY FOR THE COMPLETION OF THIS PROJECT.THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PERMITTING AND LICENSING NECESSARY TO COMPLETE THIS WORK.

2. GENERAL

A. QUALITY
1. OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT PLANT MATERIAL AT ANY POINT OF THE LANDSCAPING OPERATION.
2. PLANTS SHALL MEET OR EXCEED QUALIFICATIONS SET FORTH BY THE AMERICAN STANDARD NURSERY STOCK'S LATEST EDITION.

B. DELIVERY, STORAGE, HANDLING
1. REASONABLE CARE SHALL BE TAKEN TO ASSURE HEALTHY PLANT MATERIAL.
2. PLANTS THAT SUFFER IN DELIVERY, STORAGE, OR HANDLING WILL BE REJECTED.

C. PROJECT CONDITIONS
1. COORDINATE LANDSCAPING OPERATIONS WITH WORK OF OTHER TRADES.
2. PRIOR TO COMMENCING WORK. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO HAVE UTILITY LOCATOR SERVICE LOCATE AND MARK LINES.
3. COORDINATE SITE SPECIFIC LINES (UTILITY PIPES) WITH GENERAL CONTRACTOR.
4. GENERAL CONTRACTOR SHALL BACK FILL ALL CURBS, WALKS, AND PARKING LOT ISLANDS.

3. MATERIAL

A. TOPSOIL/BACKFILL
TOPSOIL/BACKFILL MATERIAL SHALL BE FERTILE, FRIABLE SOIL THAT IS REASONABLY FREE OF SUBSOIL, CLAY LUMPS, ROOTS, STUMPS, DEBRIS, STONES OR LARGER THAN 3" OR OTHER EXTRANEOUS MATERIAL HARMFUL PLANT GROWTH.

B. PLANTING BACKFILL MIXTURE
1. PLANT MIX SHALL BE 70% EXISTING SOIL AND 30% COMMERCIAL COMPOSTED PLANT MIX.
2. DO NOT USE PEAT MOSS AS A PLANT MIX.

C. SOD
1. EITHER CUT OR ROLLED IS ACCEPTABLE
2. SOD SHALL BE WELL GROWN AND HOLD TOGETHER WHEN SUSPENDED IN AIR AND HELD FROM ONE END.

D. FERTILIZER
ADJUST LEVEL OF NITROGEN BASED ON SEASON, RATES ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

E. PRE-EMERGENT
GRANULAR TYPE FOR BED AREAS ONLY, RATES ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

F. STAKES AND GUYS
1. STAKES SHALL BE 2X2 HARDWOOD IN LENGTHS OF 2' AND 5'.
2. WIRE FOR GUYING SHALL BE GALVANIZED, DOUBLE STRANDED 14 GAUGE.
3. HOSE OR PROTECTIVE VINYL SHALL BE USED AT THE POINT OF CONNECTION WITH THE TREE.
4. LOCATE ALL WOOD STAKES IN MULCHED AREA.
5. STAKES TO BE REMOVED ONE (1) YEAR AFTER FINA ACCEPTANCE BY THE MAINTENANCE CONTRACTOR.

4. EXECUTION

A. PLANTING
1. POSITION TREES AND SHRUBS AS PER PLANS AND SECURE THE APPROVAL OF THE OWNER'S REPRESENTATIVE BEFORE EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.
2. PLANT PITS-TREES AND SHRUBS
   A. DIG HOLE MINIMUM 12" BEYOND THE WIDTH OF THE BALL AND 8" BEYOND WIDTH OF CONTAINER.
   B. FOLD DOWN WIRE BASKETS AT LEAST 1/2 DEPTH
   C. REMOVE ALL OF NYLON STRAPS AND TWINE.
   D. DEPTH SHALL NOT EXCEED DEPTH OF CONTAINER OR BALL. NOTE: SCARIFY ROOTS OF CONTAINER PLANTS.
   E. NO SYNTHETIC BURLAP ALLOWED.
3. FULLY PREPARE SOIL AROUND BALL OF PLANT. COMPLETE BACK FILLING AND WATER THOROUGHLY TO ELIMINATE AIR POCKETS AROUND ROOT.
4. ALL PLANTS SHALL BE SET SO THAT WHEN SETTLED, THEY BEAR THE SAME RELATION PLUS 2" TO THE REQUIRED GRADE AS THEY BORE TO THE NATURAL BEFORE BEING TRANSPLANTED.
5. IMMEDIATELY AFTER PLANTING, STAKE ALL TREES TO PREVENT DAMAGE FROM THE WIND.
6. PREPARE RAISED EARTH BASIN AS WIDE AS PLANTING HOLE OF EACH TREE.
7. WATER IMMEDIATELY AFTER PLANTING, WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH A MANNER AS NOT TO DISTURB BACK FILL AND THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED.
8. ALL SHRUBS AND GROUND COVER AREAS SHALL BE TREATED WITH A PRE-EMERGENT AFTER MULCHING

B. BED AREA
1. ROTOTILL EXISTING SOIL.
2. ADD THE FOLLOWING AMENDMENTS 100SQ.FT. AND ROTOTILL INTO SOIL.
   A. 10 BAGS NATURE'S HELPER SOIL CONDITIONER.
   B. 40# COMPOSTED COW MANURE
   C. 5 CUPS FERTILIZER 10-10-10
   D. SULFUR OR LIME (AS NEEDED TO ACHIEVE OPTIMUM PH).

C. PRUNE
1. LIGHTLY HAND PRUNE PLANTS FOR OPTIMUM APPEARANCE AND DESIGN INTENT.
2. MULTI-TRUNK TREES SHALL HAVE SUCKERS REMOVED.

5. FINISH GRADING
   A. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN, AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE.
   B. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER.

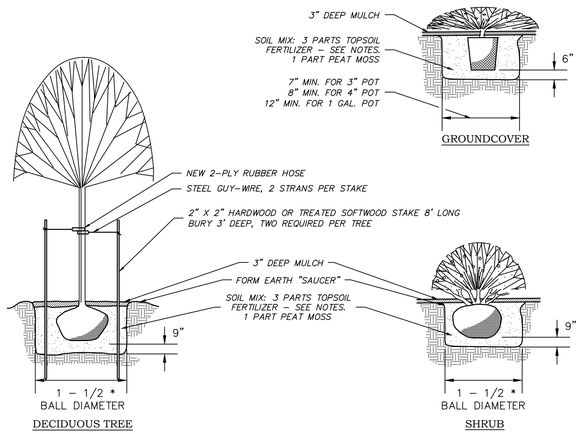
6. SEEDING
   A. APPLY IN SUCH A MATTER THAT IS UNIFORM IN COVERAGE.
   B. APPLY MATERIAL PER MANUFACTURER'S RECOMMENDATIONS.
   C. WATER HYDROSEEDED AREAS AS REQUIRED TO INSURE A 95% MINIMUM GERMINATION AND COVERAGE.
   D. SEED TYPE ACCORDING TO SEASON.

7. GUARANTEE
   A. CONTRACTOR SHALL GUARANTEE ALL NEW TREES FOR A PERIOD OF ONE (1) YEAR.
   B. CONTRACTOR SHALL GUARANTEE ALL OTHER NEW MATERIAL FOR A PERIOD OF 120 DAYS.
   C. GUARANTEE SHALL NOT INCLUDE THEFT OF PLANTS AFTER INSTALLATION, IMPROPER WATERING, AND/OR MAINTENANCE PRACTICES BY OTHERS.

8. MAINTENANCE
MAINTAIN SITE WEEKLY BY MOWING, WATERING, AND REPLACING DEAD PLANT MATERIAL UNTIL SUBSTANTIAL COMPLETION AND ACCEPTANCE.

9. SUBSTANTIAL
   A. SUBSTANTIAL COMPLETION SHALL BE DETERMINED BY THE OWNER'S REPRESENTATIVE.
   B. THE FOLLOWING ITEMS MUST BE COMPLETE PRIOR TO WRITTEN APPLICATION FOR SUBSTANTIAL COMPLETION:
      1. ALL SPECIFICATIONS STRICTLY ADHERED.
      2. 100% OF PLANT MATERIAL INSTALLED (LESS ANY PLANTS THAT MAY BE PLANTED IN ANOTHER SEASON FOR HORTICULTURAL OR AVAILABILITY REASONS UPON APPROVAL BY OWNER'S REPRESENTATIVE).
      3. SEEDED AREAS GERMINATED (95%).
      4. SOD AREAS SHALL DISPLAY UNIFORM COLOR, QUALITY, AND COVERAGE.

10. CLEAN UP
UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS. RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM CLEANED AND THE SITE LEFT IN A APPROVED CONDITION BY THE OWNER'S REPRESENTATIVE.



NOTES
1. STAKE ONLY TREES OF 1-1/2" CAL. OR LARGER.
2. ROOTBOUND MATERIAL AND MATERIAL WITH GIRDLING ROOTS NOT ACCEPTED
3. REMOVE TAGS, TIES, TWINE, TOP HALF OF WIRE BASKET AND BURLAP STRING, ROPE AND STRAPS.

PLANTING DETAILS
N.T.S.

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350 airport road griffin, georgia 30224
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STREET CONSTRUCTION PLANS FOR

KINCAID AND HAMILTON INTERSECTION REALIGNMENT

LOCATED IN SPALDING COUNTY

SHEET:
LANDSCAPE DETAILS

COA #: PEF004167

GEORGIA REGISTERED PROFESSIONAL ENGINEER
No. PE013620
WADE T. STROUD
7/28/25
GSWCC LEVEL II CERT. # 0000010472

Project No.	Issue Date:
PCG3152-24033	JULY 2025
Drawn By: KLB	Checked By: WTS

31
SHEET 31 OF 31